

An architectural site plan of a city grid, likely Manhattan, showing a river (the Hudson River) on the left. The grid is composed of light gray lines representing streets. Several areas are highlighted in red and green, indicating specific zones or developments. The text is overlaid on the plan.

# **The contemporary metropolis after relentless urbanization**

**ARCH 701 Design Studio**

**Fall 2015**

NYIT School of Architecture and Design

## Abstract

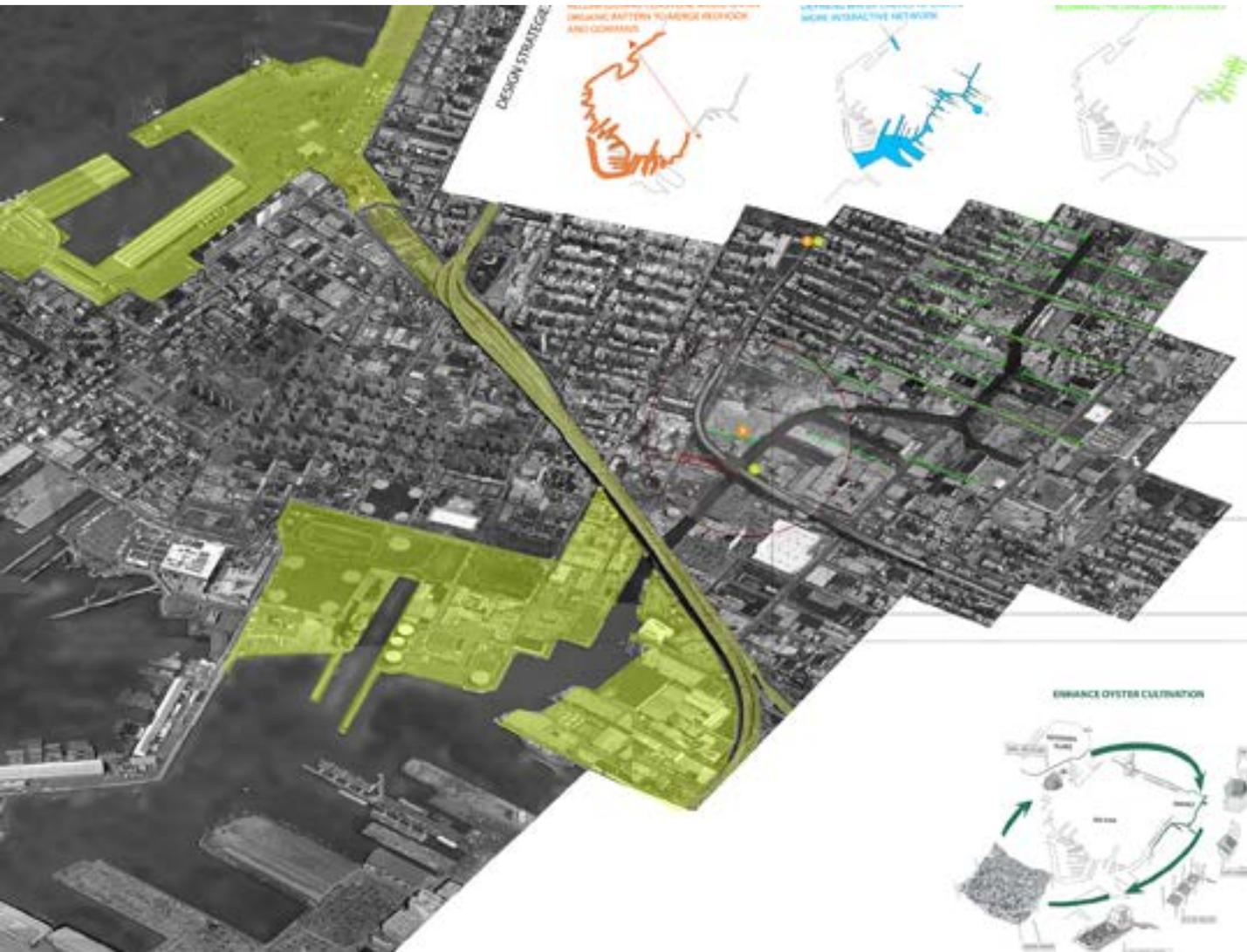
Our contemporary cities exist in perpetual urgency: metropolitan territories demonstrate tremendous diversity and complexity in growth and decline. By 2050, 70 percent or so of the world will live in cities. What does it mean for us to live together? And what will it mean for us to live together, several generations from now in the future? To elaborate this paradox is to understand the uestion of organization, or how we live together and mix. It is through this lens and the interdisciplinary filter of urban design that we must today more than ever question/probe/critique/rebuild/re-invent our built and natural systems.

## Introduction

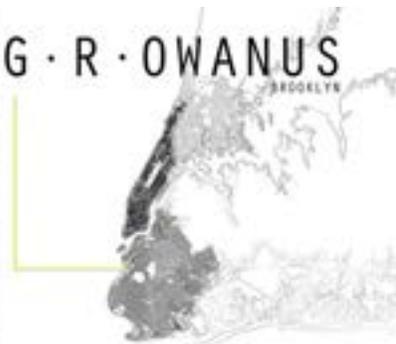
This studio engages New York City as a laboratory and introduces the ideas, representations, and techniques of contemporary urban design and discourse through the lens of a resilient built environment. By analyzing and questioning the morphology/or- ganizations/processes inherited from the past, we will propose a new vision for the city. We will innovate new patterns of human concentration as opposed to perpetuating the last 80 years of relentless expansion. Working in a post-industrial city requires the critical investigation and re-definition of the many layers of existing and past urban fabric and urban infrastructure to shape the city to the needs of its future inhabitants. Our focus will be on a new resilient vision for New York City in the form of re-thinking how we live (and work) together at the scale of an EcoDistrict, driven by new strategies that weave transit, housing, natural systems and the public realm. New York City, the most populous and the most urban of America’s cities will serve as a laboratory for these investiga- tions. A resilient New York City will develop the capacity to adapt and thrive in constant change. Success as urban designers will be measured from a civic building perspective, when innovative program and physical form provide the integrated resilience necessary for positive economic, social and ecological elements to flourish over time. Energy, Transportation, Waste, Water, Green Infrastruc- ture / Natural Systems and other urban infrastructure systems carry profound technical, social and cological consequences.

## Methodology

This first semester introduces students to an urban design process. In urban design, site is not a given; students must identify and investigate the complex, layered contexts, operating at multiple scales, within which urban places are embedded. Similarly, the construction of program is within the urban designer’s purview; opportunities exist to extend and expand the field for human action and interaction. Working in multiple scales as well as multiple time frames will be an integral part of this investigation to design an intervention that follows a speculative hypothesis for the future of the City The techniques of investigating a site; its physical and non-physical context; its geographic, historical, or socioeconoic apects; its boundaries and networks; and its areas of influence and impact create knowledge about the site. In this studio, we treat drawings, diagrams and models not as final representations of a proposal, but as material evidence for a process of “thinking through making”. Students will be introduced to a variety of different techniques throughout the semester and we encourage students to test, refine, and sharpen skills of representation as a means of thinking and communicating complex ideas. In developing an urban design project, the process by which we imagine a project being implemented is an essential part of design itself. Who are the stakeholders that would advocate for or pay for the project? Who are the users that would benefit? What is the timeframe in which it is envisioned? Speculative answers to these questions inform the decision-making process for the physical manifestation of the urban design project. Students will be asked to translate investigation of site and program, and the making of knowledge about an urban site into a series of conceptual hypotheses for the site that operate on several scales and in several temporal dimensions. In the context of this studio, students will be asked to speculate with innovative models for how New Yorkers in the 21st century will live and work, and mechanisms to develop such models. Students will then be asked to apply a hypotheses to their specific site and develop design proposals that confront how we live together into physical space.



- Railway stations on the Prospect Park do not support benefits from the presence of being high and dispersed spaces below it.
- The high degree of water pollution control of CSD.
- Mobility is not properly organized there are many dead ends. This makes the street disconnected in part.
- Very low percentage of buildings public green space.
- Industrial waste leads to a lot of environmental damage.
- Uncontrolled evolution of residential scale.
- Weak opportunities for an active water cultivation.



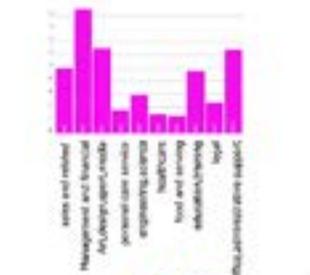


**HOUSING AFFORDABILITY IN GOWANUS**



65% of the participants identified "affordable housing" as a benefit that must accompany any new density added to the neighborhood, and 58% also selected "deeply affordable housing"

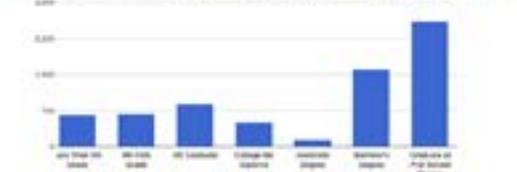
**TOP OCCUPATIONS OF GOWANUS RESIDENTS (2007-2011)**



more than 60% of participants from Gowanus supported creating a balanced mixed-use zone that allows some increased residential density in order to meet a variety of community goals.

**G-R-OWANUS**

RECREATION RECREATION RECREATION



"high educated" district in Brooklyn

BUT 

"skills mismatch" problem will need to be addressed by new local employment opportunities

Gowanus faces a shortage of public school seats for local students.

 identified a need for 4,000 new seats in District

**ECO-DISTRICT DESIGN STRATEGIES**

**ECOSYSTEM**

- Water creeks
- integrated soft landscape (marshy) to slow storm water
- retention tanks as a flooding basins

**RESOURCE EFFICIENCY**

- Anaerobic digester for solid waste management.

**MOBILITY AND CONNECTIVITY**

- Solving street ends by connected promenade areas
- elevated walkways above the new industrial zone
- creating some spaces under the highway by rising walkways

**PROSPERITY**

- developing urban agriculture along the canal and highway
- provide new employment opportunities for entrepreneurial manufacturing
- both "mandatory mixed-use" and "mandatory inclusionary zoning"
- enhance oyster cultivation

# BROOKLYN

INSIDE THE WALLS  
BROOKLYN NAVY YARD

LIVE, WORK, CREATE.  
BROOKLYN NAVY YARD

LIVE, WORK, CREATE.  
BROOKLYN NAVY YARD

LIVE, WORK, CREATE.  
BROOKLYN NAVY YARD

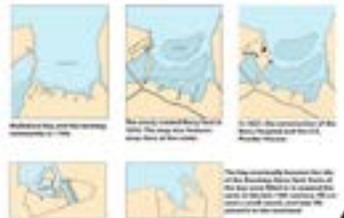
# BROOKLYN

## DEVELOPMENT OF BNY

The 100-acre site located on the Brooklyn water-front. Established in 1807 as one of the nation's first free-trade wharves, over 140 years the Yard developed into the nation's largest industrial facility. Today, it is home to the concentration of manufacturing and green businesses in New York City.



## LANDFILL OVER THE YEARS



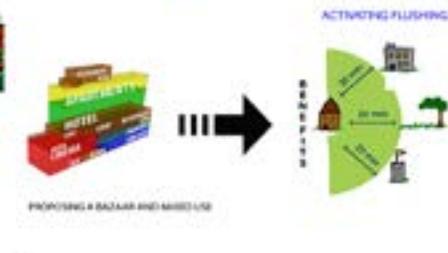
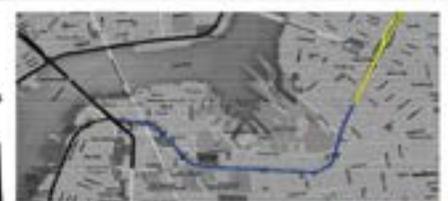
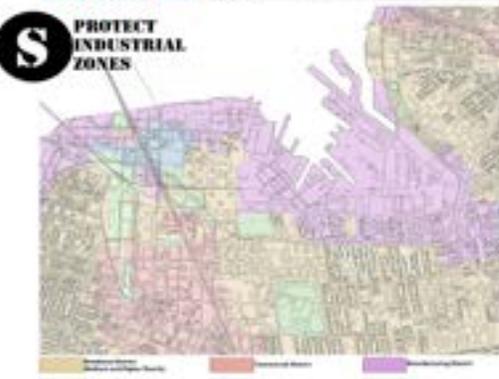
## UN-CHANGEABLE ZONING



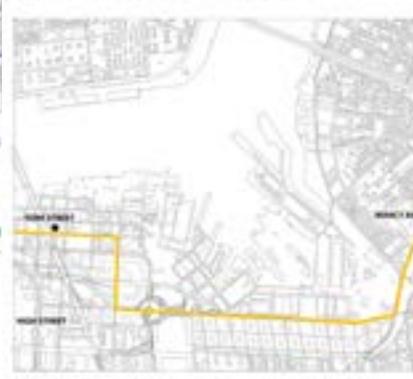
## T LANDFILL FLOOD



## S PROTECT INDUSTRIAL ZONES



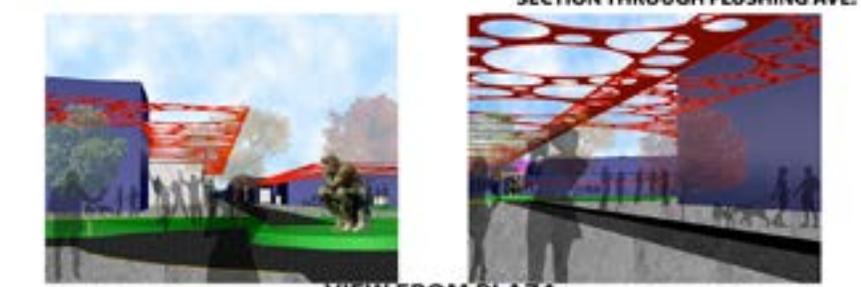
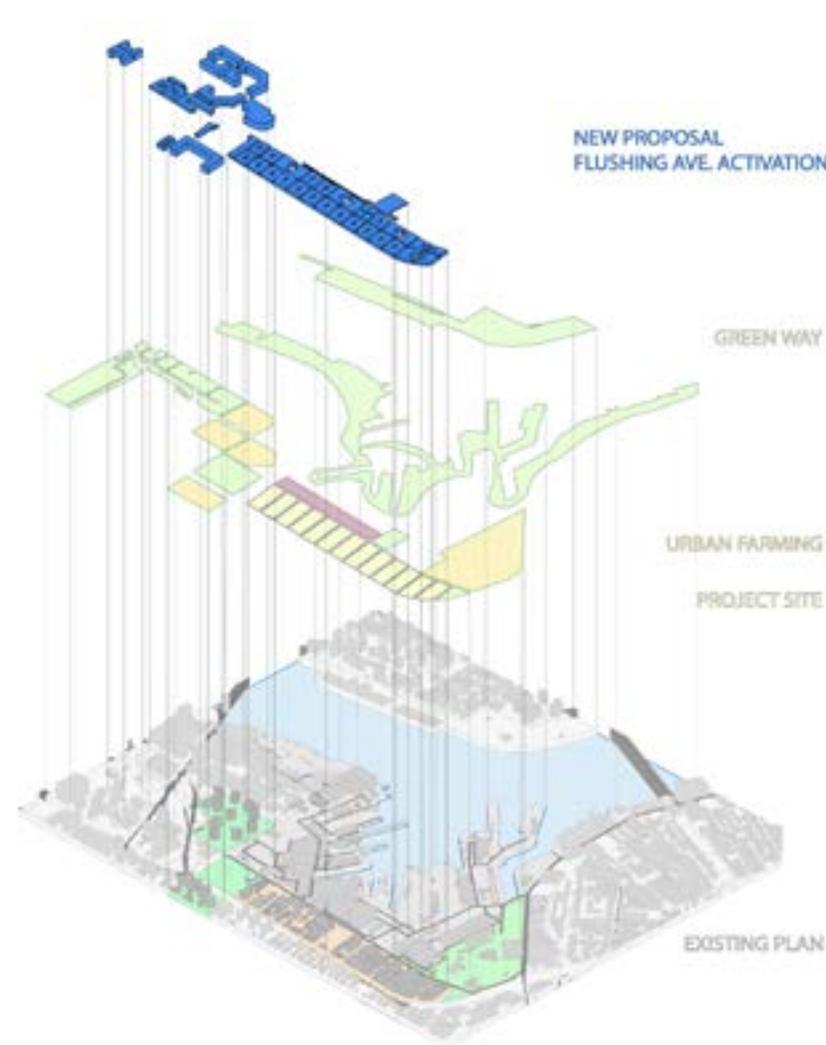
**ALTERNATIVE TRANSPORTATION**  
Use of Ferry as means of mass transit.  
Use of water ways for shipping goods.  
Diverting trucks away from flushing to reduce noise and air pollution.



**NAVY YARD + DOWNTOWN + DUMBO CONNECTION**

Community Mobility  
Create a network of community gardens, public art, and green spaces that connects the Navy Yard to Downtown and Dumbo. This network will provide a high-quality, walkable, and bikeable path that connects the Navy Yard to Downtown and Dumbo.





**MISSION**

1. Create a vibrant, walkable, and inclusive community
2. Provide quality and consistent local job opportunities through excellent products
3. Minimize the overall displacement of existing residents and businesses
4. Ensure diverse, distributed development in all historic buildings and across existing

**APPROACH & DEVELOPMENT**

Goal: Promote equity and opportunity and ensure fair distribution of benefits and burdens of development and development.

Objectives:

1. Ensure neighborhood investments provide direct community benefits through job creation and investment opportunities
2. Provide quality and consistent local job opportunities through excellent products
3. Minimize the overall displacement of existing residents and businesses
4. Ensure diverse, distributed development in all historic buildings and across existing

**HEALTH & WELLBEING**

Goal: Promote human health and community well-being.

Objectives:

1. Provide access to safe and fun/recreational/active and natural areas
2. Provide access to healthy, local and affordable food
3. Minimize noise and congestion impacts
4. Support economic opportunities to support a socially and economically diverse population
5. Improve indoor and outdoor air quality

**COMMUNITY EQUITY**

Goal: Create collective neighborhood identity through the built and natural and a culture of community.

Objectives:

1. Create safe, accessible and walkable paths that promote interaction and access
2. Foster social networks that are inclusive, flexible and vibrant
3. Develop local governance with the leadership and capacity to act on behalf of the neighborhood

**ENERGY**

Goal: Activate and use energy usage efficiently.

Objectives:

1. Maximize energy use by minimizing demand and maximizing conservation
2. Optimize infrastructure performance at all scales
3. Use renewable energy

**ACCESS & MOBILITY**

Goal: Provide access to clean and affordable transportation options.

Objectives:

1. Provide accessible corridors through natural area and improved street access
2. Prioritize active transportation
3. Reduce vehicle miles traveled
4. Maximize and use existing vehicles

**WATER**

Goal: Meet both human and natural needs through reliable and efficient water management.

Objectives:

1. Reduce water consumption through conservation
2. Reuse and recycle water resources whenever possible, utilizing water only for public needs
3. Storage, distribution and building water discharge within the district

**90%**

**ACCESS & MOBILITY**

Goal: Provide access to clean and affordable transportation options.

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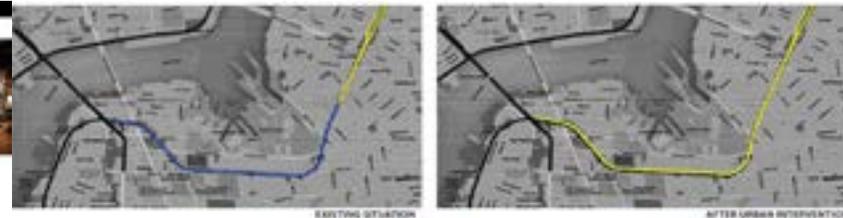
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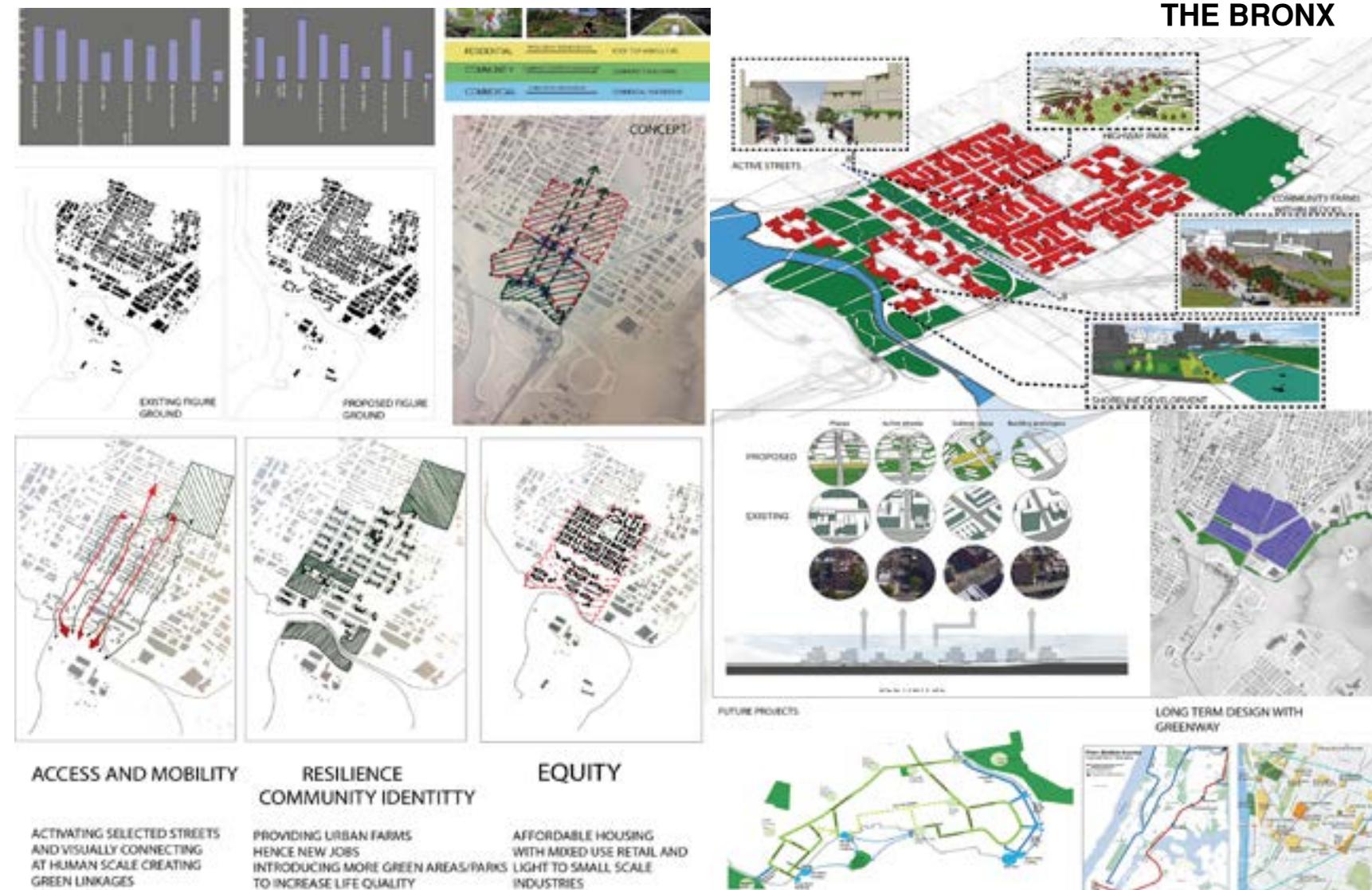
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# THE BRONX



# THE BRONX



LOCATION

SWITCHING ON ST. GEORGE



S.W.O.T

STRENGTHS

- 1. Terrain**  
The naturally existing terrain of St. George is exceptionally appealing from both the water front and the highest point in elevation.
- 2. Proximity to Manhattan**  
The ferry ride to Manhattan is only 20minute journey which is not as long when compared to the amount of time New Yorkers spend on Island.

WEAKNESS

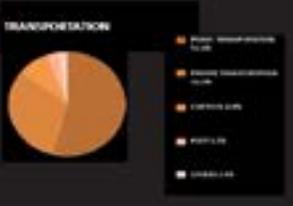
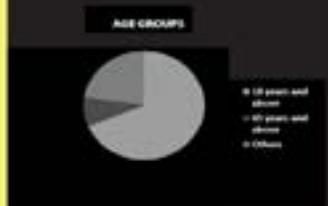
- 1. Ferry**  
The Ferry however is the only way to get to Manhattan directly. As a result of the proximity to downtown Manhattan, there are no alternative direct transport connections. The only other routes are the bridges to New Jersey and Brooklyn.
- 2. Inactive town**  
Staten Island in general has the appearance of a sleepy town and is generally quite inactive. St. George has the potential to be a downtown, iv

OPPORTUNITIES

- 1. Mass Development**  
St. George is currently the host to development on many levels. Some of these include the ferryport, the empty outdoor mall and lighthouse. These projects could open up many areas of improvement in and around St. George.
- 2. Downtown area for Staten Island**  
St. George is strategically located on the prominent edge of Staten Island at a distance closest to Manhattan. Hence giving it the potential to serve as a downtown for the entire borough.

TRENDS

- 1. Gentrification**  
The proposal of a large housing project on the waterfront is a trend to gentrification as it will strengthen the disconnect between the waterfront and the residential areas of St. George.
- 2. Mass deconstruction**  
The buildings along the remaining wall of St. George which are mostly courthouses and municipal facilities are unviable to the people of the ferry. These buildings also act as a visual barrier to the beautiful town inside.



TERRAIN

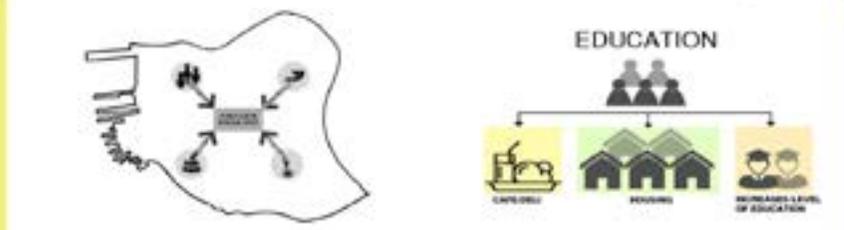


GREEN SPACES



ANALYSIS

EDUCATION

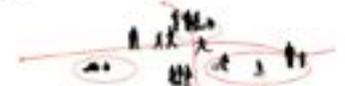


To utilize the potential St. George has for educational/training facilities

- Problems** - Currently St. George have fairly good schooling in many areas in east side of St. George, but soon after schooling the students are to leave to other boroughs for further education.
- Opportunities** - To enhance higher education facilities for active students and also use it for direct students moved from the neighbouring boroughs etc.
1. Student population will help enhance the area and give space to smaller businesses like cafes and restaurants to open.
  2. The college/university will provide many job opportunities.
- Participation** - Help using a new concept in St. George, that does not mean a gentrification.
1. The main goals should include of the new housing developments.
  2. Make St. George more livable with good educational facilities which is a new driver for business to settle.



LIFE



SPACE



BUILDINGS



CONCEPT



PROPOSED SITE



EXTENSION OF THE GRID



BUILDING PLOTS

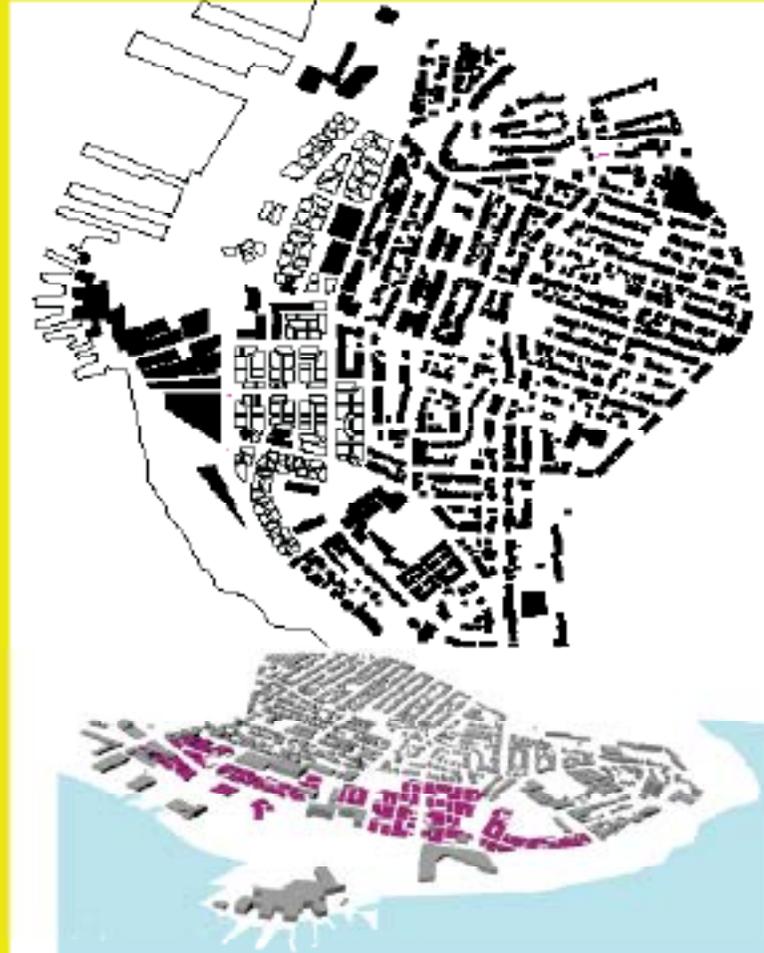


ZONING CONCEPT

EXISTING FIGURE GROUND



PROPOSED FIGURE GROUND



TRANSPORTATION



LAND USE



LANDMARKS



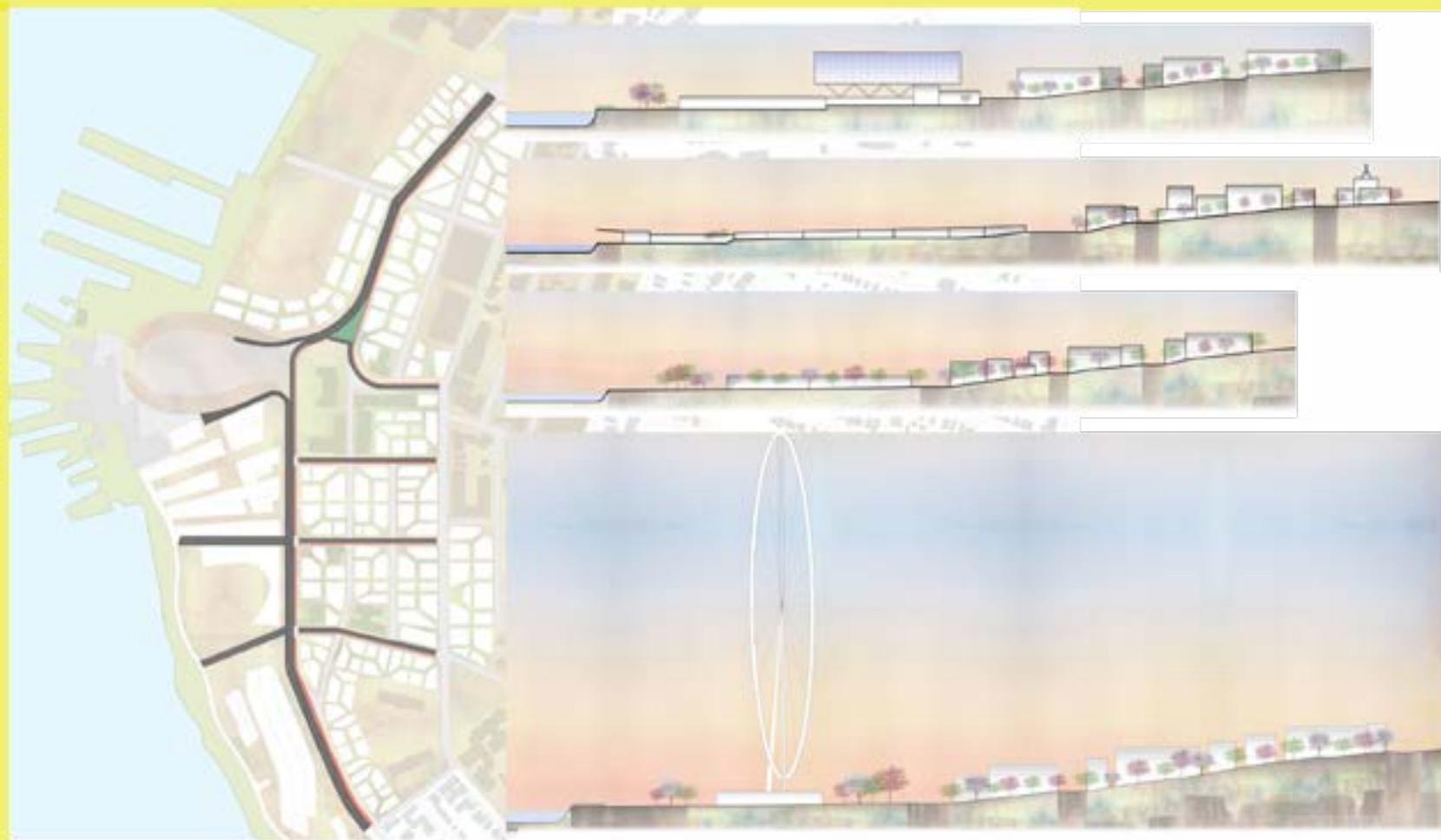
LANDMARKS



PROPOSAL



PROPOSAL SECTIONS





SITE LOCATION:

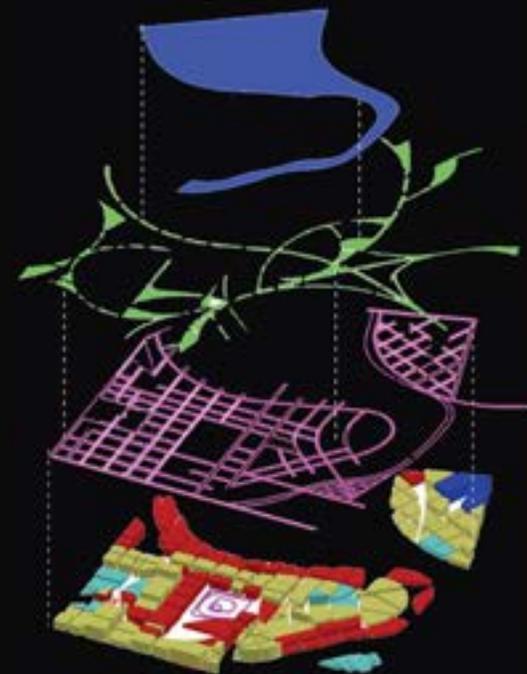
# WILLETS POINT, QUEENS



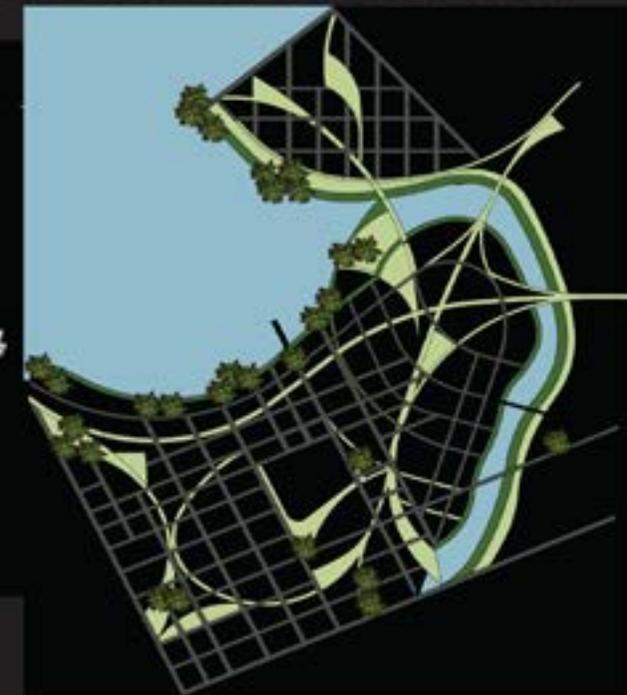
## ANALYSIS



FIGURE GROUND



DESIGN INTERVENTION



EXISTING CONDITIONS



Course Faculty:

Jeffrey Raven, Associate Professor - ARCH701 Urban Design Studio

Director Graduate Program in Urban and Regional Design

Students :

Gowanus Brooklyn: Sherif Abdellatif, Oyku Arda, Farcia Soares

Navy Yard Brooklyn: Sumeyye Sarac, Vinay Nandish, Namrata Patel

Bronx Connector: Sanketa Kadam, Seda Haksoz

Staten Is. St. George: Abhishek Akula, Soujanya Krishnappa, Ana Llopis

Queens Willets Pt.: Pooya Javaheri, Sudha Vasu, Loren Mendoza



This **design jury** drew from faculty and active professionals leading global practices based in the New York City Metroplotian areas.

- Eugene Kwak – CookFox; Adj. Asst. Professor – ARCH841

- Theodore Liebman – Perkins Eastman

- Jack Robbins - FXFOWLE

- Louise Braverman – Louise Braverman Architect

- Andrew Heid - NO ARCHITECTURE

- Gregory Haley - Grimshaw

- Ernesto Vela – Think Architecture

- Beyhan Karajan – NYIT Faculty

- Giovanni Santamaria - NYIT Faculty

- John di Domenico - NYIT Faculty

