

S Massoud Sallah (Mesut) | 2021 | Application  
to Columbia University GSAPP for MArch



# CONTENTS

ACADEMIC | PROFESSIONAL | 2014 - 2021

## ACADEMIC

---

01	GSD CAREER DISCOVERY ACADEMIC   SUMMER 2014	01
02	LANDSCAPE STUDIO ACADEMIC   FALL 2014	05
03	HODGES SQUARE PARK ACADEMIC   SPRING 2015	09

## PROFESSIONAL

---

04	MODEL MAKING PROFESSIONAL   2016-2019	11
05	WHITTINGHAM DISCOVER CENTER PROFESSIONAL   2019	13
06	TOKYO BAY ACADEMIC   2021	17

## INDEPENDENT

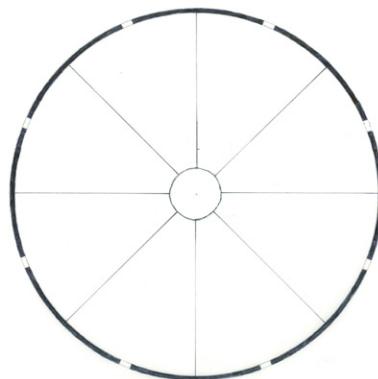
---

07	ART WORK ACADEMIC AND INDEPENDENT   2012-2021	22
08	SCRIPTING INDEPENDENT   2012-2021	24

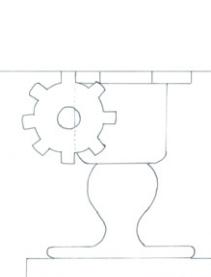
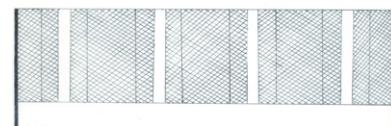
# 01 GSD CAREER DISCOVERY

ACADEMIC | INDIVIDUAL | 2014

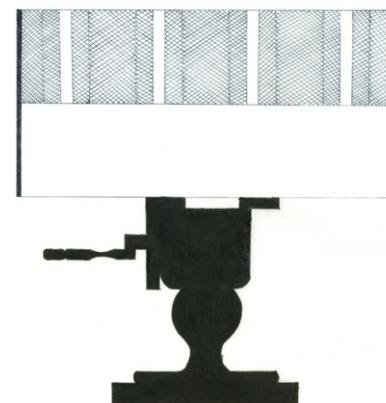
“Tools of Seeing” was a project for my design studio at GSD Career Discovery. The prompt was to invent a public site and architecture that represents the Film Archive and Cinema as an open cultural center and landscape. Students had to pick either a protocinematic device or a director/movie from a given list. I chose Horner’s Zoetrope.



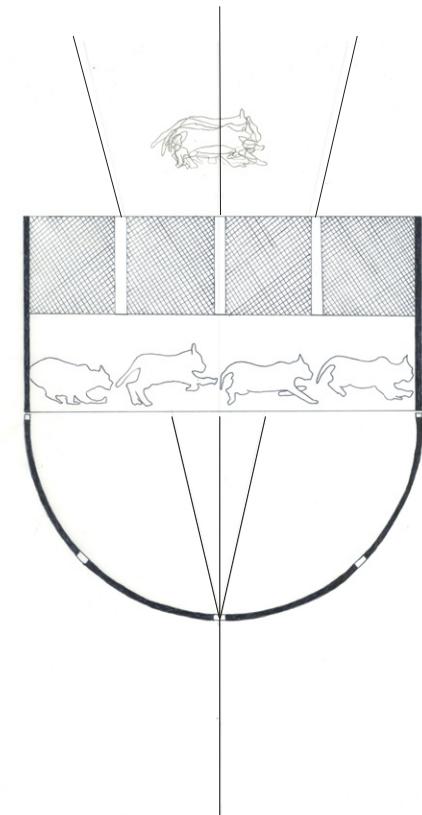
FLOOR-PLAN



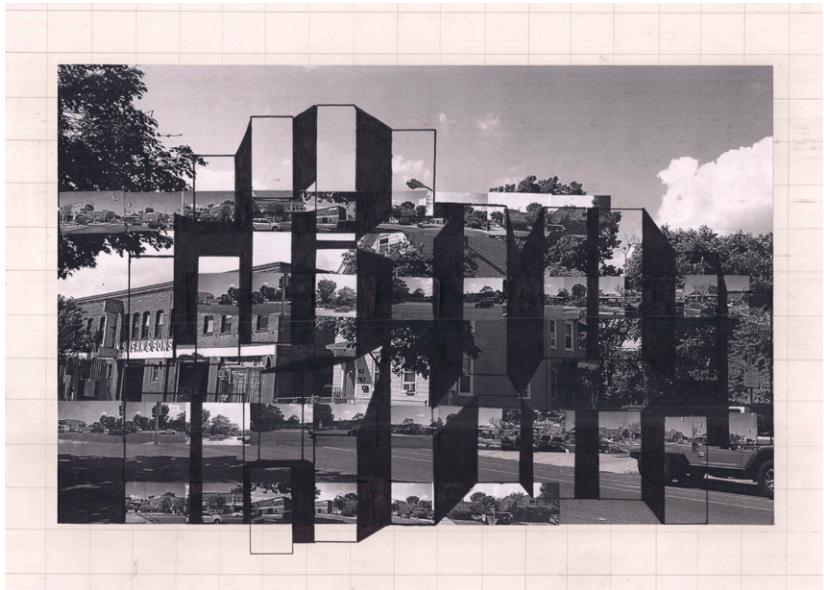
ELEVATION



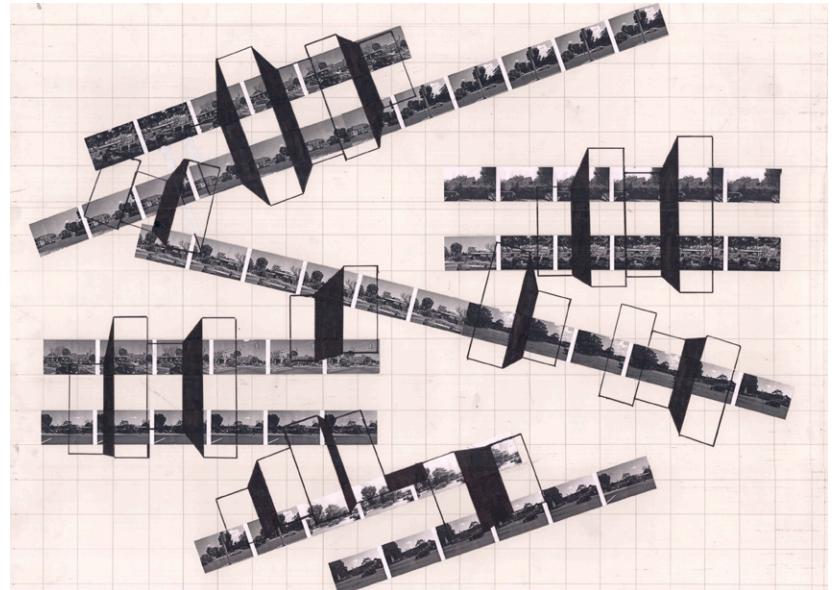
SECTION



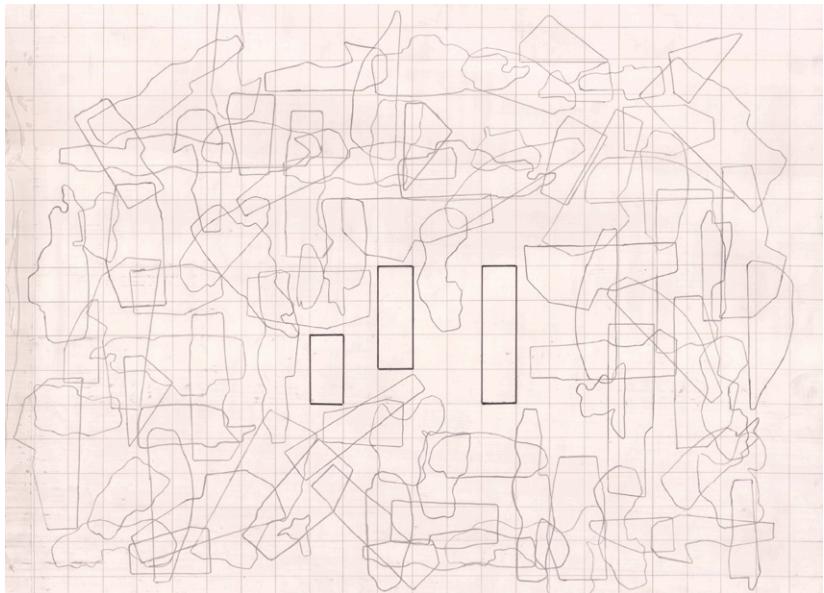
DEVICE DIAGRAM



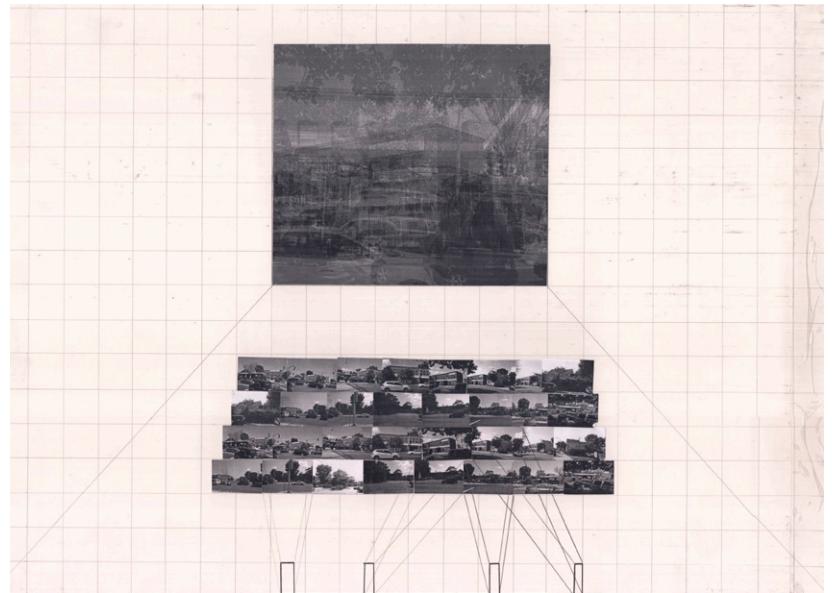
COLLAGE PERSPECTIVE NO. 1



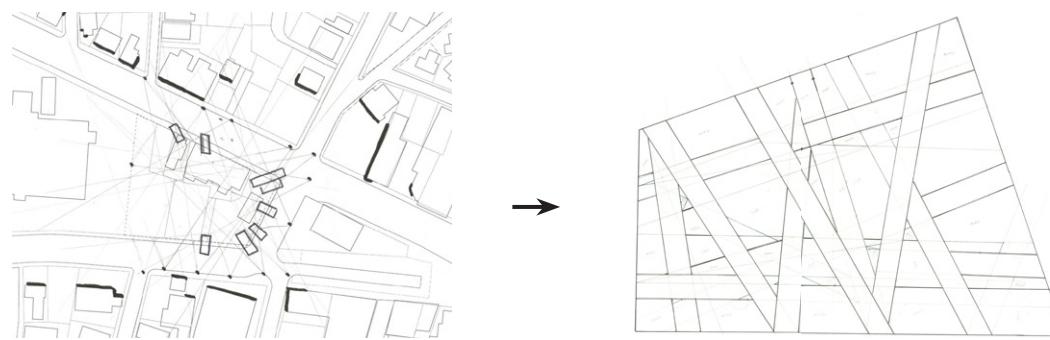
COLLAGE PERSPECTIVE NO. 2



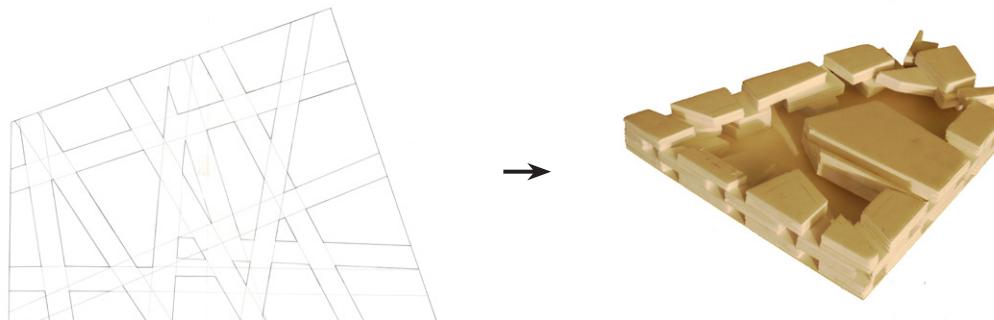
COLLAGE PERSPECTIVE NO. 3



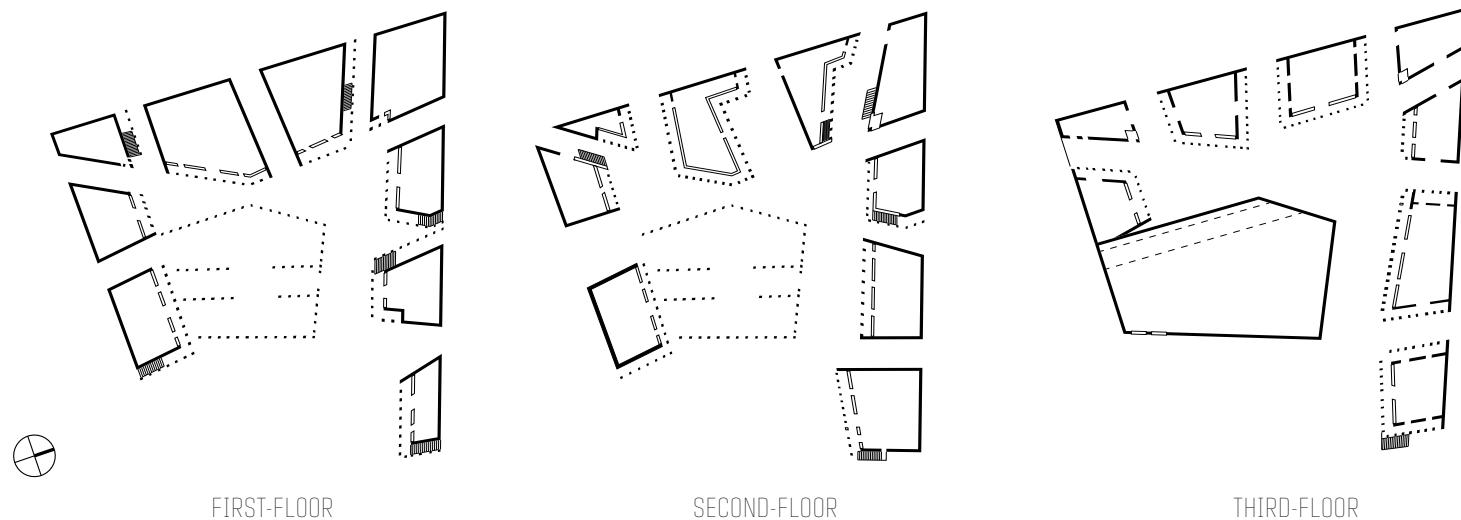
COLLAGE PERSPECTIVE NO. 4



**CONCEPTUAL HAND DRAWINGS** I began by creating the grid lines based on the mapping field. Then, I started thinking about creating space and clearing paths



**CONCEPTUAL PHYSICAL MODEL** Transition from 2D conceptual plans to conceptual 3D model





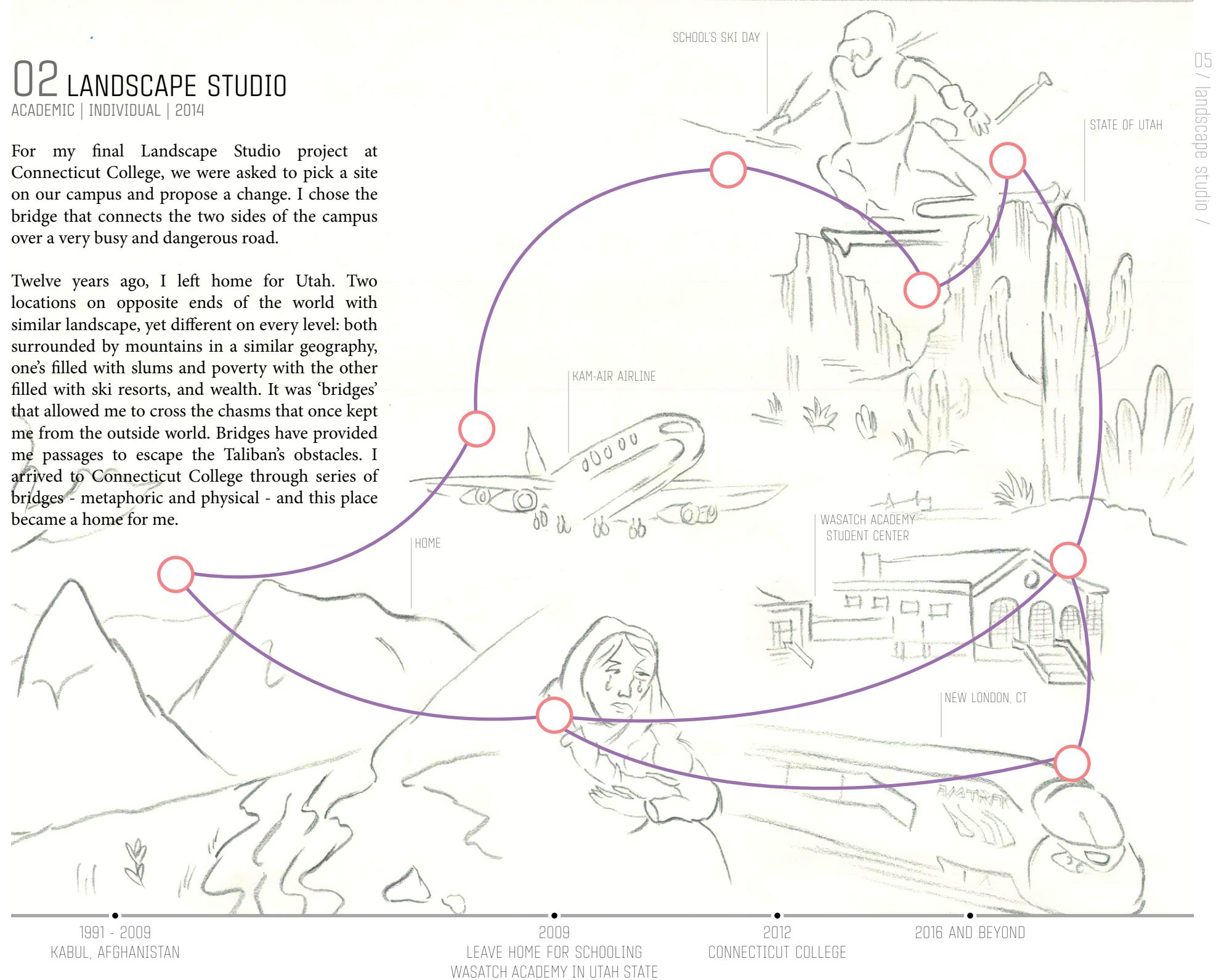
SITE MODEL PERSPECTIVE SOUTHEAST VIEW

## 02 LANDSCAPE STUDIO

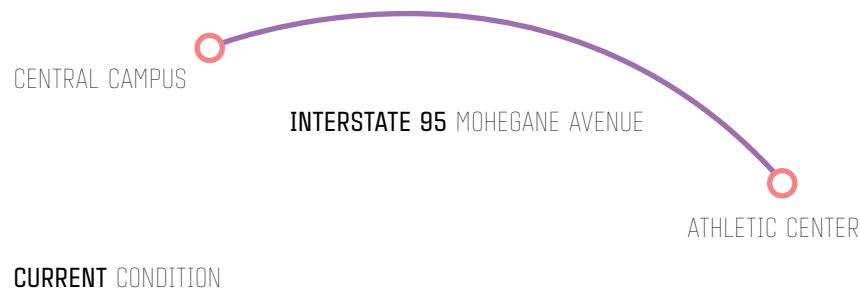
ACADEMIC | INDIVIDUAL | 2014

For my final Landscape Studio project at Connecticut College, we were asked to pick a site on our campus and propose a change. I chose the bridge that connects the two sides of the campus over a very busy and dangerous road.

Twelve years ago, I left home for Utah. Two locations on opposite ends of the world with similar landscape, yet different on every level: both surrounded by mountains in a similar geography, one's filled with slums and poverty with the other filled with ski resorts, and wealth. It was 'bridges' that allowed me to cross the chasms that once kept me from the outside world. Bridges have provided me passages to escape the Taliban's obstacles. I arrived to Connecticut College through series of bridges - metaphoric and physical - and this place became a home for me.

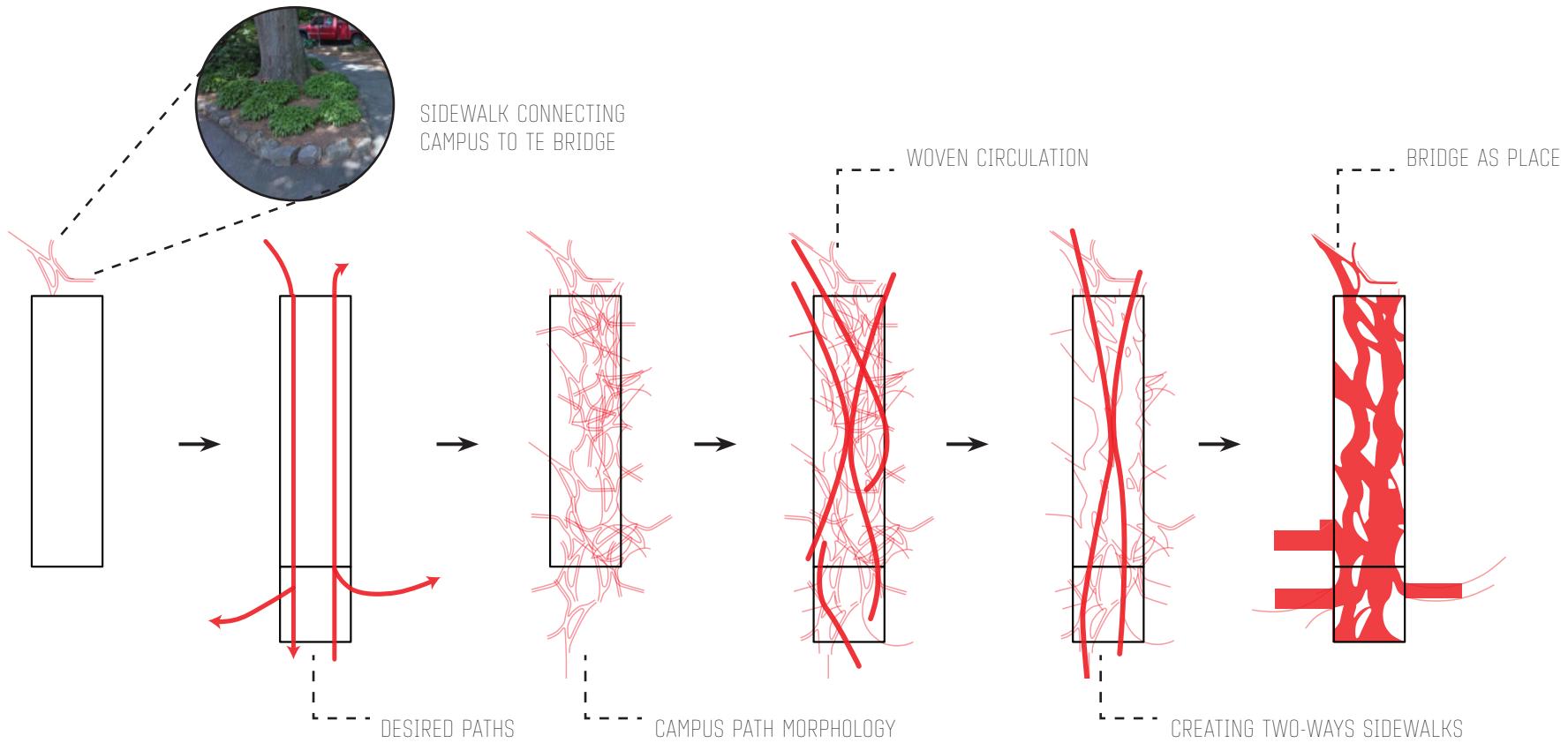


The college's idyllic hilltop overlooks the Long Island Sound, the Athletic Center overlooks the Thames River. But the Athletic Center is divided from the main campus by Interstate 95. The existing pedestrian overpass is not accessible for those individuals who might have a physical disability and the steel maze around the bridge gives the impression of walking through a prison column.



For that reason, I believe that there is a need for a new pedestrian bridge, crossing Mohegan Road, that would provide an accessible landscape integrated with the campus open space network, linking the two sides. In addition to improving connectivity between east and central campus, the bridge will act as a symbol of the ways Connecticut College teaches us to bridge differences and create vital connections.





CONCEPT SECTION



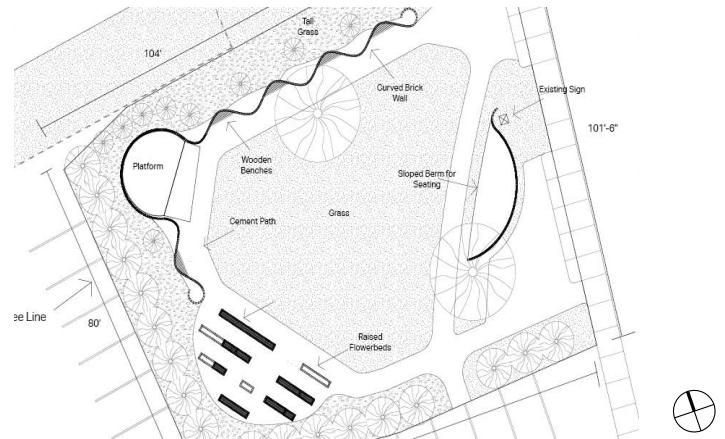
CAMPUS BRIDGE CONNECTION - CONCEPT RENDERING

# 03 HODGES SQUARE PARK

ACADEMIC | GROUP PROJECT | 2015

Connecticut College launched a “design-build” course that teamed architectural studies and psychology students with the Hodges Square Village Association to collaborate on the design and construction of a park in New London, Connecticut.

As psychology and architecture students, we worked together to create and distribute a survey for the Hodges Square community, analyze the survey data, and use that data as parameters for the park design.



FINAL DESIGN MASTERPLAN



COLLAGE PERSPECTIVE

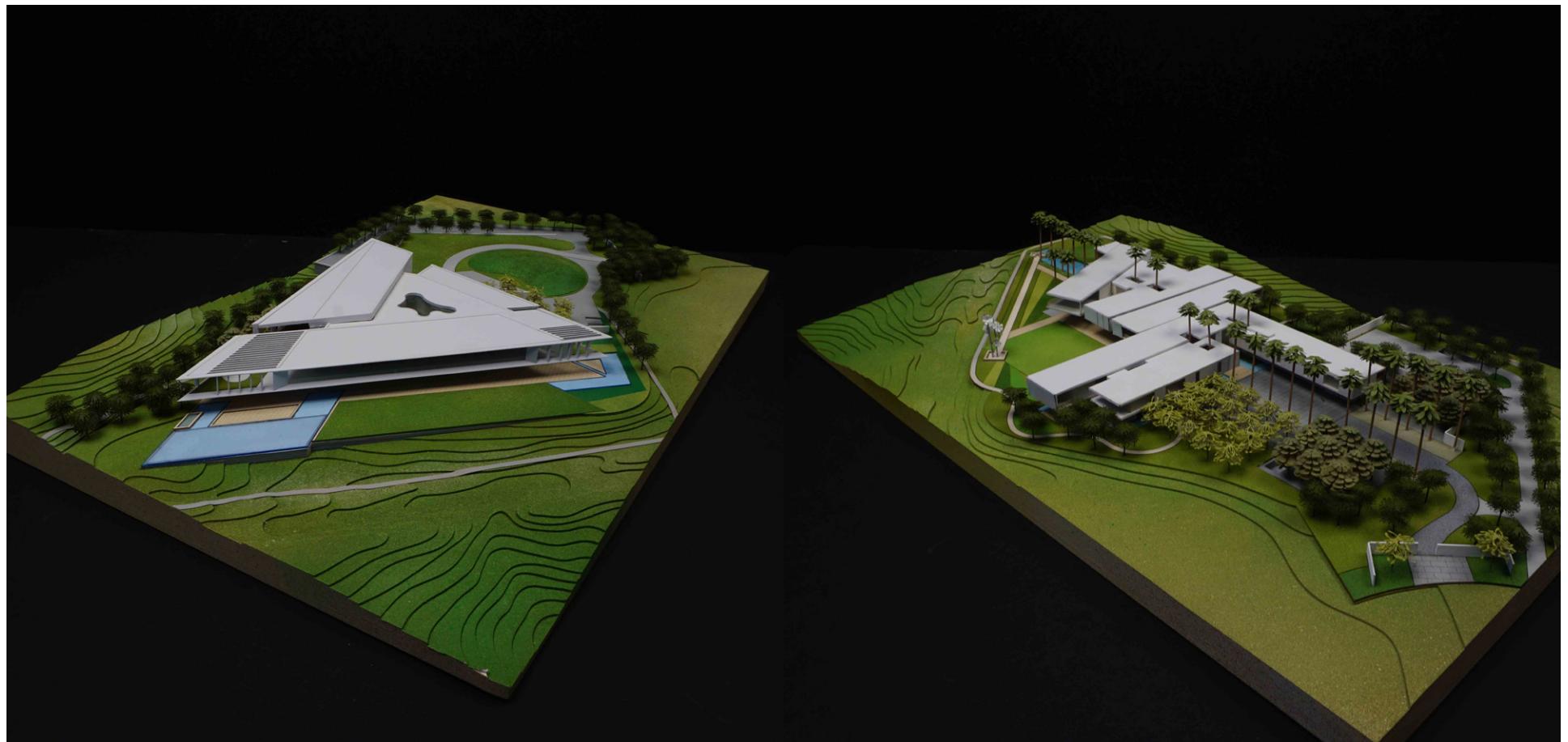


PHASE I Completion of three seating bays of Phase 1, featuring curved brick walls and ipe boards. Phase 1 was completed with the College funding, material and equipment donations, as well as a Kickstarter campaign that raised \$2,495.

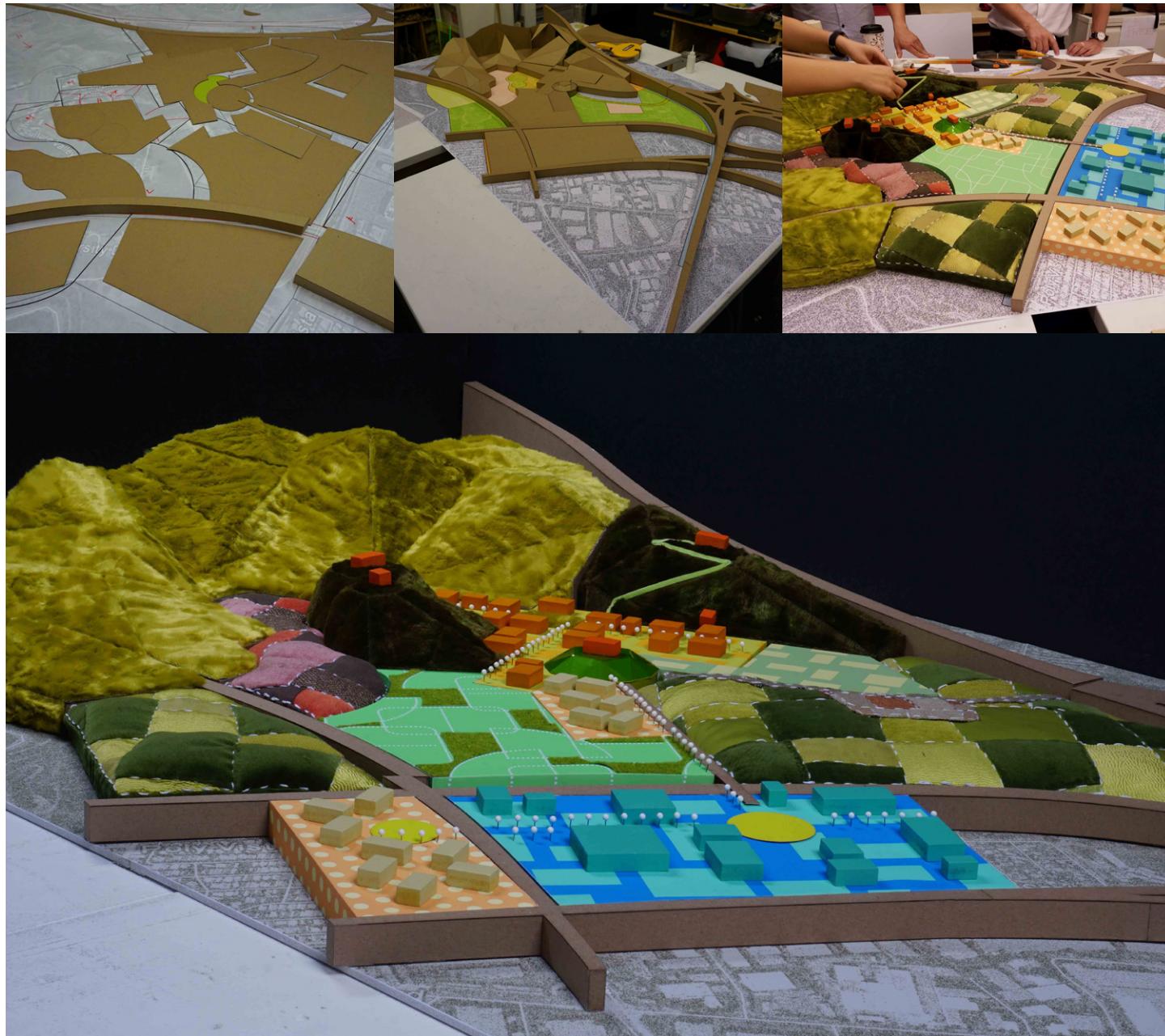
## 04 MODEL MAKING

PROFESSIONAL | RIOS Studio | 2016 - 2019

With no professional academia background in architecture, I started my journey in the model shop. During my time at Rios Clementi Hale Studios, I worked on over 50 physical models with a team of three people, from simple massing models to more highly detailed models. In addition, I developed strong 3D digital modeling skills using Rhinoceros, 3D printing and laser cutting to deliver complex geometry faster.



LAS VEGAS RESIDENCE, OPTION 1 AND 2, 1/32"=1' - 0" | 3D PRINTS, LASR CUTTING, PAPER, WOOD



CAL POLY POMONA CAMPUS, MASTER PLAN CONCEPTUAL MODEL, 1/32"=1' - 0" | TEXTILE FABRIC, PAPER, PAINTED WOOD

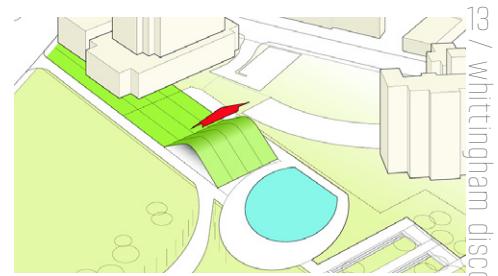
# 05 WHITTINGHAM DISCOVERY CENTER

PROFESSIONAL | JCJ Architecture | 2019

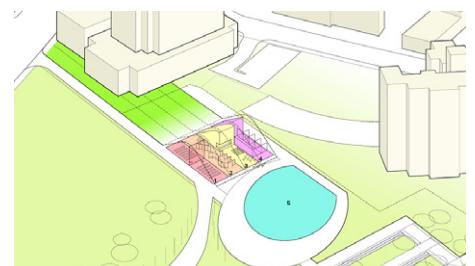
LORENZO MATTII [DESIGN PRINCIPLE] | MESUT SALLAH [DESIGNER]

A conceptual design to rehabilitate and energize the 28-acres of blighted parkland in the heart of downtown Stamford. Designed to function as both an integral part of the landscape and a dynamic object within an urban space, the Discovery Center will contribute to the ecological diversity and restoration of an important public resource. In addition to creating a place of enduring appeal that engages and holds the eye of the observer, the building would include facilities to interactive exhibits, functional classrooms/labs, support areas for an adjacent ice skating rink, carry out cafe, office and support spaces for employees.

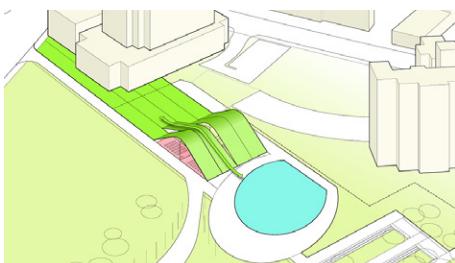
In this project, I was responsible for the overall 3D modeling, creating diagramtic axons and all the rendering views. The project was awarded the AIA Connecticut 2019 in the Unbuilt Category.



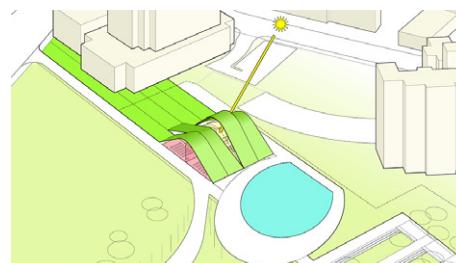
PEAKS - The slopes designed to be an extension of the landscape.



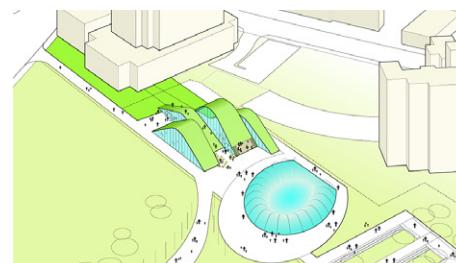
The lifted landscape open up for the possibility of programming the space underneath.



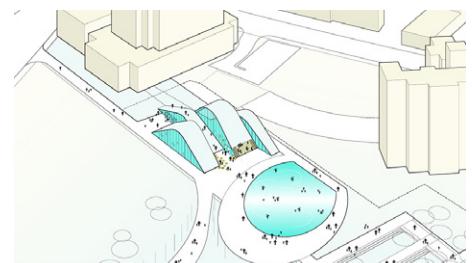
Lowering of the hills allowing visitors to climb onto the roof.



Raising an adjacent hill allows daylight into the building.



SUMMER - the roofscape is a green continuum of the surrounding natural landscape.



WINTER - the fountain is converted to a skating rink. The Discovery Center will offer visitors an unusual destination - sledding, recreation and dwelling



WHITTINGHAM DISCOVERY CENTER | View from the East - approaching from Downtown



WHITTINGHAM DISCOVERY CENTER | North View



WHITTINGHAM DISCOVERY CENTER | West View

# 06 TOKYO BAY | INTEGRATED RESORT

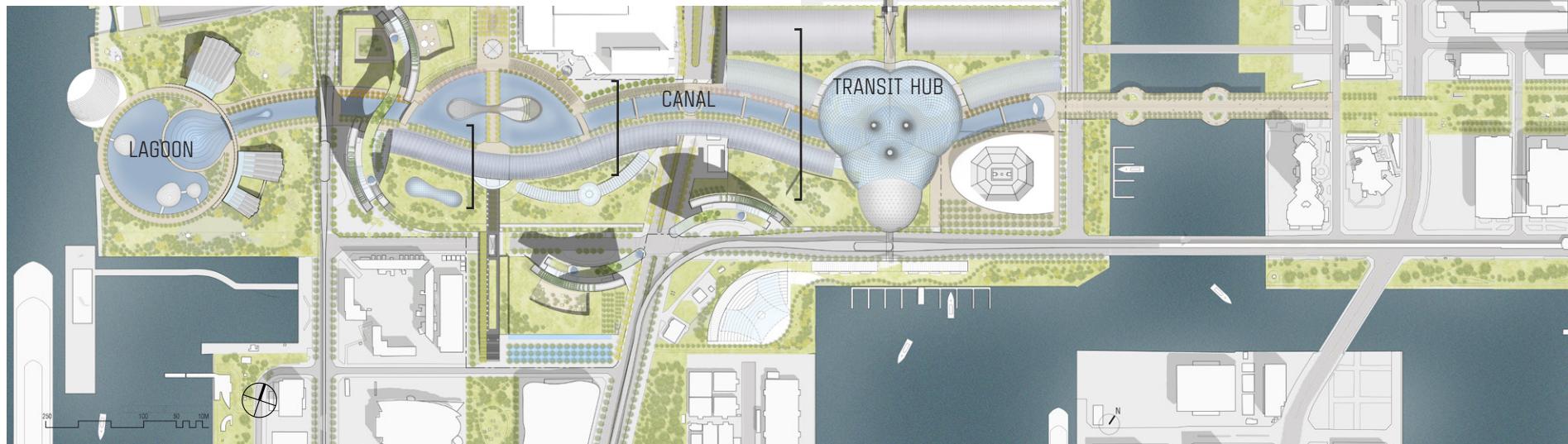
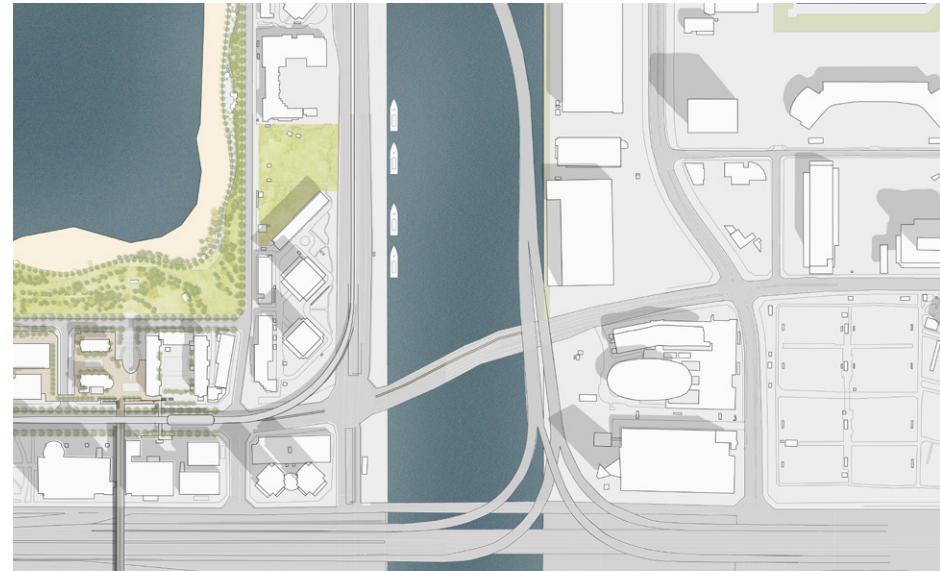
PROFESSIONAL | COMPETITION | SAFDIE ARCHITECTS | 2021

MOSHE SAFDIE AND JARON LUBIN [DESIGN PRINCIPLES] | SEJUNG OH [ASSOCIATE DESIGN PRINCIPLE] | SEUNG KIN [SENIOR DESIGNER] | NICHOLAS FRAYNE, CLAYTON STRANGE, DEEKSHA KARLA, SIQI TAN, MEGAN TAN AND MESUT SALLAH [DESIGNERS]

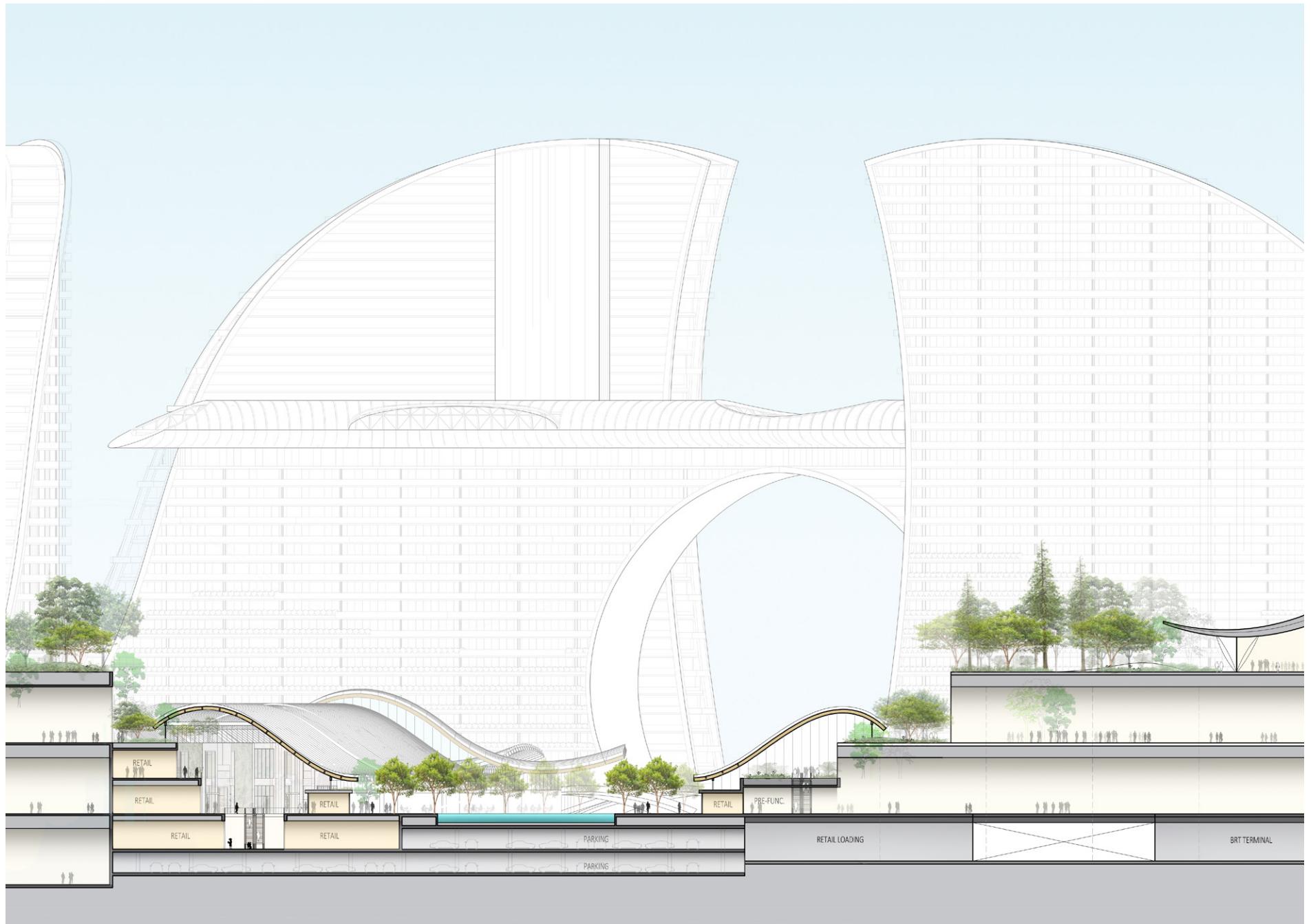
A design competition to create a new district hub in Tokyo with the aim that is characteristics of Tokyo and aspires to be the city of the future. Moshe Safdie's masterplan vision for the site focuses on urban relations and connects the site with other planned developments in Tokyo to create a loop of activities defining the Tokyo Inner Harbor.

The master plan includes rehabilitated green harbors, canal, retail spine, hotels and casino, cultural venue, transit hub, skygardens and cultural and entertainment lagoon. All parts of the urban fabric are given strong identities, relating to each other and resulting in a colorful, resilient and vibrant new district.

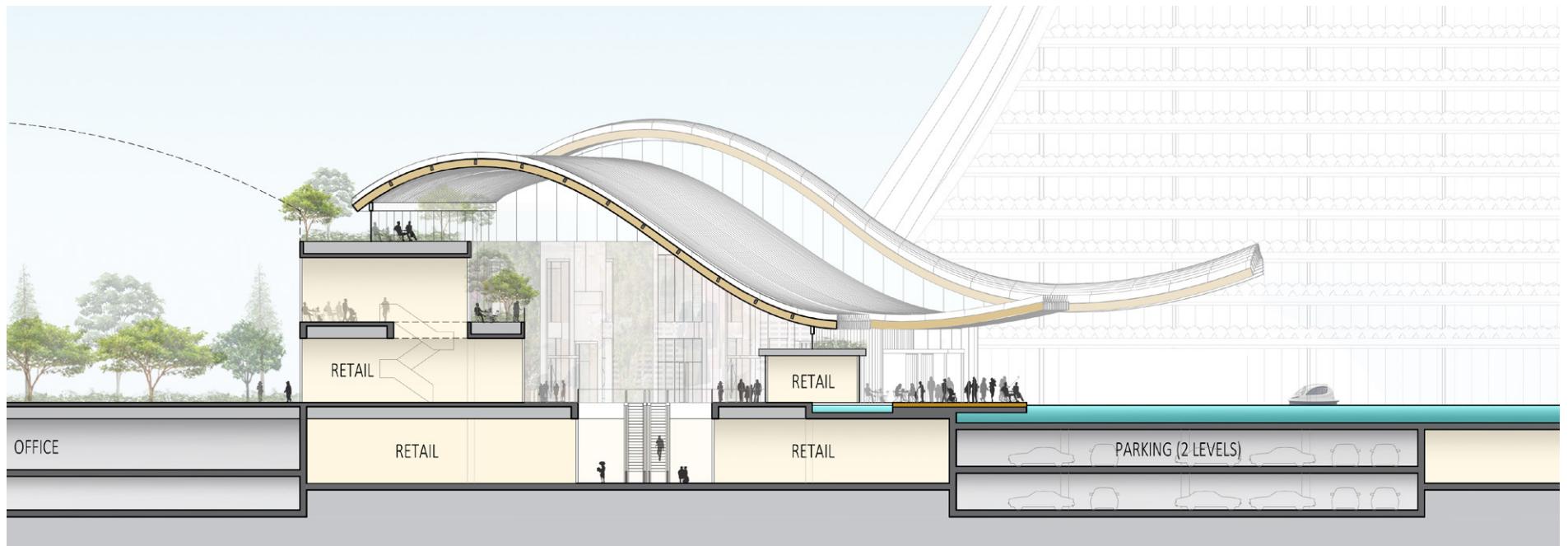
My responsibility for this project included updating Rhino 3D model on a daily basis, drawing sections, modeling complex roof geometries and developing various Grasshopper scripts for efficient and fast modeling.



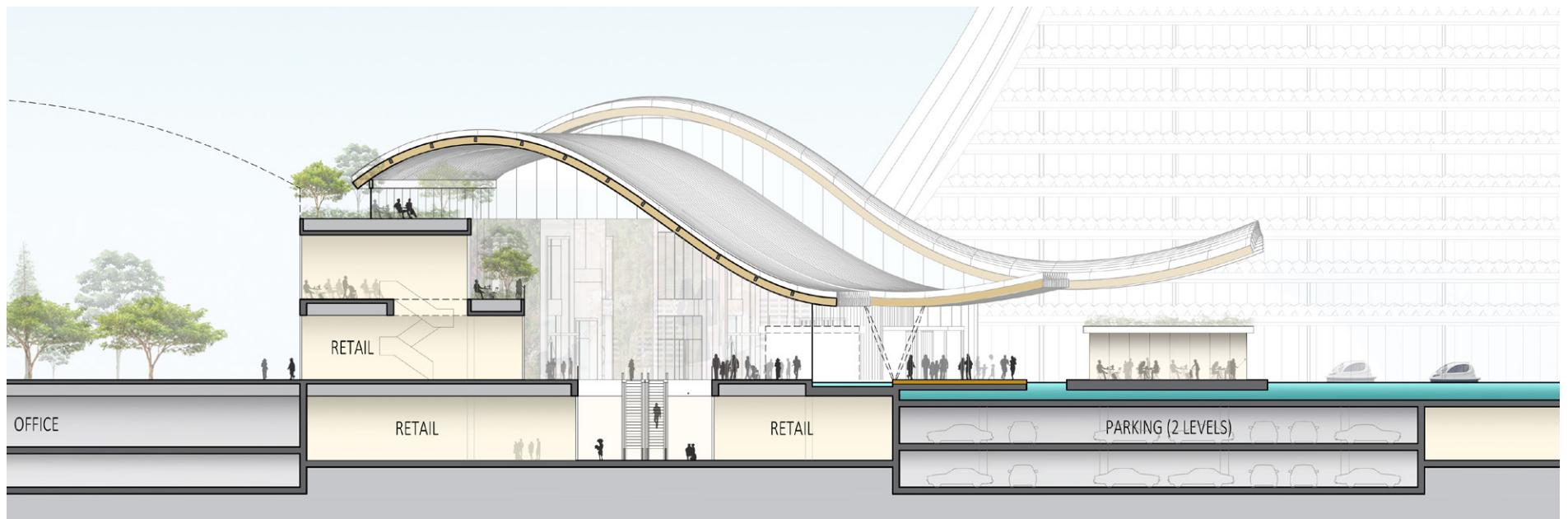
MASTER PLAN - Drawn by Clayton Strange and Illustrated by Deeksha Karla.



RETAIL AND CANAL SECTION - Demonstrating the concept of Indoor and Outdoor retail experienced alongside the canal. The greenery bringing sustainable value to the buildings and pedestrian space.



TYPICAL RETAIL AND CANAL SECTION I

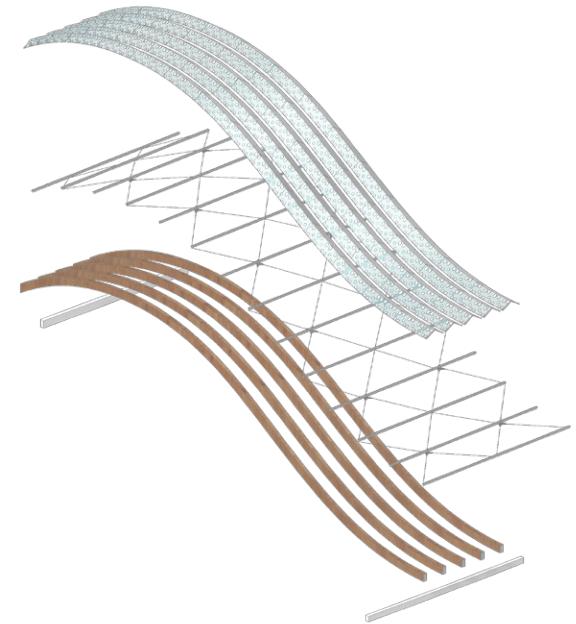


TYPICAL RETAIL AND CANAL SECTION II

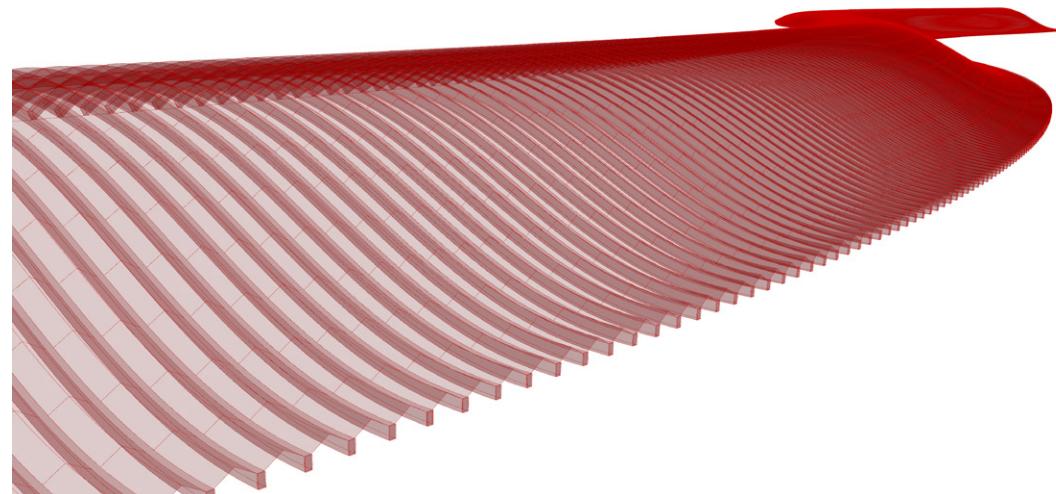
GLAZING WITH PATTERNED BIPV ON SOUTH-FACING PANELS

SECONDARY PURLIN AND CROSS BRACING

PRIMARY TIMBER STRUCTURE 250 X 600 MM @ 1.5 M CENTERS



RETAIL ROOF AXON an expression of Japaness craft. It has distinctive presenese along the canal, creating indoor and outdoor retail spaces.



Parametric roof using Grasshopper. The script controls the overall form of the roof. Different parameters are given to easily adjust the overall shape, length and width, and the size of timber structures. The roof curvature is attached to follow the form of the canal spine. Full script is available on my Github page | <https://github.com/mesutsala>



FINAL RENDERED IMAGE OF TOKYO INTEGRATED RESORT. Rendered by Shimmer rendering firm.

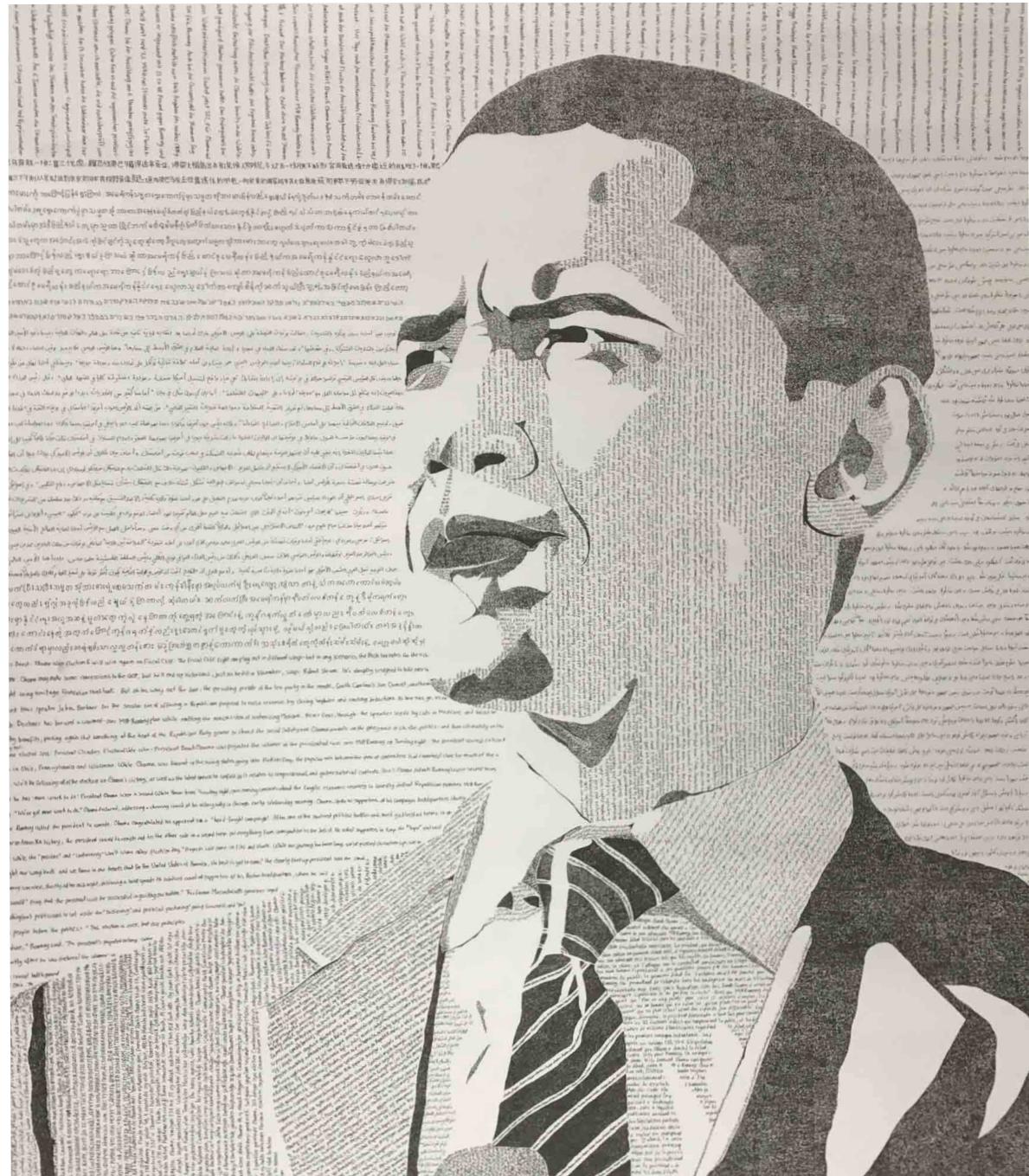
# 07 ART WORK

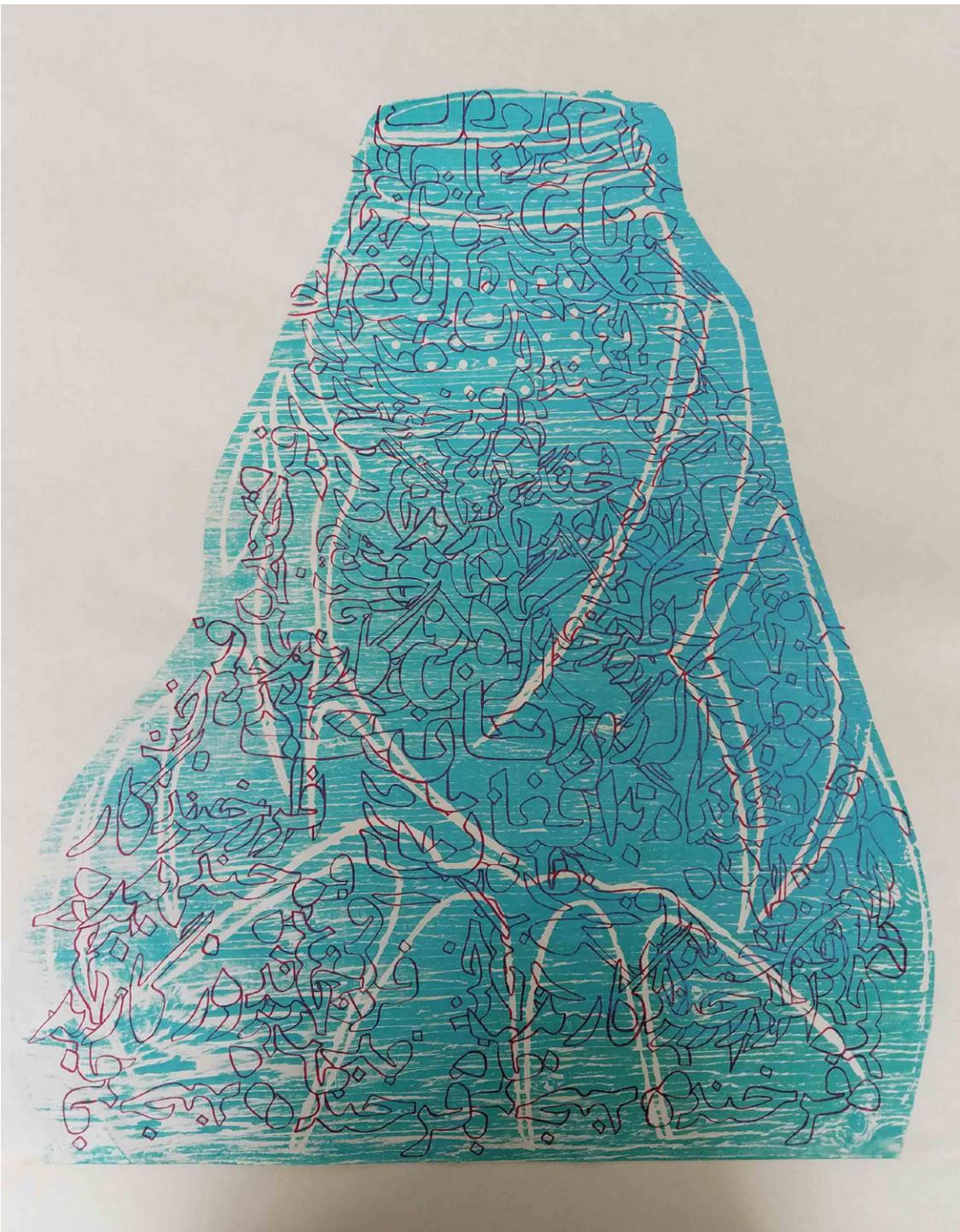
INDEPENDENT AND ACADEMIC | INDIVIDUAL | 2012 - 2016

## a. OBAMA

Hand-drawn portrait of Obama 36" x 48"

Hand-written in 10 different languages, comprised of sentences from various articles about Obama winning the election in 2012.





b. #IAMFARKHUNDA  
Ink, Printmaking 40" x 60"

In memory of Farkhunda, an Afghan girl who was publicly beaten to death by over 200 men. This piece portrays her face covered by chadare (burqa) with written calligraphic words marking her name and calling for justice and the rights of Afghan women.

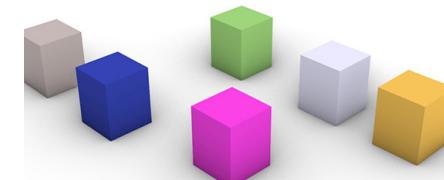
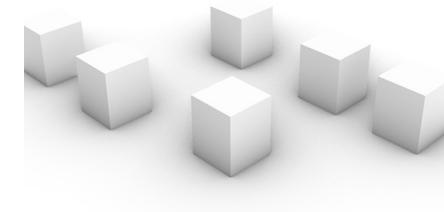
# 08 SCRIPTING

INDEPENDENT | INDIVIDUAL | 2020 - 2021

I develope plug-ins to automate repetitave tasks in Rhinoceros. The following phyton script creates material for every Rhino layers or selected layers. It can save minutes or hours when we need to assign materials name to objects in Rhino for visualization.

```

0   import rhinoscriptsyntax as rs
1   import random
2
3   #author Mesut Sala
4
5   def randomColor():
6       R = random.randint(0, 255)
7       G = random.randint(0, 255)
8       B = random.randint(0, 255)
9       return R, G, B
10
11  def MaterialNameByLayer():
12
13      layersName = rs.LayerNames()
14      options = ('All Layers', 'Selected Layers')
15
16      if options:
17          results = rs.ListBox(options, "Pick an option: Mesut")
18
19      if results is None: return
20
21      elif results == "All Layers":
22          for i in layersName:
23              if i:
24                  index = rs.LayerMaterialIndex(i)
25                  if index == -1:
26                      index = rs.AddMaterialToLayer(i)
27                      rs.MaterialName(index, i)
28                      materialColor = rs.MaterialColor(index, randomColor
())
29
30
31      else:
32          selectedLayers = rs.GetLayers("Select the layers you want
to add materials:", False)
33          for i in selectedLayers:
34              if i:
35                  index = rs.LayerMaterialIndex(i)
36                  if index >= -1:
37                      index = rs.AddMaterialToLayer(i)
38                      rs.MaterialName(index, i)
39                      materialColor = rs.MaterialColor(index, randomColor
())
40
41
42
43  if __name__=="__main__":
44      MaterialNameByLayer()
```



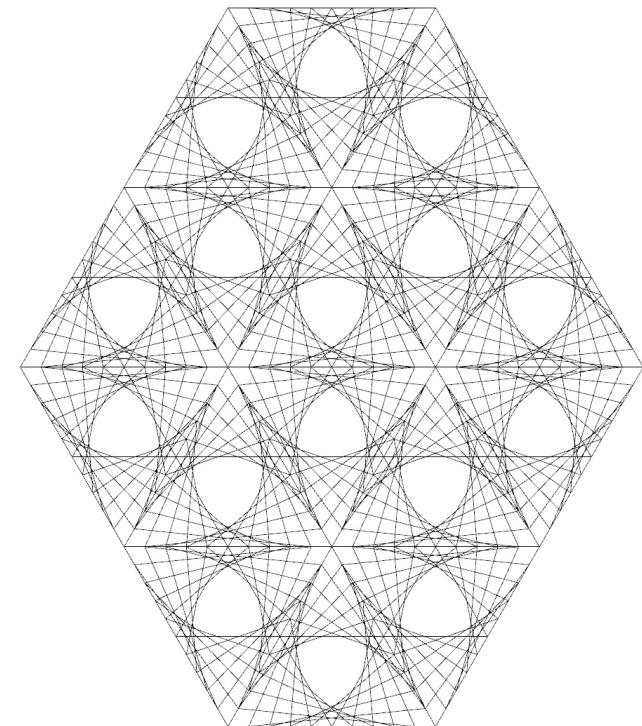
# 08 SCRIPTING

INDEPENDENT | INDIVIDUAL | 2020 - 2021

In addition to creating plug-ins, I write codes in Python to create complex patterns. In this example, I took a simple rectangle geometry using the bone structures as input to create more complex pattern. We can repeatedly run the same code to create more complexity. The full script is available on my Github page: <https://github.com/mesutsala>

```

0   import rhinoscriptsyntax as rs
1   import random as rn
2
3   #author Mesut Sala
4
5   startPt = rs.GetObject("Pick a point")
6   circle = rs.AddCircle(startPt, 40)
7   rs.HideObjects(startPt)
8   rs.HideObjects(circle)
9   points = rs.DivideCurve(circle, 6, True)
10
11
12 #CREATE A POLYGON
13 polygon = rs.AddCurve([points[0],points[1],points[2],points[3],points[4],
14 ,points[5], points[0]], 1)
15 #INTERIOR LINES:
16 line00 = rs.AddCurve([startPt, points[0]], 1)
17 line01 = rs.AddCurve([startPt, points[1]], 1)
18 line02 = rs.AddCurve([startPt, points[2]], 1)
19 line03 = rs.AddCurve([startPt, points[3]], 1)
20 line04 = rs.AddCurve([startPt, points[4]], 1)
21 line05 = rs.AddCurve([startPt, points[5]], 1)
22
23 line00Pts = rs.DivideCurve(line00, 10, True)
24 line01Pts = rs.DivideCurve(line01, 10, True)
25 line02Pts = rs.DivideCurve(line02, 10, True)
26 line03Pts = rs.DivideCurve(line03, 10, True)
27 line04Pts = rs.DivideCurve(line04, 10, True)
28 line05Pts = rs.DivideCurve(line05, 10, True)
29
30 #BORDER LINES:
31 borders = rs.ExplodeCurves(polygon, True)
32
33 border00Pts = rs.DivideCurve(borders[0], 10, True)
34 border01Pts = rs.DivideCurve(borders[1], 10, True)
35 border02Pts = rs.DivideCurve(borders[2], 10, True)
36 border03Pts = rs.DivideCurve(borders[3], 10, True)
37 border04Pts = rs.DivideCurve(borders[4], 10, True)
38 border05Pts = rs.DivideCurve(borders[5], 10, True)
39
40
41 #TRIANGLES 00
42 rs.AddCurve([line00Pts[1], border00Pts[1], line01Pts[9], line00Pts[1]],
1)
```



BONE STRUCTURE