



# The Third Typology: Architecture on the Bank of the Bengawan Solo

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**THE THIRD TYPOLOGY: ARCHITECTURE ON THE BANK OF THE BENGAWAN SOLO**

A Thesis Submitted to the Department of Architecture  
Harvard University Graduate School of Design, by

**PARAMA PRADANA SUTEJA**

In Partial Fulfillment of the Requirements for the Degree of  
[Master of Architecture]

**DECEMBER 2023**

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Parama Pradana Suteja



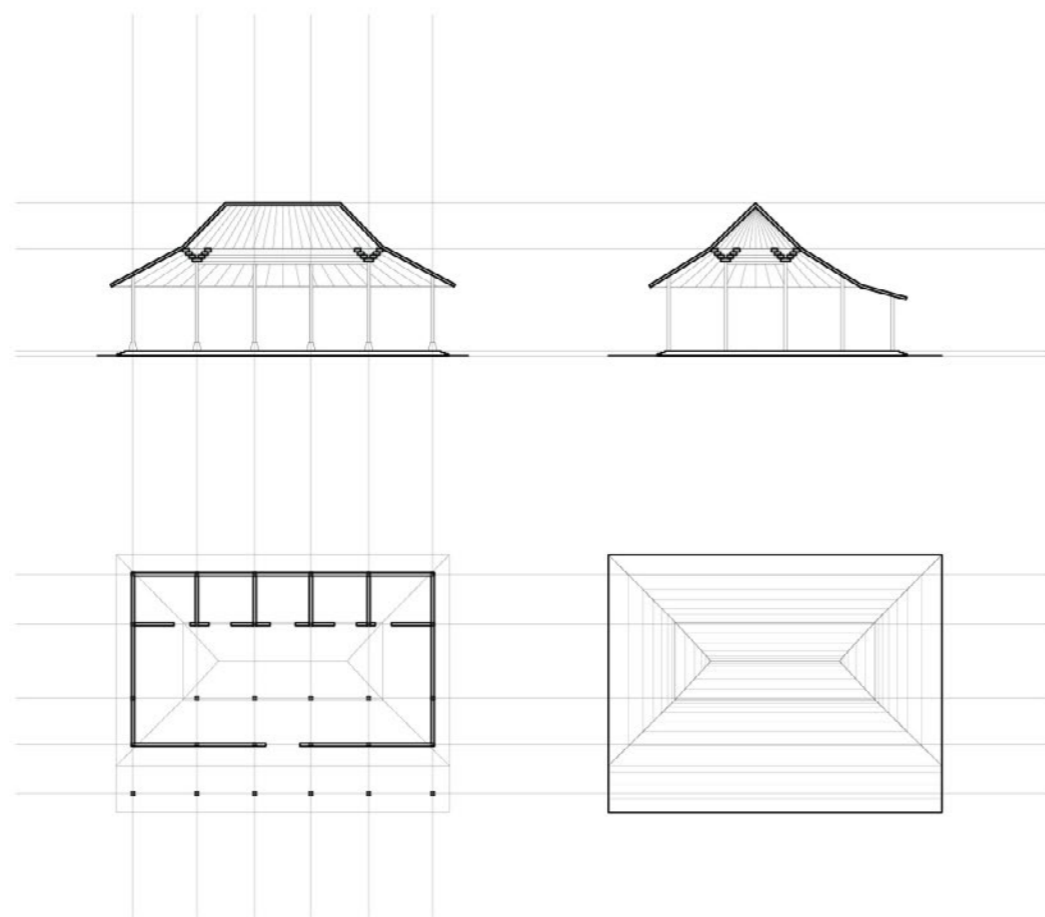
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Eric Höweler

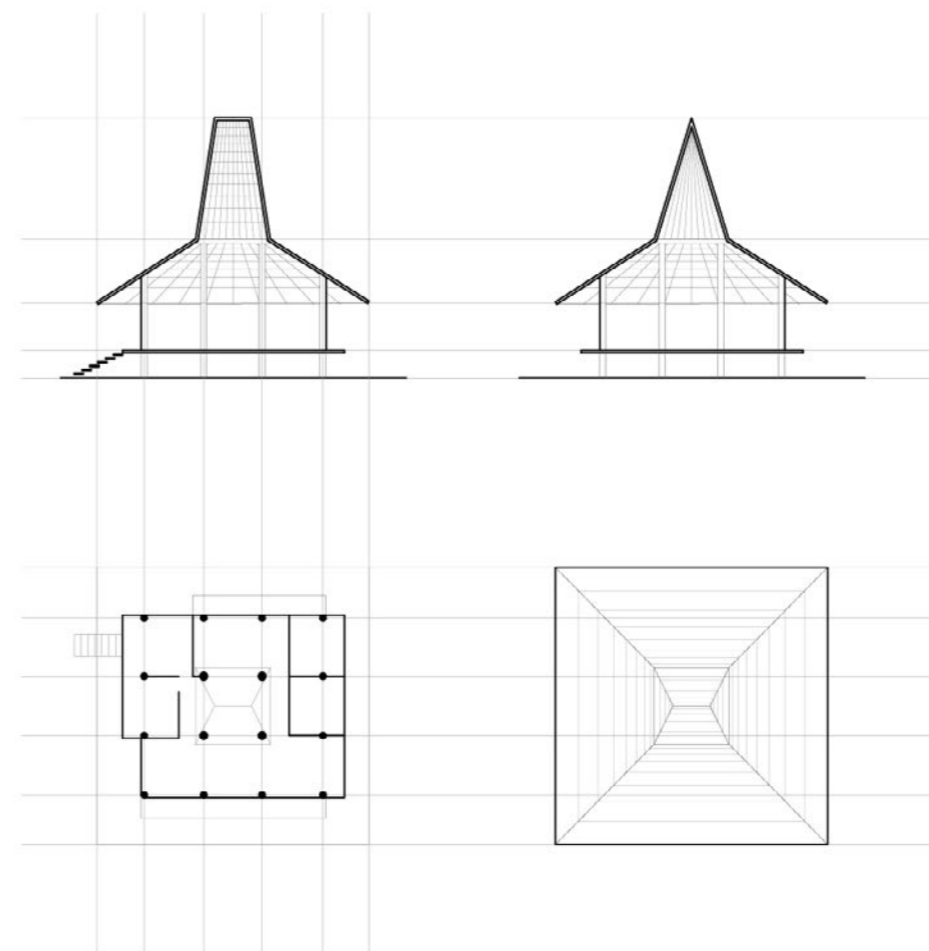
# THE THIRD TYPOLOGY

*Architecture on The Bank of The Bengawan Solo*

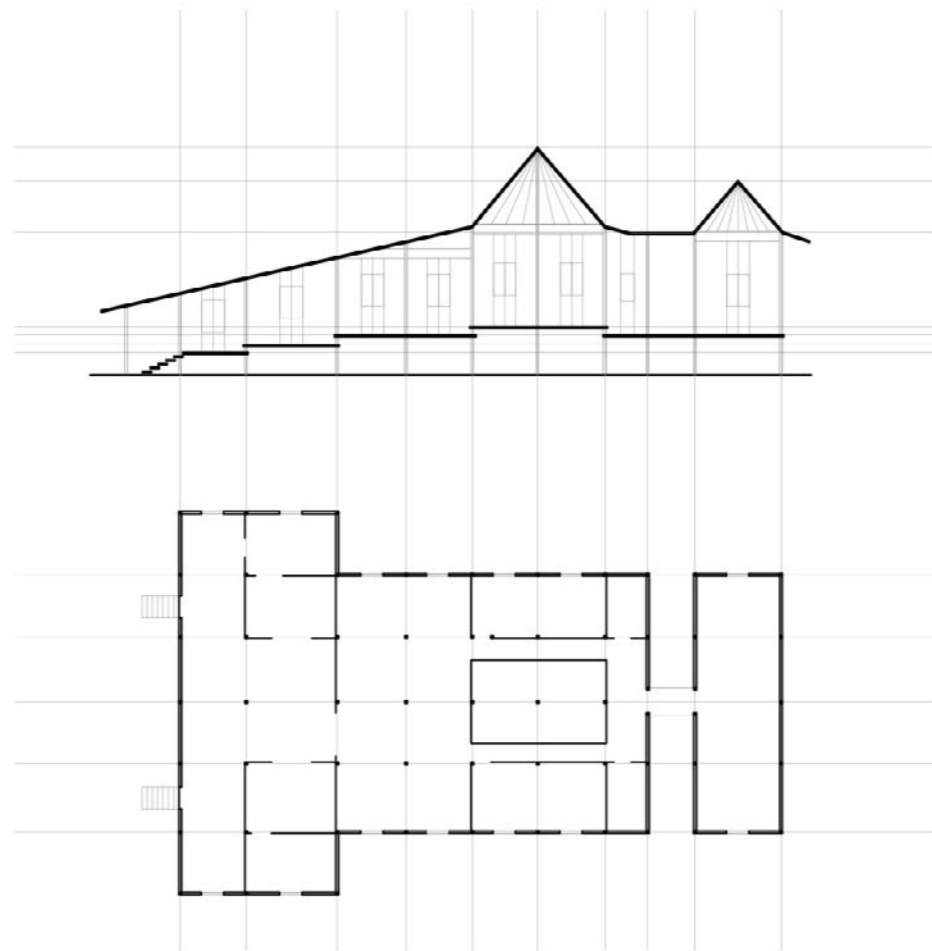
*I. The Legacy of the Rumah Adat*



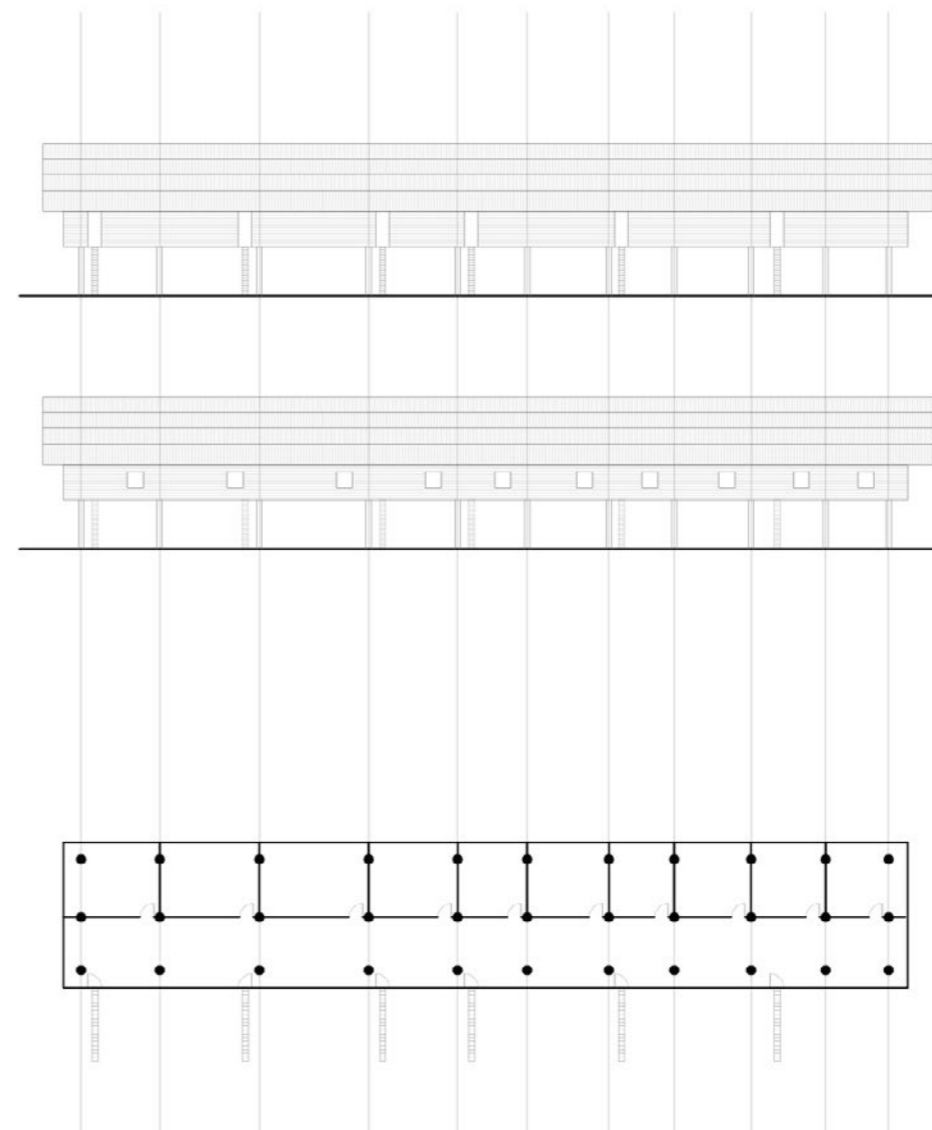
Joglo House, Java



Sumbanese House, Sumba



Limas House, Sumatra



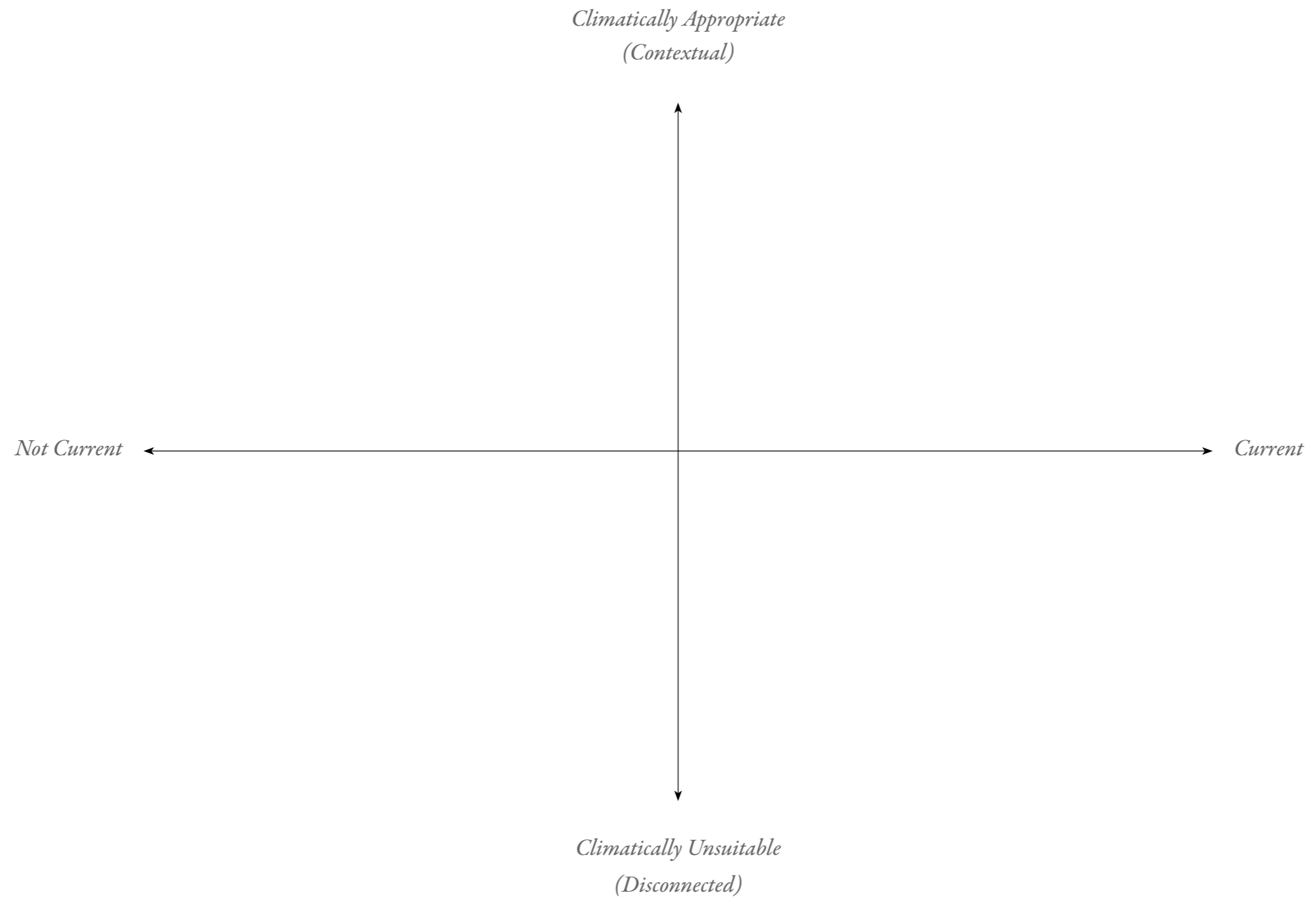
Borneo Long House, Kalimantan

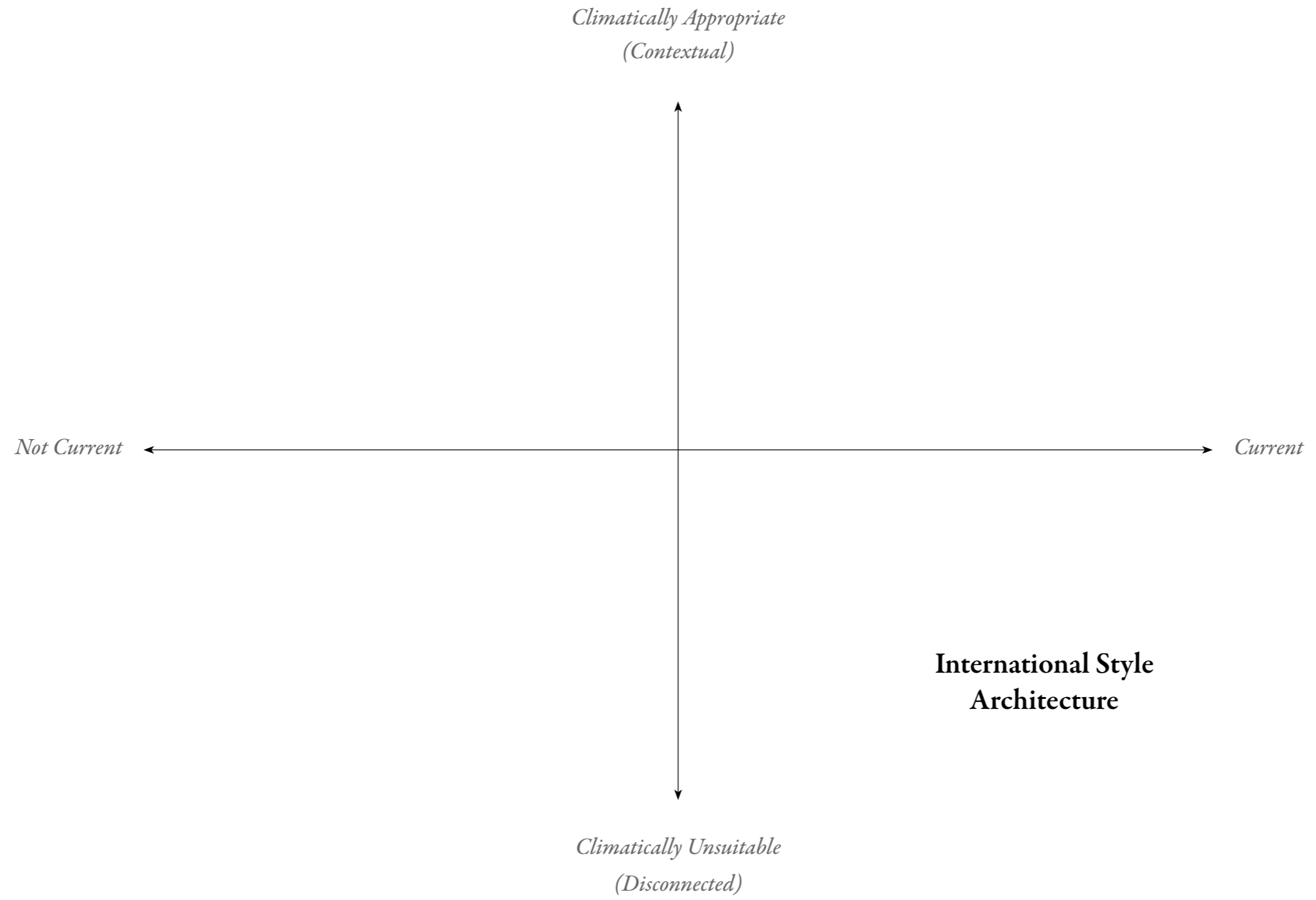
### *The Dichotomy's Pitfall*

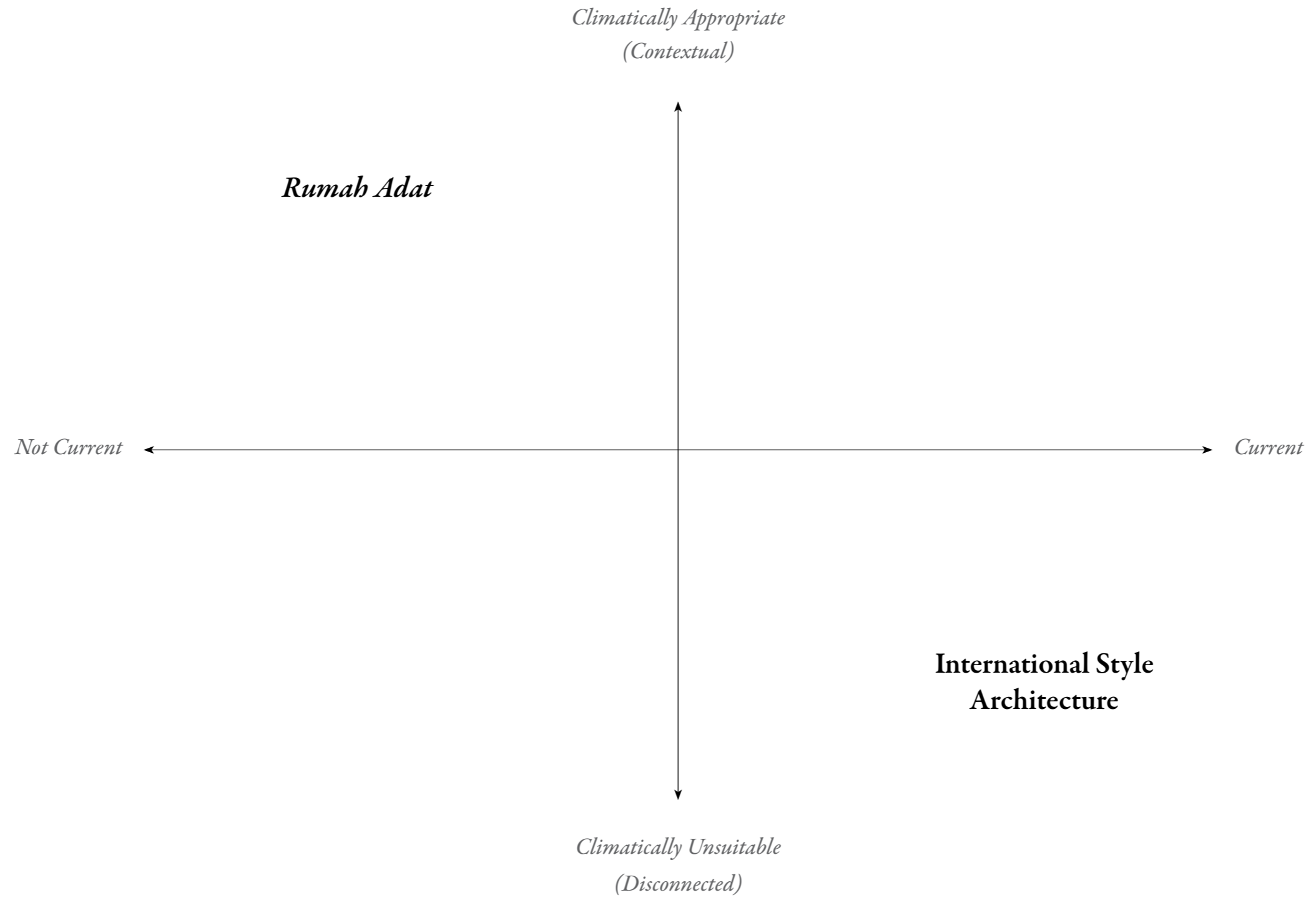
1. Fragmentation in developing a unified national identity.
2. Loss of valuable cultural knowledge and heritage.
3. Lack of contextually sensitive design leading to adverse environmental and social impacts.

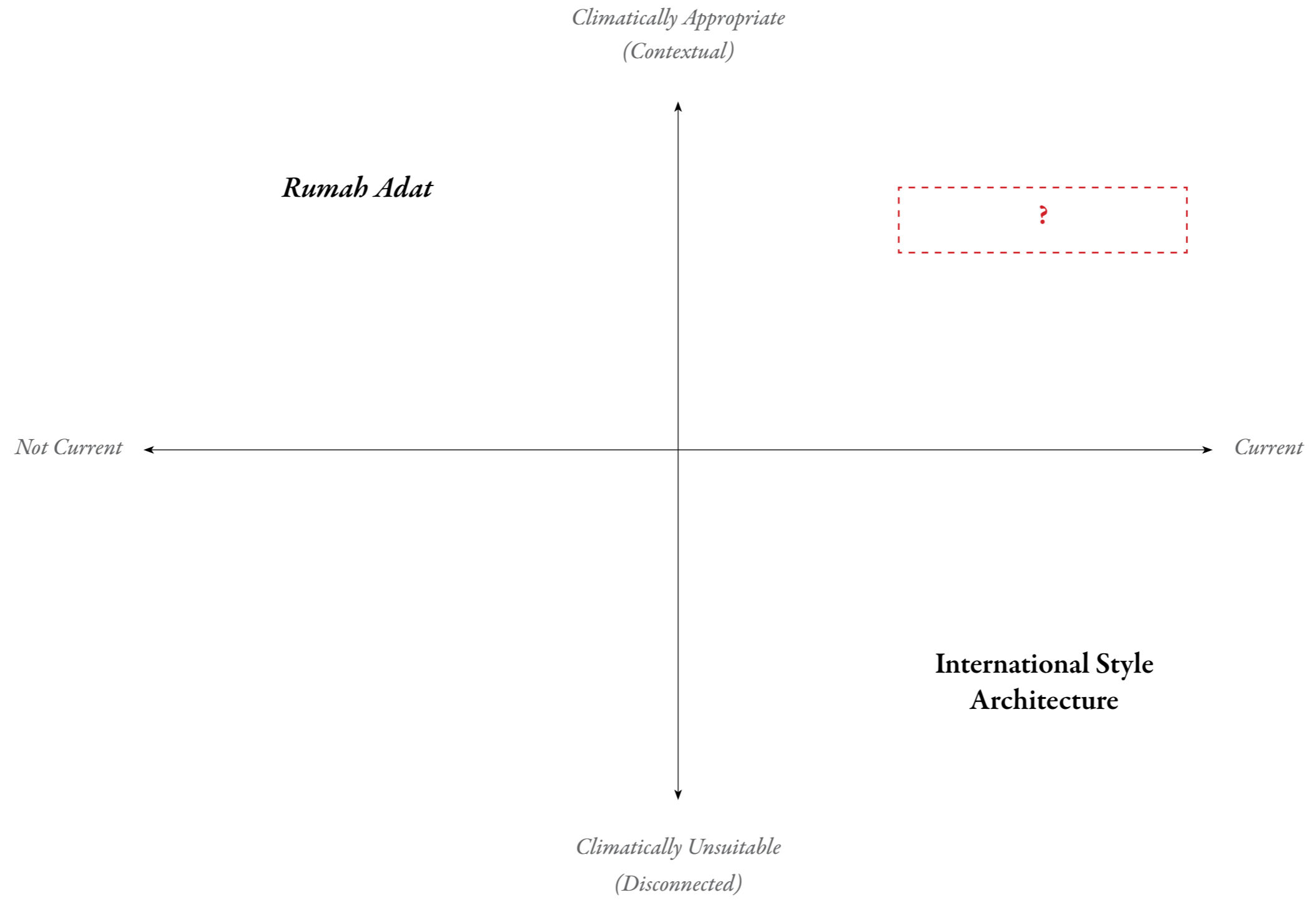
## *II. Bridging Two Worlds*



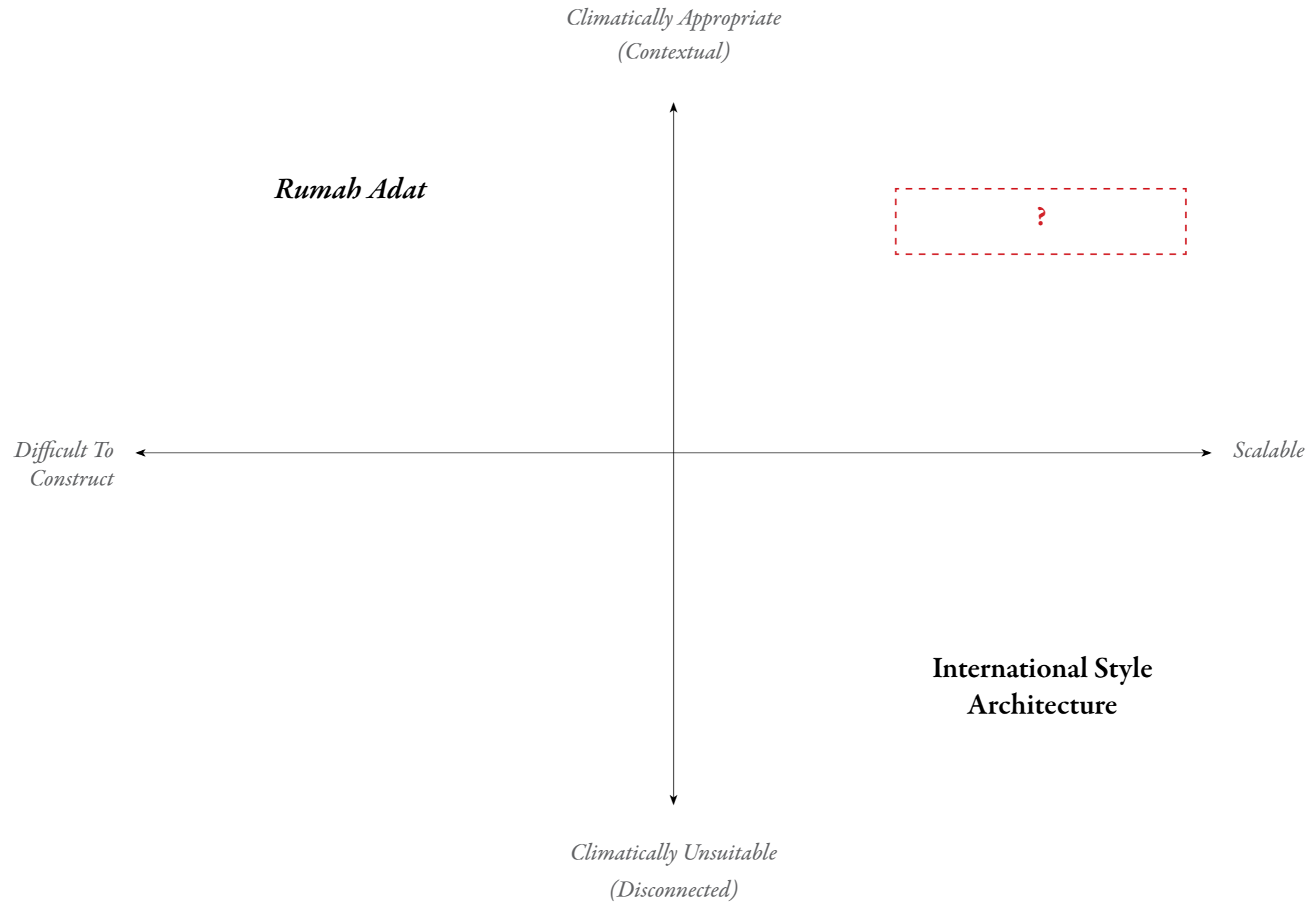


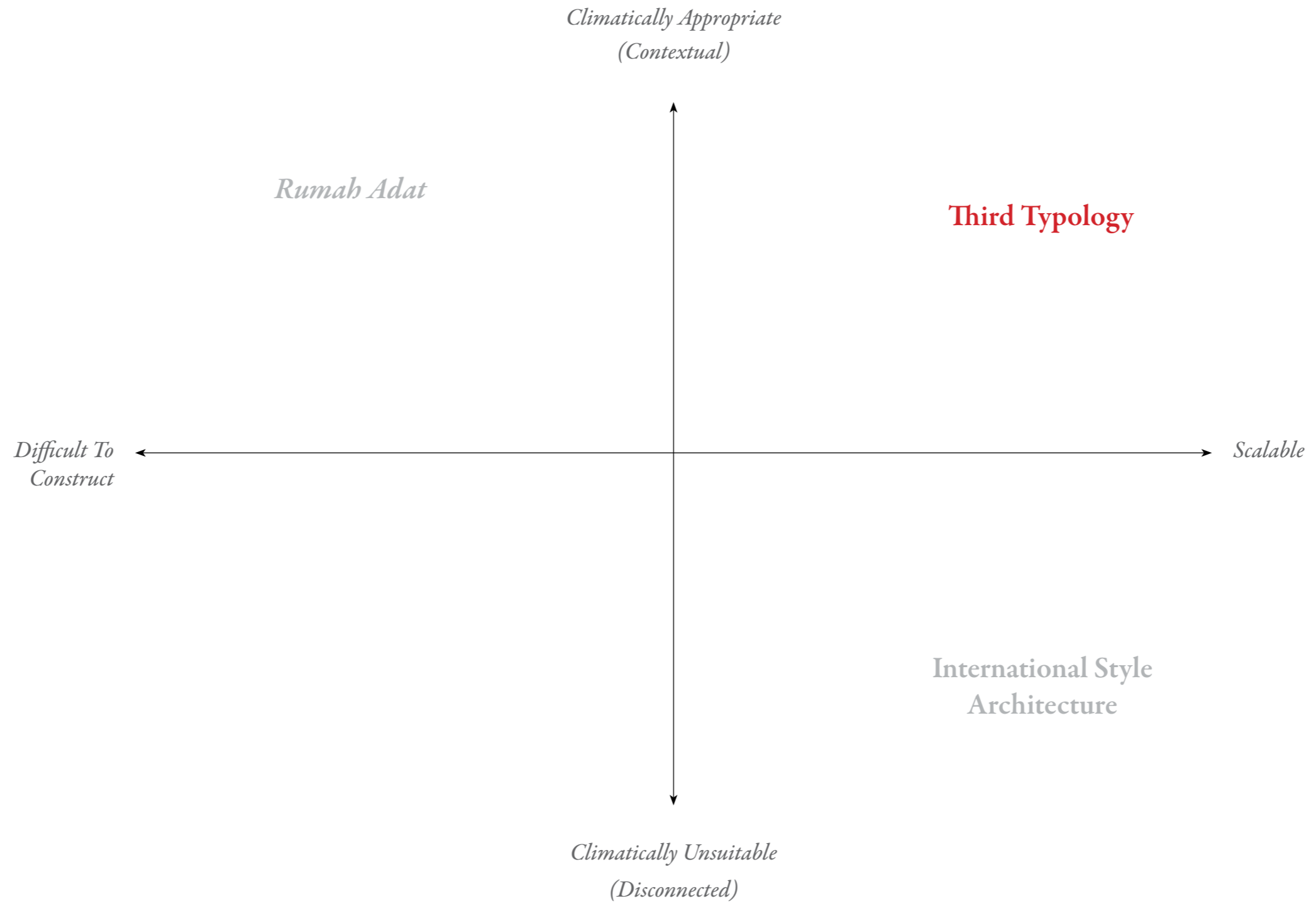


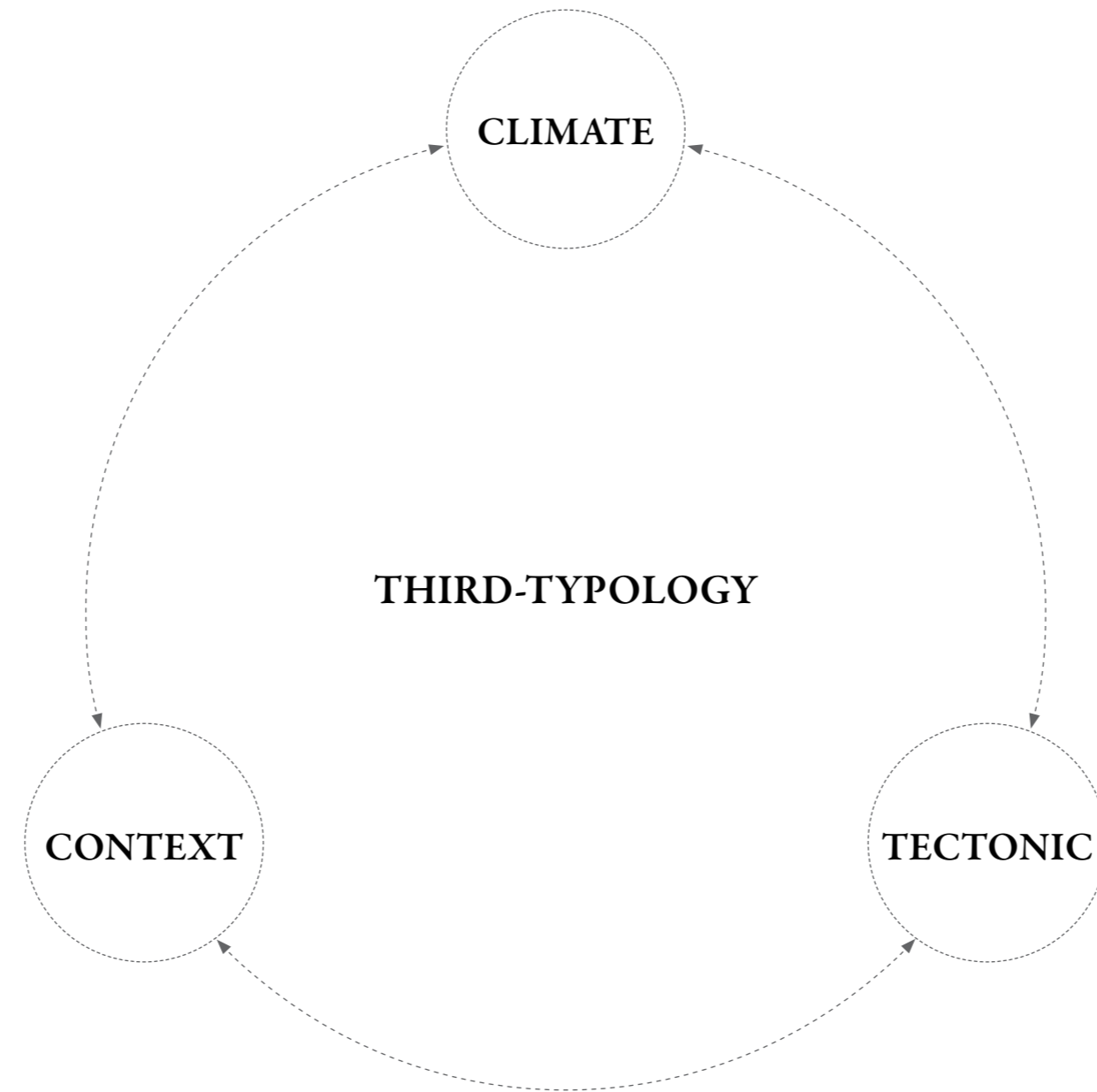




*How can architectural solutions be both  
climatically-appropriate and meets the current needs?*

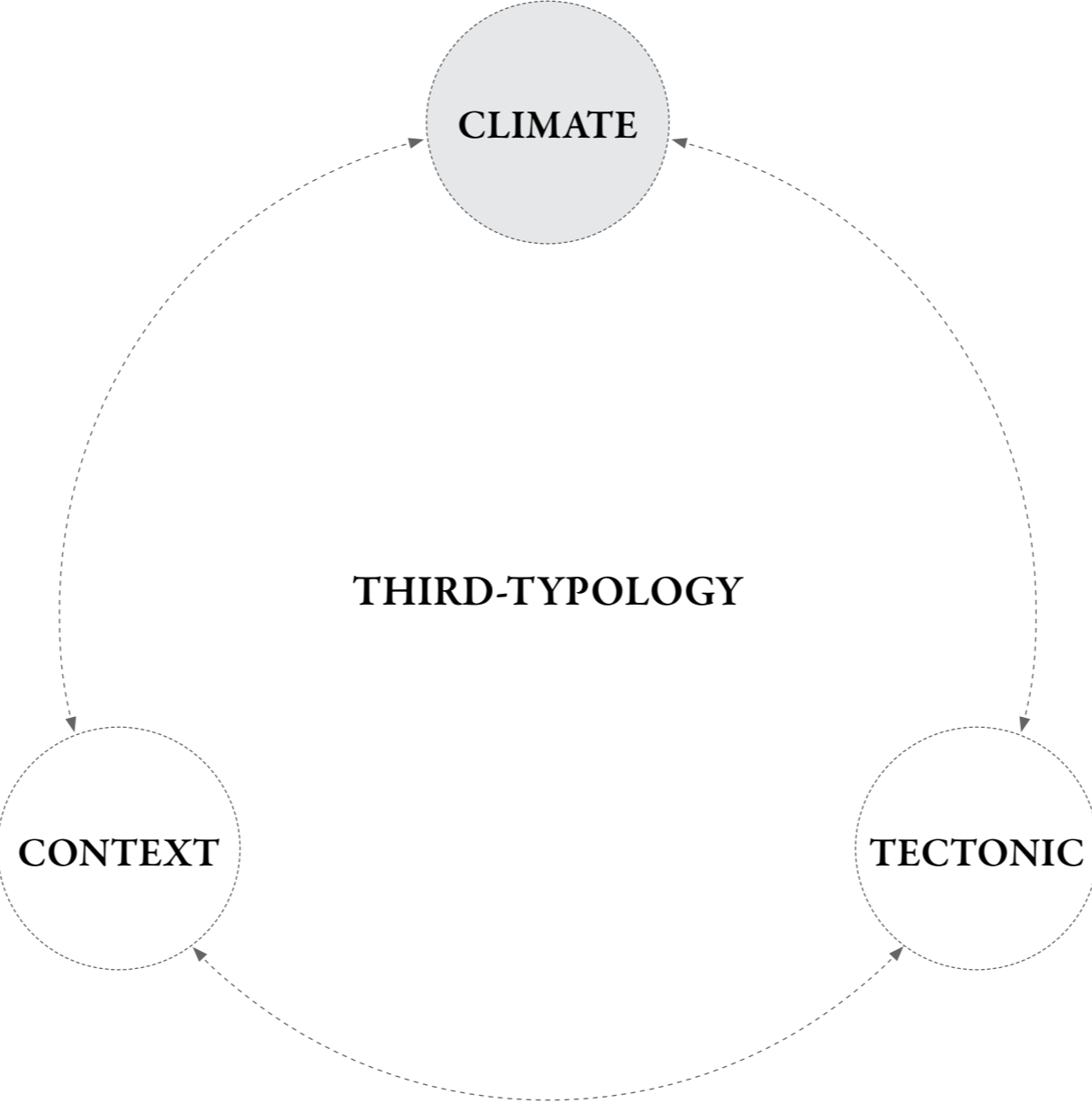


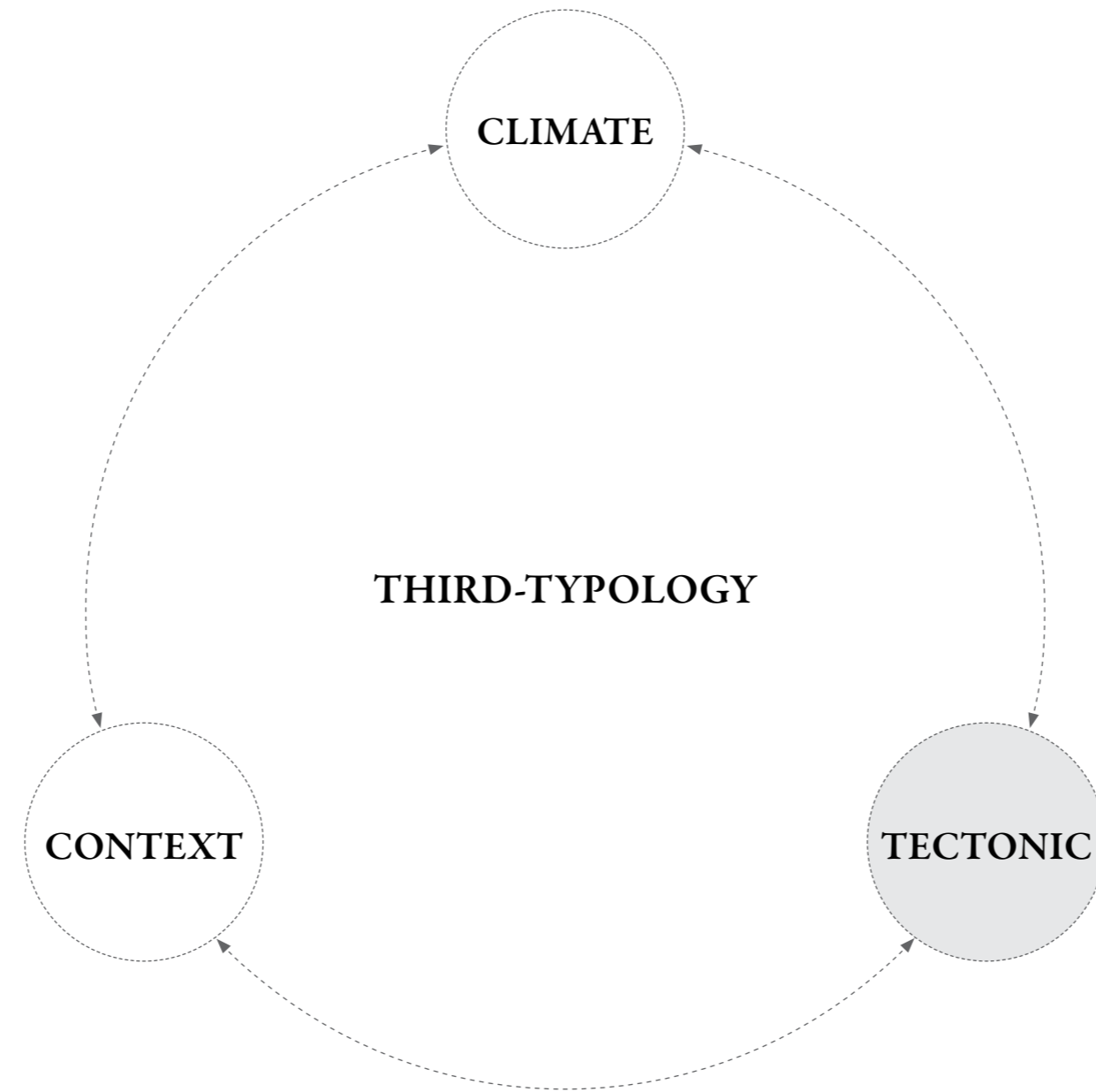




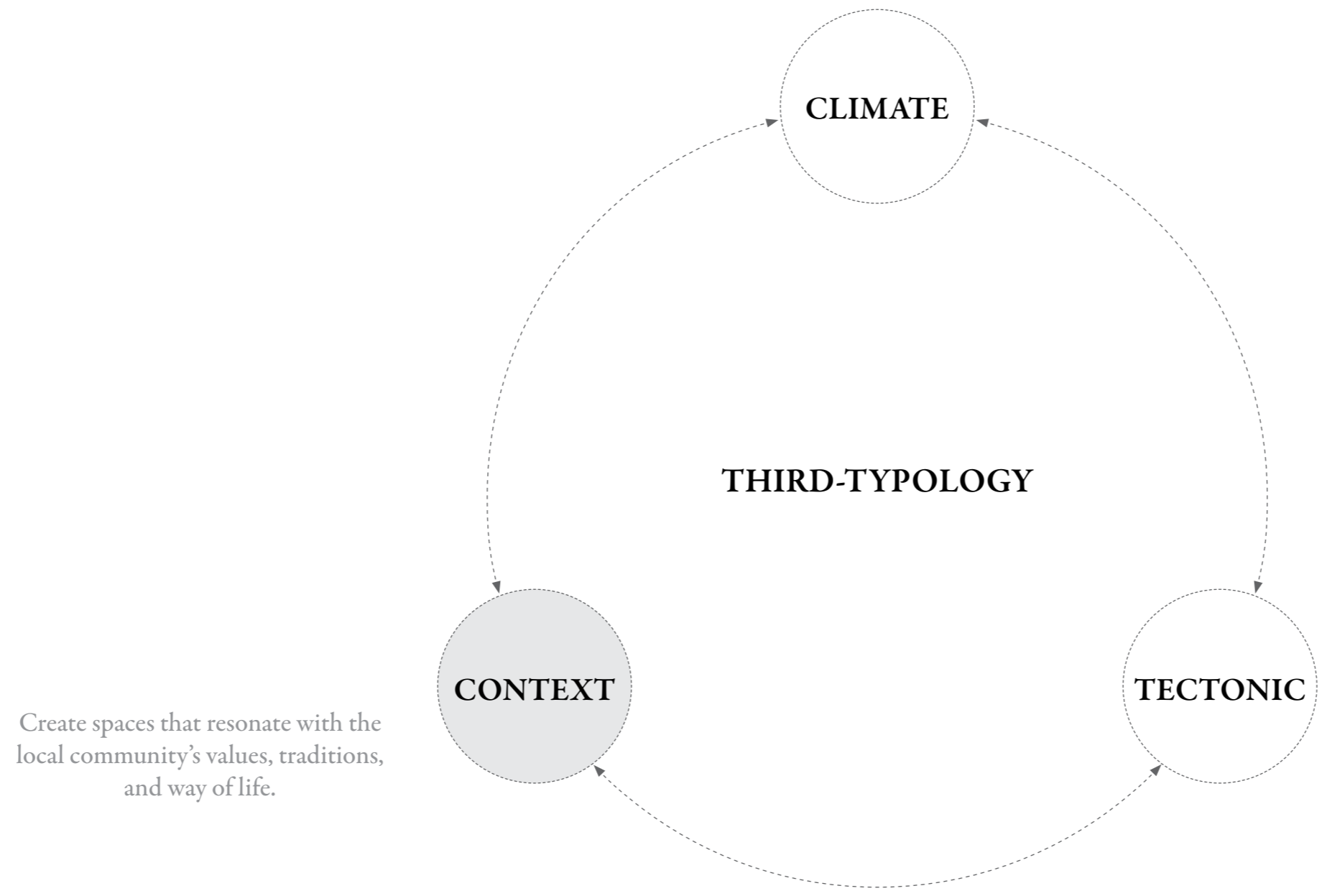


Climatically Responsive and Resilient Design





Emphasize the importance of construction methods, materiality, and structural innovation.



*The Site:*

*The Site:  
Bengawan Solo*





Informal Settlements



Site - Banks of the Bengawan Solo River, North of Mojo Bridge,  
on the Solo-Sukoharjo Border



Informal Agriculture and Urban Farming  
Akar Wangi/Vetiver



Volleyball







*URBAN FARMS*

*FOOD PROCESSING*

*HOUSINGS*

*SPORTS FACILITIES*

*HOUSINGS*

*URBAN FARMS*

*FOOD PROCESSING*

***SPORTS FACILITIES***

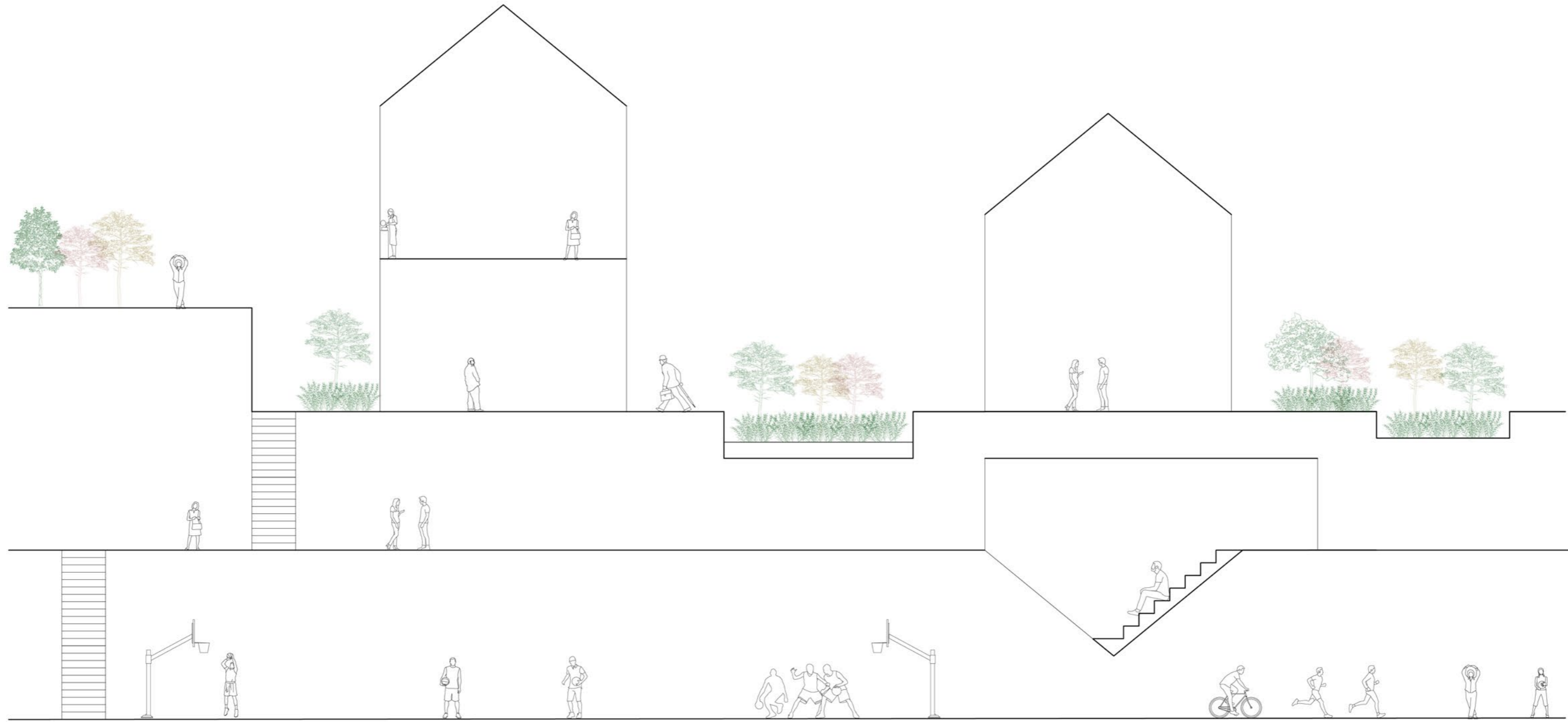


*HOUSINGS*

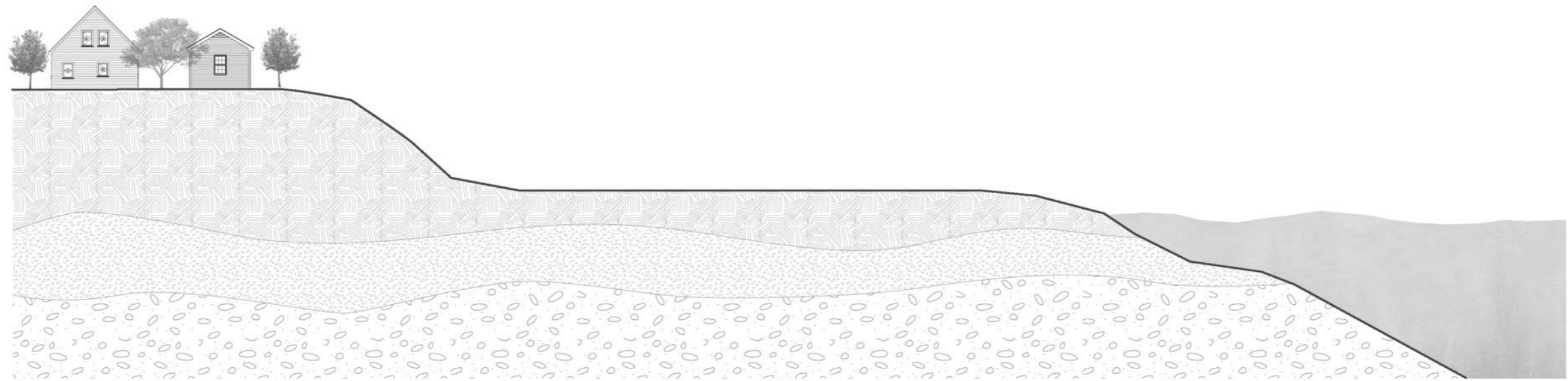
*URBAN FARMS*

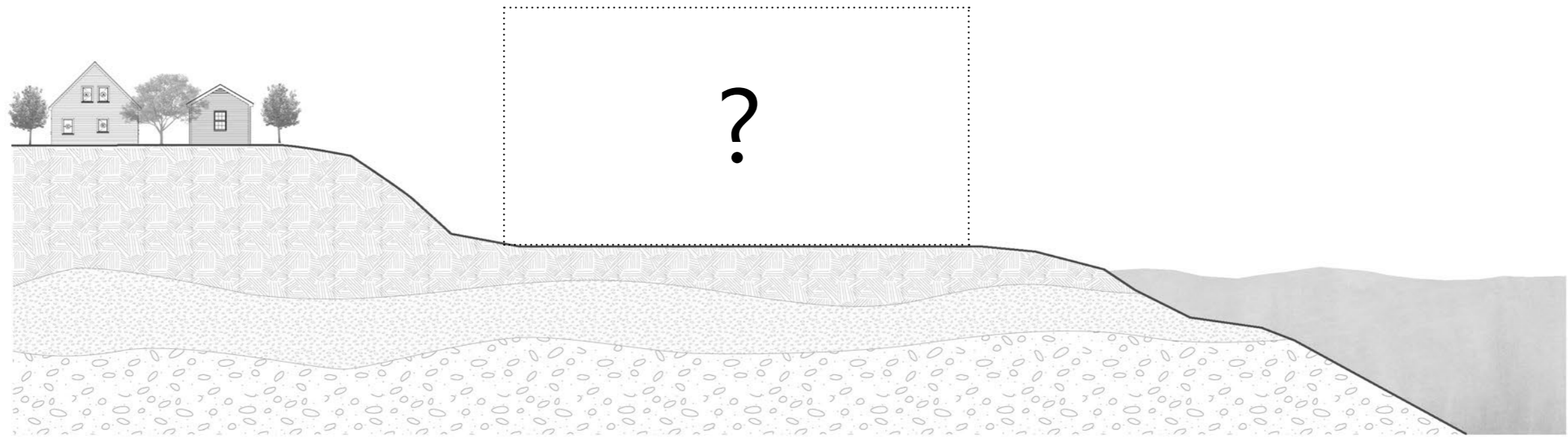
*FOOD PROCESSING*

*SPORTS FACILITIES*

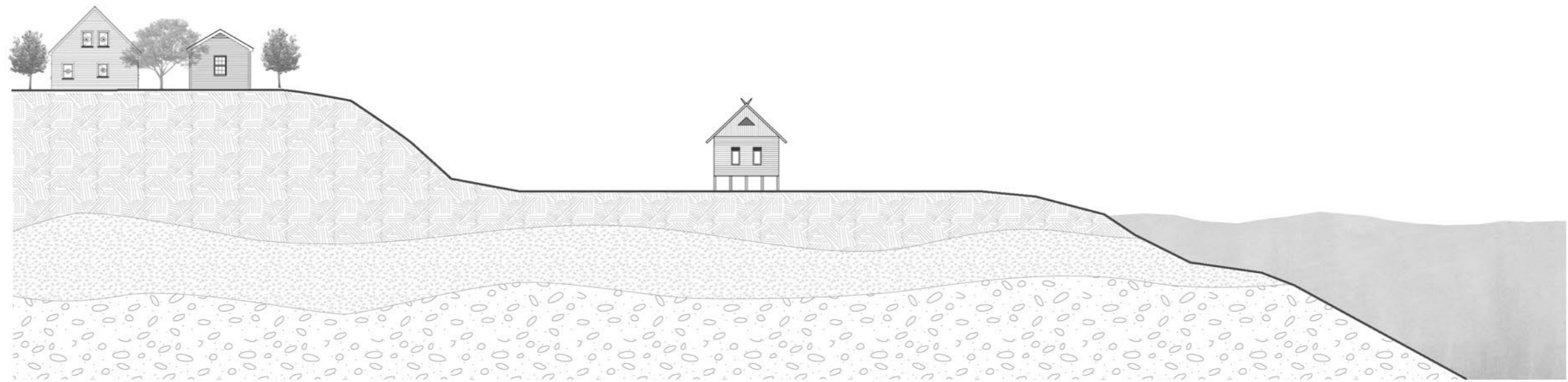


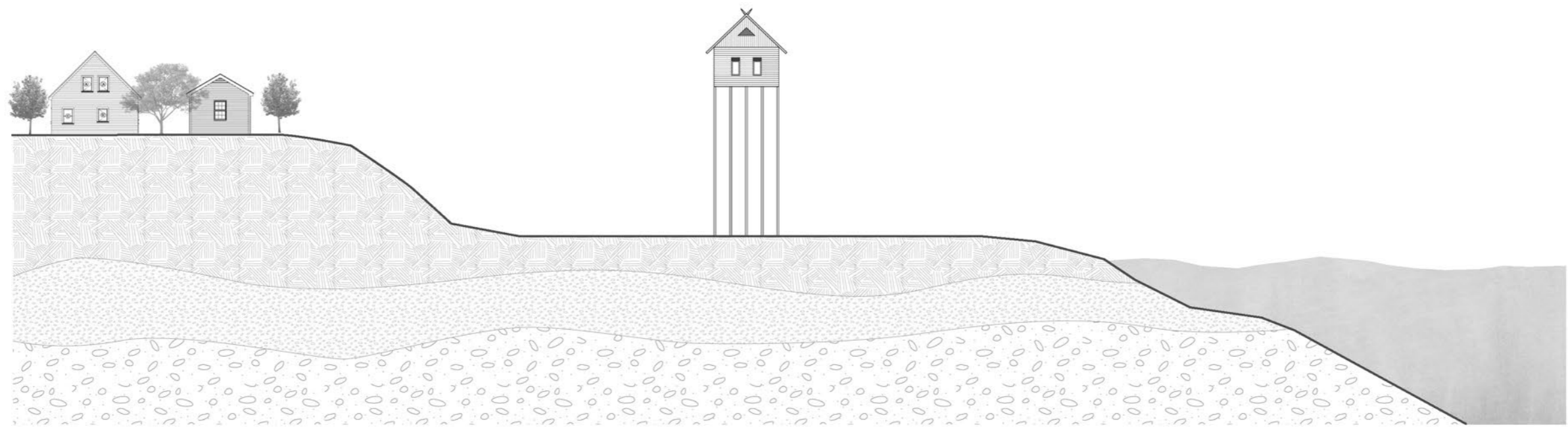


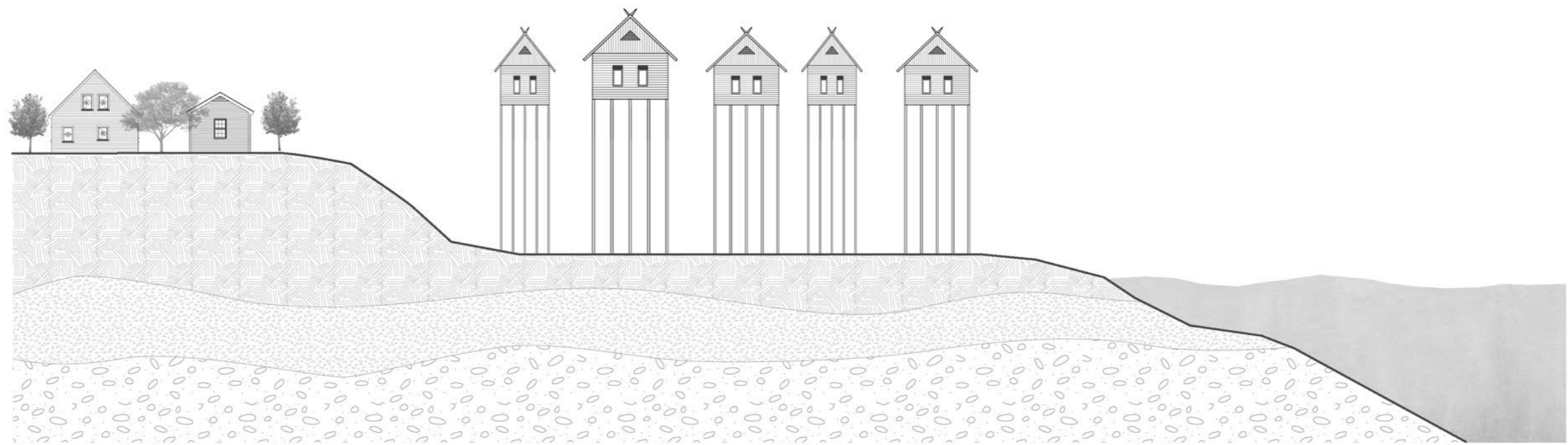


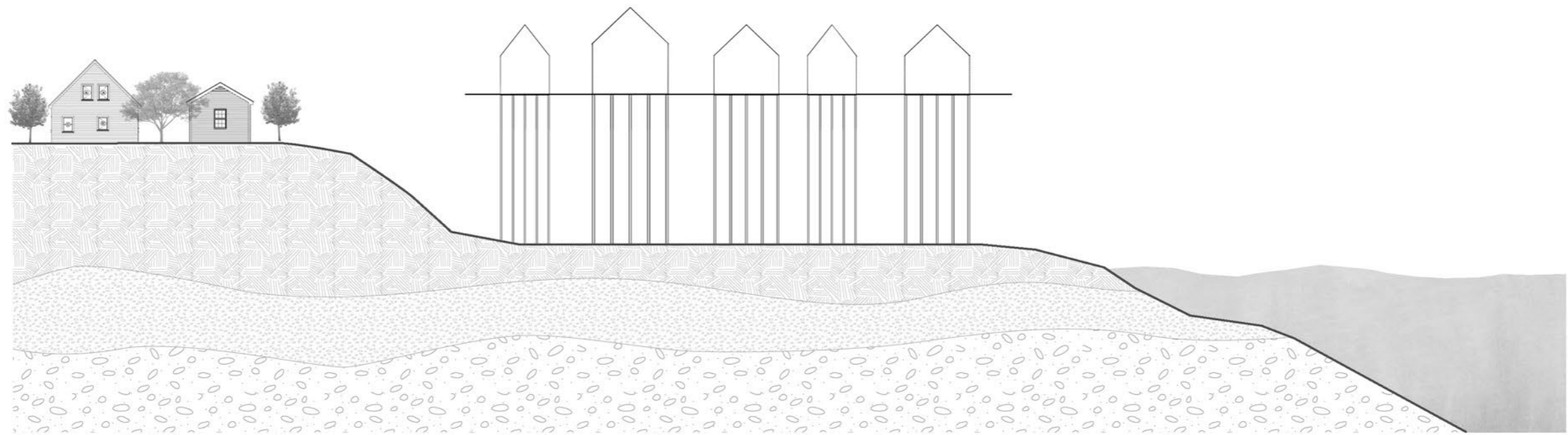


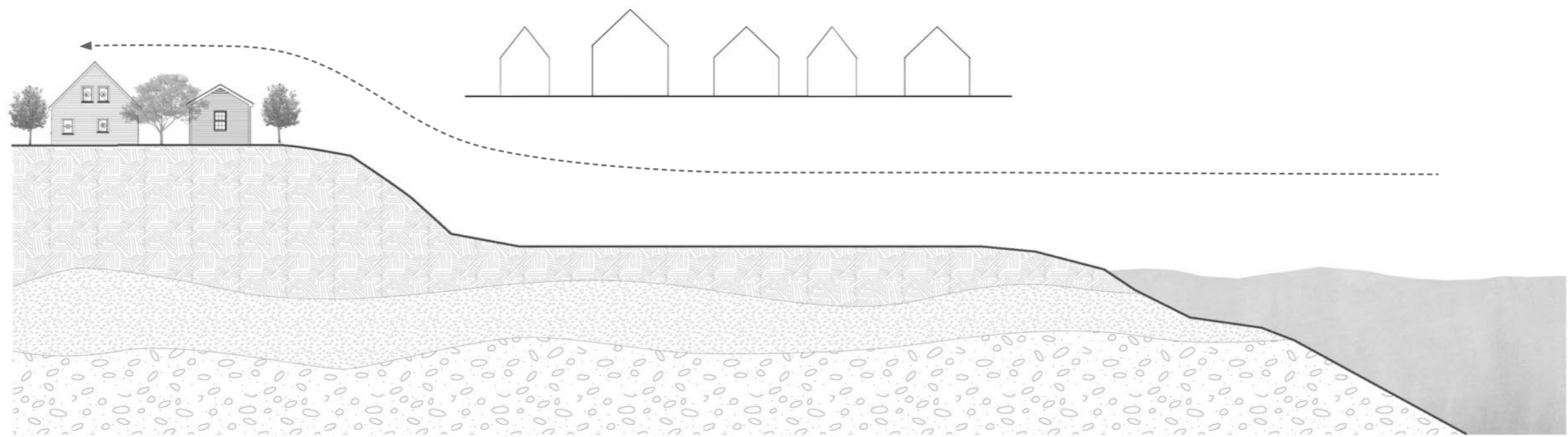


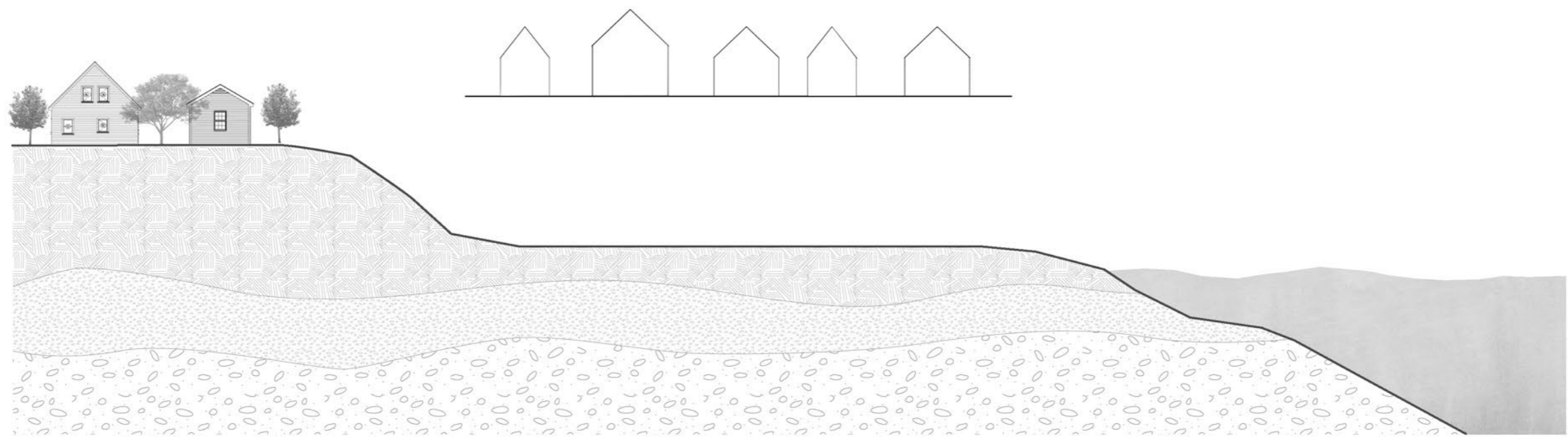


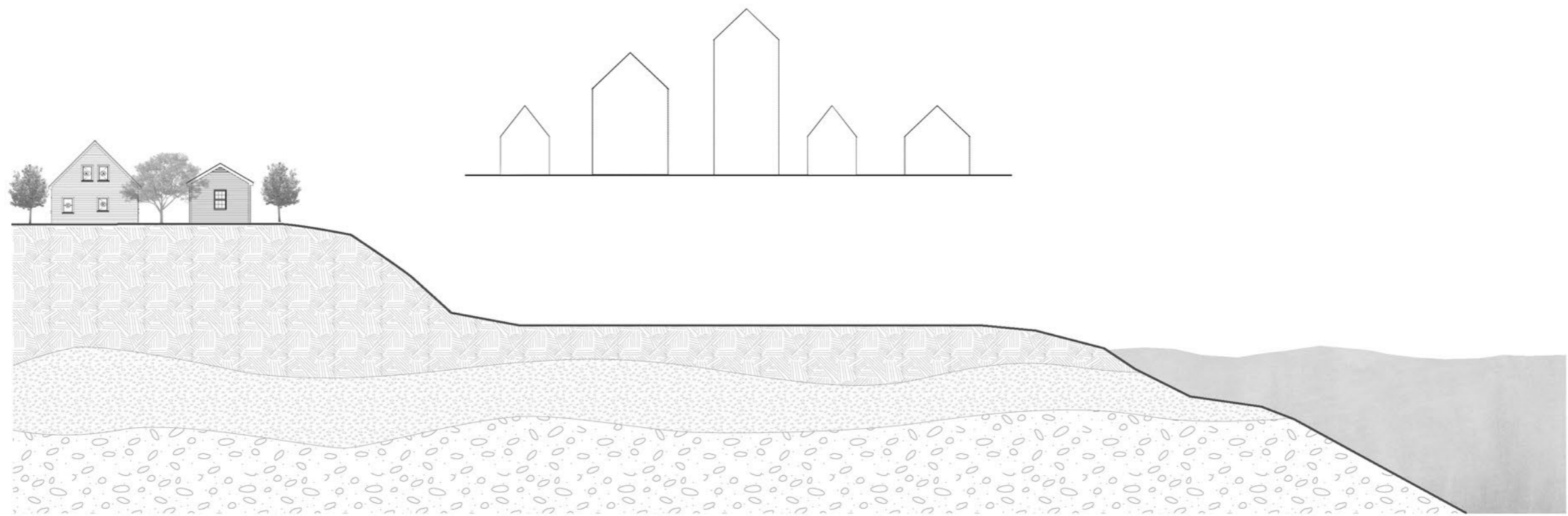


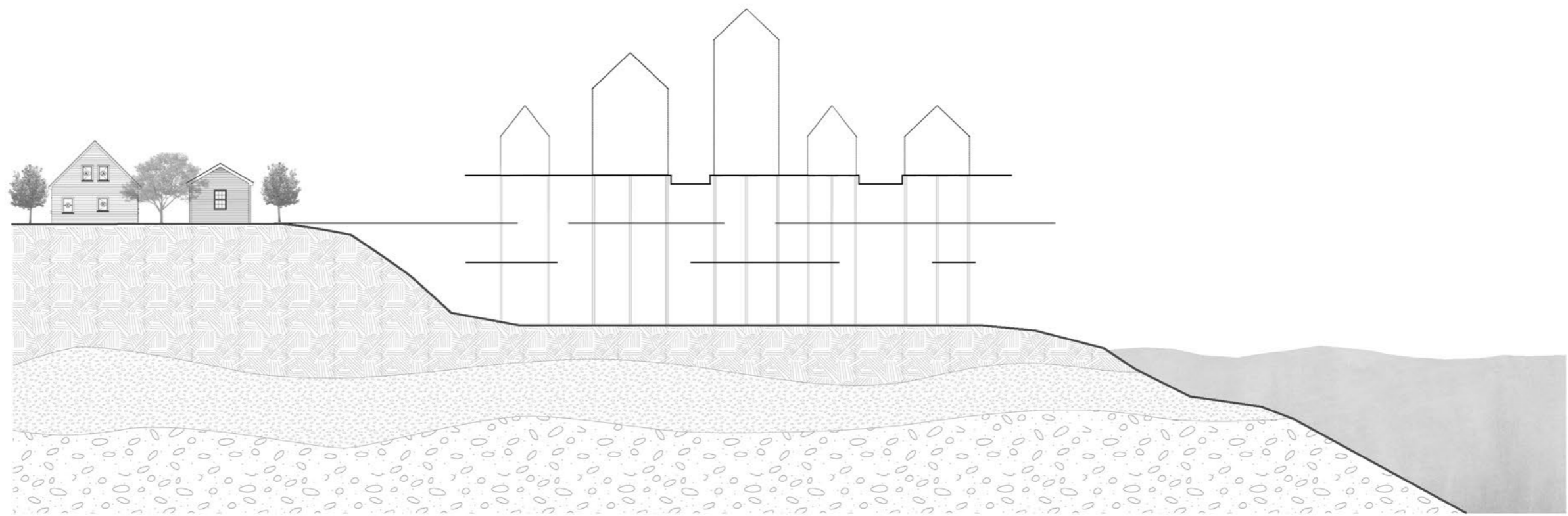




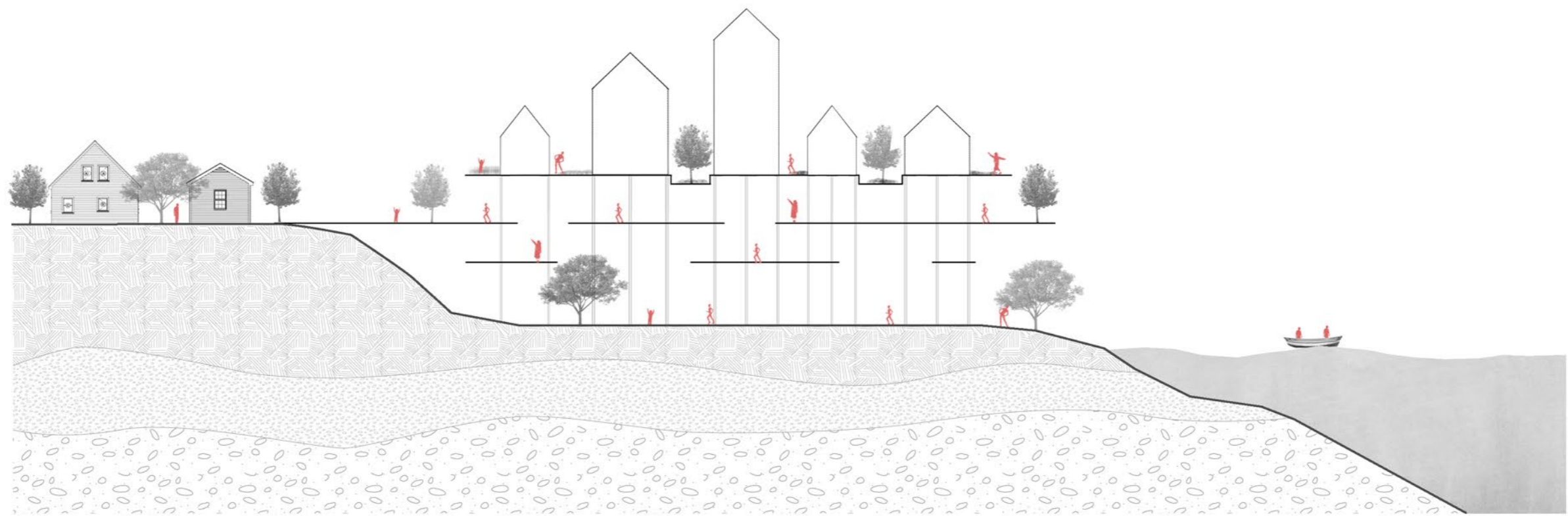


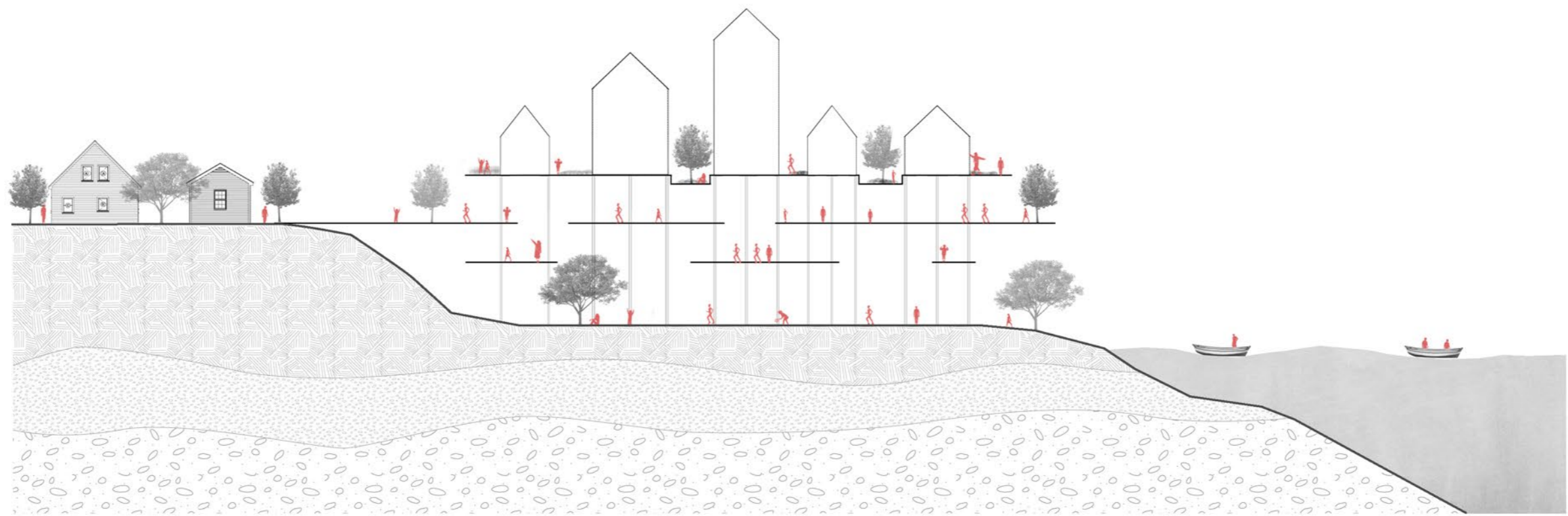




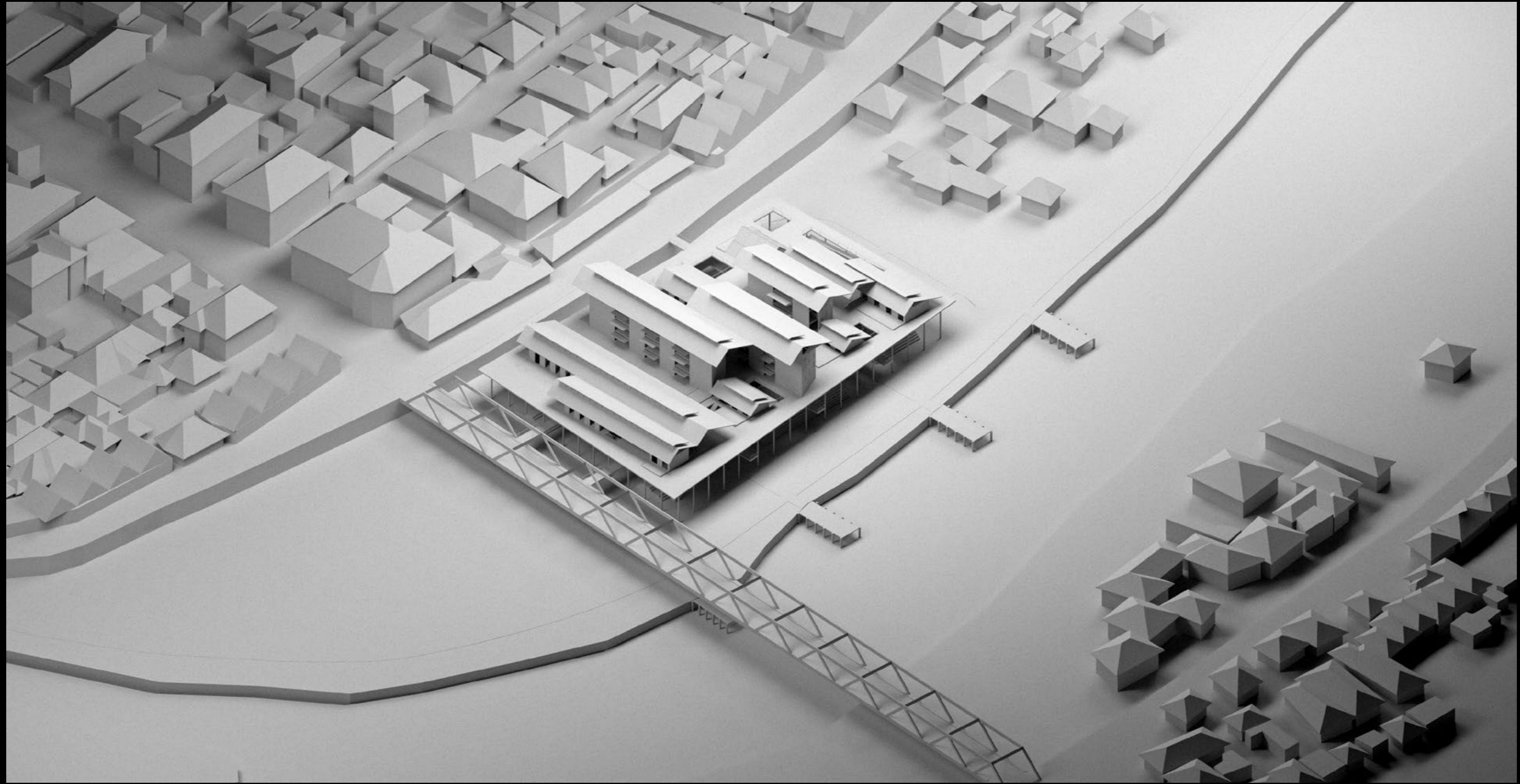


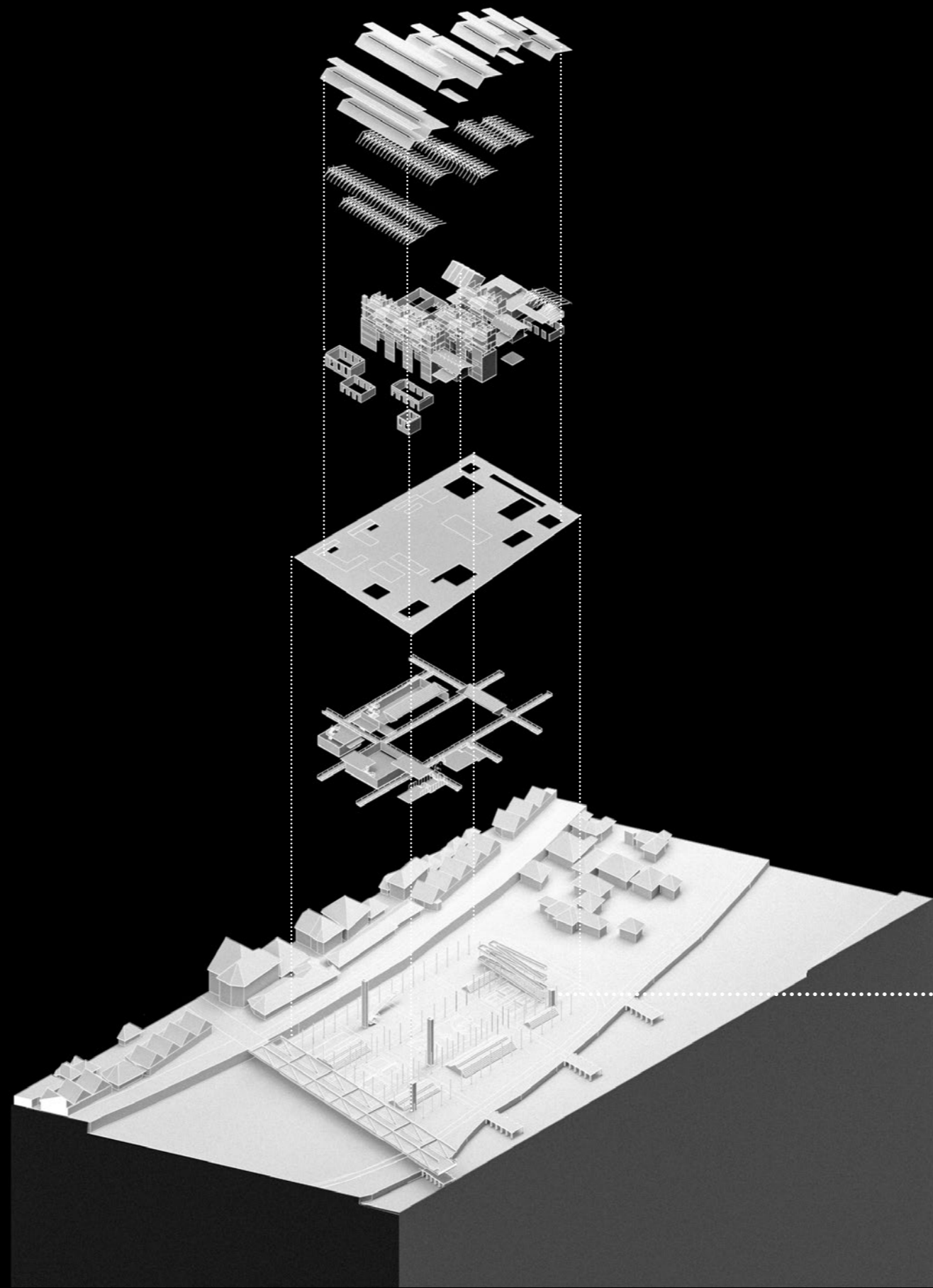




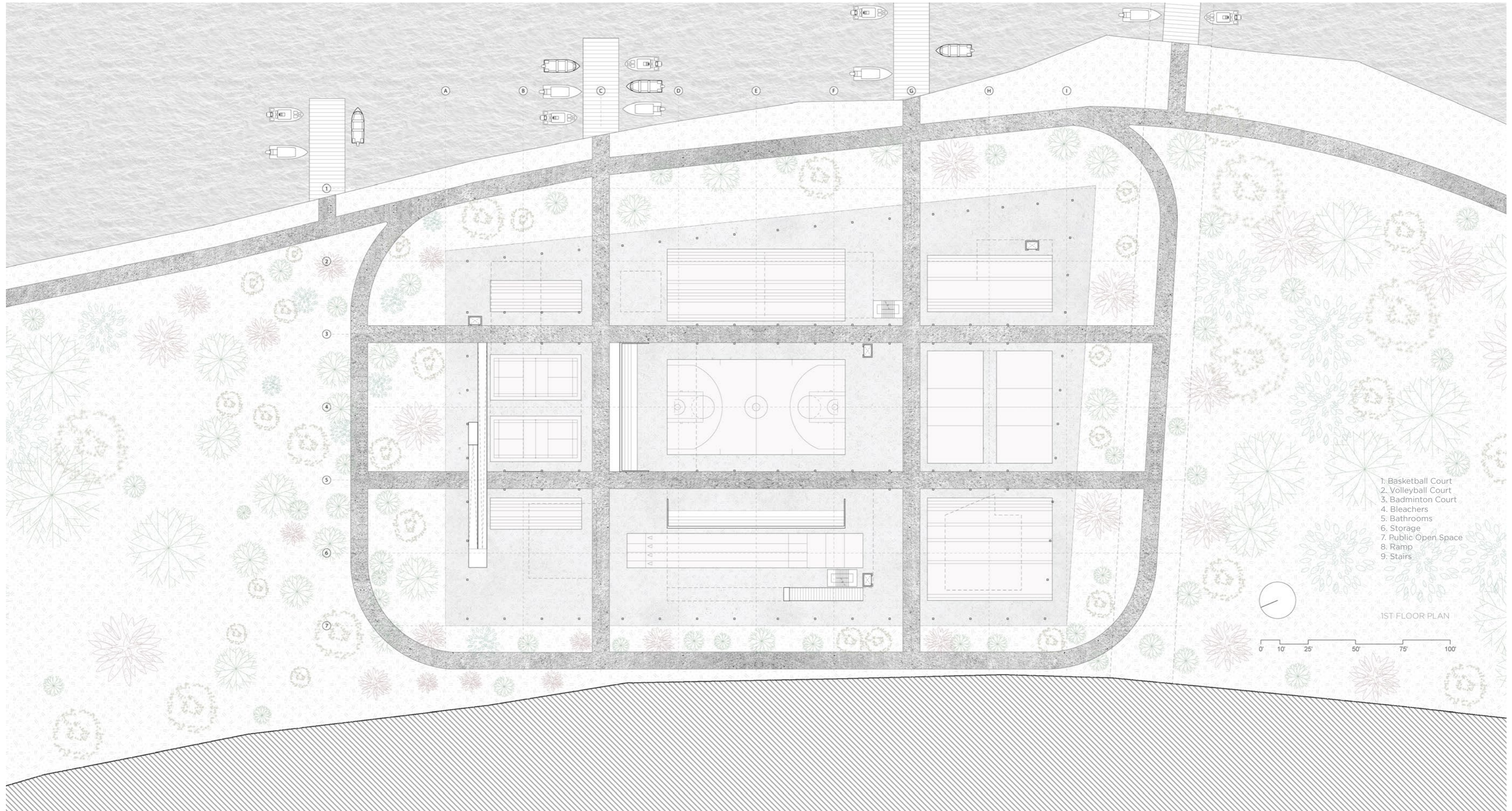






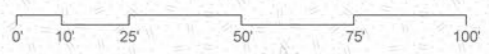


1ST FLOOR  
SPORTS FACILITIES



- 1. Basketball Court
- 2. Volleyball Court
- 3. Badminton Court
- 4. Bleachers
- 5. Bathrooms
- 6. Storage
- 7. Public Open Space
- 8. Ramp
- 9. Stairs

1ST FLOOR PLAN





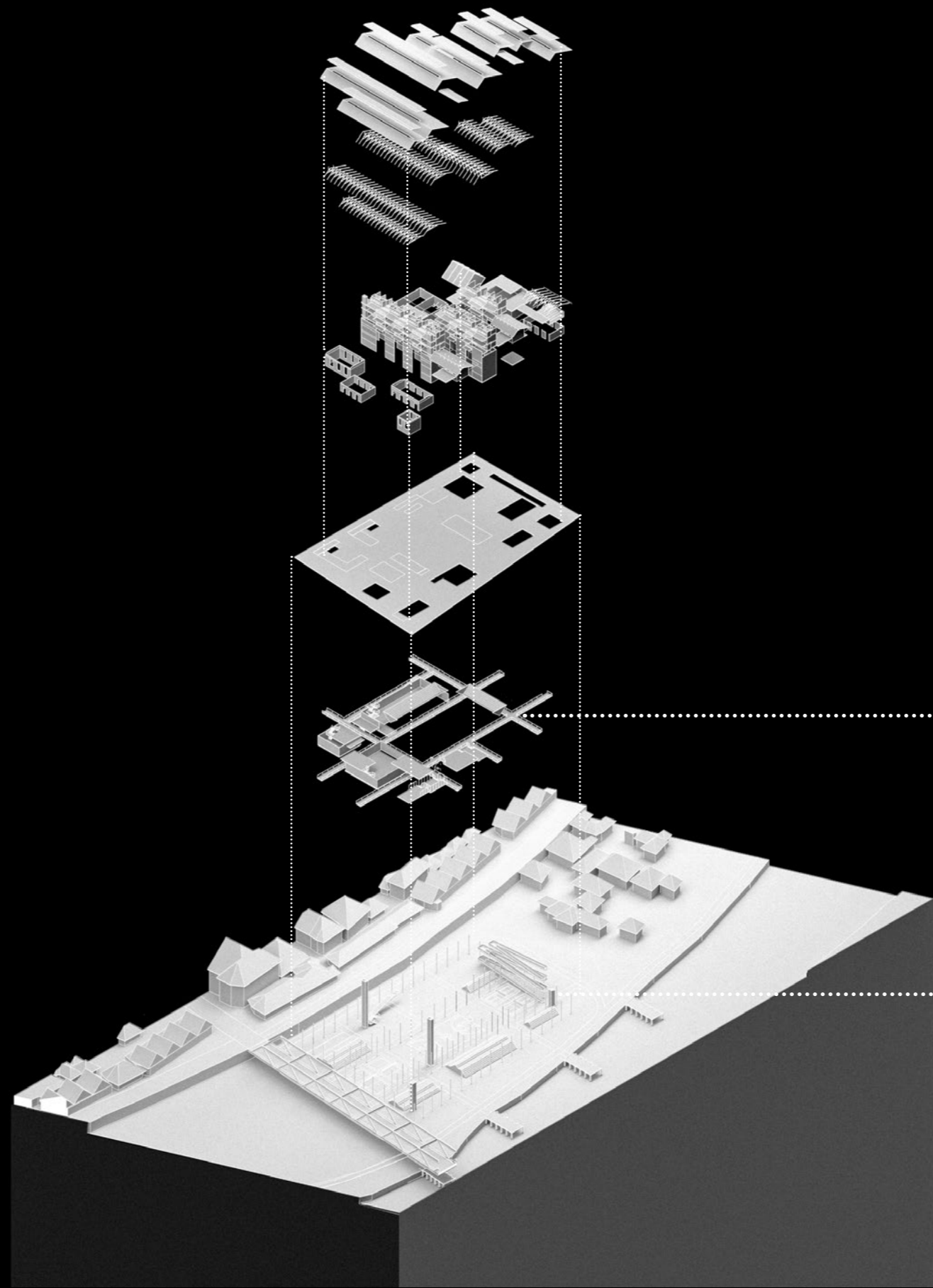






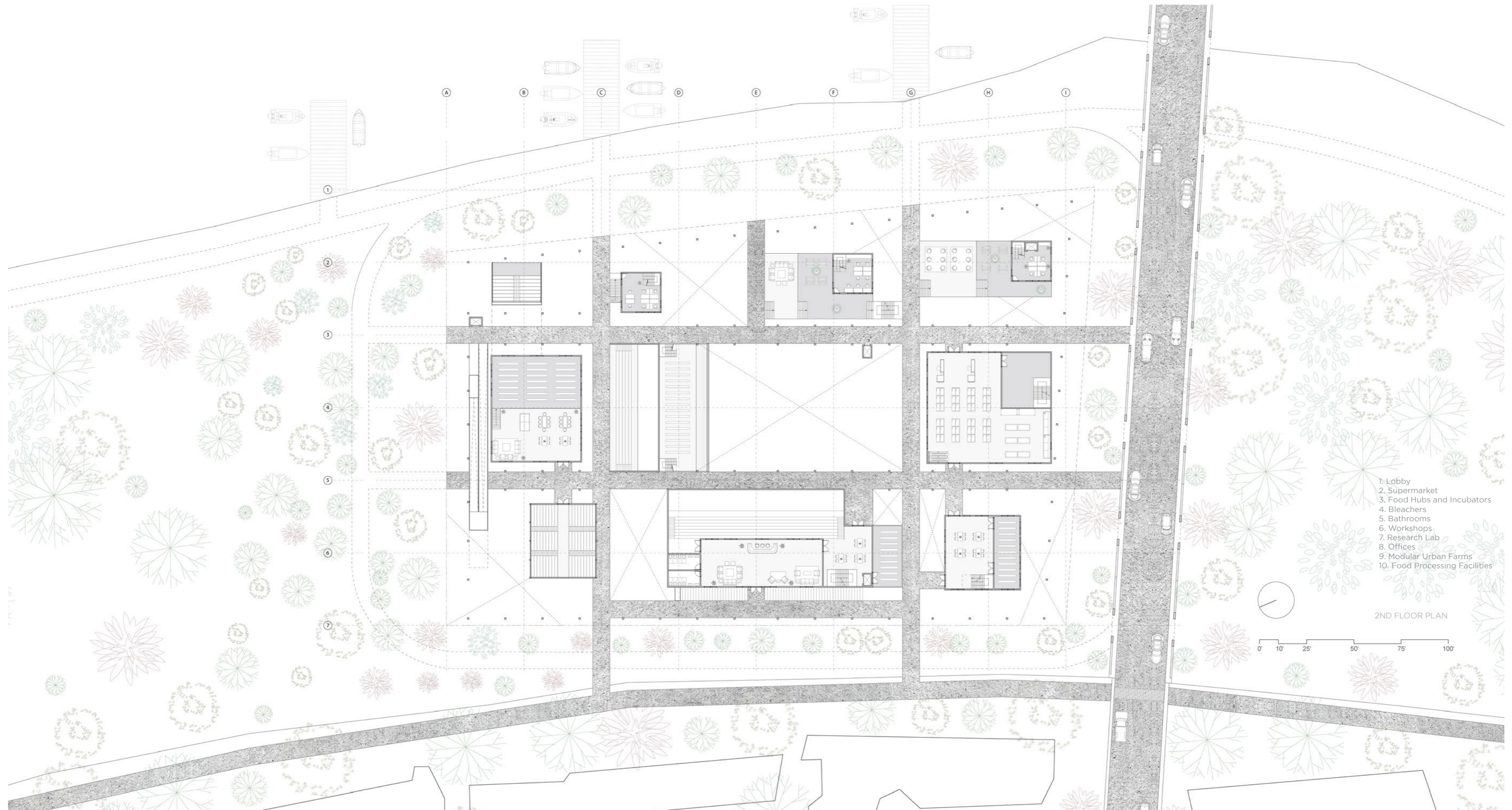






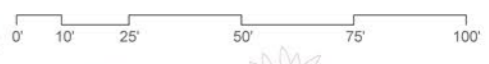
2ND FLOOR  
FOOD PROCESSING FACILITIES

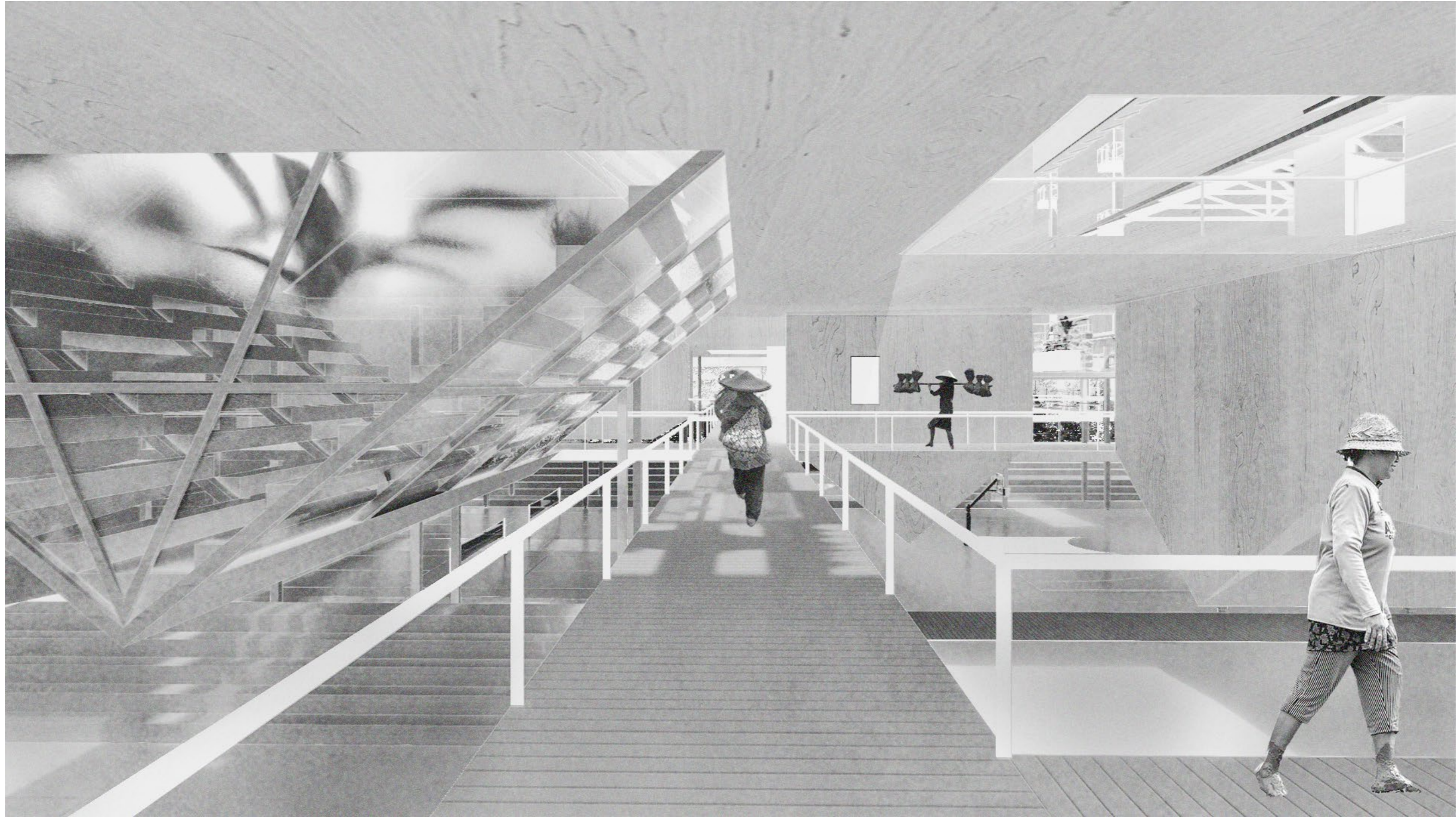
1ST FLOOR  
SPORTS FACILITIES



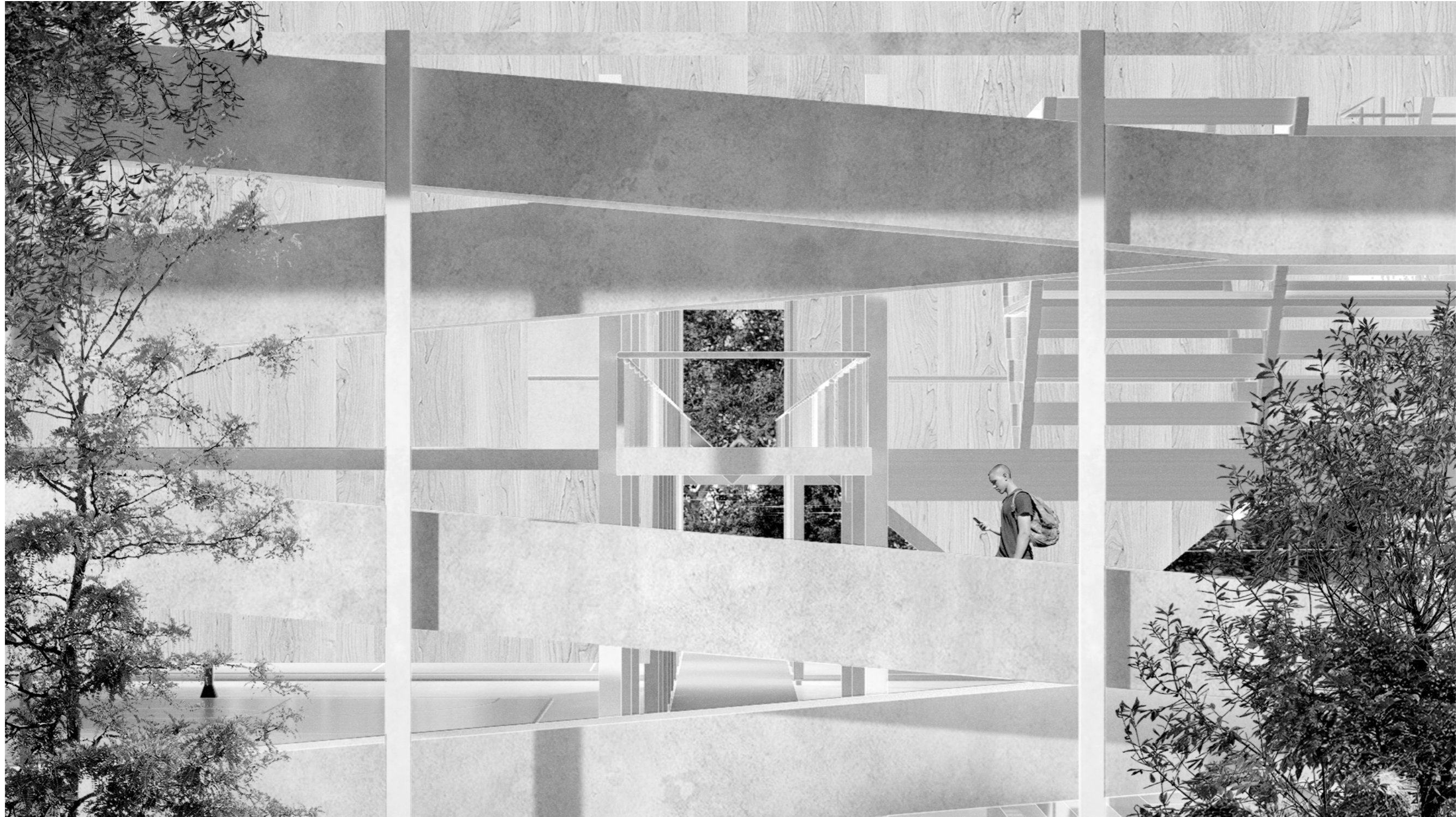
- 1. Lobby
- 2. Supermarket
- 3. Food Hubs and Incubators
- 4. Bleachers
- 5. Bathrooms
- 6. Workshops
- 7. Research Lab
- 8. Offices
- 9. Modular Urban Farms
- 10. Food Processing Facilities

2ND FLOOR PLAN

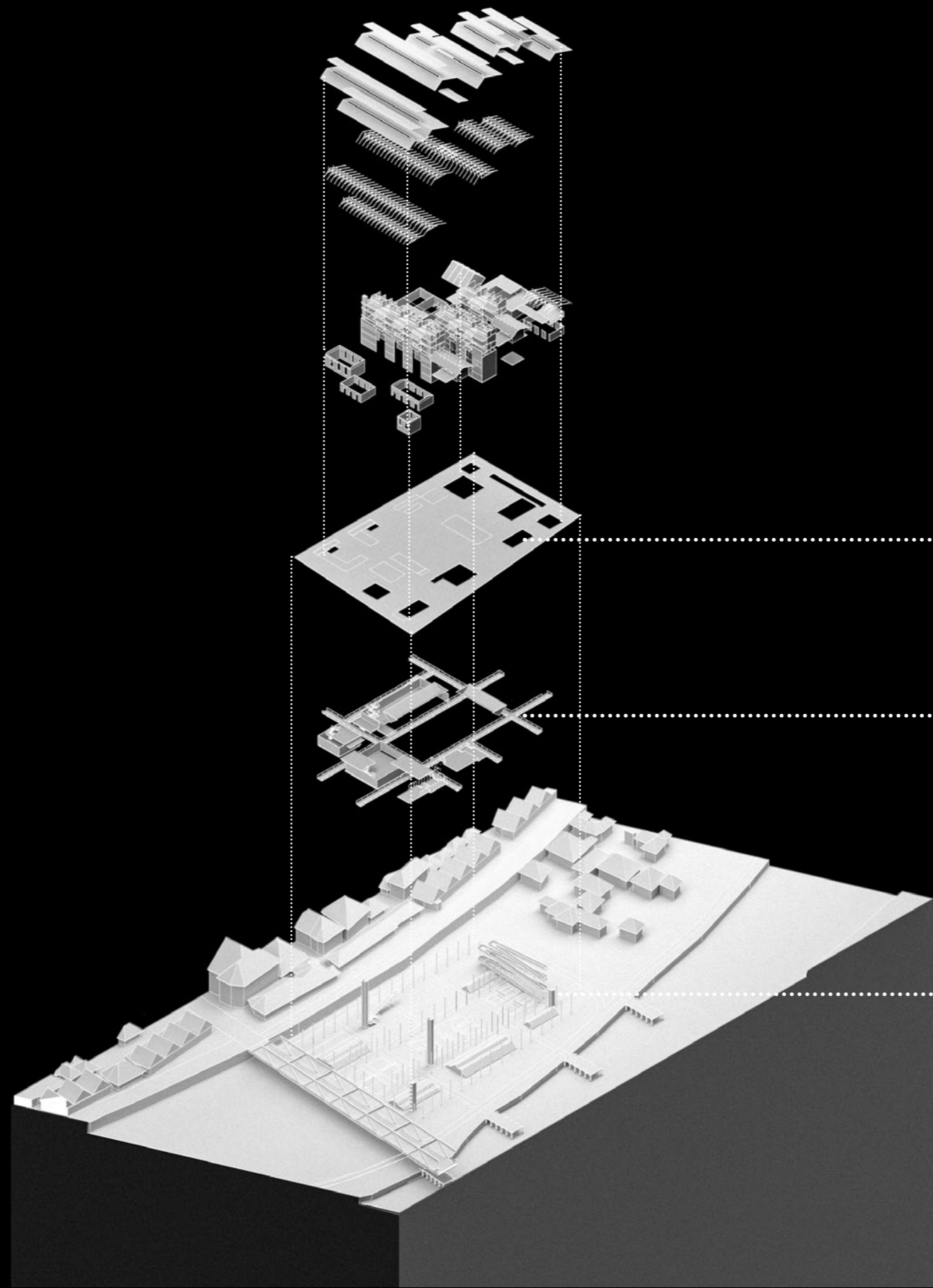












3RD FLOOR  
URBAN FARMS

2ND FLOOR  
FOOD PROCESSING FACILITIES

1ST FLOOR  
SPORTS FACILITIES



- 1. Housing
- 2. Storage
- 3. Research Facilities
- 4. Urban Farm
- 5. Communal Open Space
- 6. Communal Kitchen
- 7. Ramp
- 8. Stairs



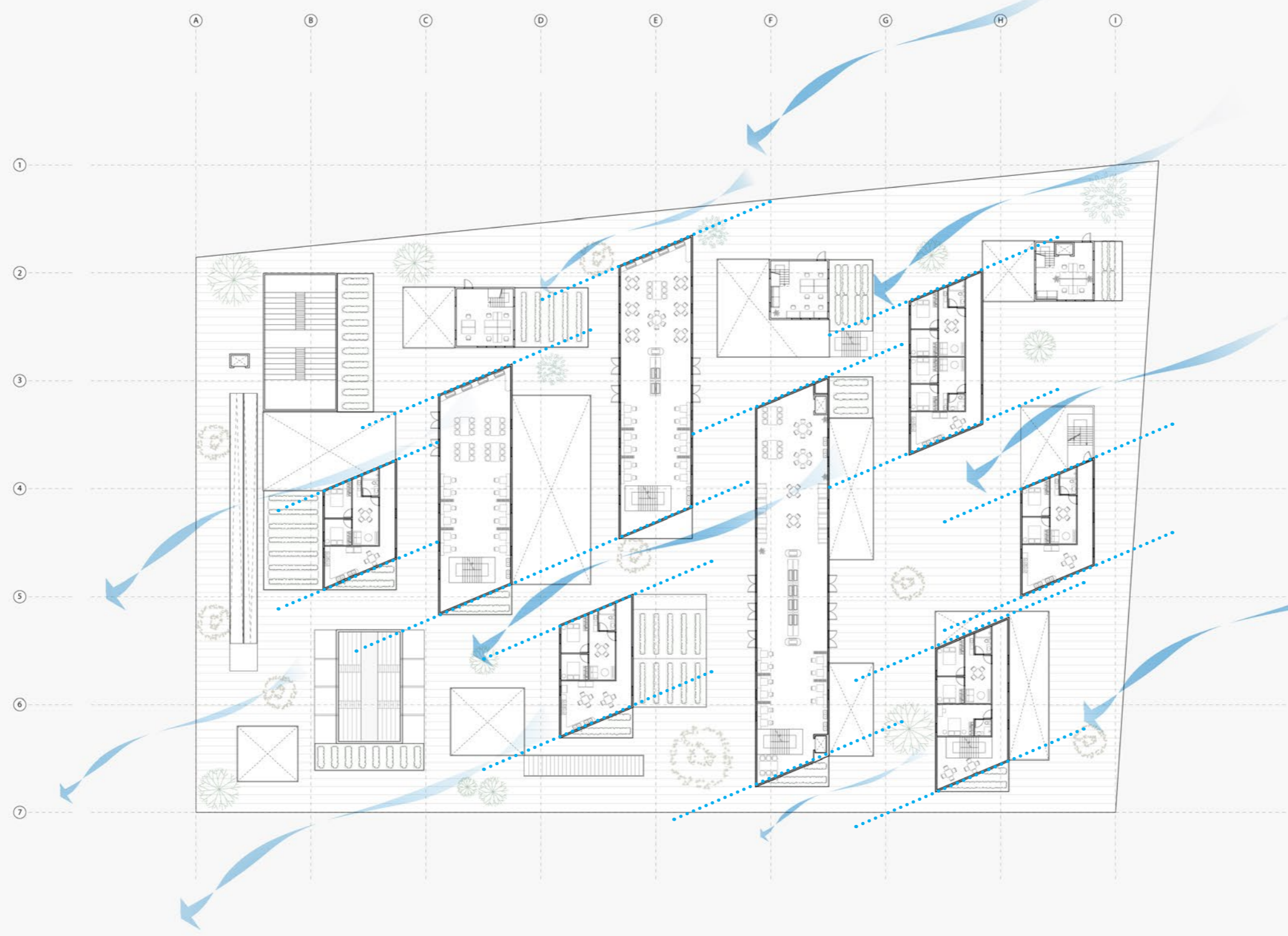
3RD FLOOR PLAN





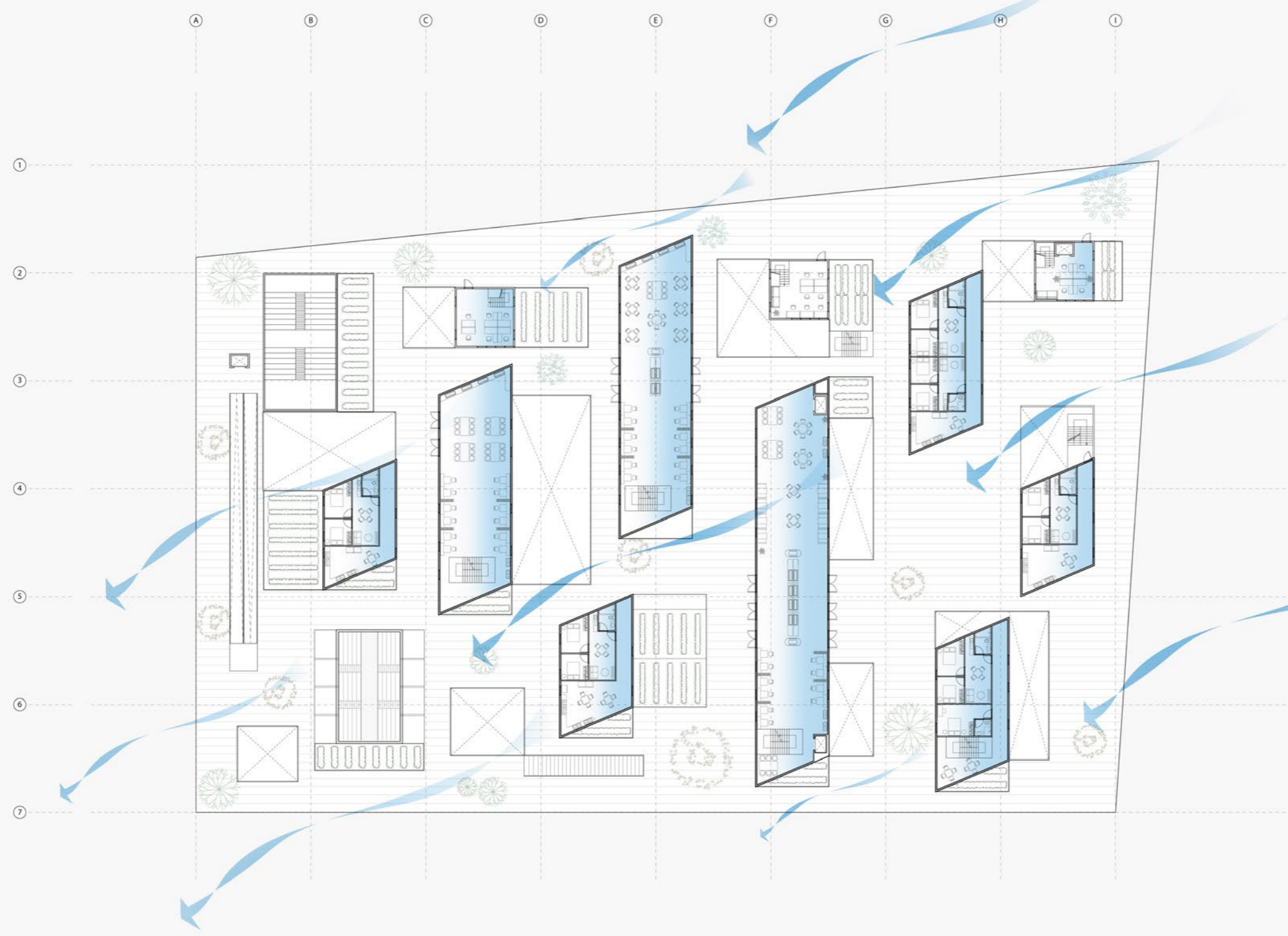
3RD FLOOR PLAN





3RD FLOOR PLAN





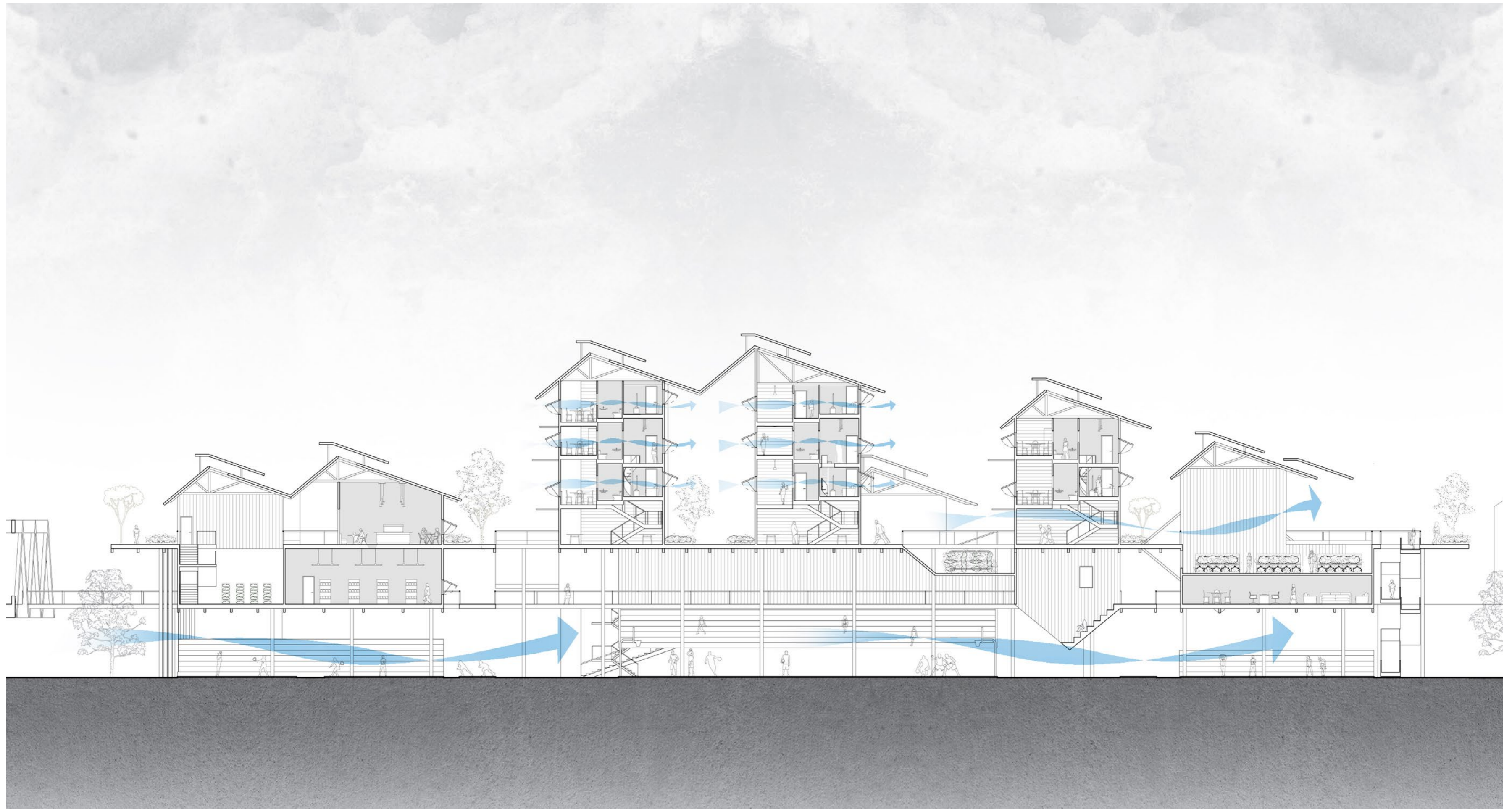
3RD FLOOR PLAN



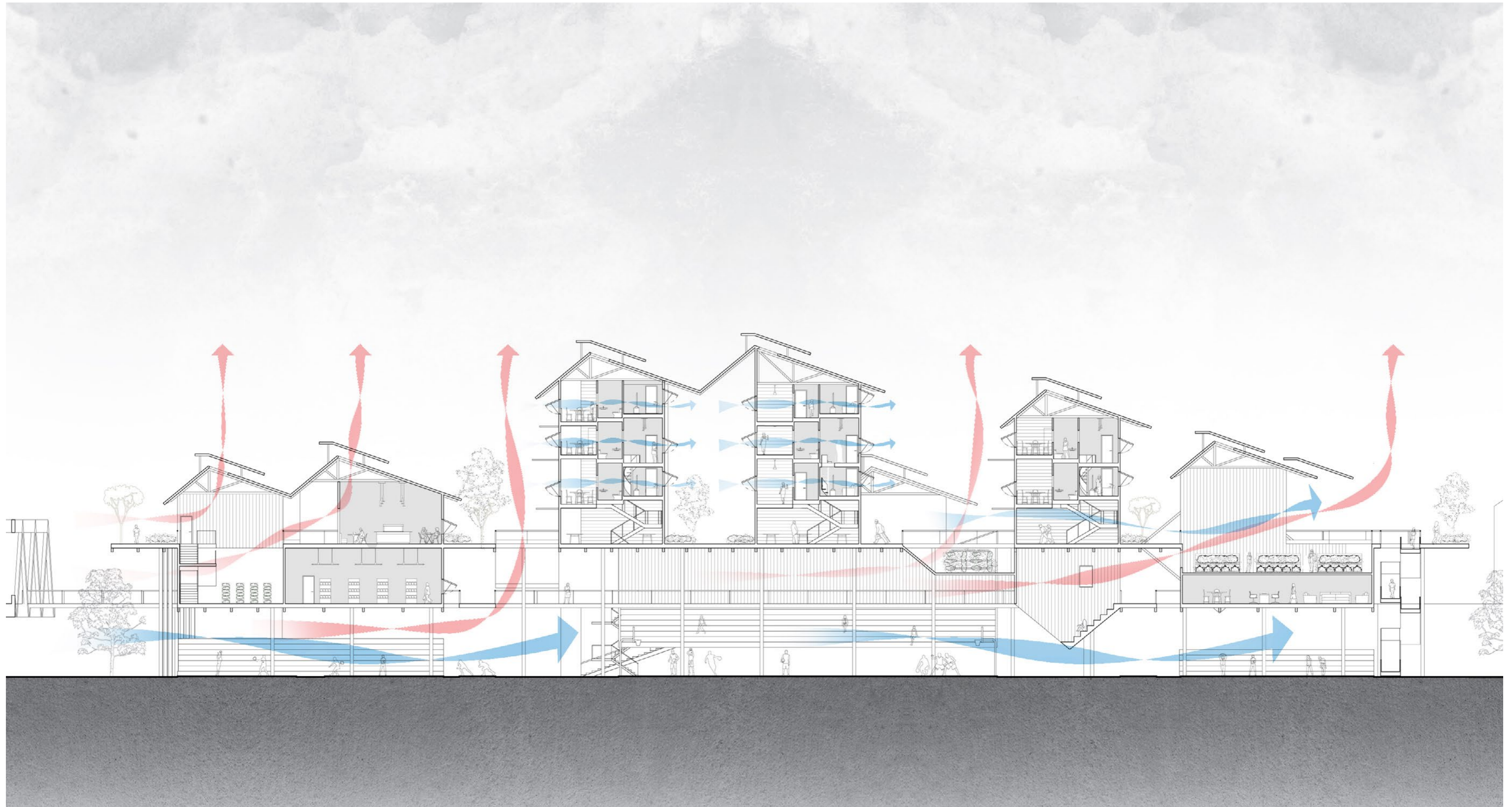


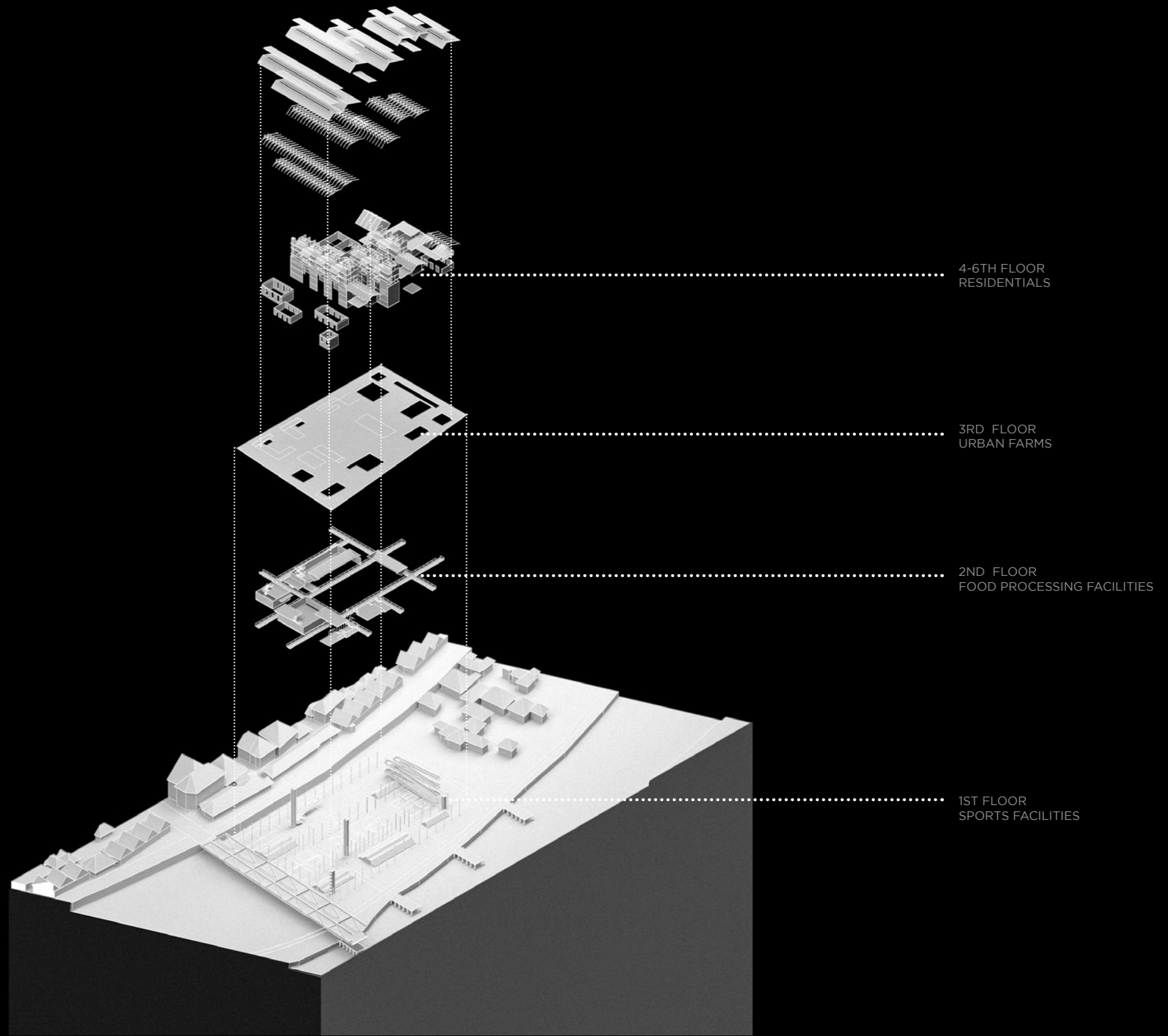
0' 10' 25' 50' 75' 100'





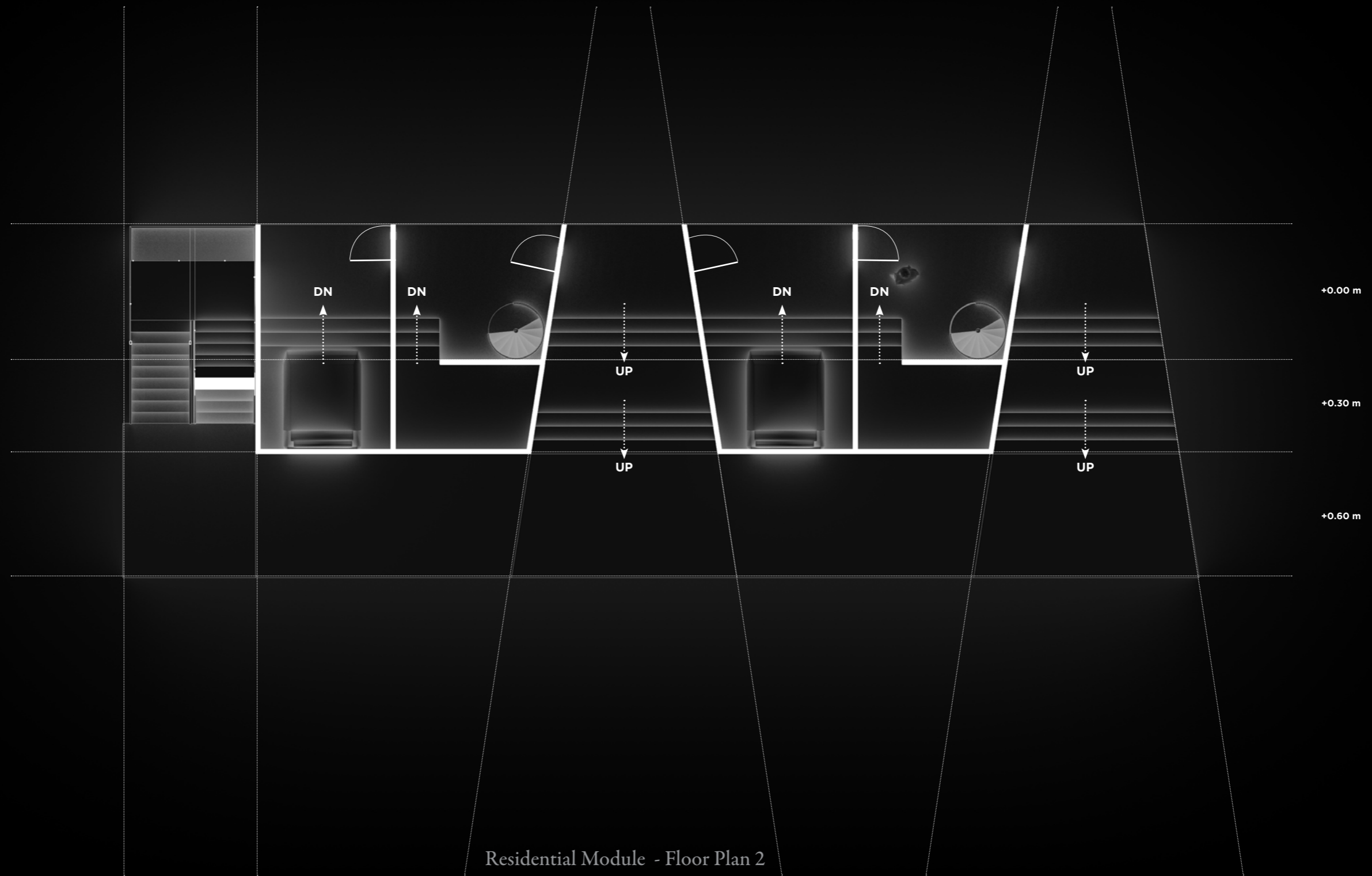








Residential Module - Floor Plan 1



+0.00 m

+0.30 m

+0.60 m

DN

DN

DN

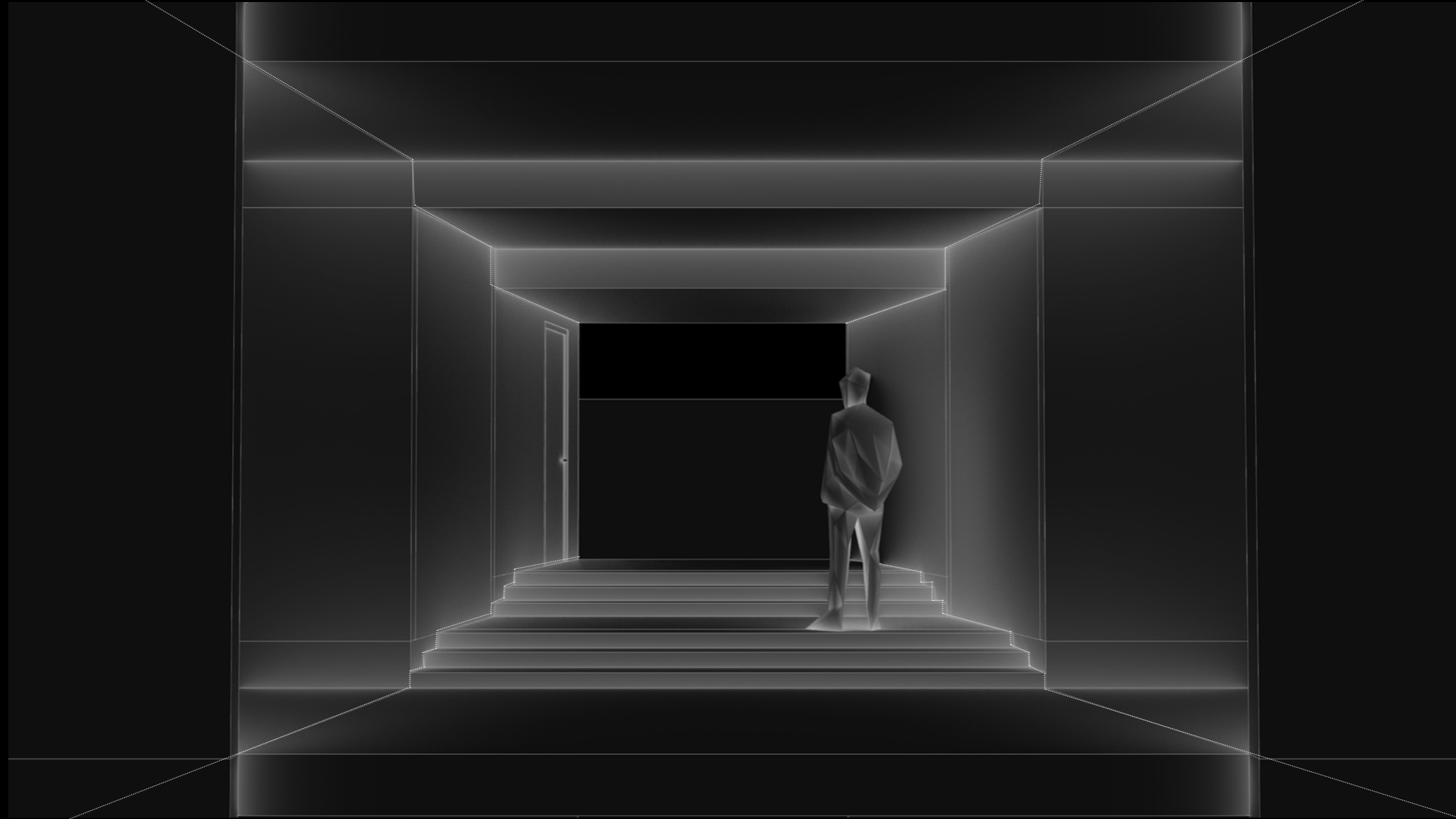
DN

UP

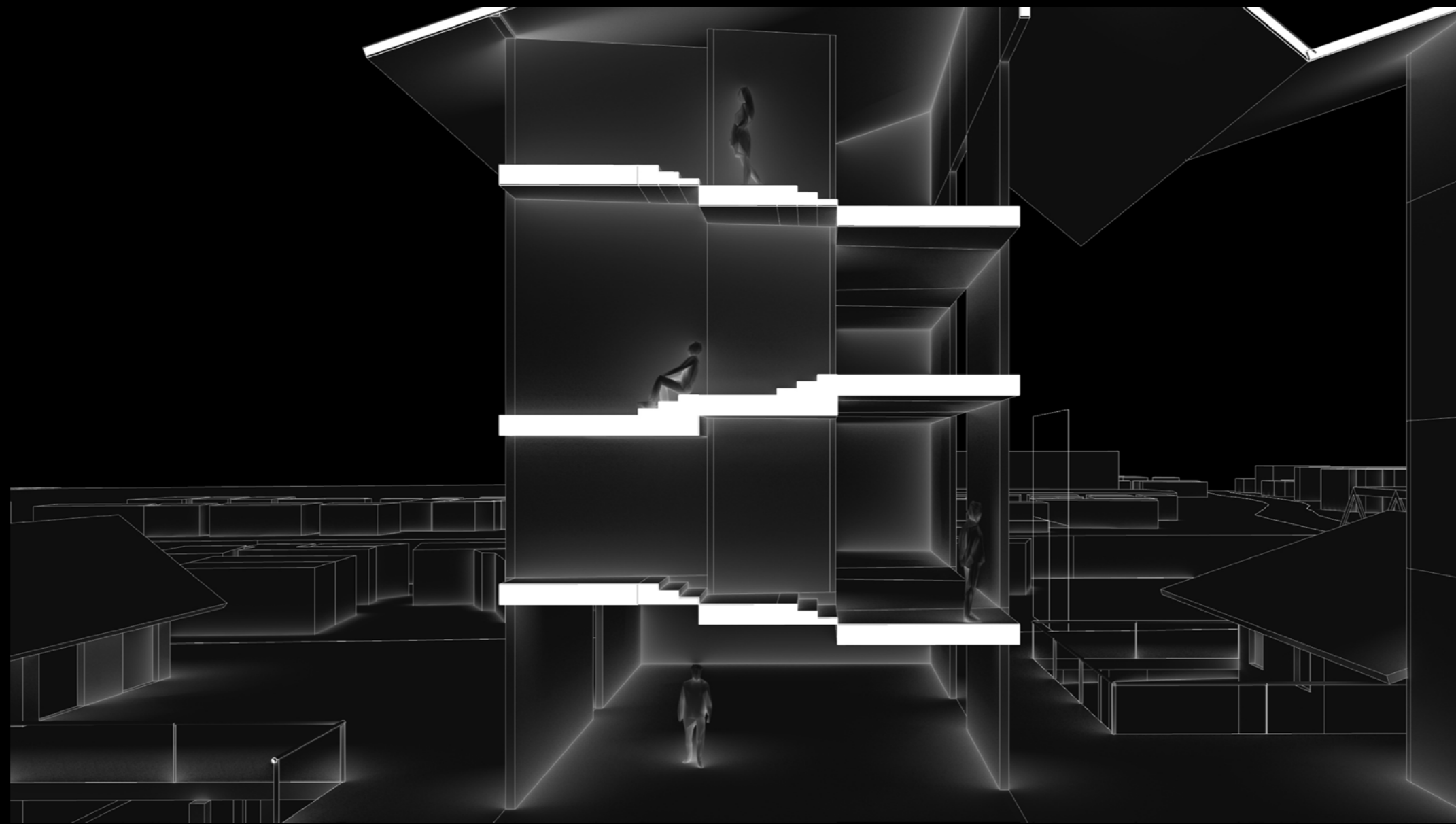
UP

UP

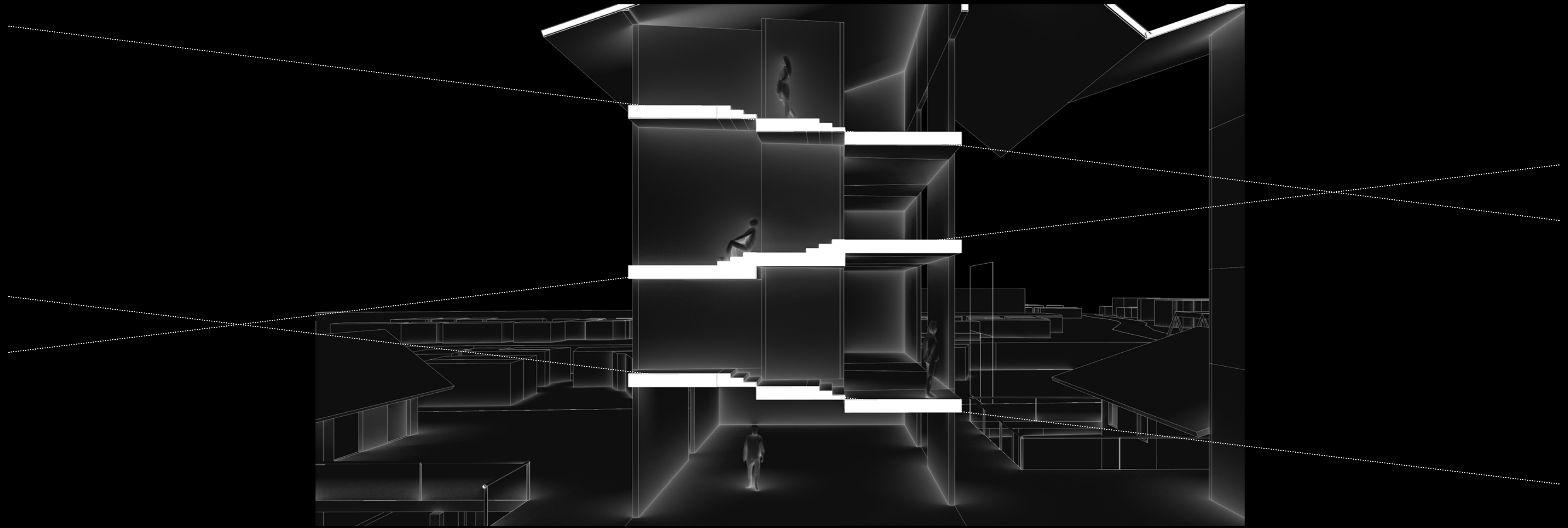
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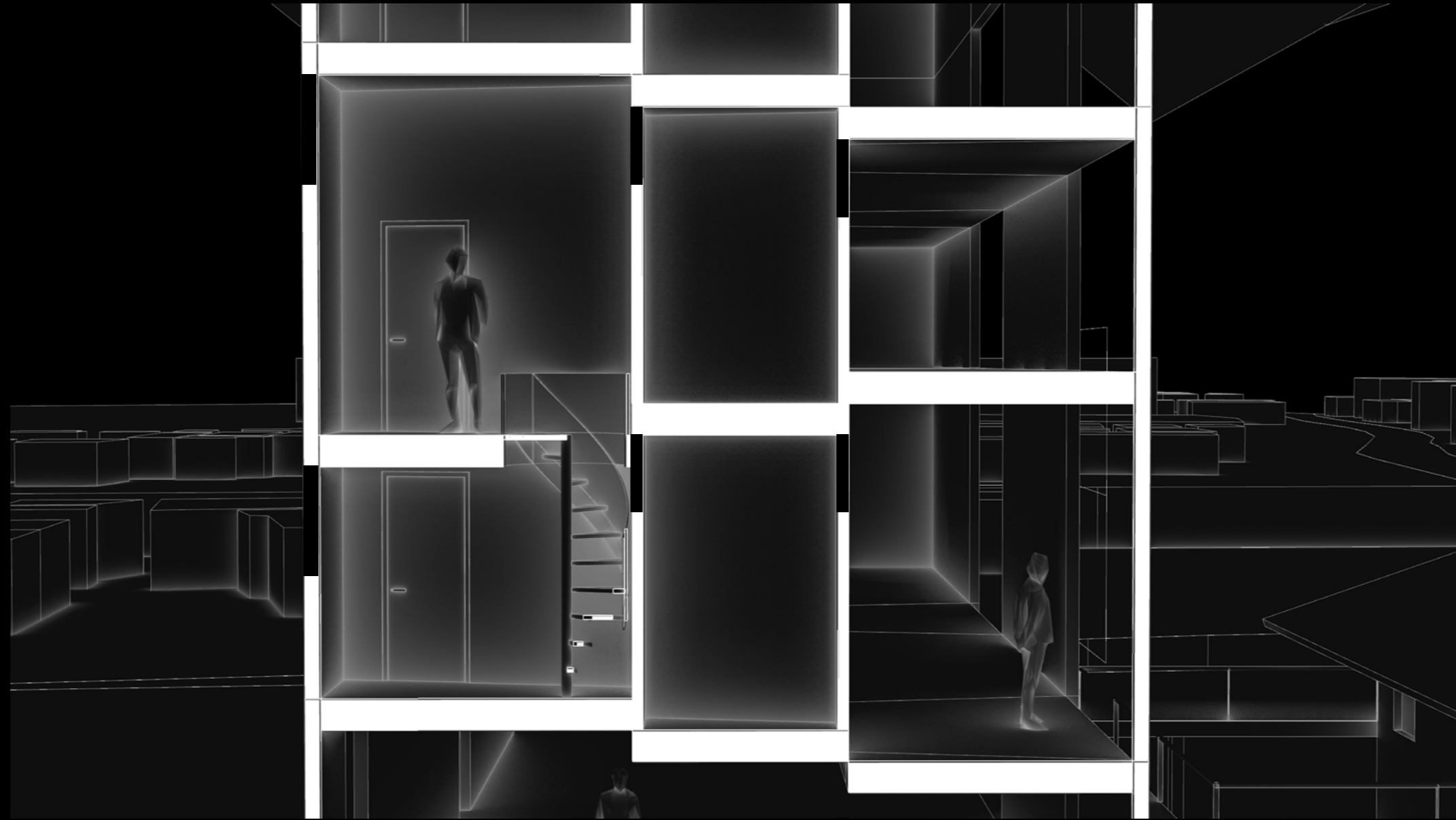
Perspective View - Venturi Breezeway



Section - Venturi Brezeway



Section - Venturi Brezeway



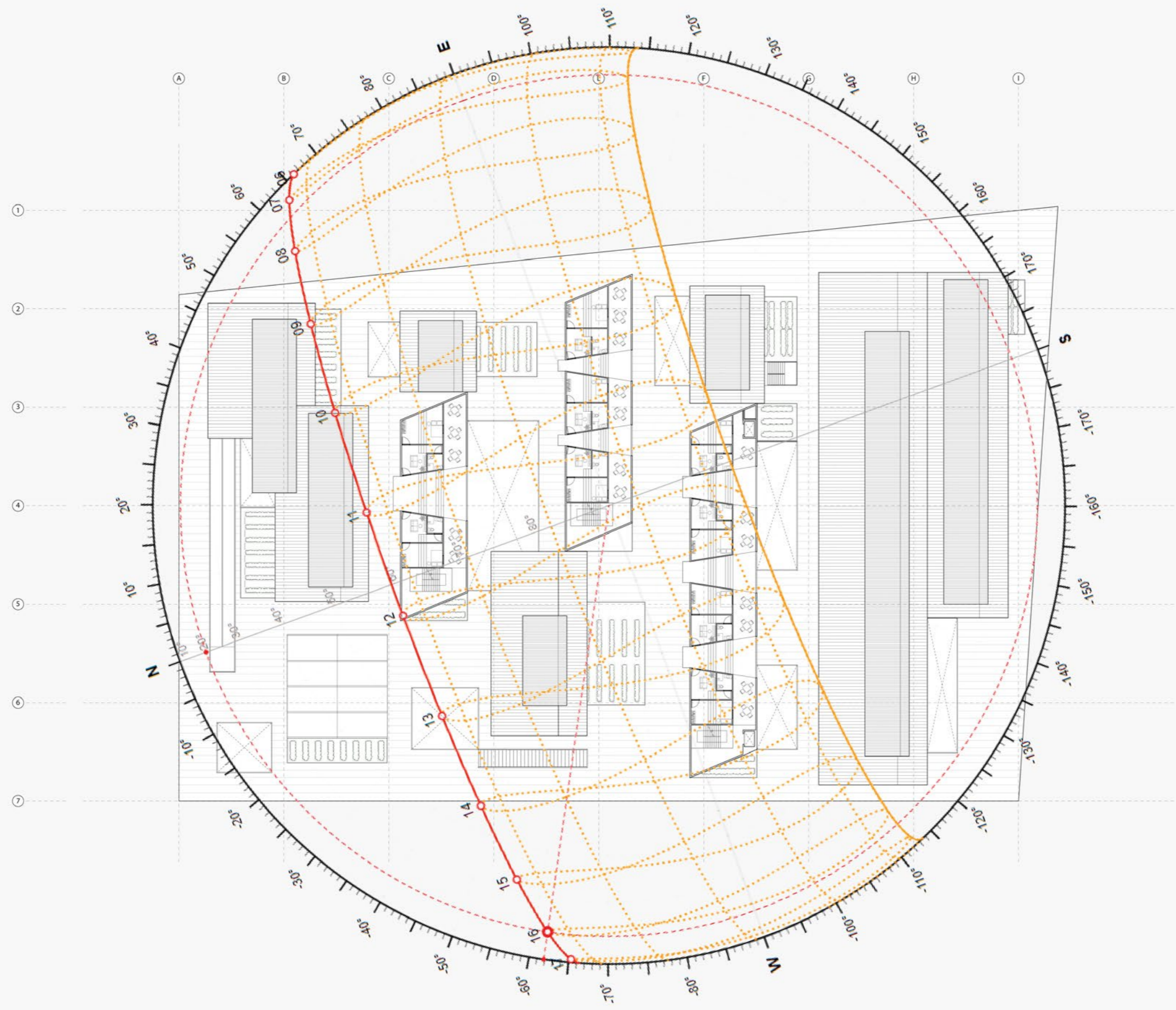
Section - Apartment Unit - Stepping interior Creating Venturi Breezeway





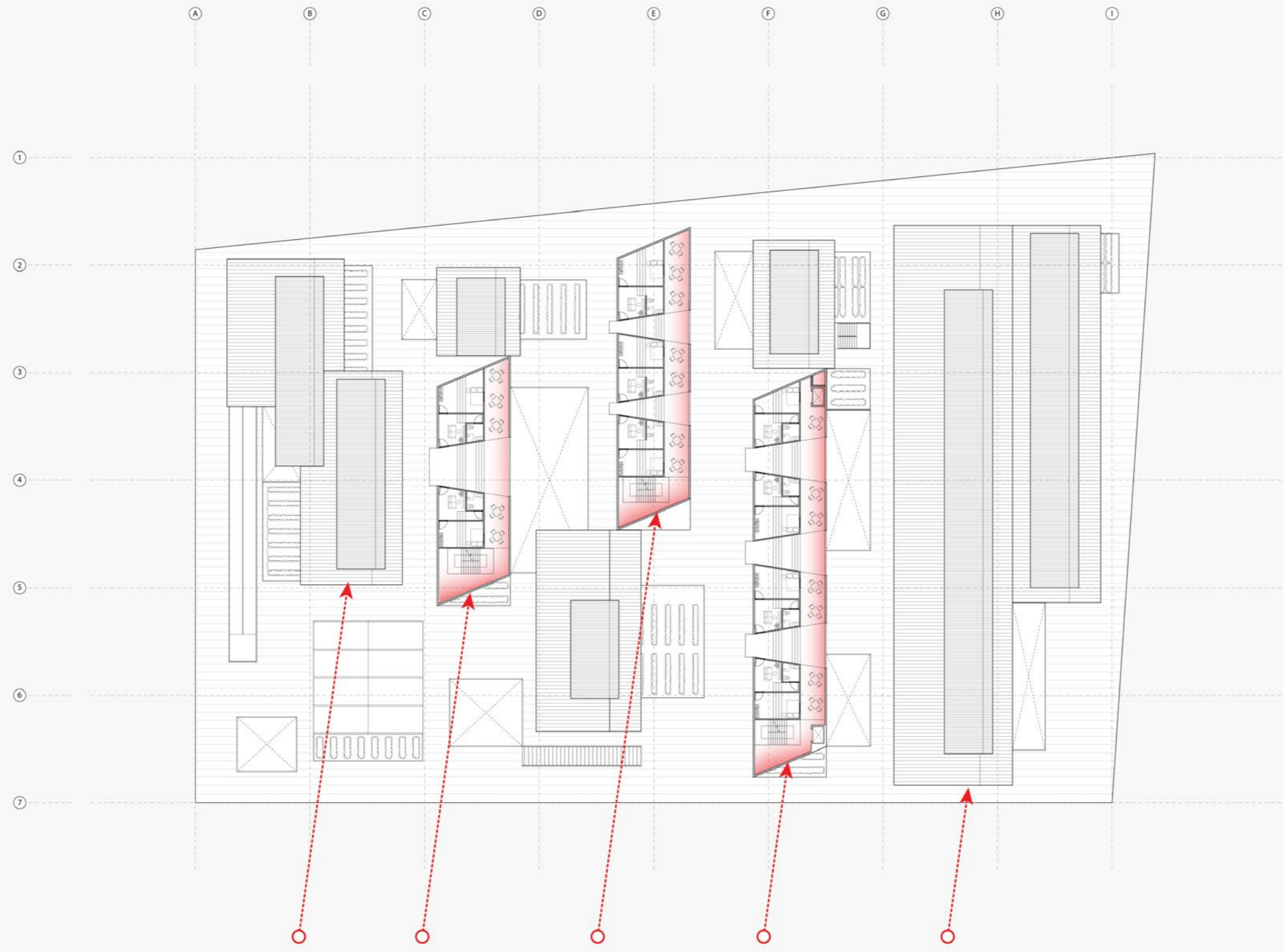
RESIDENTIAL FLOOR PLAN  
(TYPICAL)





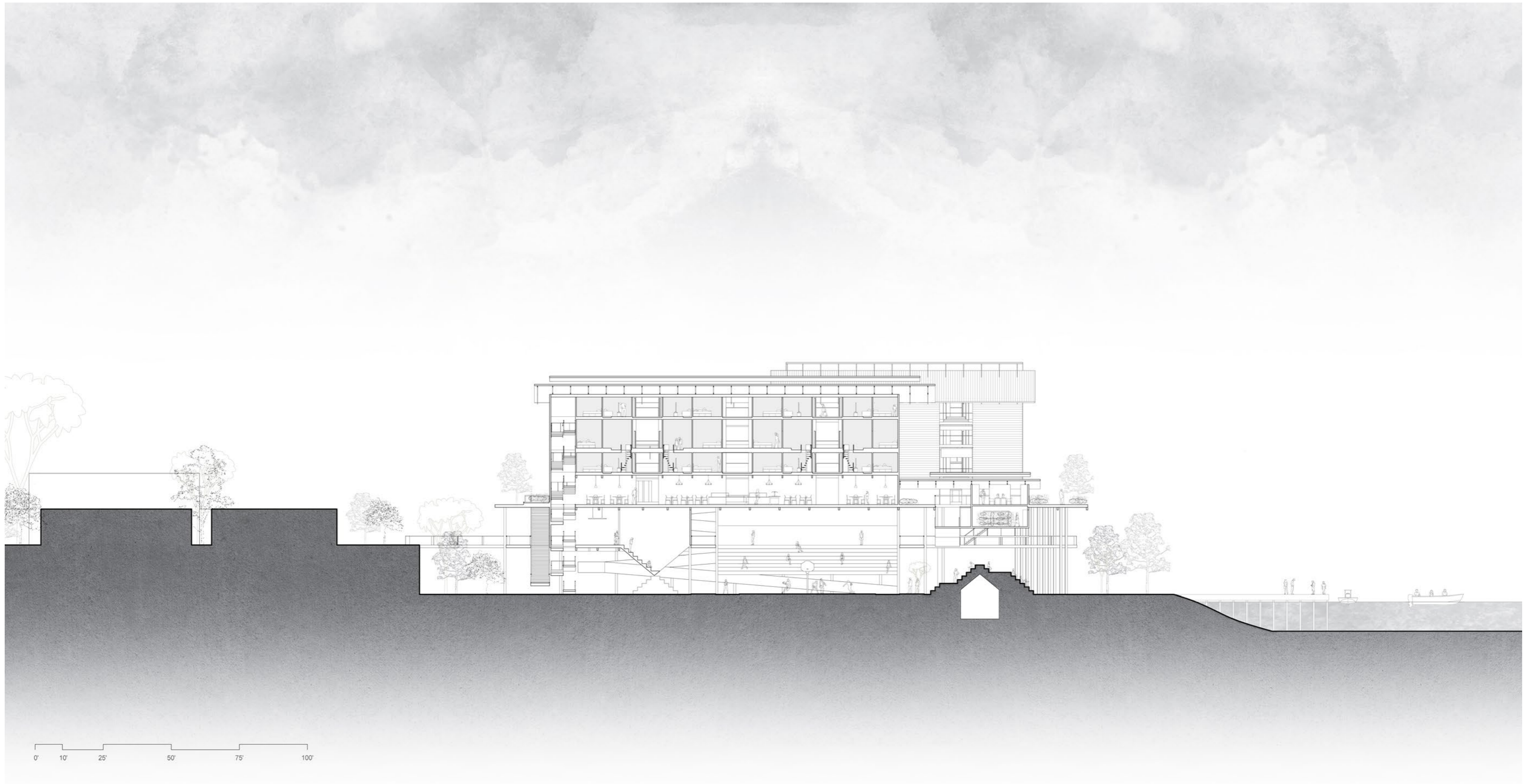
RESIDENTIAL FLOOR PLAN  
(TYPICAL)



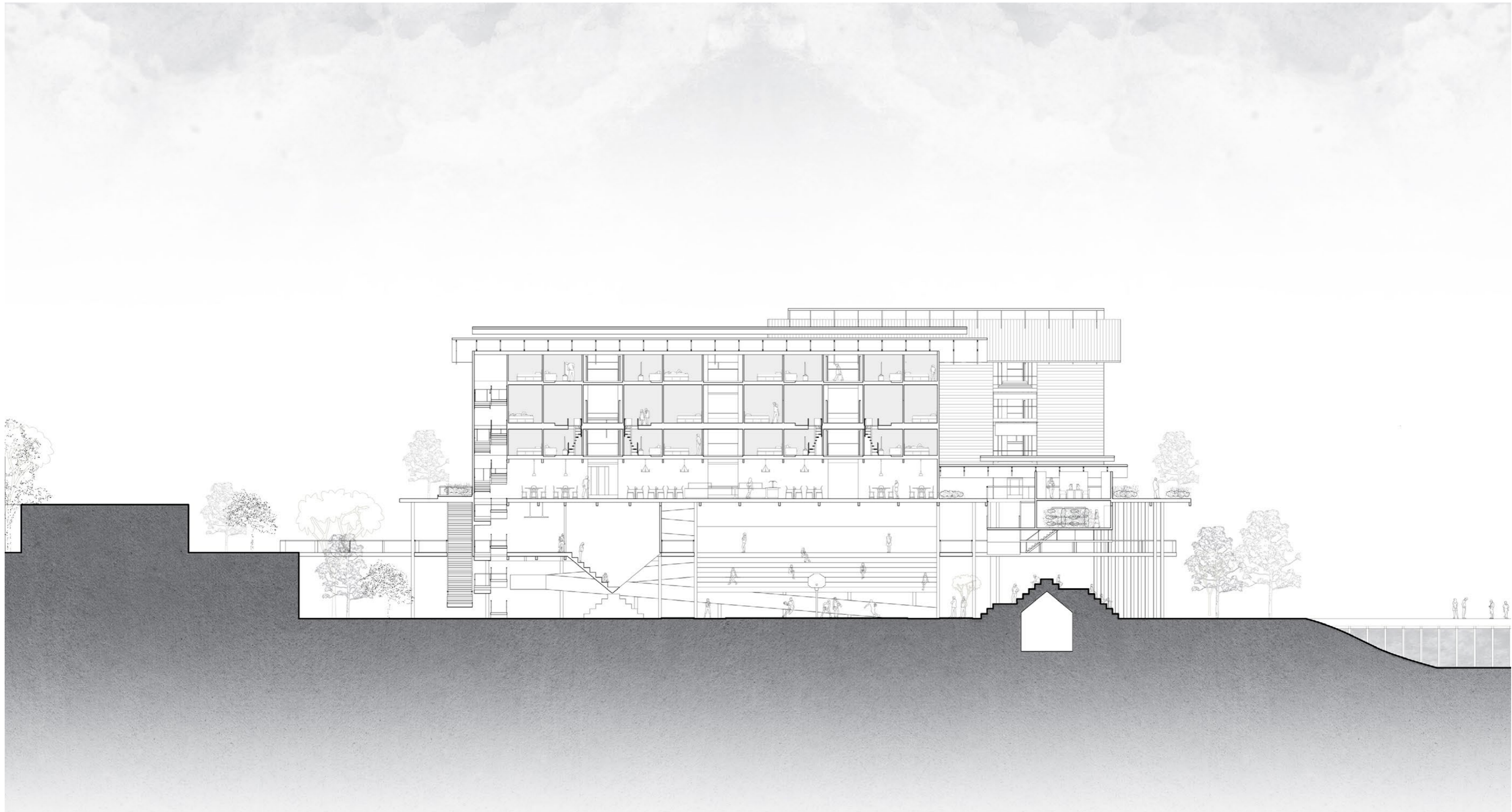


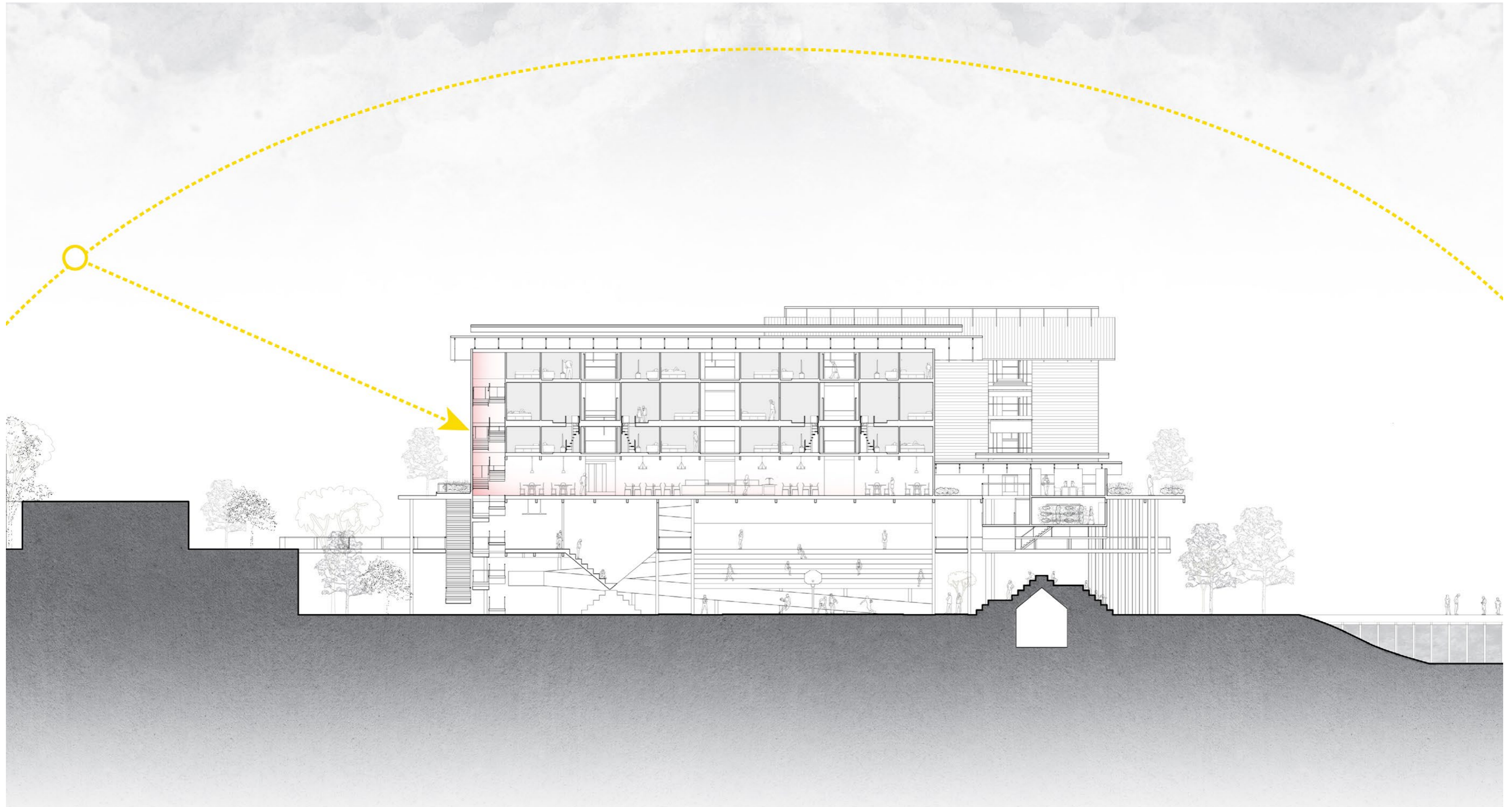
RESIDENTIAL FLOOR PLAN  
(TYPICAL)

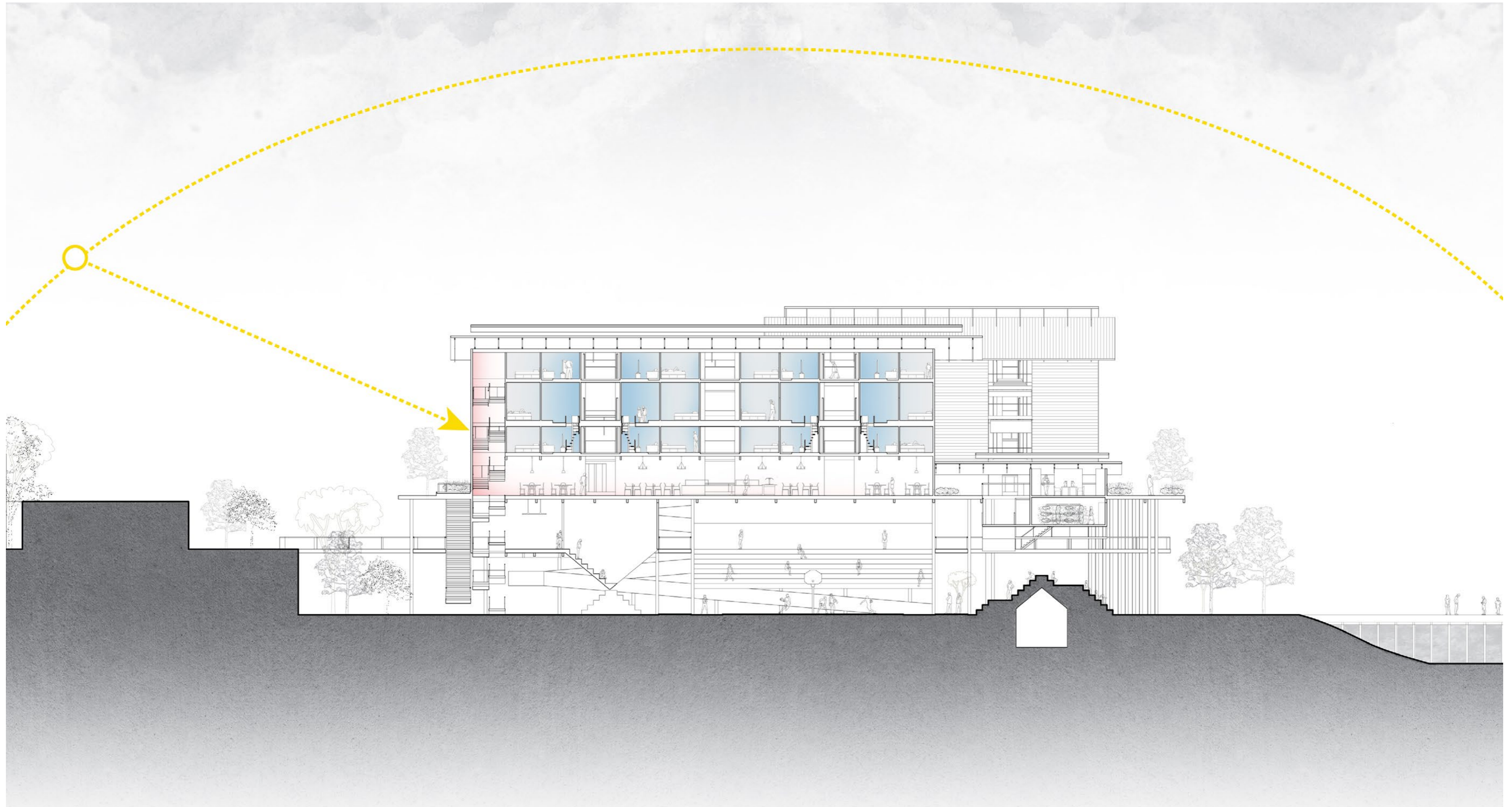




0' 10' 25' 50' 75' 100'











*Thank You*