

Six Design Studies for Jersey City

Developed by the Students in
Intermediate Landscape Architecture I (Fall 2014)

From

Department of Landscape Architecture
School of Environmental and Biological Sciences
Rutgers, The State University of New Jersey
New Brunswick, NJ

Course Instructors:

David Smith

JeanMarie Hartman, Ph.D.

Design Topic

- 1.) Historic Enhancements
- 2.) Bergen Arches
- 3.) Re-Envisioning Streetscapes
- 4.) Improving Bike Paths
- 5.) CSO Event Reduction
- 6.) Transportation Nodes

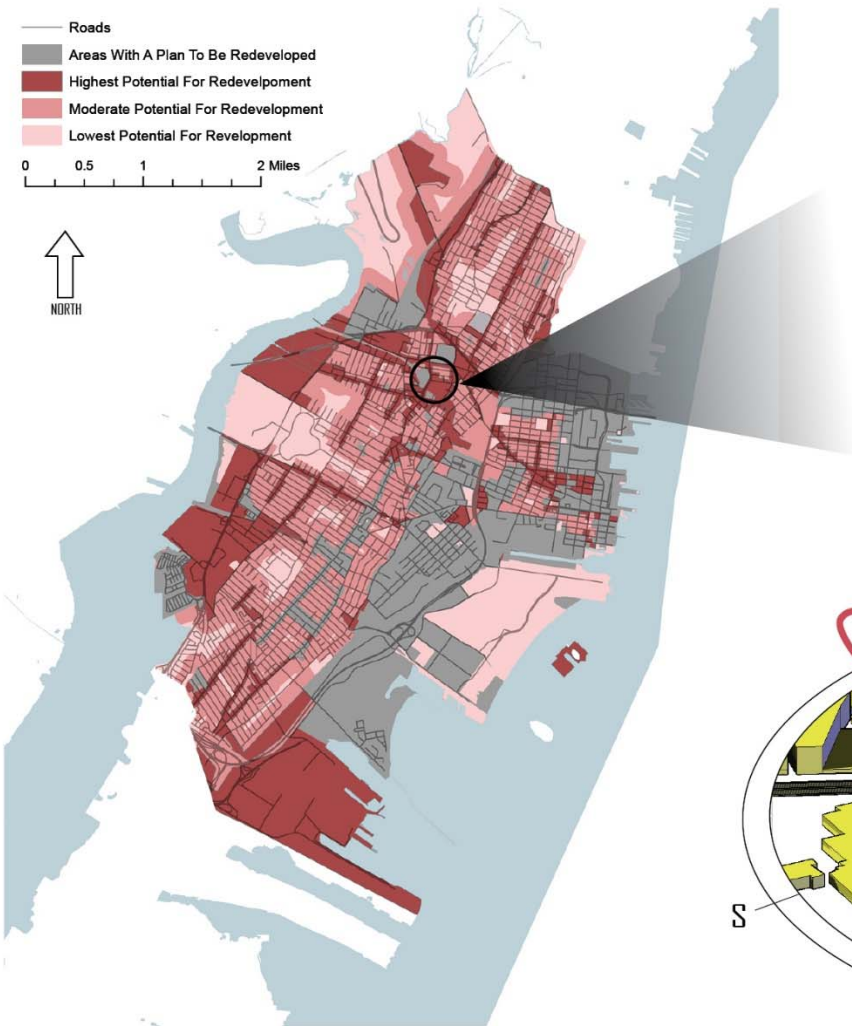


JERSEY CITY DESIGN PROPOSALS

ALEXIS SCHENKER / KARINA LIVSHITS / MICHELLE LIM

HISTORICAL ENHANCEMENTS RISK ANALYSIS

12/18/2014



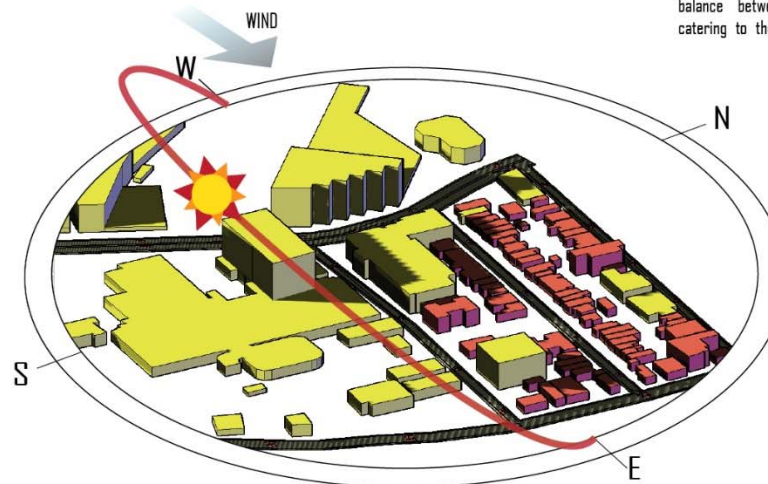
RISK ANALYSIS MAP

This map was comprised of a redevelopment map, urban enterprise zones, parks, and water bodies in Jersey City, New Jersey.

We calculated that the risk of development for the next area to be developed was within 600 feet of the enterprise zones, which is the length of one block away from these zones.

In the darkest red is the highest level of risk of redevelopment. The next lightest color is the zones with moderate risk of redevelopment and the lightest pink has the lowest risk of redevelopment. Our analysis of this map will help in other areas of Jersey City to define a suitable space for historic enhancements based upon the next area a high risk of redevelopment.

Journal Square was chosen to be the design prototype for our enhancements. Journal Square is the most at risk and is next to an area that already has a plan for redevelopment (gray areas). This allows us to respect historic aspects of Jersey City, while new redevelopments are ongoing. In turn, this creates a balance between neighborhood and commercial spaces while catering to the needs of the diverse communities in Jersey City.



SUN/SHADE DIAGRAM

Residential
Commercial

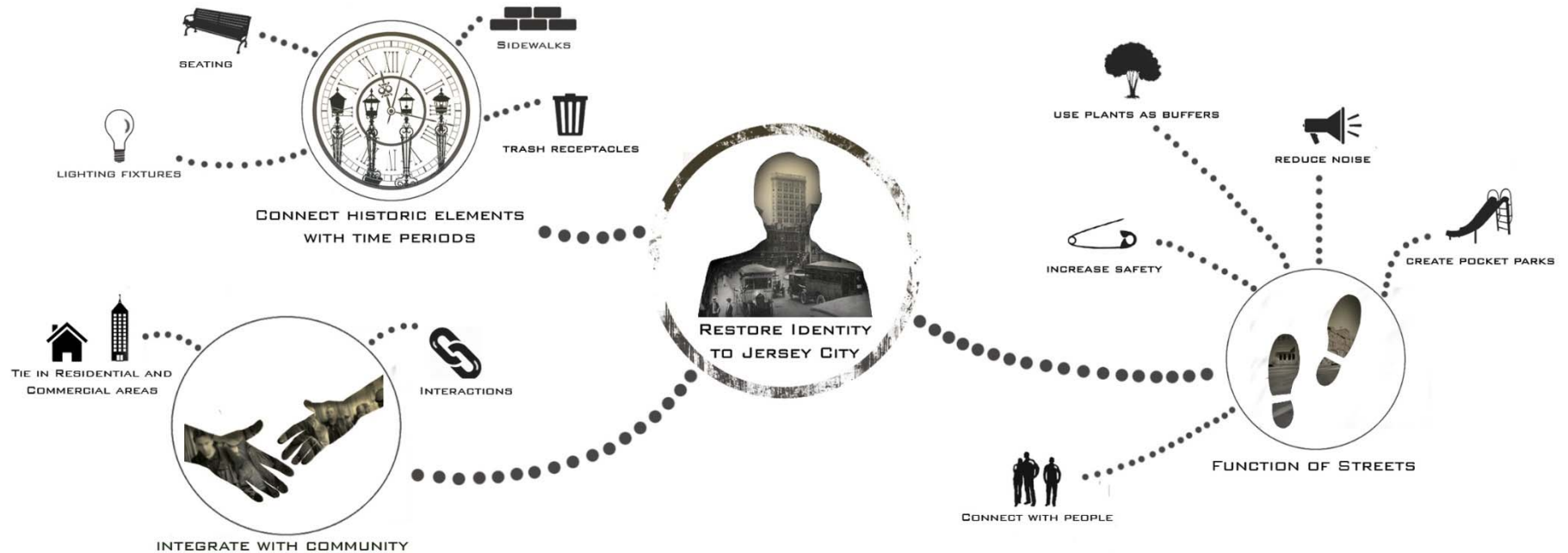
<Risk Analysis Map from <NJDEP>
<Projected Coordinate System> by <NAD_1983_StatePlane_New_Jersey_FIPS_2800_Feet>

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HISTORICAL ENHANCEMENTS PROGRAM AND HISTORIC TIMELINE

12/18/2014



Before development of Journal Square, it was the site of farmhouses and manors belonging to descendants of Bergen, south of Bergen Square.



NewKirk House was built and is often known as the Summit House. It is one of the oldest surviving structures in Journal Square. The house is comprised of different building materials that have been maintained up to this day.



Appletree house was built in 1750. There was an addition added in the 1820s. The house may have been the site of a meeting between George Washington and the Marquis de Lafayette in 1779.



Journal Square was created when they condemned and demolished the offices of the Jersey Journal and was named in it's honor.



The bridge that supports JFK boulevard was completed by Abraham Burton Cohen, an American Civil Engineer known for famous concrete bridges.



Labor Bank Building is built, being the city's first skyscraper, and the original headquarters for Labor National Bank. It has a Beaux-Arts architectural style, and was designed by John T. Rowland.



Stanley Theatre opened and became the 6th largest movie palace in the country in 1928. It was purchased by the Watchtower Bible and Tract society to be restored as a regional Jehovah's Witnesses Assembly Hall.



In 1929, Loew's Theater opened its doors, in 1986 it was sold to NJ's largest developer and the palace closed its doors. Six year crusade began to stop the demolition of the theatre, which drew out many preservationists and volunteers to speak out against the demolition.



Before being named Kennedy Blvd, it was known as the Hudson Boulevard until being named after John F. Kennedy shortly after his assassination when he gave his last speech in his campaign two days before election day.



*Timeline Images Sources in Order: njcu.edu, njcu.edu, hudsoncountynjgenealogy.org, njcu.edu, wikipedia.org, wikipedia.org, flickr.com, destinationjerseycity.com, nj.com

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HISTORICAL ENHANCEMENTS DIAGRAMS

12/18/2014



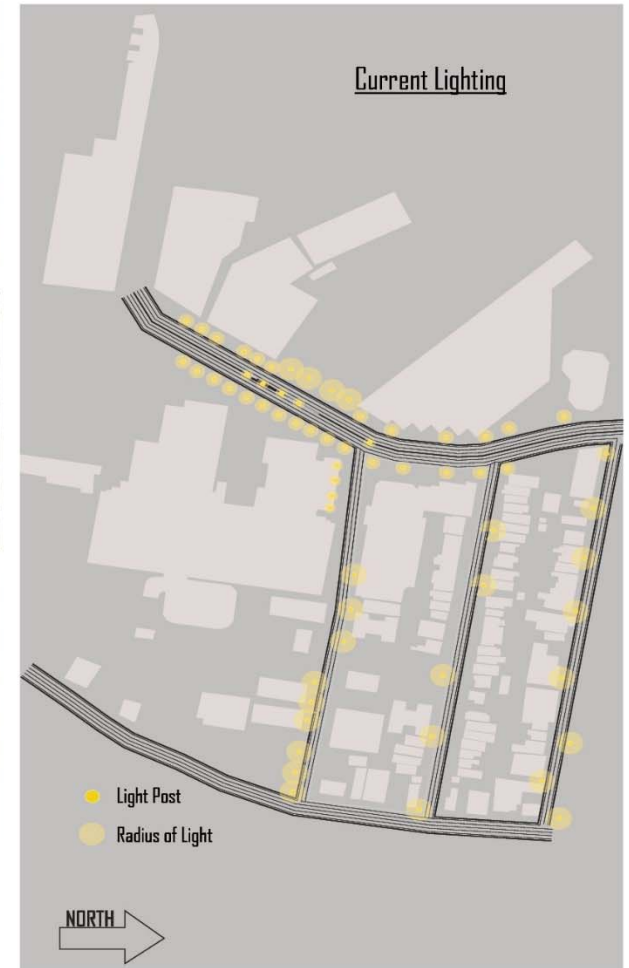
COMMERCIAL STREET SAFETY DIAGRAM



RESIDENTIAL STREET SAFETY DIAGRAM



POCKET PARK ENTRANCE SAFETY DIAGRAM



JERSEY CITY DESIGN PROPOSALS

HISTORICAL ENHANCEMENTS JOURNAL SQUARE RESIDENTIAL PERSPECTIVES

ALEXIS SCHENKER / KARINA LIVSHITS / MICHELLE LIM

12/18/2014



PLANTERS HOUSE PLANTERS LIGHTING PARK SPACES



RESIDENTIAL STREET - VAN REIPEN AVENUE



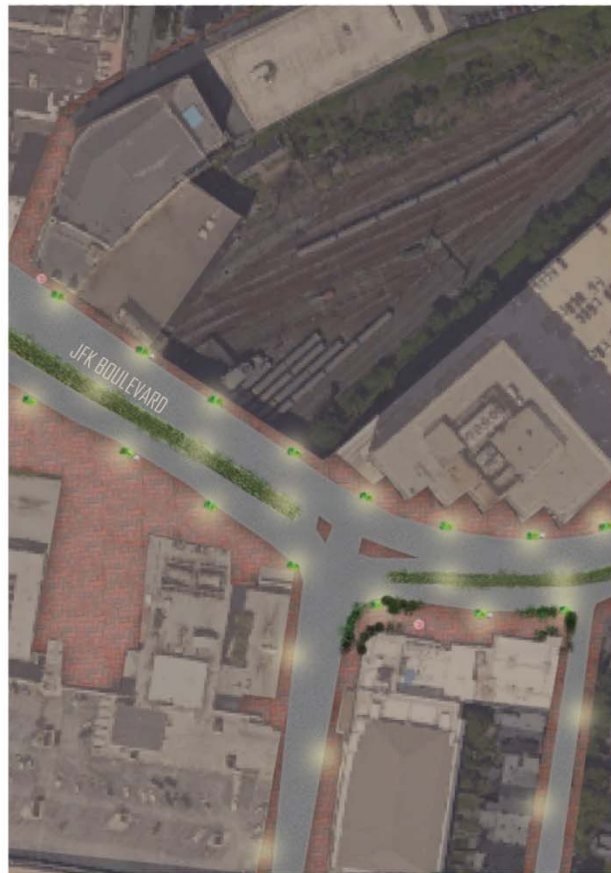
All image files from <danielpowellfiles.wordpress.com, flmnh.sfl.edu, upload.wikimedia.org, pinterest.com, teleflora.com, nps.org, mossyallfences.com, homedepot.com, lowes.com, gardenZhome.com, wayfair.com, Google street view>
Journal Square Plan from <Google Maps, NJDEP>
Materials List from <gardenZhome.com, wayfair.com, amazon.com, homedepot.com, lowes.com, penneyernewman.com, tyllighting.com>

JERSEY CITY DESIGN PROPOSALS

HISTORICAL ENHANCEMENTS JOURNAL SQUARE COMMERCIAL PERSPECTIVES

ALEXIS SCHENKER / KARINA LIVSHITS / MICHELLE LIM

12/18/2014



PLANTINGS TRASH LIGHTING HISTORIC CLOCKS



COMMERCIAL STREET - JOHN F. KENNEDY BLVD



COMMERCIAL STREET - JOHN F. KENNEDY BLVD and VAN REIPEN AVE



*All image files from <danillemgwell.files.wordpress.com, flickr.ufi.edu, upload.wikimedia.org, pinterest.com, teleflora.com, npcsj.org, mossyrockfences.com, homedepot.com, wayfair.com, Google street view, plaque-maker.com, webstaurantstore.com, goinglighting.com, alibaba.com>

<Journal Square Plan> from <Google Maps: NJDEP>

*Materials List- from <wayfair.com, amazon.com, homedepot.com, pennycynewman.com, plaque-maker.com, alibaba.com, webstaurantstore.com, tyllighting.com>



0 10' 25' 50' 100'

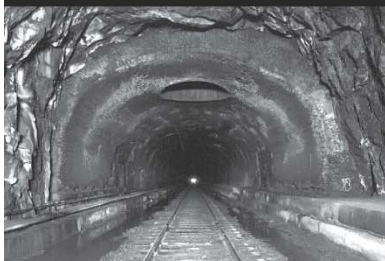
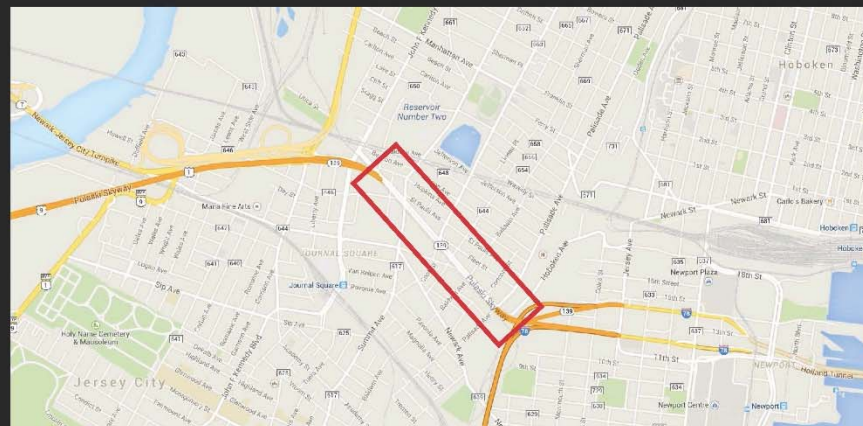
JERSEY CITY DESIGN PROPOSALS

FOSS/ THOMSON

CONTEXT MAP

THE BERGEN ARCHES HISTORY & CONTEXT

12/18/14



1880



1910



1936



1956



P



R



E



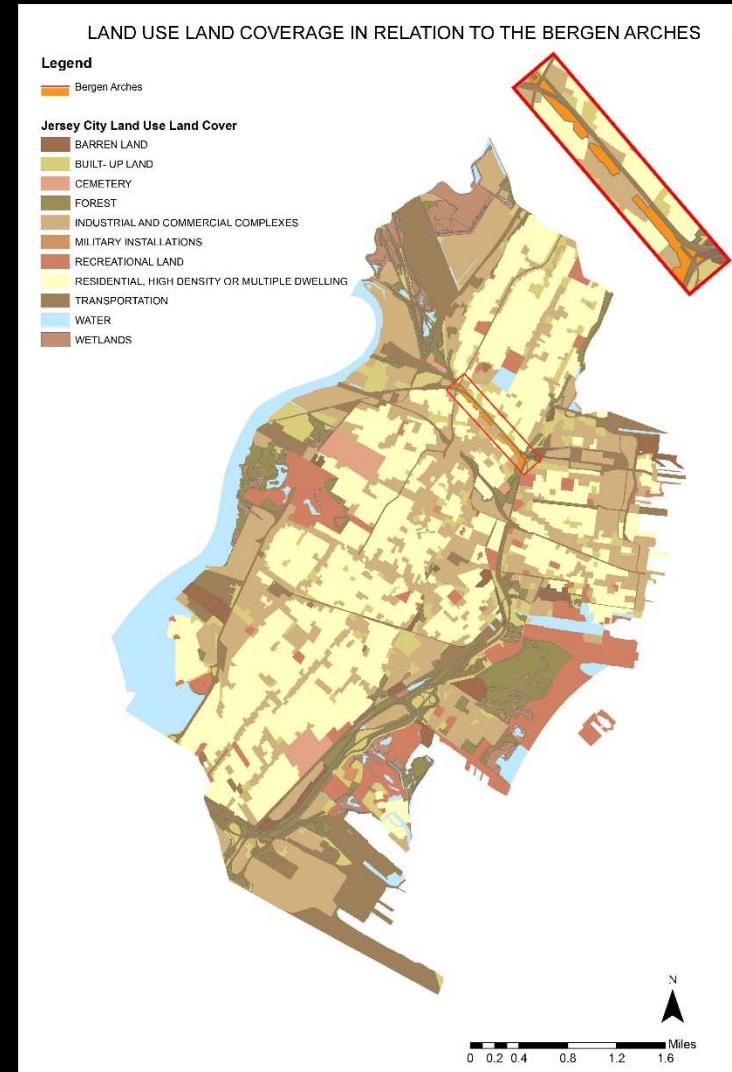
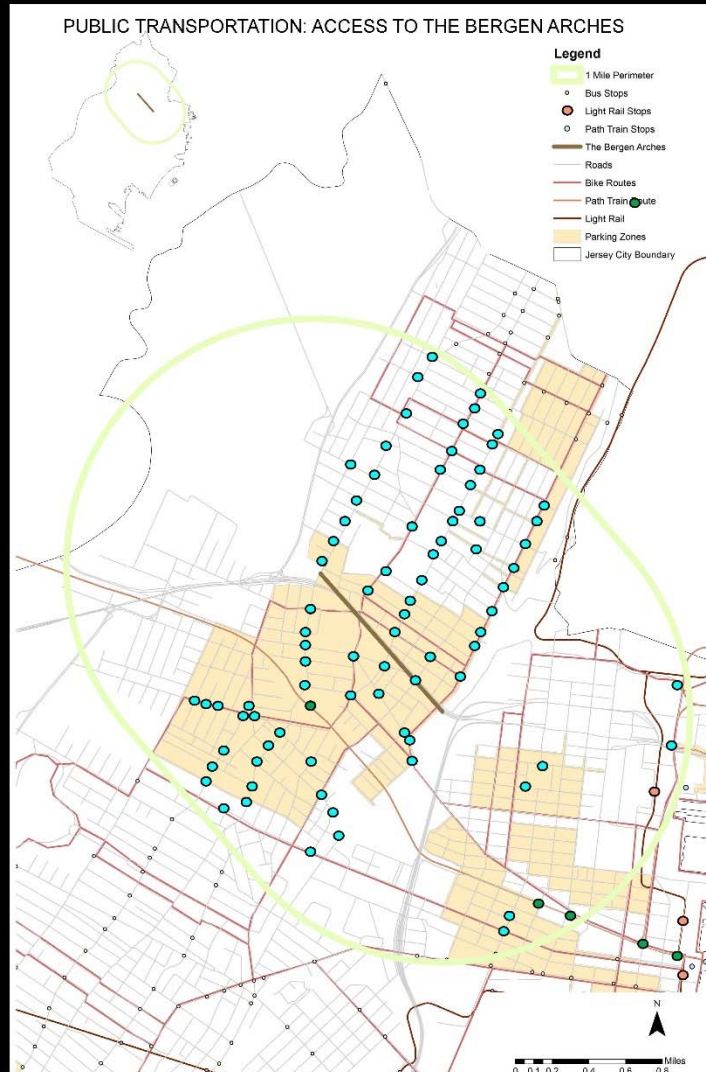
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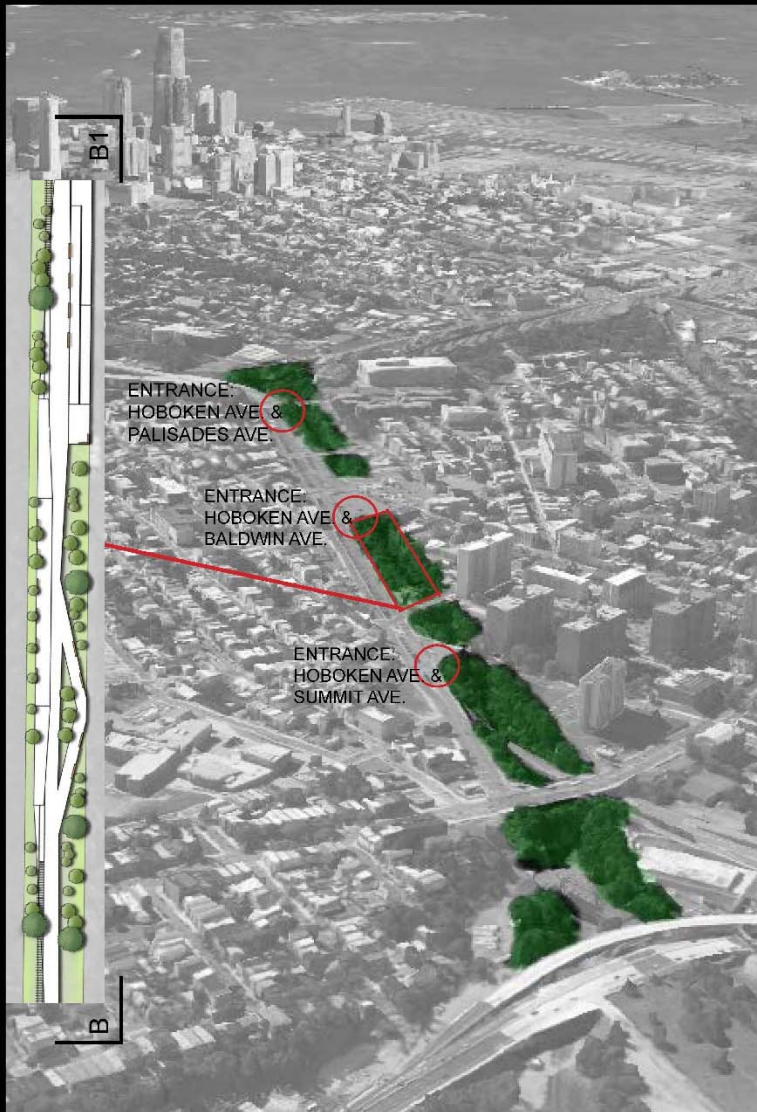


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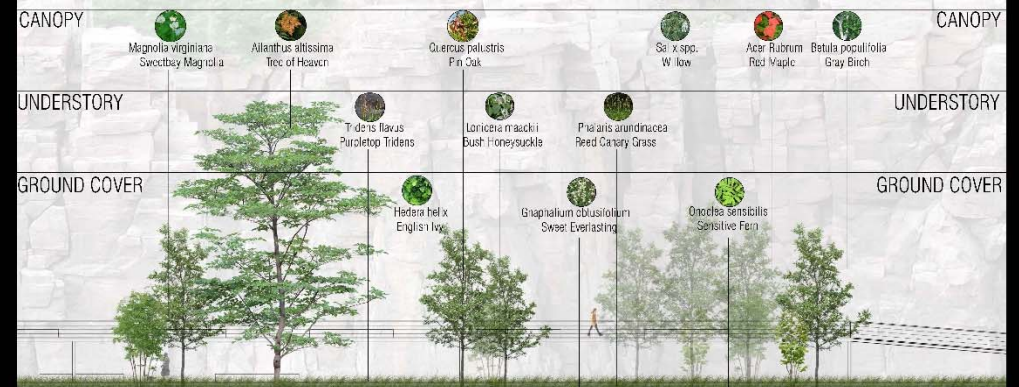




PROGRAMMING THE BERGEN ARCHES



SPONTANEOUS URBAN PLANT PROGRAM

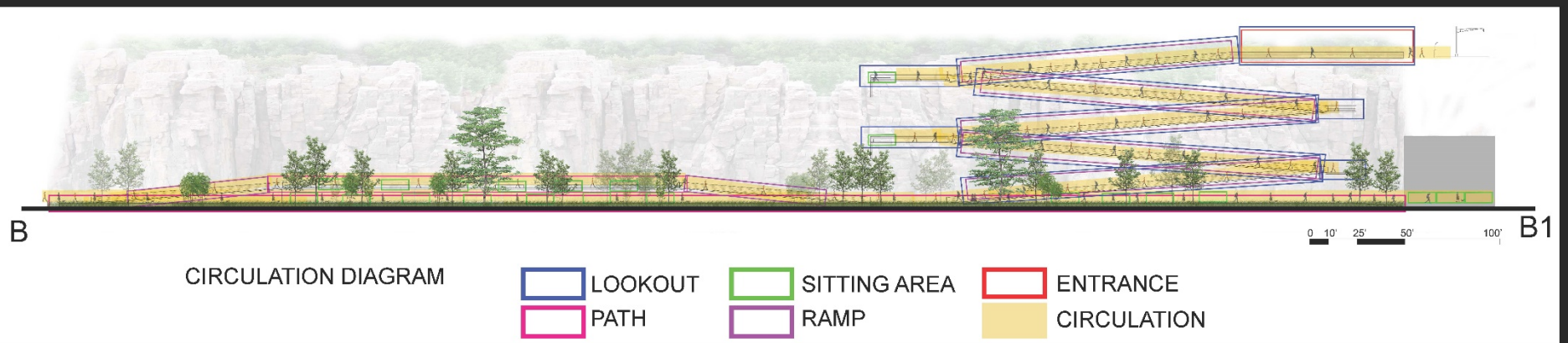
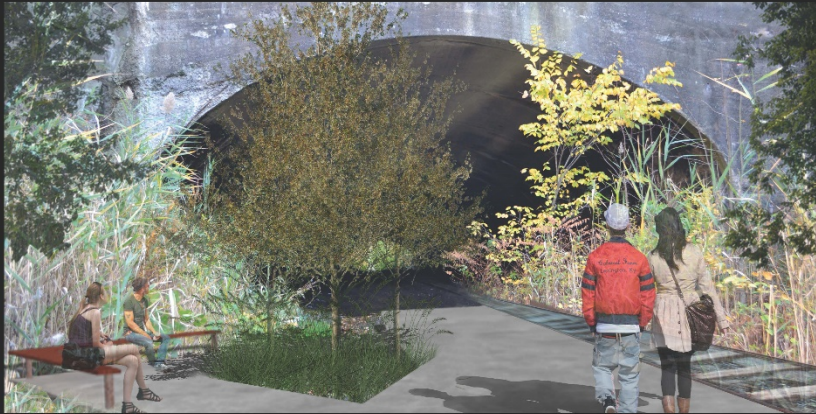


JERSEY CITY DESIGN PROPOSALS

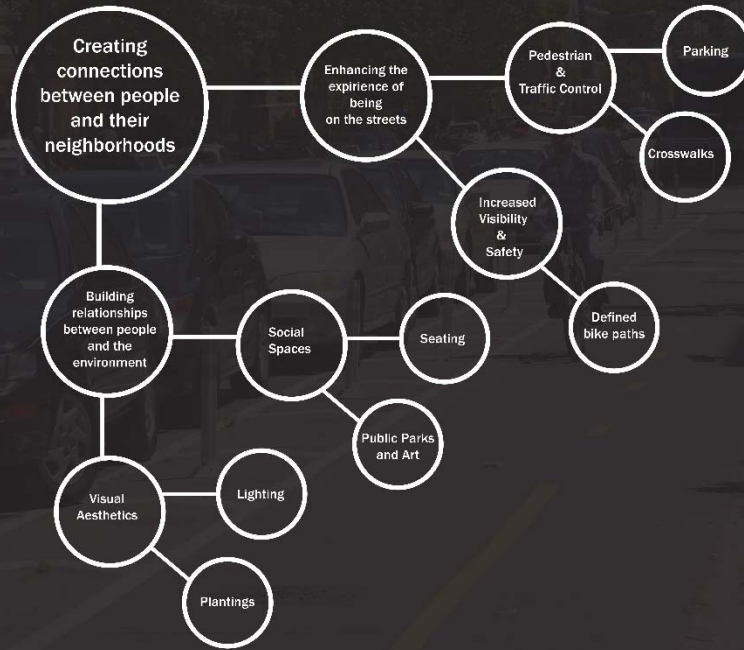
THE BERGEN ARCHES HISTORY & CONTEXT

FOSS/ THOMSON

12/18/14



REENVISIONING STREETSCAPES

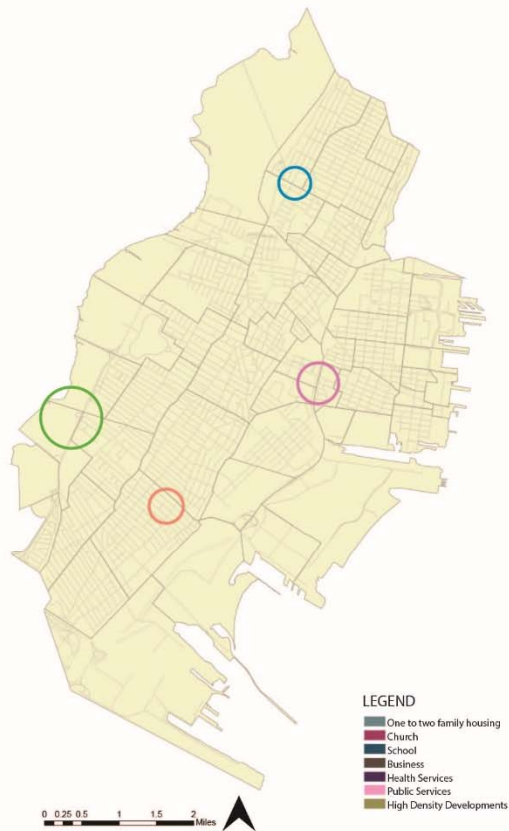


REENVISIONING STREETSCAPES

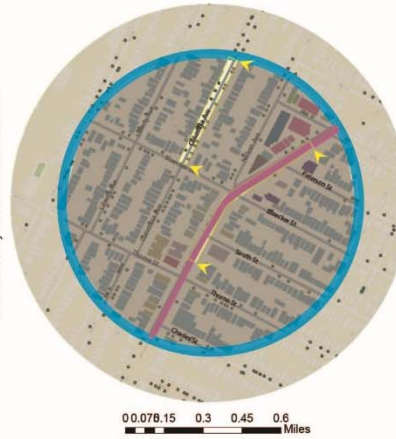
Breanna Robles Joshua Rodriguez Stacy Martinez

REENVISIONING STREETSCAPES

Breanna Robles Joshua Rodriguez Stacy Martinez



J.F. Kennedy Blvd & Columbia Ave



The Heights
Neighborhood Main Street
County Road
Kennedy Blvd is a well traveled streets with motal as well as pedestrian traffic. The area is filled with schools, churches, businesses and homes so there is always activity on the streets.



REENVISIONING STREETSCAPES

Breanna Robles Joshua Rodriguez Stacy Martinez

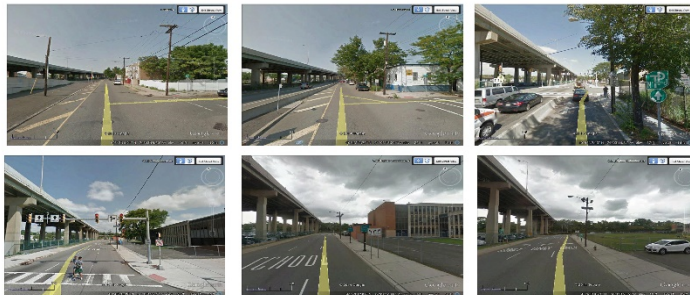
Center Street & Christopher Columbus Dr



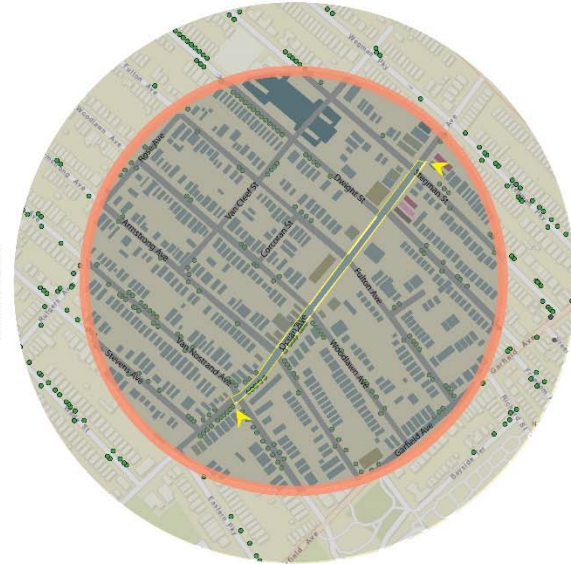
0 0.075 0.15 0.3 0.45 0.6 Miles

Downtown
Frontage Road
County Road

Littered with old warehouses and vacant homes, Center St, is a frontage road that runs parallel to I-78 and also has an exit from it coming onto the street. The area has high schools, shopping marts, businesses and active residents so it receives heavy foot as well as motor traffic.



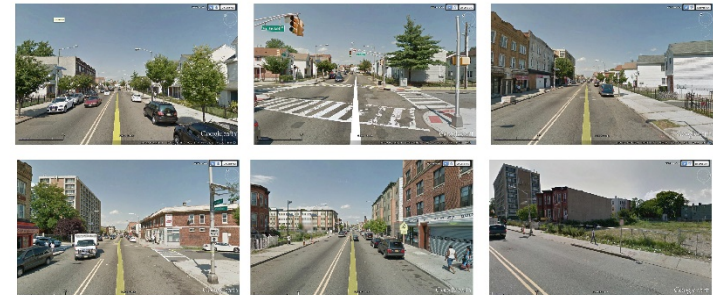
Ocean Ave



0 0.0375 0.075 0.15 0.225 0.3 Miles

Greenville
Mixed Neighborhood Street

Ocean Ave is mostly surrounded by homes. Mixed residences line the street, small businesses being a major factor of the street. There are abandoned lots, and vacant buildings that also line the street that people still make use of. The area recently went under development giving the area new affordable houses for people to live in.



REENVISIONING STREETSCAPES

Breanna Robles Joshua Rodriguez Stacy Martinez

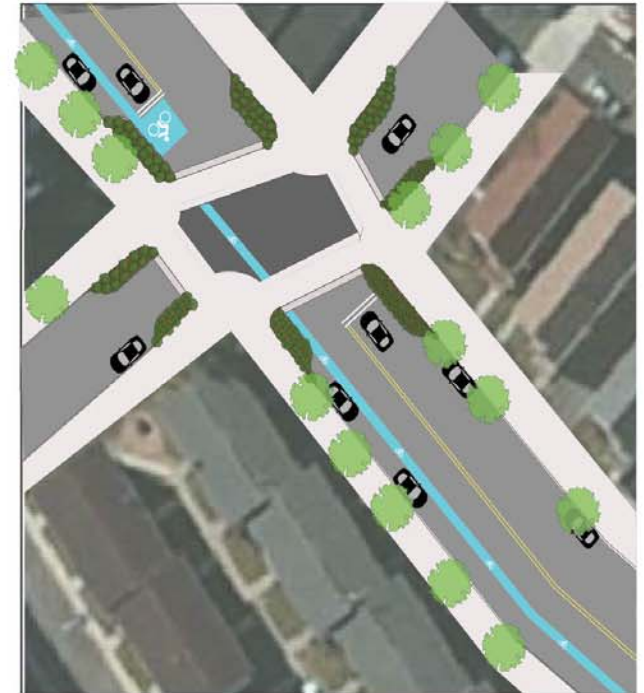
J.F.K Blvd. & Columbia Ave



REENVISIONING STREETSCAPES

Breanna Robles Joshua Rodriguez Stacy Martinez

Ocean Ave



REENVISIONING STREETSCAPES

Breanna Robles Joshua Rodriguez Stacy Martinez

Center St & C.Columbus Dr



0 0.0125 0.025 0.05 0.075 0.1 Miles



JERSEY CITY DESIGN PROPOSALS

Joshua Rodriguez / Stacy Martinez / Breanna Robles

Public Arts Program Jersey City
Siteplan / Case Studies Board

December 11th, 2014

Implementation of Walking Tours

Waterfront Art Walkway

Portable Collection of Public Art

Temporary Art Installations

Public Art Plazas

Local Artist Priority

Call for Artists Applications

Percent for Art Program

One Percent of Development to the Arts

Strong Ties to the Community

Storefronts, Facades, and other unusual Sites for Art

Teaches and Engages Community

Exhibitions of Temporary Art in the City

Clear Commitment to Student Artists

Permission Pieces Throughout the City

Strong Aesthetic Presence in Urban and Rural Areas

The Community has a Strong Voice in the Selection Process

Public Art Exhibition Events

Commitment to the Community of Jersey City

Art House Productins Partnership

Community Gardens

Getting the Community Involved in City Events

Commitment to Community Events

Mural Arts Program



JERSEY CITY DESIGN PROPOSALS

Joshua Rodriguez / Stacy Martinez / Breanna Robles

Public Arts Program Jersey City Diagrammatical Board

December 11th, 2014

Thoughts & Perception

Public art can be a key factor in establishing a unique and culturally active place.

Places with strong public art expressions break the trend of blandness and sameness.

Public art is a reflection of its place and time. It acts as a place marker in all human settlements.

Public art brings artists and their creative vision into the civic decision making process.

American cities and towns aspire to be places where people want to live and want to visit. Having a particular community identity is important.

As has been witnessed throughout history, public art can be an essential element when a municipality wishes to progress economically and to be viable to its current and prospective citizens.

Cities gain value through public art; cultural, social, and economic value is established.



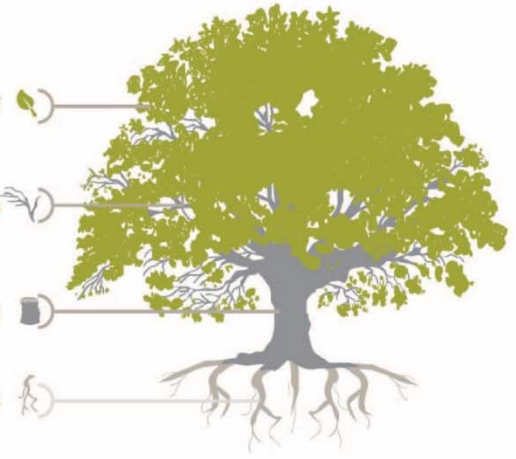
Philanthropists — leaf

Users — branch

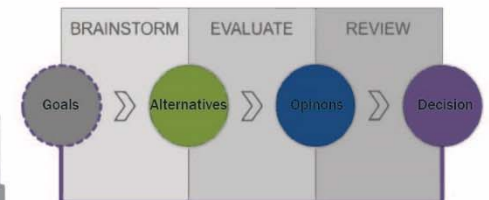
Artists — trunk

Community — root

The Big Picture



Decision Making Process



JERSEY CITY
DESIGN PROPOSALS

Joshua Rodríguez / Stacy Martinez / Breanna Robles

Public Arts Program Jersey City
Siteplan / Case Studies Board

December 11th, 2014

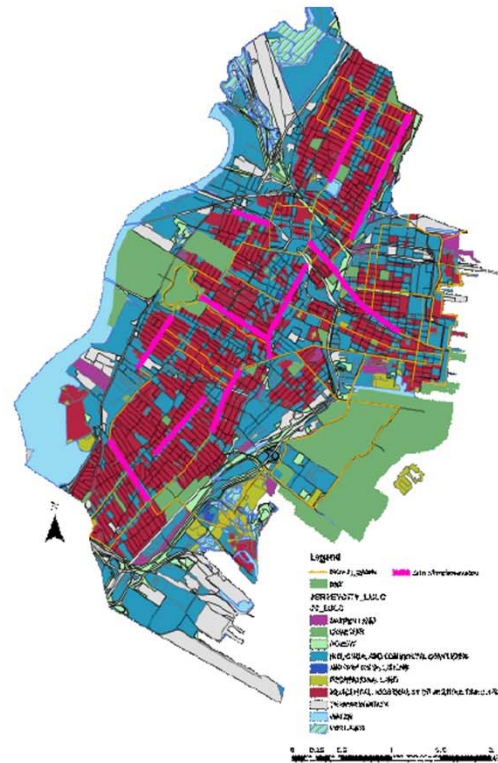
Ocean Avenue



IMPROVED BIKE PATHS DIAGRAMS

DECEMBER 2014

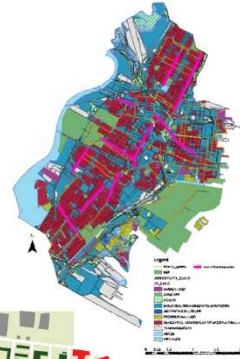
The diagrams below show the most important items that were used to decide why a bike path leading down Manila Ave, past the Grove Street PATH station, and down to Liberty State Park.



IMPROVED BIKE PATHS DIAGRAMS

DECEMBER 2014

The diagrams below show the most important items that were used to decide why a bike path leading down Manila Ave, past the Grove Street PATH station, and down to Liberty State Park.



A map of the study area, which is a residential neighborhood. The map is color-coded to show land use density: green for low density, orange for medium density, and red for high density. A red line indicates the main street network, which runs diagonally from the top left to the bottom right. The map also shows various building footprints, including houses and commercial buildings. A legend in the bottom left corner identifies the density levels. A scale bar in the bottom right corner indicates distances in meters (0, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000).

Land



PLAN



MANILA AVE.

SECTION



PERSPECTIVE



PLAN

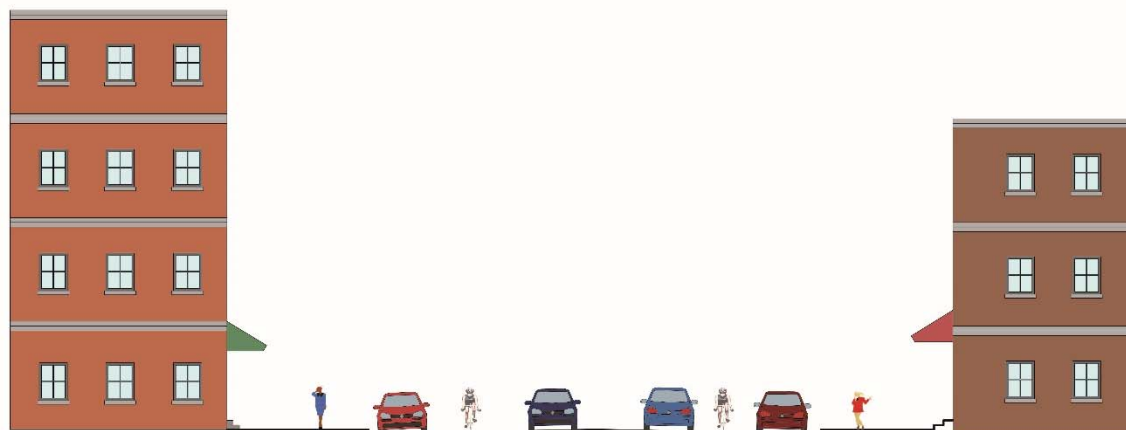


GRAND ST.

SECTION

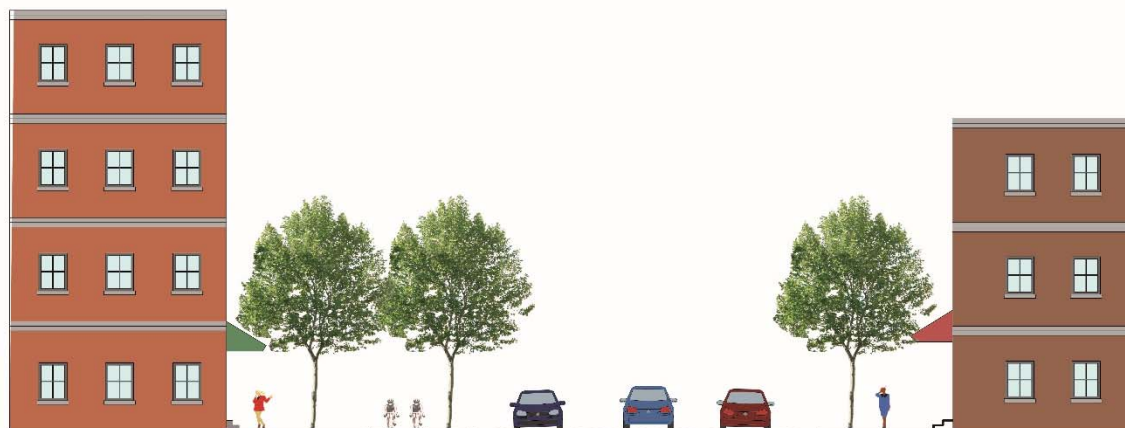


PERSPECTIVE



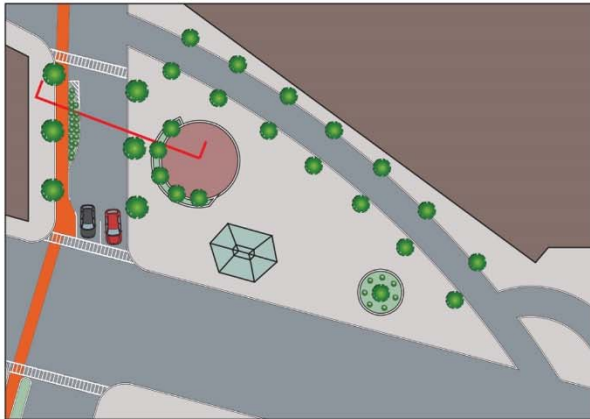
Grove St Section BEFORE

Scale 3/16"=1'



Grove St Section AFTER

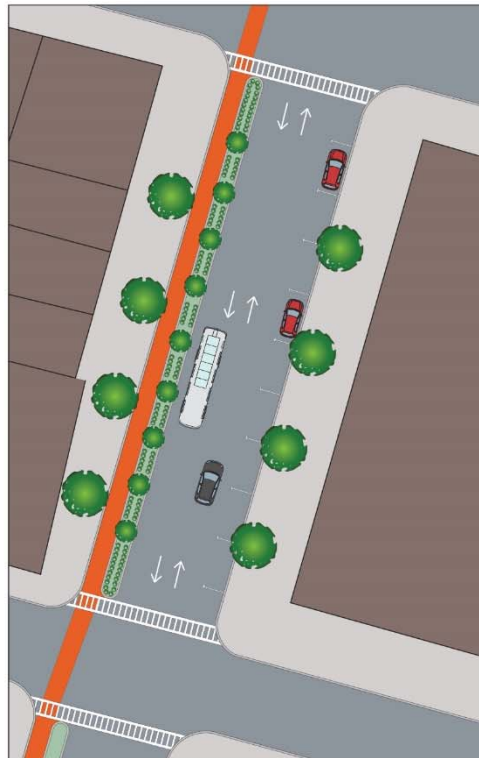
Scale 3/16"=1'



Call Out Plan Grove Path Plaza Scale 1/32"=1'



Section 1 Grove Path Plaza Scale 3/16"=1'



Call Out Plan of Bike Path Scale 1/167"=1'



Grove St Bike Path Plan Scale 1/64"=1'

**JERSEY CITY
DESIGN PROPOSALS**

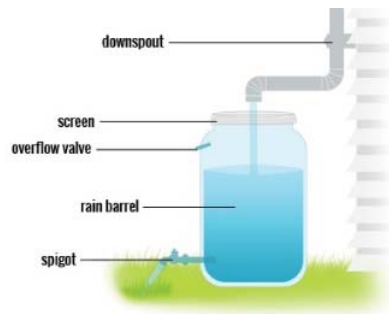
MATT BOWMAN / AUSTIN SCOTT / KEVIN TAYLOR / ALEX THESING

**IMPROVED BIKE PATHS
JERSEY AVENUE**

DECEMBER 2014

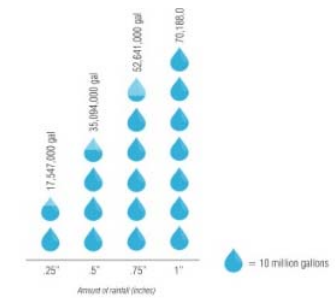


WHAT IS GREEN INFRASTRUCTURE?



RAIN BARRELS

- Collects and stores roof water run off that can be reused when necessary and saves water from going into the combined sewer systems
- An estimated total of 58,490 residences in Jersey City can install multiple rain barrels and conserve up to 1200 gallons per household
- The diagram to the right describes how much water could be conserved throughout Jersey City based on our estimates on a 1200sf roof area



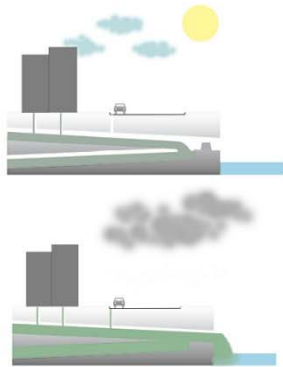
NJDEP
AROGIS
DR. VAN ABS
GOOGLE EARTH

JERSEY CITY DESIGN PROPOSALS

AMBER BETANCES / LORRI LINDSAY / CHRISTIE SALIBA

CSO EVENT REDUCTION IN JERSEY CITY INTRODUCTION

DECEMBER 2014



WHAT IS A COMBINED SEWER SYSTEM?

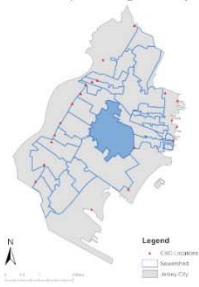
- Combined Sewer Systems are sewer systems designed to collect stormwater runoff, domestic sewage, as well as industrial wastewater in the same pipe, bringing it to a publicly owned wastewater treatment work facility
- These systems are not designed to handle large rain storm events

WHAT IS A COMBINED SEWER OVERFLOW?

- Combined Sewer Overflows occur when the combined sewer systems over-capacitate from a storm event
- Excess untreated water is discharged directly into local waterbodies such as rivers, oceans, streams, etc.
- The excess water may contain untreated sewage that can gravely impact human health, as well as water quality for the rest of the city

DESIGN INTERVENTION: IMPLEMENTING GREEN INFRASTRUCTURE IN JERSEY CITY

- 65% of Jersey City uses combined sewer systems and currently has 21 CSO sites
- The city currently lacks the funding to upgrade their current water infrastructure; green infrastructure is an alternate cheap and highly effective way to curb excess water from entering Jersey City's sewer systems
- Through analysis and investigation, our group found that certain areas benefit from green infrastructure over other areas
- Abandoned lots dispersed throughout the city serve as prime opportunities where green infrastructure can be implemented successfully



CSO points overlaid on the sewerheds of Jersey City show the spread of the 21 CSOs. This group address design implementation in one watershed to serve as an example for the rest of the city.



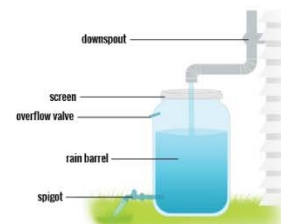
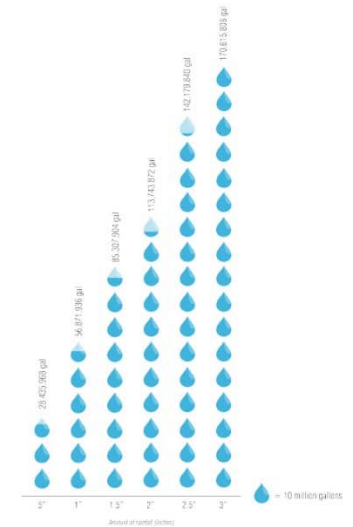
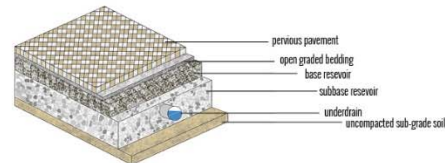
Vacant lots overlaid on income levels found in Jersey City show the correlation between low income areas and the density of vacant lots in the area.

WHAT IS GREEN INFRASTRUCTURE?

- Green Infrastructure is an approach to stormwater management that mimics the natural water cycle
- Helps prevent and delay water runoff from entering piped infrastructure, reducing the stress on combined sewer systems
- Neighborhood aesthetic amenity through creation of green space, street trees, gardens, etc.
- Our group plans to use a range of green infrastructure implementation as described below, as well as in our designs

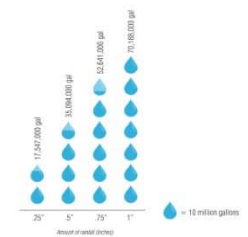
PERVIOUS PAVEMENT

- Designed to allow water to infiltrate through the surface of the pavement where water is naturally filtered and pollutants removed
- An estimated total of 7,603,200 square feet of standard impervious concrete sidewalk exists in Jersey City; this could be replaced with pervious pavement
- The diagram to the left describes how much water could be conserved throughout Jersey City based on our estimate, depending on the amount of rainfall



RAIN BARRELS

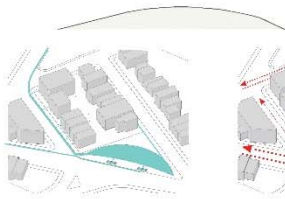
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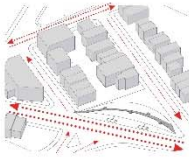
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DR. VAN ABS
GOOGLE EARTH



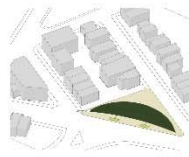
A Plan: 678 Grand St.



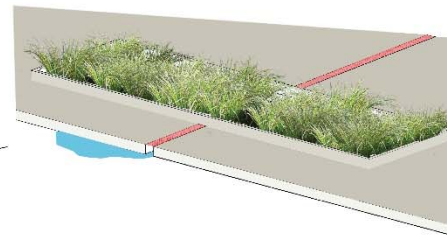
Stormwater Diagram



Circulation Diagram



Green Infrastructure Diagram



678 Grand St.

This site covers about 7,067 sq. ft. or .16 acres it is located on a residential street that intersects a commercial road. The conditions of the site are in much need of repair. The site is on a sloping street and has a sewer drain right at the point of the site, making it a perfect candidate for rainwater collection.

The design allows this area to be fully used for stormwater collection while providing an aesthetically pleasing environment that welcomes the people of this community. It can be used as a walkway or a place for people to sit and enjoy their surroundings. This design rejuvenates the neighborhood while creating a sustainable and educational environment for kids and adults.



B Section: 678 Grand St.



AMBER BETANCES / LORRI LINDSAY / CHRISTIE SALIBA

DECEMBER 2014



GOOGLE EARTH

THE GREEN TRANSPORTATION INTERCHANGE IN JERSEY CITY

Fall 2014 - Junior, 1st semester

Seungin Hong, Anthony M, Richard Conti



02



- Vehicle Circulation
- Pedestrian Circulation

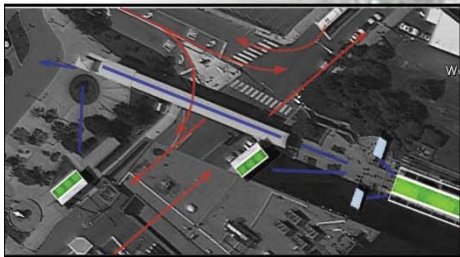
Harborside HBLR station

Primary reason of choice of Harborside HBLR Station as part of site design experiment because there are lack of other modes of transportation facilities such as bus stops, or bike racks. Harborside is one of the best examples of typical business district to demonstrate how these green interchange models can be applied, and how they would function. The design is selective. Installing the structures at the appropriate location to fully function the active exchange of passengers between different modes of transportation.

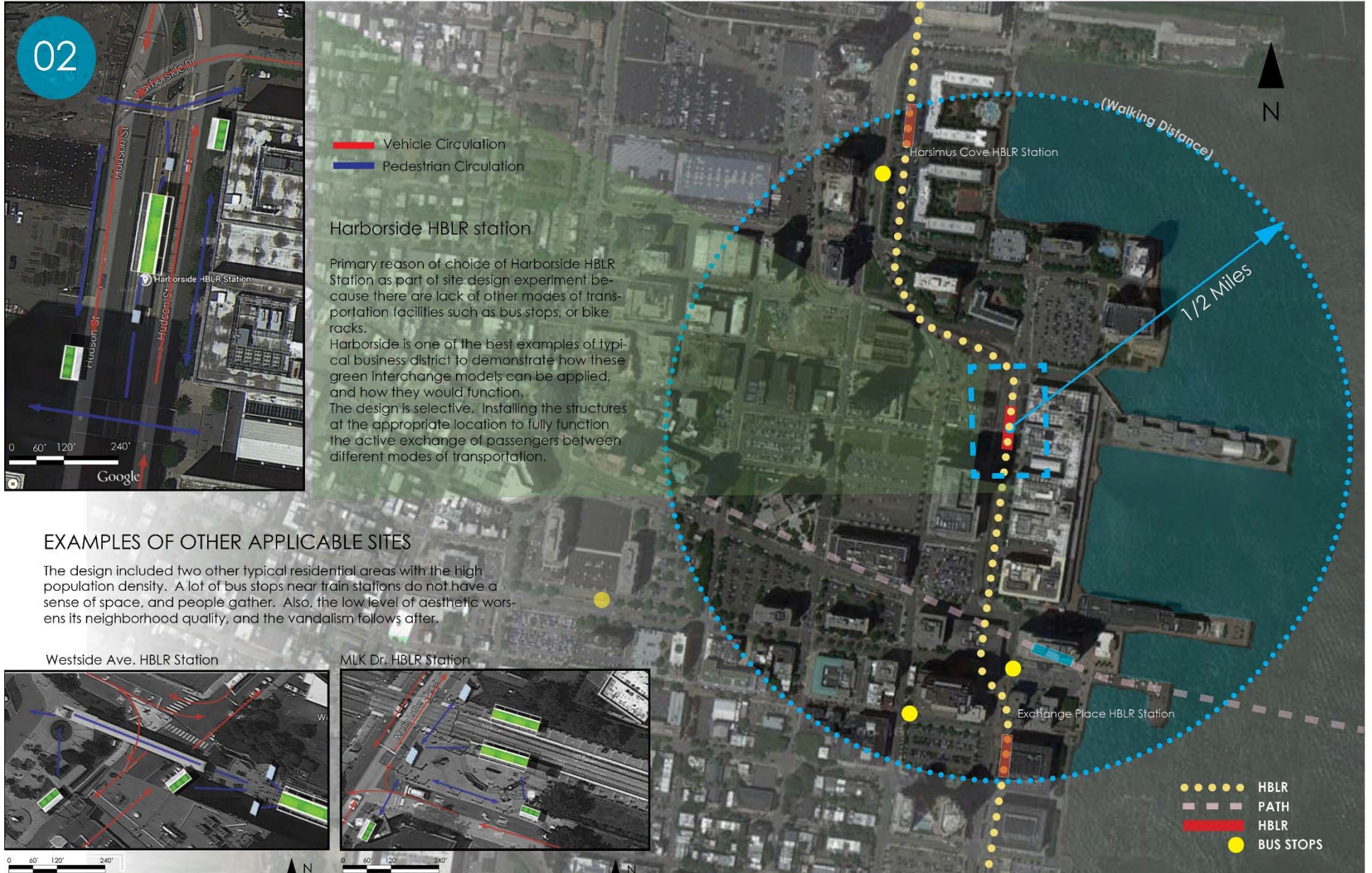
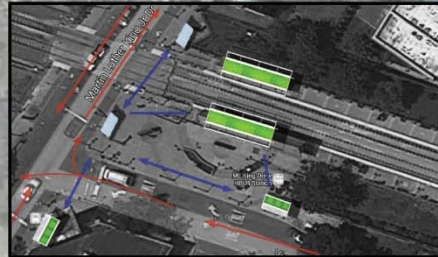
EXAMPLES OF OTHER APPLICABLE SITES

The design included two other typical residential areas with the high population density. A lot of bus stops near train stations do not have a sense of space, and people gather. Also, the low level of aesthetic worsens its neighborhood quality, and the vandalism follows after.

Westside Ave. HBLR Station



MLK Dr. HBLR Station



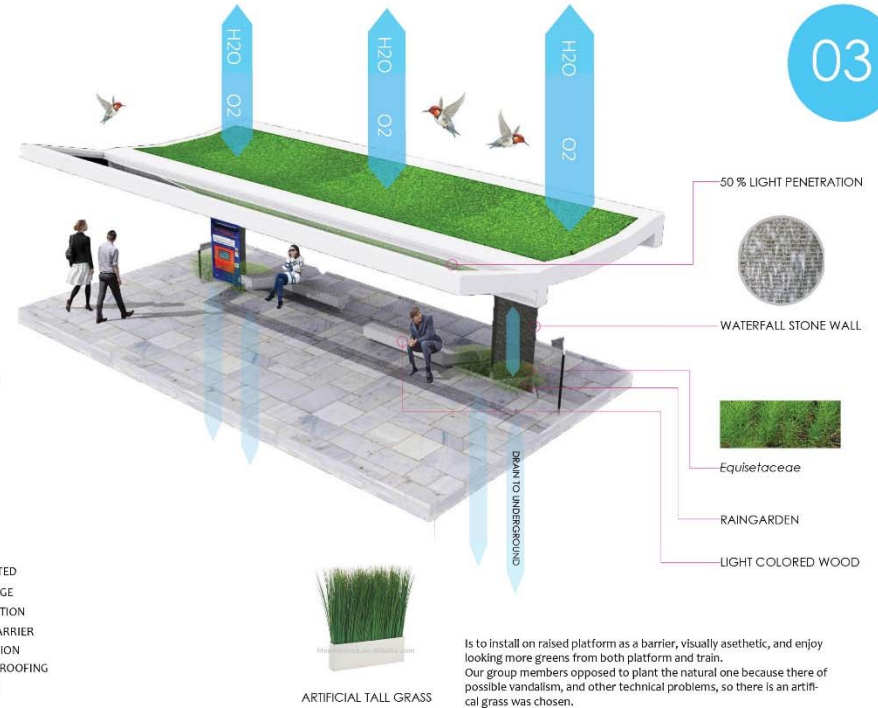
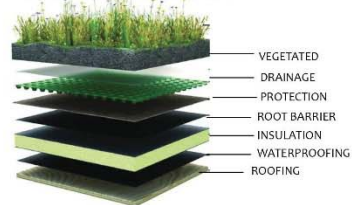
DESIGN SYSTEM DETAIL

Glass panel is attached on roof to let people access the lights, and it has 50% light penetration rate to protect people from hotness during the summer. Structure has heat insulation to less heat conduct ~ Artificial tall grass is to protect people from falling off platform to railway by accident.

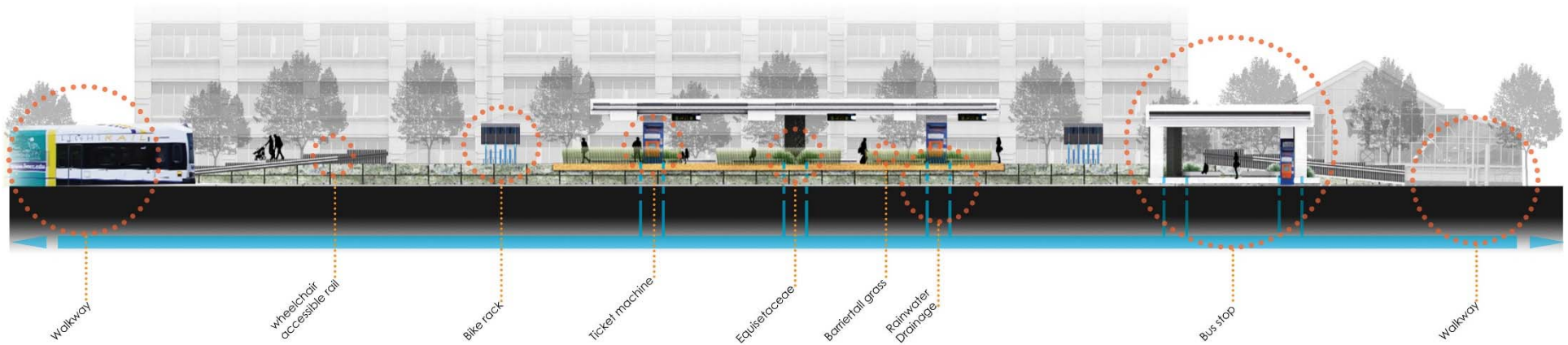
At the same time, promoting the aesthetics by installing green infrastructure - waterfall column, green roof, and raingarden.



GREEN ROOFING LAYER DETAIL



SECTION ELEVATION DETAIL





Perspective view of Harborside HBLR Station, front



Perspective view of Harborside HBLR Station, left

Please leave some notes and questions and comments!

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