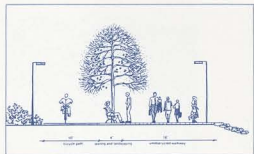
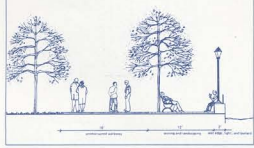


Illustrative Cross Sections

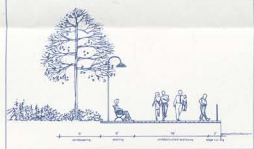
Within the easement required for public access, the walkway may be designed in a variety of ways. Several examples are presented below.



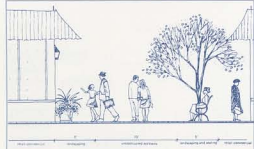
Parallel walkway and bikeway surfaces may be separated by a landscaped buffer.



The walkway may be separated from the water's edge by a landscaped seating area.



The walkway may be at the water's edge, with a landscaped area separating it from other uses and activities within the development.



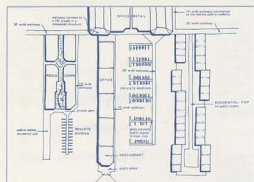
Connecting walkways within commercial development will enhance access to retail uses.



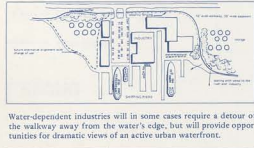
Landscaping can be used to screen connecting walkways from adjacent residential uses.

Illustrative Plans

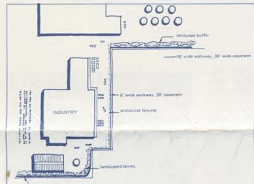
The location of the waterfront and connecting walkways must respect the functional requirements of the use of each site.



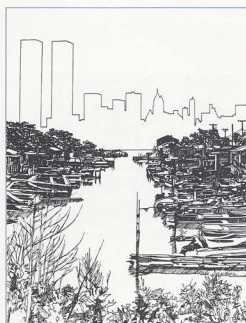
Mixed use, office, residential and marina developments provide opportunities for variety in walkway design and location.



Water-dependent industries will in some cases require a detour of the walkway away from the water's edge, but will provide opportunities for dramatic views of an active waterfront.



Non-water-dependent industries will require clearly defined separation from the walkway, but may permit walkway location at the water's edge.



Morris Canal Basin

Redevelopment proposals for the Hudson Waterfront include provisions for pleasure boat marinas at Liberty State Park and in several of the major private developments. The Hudson is an important pleasure boat route and connection to the Erie Canal and the Great Lakes. The scenic urban landscape of the Lower Hudson and its many tourist attractions make it particularly attractive to pleasure boaters.

Central New Jersey Terminal

The magnificent 1889 railroad ferry terminal at the foot of Johnson Avenue is currently undergoing restoration in conjunction with Liberty State Park development. It is important not only architecturally but also for its historic association with Ellis Island.



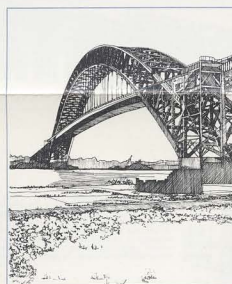
Statue of Liberty

A gift of France to the United States, the Statue of Liberty was designed by a young Abolitionist sculptor Auguste Bartholdi, who began work on the statue in 1874. Through the efforts of many, including Joseph Pulitzer, editor of the "New York World" the pedestal for the statue was installed in May 1885, on what was then called Bedloe's Island. The top of the torch stands 228 feet above the water. The Statue is linked by the Circle Line Ferry with Ellis Island, the arrival point for hundreds of thousands of immigrants to the United States in the late 19th and early 20th Centuries.



Caven Point

Caven Point Pier is a 4200 foot-long pier constructed in 1945, popular for fishing. Caven Point wetland is a twenty-one acre area of mudflats and shallow tidal bays. Blue Crabs abound in the saline wetland and Chopters, Least Terns and Black Skimmers (Endangered Species) and Great Blue Herons, Pottillied Grebes, Short-tailed Owls and Savannah Sparrows (Threatened Species) have been sighted there. Caven Point is a recognized birding area for the New Jersey Audubon Society.



Bayonne Bridge

Three weeks after the George Washington Bridge was dedicated in 1931, the Port of New York Authority opened another record-breaking span, the Bayonne Bridge linking Bayonne to Staten Island across Kill Van Kull. Designed by O.H. Ammann and Alston Dana, the bridge is a parabolic two-hinged arch; the rise of the arch is 266 feet and the deck clearance is 155 feet above the high water. Its span at the time of completion was nearly 700 feet longer than its closest rival, the Hell Gate Bridge. With a clear span from abutment to abutment of 1652 feet, the bridge is still the world's longest man-made arch.



The Hudson Walkway Plan

The Hudson Waterfront Walkway Plan delineates the route of the proposed Walkway and scenic or historic extensions away from the Waterfront to and along the Palisades, and through areas of particular recreation value and interest: the Palisades Interstate Park, North Hudson Park, historic Washington and Hudson Streets in Hoboken, Liberty State Park and Caven Point in Jersey City and Kill Van Kull Park in Bayonne.

The Plan identifies features of the Study Area significant for development and use of the Walkway: areas proposed for development; public land holdings; railroad property; parks, historic sites and districts and major access points to the waterfront, by car or public transportation.

For further information concerning the Hudson Waterfront Walkway, contact the New Jersey Department of Environmental Protection, Division of Coastal Resources, CN401, Trenton, New Jersey, 08625, or telephone (609) 292 9762.

The Master Plan for the Hudson Waterfront Walkway was prepared for the State of New Jersey Department of Environmental Protection, Division of Coastal Resources by:

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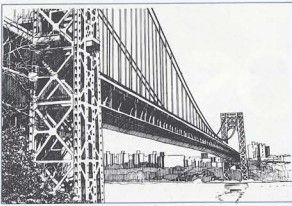
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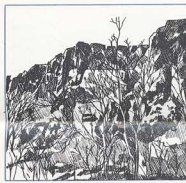
This report was prepared under contract with the New Jersey Department of Environmental Protection, Division of Coastal Resources with financial assistance by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, under provisions of the Federal Coastal Zone Management Act, P.L. 92-583, as amended.

HUDSON WATERFRONT WALKWAY

George Washington Bridge



Designed by Port of New York Authority engineer, Othmar Ammann, and noted architect, Cass Gilbert, and constructed between 1927 and 1931, the bridge had nearly twice the span of any then existing bridge in the world and represented numerous structural advances for the time. The Palisades Interstate Park Commission was founded in 1900 and the first land purchase of Fort Lee staff occurred in that year with financing provided by J.S. Morgan. In 1974, development began of Fort Lee Historic Park to commemorate the role of the area in the Revolutionary War. The park includes several boat ramps and picnic areas and is accessible by means of the park drive which extends from Edgewater north to Alpine under the George Washington Bridge.



Palisades

The Palisades are world-famous vertical columns of diabase rock, which originated beneath the ground as volcanic magma 175 million years ago. Wedged sandwich-like between layers of sedimentary sandstone and shale, the 1000-foot-thick "wall" of molten rock slowly cooled and solidified over the years into today's diabase rock. As it cooled the entire mass experienced great vertical fractures which broke it up into a series of rock columns. Millions of years of erosion removed the top layers of sedimentary rocks and exposed these columns, so clearly and dramatically visible along the Hudson Waterfront in Fort Lee, Edgewater, North Bergen and West New York.

Legend

- Ideal Route
- Loop Excursion Route
- Ferry Services
- Existing Fishing
- Proposed Fishing
- Existing Marina
- Proposed Marina
- Hospital
- PATH Train
- Existing Ferry
- Proposed Ferry
- Outstanding Views
- Major Vehicular Access
- Minor Vehicular Access
- Pedestrian Access
- Development Parcels
- Historic Sites
- Historic Sites
- Municipal Ownership
- Railroad Property
- Parks
- Tidal Flats
- Beach



Binghamton

The "Binghamton" was built in 1904-5 in Newport News, Virginia. In continuous service from 1902 to 1967, providing the final connection between the rail lines in Hoboken and New York City, the ferryboat is one of the few remaining early 20th century ferryboats on the eastern seaboard. Commercial ferry service was first established on the Hudson Waterfront in 1642. The "Binghamton" is now docked in Edgewater near the historic Alcoa factory and is used as a restaurant.



Ford Plant

The Ford Motor Company Assembly Plant in Edgewater was built in 1929-31 according to designs of the architectural firm of Albert Kahn Associates. The firm was noted for its industrial architectural design, both in the United States and the Soviet Union.



Burr-Hamilton Duel Site

The financial and political rivalry of Aaron Burr and Alexander Hamilton, stemming from the founding in 1799 of the Manhattan Company for the establishment of a public water system for the City, culminated in a duel on the Hudson Waterfront, July 11, 1804, in which Hamilton was fatally wounded. Hamilton was one of the authors of "The Federalist Papers" and a signer of the U.S. Constitution. A monument on the Palisades in Weehawken commemorates the duel site below.



Hamilton Plaza

Hamilton Plaza in Weehawken is a fine scenic overlook owned and maintained by the Township of Weehawken on the cliffs above the Aaron Burr-Alexander Hamilton duel site. Benches provide for a resting spot during either a bicycle or walking trip along the Hudson Waterfront. The Plaza is an example of the quality of public open space and visual access to the River that State Coastal Policy is intended to encourage.



Hoboken

Hoboken is a city of great variety—home of the Stevens Institute of Technology, the oldest college of mechanical engineering in the country, founded in 1870, and of Frank Sinatra, and location of the movie "On the Waterfront." The city is experiencing extensive restoration of its historic brownstones and revitalization of its commercial district, including several restaurants along and near Washington Street that draw visitors from throughout the region.

Erie Lackawanna Terminal



This handsome complex, adorned with ornate copper, looks much as it did when it was completed in 1907. With its main structure built over water, the Erie-Lackawanna Terminal represents significant advances in the fields of architecture, engineering and transportation. The Terminal Building is planned for adaptive reuse as a part of a major waterfront development proposed by the Port Authority of New York and New Jersey and the City of Hoboken.

HUDSON WATERFRONT WALKWAY

Introduction

This brochure summarizes the State of New Jersey's policies regarding public access to the Hudson Waterfront. These policies were developed during a two-year study funded by the Division of Coastal Resources in the New Jersey Department of Environmental Protection to plan a walkway along the Hudson River between the George Washington Bridge and the Bayonne Bridge.

This plan is a vision for the future, to be implemented incrementally, as developers complete projects along the waterfront. The plan establishes a theme and states the objective of inclusion of a waterfront walkway as an essential part of every development along the waterfront. The walkway will not displace other waterfront uses, but will be designed to complement whatever design scheme the developer selects. Guidelines developed as a part of the plan establish minimum locational and dimensional requirements and overall design requirements for the walkway.

Purpose and Background

The Hudson Waterfront Walkway is designed as a continuous route, providing for direct public access to the water's edge to the maximum extent possible, along the West Shore of the Hudson River.

In conformance with the New Jersey Department of Environmental Protection's Coastal Resource and Development Policies (NJAC 7:27-1.1 et seq), the route is intended to parallel the waterfront and to link existing parks. Connections to paths above the Palisades cliffs are considered so that parallel systems of paths above and below the cliffs can eventually be developed to take advantage of unique open space opportunities. Areas are identified where a path will be widened into a plaza or small waterfront park.

Guidelines for design and construction of the Walkway call for establishment of small waterfront parks at intervals of no more than one-half mile along the water's edge. Public lands with possible potential for development as waterfront parks are identified as a part of the Hudson Waterfront Walkway Plan.

The Walkway, an outgrowth of the efforts of the Hudson River Waterfront Study, Planning and Development Commission, was recommended in the Commission's "Final Report," published in September, 1980. The concept has been under consideration for several decades; it was presented in the Regional Plan Association's 1966 Study, *The Lower Hudson*, and is supported by the 1983 *New Jersey State Outdoor Recreation Program*.

Three major changes in the past decade, one in State Administrative Rules governing waterfront development, one in railroad ownership and service routes and one in shipping technology, combine to present a unique urban waterfront development opportunity on the Hudson Waterfront.

In September, 1980, the jurisdiction of Coastal Resource and Development Policies governing conditions and issuance of Waterfront Development Permits was expanded to cover the entire New Jersey Coastal Zone including the Hudson Waterfront. This expansion was particularly timely in view of the dramatic changes in land use and ownership that are occurring on this waterfront.

Consolidation and reorganization of rail service in the region has resulted in abandonment of major portions of the 1900 acres along the New Jersey Hudson Waterfront between the George Washington Bridge and the Bayonne Bridge that were occupied by railroad yards until the mid-1970's.

Simultaneously, as a result of the major technological change in shipping to container operations with mechanized handling and storage, bulk cargo operations along the Hudson Waterfront have become obsolete.

As a result, after twenty years of stagnation, vast areas of the waterfront have become available for redevelopment, and developers have begun to respond. As of December 1982, including the 800-acre Liberty State Park, 3400 acres along the Hudson Waterfront are proposed for mixed-use, residential, commercial, office and major recreational development.

The Hudson Waterfront Walkway is proposed as a continuous open space system along the River's edge, linking these sites together and providing one of their major amenities, and assuring that the public will continue to be able to gain access to the River.

Access to the Waterfront

Portions of the waterfront are accessible to the public at present, although access to many of the privately-owned parcels is difficult. Access to other sites such as Stevens Institute is possible by special appointment.

The Port Authority Trans-Hudson (PATH) rail system provides immediate access to the Hudson Waterfront at Exchange Place, Pavonia and the Erie Lackawanna Terminal. Some bus service is available from Journal Square in Jersey City, but for the most part, the waterfront is currently accessible largely by car. Parking along the waterfront can be difficult, particularly near PATH stations. The most notable exception is Liberty State Park, where ample parking is available both for park use and access to the Liberty and Ellis Island ferries.

Vacant rail rights of way along the waterfront provide numerous locational opportunities for light rail, and several former ferry terminals are essentially intact and potentially available for a return to their former use providing service to Manhattan as well as a north-south ferry route. Such possibilities include the Erie Lackawanna Terminal and the Central New Jersey Terminal as well as the Circle Line ferry stop at Liberty State Park. Several proposals to extend light rail service north from the Erie Lackawanna Terminal, and to re-establish ferry service, if redeveloped, could enhance the waterfront's accessibility and its urban open space value.

The issue of transportation in the Hudson River area is being addressed by the New Jersey Department of Transportation in an 18-month study that began in February, 1984. The end result will be a recommendation for a variety of improvements to the existing automobile and mass transit systems.

Minor modifications to the current Circle Line Ferry Service linking Lower Manhattan, the Statue of Liberty and Ellis Island, and Liberty State Park, and permitting bicycles on the ferries would further enhance the recreational potential of the Hudson Waterfront.

Changes in current policies regarding transport of bicycles on the PATH and New Jersey Transit systems would result in similar recreation benefits. At present, the PATH system requires a permit for bicycles, and allows them on trains only in off-peak hours, while New Jersey Transit allows only folding bicycles on its trains.

Pleasure boat marinas are presently limited to boats with drafts of less than five feet along this stretch of the Waterfront, but several of the numerous proposed waterfront developments include marinas that will provide for deeper draft vessels.

The Design Guidelines

Design Guidelines for the Walkway were developed as a part of the Walkway Plan, to assist the New Jersey Department of Environmental Protection's Division of Coastal Resources in reviewing permit applications under the Waterfront Development Permit Law, to determine the adequacy of provisions for public access to the Hudson River Waterfront. The Guidelines will assist potential developers, local officials and residents of waterfront municipalities in determining what appropriate public access is.

The guidelines establish dimensional, locational and overall requirements for the walkway. Dimensional requirements call for an easement with a minimum width of ten feet and a minimum width of sixteen feet along the water's edge. The waterfront walkway must be located as close to the water's edge as possible.

Connecting walkways of a minimum easement width of twenty feet and a minimum pavement width of ten feet and stopping points with seating and bicycle parking facilities must be provided at intervals of no more than one-half mile along the waterfront. Connecting walkways are intended to provide access from the first public road inland to the waterfront.

Exceptions to dimensional requirements for the walkway are established for environmentally sensitive areas, industrial areas and narrow waterfront sites.

Provision for safe, convenient and adequate access for bicyclists within waterfront developments and for signage at all access points to the walkway are required.

Finally, the walkway design for each waterfront site must reflect consideration of:

- continuity of public accessways, with provision for linkages to the north and south;
- preservation of views of the waterfront from the Palisades, of the Palisades from the waterfront, and of view corridors to the waterfront from the first public road inland;
- safety, security and privacy for existing and proposed uses and for pedestrians and bicyclists;
- durability and maintenance;
- design compatibility and quality and amenities; and
- environmental protection.