



Spring 2006

The City of New York
and
NYC Economic Development Corporation

in partnership with

Sustainable South Bronx
The Point CDC

South Bronx Greenway

EXECUTIVE SUMMARY

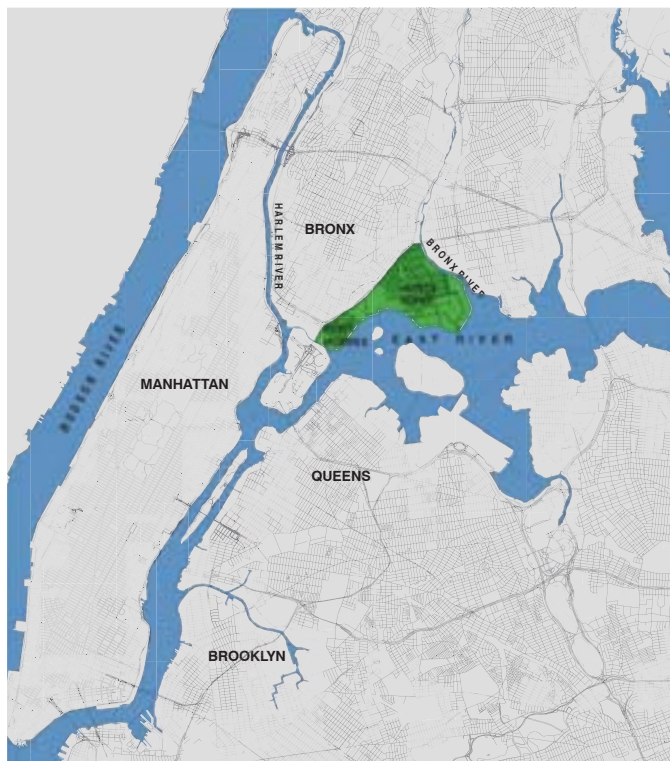
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Prepared By:
Mathews Nielsen Landscape Architects, PC



The project has been partially funded through a Congestion Mitigation and Air Quality Improvement Program grant (CMAQ), provided by the Federal government through the New York State Department of Transportation. Additional funding was provided by Consolidated Edison, the Iroquois Gas Transmission System, L.P., and City funds allocated by former Council Member Jose Serrano. In-kind services have been provided by Sustainable South Bronx and The Point Community Development Corporation.





City of New York

Dear Friend:

We are pleased to share with you the plan for the South Bronx Greenway. The Greenway Plan is the result of a comprehensive planning process for the South Bronx and Hunts Point that began with the Hunts Point Vision Plan, issued by my office in March of 2005 and created in cooperation with the community, elected officials and local businesses.

The Vision Plan sought to identify action items that promote a competitive business environment and sustainable community in Hunts Point. Specifically, the Vision Plan calls for NYCEDC, in coordination with Sustainable South Bronx and the Point Community Development Corporation, to identify concrete initiatives for establishing linkages both inland and along the waterfront between the Bronx River Greenway and Randall's Island.

The enclosed Greenway Plan provides a framework and series of viable recommendations for concrete actions that will improve access to the waterfront, enhance transportation safety, and provide additional recreational opportunities. The Greenway is also an important part of a regional network of bike and pedestrian paths that provide important linkages to existing natural resources.

We look forward to collaborating closely with the South Bronx communities and local elected officials as we turn this ambitious plan into a reality in the years ahead.

Sincerely,

Michael R. Bloomberg
Mayor





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Introduction

The South Bronx Greenway project originates from efforts made by two local organizations, The Point Community Development Corporation and Sustainable South Bronx, who sought to improve the quality of life within their community and proposed a continuous bicycle and pedestrian trail along the Hunts Point waterfront with a connection to Randall's Island. In 2005, the Mayor's office released the Hunts Point Vision Plan that set the stage for implementing a South Bronx Greenway by identifying this initiative as one of its primary goals. The proposed waterfront greenway would provide some of the first waterfront access to the South Bronx, connect to the City's existing and proposed greenway projects, create alternative means of transportation, improve air quality, and provide opportunities for compatible economic development. The Greenway will result in quality of life improvements for businesses and residents alike and demonstrate that industry and community can coexist through careful planning and design.



Mathews Nielsen Landscape Architects, P.C.

Guiding Principles

When it is built, the South Bronx Greenway will:



Support Safe Connections

Create safe connections that promote a network linking people to places;



Foster Community Economic Development

Create a Greenway that generates economic benefit and improves the quality of life;



Improve Environmental Quality

Create a Greenway that promotes a restorative and sustainable environment;



Promote Urban Health

Create a Greenway that nurtures physical interaction and well-being; and



Encourage Long-Term Stewardship

Create a Greenway that encourages community based participation in its management and maintenance.

Goals

In creating the Greenway plan, the project team was tasked with:

- Creating a continuous, safe path and bikeway along the waterfront;
- Identifying appropriate sites for waterfront access;
- Identifying an appropriate inland route where waterfront access is not feasible;
- Integrating commuter bikeway needs and connectivity to the greenway system;
- Identifying streetscaping and other design improvements that reduce conflict;
- Improving air quality and water quality;
- Utilizing a comprehensive planning process;
- Creating a phasing plan; and
- Developing creative solutions for stewardship.

Creating a South Bronx Greenway is not without its challenges. The project area is isolated from much of the Bronx’s dense residential communities by the Bruckner Expressway and the Amtrak rail corridor, but within the peninsula there are pockets of vibrant residential neighborhoods and Hunts Point is a thriving industrial hub. The Hunts Point and Port Morris waterfronts lie within manufacturing districts and much of the waterfront is developed for industrial uses.

Although the complete vision of the South Bronx Greenway may take ten or more years to realize, it is significant that the first 6.9 miles of green streets and 4.7 acres of waterfront can be operational by the year 2010 with funding already in place to commence several short term projects. Concurrent projects being undertaken by NYC DPR and NYC DOT are scheduled to be completed on or before that date. Taken together, these will result in 6 miles of green streets, and 9 acres of waterfront parkland within the near term.

Greenway Route

A safe and integrated network of streets and waterfront linkages is essential to the Greenway. The proposed connections create a series of loops of various lengths that offer users a choice based on their available time and level of physical ability. The routes travel along streets, easements and in the water to provide direct access to the waterfront from a variety of locations. These points of origin or destination include mass transit subway and bus stops, employment centers, and residential neighborhoods as well as significant cultural and educational destinations. Equally important is to establish connections to recreational facilities both within Hunts Point and immediately outside of the project limits. The network of streets are identified as greenstreets and 1.5 mile of waterfront perimeter as riverwalks.

Legend

Existing Points of Origin/
Landmarks/ Destinations

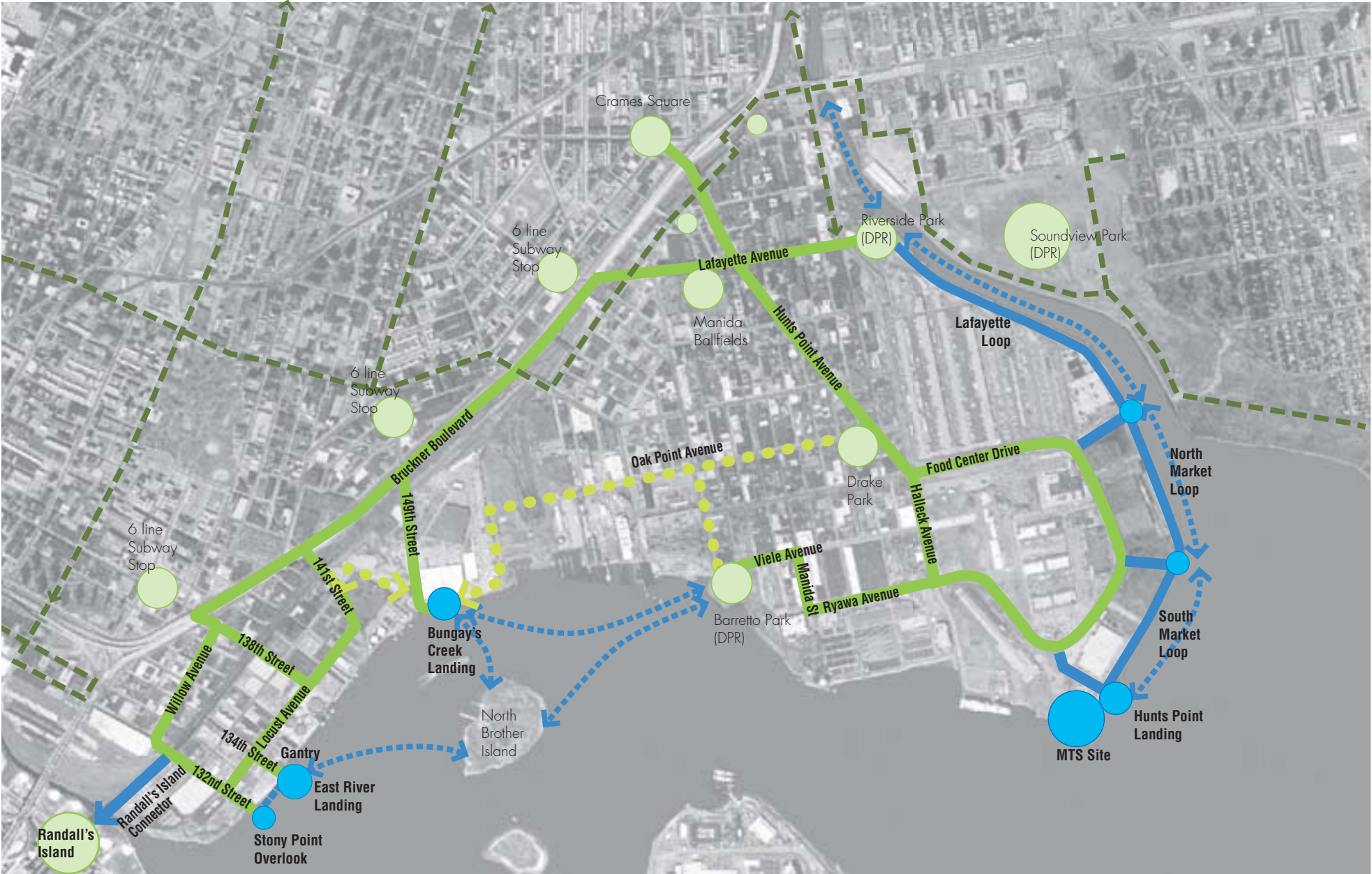
Existing/ In Progress Neighborhood
Connections

Proposed Waterfront Destinations

Proposed Greenstreet Connections

Proposed Waterfront Connections

Proposed Water Connections



Phasing

The projects identified in the Greenway plan have been grouped into three phases as follows :

- **Short-term** projects are envisioned to proceed within the next five years depending on available funding;
- **Mid-term** projects could be accomplished within 5 to 10 years depending on available funding; and
- **Long-term** projects are likely to take greater than 10 years to be realized.

The determination of time is the result of a number of contributing factors. Fundamentally the underlying land ownership and existing land use governs the time categorization. Subsets within those classifications include whether the land is publicly controlled and by which public entity, whether the land is privately held and whether the land use is water-dependent or not. Other considerations include whether the land is under-utilized or vacant and whether there are competing visions for its future use. The following projects are conceptual and subject to agency input and approvals. As a result, particular design components may be subject to change.

Short Term Projects

Short term projects are possible within a five year time frame pending funding commitments. They occupy land that is publicly controlled and do not have major conflicting land uses. The short term projects propose to add 6.9 miles of green streets and 4.7 acres of publicly accessible open space.

Greenstreets are safe, pedestrian friendly public routes that are designed to improve access and environmental quality. Publicly accessible open spaces are carved from right-of-ways and waterfront corridors of varying widths that offer quality of life and environmental benefits.

Specifically, short-term projects are located on sites that are controlled by either the NYC Economic Development Corporation, the NYC Department of Transportation, or the NYS Department of Transportation. EDC has made a commitment to establishing a minimum 30-foot setback for all properties within the Food Distribution Center as a condition of any new or renegotiated leasehold. Hunts Point Landing (Hunts Point Avenue extension) is not presently used as a through street and therefore could be demapped for the majority of its length and converted to public open space. Other short-term projects all fall within mapped right-of-ways or private drives and comprise streets that can be improved for public use (Lafayette Avenue, Hunts Point Avenue, Food Center Drive, Ryawa and Viele Avenues, Bruckner Boulevard, and Willow Avenue). Another short-term project (Randall's Island connection) has underlying ownership by NYS DOT-- with a 99-year privately held lease.

This Summary outlines proposed short term projects in detail, including cost and maintenance estimates.

Short Term

- Hunts Point Avenue Corridor
- Lafayette Avenue Paseo
- Hunts Point Landing
- Randall's Island Connection
- Food Center Drive
- North Market Loop
- South Market Loop
- Ryawa-Viele Connection
- Willow Avenue Connection
- Bruckner Boulevard (interim)

Mid Term

- Lafayette Loop
- 149th Street and Bungay's Creek Landing
- 13th Street
- Locust Avenue
- 132nd Street and Stony Point Overlook
- East River Landing

Long Term

- MTS Site
- Oakpoint Avenue
- 141st Street

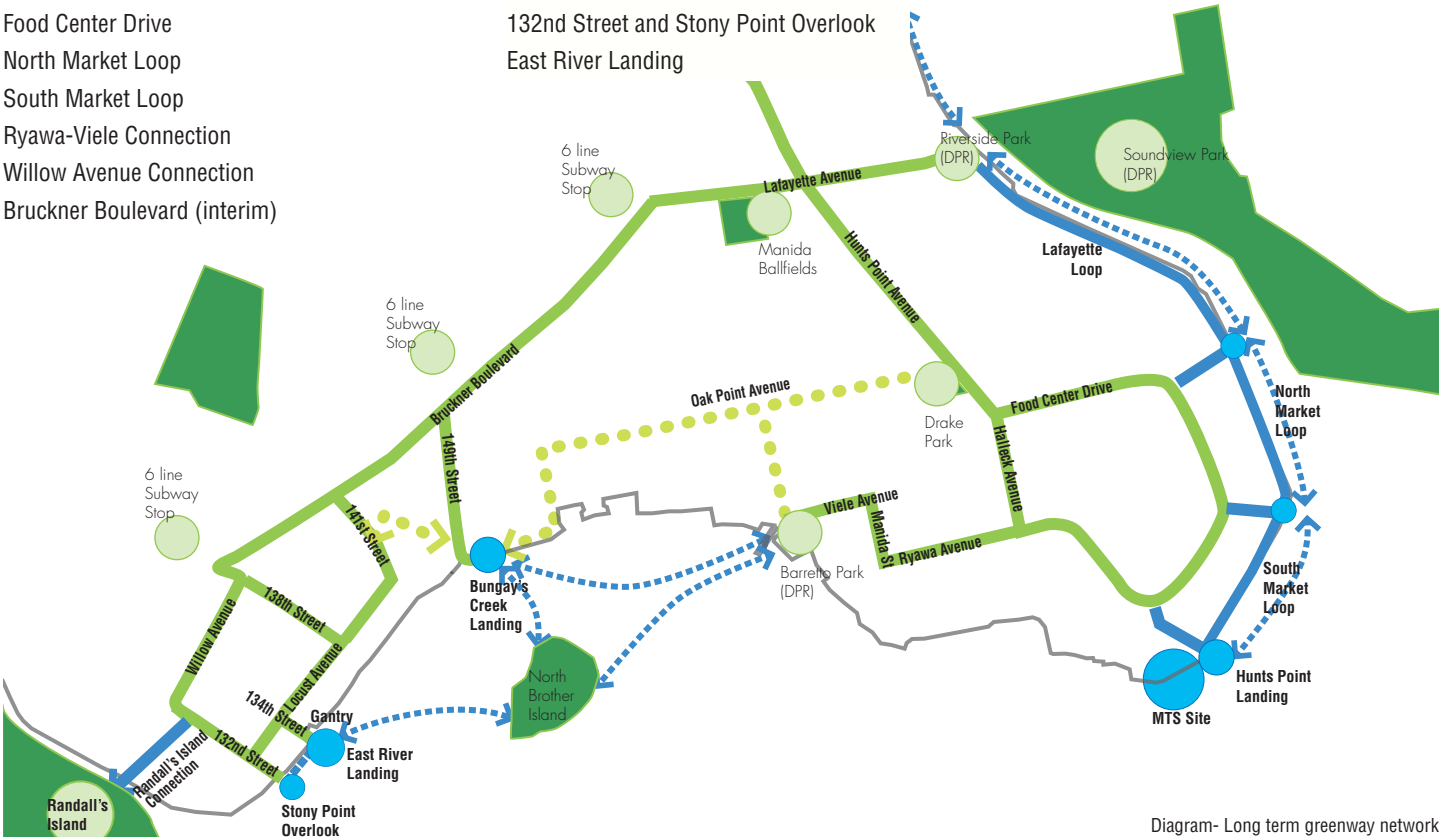


Diagram- Long term greenway network

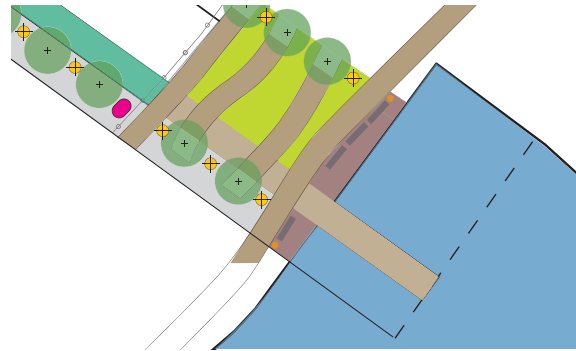


Proposed entry at Hunts Point Landing

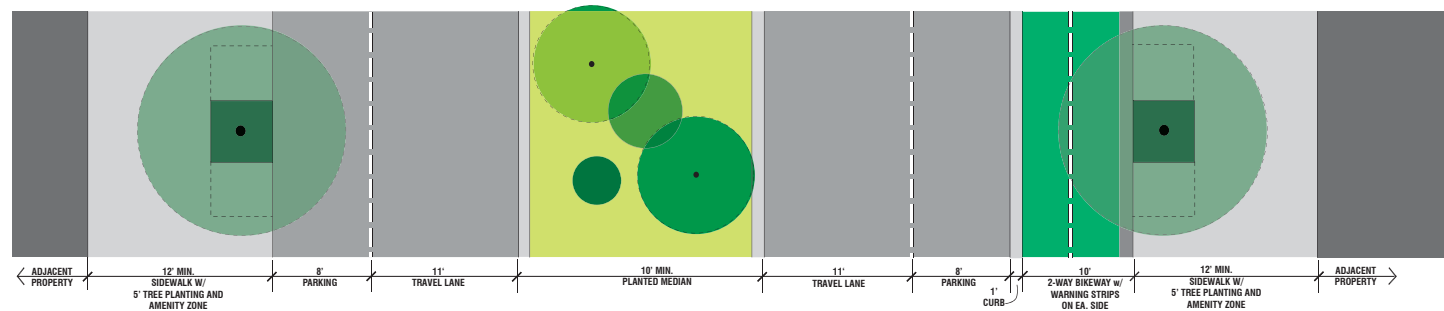
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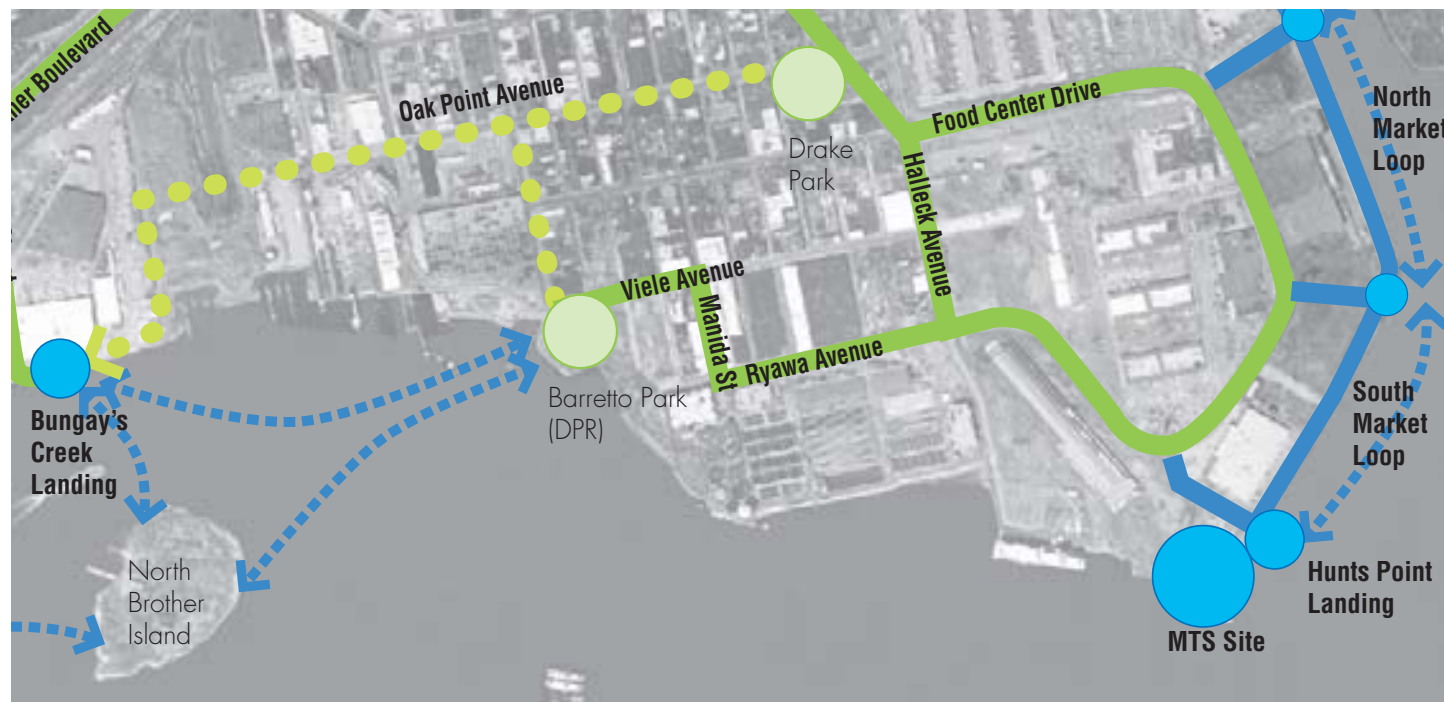
A typical 30' riverwalk easement



A typical street end/ waterfront destination



A typical 100' right of way (ROW) greenstreet



Scenario showing a future without municipal use facilities

Mid Term Projects

Mid-term projects are also located on publicly held land under the jurisdiction of NYC DOT or NYC EDC. Availability of the EDC sites will require lease negotiations with property lessees and significant capital investment within the Food Distribution Center to make available the land that forms the riverwalk connection between Riverside Park and the Hunts Point Landing waterfront destination. Adjacent land users have been occupying street ends in Port Morris (132nd, 134th and 149th Streets) for several years. Future plans should respond to the desire to reopen these locations for public access as well as consider needs of adjacent land owners. Other mid-term projects include greenstreet improvements within the Port Morris neighborhood to facilitate access to these waterfront street end destinations.

This Summary includes design guidelines and prototypes that will serve as a framework for implementing future projects.

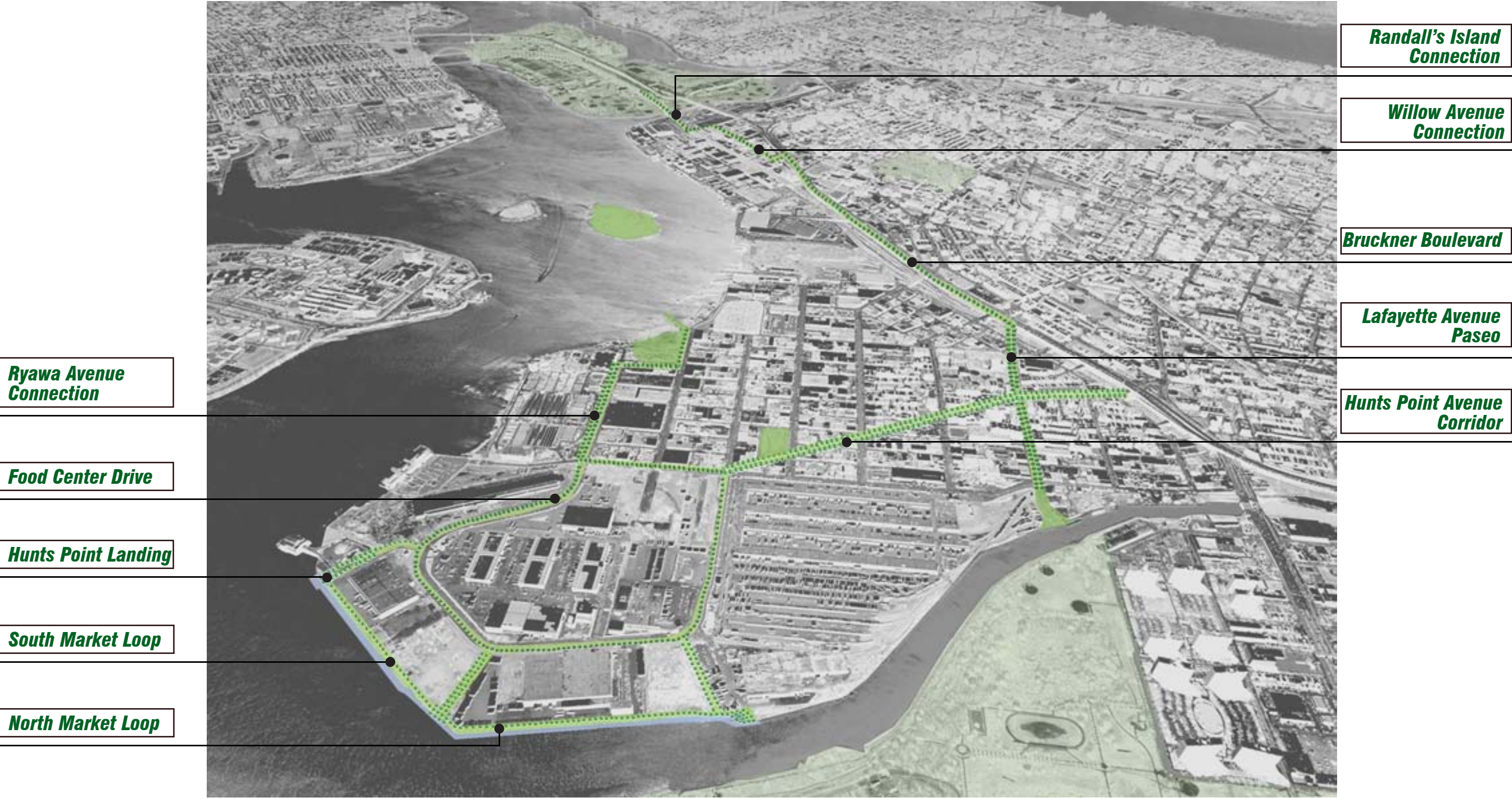
Long Term Projects

Long term projects are located on sites where there are significant challenges for property acquisition or easements and where there are competing proposals for future land use. Therefore these projects are seen as extending out more than ten years.

Long-term projects suggest in-water and shoreline connections between destinations created in earlier phases as well as an expansion of the inland network to connect the neighborhoods of Port Morris and Hunts Point. A key site for the future is the Marine Transfer Station. In the long-term, the Vision Plan recommends the partial or complete use of the MTS site as a waterfront destination, facilitating a greenway link through the site should alternative uses be deemed preferable.

Connection between Hunts Point neighborhood and Port Morris neighborhood is possible along the future Bruckner bikeway, however a shorter connection is preferred. A possible linkage could lead from Hunts Point Avenue at Drake Park along Oak Point Avenue and continue inland through the Oak Point site and privately controlled parcels to 149th Street at Bungay's Creek Landing. If constructed, an additional 2.3 miles would be added to the greenstreet network.

Short Term Projects



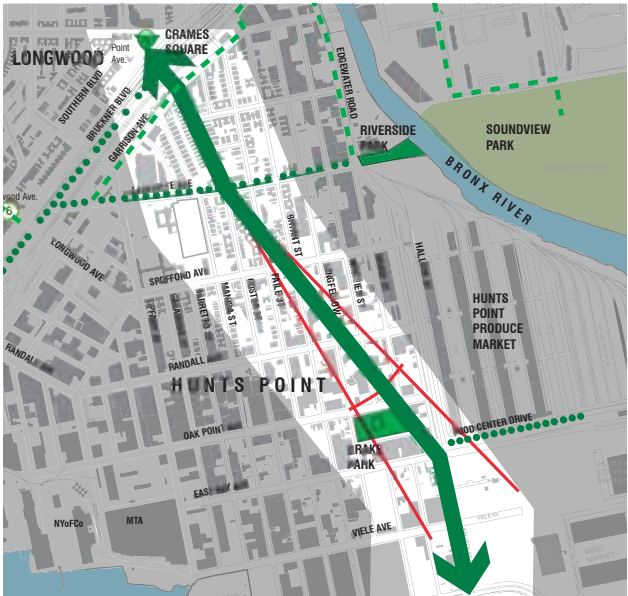
Proposed short-term greenway routes and destinations

Hunts Point Avenue Corridor

Hunts Point Avenue is the “main street” of the peninsula. Its diagonal path dates from the 18th Century and offers a direct route from both mass transit and the Hunts Point residential neighborhood to proposed short term waterfront projects. Pedestrian and vehicular traffic is heavy and several intersections have unusually high pedestrian accident rates. The section between Garrison and Spofford contains the densest retail activity in the peninsula calling for a design solution that enhances the pedestrian streetscape. The street also carries the only bus line in Hunts Point that connects workers in the Food Distribution Center with the subway. Enhancement of this retail zone will help support local businesses and attract additional customers from the industrial sector. Improvements to this street have been coordinated with the Hunts Point Streetscape project as well as the new truck route designations that will help deter trucks from traveling on Hunts Point Avenue.

Program

Hunts Point Avenue is proposed as a greenstreet that will include a bikeway, plantings, new street lights and pedestrian amenities subject to agency approvals. The selection of some materials will vary depending on the location in the northern or southern section. The northern end of Hunts Point Avenue encompasses the area between Crames Square and Spofford Avenue and is characterized by residential and small commercial uses. Traffic calming, pedestrian and cycling-related improvements are priorities for the benefit of both constituencies. The southern end of Hunts Point Avenue traverses the industrial zone. To ensure viability of this sector, the median will be removed. Certain elements such as lighting, contra-flow bikeway and its color, street trees and signage need to be continuous throughout the street’s length to provide visual continuity, safety, and affirm Hunts Point Avenue’s role as the main street of the area.



Context and access map



Existing view looking south



Mathews Nielsen Landscape Architects, P.C.

Proposed view between Garrison and Spofford facing south

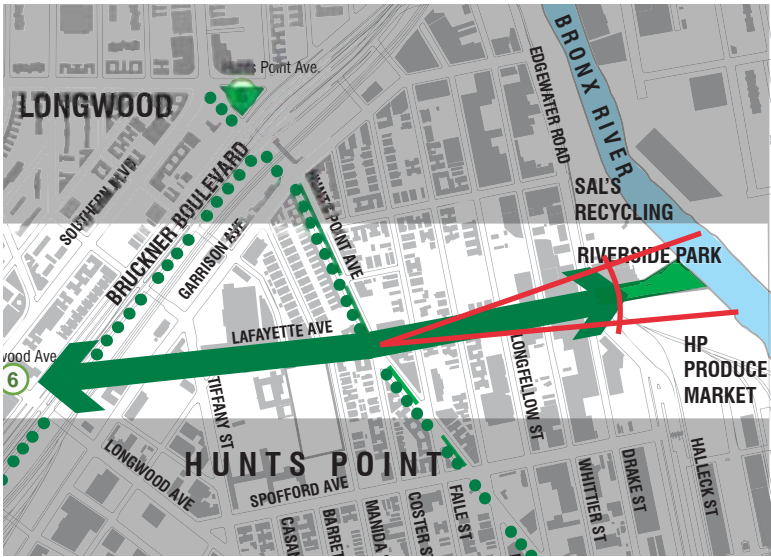
Lafayette Avenue Paseo

Lafayette Avenue is the heart of the Hunts Point residential neighborhood. It offers a direct east-west connection from mass transit to Riverside Park and to the Longwood subway station west of Bruckner Boulevard. With the exception of two short blocks at its extreme east and west ends, it has a consistent residential/institutional character with the occasional corner retail business. The street also provides direct access to the Manida/Carballo ballfields, Corpus Christi Monastery, the Wildcats High School, and burgeoning artisan workshops and not-for-profit organizations in the American Bank Note Building. Riverside Park is scheduled for completion in 2007 and will offer direct waterfront access, an amphitheater and other recreational facilities. Improvements to Lafayette Avenue will significantly improve the pedestrian experience, while encouraging people to gather and enjoy the outdoors.

Program

Lafayette Avenue is proposed as a greenstreet for its entire length between Bruckner Boulevard and Edgewater Avenue that will include a bikeway, sidewalk plantings, new street lights, and pedestrian amenities. Within the residential core, between Tiffany and Longfellow, a protected, planted median or paseo is proposed to replace the painted median. The generously proportioned median offers the opportunity for a variety of recreational activities that will support the institutional and residential uses that flank it. Within the approximate 25 foot width there is ample space for game tables, community gardens, demonstration rain gardens, and residents to gather and talk in a shaded, protected and convenient space. For safety reasons, no active sports or large paved areas are proposed. Access to the median would be provided at each intersection. The paseo will add 15,000 square feet of new recreational and landscaped space to the neighborhood.

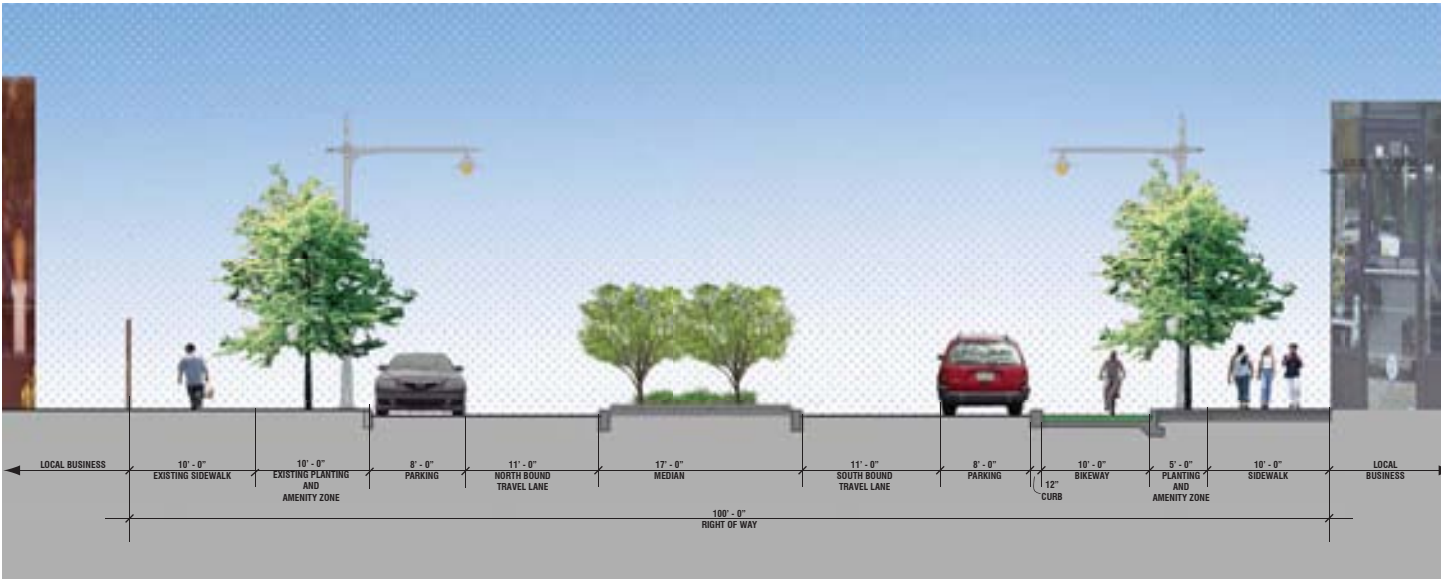
At the extreme east and west ends of Lafayette Avenue the median will be removed to permit sufficient road-way width for trucks to access businesses.



Context and access map



Existing painted median looking towards Bronx River



Section at Lafayette Avenue between Tiffany and Hunts Point Avenue



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Proposed full reconstruction of Lafayette Avenue between Tiffany and Longfellow

Hunts Point Landing

Hunts Point Avenue terminates at the confluence of the Bronx and East Rivers. Though land use changes altered the original diagonal street alignment, Hunts Point Landing is an appropriately named new waterfront destination recalling this historic connection to Hunts Point Avenue. Though it is a mapped roadway, it carries no traffic after the entrance to the Fulton Fish Market which occurs within the first 200 feet of its 825 foot length. Hunts Point Landing can be transformed into a 1.5 acre waterfront destination that will provide a variety of community activities and a diverse waterfront experiences.

Program

The site's shape as a long rectangle can be used to its advantage as a means to organize program activities. In the upland section there is space to provide a multi-purpose paved area that can accommodate parking or large events. This space would also be suitable for active sports such a half-court basketball or a children's play area. As emergency access will be required to most of the site, a turn around can double as a shaded plaza with views out to the water. Picnicking and barbecuing could occur near the parking area or the central plaza as a place for workers to have lunch or family weekend gatherings. Closer to the water, the site can become increasingly vegetated by creating a sustainable river edge ecosystem. Due to removal of relieving platforms and piers nearby, it is anticipated that the Department of Environmental Conservation will permit a small pier for fishing. Also, a floating platform will allow access for small craft boating. A shared use riverwalk will connect this site to adjacent segments that are accessible from Food Center Drive, such as the North and South Market Loops.



Context and access map



Existing view from water's edge



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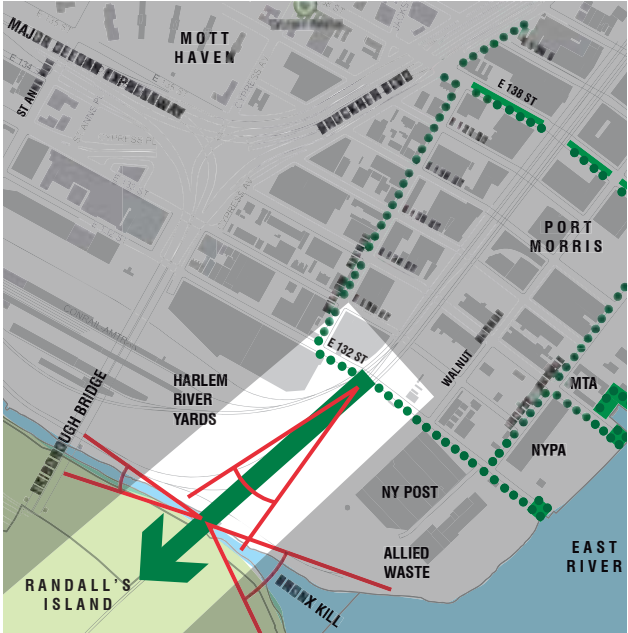
Proposed view from water's edge

Randall’s Island Connection

There is a unique opportunity to create an on-grade connection to and from Randall's Island. Randall's Island contains a wide variety of recreational facilities, including state-of-the-art ballfields suitable for a variety of sports, large picnic areas, a stadium, and in the near future, a water park. Currently there is no easily accessible pedestrian or bicycle connection to Randall's Island from the South Bronx: a long ramp under and alongside the Triborough Bridge terminates in a two-story staircase at Port Morris. The proposed site is located under an Amtrak viaduct, and a number of jurisdictional issues will have to be resolved to gain access.

Program

The primary purpose of the Randall's Island Connection is to provide a safe, convenient and attractive connection between the South Bronx and Randall's Island. Due to the fact that it could serve as a regional greenway connector, the shared path is recommended to be wider than elsewhere along the South Bronx Greenway. The corridor is viewed as a place to move through at different speeds (walking, running, blading and cycling) and is not considered a place to linger, picnic or gather. In addition to a shared path, the proposed project includes a bridge that should accommodate emergency and service cars or light trucks.



Context and access map



Existing view from Port Morris approach



Section at Bronx Kill facing East River



Proposed view from Port Morris approach

Food Center Drive

Food Center Drive is an unmapped, publicly-owned street that provides truck access to food businesses within the Food Distribution Center. The *Hunts Point Vision Plan* recommended rerouting circulation in a one-way counterclockwise direction to improve industrial circulation and allow for maximum utilization of space, including a bikeway. Trucks would enter from the south at Ryawa Avenue and exit at the north on to East Bay Avenue. This one-way circulation pattern allows for one lane to be converted to the Greenway.

Food Center Drive is also a vital connection within the greenstreet network to provide access to the waterfront. Like spokes on a wheel, Food Center Drive will allow access to the waterfront at Hunts Point Landing, South Market Loop and North Market Loop. In addition, it connects directly to Hunts Point Avenue via Halleck which is a major diagonal greenstreet through the peninsula.

Program

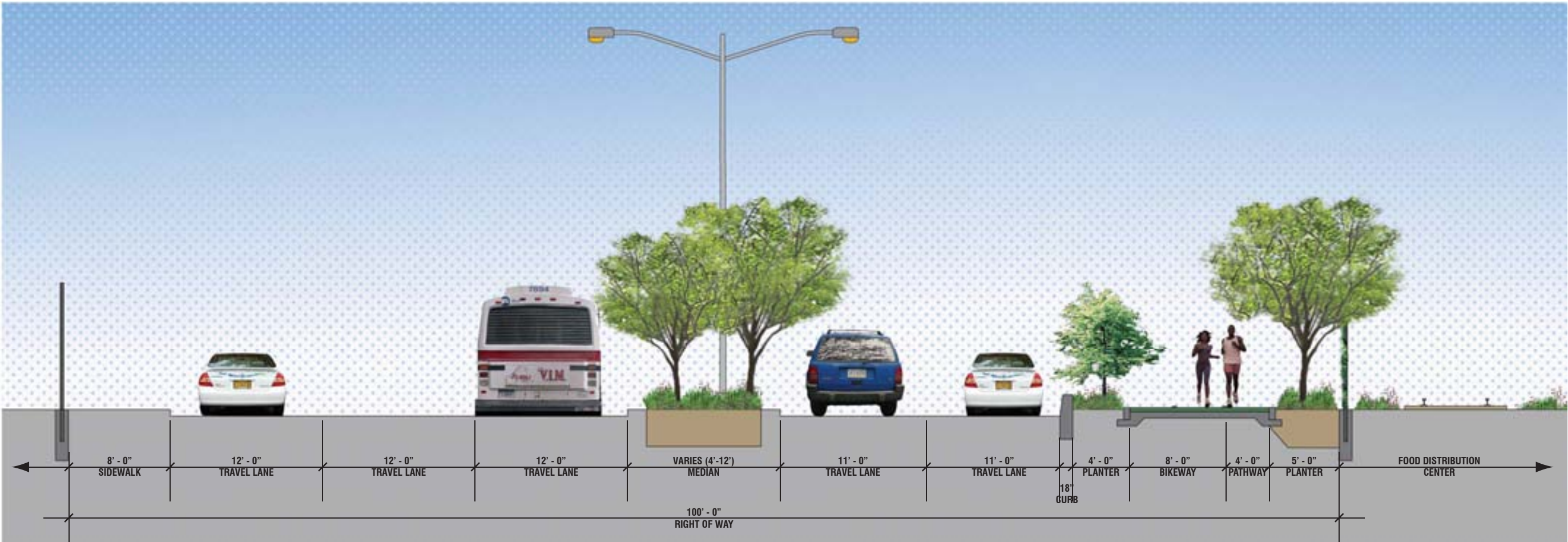
Food Center Drive is proposed as a greenstreet for its entire length commencing at Ryawa Avenue and terminating at East Bay Avenue. The twelve-foot wide shared path will be located along the side of the road closest to the water and be planted on either side. On the west side the buffer will comprise a one-foot wide raised concrete barrier, a four-foot wide planted area and greenstreet light fixtures. This will provide a fully separated shared use path creating a safe adjacency between trucks and pedestrians. On the waterside between the shared path and property line fences, another five-foot wide planting buffer is proposed. The advantage of this strategy is to allow pedestrians and cyclists direct access to the waterfront connectors without having to cross the wide road. The shared path will be designed to create safe crossings at driveways to permit truck access to various food distribution facilities, the largest of which are the entries to Bazzini, Krasdale and the Fish Market.



Context and access map



Existing view at Food Center Drive



Section at Food Center Drive

North Market Loop

North Market Reach

North Market Reach comprises a 1840 foot long stretch of riverwalk that will link with Hunts Point Landing and South Market Reach. This riverwalk, when combined with the two North and South Market Connectors and Food Center Drive, will create nearly a mile (.86 mile) loop for employees of the Food Distribution Center and area residents. This segment of the riverwalk will be located within a nominal 30 foot easement parallel to the water with intimate views of the mouth of the Bronx River. Existing shoreline conditions offer the unique opportunity to create educationally and environmentally valuable riparian edges.

Program

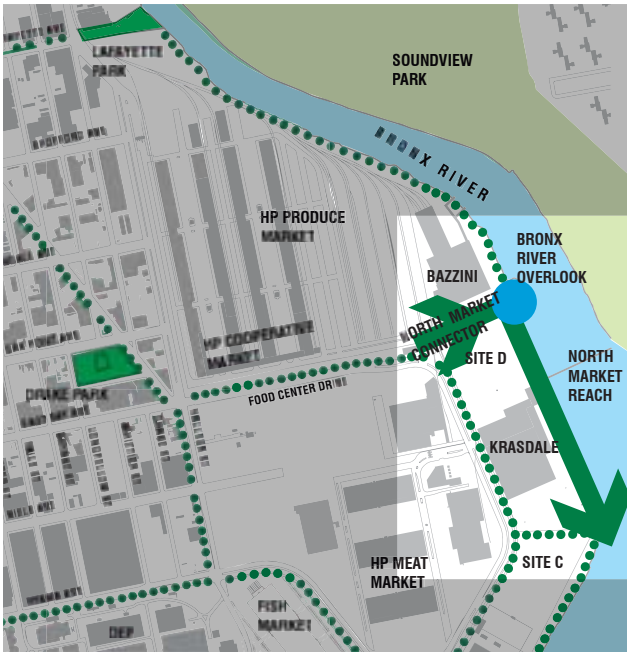
The long narrow dimension of the site lends itself to linear activities such as strolling, running or biking. At intervals near Hunts Point Landing and along North Market Reach, it is possible to locate places to picnic or sit. The reach has the potential to augment shoreline bird watching opportunities. Along the Krasdale fence line, 1100 feet of the waterfront will only be able to accommodate the 12 foot wide riverwalk paving. During future design phases, consideration should be given to creating one or two widened overlook nodes for people to pause. There may also be ways to engage tenants of the distribution center in future programming and/or concession opportunities along the waterfront. These should be located and proportioned in conjunction with the waterfront permitting process, and maintenance and emergency vehicle access needs.

North Market Connector and Bronx River Overlook

The Market Connector is a 700-foot long easement within Site D that creates a connection between Food Center Drive and the waterfront. It will intersect and provide access to the riverwalk and the northern end of the South Market Loop, and the southern end of La-fayette Reach, a mid-term project. An overlook is recommended outboard of the riverwalk to serve as a destination and place-marking feature. The connector will provide .5 acre of new public space.

Program

The purpose of this connector is to provide access and egress to and from the riverwalk so that a dead end is not created at the end of the Market reach in the short term. In addition it will provide more convenient waterfront access for workers in the Produce Market than the South Market Connector. The program opportunities are sitting areas along the path and viewing at the overlook as well as ecological shoreline restoration where possible. Given the unbroken linearity of the site, this connector is a good candidate for public art that might include temporary exhibits or murals to more actively engage the community in the space.



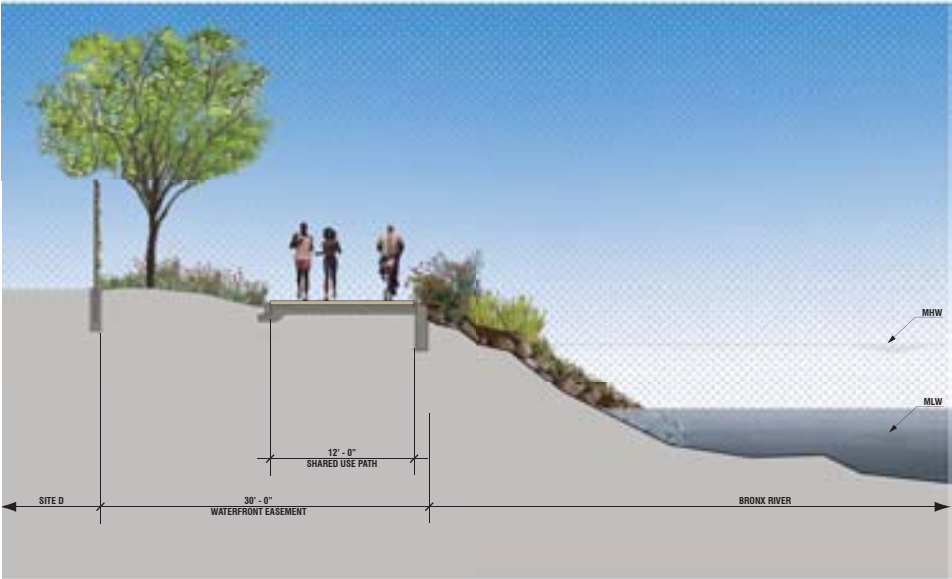
Context and access map



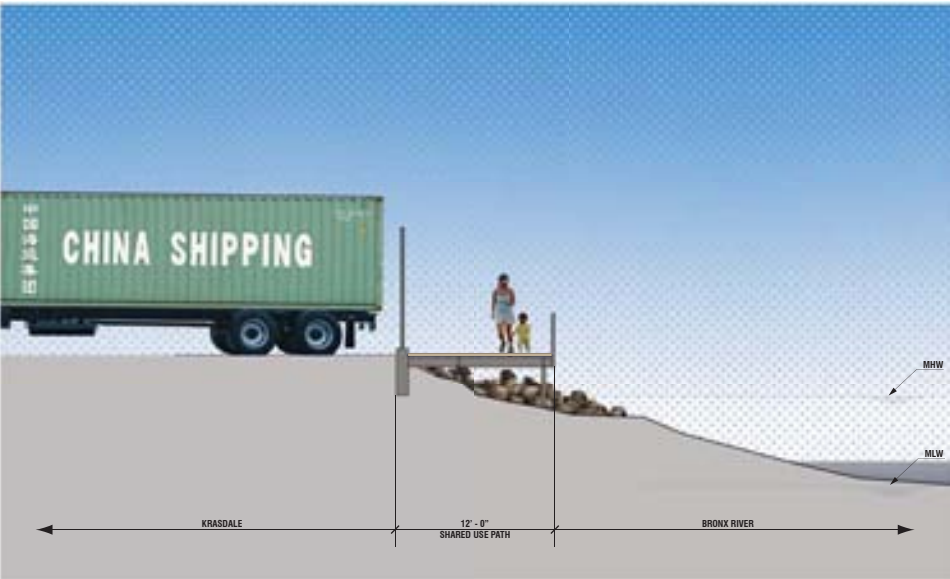
Waterfront at Krasdale Foods



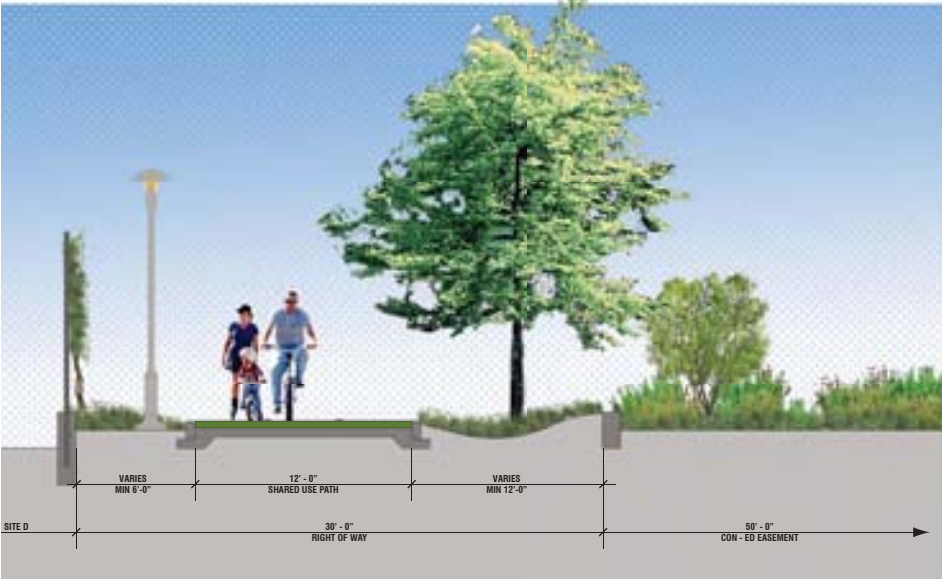
Waterfront at Con Ed easement between Site D and Bazzinni Nuts



Section 1- North Market Reach at Site D



Section 2- North Market Reach at Krasdale waterfront



Section 3- North Market Connector looking west

South Market Loop

South Market Reach

South Market Reach comprises a 1540 foot long stretch of riverwalk that will connect Hunts Point Landing to the South Market Connector. The significance of this site is that it will create a three-quarter mile loop comprised of a riverwalk, Hunts Point Landing, South Market Connector and Food Center Drive. This segment of the riverwalk will be located within a 30 foot easement parallel to the water with spectacular views across Long Island Sound.

Program

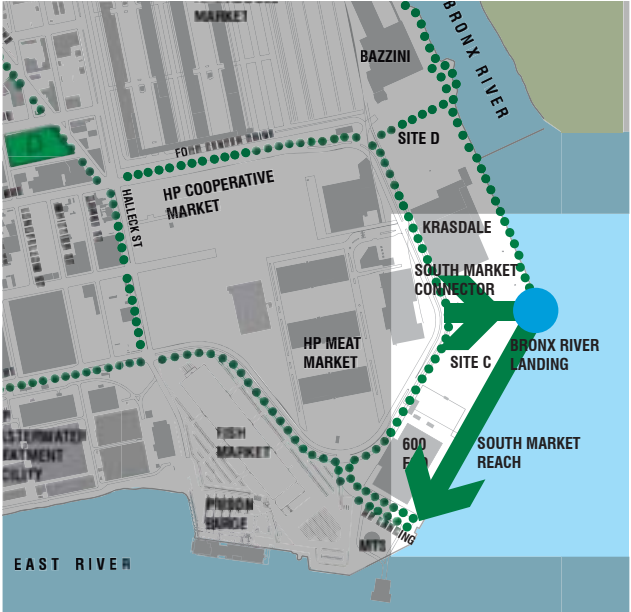
The long narrow dimension of the site lends itself to linear activities such as strolling, running or biking. A 12 foot wide riverwalk will serve pedestrians, cyclists as well as emergency and service vehicles. In addition, opportunities to engage tenants of the distribution center in programming and potential concessions may be explored. To relieve the linearity, two widened nodes will be provided to facilitate fishing, picnicking and resting under the shade of new trees.

South Market Connector and Bronx River Landing

The South Market Connector is an 600-foot long easement adjacent to Site C that creates a second connection between Food Center Drive and the waterfront. It will intersect and provide access to the riverwalk and create physical circuits that are defined as the South Market Loop and North Market Loop. These circuits allow workers or residents to select a route based on their available time and ability. At its intersection with the riverwalk the easement fans out to nearly 140 feet where Bronx River Landing overlook affords a dramatic focal point and vista over Long Island Sound. In all, this site represents nearly an acre (40,900 square feet) of public space.

Program

The South Market Loop offers ample space for places to picnic and sit within the shade of new trees and a restored landscape. The overlook would be a pile supported platform extending over the rip rap (stone shoreline edge) to the high water line, approximately of 5 feet deep and sixty feet long that offers dramatic views, fishing opportunity and possibly a boat tie up.



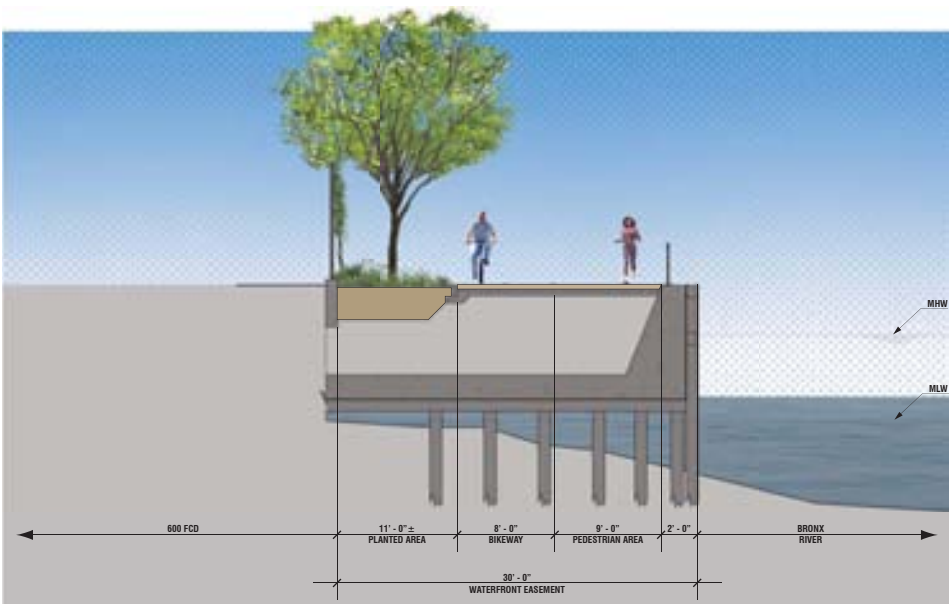
Context and access map



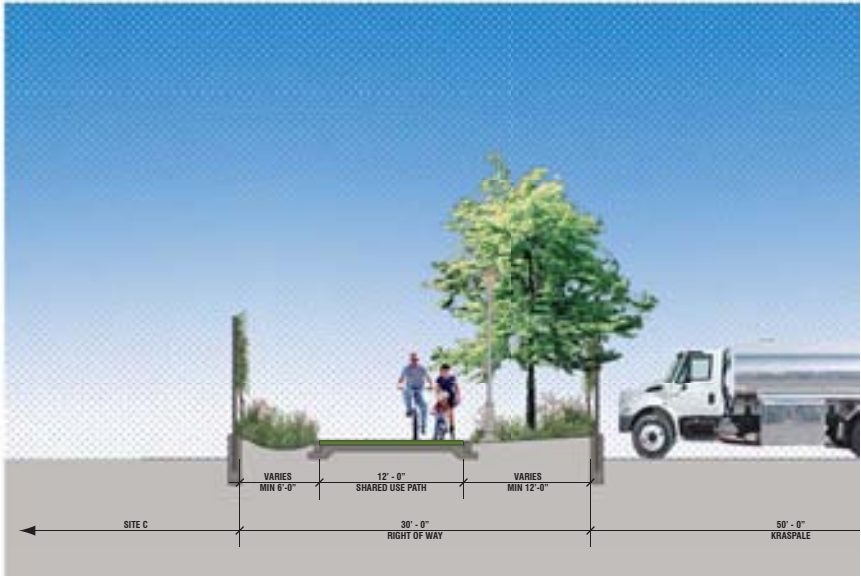
Waterfront at Site C



Plan at South Market connector



Section 1- South Market Reach on existing relieving platform



Section 2- South Market Connector

Ryawa-Viele Connection

Ryawa Avenue, with short jogs onto Manida Street and Viele Avenue, provides the shortest and potentially safest connection from Food Center Drive and its associated waterfront greenway to Barretto Park and the Tiffany Street Pier. Given current NYC DEP constraints, Ryawa Avenue is the closest waterfront route in this area of the peninsula. It is not a designated truck route. Traffic volumes are very low (10-20 trucks per hour during the peak morning according to 2003 data contained in the FEIS for the Fulton Fish Market) and only two driveways on the south side into the DEP facility. As a result there is opportunity to narrow the travel lanes to add a 24 foot planted buffer along the south side, provide new street trees and a two-way contraflow bike route. This buffer will add 1.4 acres of new biomass to the area and improve both air and water quality.

Program

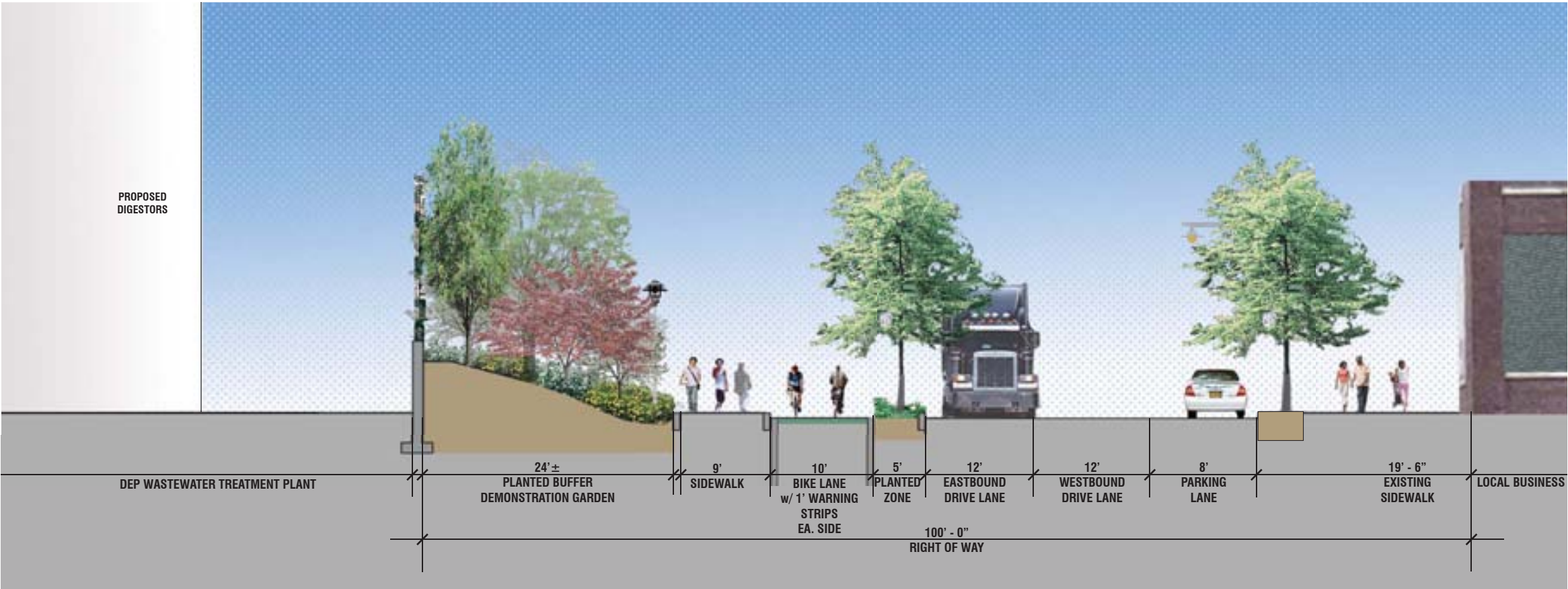
Ryawa Avenue is proposed as a greenstreet with a planted buffer along the south side. The buffer could be in the form of a planted slope attaining an elevation of three to four feet along the Treatment Plant property line. The berm will screen the Treatment Plant, add more surface area for planting, and serve as a biofiltration (use of vegetation to cleanse storm water) demonstration landscape. A retaining wall would be required to accomplish this berm. At the base of the slope, a bioswale is proposed to capture on-site runoff from both the berm and sidewalk. The roadway would be reduced to 32 feet, allowing for 9 feet of sidewalk on the south, 10 feet for the contraflow bike lane and a 5 foot wide planted median that would also accept runoff from the bikeway. On the north side of the street, new street trees would be planted in the existing north sidewalk.



Context and access map



Sidewalk at Ryawa Avenue



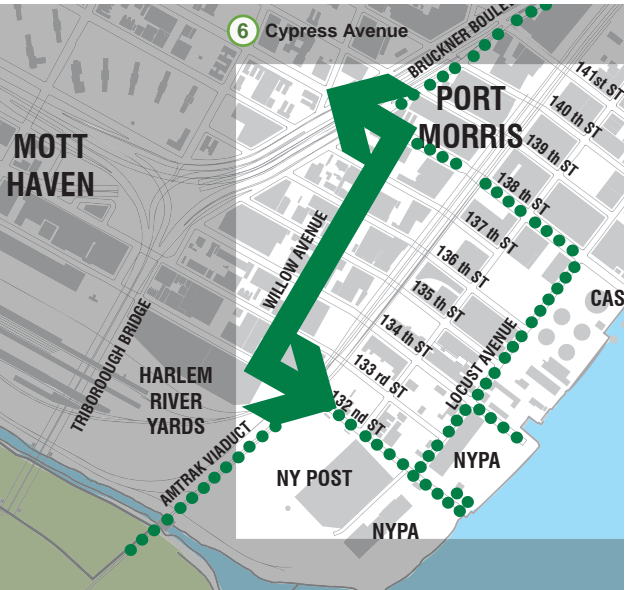
Section at Ryawa Avenue

Willow Avenue Connection

The Willow Avenue project will allow residents of Port Morris and cyclists traveling on Bruckner Boulevard to have direct, safe access to the Randall’s Island connector. Willow Avenue is an important street within Port Morris that traverses the burgeoning residential area of Port Morris. This short term project also includes a short spur along 138th Street to provide safe connection across Bruckner Boulevard to access mass transit and the interim bikeway proposed along Bruckner Boulevard. At its southern end, this short term project also includes a connection at 132nd Street to access the Randall’s Island connection.

Program

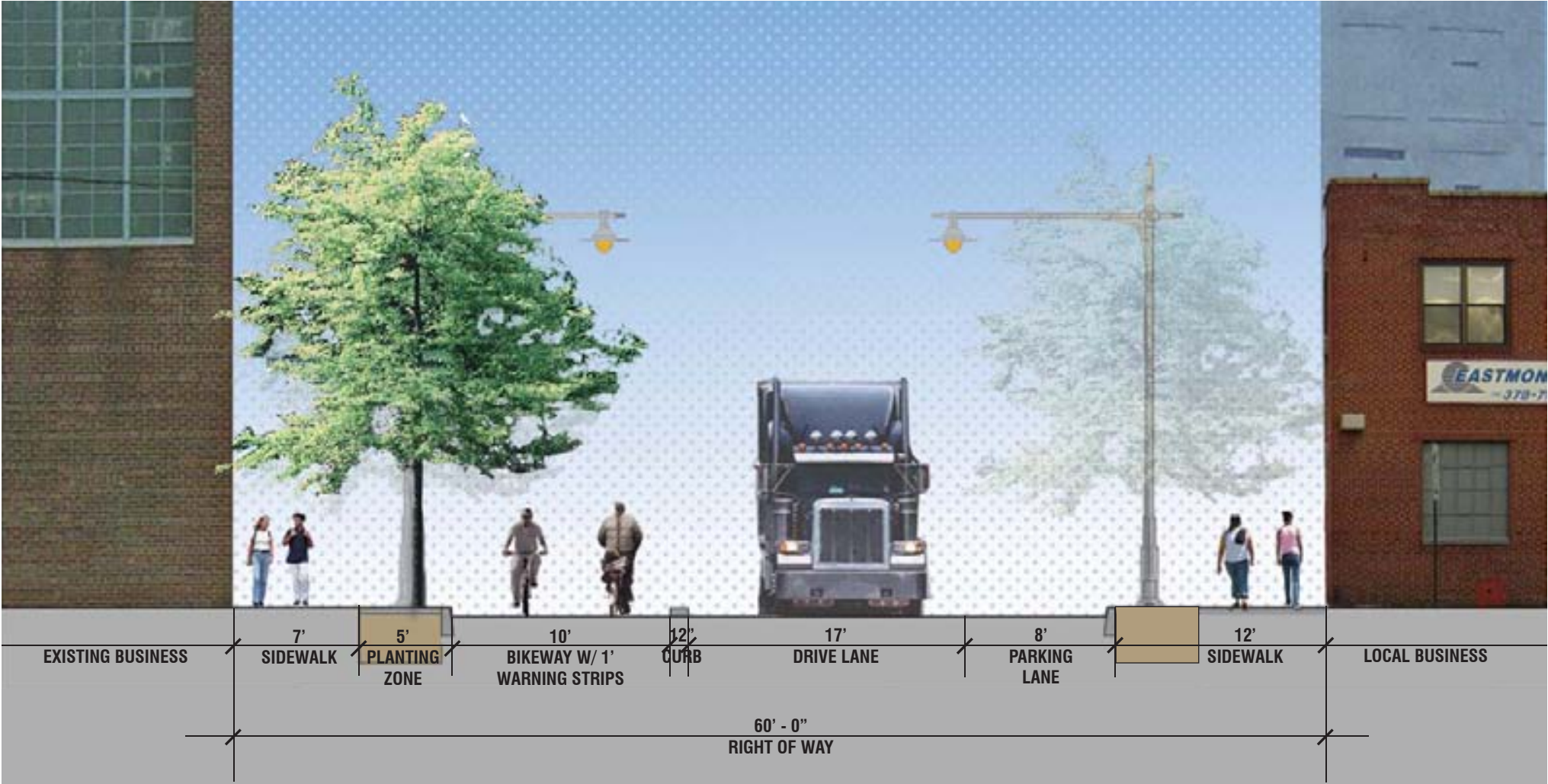
The Willow Avenue link is a greenstreet project that will have variations in configuration and treatment based on the right of way dimensions and traffic conditions. Complete roadway reconstruction has been limited to 138th Street where the painted median is proposed to be replaced with a raised, planted median similar to Hunts Point Avenue. Travel lanes will be reduced from 15 feet to 12 feet; no change is proposed to the parking lanes. A ten foot contra-flow bike lane is proposed along one side and 5 foot planted areas are proposed within both sidewalks, thereby retaining existing curbs. Willow Avenue will be reduced to one moving and two parking lanes. This narrowing will allow for the bikeway and improved street tree conditions. Treatment of 132nd Street is similar; however in lieu of reducing the number of travel lanes, the lane widths will be reduced to allow for the bikeway and sidewalk improvements.



Context and access map.



Existing view of Willow Ave at 132nd St.



Section at Willow Avenue

Bruckner Boulevard

Bruckner Boulevard defines the western boundary of the Hunts Point and Port Morris neighborhoods and physically isolates them from the rest of the South Bronx. Nevertheless, it is a major at-grade thoroughfare that provides direct connection between Hunts Point and Port Morris. In addition, it will serve as a regional bicycle connection from the Bronx River Greenway to Randall's Island to the Manhattan Greenway system. In the future, the Bruckner Expressway is scheduled to be reconstructed. As part of this undertaking NYS DOT is planning a permanent at-grade bikeway along Bruckner Boulevard. However, this project is many years off, so the Master Plan recommends an interim, low-cost bikeway along Bruckner Boulevard between Hunts Point Avenue and 138th Street.

Program

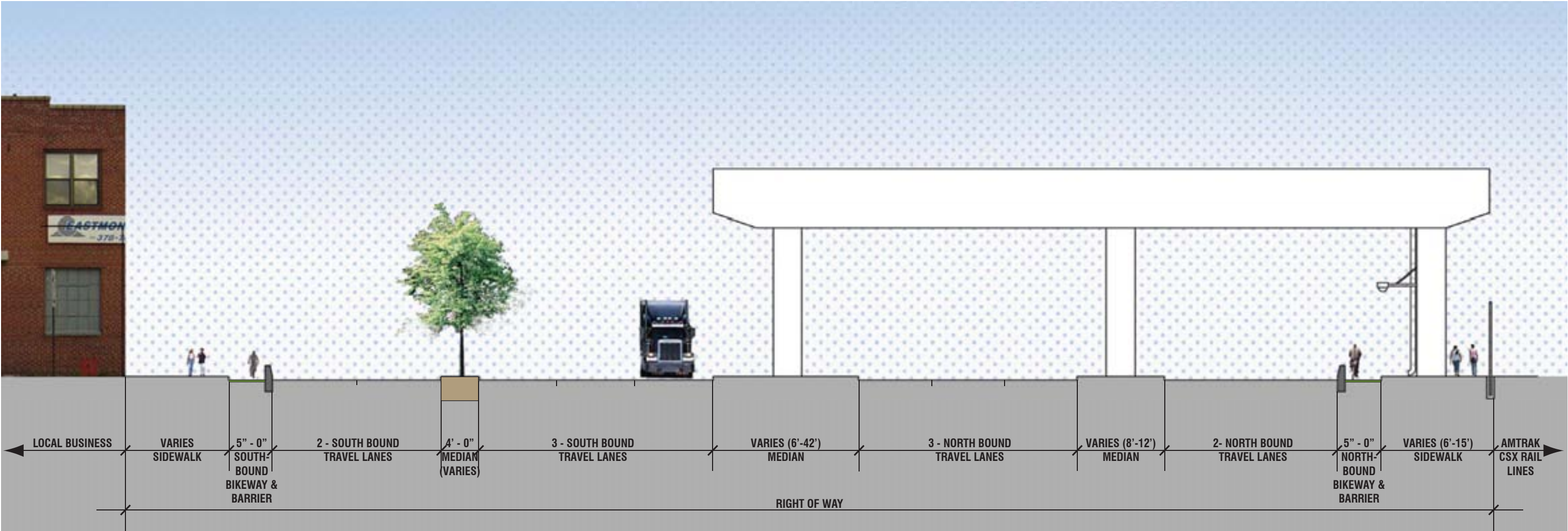
Bruckner Boulevard is proposed to be improved as both a pedestrian and bike route in the short term. As an interim solution until full reconstruction of the Expressway is completed, the modifications are intended to be cost-effective and readily accomplished without roadway reconstruction. The bikeway is proposed to be one way in each direction, traveling with the flow of traffic but protected from the vehicular travel lanes with a high curb. No improvements are proposed to the sidewalks as trees cannot be planted under the Expressway.



Context and access map



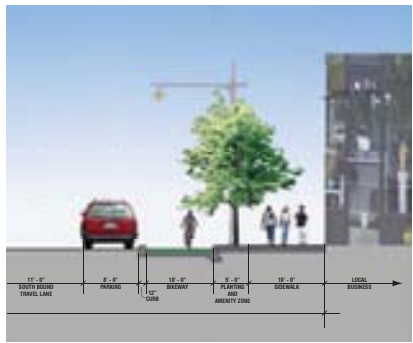
Existing view Bruckner Boulevard



Section at Bruckner Boulevard



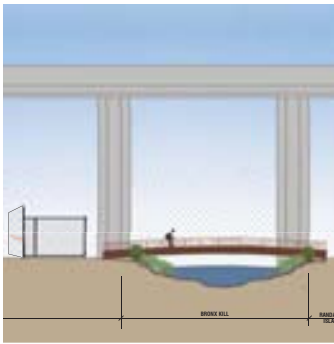
Hunts Point Avenue Connection



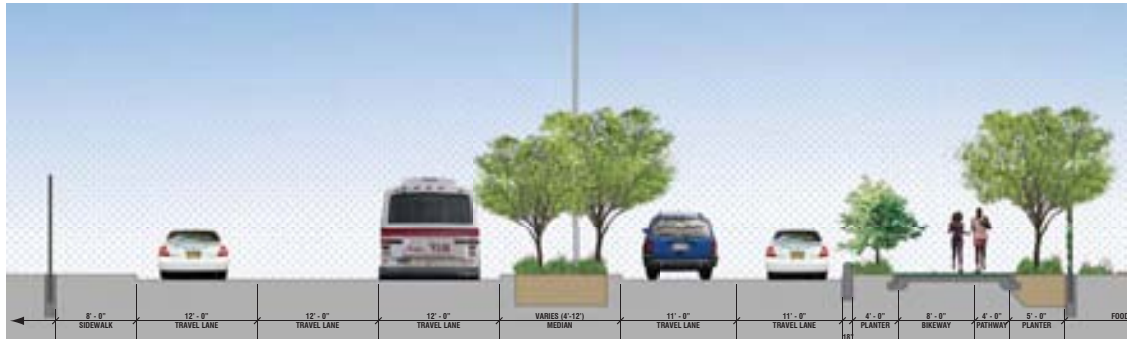
Lafayette Avenue Paseo



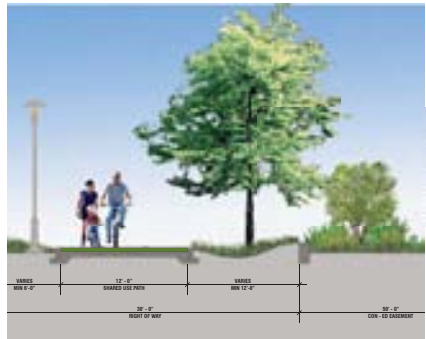
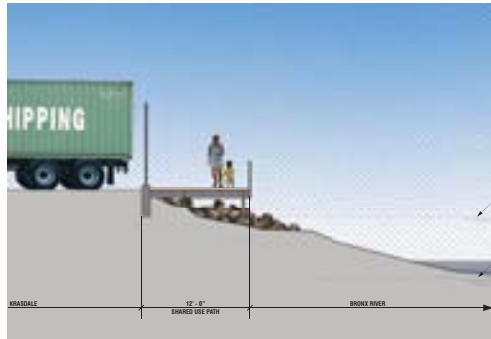
Hunts Point Landing



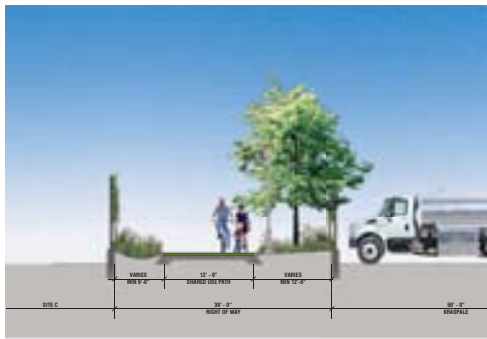
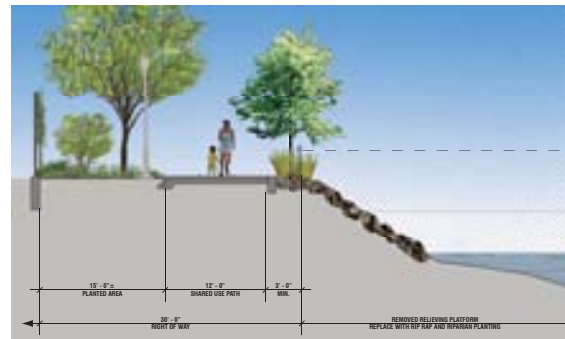
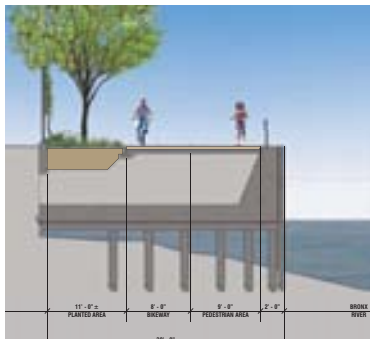
Randall's Island Connection



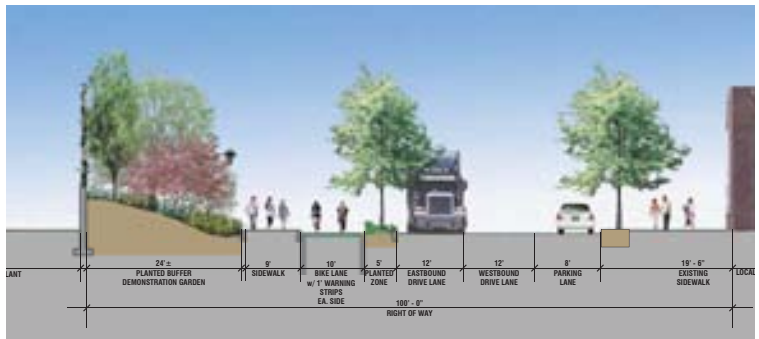
Food Center Drive



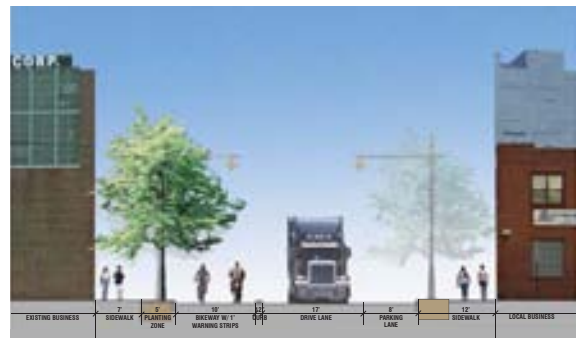
North Market Loop



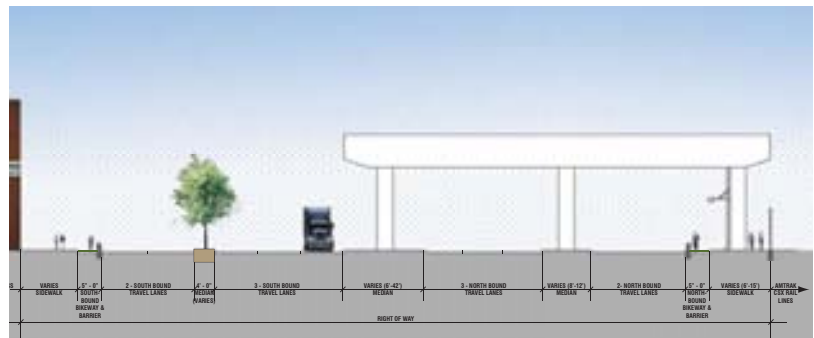
South Market Loop



Willow Avenue Connection



Bruckner Boulevard Connection



Bruckner Boulevard Connection

Design Guidelines

Systems

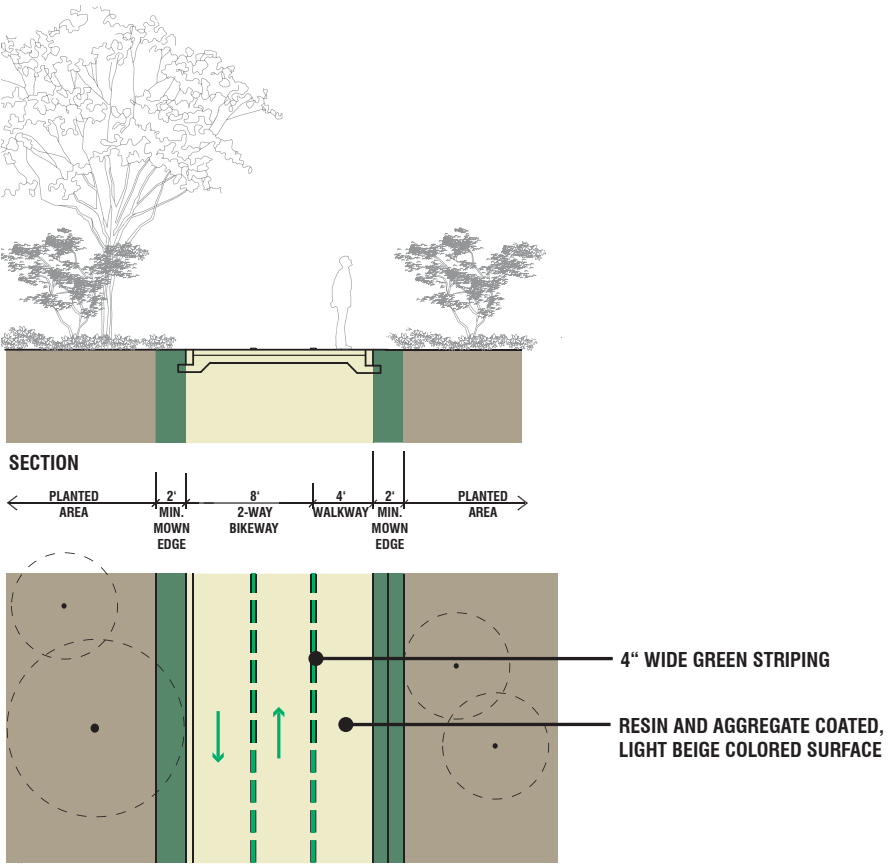
Objectives Systems express long term goals for consideration by future participants in the Greenway's incremental implementation. They provide a planning, design and maintenance direction to ensure a consistent standard of sustainability that can be flexibly applied based on specific site conditions and on-going advances in best management practices.

Systems include circulation networks, environmental graphics, stormwater management, use of recycled materials and planting strategies. These systems should be considered as site-wide goals to be incorporated into future projects as appropriate to the specific location. They are as follows

- 1. Greenstreets Network
- 2. Bikeway Network
- 3. Signage and Public Art
- 4. Stormwater Management
- 5. Pavement
- 6. Soils
- 7. Trees
- 8. Vegetation
- 9. Habitat Enhancement



"Tyregrip" bikeway pavement



"Tyregrip" bikeway pavement



Constructed wetlands at Riverdale County School, Bronx, NY.



Stormwater detention system under parking lot, Riverdale County School, Bronx, NY



Vegetative filter strip at Day Care Center, Rockaway, NY.



Pervious pavement, Gantry State Park, Queens, NY.



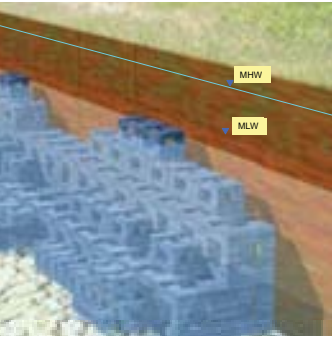
Structural soil trench along sidewalk, Manhattan, NY.



Diversified tree species in median, Route 9A, Manhattan, NY.



Drought tolerant native perennials, Bay Shore, NY.



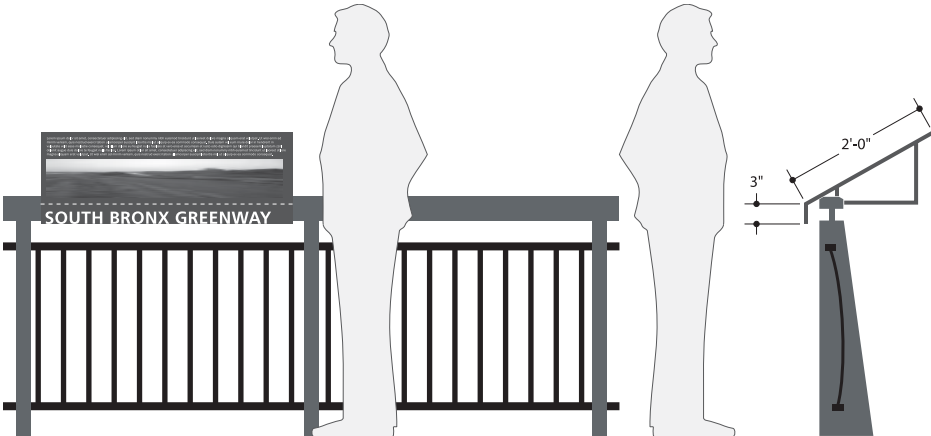
River bed habitat enhancement



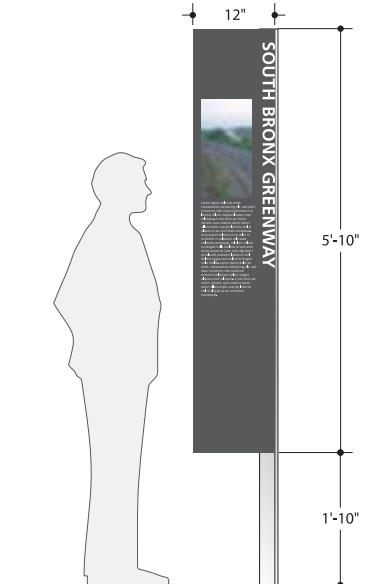
Pavement embedded mile markers



Pavement embedded caretaker acknowledgements



Elevation and section view of rail mounted interpretive signage



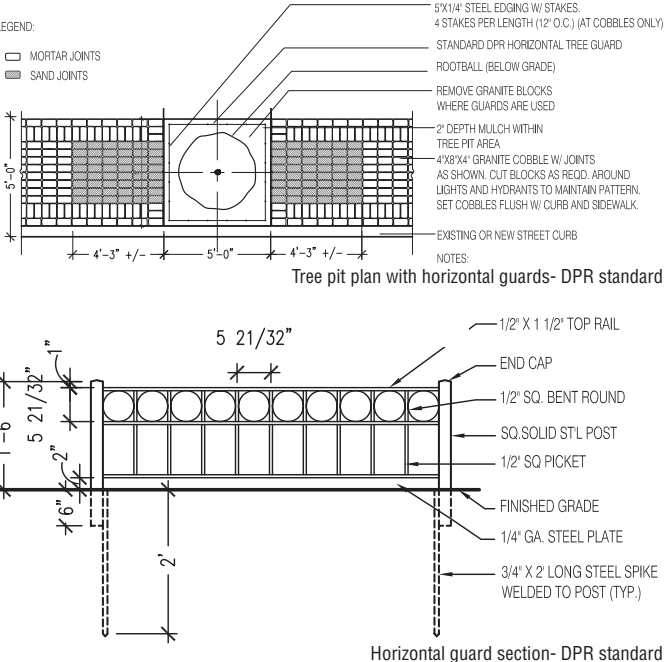
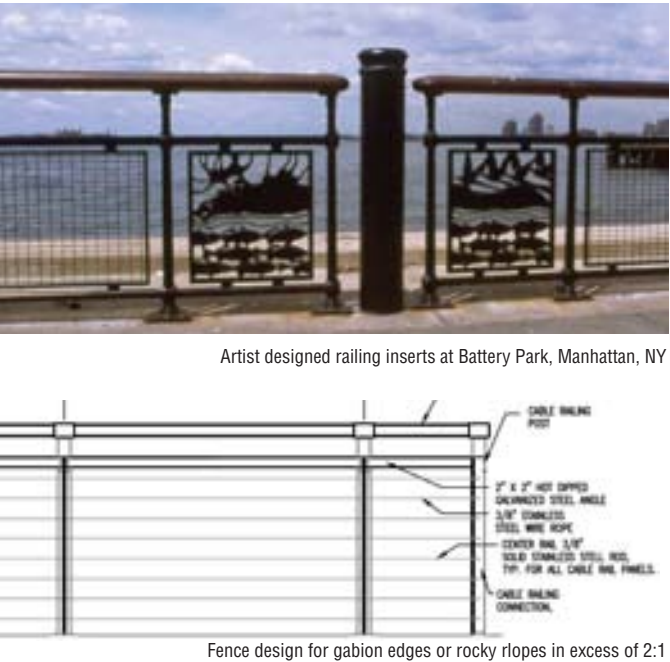
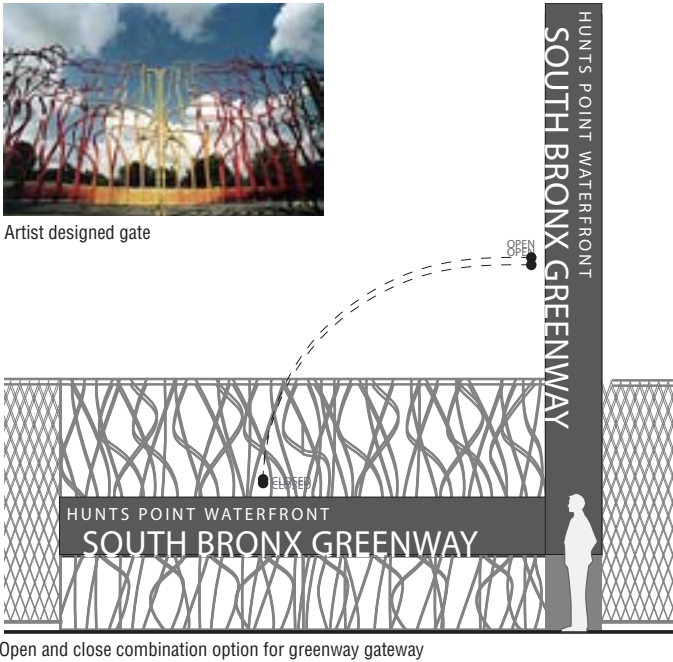
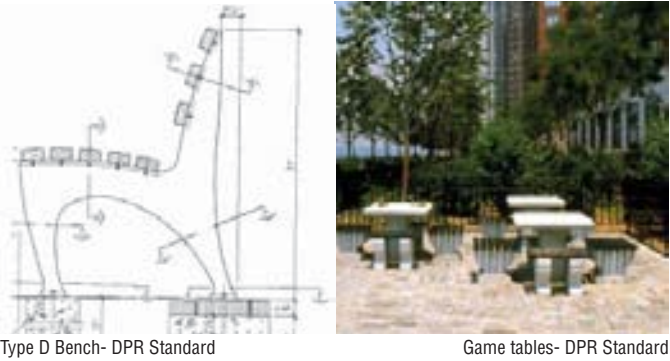
Elevation and plan view of post and panel mounted interpretive signage

Materials

Objectives These represent elements that are both recognized and maintained by city agencies as well as suggestions for the types of elements that can be locally designed or fabricated to create diversity of expression along the Greenway.

By creating opportunities for design and material choices, the guidelines allow flexibility in terms of matching a system or material to a specific site and project budget, while creating Greenway spaces that consistently contribute to the goals described in the Introduction.

- 1. Planting
- 2. Waterfront Edges
- 3. Gateways
- 4. Paving
- 5. Seating
- 6. Tables
- 7. Railings
- 8. Fencing
- 9. Lighting
- 10. Treeguards and Tree Protection
- 11. Other Site Elements



Cost and Maintenance Estimates

Cost Estimate

The following cost estimates are provided for all short-term projects and are based on the schematic designs illustrated in the Schematic Design Section of the Master Plan. Certain projects can be incrementally implemented. For example, greenstreets can be constructed in sections, the Lafayette Paseo can be initially defined with suitable barriers and infilled over time. Waterfront destinations and riverwalks can be constructed individually. However, selective implementation should strive to create meaningful linkages without dead ends.

Cost Assumptions

The estimates do not include costs for geo-technical investigations or land acquisition. Within properties under the control of the NYC Economic Development Corporation, costs for rip rap repair or reconstruction have not been included. Shoreline and marine structures required by the Greenway program are included in the estimates. Costs for site remediation are based on historic land uses and must be confirmed prior to embarking on design. Costs are provided in 2005 dollars with a three year escalation. The area encompassed by each project estimate is shown on the plan.

Maintenance Estimate

The project team recognized that creative solutions are necessary for the Greenway’s future upkeep. The strategy for stewardship of the Greenway should:

- Be founded upon a partnership between City and local constituents;
- Encourage community-based participation in the Greenway’s management and maintenance;
- Seek funding sources to support signature features created by local artists;
- Nurture a landscape management strategy that ensures the regular upkeep of the Greenway and integrates evolutionary changes that may arise from future social or economic circumstances.
- Encourage awareness among all stakeholders, including residents, employers, land owners, and public agencies, that stewardship is a shared responsibility that requires funding, resources, and long-term commitment.
- Balance design goals with maintenance capabilities to minimize the burden on future Greenway care.
- Build social capital through education and local participation in the future directions of the Greenway’s implementation. Support a pro-active stakeholder process throughout future phases to sustain attentiveness to maintenance issues.
- Develop ways to promote identity of place. Consider opportunities to permit revenue-generating activities such as concessions and special events that can contribute to maintenance.
- Collaborate with the Greenway management structure to promote job training, gainful employment of local residents and seasonal youth workers for on-going maintenance.

Maintenance Assumptions

The maintenance and operations costs provided herein assume each project as a stand-alone site. Over time as the Greenway increases in size, it can be assumed that there will be efficiencies that may reduce some costs. In general, the greenstreets assume a majority of maintenance tasks will be performed by City agencies because the components are have been selected and designed to conform with City standards and the projects are located within the public right-of-way. Maintenance of the waterfront network assumes that the majority of tasks will be performed by a newly formed Greenway management and maintenance entity because the sites are not assumed to become mapped parkland.

The maintenace costs exclude outlays for programming, insurance, and administration; in addition, costs for security personnel are excluded from the waterfront network.





Bronx Kill

SOUTH BRONX GREENWAY



Acknowledgements

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Former Council Member Jose Serrano
Iroquois Transmission System, L.P

Project partners and in-kind funding

The Point Community Development Corporation
Sustainable South Bronx

Stakeholders (includes participants of Advisory Committee meetings, community charrettes and interviews)

Elected Officials

Assemblywoman Carmen Arroyo
Assemblyman Ruben Diaz, Jr.
Bronx Borough President Adolfo Carrion
Council Member Helen Foster
Council Member Maria C. Arroyo
Office of the Mayor
Senator Hillary Clinton
State Senator Ruben Diaz, Sr.
State Senator Jose Serrano
Representative Joseph Crowley
Representative Jose Serrano, Sr.

Business Owners/ Leaseholders

Bazzini Nuts
Castle Oil Corporation
Harlem River Yards
HP Terminal Produce Co-operative Market
Krasdale Foods, Inc.
NYOFCo
NY Post Port Morris Print Center, News Corporation
Oak Point Property, LLC

Public Agencies

Empire State Development Corporation
BOEDC
Metropolitan Transit Authority
NYC Department of Corrections
NYC Department of Environmental Protection
NYC Department of Parks and Recreation
NYC Department of Planning
NYC Department of Transportation
New York Police Department
New York Power Authority
NYS Division of Coastal Resources
NYS Department of Transportation
NY Metro Transportation Council
Randall's Island Sports Foundation

Community groups

Dedicated members of the community who attended outreach meetings
Bronx Charter School for the Arts
Bronx River Alliance
City Year
Center for Sustainable Energy-BCC
Columbia School of Journalism
Community Board 1
Community Board 2
Corporate Performance Artists
Downtown Bronx EDC
Friends of Brook Park
Grand Silver Co.
Green Workers Co-operatives
Greening for Breathing
HPAC
Hunts Point Task Force
Land Use Committee, Community Board2
More Gardens!
Mothers on the Move
NYC Audubon
Wagner School
PICCED
St. Ignatius Academy
SEBCO
SoBRO
Sum Missions
Transportation Alternatives
UHP
UNO
The Point CDC
Sustainable South Bronx

For hosting all community and advisory committee meetings

The Point CDC