

Liquid Asset: From Land Dispossession to Mutual Care

Columbia University GSAPP
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Alessandro Orsini

DRAFT

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Columbia University, GSAPP A4104_002, Spring 2023 Advanced Studio IV.
Alessandro Orsini (Architensions) ao2713@columbia.edu

Introduction

New York City has used eminent domain and other forms of land appropriation to obtain space for reservoir construction and provide drinking water to its urban environment via a surface infrastructural system that avoid the use and subsequent costs of water filtration. This system, through the years, has displaced communities and created environmental and financial instability throughout the Catskills/Delaware region of the watersheds.

This studio studies the water politics and the relationship between the New York State upper territory and its dispossession, extraction, and subdivision processes that allowed the city to create large voids, open spaces within the territory, with the goal to protect the reservoirs' water quality.

Measure, Appropriation, and Dispossession

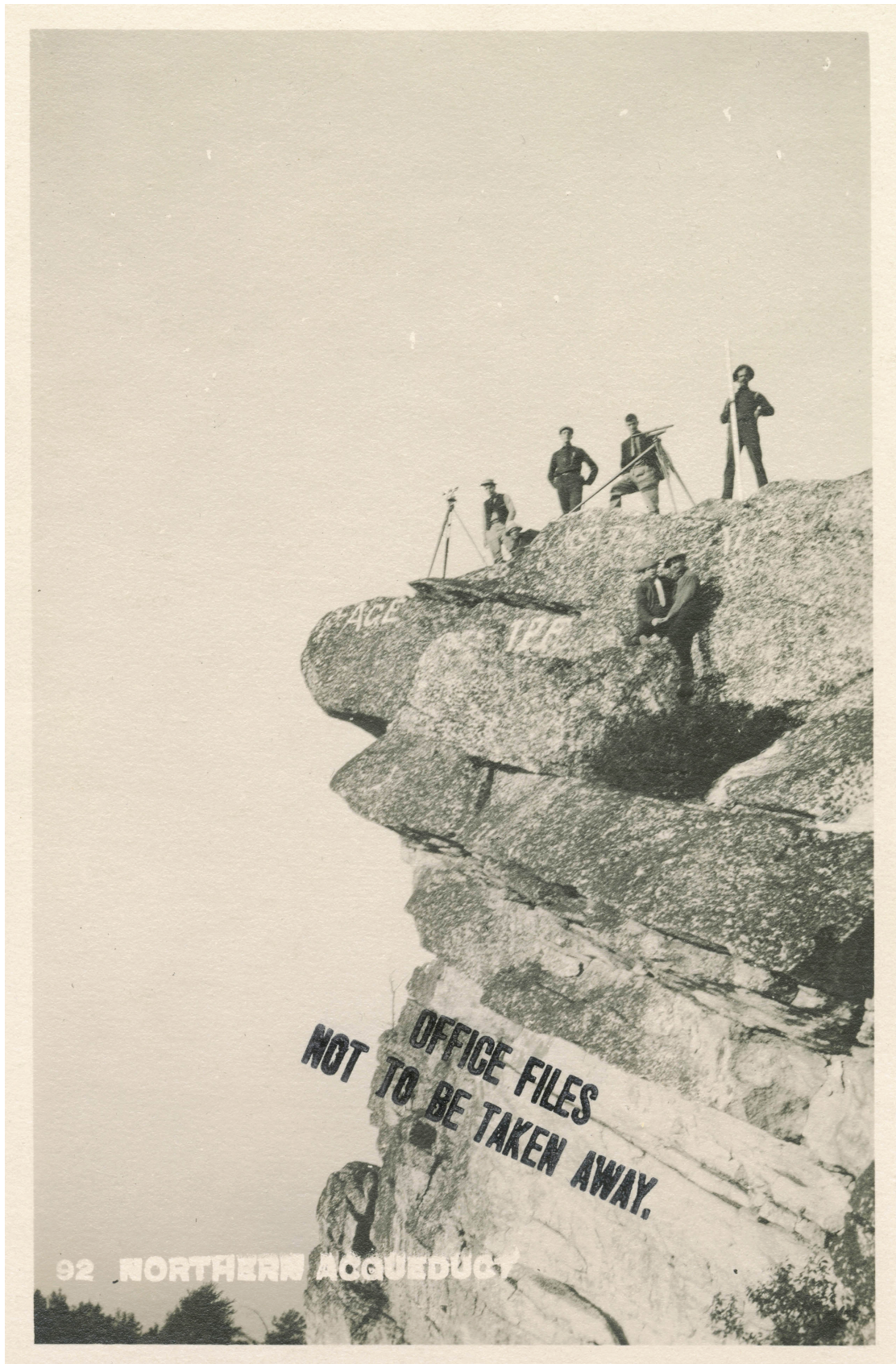
Processes of dispossession are at the center of this investigation. What are the mechanisms that allowed the measure, subdivision, and eventual regulation and brought to land appropriation? In his book "The Nomos of the Earth" Carl Schmitt explains that the first measure for land-appropriation, understood as the partition and classification of space, can be brought back to the word *nomos*.¹ The term describes the relationship between measure and order, transmuting into the ensemble of rules that were used to create the world order of laws.

This word represents the spatial manifestation of the immediate form of the political and social order of people; therefore, we can establish that the origin of land appropriation and commodification emanates from the term *nomos*. Though time *nomos* related to the rule of medium sized well distributed landed property,² translating the term as a gate, a fence, and an enclosure in the spatial sense. For these reasons it became essential in describing the fundamental process of apportioning space, and an ordering principle for the cohabitation of people. This process establishes borders and enclosures, a tool that capitalism uses to isolate society and create land value ready to be commodified, a system that originates in the United Kingdom's parliamentary enclosures.³ The insertion of capitalist social dynamics in rural England during the industrial revolution evolved by the 18th century into a link between the rural and the city where the market ruled industrial and agricultural productions, progressively portioned land to the detriment and destruction of the commons in the countryside. This process describes how we survey our planet, distribute, occupy, or colonize land, opposite to the commons that relies on a process of sharing the land and its resources. This is how mechanism of dispossessions were initiated in the United States based land colonization by the United Kingdom.

¹ Carl Schmitt, *The Nomos of the Earth in the International Law of the Jus Publicum Europaeum*, trans. G. L. Ulmen (New York: Telos Press, 2003), 67.

² Schmitt, 73.

³ Raymond Williams, "Enclosures Commons and Communities," in *The Country and the City*, 1. issued as an Oxford Univ. Press paperback, repr (New York, NY: Oxford Univ. Press, 1975), 96.



Surveyors at Bonticou Crag determining the future path of the Catskill Reservoir, November 1906

The Watershed Areas and the Reservoirs

From 1837 to 1970 New York City have built nineteen reservoirs in the Catskill/Delaware region to meet the demand of clean drinking water. The upstate area of the watershed has been subjected by processes of land acquisition and dispossession resulting in population displacement and financial instability for the local communities.⁴ In 1980, the Environmental Protection Agency (EPA) created the Surface Water Treatment Rule (SWTR) outlining strict regulation aimed at protecting the water quality around the US and impacting New York City's water management. This rule established how a city could avoid water filtration systems mandated in the 1986 EPA ruling that updated the Clean Water Act. This determination (FAD), approved by the FDA, could be rejected, and revoked at any time if water quality falls under prescribed quality standards, with the consequent adoption of water filtration with expensive costs for construction and maintenance. These high costs were learned by city officials from the experience of the Croton watershed, which unprotected from urbanization and pollution, fell under the mandate for water filtration by the EPA through a new \$3 billion facility built in 2015.

In 1993 New York began negotiations with a coalition of watershed cities in the Catskills/Delaware region to ensure water filtration avoidance through a memorandum of agreement (MOA). Such document called for land acquisition to maintain the water quality through the Catskills Watershed Corporation. Although the region largely met the EPA standards, nonetheless the very small increase of development between 1970 and 1990, New York City continued its program of land acquisition to limit development, leading to inflated property value and economic instability of the region. Areas in proximity to water bodies and streams have been increasingly owned by the city, which pays for most of the taxes in the region with the result of shrinking tax base and producing several economic challenges. The creation of large voids has been affecting low-income people within the watershed communities, which are also less likely to comply with the strict regulation dictated by the city of New York. These policies affected the accessibility to affordable housing, healthcare, daycare, and educational programs,⁵ in other word eliminated any opportunities for the commons.

Site – The Ashokan Reservoir

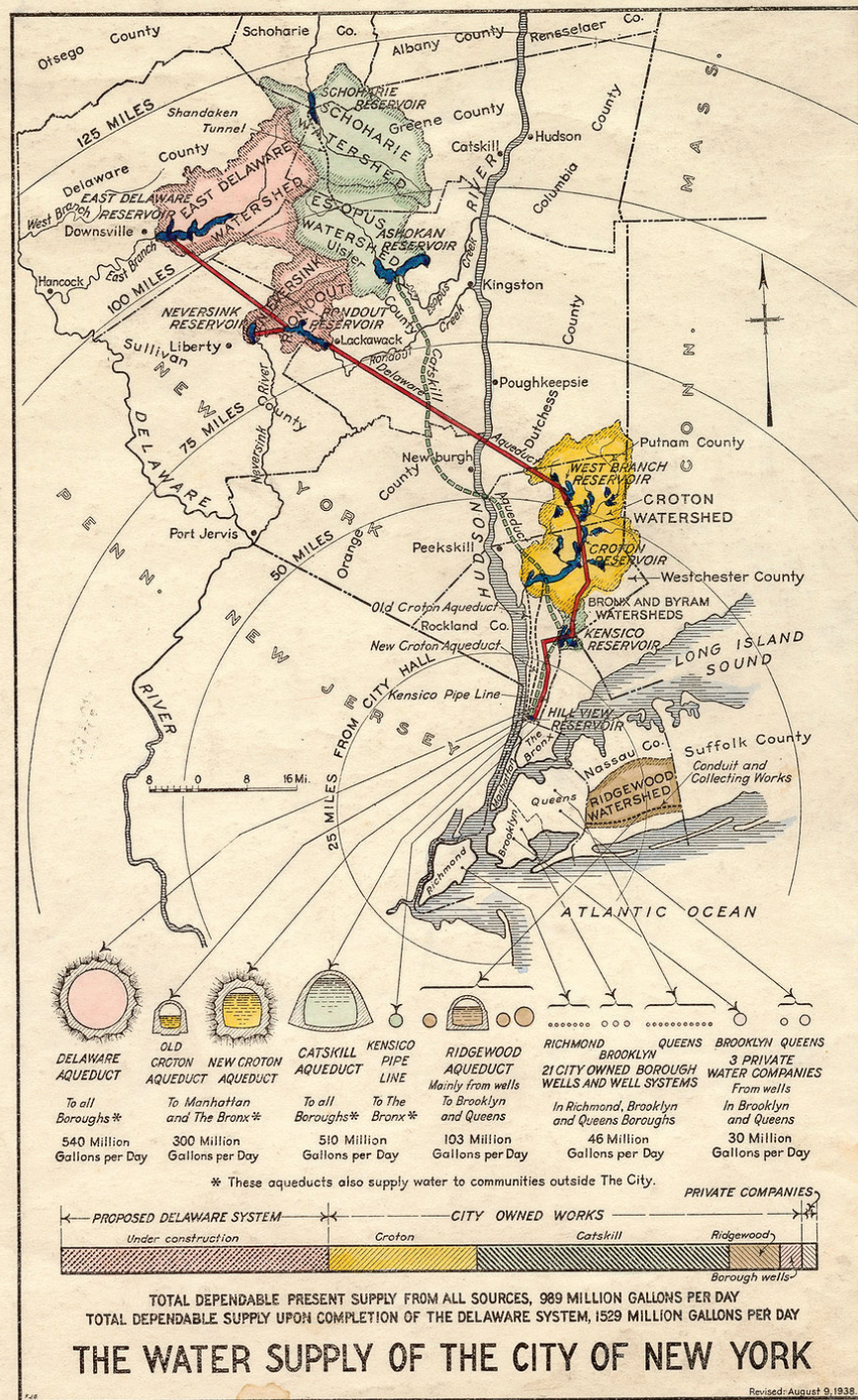
Construction of the Ashokan Reservoir began in 1905. Located in Ulster County 73 miles north of New York City it was formed damming the Esopus Creek, which flows and drains into the Hudson River. It consists of two basins, divided by a weir housing a roadway on it top holding 122.9 billion of gallons in its full capacity and was placed into service in 1915⁶. It was named after the native Iroquois term for “place of fish”⁷ since the area was inhabited by the Esopus tribe of the Lenape, which were eventually pushed off this land by Dutch settlers, which started to farm the land and by the Indian Removal treatises of the early 19th century.

4 Joan Hoffman, “Economic Stratification and Environmental Management: A Case Study of the New York City Catskill/Delaware Watershed,” *Environmental Values* 14, no. 4 (2005): 455 in; Colby Richardson, “The New York City Watershed: Improving Relations Using Environmental Policy,” *Honors Theses*, May 1, 2018, 1, <https://digitalworks.union.edu/theses/1658>.

5 Hoffman, “Economic Stratification and Environmental Management: A Case Study of the New York City Catskill/Delaware Watershed,” 458–60.

6 “Ashokan Reservoir - DEP,” accessed January 3, 2023, <https://www.nyc.gov/site/dep/water/ashokan-reservoir.page>.

7 “The World’s Greatest Aqueduct,” accessed January 4, 2023, <http://www.catskillarchive.com/aqueduct/index.htm>.



Map and Typical Sections of New York City Water Supply, 1938

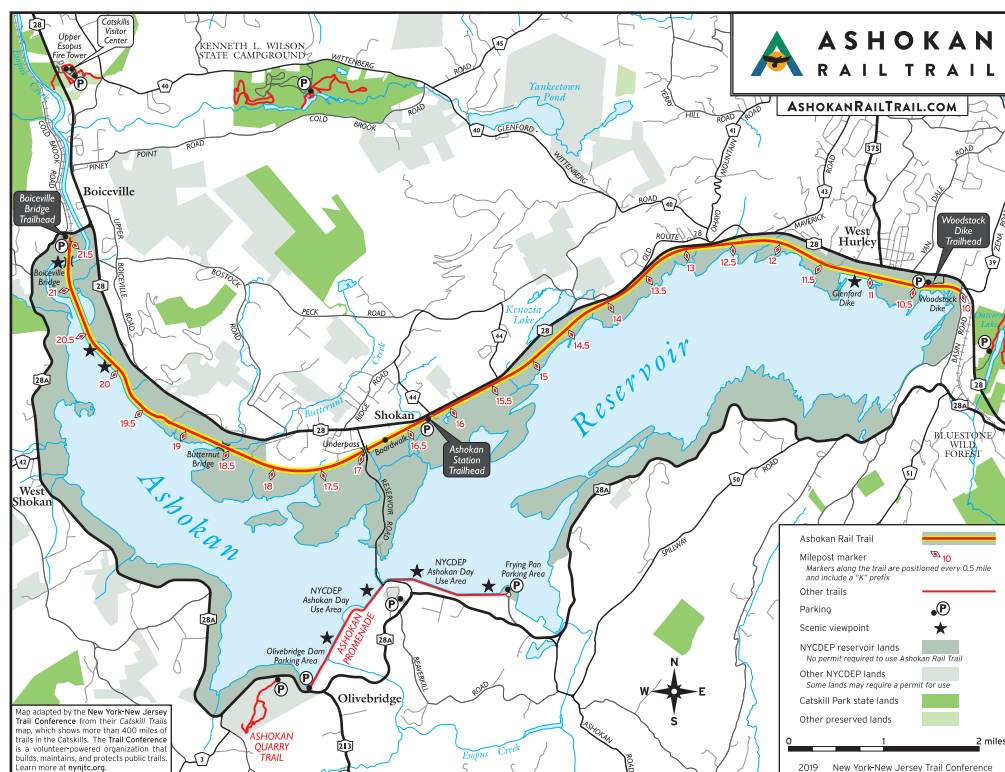
Its weirs, dikes, and the Olive Bridge Dam blocked the Esopus Creek waters for twelve miles, flooding the area that needed to be freed from homes, farms, businesses, churches, schools, displacing over two thousand residents. Many of these residents were not paid the full value of their property and were given two months to uproot their lives and move elsewhere. Between 1907 and 1913 a steady amount of people moved out from the Ashokan Valley⁸. Sometimes entire communities were relocated including their buried relatives and family members. The dozen cemeteries of the area accounted between 2413 and 2800 graves, one of which was an old burial ground established by the Lenni Lenape. The Native American remains with some unclaimed European American were moved to a cemetery in the western area of the reservoir.⁹

These communities had to re-envision their means of sustenance, their traditions, and support system or any possibility of sharing, the land, the food, and the water itself. Furthermore, today the erosion generated by severe storms, a consequence of climate change, creates excessive turbidity in the reservoir, prompting New York City to reverse massive amount of muddy water into the lower Esopus creek. This solution, the least expensive for the DEP to preserve the quality of drinking water, turns the costs onto farmers, businesses, residents, and entire communities along the Esopus Creek. Since the level of lights and oxygen are drastically diminished, the muddy water is affecting the water quality and wildlife habitat of the creek. Fish cannot see their food and are unable to feed, while communities downstream must sustain the costs to process their drinking water to make it drinkable¹⁰.

8 Lucy Sante, *Nineteen Reservoirs: On Their Creation and the Promise of Water for New York City* (New York: The Experiment, 2022), 62.

9 Sante, 55.

10 "Ashokan Reservoir: Stop the Mud," Riverkeeper, accessed January 5, 2023, <https://www.riverkeeper.org/cam->



Map and Rail Trail of Ashokan Reservoir

Towards the New Commons

Reorienting these inherently exclusive patterns of dispossession by eminent domain is at the base to providing spaces for the collective and inclusion of the diverse resources. These resources are central to the creation of the *new commons*, an expression of the basic needs of society and specifically of the communities around the watersheds.

Liquid Asset studio will be investigating how to unfold spatial narratives that can foster activities, such as work, education, healthcare, community gathering, communal food provision, and cultural production that oppose the isolation and financial instability generated by dispossessed land practices.

Students will investigate strategies of land sharing, moving from the definition of private property, controlled by the City of New York, to multiple forms of cooperative configurations that would link the rural suburbs dynamics of the surrounding settlement, the agricultural land, and the potential of invigorating the economy in the environmentally fragile context of the Ashokan Reservoir and its surrounding land. The project's goal will identify interventions that give accessibility of the land back to the communities, through reorganization, transformation, and alteration, accommodating a more equitable and inclusive vision of living.

[paigns/safeguard/ashokan-reservoir-stop-the-mud/](#).



Old town of West Hurley, included in territory taken for the East basin of Ashokan reservoir. December 7, 1906

In addition to the diffuse interventions, students will design a water filtration plant that will help mitigate the water pollution of the Esopus Creek generated by the muddy water generated by New York City poorly managed environmental issues in the Ashokan Reservoir.

Studio Tasks & Structure

The studio will consider an interconnected notion of design, history, and theory, and therefore we begin with a careful and rigorous analysis of the history and present condition regarding the main topic of land dispossession and how as it relates to the removal of native communities, residents, the elimination of the commons and the creation of a highly unstable financial and environmental condition in the watershed areas.

The determined physical interventions will unlock spatial configurations comprise of alternative forms of social aggregation. To formulate an architectural vision of the new commons, we will expand our understanding of the commons not only as shared domestic and economic space, but as space that provides resources beyond shelter and commerce. We assume that twenty-first-century commons will provide these resources, in addition to shelter and commerce to accommodate diverse resources within a framework of shared production and consumption that is physically, economically, environmentally, and culturally accessible to all.

Context (2 weeks, due 02/03)

Readings, research, history, context analysis, site model. Students will work in groups of two to gather information on the area of investigation. The information gathered will be shared by all students of the studio in a final presentation.

Requirements:

- Multiple map drawings of the watershed areas depicting accessibility, land use, vacancies, dispossessed land by New York City, demographic, density.
- Research of commoning strategies in diverse cultures of the Catskills/Delaware area. Students will focus on understanding what kind of ritual, traditions, sharing infrastructure were lost due to the construction of the reservoirs.
- A study of the native Lenni Lenape inhabitants of the area will ask few questions: what were the mechanism of dispossession operated on these communities? What commoning strategies of these communities were erased?
- A survey of possible local partners such as institutions, no-profit, etc. for which the project can be developed with.

Toolkits (2 weeks, due 02/17)

Students will begin to identify alternatives economical structures that will take the form of a series of urban strategies and architectural forms.

Requirements:

- A conceptual montage that describes the effect of each toolkit component
- Mixed media drawings for each component showing flexibility with different uses
- Toolkit Models scale 1/4" = 1'
- Toolkit Construction Manual
- Text (1000 words max.) which conceptualized your position on the commoning, the alternative economical models and future aspirations for your vision.

Urban & Architectural Forms (Due at Final Review 04/26)

Students will be asked to contextualize their previously developed toolkit, assigning to each element a location within the site to produce alternative urban forms that unlock commoning practices.

These elements will also be investigated through the lens of their form, materiality, and use.

Requirement:

- One site plan map with urban forms strategy
- One axonometry/montage of the urban configuration
- Six vignette line drawings zoomed into the urban alteration produced.
- Six visuals in the form of collages, perspectives, line drawing, mixed media
- Relevant Floor plans (minimum two) & Relevant Sections Perspectives (minimum two)
- Six models photos



Ashokan Reservoir, Aerial View

Schedule

Week 1

Monday, January 23 – Studio Brief Discussion:
Readings and Research goals
Wednesday, January 25 – Lecture:
Thursday, January 26 – Desk Crit

Week 2

Monday, January 30th – Reading Responses and
Visual Presentation.
Wednesday, February 01 - Lecture
Thursday, February 02 – Desk Crit

Week 3

Monday, February 6th – Pin-up- Ass. 1 Due
Wednesday, February 8th – Lecture
Thursday, February 9th – Toolkits Assignment
Discussion and Readings Presentation

Week 4

Monday, February 13 – Pin-up
Wednesday, February 15 – Lecture
Thursday, February 16 – Desk Crit

Week 5

Monday, February 20 – Pin-up
Wednesday, February 22 – No Event
Thursday, February 23 - Pre- Midterm

Week 6

Monday, February 27th – Midterm Review
March 1st – No Class
March 2nd -No Class

Week 7

March 6th - Assignment 3 Introduction
March 8th - Lecture
March 9th - Desk Crit

Week 8

Spring Break March 13th – March 17th

Week 9

Monday, March 20 – Design Development Pin-

up

Wednesday, March 22 – Lecture:
Thursday, March 23 – Desk Crit

Week 10

Monday, March 27th – Pin-up: Site plan &
Axonometries
Wednesday, March 29th - Lecture
Thursday, March 30th – Desk Crit

Week 11

Monday, April 3 – Pin-up
Wednesday, April 5 – Collective Workshop
Thursday, April 6 – Desk Crit

Week 12

Monday, April 10 – Pin-up
Wednesday, April 12 – No Event
Thursday, April 13 – Desk Crit

Week 13

Monday, April 17 – Desk Crit
Wednesday, April 19 – No Event
Thursday, April 20 – Final Review Mock-up

Week 14

Monday, April 24 – Desk Crit
Tuesday, April 25 – Final Review

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