



Rudyk Park Community Accessibility and Expansion Project

(Perth Amboy Parks and Trails Concept Design for Sites 1, 2 & 3)

Final Design Report

09/27/16



CITY OF PERTH AMBOY
THE HONORABLE MAYOR WILDA DIAZ



United States
Environmental
Protection Agency's
Brownfields Program

RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

Acknowledgments

First and foremost we would like to thank the City of Perth Amboy and the Honorable Mayor Wilda Diaz, as well as her staff Annie Hindenlang (Office of Economic and Community Development), Ken Ortiz (Office of Recreation), and Frank Hoffman (Department of Public Works) for all their support. We would also like to thank Middlesex County Improvement Authority (MCIA) and the United States Environmental Protection Agency (USEPA) for funding this project.

Project Team

Richard Alomar, RLA, Landscape Architect, Assistant Professor, Department of Landscape Architecture, Rutgers University

Denise Nickel, Senior Project Manager, Middlesex County Improvement Authority (MCIA)

Sara Malone, Senior Research Specialist, Environmental Analysis and Communications Group, E.J. Bloustein School, Rutgers University

Zenon Tech-Czarny, Project Manager, Center for Urban Environmental Sustainability (CUES), Rutgers University

William Kurzenberger, Program Coordinator, Office of Economic and Community Development, City of Perth Amboy

Thomas Barracato, Intern, Center for Urban Environmental Sustainability (CUES), Rutgers University

Table of Contents

Introduction	5
History	6
Existing Conditions	8
Synthesis	14
Design Development	17
Context Plan	20
Conceptual Site Design	24
Phasing	37
Conclusions	37



City of Perth Amboy
Stanley F. Rudyk
PARK
Mayor

Introduction

The *Rudyk Park Community Accessibility and Expansion Project (Perth Amboy Parks and Trails Concept Design for Sites 1, 2 & 3)*, is a conceptual design/plan for expanding and improving access to Rudyk Park. The project is part of the City of Perth Amboy's larger initiative to improve community access to parks and recreational spaces throughout the city. Rudyk Park was selected as the project focus because of its active use, limited accessibility and expansion potential.

For this project, planning and design professionals from Rutgers University and Perth's Amboy's Office of Economic and Community Development conducted research and analysis of the park, community outreach (which included two community meetings and a door to door survey) and prepared a final conceptual park design. This report is the final product of the project. It includes a brief history of Rudyk Park, a review of existing conditions, site synthesis, the design development process, information about the community meetings, the final conceptual site design, vignettes and proposed construction phasing. This report is conceptual, and intended to further the conversation about the design of Rudyk Park and it's surrounding area.

Project Objectives

1. Collect input on park use, improvement opportunities, and access needs from local community.
2. Prepare the park expansion site design to maximize recreational uses, park access, supportive infrastructure and resiliency.
3. Engage and inform the Citywide community throughout the Rudyk Park planning and redesign process.
4. Assist in addressing one of the City's combined sewer overflow (CSO) issues by evaluating the park's drainage of New Jersey Route 440 stormwater runoff.

Image on left: Rudyk Park from State Street
Source: Zenon Tech-Czarny

History

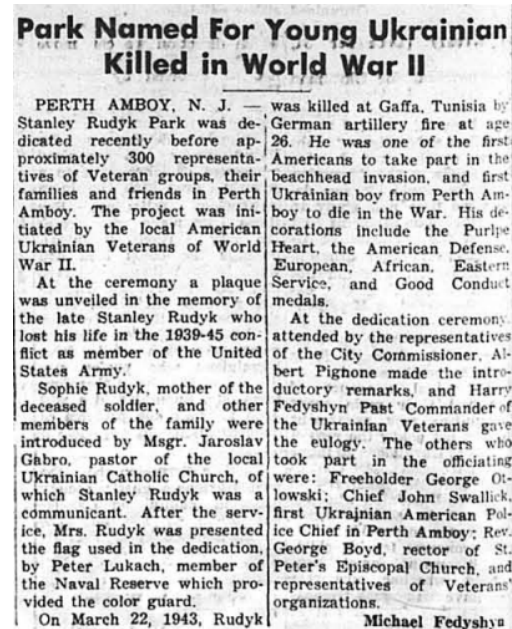
Up until the 1950s, the area where Rudyk Park is today was primarily marsh and wetland. Several freight train spurs ran along the east side of the site connecting the factories and storage facilities north of the site to the main line. The trains primarily carried coal and oil, which may have contributed to possible contamination of the land. According to a 2003 New Jersey Department of Transportation report, there were traces of polycyclic aromatic hydrocarbons and metals found on site as well as historic fill that may contain contaminants. In the late 1920s, the NJ-440 / Outerbridge Crossing was built – defining the southern edge of the future park. It was the first major project undertaken by the New York-New Jersey Port Authority.

In the early 1960s, the city constructed a recreational building with bathrooms, a swimming pool, basketball court and a playground, officially establishing the park. It was named after the Army Private First Class Stanley Rudyk, who was a star athlete from the neighborhood and the first local Ukrainian-American casualty of World War II. In the 1970s, the NJ-440 State Street offramp was built over the pool area and two soccer fields were added – this defined the north-western edge. In the mid-1980s the recreation building was demolished and High Street was extended, framing the north eastern boundary of the proposed park expansion area. In the late 1990s to early 2000s, the park underwent a major overhaul. All of what we see today was built during that time. In 2008, the 440-High Street offramp was built, framing the northwestern border of the proposed park expansion area.



Outerbridge Crossing in 1928

Source: The Port Authority of New York and New Jersey



Newspaper article about Rudyk Park Naming

Source: Ukrainian Weekly, February 1961



1954



1966



1972



1995

Aerial Photos of Rudyk Park Area
Source: historicaerials.com

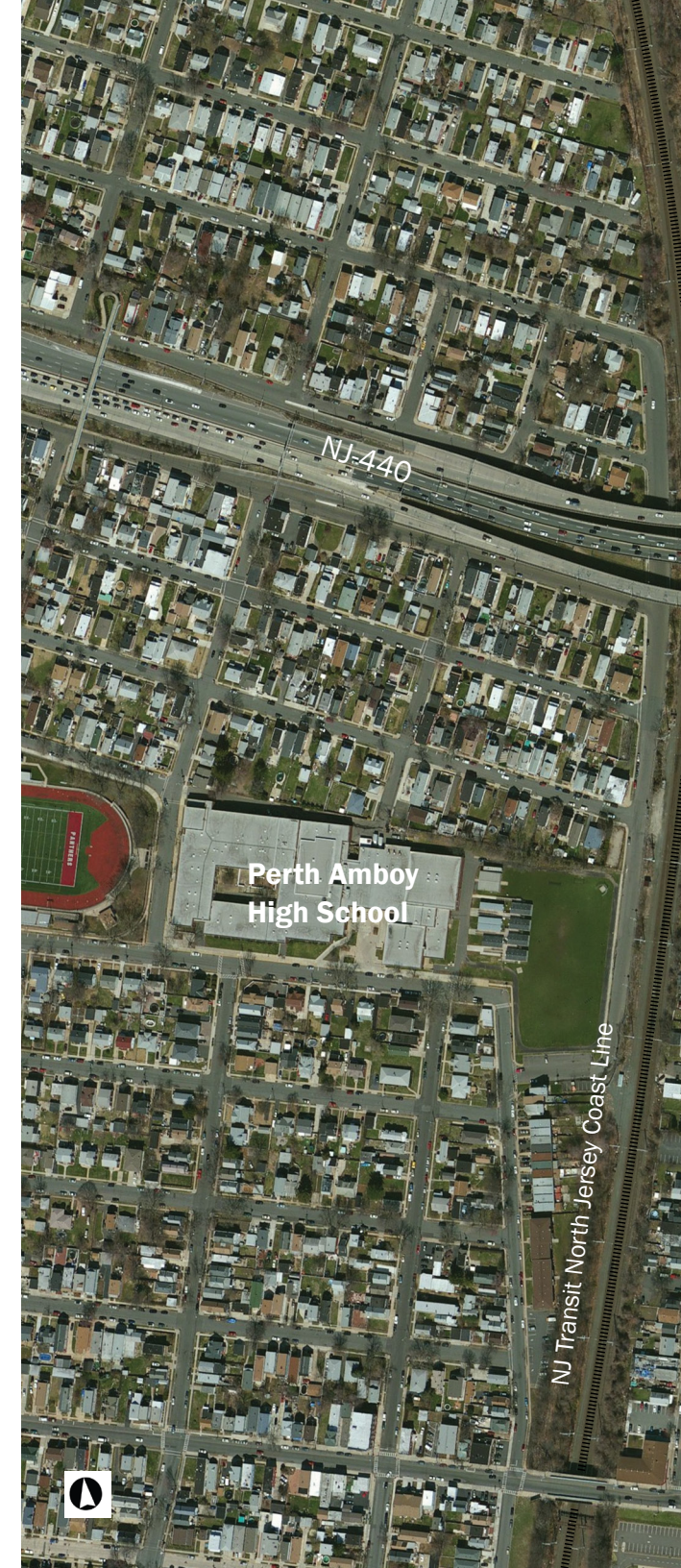
Existing Conditions

Context

Rudyk Park is located in the northeast section of Perth Amboy, at the base of the NJ-440/Outerbridge Crossing, between a primarily residential neighborhood to the west and south of the park, and an industrial district to the north and east of the park. This area of Perth Amboy includes businesses such as Morton Salt, Caesarstone, Custom Building Supplies, and Kinder Morgan. Construction is underway for five large warehouses at the BridgePort Logistics Center on High Street, and the Perth Amboy Self Storage Building on the former Conrail Main Line property directly north of the park across the 440-High Street off-ramp. The Perth Amboy High School and Habortown residential development are located relatively close to Rudyk Park, although they are cut off by NJ Transit North Jersey Coast Line and Conrail branch track to Kinder Morgan, respectively. The closest pedestrian crossing is on Hall Street. There is a bike and pedestrian trail that runs parallel to State Street southwest of the site.

Site

The existing Rudyk Park is bordered by State Street, the NJ-440-High Street off-ramp, the expansion area and the NJ-440/Outerbridge Crossing. The park is approximately 8.13 acres and includes a soccer field, a baseball field, two basketball courts, two playground structures with seating, a perimeter trail for walking and running and a concessions/storage building with restrooms. The primary attraction of the park is the Roberto Clemente Stadium, where the high school baseball team practices and plays home games. The soccer field is heavily used for pickup games and the annual Puerto Rican Festival. Due to overuse and the impacts of the festival from vendors and foot traffic the soccer



Context Map
Not to Scale
Aerial Source: ESRI



Future BridgePort
Logistics Center

Future
Self Storage

Morton Salt
(Tenant)

RUDYK PARK

Expansion Area 2

Expansion Area 1

High Street

Outerbridge Crossing

Caesarstone

Custom
Building
Products





Kinder Morgan Inc

State Street

Conrail Branch Line

Harbortown

Hall Street

-  Park Boundary
-  Expansion Area Boundary
-  Train Line
-  Bike and Pedestrian Trail

field is compacted and its condition has deteriorated. The basketball courts, playgrounds, and perimeter trail are also frequently used, but are in fairly good condition.

Adjacent to the existing park are six vacant lots with five owners. For purposes of this project, we have divided these lots into two areas: Expansion Area 1 (the area abutting the northeast border of the park), and Expansion Area 2 (a group of parcels along High Street). Expansion Area 1 (Block 427, Lot 2), owned by the City, encompasses 2.33 acres. This section is heavily vegetated and is separated from the existing park by a chain-link fence. It includes a subsurface gas pipeline and stormwater collection area. Expansion Area 2 encompasses 6.24 acres and has several owners. The largest parcel is owned by Conrail (Block 108, Lot 5). This parcel includes one derelict train spur, and another train spur reportedly used occasionally for decoupling. The second largest parcel is owned by Bridge Development Partners, LLC (Block 426, Lot 3.04). This parcel connects across High Street to the BridgePort Logistics Center property. There are also two narrow parcels between the Conrail and Bridge Development parcels, Block 108, Lot 5.04 owned by Conrail and Block 426, Lot 3.06 owned by Adler Associates. Finally, Block 425, Lot 1.01, partially located in Expansion Area 2, is owned by Kinder Morgan.

Though not part of this project, the city has plans to build a firehouse on the southern portion of Expansion Area 2. The future firehouse site is separated from the park expansion area by the active Conrail branch service line to Kinder Morgan.



Basemap map
Not to Scale
Aerial Source: ESRI



- Park Boundary
- - - Expansion Area Boundaries
- Parcel Lines
- Contour Lines
- - - Sewer Lines
- - - Gas Lines
- Stormwater Collection Area
- # Number and "V", indicating direction of image, refers to photographs on the following two pages.
- ^

EXISTING PARK

EXPANSION AREA 1

EXPANSION AREA 2

High St

**FUTURE
FIREHOUSE**

NJ-440 / Outerbridge Crossing

Block: 427
Lot: 2

Block: 427
Lot: 1

Block: 108
Lot: 5

Block: 108
Lot: 5.04

Block: 426
Lot: 3.04

Block: 425
Lot: 1.01

Block: 426
Lot: 3.06

1



Concessions stand and restroom building

2



Playground structures

3



Soccer field

Source: Zenon Tech-Czarny

4



Basketball Courts



Expansion areas at the intersection of High Street and the NJ-440 offramp



Derelict train spur



Gas Pipeline



Stormwater retention area

Synthesis

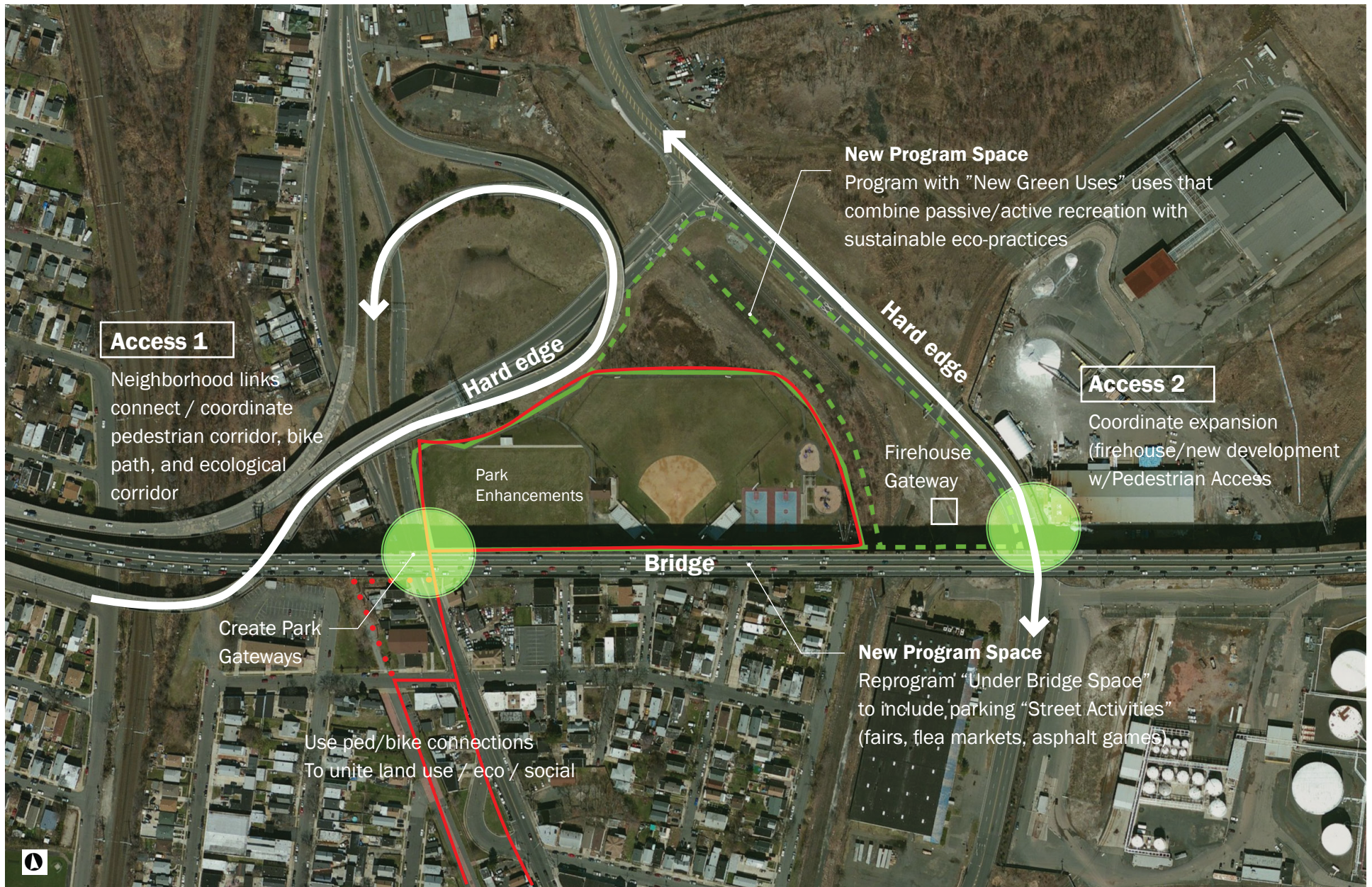
For the research and synthesis portion of the project the design team spoke with municipal staff, and visited and photographed the site a number of times. The team reviewed the history, topography, ownership (parcels), zoning, and land use/land cover data, as well as related planning documents. The team's analysis confirmed that the primary issues at the park are very limited access, underutilized expansion opportunities, recreational use conflicts and poor drainage, as discussed in detail below.

The team's investigation identified a number of opportunities to enhance the park, starting with one of the larger concerns – access to the park. It is not clear how to get to the park or where to enter it. The park is fairly isolated from the rest of the city and is surrounded on all sides by a highway and busy streets. From NJ-440 - State Street South exit, park goers have to navigate the confusing exit, drive past the park, turn left on Pulaski Avenue, turn right on Valley Place and park under the bridge. The High Street Exit from NJ-440 is equally, if not more confusing, requiring visitors to drive down High Street to Hall Street, make a right on State Street and drive back to the NJ-440 underpass. While, it is relatively easy to access the park from the south, it is not clear how to enter the park as there is limited signage identifying the park entrance and a chain link fence surrounds the whole park without clearly delineated entrances. It is also a challenge to enter the park from the east. There is no official entrance or path and so entrance requires an illegal and possibly dangerous crossing of the

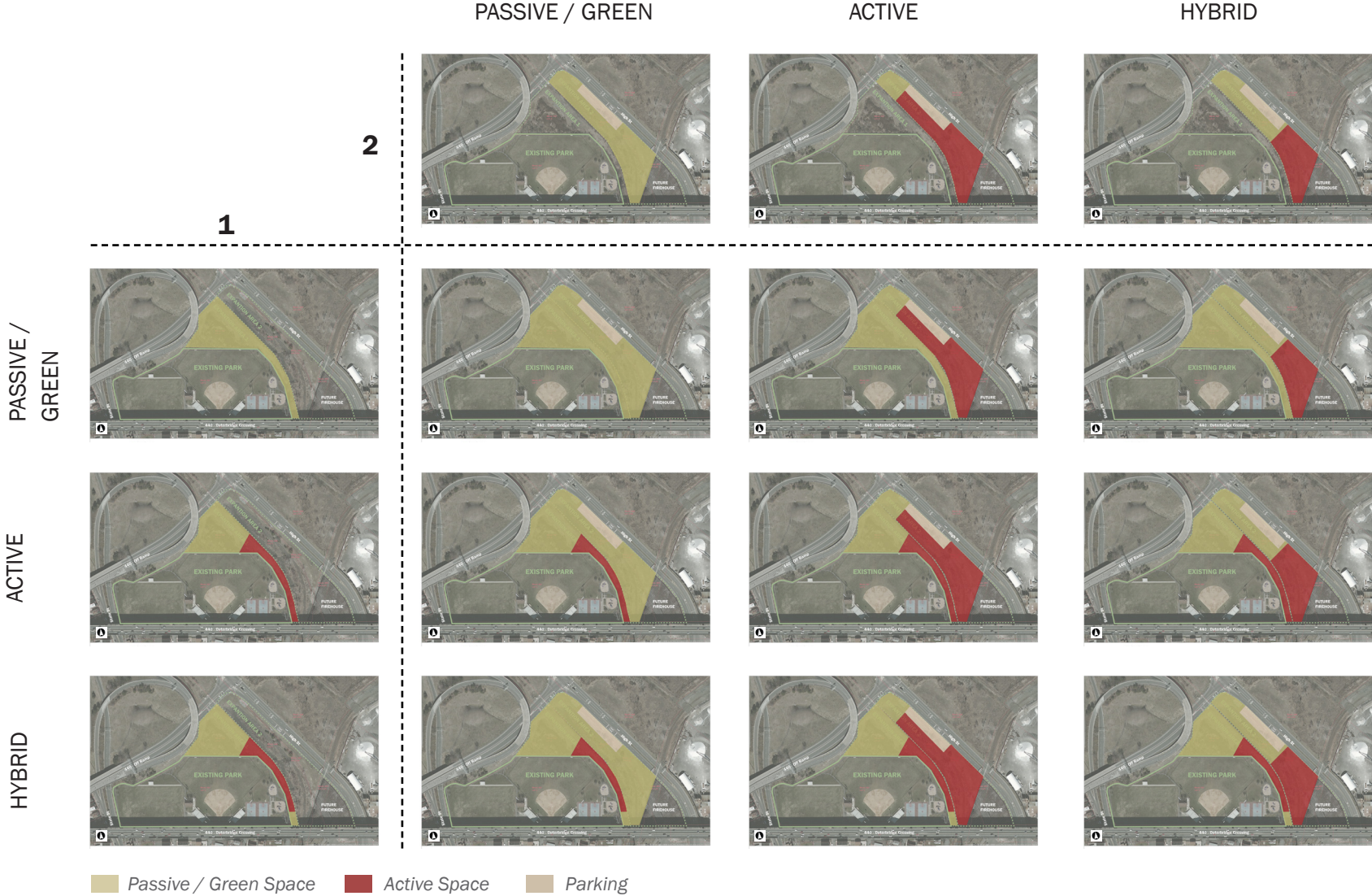
BridgePort and Conrail properties. The teams preliminary investigation and stakeholder engagement identified the following park enhancements to alleviate the above concerns.

Specific Enhancements

- Access should be enhanced at State Street (Access 1 on the following map) and High Street (Access 2).
- New bike and pedestrian Health Trail should be built connecting the park to the neighborhood and a new main gateway at State Street should be created.
- New program spaces should be created in the expansion areas and under the bridge.
- Green Infrastructure such as rain gardens, bioswales and permeable pavement should be incorporated throughout the park with a focus on the stormwater /bioretention area.
- Enhancements should also be made to the soccer field and to other parts of the existing park.



Program Matrix



Preliminary Design Concepts



Passive / Green Concept



Active Concept



Hybrid Concept

Design Development

Following our synthesis, the design team prepared a program matrix to develop preliminary design concepts. We started by creating three options for both Expansion Area 1 and Expansion Area 2, a “Passive/Green option”, an “Active Option” and a “Hybrid Option”. As the names imply, the passive/green option is primarily passive recreation and greenery; the active option is primarily active recreation such as basketball courts, tennis courts and other small sports fields; and the hybrid option is a mixture of active and passive activities. Once the three options were completed for both expansion areas, we combined them in the matrix and created various combinations. Based on these combinations we chose three options and developed them more fully into preliminary design concepts.

These three concepts were presented to the community at the first open house meeting.

Summary of First Community Meeting / Open House

The first project community meeting was held on April 29, 2016, in the Middlesex County Vocational School on High Street. The meeting provided a variety of ways for community participants to share their comments and ideas, help design the expansion areas, and improve access to Rudyk Park. There were four stations that participants could visit. The first station asked where participants live, and how they access the park; the second asked what participants liked and didn't like about the park; the third presented the three schematic design concepts and solicited comments via sticky notes; and the fourth encouraged participants to "Design Your Own Park" by giving them blank park maps that they could draw on. Participants also provided input through informal conversations with team members. Following is a summary of information and feedback received from the various stations:

- Most participants lived outside the immediate area and primarily traveled to the park by car. There were several that lived within a 10 minute walking distance or walked and biked to the park.
- Participants liked the soccer field, baseball field, and basketball courts. They didn't like the State Street fence, the underpass, and overgrown expansion areas. Some of the comments include "Improve the soccer field", "Use space under the bridge", "Improve walking trail and add bike lane".
- The green concept received the most attention, with comments suggesting connecting the park with the bicycle and walking trail, improving access, the approval of passive

recreation, green space and stormwater management. The hybrid concept received comments to add more walking trails, and an amphitheater. The Active concept received comments to add a "bbq /picnic area" and "Volleyball courts".

- There were a number of great drawings in the "Design Your Own Park" exercise. The drawings ranged from simple practical suggestions to the more fantastical. Suggestions included improving the existing facilities, adding a barbecue and picnic area, pool, parking, volleyball court, tennis courts, and ice skating rink, amphitheater and drive-in movie theater.

At the end of the meeting the Rutgers team and a number of Recreation, Planning and other city staff had an informal



Perth Amboy Principle Planner Annie Hindenlang speaking to City Councilman Joel Pabon

Source: Denise Nickel

discussion about what could be implemented in the expansion areas; passive recreation was a very popular option.

Summary of Pre-Workshop Meeting and Second Community Meeting

Prior to the second community meeting, the team discussed the draft final design concept. The team reviewed the previous community meeting notes, preliminary sketches of the draft site design, several perspectives, and the proposed Health Trail Plan. Rutgers staff, the Honorable Mayor Wilda Diaz, Perth Amboy's Office of Economic and Community Development Executive Director / Principle Planner Annie Hindenlang, Director of Recreation Ken Ortiz, and Director of Public Works, Frank Hoffman were in attendance. The team voiced approval of the new concept design and were excited to share it with the community.

The second community meeting was held on June 21, 2016 from 4:00pm to 6:00pm in the Harbortown Clubhouse, the format for the meeting was presentation and discussion. Participants asked questions and discussed the various ideas. Overall, the feedback was positive, and participants were excited by the project design. Residents of Harbortown were especially pleased to know they would have access to the park from High Street.



*Professor Richard Alomar explaining concept to Mayor Diaz, Office of Economic and Community Development Program Coordinator William Kurzenberger and Director of Public Works, Frank Hoffman
Source: Denise Nickel*



*Professor Richard Alomar presenting design concept at the second meeting.
Source: nj.com*

Context Plan

The analysis of site conditions, a review of existing city planning proposals, and community recommendations/input were used by the design team to develop a project concept plan that addresses opportunities for additional recreation space. The concept plan also encompasses city-wide issues regarding community health and well-being. The approach to park improvements includes enhanced recreational space for the immediately surrounding neighborhoods and improved connections to other neighborhoods, schools and parks.

1. Connectivity and Access

Perth Amboy's 2016 Bicycle/Pedestrian Element (10.27.15) recommends improvements to areas surrounding Rudyk Park that enhance city-wide circulation. Upgrades to the Pulaski Avenue Tunnel, the development of pedestrian corridors along Pulaski Avenue and the proposed bike path extension as well as the new crossing location on State Street (Option A in the Bicycle/Pedestrian Element) would contribute to better access to Rudyk Park.

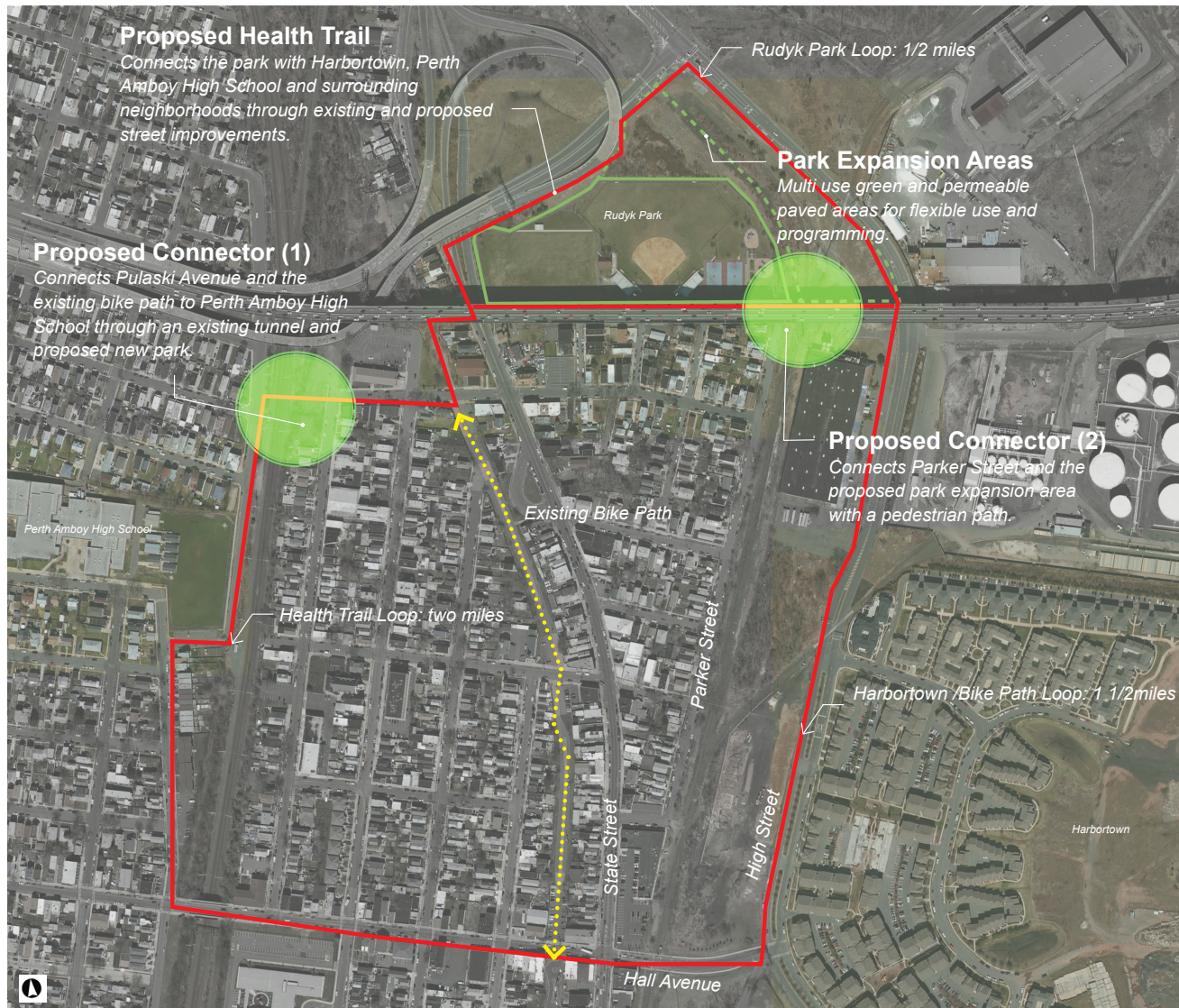
The Access component of the concept plan (see Proposed Connectors 1 and 2) creates access to the park from State and Parker Streets. A proposed new park on State Street would improve access to the existing tunnel under the NJ Transit North Coast Line to allow direct connections between State Street, Rudyk Park and the City's planned bicycle and pedestrian paths. The Parker Street entrance connects the park to pedestrian and bike circulation on the proposed Middlesex Greenway Extension.

2. Health and Well-being

The Health Trail concept connects the proposed city-wide circulation recommendations into a two mile loop for the community to walk, run and bike. The existing Rudyk Park perimeter trail is extended to connect to High Street, Hall Avenue, State Street and Dillman Lane. The loop provides Harbortown and Perth Amboy High School with easy access to open green space.

3. Improvements and Community Recreation

The improvements to the park focus on increasing green space and flexibility. Community input drove the decision to design a large green open space that accommodates a variety of activities like barbecues, picnics, informal games as well as semi-paved areas for larger gatherings and interim parking.



Overall Context Plan



Proposed Connector (1) - Catherine Street
Connects Pulaski Avenue and the existing bike path to Perth Amboy High School through a park and tunnel.



Proposed Connector (2) - Parker Street
Connects Parker Street and the proposed park expansion area with a pedestrian path.



Tunnel Existing Conditions (View from Catherine Street facing tunnel)

Source: Google Street View



Tunnel Proposed Park Connector



Parker Street Existing Conditions (View looking East Under 440 Bridge Towards High Street)

Source: Zenon Tech-Czarny



Parker Street Entrance Proposed

Conceptual Site Design

The final conceptual site design expands Rudyk Park all the way to High Street. The design features new entrances, enhanced stormwater management / bioretention areas, 100,000 square feet of multi-purpose open green space surrounded by picnic areas and barbecue stations, a multi-purpose semi-permeable plaza area for parking and festival space, as well as an exercise trail with stations and a central workout area. Furthermore, the park will connect to the surrounding neighborhood with a Health Trail (see page 20). This Health Trail connects the park to Harbortown and the Perth Amboy High School through surrounding neighborhoods.

Features Legend

Program

 Walking Trail	 Farmers Market	 Striped Parking
 Running Trail	 Picnic Area	 Asphalt Games
 Biking Trail	 Art	 Fitness Station

Sustainability

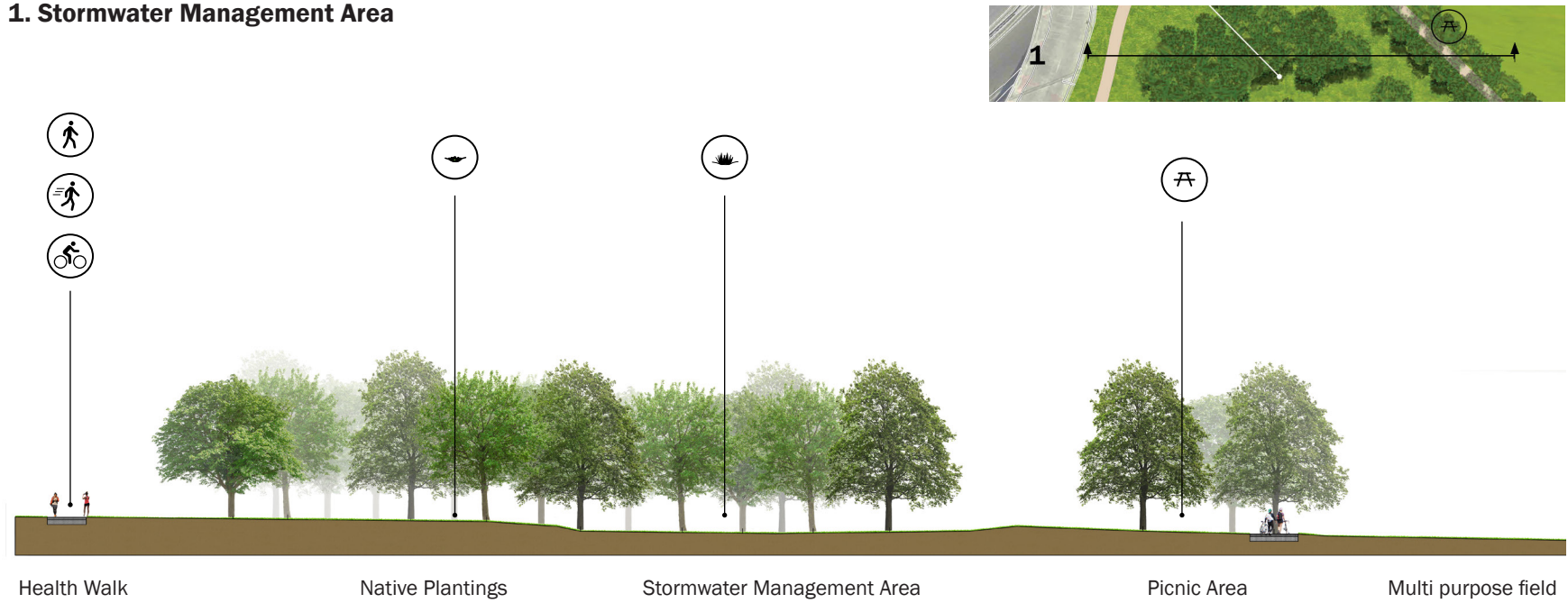
 Porous Pavement	 Rain Garden	 Bioswale
---	---	--

Site Plan
Not to Scale





1. Stormwater Management Area

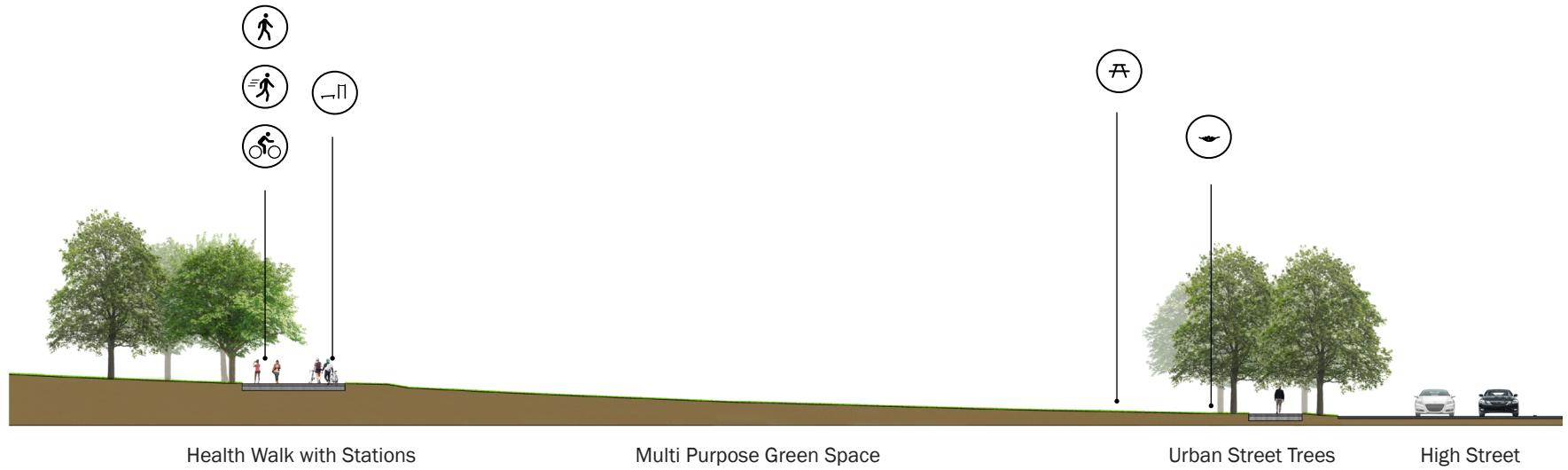


Sections

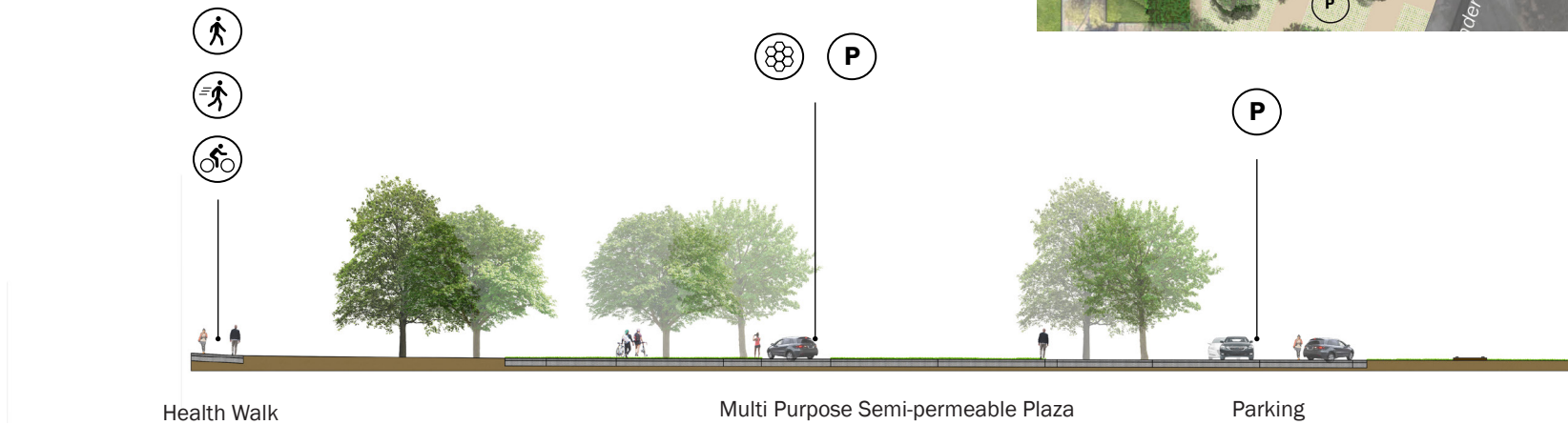
Not to Scale

* All sections face north

2. Multi Purpose Green Space



3. Multi Purpose Semi-permeable Plaza



Rudyk Park Entrance

The current entrance to Rudyk Park at State Street is not clearly identified and not welcoming. There is a chain link fence with gates that are usually locked and a small gap where visitors enter. The proposed design will make the entrance more visible and prominent. It will feature clearer signage, a street and entrance plaza, a distinct park entry and continue the existing tree allee.

Features



Examples/Case Studies



Sense of Entry (Old Grove Park)



Fitness Areas/Park Health Trail



Entrance Area Plan



State Street Entrance Area Existing Conditions (View from State Street under the Outerbridge Crossing)

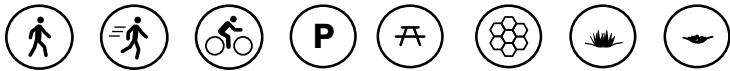


State Street Entrance Area Proposed Concept (View from State Street under the Outerbridge Crossing)

Expansion Area

The expansion area is the largest component of the proposed design. The area currently includes overgrown brush, a rail spur reportedly used for decoupling and one branch line serving Kinder Morgan. This design proposes to convert most of the area into a large open green space similar to the Great Lawn in Central Park. The Multipurpose Green Space could be used for a variety of activities such as festivals, informal games and family and community gatherings. Moreover, the open field is surrounded by shaded picnic areas and barbecue stations. The expansion area also includes a multipurpose semi-permeable plaza area that can also be used for parking, festivals and family gatherings. More information on the Multipurpose Semi-Permeable Plaza can be found on page 32.

Features



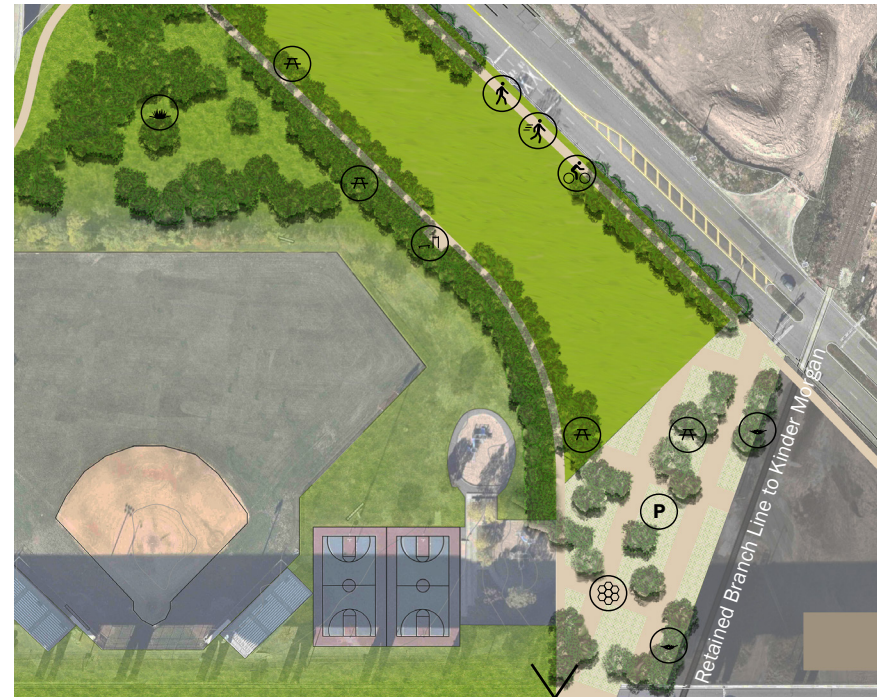
Examples/Case Studies



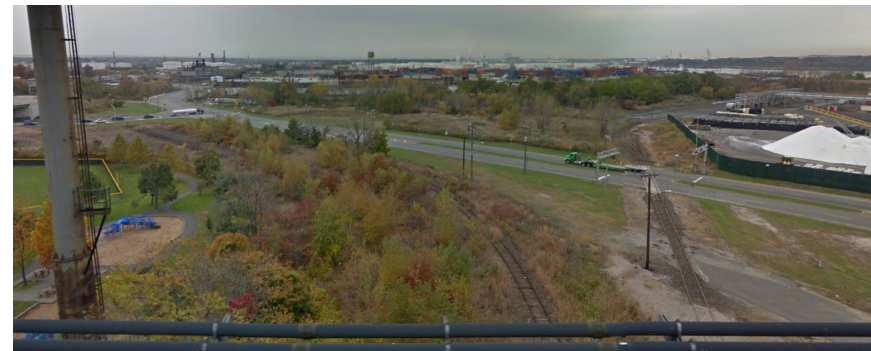
Open Field (Great Lawn
Central Park)



Multi-use/Flexible Spaces



Expansion Area Plan



Expansion Area Existing Conditions (View from NJ-440/Outerbridge Crossing
facing High Street)



Expansion Area Proposed Concept (View from NJ-440/Outerbridge Crossing facing High Street)

Multipurpose Semi-Permeable Plaza

Multipurpose Semi-Permeable Plaza is located in the Expansion Area on the east side of the site, between the Multipurpose Green Space and the proposed firehouse. As the name suggests, this area is meant to be used for a variety of activities. While it will primarily be used for parking, it can also be used for festivals and other events. The pavement will be semi-permeable and will include a stormwater management buffer to help control stormwater runoff.

Features



Examples/Case Studies



Semi-Permeable Surfaces



Community/Family Programming



Multipurpose Semi-Permeable Plaza Plan



Multipurpose Semi-Permeable Plaza Existing Conditions (View from High Street facing the Outerbridge Crossing)

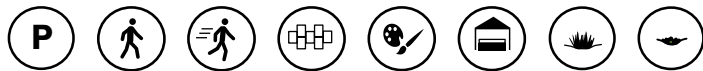


Multipurpose Semi-Permeable Plaza Proposed Concept (View from High Street facing the Outerbridge Crossing)

Underbridge

The space under the NJ-440/Outerbridge Crossing is underutilized and is currently only used for informal unorganized parking. This design proposes to activate the space with community programming such as farmers markets, flea markets, art installations, pavement games, running and biking trails and even ice skating or a skate park. The area could also be enhanced by the use of rain gardens, bioswales and other green infrastructure to capture stormwater from the bridge and adjacent drainage areas. The land under the bridge is technically owned by the Port Authority of New York and New Jersey (PANYNJ), though managed by the City of Perth Amboy. The PANYNJ is open to the proposed uses as long as there are no hazardous materials used.

Features



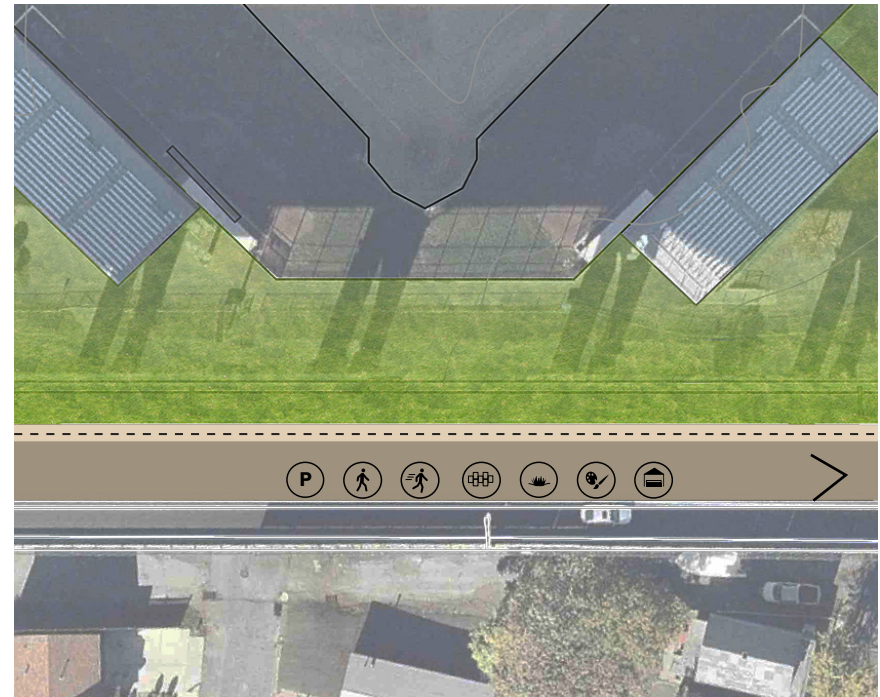
Examples/Case Studies



Randall's Island



Garnier Drive, Toronto



Underbridge Area Plan



Underbridge Existing Conditions (View from under the NJ-440/Outerbridge Crossing facing State Street)



Underbridge Proposed Concept (View from under the NJ-440/Outerbridge Crossing facing State Street)



Phase 1



Phase 2



Phase 3



Final Phase

Phasing

The proposed improvements to the park can be phased to allow implementation of portions of the design during the time period required for space acquisition negotiations, and securing the required funding.

Phase 1

1. Extend existing perimeter trail to High Street
2. Add workout station near the soccer field
3. Build new Rudyk Park entrance on State Street
4. Identify Health Trail portion of under bridge walk space
5. Build temporary parking in portion of Semi-Permeable Plaza
6. Stripe organized parking and asphalt games under the bridge
7. Investigate environmental conditions of Expansion Area 1 (In Progress)

Phase 2

1. Grade and plant Expansion Area 1
2. Implement stormwater management area
3. Investigate and remediate Expansion Area 2

Phase 3

1. Extend health trail to Parker Street
2. Begin cleaning and grading of Expansion Area 2
3. Plant Expansion Area 2
4. Add workout station at Extension Area 2

Final Phase

1. Install final portion of multipurpose Semi-Permeable Plaza
2. Install Parker Street entrance
3. Install Health Trail in Neighborhood

Conclusions

Over the years, Rudyk Park has changed significantly. Starting with a small building and pool on the east side in the 1960s, and transforming to the park we see today. This proposal is the next step in the evolution of Rudyk Park with a design concept that expands the park to High Street and provides enhanced accessibility through the proposed Health Trail. The design team strongly encourages the city to further pursue efforts outlined in the phasing plan and to incorporate this park expansion and Health Trail in their capital improvements plan, as well as to apply for various grants to develop detailed design, engineering and implementation phases. The design team also recommends the city conduct further outreach to various sports organizations that use the park and the Perth Amboy Puerto Rican festival organizers.

Case Study Sources

Sense of Entry (Old Grove Park) - <http://www.city-data.com/picfilesc/picc26606.php>

Fitness Areas/Park Health Trail - http://www.fittrail.com/images/station_photos/installationlg.jpg

Open Field (Great Lawn Central Park) - https://commons.wikimedia.org/wiki/File:Great_Lawn_Central_Park_jeh.JPG

Multi-use/Flexible Spaces - <http://www.barclaycardtravel.com/t5/image/serverpage/image-id/589593i8A7CB0467D240579/image-size/large>

Semi-Permeable Surfaces - <https://www.outdoorstonegallery.com/turfstone-permeable-paver.html>

Community/Family Programming - http://2.bp.blogspot.com/-MQNDbdVuvP4/Vk3a6H8VMal/AAAAAACKM/gjNUqPnHp_0/s1600/KIN_PublicParkBBQ_TeachingMoment-24_978px.jpg

Randall's Island - <https://assets.dnainfo.com/generated/photo/2013/09/randalls-island-connector-13790794303912.jpg/extralarge.jpg>

Garnier Drive, Toronto - <http://www.undergardiner.com/media/render-winter.jpg>