
NMC
Island is Land
Archipelago

Content

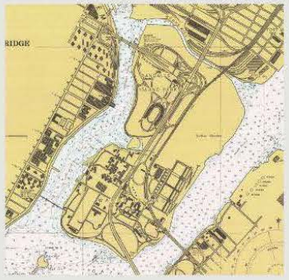
Randalls & Wards Island was an undesirable island surrounding the east and Harlem river which has a history of landfills, while now it's being converted into a recreational park for the city and a great habitat for organisms. The morphology of the island and shifts in shoreline historically and geologically reflect the transformation between land and water. Therefore, we divide the survey into two parts by respectively studying land and water to observe the material exchange in the transformation.

Estimated Sea Level Rise in 2100s
National Oceanic and Atmospheric Administration (2022)

With 10 ft sea level rise, Public amenities such as sports fields and stadiums will be covered by sea water. Coastline with tidal events marsh land will formed.

Estimated Sea Level Rise in 2050s
National Oceanic and Atmospheric Administration (2022)

In 2050 with 3 ft sea level rise, Bronx kill will be permanently water wise. As well as some parts of Wards Meadow where is covered by landfill and is football fields.

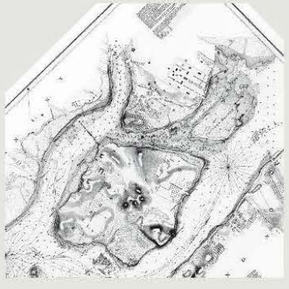


US Dept of Commerce (1996)

Landfill to Randalls and Wards Island was completed in 1988. Randalls and Wards Island was connected and current shoreline was shaped. Sunken Meadow was transformed into baseball fields and recreational parks.

NYC Gov Maps (1948)

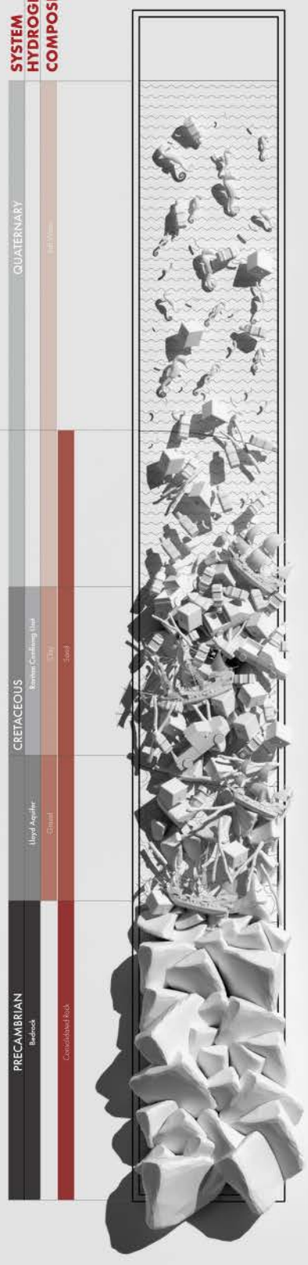
In the early 20th century, the City start realize the value of its location. In 1930, Dept of Parks and Recreations owns Wards Island and focused on the public services. As the expansion of autos and landmass, Robert Moses made plans to connect Randall's and Ward using landfills. It was infilled starting in 1955 when the city allowed construction companies to dump debris in bayswon the islands for free.



Survey of the Coast if the United States (1851)

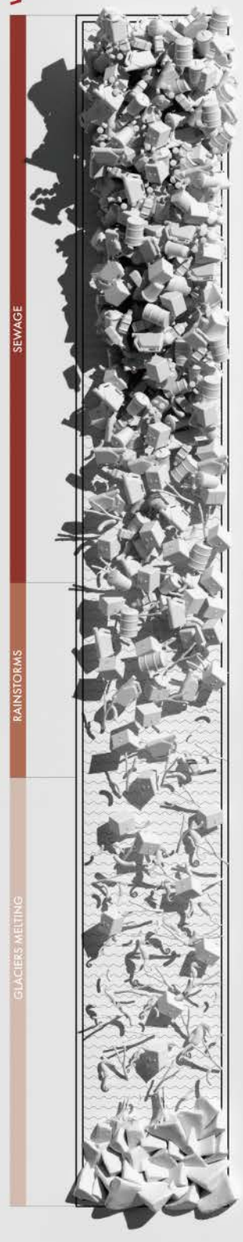
City of New York bought Randall's Island in 1835 from Jonathan Randall. Meanwhile Wards Island was mainly used as a relocation site for Manhattan potter fields.

SYSTEM HYDROGEOLOGIC UNIT COMPOSITIONS



COMPOSITION

WATER SOURCES



COMPOSITION

SOIL TYPE

LUA
Brown Very Artifact Coarse Sandy Loam
few very fine and medium roots

15% Concrete fragments
15% Cobble - sized brick
5% Natural cobbles

^BCu
Brown Very Artifact Coarse Sandy Loam
Weak very fine subangular Blocky structure

25% Concrete fragments
25% Cobble - sized brick
10 % Cobble - sized asphalt fragments
5% Gravel - sized plastic fragments
5% Natural cobbles

^Cu
Brown Very Coarse Sandy Loam
Massive with compaction related plate
few very fine roots

25% Concrete fragments
25% Cobble - sized brick
10 % Cobble - sized asphalt fragments
5% Metal fragments
5% Gravel - sized glass fragments
5% Gravel - sized plastic fragments
7% Natural cobbles

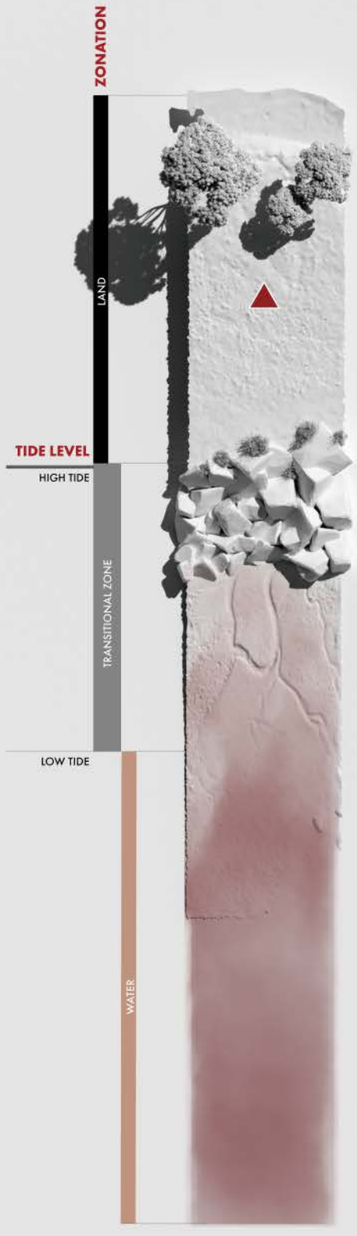
COMPOSITION

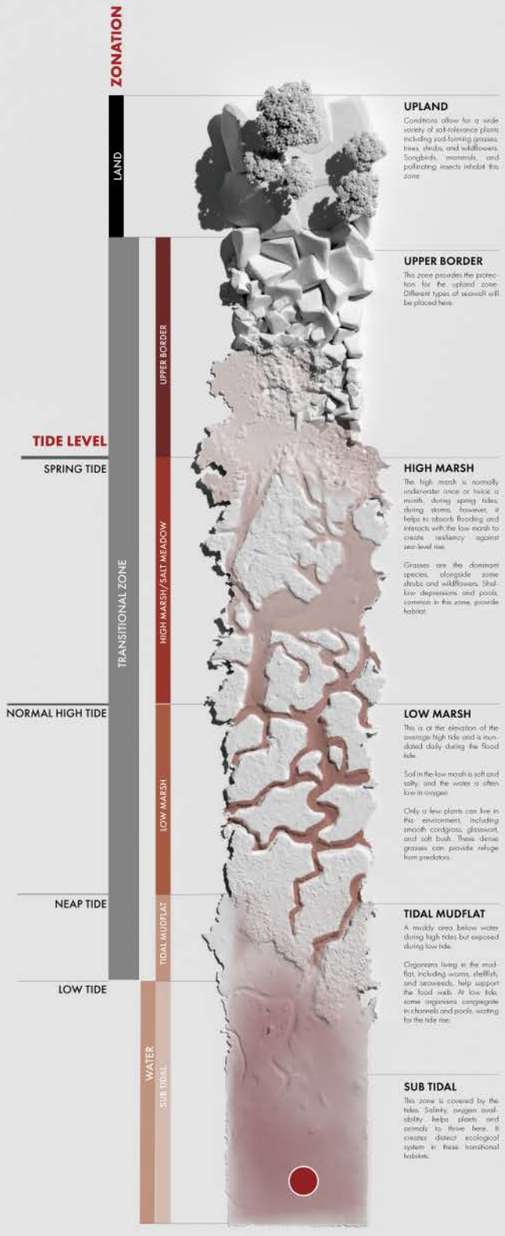
HYDROGEOLOGIC HIERARCHY

HYDRO SOURCES & POLLUTION

GEOLOGIC HIERARCHY

SHORELINE INDEX



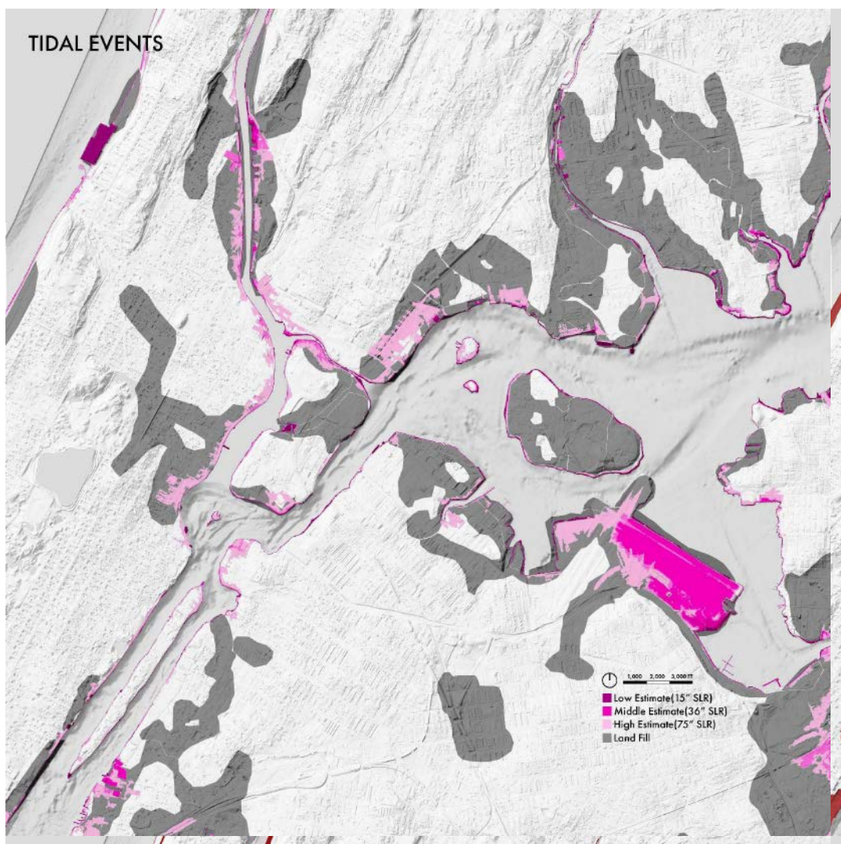


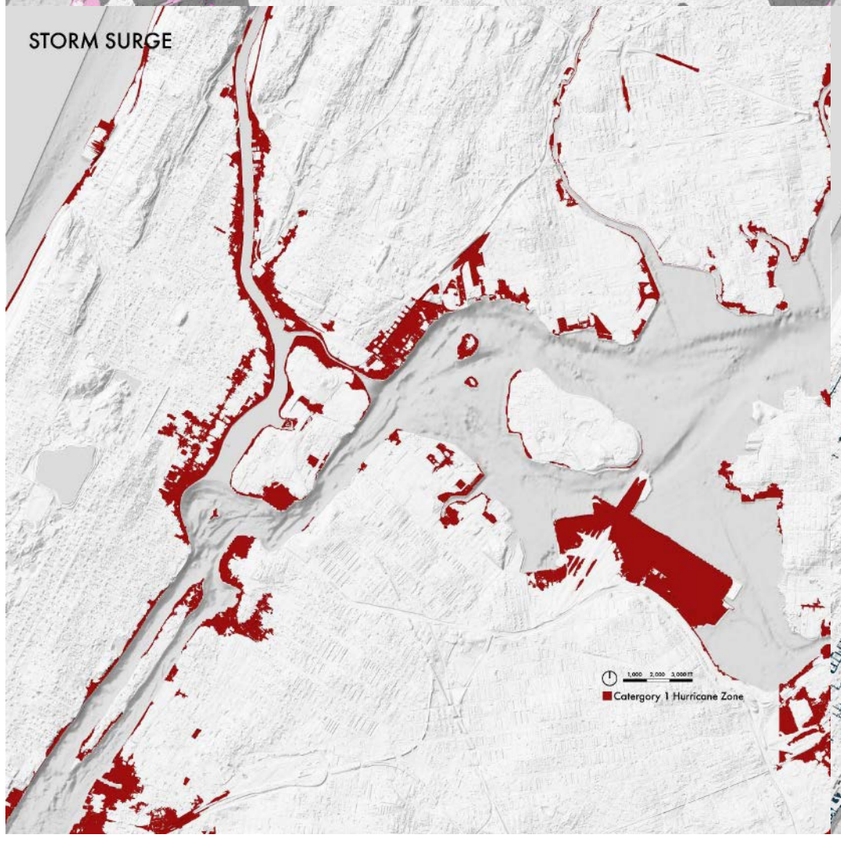
RIPRAP SHORELINE

MARSH SHORELINE

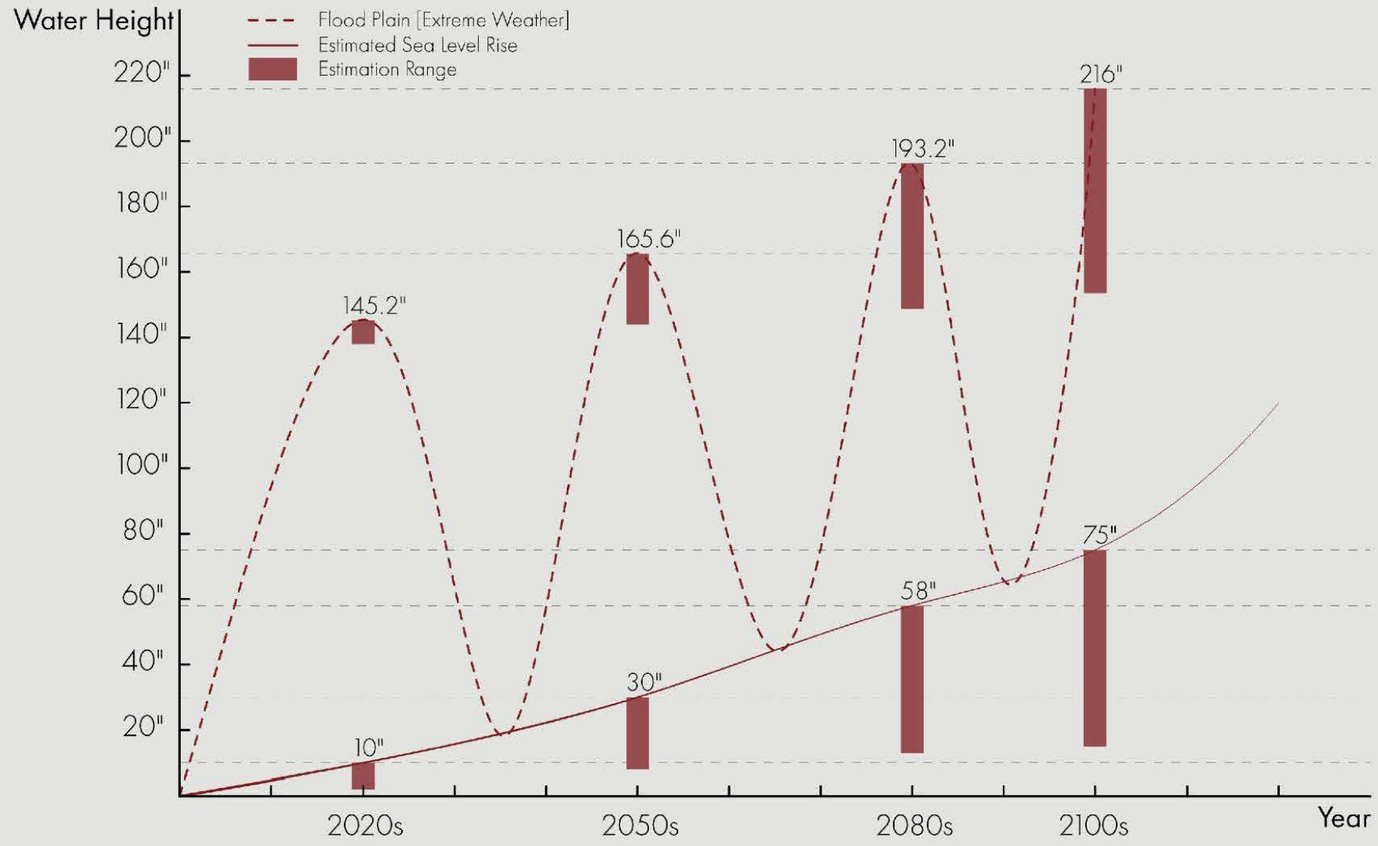
BULKHEAD SHORELINE

We created this map by hatching the shoreline from historical maps from different periods of time. The darker the poche is, the later the land is filled. The yellow line represents the current shoreline. We started looking at the area between the changing shoreline and unfolded the history of land reclamation on our site.

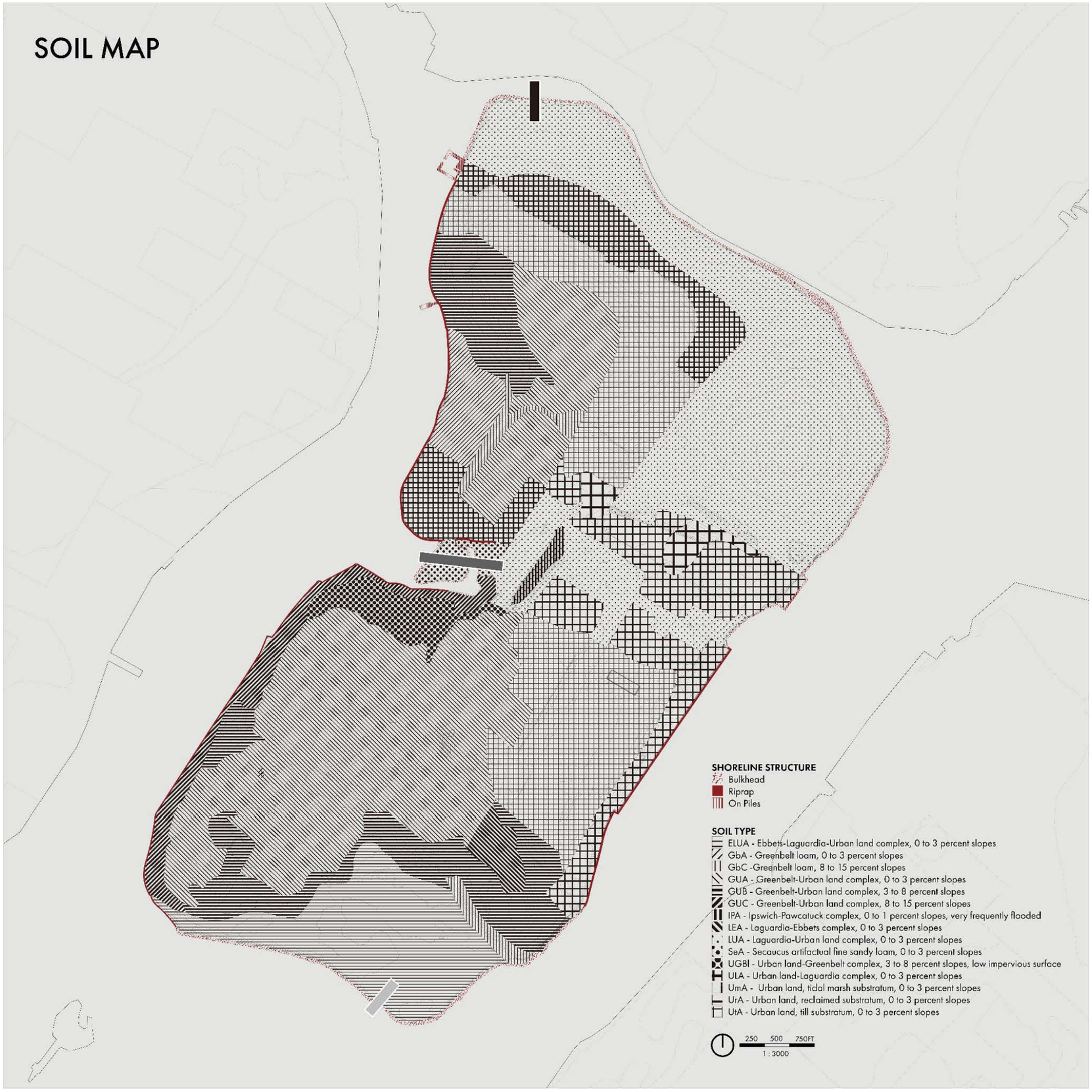




SLR + EXTREME FLOOD GRAPH



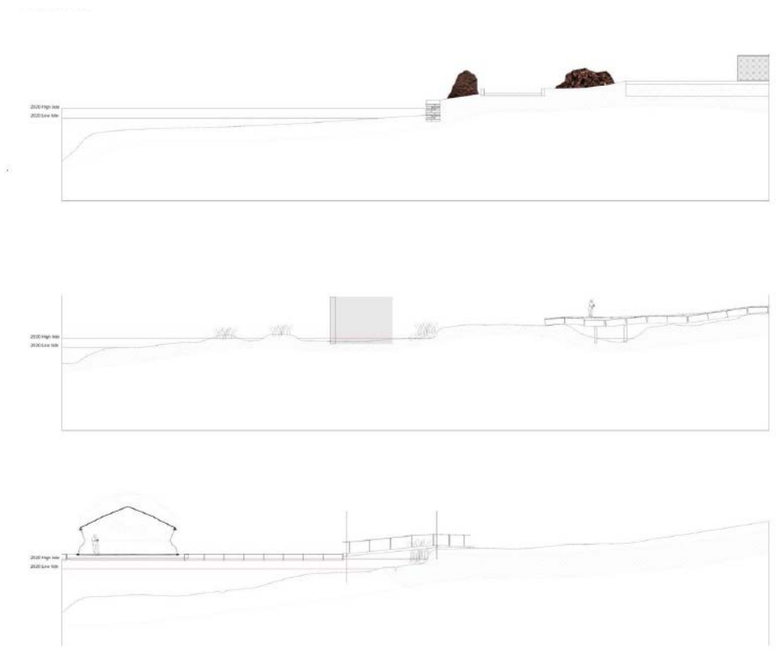
SOIL MAP

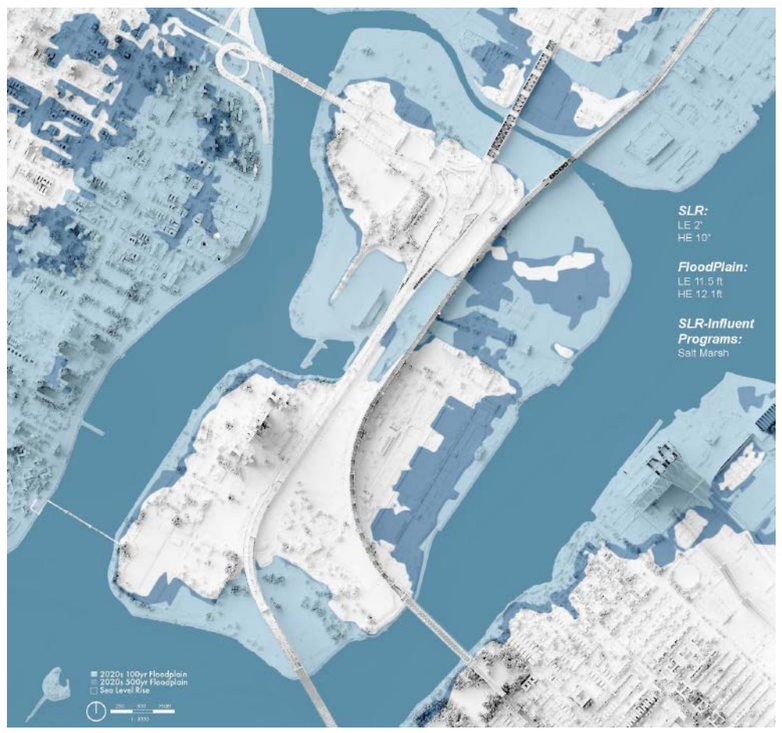


We seek the design oppotunities from the physcial materiality of the Randalls and Wards island.

Randalls And Wards island as aTest Site

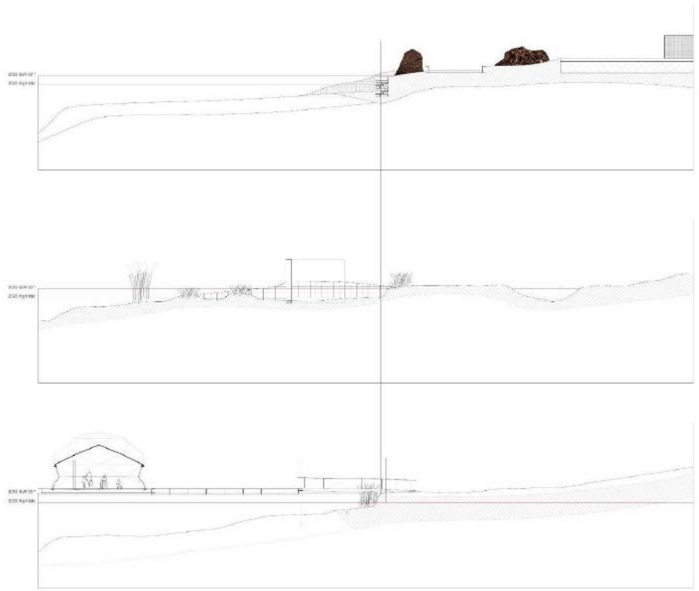
Our vision is turning Randalls and Wards island into a test site for climate changel. Three test sites will be selected and for civic, reseach and recilience test.

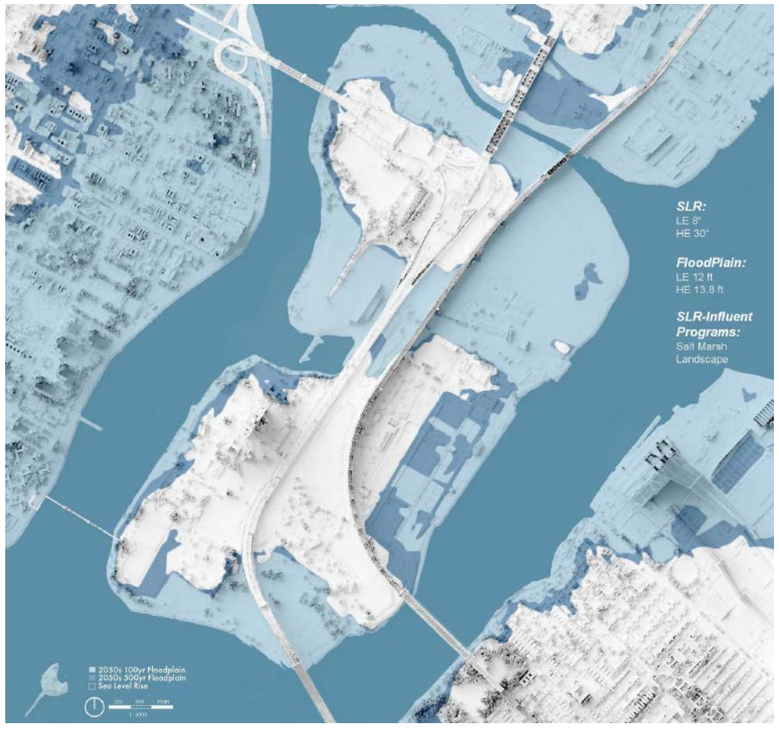




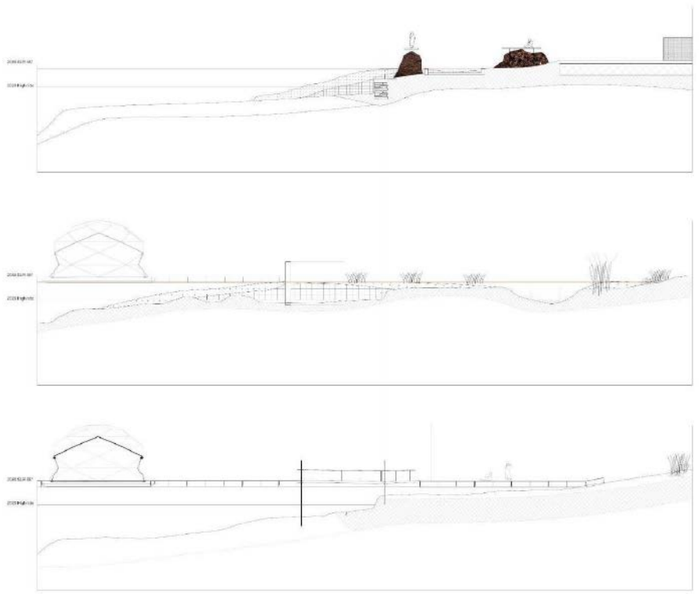
With the controlled tidal events, the salt marsh will grow. The resilient barrier will form.

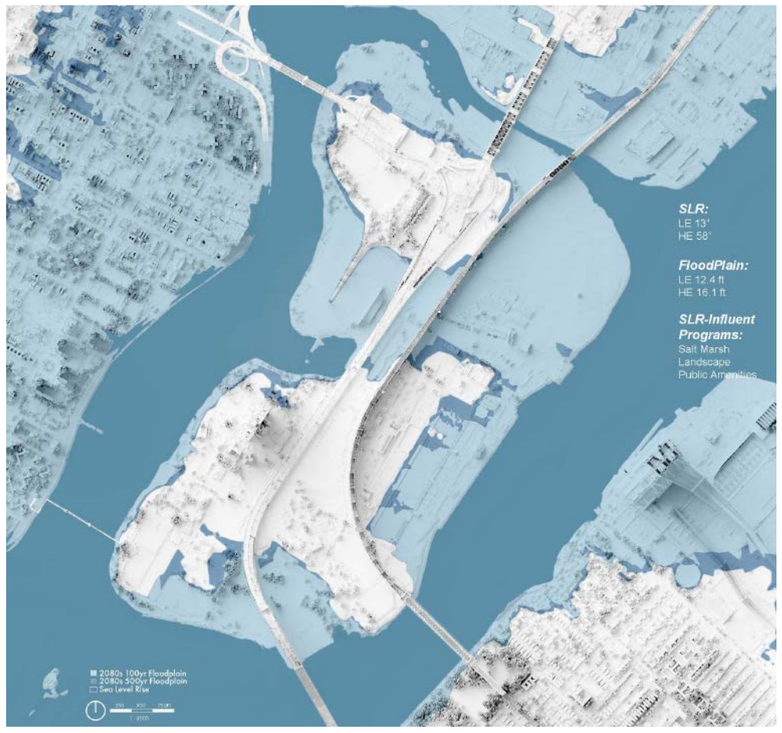
2050s PROJECTION
SECTION



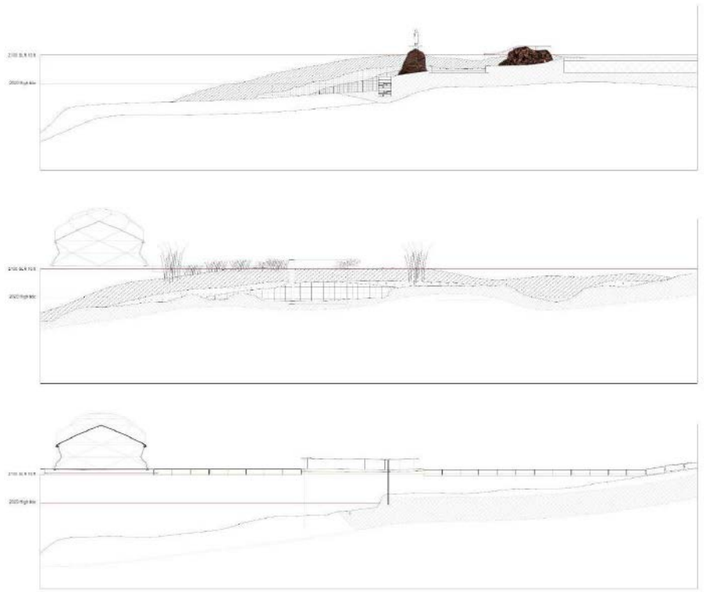


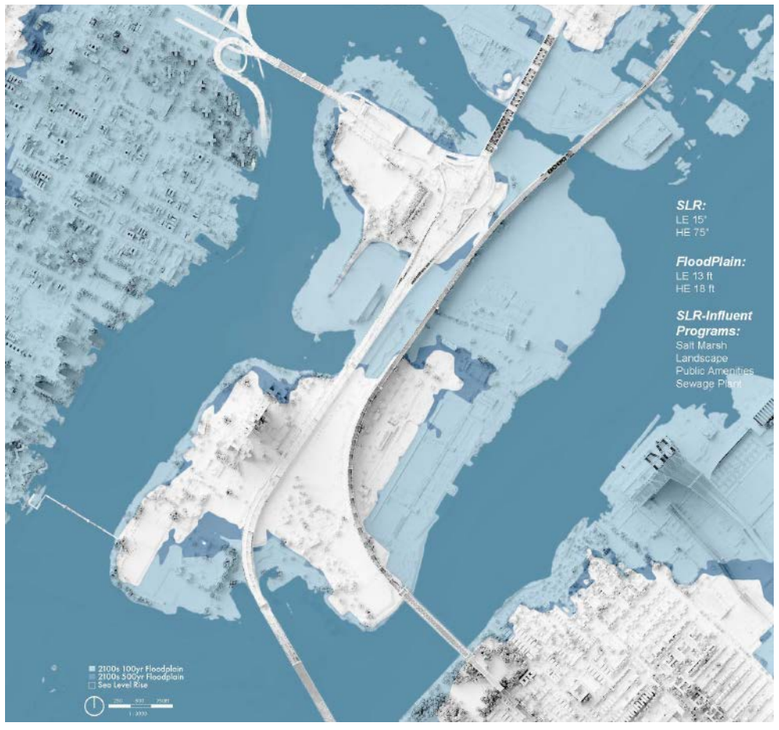
2080s PROJECTION
SECTION

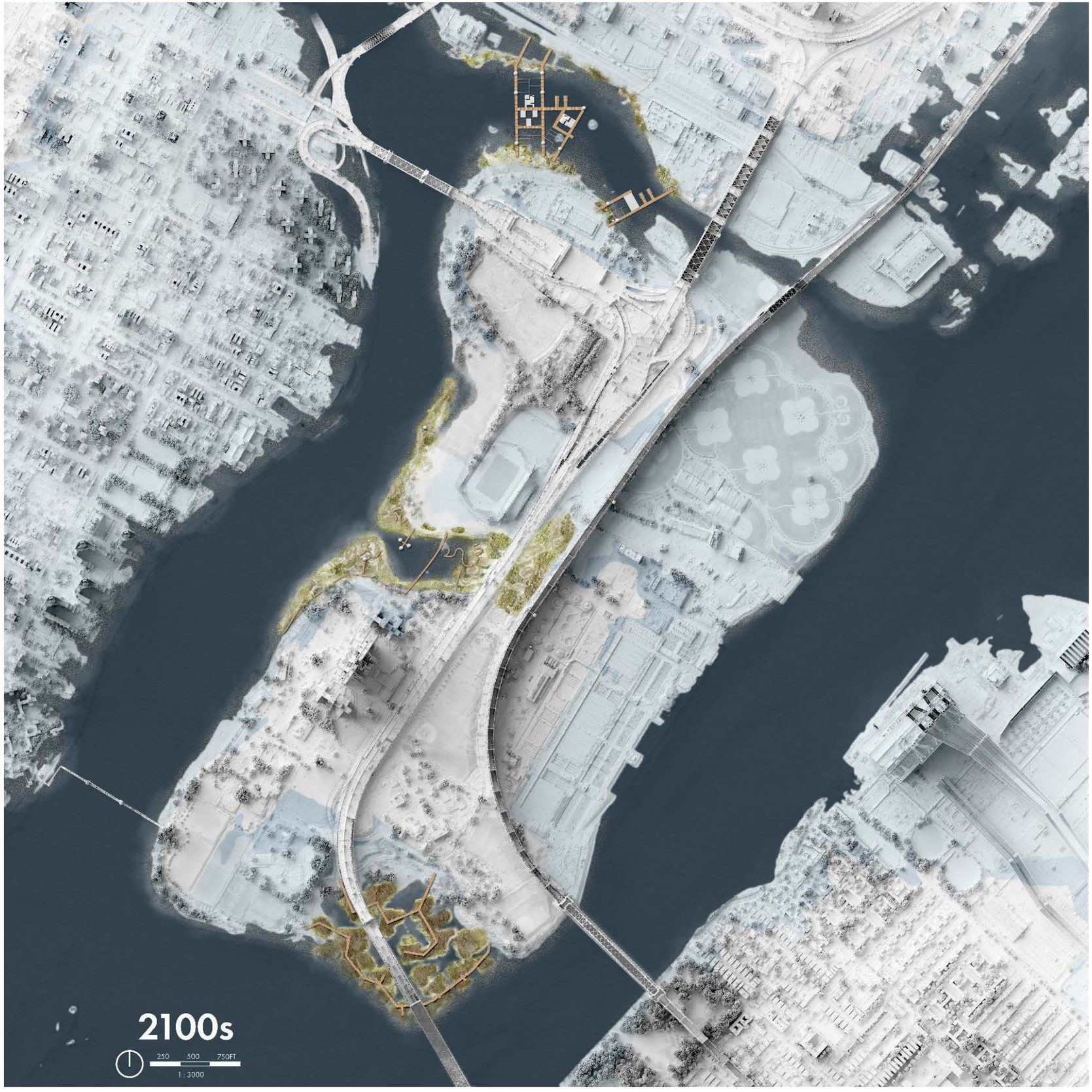




2100s PROJECTION
SECTION

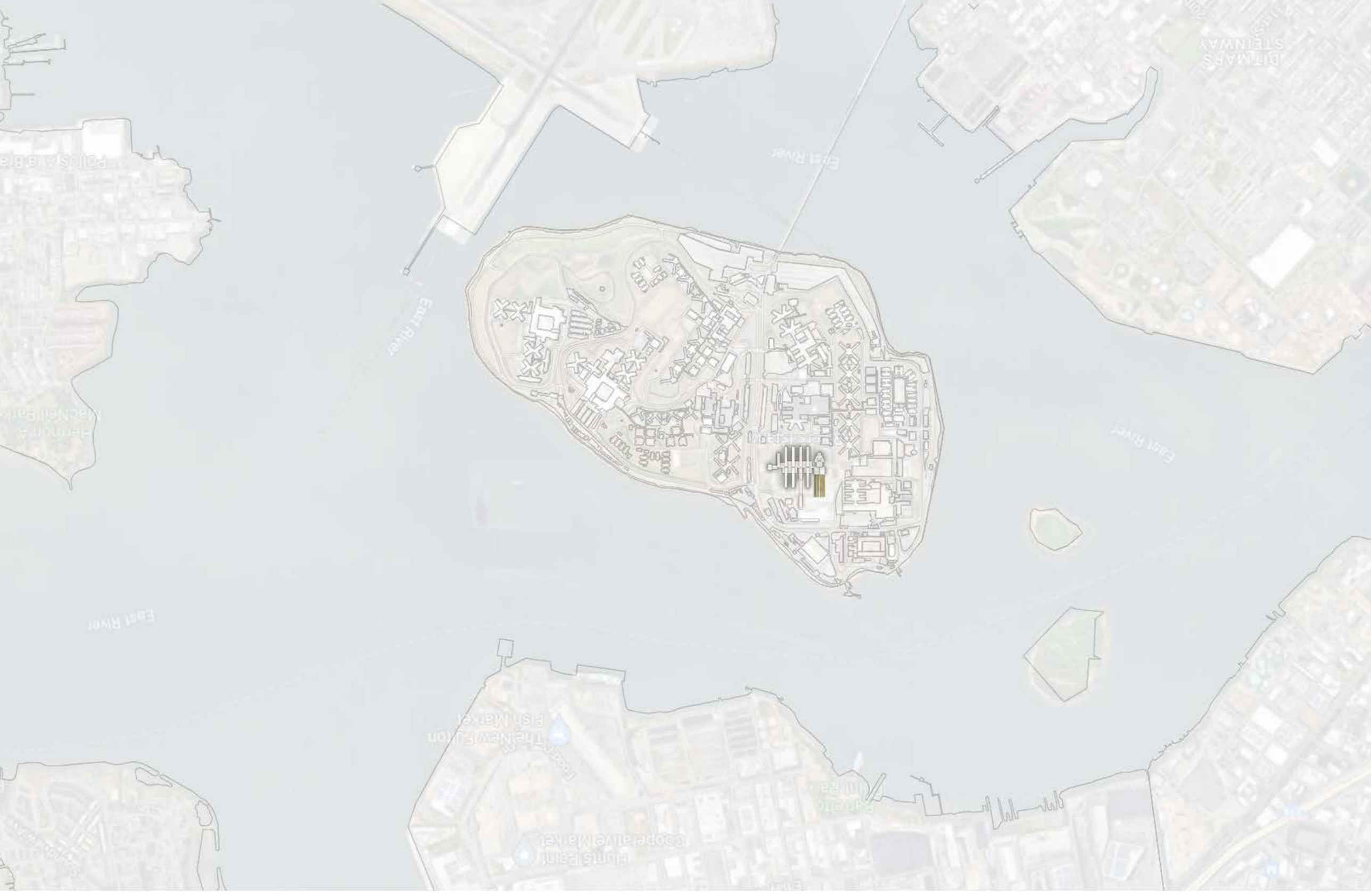






After testing the site for around two centuries, the whole Randalls & Wards Island would beomce Marshland, like it was before in the 18th century...


2200s
250 500 750FT
1 : 3000

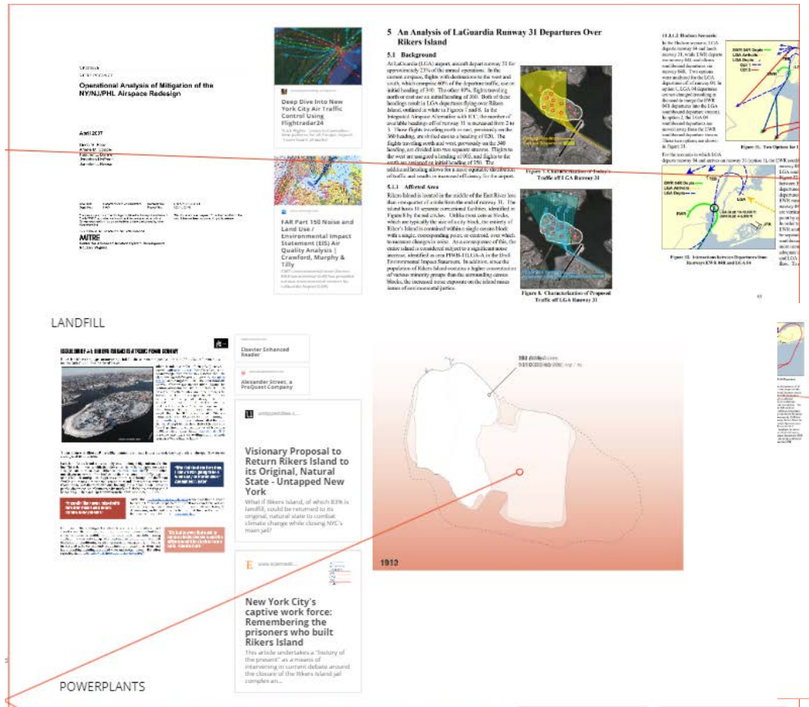

East River
East River
East River
East River
DITMARS
STEINWAY

Statistics for Rikers Island

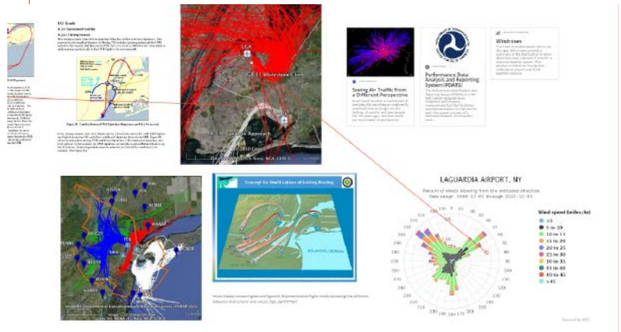
* Two-thirds of the population is detainees
* Male pop 90% of which black/hispanic is 91%
* One of eight males and more than one of four females is HIV positive
* 14% are asthmatic and 4% diabetic
* One in four suffer from psychiatric disorder
* One of 10 has serious and persistent mental illness
* 75 to 95% of inmates have a history of substance abuse
* 10% have a high school diploma
* 50 – 70 percent read below a sixth grade level in English
* more than one-fourth cannot make bail of $500
* almost 3 of 5 have bails of $2,000 or less.
* On average, inmates spend just a month and a half in the jail system
* Half are older than 30
* One-fifth between 25 and 29
* One-quarter 16 – 24
* Highest charge is a felony related to sale or possession
* One of eight is robbery
* One out of 12 for murder or attempted murder
* One of 20 is for burglary
* 70% are for felony offenses
* 30 for misdemeanor (larceny 3.0%, drugs 2.7% and prostitution 0.1%)
* 1992 had an all time high of 21,449 inmates

The Horticultural Society of New York

GROWING WITH THE GARDEN: A CURRICULUM FOR PRACTICING HORTICULTURE WITH INCARCERATED INDIVIDUALS

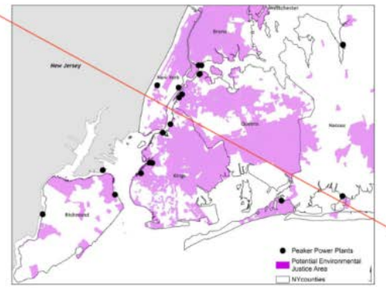


LANDFILL



POWERPLANTS

EXHIBIT 9-5 LOCATION OF PEAKER POWER PLANTS AND POTENTIAL ENVIRONMENTAL JUSTICE AREAS IN THE GREATER NEW YORK CITY AREA.

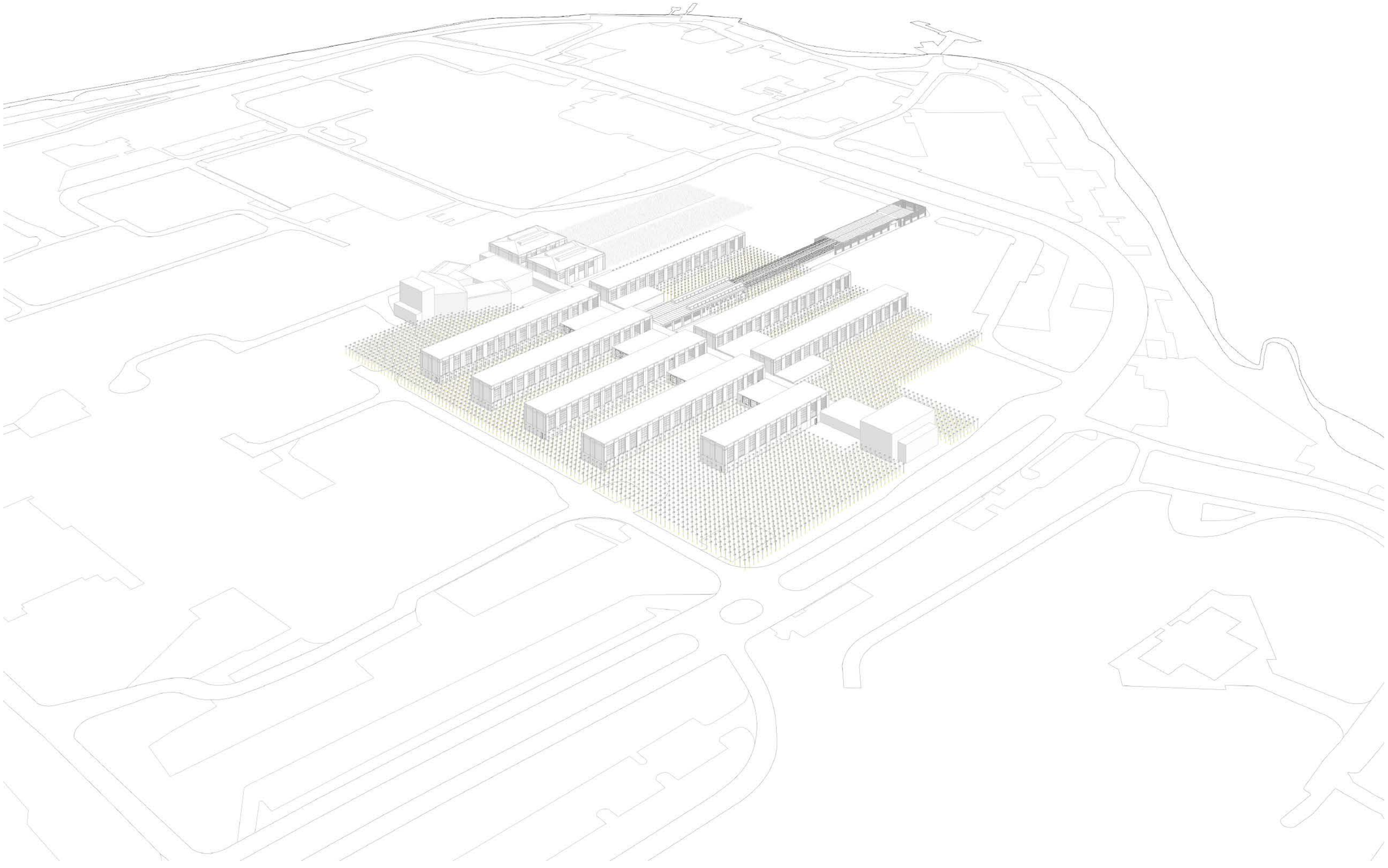


retractable bookshelf detail drawing - Google Search
library floating shelf pull out library bookshelf bookshelf bookends floating shelves millwork elevation cad blocks architecture

Moon Hoon creates an urban greenhouse on a narrow Seoul plot
This narrow building slotted between a pair of high-rise blocks was designed by architect Moon Hoon to function as an urban greenhouse filled with plants.

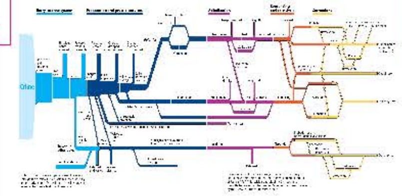
Matrix wall fix track for single and double doors with side panels | Frameless glass doors, Double sliding glass doors, Elegant doors
Apr 26, 2021 - Create beautiful, doorways and room dividers with Sliding Glass Doors, and premium-quality stainless steel sliding tracks. Made to order in the UK.

Rolling Pull-out Library Storage System | Organizing Materials & Supplies | Quickspace | UltraStore | Mobile Shelving | Compact Shelving | High Density Shelving | Stewart Systems | Retractable Shelving | Pull-out File Cabinet
Rolling retractable wall storage cabinets with adjustable steel shelves that accommodate all types of storage including industrial parts, legal files, library books, medical supplies, filing buckets, boxes, and record cartons in this space.



Statistics for Rikers Island

Who are going to Rikers Island ? / Criminal Justice Process



BJS Bureau of Justice Statistics

The Justice System

NY Correction History Society

Rikers Jails

GROWING WITH THE GARDEN: A CURRICULUM FOR PRACTICING HORTICULTURE WITH INCARCERATED INDIVIDUALS

Department of Correction

SMALLER SAFER FAIRER — A roadmap to closing Rikers Island

Smaller Safer Fairer - NYC - Mayor's Office of Criminal Justice

History of Agriculture :

Rikers Island Has A Farm, E-I-E-I-O: Part 1

Inside Rikers Island with the Jail-to-Street GreenHouse Program by the Horticultural Society of New York - Untapped New York

Digging Out from Prison: A Pathway to Rehabilitation - The Solutions Journal

NYC Then & Now

The Secret Jailhouse Garden of Rikers Island (Published 2019)

The Vegetable Gardens On Rikers Island Are Surprisingly Robust

What's growing at Rikers Island GreenHouse | The Horticultural Society of New York

Growing New Lives

Problems I see :

Plantation

Other

Property

Reality

Qualifying /Selection Process

About this program : GreenHouse Project

Goal / Aim / For ? :

Welcome to GreenHouse, a gardening program of the largest penal colony in the world.

It is also home to a little-known garden, an oasis of calm and beauty in the unlikeliest of landscapes.

External Relationship :

Curriculum :

Who are involved in this program? :

230 inmates in 2013

2019

Testimonies :

Organizations / People Involved :

Government Grants

2019 The Hearst Foundation

Found Raiser

2013

W. Atlee Burpee Foundation

Van Ameringen Foundation

Department of Education ?

DOC

NYHS

GreenHouse Project

GreenTeam program

→City Harvest

→Shelthers ?

→Other Community Organization ?

→20 Inner City Libraries ?

→8 School Yards ?

→Non-profit shelters ?

→Public Housing program ?

Can GreenHouse Project

Timeline:

Air :

As the landfill decomposed, the garbage releases poisonous methane gas.

emission of volatile organic compounds from jet fuel, substances hazardous to human health.

These employees described a strong, persistent chemical odor.

This power plant emits significant amounts of matter

generate extreme temperature conditions

No air conditioned cells. exposure to the polluted air around

Center for New York City Affairs

Environmental Hazards and Design Flaws of Rikers Island Center for New York City Affairs

Inside Rikers Island, Through the Eyes of the People Who Live and Work There

Jail has a smell. Worse than a sewer. People on the outside couldn't ever understand.

Value Analysis :

Monetary :

Labour / Time / Income / In and out / cost and benefits / aftermath monetary value / exploit labor? so / inmates

Paid prison labour - Wikipedia

GreenHouse | The Horticultural Society of New York

Air Flow / Spatial Flow

Monetary Flow

Retail price of vegetable $1.79 /pound

Retail price of lavender Sachets $1.39 x 100 ?

Foudraising events : 115,620
Government Grants : $1,296,287
Investment Income : 49,904
Total : 2,415,381

HSNY

GreenHouse Project

Program service Revenue : $845,908

Director : $318,594 /yr, 40hr / week, $28 /hr

Inmates : 2hours / day, $20 / week, $2 /hr, 6 - 8 month

Board Member : 2hr / week, 0 reportable compensation

Products Vale : Cost of one raised bed : $25

GreenTeam Project Maintenance

Program Service Revenue : 1,511,136

Other Jobs

Inmates : Bury dead body $6 /hr

Inmates : Average of $0.62 /hr

Inmates : Food Service assignments $0.16 to $0.45 / hr

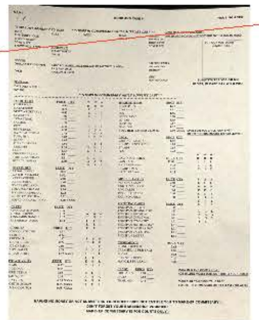
DOC

Commissary

Hygienal items:
Dove $1.86
Deodorant $0.60
Lotion $3.95
Shampoo $1.97

Gate Fee

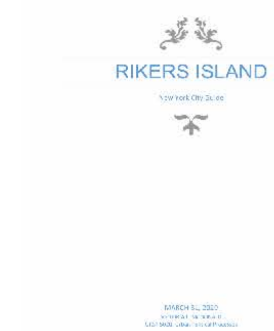
$50 - $200



Total Revenue : 5,011,673

Total Functional Expense : 4,473,892

? other salaries and wages : 1,668,595



RIKERS ISLAND

Product from the project:

Food output :

Cloves, Garlic, herb cream cheese, cold remedies → Shared with horticulture students

Peppers

value-added products, such as a soothing herbal balm, seed packages and lavender sachets, 28 raised beds

Culinary, Medicinal, and Ornamental Plants: Rosemary, Tarragon, Thyme, Hot Peppers, Chamomile, Valerian, Wormwood, Lavender, Mint

Each outcome delivered to another growing community and building trust

Infrastructures :

62 raised beds
peach trees, fig trees and papaya trees
There is a grape arbor, as well as a chest-tall patch of native plants thronged with butterflies and bees, visited by the occasional opossum.

Proliferation:

Secure the land in City

Other Production Output :

To date, GreenHouse and GreenTeam have been responsible for the greening and garden maintenance of 20 inner-city libraries and eight schoolyards, in addition to numerous city and nonprofit shelters, public housing projects, city parks, and community and private gardens—with GreenHouse providing the seedlings and GreenTeam providing the on-location work.

formerly incarcerated men and women have made tangible impacts on the city's built environment, beautifying hundreds of green spaces throughout the city in the last 16 years.

When we ignore these realities we *exclude entire groups of people and spaces from our collective imagination of the future city, foreclosing possibilities before they have the chance to emerge, restraining people before they have the opportunity to work towards their potential.*

Joyce's Garden is a way attempt to reconcile the disparities arising from the superimposition of our text on another, instead encouraging the opposed and often conflicting logics of different systems....

The point grid became the tool of an approach the targued, against functionalist doctrines, that there is no cause and effect relationship between the terms of "program" and "architecture".

Garden / Archive

Localisation --> etendue --> emplacement

Medevial   Modern   Contemporary

Experience the time and space

It connect other emplacements but in a different way. It has the quality of suspendent, neutralist or inverse the relationship. The relationship is designed, reflected or reflechis through those spaces.

These spaces are catergetized in to two genres : utopia and heterotopia

These kinds of space had Epistemology and Methodology has its meaning
These spaces can distrub the emplacements

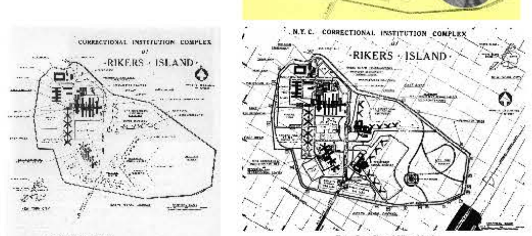
opposite to the utopia = heterotopias = anti - emplacement
Its programs are, suspendent, neutralist, inverse, degines, reflets, reflechis, representes, contestes, inverses daily spatial relationship / emplacements

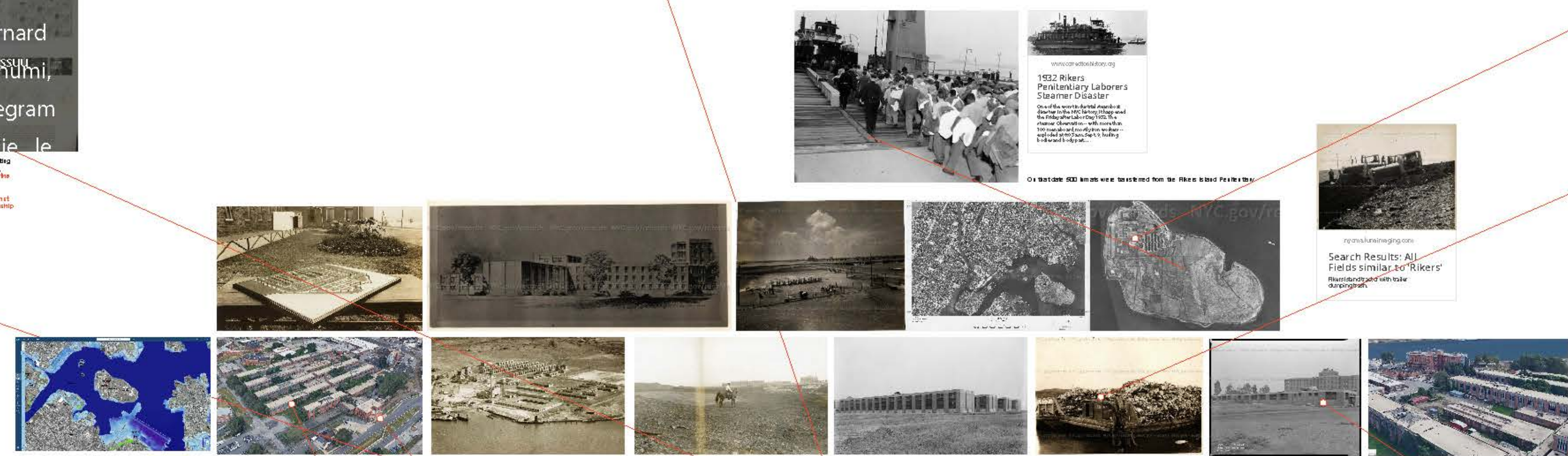
Cemetory / Museum
Idealized order / Colony / garden / boats
delusional space / compensatory space
brothel = a delusional space = where the normal moral standard is not applicable or doest need to be implemented
compensatory space = another space but has the same precise order / arrangement of our space
Colony Heterotopia = practice / realization of the colonizer's home country's rule / regulation and resist / deny the vernacular order.
ANOTHER perfect formal space VS Chaotic current

GARDEN
the oldest example of heterotopias = contrary sites
Garden = realization of another seemingly perfect order / formal space
English Garden VS French Garden
Garden = a reflection of spatial power and intention
Carpet as the reproduction of the garden
Like god, create a prefect world and stand on it... (opinion)

elf - funded ?

NYCHS Presents Ted K Raderman's 1972 'Rikers Island: Past, Present, Future'





James A. Thomas Center

had been completed Feb. 7, 1936

The NYC DOC – Rikers Island – James A. Thomas Center (JATC) will also temporarily house local offenders accused of felonies and misdemeanors.

The NYC DOC – Rikers Island – James A. Thomas Center (JATC) is quite big, with the capability of housing up to 1194 inmates, both male and female. The facility was previously used as an ICE (Immigration and Customs) holding facility, but after 2016 the contract was canceled, turning it to a prison facility.

Located in New York, the NYC DOC – Rikers Island – James A. Thomas Center (JATC) has a total of 8 jail cells, so it is small in size. The NYC DOC – Rikers Island – James A. Thomas Center (JATC) houses people who are both still awaiting arraignment as well as those who have been sentenced. Usually, inmates have a cell to themselves, but they might need to share a cell with another inmate. There are also two temporary cells designed for temporary holdings as inmates are being transferred to another facility.

Commissioner Patterson, according to the *Times* 1931 story about the cornerstone ceremonies, said that, when the facility opened, all newly arriving inmate would spend at least 30 days in a "receiving building" being examined by psychiatrists, psychologists and doctors; would receive the attention of a social services bureau, have access to library, opportunity to attend school, exercise, learn a trade, etc.

He declared the new institution was "designed to return the prisoner to society better than when he entered it, not worse, as is the case today." Those remarks were consistent with the message encased in the cornerstone. Both reflected a faith (more widely and deeply held back then than today) in the ability of "the sciences of human behavior" to "solve a problem which up until now has existed since the world began" – that is, the problem of crime and its perpetrators.

Presumed Innocent - Rikers Island House of Detention for Men, NYC

Rikers Island Prison, Cafeteria

Rikers Island Penitentiary cornerstone "inside story"

Rikers Island Penitentiary - Design Commission

Story of Rikers Penitentiary mess hall WPA mural and photo

1932 Rikers Penitentiary Laborers Steamer Disaster

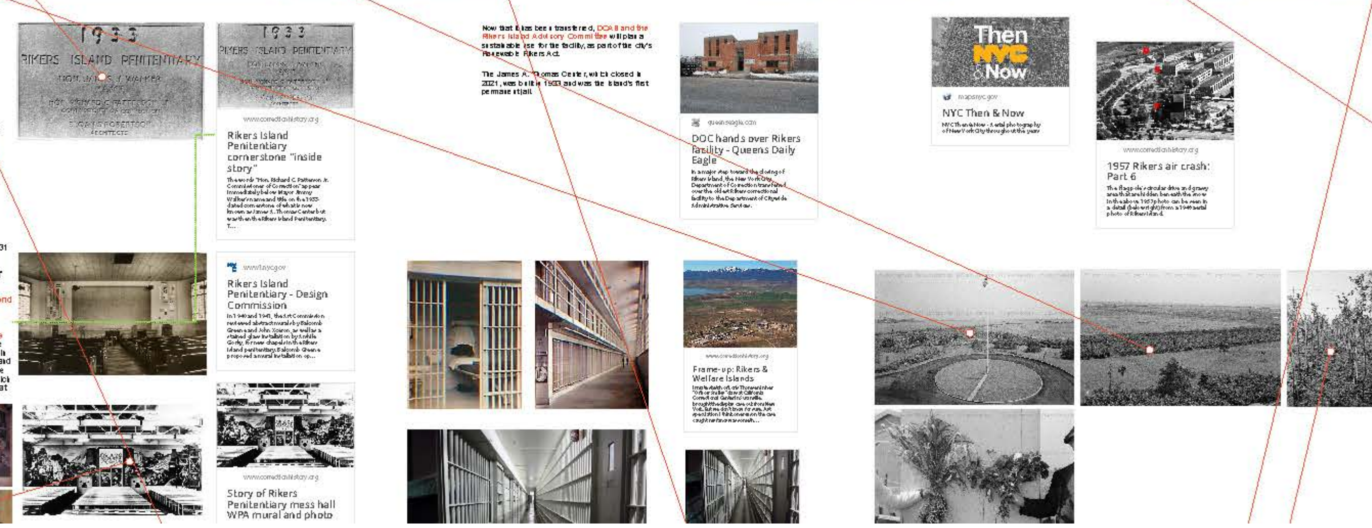
Search Results: All Fields similar to "Rikers"

DOC hands over Rikers facility - Queens Daily Eagle

NYC Then & Now

1957 Rikers air crash: Part 6

Frame-up: Rikers & Welfare Islands



In Cameron Rowland's '91020000,' Disquieting Sculptures (Published 2016)

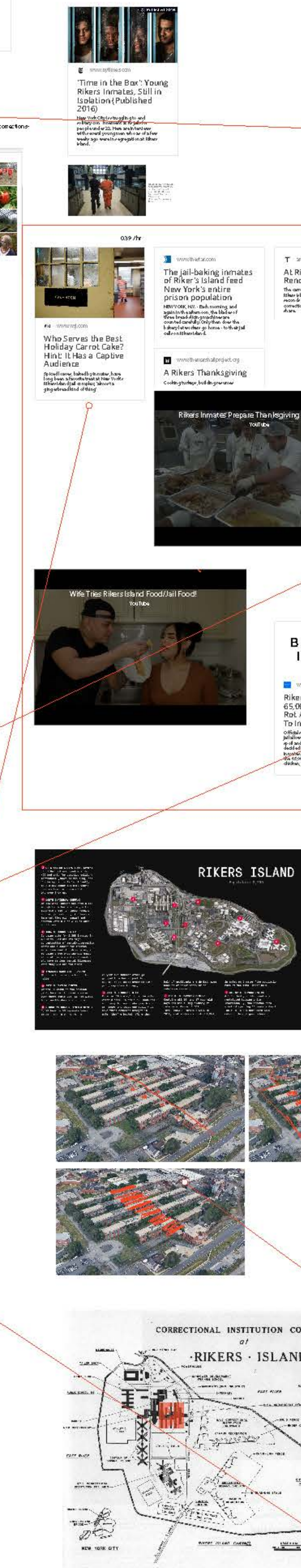
oma prada STORE DRAWINGS - Google Search

CAMERON ROWLAND 91020000

The Exhibition Hall by OMA

Tom Band - UNIT 21

Projects 90: Song Dong | MoMA



'Time in the Box': Young Rikers Inmates, Still in Isolation (Published 2016)

The jail-baking inmates of Riker's Island feed New York's entire prison population

Who Serves the Best Holiday Carrot Cake? Hint: It Has a Captive Audience

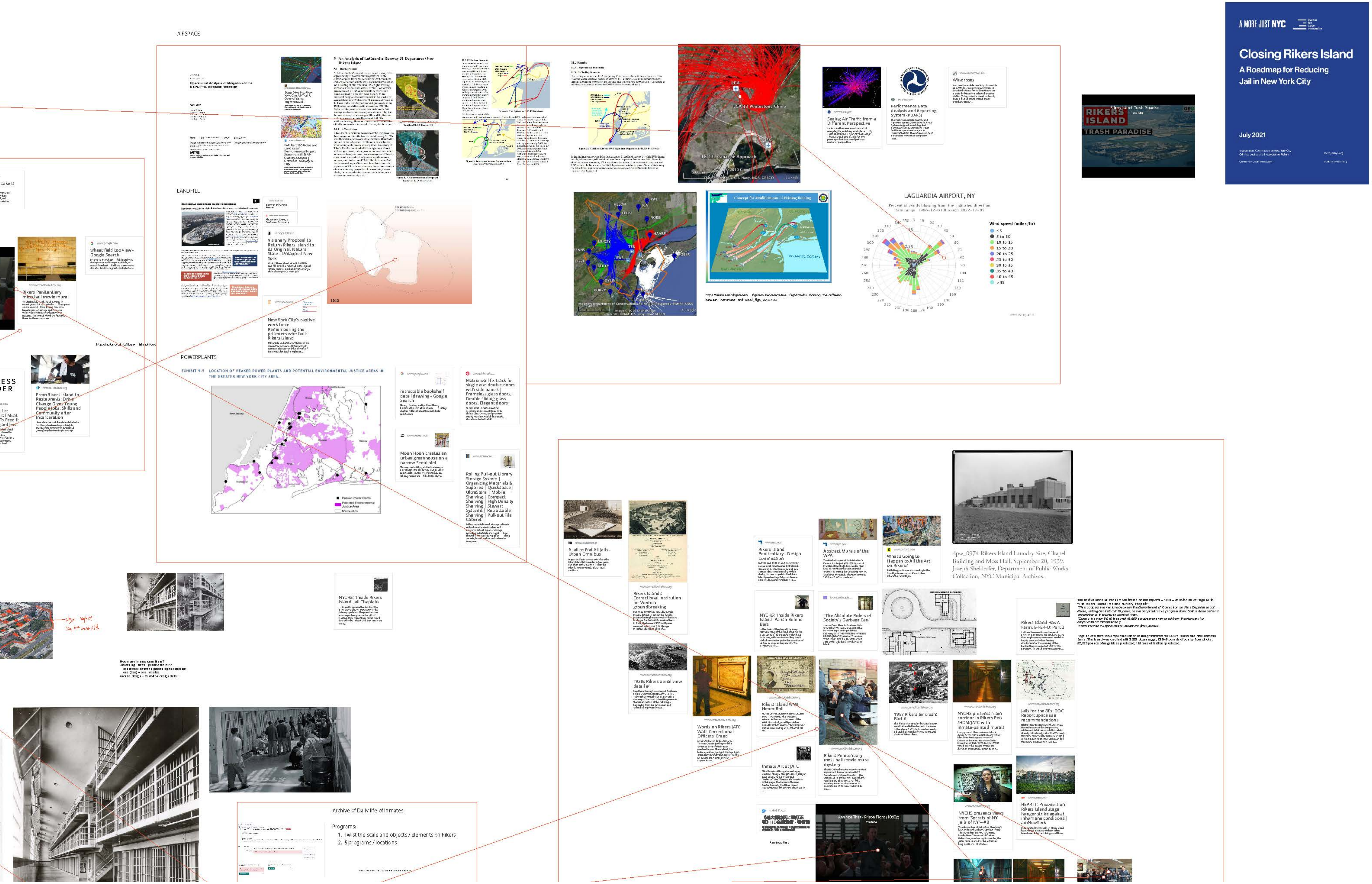
A Rikers Thanksgiving

Rikers Inmates Prepare Thanksgiving

Wife Tries Rikers Island Food/Jail Food!

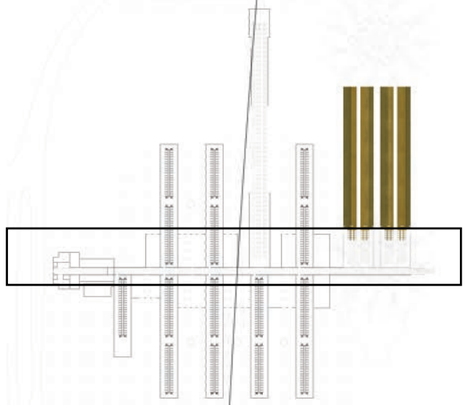
RIKERS ISLAND

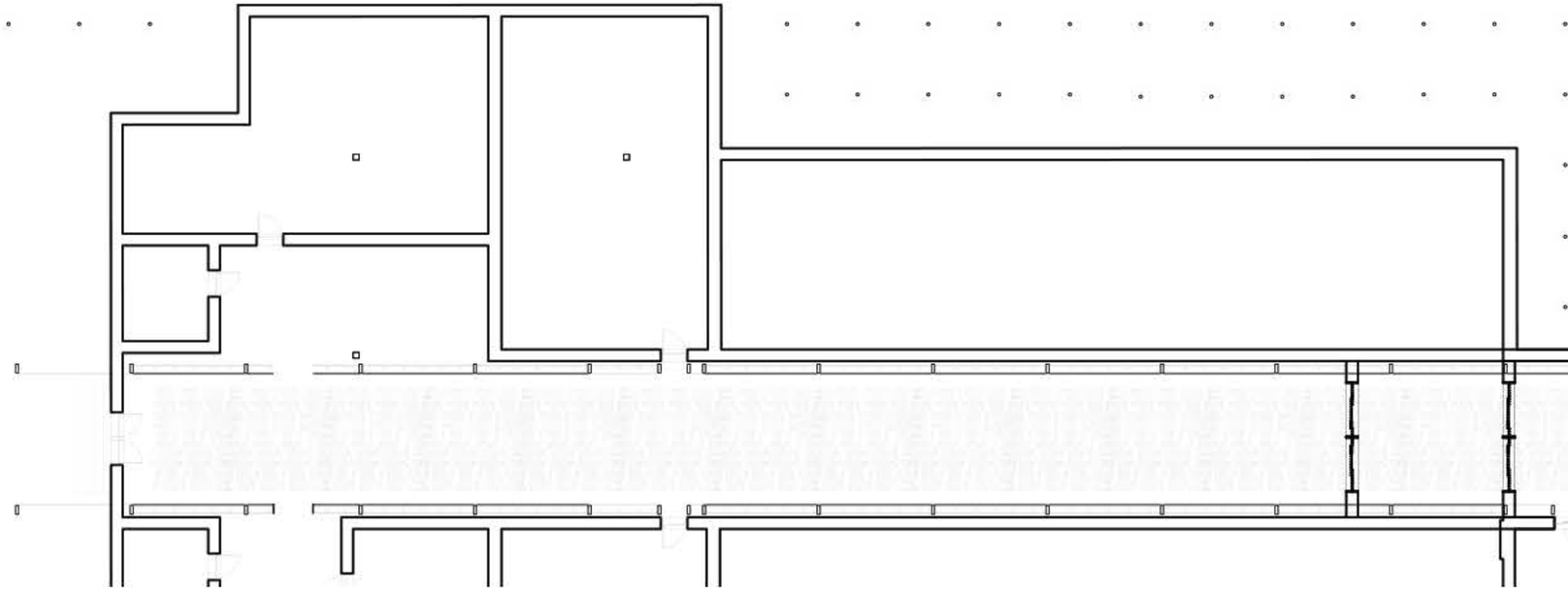
CORRECTIONAL INSTITUTION COMPLEX · RIKERS · ISLAND

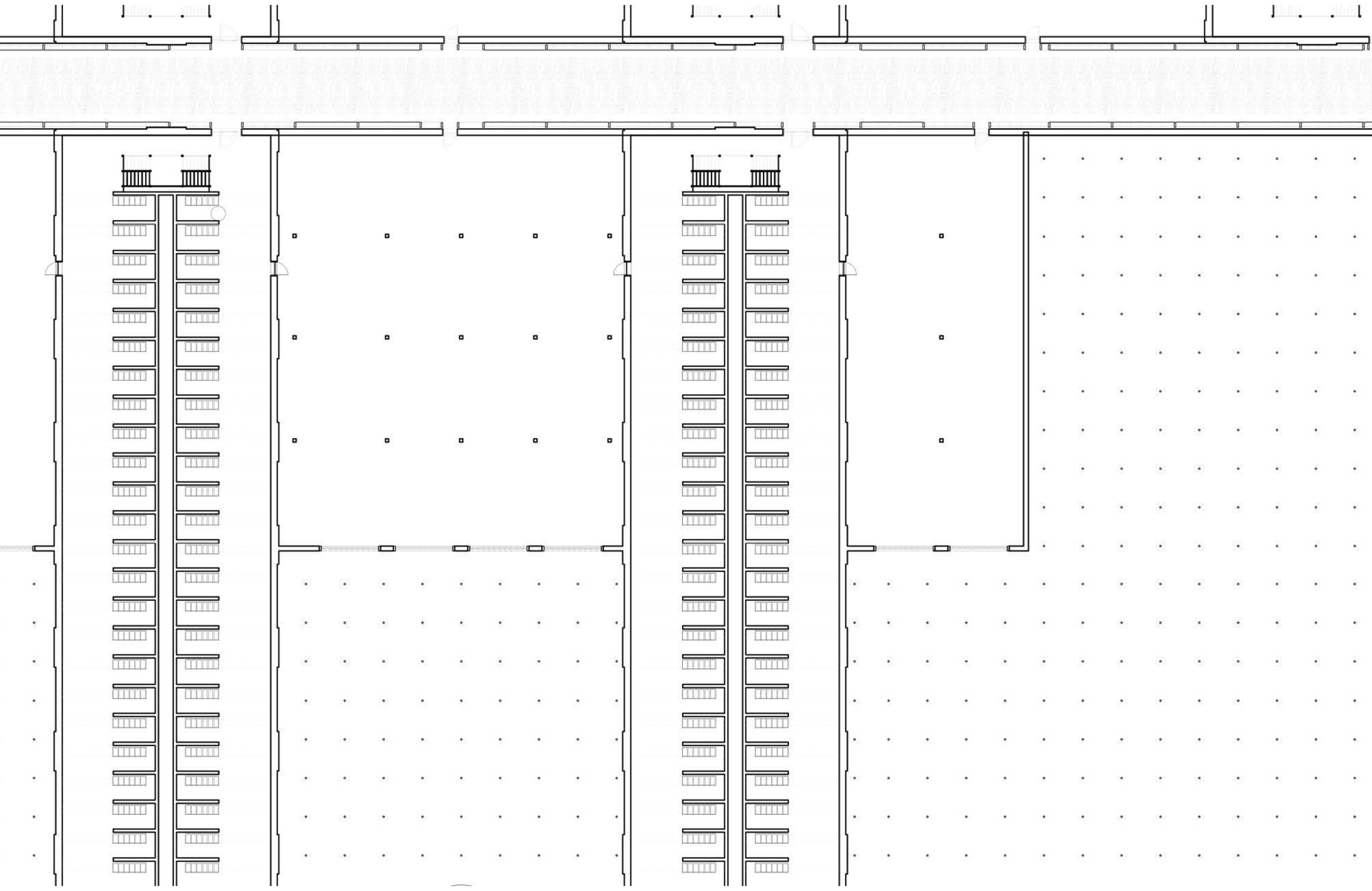


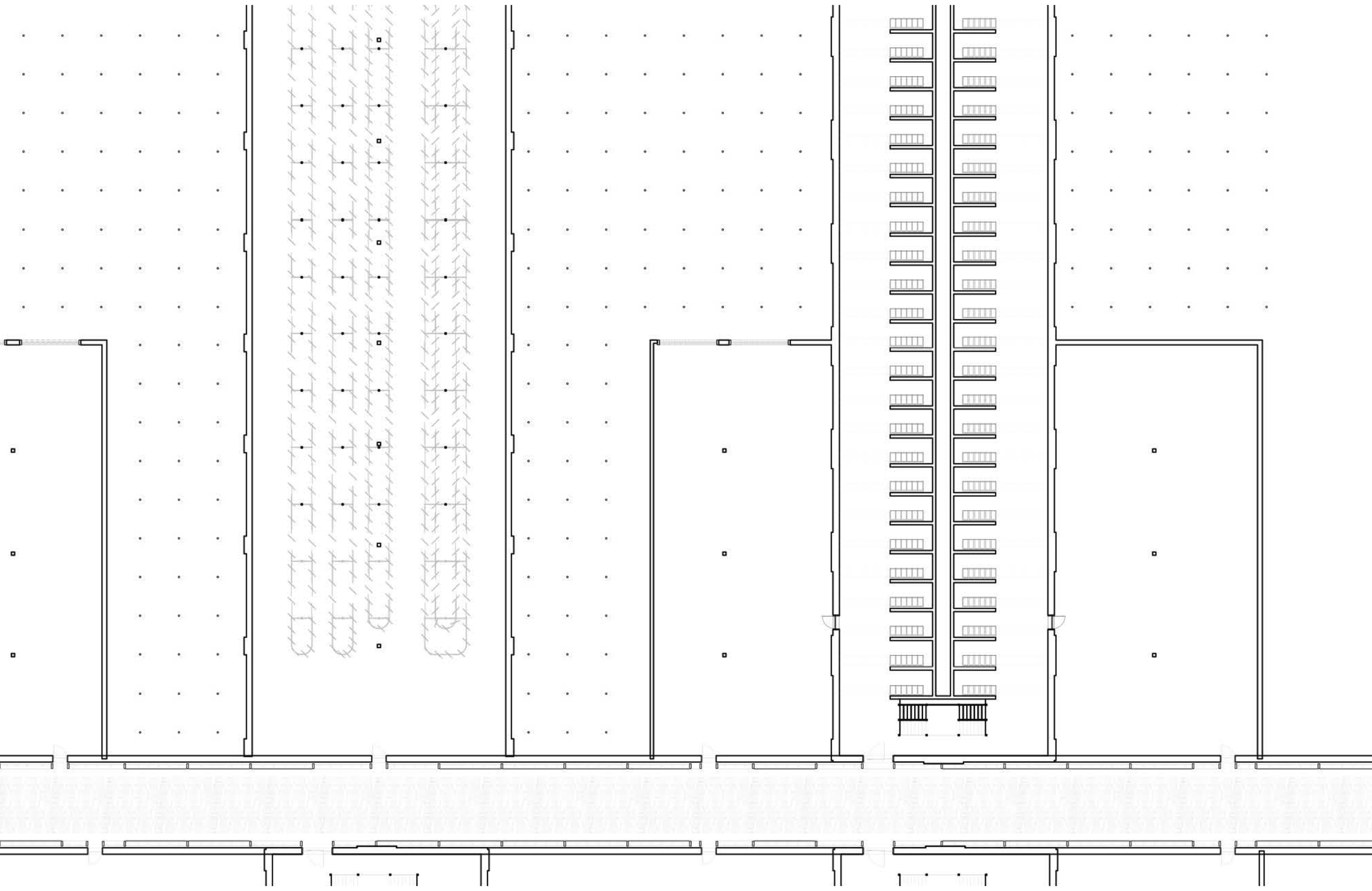
AIRSPACE
5 An Analysis of LaGuardia Runway 31 Departures Over Rikers Island
Seeing Air Traffic from a Different Perspective
Performance Data Analysis and Reporting System (PDARS)
Windroses
Concept for Modifications of Existing Routing
LAGUARDIA AIRPORT, NY
Wind speed (miles/hr)
A MORE JUST NYC
Closing Rikers Island
A Roadmap for Reducing Jail in New York City
July 2021
Rikers Island: Trash Paradise
RIKERS ISLAND
TRASH PARADISE
LANDFILL
Visionary Proposal to Return Rikers Island to its Original, Natural State - Untapped New York
wheat field top view - Google Search
Rikers Penitentiary mess hall movie mural
New York City's captive work force: Remembering the prisoners who built Rikers Island
From Rikers Island to Restaurants: Drive Change Gives Young People Jobs, Skills and Community after Incarceration
POWERPLANTS
EXHIBIT 9-5 LOCATION OF PEAKER POWER PLANTS AND POTENTIAL ENVIRONMENTAL JUSTICE AREAS IN THE GREATER NEW YORK CITY AREA
retractable bookshelf detail drawing - Google Search
Matrix wall for track for single and double doors with side panels | Frameless glass doors, Double sliding glass doors, Elegant doors
Moon Hoon creates an urban greenhouse on a narrow Seoul plot
Rolling Pull-out Library Storage System | Organizing Materials & Supplies | Quickspace | UltraStore | Mobile Shelving | Compact Shelving | High Density Shelving | Stewart Systems | Retractable Shelving | Pull-out File Cabinet
NYCHS: 'Inside Rikers Island' Jail Chaplain
A Jail to End All Jails - Urban Omnibus
Rikers Island's Correctional Institution for Women groundbreaking
1930s Rikers aerial view detail #1
Words on Rikers JATC Wall: Correctional Officers' Creed
Rikers Island Penitentiary - Design Commission
NYCHS: 'Inside Rikers Island' Parish Behind Bars
Rikers Island WWII Honor Roll
Inmate Art at JATC
Abstract Murals of the WPA
"The Absolute Rulers of Society's Garbage Can"
Rikers Penitentiary mess hall movie mural mystery
What's Going to Happen to All the Art on Rikers?
1957 Rikers air crash: Part 6
NYCHS presents main corridor in Rikers Pen /HDM/JATC with inmate-painted murals
NYCHS presents views from 'Secrets of NY: Jails of NY' - #8
Rikers Island Has A Farm, E-I-E-I-O: Part 3
Jails for the 80s: DOC Report space use recommendations
HEAR IT: Prisoners on Rikers Island stage hunger strike against inhumane conditions | amNewYork
Analyze That - Prison Fight (1080p)
dpw_0974 Rikers Island Laundry Site, Chapel Building and Mess Hall, September 20, 1939. Joseph Shelderfer, Department of Public Works Collection, NYC Municipal Archives.
Archive of Daily life of Inmates
Programs:
1. Twist the scale and objects / elements on Rikers
2. 5 programs / locations

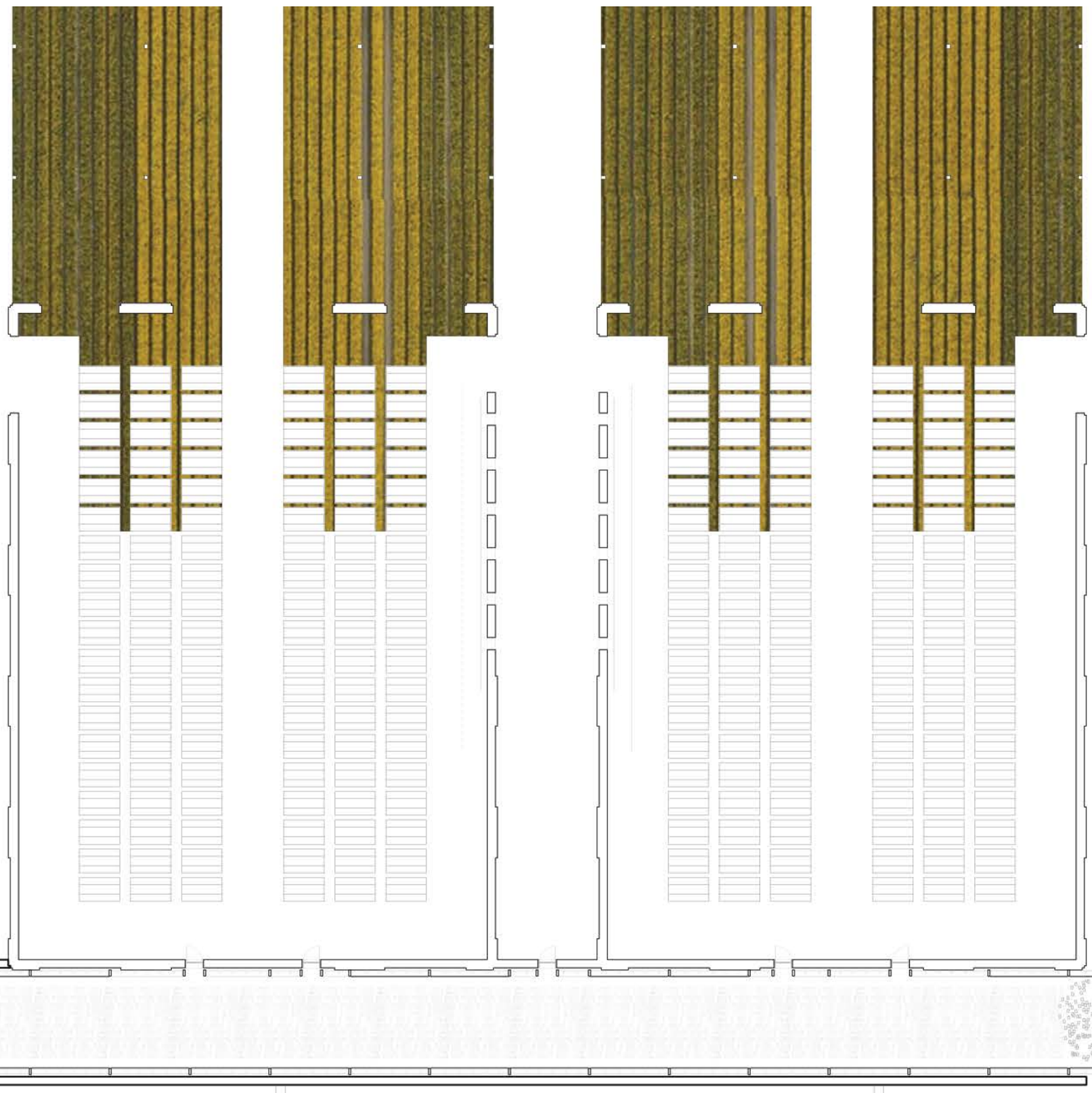
Five Archives In JATC





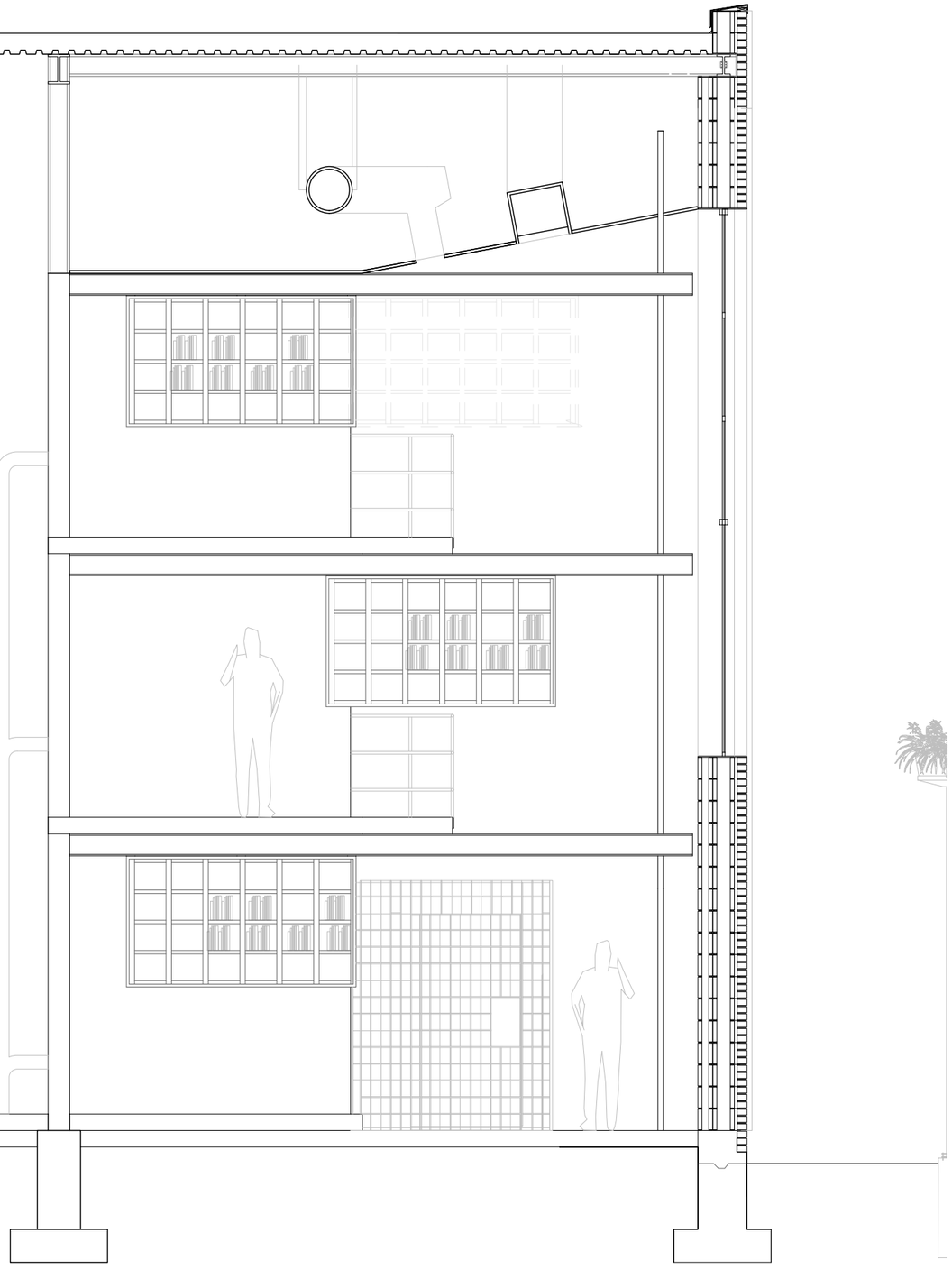


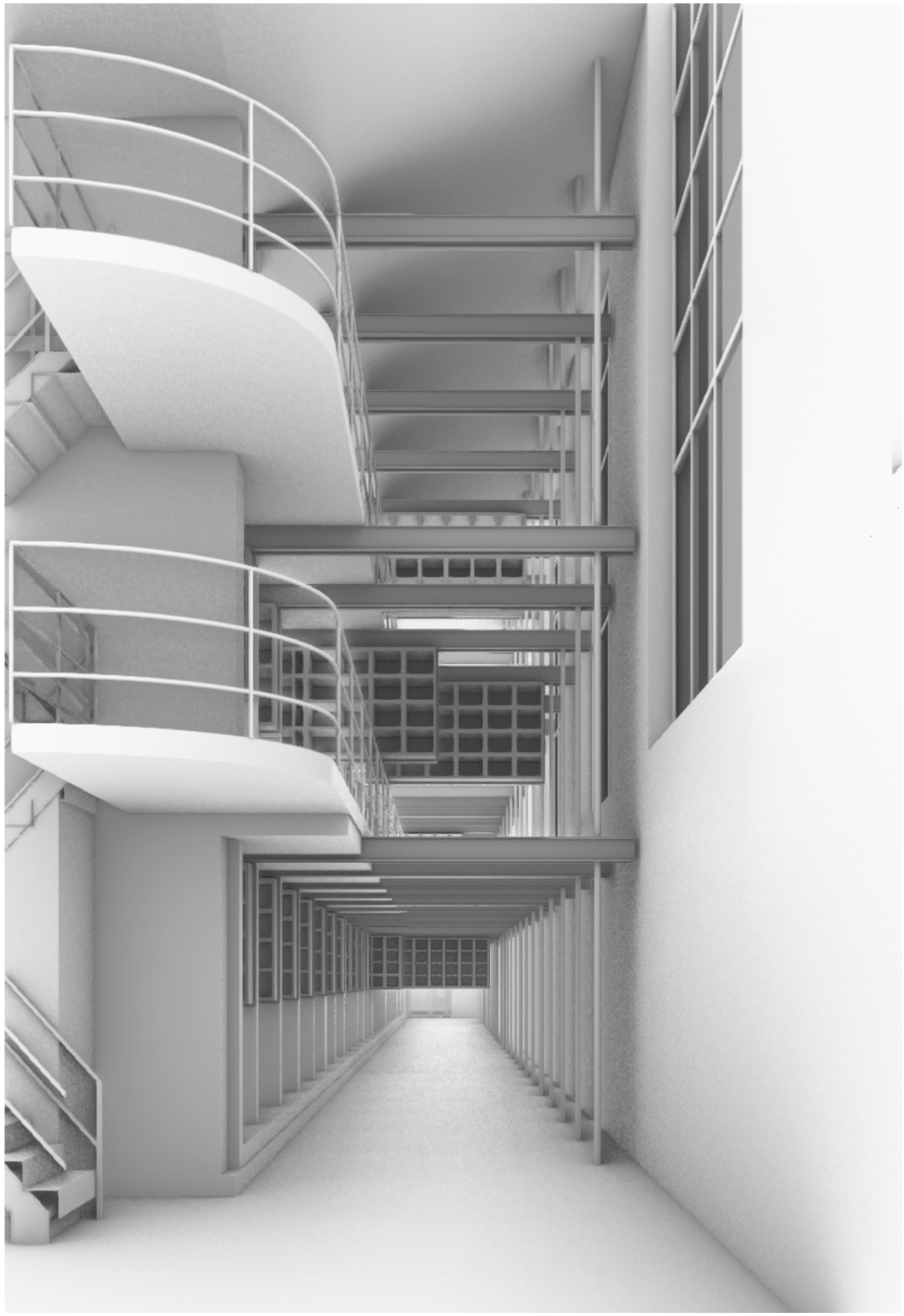




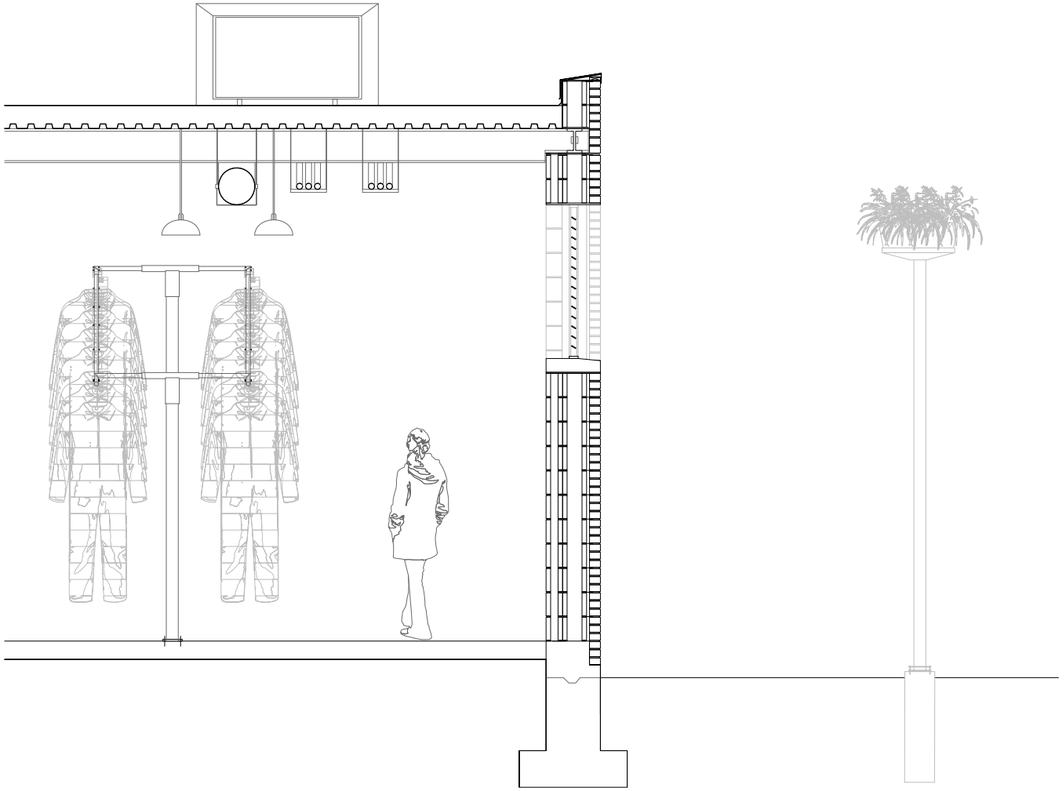

VV

Archive Of Inmates Life

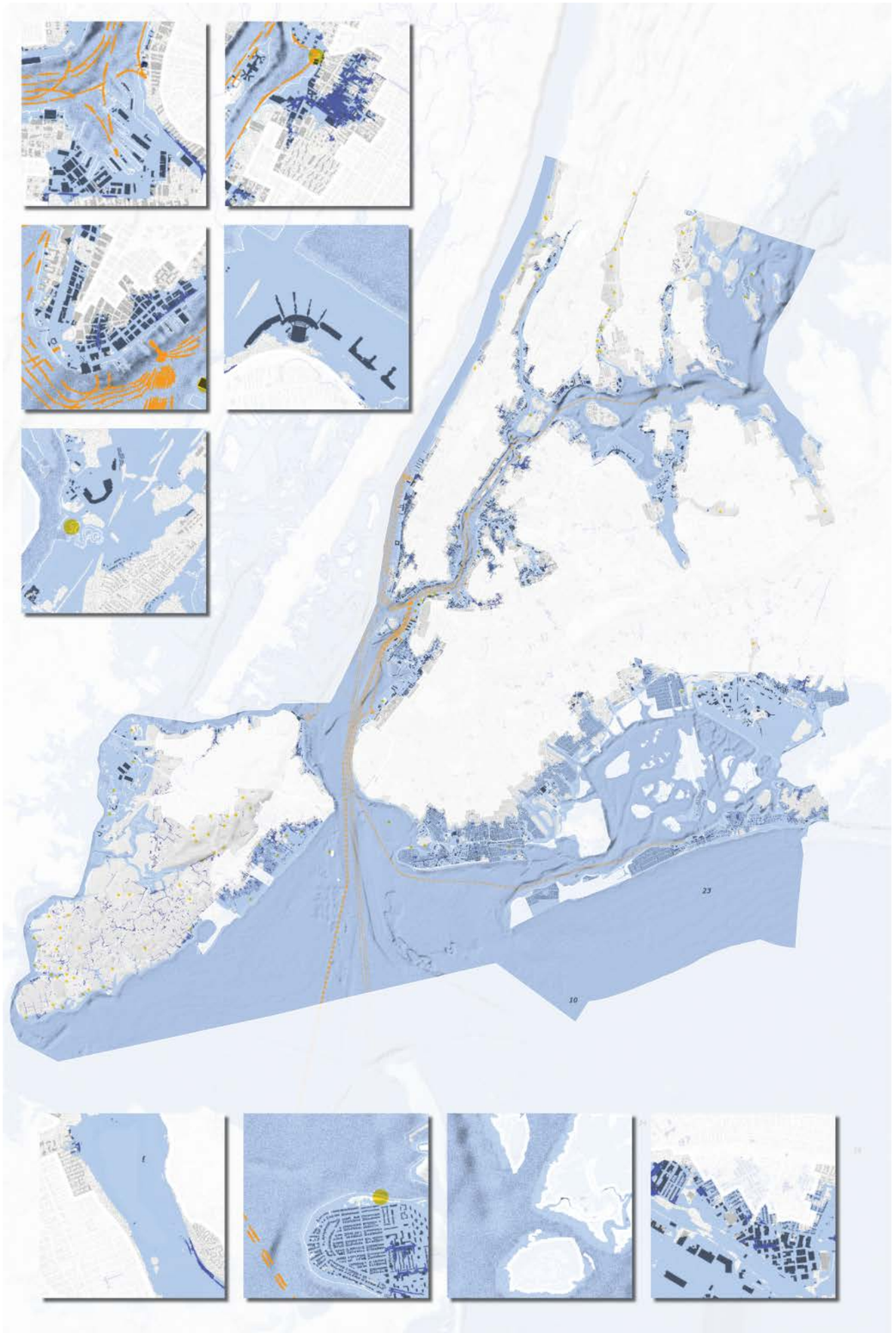


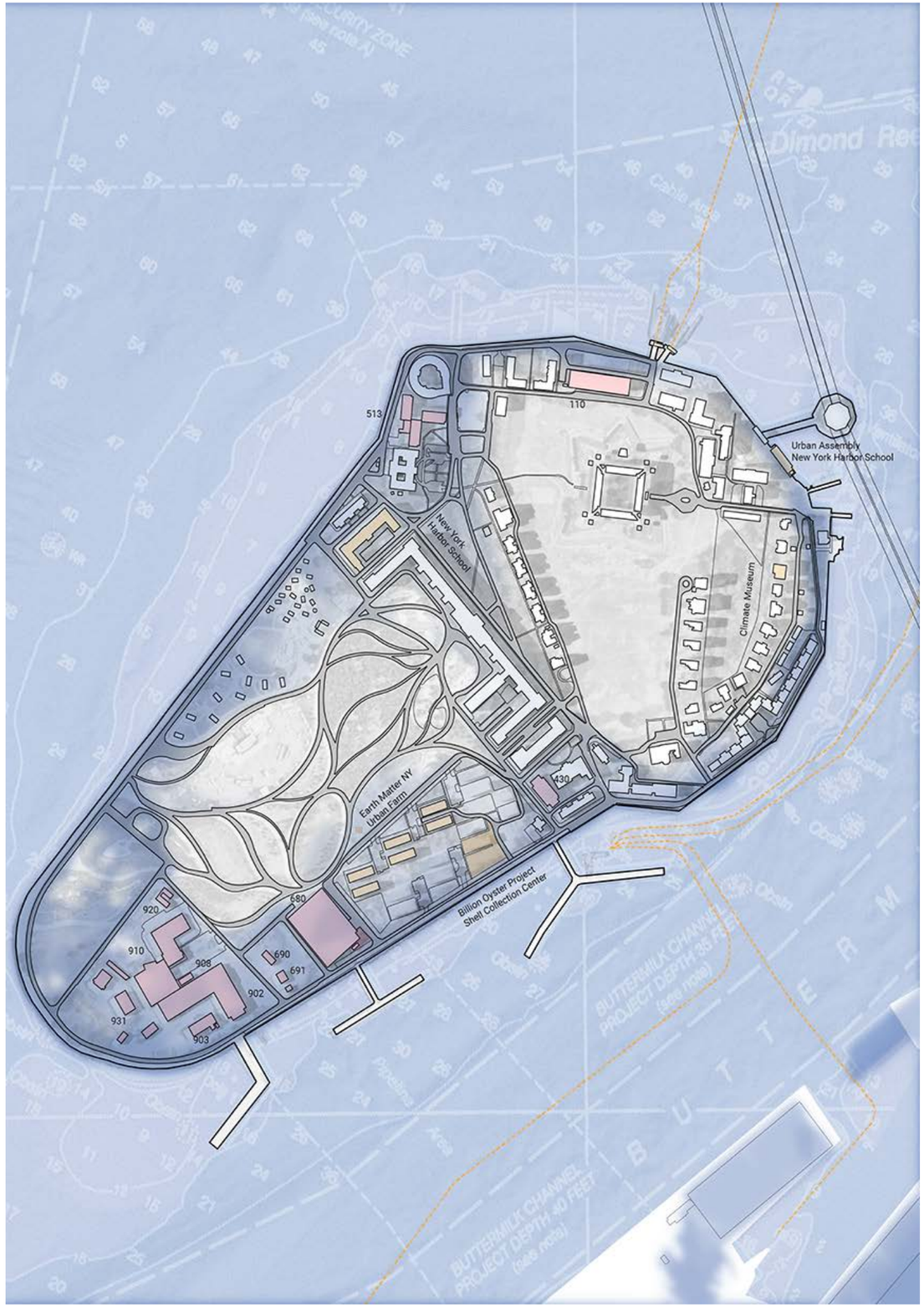


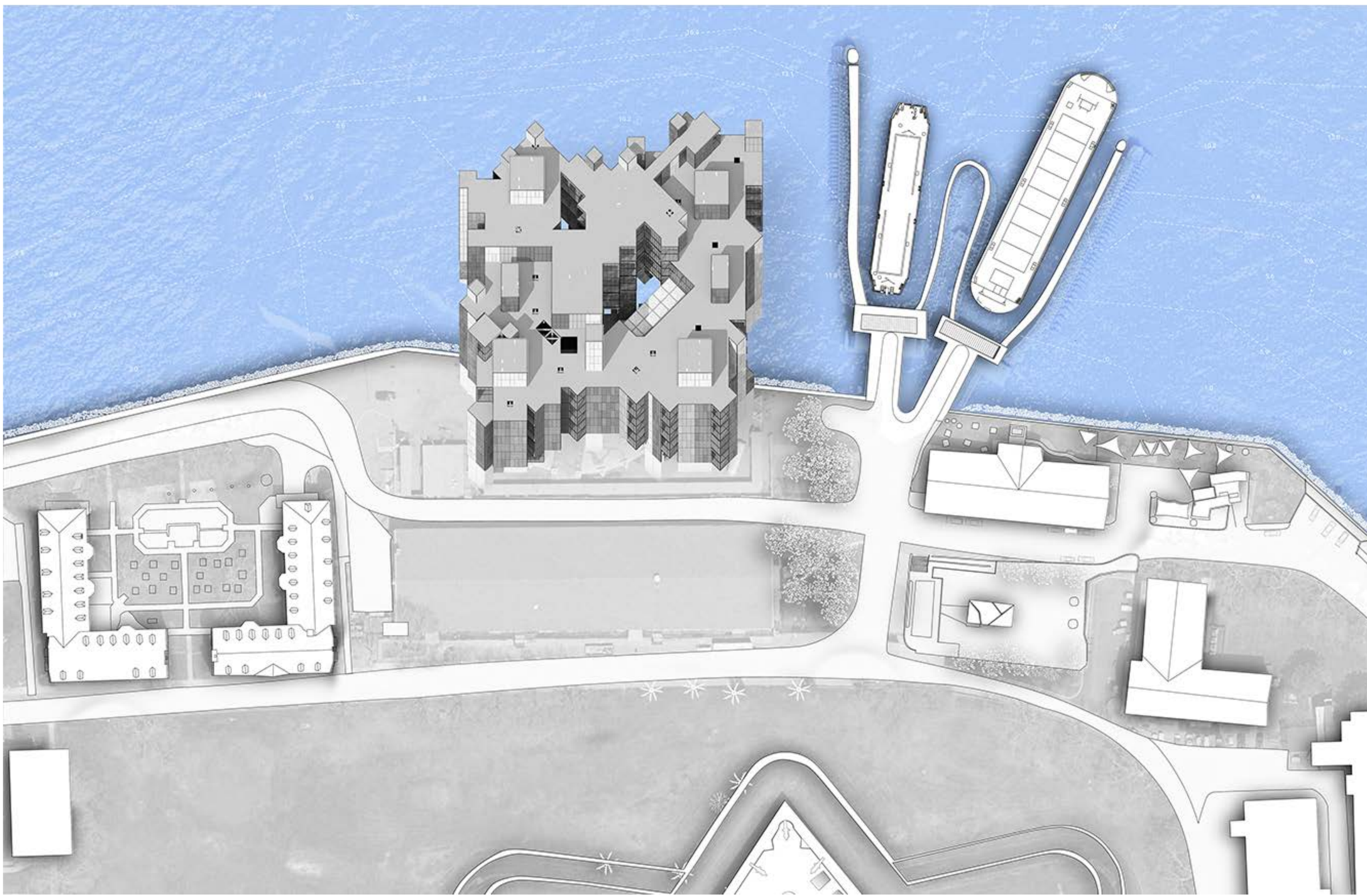
Archive of Laundry Room



Archive of Cafeteria


23
10


513
110
Urban Assembly
New York Harbor School
New York
Harbor School
Climate Museum
430
Earth Matter NY
Urban Farm
680
920
910
908
902
690
691
931
903
Billion Oyster Project
Shell Collection Center
BUTTERMILK CHANNEL
PROJECT DEPTH 50 FEET
(4cm mcb)
BUTTERMILK CHANNEL
PROJECT DEPTH 40 FEET
(4cm mcb)



Material- Bricks
Buildings 513, 920

Material- Bricks
Building 110

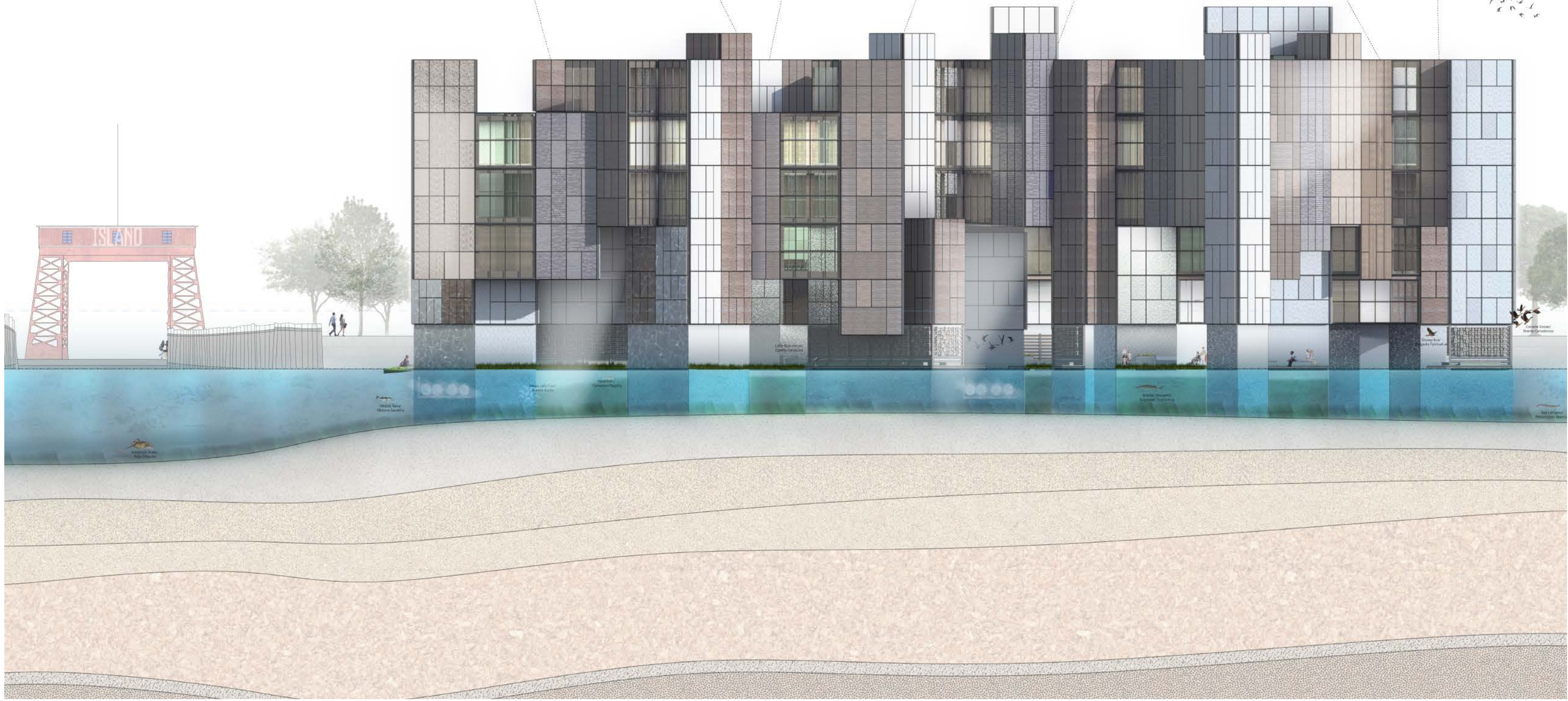
Material- Tabby Concrete
Oyster Shell Collection Station

Material- Tabby Concrete
Oyster Shell Collection Station

Roof Tiles
Building 110

Material- Corrugated Metal
Buildings 630, 903, 908, 931

Material- Miscellaneous
Buildings 680, 910, 915



Construction of the travertine tiles of the Getty Museum, LA

The Getty Museum was a 1.3 billion dollar project on a 45 hectare site that took over 14 years to plan and build. One feature of this project is the fossil travertine tiles on the facade that covers signigicant amount arera of the building facaade. This project aim to trace back the raw material of the travertine tiles and estimate the carbon emission around this sepecfic architectureal element.

Quarry

The source of the stone stone used for the Getty Center, is a family owned quarry apart 20 km away from Rome called Bagni di Tivoli. The travertine deposited over 90 meters thick and had been quarried for over two thousand years. From ancient Roman Collosseums to The Lincoln Center in New York City.

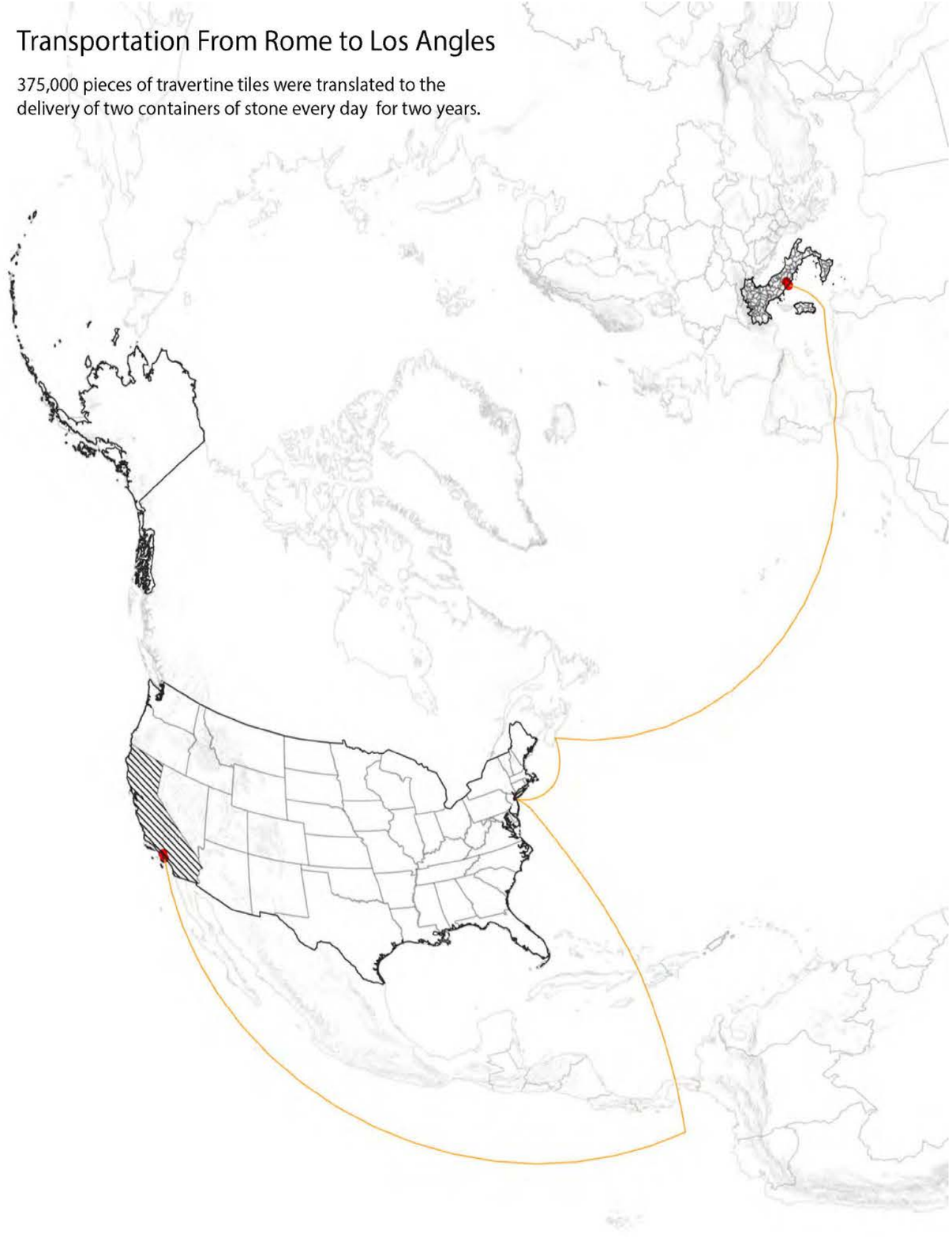
The Getty In Los Angles

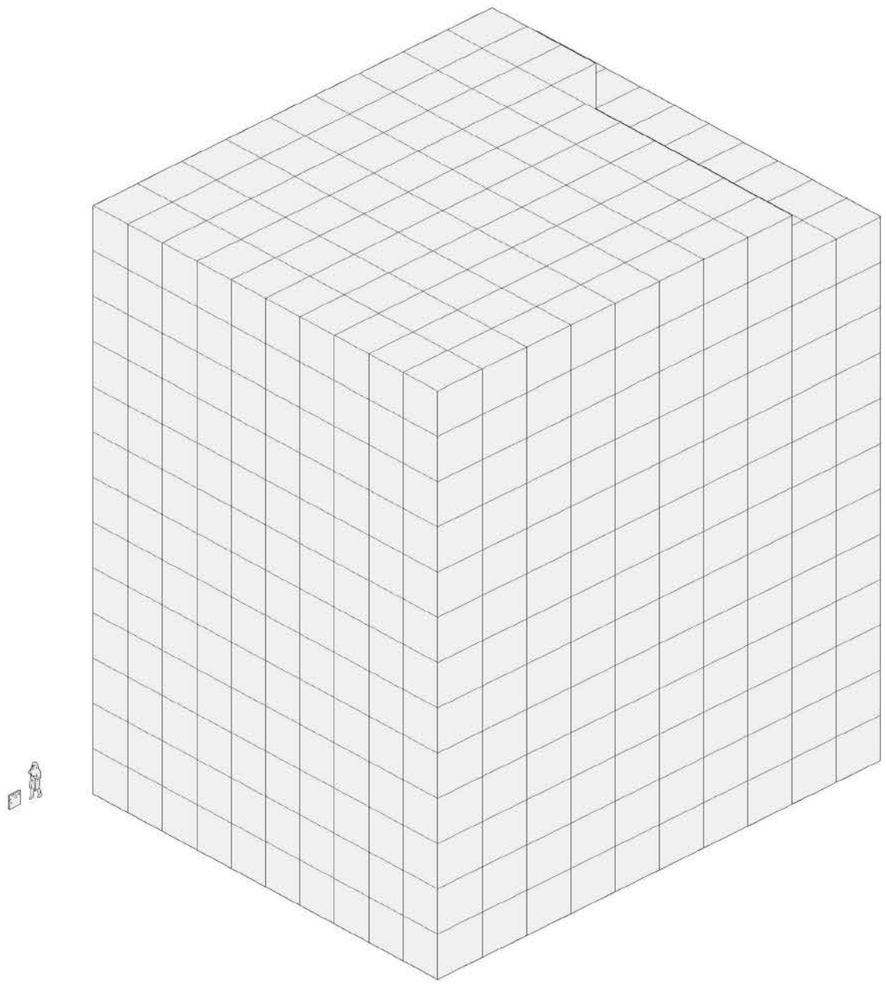
Over 108,000 Square Meters of Roman Classic Travertine from the Lippiello family quarry at bagni di Tivoli were used a t the Getty Center .

Transportation From Rome to Los Angles

375,000 pieces of travertine tiles were translated to the delivery of two containers of stone every day for two years.

Transport distrance for each trip from italy to Los Angles by waterway is 14,975 km. To transporting 145,000 tons of stone. The total CO2 emission was 12215980.68 kg.





Construction

Each travertine tile
Weight 115 KG
76cmm x 76cmx 8 cm

Stainless steel stone anchors
316 stainless steel
Total 380,000 pieces of stone anchors used

In total. about 300,000 pieces of stone were used for facades and pavings of the Getty

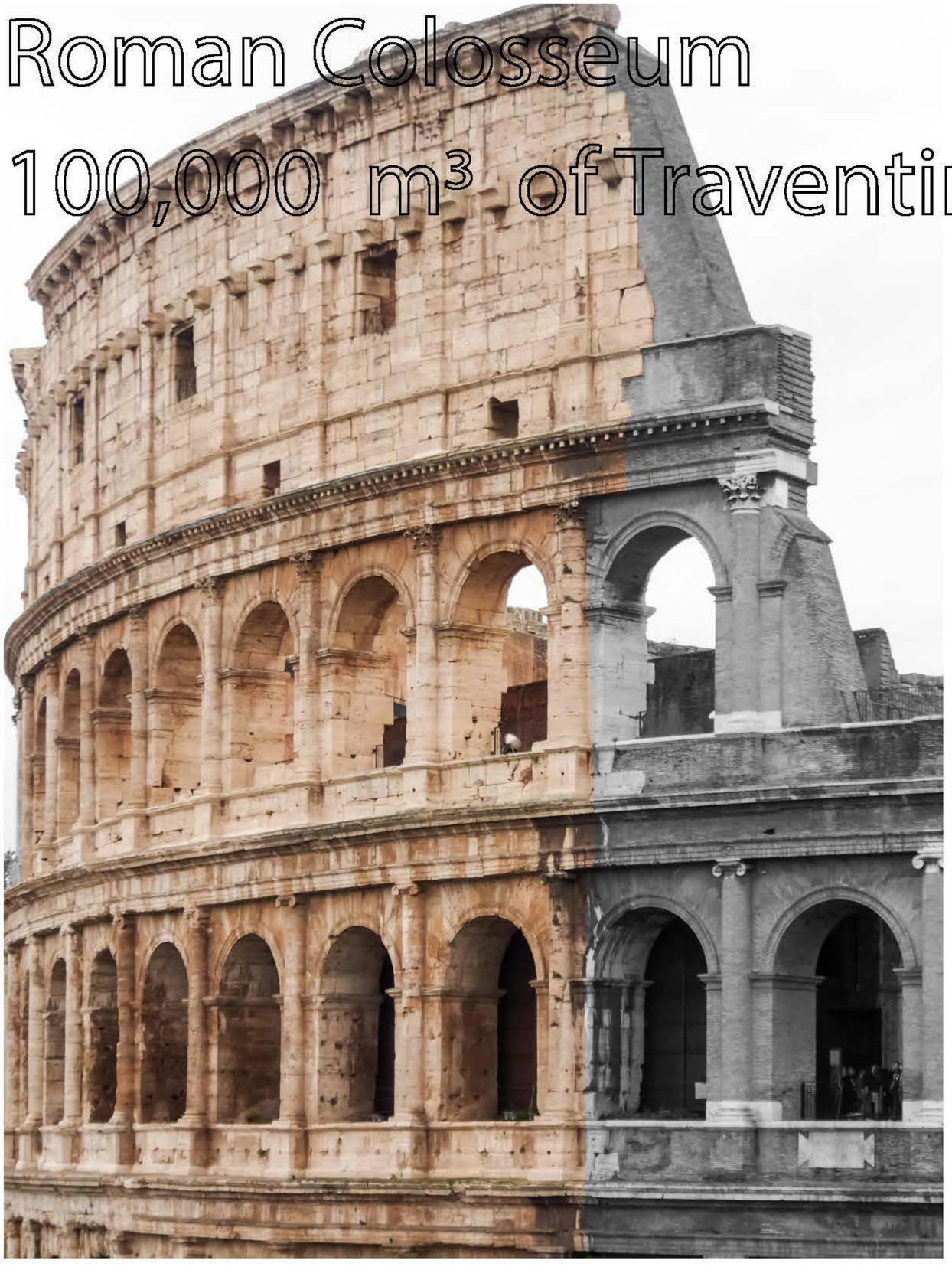
The construction mock up on the right is an example of the open-joint stone system developed by Richard Meier in his Ruropean work. Differs from the American technique of sealing the joints with mortar or caulking.

This type of construction allows water drain behind the outer skin.

The embedied Cabon of the the stone product itself on the Getty is 110,0000 cubic meter

Roman Colosseum

100,000 m^3 of Traventine



412,800

$KgCO_2e$

Trevi Fountain

4,718 m³ of Traventine

172,467

KgCO₂e

Lincoln Center

27,138 m^3 of Traventine

825'600

$KgCO_2e$

Lincoln Center

27,138 m^3 of Traventine

825'600

$KgCO_2e$

END