

# The Harlem River Greenway Vision:

harlemrivergreenway.org



1  
Create clean water by employing Great Management Practices (GMPs) for storm water retention and treatment. Mantener el agua limpia mediante el empleo de las Mejores Prácticas Manejo (GMPs) para la retención y tratamiento de las aguas pluviales y de tormenta.



7  
Reclaim for public use the waterfront park property currently used by the Yankees for parking. Recuperar para el uso público de la propiedad del parque frente al río de la actualidad utilizada por los Yankees para el estacionamiento.



2  
Transform elevated passageway into a public art space. Transform the elevated passageway into a public art space with lighting and public art. Transformar la pasarela elevada de la Major Deegan Expressway en la infraestructura verde para captar agua de lluvia. Transformar el área de la calle en un espacio social al aire libre con iluminación y arte público.



3  
Recreate and build promised park at Pier 5, showcasing GMPs for storm water management on its river brownfields and nature wetlands. Rehabilitar y construir parque prometido en el Muelle 5, mostrando GMPs



9  
Change how people utilize and think about the river by transforming it into a "river," where water bus or water ferry service carries patrons to the boat shed in on game days and transports Bronx residents from place to place along the river. Cambiar cómo la gente utiliza y piensa el río mediante su transformación en una "caña", donde el autobús acuático o el servicio de ferry de aguas lleva a los clientes al Yankee Stadium en los días de juego y transporta los residentes del Bronx en lugar a otro a lo largo del río.



14  
Ensure that the public has full access to the river along the CSD site. Generally, acquire full CSD site for public open space. Asegurarse de que el público tiene acceso completo al río a lo largo del sitio de CSD. Con el tiempo, adquirir plena sitio de CSD para el espacio público abierto.



15  
Eventually, acquire the four-acre waterfront site south of University Heights for an extension of Roberto Clemente State Park, or acquire full waterfront access. Con el tiempo, adquirir la tierra de cuatro acres de costa al sur de acceso de la Universidad de Puerto Rico para una extensión de Roberto Clemente State Park, o adquirir acceso al River line completo al final completo.



16  
Make Roberto Clemente State Park the premier gateway to the river with improved signage, permitting, improved programming, and storm water capture. Haga Roberto Clemente State Park de la entrada principal al río con la señalización mejorada, que permita acceso, el acceso al agua, mejorar la programación, y la captura de aguas de lluvia.



18  
Create opportunities along the river to educate and celebrate the culture of the Bronx through the creation of a "moving museum" that runs on rail, or a "science barge" that moves up and down the river. Crear oportunidades a lo largo del río para educar y celebrar la cultura del Bronx a través de la creación de un "museo móvil" que se ejecuta en tren, o sea "Barco de la Ciencia" que se mueve arriba y abajo del río.



19  
Add signage and wayfinding to key streets leading to the river. Make sure that all future transportation projects, such as planned improvements to University Heights, increase people's ability to bring bikes and bicycles to the water. Añadir la señalización y señalética de las calles principales que conducen al río. Asegurarse de que todos los proyectos futuros de transporte, tales como las mejoras previstas en la Universidad de Griggs, aumenten la capacidad de la gente para traer los barcos y bicicletas para el agua.



20  
Engage public interest in use of the river and the Greenway through creative programming. Comprometer el interés público en el uso del río y la vía verde a través de una programación creativa.



21  
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## Issues & Opportunities: Roberto Clemente State Park to Pier 5 (Mill Pond Park)



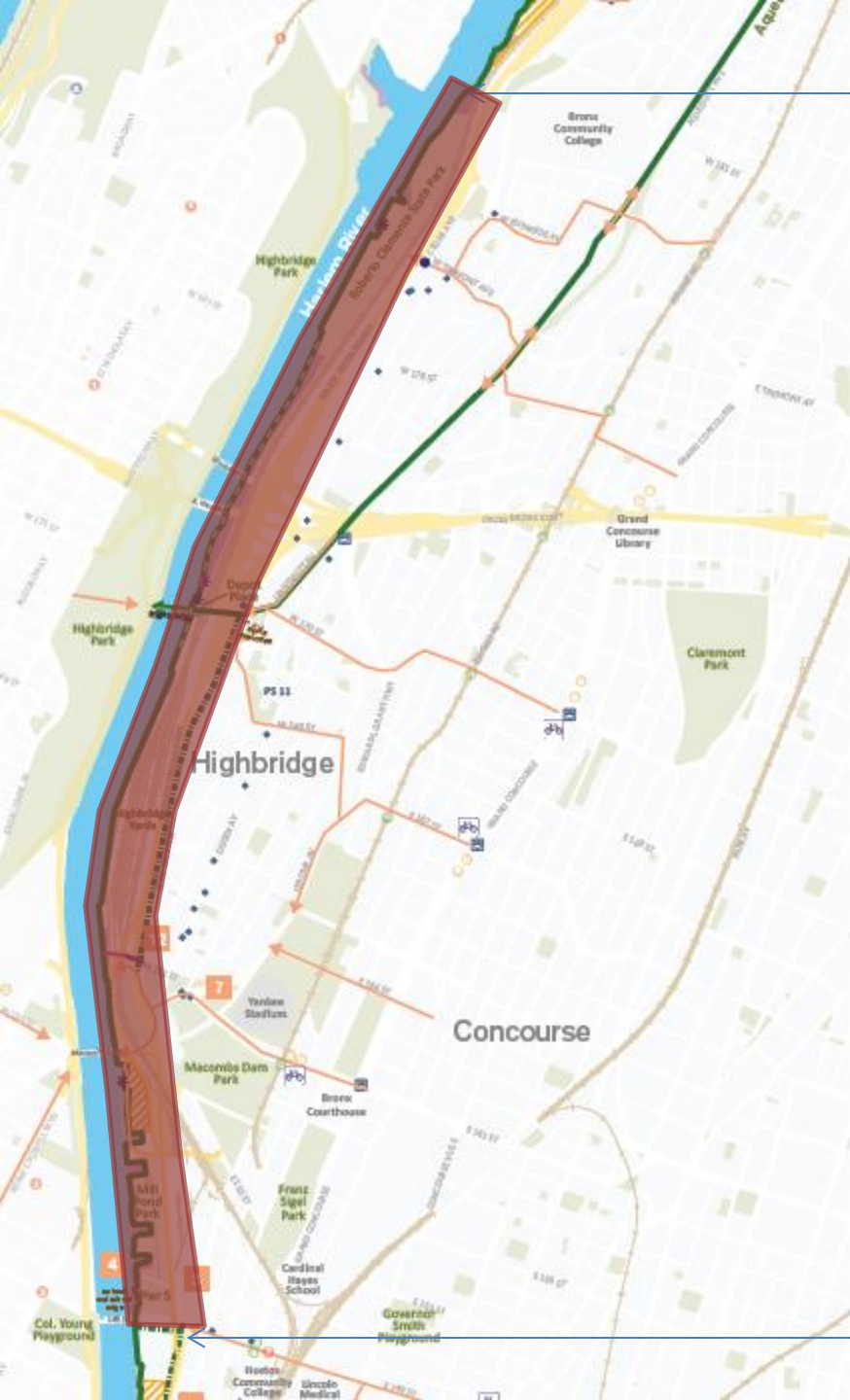


3 Public Visioning Sessions w/  
HRWG, Trust for Public Land & Pratt Institute









Roberto Clemente State Park

~ 2.8 miles

Pier 5



Roberto Clemente State Park





Harlow River

Rehabilitated Aquatics Complex  
Proposed Improvements to include:  
- Rehabilitated Main Pool and Diving Pool  
- New Springground Pad  
- Rehabilitated picnic areas  
- New and enlarged locker and Restaurant Areas  
- Rehabilitated Mechanical Systems  
- Restored Public access to pool complex

Existing Shoreline  
Proposed Shoreline  
Water Access Point  
Picnic Area A  
Picnic Area B  
Picnic Area C  
Arrival Plaza  
Park Administration Building  
Main Pool  
Diving Pool  
Locker Area  
Restaurant Area  
Picnic Pavilion  
Shaded Picnic Groups surrounding Open Field Play Area  
Open Field Play Area  
Playground  
Basketball Courts  
Regional Maintenance and Stores Building (North)  
Public School  
Matthews Road  
West Temont Avenue  
Harlow River Park Drive

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# MORRIS HEIGHTS



LOOKING EAST FROM METRO NORTH STATION TOWARDS CEDAR AVENUE

## EXISTING CONDITIONS




Morris Heights Metro North Station &  
Roberto Clemente State Park



- 1: Develop contextual maximum base heights and, after setback, maximum building heights
- 2: Refurbish step street and incorporate artwork to make a more inviting gateway from the community to the park
- 3: Permit commercial uses so that ground floors are able to provide more active uses
- 4: Close dead end street to vehicular usage to allow for pedestrian and commercial activity
- 5: Hide the expressway below with a more decorative screen which incorporates planting, seating and street lamps.
- 6: Implement measures to slow traffic along Cedar Ave.
- 7: Incorporate a decorative inlay into the street bed of the overpass, and across Cedar Ave.





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4: Close dead end street to vehicular usage to allow for pedestrian and commercial activity





Roberto  
Clemente SP

Bridge Park

Washington  
Bridge

Alexander Hamilton  
Bridge  
(Under Construction)

Depot  
Place



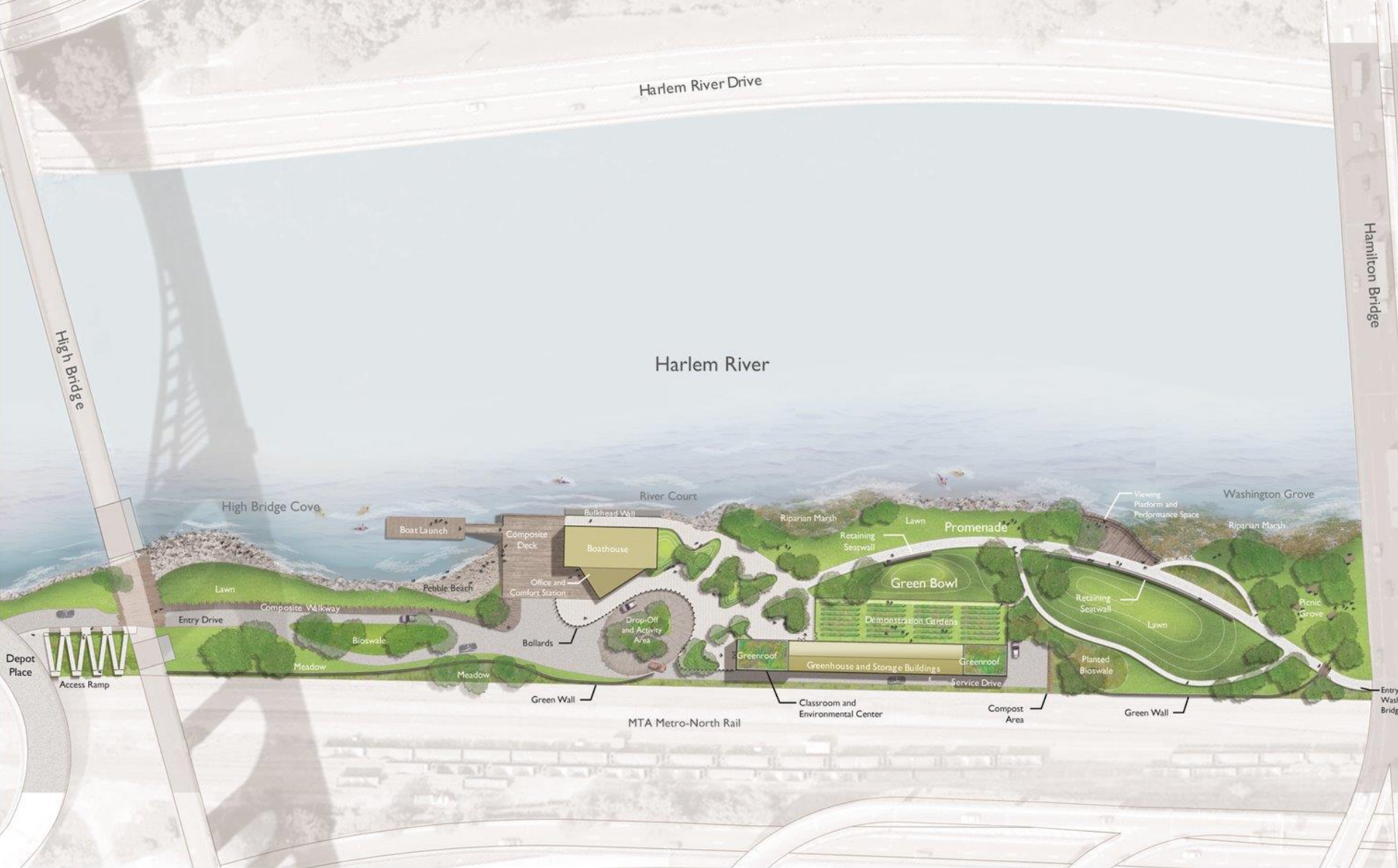
Completed Greenway Segment

Proposed Promenade Park

Hamilton Bridge  
North to  
Roberto Clemente SP

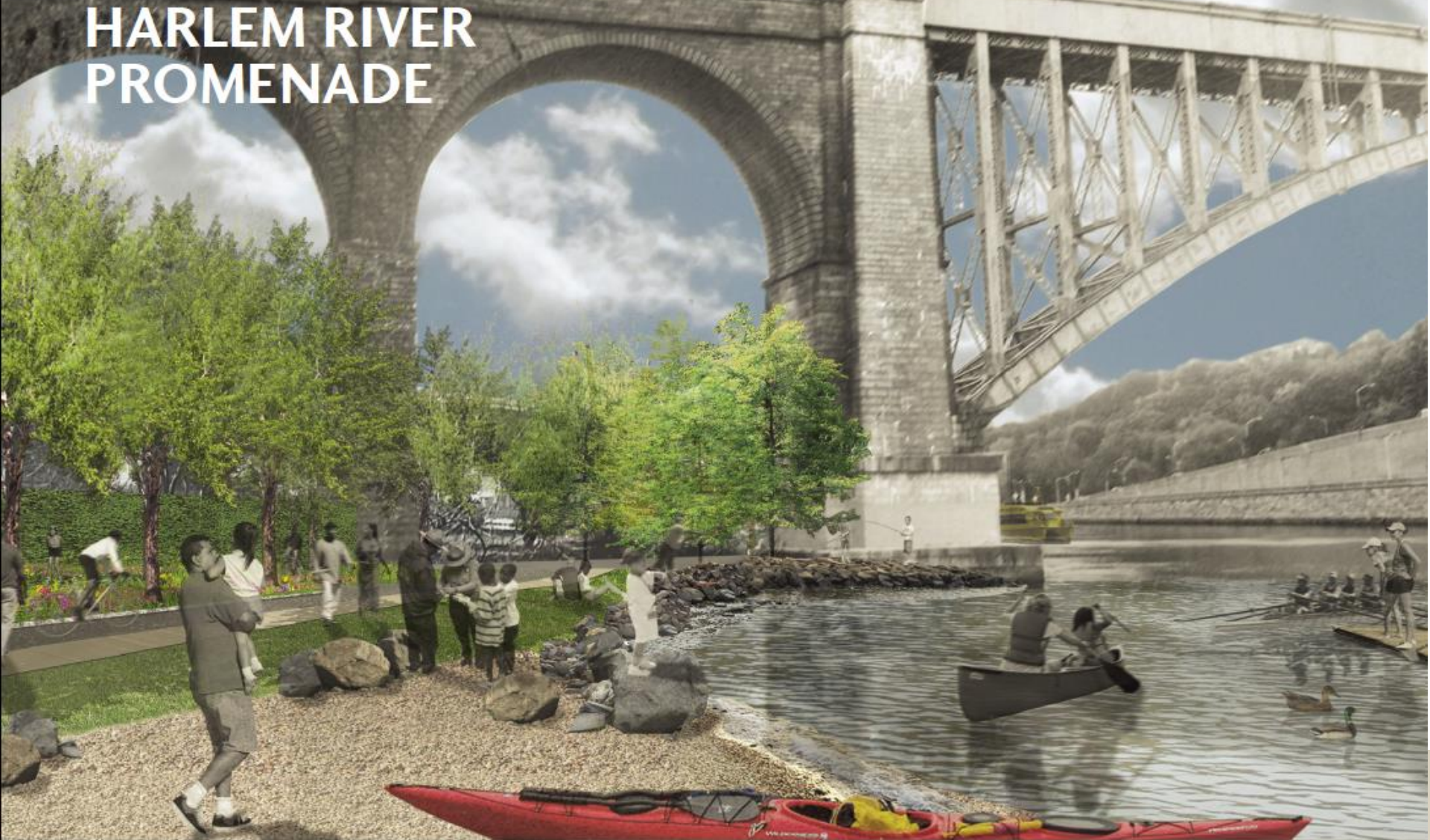








# HARLEM RIVER PROMENADE







**HB**

# HIGH BRIDGE & DEPOT PLACE

NEW CONNECTIONS FOR NYC'S OLDEST BRIDGE

The studio collaborated with the Bronx Borough President's office, NYC Department of City Planning, and the Harlem River Working Group to develop a comprehensive and integrated waterfront access plan along the western banks of the Harlem River.

**Department of Urban Studies and Planning, School of Architecture + Planning at MIT**

2011 Site and Environmental Systems Planning Practicum

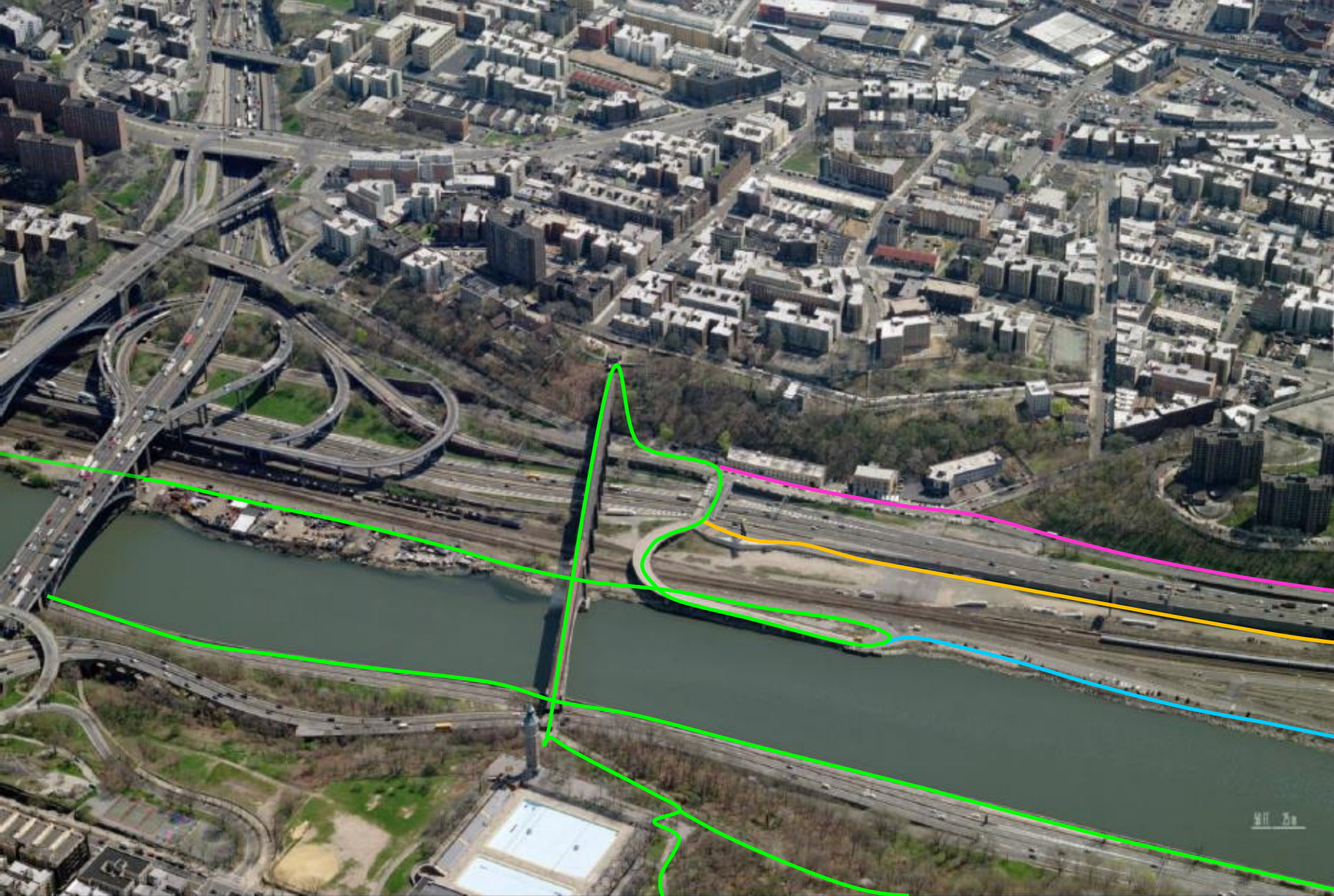


Mid-review meeting with representatives of the Harlem River Working Group in March

**Department of Urban Studies and Planning, School of Architecture + Planning at MIT**

2011 Site and Environmental Systems Planning Practicum





HB

HIGH BRIDGE & DEPOT PLACE

BRONX MEET YOUR  
WATERFRONT PLAN



# The Highbridge & Depot Place



High Bridge & HB Stairs

Depot Place Ramp

High Bridge Yards  
MTA







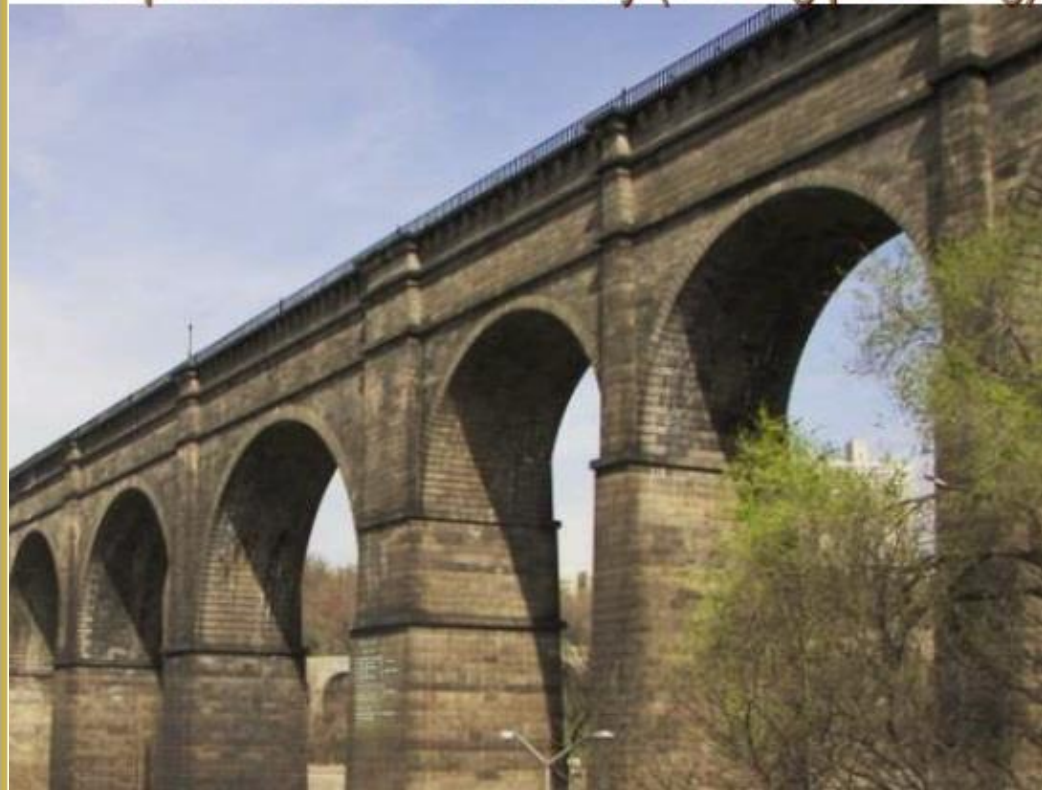
# STRUCTURAL REHABILITATION

## MASONRY ARCH SPANS AND WALKWAY

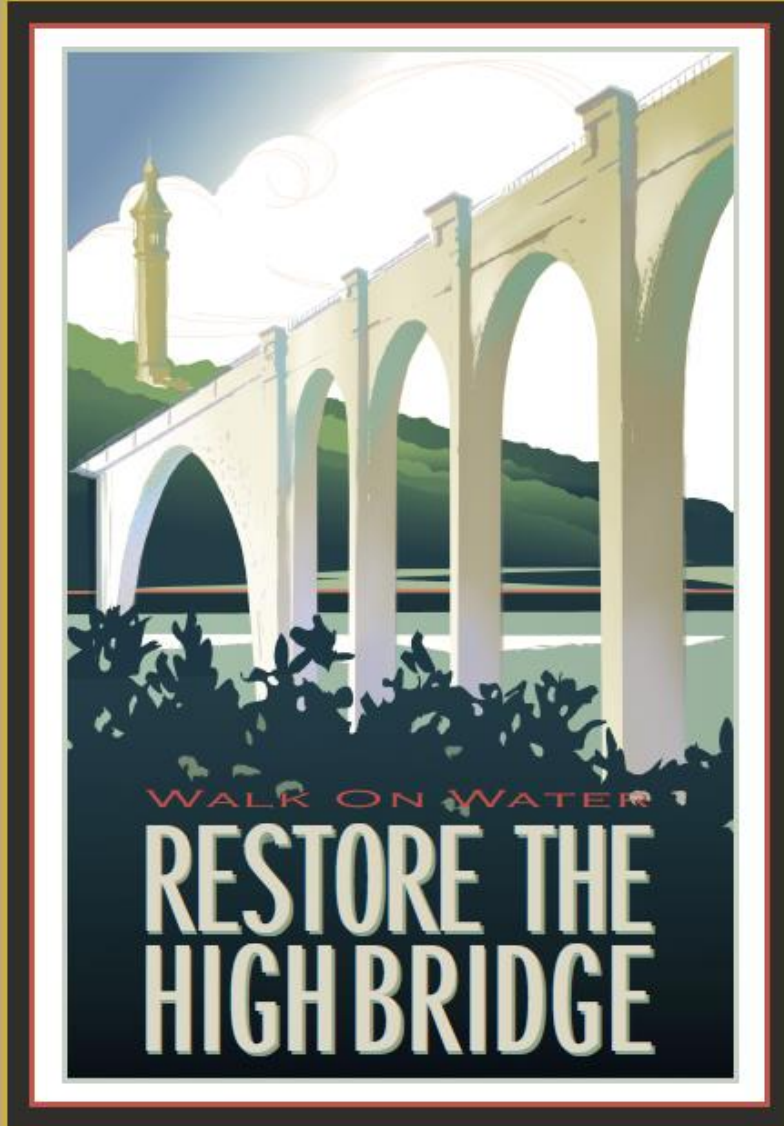
Waterproof deck

Add new steel tie rods below deck

Repoint & clean all masonry (funding permitting)



**\$62 Million Highbridge Rehabilitation Project**  
**NYC's Oldest Bridge - Closed since 1970**

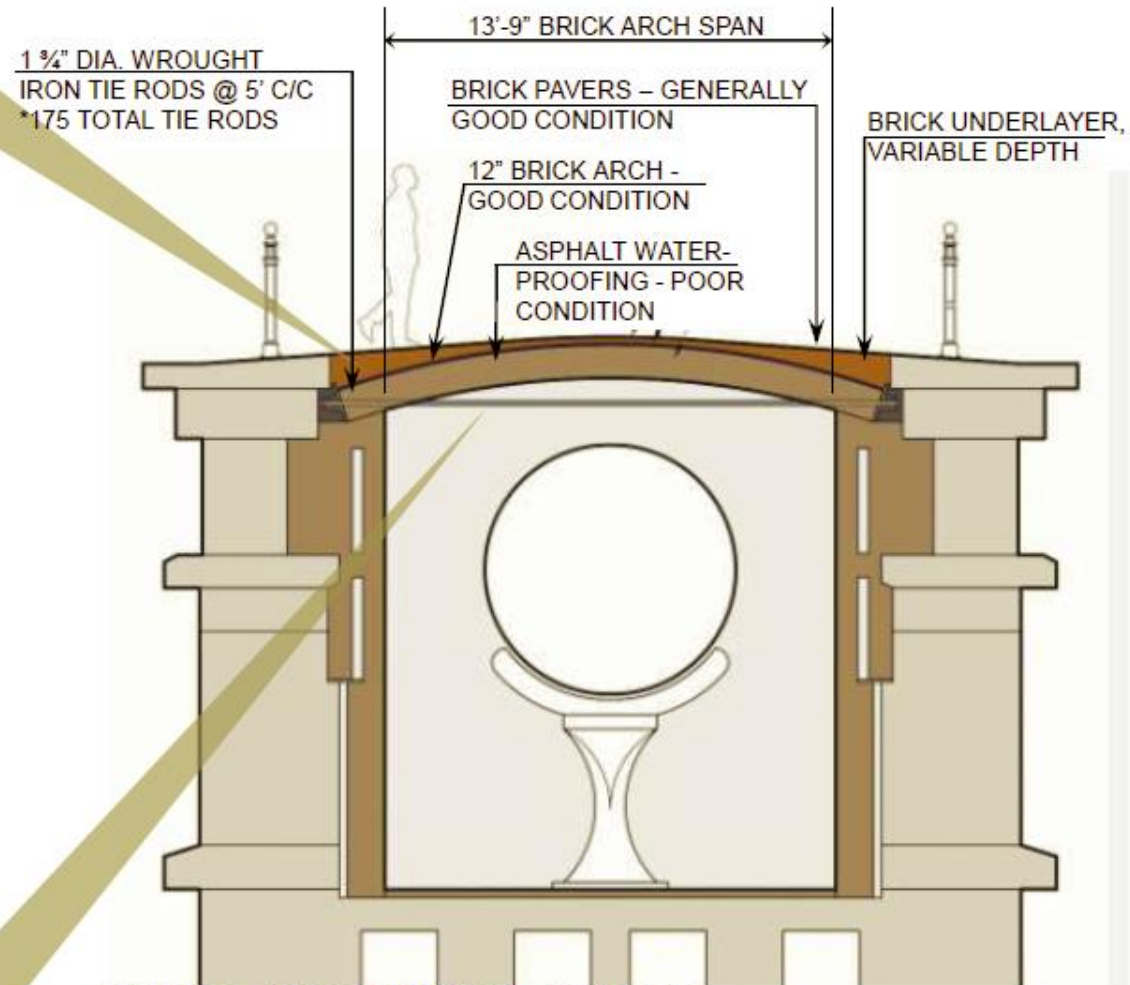


For more information: [www.highbrideguy.org](http://www.highbrideguy.org). Sponsored by the National Park Service Rivers & Trails Program, Appalachian Mountain Club and Partnerships for Parks. Poster design & illustration: Phil Melillo [www.melillostudio.com](http://www.melillostudio.com)



# STRUCTURAL REHABILITATION

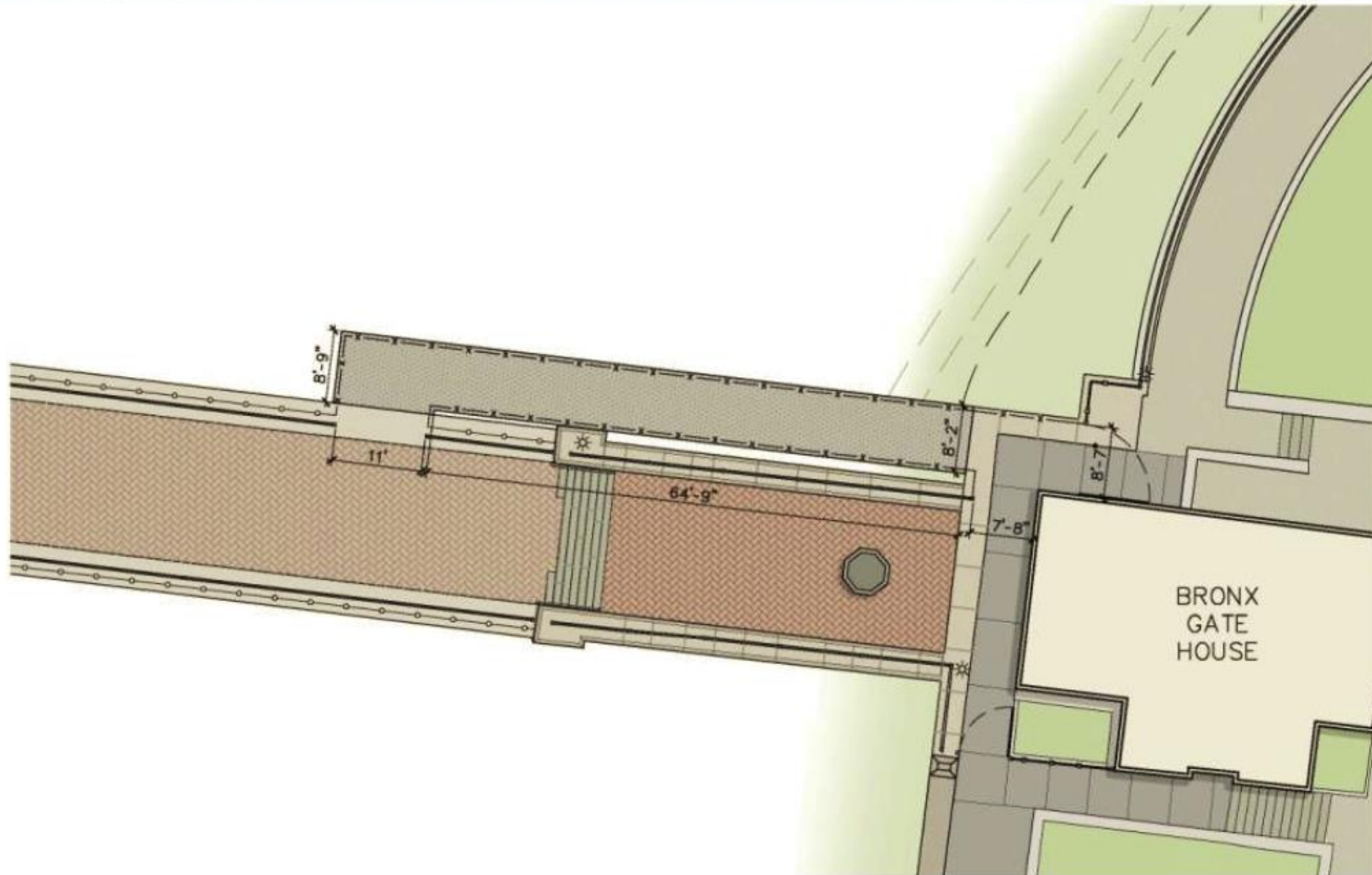
## MASONRY ARCH SPANS AND WALKWAY



\* TIE RODS – 5% TO 90% MATERIAL SECTION LOSS  
90 TIE RODS HAVE > 25% MATERIAL SECTION LOSS

MASONRY ARCH SPAN SCHEMATIC  
SECTION THROUGH ATTIC

# ACCESS RAMPS BRONX





# ACCESS RAMP RENDERING BRONX



# ACCESS RAMP RENDERING MANHATTAN





# ARCHITECTURAL LIGHTING (*UNFUNDED*)



# PROJECT FUNDING

## Total Funding = \$62 Million

- \$49.6 Million through PlaNYC
- \$5 Million through Rep. José E. Serrano
- \$7.2 Million in other federal grants

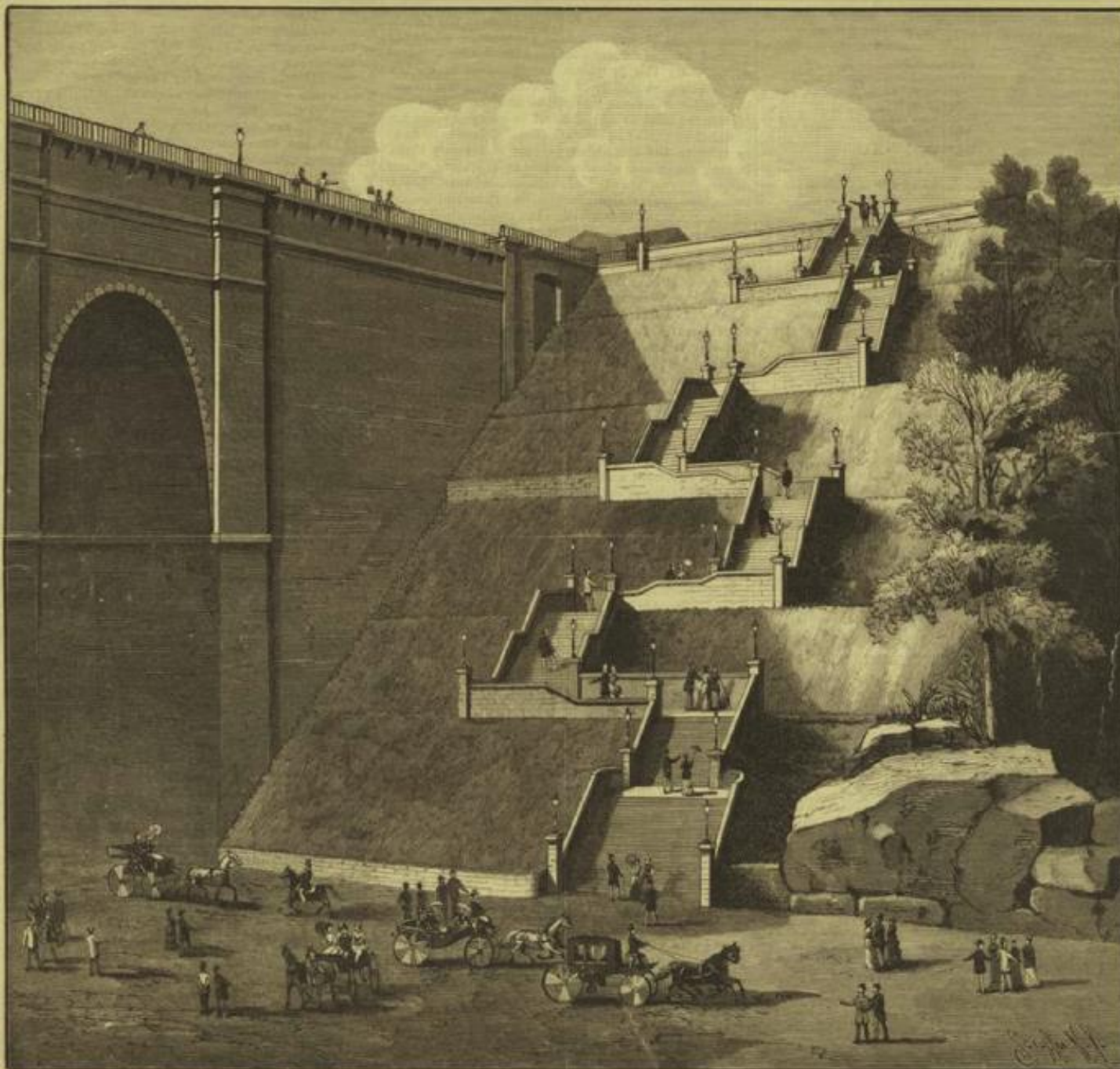


Students from P.S. 11 and P.S. 126 at the High Bridge Groundbreaking Ceremony

Congressman Serrano & Mayor Bloomberg at Groundbreaking Ceremony for Highbridge Rehabilitation Project.



Parks/DOT  
Highbridge Stair  
Rehabilitation  
Project \$1.6 million



STONE STEPS AT HIGH BRIDGE, NEW YORK CITY.

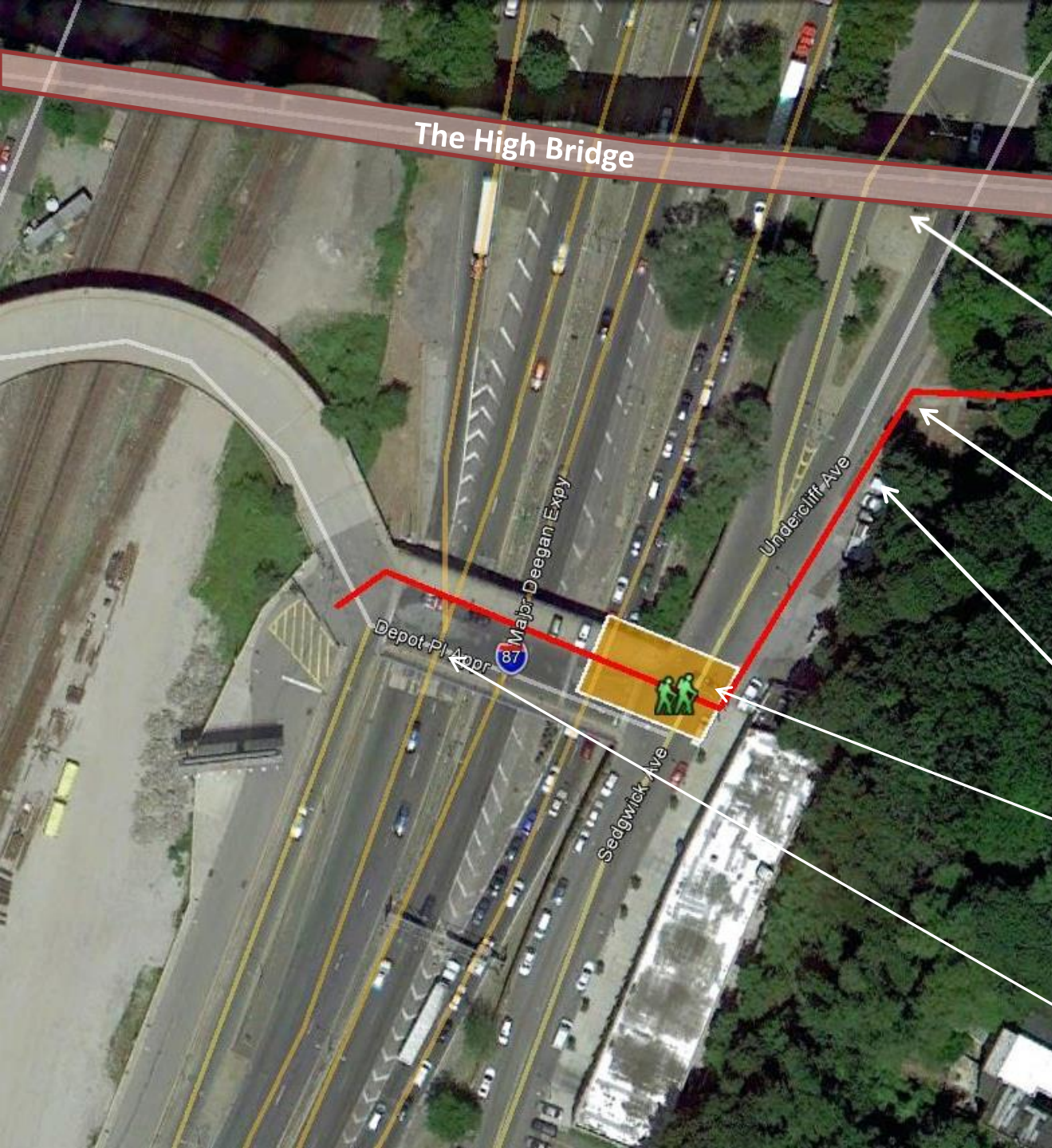
N. Y. PUBLIC LIBRARY  
PICTURE COLLECTION

SC 40.2.5.186









The High Bridge

High Bridge to Depot Place  
Proposed Crossing  
Sedgwick Avenue

The Highbridge

Highbridge Stairs

Gas Station

Proposed Sedgwick  
Street Crossing

Depot Place Ramp

Major Deegan Expy  
87

Undercliff Ave

Depot Pl. Appr

Sedgwick Ave



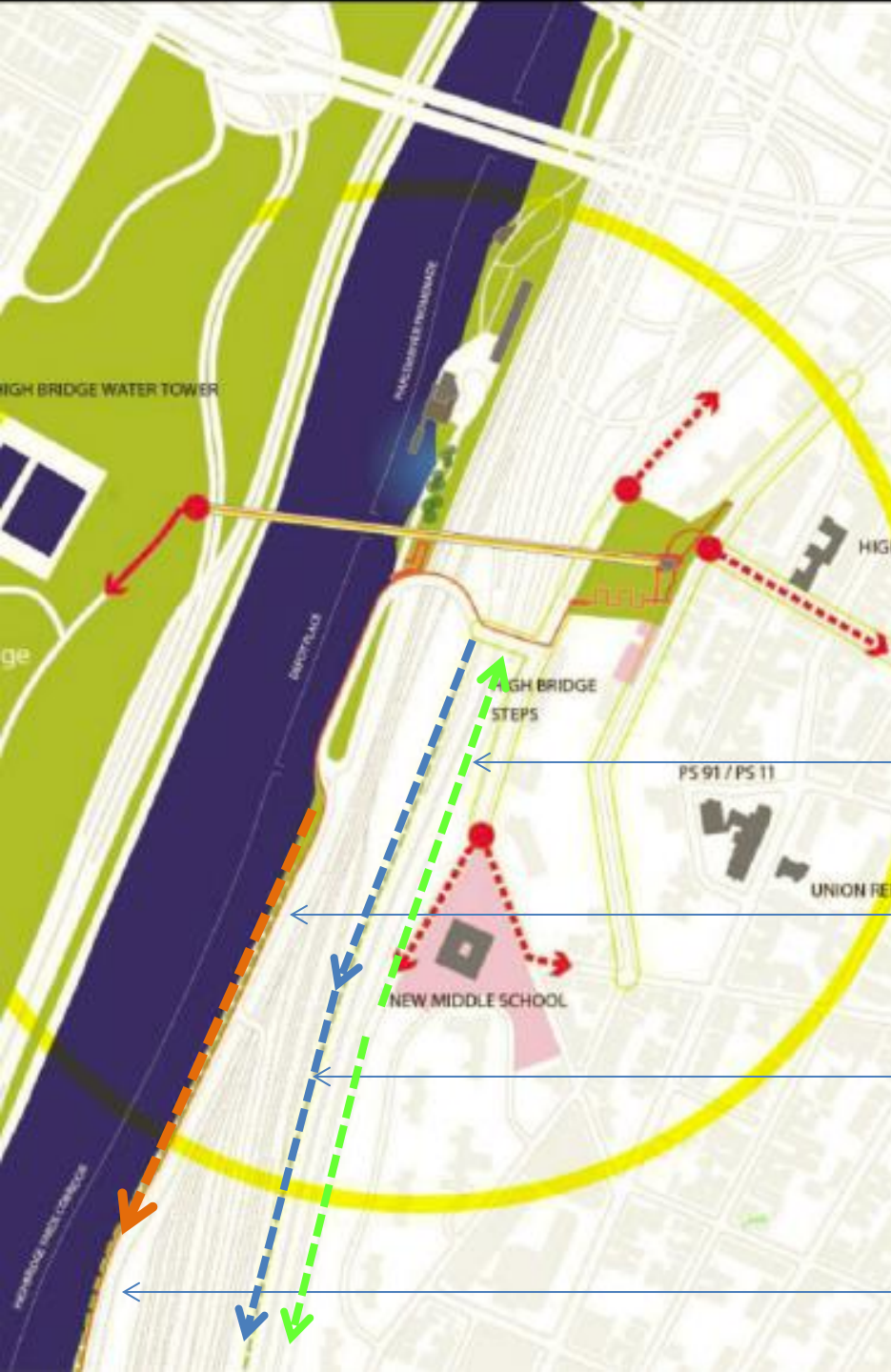
Proposed Sedgwick Ave Crossing (MIT)





Proposed Depot Place Greenway Ramp (MIT)

## Depot Place to Macombs Dam Bridge 3 Proposed Options



**Sedgwick Route**  
(Two-Way Protected Bike Lane)

**Greenway Route**  
Waterfront Alignment (*Preferred*)

**Greenway Route**  
Deegan Alignment

**Highbridge Yards**  
MTA



## Depot Place to Macombs Dam Bridge

Greenway Route  
Deegan Alignment

Highbridge Yards  
MTA

Greenway Route  
Waterfront Alignment (*Preferred*)

161<sup>st</sup> St Pedestrian Bridge





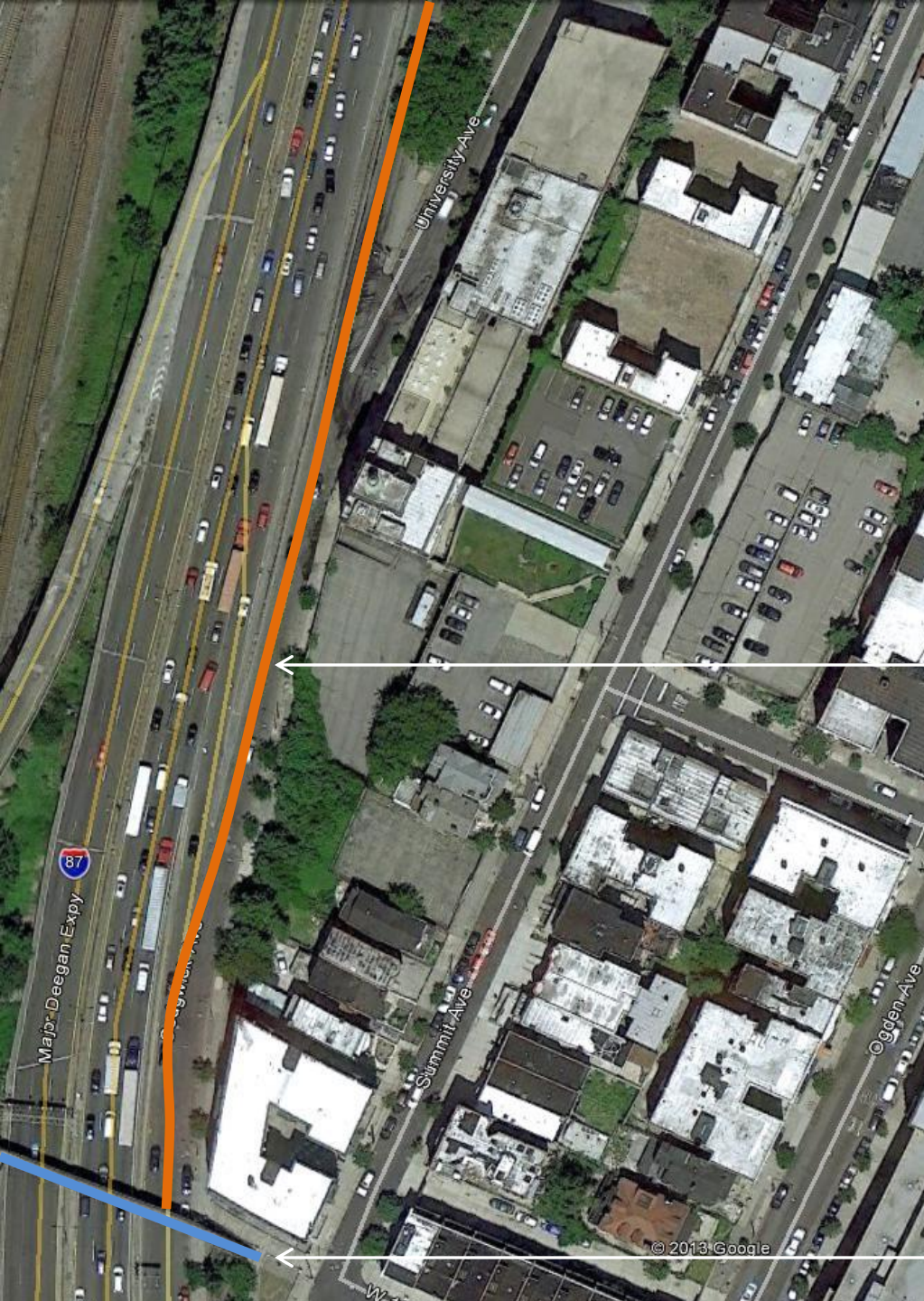






Proposed Deegan Alignment Behind Highbridge Yards (MIT)





## Sedgwick Ave Alignment

161<sup>st</sup> St to Depot Place

Sedgwick Ave Alignment  
(Two-Way Protected Bike Lane)

161<sup>st</sup> St Pedestrian Bridge





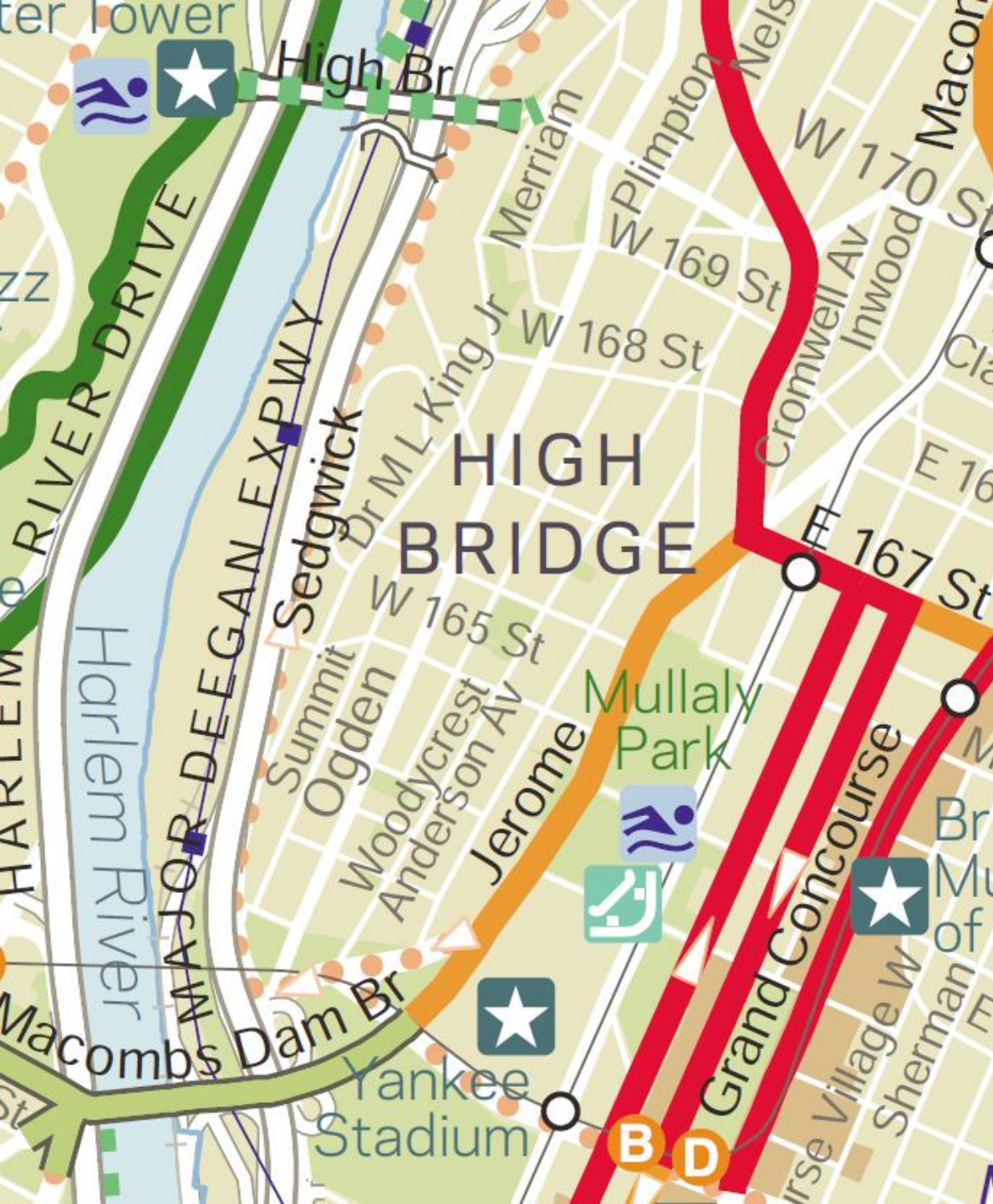
Depot Place

Sedgwick Ave Alignment  
(Two-Way Protected Bike Lane)











**MD**

MACOMB'S DAM

**Macombs Bridge Pedestrian Crossing**

-  Vehicular Traffic
-  Pedestrian Traffic

Image © 2011 Sanborn

©2010 Google

**MD**

**CURRENT CIRCULATION**





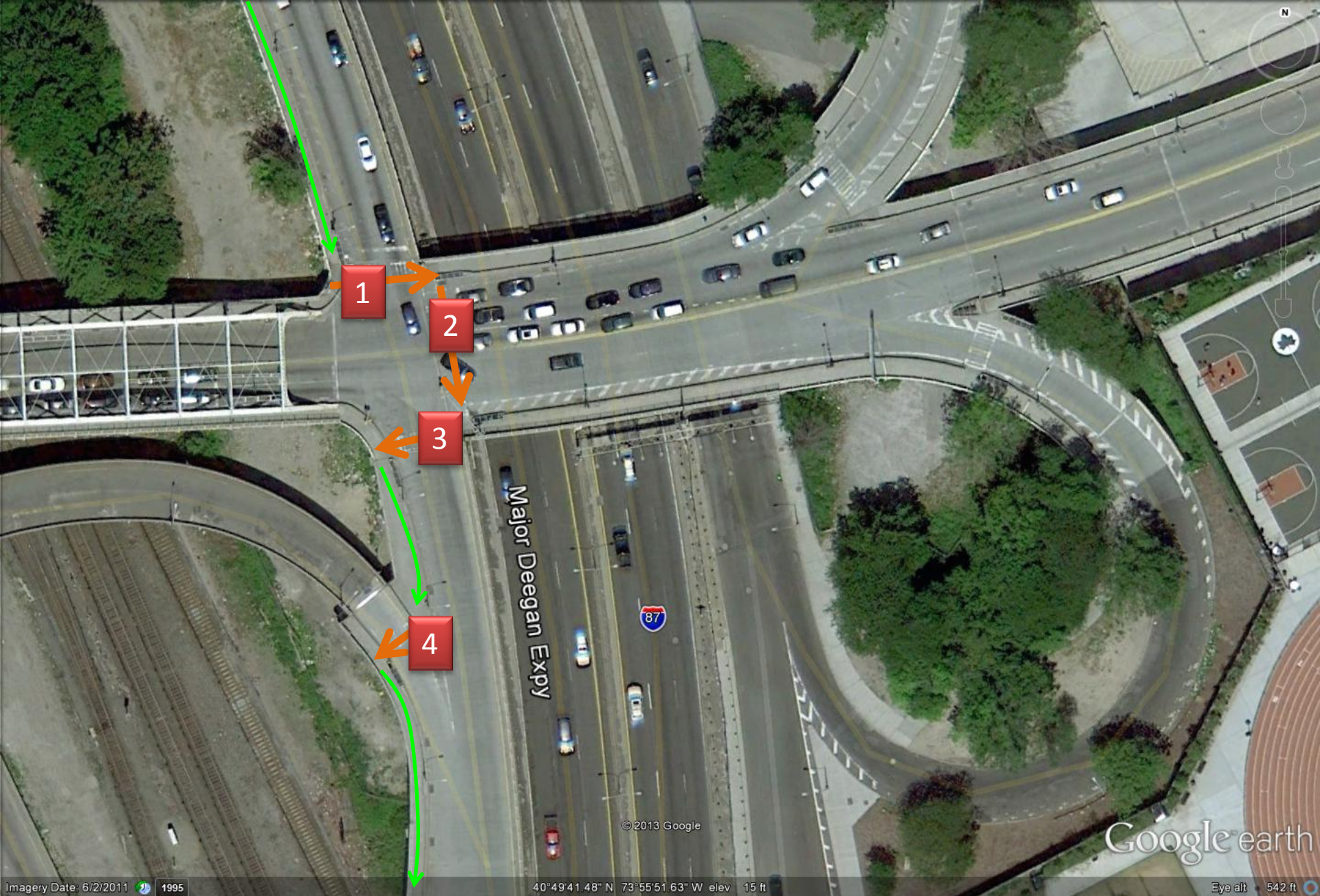


**MD** EXISTING PEDESTRIAN SPACES: Missing Connections



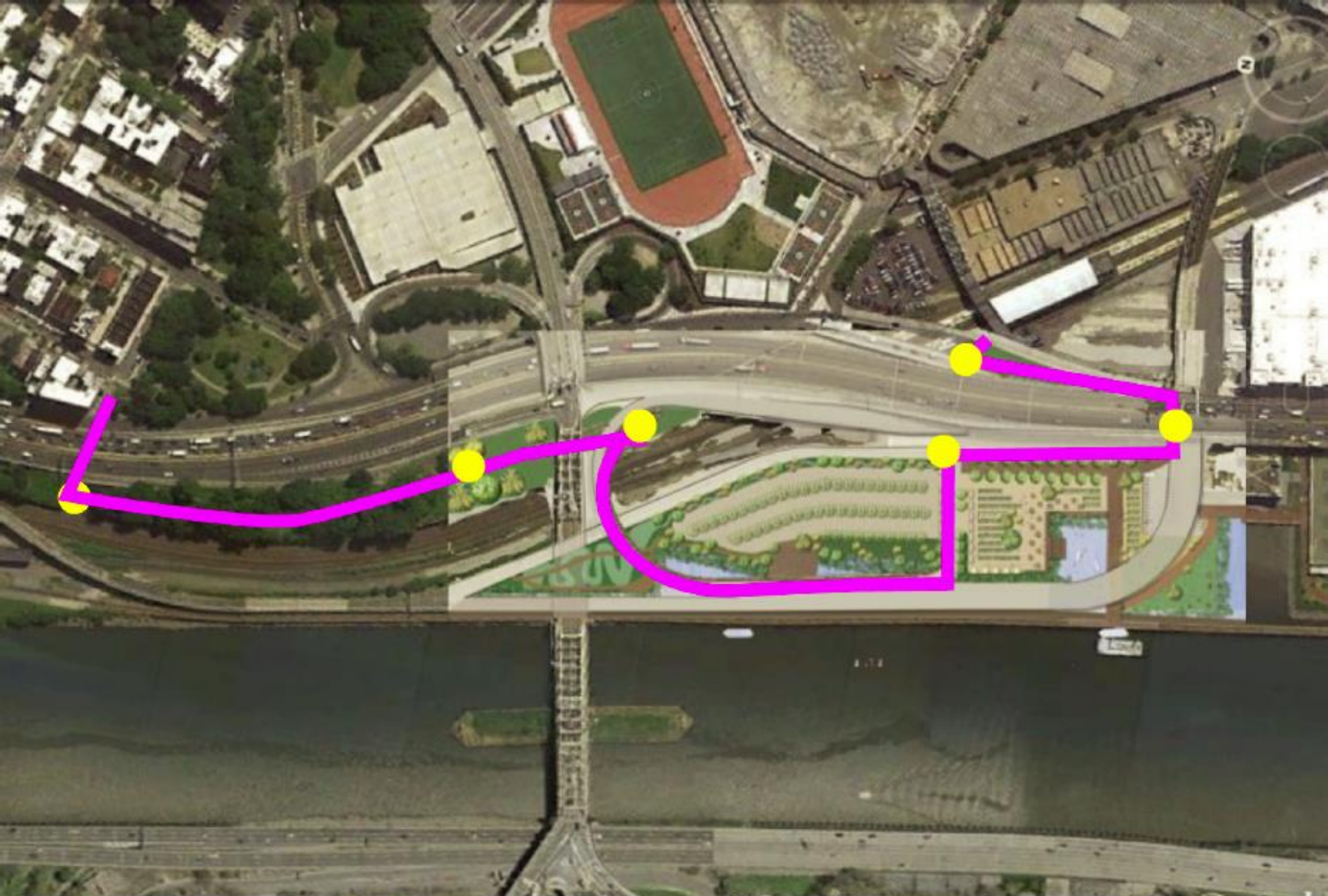
**MD** EXISTING PEDESTRIAN SPACES: Missing Connections





Macombs Dam Bridge Pedestrian Crossing (Existing Condition)





EXPERIENCE WALK





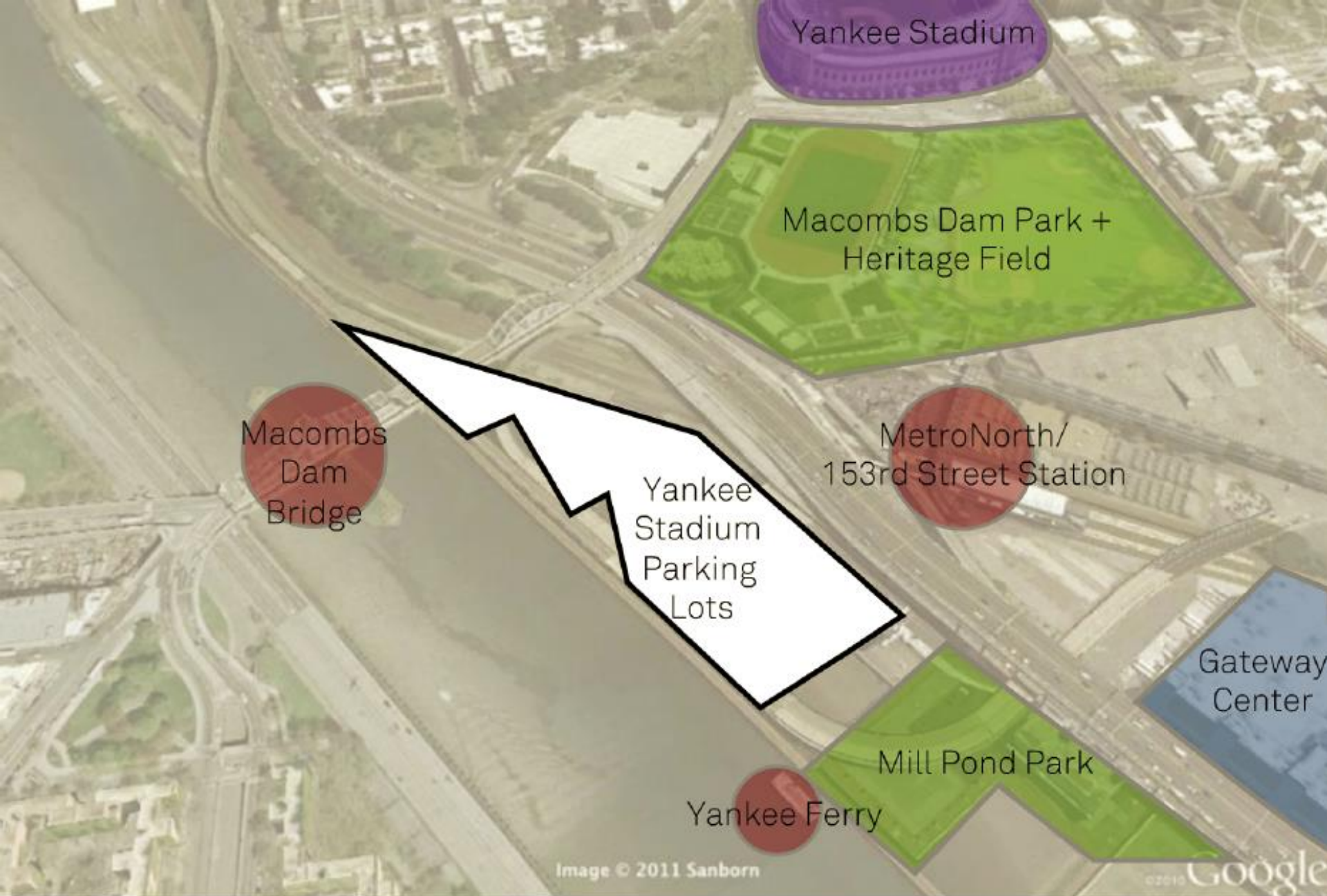
MD











Yankee Stadium

Macombs Dam Park +  
Heritage Field

Macombs  
Dam  
Bridge

Yankee  
Stadium  
Parking  
Lots

MetroNorth/  
153rd Street Station

Gateway  
Center

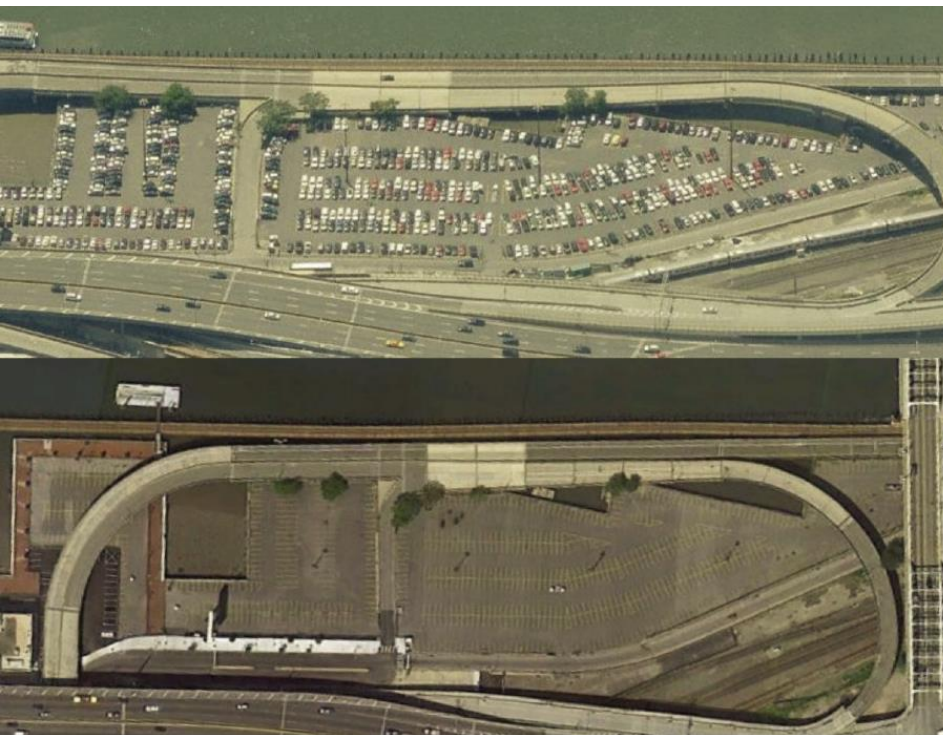
Mill Pond Park

Yankee Ferry

Image © 2011 Sanborn

©2010 Google





Yankee Parking Lots



Low-cost, flexible hard space for pop-up **food** and **tailgating**



Significant paved space  
adjacent to largest  
regional destination in  
the area with Heritage  
field opening in 2012









Image © 2011 Sanborn

Google

MD

MACOMBS DAM PARK-IT PLACE

BRONX MEET YOUR  
WATERFRONT PLAN



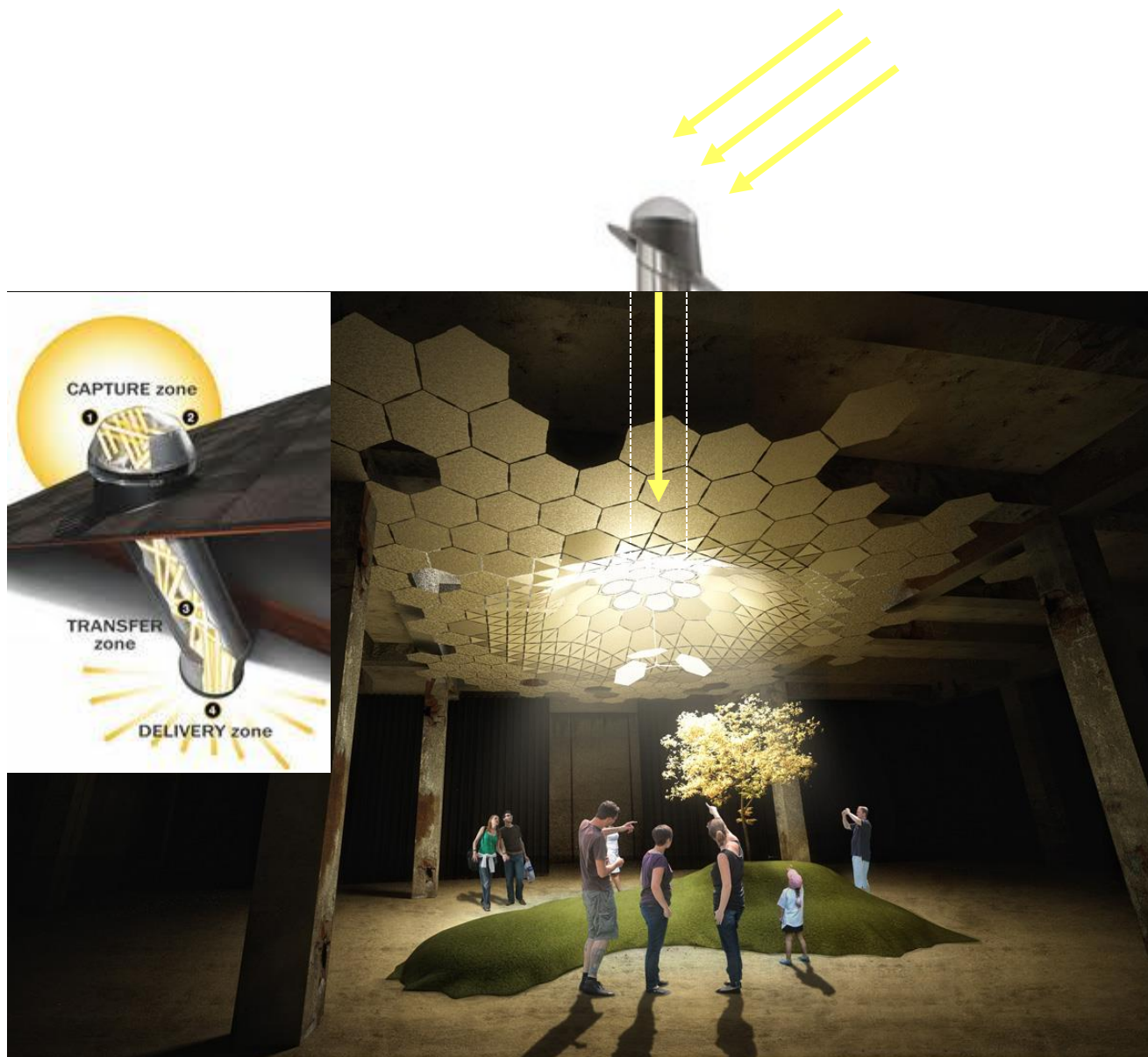
Bronx Terminal  
Market Mall

Mill Pond Park




Underneath Deegan Elevated Roadway





Daylighting with Solar Tubes





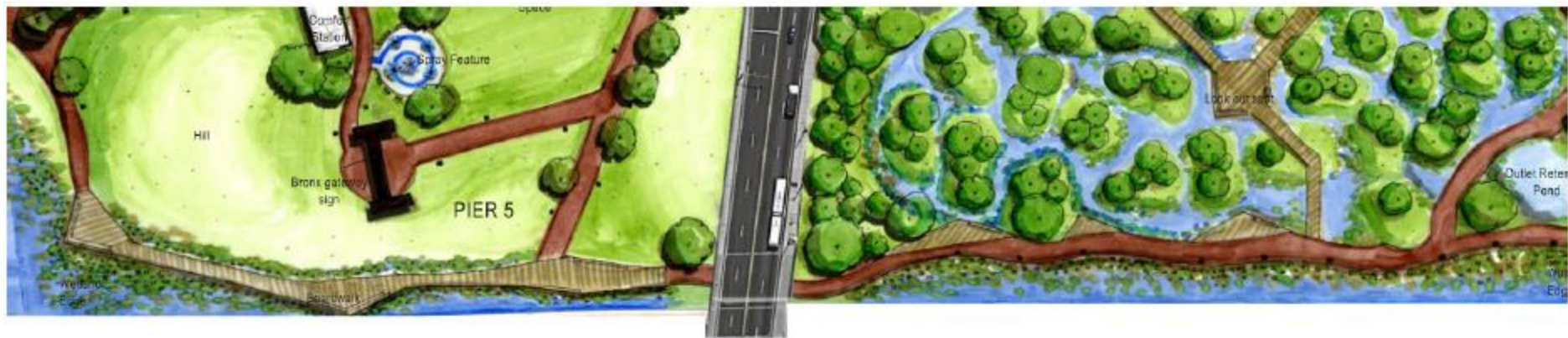
Rethinking the  
Relationship between  
People and Their River

P5

PIER 5 WATER PARK

BRONX MEET YOUR  
WATERFRONT PLAN





Integrate ecological edge design with Skate Park or Playground

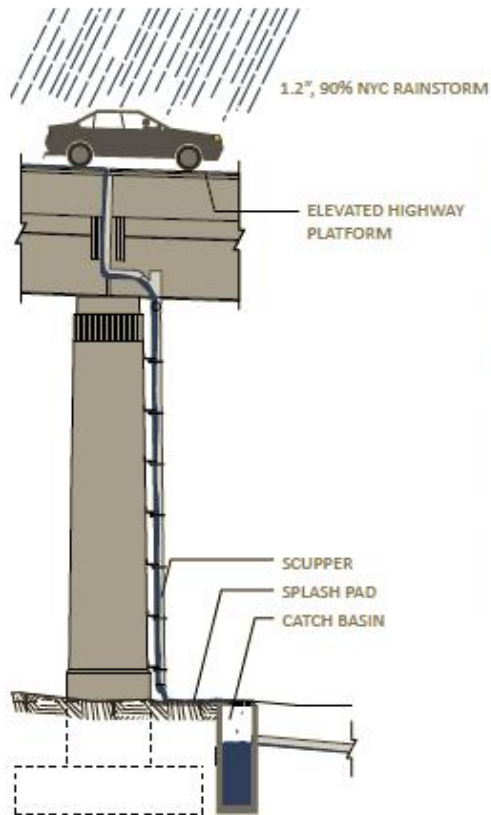


Skate Park



New waterfront edge with gabion wetland





## EXISTING CONDITIONS

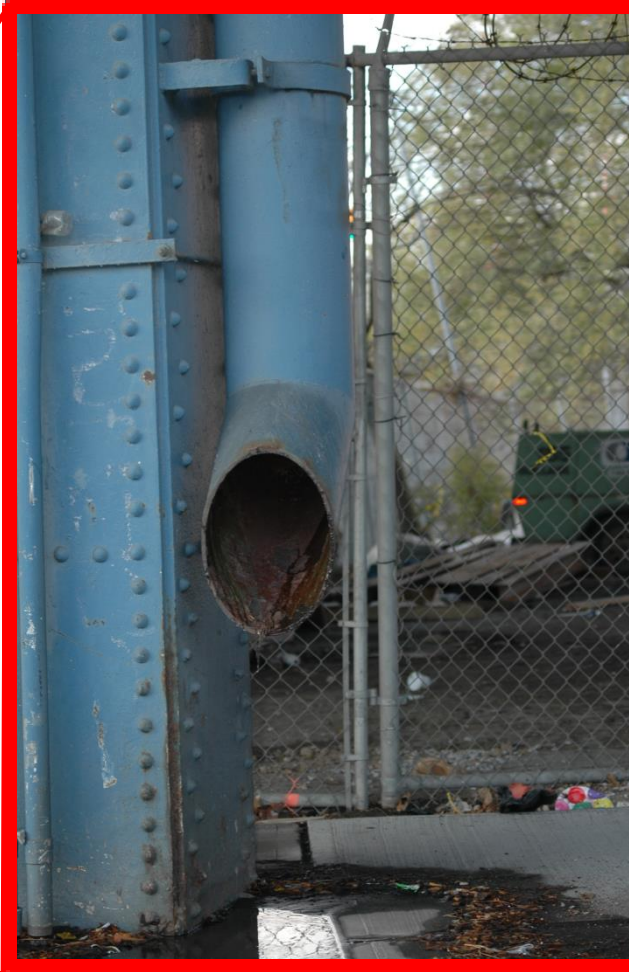
STORM WATER CAPTURE AT PIER 5

dlandstudio architecture + landscape architecture, pllc 137 Clinton Street Brooklyn NY 11201 T 718-624-0244 www.dlandstudio.com

January 28, 2013

# NOAA/WCS Interim Stormwater Capture Project







THE CLOSED SYSTEM FILTERS AND EVAPO-TRANSPIRES 100% OF SURFACE RUNOFF FROM TWO SCUPPERS.

34" Jersey Barriers, ballasted with water or sand, are connected to form the planter, which is then lined with a waterproof liner. A sedimentation basin, composed of modular gravel sacks that will capture particulate matter, is installed directly below the redirected scupper.

Water flows through the sedimentation basin into the bottom of the planter below the Gaia-Soil planting media. Following a heavy rainfall the plants float, allowing the water to evaporate over time.

PERSPECTIVE

STORM WATER CAPTURE AT PIER 3

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January 28, 2013





**THE OPEN SYSTEM FILTERS 75% OF SURFACE RUNOFF FROM FOUR SCUPPERS, FOLLOWING DEP STANDARD GUIDELINES. EXCESS WATER DRAINS ONTO THE SITE.**

34" Jersey Barriers, ballasted with water or sand, are connected to form the planter, which is then lined with a waterproof liner. A sedimentation basin, composed of modular gravel sacks that will capture particulate matter, is installed directly below the redirected scupper.

Water flows through the sedimentation basin directly onto the planting. Following evapotranspiration, the reduced runoff flows through the planting media into a gravel drainage layer that drains out of the planter and onto the site.

## PERSPECTIVE

STORM WATER CAPTURE AT PIER 3

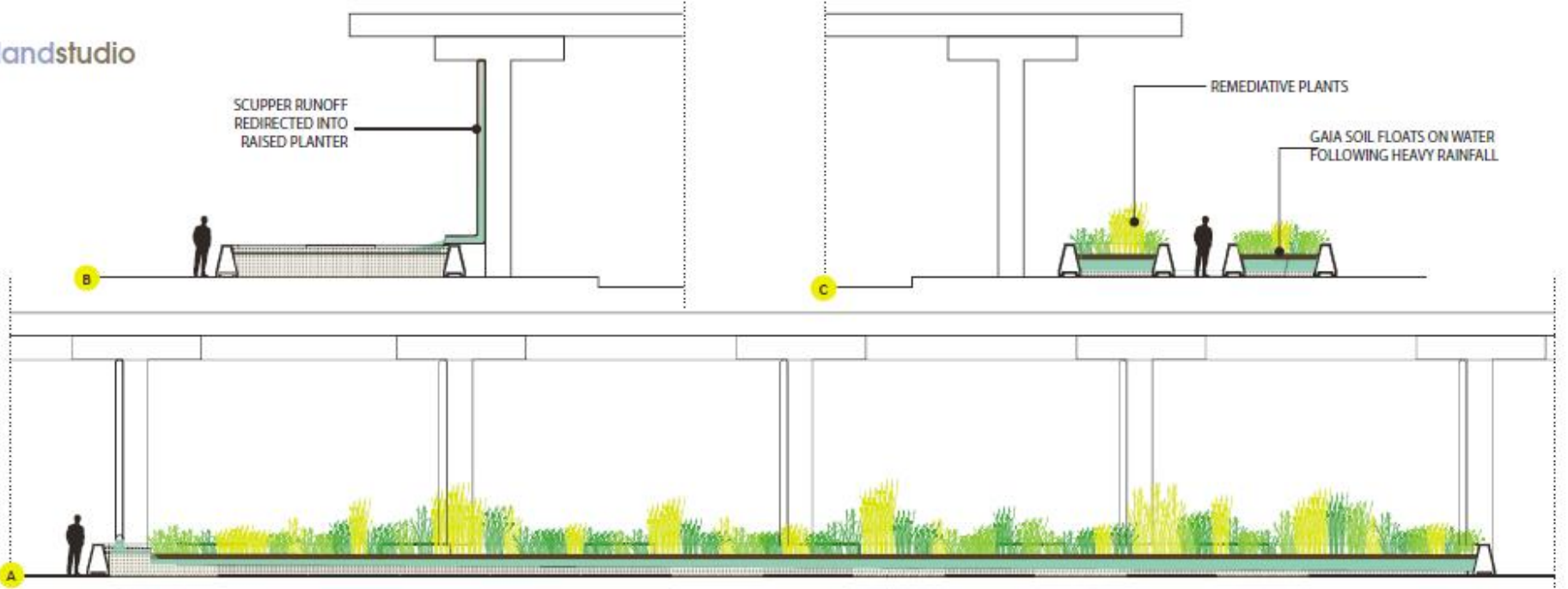
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January 28, 2013

SCUPPER RUNOFF  
REDIRECTED INTO  
RAISED PLANTER

REMEDIATIVE PLANTS

GAIA SOIL FLOATS ON WATER  
FOLLOWING HEAVY RAINFALL



SCUPPER 1

SCUPPER 2

20 FT

SEDIMENTATION BASIN

MAINTENANCE PATH

FILTRATION AND EVAPOTRANSPIRATION BASIN

SAND FILLED PLASTIC JERSEY BARRIERS

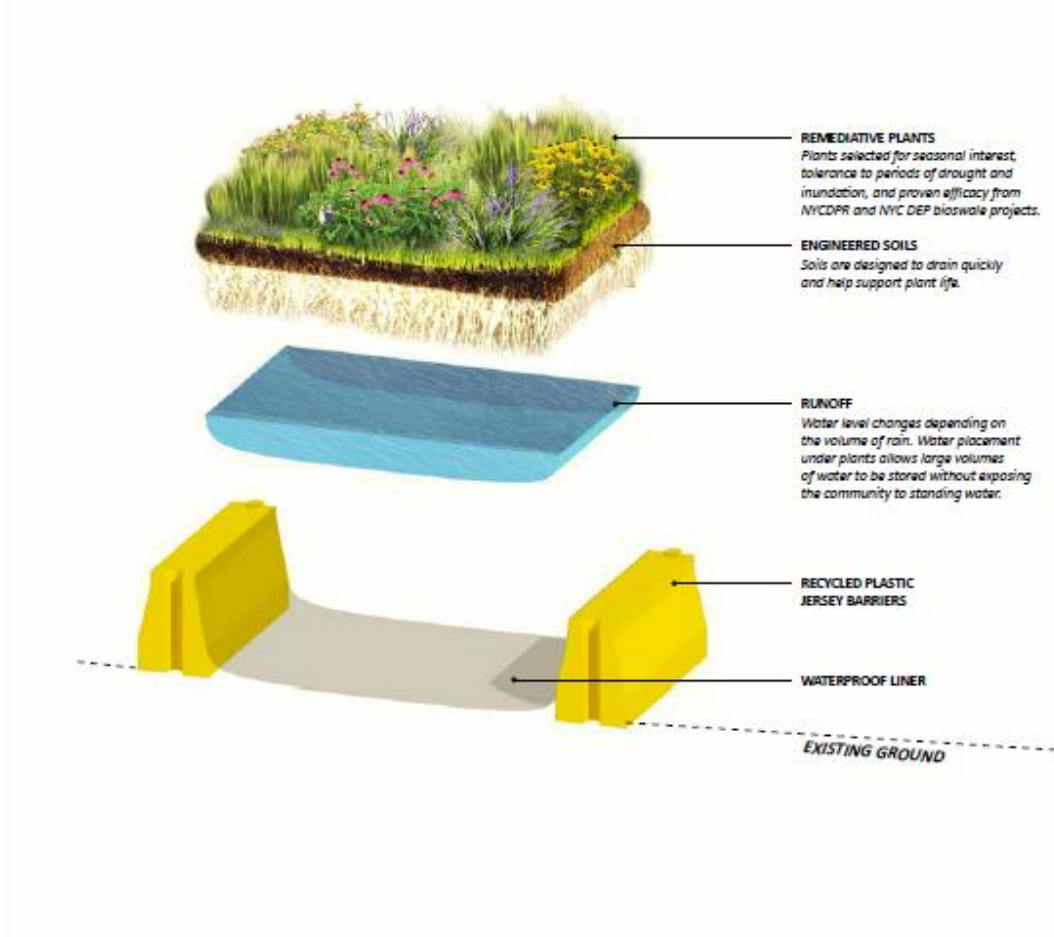
SCHEMATIC PLAN AND SECTIONS: CLOSED SYSTEM

STORM WATER CAPTURE AT PIER 3

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January 28, 2013

























CLOSED SYSTEM: AXON

STORM WATER CAPTURE AT PIER 3

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# PLANT PALETTE CAPABILITIES

H <sub>2</sub> O	HYDROCARBON DEGRADATION/ACCUMULATION	STORMWATER TOLERANT	HEAVY METAL ACCUMULATION
		 <i>Carex Ice Dance</i>	 <i>Carex Ice Dance</i>
		 <i>Acorus gramineus</i>	
		 <i>Carex pendula</i>	 <i>Carex pendula</i>
		 <i>Solidago sempervirens</i>	 <i>Solidago sempervirens</i>
		 <i>Iris spp.</i>	 <i>Iris spp.</i>
	 <i>Calamagrostis x acutiflora 'Overdam'</i>	 <i>Calamagrostis x acutiflora 'Overdam'</i>	
	 <i>Panicum virgatum</i>	 <i>Panicum virgatum</i>	
	 <i>Verbena hastata</i>	 <i>Verbena hastata</i>	
	 <i>Achillea millefolium</i>	 <i>Achillea millefolium</i>	
		 <i>Athyrium filix-femina</i>	 <i>Athyrium filix-femina</i>
		 <i>Solidago hispida</i>	 <i>Solidago hispida</i>
	 <i>Schizachyrium scoparium (Michx.) Nash</i>	 <i>Schizachyrium scoparium (Michx.) Nash</i>	



# PROJECT IMPLEMENTATION

PROJECT DURATION: 11 MONTHS

EXPECTED COMPLETION DATE: FALL 2013

IMPLEMENTATION:

