METROPOLITAN DISTRICT COMMISSION
COMMONWEALTH OF MASSACHUSETTS

THE NEW CHARLES RIVER BASIN MASTER PLAN

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March 1995

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Visitor Services

Among the programs sponsored are environmental education activities which reached 12,000 students. A volunteer-run environmental education program, "Through the Garden Gates", brought 52 classes to the Conservancy Garden. In-school programs serving ninety-six classes were taught by volunteer educators. A recreation program covers many activities, including Camp Central Park and rock-climbing clinics. After-school and weekend drop-in recreation programs at the North Meadow Center attracted 15,000. Park materials are produced (including maps), a 90-minute trolley tour is operated and there are information kiosks manned by volunteer gatekeepers. Interactive computers suggest walking tours and answer visitor's questions. Among the many other visitors' programs are Design Wise summer education for high school students, the Reservoir Project for junior high students, and Summer Stage, which attracts 400,000 people to park performances. An extensive volunteer program is conducted with numerous volunteer committees performing a wide range of services. Volunteers number 3,700 and contribute 27,500 hours of service. Student volunteers numbering 2,716 accompanied by 500 adults contributed 5,000 hours of service. Many activities are the result of partnerships with such groups as the 92nd Street Y and the U. S. Korean Foundation.

Finances

In 1992, the Conservancy's revenue totaled $10.4 million. Of this amount, program services came to a total of $8.8 million with design and construction funded at $4.5 million, horticulture, maintenance and operations at $2.6 million, and visitor services at $1.7 million. Support services (management and fund raising) received $1.6 million. Capital additions totalled $1.8 million.

BUILDING A NEW BASIN CONSTITUENCY

A real opportunity exists to create a private partner to join the MDC in caring for this new park. The work already underway with the Citizen's Advisory Committee (CAC) could be the foundation for a process that would continue through the period of park development. This would enable the private organization to begin at the same time that the New Basin opens.

A number of methods could be followed in developing a constituency group. The following suggests how this might be accomplished.

Phase 1: Information Program

Develop a Community/Park Information Program to take place while the park is under development. This region-wide information campaign would be closely coordinated with the temporary exhibit and other pre-opening

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INTRODUCTION

WHERE THE RIVER JOINS THE SEA

The Charles River has shaped the history of Boston's urban development. Its watershed gathers in many of the towns in the metropolitan area, with three of the oldest settlements—Boston, Charlestown and Cambridge—coming together where the river joins the sea. The mouth of the river has been a center of human activity: an important fishing and hunting ground, a major harbor, an industrial center, and a rail hub.

To link the activities on either shore, people have found many ways to cross the river: small boats, ferries, bridges, railroad tracks, viaducts, and highways. The shores were made productive with piers, filled bulkheads, and canals, gradually transforming the estuary into land for housing, industrial, and transportation uses. The yearning to control the flow of river and tide produced two dams across the mouth of the river. The first dam created the calm and stable water body that we now know as the Charles River Basin. The new dam, a half-mile down stream, brought a new level of flood control to the basin together with expanded and improved locks. It has also created the opportunity between the two dams for a New Charles River Basin.

Over time, people's perception of the river has changed markedly. The transformation from a utilitarian channel, troublesome in its occasional flooding, to a valued natural and recreational resource has been gradual. As water-based industry and commerce declined and the Back Bay was filled in on both sides of the river to create new land for housing and institutions, the riverfront came to be seen as a "front yard" rather than the "back yard" to the city. New opportunities arose to create esplanades and parklands and then roadways that further reshaped the river's banks. Today in the New Basin, a similar opportunity arises as the Central Artery/Tunnel project plans a major new river crossing, charging the Metropolitan District Commission (MDC) with creating parklands as a major public benefit of the highway crossing.

The MDC was established at the end of the last century to create and oversee regional parklands. In the last 100 years the Metropolitan Park System has grown to encompass parklands along the three major river systems in the Boston area: the Mystic, the Charles, and the Neponset. Of these, the Charles River is the central organizing piece of the park system, located in the heart of the region and offering the most accessible parklands to the largest population. The Charles is well known to residents and visitors alike for its gracious esplanades, its boating, and its famous festivals such as the Fourth of July celebration and the Head-of-the-Charles Regatta.

The New Charles River Basin will connect the Charles River Esplanades to Boston HarborPark.

The New Charles River Basin extends from the new dam and locks (in the forground) to the Museum of Science on the old dam upstream.

Despite the many human interventions across and along the Charles River, it remains the dominant natural system in the region. The Charles drains thousands of acres of upland and carries these waters through its channels, basins, and locks out to the sea. Its marshy shores and grassy banks offer habitat for many different types of birds and small wildlife. Every spring, alewives and other migrating fish struggle upstream to reach their spawning grounds. The natural ecologies and lifeways of adjacent communities are strongly influenced by the presence of the Charles.

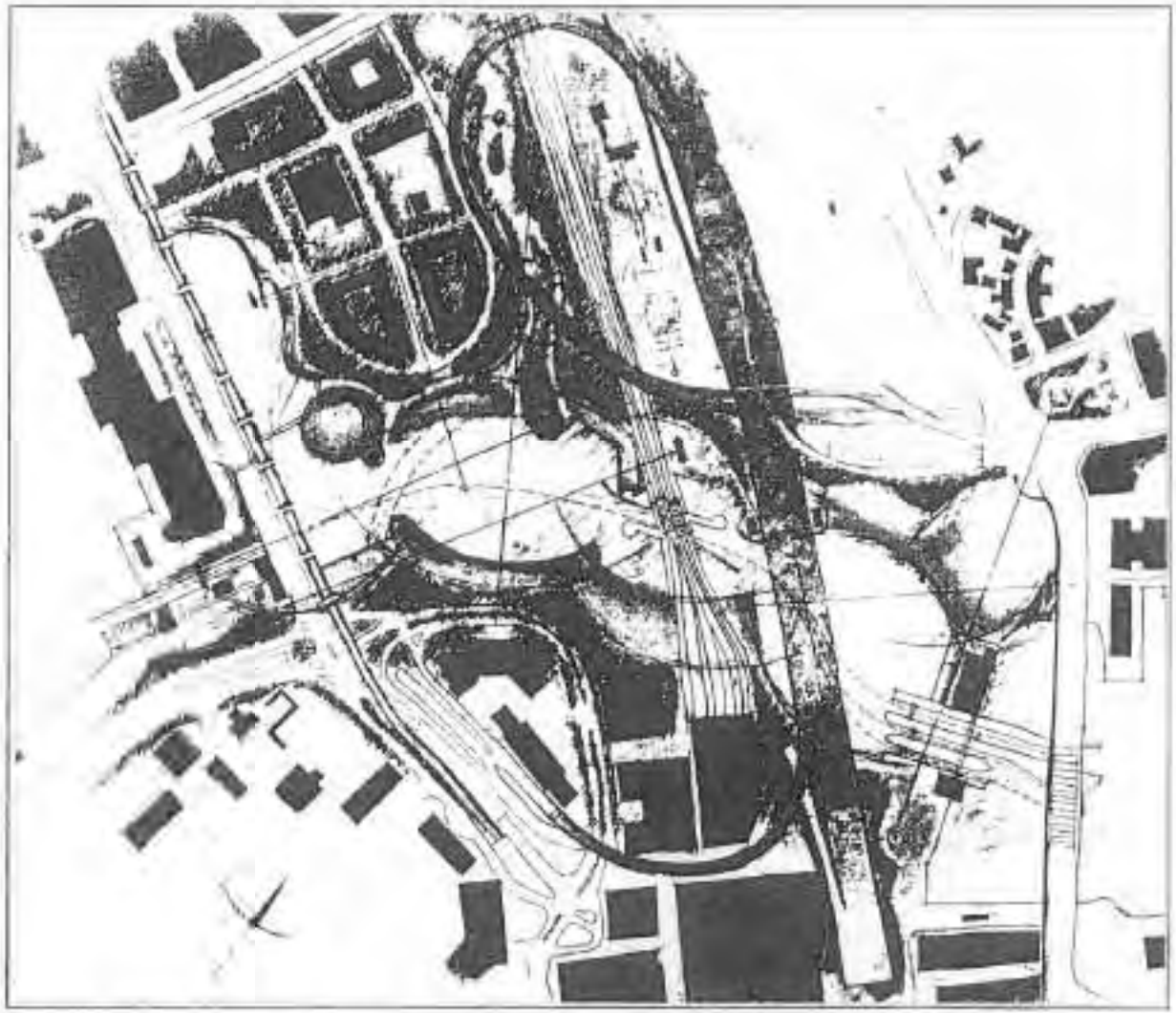
Although the river is now widely recognized for its recreational and natural value, the "lost half mile"—the New Charles River Basin—has yet to be reclaimed. This critical section where the river joins the harbor is largely a wasteland of past industrial eras. The pedestrian is unwelcome, the shores are often unreachable, and engineering works dominate the scene. At either end, the waterfront open spaces of the harbor park and the old Charles River Basin establish a tension that demands connection, while new development on both shores reaches for the water's edge.

Our generation now has the responsibility to complete the riverfront park system. The New Charles River Basin is the missing link. As this report demonstrates, it can become a magnificent forty-acre park, the most exciting new Boston open space of the 21st century. As the public embraces the New Basin within its image of the city, the impact will be comparable to the creation of Commonwealth Avenue and the Emerald Necklace in the 19th century and the Charles River Esplanade and the Boston waterfront in the 20th century.

VISION OF THE NEW BASIN

The New Charles River Basin will reshape the connection of water and land at the mouth of the river and all of the relationships that follow. This major public open space joins the river to the harbor, the city to the river's edge, and the banks of the river to each other. The New Basin marks the intersection of the regional park and transportation systems. The rediscovery of this lost half mile and all of its rich stories will create a unique and desirable destination for residents and visitors to the city, drawing people locally, regionally, and even nationally. The theme of connection is a source of inspiration for the park design, its interpretive elements, and its programmed activities.

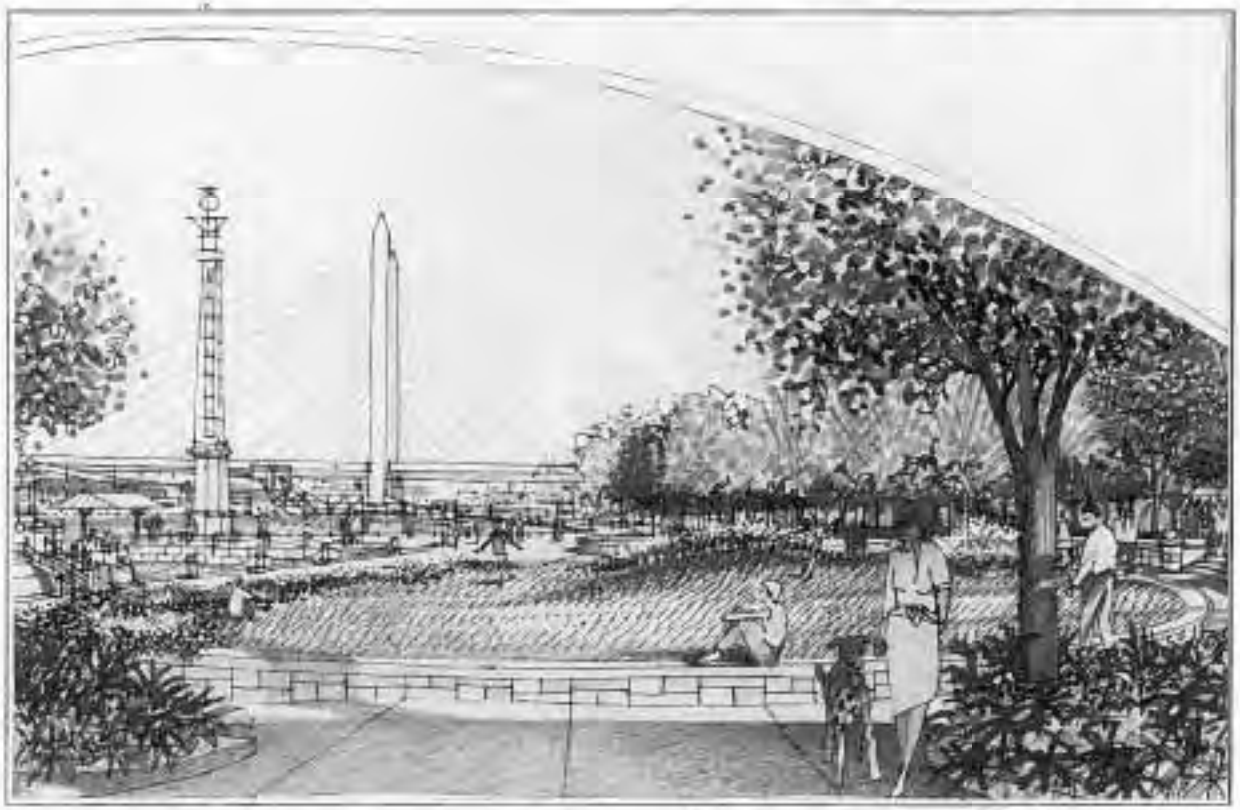
The flow and continuity of the shorelines in the New Basin will define a clear channel for the river, while giving a new more expressive and unified form to each of the three major water bodies: the North Point Inlet and the basins above and below the bascule bridges. Many boaters will continue to pass through the New Basin on their way up river or out into the harbor, while others may stop at a protected new cove. Along the main channel, water taxis



Concept Diagram of the New Basin

will chug along their daily routes, collecting passengers at different landings within the New Basin. Canoes, rowboats, and paddleboats will wind their way through side channels.

Along the shores, continuous promenades, walkways, and bicycle paths will connect the upstream esplanades with the Harborpark and link the riverbank with the city. Pedestrians will follow the water's edge promenade or the smaller intermediate path that winds along the bank or one of the many spurs leading into the surrounding neighborhoods. Bicyclists and rollerbladers will speed along a designated path at the upper edge of the river bank adjacent to bordering streets.



A gateway into Nashua Meadows frames a view of the water and the new bridge downstream.

New foot bridges and handicap-accessible ramps make it possible to travel unimpeded across the rail tracks and intervening waterways. Bridges between the two river banks abound in this area, but few are friendly to pedestrians, and they have never before been integrated positively into a public open space system. The improved pedestrian connections will bring the communities of Boston and Cambridge together.

The banks of the river will be blanketed with green meadows, graced by large shade trees, and bordered with broad colorful drifts of perennials and groupings of small flowering trees and shrubs. The upper slopes of the river banks will be deep in shade under a continuous expanse of woodland trees that enclose the new parklands

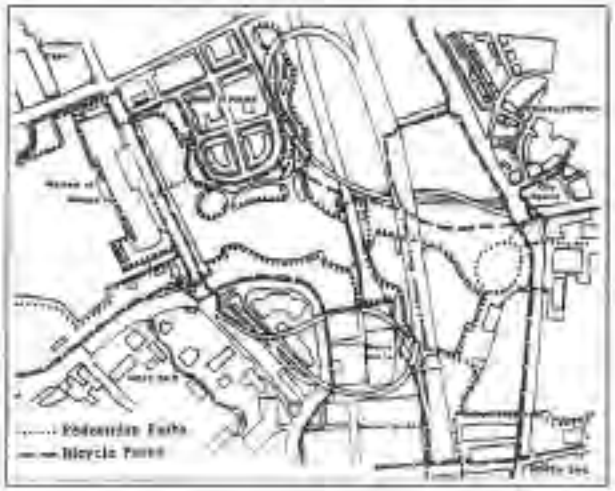
The New Charles River Basin will create positive visual connections between the river and its urban context. The many connections will be dramatized by visual gateways or windows which penetrate the bordering trees and take advantage of key views across the water. As gateways, they will open to foot

bridges, at-grade crossings, streets and pedestrian paths from the adjacent communities. The new open spaces and internal vistas recognize and enhance the unique and powerful presence of existing and future roads, bridges, ramps, tunnels, rail lines, viaducts, and dams, while preparing the setting for other development. Major new private development will complement the park at Cambridge's North Point and around Boston's North Station, strengthening the connections to the city.

The history and ecology of the New Basin and its connections to the rest of the world will be expressed in many features and details of the park. The restored historic structures of the old dam provide the setting for a new visitor center, which will be a gateway destination on the New Basin. At the visitor center and at other sites within the park, permanent and changing exhibits relate aspects of the immediate environment to the larger context of the city, the watershed, the Metropolitan Park System, and the regional transportation systems. Art works expressing the theme of connection are integrated into the landscape and the life of the park. Through these interpretive and artistic elements, people using the park experience the richness and variety of local places within the cohesive framework of the New Basin. An environmental discovery program will use the New Basin to teach children about the river, nature, and the city.

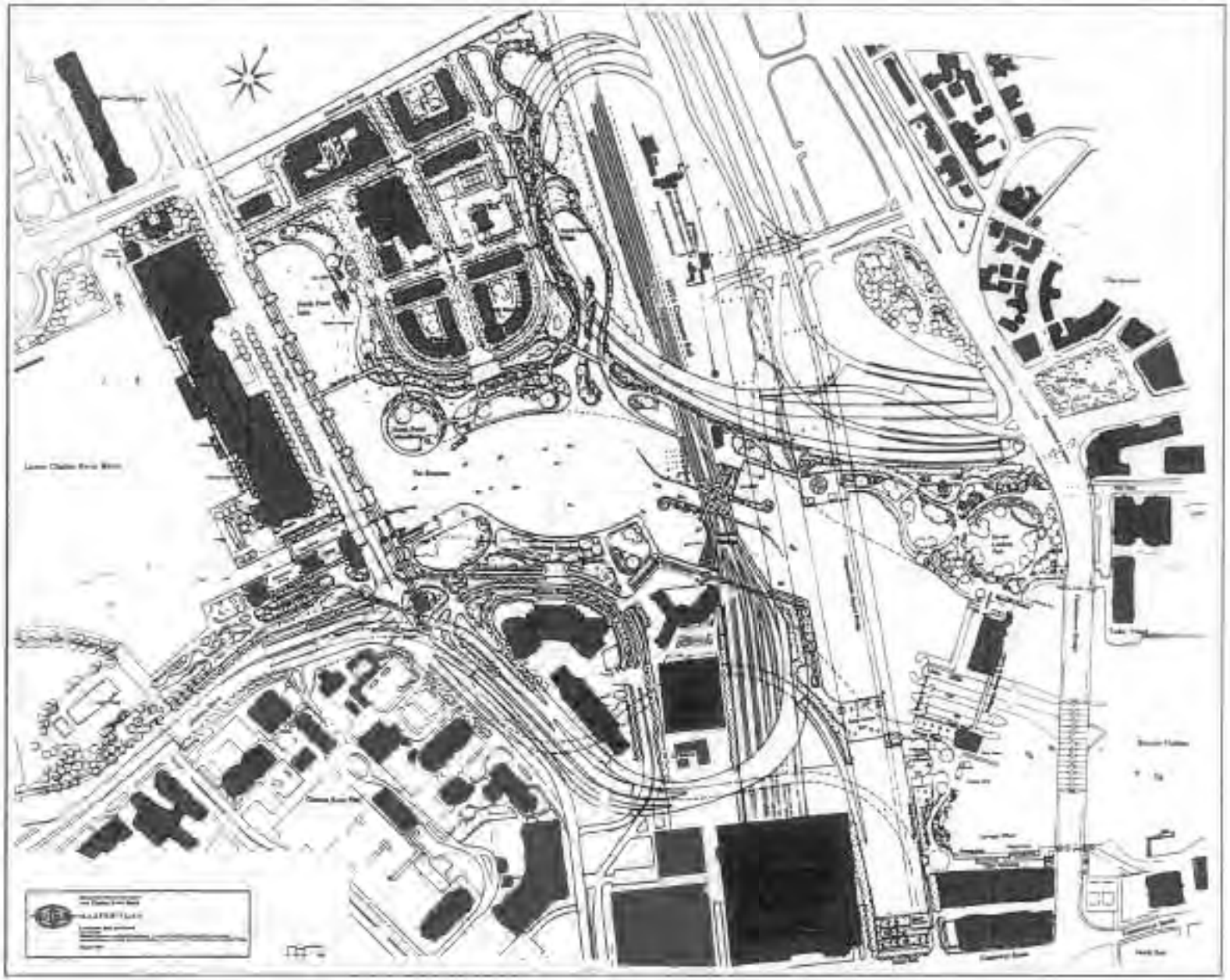
Residents of the surrounding neighborhoods will be regular park visitors, coming from the Charles River Park, the North End, East Cambridge, Charlestown, and new housing at North Point. Interpretive programs and activities in the park will foster this local relationship, including community gardens, community picnics and other programmed events for children and families.

The New Basin's unique location at the nexus of north-south transportation routes will reach out to a much larger population as well: tourists and office workers in downtown Boston and East Cambridge; families, school children, and other residents of Boston, Cambridge, and the larger metropolitan area; visitors to nearby hotels, shopping, tourist attractions, and recreational facilities such as the Boston Garden and the Museum of Science. The New Basin will be accessible for many on foot, including those arriving via the North Station commuter rail, the Orange Line subway, and Green Line subways. Others will arrive by water at Lovejoy Wharf or at one of the water taxi landings.



Circulation diagram showing bicycle paths (dashed) and main pedestrian walkways (dotted)

At each gateway into the New Basin and at other key locations within the park, views across the water will entice visitors to enter and explore other areas in the basin. The gentle slope of the river banks down to the low shoreline unites the two shores and creates a common focus on the water. During major festivals, with crowds of people on both banks and a parade of boats on the river, communities on the river will be connected in a way never before imaginable, celebrating on this special common ground where the river joins the sea.



Master Plan for the New Charles River Basin

The master plan for the New Basin creates dramatic changes in the river, its shore, and the local pedestrian and cycle system. When completed, it will offer many public benefits along the extended Charles River Reservation:

- Over forty acres of diverse, high-quality parklands along reconstructed river banks.
- A procession of newly shaped water bodies, each with its special character and function, celebrating the mouth of the Charles.
- The North Point Wilds, with its watery landscape of riverine plants.
- New waterways in North Point Wilds and the Creek, as a haven for canoes, rowboats, and paddle boats.
- Landings for water taxis, tour boats, and other large craft.
- At the Bascule Bridge, a small cove with transient docking for river boats.
- Below the new dam, a harbor for ferries, water taxis, and State Police boats, with saltwater fishing platforms.
- Next to bordering roadways, a smooth pathway fifteen feet wide, for safe transit by cyclists and rollerbladers, with controlled crossings at major streets and ramped bridges over the railroad.
- Within the park, an eight-foot meandering pathway with special pavement to discourage fast-moving people on wheels, while allowing all other users.
- A twelve-foot esplanade, also with special paving, for strolling along the water's edge.
- New walkways and footbridges at the old dam, the Green Line viaduct, the North Point inlet, the bascule railroad bridges, and the Charlestown Bridge.
- The Charles River Visitor Center on the historic dam, with permanent and changing exhibits that tell the story of the river and the city.
- Landmark interpretive destinations, such as the environmental learning barge, an historic schooner, and working demonstrations of the locks.
- Programs and interpretive features for the surrounding residential communities of Charlestown, North Point, Lechmere, Charles River Park, and the North End.

A panoramic view from Bunker Hill Monument in 1848 shows the new railroads crossing over the Charles and the Millers Rivers to stations on Causeway St. Upstream are the Craigie and West Boston Bridges (now the old dam and the Longfellow Bridge), and the 1821 mill dam across the Back Bay. On the far right are the landscaped grounds of the McLean Asylum.

RECLAIMING THE "LOST HALF MILE"

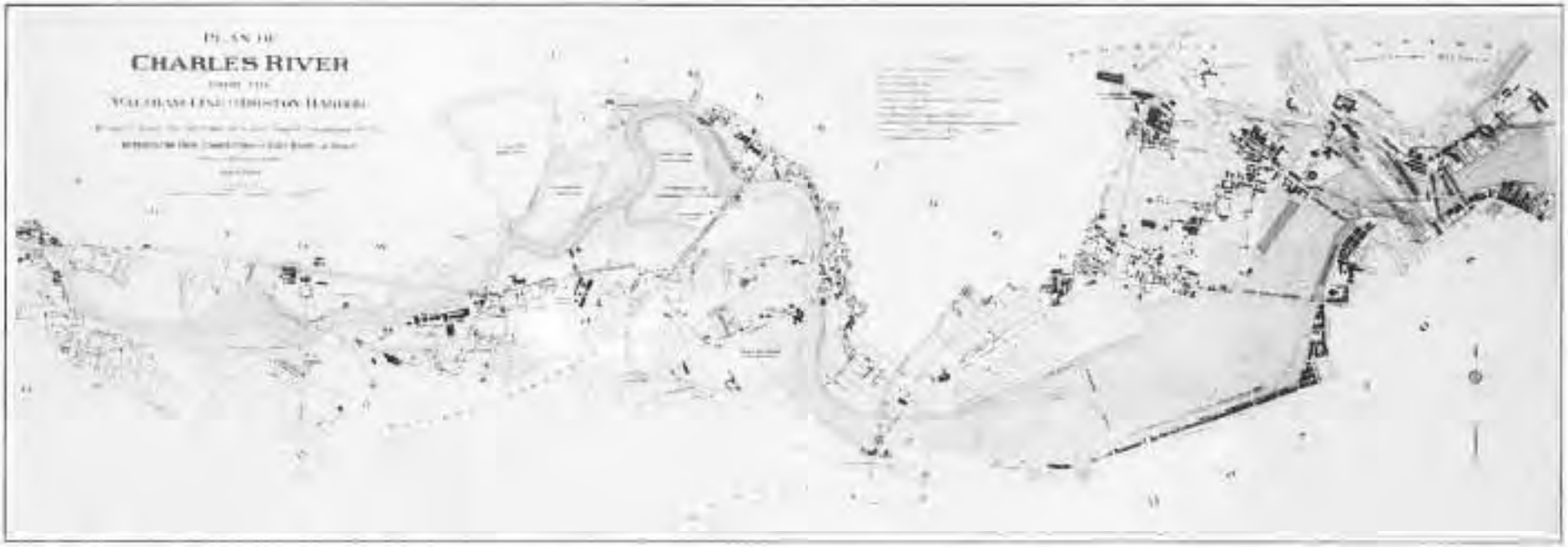
The Charles River Basin looks to all appearances like the most visible and carefully preserved natural feature of Boston. In fact, nothing could be further from the truth. In the nineteenth century the shallow basin, its nine mile length edged with broad salt marshes from Watertown to Boston Harbor, was dammed for mills and filled for commercial and residential ventures. The bays of the lower Charles at low tide became vast expanses of stinking, sewage-laden mud flats. Not until the end of the century did the citizens of greater Boston take the first steps to clean up the river and transform its shores. Today nothing remains of the tidal estuary that was once the lower Charles—the margins of the Basin are an entirely man-made landscape.

The degradation of the river began with the construction of a mill dam, built in 1821 along the line of today's Beacon Street. Causeways for the Worcester and Providence railroads were constructed fourteen years later,

further impeding the sluggish, increasingly fouled streams that flowed into the bay, and the mills failed. In 1857, the Commonwealth reclaimed its title to the polluted tidelands and converted the bay into real estate by filling it with gravel, brought by trains running around the clock from Needham to Boston for more than twenty-five years. The sanitary hazard created by the mills and railroads in the Back Bay was resolved—for a time, at least—by state-funded intervention that created a whole new quadrant of the city.

Downstream of the Back Bay, the Boston & Lowell Railroad opened in 1835, and like the Worcester and Providence lines, built trestles over the tidal flats and open water of the rivers to reach the Boston peninsula. But the General Court chose not to develop its legal interest in the flats of the lower Charles and the Millers River, as it had in the Back Bay. The protests of the McLean Asylum were ignored, and railroads and other noisome industries continued to expand in East Cambridge and along the river's edge in Charlestown, largely unregulated by the state.

The first Boston railroads built trestles across the Back Bay and the Millers River in the 1830s. Beginning in 1857, the mill ponds of the back Bay were filled to make new land (1865 map, Cambridge Historical Commission).



A joint commission of the Metropolitan Park Commission and the State Board of Health produced a remarkable map in 1894 showing the deplorable state of the Charles River Basin. Along the waterfront were two prisons, three coal-burning power plants, numerous shabby commercial and industrial ventures (including slaughterhouses in Brighton and East Cambridge), a bankrupt residential development in Cambridge (today the site of MIT), and "temporary" railroad trestles below Craigie's Bridge. The only park on the river was the Charlesbank, near Boston's West End (MDC Archives).

Moved by the popularity of Mt. Auburn Cemetery and the example of New York's Central Park, vigorous public discussion addressed the opportunities to create parks for Boston. Frederick Law Olmsted was hired by the city in 1878 and created what is known today as the "Emerald Necklace." But as the city's population swelled, the escalating pollution of the region's rivers and bays alarmed the state's new board of public health. Along the lower Charles were two prisons, three coal-burning power plants, several gas works, and numerous shabby commercial and industrial structures. Two large slaughterhouses, one on the Millers River and the other upstream of the Brighton marshes, dumped offal into the shallow waters. Instead of a public parkway along the river edge of the elegant Back Bay, there was "a contemptible scavenger's street, thirty feet wide, backing up against the unmentionable parts of private houses."

In 1893 the Metropolitan Park Commission published its first report, written by Sylvester Baxter, the commission's secretary, and Charles Eliot, its landscape architect. They proposed a park system that would preserve the "rock hills, the stream banks, and the bay and sea shores" of greater Boston. Once in the public domain these natural features of the region would then establish the framework for urban development,

not the haphazard and unplanned assemblage of streets, lots, railroads, and streetcar lines.

The first reservations to be acquired—Beaver Brook, the Blue Hills, the Middlesex Fells—were natural areas that represented "unique and characteristic" New England scenery. The rivers and bays, with their shores reclaimed, would offer "permanently open spaces provided by nature with cost."

In spite of the foul condition of the Basin, Eliot was certain that the Charles would become the central reservation of the metropolitan district and the most celebrated "water park" in the entire country. The Cambridge and Metropolitan Park Commissions made their first takings along the river in 1894 and 1895.

Six years later, James Storrow lead a new campaign for a dam at Craigie's Bridge. Finally approved by the General Court and completed in 1910, the earthen structure was graced with a large park on its surface connecting East Cambridge and the West End. The tides were excluded above the dam, and the now-stable water level covered the mud flats forever. A few voices lamented the loss of the last "once primitive and primitive and beautiful salt meadows"

The metropolitan park plan of 1893 was bounded by the rock hills that surrounded Boston about ten miles from the State House. The forest reservations—Middlesex Fells and the Blue Hills—were laid out along this ring of hills. The radial spokes of the system were the three rivers—the Mystic, the Charles, and the Neponset. The beaches of the bays and sea shores comprised the third element of the plan. The hills, the rivers, and the shores were linked by tree-lined parkways. By 1899, over nine thousand acres of reservations and parkways had been acquired (MDC Archives).

In 1923, the Millers River still flowed around and under the railroad bridges and platforms. On the left along the edge of the old dam is the West End Street Railway viaduct, now the Green Line to Lechmere (photograph, Bostonian Society).

along the Charles, but the stabilized river drew to its banks new campuses for Harvard, MIT, and Boston University. The Storrow Memorial Embankment—now universally known as the Esplanade—was designed by Arthur Shurcliff and dedicated in 1936, ninety years after a water park was first proposed for the Charles.

The dam was built a half mile upstream of the harbor, separated from the railroad bridges downstream by the imposing concrete arches of the West End Street Railway viaduct (today the Lechmere branch of the Green Line). A decade before, Eliot complained that the railroads had "contrived to obtain permission to cover the river with a timber platform which they use as a rent-free switching yard and terminal." Since this was done under temporary permits, Eliot was convinced that sooner or later the water park would extend to Boston Harbor.

In fact, the railroads' permits were extended and made permanent. In 1928, the Boston & Maine line was authorized to construct seawalls and fill land in Cambridge and Charlestown at the same time the new North Station was built. But railroad traffic from North Station peaked in the 1950s, and twenty

years later only commuter lines crossed the two remaining bascule bridges over the Charles. Most of the switching yards lay vacant, the Millers River became a paltry settling basin, and its once-broad confluence with the Charles was buried in a culvert.

Though the area was changing dramatically, the mouth of the river remained hidden from public use. In a landmark study published in 1959, MIT urban planner Kevin Lynch found that many Boston residents could not say where the river met the harbor.

A new dam was approved by the legislature in 1962, and the MDC's jurisdiction was extended. The first park lands in the New Basin were acquired as part of the dam construction, completed in 1978, and in the late 1980s the MDC acquired almost twenty acres in Cambridge, Charlestown, and Boston. Construction on the first park in the New Basin will start in 1995. During the next decade, the esplanades, begun more than a hundred years ago, will be connected with the harbor for the first time.

The park and buildings on the dam (today the site of the Museum of Science) were designed by Guy Lowell. Downstream is the seawall constructed in the 1920s by the Boston & Maine Railroad (ca. 1947, Cambridge Historical Commission).

CONTEXT

The New Charles River Basin fulfills the MDC's long-standing goal to reclaim the "lost half mile" as parkland. The New Basin sits in the midst of a range of other public and private projects planned for the surrounding areas. The project most intertwined with the New Basin is the proposed Charles River Crossing of the Central Artery Tunnel Project (CA/T). The impact of this crossing on the existing and future parklands in the basin is the source of mitigation agreements and funding for the New Charles River Basin. The CA/T bridge, ramps, and tunnels will penetrate the New Basin at many points and the final basin design will be extremely sensitive to these highway alignments. Because of the construction impacts of the CA/T project, the implementation strategy for the New Basin has to be carefully coordinated with the CA/T plans and construction schedule.

Ducks rest on old pilings, with the bascule bridges and the industrial landscape behind.

The New Basin master plan is also responsive to plans by the City of Cambridge for the North Point neighborhood, including road alignments, development parcels, and land uses. The consultant team has worked closely with the City of Cambridge to mesh the park and roadway alignments and to set the stage for a cohesive environment of new buildings, streets, and parklands on the river's north bank. Cambridge welcomed a realignment of some streets within its North Point Plan in order to achieve this integration, providing maximum benefit to the park and to the new community.

New development near North Station, including the new Boston Garden, will frame the New Basin on the south bank of the river. Proposed roadway improvements and new land

uses will draw people into the area, many of whom explore the new park and its activities.

The Museum of Science is a key anchor on the upper end of the New Basin and offers the potential for coordinated programming and interpretive exhibits, as well as a beginning destination for many park users. The proposed improvements to the historic dam will positively affect the setting of the Museum. In particular, a walkway will connect the Boston and Cambridge shores along the upstream side of the Museum. The MDC is currently studying possibilities for this new pedestrian connection.

Other opportunities for coordination in planning, design, and programming include the proposed City Square Park in Charlestown, Massachusetts General Hospital, Cambridgeside Galleria Mall, other commercial and residential developments in Cambridge, and academic and cultural institutions in the area, such as MIT, Harvard, Boston University, the Children's Museum, the Aquarium, and public schools.

The completion of the master plan is the next step in the realization of a vision designed to bring the New Charles River Basin into vital play with the city and the river. Many more cooperative steps by all involved parties will be needed to create the New Basin over a ten-year period. In this process, the MDC will continue to play a formative role, as principal proponent and guardian of this vision.

The Planning Process

The current work on the master plan and its long-term implementation require an involved and committed group of individuals to guide the process, provide valuable input, and voice support over the next decade. To fulfill this role, a Citizens Advisory Committee (CAC) was established early in the master plan process and includes representatives from the City of Boston, the City of Cambridge, and members of the environmental and design community. The CAC was first called for in agreements between the MDC and the Massachusetts Highway Department (MHD) and later became a requirement of the Secretary's Certificate for the Supplemental Final Environmental Impact Report (SFEIR) of the Central Artery/Tunnel project.

The CAC has public responsibilities for review and comment on parkland and other land use issues in the New Charles River Basin area. The CAC should continue through all phases of final design and construction. Eventually, the organizations and individuals now represented in the CAC could become members of a "Friends of the New Charles River Basin," which would advise and assist in the ongoing management and operation of the park, and in raising additional program funds. This would be similar to the role in New York City of the Central Park Conservancy.

In numerous meetings throughout the planning process, the CAC has actively contributed ideas, attitudes, and expectations about the park, which have shaped the vision of the New Basin. Individual members have made many useful comments and criticisms as the program and design ideas have developed. Consistent priorities and concerns voiced by the CAC were:

- Connections both across the river and up and downstream;
- Links to other parks;
- Interpretive potential as a regional draw;

- Places for passive enjoyment and active recreation;
- The park's appeal to people of all ages;
- Safety and maintenance issues;
- Re-creation of the Miller's River as a wetland;
- Access to the water;
- Integration of the engineering works into the park.

Joint discussions between the MDC, the consultant team, and the CAC at the beginning of the project produced a statement of key issues, opportunities, and constraints, which provided focus to the master plan. CAC priorities became a key basis for a set of planning goals, the development of two alternatives for the New Basin, and ultimately the synthesis and refinement of the master plan.

In addition to the CAC, there are many other involved agencies and parties who have played a significant role in shaping the master plan. From the start of the master planning effort in February 1992, and throughout the project, a key priority of the MDC and its consultant team has been maintaining effective and meaningful communication and coordination with the MHD and the CA/T project staff. Additional discussions were held with other relevant public agencies, institutions, abutters, local artists, and others as appropriate throughout the process.

Planning Goals

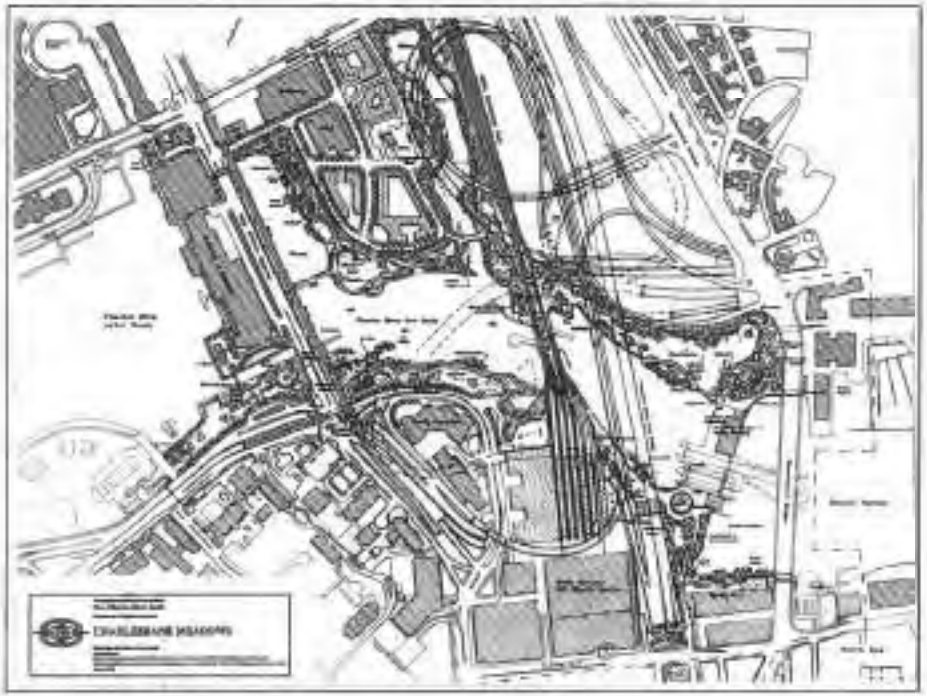
In developing the Master Plan for the New Basin, the consultant team has been guided by seven major goals. These goals were shaped by the concerns of the MDC, the CAC, the Cities of Boston and Cambridge, the Federal Highway Administration (FHWA) and other interested parties.

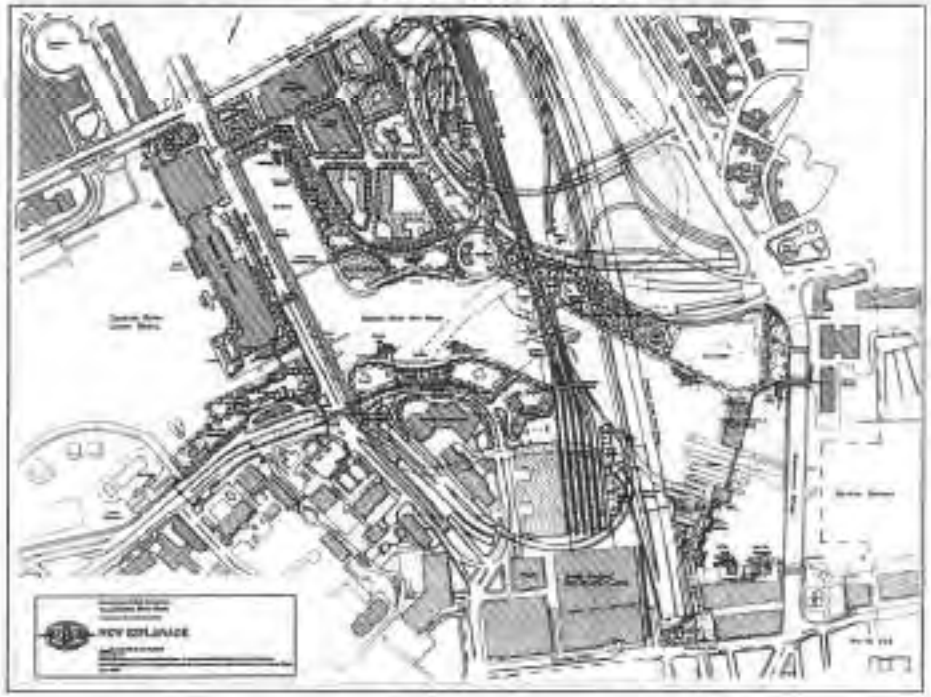
1. Integrate the river, new parklands, existing and proposed transportation structures, and other adjacent urban development into one imageable place.
2. Connect the Lower Basin parklands to Boston Harbor, reinforcing the sense of the mouth of the river.
3. Provide for the open space needs of nearby residents and office workers.
4. Create attractions that will draw regional users to the New Basin throughout the year.
5. Provide visual and physical access and ensure public safety in the parklands so that they can be freely used by all people.
6. Provide meaning for park users by revealing and interpreting the bio-regional, historical, cultural, and urban contexts.
7. Create a system for park management that can respond to the changing needs and demands of users over time.

Alternatives

In the initial phases of the master plan, two alternative approaches were considered for the New Basin. The first alternative, the "Charlesbank Meadows," portrayed a romantic, picturesque, semi-wild setting, similar to the Fens or parts of Central Park in New York City. This scheme sought to evoke wild nature in the midst of the city and to highlight the engineering structures as industrial artifacts in this naturalistic setting. It would be as if nature had reclaimed this ragged edge of the city and then been developed into a park.

The second alternative, the "New Esplanade," had as its general character a continuation of the more formal and obviously man-made landscape of the existing Charles River Esplanade. This scheme introduced a larger geometry which was closer in scale to the existing and proposed engineering works which now dominate the area. The familiar and comfortable 19th century pattern of the existing esplanade pushed its way through these large structures to reach the sea.





Two alternatives, " Charlesbank Meadows" and "New Esplanade" were developed as separate schemes. The final masterplan for the New Charles River Basin is a synthesis of these design ideas.

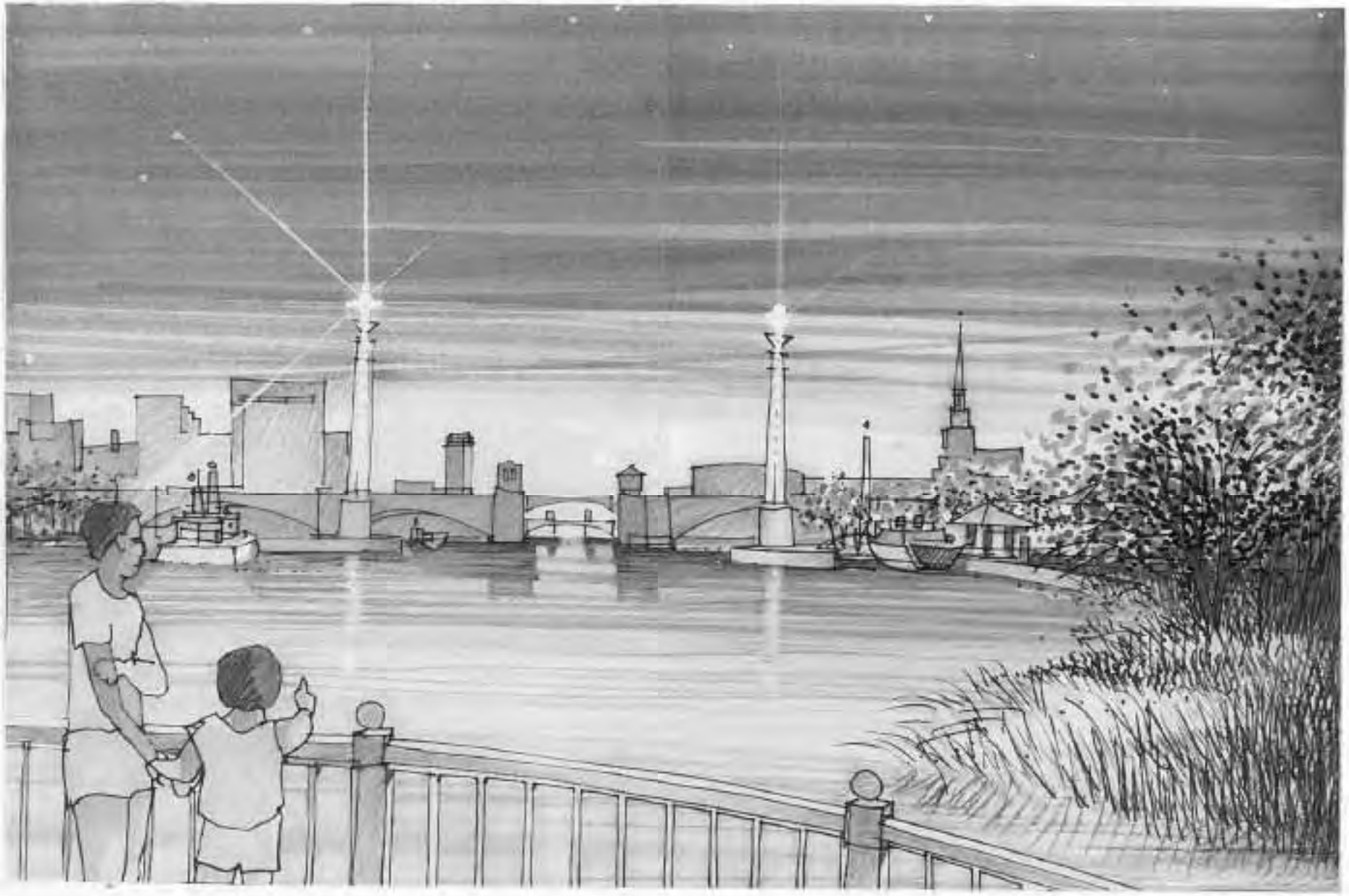
In discussions with the CAC about the two alternatives there was no clear consensus on a single direction. The formality of the esplanade alternative offered a strong response to the bold scale of the existing setting, yet such a genteel solution seemed inappropriate when compared to the semi-industrial character of the area. It seemed a bit like putting on a tuxedo to visit the dockyards. The strength of the Charlesbank Meadows alternative lay in its contrast with the urban setting, introducing a reverence for the forms of nature in the New Basin. It was intriguing, but there were many doubts that the spaces involved were large enough to create a truly natural feeling.

The subsequent synthesis of the two alternatives resulted in an open and inclusive design, perhaps not seen before in Boston, which maintains the reverence for nature, in its curving forms and details, while welcoming the large elements of the urban landscape as parts of the whole. The design is based on the reconciliation of opposites—space and mass, centrality and extension, nature and culture—that characterized the Baroque architectural synthesis.

Based on comments by the CAC and the MDC, desirable elements of each alternative were combined into a single master plan design. Over the course of several months, this plan has been refined through on-going discussions with these groups. The design ideas for creating local identity were tested in schematic design for two parcels.

THEME

The interpretive theme for the New Charles River Basin is *Connections*, an exploration of the many and varied connections weaving together the urban fabric and human experience. Primary among these connections is the link between river and city, a dependence which has been expressed in many ways over time. To explore this relationship, the interpretive design and exhibits in the New Basin will reveal the connections between past, present and future; between transportation, recreation and commerce; between communities and neighborhoods, cultures and customs; between housing, markets, workplaces, and public institutions; and between land, water, and air. The New Basin will integrate work and leisure, learning and playing, pathways and sites. Views and promenades will connect the many areas adjacent to the river, crossing separations and barriers and making a united whole.



To the west of the Beacons is the Green Line Viaduct and the lock of the old dam.

2

PLANNING AND DESIGN PRINCIPLES

PLANNING AND DESIGN PRINCIPLES

The master plan encompasses the ideas, concerns, and aspirations of a wide spectrum of participants. Each of the public agencies in the process has special priorities. The MDC intends to connect the Charles River Reservation with the harbor. The CA/T Project is required to successfully mitigate the impacts of the new Charles River Crossing. The Cities of Boston and Cambridge hope to improve access, connect open space systems to the river, and enhance local development plans.

Over time, the interests of the parties may shift and unforeseen issues will appear. The MDC must maintain a strong sense of mission and broad civic support to realize the goals of the master plan through the final design, construction, and long-term management. The unfolding of this complex process should be guided by the following set of planning and design principles, which capture the essence of the master plan vision.

1. The physical form and landscape character of the New Basin should be simple, bold, and unified, using a design motif of broad sweeping curves.

- Boldly curving shorelines, pathways, planting beds, and tree masses will unify the two sides of the river and lead the eye onward from space to space. The curves must be generous, like the large-radius curves of the surrounding roadway system. This fluid geometry will create a

Generous curving shorelines, pathways, and plantings will unify the basin and connect the spaces on both sides of the river.

sense of spatial flow expressing the connection between the Lower Basin and the Harbor.

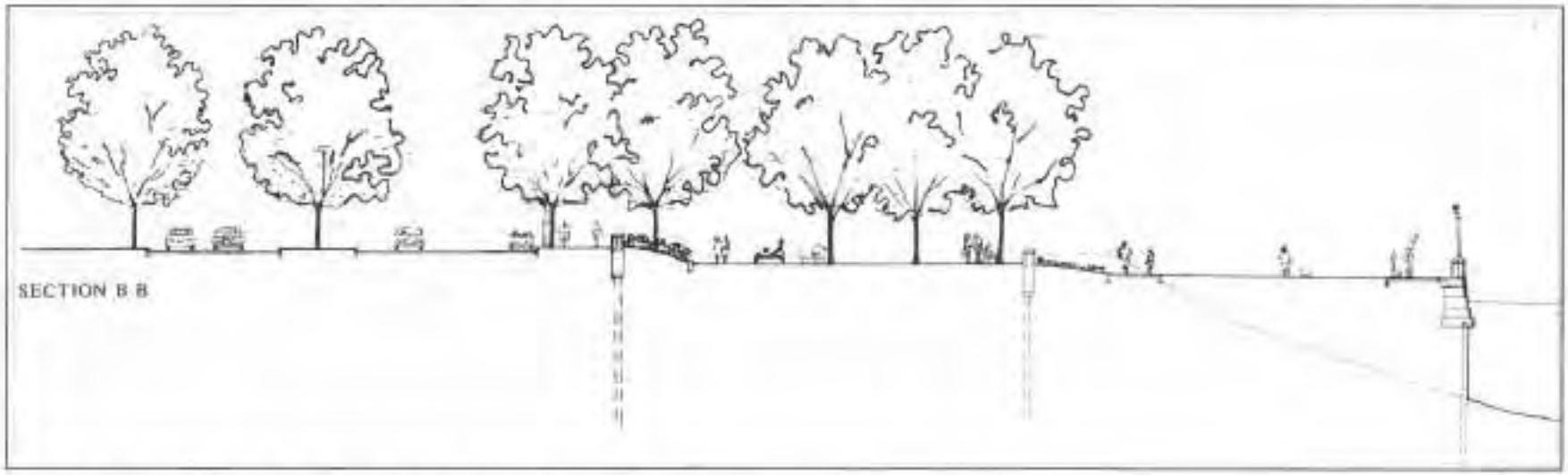
- In their particular forms, these curving lines must also respond to the mostly straight lines of the major crossing structures so that they can be integrated with the parklands and river edges into a single cohesive design.

2. Parklands should slope or terrace down from the level of the surrounding streets to just above mean water to emphasize views and increase the prominence of the river.

- Sloping the parklands down to the water will give the river visual prominence and restore the sense of river banks. Because the level of the adjacent streets is seven to twelve feet above the mean water level of the river, the narrow body of water will only be visible from these streets if the land falls away to meet it.

- At Nashua Meadows, a formal terraced bank treatment with low walls will relate to the scale and functions of the local urban setting and provide a sense of separation from the heavily travelled Nashua Street.

- At North Point, a more informal transition down to the river with green banks and only a few walls relates to the residential neighborhood setting and quiet bordering street, and continues the natural edges of the North Point Wilds.



A section diagram shows the parklands sloping down to the water's edge.

- At Revere Landing Park, a low wall adjacent to the on-grade highway ramp provides a sense of psychological separation from the traffic. Stairs and ramps provide a grand sense of entry and resolve the grade differentials between Rutherford Avenue and the lower banks, which slope down gradually to the marshy edge of the water.

3. The shorelines within the New Basin, while expressing flow and continuity, should be shaped to create a powerful sense of the mouth of the river as a special place.

- Each part of the water body between the old dam and the new dam should have a form expressive of its larger context, while maintaining the overall flow and sense of connection.

- The realignment of the shores should create unique water places, while providing for the safe passage of the many boats that move through this area.

- In the North Point Inlet, the water edge should be reshaped to create as a focal point a harbor for small boats and as a curving counterpoint to the powerful straight line of the viaduct.

- Between the old dam and the bascule bridges an oval basin serves to relate the two sides of the river and to create a sense of place.

- The inland waterway of North Point Creek connects one spur of the delta to the inlet and provides opportunities for safe boating by small craft.

- In the lower section of the New Basin, between the bascule bridges and the new dam, the river must sweep to the east while reflecting in the alignment of its edges the massive presence of the cable stay bridge overhead. The articulation of the shoreline in this area will be especially important to provide a proper base for the pylons supporting the bridge. Downstream from this should be a naturalistic, marsh edge for Revere Landing Park, which overlooks the mouth of the river.

4. Along the shore, a series of open and linked meadows and plazas should provide relaxed settings for passive recreation and views around the New Basin.

- Each meadow or plaza should take a distinctive form, derived from the shape of the immediate upland and water's edge.

- Large planting beds bordering the meadows should flow from one to another, in bold sweeps, providing a rich and colorful foreground for meadow activities. The beds should be broad and long, allowing for dramatic drifts of colorful perennials, highlighted by clumps of shrubs and flowering trees, which bring color and textural interest to all seasons.

Plazas and meadows provide open areas for relaxed recreation. Plantings and structures direct views across spaces to the opposite shore of the basin and to the city beyond.

- Shade trees should be placed to create focal points within the meadows, as anchors for activity and to frame the key views. Placed both singly and in clumps, these large specimen trees can emphasize views and, like rocks in a stream, make the flow of space around them more dramatic. The sheltering spaces under these trees will become sanctuaries for the park user, providing a pattern of precious repose within the ceaseless flow of the city.

- In the North Point Wilds and spreading out from them into nearby meadows, native and wetland plantings should be carefully chosen to provide wildlife habitat and teach visitors about wetlands, without blocking visibility and creating unsafe areas.

5. Continuous upland bands of densely planted trees should define the upper edge of the river and its shores, delineating a sanctuary for activity at the river's edge and a sense of continuity from end to end.

- From the outside the wooded upland will follow the forms of adjacent streets and highway ramps. On the inside it should generally follow the shape of the water bodies to emphasize these graceful forms.

- The trees should be tall, dark green and densely planted (25 feet on center) to create continuous visual backgrounds for the water and adjacent open spaces.

- The rows of upland trees should read in long continuous flows, from one end of the basin to the other.

- Views under and through the trees should be kept open to ensure a sense of safety inside the park.

6. Gateways to the New Basin parks from adjacent neighborhoods and parks should be clear, strong and inviting, despite intervening heavily travelled streets, viaducts, ramps, and other structures.

- The plantings of upland trees should have "windows" that allow views and approaches to and from key locations in the surrounding urban context, helping to unite the parklands with that context.

- All gateways should be ample, with open views to provide a sense of accessibility and safety.

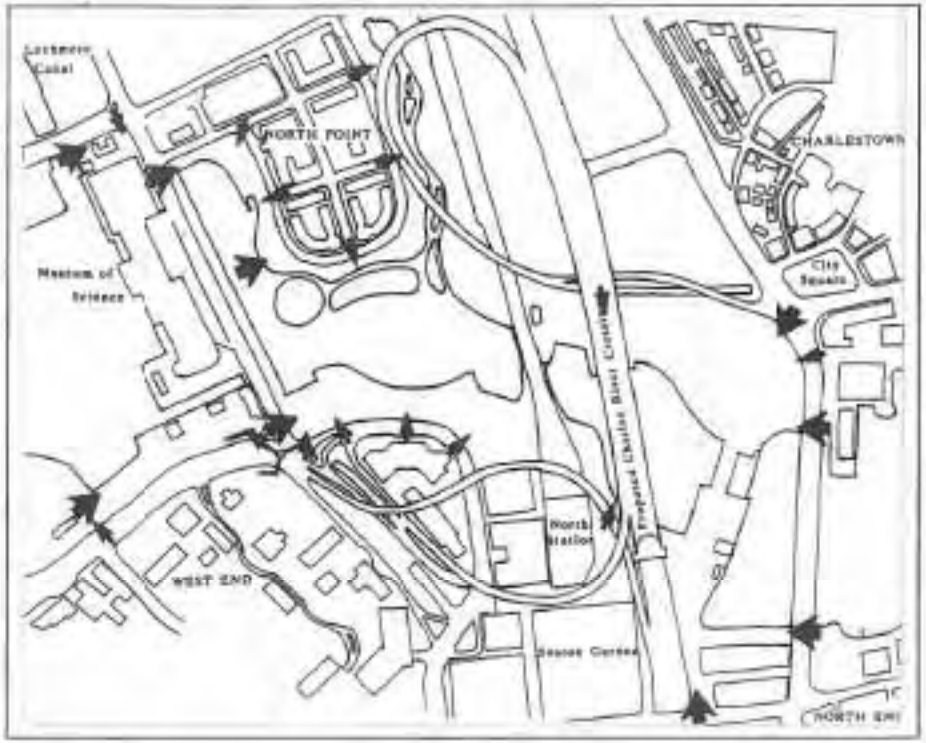
- The regional gateways to the New Basin are the entrance from City Square across Rutherford Avenue to Revere Landing Park; the connection from the new Central Artery parks across Causeway Street through Portal Park; the points of arrival from the Boston Esplanade to the Charles River Visitor Center and from the Cambridge Esplanade to the historic stables building; and the entrances from the old dam on grade across the O'Brien Highway and through the archways of the Green Line Viaduct into North Point and Nashua Meadows.

- Harborpark connections include the several passages under the Charlestown Bridge: two from the Charleston Navy Yard into Revere Landing Park and one from the North End into Lovejoy Wharf.

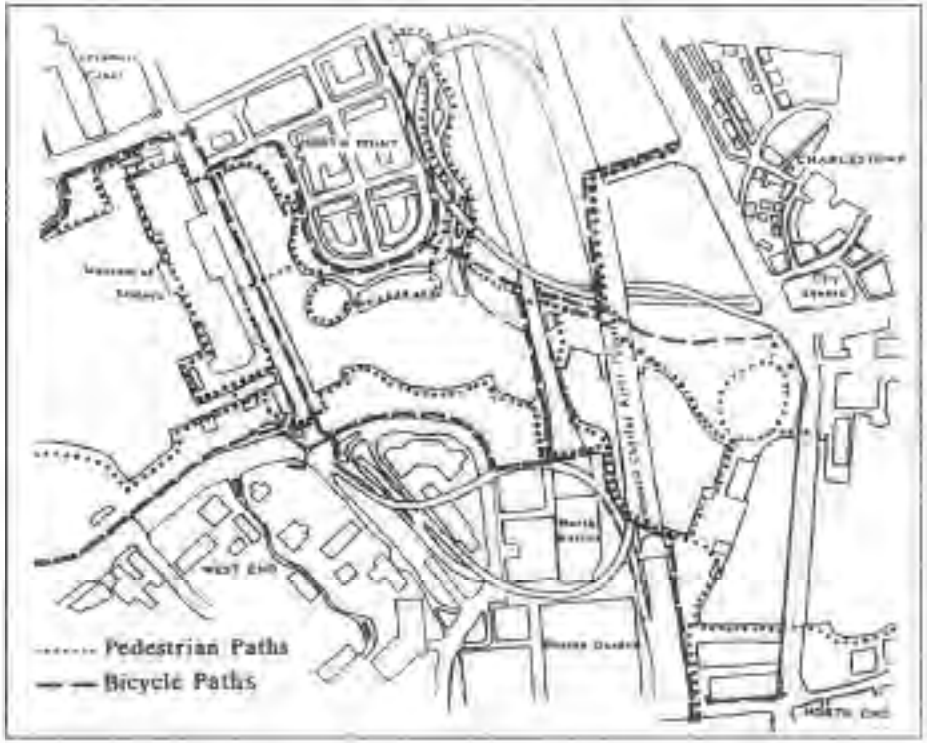
- The connections between the New Basin and the surrounding neighborhoods and city parks are marked by other key gateways. These connections include the route from Martha Way and Charles River Park across the Storrow Drive footbridge into the Charles River Visitor Center and through the Science Park transit station mezzanine to Nashua Meadows; from Rutherford Avenue under the Central Artery ramps and bridges into the Bascule Meadows area; from the Suffolk County jail and several other locations along Nashua Street into Nashua Meadows; from the streets of North Point into the parks; and from the Lechmere Canal across Land Boulevard into the historic dam area.

7. Continuous pathways should link the New Basin to the Lower Basin, Boston Harbor, and other park systems and provide for several modes of travel, separating bicyclists and rollerbladers from those on foot or in wheelchairs.

- At the upland edge of the park, a broad smooth-surfaced pathway fifteen feet wide will serve the needs primarily of people on bicycles and rollerblades or fast-moving joggers. Shaded by street trees, the upper pathway will generally parallel streets or roadways. When the path borders streets with parking, the area between the path and the curb should have special paving that allows people to enter or exit vehicles without stepping directly into the path of bicyclists or other high-speed park users.



The gateway diagram shows primary and secondary entrances into the New Basin.



The circulation diagram shows the bicycle paths (dashed) along the roads and pedestrian paths (dotted) penetrating the parks and running along the water's edge.

- Curving along the upper edge of the meadows, just below the tall trees, a smaller intermediate pathway eight feet wide will serve strollers and slower joggers.

- At the river's edge, a broader pathway (twelve feet wide) will serve as a slow-paced waterfront promenade, with benches and lights on the upland side of the path.

- A series of spur paths (eight to twelve feet wide) should connect the continuous linear path systems to the surrounding neighborhoods and urban park systems.

- All paths, bridges, and ramps will be handicap accessible. On all but the upper path, paving materials should be selected to discourage fast-moving bicycles and skaters, while still allowing for wheelchair and stroller use. Smooth asphalt unit pavers with rougher strips of granite set at approximately ten feet on center should

be tested for this purpose. Paths in the North Point Wilds should be more informally paved in stone dust.

- Ramps leading up to rail crossings and elsewhere should be a minimum of ten feet wide to allow for cyclists, rollerbladers, people on foot and people in wheelchairs to pass comfortably. The railroad bridges themselves should be twelve feet wide to allow people to stop along the way and enjoy the view without blocking movement.

- Supplementing the ramps, the towers at the ends of the bridges should also have wheelchair lifts and stairs. The lifts should be in tempered glass enclosures to make them visible and safe.

- Cross-river connections under the Green Line Viaduct and on the bascule bridges should also be at least eight feet wide to allow for passage.

8. Spaces within the park should support a wide variety of mainly passive activities.

- Lawn areas should be gently sloping to provide for comfortable sitting or lying down with a view of the water. Where lawns are large enough, trees and plantings should be placed to allow for informal sports and active play by children and families.

- Terraces in the upland areas should be well-shaded and populated with many benches and picnic tables, oriented generally for good views of the water across the sunny meadows. Surfaces here should be relatively soft to allow small children to tumble about.

- Plazas, generally at gateways, at the water's edge, or in special locations such as under the cable stay bridge and in Revere Plaza should be decoratively paved with special inserts (often telling stories) and should be amply supplied with benches.

- The two designated playgrounds, at North Point and in Revere Landing Park, should be paved with safety surface, fenced, and also provided with ample benches.

- The physical design of the park should allow for occasional special events, including basin-wide annual festivals and smaller gatherings, which might be sponsored by adjacent neighborhoods, institutions, or other groups.

9. The physical design of the park should be reinforced by a comprehensive program of environmental, recreational, and cultural activities.

- Programs should focus on the multiple relationships between nature and human culture as revealed by the presence and history of the river in the city.

- An environmental discovery program should be managed by MDC park rangers, trained to deal with the connections between the urban and the natural

environment. The North Point Wilds would provide a special opportunity for this program.

- The Charles River Visitor Center, making use of the historic structures at the south end of the old dam, would be a starting point for the discovery program. Here the visitor would find a permanent exhibit on the Charles River and its relationship to human habitation and the creation of the Boston metropolis. Changes in the river would be explained and illustrated not only by audio-visual means but by a kind of "working model" spray pool for children. The offices of the environmental discovery program would also be housed here, together with community classrooms and meeting space.

- In addition to ranger-assisted active exploration of the park and its lessons, there must be many interpretive features built into the park environment. These will highlight special aspects of the park and its urban context and provide opportunities for artists and designers to give visible expression to other themes which are appropriate to the area.

- The New Basin should become host to special gatherings and annual festivals. Great spaces attract great events and these in turn make the place more memorable and meaningful to those who use it daily or for those who visit only for the special event. Neighborhood-oriented festivals and events should also be encouraged.

3

ANIMATING THE NEW BASIN

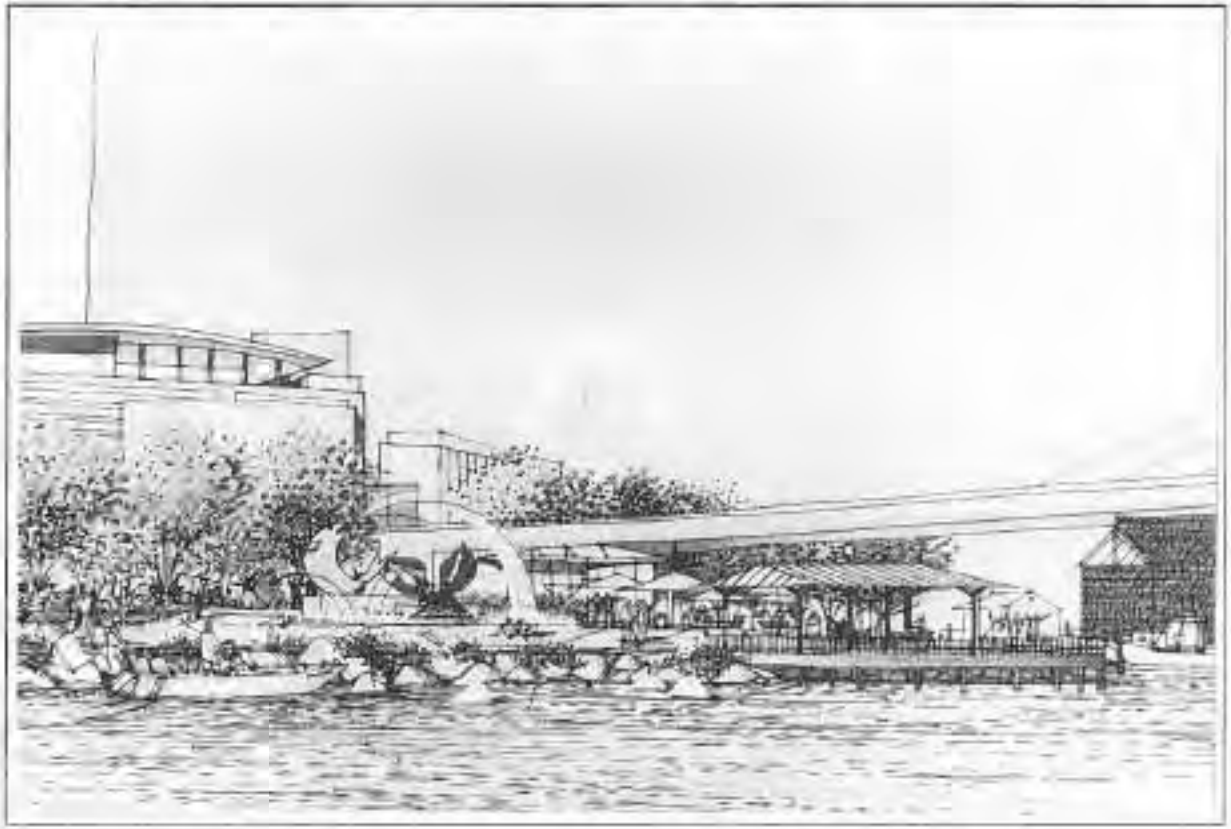
INTERPRETIVE DESIGN

The incorporation of interpretation in the making of landscapes and structures is a continuing universal human occupation. Wherever and whenever people interact with and shape the environment, they mark their efforts with thoughts and ideas about place, time, and life. The complex and rich story of the Charles River Basin provides abundant inspiration and resources for the respectful continuation of this great tradition.

The New Charles River Basin master plan approaches interpretive design at three levels. The first level integrates interpretation into the actual design of the park and its furnishings. The second level creates larger scale interpretative events at certain locations throughout the New Basin. The third level establishes interpretive destination sites which will house and support both permanent and temporary exhibits and ongoing interpretive activities.

Level One Interpretation

The level one elements are designed into the park itself, incorporated into pathways, benches, lighting elements, water fountains, pavement, building entrances, gateways, kiosks, railings, and footbridges. These elements might convey the history of the area, denote uses, provide information about the natural environment, or indicate views. This approach continues the universal tradition of marking the



A whimsical fountain of intertwined river and sea creatures is located at the mouth of the river, emphasizing the theme of connections.

environment with thoughtful explication of human experience, and also provides certain opportunities:

- Establishment of a different character for each discrete park parcel while maintaining the continuity of the whole.
- Creative collaboration between diverse talents, such as artists, citizens, historians, ecologists, designers, and engineers.
- Perceptual orientation and organizational features for park users, focusing attention on certain physical aspects of the built and natural environment and enhancing or mitigating unusual environmental features.

Integrating interpretation into ordinary park furnishings and finishes goes beyond conveying information and providing kinesthetic delight. Such interpretive elements invite park users to establish visual and sensory relationships, aiding them in developing a sense of place and a feeling of ownership and pride.

The theme of the level one interpretive elements will build on the overall theme of connections in the New Basin. For example, the succession of river crossings in this area could be illustrated with a timeline embedded in the pavement. The relationship of the river to the neighboring communities could be highlighted with images, names and other elements that celebrate the history and life of Charlestown or the old West End. Historic tools, trinkets and products that chronicle the industrial history of East Cambridge could be incorporated into the furnishings of North Point Meadows. The natural life of the river and its banks could be portrayed by silhouettes of flora and fauna and markings that tell the story of the run of the fish upriver to spawn. Views across the water or across the city to local landmarks could be called out in the pavement. Each entrance or gateway to the New Basin will have interpretive elements designed into it so that the visitor will be immediately cued to look for informative surprises integrated into the landscape.

Level Two Interpretation

Level two interpretation provides interpretive installations on a larger scale to invite interaction and more sustained attention. In addition to again providing opportunities for artists to join in creative collaboration, these installations allow the park user to experience more involved interpretive concepts. At the same time, these installations will become landmarks—orientation points helping park users to identify and mentally organize the space, a necessary perceptual factor in the way people develop spatial knowledge, orientation and location.

As orientation points, the level two elements are strategically located around the New Basin, often serving as the centerpiece for a particular character area. Together the set of these interpretive elements define the connections theme. For example, at the historic dam, a scale model of the Charles River illustrates the relationship of the New Dam to the larger context of the watershed. In Nashua Meadows, the beacon is a major marker for the river channel and could become an opportunity to

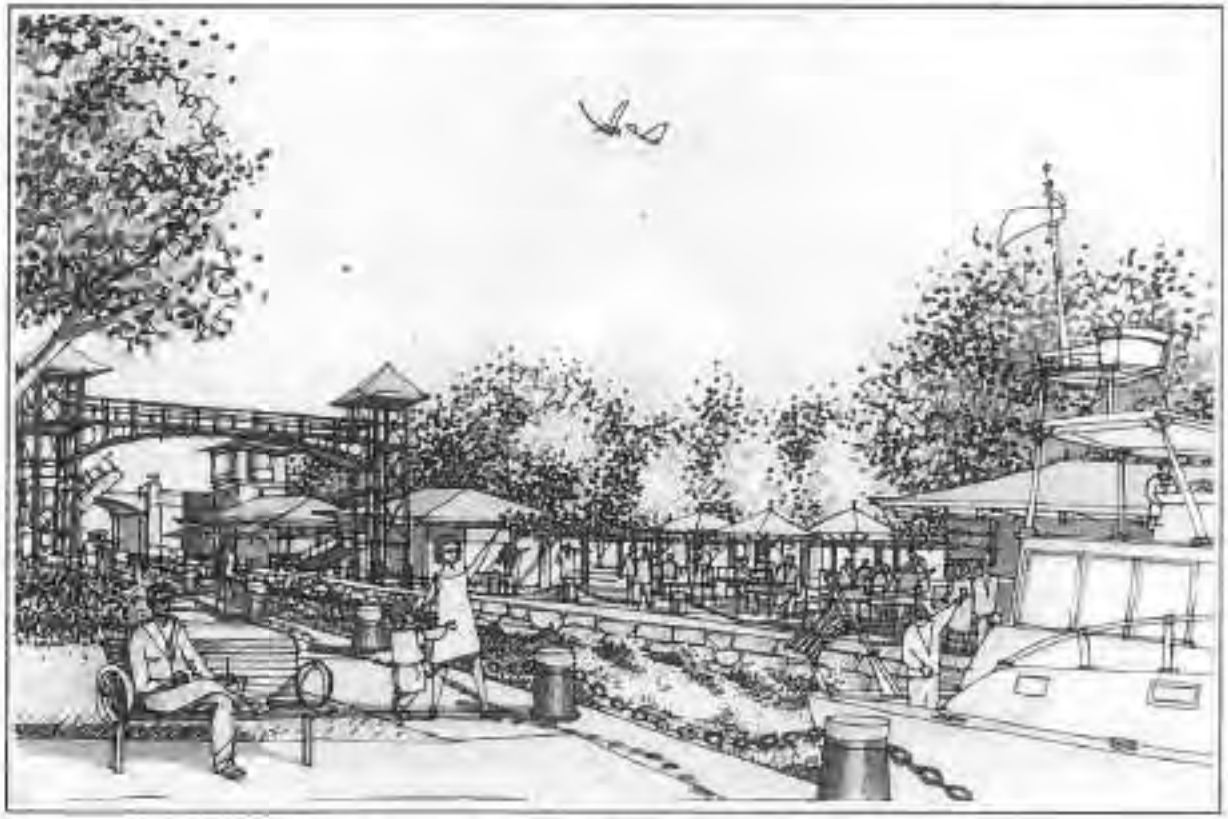
explore the changes in the river over time. A sports hero walk identifies one of the New Basin gateways with the activities of the adjacent city. A fountain at Revere Plaza marks the juncture of the river with the harbor. Under the cable stay bridge in Charlestown Meadows, an interpretive installation deals with the bridge as a regional transportation link.

Level Three Interpretation

Level three interpretation is concerned with the creation within the New Basin of destination sites that will attract visitors for the specific purpose of interpretive experience. These installations are the anchors of the New Basin's interpretive infrastructure, providing thematic context and integration of all park interpretation through both permanent and temporary exhibits. In addition, these installations will support and house ongoing interpretive programs.

The primary gateway to the New Basin will be the Charles River Visitor Center, housed in the restored historic building complex at the site of the old dam. Here, information, orientation, and education will be available to park visitors. The Visitor Center will have both permanent and changing exhibits which explore connections between the New Basin and its surrounding in terms of ecology, uses, people, and cultural history.

For school children, the Learning Lab Barge will be an important destination. This environmental science laboratory will explore river ecology in a hands-on learning environment. Interactive displays on the New Dam and audio-visual programs in the pumping station



The Charles River Visitor Center is housed in a restored historic building on the old dam.

will explore the operation and the mechanisms that control the flow of the once tidal river.

Many visitors will be intrigued by the historic schooner (either a restored ship or a replica) moored at the North Point inlet. Going aboard, they will learn more about boats on the river. From the nearby boat house, paddle boats, canoes, and rowboats will be rented out for day use. Bascule Bridge Park will be an important destination as a center for both temporary and permanent exhibits of art works. The industrial forms, the bridge and its mechanisms, and the abandoned piles in the river form a special setting for individual sculptures or complete environmental installations.

Interpretation and Public Art

The approach to interpretive design in the New Basin widens the concept of public art to include the entire design of place, not merely the inclusion of individual art works (although that is important). Since art is deemed intrinsic to each and every action that forms the space, the collaborative process becomes essential, with individual talents assuming responsibility for the creative process, each in turn and at the appropriate time. Professional artists will be important members of the team of talents and minds that shape the New Basin. In certain instances, such as the Bascule Bridge Park, artists' work will become the content and focus of the area as well as part of the process. The plaza at the Charles River Visitor Center will also feature changing art installations. Through the interim and permanent programs, artists and their work will continue to be part of the New Basin beyond its creation and into its operational life.

When the New Basin enters its next phase, a necessary first step will be the design of a collaborative process for bringing talents together to accomplish the creation of this new open space. This process design must include the roles of all participants set out in a sequence of creative endeavor that defines the functioning role of each participant. Citizens, artists, designers, historians, ecologists, engineers, fabricators, contractors and many others might play a role in such a process.

INTERPRETIVE EXHIBITS

Interpretation Prior to New Basin Opening

Activities designed to interpret the project actually can begin prior to the construction and opening of the New Basin. The purpose of these activities would be:

- To inform the public of the planning underway and to allow citizens' ideas and thoughts to be conveyed to the MDC.
- To build a constituency for this undertaking.

As a major public open space, the New Charles River Basin will make a powerful contribution to the city image and the healthy functioning of the metropolitan environment. Because the New Basin completes a long-anticipated linking of river and sea and ties together disparate communities and experiences, its creation affords a rare conjunction of past planning and future preparation and represents a significant moment in the life of the community.

In order to share this momentous undertaking with a wide and varied public, a temporary exhibit is proposed. Designed for the general public and devoted to the themes of connections, this exhibition will be installed in the Museum of Science. By exploring the interpretive themes of the New Basin, visitors will have time to learn about this complicated undertaking, to reflect upon the project, to explore various subjects and levels of interest, and to take part in interactive experience that will provide information for the MDC and park planners. The major components of the exhibit will be designed and fabricated so they can be stored when the temporary exhibit closes, then moved and adapted to a permanent installation in the Charles River Visitor Center.

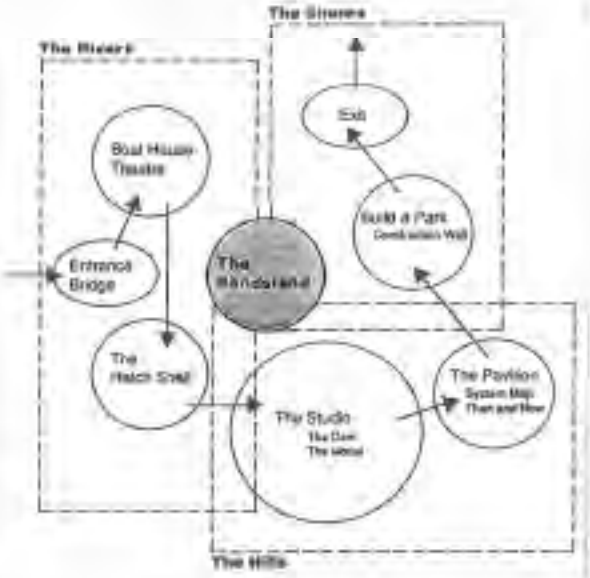
Exhibition Purposes

The goals of the exhibit are:

- To produce exhibit elements that can be reused in the New Basin permanent facilities.
- To heighten public awareness of the connections and interactions among the many elements, both natural and man-made, in this place of habitation.
- To increase public understanding of this project and how it has come about and strengthen the public's sense of connection to this undertaking.

The exhibit should follow these criteria and guidelines:

- The exhibition should be sufficiently distinctive that it will stand out in the midst of the many Science Museum exhibits.
- It should promote understanding of how the urban environment works and the role of parks in that environmental system.
- The temporary exhibits should be timeless; they should not be tied to the specific time of production by clothing styles, signage, and other visual references, so that the viewer feels that this is a current presentation whenever they see it.
- The temporary exhibits should be designed to function successfully in the designated permanent locations.
- The exhibition design and production should be accomplished within a 12 to 14 month time frame.
- The exhibit should be designed to accommodate programmatic activities.



The exhibit layout could reflect the hills, the rivers, and the shores of the Metropolitan Park System.

Exhibition Story Line

The exhibit is designed as an interactive experience, which communicates certain ideas and information by the means of kinesthetic experience. The exhibition visitor is an active participant making choices and using senses to explore and understand the exhibition concepts.

The life that exists along the banks of the river will be described at the Visitor Center.

The visitor would enter the exhibit through a gateway and arrive in a shaped space, which would introduce the subject of river and city connections. After this introductory experience, the visitor would enter the main exhibit. The main exhibit would appear as a series of nodes each linked to the others by an ingenious system of connectors, including bridges, tunnels, paths, mazes, ramps, and platforms. These connectors would also serve as display corridors, each with a theme exploring an idea embodied in the New Basin. This exhibit will continuously challenge the visitor to make choices, look closely, explore, and think.

The first node would present "The Charles River Ride." Entering a theater designed like a boat dock, the visitors would have the effect of travelling the Charles River by boat, viewing the passing scene from the water. This journey from the river's headwaters in Hopkinton to the tumult of Boston Harbor could take place in one spring or fall day and would capture the changing essence of the Charles as it makes its way to the sea: natural habitats and wildlife, different boats on the river, signs of long-abandoned mill dams and carting paths, landmark bridges along the way, the Esplanade and lagoons, and the key features of the New Basin before finally passing through the new dam and out into the harbor.

The second node would be found in a facsimile of the Hatch Shell, which would present a short video. The purpose of this video would be to explain the breadth and depth of the MDC's responsibilities for the Metropolitan Park System. Significant activities would be presented through photographic portraits and conversations with MDC archaeologists, flood control engineers, gardeners, and planners as they go about their work in the field.

The third node would be an interactive theater containing a large-scale model of the basin surrounding an audio-visual presentation showing the development of the park before and after. Individual visitors could activate the display by pushing buttons that would light parts of the model and trigger specific sound and visual projections. Alternatively, an MDC host could lead a game-like discussion session, covering such topics as public art, programs,

community connections, history, and cultural heritage.

A demonstration place would be the fourth node and would serve as a location for a variety of programs and demonstrations. Many of these could be given by MDC employees, while others might be presented by people drawn from throughout the community. Possible demonstrations include horticultural work, history, the role of public art, and various public programs such as musical performances, orientations for tours and school groups.

Exhibition Adaptation to Permanent Use

Most exhibit components could be adapted and installed as permanent exhibits in the Charles River Visitor Center. These include the introductory Connections presentation, the River Ride, the Hatch Shell show, and the Interactive Theater. In addition, certain individual components such as seating, lighting elements, and connector exhibits could be reused.

PUBLIC PROGRAMMING

The creation of the New Charles River Basin provides opportunities to forge major connections in the region's urban fabric, knitting together a variety of uses and providing for a diversity of users. While space design is the major consideration, this master planning effort has considered the dynamic interaction of time and space by making public programming (or the temporal human activities that will take place in the space) an integral part of the planning process. It is through use and experience that public space fosters community image, identity, and a sense of shared ownership. The intention of this master plan is to create a successful public park, one that will provide a compelling place experience for a variety of users and a range of uses that vary in nature, level, intensity, and frequency.

In order to understand the purposes and potential for programming in the New Basin, a research effort was conducted that examined the history of the area and present-day activities, the larger Boston framework, and projects in other cities. This research established the following:

- Parks are important to the life of the metropolis and need to be supported by a broad-based citizen constituency.

The life that is brought to the river's edge will help shape it physically and culturally for all park users.

- Environmental programs not only can be successful, but they can serve a social purpose within the community, even under difficult circumstances.
- Citizens respond to program opportunities, whether these are environmental education programs or events.
- Events can attract large groups of people in an orderly manner and can produce economic benefit.
- Parks and public places incorporating connections between water and land are part of the community's history and its planning for the future.

Programming Criteria

The program planning will consider the needs of people from the immediate and adjacent surroundings, regional residents who might come for occasional park use or for certain specific events, and tourists who are visiting the region.

The programming will be designed to realize the following goals:

- Promote a sense of connection between all citizens.
- Attract diverse users to participate in a complex pattern of uses ranging from a onetime visit by tourists to daily use by persons from neighboring areas.
- Aid in increasing park security by promoting continuous and populated use, the most important factor in security.
- Enhance appreciation of the public realm and its integral importance in a democratic society.
- Increase awareness and understanding of the environment, both natural and man-made, fostering a sense of connection to and appreciation of the environment.

The community needs will be linked to the space planning and design in order to connect a variety of uses and user groups, to make new connections between spaces that had been separated, and to provide linkage for activities that might be seen as incompatible.

Integration of Space Planning and Programming

Interaction of the following elements are the means for integrating space planning and programs:

- The nature, configuration, space, condition, and circumstances of the physical space.
- The image and interactions of that particular space with the physical context surrounding it.
- The perceptions, expectations, needs, and habits of people who use (or could use) the site and their access to it.
- The image of the space in terms of the perceptual constructs and "mental maps" of residents.

Pre-Opening Programs

Programs conducted prior to park opening would serve the following purposes:

- Provide the public with awareness and understanding of the project.
- Begin development of a park constituency.
- Allow for an exchange of ideas with the public.
- Test experimental and prototypical concepts and ideas for park designs before translation into final form.

Pre-opening programs might include the following:

- Guided tours on topics such as history, natural processes, transportation, or development of the New Basin.
- Temporary art installations, which can focus public awareness and test ideas for future programming efforts.
- Performances, which can draw public attention to future park development.
- Demonstrations and workshops, which could become the basis for future programs or which could result in public contributions to the development of the New Basin, such as work on murals or hand-crafted tiles.
- Special events can be staged in coordination with project development, such as cleanup days.

Permanent Programs

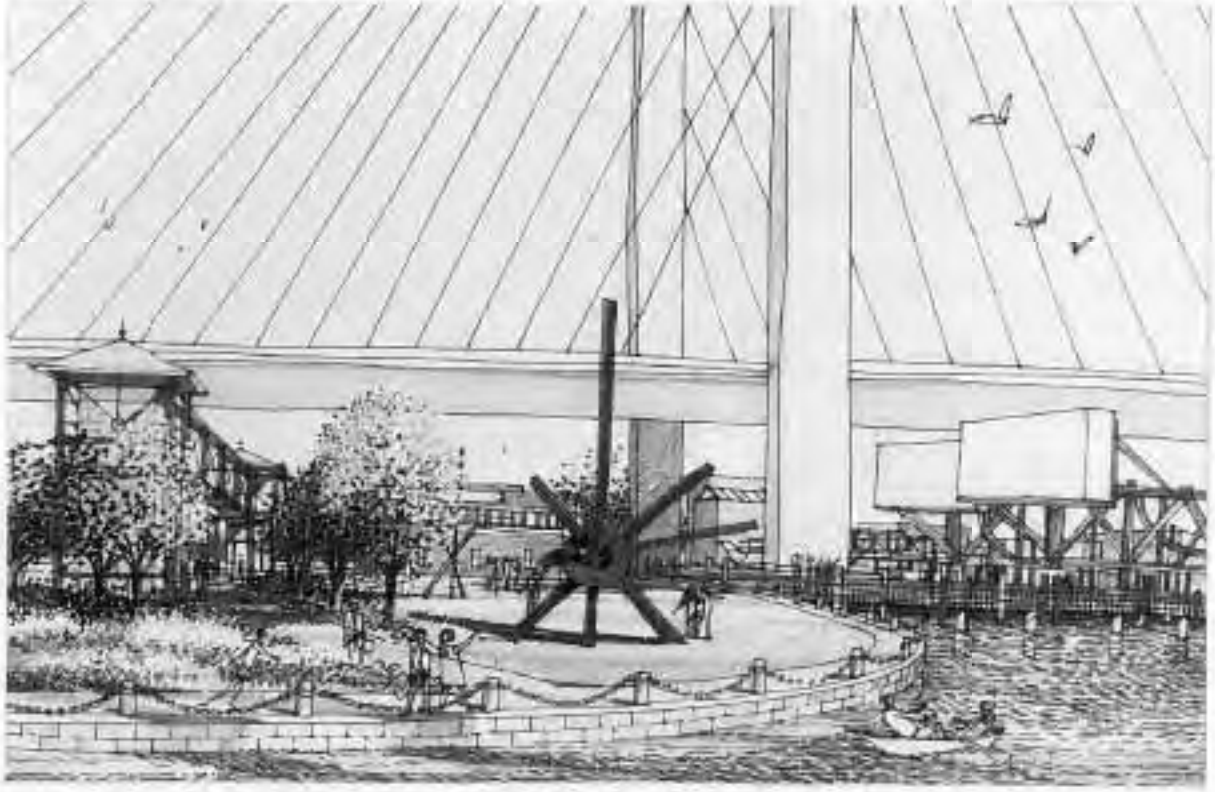
An ongoing, multitrack program schedule will be a major asset of the New Charles River Basin. It will take some time, however, to develop a full schedule of programs. Program categories should remain relatively stable, while specific programs can and should change to meet the community's needs. Some of the programs will require advance registration while others can be offered on a "drop-in" basis. The following sections elaborate on the categories of permanent programming.

Exhibits

While exhibits in the New Basin will serve informational and education purpose on their own, they also can serve as settings and locations for programs.

- The Charles River Visitor Center will have both permanent and changing exhibits, some of which could be adapted for changing demonstrations. These exhibits will be the basis for programs that provide orientation, information, and education about the New Basin and the city.
- The historic schooner moored at North Point inlet together with the boat house can serve as the centerpiece for programs on boating and boats as well as a setting for programs on the history of East Cambridge.

- Bascule Bridge Park will have permanent and temporary art works, and can become a center for arts programs, some of which may be sponsored by the Art in the Park program.
- At the new dam, the scale model of the lock system in the plaza together with the exhibits in and around the building can serve as focus for a program of water systems and their control.



Outdoor exhibits, including art works, historic ships and scale models of the workings of the river, provide opportunities to integrate the community with the park.

Arts in the Park

The strong integration of art works into the park, coupled with the understanding that the park itself is intended to be a work of art, provides the framework for art programs designed to attract diverse audiences, ranging from school children to artists themselves. These programs could be education courses, workshops, demonstrations, exhibits, or performances. Literary, performing, and visual art could all be explored. In addition, art programs can be integrated with history and science programs to provide a more comprehensive way to consider human experience and its expression.

School Programs

School programs designed to serve the full range of students, beginning with kindergarten and continuing through college level. The park provides an active learning area, one where discovery methods can be employed as a teaching strategy. The approach could center on

art, history, science, or technology — or integrate all of these within the park setting. One strategy might be to work with the established school curriculum, providing programs designed within the concepts mandated for each grade. In addition to student-oriented programs, it would be possible to create an education resource center in the Charles River Visitor Center, to support teacher training and the development of curriculum materials.

Programs should be tailored to each age group, and might include topics of environmental awareness, science in the city, the exploration of natural and man-made environments, history of place, laboratory science, career development programs, among many other possibilities.

Adult Programs

The range of adult programs and their subjects are limited only by the imagination and the resources available. The following are a few examples:

- Classes on boating, gardening, sketching, plant identification, or local history.
- Tours could be self-guided with maps, brochures, and audio cassettes, or guided according to a particular subject, such as technology, art, plants, water systems, or river history.
- Volunteer training, which would familiarize volunteers with the New Basin's many features and offerings and provide specialized instruction related to particular service assignments.
- Community Programs that might include talks and lectures, workshop, demonstrations, family activities, or film series, encompassing subjects from the history of open space in Boston to a family gardening workshop.
- Recreational activities, including instruction, events, team development, day camps, workshops, classes, and informal discussions.
- Special events, such as onetime programs linked to occasions, holidays, or seasons, and including performances, appearances by special persons, or cleanup days.

Students learn about the riverine ecosystem as part of a wide-ranging education program.

Festivals

Large-scale celebrations perform a particular service in a community by bringing together large and diverse groups of people; focusing attention on community attributes, strengths and talents; and providing a sense of common identity and communal expression. In many cities, festivals have become not only a symbol of the city, but an important event treasured by both residents and visitors. Boston's First Night and Fourth of July celebrations illustrate this principle. The New Charles River Basin will offer an ideal setting for festivals, since the space has been planned to adapt and accommodate large gatherings on a temporary basis. The infrastructure for festivals (electrical hookups, portable stage locations, water sources, etc.) will be built into the design. Two festivals, which could occur annually or biannually, are suggested:

- Children's Festival This family-oriented event would take place over a weekend and would be designed as a celebration for and about children. Efforts should be made to draw participation from all segments of the population and all sectors of the region. Properly developed, this event could become a festival of stature and importance, one that is widely famous. Late spring or early summer might be a good time for staging. Two events that might serve as case studies are the Richmond, Virginia, Children's Festival and the Vancouver, British Columbia, Canada, Children's Festival.

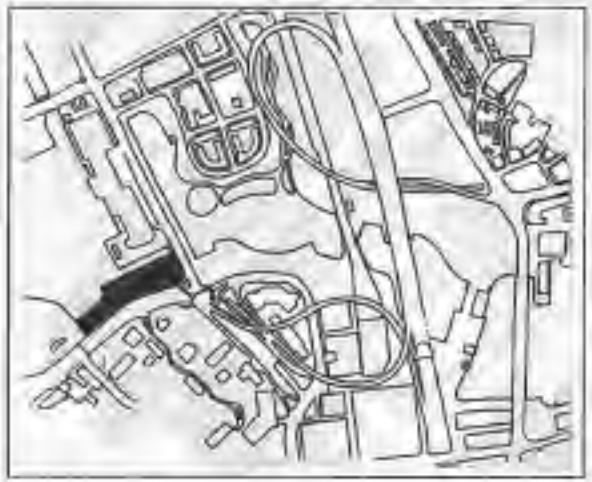
- Charles River Festival and Boat Parade Celebrating the River and its role in the life of Boston, this festival would have a special emphasis on river activities, including boats and boating. The centerpiece of the celebration would be a nighttime parade of boats festooned with lights and decoration becoming literal "floats." Such a parade can be captivating. The New Charles River Basin would be ideal for staging such a festival in early fall. Events that can provide precedents are the San Antonio Fiesta River Parade, the Chattanooga, Tennessee, Festival of Rivers, and the Vancouver, Canada, Sea Festival.

4

A WALK THROUGH THE NEW BASIN

THE CHARLES RIVER VISITOR CENTER ON THE HISTORIC DAM

Approaching the New Basin from all directions, the tower on the lower lock house marks the location of the new visitor center on the southern position of the historic dam (3.7 acres). People come to the Charles River Visitor Center by boat and on foot, bicycle, rollerblade, and wheelchair. Some have arrived via the MBTA Green Line, others via the Orange Line and commuter rail at North Station. Still others combine it with a visit to the Science Museum. Some have parked their cars nearby, while others simply live close at hand, crossing the

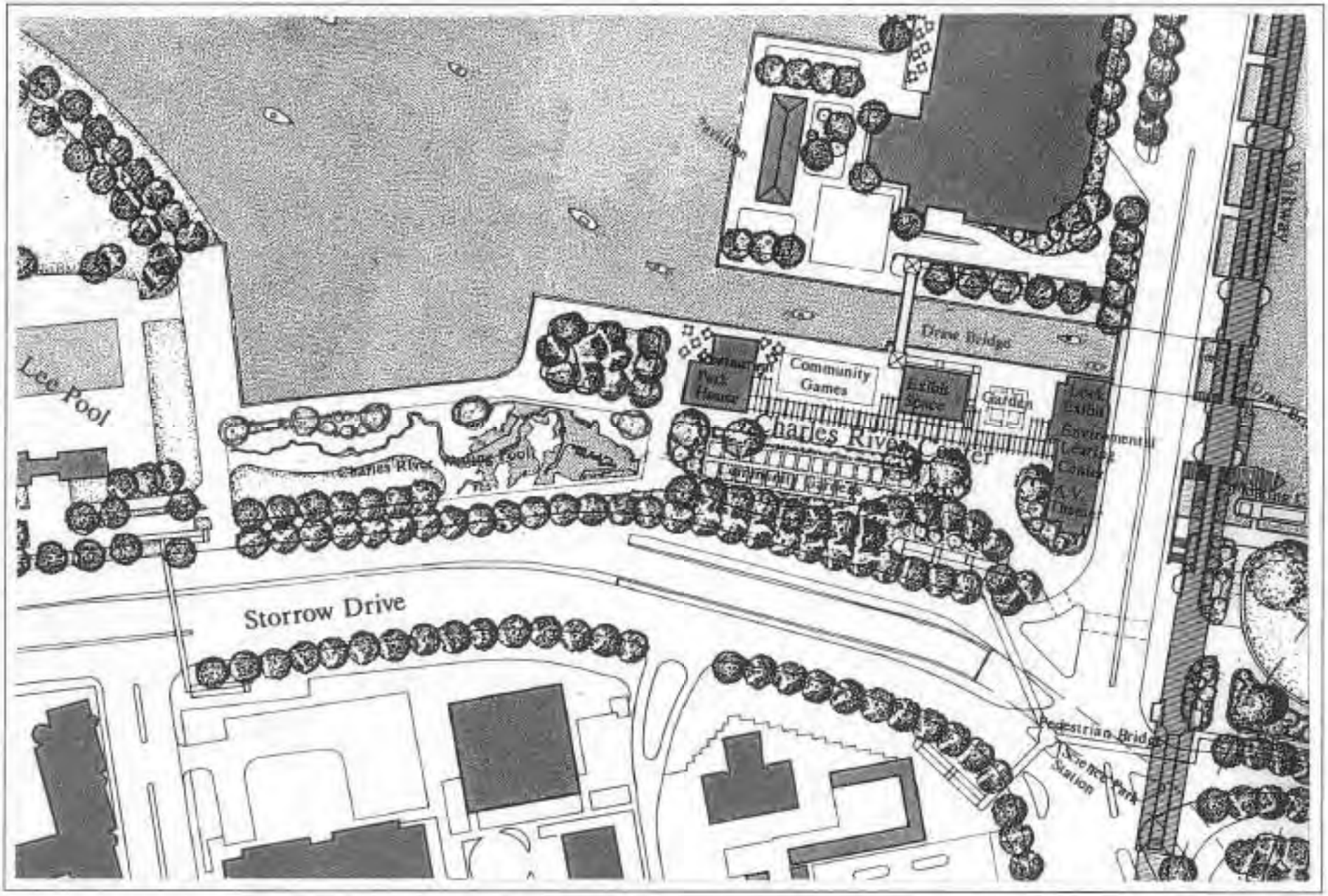


pedestrian bridge over Storrow Drive. School children are dropped off at the Science Museum turn-around on the north side of the old lock and cross to the Center on the new drawbridge.

The complex of historic buildings provides information and orientation for first-time visitors who seek it out as their first stop, as well as for more frequent visitors who are traveling along the length of the Charles or crossing between Boston and Cambridge. Housed within the historic upper lock house, flood control building, and lower lock house (the former police station), multi-media exhibits and activities reveal the many facets of the Charles River and its relationship to the city, harbor, and the bridges and dams that cross it. As the gateway into the New Basin, the Center highlights the walking tours, the history, the sights and special features of this newly created public open space.

Some people begin their visit by exploring the videos, installations, and other interactive displays that take the visitor on a journey down the length of the Charles River and highlight the responsibilities and functions of the MDC as guardian of the reservation and the Metropolitan Park System. Others may find the multi-media presentation in the lower lock house theater to be the best introduction to the river, its parks, and activities, setting them within the larger context of the metropolis and its great park system. At the ground level of the lock house, historic photos, scale models, and interactive displays tell the story of the historic locks and the radical transformation of the Charles River as a result of the construction of the first dam. Upstairs are classrooms and offices for the Charles River environmental discovery program, some of which are available for meetings and workshops by community groups.

Outdoor exhibits and temporary art works in a large plaza attract those passing through, who may catch their breath under the shady arbor that connects the buildings of the Visitor Center. A formal garden offers a quiet sanctuary for visitors to rest. For many, the restaurant with its outdoor tables at the upper lock house is a favorite meeting place, a place to watch the boats pass and to gaze out on the lower basin stretching away to the Longfellow Bridge and beyond.


Lee Pool
Charles River
Wading Pool
Drive Bridge
Community Games
Exhibit Space
Garden
Environmental Learning Center
A.V. Theater
Storrow Drive
Pedestrian Bridge
Science Park Station
Walkway

Crowds of school children, tour groups, and others gather under the shade of the arbor and in the open plazas and lawns around the Visitor Center. Nearby a scale model of the Charles River set into the level of the pavement provides an ideal orientation to the experience of the river and its relationship to the harbor and the city. The model depicts the original shape of the river channel and the gradual encroachment of the land into the mudflats and the river. Water spills out from the edge of the original shoreline and seeps across the mudflats, while occasional randomly programmed sprays of water from the river channel surprise and delight children and adults as they step into this miniature model and explore the length of the river.

During festivals, the shady lawn and the jutting promenade provide an excellent vantage point for activities in the Lower Basin, upstream of the historic dam. At other times, this place becomes a tranquil spot for gazing across the water or having a quiet picnic. Gardeners working in the nearby community gardens create a rich and diverse landscape and provide a local presence to balance the more transient

Viewers watch as a boat passes through the old lock. The footbridge is then lowered to give access across the lock to the Museum of Science and the rest of the park.

use of the Visitor Center. The benches, lighting, railings, and other park furnishings throughout the area are patterned on historic elements originally designed for the dam when it opened at the turn of the century.

Traveling in and around the exhibits and through the historic dam area, there are several pathways to choose from. The water's edge promenade follows the seawall and the channel of the old lock. An intermediate path passes

along the length of the arbor and serves as a front door to the Charles River Visitor Center buildings. Bicyclists pass under the double row of shade trees along the edge of Storrow Drive leading to an at-grade crossing to Nashua Meadows or an overhead pedestrian bridge across the O'Brien Highway and Storrow Drive.

When a tall boat passes through the canal of the old lock, the drawbridge and the new foot bridges rise high in the air. This dramatic event creates a momentary pause in the movement across the dam and attracts the attention of casual visitors, tour groups, and school children on both sides of the lock. When the bridges are lowered, the crowds mix once more, people move across the foot bridges, and the cars move on. Some people continue to explore the exhibits at the Center, while others decide to cross over the new footbridge to the Museum of Science or to follow the new walkway on the upstream side of the Museum to the Cambridge shore. Many choose to follow the boats as they make their way out to the harbor, walking, cycling, or skating along the banks of the river.

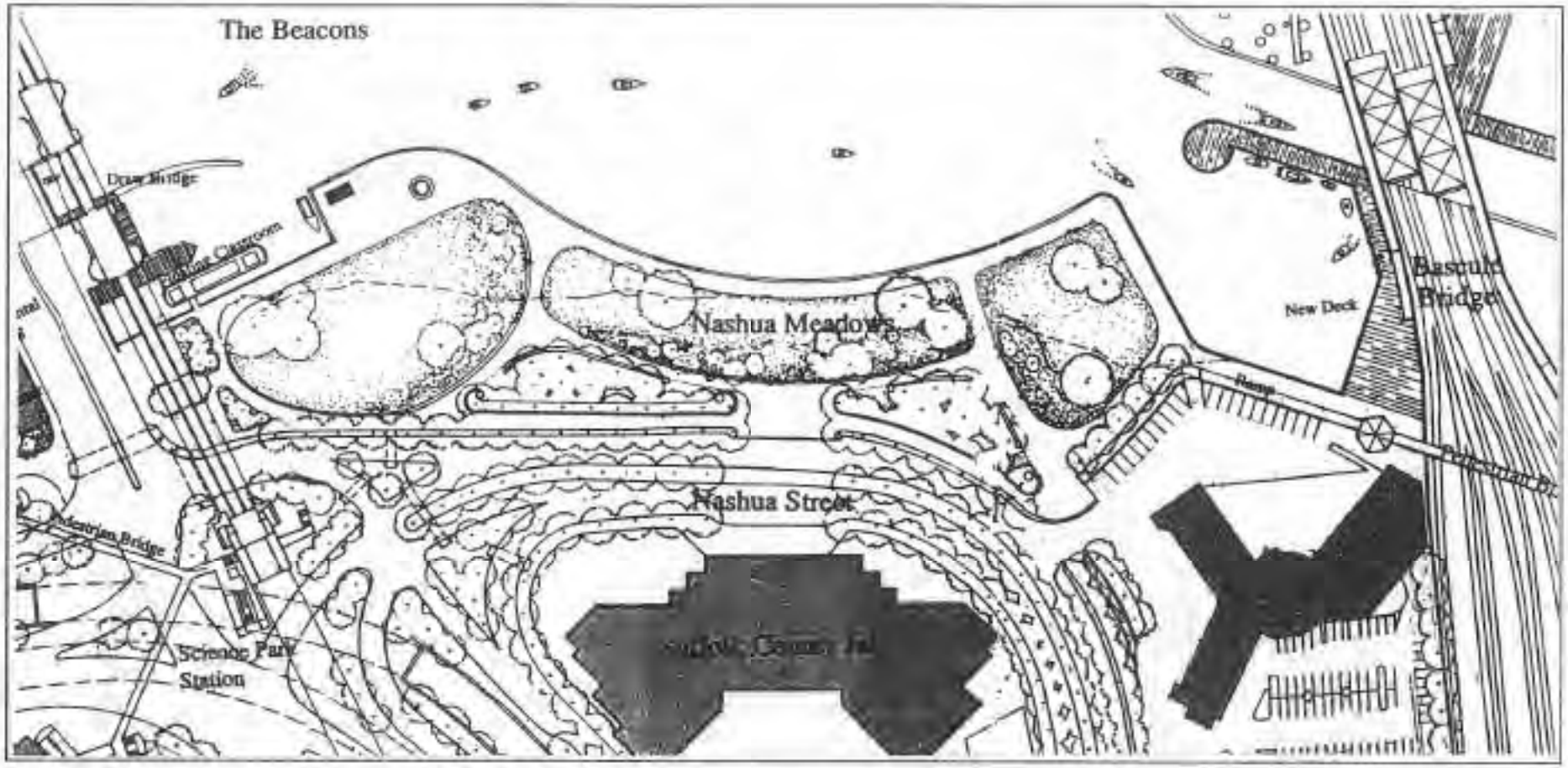
Implementation Issues

- *Final design of Leverett Circle should reroute the Nashua Street/Storrow Drive roadway connection under the Science Park Transit Station so that the final arch of the Green Line viaduct becomes the major pedestrian entrance to Nashua Meadows and the New Basin.*

- *The redesign of the Science Park Transit Station should provide free mezzanine-level pedestrian access from Charles River and Martha Way to Nashua Meadows via a new pedestrian bridge.*

- *Police use of the lower lock building and MDC garage functions in the flood control building must be relocated before renovations can begin.*

- *Existing public tennis courts in the area must be relocated.*

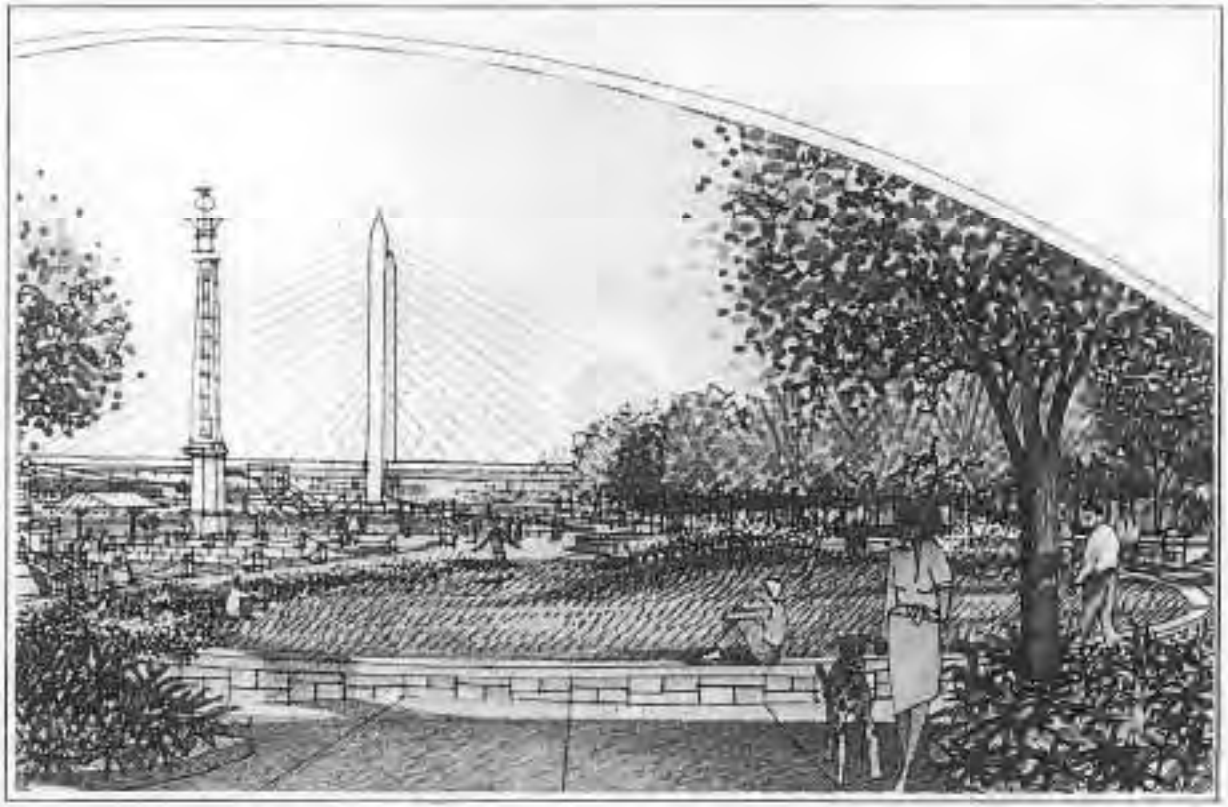


NASHUA MEADOWS

At Nashua Meadows (3.8 acres), Boston's city streets lead down to the river bank where the waters of the Charles open out to the Cambridge shore. Stories from the adjacent city are revealed in small details and major works of sculpture that connect the river banks back to Charles River Park and North Station. Nashua Meadows is also a beautiful link in the journey from the Charles River Visitor Center down to the mouth of the harbor, a place to promenade along broad meadows sweeping down to a long low shoreline. The graceful curve of the shore embraces the water and responds to the opposite shore of North Point. Water taxis, a footbridge under the Green Line viaduct, and a footbridge along the bascule bridges bring the

banks of the river together.

Arriving from the Charles River Visitor Center and Charles River Park, the arch of the green line viaduct opens as a welcoming gateway into the Nashua Meadows. The towering beacon catches the viewer's eye while straight ahead, views of the water, Tower A, and the cable stay bridge appear in the distance. From downtown and North Station, people follow Merrimac Street to Nashua Street, entering through one of several openings that penetrate the dense overhead screen of trees along the upper bank. From the foot of the artery ramp, views connect directly to the historic schooner docked at North Point. From the center of Nashua Meadows, a small lookout pavilion can be seen set among the trees at the North Point Wilds. At a third opening, views of the bascule bridges and the cable stay bridge are dominant. Coming from the east, the entrance via the pedestrian bridge over the rail tracks provides a high vantage point to survey all of the Nashua Meadows as well as to gaze across to North Point and the historic dam.



The gateway entrance into Nashua Meadows shows the beacon and the cable stay bridge. The ground slopes down to the water to allow maximum views of the water and other sites along the river.

Along the upper bank, densely planted street trees offer quiet sitting areas with benches and low terrace walls. From there, one can look down to the river across bold sweeps of perennial flowers and shrubs protected by low walls. Within the meadows, large specimen shade trees offer respite from the sun, attract picnickers under their sheltering canopy, and provide visual anchors. In the open areas, people bask in the sun, toss balls and frisbees, and gather to hear performances from a music barge at the water's edge or to watch special events on the water. At other times, simply watching the

boats pass by is enough to fill an hour or two.

A broad promenade follows the water's edge, marked with special granite features. Ample benches on the upland edge of this walkway provide the ideal setting to watch the world go by with the sun at one's back. A smaller path winds along the edge of the upland trees, passing quietly between the low terrace walls and the profusion of color in the perennial beds. Bicyclists and rollerbladers race along a smooth path under shade trees next to Nashua Street. The widening of Nashua Street would offer the opportunity to create a gracious boulevard with a landscaped central median, curbside parking, and rows of trees on either side, making it easier to cross and less of a barrier between the city and the park.

Stories of the city are told through interpretive elements embedded in the steps, the walls, and the benches of the three terraces. Images of neighborhood streetscapes, lists of residents' names, and tales from oral histories recall the vibrant life of the West End. Another terrace could call out the history and activity surrounding North Station, the arrival of trains, and their contribution to the city's development.

A water's edge promenade encircles the New Basin. The upper banks of the river are enclosed by dense plantings of tall trees.

Each terrace also offers an opportunity for a major sculptural work, playing more freely on such themes.

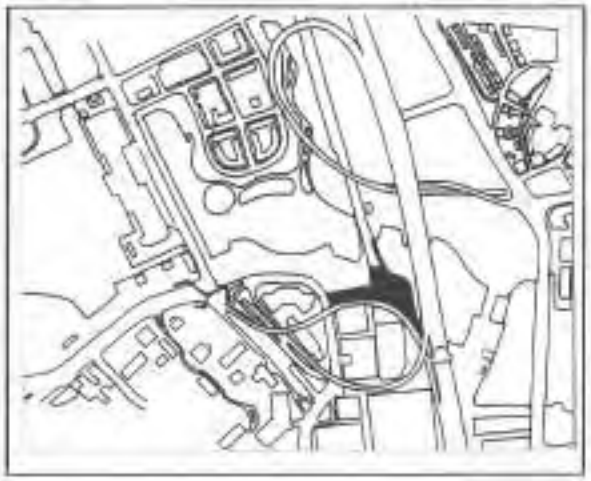
Along the Meadow's edge, a water taxi pulls up to drop passengers from other parts of the New Basin, the upper river, and the harbor. The low sheltering roof and broad eaves of the water taxi shelter invite waiting passengers in out of the sun or rain, where the schedule and routes of the water taxi are posted near the

beacon. School children clamor up the gang-plank of the floating classroom, converted from a small ferry, where they conduct scientific experiments and get hands-on experience about the ecology of the river.

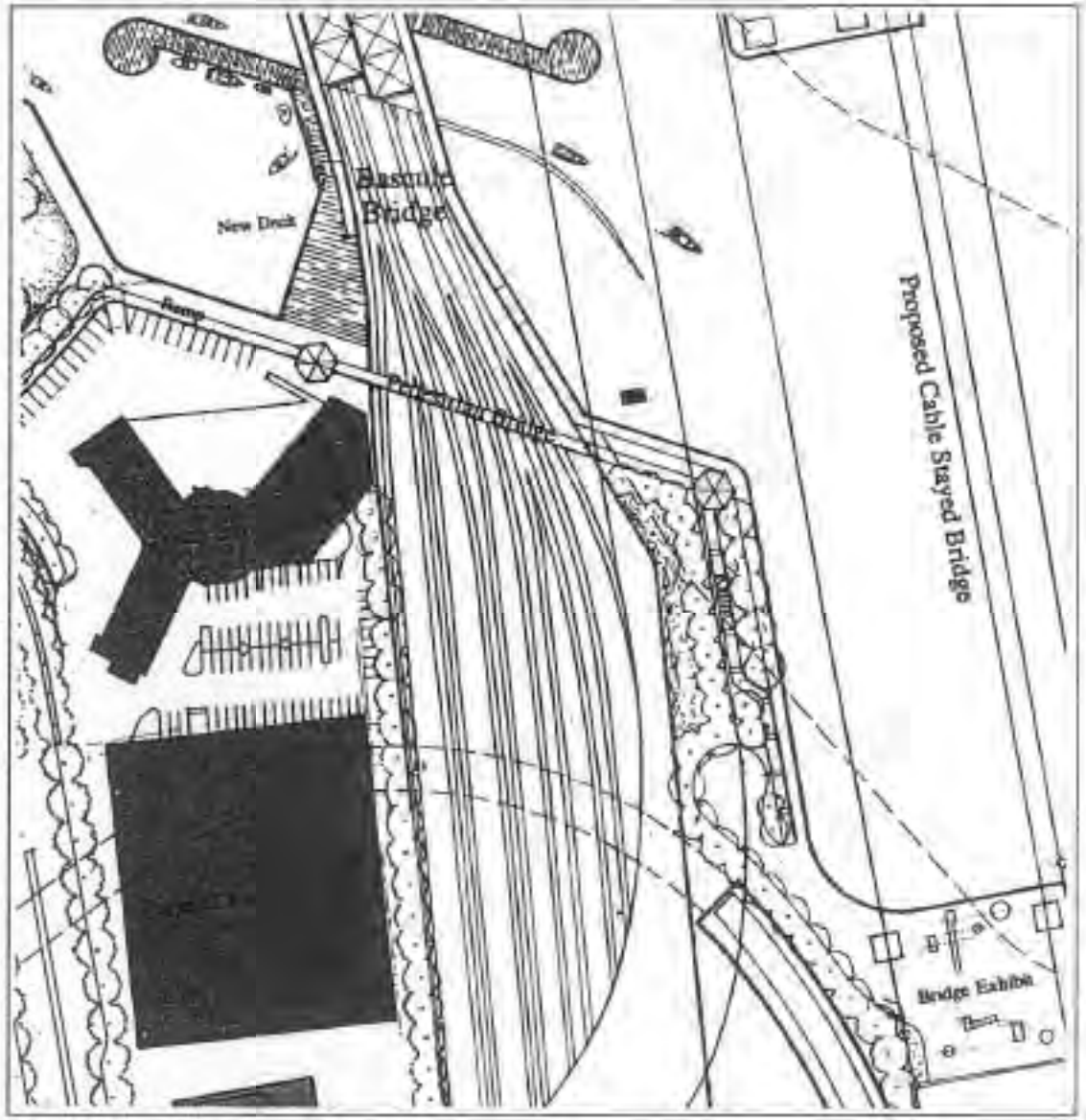
Boaters journeying between the upper Charles and the harbor may choose to dock at the boat basin on the eastern end of the Nashua Meadows. A low wooden dock surrounds the boat basin, curving away from the bascule bridges and paralleling the main river channel. At the end of this dock, one stands surrounded by water, looking across to the green banks of the river on both sides, with a train passing across the Green Line Viaduct in the distance and commuter trains and the highway passing behind, experiencing the very essence of the New Basin.

Implementation Issues

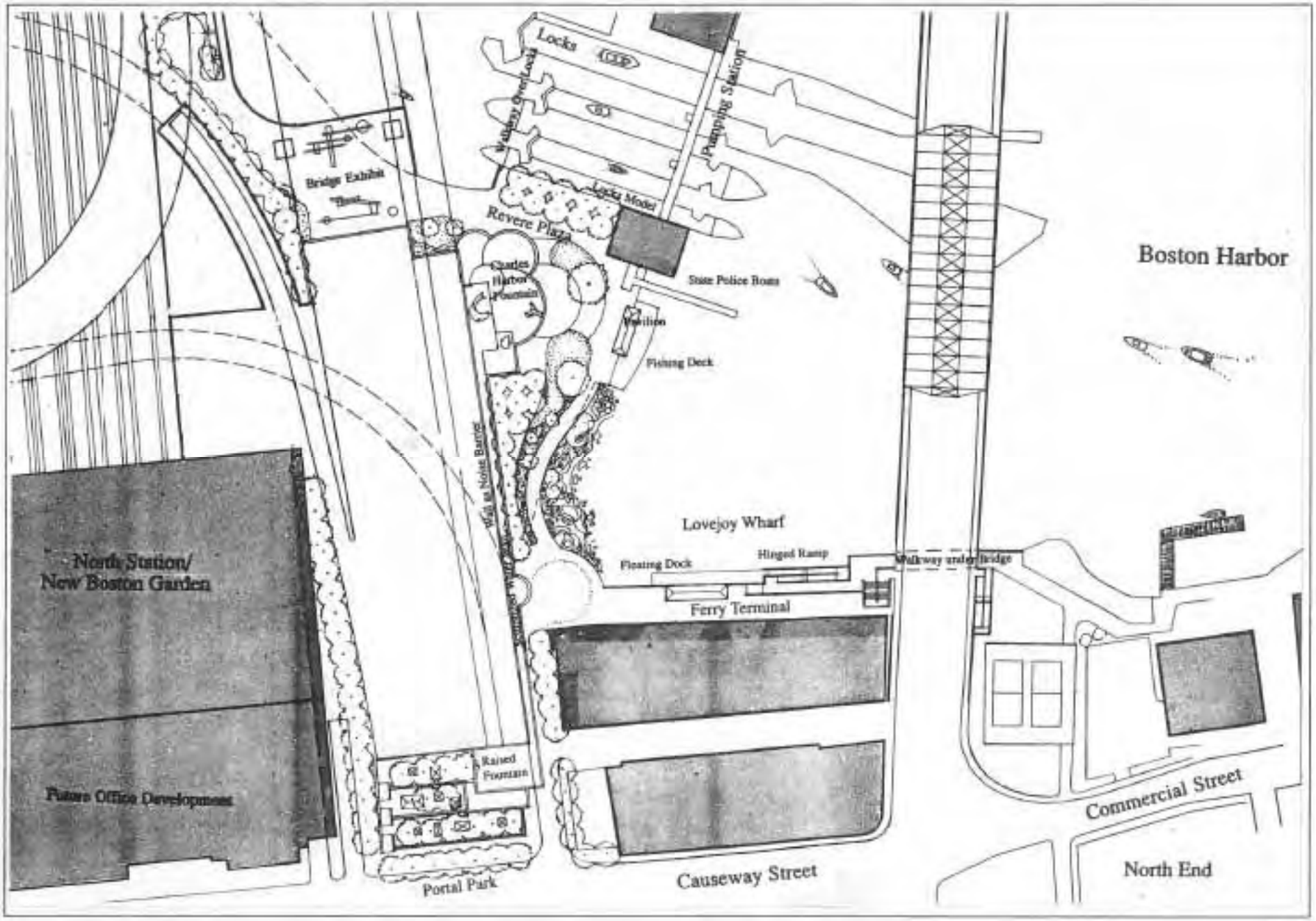
- *Environmental approvals are required for proposed boat basins, boat landings, and extensions of the park area.*
- *In final design of both parklands and Leverett Circle, pedestrian access from Charles River Park, Martha Way and Merrimac Street should be strengthened; the at-grade crossing of O'Brien Highway is critical.*
- *Several major utility lines, including Boston Edison conduits, MWRA combined sewer, MBTA signal cables, and MCI telecommunication cables pass under this parcel to cross the river; some require special protection or relocation. While the cost of this is included in the master plan cost estimate, careful coordination with any work done by CA/T in this area will be required.*
- *The greening of Nashua Street with a planted median is recommended to improve access across and into the park.*
- *The implementation of the water taxi system is expected to be a private enterprise, requiring marketing and financial feasibility studies.*



PEDESTRIAN BRIDGE



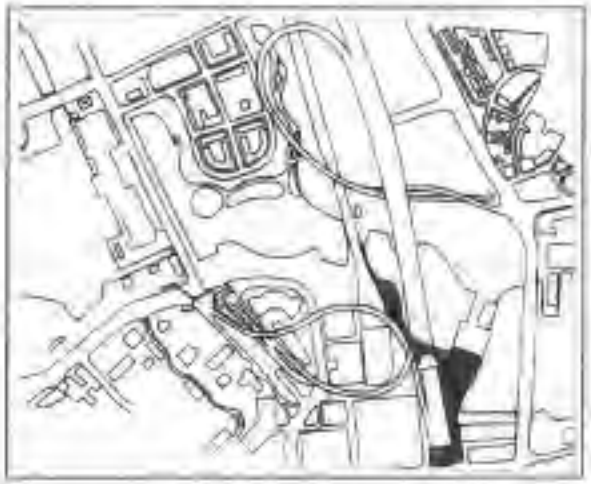
A pedestrian bridge over the MBTA tracks will link Nashua Meadows and Revere Plaza, providing views over the whole basin and of the passing trains below.


Locks
Walkway over Locks
Pumping Station
Bridge Exhibit
Locks Model
Revere Plaza
Charles Harbor Fountain
State Police Boats
Pavilion
Fishing Deck
Boston Harbor
Wall at Nose Barrier
North Station/
New Boston Garden
Lovejoy Wharf
Floating Dock
Hinged Ramp
Walkway over bridge
Ferry Terminal
Future Office Development
Raised Fountain
Commercial Street
Portal Park
Causeway Street
North End

REVERE PLAZA

Revere Plaza (3.3 acres) marks the mouth of the river and its final passage out to the harbor. The Charles River Crossing pushes out to the very edge of the water here, resulting in one of the narrowest segments of the park. The life and the activity of the Boston Garden and the North End spill into Revere Plaza. At the same time, it is closely linked to the north bank by the footbridge attached to the bascule bridges and by the pedestrian pathway across the new dam.

Heading down river from the Nashua Meadows, visitors cross over the MBTA commuter rails on a metal and glass bridge that crosses at a height of 23 feet over the tracks. Handicap-accessible approach ramps hug the walls of the Central Artery vent building on the western side and descend in a long gradual slope adjacent to the MBTA tracks on the eastern side. Each of the two bridge towers houses a central chair lift, which is enclosed in glass for safety and encircled by a set of stairs.

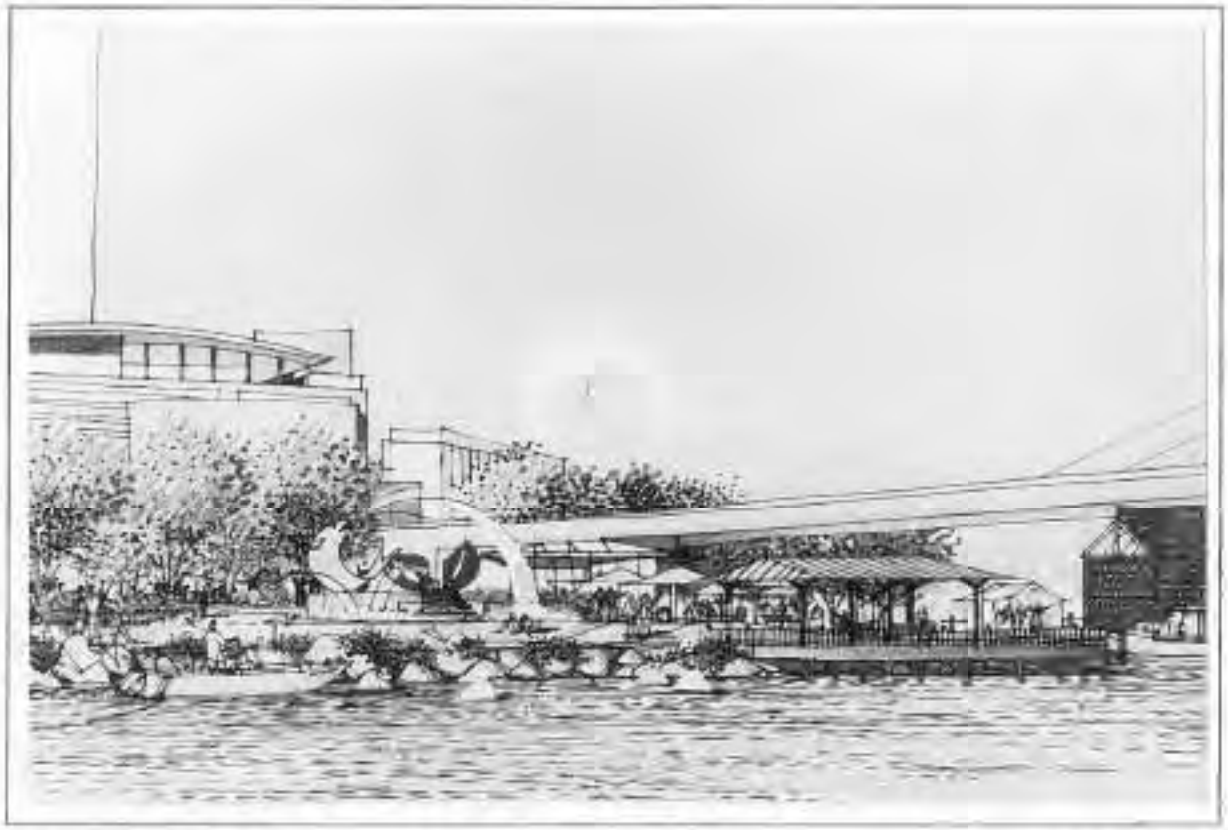


The high vantage point of the tower and ramps offers a first glimpse into the final reach of the Charles River. From here, one gazes under the cable stay bridge and across the water to the green of Revere landing Park and through the locks to the harbor. Others arrive in Revere Plaza along a sports hero walk or celebrity stroll leading from the New Boston Garden, through Portal Park at Causeway Street, or across the new dam.

At the foot of the pedestrian bridge ramp, the park is at its narrowest point. The realigned shore, which follows the sweep of the channel, is just broad enough to permit a wide water's edge promenade for both walkers and cyclists. This path joins Revere Plaza to the north bank of the river via the footbridge attached to the bascule bridges. Along the path, a lower level deck serves as a water taxi landing and becomes a peaceful place for quiet conversation or for contemplation of passing boats making their way into the locks.

The cable stay bridge soars across the river and dominates the basin at this point, dwarfing the pedestrian below. In the pavement, a timeline is embedded to illustrate the succession of river crossings through time, comparing the scale of small Native American boats, colonial ferries, early toll bridges, the bascule bridges, dams, and the most recent crossing of the cable stay bridge and tunnels of the Central Artery. Under the bridge itself, interpretive panels highlight the engineering principles that are the basis for all of these crossings, as well as the increasing complexity of the technology. Exciting outdoor audio-visual presentations are made possible by the deep shade of the bridge.

On their way down to the waterfront, people coming from Boston Garden events walk through an outdoor gallery of Boston's basketball and hockey heros, standing shoulder to shoulder with their favorite players along the way. Along the sports hero path, through-cyclists are directed toward the city on a route



A bronze fountain of fish, lobsters, and frogs spouts water to symbolize the meeting of the river and the sea. An open pavilion provides shelter from the sun and a place to fish.

that takes them down Causeway Street and over the Charlestown Bridge, where they can re-enter the park at the Charlestown Meadows. This route avoids the new dam, which prohibits bicycles from crossing for safety reasons, and minimizes pedestrian and bicycle conflicts in this narrow section of the New Basin shore.

People entering the New Basin from downtown and the North End pass through Portal Park, the point where the Central Artery rises out of the ground on its climb up to the cable stay bridge. On the terraces of Portal Park, book fairs, flea markets or stalls for sports souvenirs are set up under the trees. Interpretive elements in the benches, steps, and low sitting walls describe the role of markets and trading in the North End and in the early days of the Boston waterfront. Water spills from a raised basin in one corner of this shady park, and flows around the corner.

Following the sound and sensation of the water, the visitor is drawn around the corner and into the New Basin. Down the length of the corridor, the constant rush of water spilling over walls masks the sounds of the highway behind. Along this cool walk to the river, prisms catch light and refract rainbows and a linear bas-relief tells the story of the North End and its relations with river and harbor since Paul Revere's time.

The water wall leads to the Charles Harbor Fountain, a celebration of the joining of river and harbor. Whimsical bronze figures of fish, frogs, lobsters, and other creatures of the river and sea climb through the different pools of water and spout water from one to another. During major festivals, people gather at this

plaza to watch the parade of boats pass by. At other times, street performers and special events entertain lively crowds. A cafe-on-wheels is parked near the fountain catering to nearby office workers and to Boston Garden crowds.

An open pavilion stands nearby offering shade on hot days and shelter from inclement weather. The surrounding wood deck reaches out over the water where the views open out under the Charlestown Bridge to the harbor. Fishermen might cast a line here, while others watch the docking of harbor police boats on the finger pier or water taxis at Lovejoy Wharf. From here, pedestrians can cross the new dam to reach Revere Landing Park on the north bank of the river. The key connection to HarborPark is made by means of a walkway from Lovejoy Wharf under the Charlestown Bridge.

Implementation Issues

- *Access will be negotiated with the MBTA for a small parcel on the south bank of the river, east of the bascule bridges, to achieve a continuous pedestrian connection along this stretch of riverbank. Pedestrian access across this parcel was stipulated in Ch. 91 Waterways License No. 1111.*

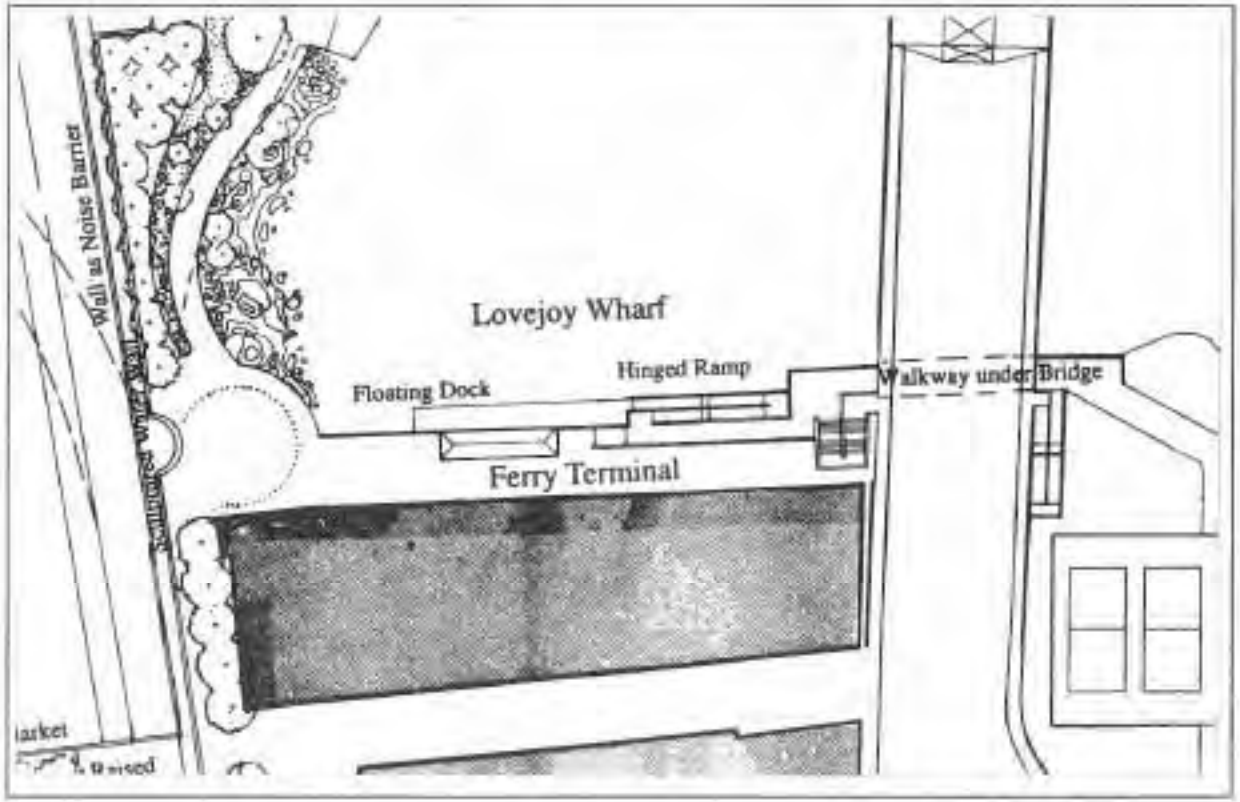
- *Coordination with the MBTA is also necessary to build the pedestrian bridges over the railroad tracks also mandated in Ch. 91 Waterways License No. 1111.*

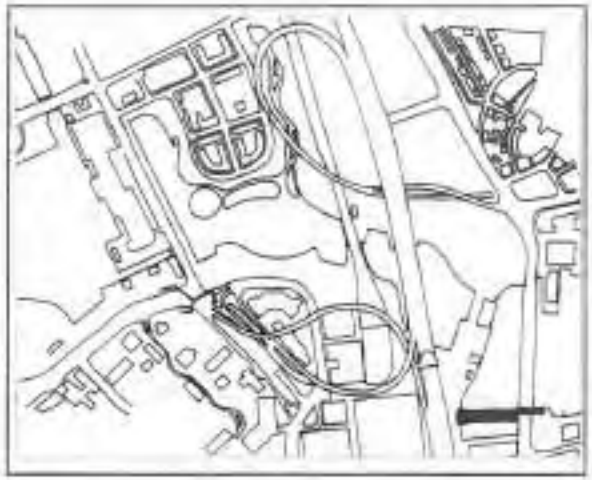
- *To achieve the continuous pedestrian connection east of the bascule bridges, environmental approvals will be required for the extension of park areas.*

- *The master plan design for Portal Park must be coordinated with the CA/T design process for this parcel.*

- *The final design for the cable stay bridge will affect the design of Revere Plaza.*

- *Access and a vehicular turnaround for Harbor Police and MDC flood control personnel must be maintained in this area.*





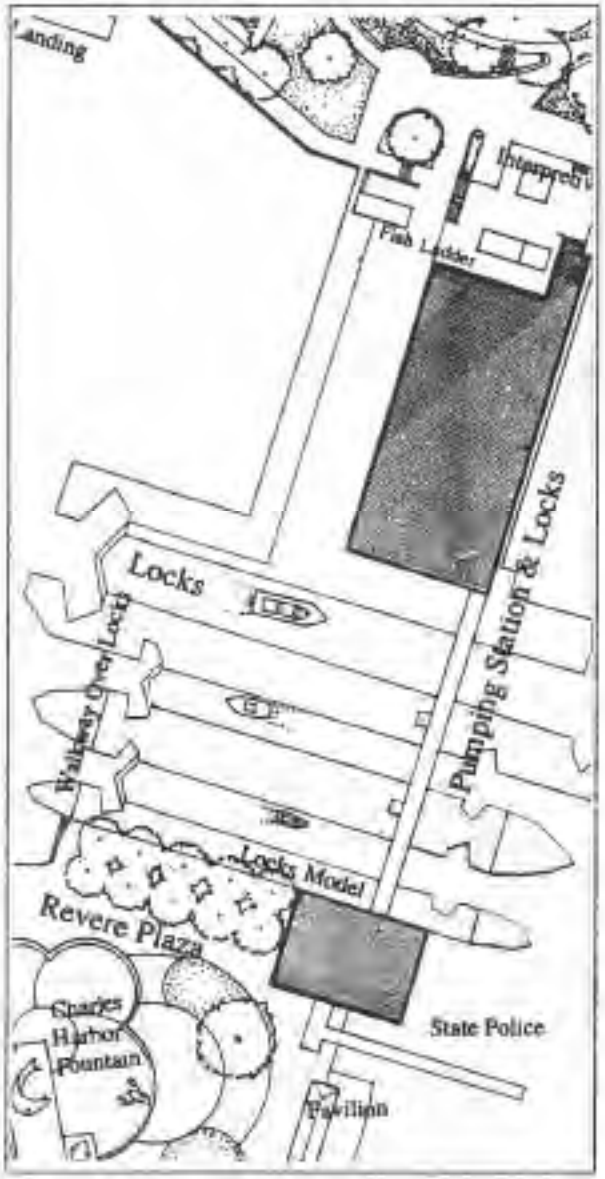
LOVEJOY WHARF

At the Lovejoy Wharf terminal, people are waiting for the water shuttle and studying the posted maps and schedules on outdoor kiosks and in the shelter of the terminal building. Panels in the building tell the story of the Harbor Islands and other destinations. As the water shuttle arrives, people begin to queue along the wooden ramps and docks at the boat landing. Some head under the Charlestown Bridge on a walkway connecting to the Steriti Rink, the North End, and the Boston HarborPark. Others follow the water wall either into the New Basin or out to Portal Park, North Station, the MBTA Green Line, the Orange Line, and downtown. A set of stairs on one side and a ramp on the other lead up to the Charlestown Bridge, which is one route to City Square and other parts of Charlestown.

As a transportation node, the plaza at Lovejoy Wharf (0.6 acres) accommodates groups of commuters and tourists climbing off the water shuttles and taxis. At other times, the plaza offers quiet places to rest and gather information for passengers awaiting a boat's arrival during off-peak hours. At the terminal, restrooms are available as well as food and drink. In the base of the adjacent building, a seafood restaurant prospers. In warmer weather tables are set outdoors for more leisurely lunches looking over the water.

Implementation Issues

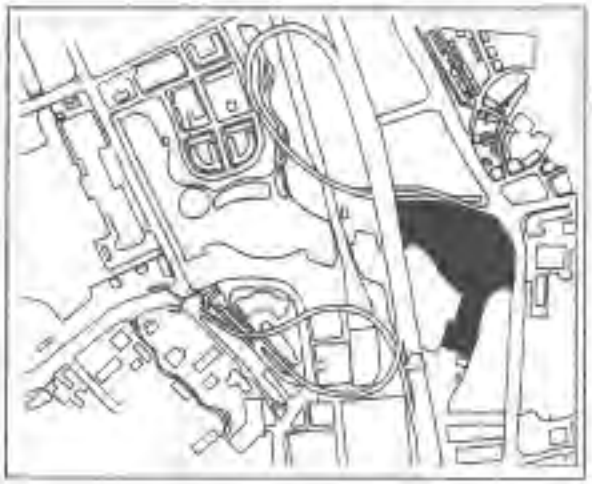
- *The walkway under the Charlestown Bridge leading to Steriti Rink and the stair and ramp connections to it should be coordinated with the City of Boston, who has jurisdiction over the bridge.*
- *The implementation of the water shuttle and water taxis is expected to be a private enterprise, requiring marketing and financial feasibility studies.*
- *Lovejoy Wharf is proposed for acquisition by the MDC. A ferry terminal building may be constructed.*
- *The master plan design for Lovejoy Wharf must be coordinated with the CA/T design.*



NEW CHARLES RIVER DAM

Crossing over the new dam, the park visitor has the rare opportunity to study the mechanism of the lock system, which is explained in a scale model set in the plaza alongside the locks. Within the pumping station, an audio-visual room recreates the sensation of a storm with the vibrations and sounds of the dam's powerful pumps in full operation. A demonstration reveals how the pumps work and the decisions that must be made in their use, depending on the tides, the flood levels, and the weather.

Interpretive elements embedded in the pavement and on the building walls tell the story of the former estuary and of the fish and their run from the sea up into the Charles River to spawn. During the spring, the struggle of the fish up the fish ladder bring this story to life, complete with the calls and swoops of sea gulls eyeing every movement of the fish. Visitors can go down next to the newly renovated fish ladder and watch through glass as the fish move up river. The outdoor displays illustrate the different species of fish, now and in the past, their route from the sea up the river, and the challenges they must face each year along the way. The seawall along the harbor attracts fishermen at all times of the year. Markings in the pavement commemorate the actual size of record catches as a challenge to future fishermen.



REVERE LANDING PARK

At the Revere Landing Park (13.1 acres), the Charles River makes a graceful sweep down to the new dam and out to the harbor. Through this park, the residents of Charlestown and other visitors make their way down to the river or follow the waterfront by passing under the Charlestown Bridge. Above and behind the upper bank of the river, the approach ramps to the Central Artery twist their way up to the cable stay bridge and down to the tunnels below City Square and the river.

The shoreline is sculpted away from the original edge to align with the angle of the

bridge abutment and to respond to the gentle curve of the river's main channel and the opposite bank. The meadows slope down to the edge of the water, dotted with large shade trees.

The dense grove of trees on the upper bank encloses a science playground and shades the bicycle path. An intermediate path traces the lower edge of the grove of trees along the science playground. At the water's edge, the pedestrian promenade is only a few feet above the surface of the water and looks over the wild rushes, aquatic plants, and sandy beach at the water's edge.

A grand staircase leads Charlestown residents and other visitors from City Square down into Revere Landing Park and out to the river. The skyline is framed in the distance by vegetation.

From City Square and the Charlestown neighborhoods, the visitor arrives at the head of a grand staircase leading into Revere Landing Park and across the new dam. From this high point, the gradual rise of the cable stay bridge is set against the backdrop of downtown Boston. The water taxis and harbor police boats bustle in and out of the harbor while a panoply of other boats ply the river. From this landing at Rutherford Avenue, bicycle ramps head down a long gradual handicap-accessible ramp hugging the wall of the adjacent highway ramp, while another handicap ramp curves around the edge of the central lawn.

The lawn area forms a gently sloping oval overlooking the water, bordered by a profusion of color and variety in the planting beds. Within this area, small children toddle about the blankets of relaxing parents. Some people bask on the southern slope, while others toss frisbees and play games in the grass. The form of the oval makes an ideal arena for outdoor concerts

or as a vantage point for viewing the passage of boats during festivals.

Along the base of the restored granite wall of the Charlestown Bridge, residents from the nearby neighborhoods are working on their individual plots in the community gardens, trading tips with other gardeners and watching their children play nearby. An opening in this wall provides a pedestrian connection to Water Street, City Square, and the Charlestown waterfront, while another walkway hugs the bridge abutment and provides continuous passage along the water's edge.

Set within the trees of the upper bank, the imaginative Science Park Playground draws school children and their families from all areas of the region and complements the toddler playground located in the North Point parklands. A huge replica of a DNA molecule becomes a climbing structure. Slides swoop down the tail of a dinosaur, and the carousel illustrates the principals of gravity and centrifugal force. Both children and adults may spend hours exploring this exciting playground, created through the collaboration of artists, scientists and Science Museum staff.

Another important entrance to the Charlestown Meadows is found under the cable stay bridge. Charlestown residents coming from the Town Hill District and northern Rutherford Avenue may use a continuous sidewalk under the bridges and ramps of the central artery to arrive at this entrance into the New Basin. Along the way, they are joined by those who arrive by car and park in a lot next to these roadways.

Passing directly under the cable stay bridge, views across the water are framed by the enormous bridge pylons. The cable stay bridge is over 60 feet overhead at this point and defines a spacious room featuring a grand medallion set in the center of a broad plaza. Within the medallion, an artist has created a mosaic to commemorate the building of the bridge above.

Complementing the interpretive features at the base of the bridge abutment on the south side, elements on this side might focus on the immediate experience of the bridge and its engineering—how many cars are passing overhead, how fast they are going, how their sound is measured, and how the weight and vibration of the cars affects the bridge. The pattern of their vibrations could be programmed to constantly change a color display.

Passing under the cable stay bridge, the landscape opens into the lawn and water areas of the Bascule Bridge Park.

Implementation Issues

- *The realignment of the shoreline will require environmental approvals; final alignment in the vicinity of the cable stay bridge pylons will depend on the bridge design.*
- *The design at the City Square intersection should be coordinated with the CA/T project due to traffic and safety considerations.*
- *Since the locks and pumping station are a vital working operation, the design of Revere Landing Park and the plaza areas on the new dam must permit the occasional passage of heavy vehicles.*
- *The exact location of the Rutherford Avenue pedestrian connection is unresolved.*

- *The implementation of the water taxi system is expected to be a private enterprise, requiring marketing and financial feasibility studies.*

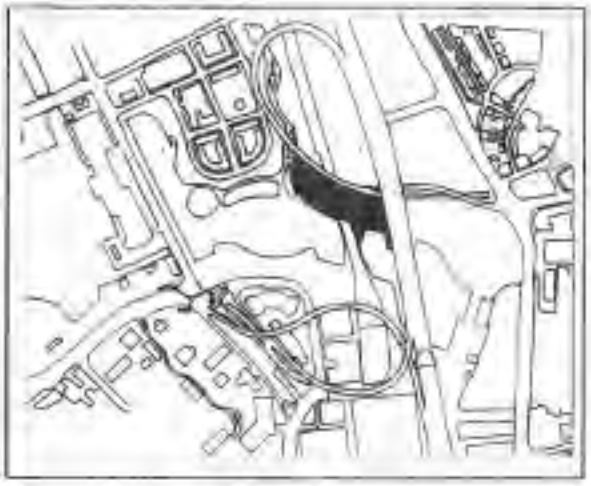
- *The continuous pedestrian connection under the Charlestown Bridge will require environmental approvals. This connection, the Water Street connection, and the new stairs and ramps to the bridge will require coordination with the City of Boston, which has jurisdiction for the Charlestown Bridge.*

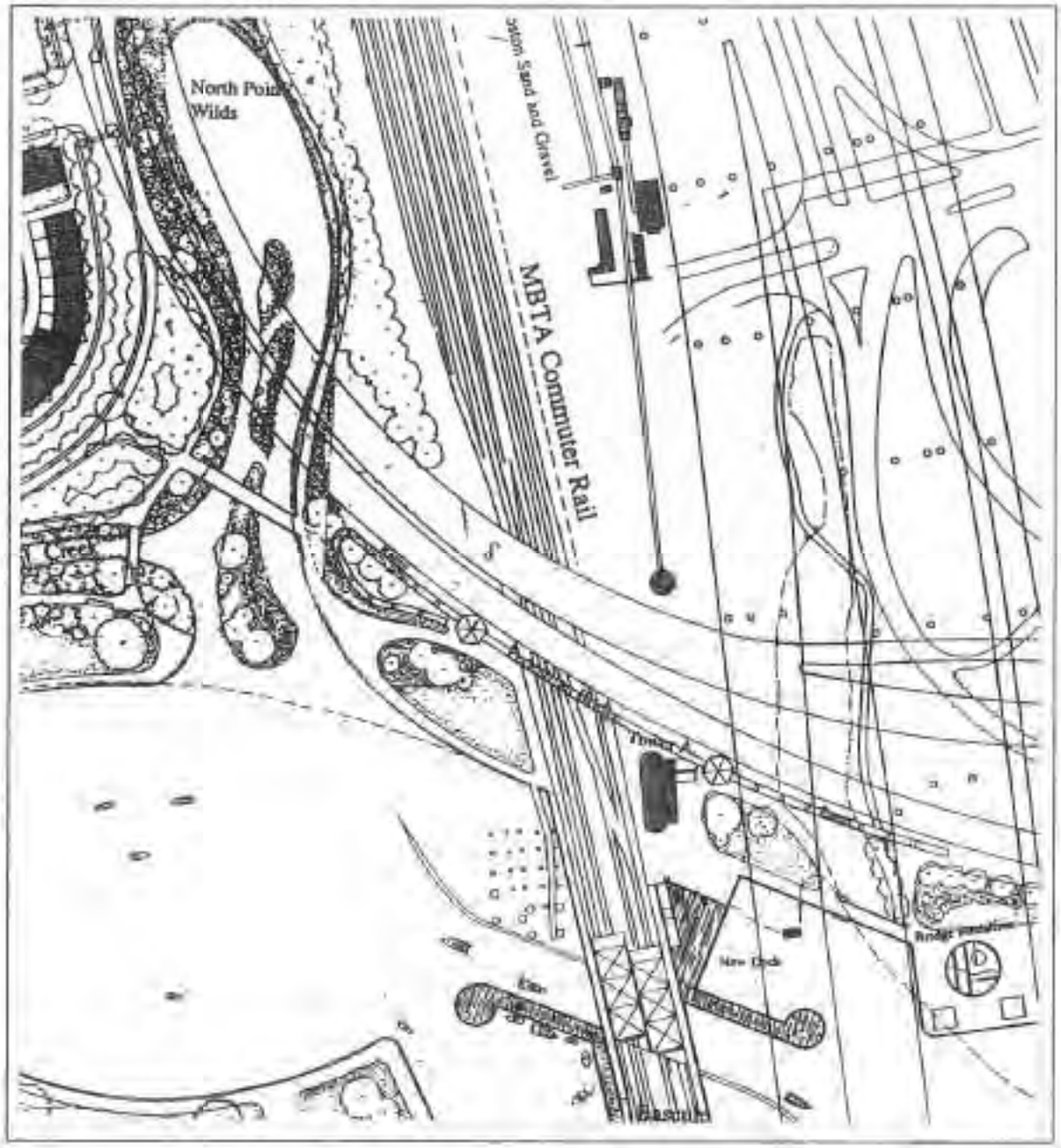
- *Parking for MDC flood control employees must be resolved in the final design.*

- *The master plan does not address the future of the existing Miller's River, which will be decided by a number of agencies including the Boston and Cambridge Conservation Commissions, Department of Environmental Protection, and the CA/T project.*

BASCULE BRIDGE PARK

The bascule bridge parklands are set in the open meadows and coves on both sides of the bascule bridges, linking the Charlestown Meadows to North Point. The industrial forms of the bascule bridges, the nearby sand and gravel facility, the cable stay bridge structure and its ramps, and the abandoned piles form a backdrop for temporary and permanent exhibits of art works. The exhibits may range from individual sculptures to more complex site-specific installations that are integrated into the environment on both the land and the water. This special setting for art works complements





and highlights the work of artists and artisans throughout the parks.

In the open lawn areas on both sides of the bascule bridges, the lawns may feature sculptures, installations, or performing arts. At certain times, artists will be permitted to reshape the land surface and its texture as a part of their installations, with the provision that they restore the grading and lawn at the end of the exhibit.

Just below the bascule bridges, a small cove makes a wonderful water park for art installations. A low wooden dock encloses this cove, which is off limits to boat landings. Walking out to the end of the dock, one can contemplate all dimensions of the art or just watch the passing boats and the rise and fall of the bascule bridges.

Newly rebuilt fender piers clearly define both sides of the river channel as it passes beneath the bascule bridges. Boaters passing through the channel glimpse the historic dam in one direction and the activity of Revere Plaza in the other.

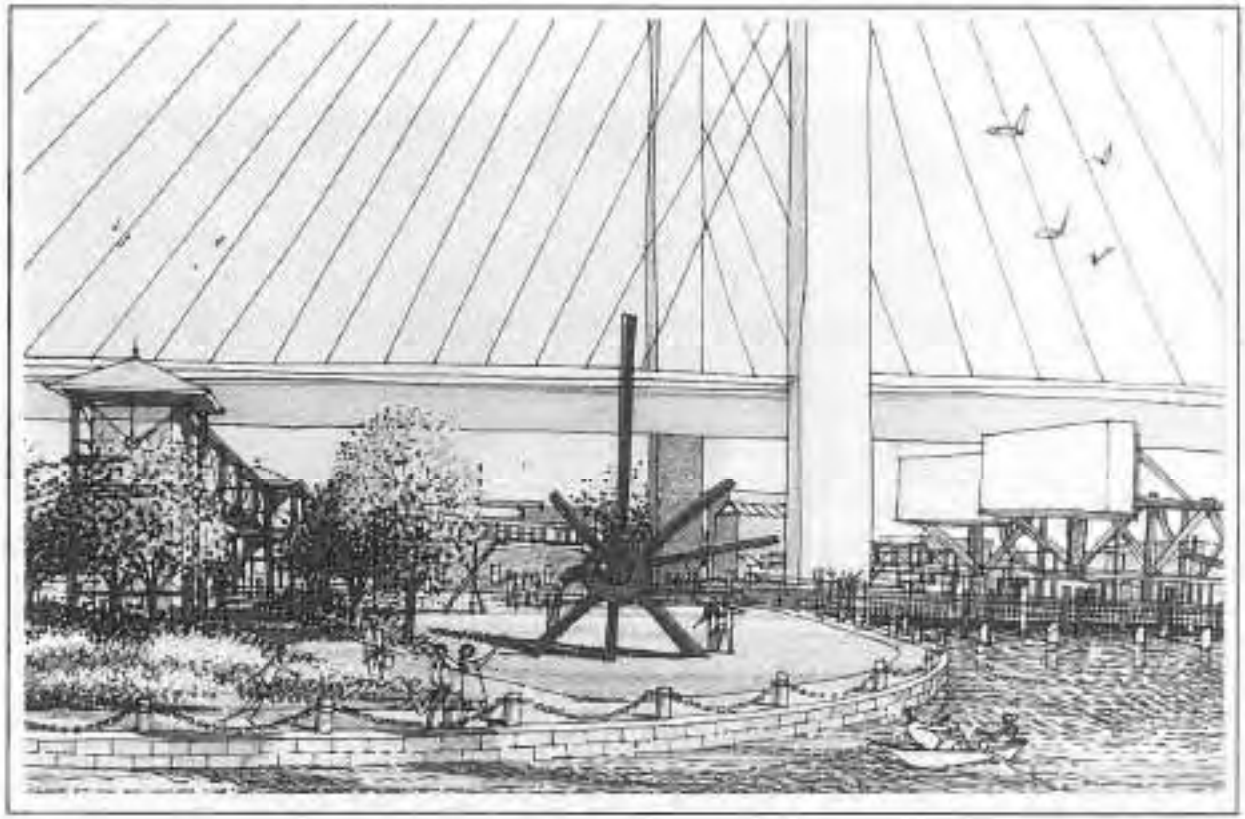
On the upstream side of the bascule bridges, the pilings and deck of an abandoned railroad trestle are removed. Along the outer edges of the bascule bridges, pedestrians cross the river on cantilevered footbridges, which lead to the Nashua Meadows and Revere Plaza on the south bank of the river.

In the midst of the Bascule Bridge Park, Tower A is a center of activity. On the first floor are restrooms and concessions for food and drink. Within the building and on its outer walls, the history of railroads in this area is displayed, highlighting the landscape transformation brought about by landfill for rail yards and adjacent factories, as well as the changing role of train transportation in the city. From the second floor of Tower A, the MBTA continues to operate the bascule bridges, coordinating the passage of MBTA commuter trains into North Station and the passage of boats on the Charles River.

Bicycles and pedestrians cross the MBTA tracks on a pedestrian bridge similar to the one on the south bank of the river. The metal and glass towers house the stairway and central chairlift, which will have a glass enclosure for safety. The sides of the bridge itself will be either glass or screen mesh to protect the tracks below but allow views out from this vantage point. Approaching from Revere Landing Park, handicap-accessible ramps parallel the highway ramps, cross through the bridge, and wind down through the trees on the western side.

The length of the tracks is fenced to prevent pedestrians from crossing at will. In the long run, the master plan recommends that the MBTA consider an at-grade crossing of the MBTA tracks. The switchman in Tower A could operate gates to coordinate pedestrian crossings with the schedule of the trains. During rush hour, for example, at-grade pedestrian crossings might be restricted altogether. On weekends, when trains are less frequent and the park more heavily used, the gates would be open for long periods, closing only on the approach of the occasional train. This on-grade crossing would greatly facilitate access between the eastern and western portions of the New Basin.

From Tower A and the pedestrian bridge, clear view corridors look out to the tower of the lower lock house on the historic dam. Markings in the pavement at the water's edge call attention to the view upstream, which is framed by the beacons and continues under the viaduct, through the lock and out to the towers of the Longfellow Bridge in the distance. From this prominent position on the north bank, the landscape begins its transition into the North Point Wilds.



Permanent and temporary art works in the Bascule Bridge Park will be set against the industrial forms of the cable stay bridge and the bascule bridges.

Implementation Issues

- *The Bascule Bridge Park will be built in two phases: the east half will be a part of the Revere Landing Park West construction and the west half will be part of the North Point East construction. The Bascule Bridge Park is seen as an important destination in this location, however, and a center for interpretive design, exhibits, and other programmed activities as well as public arts programs.*

- *The arts program in the Bascule Bridge Park and throughout the New Basin will be coordinated with the Artery Arts Program.*

- *The design of an appropriate public management process for the changing art exhibits in this area will be crucial.*

- *The continuous pedestrian connections across the bascule bridges require coordination with the MBTA. Located on outriggers, these walkways can be operated and supervised in a manner similar to the drawbridge at the lock over the old dam.*

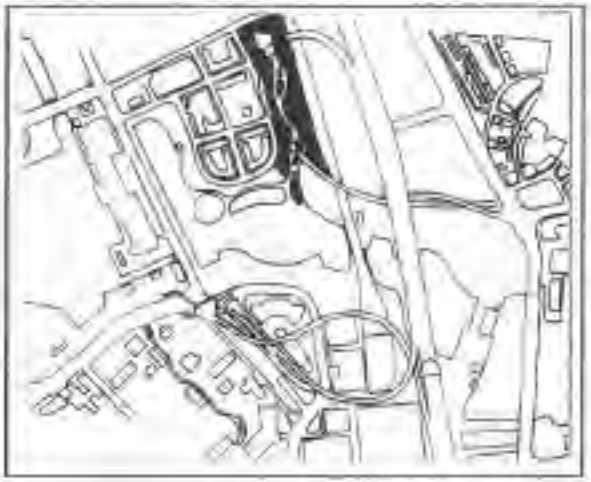
- *The design of the pedestrian bridge over the commuter rail tracks on the north bank must be coordinated with the MBTA.*

- *Proposed activities and functions at Tower A must be coordinated with the MBTA and will require its approval.*

- *Construction near the wooden structural elements of the bascule bridges should be designed to minimize fire hazard.*

NORTH POINT WILDS

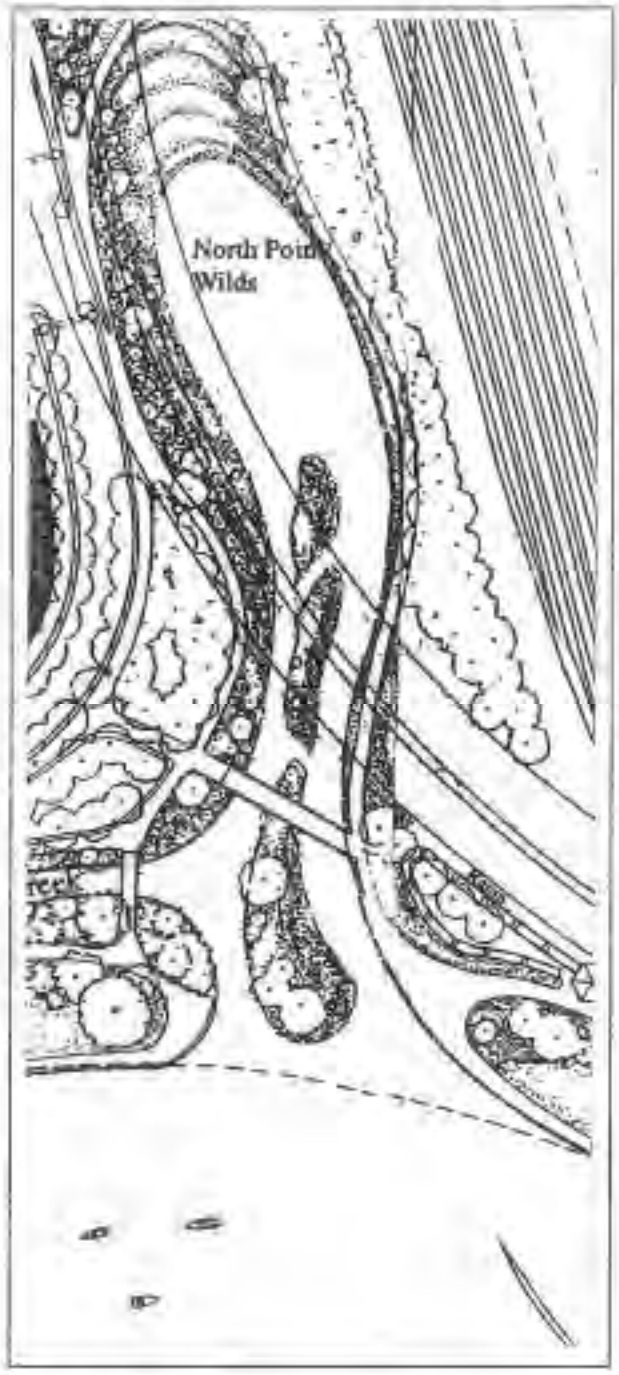
The North Point Wilds (8.4 acres) meander from the Gilmore Bridge down to the Charles River and create a miniature ecosystem modeled on the tributary streams of the Charles. Wetland plantings, rocks, and shallow marshes form habitats that attract waterfowl, fish, amphibians, and other wetland creatures. The fauna and flora of this area make it an ideal learning environment, a place to explore and interact with many natural elements of the Charles River watershed. MDC rangers and other park naturalists lead school programs to teach about bio-diversity and the ecology and geomorphology of streams and rivers.



Although naturalistic in form and character, the Wilds remain a vital part of the city, bordered on one side by the MBTA tracks and on the other by the new residential development in North Point. Overhead, a ramp of the Central artery rises up with a clear height of 30 feet. The stanchions of the highway ramp march through the park at regular but widely spaced intervals.

At the mouth of the North Point Wilds, a foot bridge crosses from North Point to the Bascule Bridge Park. Park visitors can approach the Wilds from either side of the stream, winding through the landscape along informal stone dust paths. At the terminus of each street in North Point, a gateway opens through the trees into the Wilds. Down one street the trees frame a view of the open pavilion across the water. At the end of another street, a small structure marks the park entrance and houses pump equipment to keep the water flowing. A foot bridge crosses upstream in the wilds, creating a variety of loops for pedestrians to use.

On the upper banks of the Wilds, shade trees enclose the parklands and filter views of



the nearby sand and gravel operation. The trees and a dense understory planting buffers the length of the MBTA tracks and screens against blowing sand. The street trees along the North Point roads define the other edge of the park and part only for the view corridors at the ends of streets and in the area directly beneath the highway ramp. Along the adjacent North Point street runs the bicycle path, pedestrian lighting, and curbside parking for cars.

From the outer rim of the North Point Wilds, the land slopes gently down to the marshy edge of the water. Small boats can work their way up this waterway, against the flow, and then float down it, passing under the low bridges. At certain times boats are prohibited to protect nesting wildlife.

Along the informal paths, bronze silhouettes set in the back of each bench identify different plant or animal species found in the area. In the shady picnic area under the trees, other displays and surprises celebrate the diversity of the flora and fauna in this developing wetland ecosystem. For those stopping at the open pavilion, a clear view looks out to the Charles River and to the Nashua Meadows and the jail beyond.

Implementation Issues

- *The location of the new water body needs to be coordinated with the pier locations of the CA/T loop ramps. Emergency fire access will be provided in final design.*

- *The design and construction of the North Point roadway system will be coordinated with the City of Cambridge and the CA/T.*

- *Water circulation is key to the success of this concept; water will need to be pumped to the head of the Wilds from the river and then be aerated by the slope of the stream and rocks placed within it.*

- *The channel must be designed to provide the water depth required for small boats and the shallow depth required for wetland planting at the edges.*

- *Excavation from this channel will be used to build up a berm next to the railroad and elsewhere in the project where fill is required. Overall, the Master Plan has been calculated to balance and manage cut and fill on the site.*

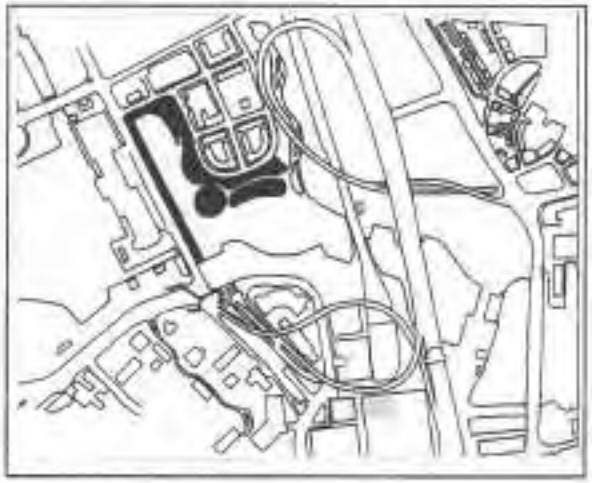
- *A study should be made of the possibility of connecting the North Point Wilds bike path under the Gilmore Bridge and out to the Mystic River Reservation bike path.*

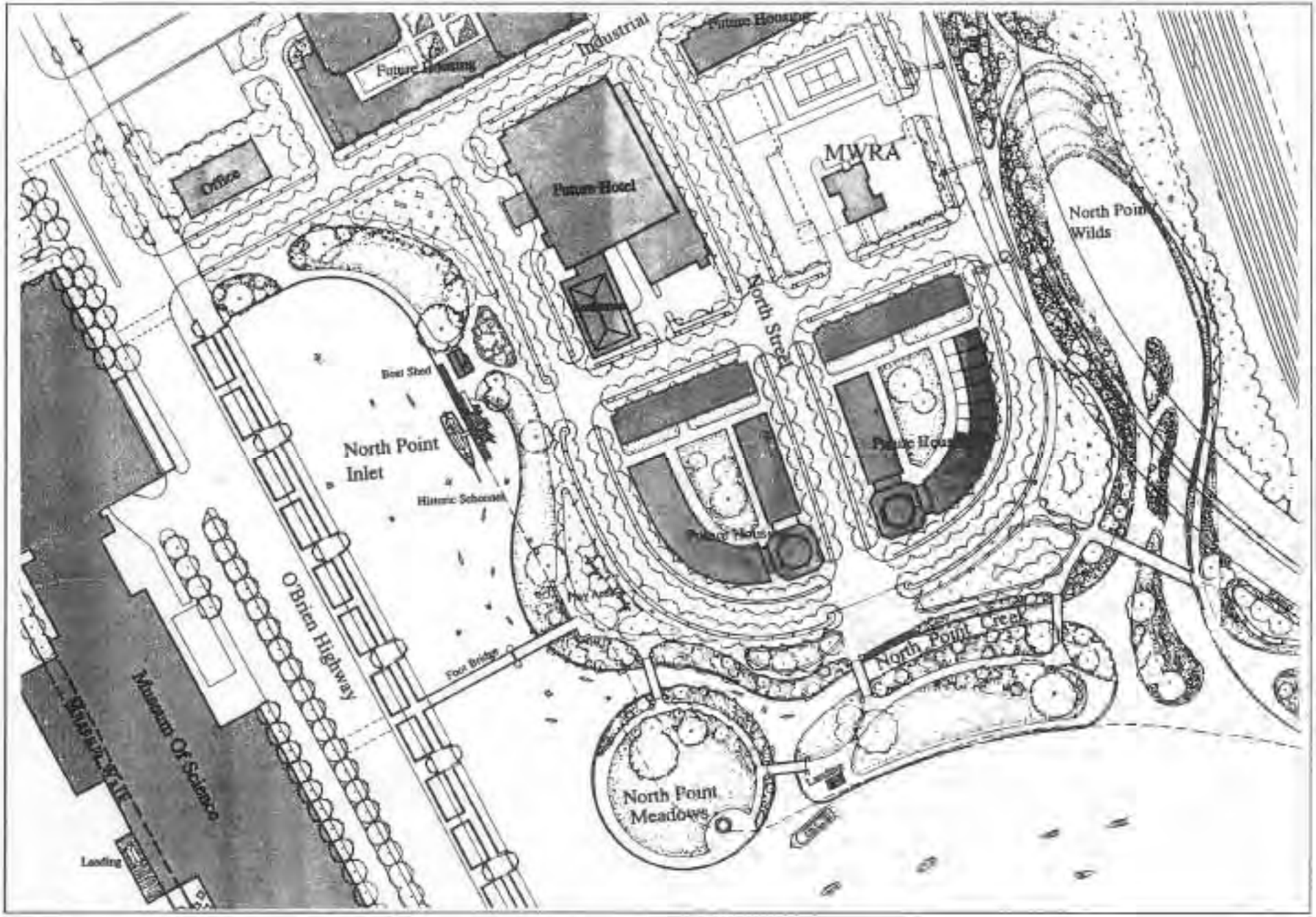
NORTH POINT MEADOWS

The North Point peninsula is encircled by parklands, penetrated by small boat channels, and surrounded by water as it juts out into the main channel of the Charles River (7.2 acres). Set within the midst of this rich landscape, the new residential community at North Point use the new park for jogging, daily walks along the water's edge, and enjoyment of the water in all its forms. Visitors and residents from Lechmere and East Cambridge are also drawn to the North Point Meadows, where the industrial history of the area is revealed in many ways. The many recreational opportunities in the park attract students from Bunker Hill Community College and people using the MBTA Orange Line.

The North Point parklands are a critical link in the journey to the harbor, connecting the historic dam and the Cambridge side of the Charles River Reservation to the parks below the bascule bridges. A series of at-grade crossings along the busy O'Brien Highway lead to the park gateways under the arches of the green line

Small boats paddle through the many inlets around North Point. The seawall curves as an expression of the flow of the water through the dam sluiceway into the main river channel and echoes the curve of the opposite shore.




Industrial
Future Housing
Future Housing
Office
Future Hotel
MWRA
North Point Wilds
North Street
Boat Shed
North Point Inlet
Historic Schooner
Future Housing
Future Hotel
O'Brien Highway
Play Area
Foot Bridge
North Point Creek
Museum Of Science
Museum Of Science
North Point Meadows
Landing

viaduct. The primary gateway into the park passes under the viaduct at the head of the inlet, next to Industrial Way. Stepping out from under the arches of the viaduct, the park visitor is able to look across the waters of the inlet to the nearby historic schooner or further to the open water of the Charles and across to the other bank of the river.

The new street running down the center of North Point ends in a plaza with views across the water to the Nashua Meadows, the jail, and in the distance, the Custom House tower. From the plaza, the visitor may sit on broad stairs that step down to the water, or may choose to cross the foot bridge over to the outer islands. Cyclists coast along the bicycle path which parallels the street and pedestrians stroll along the winding path between the trees and the creek. The terminus of each North Point street provides a visual and physical connection to the park and the water.

A footbridge spanning the inlet is the point of arrival from the Museum of Science, introducing an important loop system for pedestrians passing between the historic dam and the North Point Meadows. A pedestrian walkway under the viaduct connects the North Point Meadows to the Nashua Meadows and the Charles River Visitor Center, while providing a unique, memorable urban experience. Smaller footbridges tie the upland shore to a series of small islands set like jewels around the North Point peninsula and connect to the Bascule Bridge Park downstream.

A historic schooner is docked along the shores of the inlet, reminiscent of the bustling port that once existed in East Cambridge.

The curving shoreline of the North Point Meadows embraces an oval basin and responds to the curve of the opposite shore. A new seawall sweeps around the outer island and into North Point Inlet, creating a small cove before joining the existing stone seawall at the back of the inlet. Granite stones set into the grassy banks along the inlet recall portions of the former shoreline. The curve of the new shoreline expresses the flow of the water from the dam sluiceway into the main river channel.

Between the islands and the upland, small boats paddle along the North Point Creek, which parallels the shore and leads from the inlet to the waters of the North Point Wilds. Along the north bank of the channel, lush greenery, like that of the Wilds, spills over a low granite wall. Shade trees hold the high ground on the upper banks of the peninsula and line the North Point roadways. Under the trees, people find sitting terraces, a special children's playground, and picnic areas.

Along the shores of the inlet, visitors approach the historic schooner along a path embedded with historic tools and trinkets from the once-thriving industrial era of East Cambridge. Each bench along the way carries the name of a prominent local resident or a memorable phrase about Cambridge. Climbing aboard the schooner, which may be either a restored ship or a replica, the visitor can vividly imagine the bustling port and canals of East Cambridge.

The nearby boat house is designed to recall the industrial architecture of the area and further describes the rich history of East Cambridge. From this structure, paddle boats, canoes, and rowboats are rented out for day use. Restrooms, a food and drink concession, and benches to sit and rest also serve the weary visitor. Under the nearby trees, families and groups of friends picnic and socialize through the afternoon.

The open meadows of North Point are discovered on the islands. Individuals and small groups find a peaceful sanctuary for resting or playing games on these broad lawns. During special events, crowds gather for a prime view of water activities or to hear musical performances. The water's edge promenade is ideal for strolling or enjoying the warmth of the sun on spring and fall days. Others seek the shade of the spreading trees or stroll through the colorful beds of shrubs and perennials. At the water taxi landing, passengers disembark to explore the shore and discover the history of North Point and East Cambridge. The towering beacons, illuminated at night and rising one hundred feet in the air, mark the channel of the Charles River for those both near and far.

Near the foot of the footbridge from the Museum of Science, visitors discover a unique playground for small children. Here, the swings, slides, seesaw, and other equipment express and reveal the basic principles of physics at play—gravity, friction, levers, fulcrums, and hinges. These displays are developed jointly with the Museum of Science and complement the larger Science Park at Charlestown Meadows. The fence around this playground displays the silhouettes of the many types of boats that have used this area over time.

Implementation Issues

- *At-grade crossings are recommended across the O'Brien Highway due to the narrow sidewalks and lack of room for handicap accessible ramps to an overhead bridge. A crosswalk is recommended at the Land Boulevard intersection, with additional pedestrian-activated crossings at the Industrial Way intersection and across from the Museum of Science once the North Point development begins. When the final design for Leverett Circle is selected, the feasibility of the at-grade crossings and grade-separated crossings will be studied in more detail.*

- *A portion of the Guilford and North Shore Realty Trust lands are proposed for acquisition by the MDC.*

- *Environmental approvals are required to modify the shoreline at North Point.*

- *Alteration of the granite seawall will require review by historical agencies.*

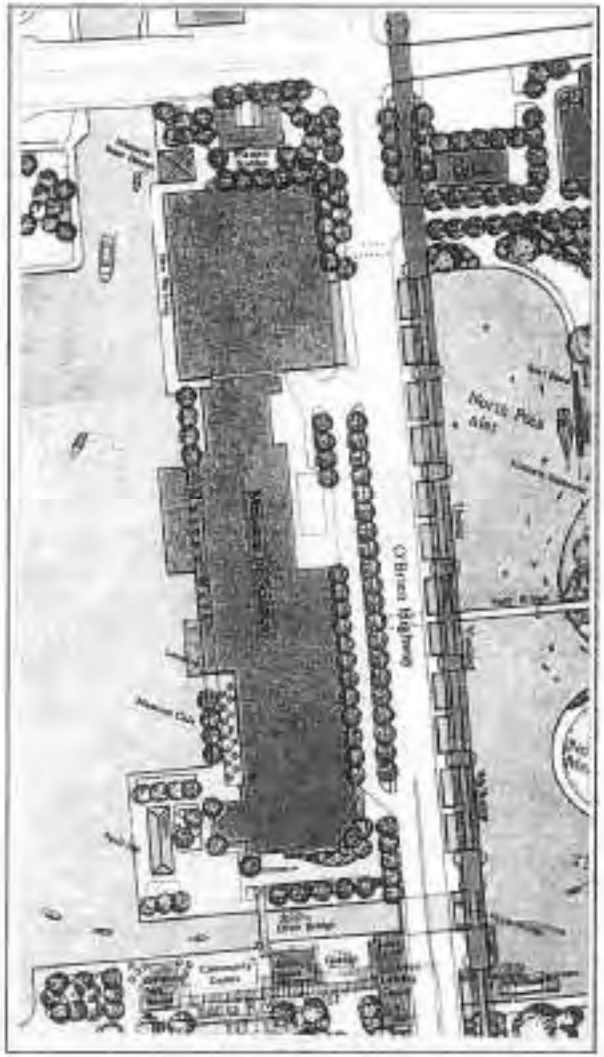
- *The pedestrian footbridge across the inlet will require approval of the Coast Guard.*

- *Cut and fill must be balanced to minimize off-site disposal.*

- *As with Nashua Street, the utilities running through this area will need to be relocated or protected in certain sections; although the costs of this are included, final design should strive to minimize impact on utilities.*

- *The design and construction of the the North Point roadway system will be coordinated with the City of Cambridge and the CA/T.*

- *The proposed road alignment will require a land exchange between the MDC and the City of Cambridge.*



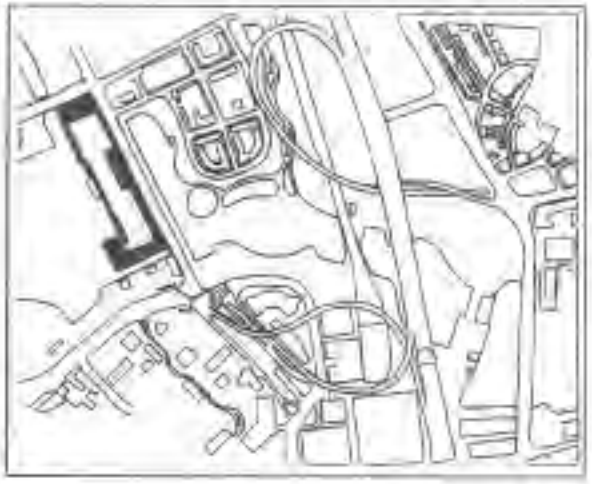
HISTORIC DAM NORTH

A tour through the northern part of the historic dam (3.0 acres) closes the circle around the New Basin. The historic dam is the setting for the Museum of Science, but also provides critical pedestrian crossings between the north and south banks of the Charles River and between the existing upstream parklands and the parklands of the New Basin.

Along the busy Land Boulevard, the historic stable building is a jewel left over from another time, now renovated for public use. The MDC boat patrol and park personnel occupy the nearby boat house, another renovated historic structure. The boat house also accommodates a refreshment concession. The grounds around both of these buildings are landscaped with lawn and trees and sidewalks for pedestrian access.

The width of the historic dam offers visitors a choices of several routes to cross the river. People coming from the Cambridge esplanade or the Lechemere Canal walkways skirt around the boat house cafe and then follow a new walkway along the upstream side of the Museum of Science and its garage. Along the way, they may stop at overlooks and gaze across the lower basin of the Charles. Trees are planted where the building steps back, where the Museum's indoor dining room may spill outdoors. Near the historic lock, the grounds widen into a graceful setting for the open air pavilion, which looks out over the lower basin. During festivals, people gather here or on the nearby plaza which doubles as a drop-off for buses and other vehicles. A new footbridge leads across the historic lock to the Charles River Center. As boats pass, the bridge rises high above the ground on tracks.

A continuous sidewalk travels along the length of the O'Brien Highway, connecting Land



Boulevard to the entrance to the Museum of Science and to the Charles River Visitor Center. New street trees, historic lighting fixtures and other furnishings enhance both the pedestrian and vehicular experience on the O'Brien Highway. At the face of the garage, the removal of ramps permits additional landscaping and a view down into the waters of the sluiceway below.

On the downstream side of the O'Brien Highway, pedestrians now find it possible to walk under the viaduct, a unique experience that connects North Point directly to the Nashua Meadows. This long corridor is suspended above the water at the same level as the O'Brien sidewalk and connects back to this sidewalk under every arch. The occasional rumble of the Green Line trains is an exciting interlude during an otherwise peaceful walk along the waters of the North Point Inlet. The use of historic railings, lighting, and furnishings on this walkway and the O'Brien sidewalk unifies the character of the historic dam area.

The historic stables building and the historic boathouse behind it will be renovated for public use.

Implementation Issues

- *The master plan recommends that the stables building be renovated for a public use. Several non-profit groups have submitted proposals, which will be considered in the final design phase.*
- *The historic boathouse could accommodate additional commercial or public uses, which should be determined in concert with the reuse of the adjacent stables building.*
- *The character and alignment of the pedestrian walkway on the upstream side of the dam must be resolved for the final design.*
- *The ramps on the front of the Museum of Science garage are slated for demolition to make way for planting and pedestrian access.*

5

BUILDING THE NEW BASIN

IMPLEMENTATION

The completion of the Charles River Reservation -- connecting the esplanades to the harbor -- has been a stated goal of the Metropolitan District Commission (MDC) since 1962. Over the last two decades, the agency has assembled most of the land necessary to achieve this goal. In 1990, many of the park improvements in the New Basin became a part of the project mitigation for the proposed Central Artery crossing of the Charles River.

In order to bring the vision of the New Basin to reality, the MDC must implement a series of steps, which include some land acquisition, environmental approvals, design, and construction, all carried out in concert with the Massachusetts Highway Department (MHD) and their planning, design and construction of the Charles River Crossing of the Central Artery.

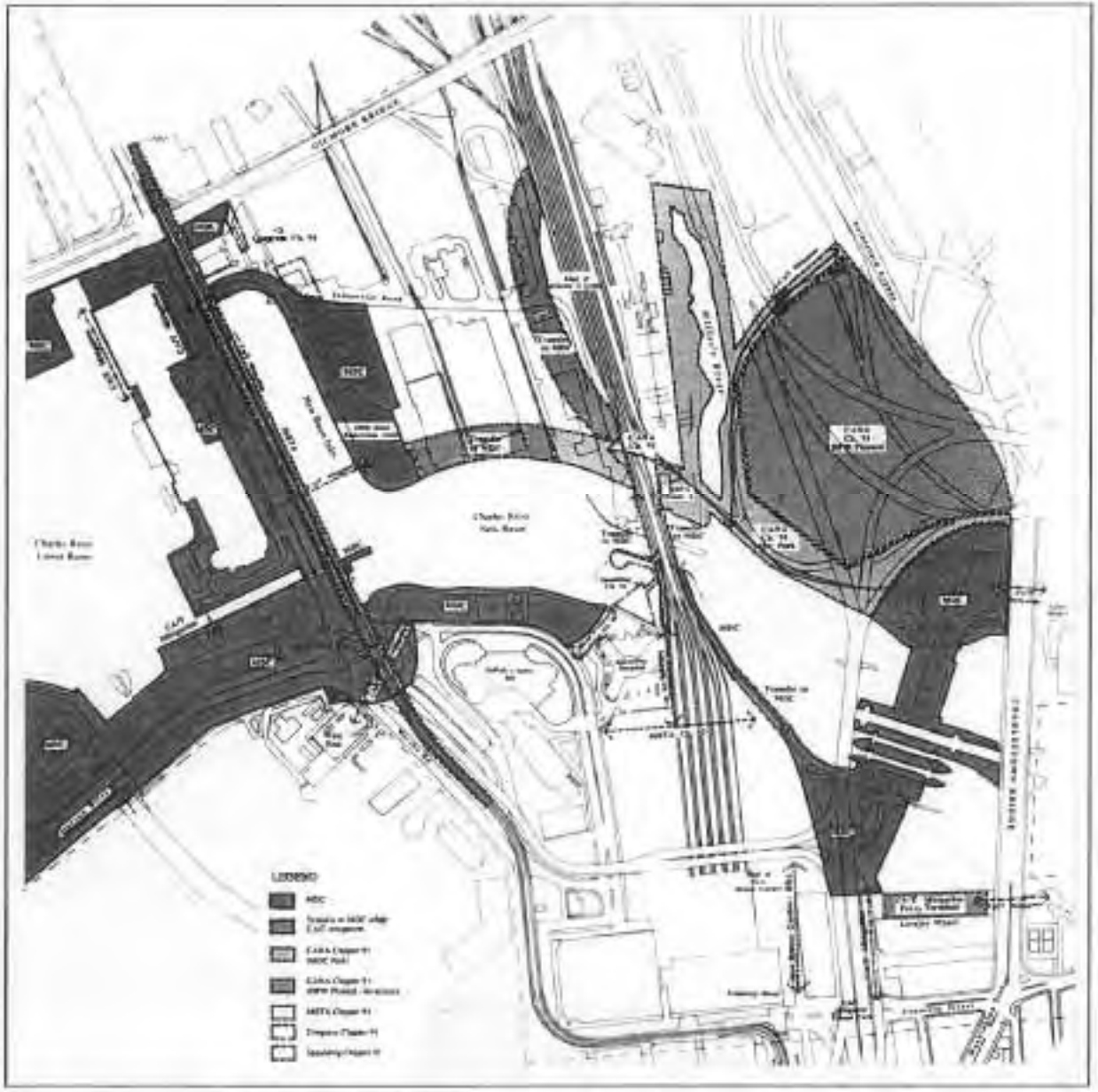
The alignment of the Charles River Crossing affects the configuration and character of the park areas, and also determines which parcels can be built prior to the highway construction. The construction schedule for the remaining "post-mainline parcels" is dependent on the construction schedule for the Charles River Crossing.

Beyond the highway project, the pattern and priority of phasing the park is shaped by the objectives of the MDC and a number of other interested parties -- the cities of Cambridge and Boston, adjacent residential communities, civic groups, institutions, and private development enterprises. The range of interests contributing to the master plan reflects the magnitude of the New Basin's public benefit. Many of these interests are represented on the Citizens Advisory Committee (CAC) for the New Basin; others have provided comments in separate interviews or in the public meetings sponsored by the CAC. Over the long and complex process of design and construction, the work of the CAC should continue with the objective of forming a broad based and deeply committed constituency to help realize the vision of the New Basin.

The final design and construction methods will be refined during the environmental approvals process. As a waterfront project, the proposed work falls within the jurisdiction of several Federal, state and local agencies, with a range of interests including public access and use of the waterfront, navigation, fish and wildlife habitat, flood control, wetlands protection, and water quality. The master plan has been developed in light of the broad environmental policies of the different agencies, with the goal of improving the overall environment in this part of the Charles River.

STATUS OF THE LAND

The New Basin of the Charles River is defined by the historic dam upstream and the new dam downstream. The MDC has managed the historic Charles River Dam since its completion in 1910, when legislation transferred the dam and the Charles River Basin to the Metropolitan Park Commission (predecessor of the MDC). The park commission was also given control and approval of all structures "on, across, over or in" the Charles River and of adjacent lands acquired for parks purposes. In 1962 a new dam was approved by the legislature, and the MDC's jurisdiction was extended.



The Metropolitan Area Planning Council's 1969 regional open space study identified the Charles River between the esplanade and Boston Harbor as a major opportunity in the regional park system. In 1978, the new Charles River Dam was completed, ending tidal fluctuation in this stretch of the river. As part of the new dam's construction, land was acquired in Boston and Charlestown for Paul Revere Landing Park, the MDC's first parkland in this area.

The MDC has now acquired ownership or long-term control of all but three of the parcels necessary to complete the connections between Cambridge, Charlestown, and Boston:

Historic Charles River Dam
Acquired by the Park Commission upon completion of the dam in 1910.

Leverett Circle and Storrow Drive
Rights of way, pedestrian walkways, and landscaped areas acquired by the Park Commission upon completion of the dam in 1910.

Paul Revere Landing Park

Acquired as part of the new dam construction (authorized in 1962 and completed in 1978).

MBTA Trestle Walkways

Walkways constructed on both sides of the Massachusetts Bay Transit Authority (MBTA) commuter rail trestle on the south bank as part of the Chapter 91 Waterways License No. 1111 for the trestle rebuilding in 1985.

Pedestrian Bridge (South Bank)

Access rights for a pedestrian bridge over the MBTA tracks on the south bank, required by Chapter 91 Waterways License Nos. 1111 and 1952.

Nashua Street

Acquired in 1987 as part of the requirements for Chapter 91 Waterways License No. 1686 for the new Suffolk County Jail.

Central Artery North Area (CANA) Lands and Pedestrian Bridge (North Bank)

Parcels along the Charles and Millers Rivers in Cambridge and Charlestown and access rights for a pedestrian bridge over the tracks on the north bank were acquired in 1987 through Chapter 91 Waterways License No. 1742 for the Central Artery North Area (CANA) highway project. In 1994, the Secretary of EOEA incorporated these CANA commitments into the mitigation requirements for the new Charles River Crossing (land to be transferred upon completion of the project).

North Point

Acquired in 1988, half purchased from the General Services Administration and half transfered by the National Park Service.

Acreage of the New Charles River Basin

1993 MOA Parcel Number		Acres
Pre-Mainline		
2	Lovejoy Wharf**	0.6
4	Revere Landing East*	3.5
7	Nashua Meadows*	3.8
8	North Point Meadows East**	3.4
9	North Point Meadows West*	3.8
10	Historic Dam South*	3.7
11	Historic Dam North*	3.0
Post-Mainline		
1a & 1b	Revere Plaza*	3.3
3	Leverett Circle*	2.9
5	Revere Landing West**	9.6
12	North Point Wilds**	8.4
Total Acres		**46.0**

* *MDC Ownership (1994)*
** *MDC Long Term Care and Control*

There are three small parcels within the New Basin not yet under MDC control which are required for continuous access along the river: a portion of the Gulfford and North Shore Realty Trust lands at North Point; Lovejoy Wharf; and a small property owned by the MBTA between the Revere Plaza area and the trestle walkways on the bascule bridges (Revere Landing South).

The MDC Central Services facility is presently located on the former GSA parcel (North Point West). The relocation and reconstruction of this facility on another site is a requirement of the 1993 Charles River Crossing MEPA Certificate and the 1993 Memorandum of Agreement (MOA). While this project is outside the scope of the master planning process, the relocation must take place prior to construction of the park improvements at North Point Meadows.

EXISTING AGREEMENTS

The implementation of the New Basin parklands is shaped in part by several existing agreements. These agreements affect the project phasing, the process for design and construction, the rights to land, and the mitigation responsibilities of the surrounding highway construction projects (Appendix C).

MDC/MHD 1993 Memorandum of Agreement

On July 29, 1991, a Memorandum of Agreement (MOA) was signed by the following parties:

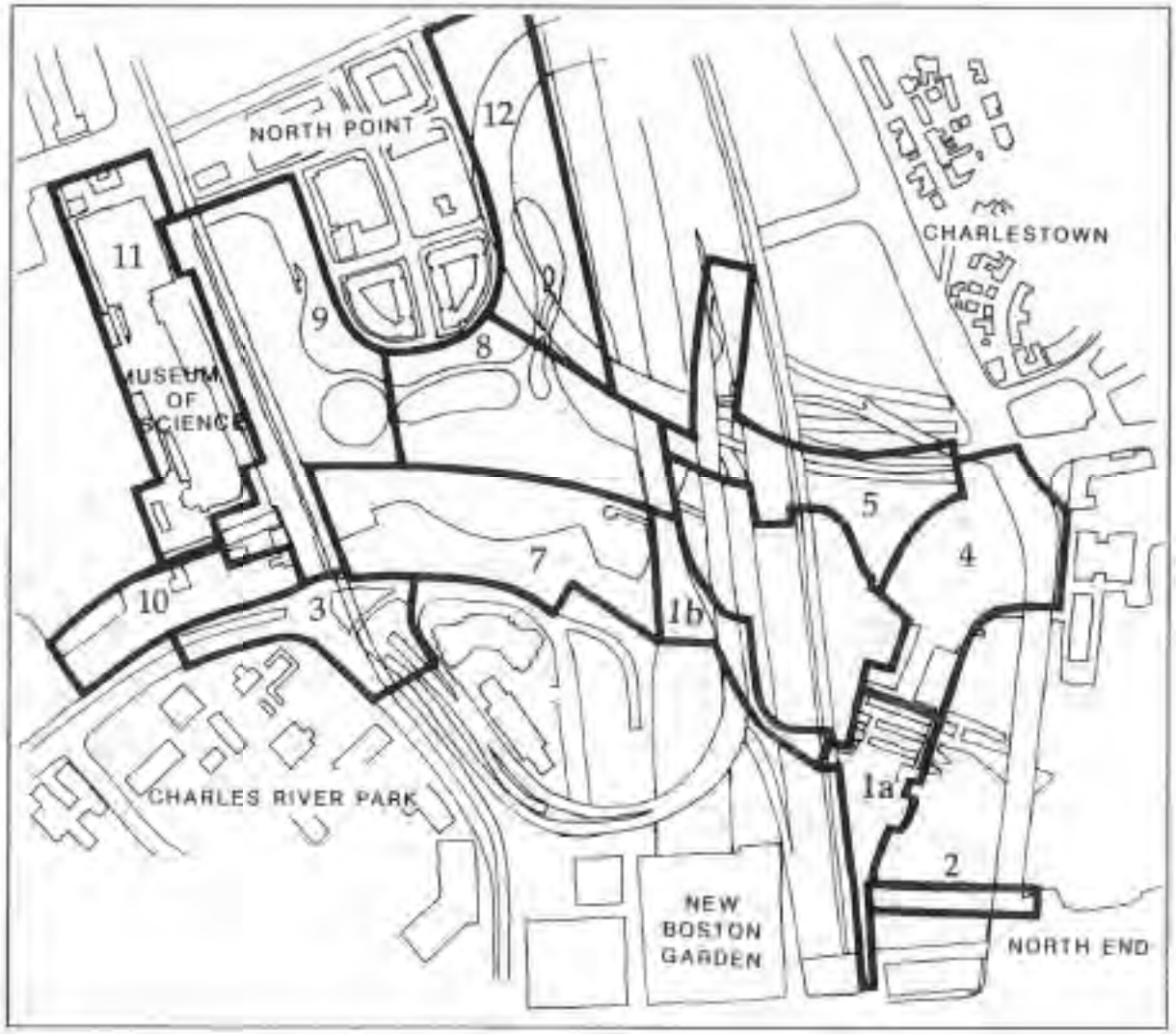
- Metropolitan District Commission (MDC)
- Massachusetts Highway Department (MHD), formerly Massachusetts Department of Public Works (MDPW)
- Executive Office of Environmental Affairs (EOEA)
- Executive Office of Transportation and Construction (EOTC).

Because a new Charles River Crossing design was selected in 1993, a revised MOA was signed on December 30, 1993, which supercedes the 1991 MOA. The 1993 MOA confirms the set of Mitigation Measures for the Central Artery project and is included as a condition to the EOEA Certificate of the Secretary on the Final Supplemental Environmental Impact Statement/Report (FSEIS/R) for the Charles River Crossing, dated December 31, 1993. These measures were based on the preferred alternative for the Charles River Crossing and evaluated in the FSEIS/R. The Mitigation Measures further the MDC's goal of developing the New Charles River Basin parks.

The MOA Mitigation Measures describe areas for park improvements, pedestrian connections, historic renovations on the old Charles River Dam, and certain regulatory requirements. All of these measures are defined by performance standards in the MOA which insure the construction of continuous public access along the Charles River in the New Basin and wetland and waterways mitigation for the CA/T Charles River Crossing.

The MOA also lays out responsibilities for the implementation of the Mitigation Measures:

- MDC is responsible for the design and construction of Mitigation Measures outside the Central Artery project limits, defined as Parcels 1a, 2, 3, 4, 7, 8, 9, 10, and 11.
- MHD is responsible for the design and construction of Mitigation Measures inside the Central Artery project limits, defined as Parcels 1b, 5, and 12.
- The Mitigation Measures can be modified if MHD and MDC agree in accordance with the MOA.
- MDC is to provide design and construction standards and consultation to MHD for park areas inside the CA/T project limits.
- MHD is to transfer all park land to MDC except necessary highway rights of way and other existing easements at the completion of the CA/T Project.



- MDC is to maintain and control the parklands upon completion of park construction, except those areas that are integral to the operation of the highway.

- Parcels 2, 4, 7, 8, 9, 10 and 11 are defined as Pre-Mainline Mitigation Measures. Design and construction of these measure are to begin no later than the start of CA/T Project mainline construction in the New Charles River Basin.

- Parcels 1a, 1b, 5 and 12 are defined as Post-Mainline Mitigation Measures. Design and construction of these measures are to begin immediately after completion of the Charles River Crossing.

The master plan has identified three additional pedestrian connections that are crucial to the MDC goals of connecting parklands within the New Charles River Basin. They are not part of the 1993 MOA performance standards, but may be implemented if funds remain after the completion of the required mitigation measures:

- A pedestrian connection from the MDC Central Services parcel across the North Point Inlet to the Museum of Science.

- A pedestrian connection across the old lock on the historic dam.

- A continuous and direct connection between the Boston esplanade and the Cambridge esplanade along the upstream side of the Museum of Science.

Other modifications recommended by the master plan are described below:

- A new water body, first proposed by CA/T staff, is included in the master plan in the area along the west side of the MBTA tracks. Performance standards for this water body are defined in the MOA.

- The 1991 Mitigation Measures required "continuous 100 foot wide parcel adjacent to and outside the loop ramps" at North Point. The 1993 MOA alters this requirement as follows: portions of this area are expected to fall within the area of North Point roads and private development parcels, which are not included in the master plan, and the rest of the original 100-foot wide parcel within the North Point Wilds area, which is a part of the master plan.

- The City of Cambridge has reconfigured the roadways and development parcels at North Point to relate better to the proposed master plan parklands. The master plan responds to this reconfiguration.

- If the Spaulding Hospital is relocated, a portion of the site could be used to increase the park area of Nashua Meadows.

The 1991 MOA identified a number of Mitigation Measures to be included in the mitigation program if recommended by the master plan. The recommendation for each of these projects is described below:

- The master plan recommends that the ice skating program on Storrow Lagoon be implemented.

- The master plan recommends that the program for swimming in the Storrow Lagoons not be pursued.
- The two small boat landings are included within the proposed master plan parcel improvements.
- The master plan recommends that the Lee Pool be reconstructed if funding is available.
- The master plan recommends the removal of the MBTA pilings and deck on the north bank of the river adjacent to the bascule bridges, subject to consultation with the MBTA as owner. The removal of these structures is part of the mitigation for the CA/T Project.

Chapter 91 Waterways License No. 1742

The Central Artery North Area (CANA) project was designed by MHD as a separate action, independent of the Central Artery project, and permits were issued in 1987. The Department of Environmental Protection (DEP) issued a Chapter 91 Tidelands License on December 30, 1987, that specified Mitigation Measures for the CANA project including Paul Revere Landing Park North and the existing Millers River. A condition of the License was that the Mitigation Measures be completed prior to the completion of the CANA project.

The preferred alternative for the Charles River Crossing resulted in the redesign of substantial portions of the CA/T project within Chapter 91 jurisdiction. The preferred river crossing also required the alteration of several of the earlier CANA Mitigation Measures. In the 1993 MOA, the MDC agreed that, in its view, the implementation of all of the Mitigation Measures set forth in the MOA would be appropriate substitutions for the Chapter 91 Mitigation Measures required by the CANA project.

In the spring of 1993, the CA/T project received Chapter 91 Waterways License No. 3302, a separate CANA license to allow temporary loop ramps to be built. As part of the License, the CA/T project agreed to a schedule for the design and construction of the first portion of Revere Landing Park.

Chapter 91 Waterways License No. 2107

In 1987, the Spaulding Rehabilitation Hospital was granted a Chapter 91 license to construct an addition to its main building. As a condition of the license, the hospital agreed to construct a large pier in the Charles with walkways extending along the upstream side of the bascule bridges and over large concrete structures that once supported two additional railroad bridges. The pier and walkways would be used by its patients and also be accessible to the public.

The design and construction of the pedestrian bridge over the MBTA commuter lines on the Boston side of the river will require coordination with construction of the deck and walkways for the hospital.

LAND ACQUISITION AND ACCESS RIGHTS

While the MDC owns and manages most of the land in and around the New Charles River Basin, two key parcels and certain access rights must be acquired in order to make the necessary pedestrian connections across this "lost half mile" between the river and the harbor. Several other parcels would contribute to the parklands in this area but are not critical to make the necessary connections.

In order to connect the park parcels on either side of the MBTA tracks, the MDC must obtain access rights or ownership of an MBTA parcel on the south bank of the river, east of the bascule bridges.

Consultation with the MBTA will also be required for the proposed walkways attached as outriggers to the two bascule bridges, which would connect the existing trestle walkways to the north bank and add important links between parks on the Boston and Cambridge shores.

Three parcels will be acquired to meet the performance standards in the MOA:

- A portion of the Guilford and North Shore Realty Trust lands at North Point.
- Lovejoy Wharf.
- A parcel for the relocation of the MDC Central Services facility.

If new development is proposed for the MGH or Spaulding Hospital properties, preliminary plans for these sites should be reviewed to improve access consistent with the Master Plan.

The MHD will maintain necessary rights of way for highway maintenance, repair, and replacement, but ownership of all park improvements will be transferred to the MDC for long-term management and operation as agreed upon in the 1993 MOA.

ENVIRONMENTAL POLICIES AND REGULATIONS

As a waterfront project, the proposed master plan is subject to a number of federal, state, and local approval processes. Because of its unique role and location, this project must balance a wide range of public interests set forth in the policies and regulations of the relevant government agencies.

The New Basin is a major new public open space, sponsored by a public agency, in one of the most under-utilized waterfront areas in the state. The goal of the project is to improve this waterfront by enhancing the recreational and natural functions of the river. Because it is a riverfront project, the recreational functions include both boating and park uses, both of which rely on public access and enjoyment of the water and linear connections through the basin. In celebrating the natural functions of the river, the project must recognize and in some cases overcome the extensive human intervention that has occurred in this area over the last two hundred years. Preliminary discussions with the Department of Environmental Protec-

tion Waterways Division and with the U.S. Army Corps of Engineers (ACOE) have confirmed the support of these agencies for the goals and strategies of the Master Plan.

The relevant policies affecting the New Basin are described below as a guide for subsequent phases of the park development. As the project moves forward, the MDC will take the lead for obtaining the necessary permits for the portions of the park that they will construct. The involved agencies will be consulted early in the design process to incorporate their comments into the plans.

U.S. Department of Transportation Section 4(f)

Section 4(f) policies are the basis for the CA/T mitigation requirements in the New Basin. Section 4(f) of the Department of Transportation Act of 1966 is a federal law that protects significant public parks, recreation, and historic resources. Impacts on parkland are allowed only when it is demonstrated that there are no feasible or prudent alternatives for the design of the transportation project.

In the FSEIS for the preferred alternative and in earlier documents, the Federal Highway Administration (FHWA) recognized unavoidable CA/T project impact on the park resources in the New Charles River Basin area and agreed that the project requires mitigation of these impacts.

U.S. Army Corps of Engineers

The park project will involve the construction of new structures below the mean water line of the river, triggering Section 10 of the River and Harbors Act and possibly Section 404B of the Clean Water Act. New structures include the reconfigured shoreline, piers, boat docks, bulkheads, and permanently moored vessels. The extent of these improvements exceed the thresholds for Nationwide Permits.

Under Section 10, the ACOE issues Department of the Army permits for structures or work in waters of the United States with the goal of protecting navigation. The ACOE typically gives favorable consideration to facilities for small boats, especially where public use and access to a waterway is enhanced. In general, projects seeking approval should be designed to enhance the environment, especially fish and wildlife habitat, flood control, and navigation. The ACOE consults with other agencies, including the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the U.S. Environmental Protection Agency, and considers U.S. Coast Guard regulations for navigational aids prior to issuing permits. The ACOE also considers a broad range of other factors in its public interest review including aesthetics, historic properties, land use, recreation, and economics.

During the permitting and design phase, discussions will be held with the ACOE regarding alternative methods for reconstructing the shoreline and making other park improvements in the New Basin. At that time, an evaluation will be made comparing the use of platforms on piles or the use of fill to achieve the best possible public access along the river shores and to minimize impacts to fisheries and other functions of the river. As a result of these consultations, the ACOE will determine whether a permit is required under Section 404 of the Clean Water Act, which regulates the use of fill in waters of the U.S.

U.S. Coast Guard

The U.S. Coast Guard has jurisdiction over aids to navigation and bridges under Sec. 9 of the River and Harbor Act. The ACOE considers the U.S. Coast Guard regulations prior to issuing their Section 10 permit. The U.S. Coast Guard also has permitting authority for the construction of bridges over navigable waters.

Coastal Zone Management

Any federal funding or federal permitting action within the coastal zone initiates a review process under the Coastal Zone Management (CZM) Act. This act authorizes states to review projects for consistency with state coastal policies.

The Charles River is classified as a coastal zone because it is an anadromous fish run, where ocean fish enter fresh water to spawn. Since the project also will receive federal funding through the Central Artery and involves the review by the ACOE, it will be subject to the Coastal Zone Management review. According to preliminary discussion with CZM officials, their jurisdiction on the upstream side of the Central Artery bridge will focus on the anadromous fish, while downstream of the bridge their review will be more comprehensive.

Massachusetts Environmental Policy Act

A condition of the Secretary's Certificate on the 1991 FSEIR for the CA/T Project called for EOEA review of the park master plan. The draft park master plan was submitted to the Secretary in March 1993, again in March 1994, and public review was invited in the Environmental Monitor. In October 1994, the Master Plan was approved by MEPA.

State Chapter 91 Waterways Regulations

The entire park area falls within areas categorized as filled and flowed tidelands subject to the state Waterways Regulations (Chapter 91). The Department of Environmental Protection (DEP) issues licenses for placing fill, building structures, and dredging within these tideland areas.

Preliminary conversations with the Department of Environmental Protection (DEP) suggest that the project will be viewed as an exciting improvement to the deteriorated condition of the area today. The proposed project meets many of the Chapter 91 goals, including:

- Protection of working waterfronts and water-dependent uses;
- Provision of pedestrian access along the water's edge and public use and enjoyment of the water;
- Revitalizing unproductive urban waterfronts.

The proposed uses in the New Basin fall within the category of water-dependent uses or accessory uses to water-dependent uses. Water-dependent uses include parks and water's edge esplanades (in particular when created by a public agency), marine educational facilities, boating facilities, navigational aids, water transportation, and fishing and water-based

recreation. Accessory uses include administrative offices, boat clubhouses, restaurants and retail primarily serving patrons of water-dependent uses, and parking.

DEP noted that special legislation would be required to amend the state Harbor Lines prior to the issuance of a Chapter 91 Waterways License to fill or build structures in or over water. In general, the DEP favors the use of platforms over fill wherever possible. During the permitting and design phase, the preferred construction methods for park improvements in the New Basin will be discussed with DEP as well as with other involved agencies.

State Water Quality Certificate

A Water Quality Certificate from the DEP is required for dredging projects and filling activities. A Water Quality Certificate will also be required under the local wetlands review process. Typically, the Water Quality Certificate specifies construction and erosion control measures to protect wetlands.

Contaminated Soils

The extent and type of contaminated materials within the New Basin will be determined during the design phase of the various parcels. All contaminated material will be handled in a manner consistent with DEP regulations.

Harbor Line Legislation

In a few locations, the parklands extend beyond the state Harbor Lines and must receive legislative approval prior to receiving a DEP Chapter 91 Waterways License. The legislative action may either redraw the Harbor Line or grant special exemptions for structures to extend over the Harbor Line as in the proposed deck at Spaulding Hospital, which was approved in 1990. A change in use of a structure subject to an existing Chapter 91 Waterways License also requires a new Chapter 91 Waterways License. A legislative sponsor should be identified early in the design and permitting phase of the New Basin.

Wetlands Regulations

Within the New Basin are several categories of wetlands regulated by the State Department of Environmental Protection, including:

- Land under water bodies
- Banks
- Anadromous fish run
- Land subject to flooding.
- Bordering vegetated wetlands

Wetland regulations are administered locally, in this case by the Boston Conservation Commission and the Cambridge Conservation Commission.

Preliminary discussions with the DEP Wetlands Division noted that primary wetland issues in this area will be maintaining the floodplain capacity of the waterway and its banks and maintaining the fish and wildlife habitat, notably the river's role as an anadromous fish run. The local conservation commissions, however, are the actual permitting agencies and further conversations will be held with these entities at the beginning of the design phase.

DESIGN AND CONSTRUCTION

The 1993 MOA between MHD and MDC divided the responsibility for park design and construction according to CA/T project boundaries. The master plan recommends that the following issues be considered in the development of design, construction, and management responsibilities.

Long-Term Management Responsibilities

The MDC is a regional agency established to develop and manage parklands. It has acquired the majority of the land in the New Basin with the long-stated goal of developing parklands on the shores of the river, connecting the two dams and extending the existing esplanades. As long-term stewards of the parklands, the agency has a vested interest in managing the design and construction process for the proposed improvements.

Once the highway is completed, the MHD will transfer land in Cambridge and Charlestown to the MDC, which will own all of the parklands in the New Basin with the exception of the highway and railroad rights of way and access easements. As property owners, the MDC will assume management responsibility for the new parklands, overseeing maintenance, programming, and interpretive exhibits within the New Basin.

Design Coordination

In order to assure that the spirit and intent of the master plan is maintained throughout the process, it is essential that the MDC play the role of guardian and principal implementor of the plan. This role is particularly important in the development of the New Basin given its scale and the nature of the construction process, which will be intermittent and prolonged over the next decade. The design of each element of the Charles River Crossing must be closely coordinated with the design of the surrounding open spaces to integrate successfully the transportation elements into the park and to realize the cohesive character of the New Basin parklands.

Coordination between MHD and the MDC on the design of adjacent parcels will greatly enhance all the areas in the New Basin. An example is the relationship between Portal Park and the adjacent open space at Revere Plaza illustrates the opportunities for unified design and construction supervision. The master plan recommends a simple water wall as a visual and noise barrier where the mainline roadway comes out of the ground at Causeway Street between Revere Plaza and Portal Park. The water wall would connect the two parcels and guide the park users into the New Basin.

Citizen Participation

One of the primary goals of the Federal Highway Administration (FHWA) is citizen participation in project design. During the master plan process, the MDC has worked closely with the Citizens Advisory Committee

(CAC) for the New Basin to shape a plan that addresses the concerns of the CAC and incorporates their ideas. The CAC is the basis for a long-term community stewardship for the park and should continue its indispensable role, with the support of MDC staff, in advising and counseling on design issues to ensure that the master plan is carried out faithfully.

COSTS AND FUNDING OF THE NEW BASIN

The 1993 MOA establishes the MHD funding for the Mitigation Measures at $80 million (in 1993 dollars). Other sources of funding will be sought for specific features in the park, such as the Children's Science Playground; if necessary, these elements may have to be changed in final design.

The following costs are presented in 1993 dollars and do not include inflation. In general, the cost estimate includes the cost of utility relocation, soil stabilization, and soil amendments for horticultural purposes. A contingency is included in the $80 million budget for remediation of contaminated soils.

The preliminary nature of the following cost estimates should be emphasized for several reasons: first, only two of the New Basin park developments have been completed through schematic design, and second, these estimates are based on platform construction over water in a number of areas. During the permitting of the master plan, the MDC will evaluate alternative construction methods for significant cost savings as permitting allows.

Additional park improvments, which are recommended by the master plansubject to the availability of additional funding, include the ice skating program, which has a capital cost of $0.1 million and an annual operating cost of $0.1 million, and the reconstruction of the Lee Pool, which is estimated to cost $5.1 million for design and construction.

More detailed information on the proposed park costs is provided in the Cost Estimate (Appendix J).

MASTER PLAN BUDGET SUMMARY

Pre-Mainline

Parcel	Name	$ Total
	Master Plan Permitting	$ 216,000
2	*Lovejoy Wharf	$ 3,483,000
4	*Charlestown Meadows East	$ 6,070,000
7	*Nashua Meadows	$ 11,091,000
8	*North Point Meadows East	$ 6,739,000
9	*North Point Meadows West	$ 13,383,000
	*MDC Maintenance Facility	$ 1,713,000
10	*Historic Dam South (site work)	$ 3,414,000
	Exhibits and Programming	$ 3,016,000
11	*Historic Dam North	$ 2,718,000
	MDC Contract Management	$ 1,548,000
	MDC Land Acquisition & Building Renovation	$ 7,000,000
Pre-Mainline Subtotal		**$60,391,000**

Post-Mainline

Parcel	Name	$ Total
1	*Revere Plaza	$ 6,879,000
3	*Leverett Circle/Storrow Drive	$ 815,000
5	*Charlestown Meadows West	$ 9,072,000
12	*North Point Wilds	$ 3,667,000
Post-Mainline Subtotal		**$20,491,000**

Chapter 91 License **($ 900,000)**

Public Benefits

TOTAL MITIGATION EXPENDITURE **$79,982,000**

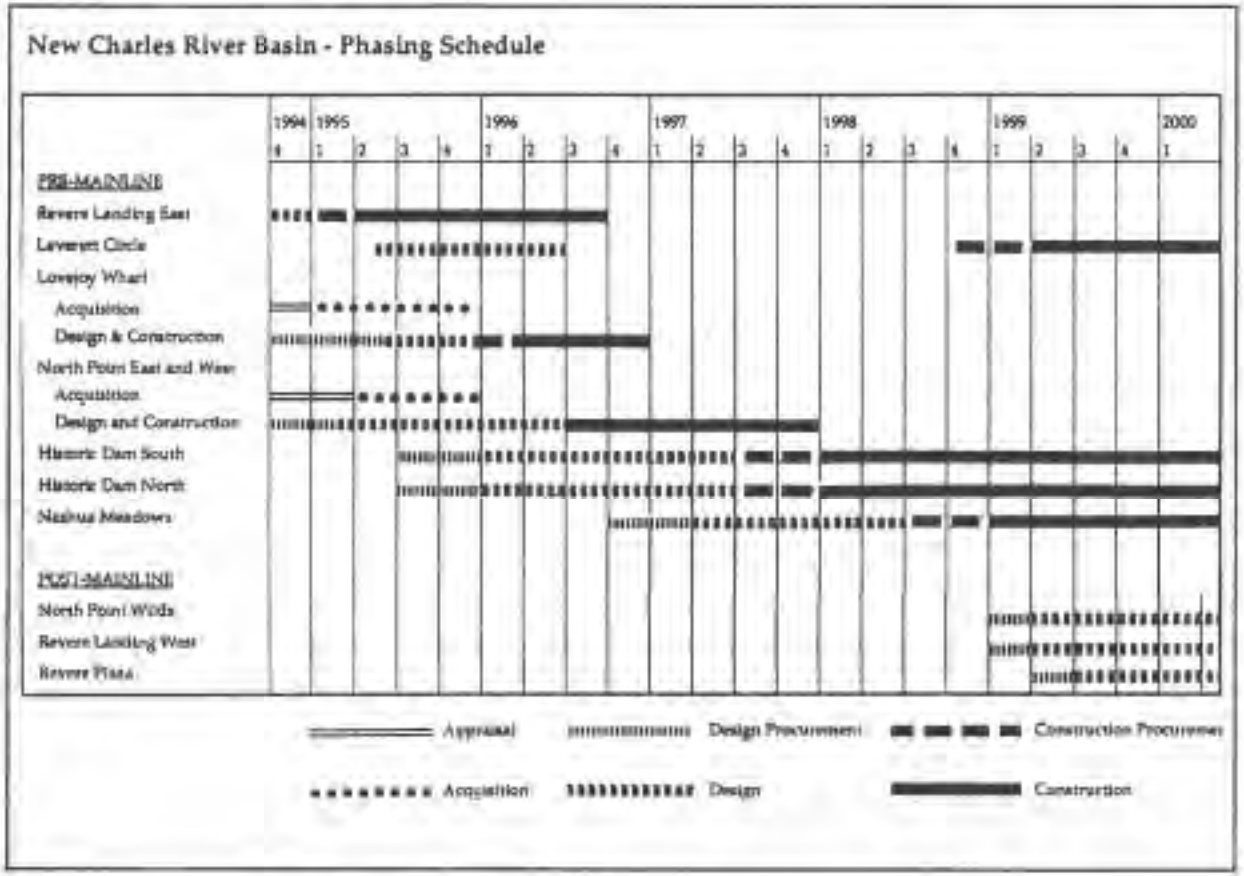
*These mitigation measures are required under the performance standards of the 1993 Memorandum of Agreement. Within each phase of the new basin project, the amounts allocated to the various categories of construction may be revised, but the total cost of each phase will be controlled so that completion of all required mitigation measures is assured.

PHASING

The priorities and dates in the phasing plan are influenced by a number of critical factors:

- The 1993 MOA requirements to commence design and contruction of the pre-mainline parcels prior to constuction of the mainline elements of the Charles River Crossing.
- MDC priorities for physical connections to existing parks.
- Priorities of agencies and interested parties including the City of Cambridge, the City of Boston, adjacent residential communities, the Museum of Science, nearby developments, and others.

New Charles River Basin - Phasing Schedule



MDC Priorities

The MDC's primary goal is to develop the New Basin so that each phase extends existing parklands, creates functional park areas, and emphasizes connections to adjacent parts of the city. The MDC priorities for pre-mainline park construction are as follows:

- Connect the North End and Charlestown waterfronts through Revere Landing Park and Lovejoy Wharf and across Revere Plaza in order to connect HarborPark with the parklands of the Charles River, and to improve the pedestrian connection across the new Charles River Dam as an alternative to the sidewalks of the North Washington Street Bridge.

- Complete the first phase of the North Point Meadows including the pedestrian connections, to create a continuous loop linking the North Point Meadows with the Lechmere Canal and the Boston Esplanade.
- Complete the historic dam renovations to connect the existing Boston and Cambridge esplanades and provide a critical link to the North Point Meadows. Further discussions will be held with the Department of Capital Planning and Operations (DCPO), the CA/T project, the Massachusetts Historical Commission (MHC), and local historical commissions, so that the MDC can define the necessary process for design and renovation of the historic buildings.

The construction of Nashua Meadows is a priority of the MDC because it will extend the existing esplanade to the commuter rail tracks and will complement the North Point Meadows.

The MDC recommends that the improvements to the North Point roadways be phased to correspond to the park improvements in that area both for access to the park and the integration of design.

In order to achieve its goal of maximizing use and access to park segments as they are completed, the MDC will explore interim pedestrian connections wherever feasible, coordinating their efforts with the CA/T project.

Central Artery Construction Phasing

Park improvements that can commence construction prior to the CA/T project construction are defined as pre-mainline projects (Parcel numbers are taken from the 1993 MOA):

- Lovejoy Wharf (Parcel 2)
- North Point Meadows West (Parcel 3)
- Revere Landing Park East (Parcel 4)
- Nashua Meadows (Parcel 7)
- North Point Meadows East (Parcel 8)
- Historic Dam Area South (Parcel 10)
- Historic Dam Area North (Parcel 11)

The following parcels will be post-mainline projects:

- Revere Plaza—the area beneath and adjacent to the proposed CA/T cable stay bridge and existing I-93 (Parcels 1a and 1b) on the south bank.
- Revere Landing Park West—the area beneath the proposed CA/T cable stay bridge and existing I-93 (Parcel 5) on the north bank.
- North Point Wilds (Parcel 12)—the area beneath the highway loop ramps.

The phasing plan for the New Basin will be updated to be consistent with the CA/T project schedule.

Other Priorities

The phasing plan takes into account the stated priorities of the agencies and interested parties that form a constituency for the New Charles River Basin parklands:

- The CA/T project would like to initiate its mitigation commitments as early as possible by making improvements that will bring people and activities into the new basin and provide locations for observing construction.
- The Museum of Science, the Galleria Mall, the Sonesta Hotel and other nearby developments will benefit from the early improvement of the historic dam area.
- The City of Cambridge has defined the North Point park as a priority critical to the development of the North Point parcels.
- The City of Boston has set the improvements to the Lovejoy Wharf parcel as a priority in order to begin ferry service to this location.
- The Charlestown community will benefit from early improvements to the Revere Landing Park, which will connect to the proposed City Square park and provide access to the river's edge.

RECOMMENDATIONS FOR NEXT STEPS

The master plan recommends that the MDC take the following strategic actions to bring the park to completion. In order to meet the objectives of the phasing plan, these actions must occur on or before the year indicated.

1995

- Complete the permitting process for the master plan.
- Complete the final design and permitting for Revere Landing Park North, and begin construction.
- Complete the Interdepartmental Services Agreement (ISA) and begin final design for the North Point parcels.
- Complete the ISA and begin the final design for Lovejoy Wharf.
- Complete the ISA and begin the final design for Leverett Circle.
- Coordinate the final North Point road alignments with the City of Cambridge and the CA/T.
- Consult with the CA/T project, the City of Boston, and the Massachusetts Bay Transit Authority (MBTA) on the implementation plan for Lovejoy Wharf ferry service.
- Coordinate with the MHD to aquire and transfer land at North Point East to the MDC.
- Establish a process for determining building programs for the historic structures on the old dam.
- Determine the final design process for the historic buildings through discussions with the Division of Capital Planning and Operations (DCPO), the CA/T project, the Massachusetts Historical Commission (MHC), and local historical commissions.
- Initiate the design procurement process for the historic dam parcels.

- Acquire ownership or access rights from the MBTA for a parcel of land on the south bank of the river.
- Begin the design and construction of the permanent exhibits.
- Select initial operators of concessions and other special park features.

1996

- Begin the final design for the Historic Dam North and South.
- Work with MHD to transfer land for Nashua Meadows to the MDC.
- Begin construction of Lovejoy Wharf.
- Begin construction of North Point East and West.

1997

- Begin final design for Nashua Meadows.
- Work with MHD to transfer land at North Point Wilds to the MDC.

1998

- Initiate the design procurement process for the first phase of post-mainline projects.
- Begin construction on the old dam.

1999

- Acquire the access rights from the MBTA for pedestrian bridges over the tracks and for walkways along the bascule bridges.
- Initiate the MHD design procurement process for the second phase of post-mainline projects.
- Begin construction of Leverett Circle.
- Begin construction of Nashua Meadows.

6

MANAGING THE NEW BASIN

THE ROLE OF THE MDC

Since its establishment as the regional park commission a century ago, the Metropolitan District Commission has acquired, preserved, maintained, and interpreted a total of 16,000 acres in numerous sites, including ten reservations, three of the Boston Harbor Islands, parkways, rivers, streams, beaches and playgrounds. The depth and breadth of this experience will enable the MDC to develop responsive mechanisms as the needs of the new park evolve.

General support will include day-to-day administration, management, planning, budgeting, staff development and oversight, establishing and maintaining relationships with both private and public entities, etc.

Once the parklands are established, the design and construction function becomes less important, but it is a necessary part of an ongoing park operation. From time to time there will be a need for adaptation of existing structures as well as design of new facilities.

Caring for the trees and plants will be a major undertaking, given the complex nature of the park and the variety of spaces that it offers. The on-going horticultural service will be important to the park's health and image.

Nothing is more important to the success of the New Basin than the maintenance of the natural and built environment. This includes a range of services, such as care of plants, animals, playgrounds, structures, art, waterways, equipment, lighting — all the elements that make up the complexity of a major urban space, one that possesses many separate design qualities.

In addition to maintenance, security will be an important operation. Proper selection, training, and deployment of an adequate park security staff will not only protect the park, it will promote its use by establishing a sense of well-being and safety for visitors.

Visitor Services encompass the interpretation and programming explored at length earlier in this report. Information, education, recreation, and events will be offered through this function.

DEVELOPMENT OF PUBLIC/PRIVATE PARTNERSHIPS

Because caring for a major urban park is demanding and complex, it is necessary to build a strong network of park advocates, people who are committed to the park and its success. An organized advocacy group can join with a public agency to provide for the park as the following case study attests.

Case Study: The Central Park Conservancy, New York City

The Central Park Conservancy is an outstanding example of a partnership between government and a private sector constituency. Formed in 1980, this public-private partnership has proved to be a successful experiment in governance and responsibility.

In 1992, the City and the Conservancy shared costs ($6 million each) for maintenance, education, recreation, and volunteer programs. The City provided $5.1 million for capital improvements while the Conservancy provided

$3.5 million. In addition, the Conservancy launched an endowment to secure the Park's future with a $1 million pledge. One Conservancy group, Playground Partners, raised over $100,000 for playground maintenance while another, the Perimeter Association, helped maintain the sidewalks and entrances at the Park's edge.

The public-private partnership shares the following functions: horticulture, maintenance, design and building, visitor services, management, marketing and financial support.

Maintenance

Operations and maintenance of Central Park requires 172 employees. The Parks Department and the Conservancy split these staff costs. The Conservancy support has allowed Central Park maintenance to continue at a necessary level despite reduction in City funding. In addition, the Conservancy has committed funds to improve traditionally weak areas of maintenance such as storm drain cleaning and waterbody management, mechanical equipment care and repair, playground cleanup and maintenance, historic structures maintenance, and bronze conservation. The Conservancy also conducted a study of park operations in order to quantify routine maintenance work and reorganize human resources to improve the quality of park care and to increase accountability. This study recommended that the park be reorganized into decentralized management zones.

Horticulture

Zone gardeners made possible by the Conservancy now number 10 site-specific workers. In the areas of tree care and woodland restoration, the Conservancy established the Central Park Tree Trust with a pledge of $1 million toward an endowment goal of $6 million. The Conservancy supports a tree crew which operates an integrated pest management program. In 1992 the Woodland Restoration Project crew was supplemented by students from the Manhattan School of Career Development and a crew of Conservancy Summer Youth Interns. The Conservancy and its partners have developed a set of Management and Restoration Plan guidelines for the North Woods as part of a comprehensive strategy to save Central Park's native forest together with restoring the design of the Upper Park.

Rebuilding the Upper Park

In order to increase use of the upper park, new plans, capital rebuilding, increased maintenance, and new programs have been instituted. These efforts include new and refurbished playgrounds, restoration of natural features, arches, cascades, surrounding landscapes, springs, eastern and western portals to the Ravine, and the restoration of Harleem Meer Lake with a naturalistic edge. The Dana Discovery Center is under construction. It will house education programs, provide information, and encourage further park exploration. A public terrace and esplanade will be completed soon, and a lakeside restaurant is planned.

interpretation activities. The purpose of this program would be:

1. To make certain that most of the region's citizens are aware of the efforts to build this park, that they have some idea of what the park will be like and what it will mean to them and to their community.

2. To get feedback from the citizens concerning their interests and ideas for the park.

3. To make people aware of what they can do to build, maintain, and operate this important public asset.

Methods for accomplishing these purposes would include the use of newspaper, television, radio, volunteer speakers' bureau, print materials, and mall kiosks.

Phase 2: Pre-Opening Activities

Establish a schedule of pre-opening interpretative activities (see Chapter 3, Animating the New Basin) designed to attract diverse groups. Integrate these activities with the information program so that the two efforts will support and reinforce each other.

Phase 3: Task Force

Create a task force of carefully-selected, highly-motivated individuals with time to devote to the task of developing a park support organization. This group will have the following charge:

1. Investigate by studying other organizations and situations and gather information from citizens and community groups.

2. Determine a mission statement.

3. Design an organizational structure and prepare the necessary documents, such as charter, by-laws, legal designation, and committee structures.

4. Set forth an implementation plan for structuring the organization, including a financial strategy.

Phase 4: Implementing the Organization

Activate the organization by following the implementation plan. This will require establishing the first board, filling committees, and beginning the life of the organization. With the first meeting of the board, the task force is dissolved.

Phase 5: Membership Drive

With the new organization underway, begin the charter membership drive.

Phase 6: Special Events

Plan and sponsor a schedule of events to coordinate with the opening of the park, so that visitors can meet representatives of the organi-

zation who might be serving as volunteers, learn of its existence and become members themselves.

As the New Basin moves from the master plan into the design and construction phase and then into long-term management, the MDC will continue its leadership role in promoting park improvements and working cooperatively with other involved agencies, institutions, and community groups. It is critical that this park become an important part of regional life for all citizens so they will take on the responsibility for the park and provide for its operation and maintenance. The reward for undertaking this challenging endeavor, which will transform the "lost half mile" of the Charles River, will be the creation of a major new open space, a priceless asset weaving the natural and man-made environment into a vibrant community.

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ACKNOWLEDGEMENTS

NEW CHARLES RIVER BASIN

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