

**[De]constructing Rikers Island: Confronting Architectures of
Harm through Reflective Remediation**

by

Sarah Yoes

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Abstract

Designed environmental, social, and physical inequalities in American cities have produced sites, systems, and architectures of harm.

Rikers Island is at the center of this condition in New York City. The Penitentiary Complex is located in the East River between Queens and the Bronx and sits atop a former landfill, constructed over time to meet the demands of an expanding system of incarceration. As a result of mounting ecological and human rights violations, New York City officials put forth legislation in 2019 to shut down Rikers Island.

The thesis utilizes theory, mapping (historical analysis of layers), and precedents to uncover and deconstruct relationships between physical, environmental, and social/political processes temporally and spatially and develop design considerations rooted in a critical awareness of layered conditions. The design method prioritizes reflection and remediation to facilitate the Island and Penitentiary's deconstruction and remediation.

Acknowledgements

Firstly I would like to acknowledge the many activists and organizers who are on the ground every day fighting for reform, abolition, and a national reparations plan. The foundational organizing, research and resources of institutions such as the Rikers Island Memory Project, the Vera Institute, Liberty Fund NYC, and many more informed my project in immeasurable ways.

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Lastly, to my partner Conor and my family, thank you for your guidance throughout my education.

Chapter 1: Introduction

While architecture traditionally centers on acts of creation and construction, what emerges as a significant challenge to designers today is contending with the impact and cost of our built environment and the complicit nature of architecture in systems of oppression. Specifically, in the United States, there are mounting calls for the physical manifestations of the country's flawed structures to be dismantled.

Architecture is too obsessed with making...The prisons that profit from black and brown men and women, the detention centers that serve to separate and destroy families, the infrastructures of the postimperial military apparatus that continuously terrorizes communities around the world cannot be fixed by better, more efficient, and sustainable architectures. Racism is a device whose aim is to create walls between people. These walls should not be made. We need to learn to un-make these walls. (Garcia and Frankowski 2020, 1)

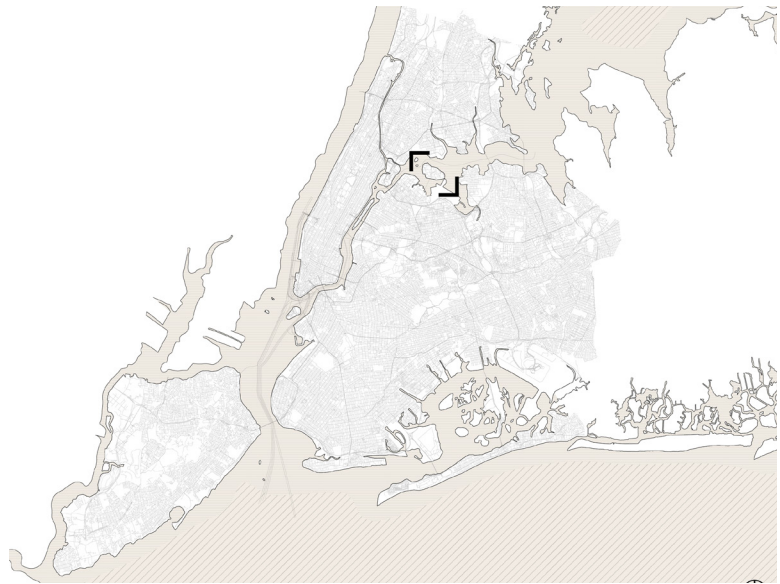
The toppling of monuments and mass mobilization of the public through city streets led by Black Lives Matter activists illustrate how designers must also challenge "the physical manifestations of the status quo" (Garcia and Frankowski 2020, 1). By looking to the formative pedagogy and work of designers and theorists such as Mabel O. Wilson, author of *Race and Modern Architecture: A Critical History from the Enlightenment to the Present*, and Milton S.F. Curry, the lead organizer behind "Spatializing Blackness," designers can develop "multidisciplinary approaches to cities, to urbanism and urban development, gentrification and redevelopment through a unique lens that is layered and complex" (Curry 2017, 1).

The thesis question emerges from this challenge to un-make architecture: As cities contend with sites, systems,

and architectures of harm, what is the designer's role in dismantling these structures?

Designers can utilize representational and spatial tools to dismantle sites, systems, and architectures of harm through uncovering spatial and temporal relationships between hidden perspectives and physical conditions. While complex sites' constraints face roadblocks within bureaucratic limitations, designers can develop essential parameters for cities to consider when contending with harmful histories through a layered and complex analysis of the physical, environmental, and social/political conditions.

Rikers Island, a sprawling 413-acre jail and prison complex built upon a former landfill, is the focus site for which this approach is explored. The island, situated in the Inner Long Island Sound between Queens and the Bronx, is surrounded by infrastructure and industry. Limited access and visibility to the isle further isolate the complex, making it hard to access resources, support, and family members to visit those impacted by incarceration.



Map, Rikers Island Location Relative New York City (New York Open Data 2019).



Photograph, View of Rikers Island from plane (Mabel 2014).

When you land at the airport you see Rikers, when you leave New York you see Rikers, and I just wonder sometimes if all of these hundreds of thousands of people realize that it is a jail where 100,000 people a year are housed, I think about that as an issue of visibility. (Day 2015)

In 2019 New York City officials put forth legislation to shut the complex down in response to mounting protests over human rights abuses, crumbling infrastructure, and poisonous environmental conditions. The island is a result of constructed conditions of physical, environmental, and social/political harm.

Michel Foucault and Matthew Gandy frame a broader theoretical analysis of cities that considers social, political, and environmental relationships which create sites, systems, and architectures of harm. They are central to contemplating the designers' role in an approach to flawed urban landscapes and built forms. The foundational theory of Michel Foucault locates cities as a place for the confinement of "deviants" in psychiatric hospitals, prisons, and asylums, beginning in the 17th century (Foucault 1977, 203). His studies include examining urban planning's role

in this "bio-politics" or political control of the body, which situates Rikers Island in a more extensive pedagogy about the relationships between prisons and cities. Matthew Gandy presents links between large-scale city infrastructure and ecology, whereby systems don't serve residents equally but rather reflect racist histories of redlining and selective investment.

A broader analysis of the city locates Rikers Island within a more extensive system of separation and isolation. Simultaneously, similar tactics are used to isolate, control, and exploit those detained at the scale of the island. Godfrey Baldacchino frames the island as both landform and imagined concept, "Islands ...are able to embody a variety of dichotomies without resolving them...[and] can be defined through almost oppositional categories" (Staniscia 2016, 51). Geographical conditions were exploited to carry out experiments of control and incarceration. Imagined concepts of reform expanded the island's footprint, creating both a natural and constructed state for which decades of human rights atrocities have gone undocumented. This dynamic speaks to Gandy's perspective; the destruction of environmental and ecological conditions is inextricably tied to social/political systems of inequality. At the building scale, Foucault's concepts of control and the body can be contextualized and expressed through the design and constructed conditions of isolation, surveillance, and confinement present in prison architecture at the prison scale.

Concepts and constructions of prisons in the United States are inextricably tied to race and class, which form the Prison Industrial Complex. The Prison Industrial Complex contends that the proliferation of prisons is more clearly linked to larger

designed economic and political structures and ideologies than to individual criminal conduct and efforts to curb "crime." Designers have been historically complicit and participatory in constructing and perpetuating these dynamics. "Un-Making Architecture: An Anti-racist Manifesto," written by Cruz Garcia and Nathalie Frankowski, calls on designers to contend with the damage and oppression that are embedded in sites, systems, and architectures, "Buildings are never just buildings. Buildings respond to the political foundations of the institutions that fund, envision, and desire them" (Garcia and Frankowski 2020, 1).

Foregrounded by this theoretical context, the island's history and relationship to broader conditions at the city scale are analyzed through the lens of physical, environmental, and social/political shifts over time. Through multi-layered research, this thesis deconstructs assumptions and reveals the layers of the island's history, it foregrounds vital considerations for the design method and approach to deconstruction. These layered histories tell a more intersectional story of the island's impact on individuals, communities, and ecologies.

As the island's decommissioning is put forth by city officials and demanded by city residents, there are questions about the island's future and its lasting negative effect on the city. The multi-layered historical research of the site positions existing proposals, which include an airport expansion, a vast energy campus, residential developments, and a re-establishment of a new penitentiary, as examples of new constructions and articulations of the same condition, which miss essential factors related to the island's constructed landfill and past harm.

At the expansive scale, a study of New York's other islands looks at how New York City has engaged with the isolated nature of geographical conditions, with relevant relationships between older infrastructure, public space, access, and new programs. Staten Island's Fresh Kills Park provides a relevant precedent for a deconstruction and remediation project, which utilizes a phased approach to environmental remediation of a former landfill. The designers choreographed access and engagement for recreation and public education over time. Ecological processes become moments for viewing and experiencing urban nature and reflecting on the site's past use, providing a logistical foundation for the deconstruction and remediation on Rikers Island, a former landfill.

Three key precedents look to successful elements of projects which engage physical, environmental, and social/political deconstruction through reflecting on historic harm via spatial, temporal, and programmatic means or engage in remediation processes on landfill conditions. Designers contend with harmful sites by deconstructing existing conditions while presenting visible opportunities for communities to engage with the site's unrepresented histories. In all three examples, the public engaged with moments or installations which became agents for political movements, conversation, and cultural shifts. The three scales are expansive, intermediate, and intimate. Significant to Rikers island is the relationship between process (remediation) and reflection.

Agnes Denes's "Wheatfield: A Confrontation" exemplifies the use of remediation processes and public engagement as a means of reflecting on and critiquing the conditions of environmental inequality and landfilling in urban areas. Lastly, Mabel Wilson and Howeler + Yoon's project, The

Memorial To Enslaved Laborers, deconstructs a university campus's dark history of slavery by designing a memorial for education, mourning, and reflecting on the land's harmful legacy, cultivating a more intersectional understanding of the University's responsibility moving forward.

Accumulatively, the design method utilizes theory, mapping (historical analysis of layers), and precedents to uncover and deconstruct relationships between physical, environmental, and social/political processes temporally and spatially and develop design considerations rooted in a critical awareness of layered conditions. More specifically, on Rikers Island, reflection and remediation frame an approach to address the Island and Penitentiary's deconstruction.

Chapter 2: Theoretical Analysis

City

Rikers Island exists within a larger context of politicized and exploitative processes within cities, which hide and isolate sites of harm out of view and public discourse. New York's architectural and urban environment is social and political by nature. "The politics of separation has thus accelerated the emergence of physiognomy of a carved up and compartmentalized landscape of discrete units, pulled apart by sharp contours, and woven together by a flow of sewage" (Weizman 2017, 20). According to Matthew Gandy, the design of landscape and city is rooted in capital and social dynamics. He challenges an approach to design that only looks at an ecological system devoid of social change. "The transformation of the experience of nature in New York City intersects with a series of social, political and economic developments" (Gandy 2003, 150). Civil rights-inspired social and political struggles are indispensable to any analysis that moves us beyond city management's technical exigencies to a deeper engagement, whereby sites, systems, and architectures of harm are confronted by an intersectional approach to design that considers physical, environmental, and social/political impacts.

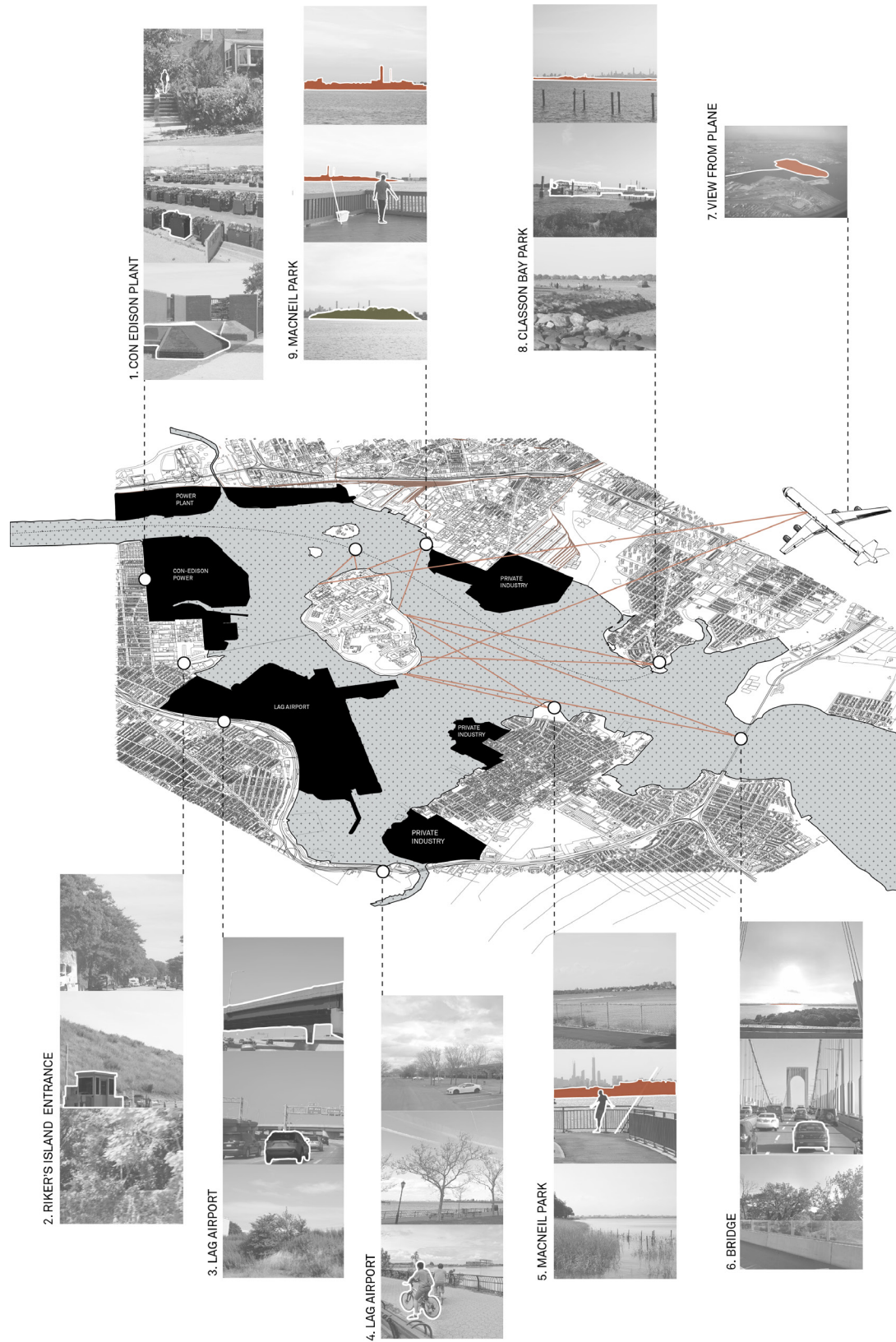
Infrastructure and planning aid in capitalist processes of separating people by categories of class and race, producing stratified neighborhoods and isolated facilities such as asylums, prisons, and jails, and waste and sewage infrastructures placed outside of city centers. These zones can be identified as heterotopias. A phrase elaborated by philosopher Michel Foucault describes specific cultural, institutional, and discursive zones that are somehow

'other': disturbing, intense, incompatible, contradictory, or transforming. Heterotopias are worlds within worlds, mirroring and yet upsetting what is outside. Rikers Island is a heterotopic condition where New York City's flawed systems are invisible and inaccessible to most residents. Therefore it is essential to recognize architecture and urban space as culpable in feeding systems of oppression and separation. Capitalist space is characterized by fragmentation (segregation, division, separation) and homogenization (coherence, conformity, uniformity).

However, in contemporary urban spaces, heterotopias have the power of "juxtaposing many sites in one space" so that they "reveal the extent to which knowledge relies on spatiality" (Topinka 2010, 67). As opposed to paving over and developing sites such as Rikers Island, ignoring the reality of the island's conditions, cities have an opportunity to invest in remediating processes of deconstruction and reflection, which challenge the public to reflect upon the systems and structures which create spatial conditions of harm and isolation.

Island

A broader analysis of the city locates Rikers Island within a more extensive system of separation and isolation. Simultaneously, similar tactics are used to isolate, control, and exploit those detained at the scale of the island. The amplitude and ambiguity of the island concept is, indeed, why many scholars of island studies still disagree. "Even the question of what constitutes an island is not conclusively settled" (Staniscia 2018, 51). Islands are simultaneously a physical reality while also inhabiting spaces symbolic and metaphorical. Understandings of islandeology center



Map of Rikers Island with images, showing limited sightliness and lack access from shoreline, as well as the industries and infrastructures blocking the coastline.

around a series of dichotomies. The oppositional categories of paradise and prison, utopia and dystopia, insularity and connectedness, hard-edge and permeable boundaries, vulnerability, and resilience illustrate the extreme ideologies projected onto islands. Utopian and dystopian visions are often applied to and tested on geographical islands because of confinement and control, allowing a closed-loop for experimentation. Design interventions can call attention to the island's liminal definition and heterotopic nature by embracing the reality of its contradictions. By rejecting a fast-paced re-invention of the island's purpose, cities can create spatial conditions which shift over decades and engage temporal processes of ecological remediation while also critically positioning the island's past and making these processes visible and accessible to the public.

Prison

Rikers Island floats in controlled and inaccessible waters. At one point, the bridge regulates access and controls engagement to and from the prison to the city. Foucault's concepts can apply directly to physical relationships created on-site. Heterotopias always presuppose a system of opening and closing that both isolates them and makes them porous. When we confront spatial experiences that tend to actualize in time and space this precarious prospect of a city of thresholds, this deviance may, however, be either constitutive of groups of people considered as other (people in prisons, in psychiatric clinics, or rest houses) (Stavrides 2007, 4). In general, the heterotopic site is not freely accessible like a public place. Foucault's conceptions of control, surveillance, and isolation are carried out in

Rikers' case, where the island's geographical realities were exploited for control and experimentation.

The penitentiary architecture grew over time, resulting in a chaotic plan of discrete compounds isolated from one another. Each era produced different architectural forms touting reform. New modernist building designs promised reform and revolutionary results, and all failed in their intentions while perpetuating a prison industrial complex linked to expansion instead of remission. Underneath it all, shifting, leaking refuse continues to move and expose an island built on false conditions.

The Role of Design

As opposed to proposing utopian and immediate projects of addition and creation on Rikers Island and sites like the complex, there must be a process of deconstructing and reflecting upon the effects of constructed conditions of harm designed by architects, city planners, and politicians. Garcia and Frankowski's Manifesto, "Un-Making Architecture: An Anti-Racist Manifesto" calls for the rejection of Architectural Utopias, devoid of historical and political considerations, and instead, designers should be engaging in Radical Design.

Radical means

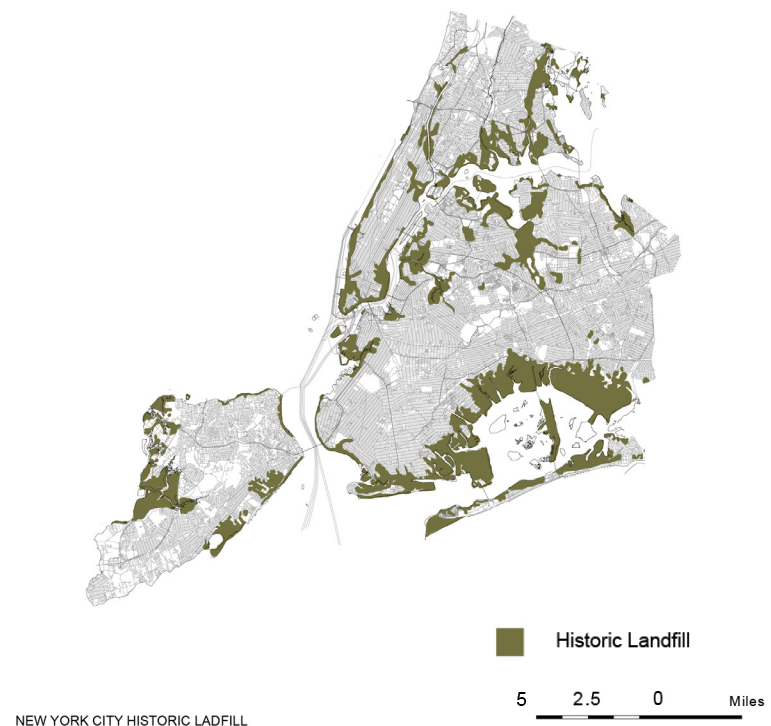
to go into the roots. For architecture to be radical it has to dig deep into its past, present, and potential future role into perpetuating the origins of social fragmentation, oppression, colonization, and racism. We must undo the damage created by the complicity of architecture with these systems of oppression. We must un-make detention centers. We must un-make prisons...We need to un-narrate the history of architecture and construct new narratives that expose the racist, settler-colonial roots of its capitalist development, modernism...In order to make new forms of radical architecture, we must learn to un-make Architecture. (Garcia, and Frankowski 2020, 2)

This act of Un-making frames the method of analysis which deconstructs the spatial, temporal and environmental conditions of the site in order to understand and design for Rikers Island as the former penitentiary is decommissioned and designated public land.

Chapter 3: The Making of Rikers Island, Historical Analysis

The City

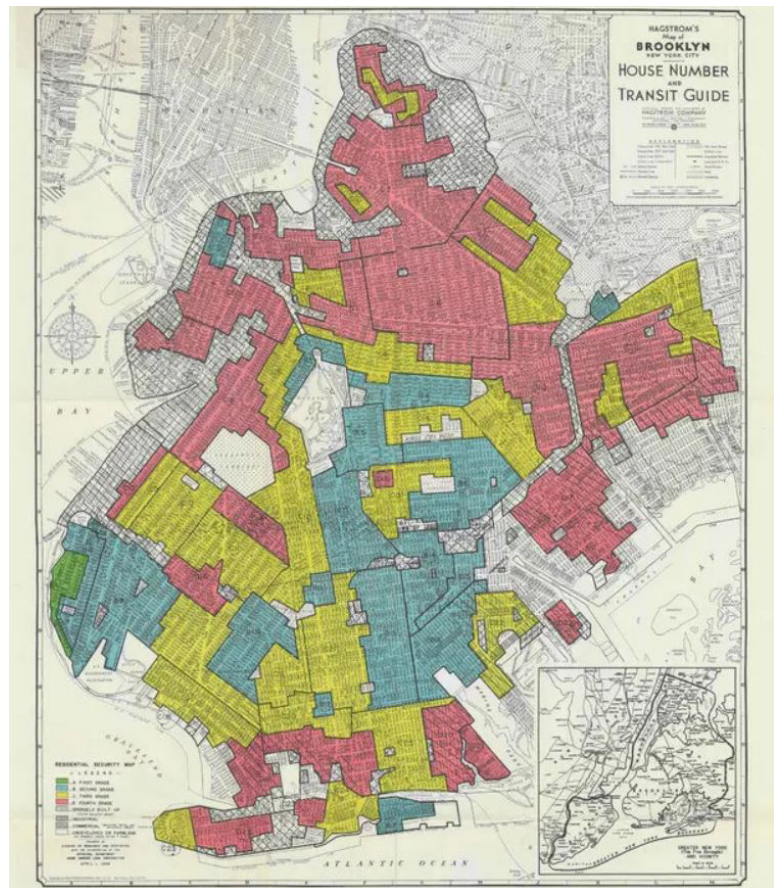
The history of Rikers Island links to the parallel expansion of New York City where landfilling, redlining of neighborhoods, and segregation of the housing market, have culminated in stratified regions of the city defined by race and class. By the 20th century, "an estimated 80% of New York City's trash ended up in the sea at one time" (Geismar 2013, 116). In the 18th century, artificial landfilling materials were often carted from big infrastructure projects, like the city's first boring tunnels for the subway system (Geismar 2013, 116).



Historic landfill, New York City (Data from Walsh 1995).

In the early 1900s, Rikers Island was sold to New York City, and much of the city's refuse was dumped there. The expansion of the city also resulted in oppressive practices of qualifying and redlining neighborhoods according to value:

The maps became self-fulfilling prophecies, as "hazardous" neighborhoods — "redlined" ones — were starved of investment and deteriorated further in ways that most likely also fed white flight and rising racial segregation. These neighborhood classifications were later used by the Veterans Administration and the Federal Housing Administration to decide who was worthy of home loans at a time when home-ownership was rapidly expanding in postwar America. (Badger 2017,1)



The 1938 Home Owners' Loan Corporation map of Brooklyn. National Archives and Records Administration (Home Owners' Loan Corporation 1939).

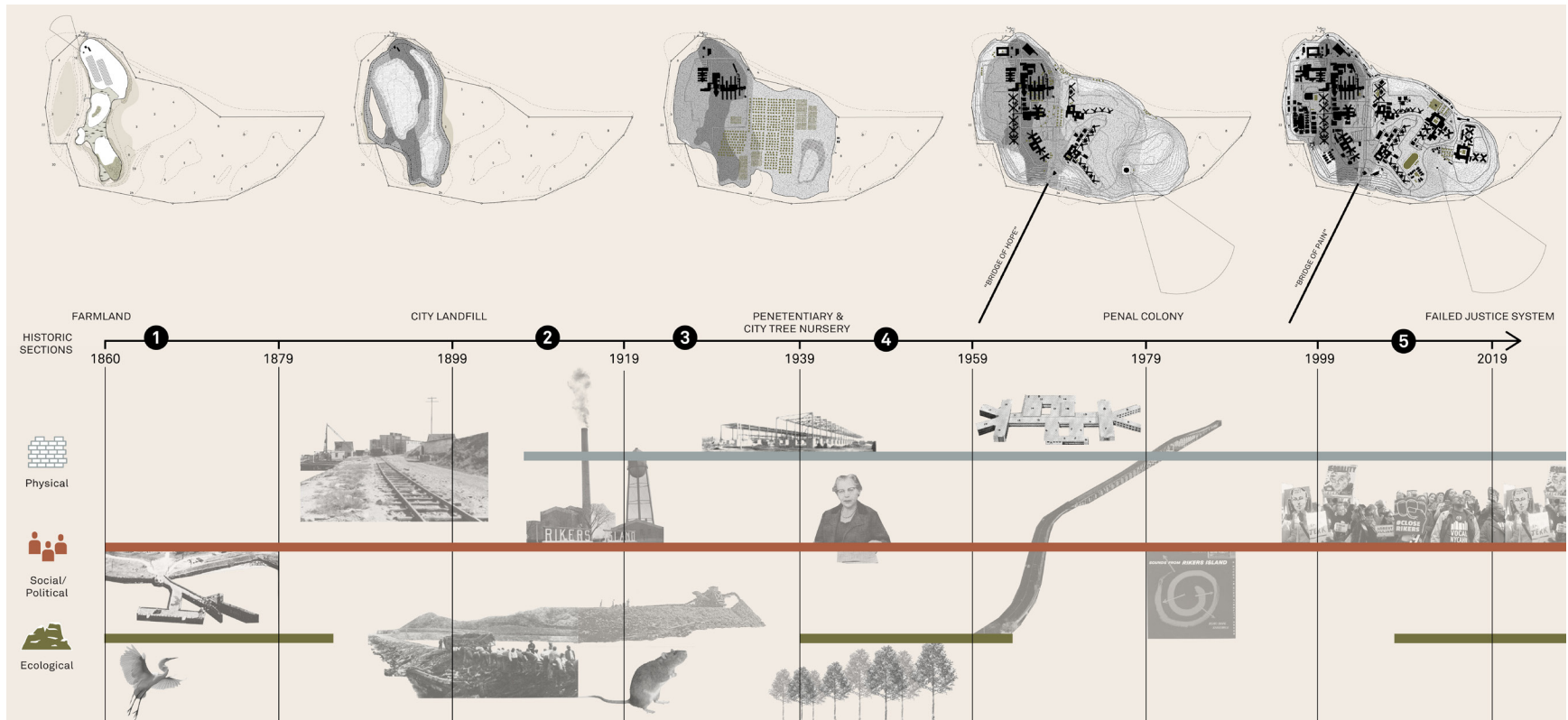
These stratifications are still doing damage today. Islands of concentrated wealth and investment protected

some neighborhoods from infrastructure and waste. Simultaneously, other areas were subjected to all of the city's processing and waste systems adjacent to neighborhoods and the Hudson River and Long Island Sound. While redlining practices stratified the city, Rikers Island penitentiary expanded over time, increasing incarceration and policing practices targeting lower-income neighborhoods.

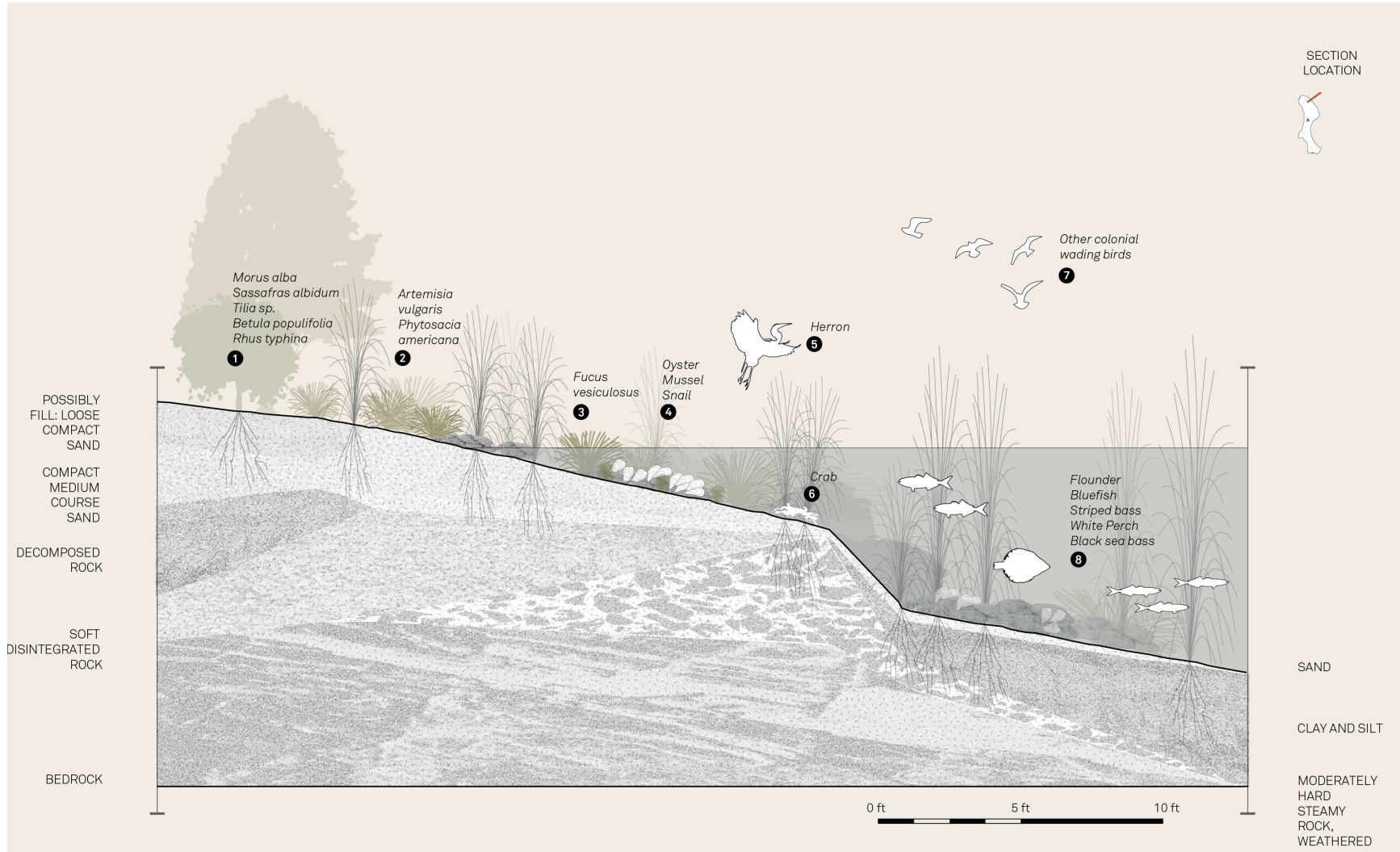
The Island Prison/Jail

The intersecting physical, social/political/ecological conditions of the island's expansion are explored through the following historical timeline. Rikers Island was initially farmland purchased by Abraham Rycken, who bought the island in 1664 and was under 100 acres. The Inner Long Island Sound was a shallow constellation of small islands and patches of wetland. After the island's purchase by New York City in 1899 (See historic section 1), the island was expanded by constructing cribbage boxes filled with refuse and rubble (see historic sections 2, 3). Inmates were forced to expand the island. These practices continued for decades. While environmental assessments and data on the island's constructed land conditions are not accessible to the public, different eras of waste are stratified beneath a thin layer of topsoil and planting. As the landform expanded, ecologies shifted as well. Oyster habitats and heron populations diminished while excessive growth of microalgae and rat populations occurred. Algae blooms interfered with many fish populations, and new species emerged which could sustain life in polluted conditions (see following sections).

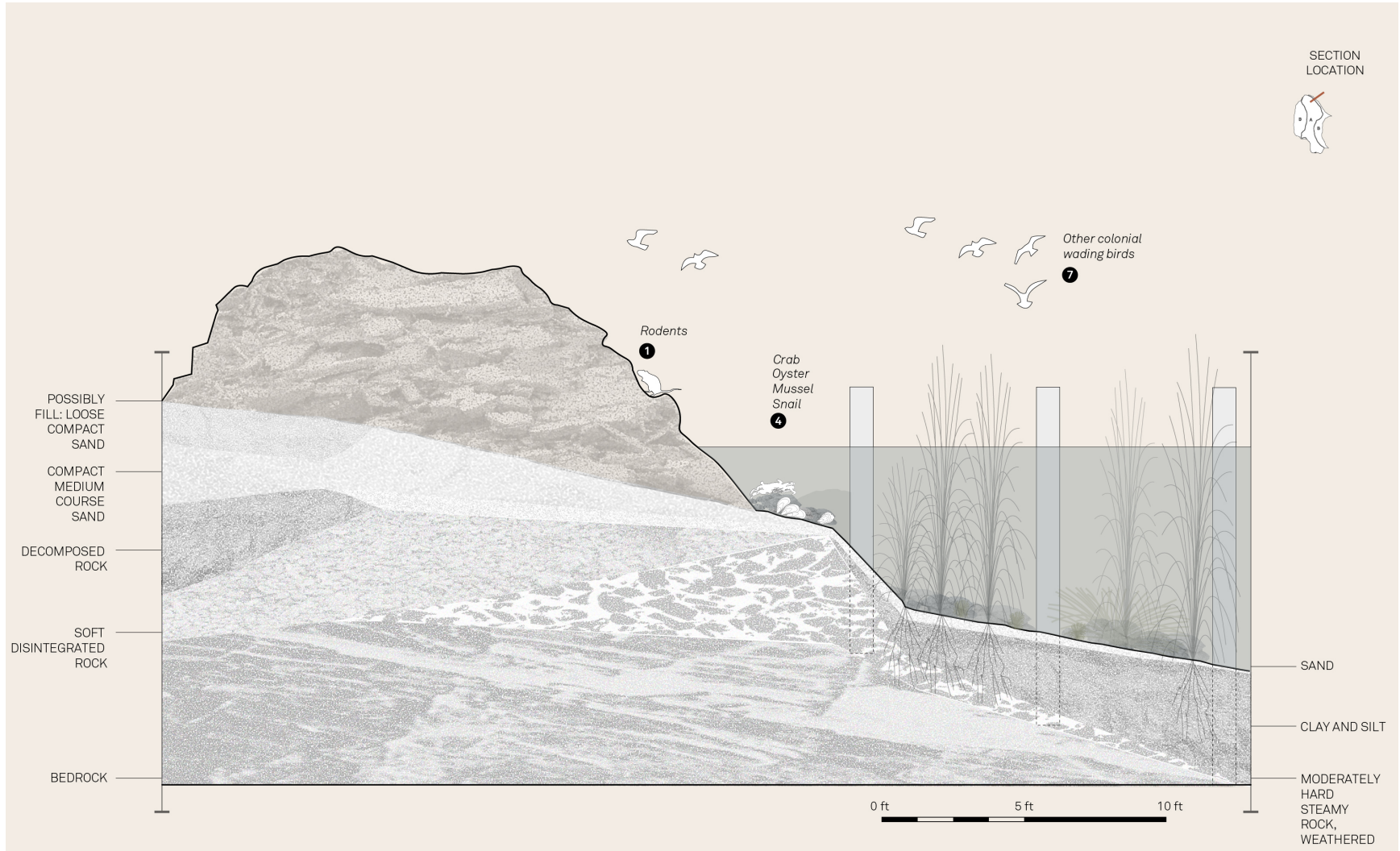
Rikers Island was conceived as a "utopian" vision of prison reform. A century ago, progressive reformers made another New York City island notorious by criticizing its violent,



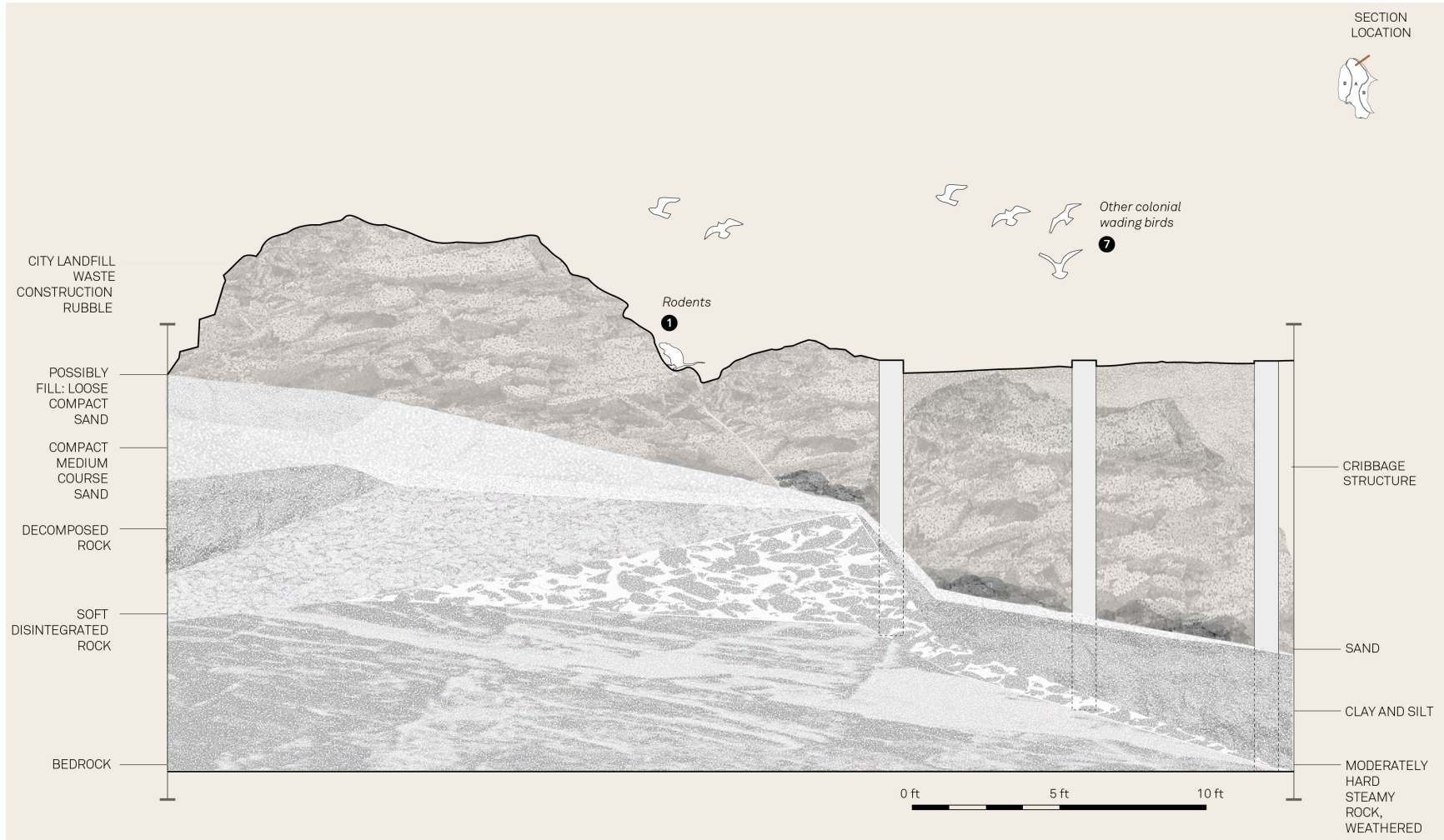
Historic timeline exploring the role of physical, ecological, and social/political factors related to the island's expansion.



Historic Timeline Section 1: 1860. Farmland: illustrates multifaceted ecosystem prior to the island's expansion (New York District, Environmental Analysis Branch 1994).



Historic Timeline Section 2: 1915. City Landfill: illustrates landfills of New York City's garbage, and structures for land expansion eroding islands ecosystem (New York District, Environmental Analysis Branch 1994).



Historic Timeline Section 3: 1920. Penitentiary and City Landfill: Continued landfilling practices and expansion of land with increasingly noxious material by forced labor of individuals incarcerated on the island as the prison and jail is expanded (New York District, Environmental Analysis Branch 1994).

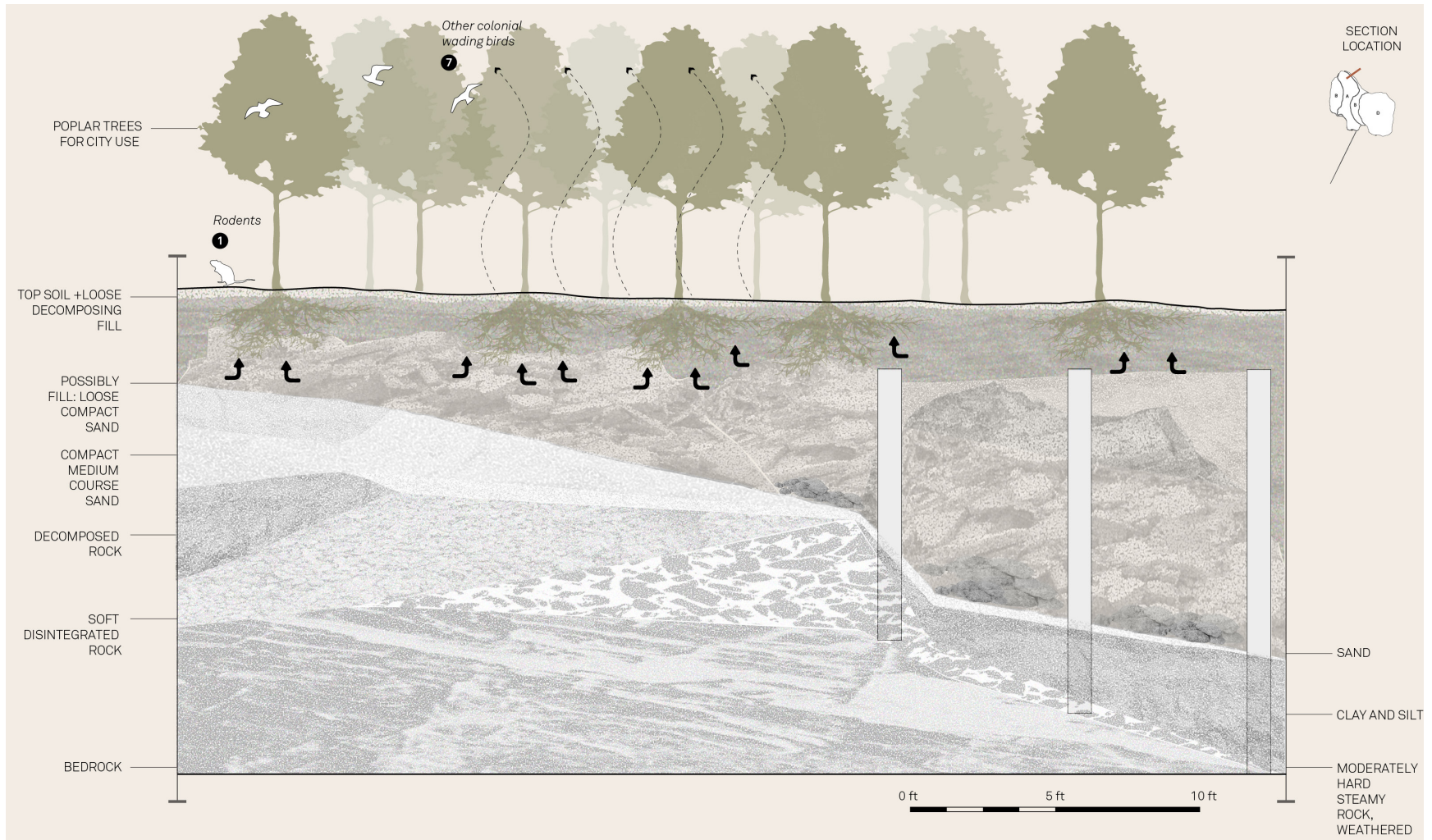
unsanitary, and overcrowded prison facilities. Welfare Island, known as Blackwells Island before 1921 and as Roosevelt Island today, was home to a cluster of institutions for sentenced prisoners, psychiatric patients, and the city's "destitute." The New York County Penitentiary — the city jail — had a reputation for being dangerous and unsanitary (Shanahan 2018, 1). A progressive consensus began to coalesce around the idea that Welfare Island was in serious need of reform, which informed the creation of Rikers Island. The Department of Sanitation continued to enlarge the island with the burnt remains of street sweepings and garbage until Robert Moses demanded that the practice be halted in anticipation of the 1939 World's Fair (Shanahan 2018, 1). Workers landscaped the trash that covered the island in 1939.

From its inception, "Rikers Island has been an uncanny landscape of incarceration, disposal, and cultivation in a direct feedback loop with other places in New York City (Hutton 2020, 159). Unknown to privileged residents, "Rikers was a place of abuse and corruption. Construction cost overruns totaled some \$2.5 million in 1934 (about \$46 million in today's dollars)" (Shanahan 2018, 1). Built atop an unstable landfill that emitted toxic fumes and caught fire spontaneously, the jail was also an environmental hazard. By the mid-1950's, the island facilities were in the throes of overcrowding — with accompanying violence, neglect, and deprivation of essential services.

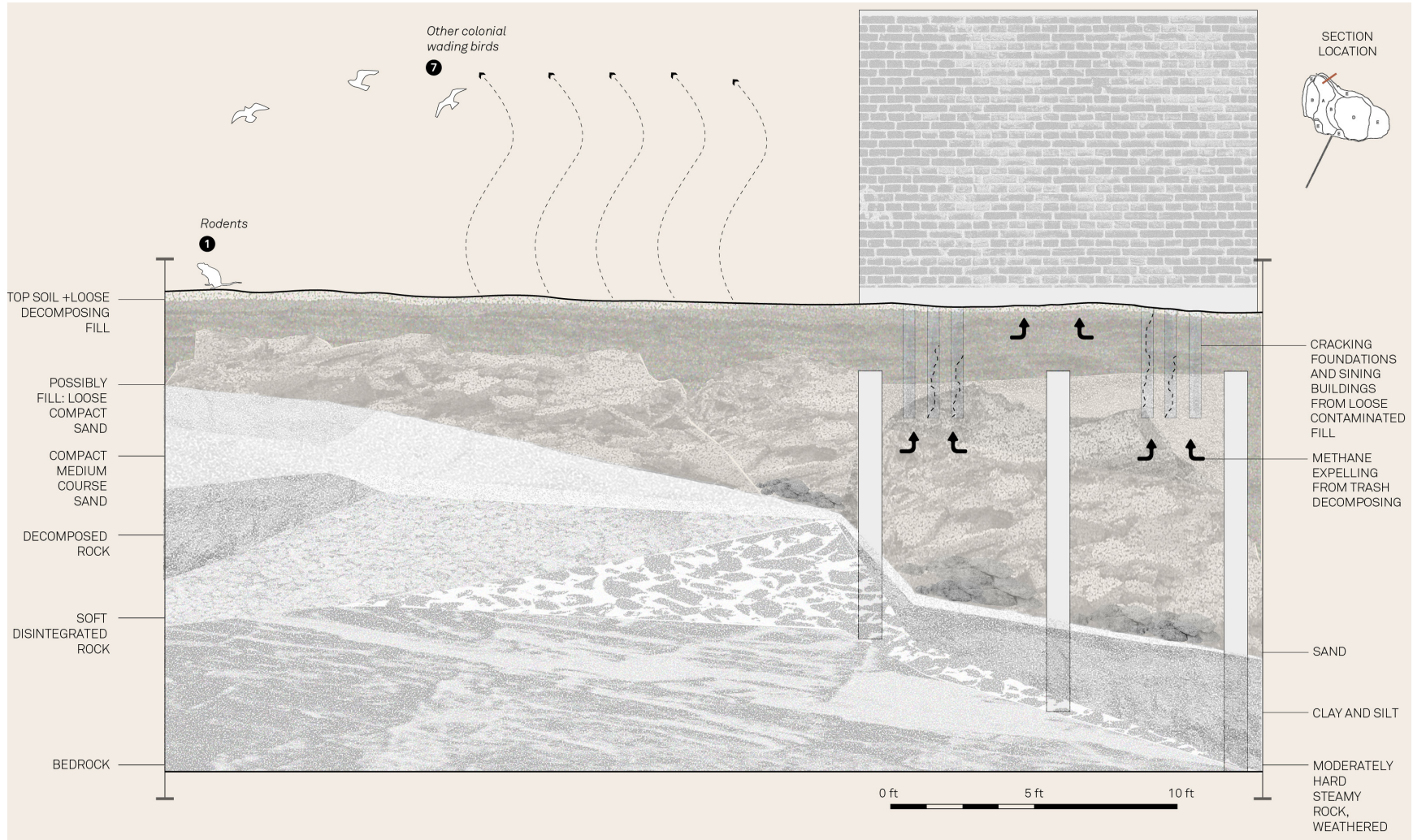
Anna Moscovitz Kross became commissioner of the Department of Corrections in 1940. She commissioned the island's bridge and conceived of the island's tree nursery program, where those incarcerated on the island grew trees for the city of New York and were unpaid for their labor.

Escaping "methane gas and mystery 'hot spots' reminded planters of the dump below the soil" (Hutton 2020, 168). The island expanded due to many environmental, social, and physical systems of exploitation, those incarcerated provided "labor [which] produced generation upon generation of healthy street trees , nurtured from seedlings to sturdy juveniles, but by not being paid" (Hutton 2020, 168), it ultimately made the operation "sustainable," illustrating the city's disregard for those impacted by the justice system and how the landscape of today's urban environment is built upon these invisible histories. (See historic section 4). The prison expanded, and populations grew consistently, following trends of policing tactics by the city and later eras, such as the War on Drugs. While structures continued to be erected, the surface's ground condition continued to degrade, causing structures to crack and sink and methane to be released from the decomposing landfill.

Indigenous ecologies, processes of expansion and removal, and the constructed forests of poplar trees are significant points in the island's history that can serve as symbolic and logistical elements that have remediating functions—while at the same time, critically reflecting the island's embedded history.



Historic Timeline Section 4: 1945. Penitentiary and City Tree Nursery: Illustrates the large scale planting of poplar trees by individuals incarcerated on the island. Trees absorbed toxins from ground conditions and then were uprooted for street foliage (New York District, Environmental Analysis Branch 1994).

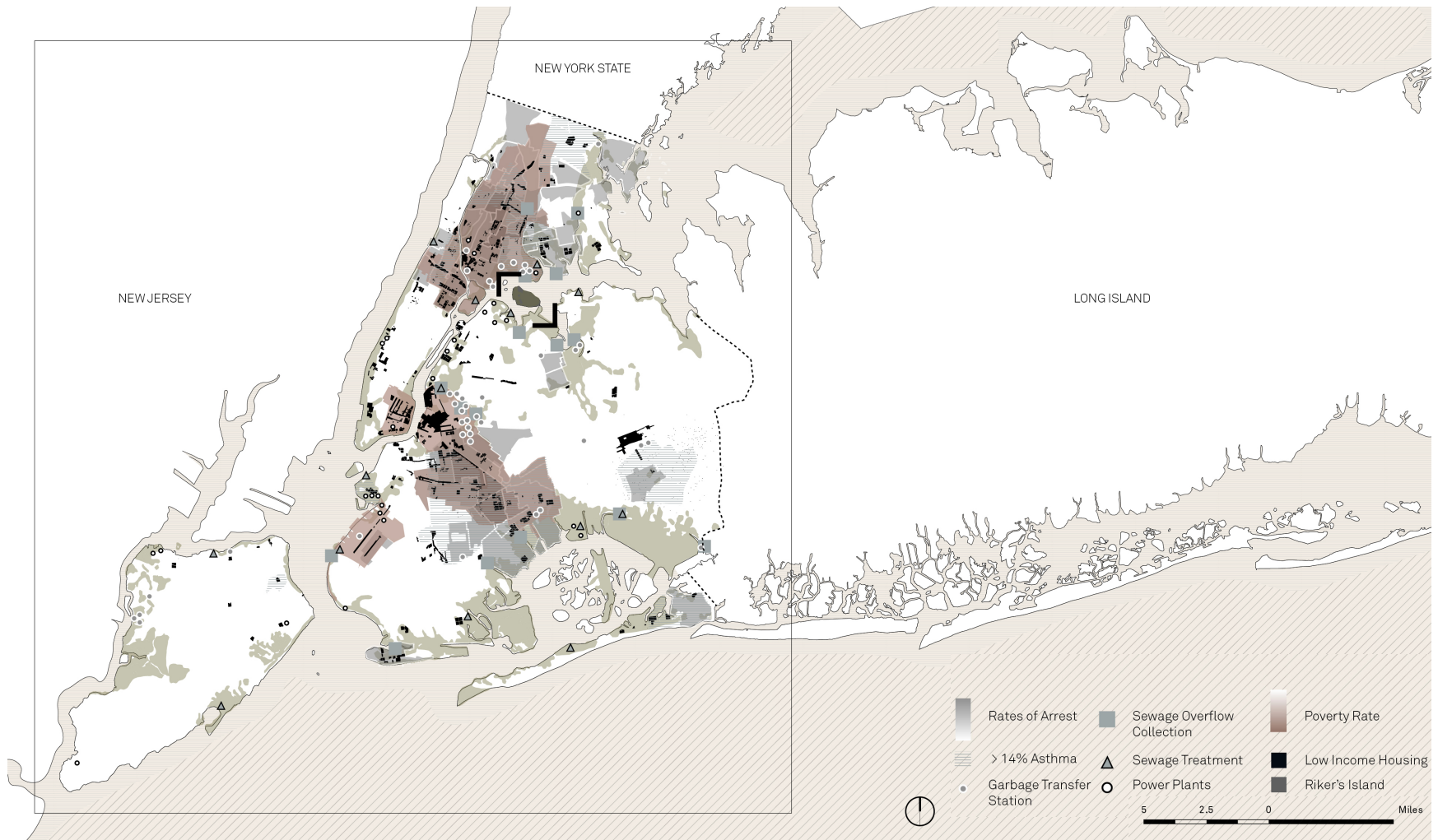


Historic Timeline Section 5: 2000. Failed Justice System. Illustrates exacerbated issues with ground condition as decomposing matter releases methane and fumes, while building foundations and structures crack and sink as a result of loose fill (New York District, Environmental Analysis Branch). 1994).

Chapter 4: Present Conditions

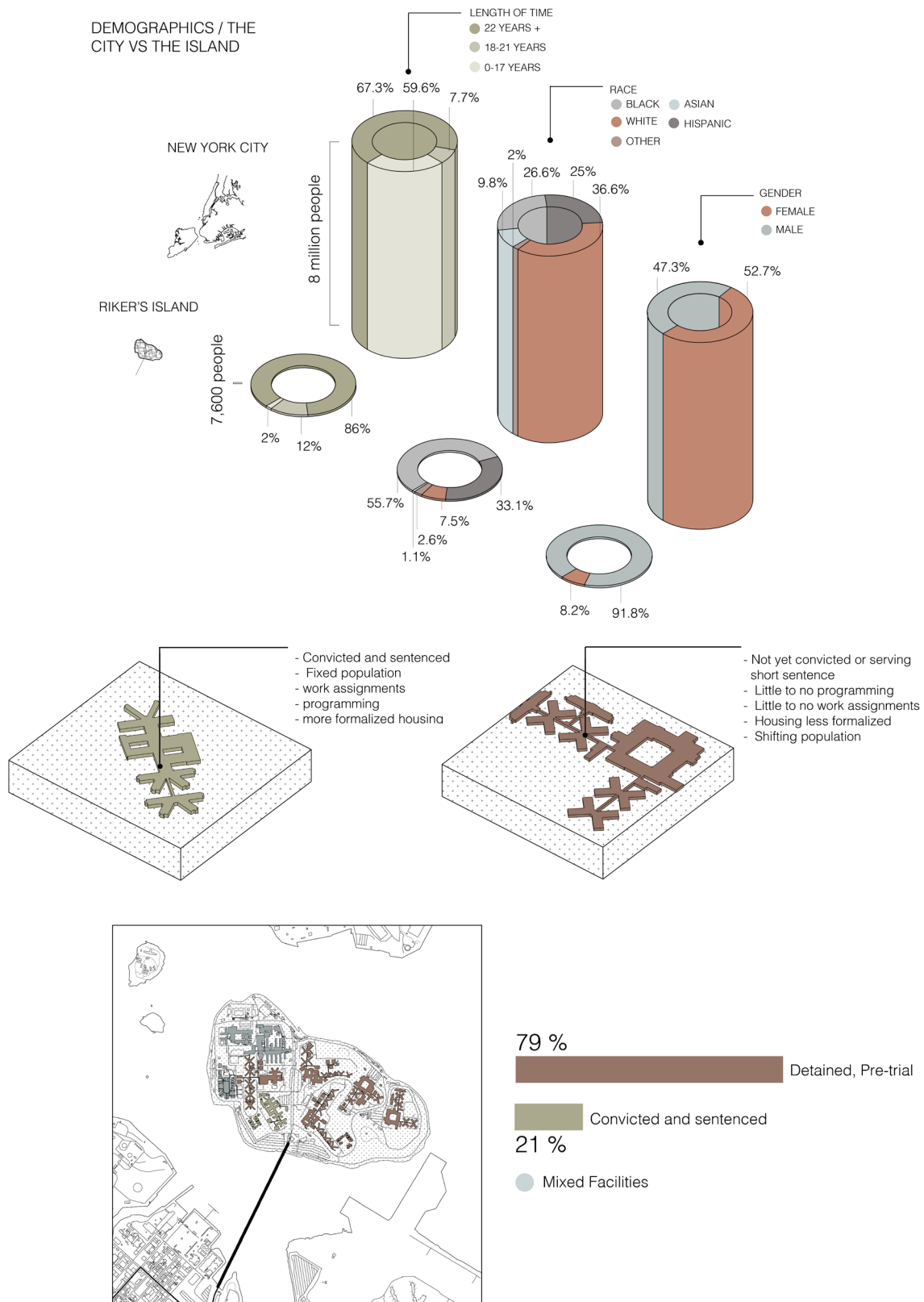
Decades of compounded inequalities in the city and formations of Rikers Island are present in the city today. Neighborhoods are stratified by income, creating stratified islands which isolate communities and concentrate wealth. Overlaying locations of hazardous environmental facilities and processing infrastructure communicates the layers of oppression city structures place on low income and minority residents. And rates of arrest target these constructed spatial conditions. The demographics of inmates on Rikers Island illustrate how these neighborhoods are disproportionately policed and monitored.

Given the site's history as a landfill, one of the foremost environmental challenges facing Rikers is the build-up and steady release of methane from the decomposing content beneath the soil of Rikers Island. The release of these pockets of gas can cause movement or shifting in the substrata of the ground, that in turn sheared and damaged the structure of the jail's buildings and has resulted in broken water mains and foundations. The continuous methane leaks on Rikers island have been cited as a carcinogen in multiple class action lawsuits against the New York City Department of Corrections from former inmates and corrections officers alike. Additionally conditions have been linked to an increased incidence of asthma amongst those on the island (Venters 2019, 120). One of the most common complaints on the island from inmates, corrections officers and visitors alike is the foul smell emanating from not only the decomposing garbage beneath the ground but also from the surrounding area. The presence of three wastewater



Map combines, rates of arrest, environmental infrastructure and poverty rates (New York Open Data 2013-2019).

DEMOGRAPHICS / THE CITY VS THE ISLAND



Diagrams, demographics of island vs the city (data from Vera Institute 2018 and New Decrausaz 2019).



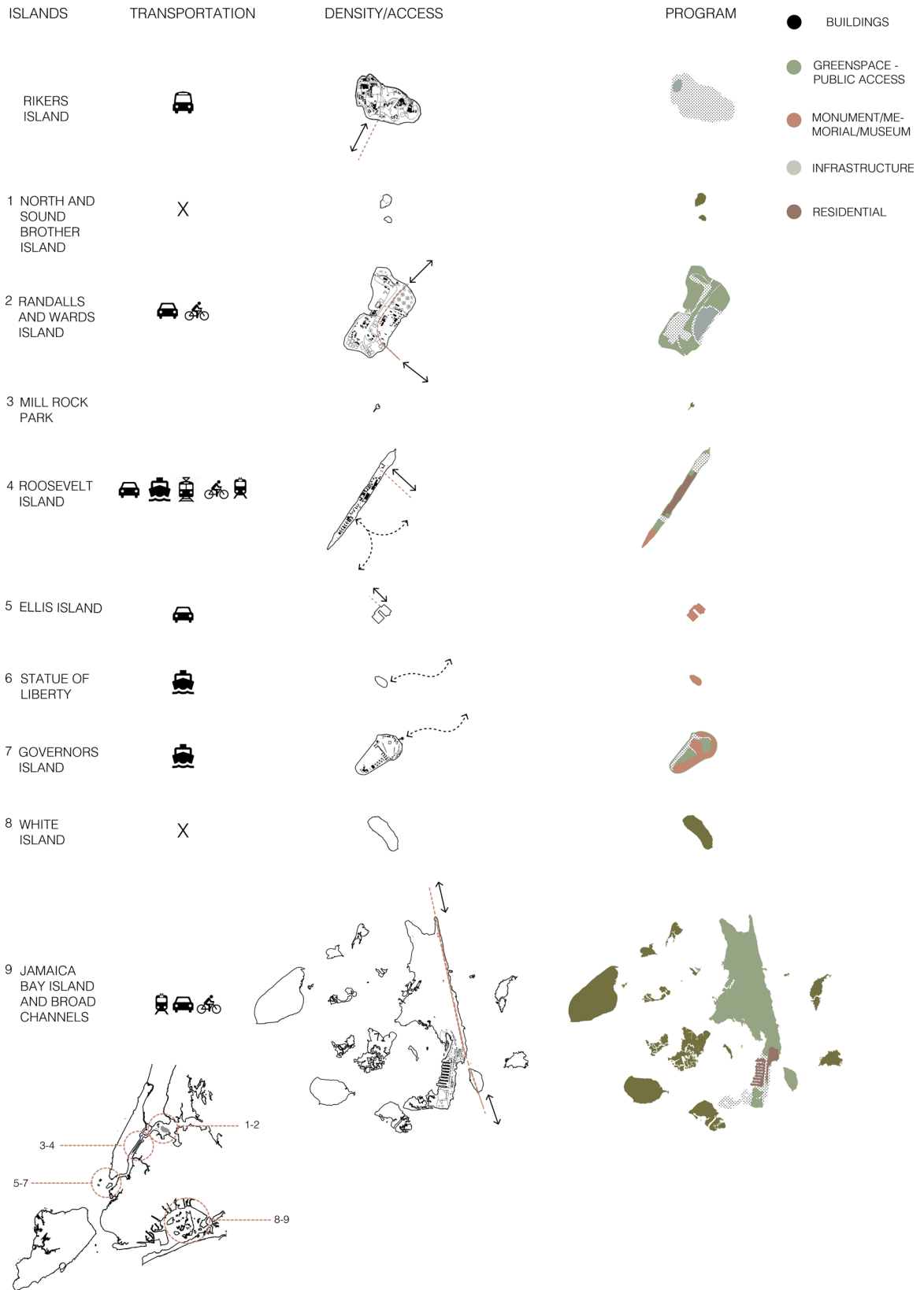
Map of Rikers Island, present day, illustrating current facilities and context (New York Open Data 2019).

treatment plants and industries processing rubber and metals in the surrounding area also adds to this issue of odour (Venters 2019, 140).

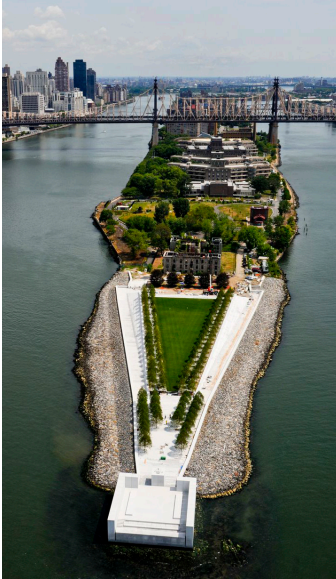
Decommissioning The Island

With a continued decline in the inmate population of New York, what happens to Rikers Island? Up until now it was politically expedient to put a vast majority of the incarcerated population in one place on Rikers Island. The expediency and efficacy of the current system has been put into question in recent years and the recent announcement by Mayor De Blasio supporting the closure of Rikers Island represents an important political turning point. As the population of incarcerated individuals shrinks, more and more the island is presenting itself as a costly exercise in agglomeration. As the infrastructure of the jails suffers after years of neglect, little is done to address the island's problems of connectivity and disrepair. This coupled with pressing environmental issues, continually raises the jail's cost of operations. Even without the proposition of closing the jail, or only assuming some populations will move off the island like the agreement to move juveniles in the Robert N. Davoren Centre to the Bronx, keeping Rikers Island as a jail always presents an out for the city government to move populations back to a troubled island given circumstance of perceived political or administrative necessity.

A study of New York City's islands can be used to understand the scale of Rikers island compared to other locations in the city, as well as how other islands have formulated relationships to access, mix of program, and past use. After producing a matrix of various island conditions in the city,



Diagram, Matrix of New York City Islands, with analysis of program and access. Two relevant islands are selected for further discussion.



Aerial view of Roosevelt Island.

two relevant examples can be investigated further (see images in margin).

Roosevelt Island is a compelling example of a condition which has a mix of public space, historical buildings representing past use, and transportation which connects the island with two boroughs. Cornell's tech campus centers education and city resources while Louis Kahn's memorial provides contemplative space which juxtaposes the bustling city beyond. The island is a hub for ferry traffic, students, and visitors who can engage with remnants of the city's smallpox hospital, while wandering through various programs. Roosevelt Island's connection to a variety of transportation options provides a variety of visual access and engagement.

Existing Proposals: A Critique

Existing proposals celebrate utopian visions of energy and education campuses, residential developments, and La Guardia airport expansions, and even renewed visions of penitentiary complexes. These "visionary" images illustrate a never-ending cycle of re-appropriation and control over the landscape and program of the site. Instead of including remediation of noxious environmental conditions as central to a process, most proposals pave over the existing footprint. A new endpoint devoid of transitions depicts the island as a blank slate ready for re-imagining, stripping all evidence of problematic conceptions of the island as it stands. The following visuals present the general approach of proposals circulated publicly and covered in the news.

Affordable housing plastered on top of what was once a larger penitentiary complex ignores issues of segregation, and environmental conditions of the unstable landfill

beneath two thirds of the island. Other plans for expanding the airport also ignore the landfill conditions beneath the surface. Some proposals have hinted at the role of wetlands and parkland as part of potential program, but along with that are efforts to rebrand the island towards gentrified notions of events, and spectacle. Henri Lefebvre states, “authentic knowledge of space must address the question of its production” (Lefebvre 2004, 389).

This suggests that by engaging with architectural interventions of remediation and deconstruction, emphasis can instead be placed upon rejecting utopian visions of new, and center on inhabiting change in the landscape carried about by the deconstruction of facilities and the reformulation and removal of land via remediation strategies. A continuous landscape in process rejects notions of a fixed endpoint, and prioritizes reparative processes socially and environmentally which present varied levels of access and visibility over time. Architectural interventions seek to reveal the physical realities of the island as opposed to paving over them.



Rendering of proposal of 80 city blocks dotted with parks and schools for 65,000 residents (Curtis + Ginsberg Architects 2016).



Rendering of "Bikers Island," a "sustainable, landscaped oasis" with rehabilitation centers, and bicycle manufacturing, and nature sanctuary (Perkins + Will 2016).

Chapter 5: Method & Proposal

The aforementioned context of Rikers Island is heavily dominated by various forms of industry, many of which expel considerable amounts of pollutants and particulates into the air around Rikers. The lack of vegetation on the island and in the local industrial areas compounds this problem, as plumes of smoke are carried on the prevailing winds across Rikers without any kind of barriers or protection. Alone, these issues may be more easily addressed in remediating the soil in the case of methane leaks or deeper, more rigid foundations to address ground movement or increased vegetal density to help offset the odour and local pollution.

Taken en masse, all these issues are symptomatic of the systemic problem with Rikers Island; without substantial work addressing the island's history as a landfill, it serves as a territory unfit for reprogramming. Any future programming of Rikers requires a bottom-up remediation and reconstruction of the island itself to make it tenable for construction and habitation or use.

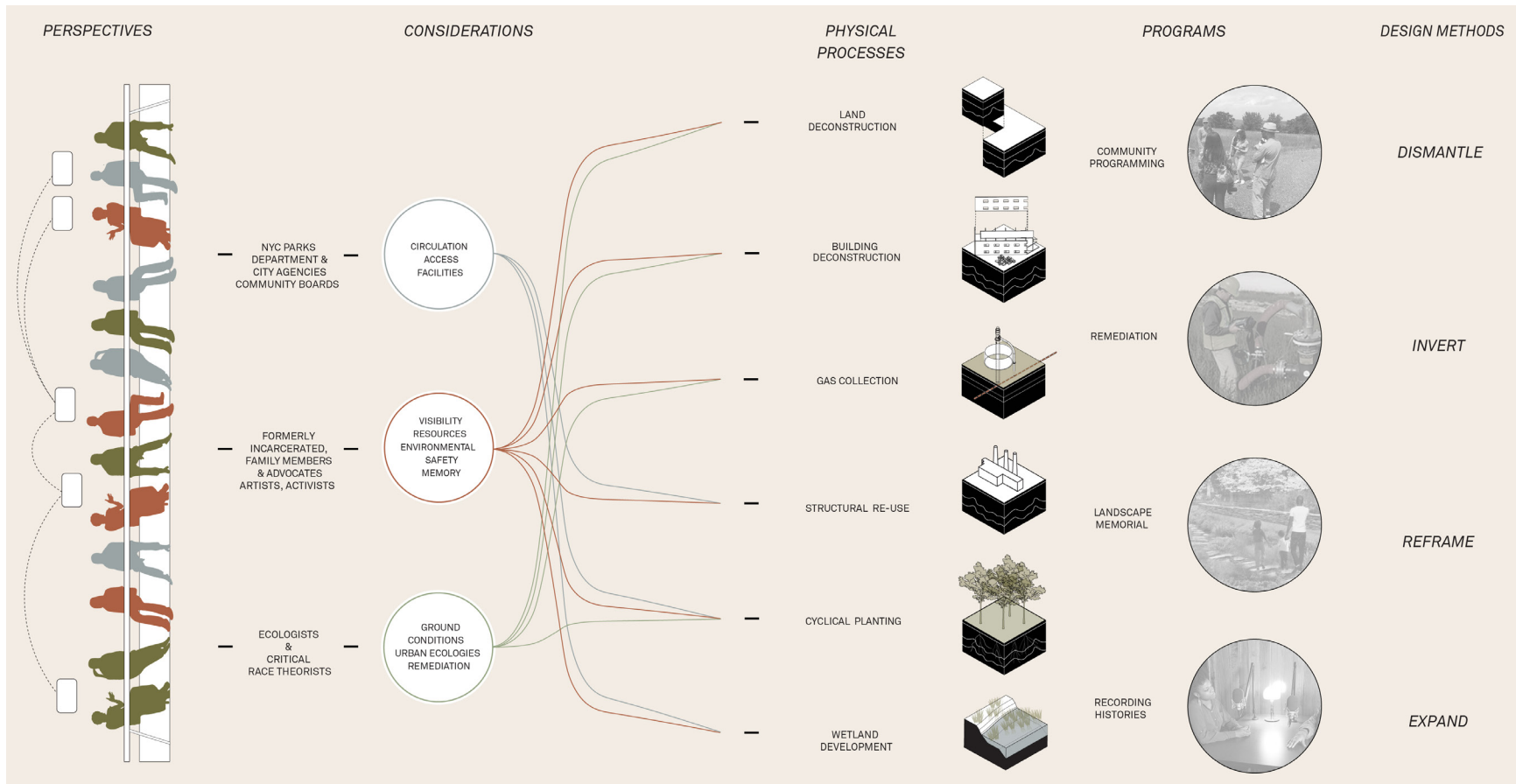
Therefore, the act of deconstructing the landfill itself will serve as a symbolic and political process of revealing, analysing, and contending with the violent and systematic oppression which created the landform ecologically and socially. This process will then engage architectural interventions for the purpose of viewing, reflecting, and healing as the landform shifts from prison infrastructure to process of regrowth and re-use. The Rikers Public Memory Project: A Community Truth and Healing Process is a grassroots organization which seeks to record and collect audio histories and collective stories. It is their mission to ensure that Rikers is "not forgotten and its memory is shaped by those who were

detained, their families, and their communities" (Rikers Island Memory Project n.d.). This thesis seeks to link the processes of environmental remediation with "an ongoing and dynamic process that uses public memory in pursuit of reparative justice for the communities that bear the mounting cost of mass incarceration" (Rikers Island Memory Project n.d.).

Linking Process & Reflection

Based upon the previous analysis, historical perspectives of physical, social/political, and ecological processes inform the island's future use. These considerations connect the physical processes of future remediation and deconstruction and link this phased approach to a more inhabitable landscape with potential programs of reflection, education, and community programming (see the response matrix diagram on the following page). Four main design methods are abstracted from the relationship between process and reflection. In designing for the island's future, Rikers Island's physical, ecological, social, and political context foregrounds the need for reflection and remediation. Dismantling the toxic infill and prison structures, inverting the harmful systems, reframing the island's purpose, and expanding reparative ecologies and the social awareness of the island's unseen history are all design methods of this reflective remediation.

Three key precedents inform an approach to process and reflection, and structure the proposal at three scales: Fresh Kills Park at the expansive scale illustrates an environmental phasing approach to remediation on a former landfill, Agnes Denes Wheatfield: A Confrontation (The Harvest) at the intermediate scale links more extensive processes of



Response Matrix Diagram, showing connections between physical processes of remediation and deconstruction and programs which inform four main design methods.

remediation to a program which reflects on environmental inequality, and at the intimate scale Mabel Wilson and Howeler + Yoon's project, *The Memorial To Enslaved Laborers*, exemplifies the material and experiential qualities of a collaborative process of reflection on past harm.

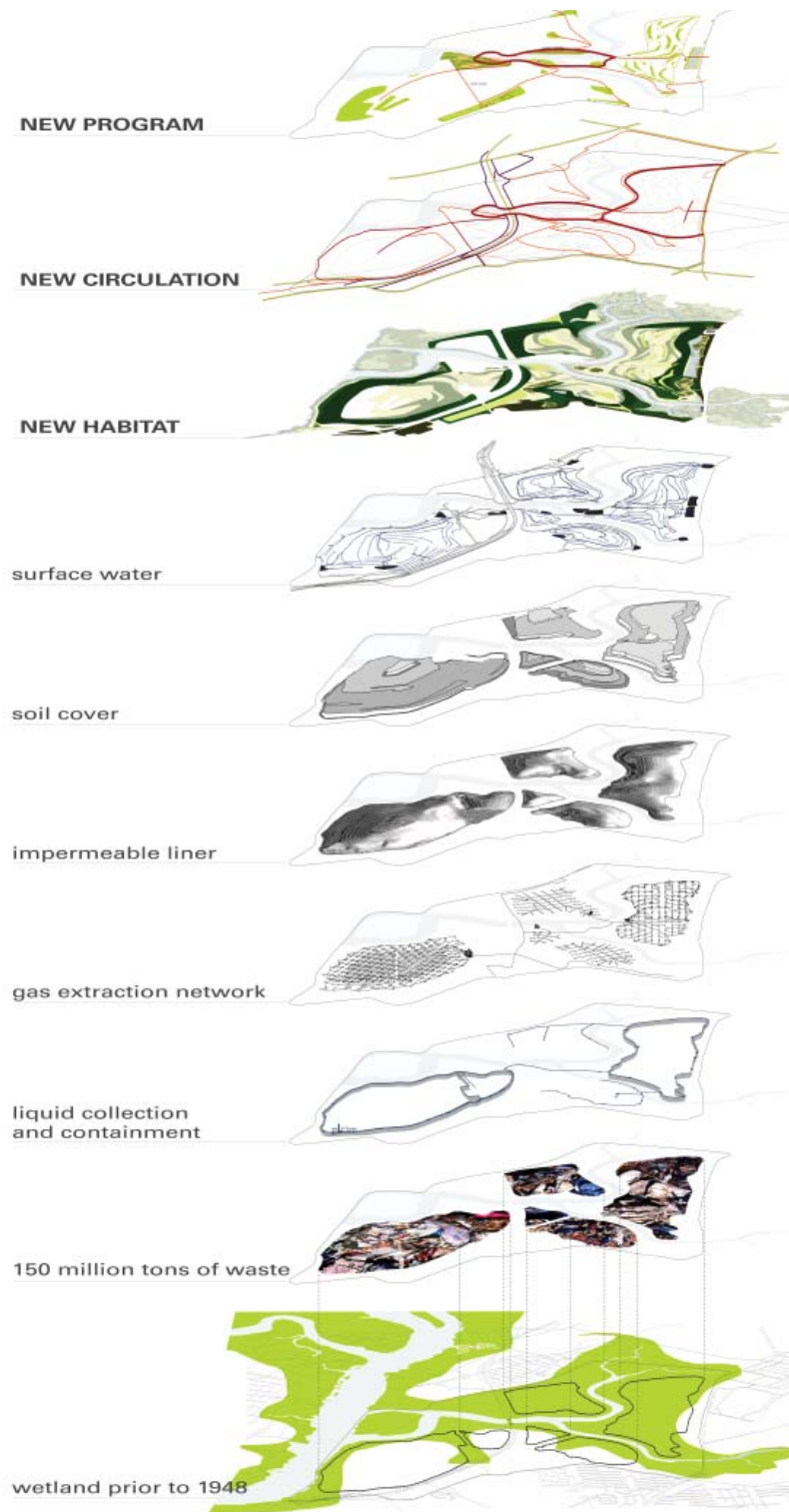
Expansive

Precedent

Fresh Kills Park is a decommissioned landfill turned parkland and recreation area in Staten Island. The process of landfill remediation was central to the development and programming of the site. The aesthetic and experiential qualities of color, planting, program and access which integrated with technical and logistical modes of phasing and infrastructure is useful in the context of this thesis. The large scale of the park, which is over 2,000 acres, provides a relevant example of feasibility in terms of remediation and civic use for unsafe sites (see layered phasing diagram on following page). As the remediation process improved conditions on the former landfill site, the public gained access, creating new community resources around recreation, environmental education, and reflection of past use. Lifescape is an

ecological process of environmental reclamation and renewal on a vast scale, recovering not only the health and biodiversity of ecosystems across the site, but also the spirit and imagination of people who will use the new park. Lifescape is about the dynamic cultivation of new ecologies at Fresh Kills over time—ecologies of soil, air and water; of vegetation and wildlife; of program and human activity; of financing, stewardship and adaptive management; of environmental technology, renewable energy and education; and of new forms of interaction among people, nature, technology and the passage of time. (Field Operations 2006, 12)

A critical limitation of Fresh Kills the project, and as a model for wider reference, is the disjuncture between



RE 17: HISTORICAL AND INFRASTRUCTURAL LAYERS FOR THE FRESH KILLS SITE

Diagram, historical and infrastructural layers (Field Operations 2006).

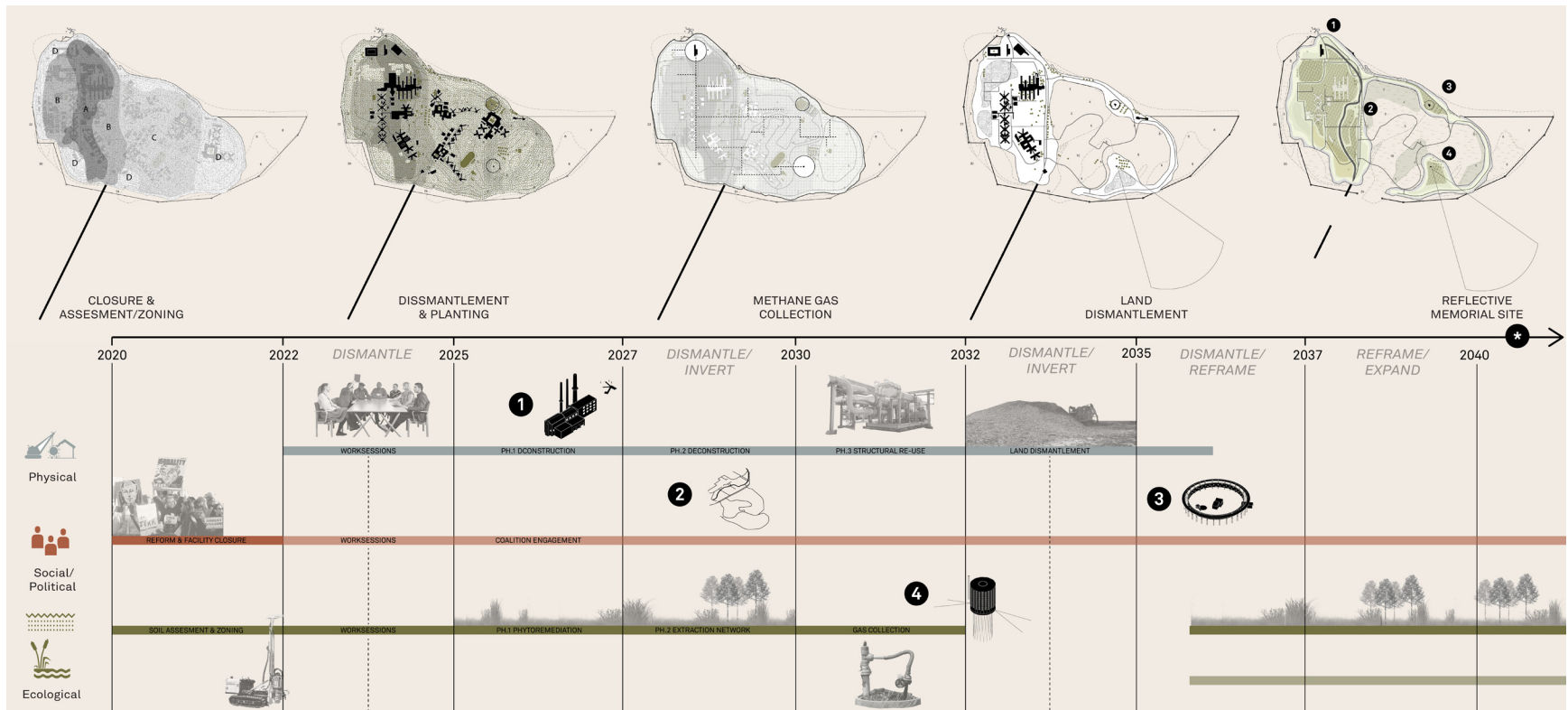
constructed and beautified "nature", and the reality of the site's destruction and abuse of the former wetland. What is missing is a reflective and critical representation of the site's history. The project's broadly optimistic vantage point lacks interventions which prioritize a critique of patterns of exploitation which continue to create conditions of waste and environmental harm.

Proposal

The proposed timeline for the deconstruction and remediation of Rikers Island utilizes the layering of the Fresh Kills Park project's phased environmental strategy while creating a more critical approach to access and interventions. Rikers Island cannot function as another public park. The island itself must present the untold stories embedded in a landscape constructed for harm and exploitation.

Land restitution returns the island to public trust. Prior to the deconstruction process is the closure and assessment/zoning of the site based on ground conditions and stability. A coalition of community members, criminal justice activist groups, former inmate alliance groups, geologists, city officials, EPA and designers create an institution that oversees and protects the island as a place of mourning and healing across varied concerns and impacts. They preside over access to the island as the site is dismantled and the site shifts in form and safety and will shift over time. The following proposed phasing timeline illustrates physical deconstruction and remediation processes over the next 20 years.

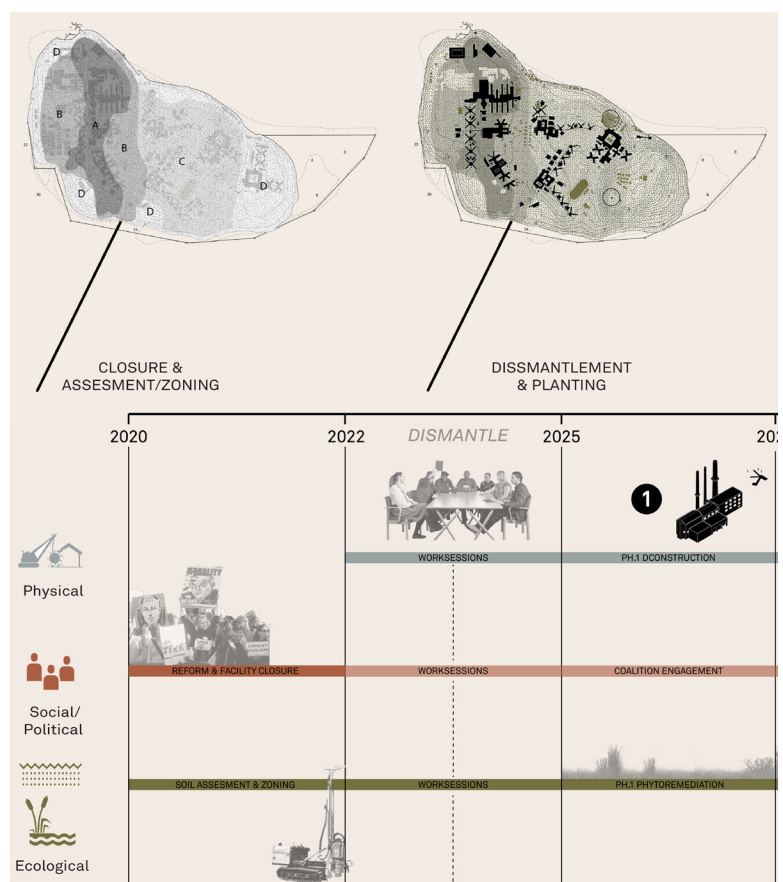
The four main design methods are utilized at the expansive phasing scale: dismantling the prison, inverting the methane



Drawing of proposed future timeline, showing the physical processes of remediation and deconstruction of the site, as well as the emergence of ecologies and use.

from pollutant to energy, reframing old structures for new programs, and expanding the natural ecology. Four existing sites are reframed and engage in processes and programs relating to the phasing outlined.

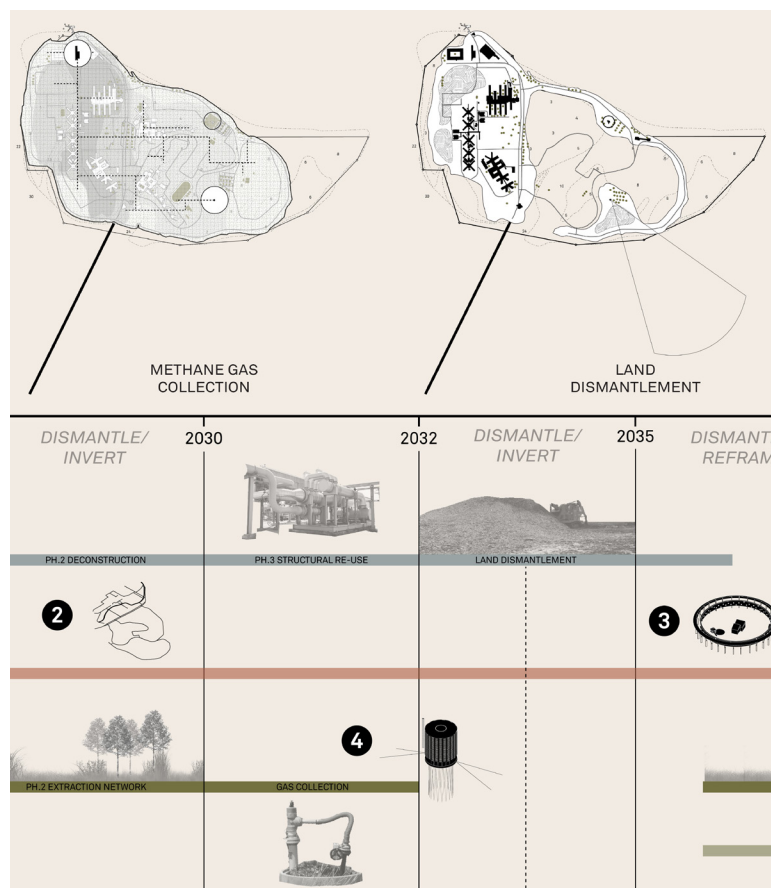
Phase one of dismantlement and rotational crop cycles targets high risk and extraneous structures which are processed and removed to make way for future methane gas collection infrastructure.



Phasing diagram showing preliminary assessment and phase 1 of island remediation process and focus site 1, the power plant.

Focus site one, the power plant, sits on the original landmass of Rikers Island and is reframed for processing deconstructed building material and energy. As assessment and remediation processes are underway, coalition members will have access to the island via ferry or car. The

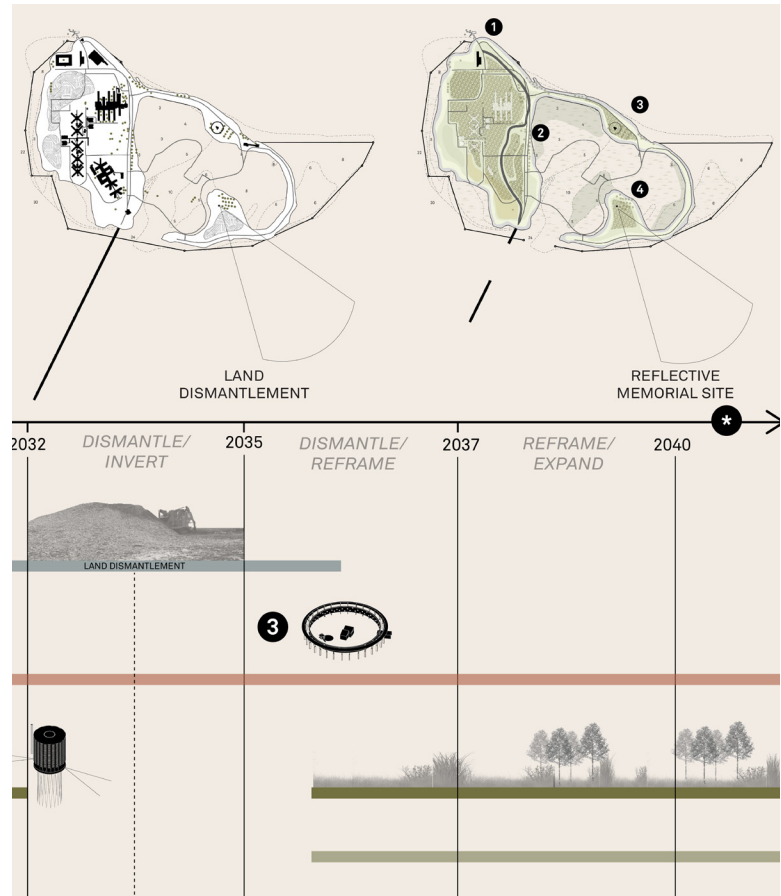
power plant building will additionally function as a meeting point for coalition members to review changes on the island, watching deconstruction occur from rooftop lookouts.



Phasing diagram showing phase two, three and four of island remediation process, and the introduction of focus sites in process: the paths, the radio tower, and the garden.

Phase two collects methane gas from the island's toxic landmass. Site two, the existing circulation, is reconfigured for reviewing and servicing collection. Liners and water drainage systems are laid, followed by the gas cap well system, which extracts methane from the ground. Site four, the radio tower, formerly a signal for nearby LaGuardia airport, is reframed for methane storage, and the radio signal is inverted for the island's audio archives. Before broader access to the island, city residents can access the

island radio signal from anywhere in the city and listen to archived interviews, stories, and music that reflect upon the city's harm through Rikers Island's expansion.



Phasing diagram showing phase five and six of remediation and deconstruction process.

Phase three is the processing and refinement of the gas for energy which services the island's infrastructural demands. Old structures become part of the digesting of the landform and will later become publicly accessible sites of remembrance, mourning, and reflection. Site three, the garden, is protected from dismantlement and protected by a constructed wall, and will be an accessible memorial after phase five and six.

Phase four is Island Dismantlement. Sites of significance are framed by a large lagoon, a void which invites regrowth and emerging ecologies. The material is processed and re-used for flood mitigation projects along the Inner Long Island Sound and the edge of Rikers Island. The original bulkhead is re-used to contain landform material as it is removed.

Phase five is the transition from destruction to regrowth and access to the site, which becomes a place for reflection and the re-emergence of ecologies and communities destroyed by imprisonment's structural and environmental racism. The power plant, radio tower, and garden are accessible to the coalition and communities affected by the justice system. The larger public will only have access to the site after the coalition and community members develop care and education guidelines for the broader city. These sites prioritize sacred moments between friends, family members, and organizers who New York City owes reparations. Raised pathways are constructed to connect memorial sites and services.

Phase six severs the bridge between land and island, reintroducing the lands' ecological nature and rejecting moves for development and capital. Instead, fostering a generational, educational, and memorial site acknowledges the city's constructed genocides. The lagoon and wetland spaces provide the potential for oyster, mussel, and wetland ecologies to flourish. The coalition begins to organize broader access through careful programming, which rejects trends in tourism and development. The site remains open for intermittent access. As the remediation processes continue, the island represents the more extensive responsibilities of New York City to develop a larger system of reparations through investment in neighborhoods that were victim to

the designed systems of environmental inequality, targeted policing, and lack of funding.

The conceptual proposal presents the island at 2040, with the emerging ecologies and transitional landscape framing four key sites to be explored programmatically, and sectionally at two scales (intermediate and intimate). The following site is not an end result but more a snapshot of a potential future still in process, one of many possible iterations of reflective remediation.

The bridge between land and island is severed, reintroducing the ecological nature of the land's origin. The re-opening of the historic bulkhead creates an intertidal marshland and lagoon landscape, and four main sites are operational. The power plant, the paths, the garden, and the radio tower (see page 46).

Intermediate + Intimate

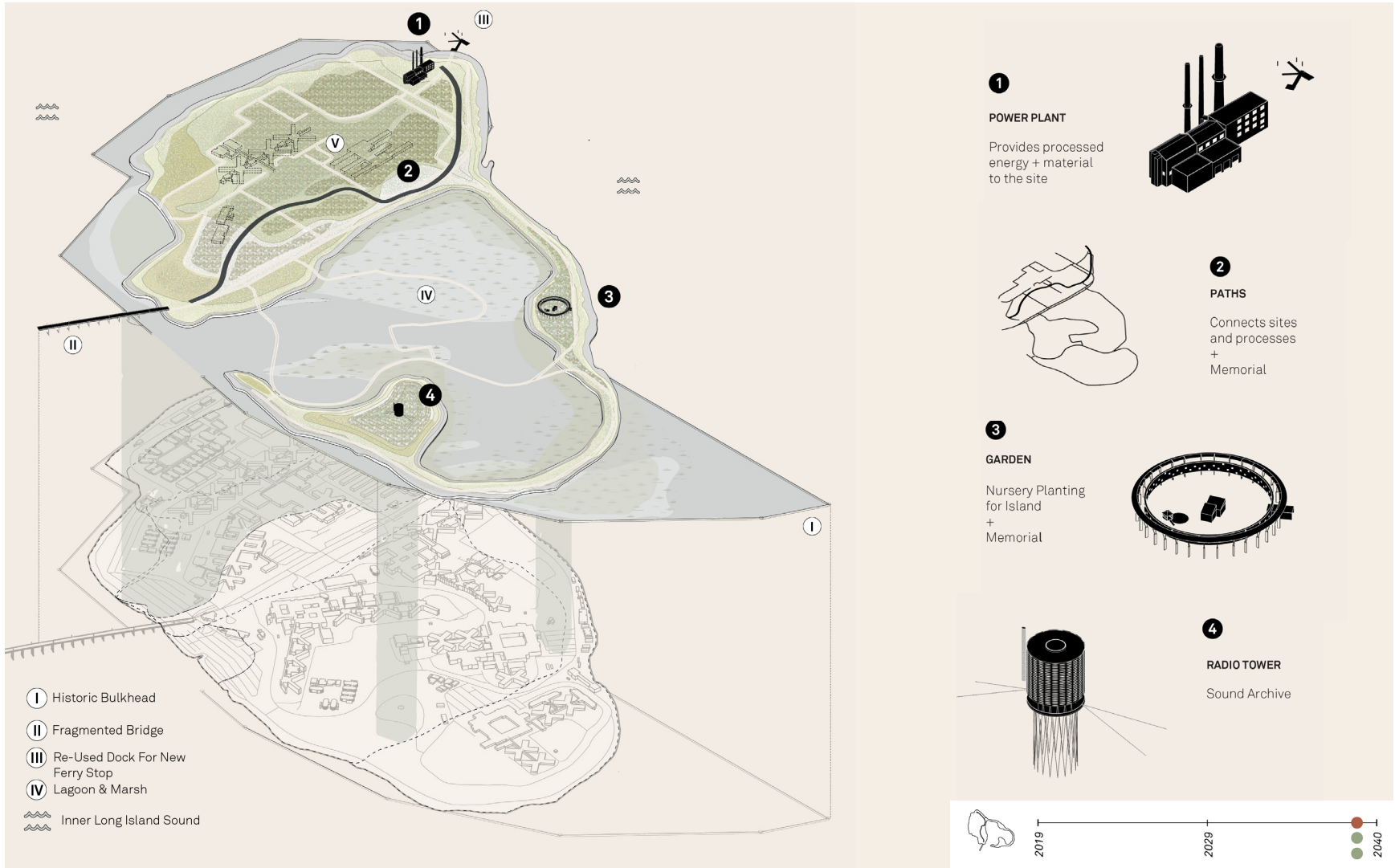
Precedent

At the intermediate scale, Agnes Denes's "Wheat field: A Confrontation (The Harvest)" illustrates the potential for design interventions to utilize environmental processes to have symbolic significance, and engage the community in a reflective programming and access to a landscape which is critical of its context.

The Confrontation was both geographical(city/country) and social (given the proximity to the New York Stock Exchange and the World Trade Center, Denes was making a point about world hunger and the exploitation of resources). The artist "tilled, sowed, and harvested almost a thousand pounds of wheat on landfill that was to become high-rise Battery Park City. It was a prophetic homage to natural cycles in an urban landscape that seemed on its way to permanence." (Lippard 2005, 17)



Photos of, Wheat field process and view (Denes 1982).



Axonometric drawing showing 2040 proposal with four focus sites and remnants of phasing process.

This project is significant because of its links to a political dialogue about dynamics of inequality and environment in the urban context, and the use of processes of planting provided a powerful juxtaposition to its context.



Image of Agnes Denes, "Wheat field", illustrating juxtaposition of field and urban background, with edges of landfill rubble visible. (Denes 1982).

A programmatic and sectional exploration of the four focus sites on Rikers Island at the intermediate scale take on Denes's linking of process, program, and view.

At the intimate scale, Mabel Wilson and Howeler + Yoon's project, The Memorial To Enslaved Laborers, acknowledges The University of Virginia's construction in Charlottesville, designed by Thomas Jefferson. The memorial creates space for mourning, reflection, and conversation by defining a circular public space and engraving material dedicated to an individual who constructed the campus. A timeline is etched along the looped bench, confronting people with the lineage in which the University of Virginia was complicit. The project reveals harmful histories while providing space for communal reflection, and exemplifies the importance of materials and details that express the memorial's intent.

This use of material and intimate spatial considerations will be carried forward into an approach to material for the proposed sites on Rikers Island at the intimate scale.



Image of Memorial to Enslaved Laborers. The inner ring shows inscribed timeline (Suchak 2020).

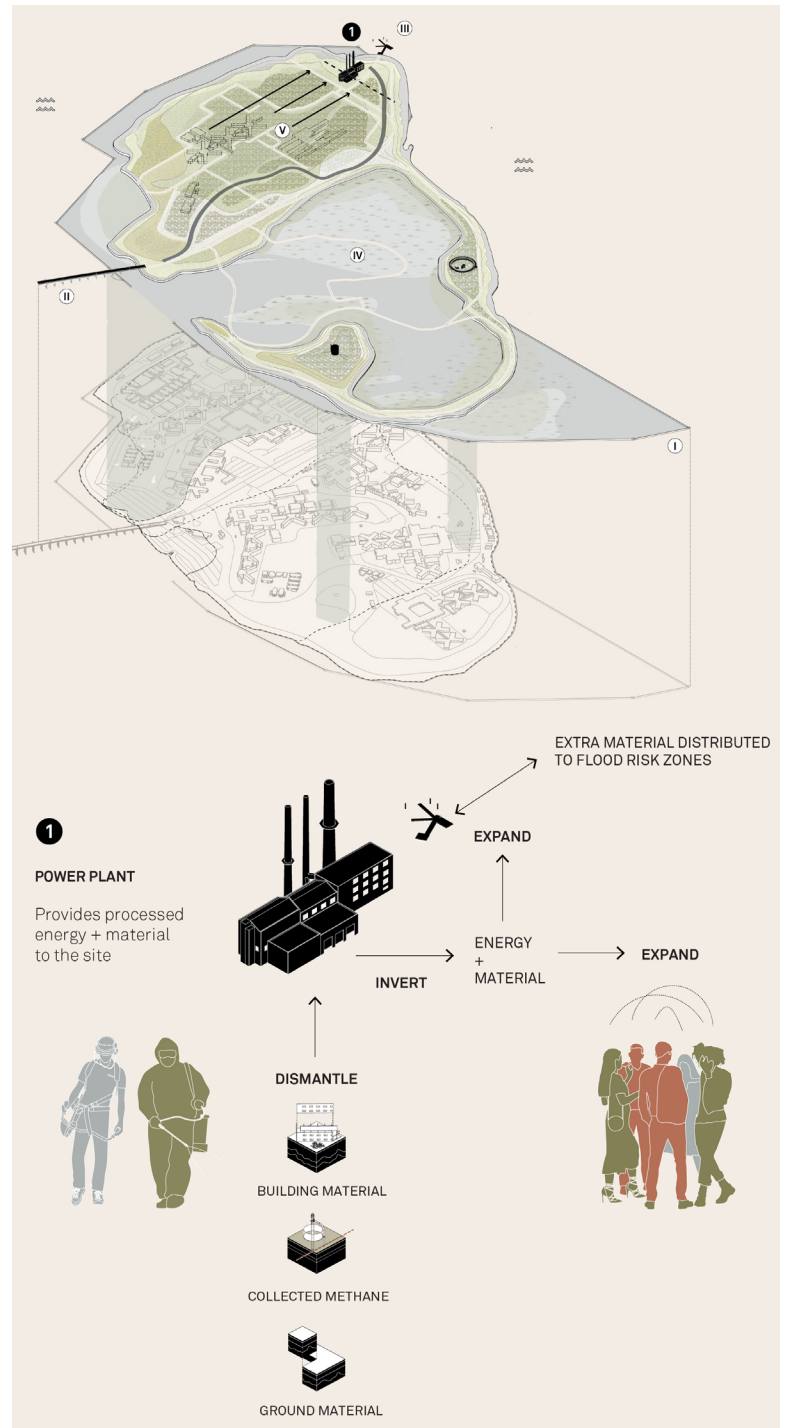
Proposal

The power plant, paths, garden, and radio tower are presented programmatically and sectionally at the intermediate and intimate scale, showing how process and reflection relate at each site.

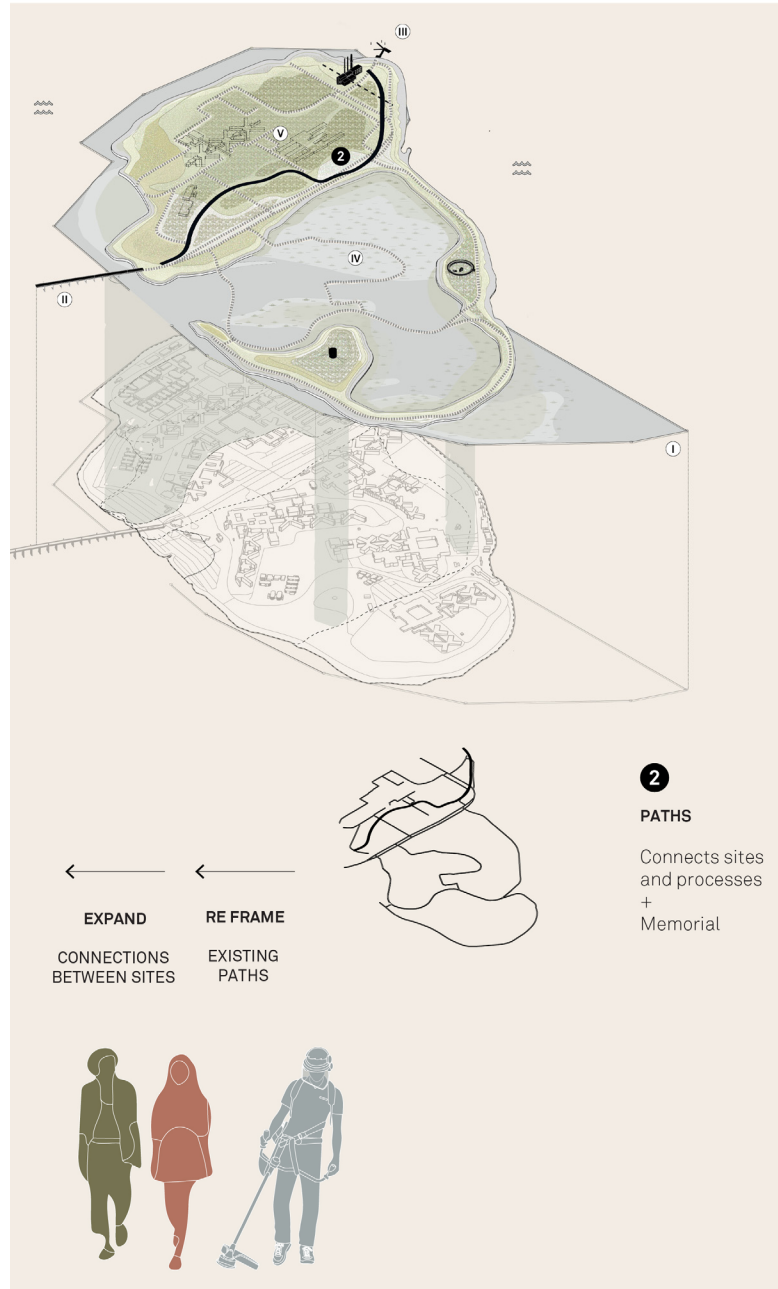
Power Plant & Paths

The old power plant is reframed for new use. Collected methane from the island's landfill is inverted and processed at the plant, producing recycled energy for the building and ground material, which is dismantled, sorted and processed. Recycled materials and energy are then shared with the rest of the island. Existing circulation is re-framed and re-articulated as the island is dismantled and used to connect sites and processes of remediation and reflection. The future proposal illustrates how paths connect over water and land.

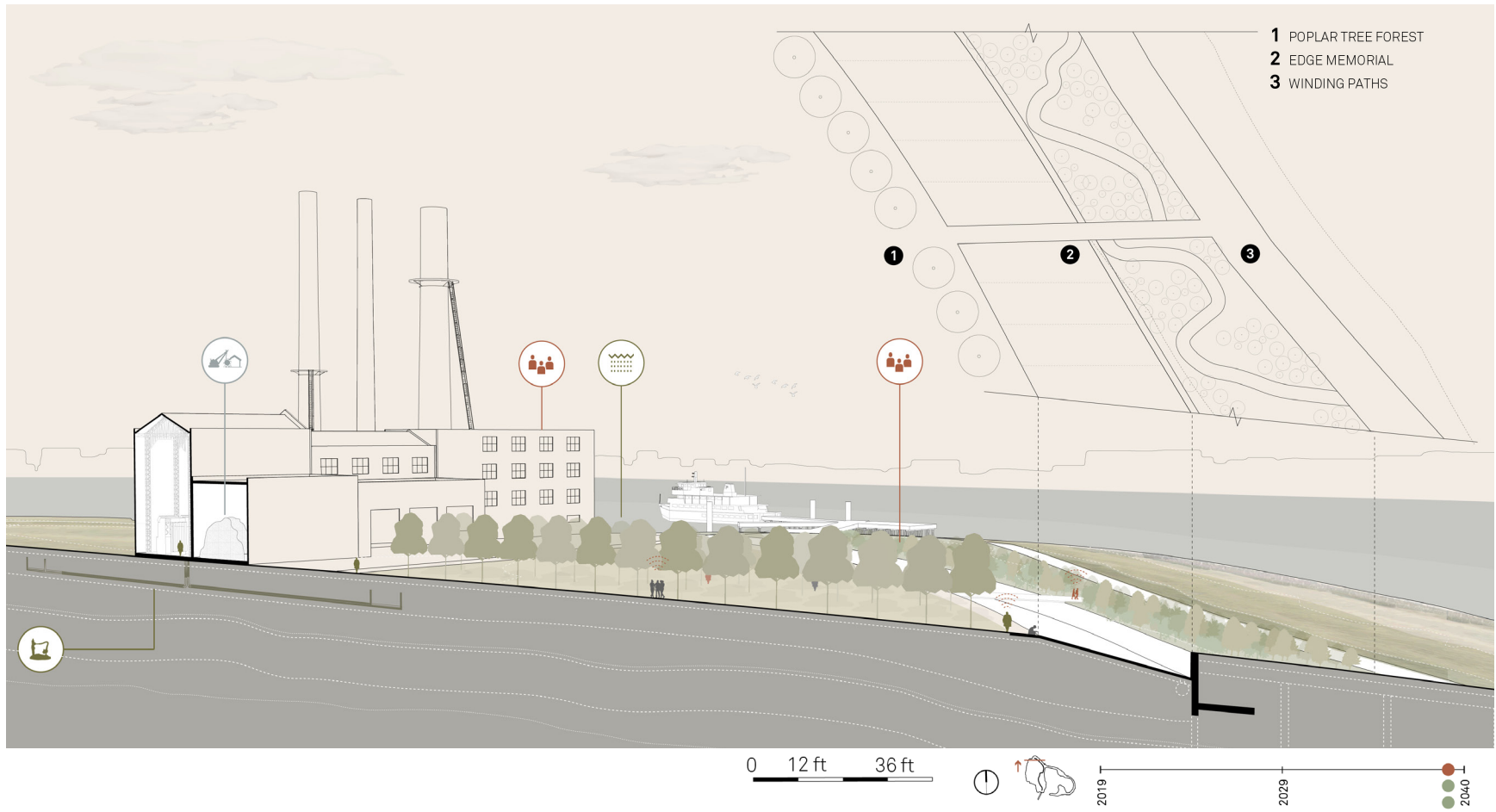
Site two is the memorial walk which traces the original edge of the landmass, becoming a reflective memorial site.



Program drawing of power plant and design methods/links to islands



Program drawing of paths and design methods/links to island



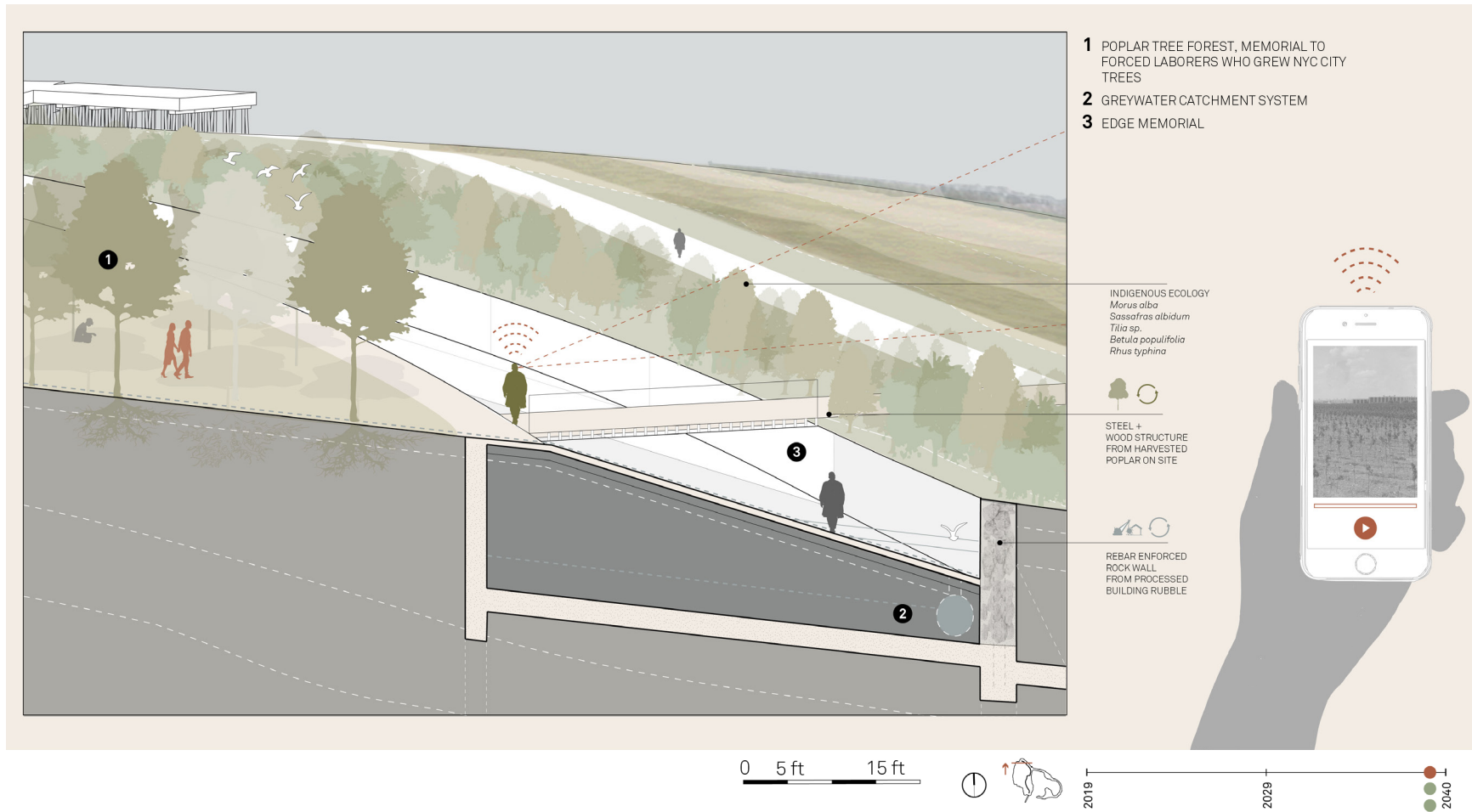
Section drawing of power plant and paths at intermediate scale, illustrating connections between process and reflective program.

At the intermediate scale, a section cut through Power Plant and Paths, illustrates the relationship between physical processes in the reframed plant building (the collection and processing of methane, and deconstructed building material), and the parallel landscape memorial (see page 51). Visitors can arrive by ferry and wander through the poplar tree forest, dedicated to forced laborers who cultivated the tree nursery. The demarcated line traces the line of the original landmass.

This line acts as a memorial in itself, stretching from one end of the island at the ferry stop to the old and fragmented bridge. It is a marker, delineating and reframing the island's original landmass from newer fill. This slope is a threshold, and a system which collects grey water from adjacent cyclical planting and remediation plots, where indigenous tree and bush species are reintroduced to the landscape. This edge, which is made from recycled materials from the power plant's processes, confronts the body with the scale of the island's harm, when viewing the rest of the landmass beyond. This procession is framed by the poplar tree memorial on one side and the island's new edge on the other (see page 53).

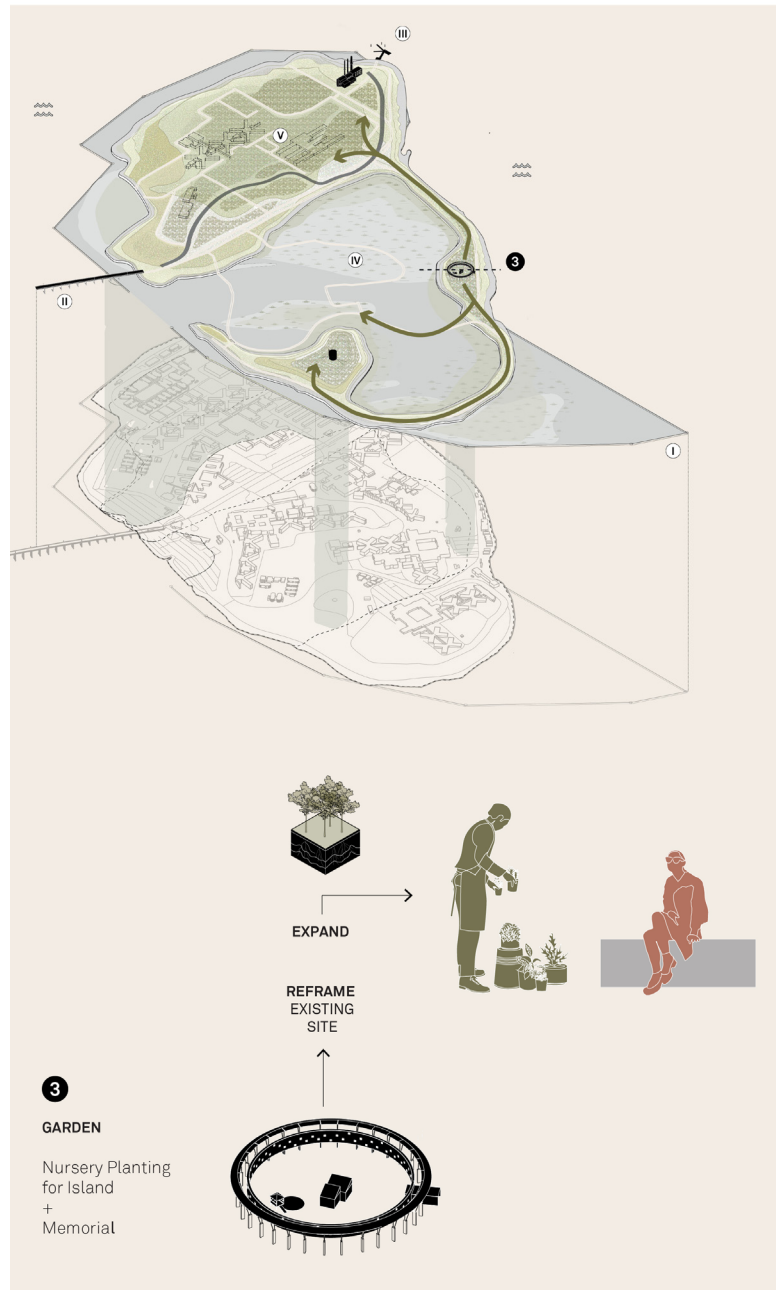
Garden

The garden, once one of the few spaces in which those incarcerated had access to green space, is expanded, creating a courtyard garden and memorial. It functions as a planting nursery for the various remediation needs on the island, as well as a site which reflects on the island's impact on individuals and families affected by the justice system (see page 54).



Section drawing at intimate scale of edge memorial. This slope is a threshold and a system which collects grey water from adjacent cyclical planting and remediation plots, where indigenous tree and bush species are reintroduced to the landscape.

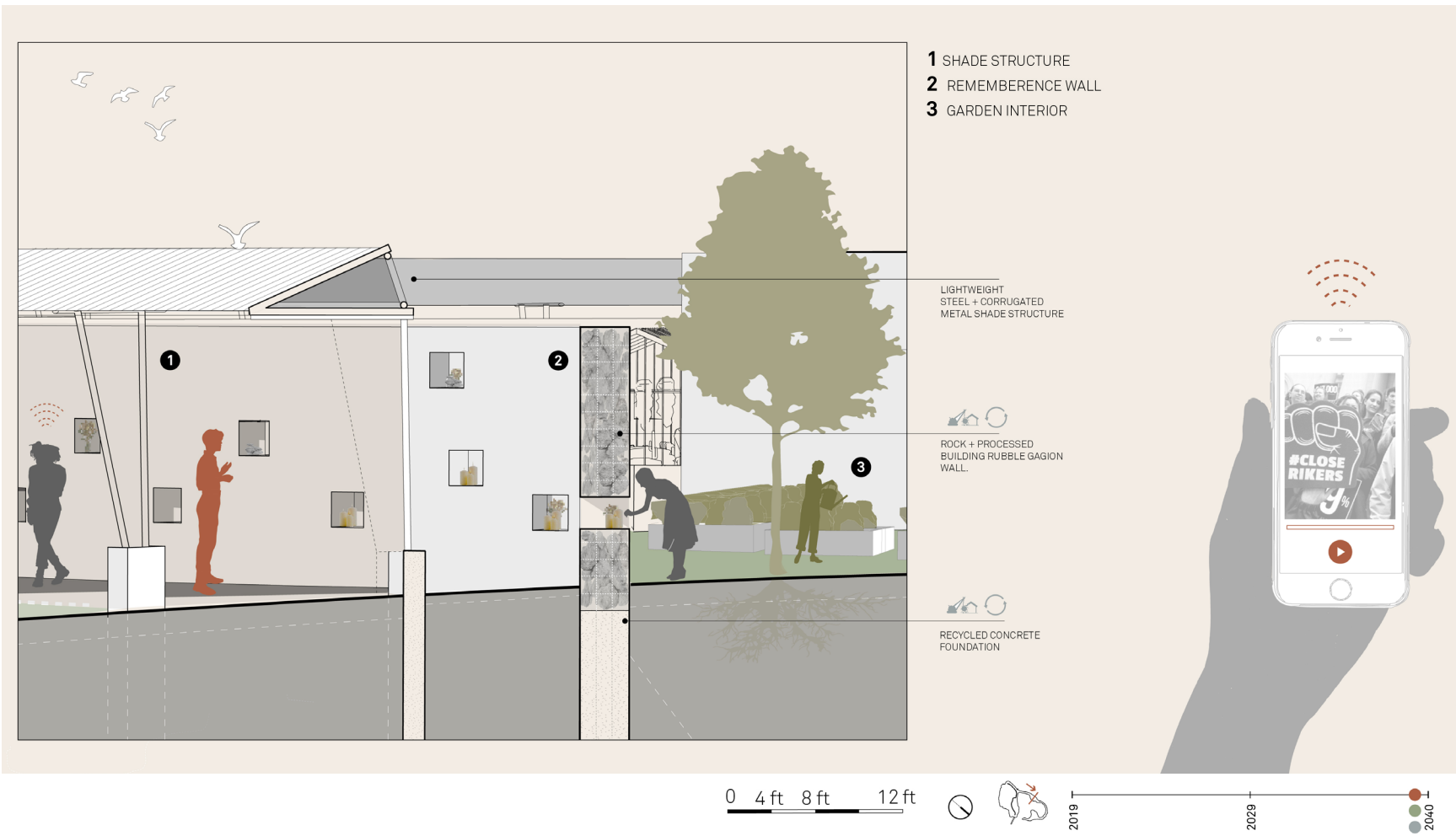
At the intermediate scale, a series of zones in the landscape illustrate the reintroduction of historic intertidal marshlands. On the exterior edge, recycled building material from the dismantle phase protects the interior from flooding and strong current, while framing an intermediary marsh.



Program drawing of garden and design methods/links to island



Section drawing of garden at intermediate scale, illustrating relationship between physical processes and reflective programming. A series of zones in the landscape illustrate the reintroduction of historic intertidal marshlands



Section drawing of garden site at intimate scale, showing material and experiential qualities of gabion wall with openings for offerings.

The previous garden site's commemorative wall acts as a screen from the wind, with foundations tethered to the bedrock below. The interior lagoon edge is supported by re-articulated building material and invites visitors to expansive views across to the radio tower beyond (see page 56).

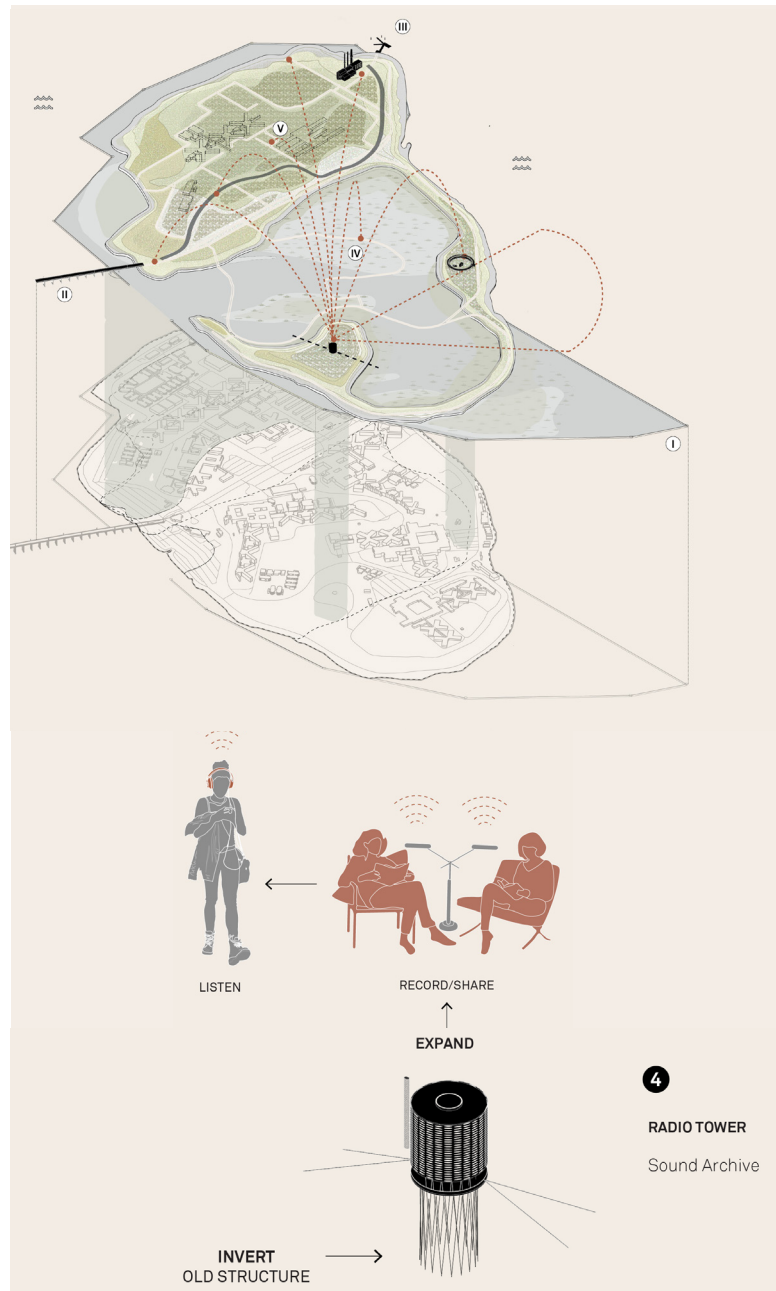
The Garden is both a site of remembrance for those lost because of injustice on Rikers Island and a greenhouse/ plant nursery. The existing site is reframed by a gabion stone wall constructed from processed building material from the site. Openings in the wall invite those who wish to leave offerings, while strands of light still pass through the gaps in the construction (see page 56).

Radio Tower

The radio tower was formerly the airport signal for nearby LGA airport. In previous phases the site is remediated through methane extraction and cyclical planting. The remaining infrastructure is reframed, creating an inhabitable radio tower, where the Rikers Island Memory Project can share recorded conversations, stories, music, and perspectives from those affected by Rikers Island. These archived sounds are accessible across the site and the city beyond (see page 58).

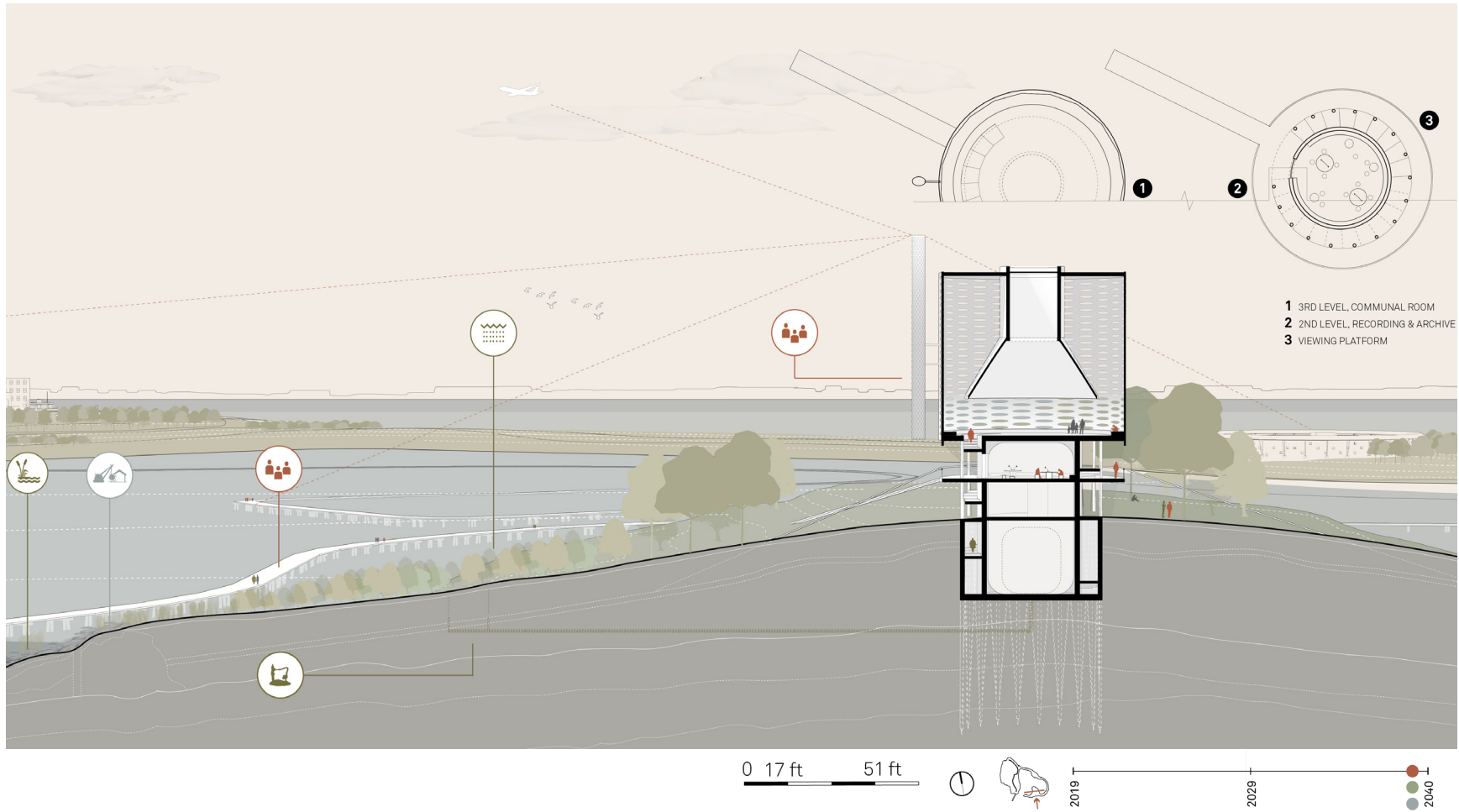
The radio tower sits at the highest point of the island, providing expansive views across the marsh and lagoon to the garden and power plant. The new program, a recording studio and sound archive, inverts the former radio signal's past use. The structure of the tower utilizes remnants of the remediation process through the former methane extraction structure for new audio recording studios. The ground floor welcomes visitors inside, while the upper stories house the audio programming and communal room. New circulation

wraps the concrete form. Visitors can use the exterior stair or ramp to emerge from below into perforated space (see page 60).

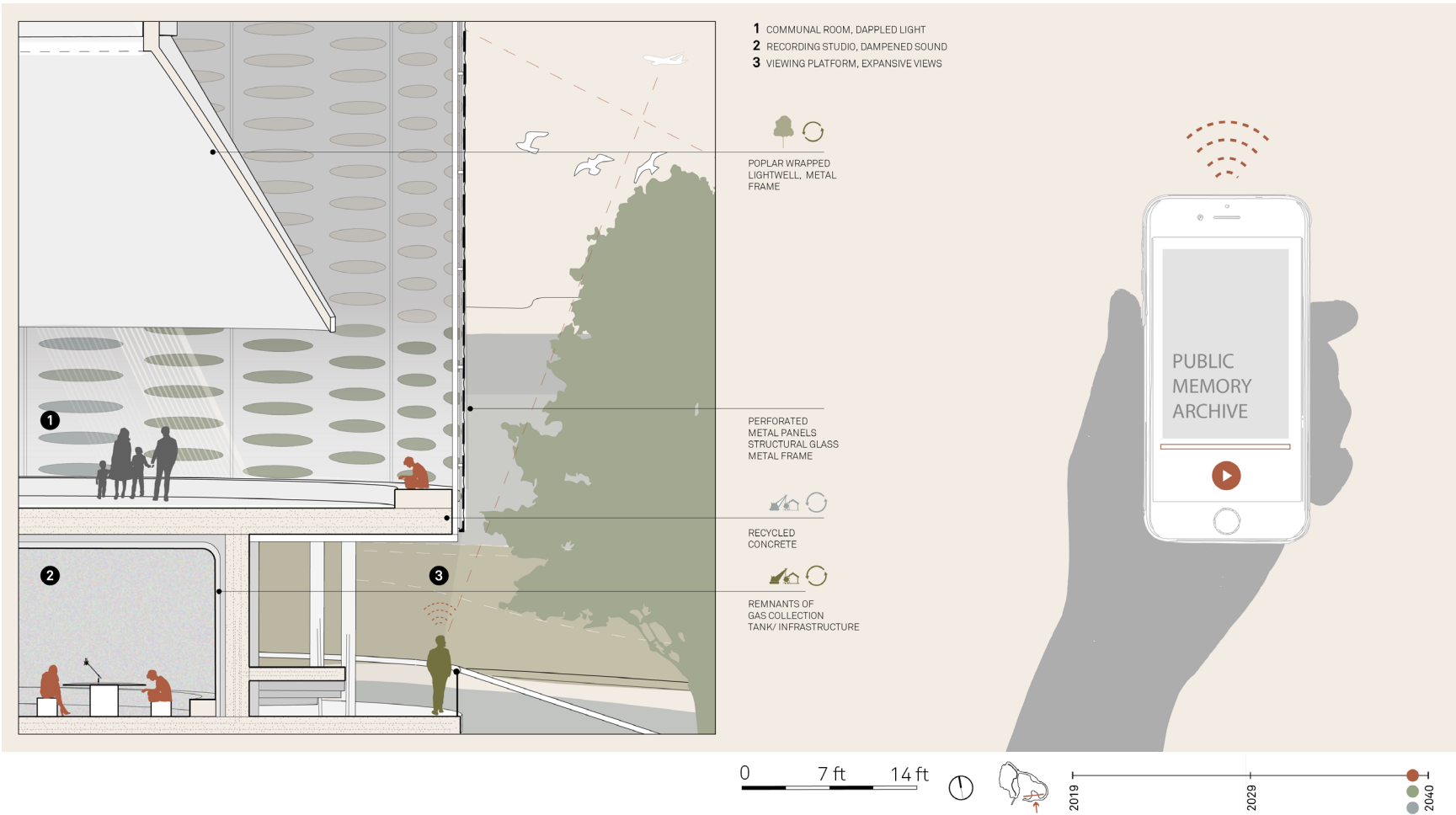


Program drawing of radio tower and design methods/links to island

Indigenous species populate remediation plots and poplar trees grow up the hill (see page 60). Reflections of experience, via recorded histories, exist beside radical futures. Spaces for intimate dampened sounds in the recording studios are cradled by outdoor viewing platforms framing views of the expanse beyond. The top floor, a communal room for listening and reflection, is bathed in dappled light from the perforated metal facade, while the light well is wrapped in poplar veneer, emanating warm light (see page 61).



Section drawing of radio tower and intermediate scale, illustrating expansive views beyond connecting to other focus sites, as well as remnant of remediation process, and emerging programs in radio tower.



Detail section drawing of radio tower communal room, interior recording studio, and outdoor viewing platform.

Chapter 6: Conclusion

The proposal for Rikers Island responds to Garcia and Frankowski's manifesto's words: Those who seek to engage in Radical Design must go to the root of past present and future potentials of constructed harm by un-making architecture. The design method utilizes theory, mapping (historical analysis of layers), and precedent to uncover and deconstruct relationships between physical, environmental, and social/political processes. It uses these processes temporally and spatially to develop design considerations rooted in a critical awareness of layered conditions.

From expansive processes of deconstruction and remediation at the scale of the island to intimate moments between the material, program, and view, the sectional investigations of the power plant, the paths, the garden, and the radio tower engage with physical processes of deconstructing the site, and reflective programs reveal invisible histories. The project exists beyond destroying the physical and spatial manifestations of harm in the built environment, challenging designers and the broader audience to question and reflect on the impact on which stories, perspectives, and conditions are prioritized in the design process.

The proposal is not about the feasibility or actuality of the designed future. More so, it reflects the responsibility the field of architecture has to contend with what we have created. Furthermore, it reflects on the effect that designed sites, systems, and structures of harm have beyond their present and formulates more intersectional methods of confronting sites that hold complex and layered histories.

References

- AP Photo/FDR Four Freedoms Park LLC. 2012. Aerial Photo of Roosevelt Island. https://www.dailyfreeman.com/news/editorial-honoring-fdr/article_c9596e08-df31-5015-a34c-653bf010c712.amp.html.
- Badger, Emily. 2017. "How Redlining's Racist Effects Lasted for Decades." *The New York Times*. <https://www.nytimes.com/2017/08/24/upshot/how-redlinings-racist-effects-lasting-for-decades.html>
- Cheng, Irene, Charles L. Davis, and Mabel O. Wilson. 2020. *Race and Modern Architecture a Critical History from the Enlightenment to the Present*. Pittsburgh: University of Pittsburgh Press.
- Cosgrove, Denis. 1998. *Social Formation and Symbolic Landscape*, Wisconsin: University of Wisconsin Press.
- Curry, Milton S. F. 2017. "Spatializing Blackness: How Can Race Inform Art and Architecture?" CNN. Cable News Network, December 8. <https://www.cnn.com/style/article/spatializing-blackness-art-architecture/index.html#:~:text=%22Architecture%20race%20theory%22%20%2D%2D%20a,discipline%20%2D%20both%20teaching%20and%20practice>.
- Curtis + Ginsberg. 2016. Rendering of City Blocks. February 29. 6sqft. <https://www.6sqft.com/beyond-bars-designers-reimagine-rikers-island-as-a-destination/>.
- Day, Ronald. 2016. "A Day in the Life of the Rikers Island Bridge." Interview by Estefenia Acosta. Humanities Action Lab, April 8. Audio, 00:28. <https://vimeo.com/162148649>.
- Decrausaz, Mark-Henry. 2019. "Rikers Island Statistics." New Rikers. Columbia University. <https://readymag.com/u11694753/657182/>.
- Denes, Agnes. 1982. Wheatfield - A Confrontation: Battery Park Landfill, Downtown Manhattan. Agnes Denes Studio. <http://www.agnesdenesstudio.com/works7.html>.
- Field Operations. 2006. Draft Master Plan, Fresh Kills Park: Lifescape Report to Staten Island, NY. New York City Department of Planning.
- Foucault, Michel. 1977. *Discipline and Punish: the Birth of the Prison*. New York: Pantheon Books.
- Gandy, Matthew. 2003. *Concrete and Clay: Reworking Nature in New York City*. Cambridge, MA: The MIT Press.
- Garcia, Cruz, and Nathalie Frankowski. 2020. "'Un-Making Architecture: An Anti-Racist Manifesto.'" WAI Think Tank. <https://waithinktank.com/Anti-Racist-Manifesto>.

- Geismar, J.H. 2013. *Tales of Gotham, Historical Archaeology, Ethnohistory and Microhistory of New York City*. New York: Springer Science & Business Media.
- Hay, Peter. 2013. "What the Sea Portends: A Reconsideration of Contested Island Tropes." *Islands Studies Journal* 8, no.2: 209-232.
- Hayden, Dolores. 1997. *Power of Place: Urban Landscapes as Public History*. Cambridge, MA: MIT Press
- Home Owners Loan Corporation. 1939. Map of Brooklyn. National Archives and Records Administration. <https://www.archives.gov/nyc/index-DEV.html>.
- Hutton, Jane Elizabeth. 2020. *Reciprocal Landscapes: Stories of Material Movements*. Abingdon, Oxon: Routledge.
- Kahn, A., & C. J Burns. 2005. *Site matters: Design Concepts, Histories, and Strategies*. New York: Routledge.
- Lefebvre, Henri. 2004. *The Production of Space*. Malden, MA: Blackwell.
- Lippard, Lucy. 2005. "Around the Corner: A Photo Essay." In *Site Matters: Design Concepts, Histories and Strategies*, edited by A. Kahn and C.J. Burns, 1-18. New York: Routledge.
- Mabel, Joe. 2013. Image of Rikers Island from Plane. Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:LaGuardia_Airport_and_environs_aerial_from_the_south_01_-_white_balanced_\(9456947362\).jpg](https://commons.wikimedia.org/wiki/File:LaGuardia_Airport_and_environs_aerial_from_the_south_01_-_white_balanced_(9456947362).jpg).
- Miller, Benjamin. 2000. *Fat of the Land: Garbage in New York: the Last Two Hundred Years*. New York: Four Walls Eight Windows.
- Mostafavi, Mohsen. 2017. *Ethics of the Urban: the City and the Spaces of the Political*. Zurich: Lars Muller.
- New York District Environmental Analysis Branch. 1994. *A Cultural Resource Reconnaissance Study Rikers Island, Bronx County, New York*. New York, NY: U.S Army Corps of Engineers. http://s-media.nyc.gov/agencies/lpc/arch_reports/102.pdf.
- New York Open Data. 2013-2019. Maps of New York City Area. https://data.cityofnewyork.us/browse?limitTo=maps&sortBy=most_accessed&utf8=%E2%9C%93
- Perkins + Will. 2016. Rendering of bikers Island. February 29. 6sqft. <https://www.6sqft.com/beyond-bars-designers-reimagine-rikers-island-as-a-destination/>.
- "Rikers Public Memory Project." 2018. A Community Truth and Healing Process, May. <https://rikersmemoryproject.org/>.
- Shanahan, Jarod. 2018. "A Jail to End All Jails." *Urban Omnibus*, February. <https://urbanomnibus.net/2017/12/jail-end-jails/>.

- Staniscia, Stefania. 2016. "The 'Island Effect': Reality or Metaphor." *New Geographies; 8: Island*, Harvard Graduate School of Design.
- Stavrides, Stavros. 2007. "Heterotopias and the Experience of Porous Urban Space. Loose Space: Possibility and Diversity in Urban Life". National Technical University of Athens. 174–192. 10.4324/9780203799574.
- Suchak, Sanjay. 2020. Images of The Memorial to Enslaved Laborers. *New York Times*. https://www.google.com/search?q=memorial+to+enslaved+laborers+new+york+times&rlz=1C1CHBF_enCA798CA798&oq=memorial+to+enslaved+laborers+new+york+times&aqs=chrome..69i57j33i10i160.7738j0j4&sourceid=chrome&ie=UTF-8.
- Topinka, Robert J. 2010. "Foucault, Borges, Heterotopia: Producing Knowledge in Other Spaces." *Foucault Studies*, no. 9: 54. <https://doi.org/10.22439/fs.v0i9.3059>.
- Venters, Homer. 2019. *Life and Death in Rikers Island*. Baltimore: Johns Hopkins University Press.
- Vera Institute of Justice. 2018. "Incarceration Trends." <http://trends.vera.org/rates/new-york-city-ny>.
- Walsh, Daniel, & Robert LaFleur. 1995. "Landfills in New York City: 1844–1994". *Ground Water*. 33. 556 - 560. 10.1111/j.1745-6584.1995.tb00310.x.
- Weizman, Eyal. 2017. *Hollow Land: Israel's Architecture of Occupation*. London: Verso.