Aditya Mehta
MS. AAD. 2024

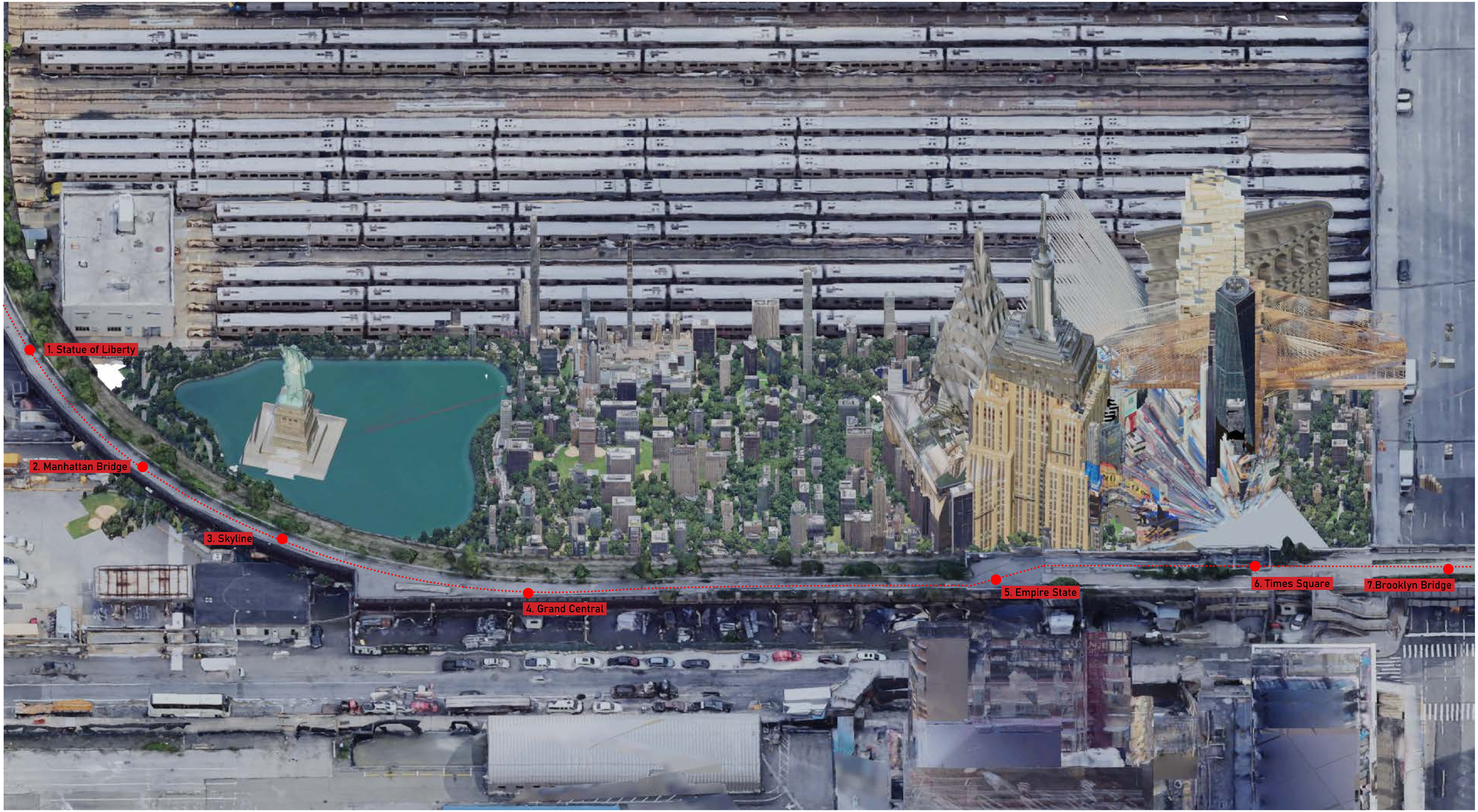
Index

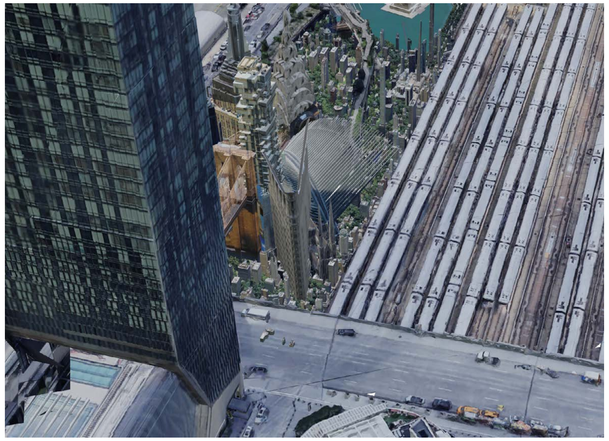
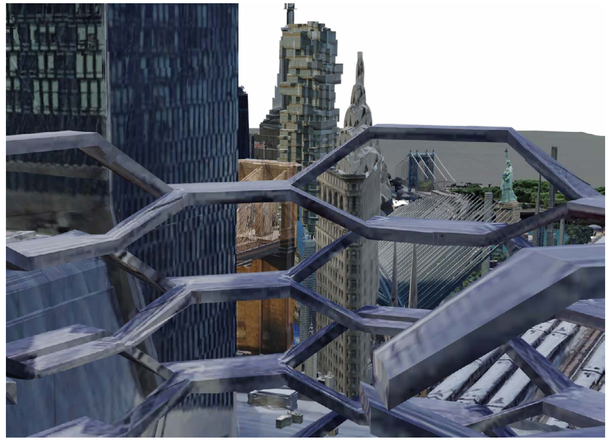
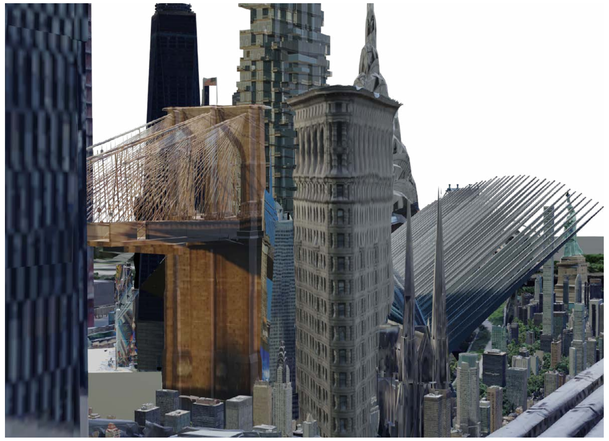
New York New York, New York, NY

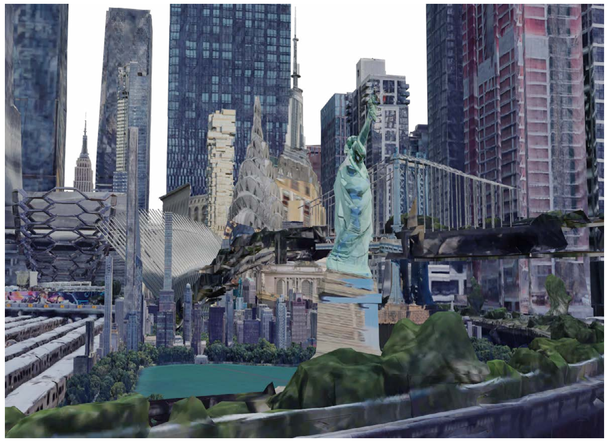
One Stop Shop for all images of New York

Summer 2023
Architecture of Compressions Studio
Michiel Helbig & Corneel Cannaerts
TA: Karolina Dohnalkova
Midterm Partners: Xiaoqi Shen & Yishu Yu

Following New York's obsession with artifacts and museums, New York New York, New York, NY plays into the rapid consumption of the city and its buildings as artefacts themselves, so that it has led to now the new development of architecture a rapidly consumable artefact.


1. Statue of Liberty
2. Manhattan Bridge
3. Skyline
4. Grand Central
5. Empire State
6. Times Square
7.Brooklyn Bridge







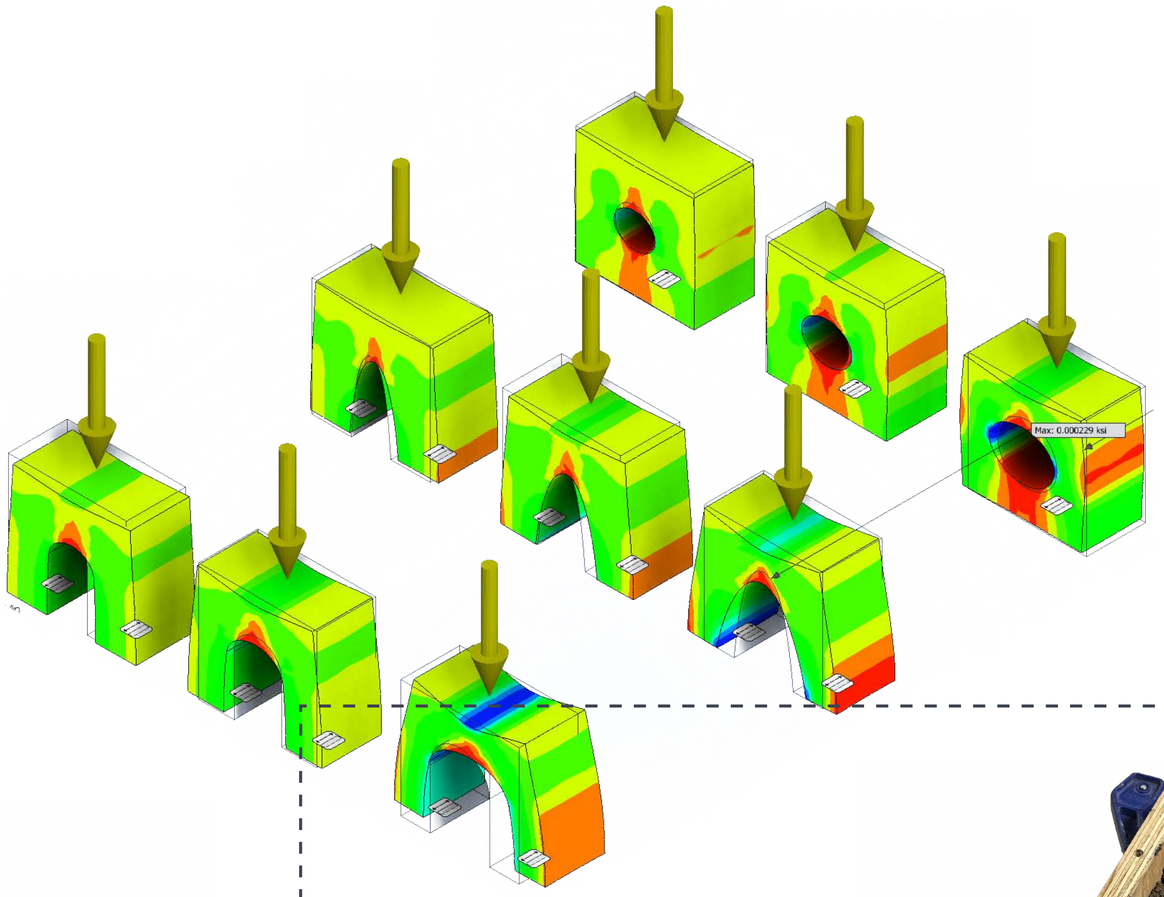
Rammed Earth + Cob
Weaving with Earth

Fall 2023
Home is where the Toxics are
Marta Wisniewska
Partner: Martin Lee

This project looks to instrumentalize a very precise engineering tool to assist a very imprecise and non-isotropic material. Using Finite Element Analysis guides the parametrization of earth by using straw (Cob) to reinforce structure at moments of expected failure.

Rammed Earth

Cob (Earth + Straw)

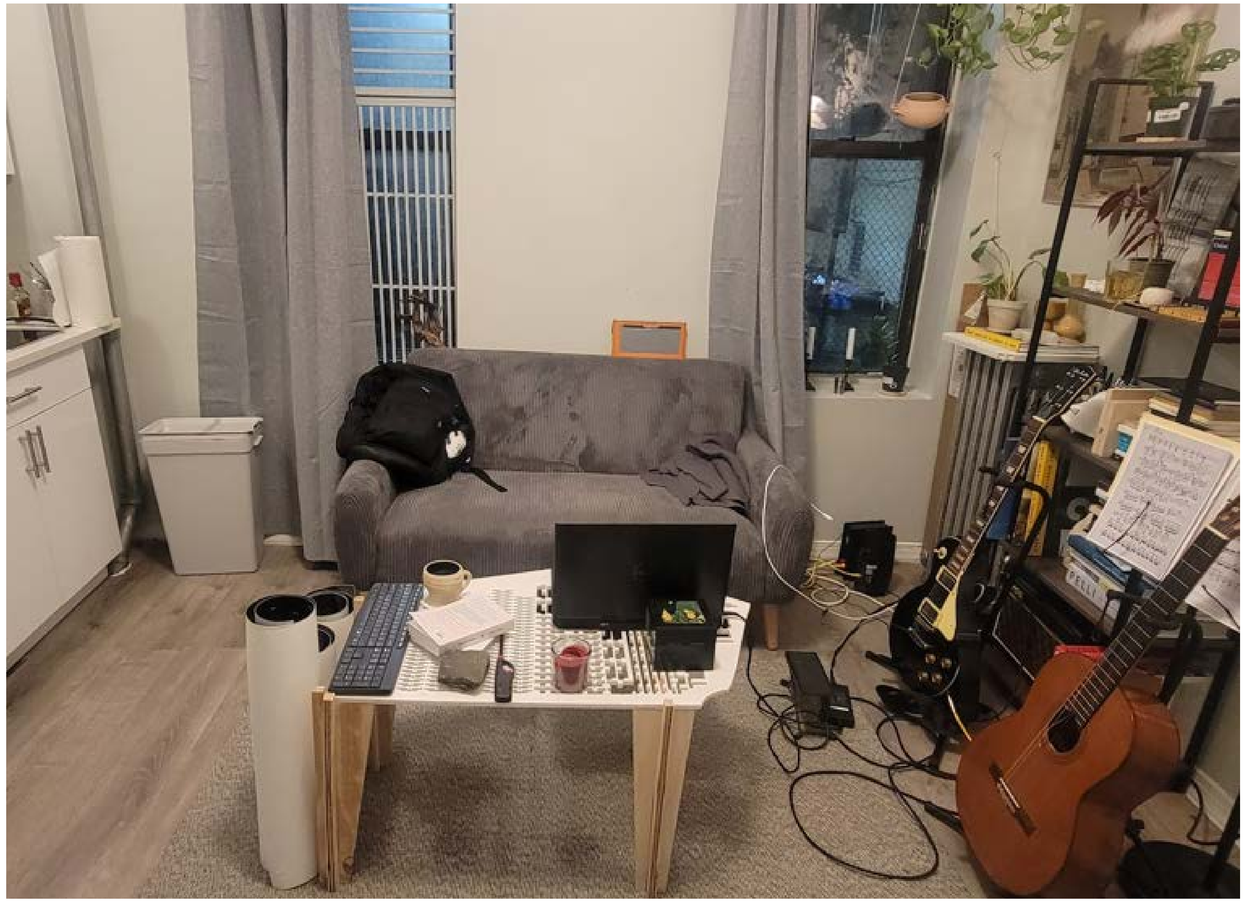


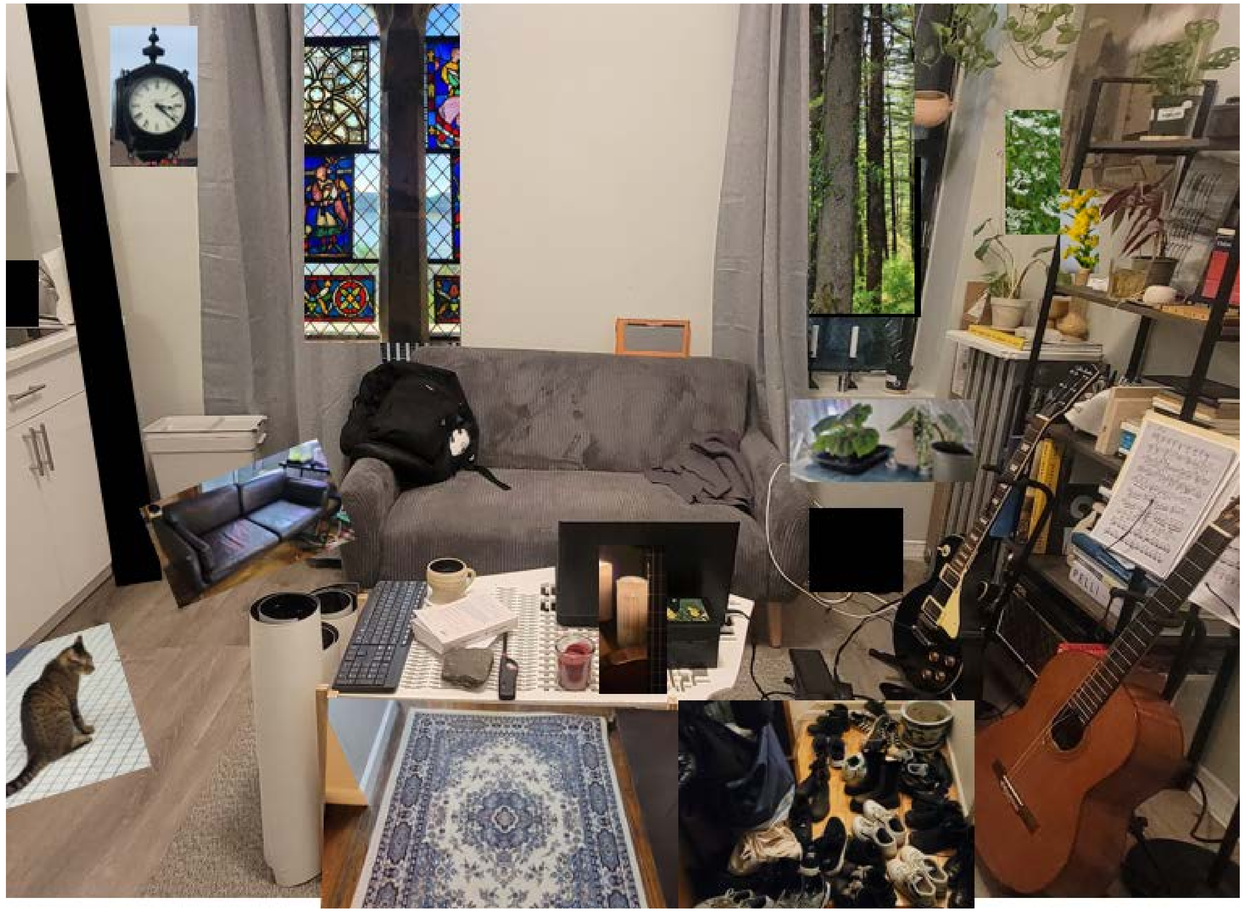
Imagination Project

Change the world around you, immediately

Fall 2023
Metatool
Dan Taeyoung
Partner: Rachita Vishwanath

What we see is not what we perceive, often the things we see remind us of other things which influence the perception of space. This project seek to blur that boundary further by directly allowing the user to edit their environment instantly by prompting AI imagery generation.



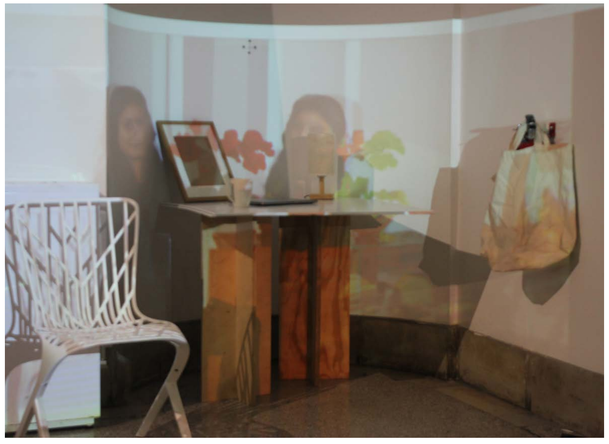










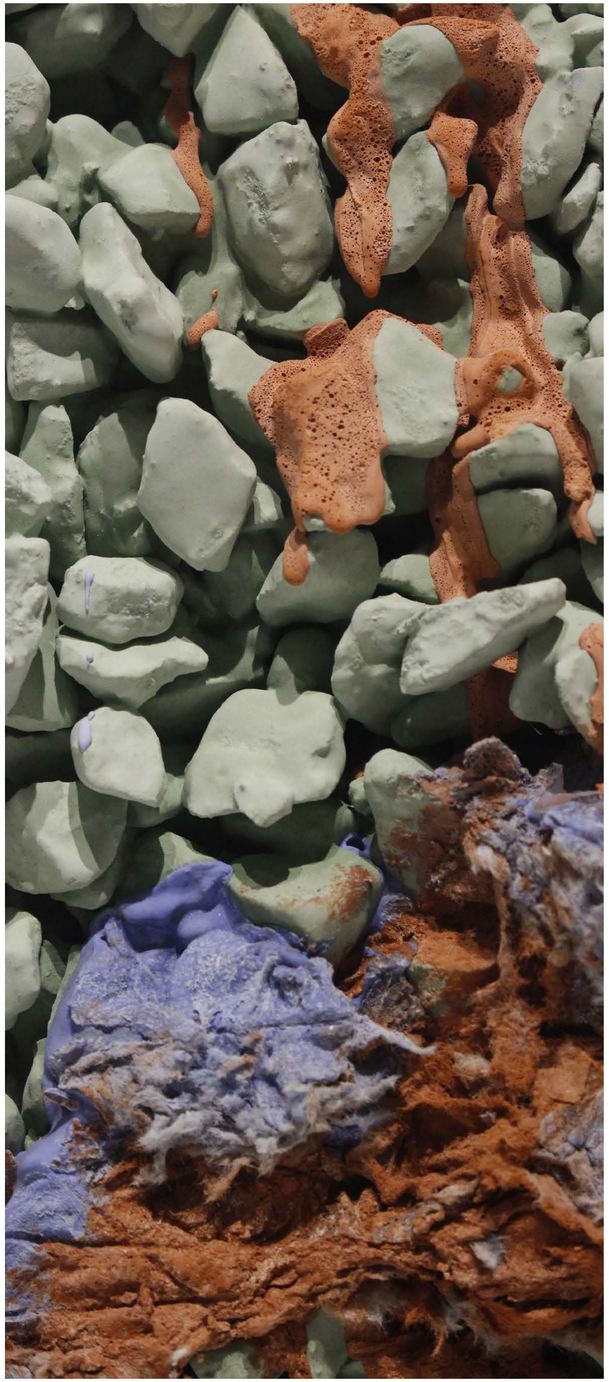



Resetting Concrete Ecologies

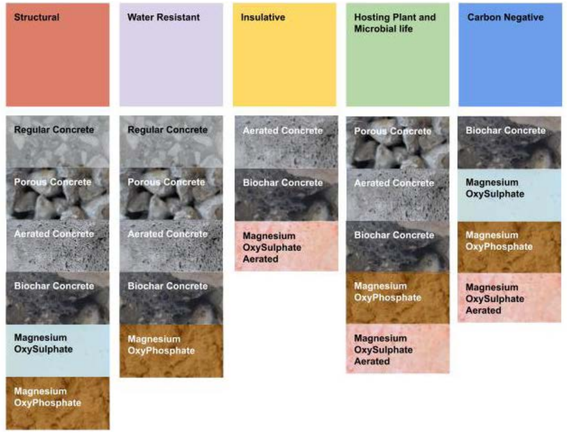
Diversifying the recipes

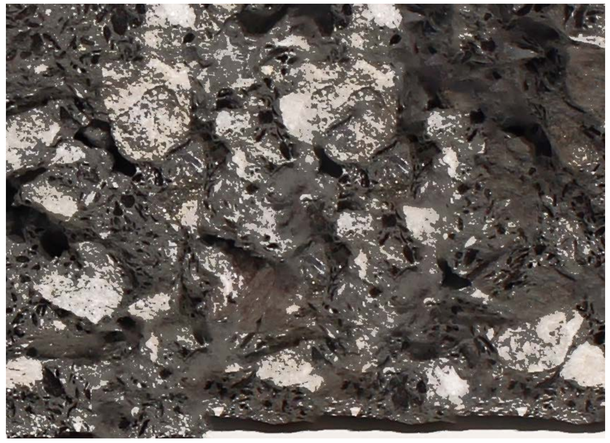
Fall 2023
Reset Studio
David Benjamin
TA: Maclane Regan

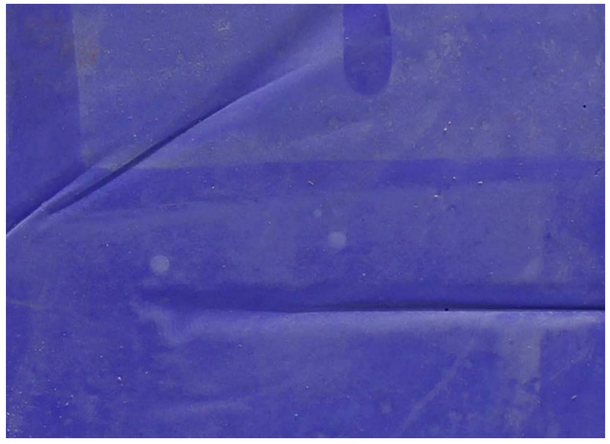
New York City, 2040
Sea level has started creeping up and making its way into the subway system, undermining and cracking many parts of the invincible concrete membrane the city was so proud of. We cannot depend on a single magic recipe, so stark that it cannot accommodate for water flow, for plants and micro-organisms to exist. We need to open up the city's surfaces and allow nature to reclaim a balance.



Magnesium Oxide as a carbon negative concrete alternatives offers a possibility to diversify the composition and construction process of concrete and structurally compressive systems. They can be used in tandem with each other to vary performance dynamically as needed. This diversifying helps accommodate for local variances in material markets and allows concrete to be open to hosting life in various places.







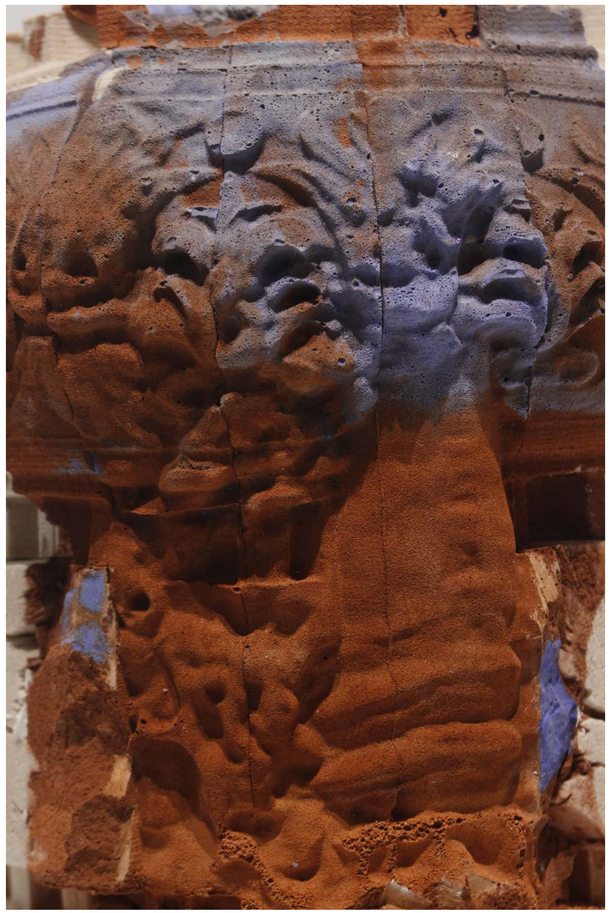
Malik, 26. Youth Empowerment Coordinator

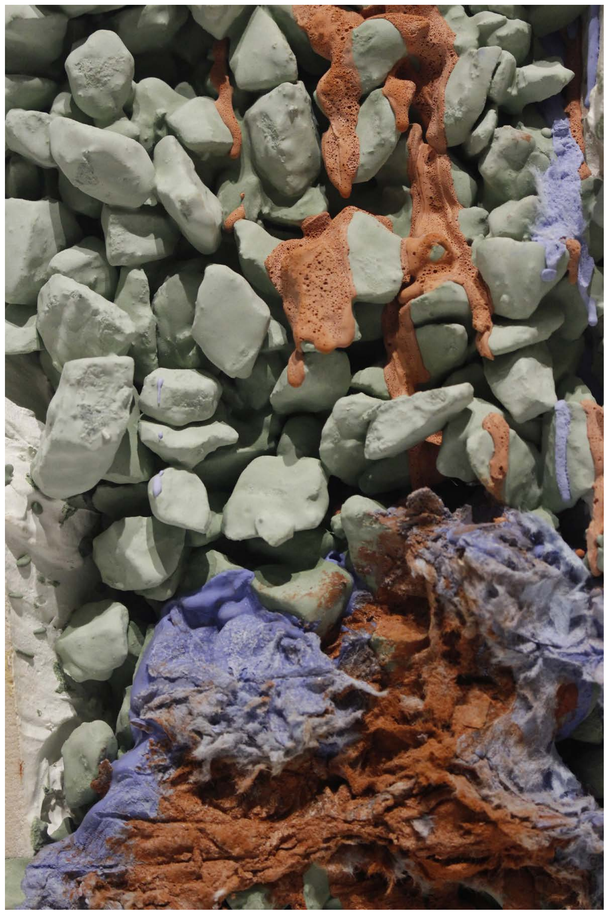
Maria, 45. Community Botanical Engineer

Mei, 67. Cultural Heritage Preservationist

AI is used to speculate the future of the city considering certain aspects of climate change. Narratives for community actants are created along with a new form of professional practice that encourages community participation not only in generating design ideas but in executing them as well.

Cracks and failure in existing architectural surfaces provides an opportunity to diversify and reinstate new identities.





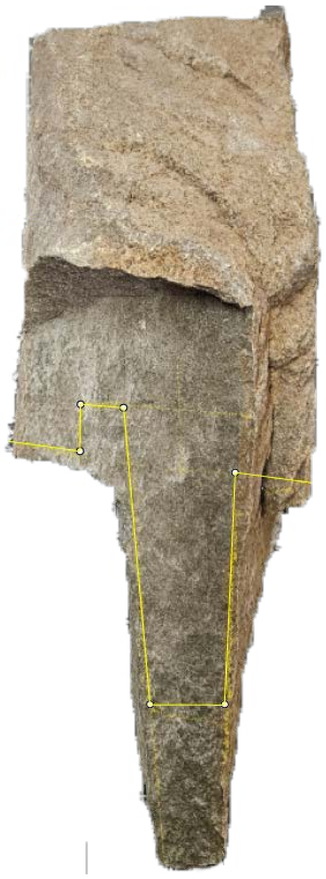
Picnic in the Palisades

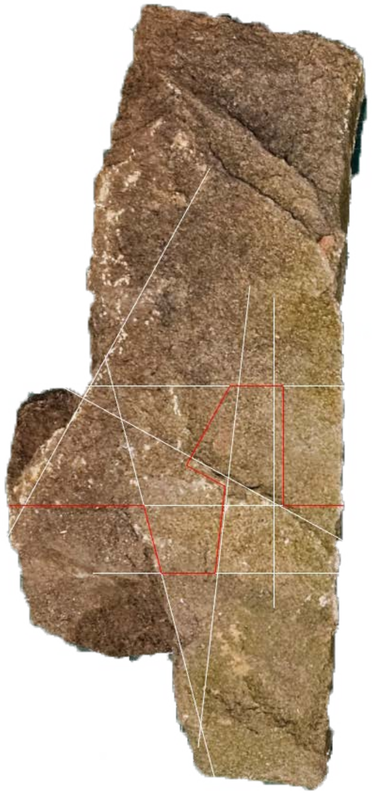
Spring 2024
Metabolic Materialities
Michael Wang

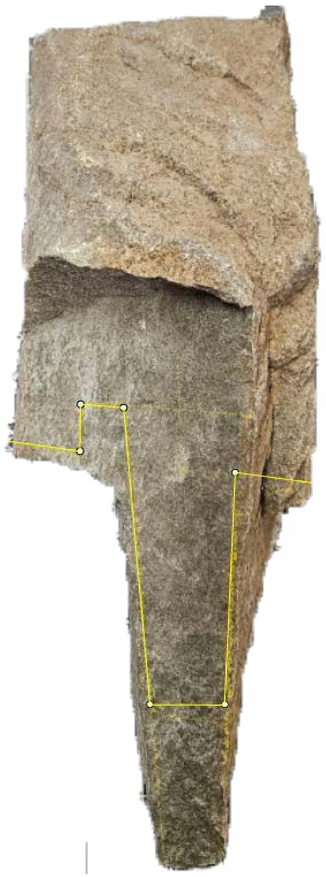
The basalt cliffs of the palisades have a history of exploitation for its structural purposes, it was really the value its aesthetic beauty held to the aristocrats of New York that saved it as a backdrop for picnic venues. This project seeks to expose the violent labour required also to bring these pieces of stone into a domestic setting.

Picnic in the Palisades (Fabrication)

Spring 2024
1:1 Construction and Fabrication Details
Zachary Malitauaopele





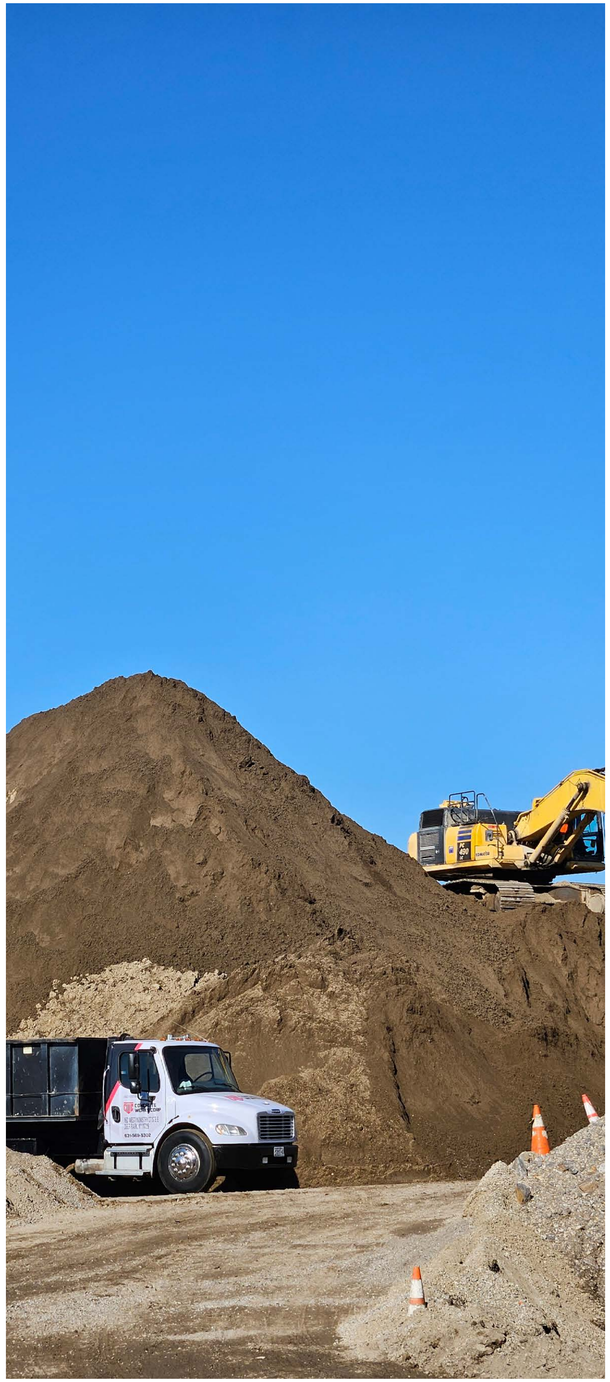


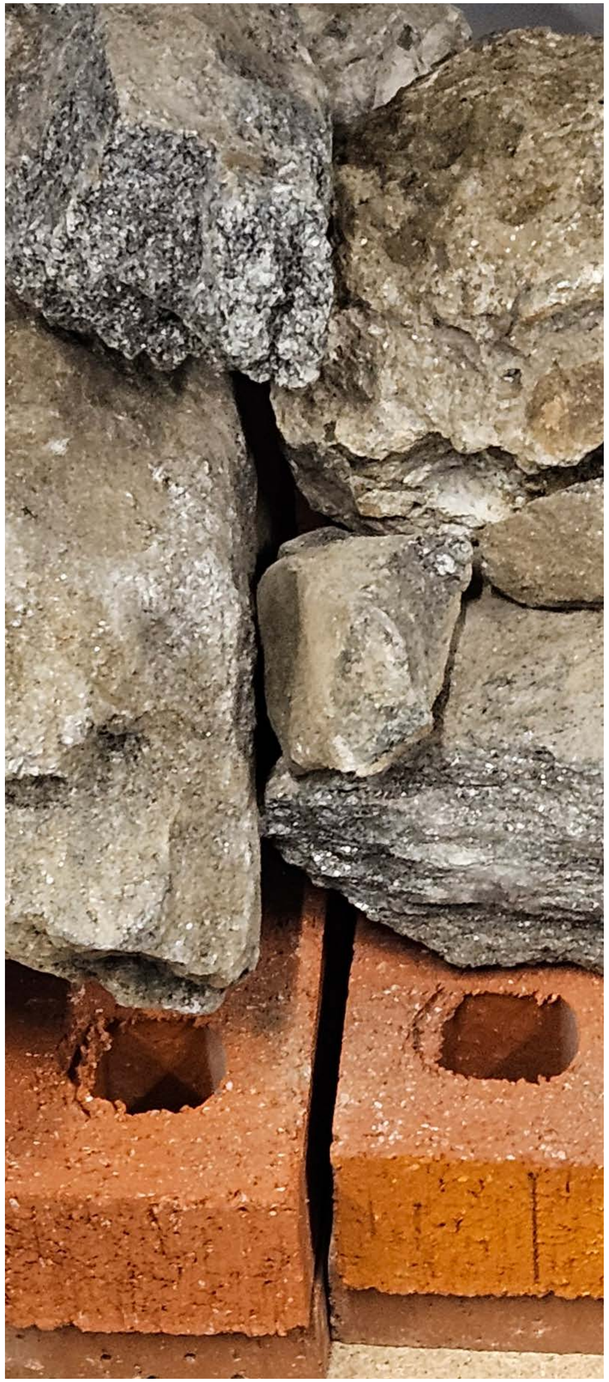
Material Memory
and other parameters

Spring 2024
Collective Assemblies
Danniely Staback
Partners: Devansh Shah & Christopher Meany

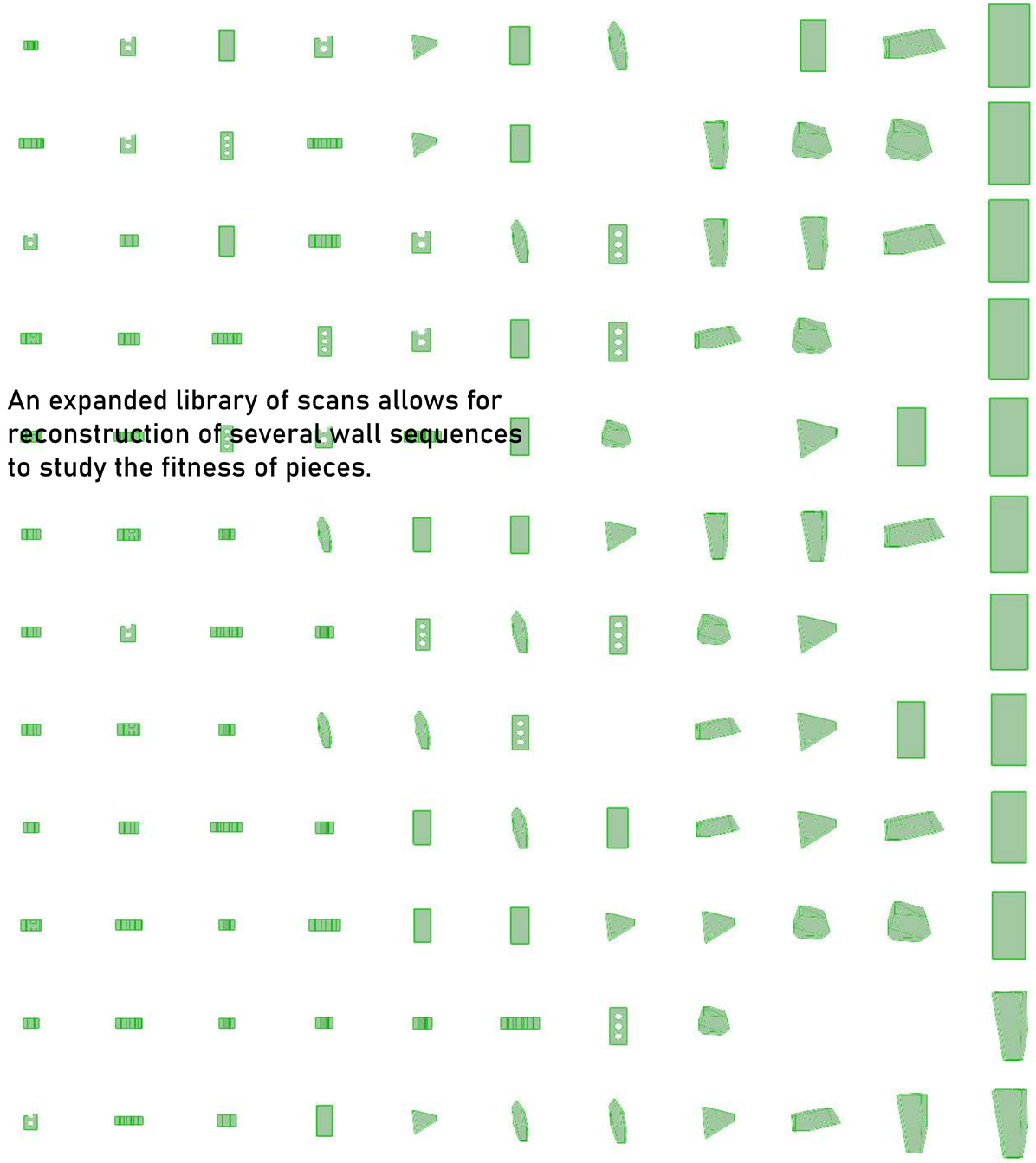
Each piece of debris holds history, history of use and misuse. It being debris, alters its ability to perform as it was expected to and often opens many different ways of using it in a mixed mortar construction. This project seeks to formulate a guide to the very human instinctive process of mixed masonry construction.

Finding the story of New York through its debris and recycling.

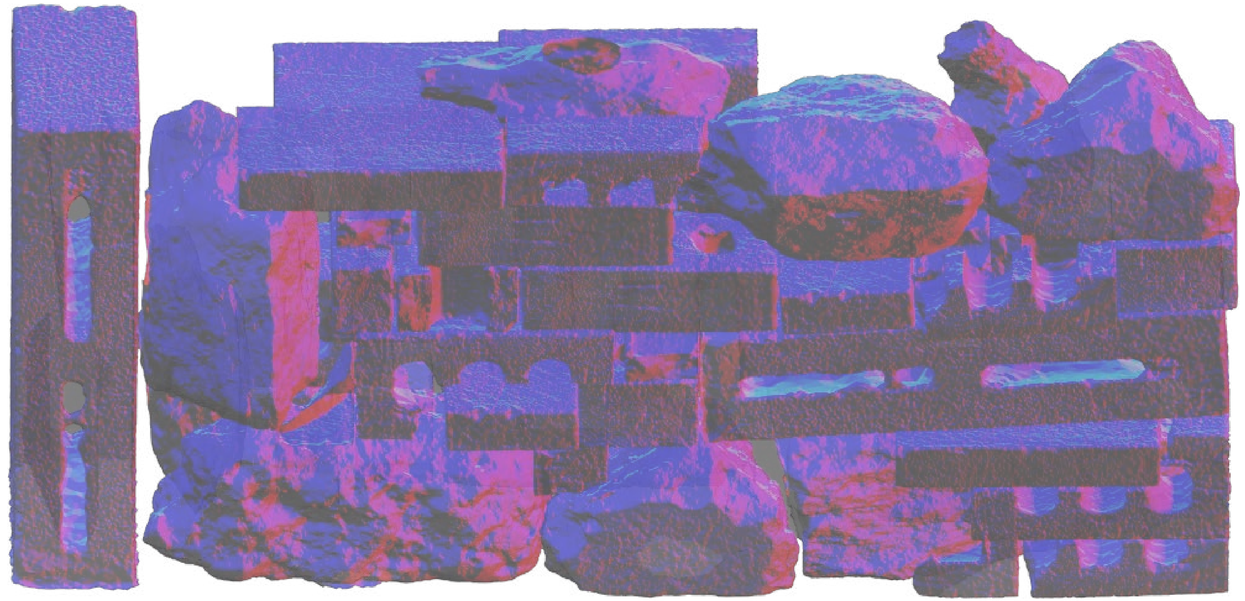


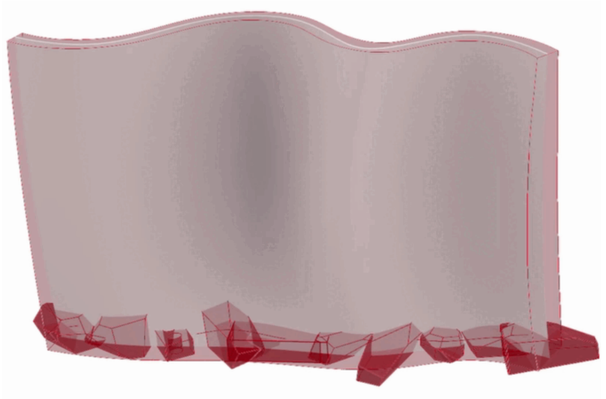


A family picture of all the debris, and their scans that allow us to start digitally manipulating them.



An expanded library of scans allows for reconstruction of several wall sequences to study the fitness of pieces.



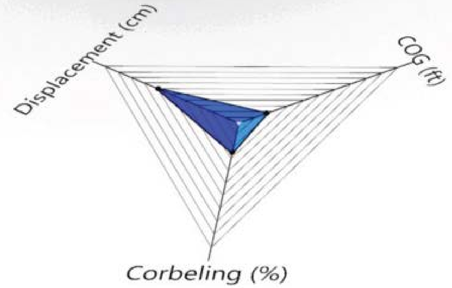


Step 1. Optimizing wall shape for structural performance.
Step 2. Determining materiality of the wall by Finite Element Analysis and inserting human aesthetic preferences.
Step 3. Laying down the first line of the wall with the heaviest pieces at the bottom.
Step 4. Determining the next placement of the debris.
Step 5. Locating the approximate placement of Debris.
Step 6. Selecting the approximately correct piece of debris.
Step 7. Using evolutionary solver to find the best fit for the piece.
Repeat from Step 4 until wall is finished.

Step 3

Step 2

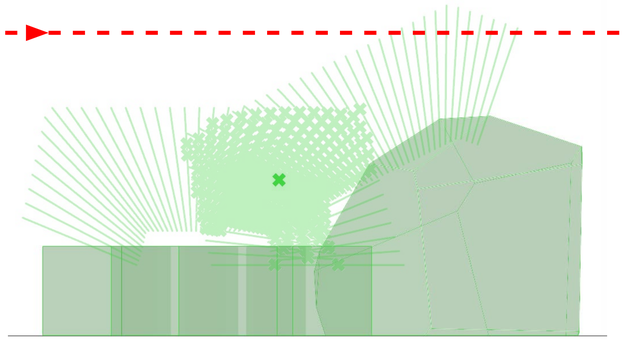
Step 1



Step 4

Step 5

Step 7

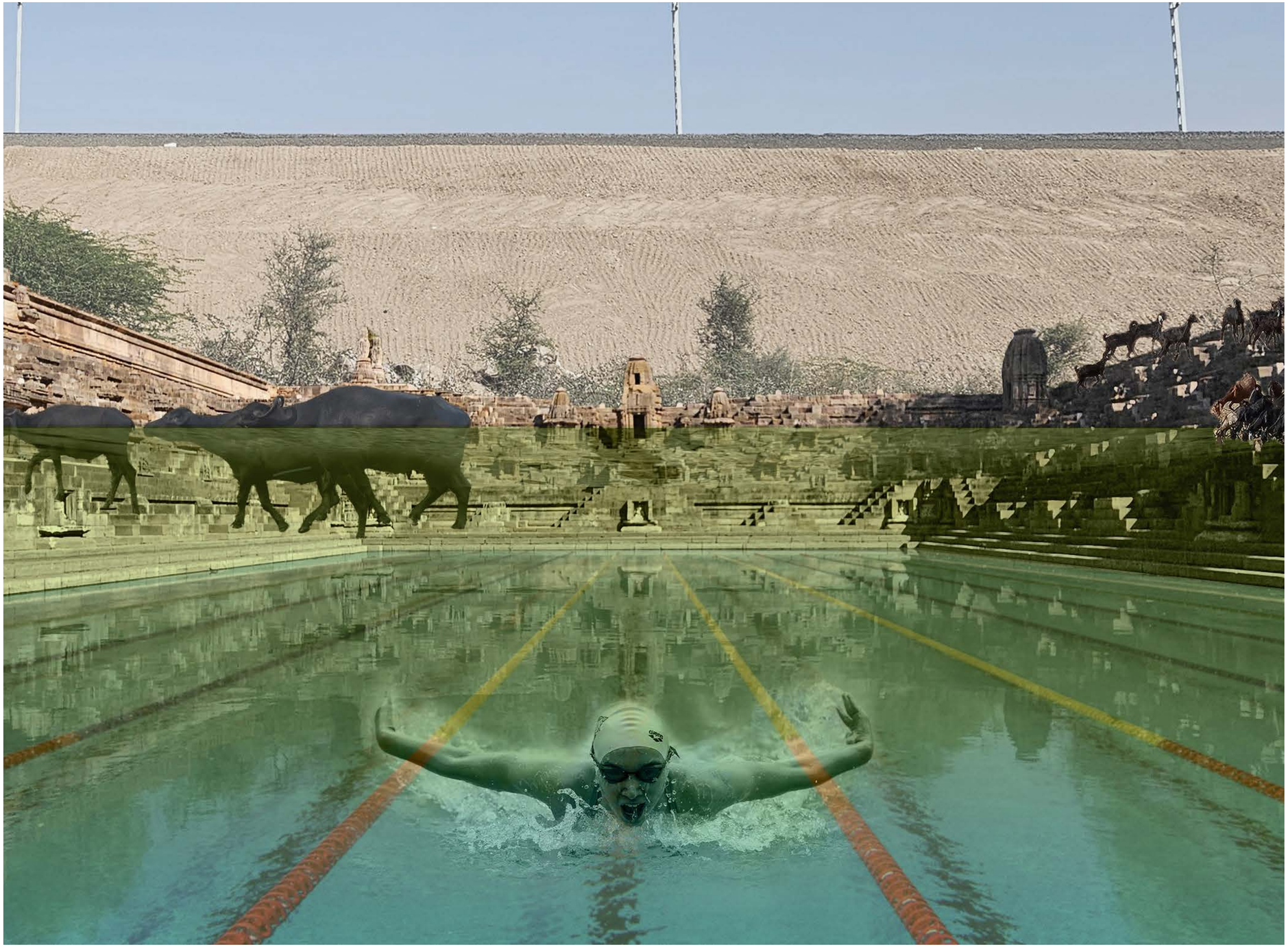


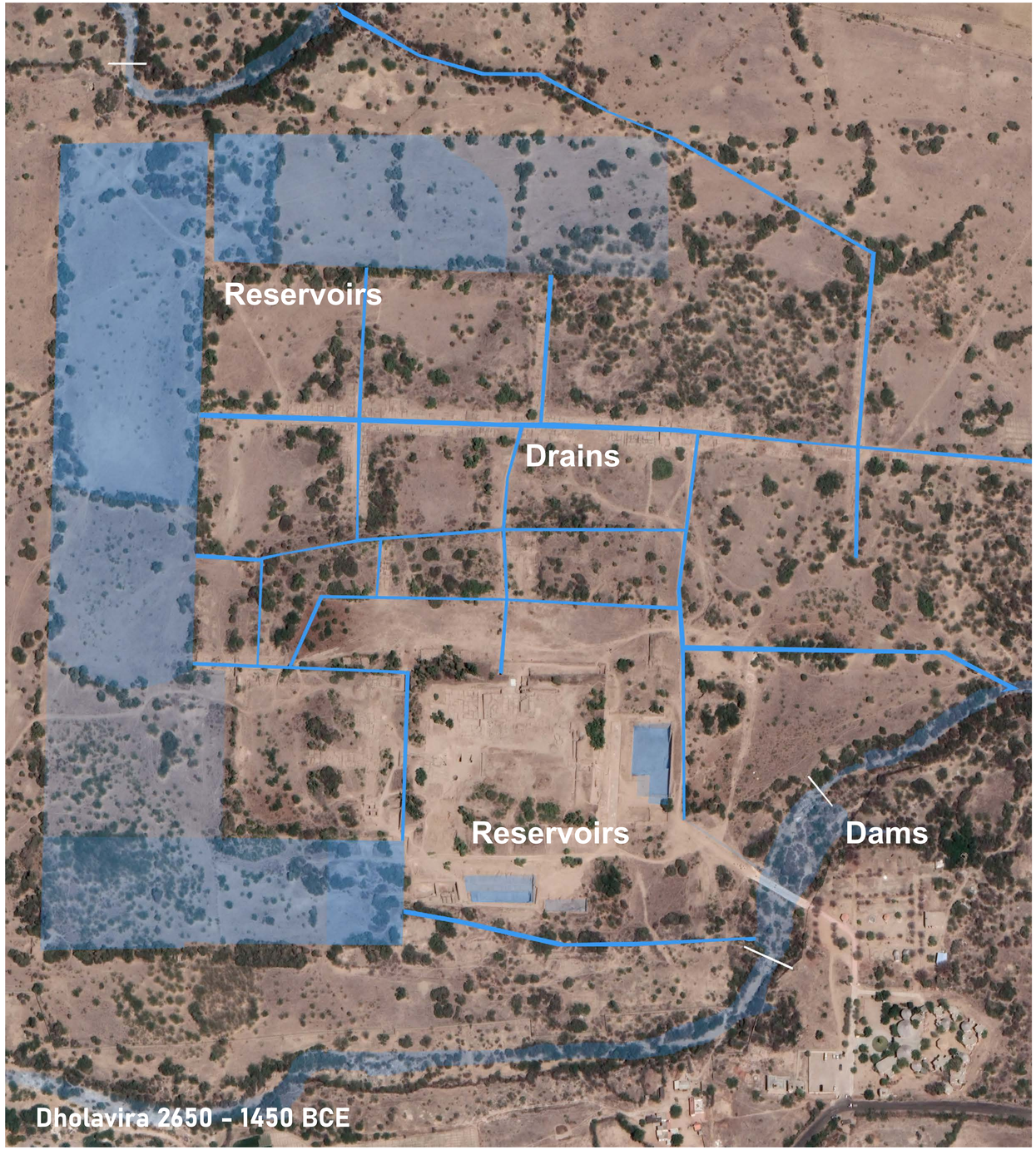
Using the grasshopper script as a guide to build a mixed masonry wall.

Relinking Terraqeous Narratives

Spring 2024
Delinking the Olympics Studio
Sonal Beri & Sandro Marpillero
TA: Maclane Regan

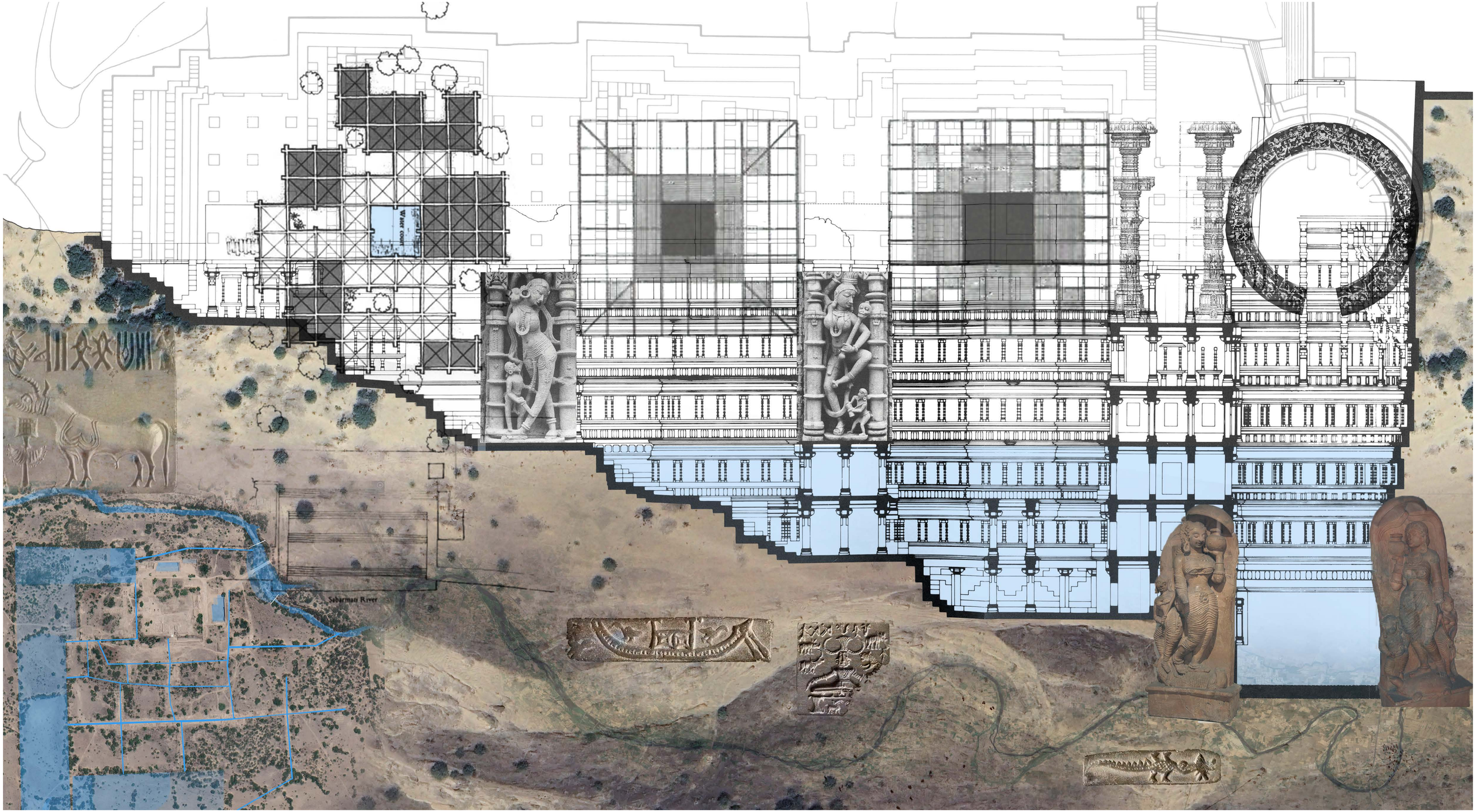
In Gujarat, earth is moved to make room for water. Lakes, wells, canals, stepwells become all necessary means to sustain life. When this sacred ritual is however desecrated by large infrastructural projects, prompted by large events like the Olympics, it upends natural ecosystems. This projects seeks to relink those terraqeous narratives and introduce to the olympics alternative relationships of space, earth and water.

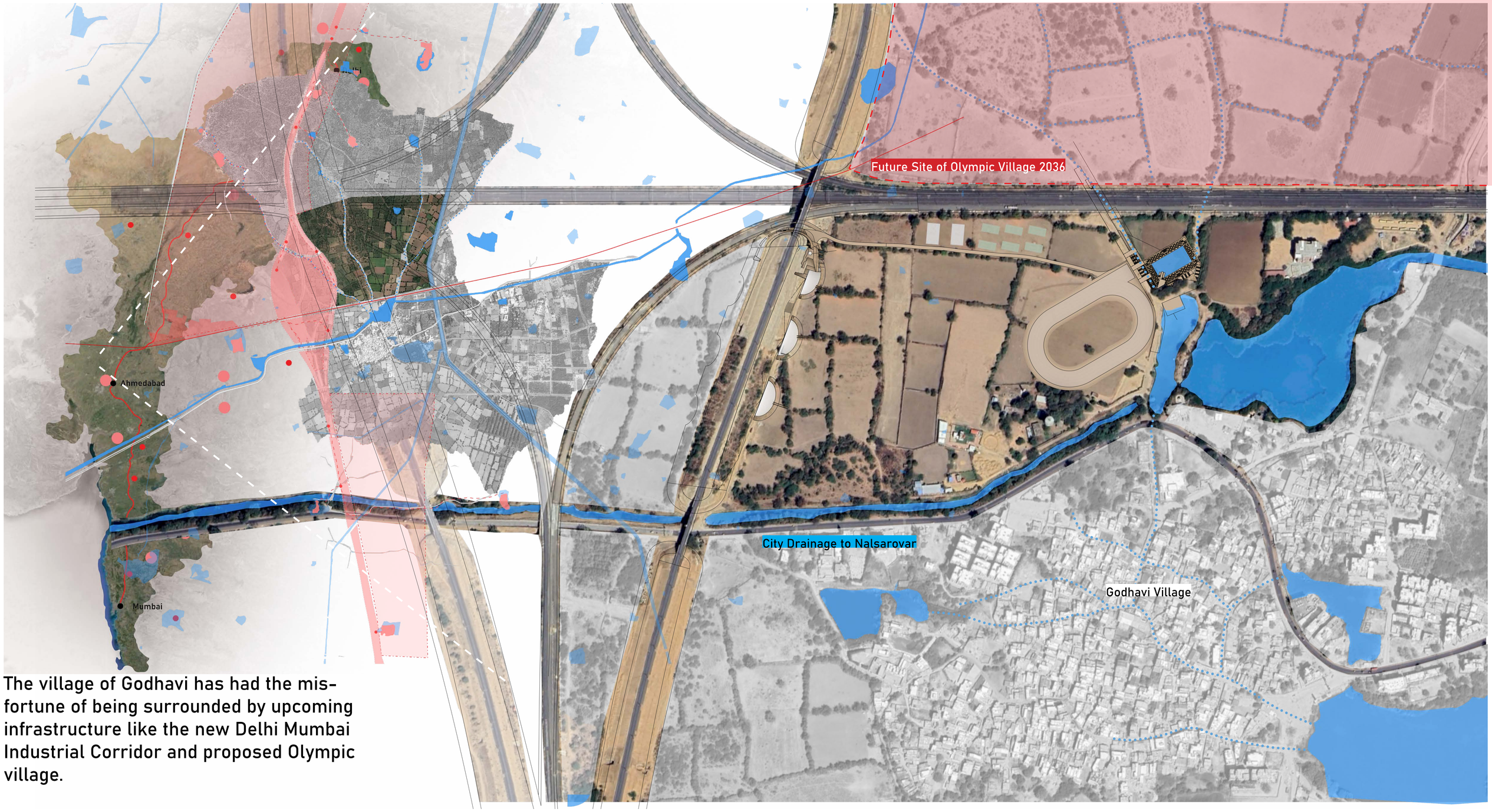



Reservoirs
Drains
Reservoirs
Dams
Dholavira 2650 - 1450 BCE


Drains
Stormwater Overflow
Tank / Dock
Lothal 2200 - 1900 BCE

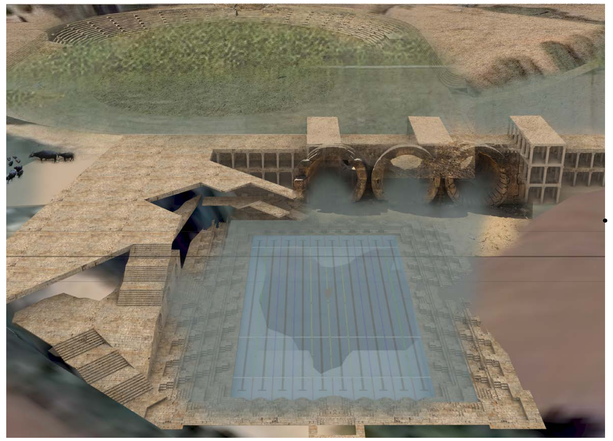
Models testing water's agency negotiation with earth. Water erodes the earth which tries to control the water. The water then also moves earth around an fills holes and clogs drains.

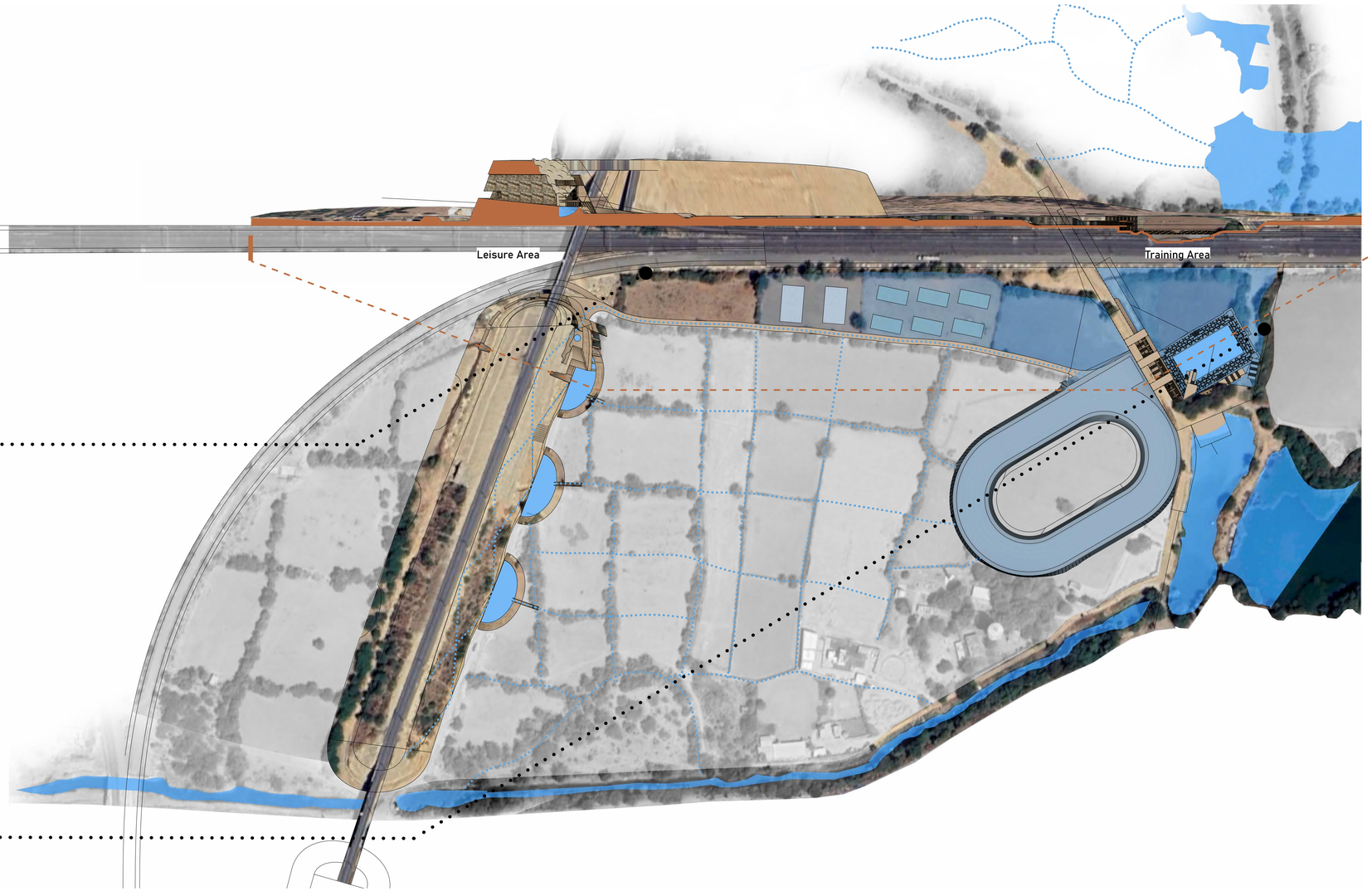

Water court
Sabarmati River



The village of Godhavi has had the misfortune of being surrounded by upcoming infrastructure like the new Delhi Mumbai Industrial Corridor and proposed Olympic village.

This project hopes to use this opportunity to link the village to the new development and through this link undermine the narratives that such large-scale projects bring with them. It creates a leisure zone for the athletes along the lines of a pilgrimage in the mountains to a sacred space, and places their sports activities in contrast to the farms and fields of the village.





The infrastructure is re-appropriated to become cavernous instrument of collecting and redistributing water, and the facilities are redesigned to re-appropriate Olympic narratives.