BLURRED BOUNDARIES

the reintroduction of hierarchical spaces in the Baithi Chawls of Mumbai

INTRODUCTION

population: 1.281.935.911

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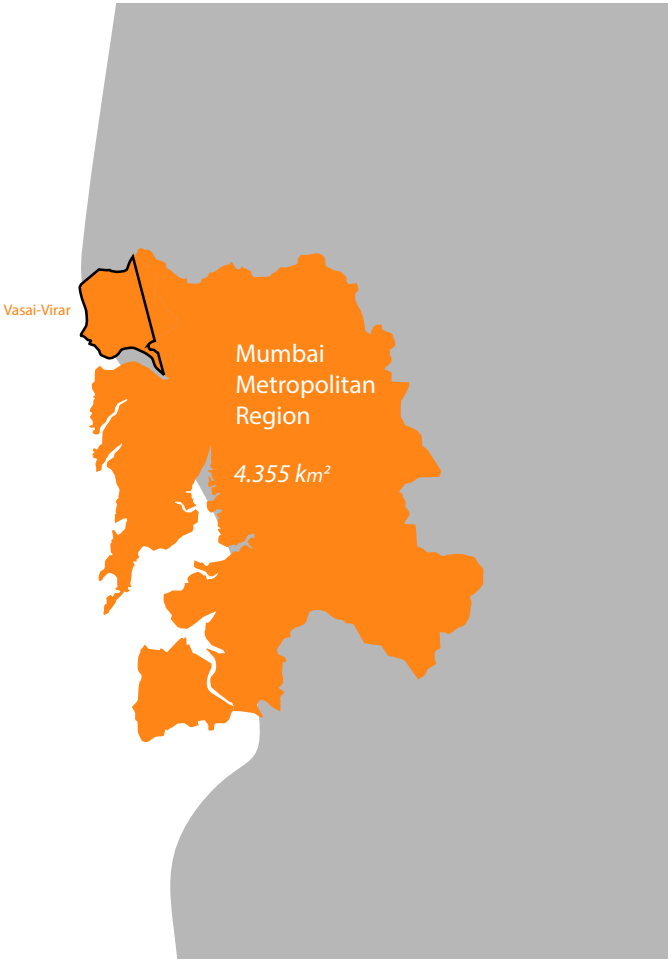
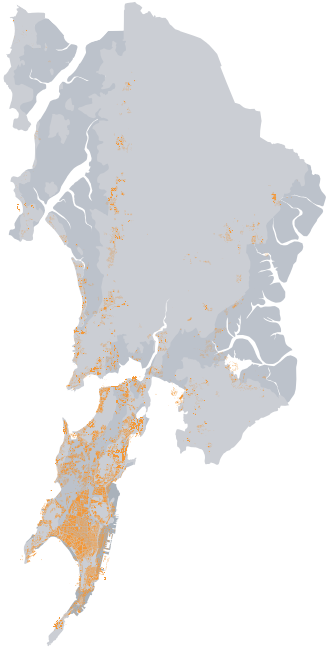
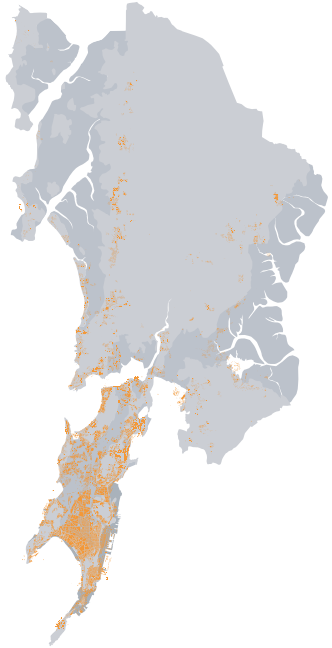


population:21.324.557



1909

population: 1.2 million



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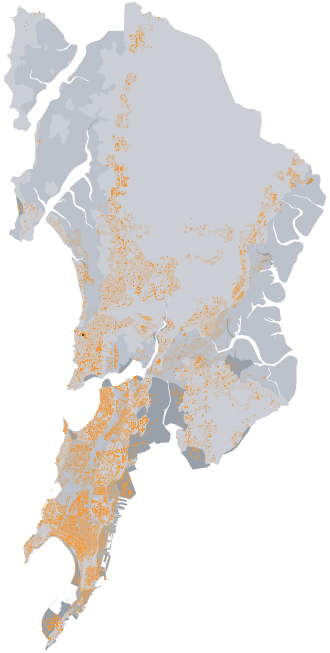
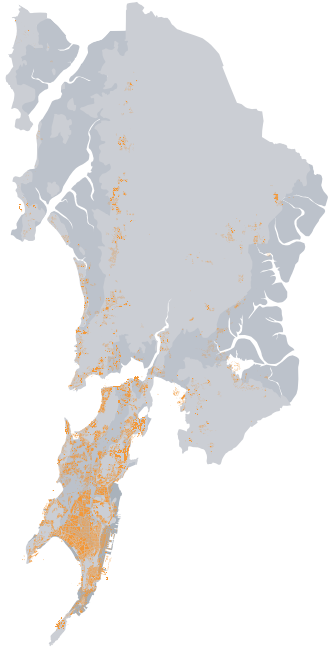


1964

population: 5.0 million



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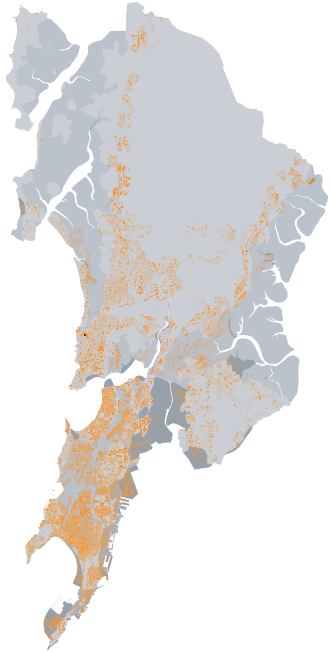

1964

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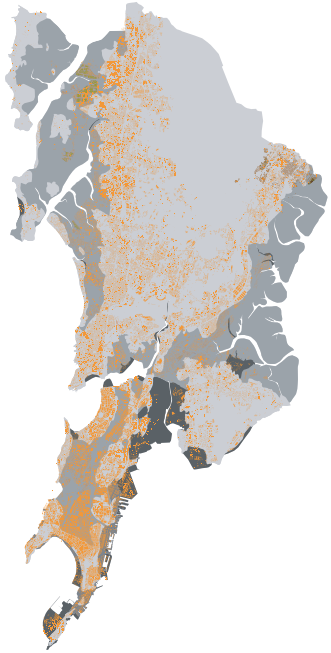


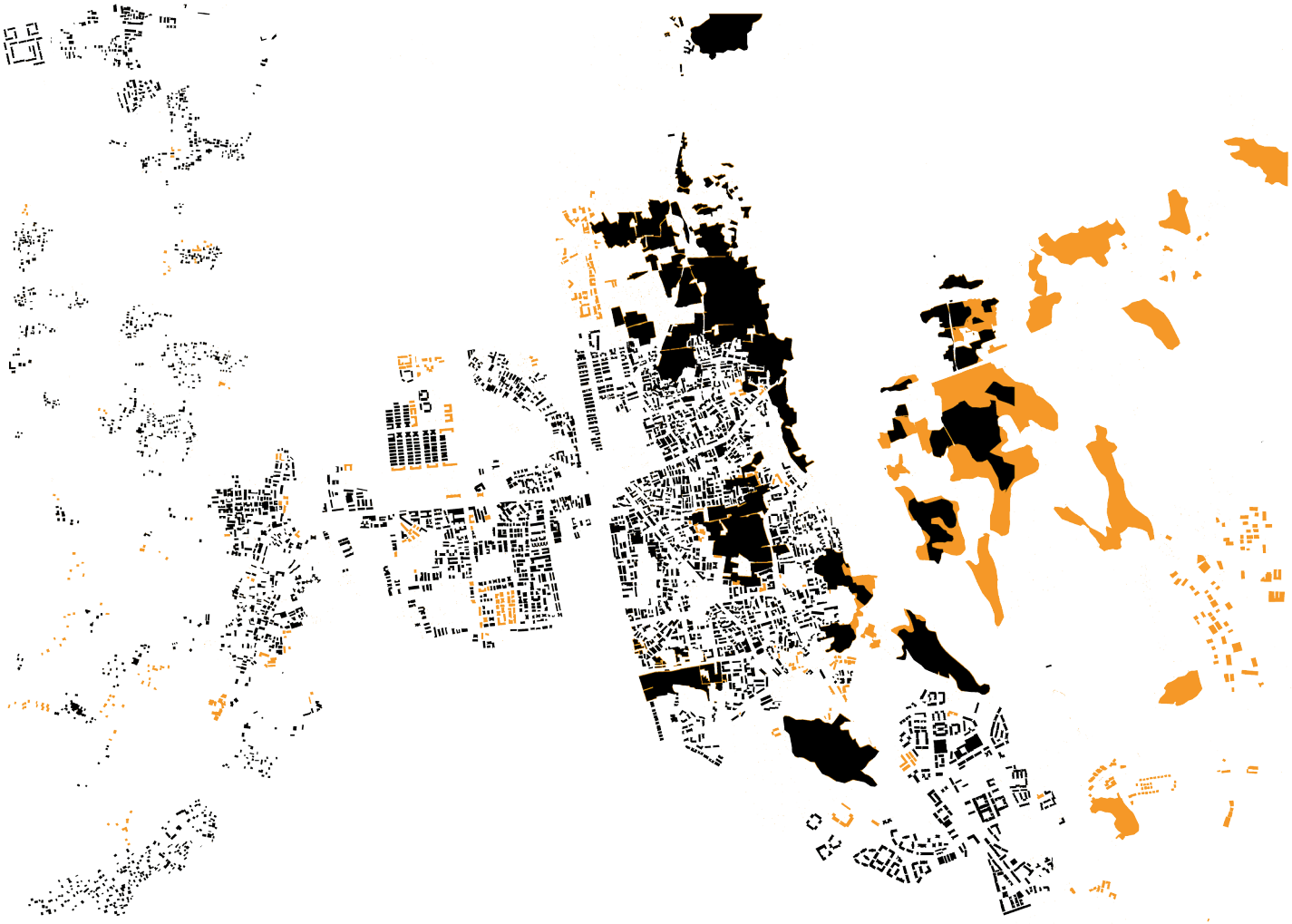
2012

population: 20.8 million

Introduction / Urban Growth Mumbai

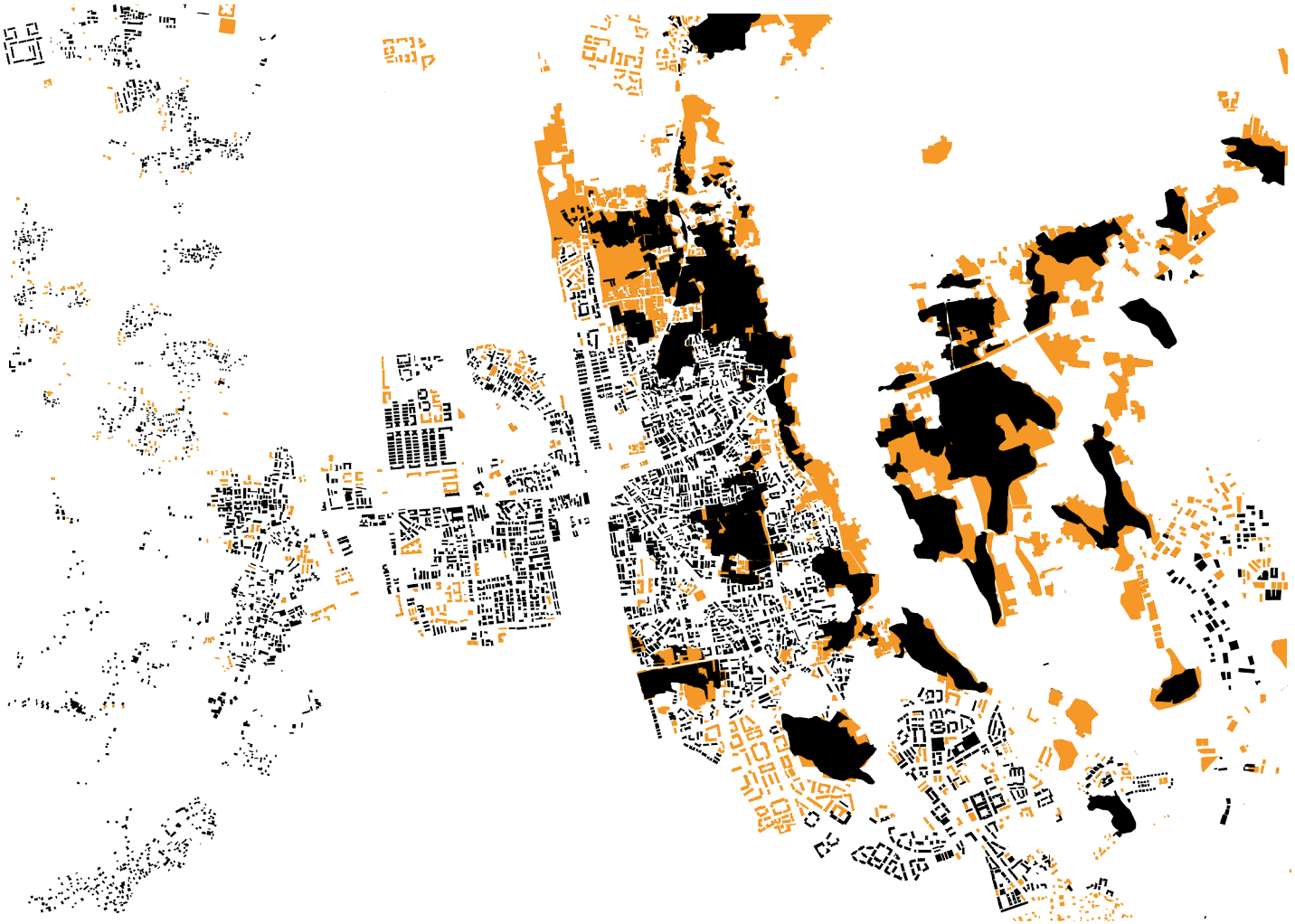
2002

Introduction / Urban Growth Nala Sopara



2005

Introduction / Urban Growth Nala Sopara



2009

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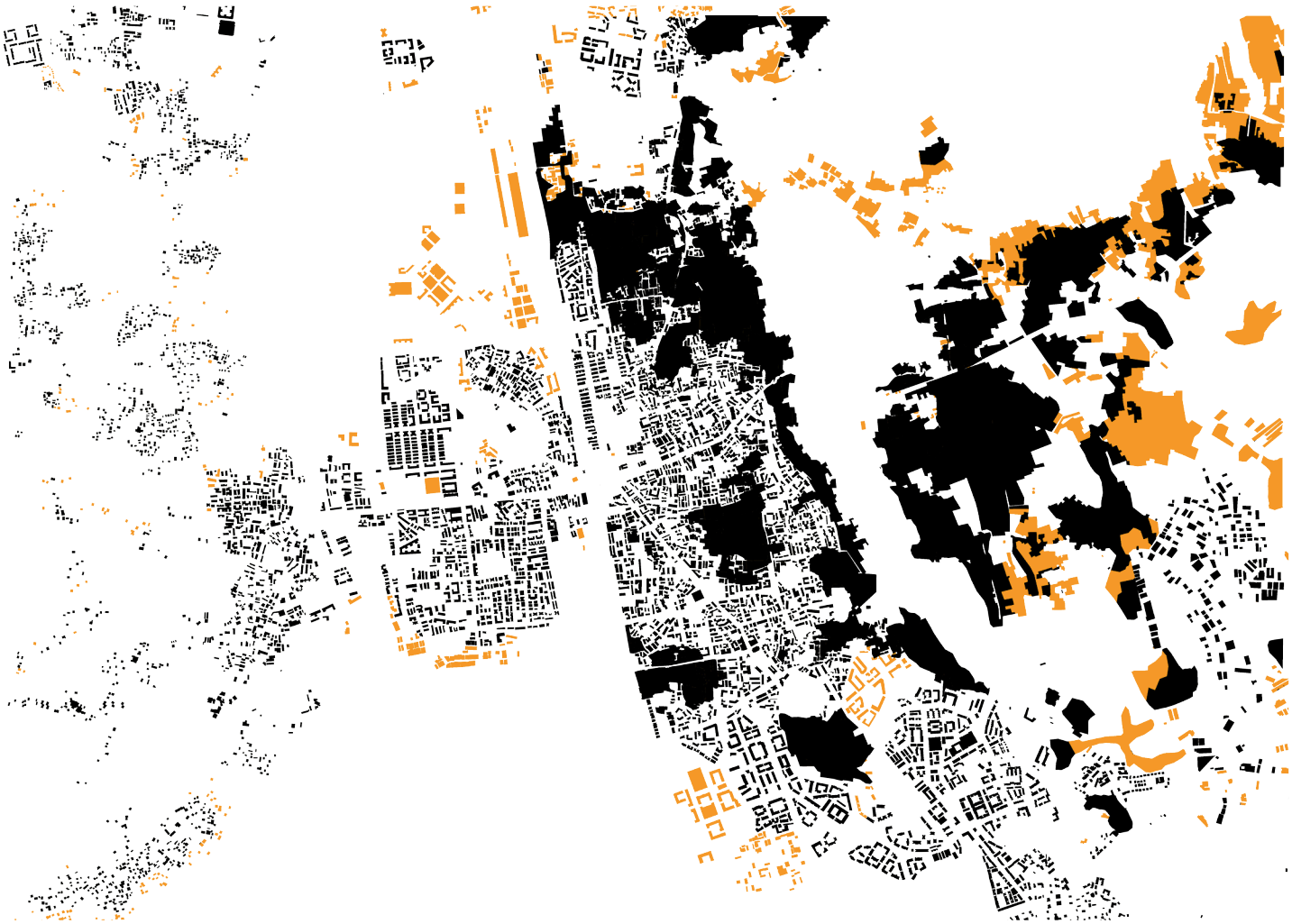
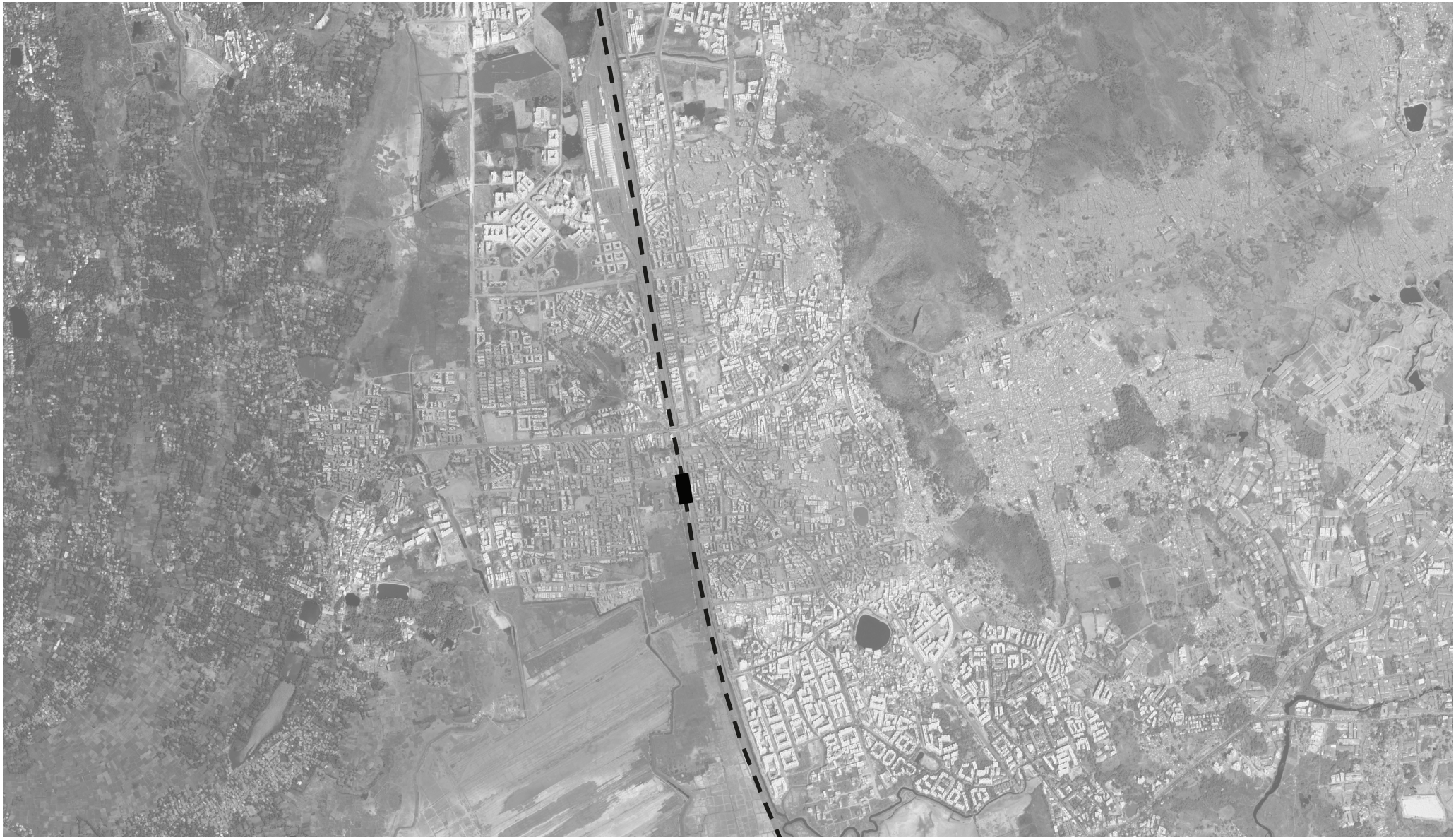


2013

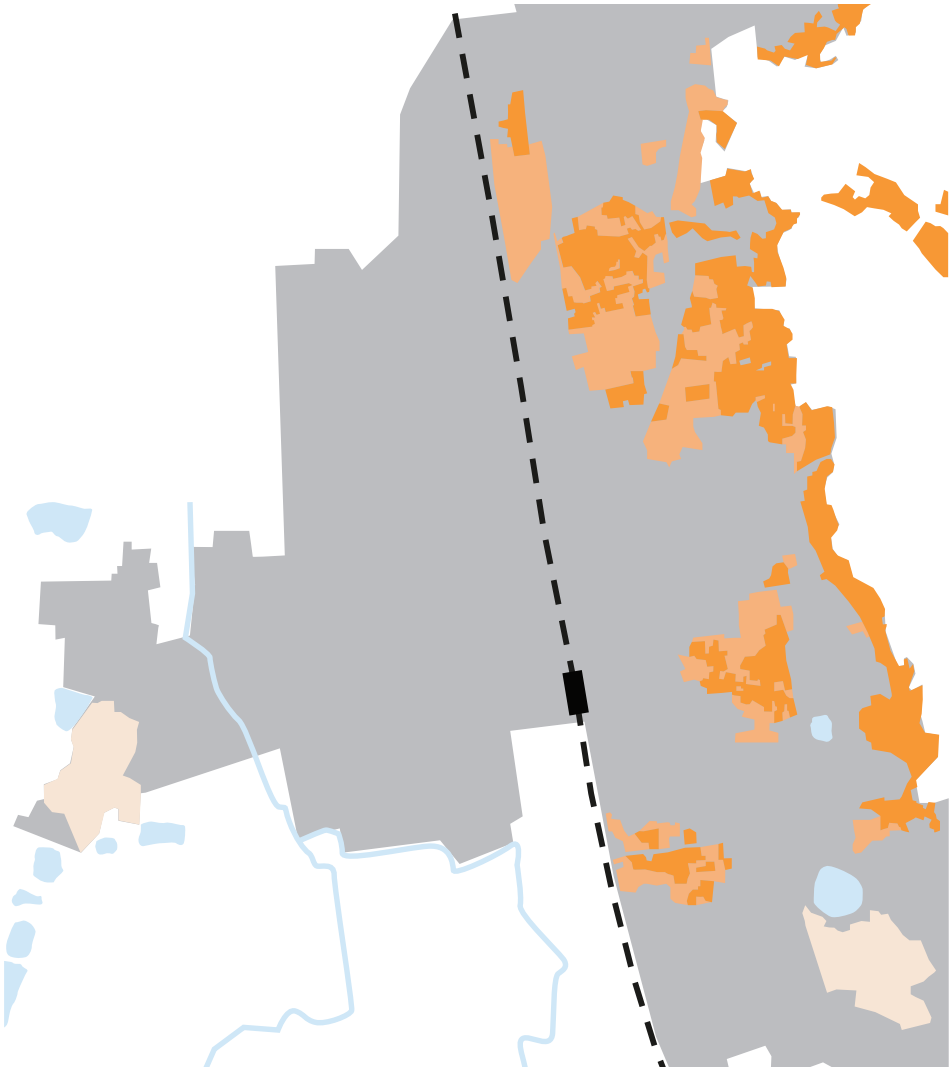
Introduction / Urban Growth Nala Sopara

2017

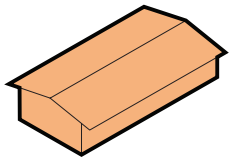
Introduction / Urban Growth Nala Sopara



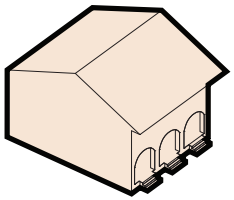
Introduction / Building Typology Nala Sopara



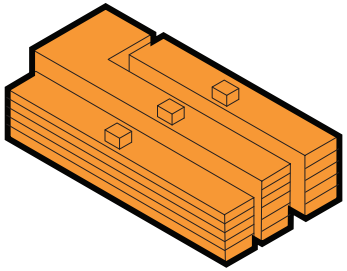
Baithi Chawl



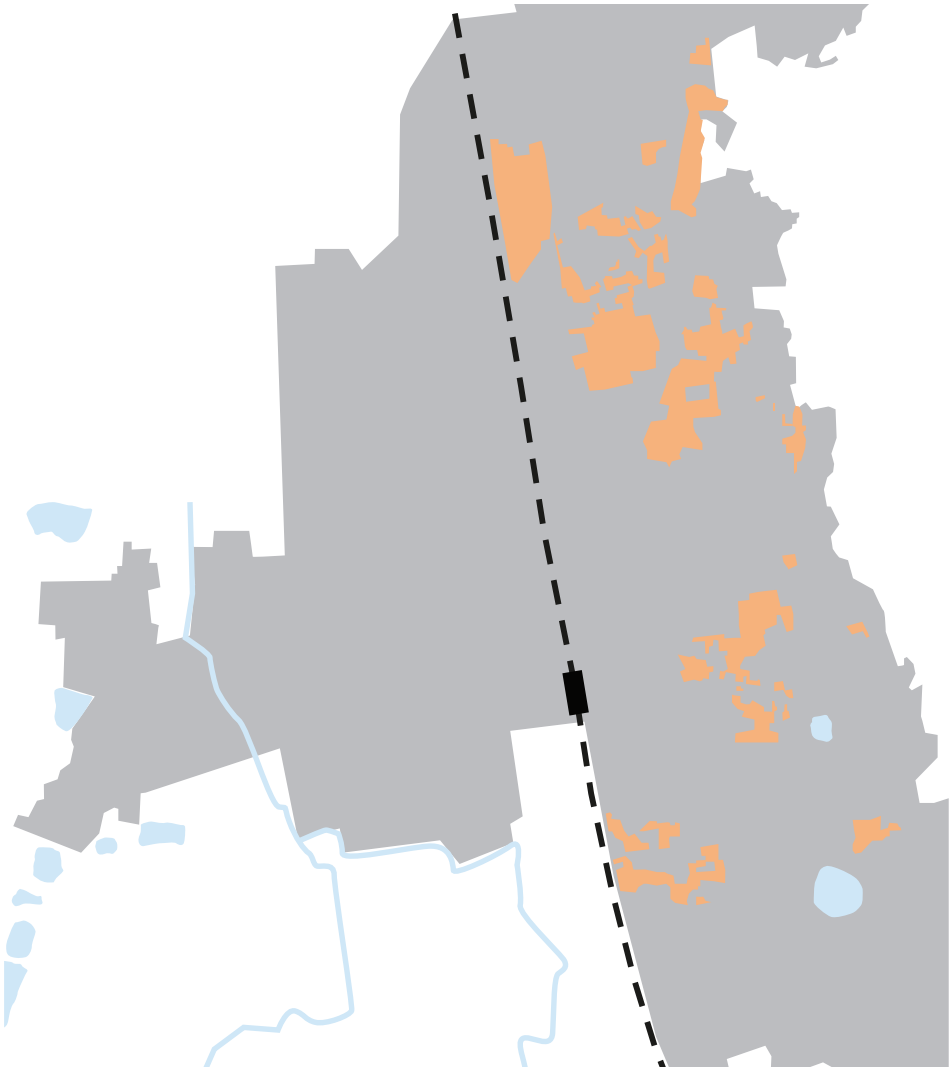
Village



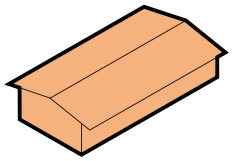
Chawl



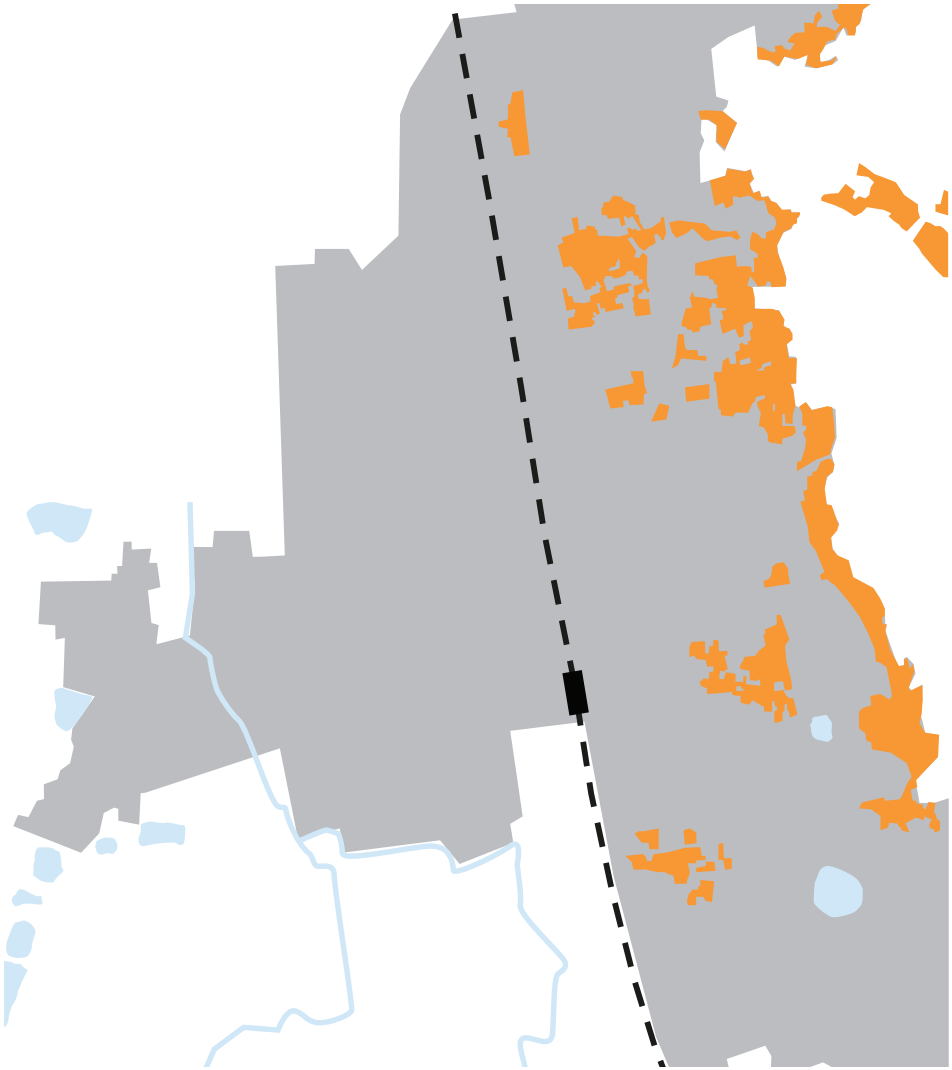
Introduction / Building Typology Nala Sopara



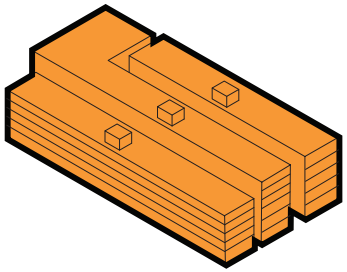
Baithi Chawl



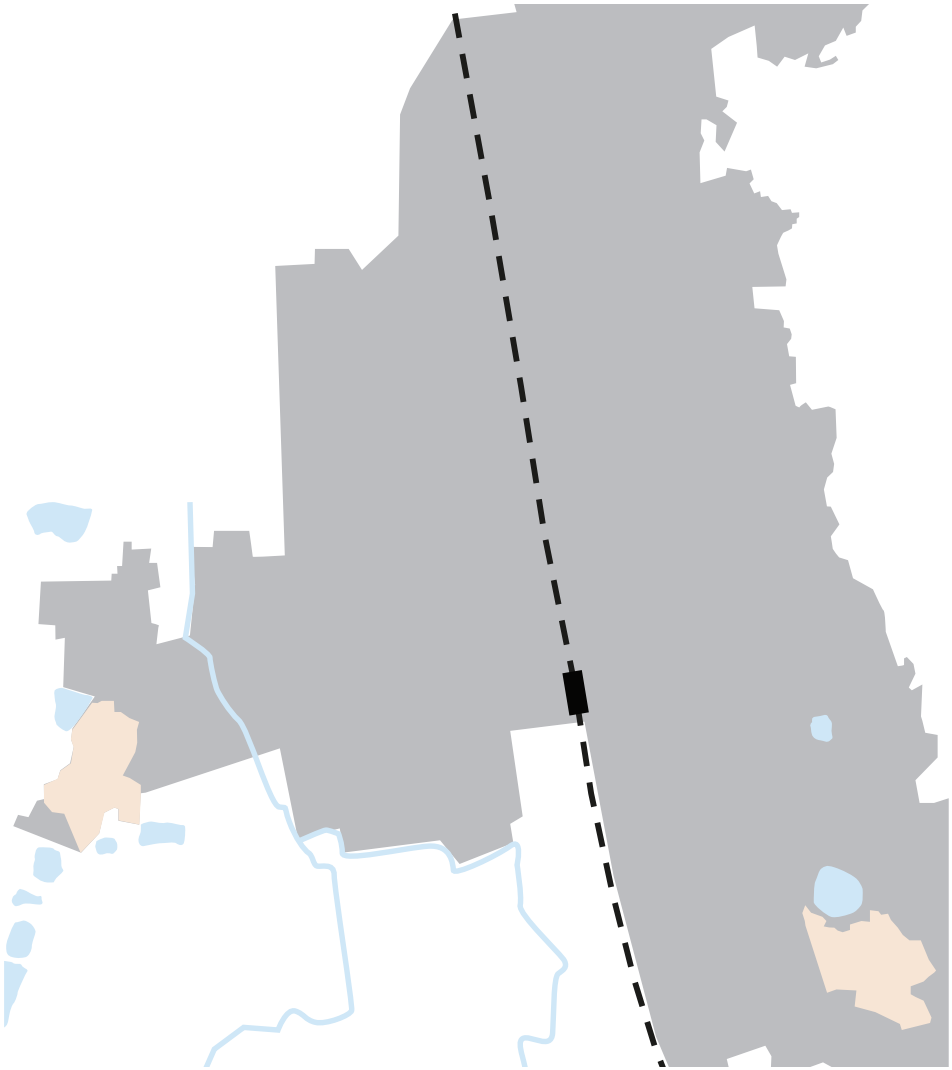
Introduction / Building Typology Nala Sopara



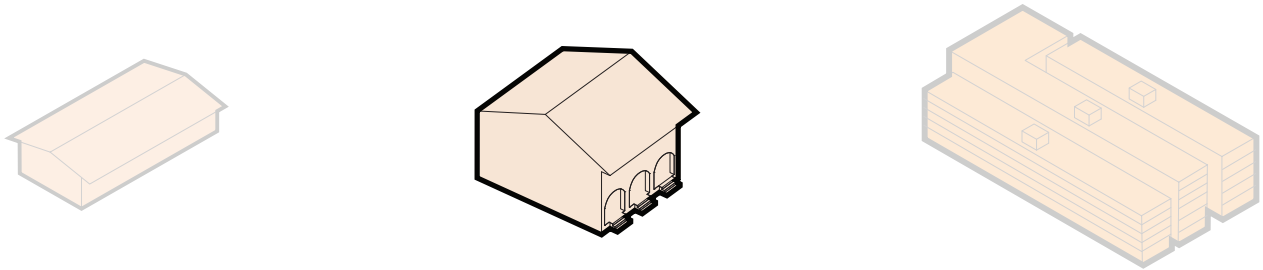
Chawl



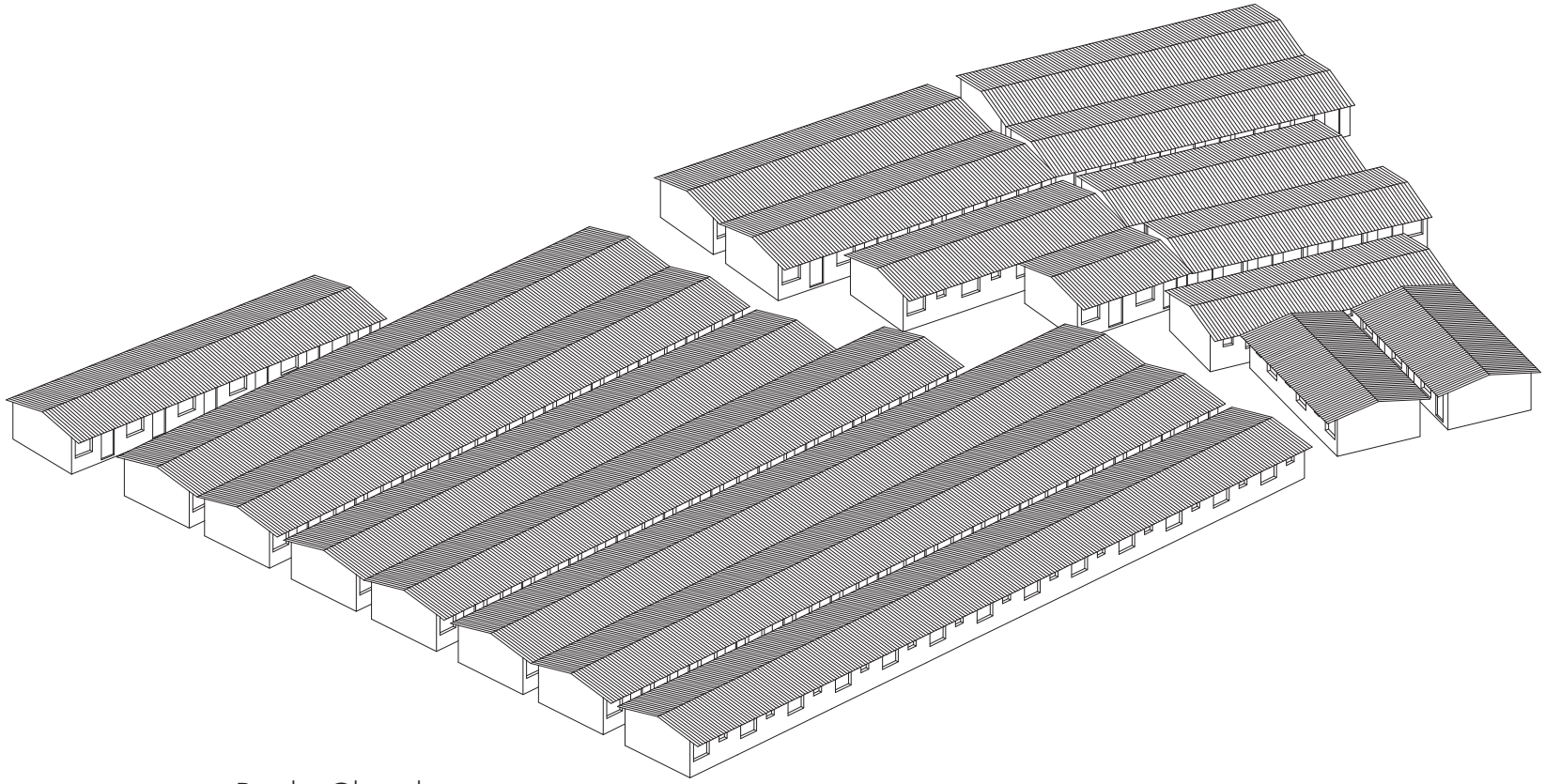
Introduction / Building Typology Nala Sopara



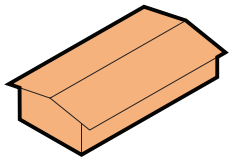
Village



Introduction / Building Typology Nala Sopara



Baithi Chawl



Introduction / Building Typology Nala Sopara

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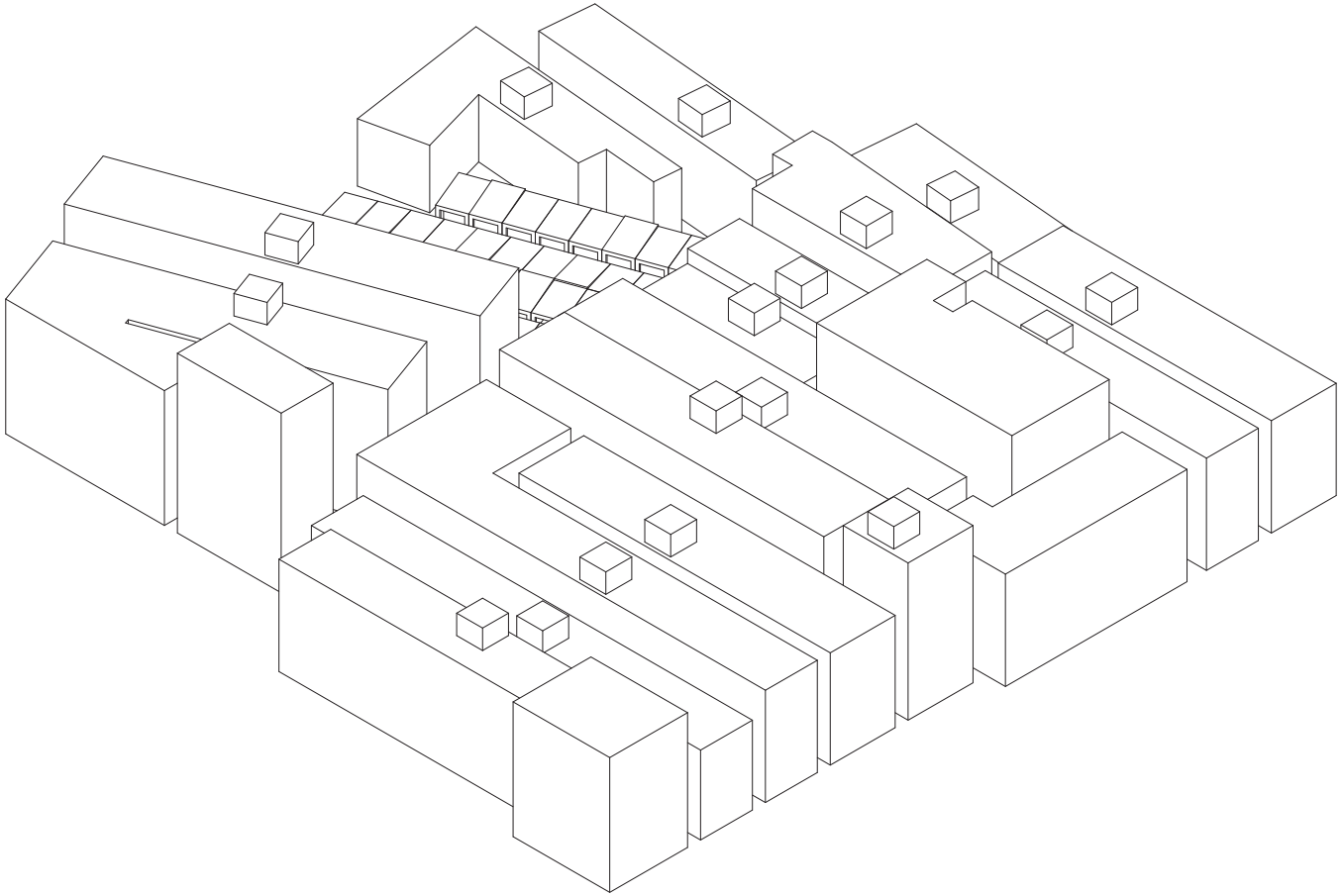
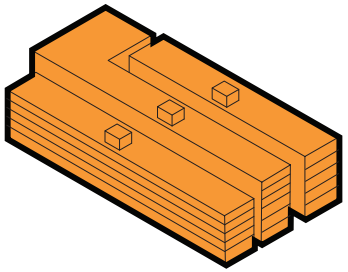


Chawl



Introduction / Building Typology Nala Sopara

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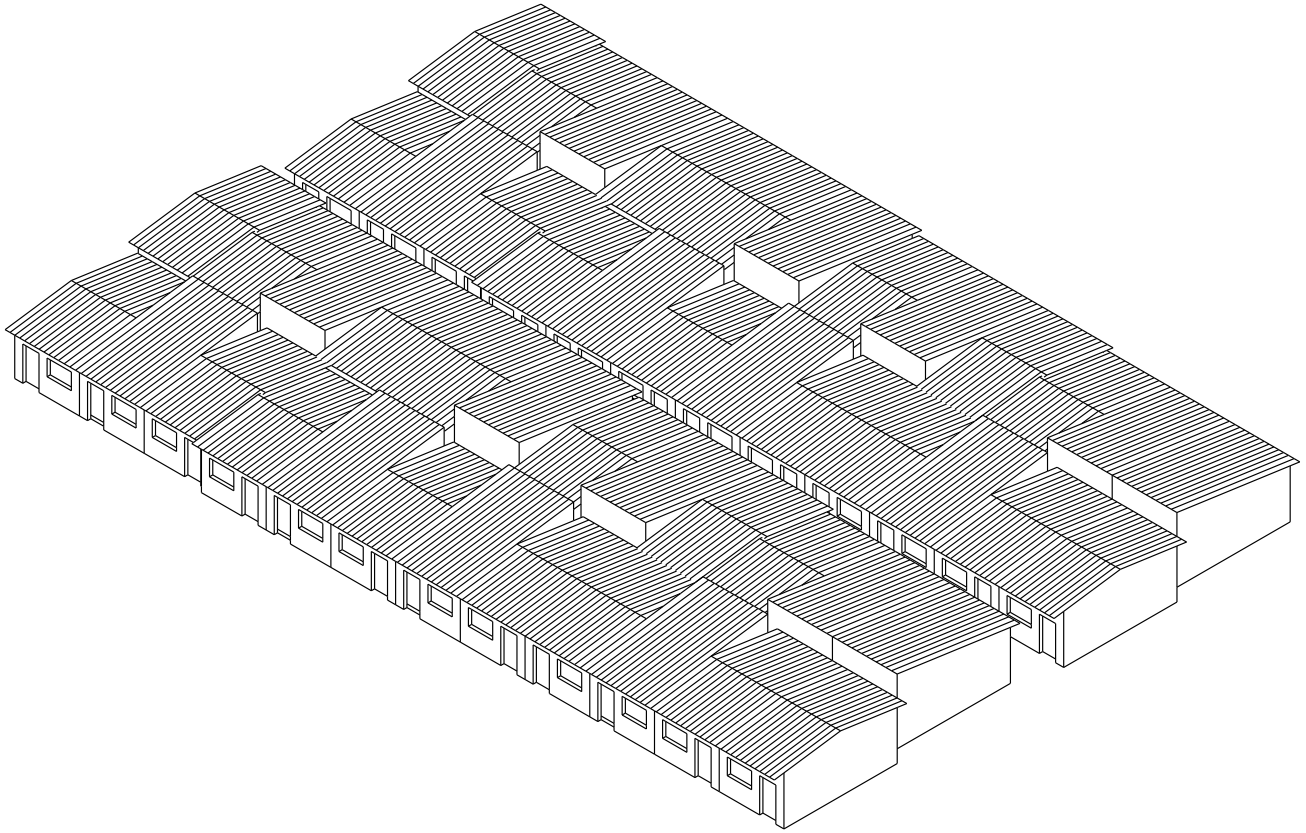
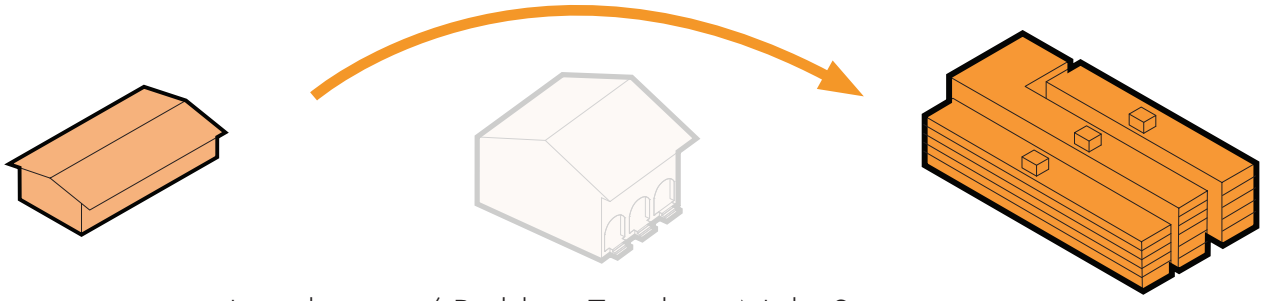
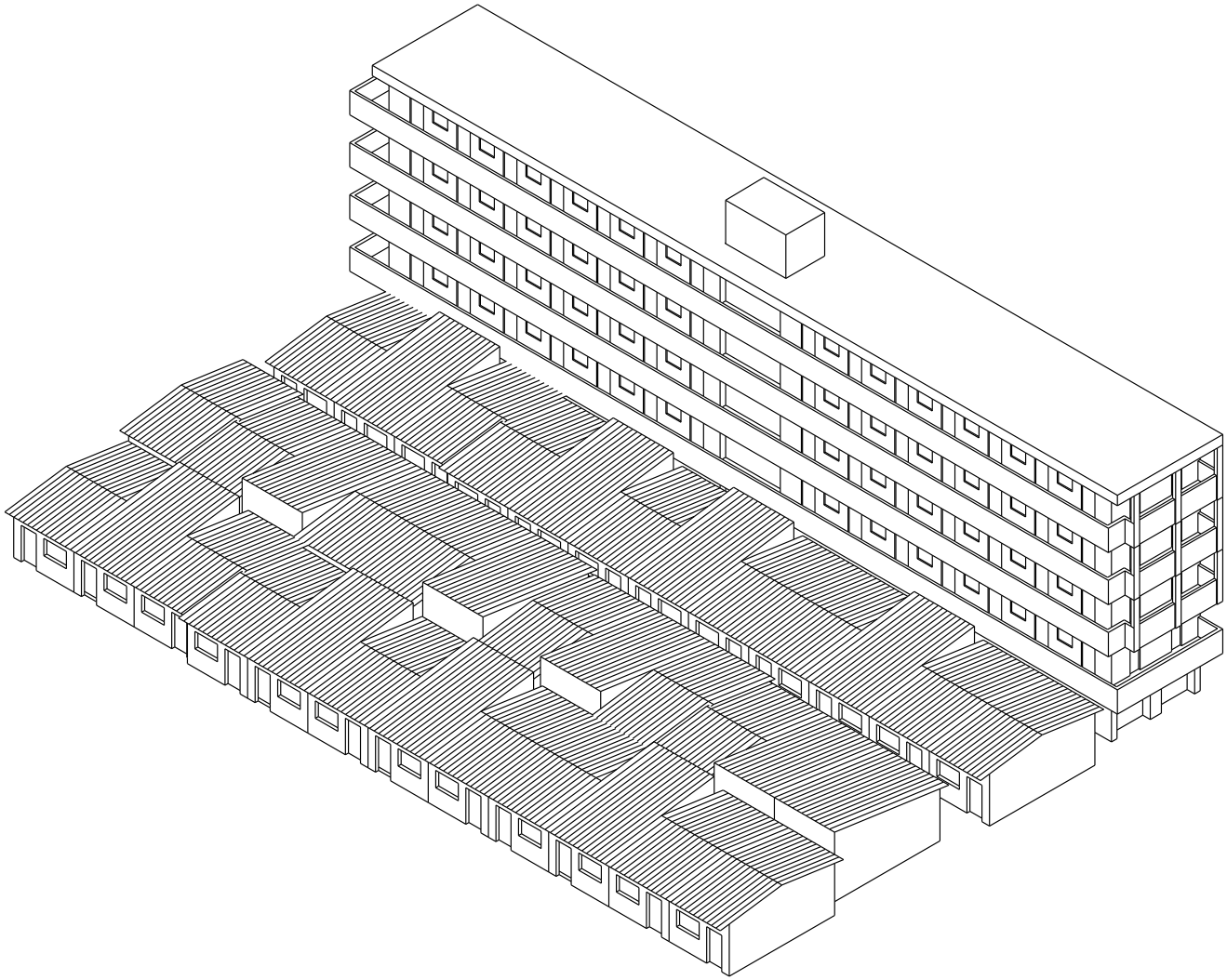
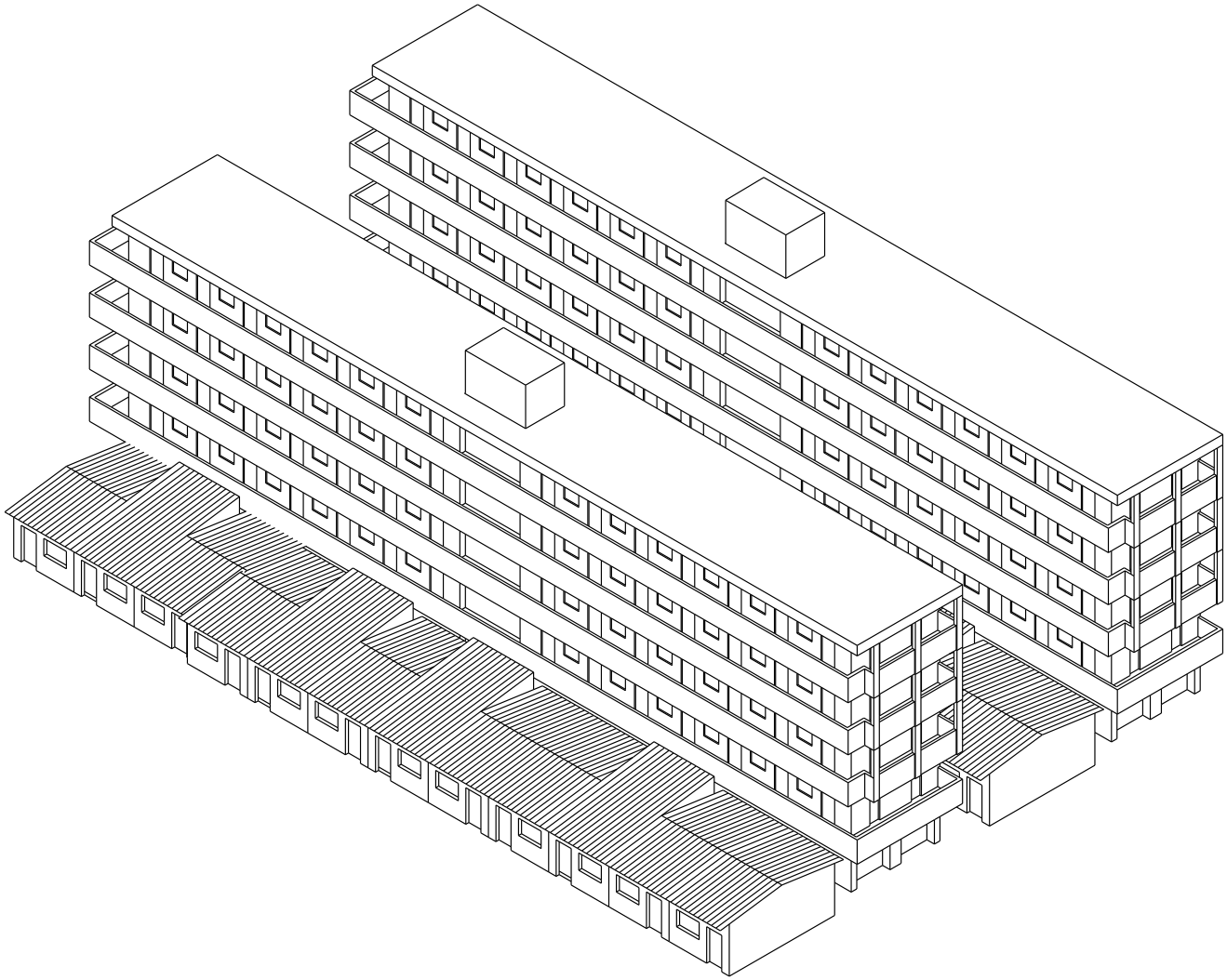




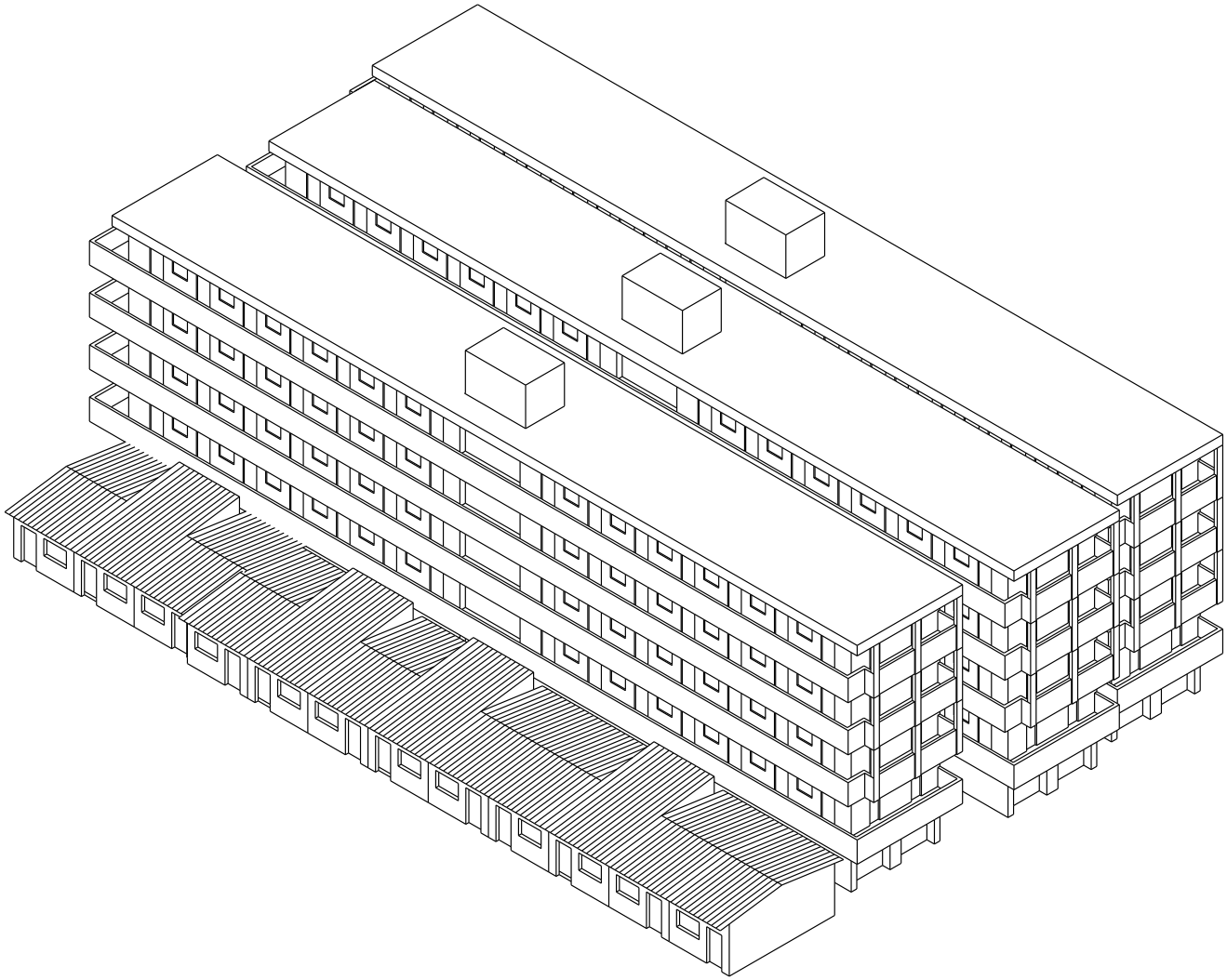
Introduction / Building Typology Nala Sopara



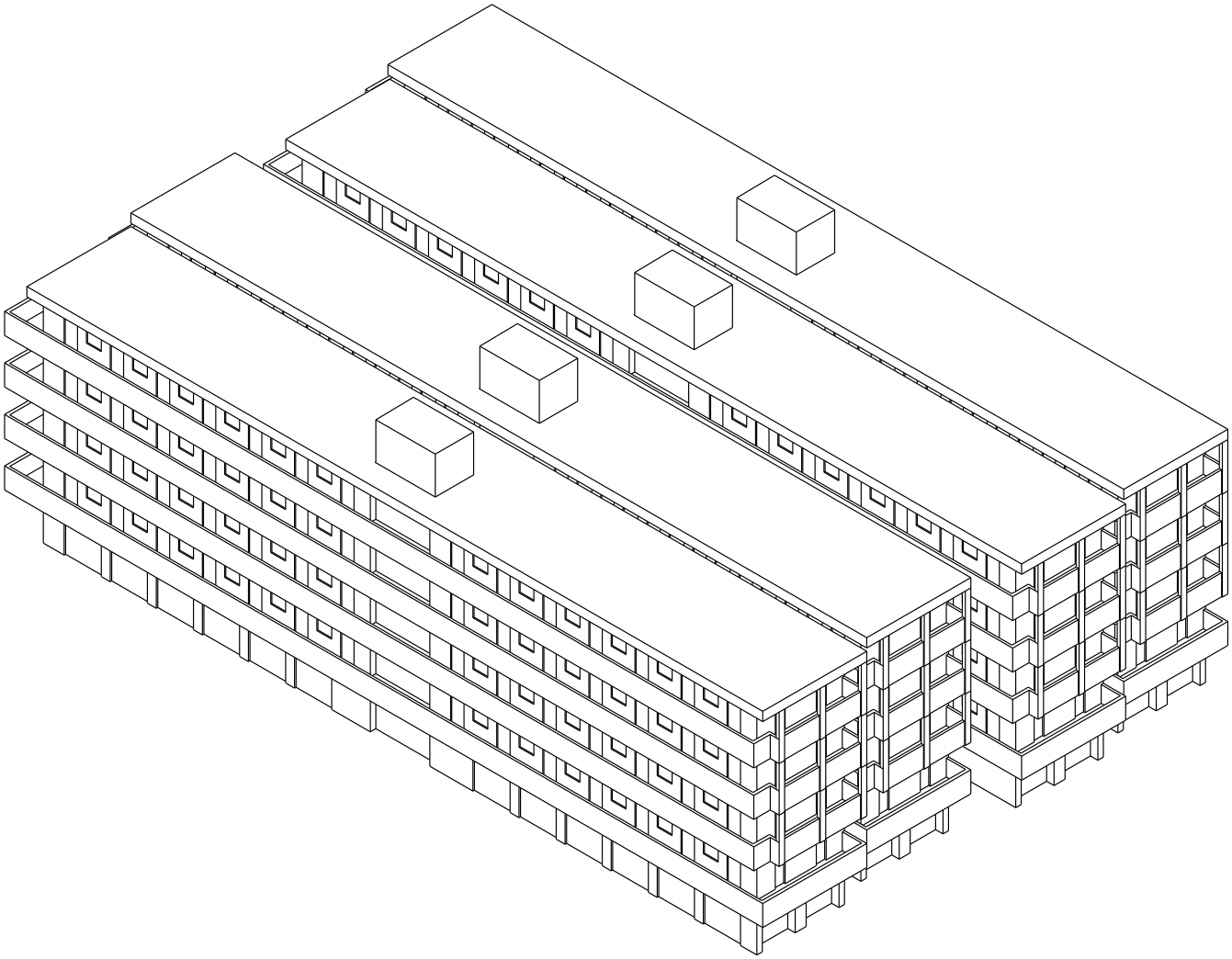
Introduction / Building Typology Nala Sopara



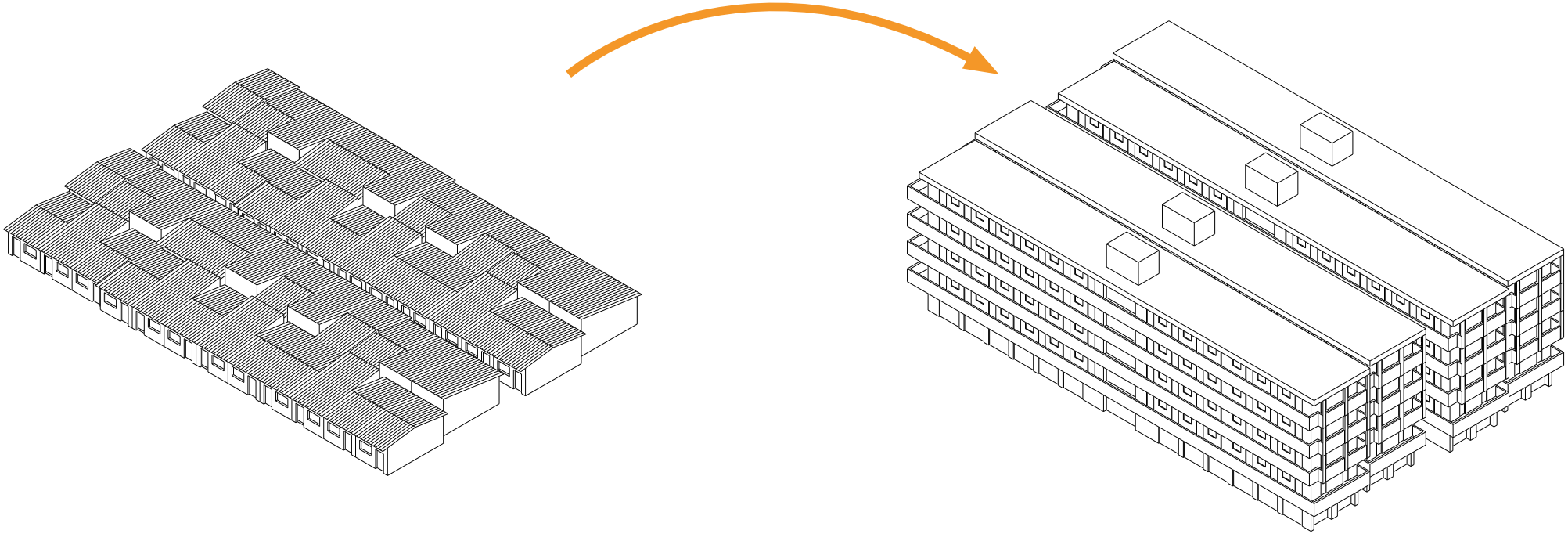
Introduction / Building Typology Nala Sopara



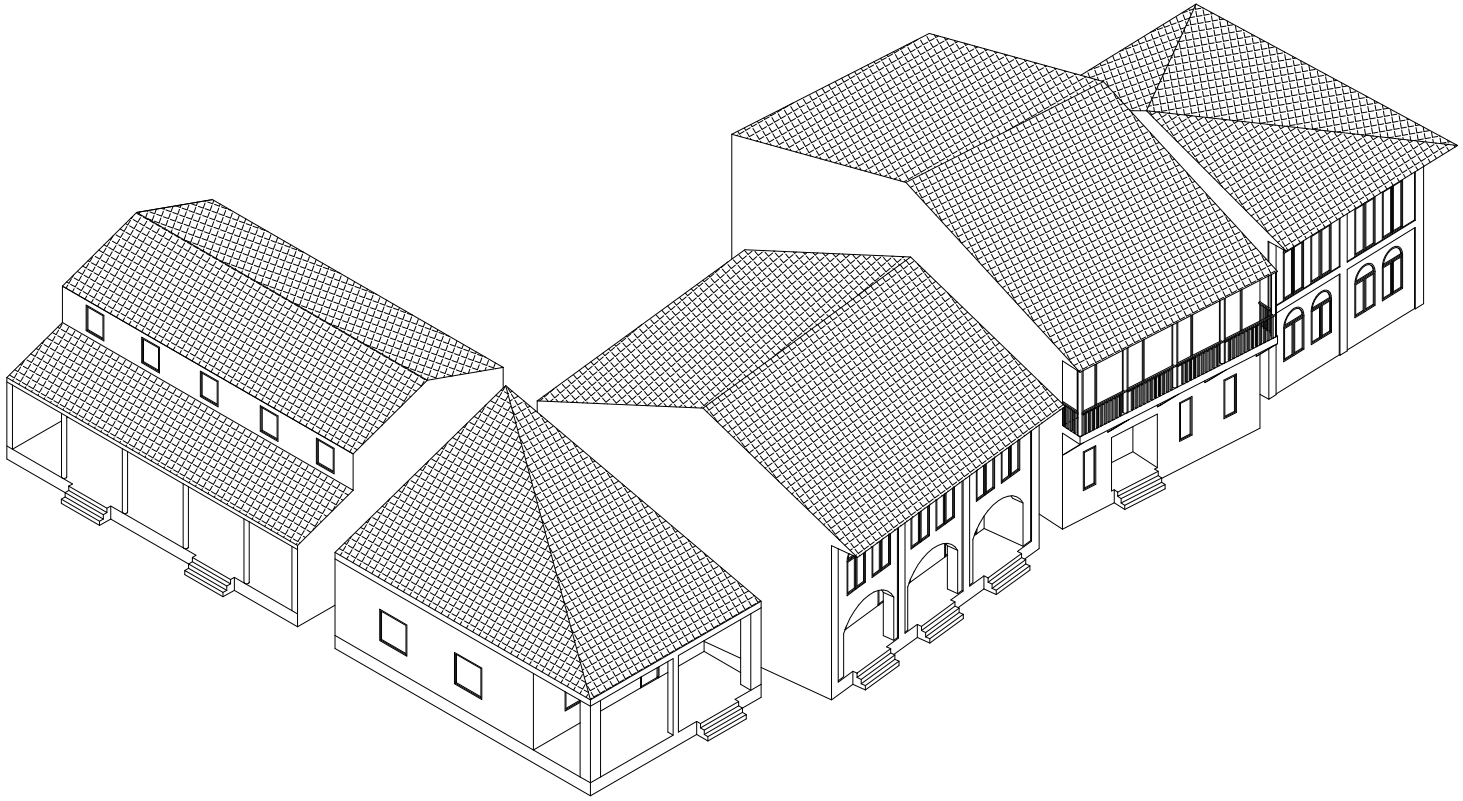
Introduction / Building Typology Nala Sopara



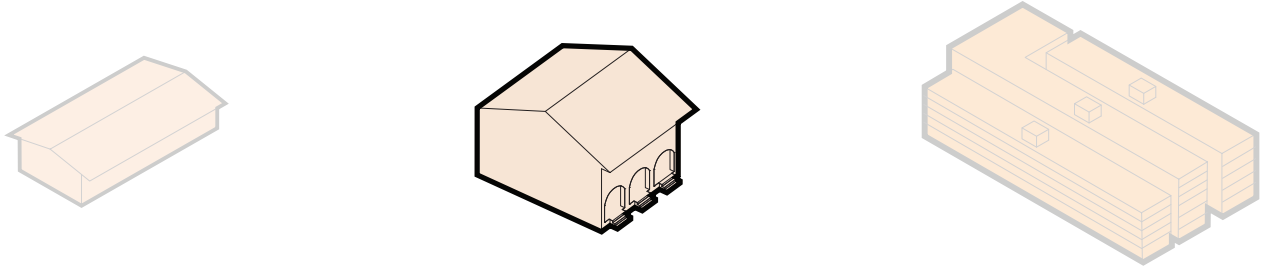
Introduction / Building Typology Nala Sopara



Introduction / Building Typology Nala Sopara



Village



Introduction / Building Typology Nala Sopara

Introduction / Building Typology Nala Sopara

Introduction / Building Typology Nala Sopara

Introduction / Building Typology Nala Sopara

RESEARCH

Research / Nala Sopara Village Vernacular

qualities of the village?

Research / Nala Sopara Village Vernacular

Research / Nala Sopara Village Vernacular

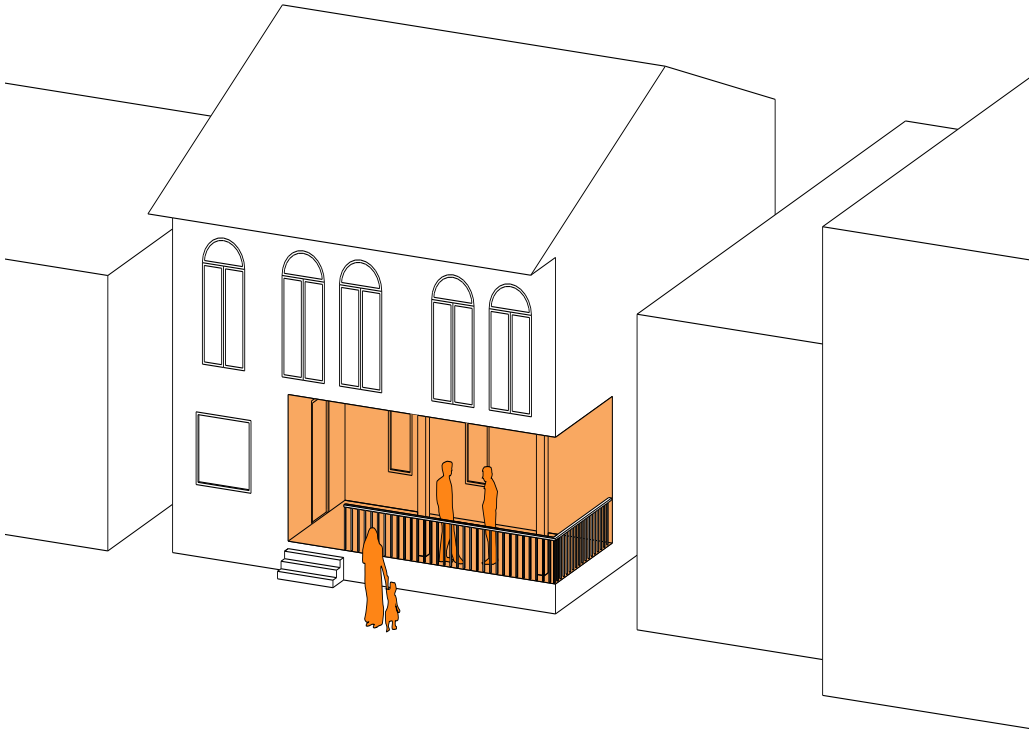
Research / Nala Sopara Village Vernacular

Research / Nala Sopara Village Vernacular

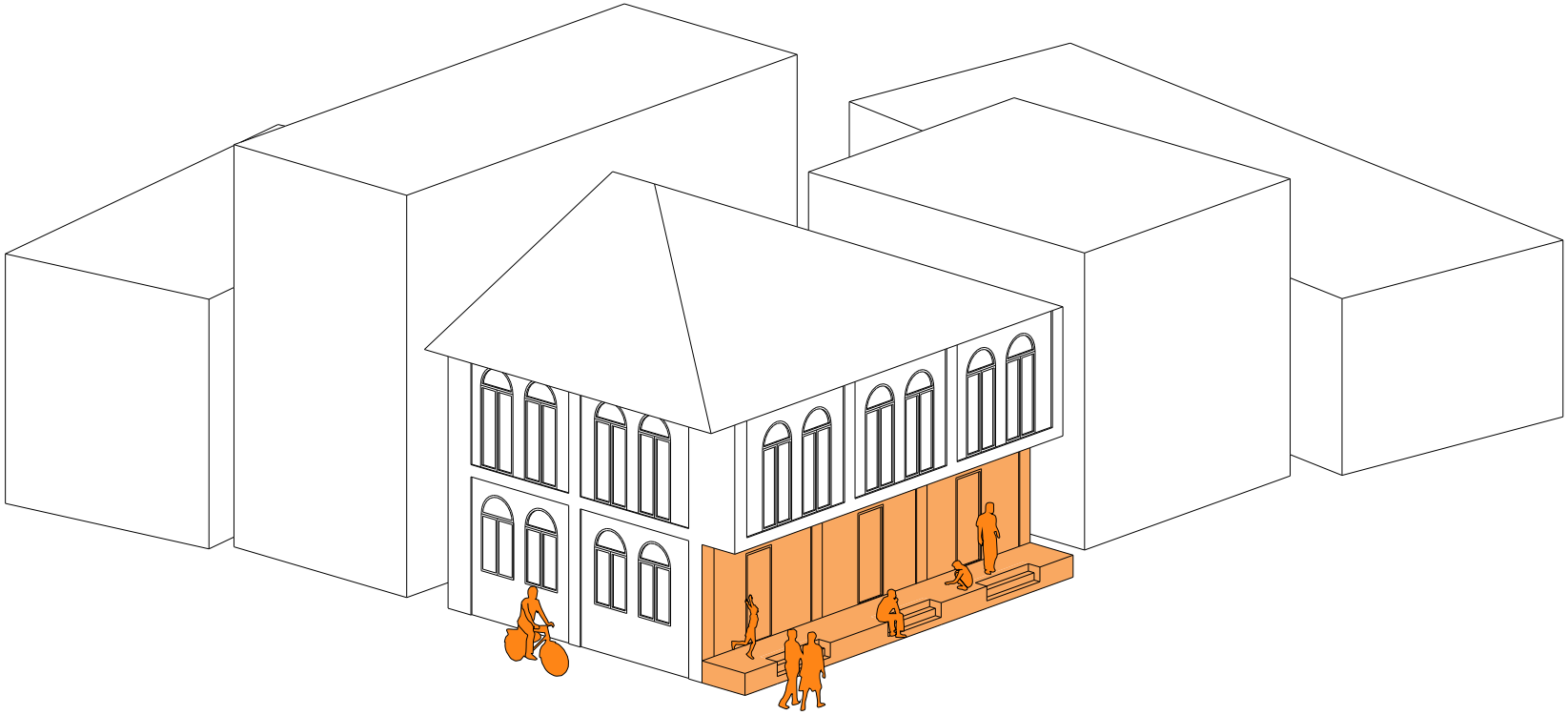
Research / Nala Sopara Village Vernacular

PATTERNS OF INHABITATION

hierarchy in space

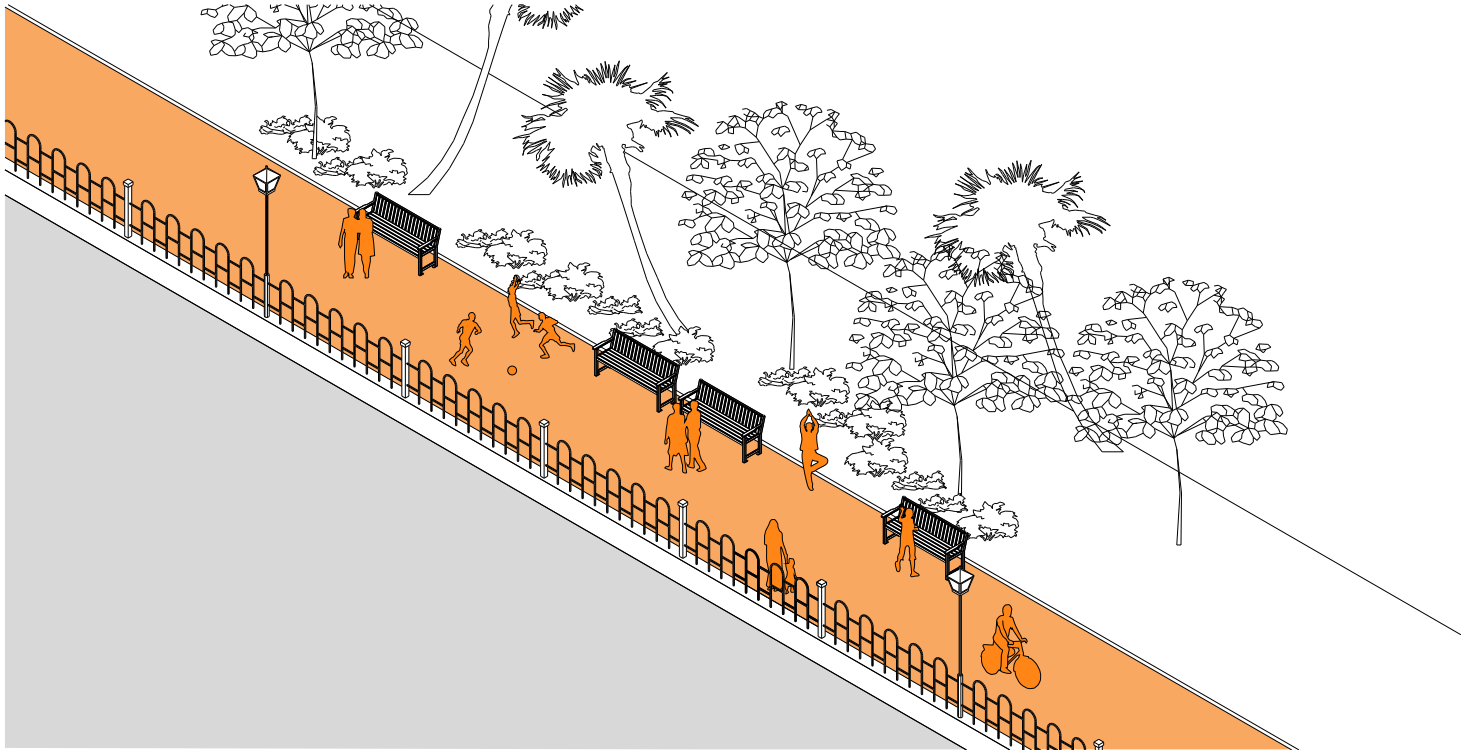


Research / Nala Sopara Village Patterns

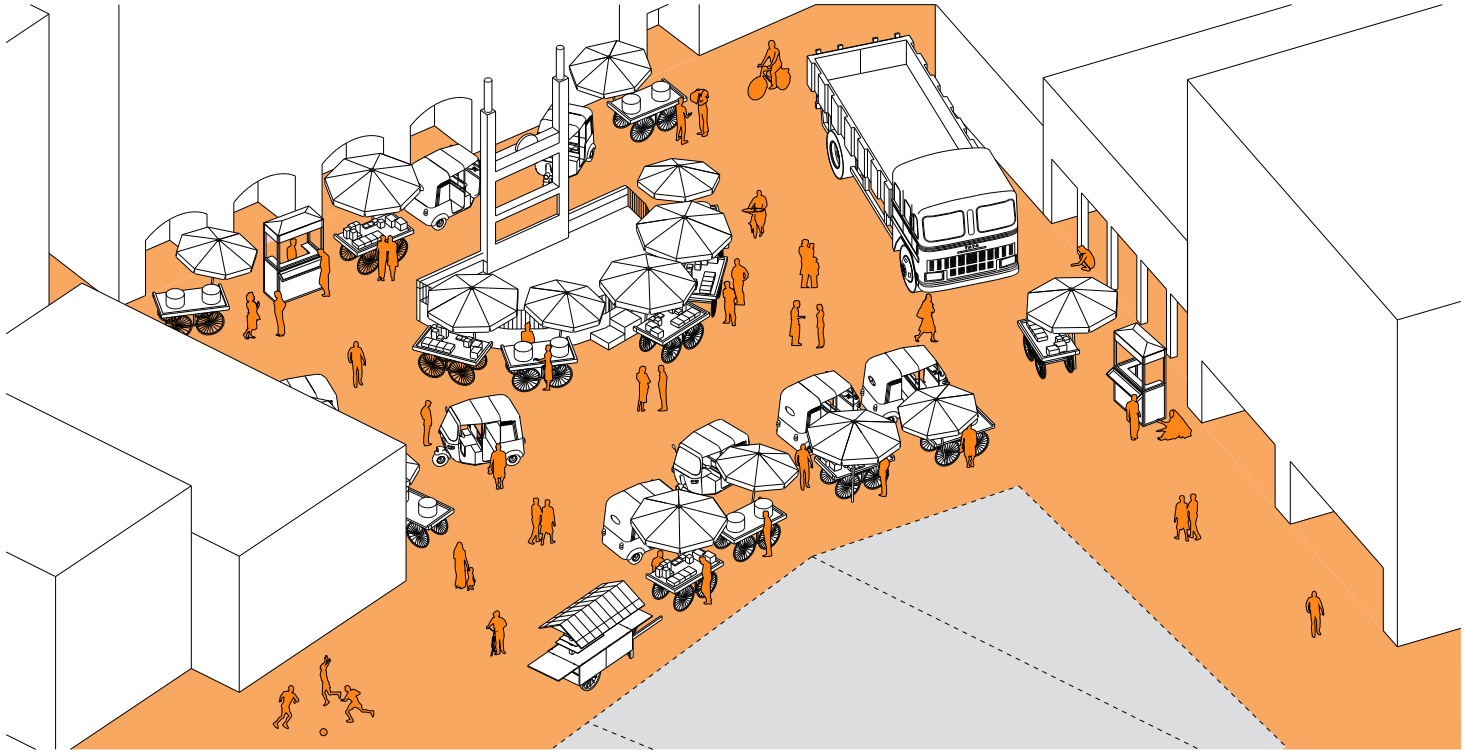


Research / Nala Sopara Village Patterns

open-to-sky-space

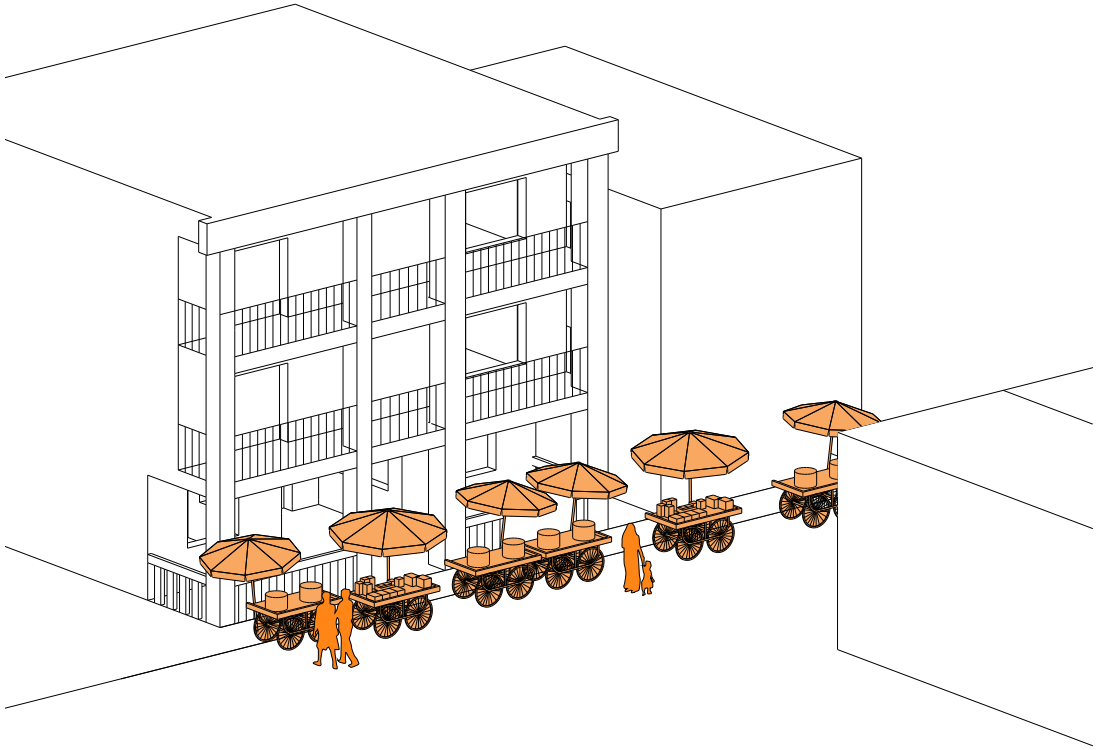


Research / Nala Sopara Village Patterns

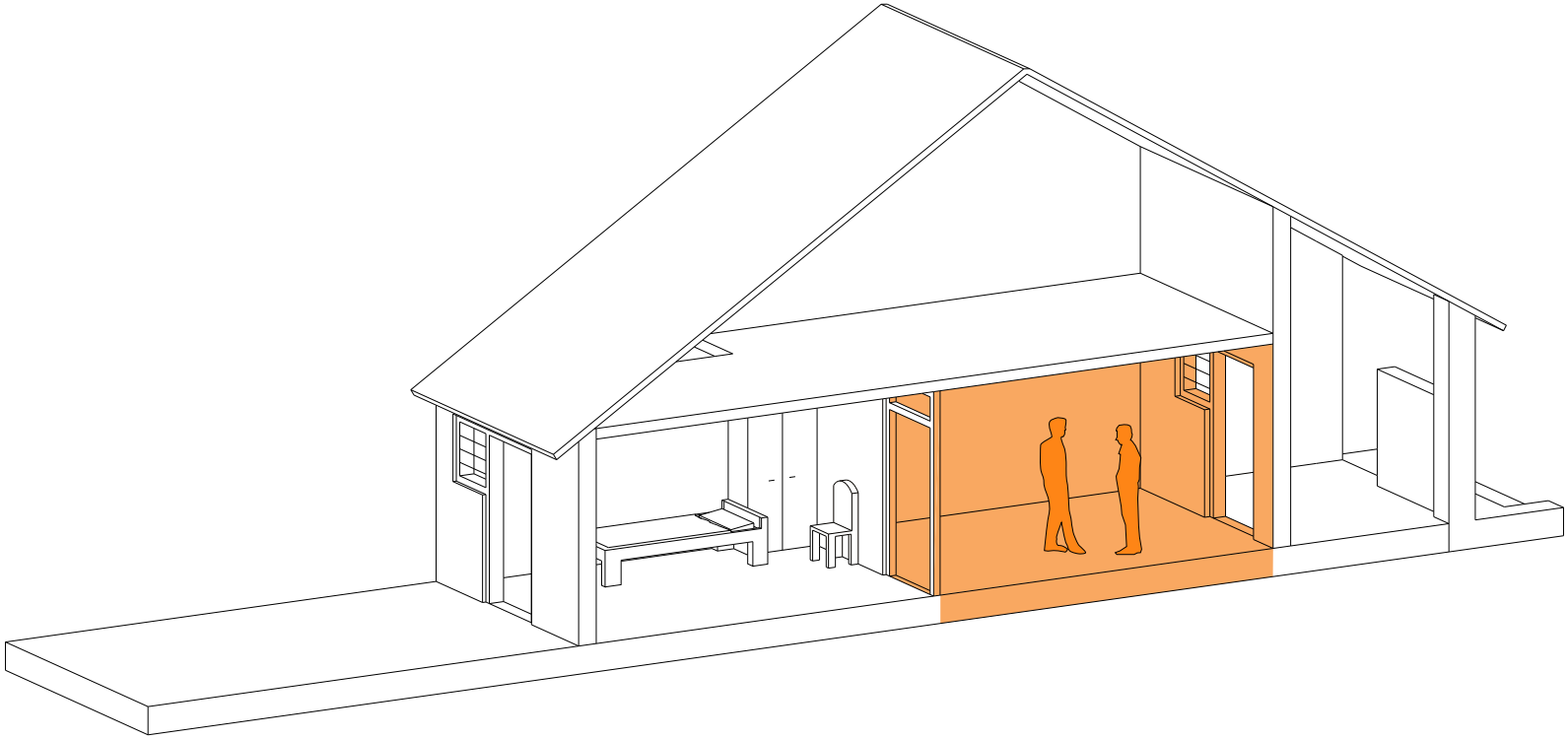


Research / Nala Sopara Village Patterns

space for income generation



Research / Nala Sopara Village Patterns



Research / Nala Sopara Village Patterns

hierarchy in space

open-to-sky-space

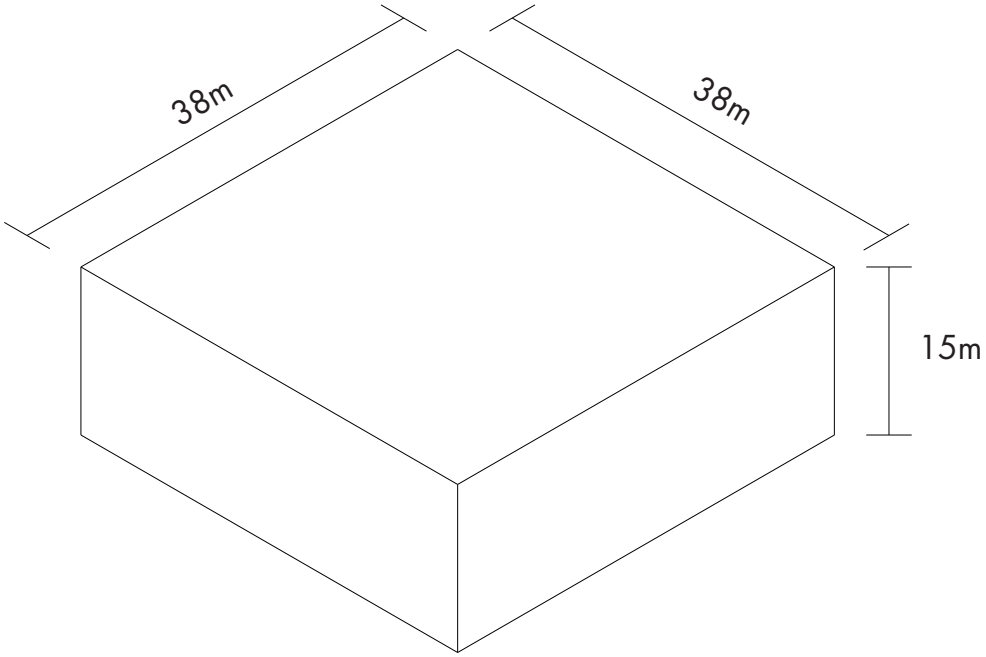
space for income generation

ARCHITECTURAL DESIGN

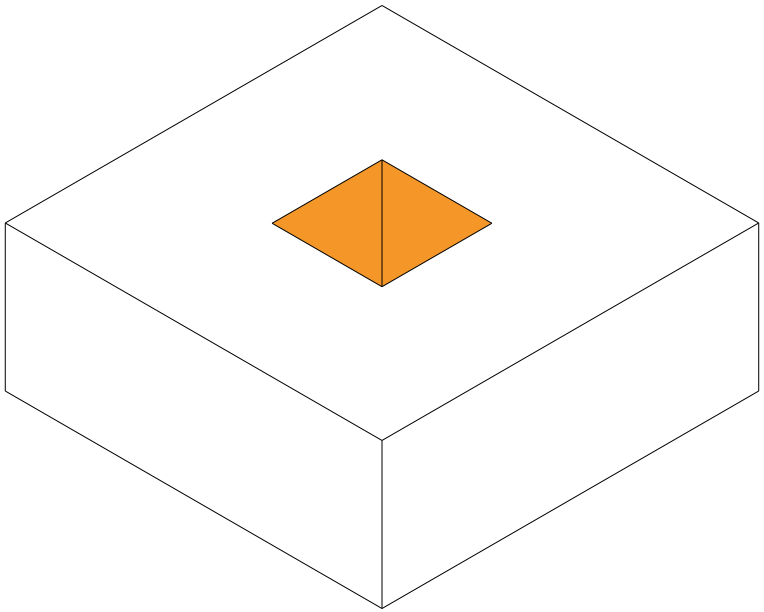
Design / Nala Sopara

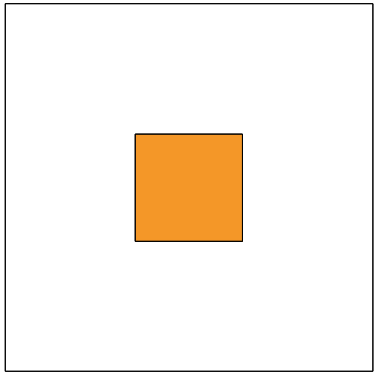
Design / Site Location

Design / Site Location

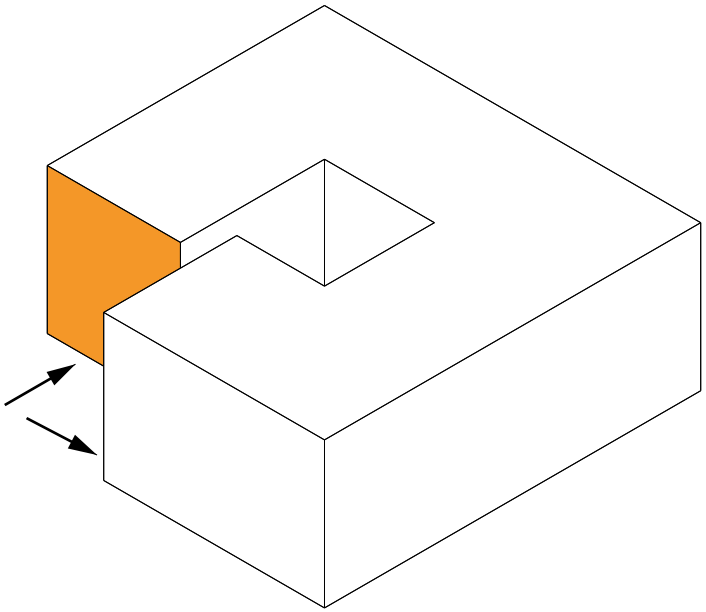


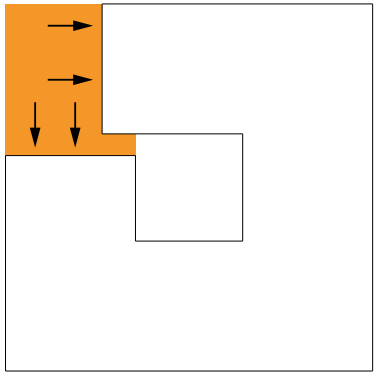
Design / Size



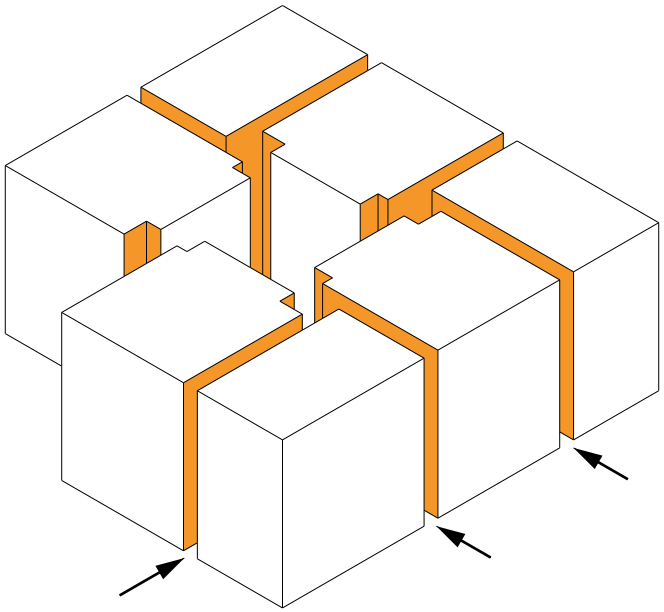


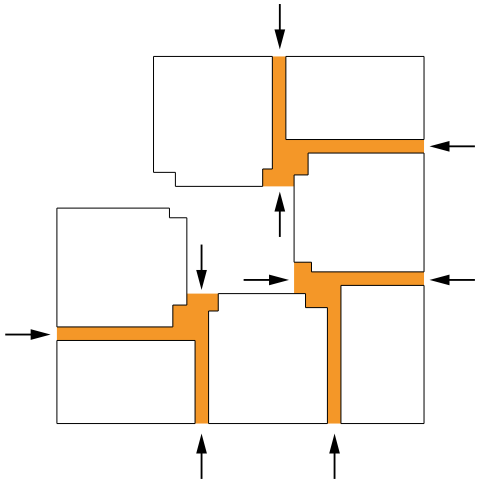
Design / Courtyard



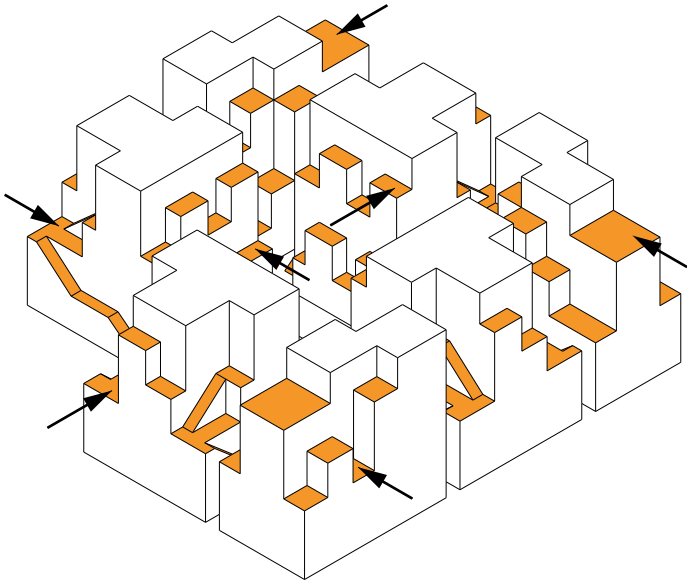


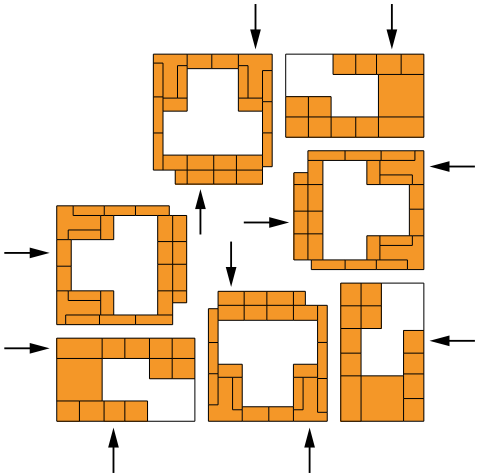
Design / Opening Up Block



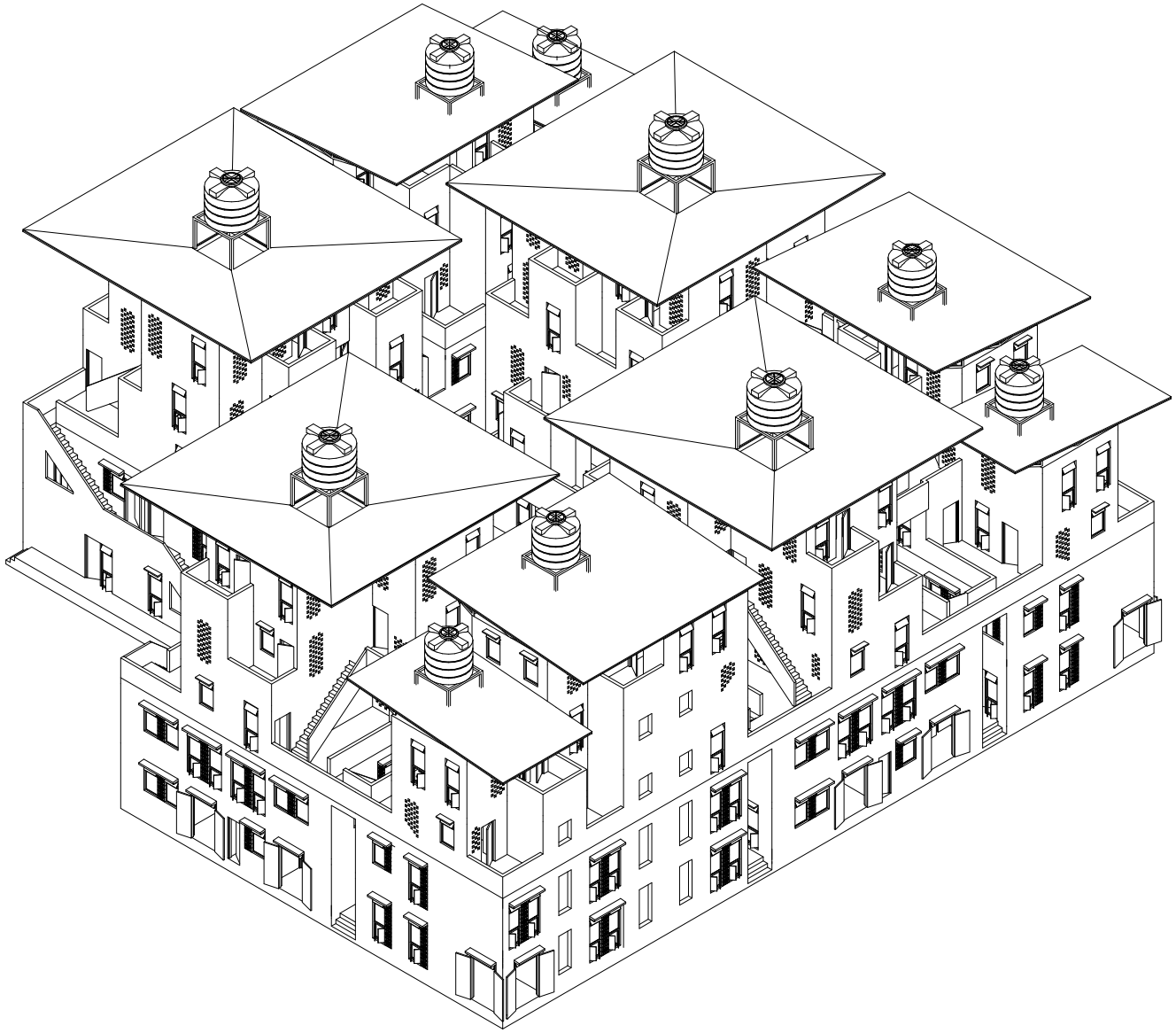


Design / Secondary Courtyards & 'Fingers'





Design / Open-To-Sky-Space



Design

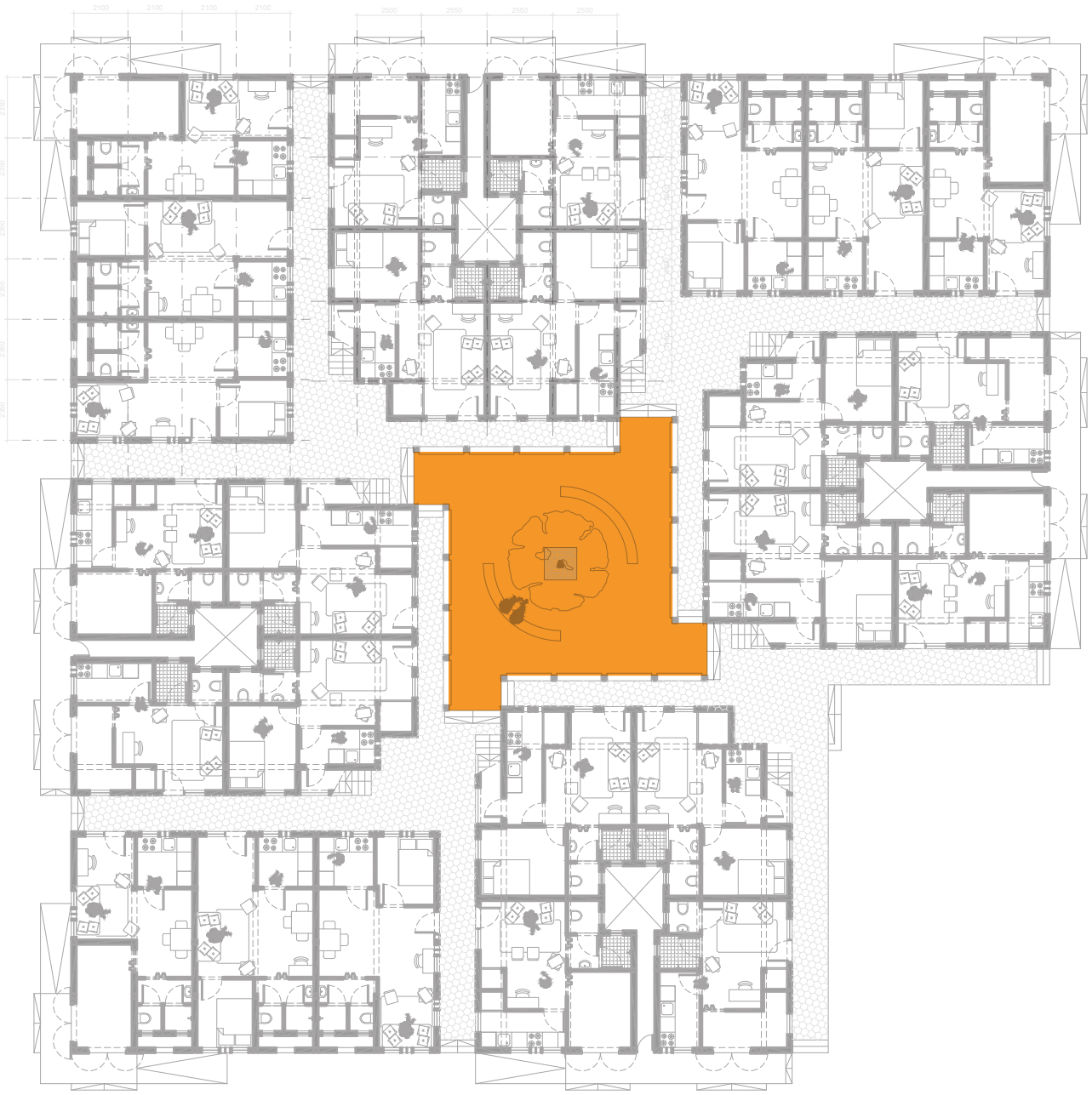
Design / Elevation

Design / Elevation

2 1 0 2.5 5 7.5 10m

SCALE

Design / Cluster



2 1 0 2.5 5 7.5 10m

SCALE

Design / Central Courtyard Cluster

2 1 0 2.5 5 7.5 10m

SCALE

Design / Opening Up Cluster

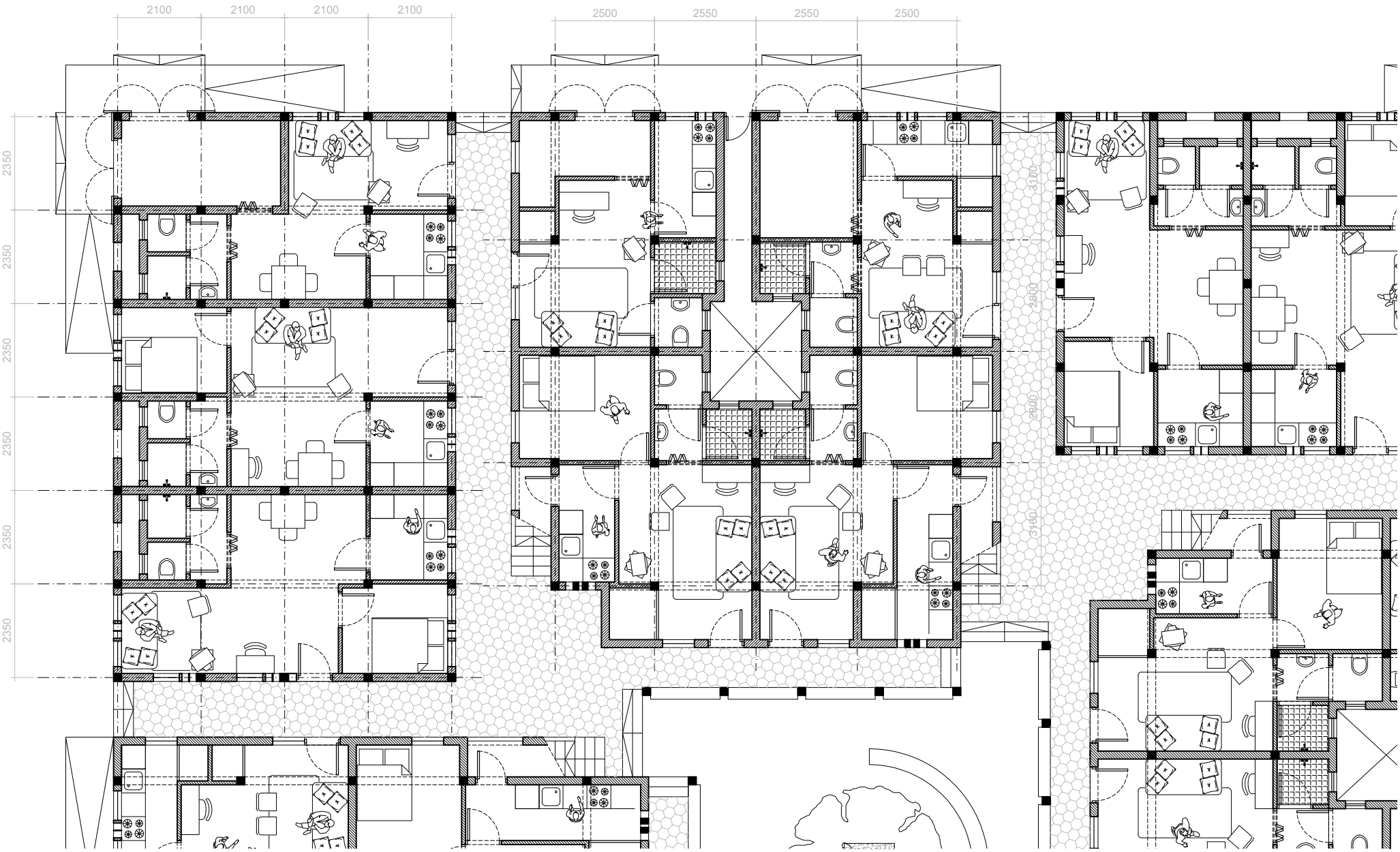
Design / Secondary Courtyard's & 'Fingers'

Design / Floorplans

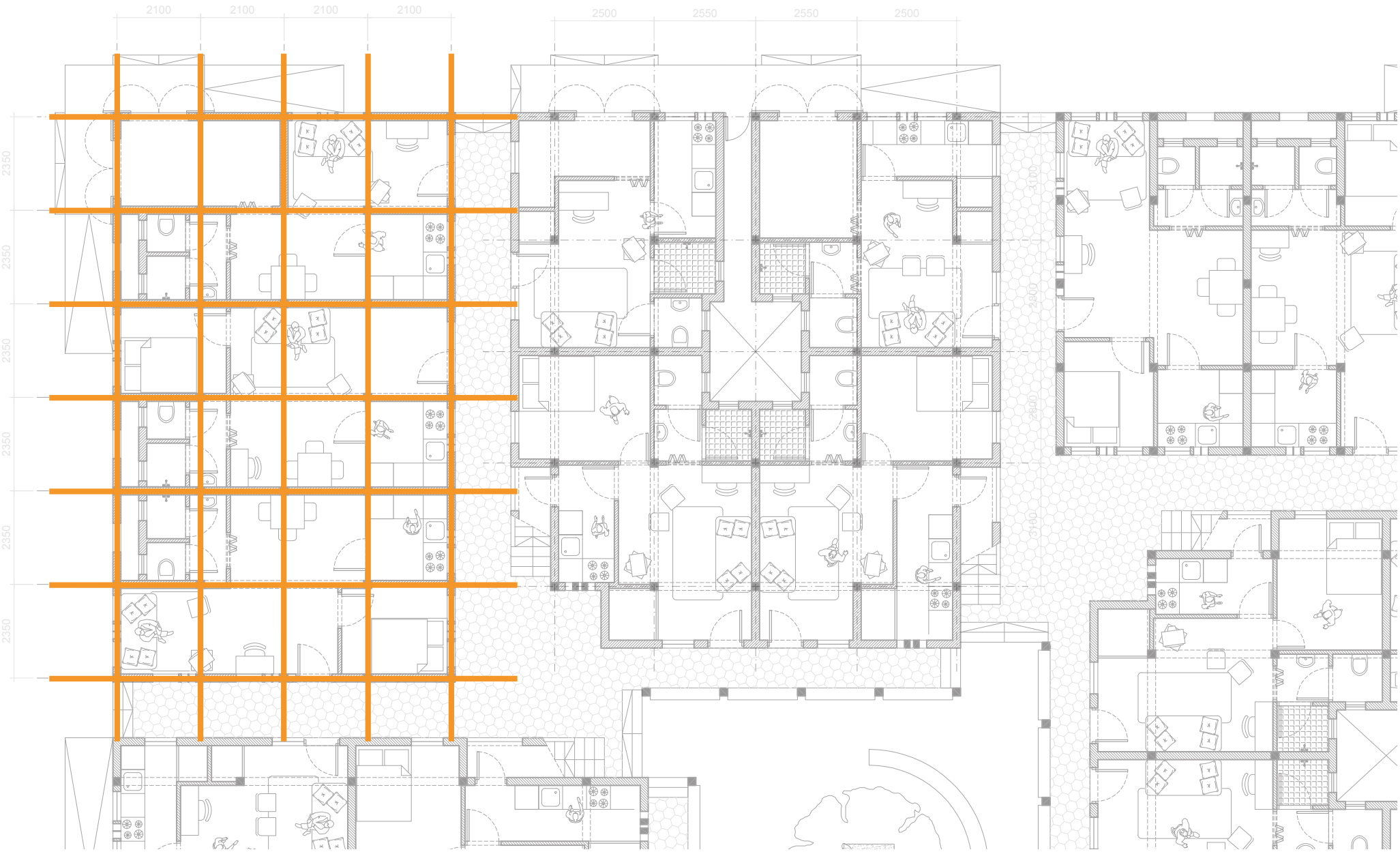
2 1 0 2.5 5 7.5 10m

SCALE

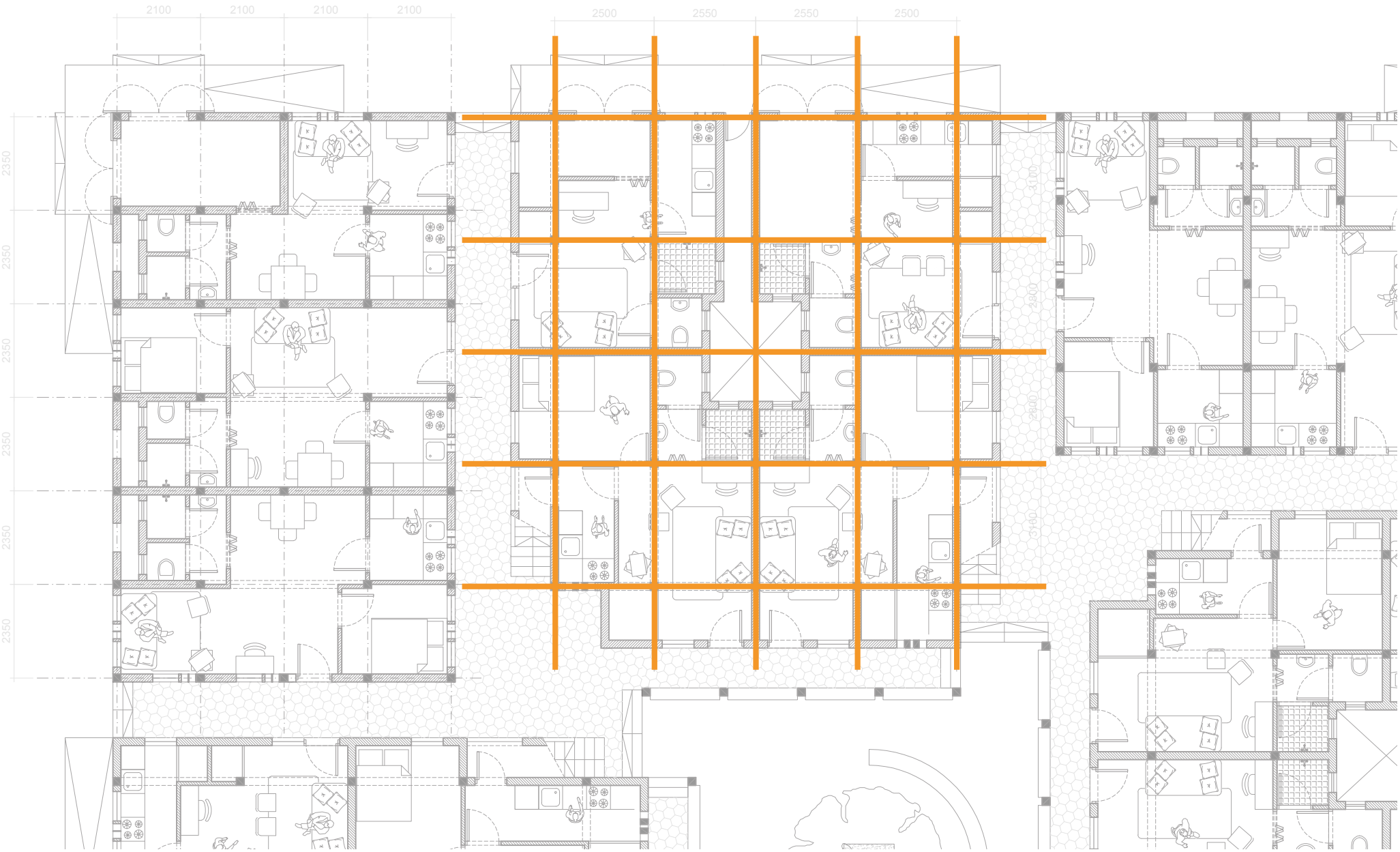
Design / Rotating Buildings



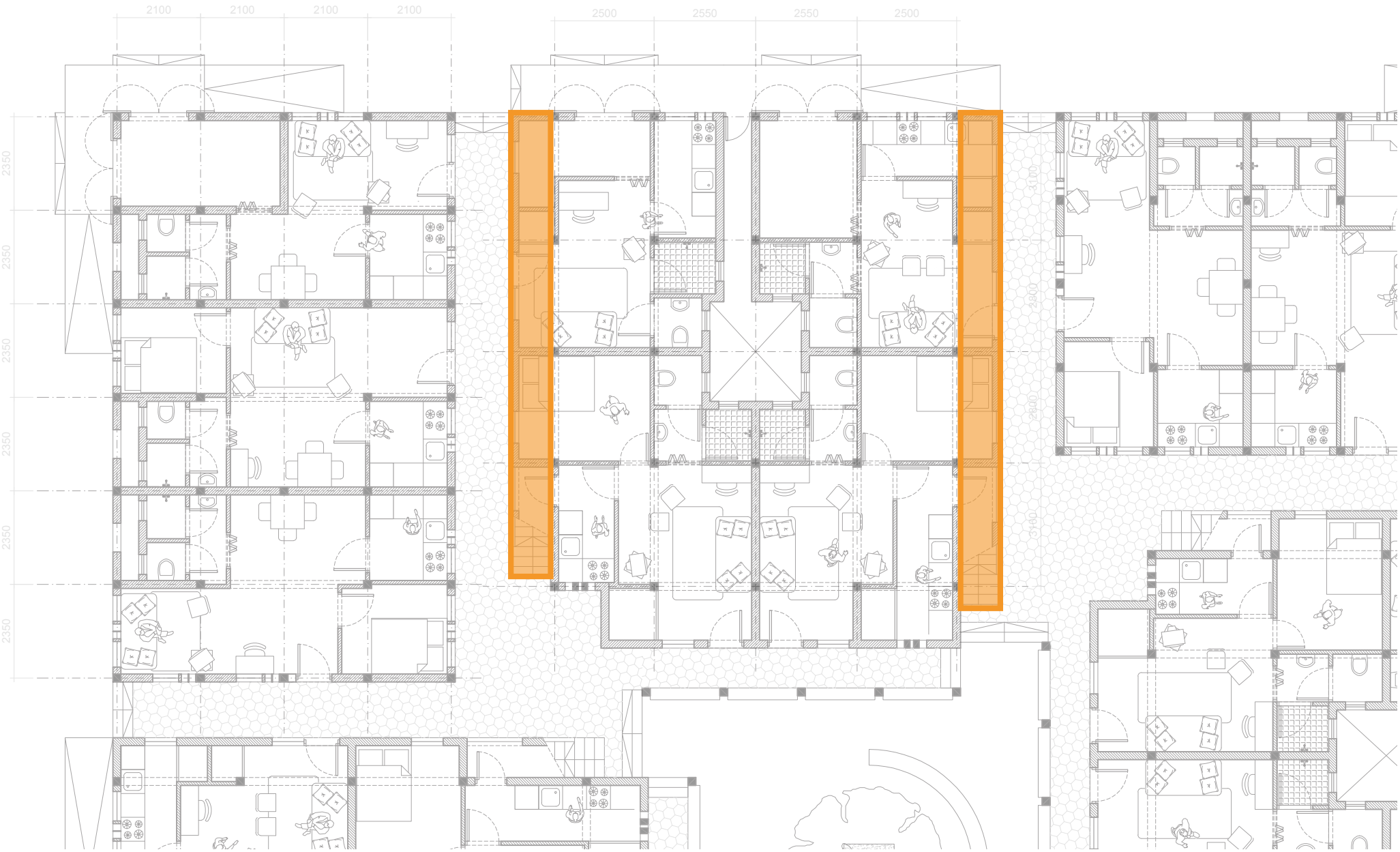
Design / GF Plan



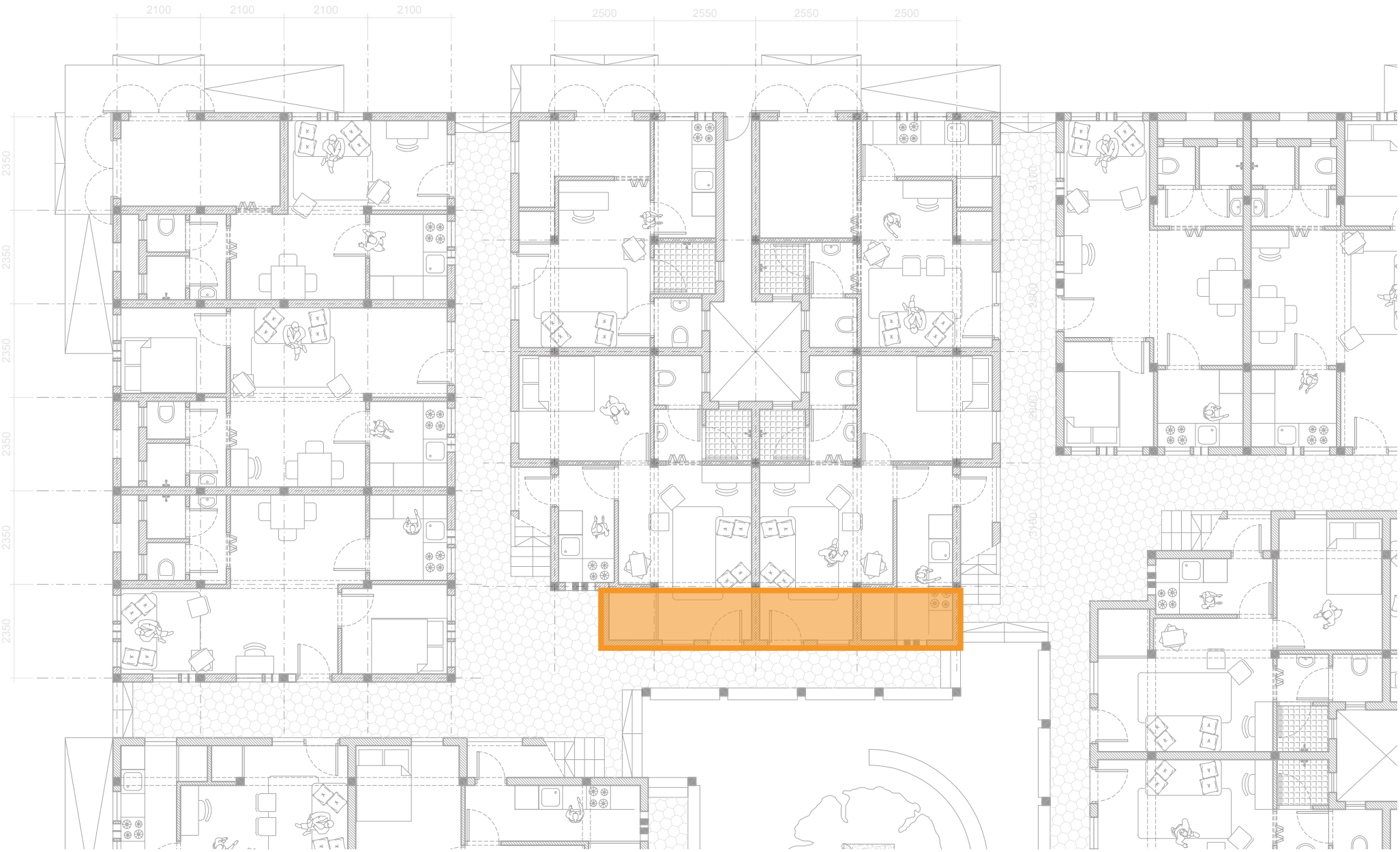
Design / GF Plan - Grid



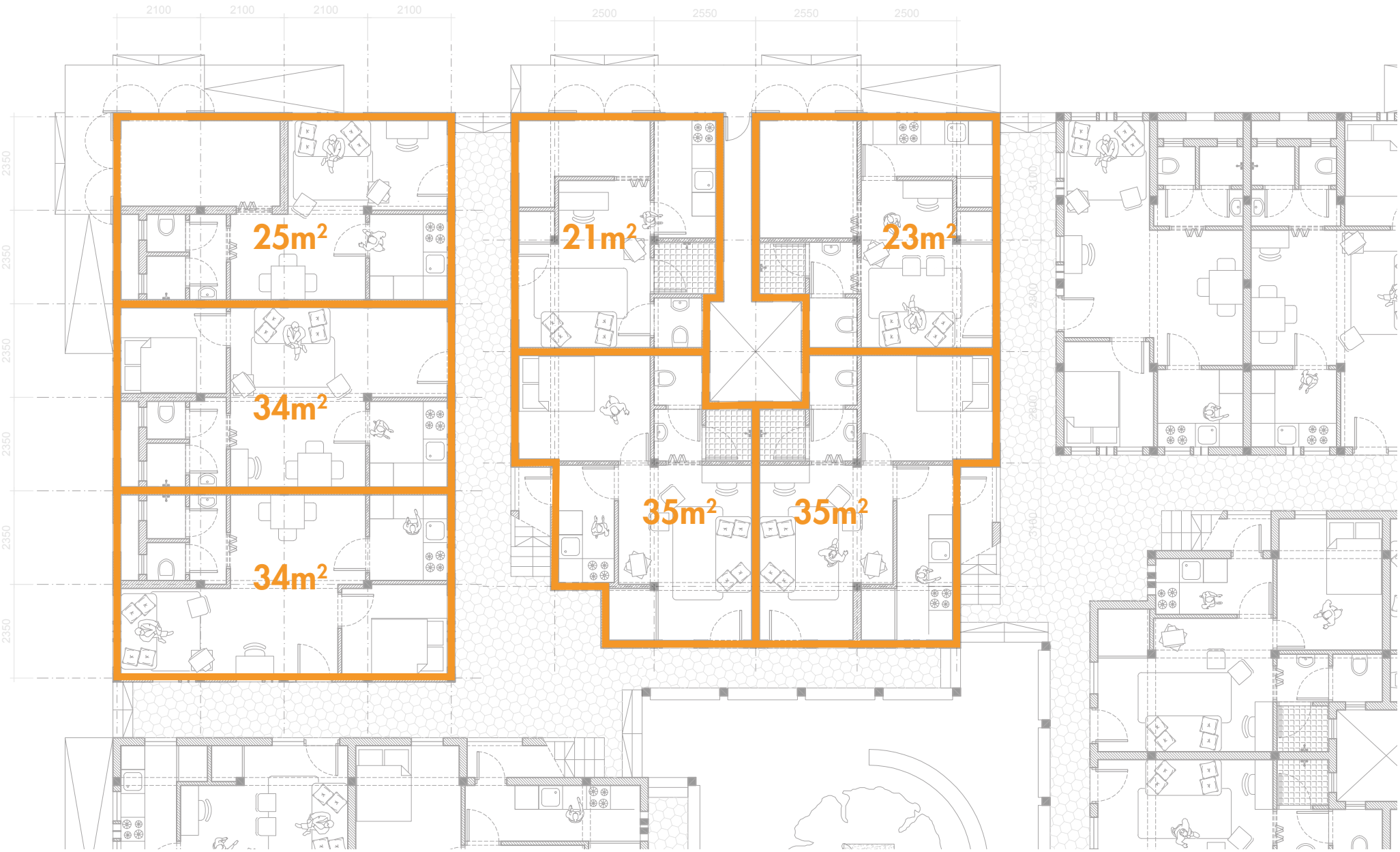
Design / GF Plan - Grid



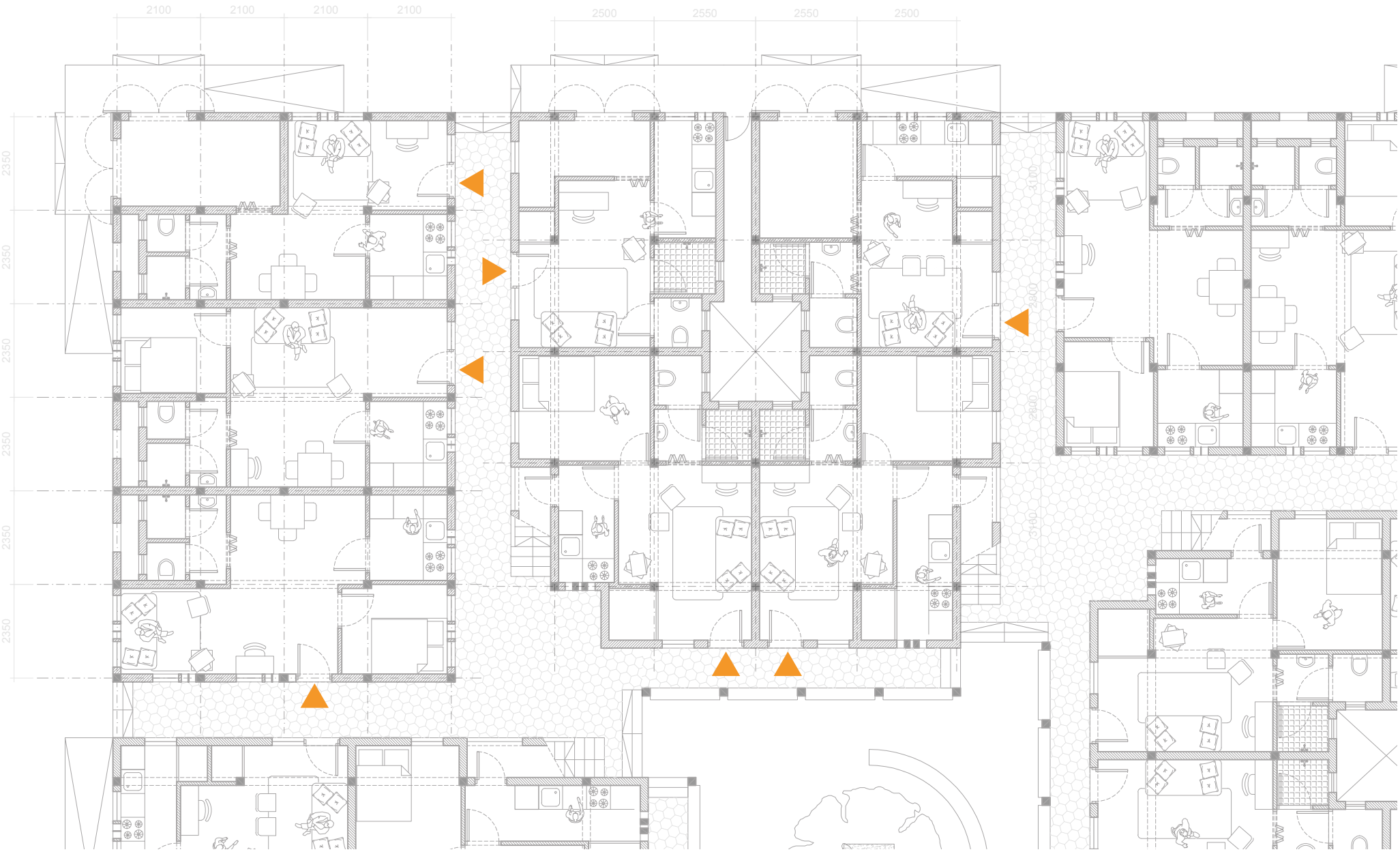
Design / GF Plan - Circulation Zones



Design / GF Plan - Brick Zone

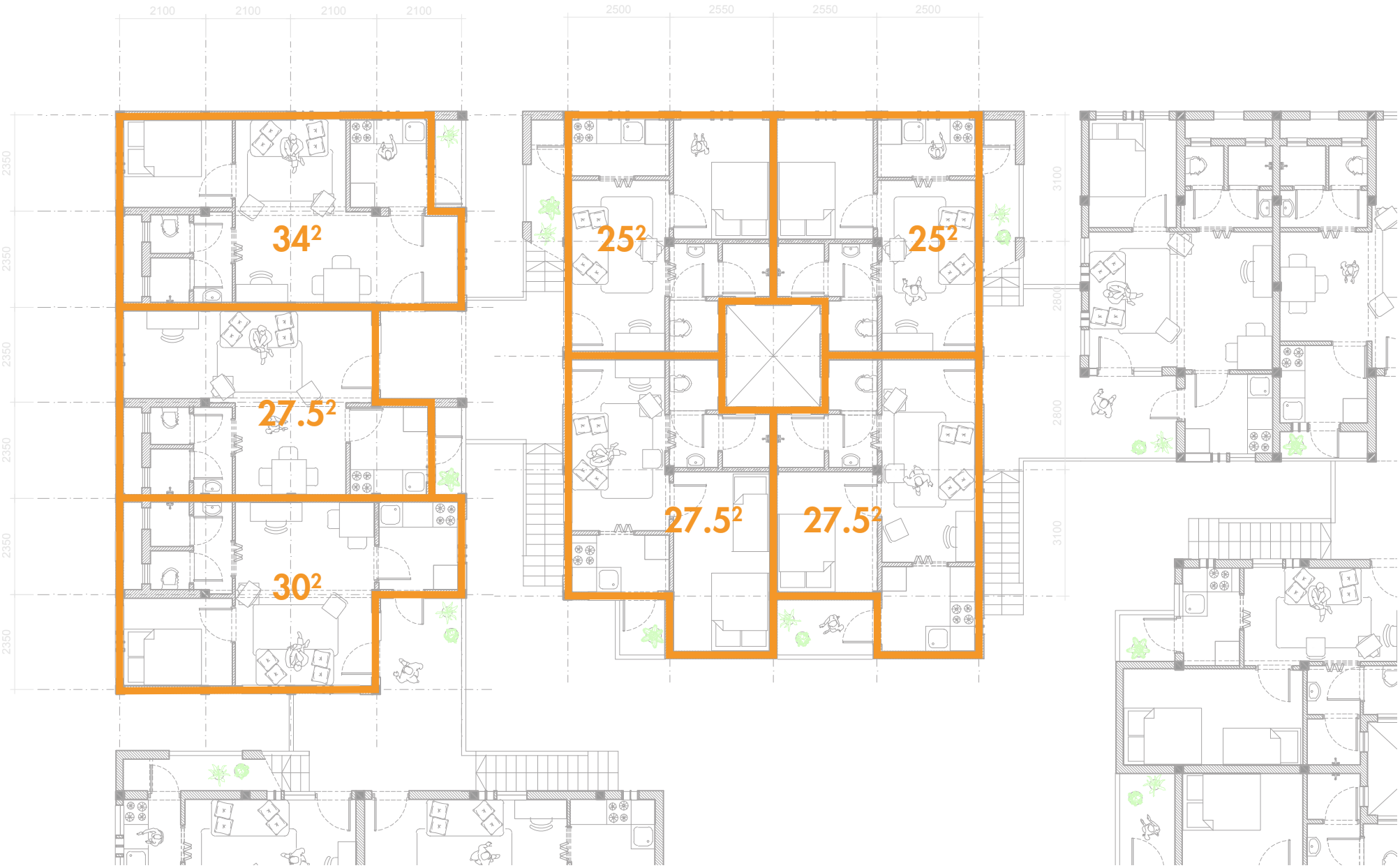


Design / GF Plan - Dwellings



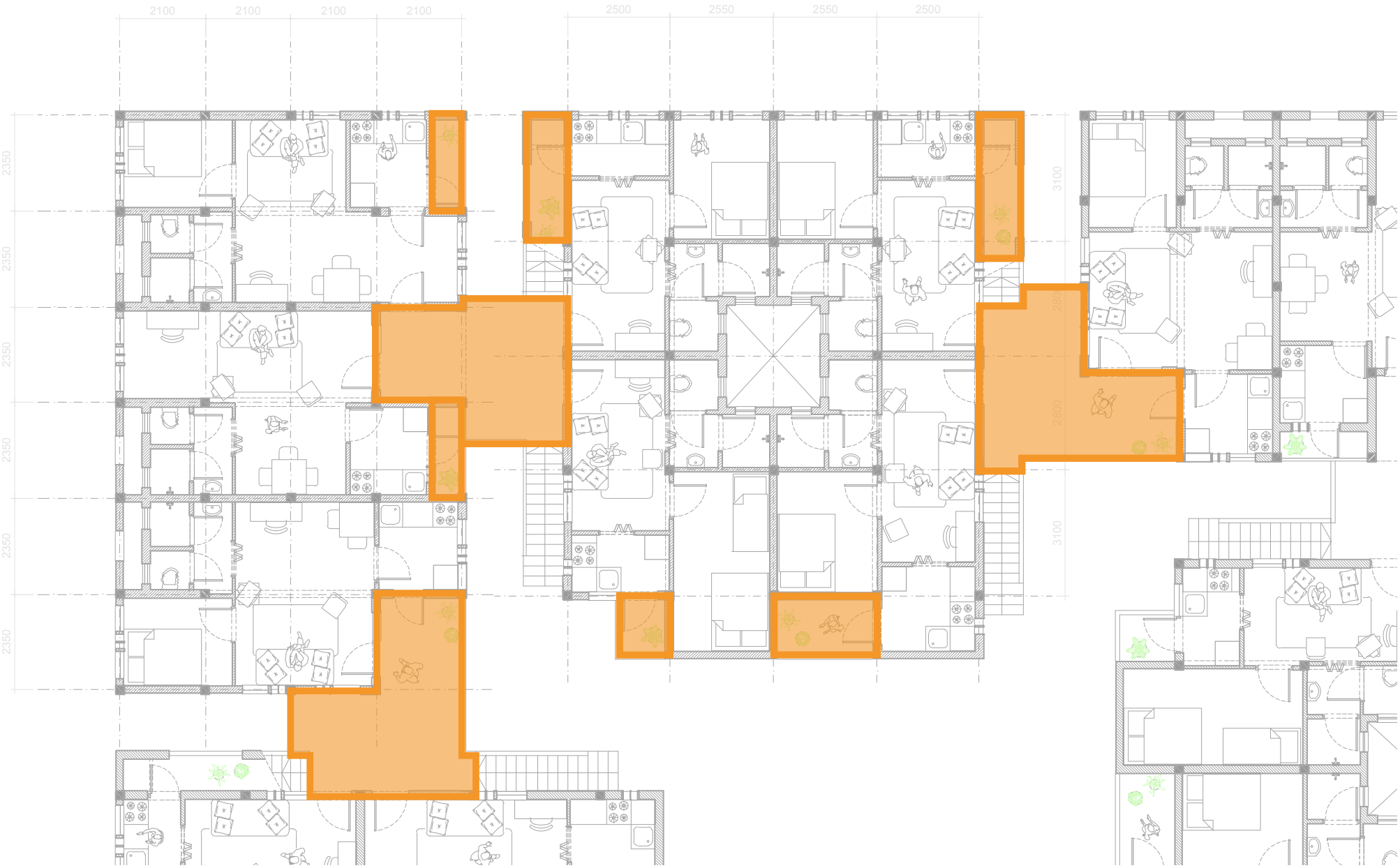
Design / GF Plan - Access

Design / 1F Plan - Stairs



Design / 1F Plan - Dwellings

Design / 1F Plan - Access

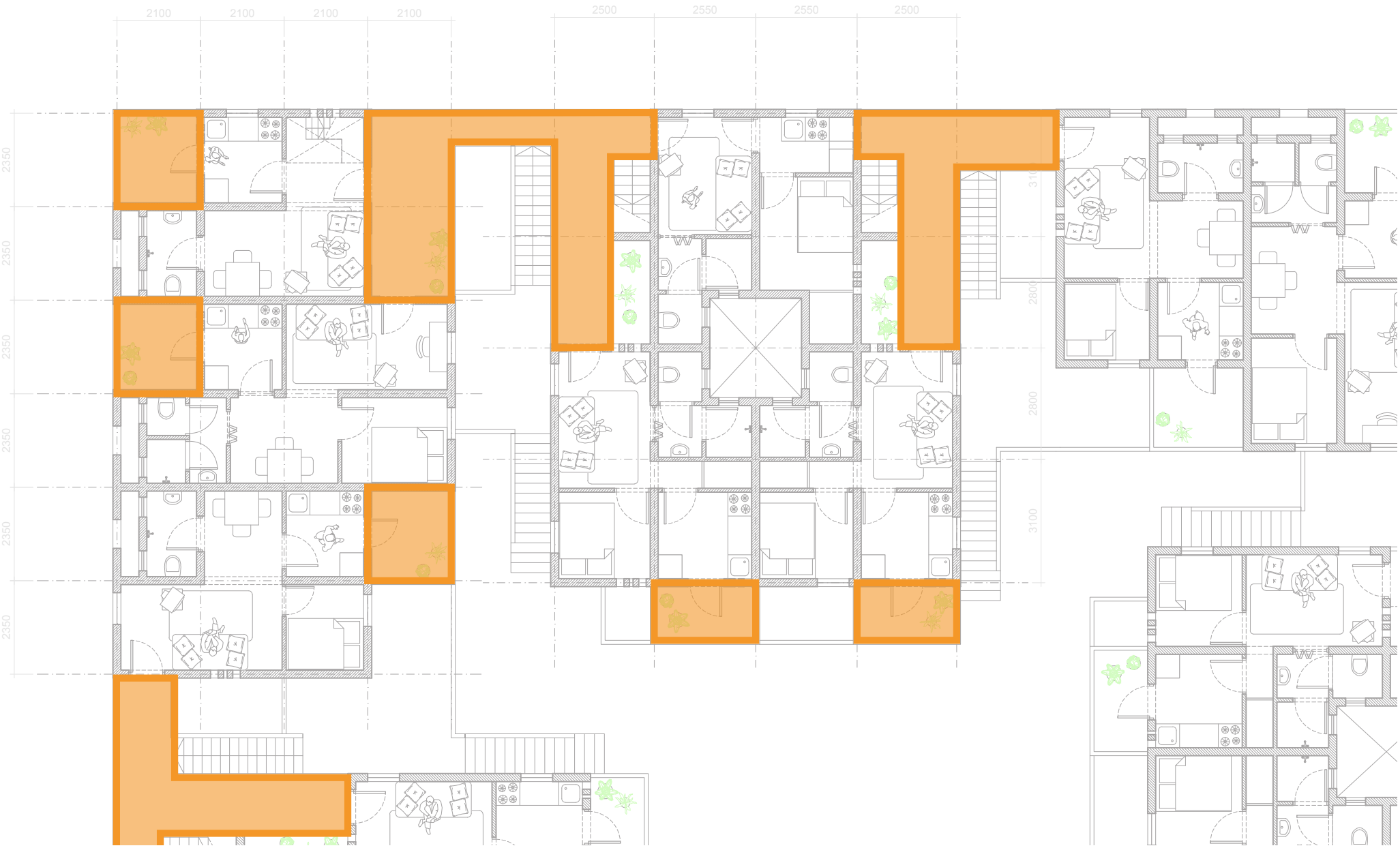


Design / 1F Plan - 'Open-To-Sky-Space'

Design / 2F Plan - Stairs

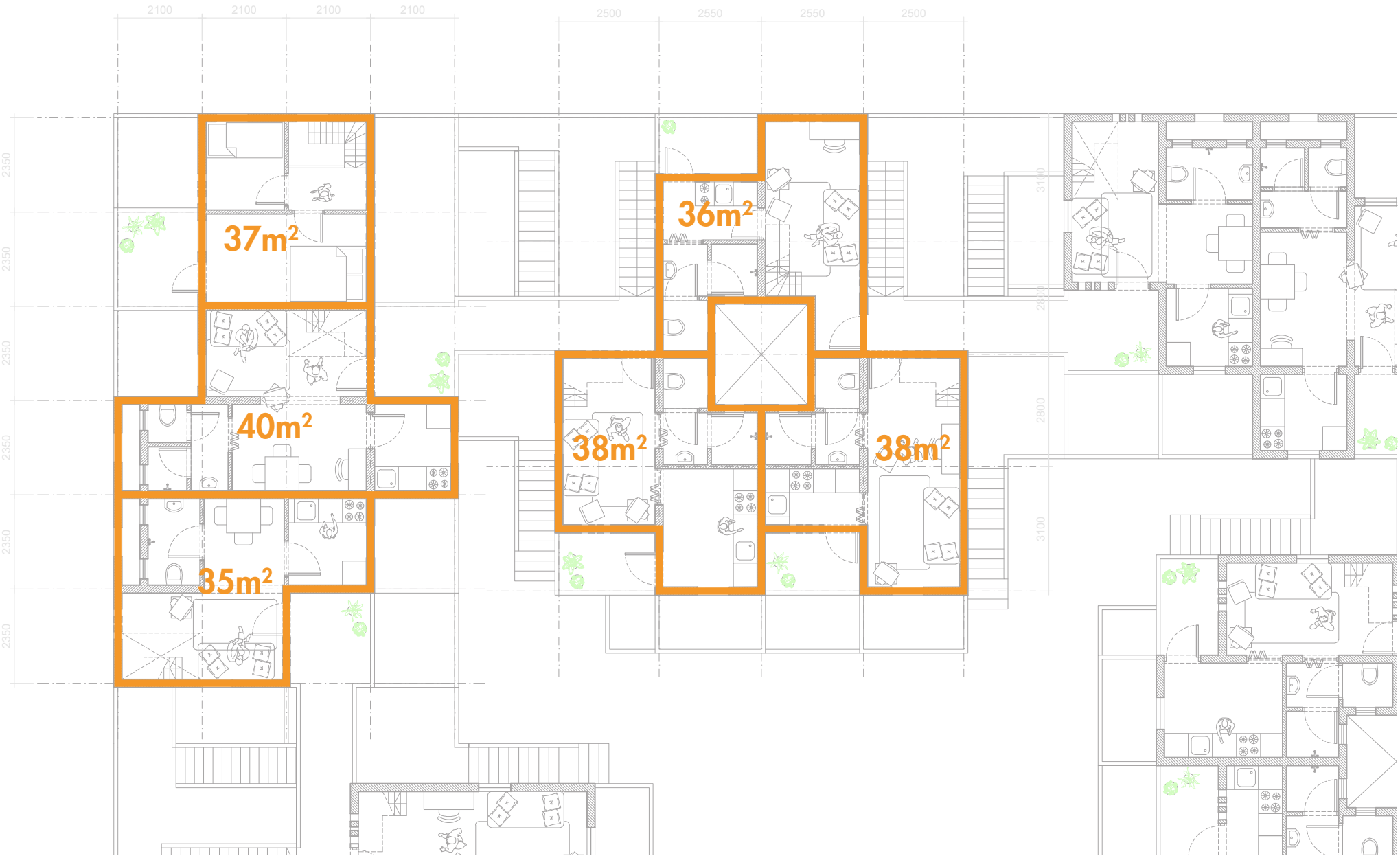
Design / 2F Plan - Dwellings

Design / 2F Plan - Access



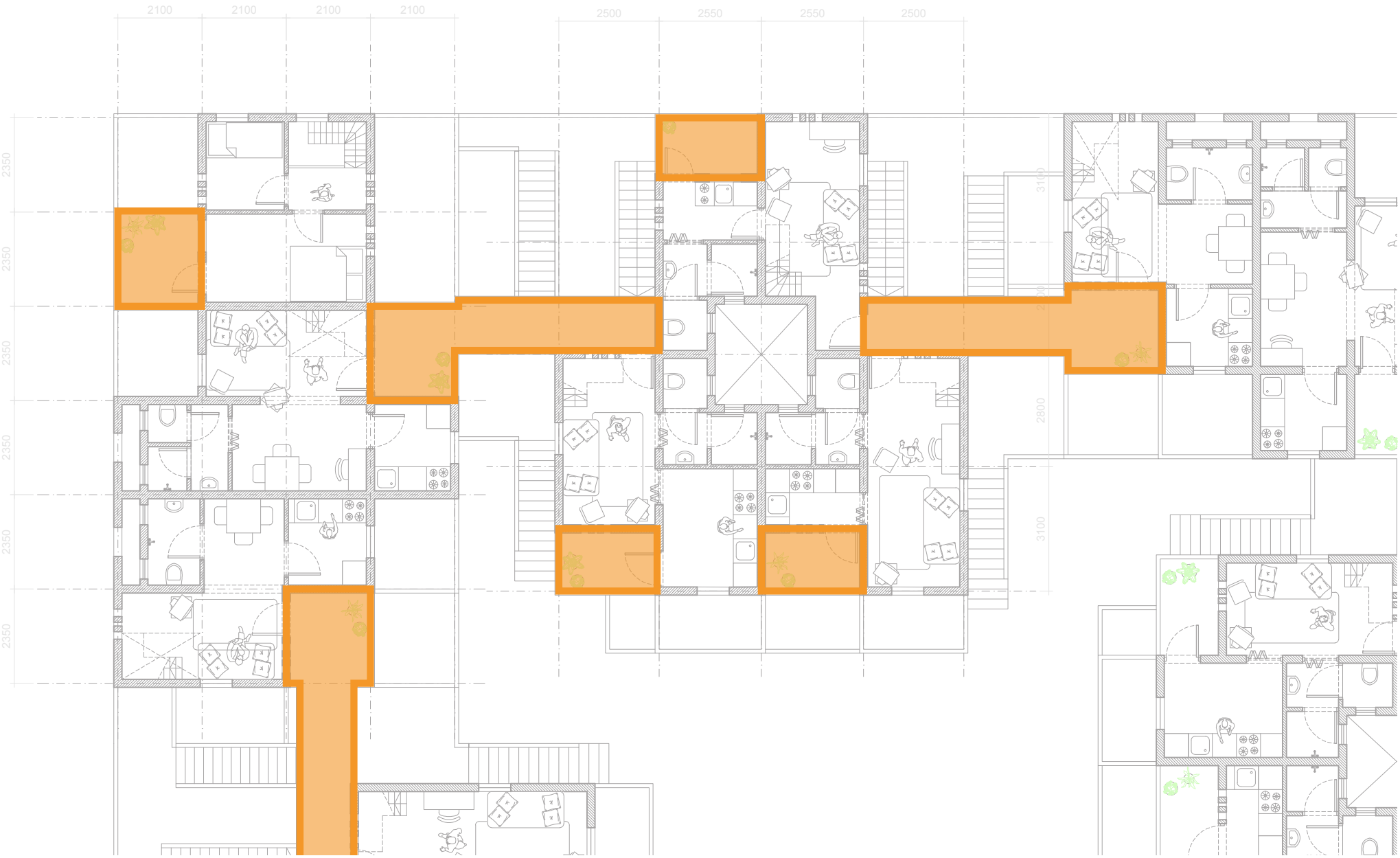
Design / 2F Plan - 'Open-To-Sky-Space'

Design / 3F Plan - Stairs



Design / 3F Plan - Dwellings

Design / 3F Plan - Access

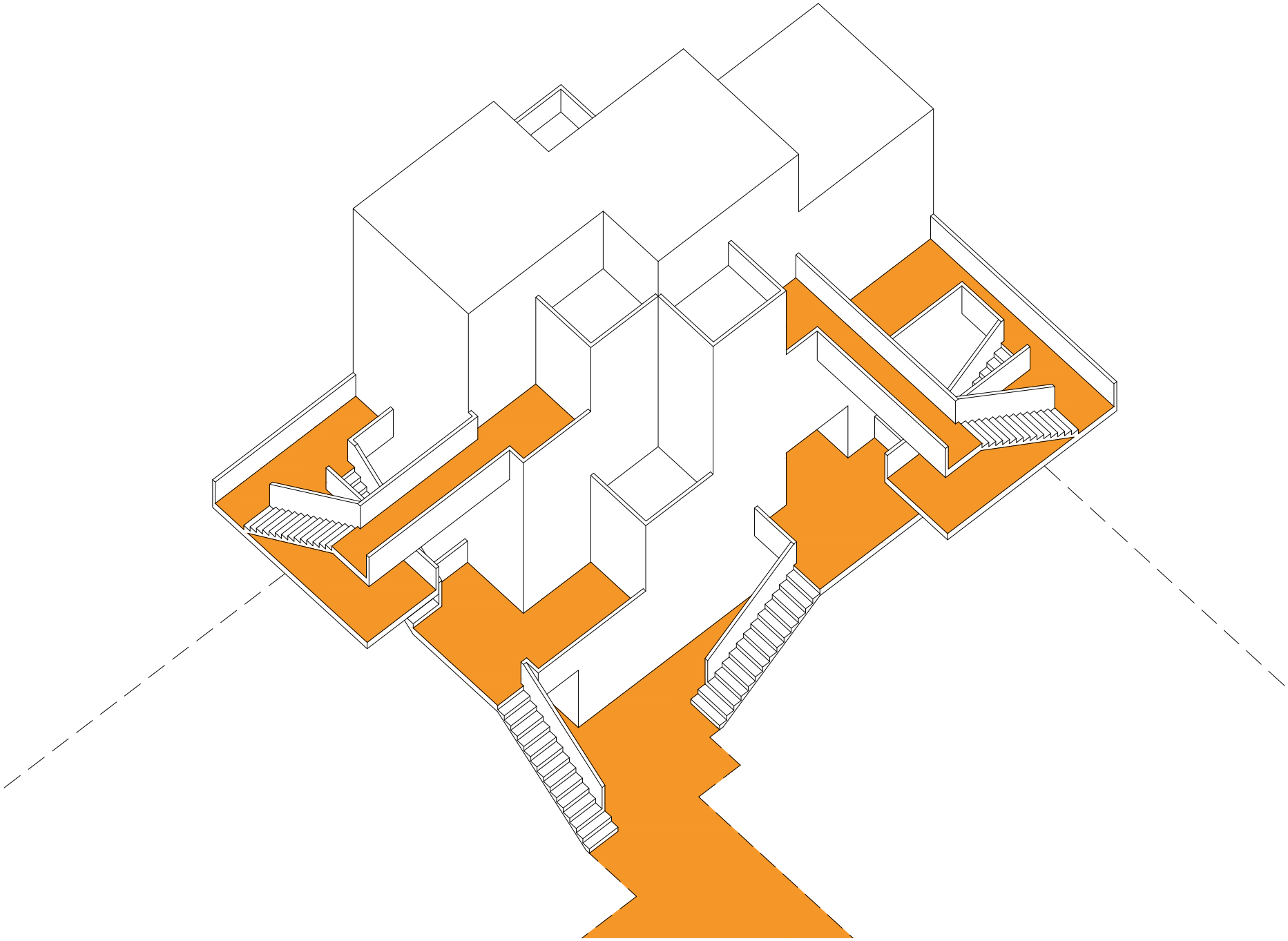


Design / 3F Plan - 'Open-To-Sky-Space'

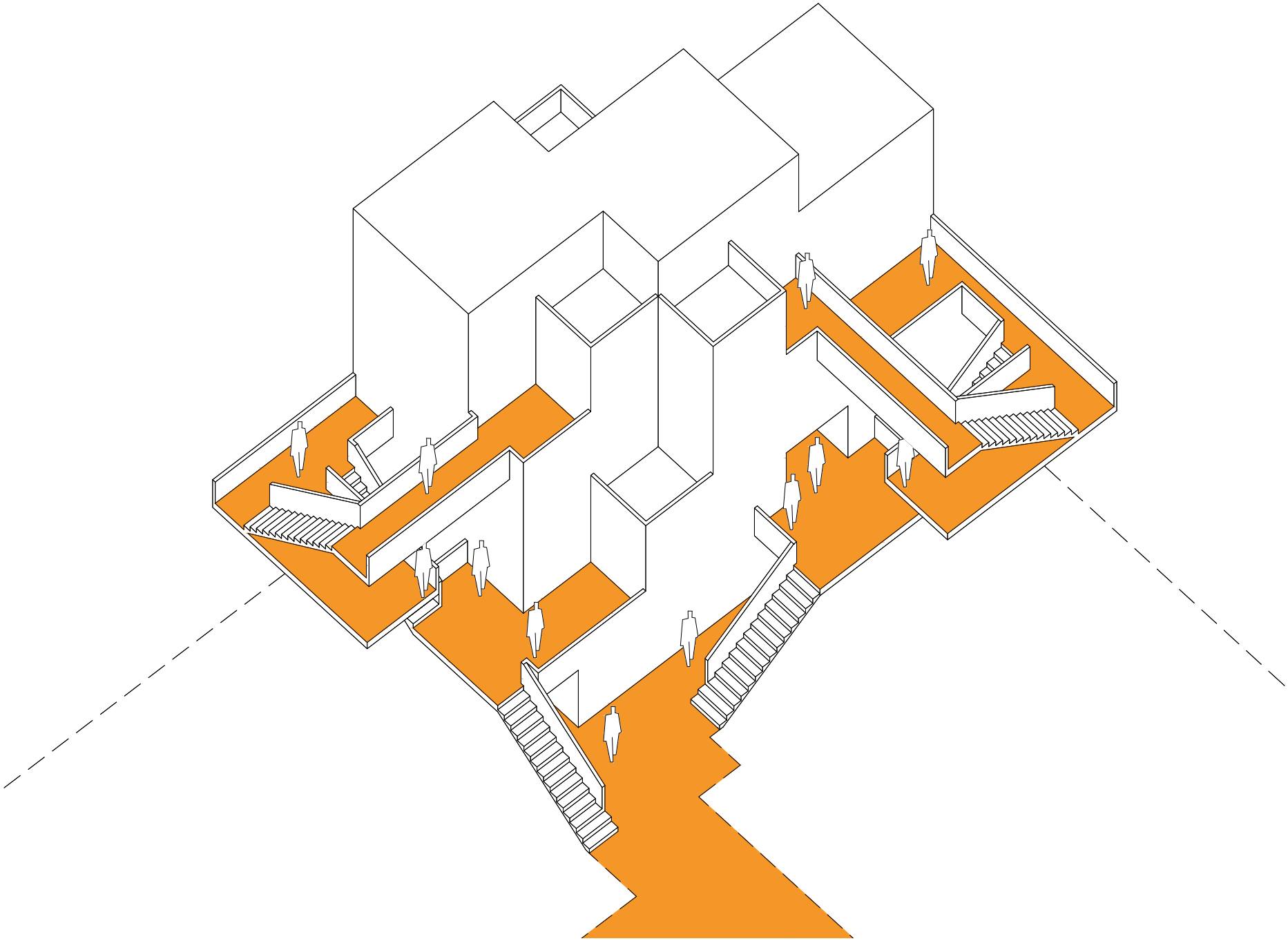
Design / 4F Plan - Stairs

Design / 4F Plan - Dwellings

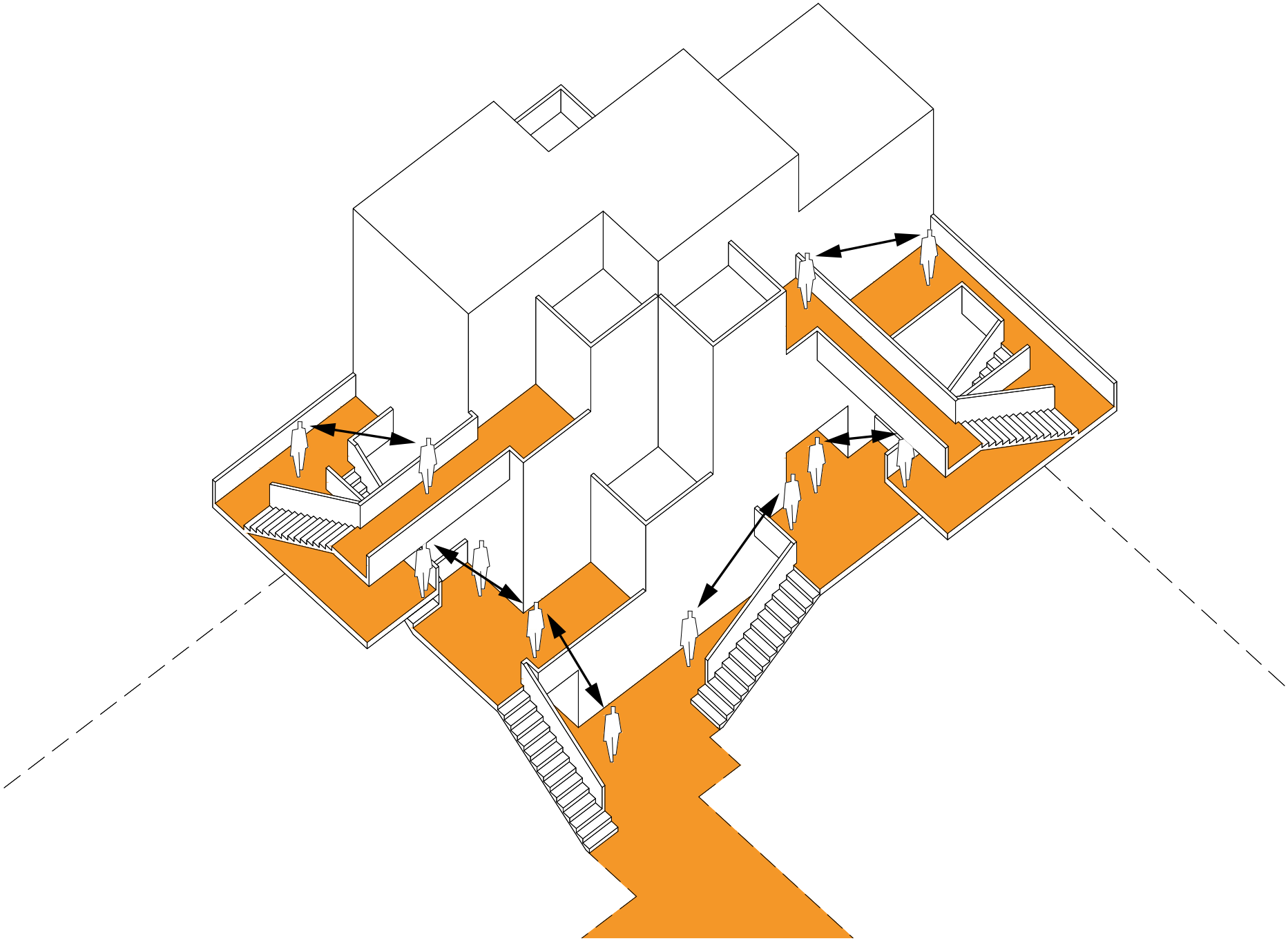
Design / 4F Plan - 'Open-To-Sky-Space'



Design / Vertical Courtyards



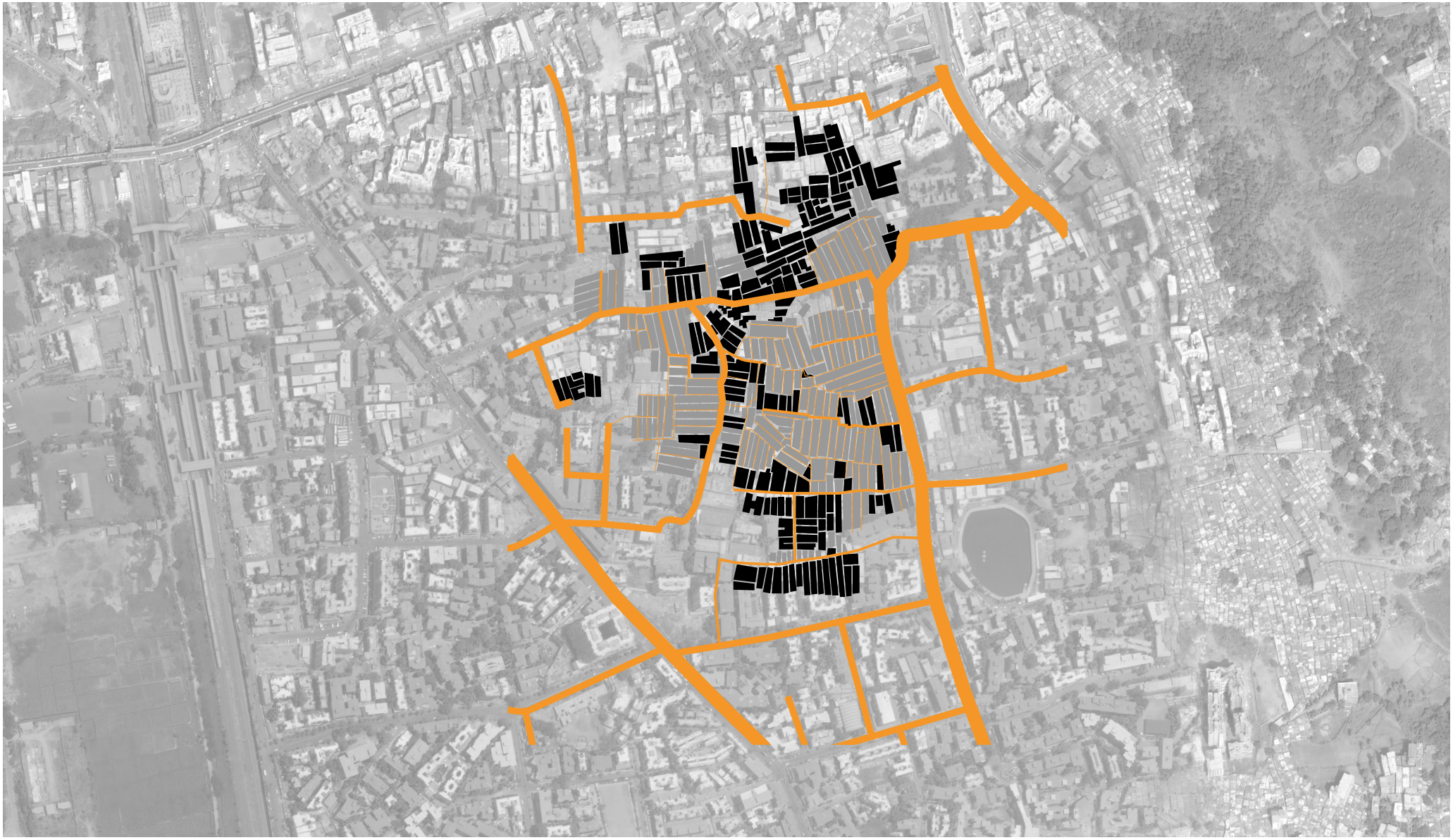
Design / Vertical Courtyards



Design / Vertical Courtyards

URBAN DESIGN

Urban Design / Site Location

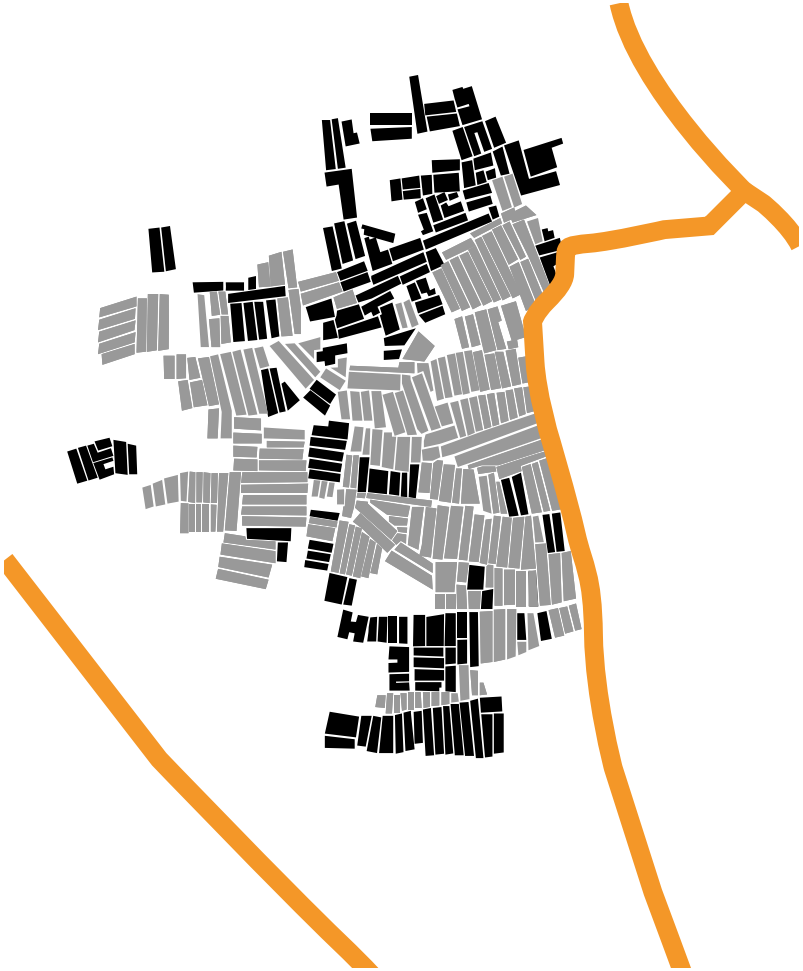


Urban Design / Site Morphology

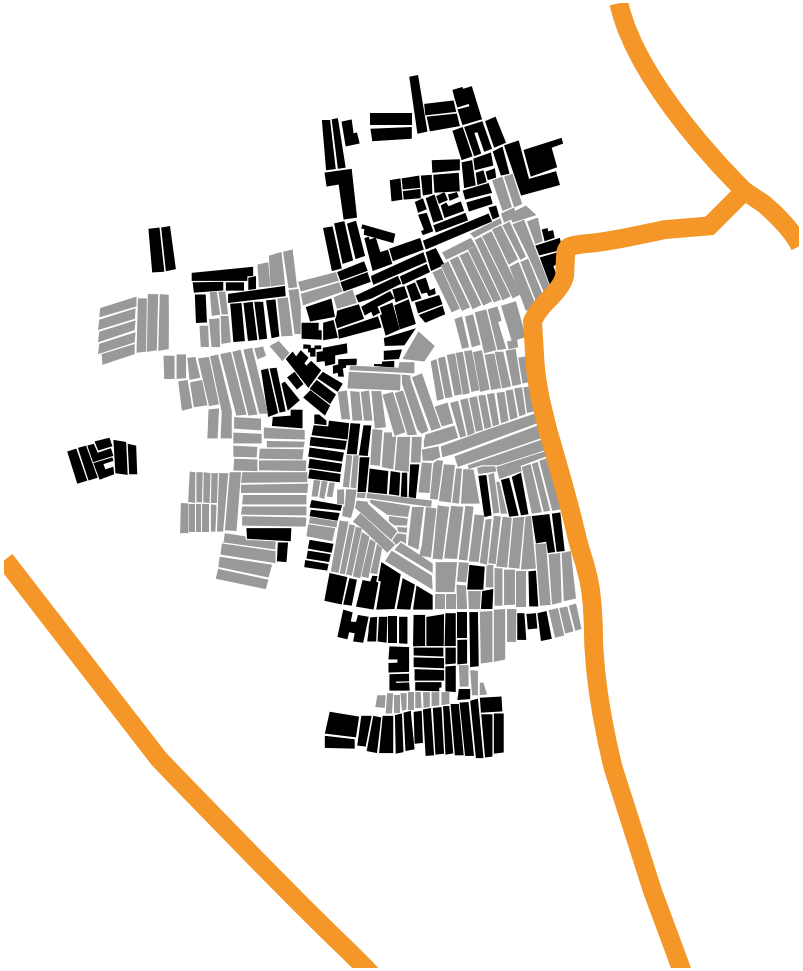
Urban Design / Site 2004

Urban Design / Site 2006

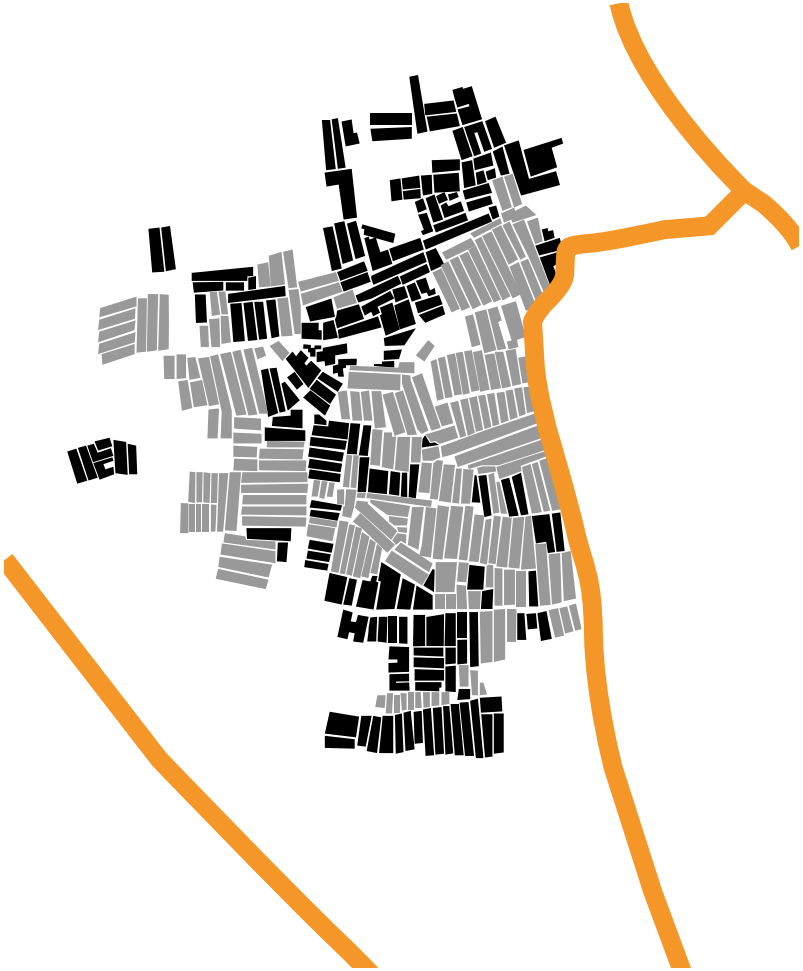
Urban Design / Site 2009



Urban Design / Site 2012

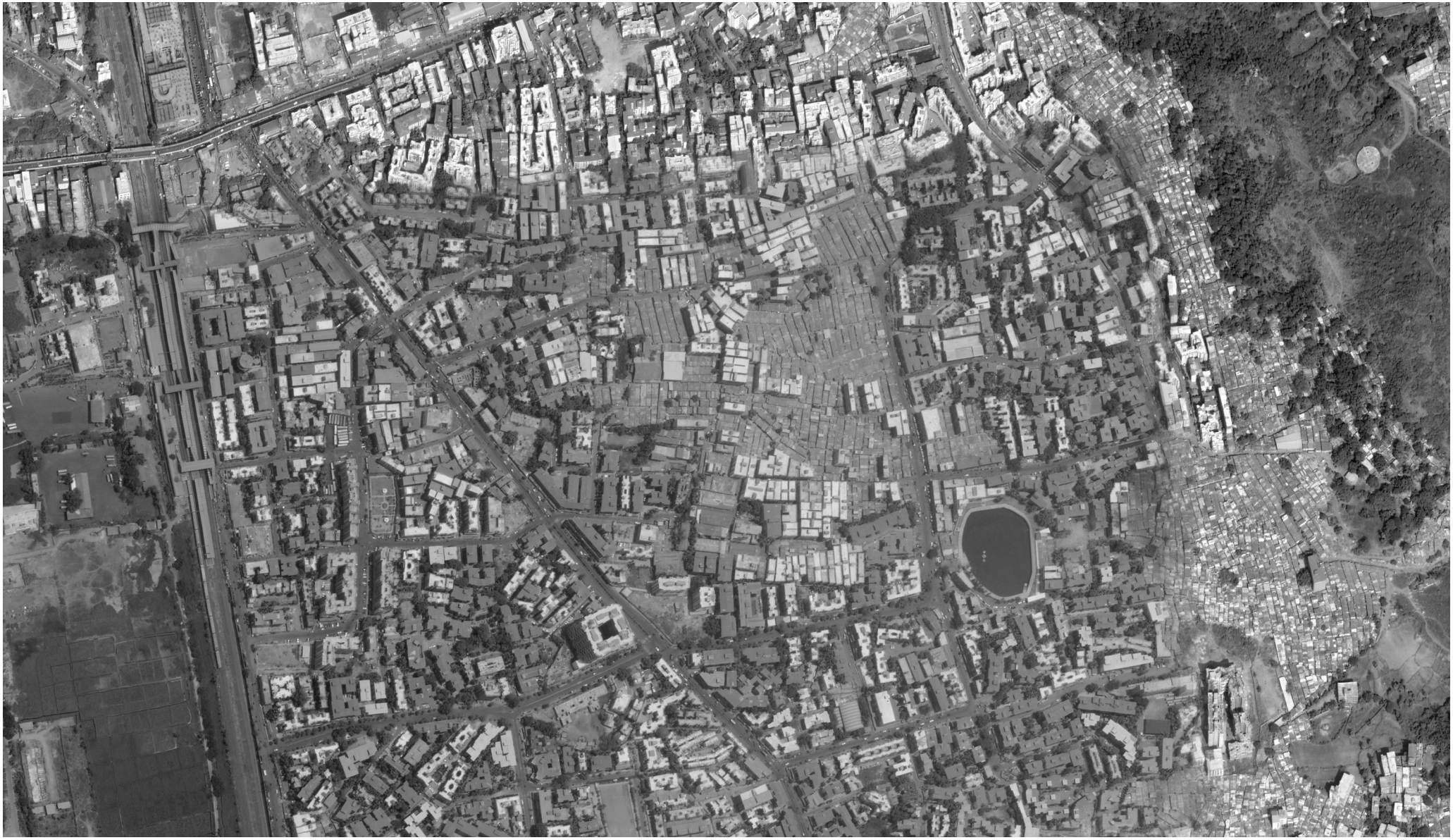


Urban Design / Site 2015

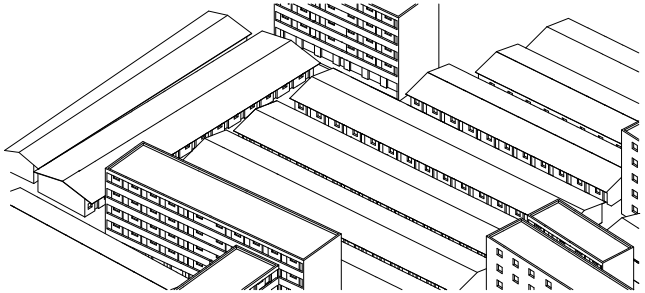


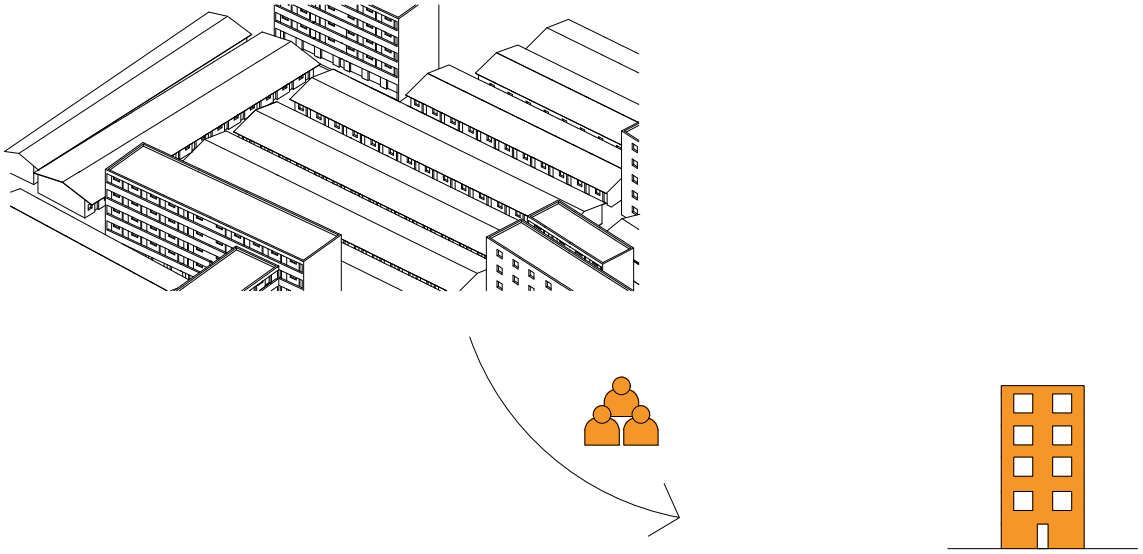
Urban Design / Site 2017

Urban Design / 3 Clusters

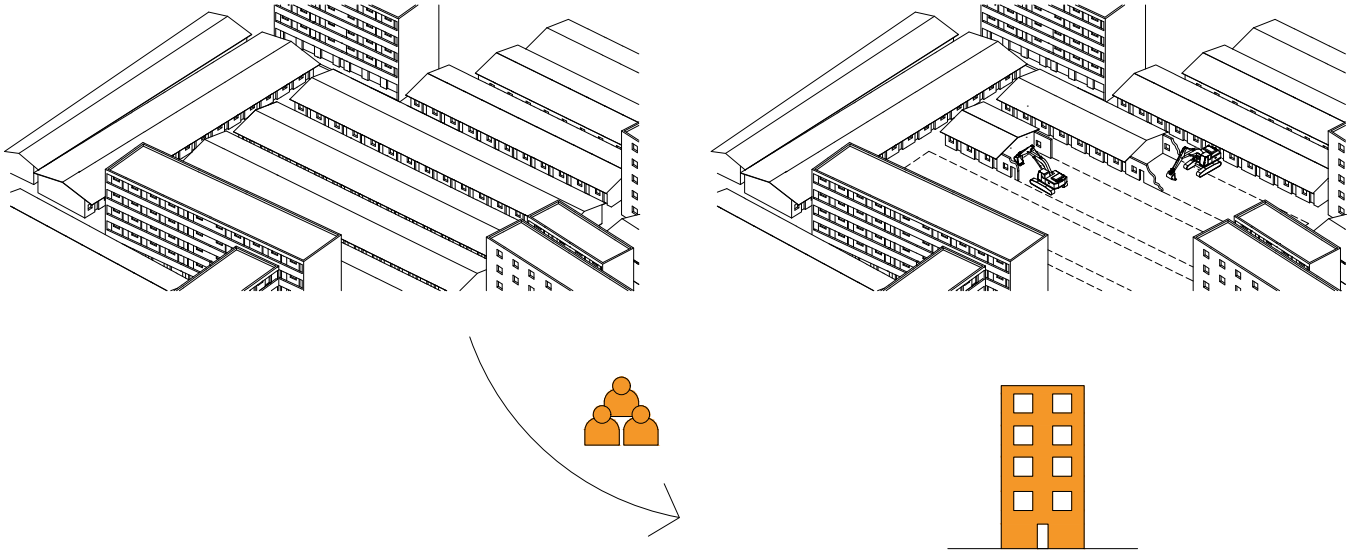


Urban Design / Location Clusters

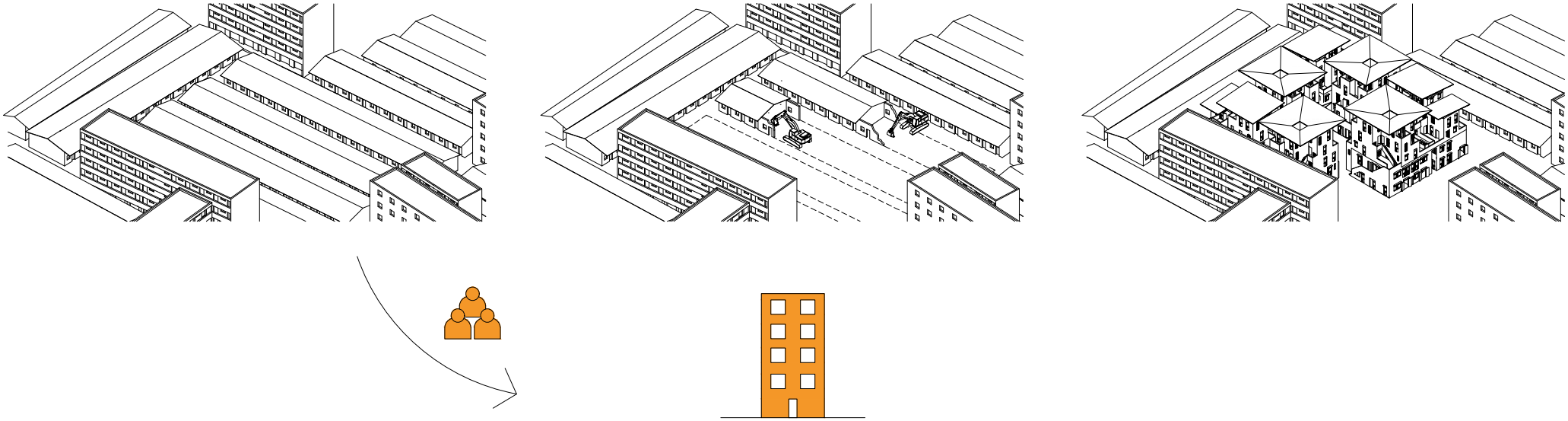




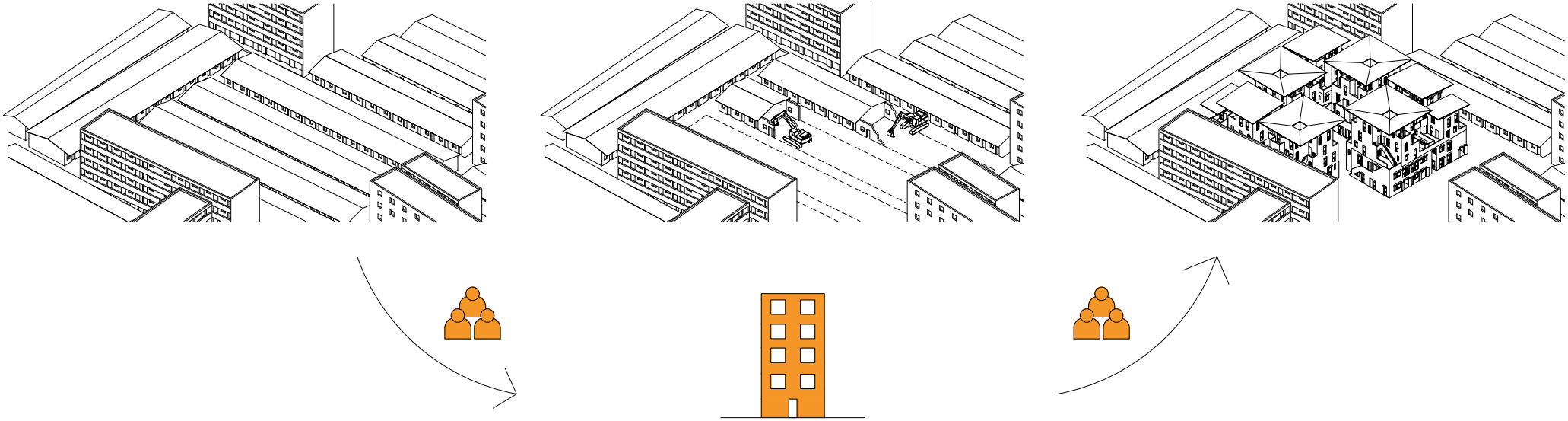
Urban Design / Development Strategy



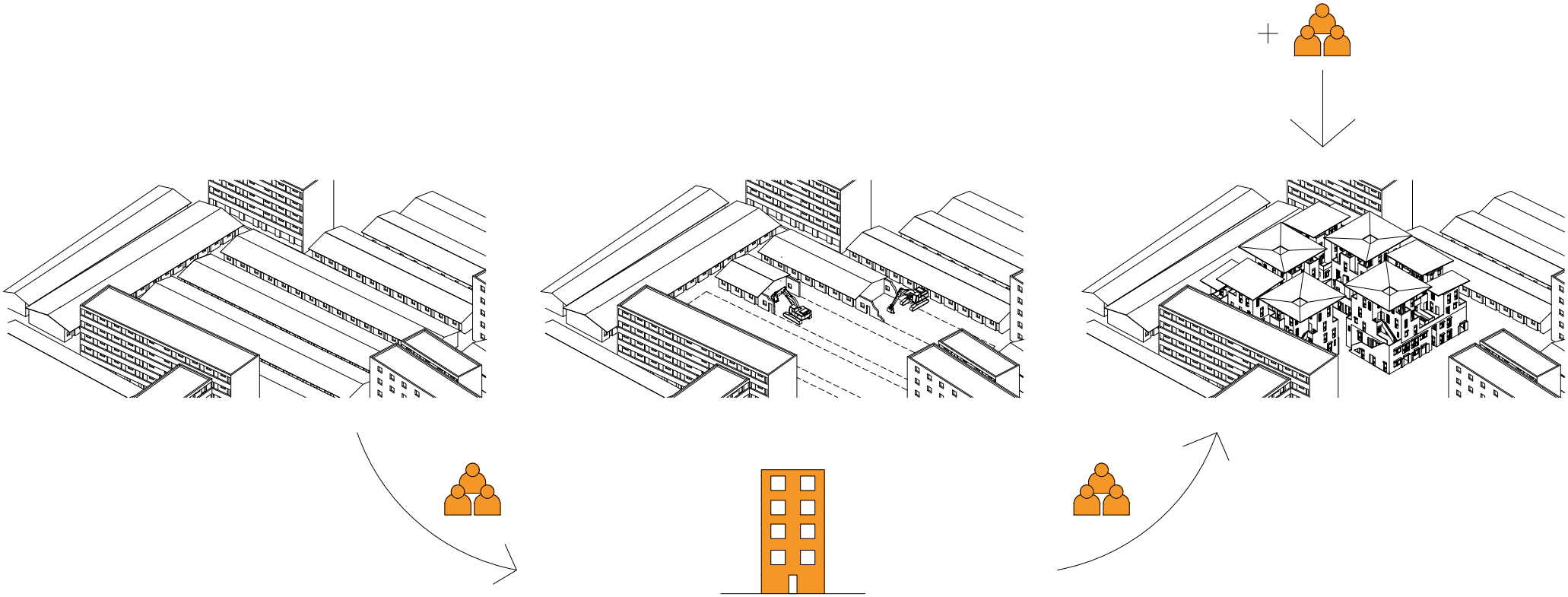
Urban Design / Development Strategy



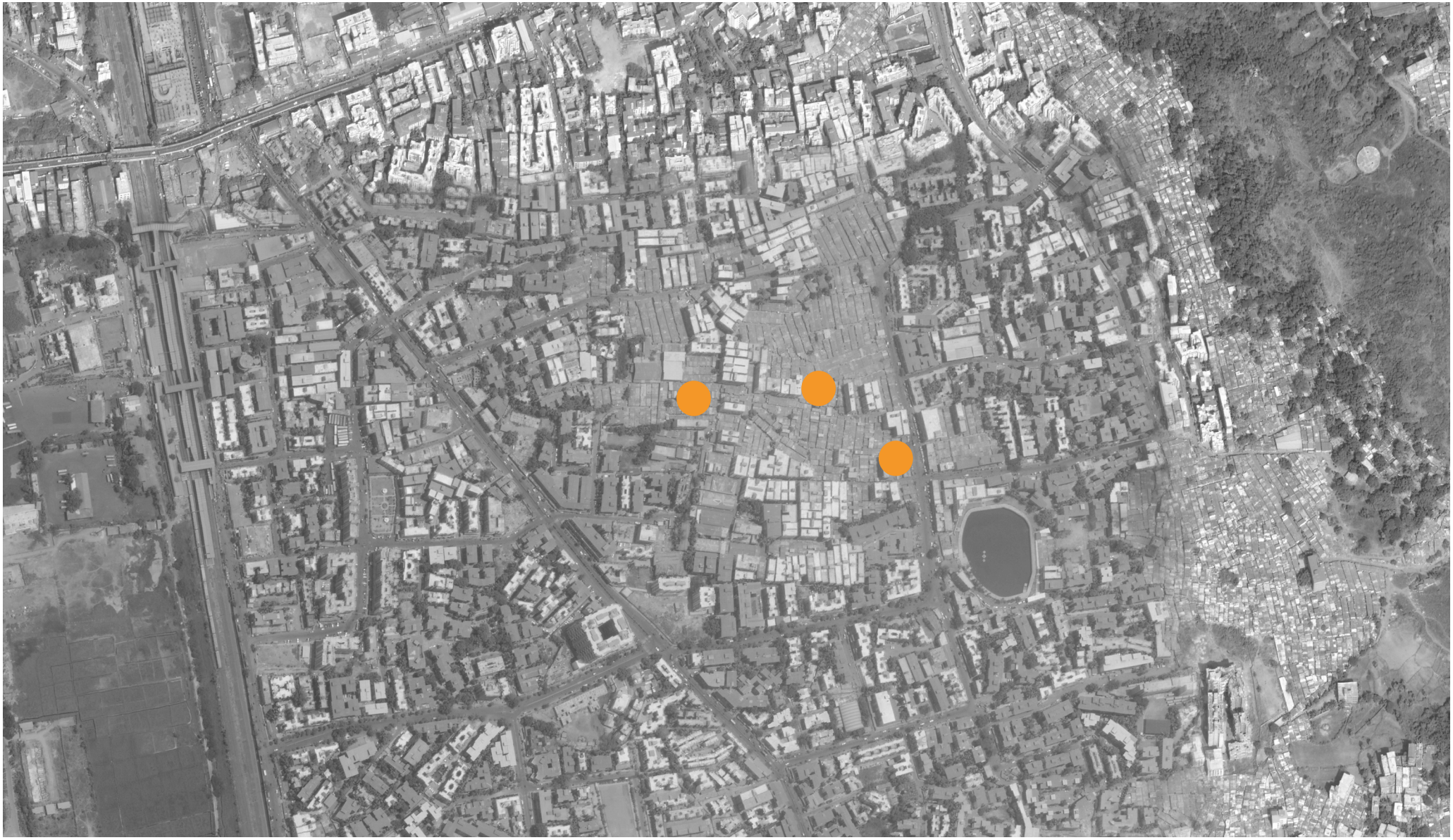
Urban Design / Development Strategy



Urban Design / Development Strategy

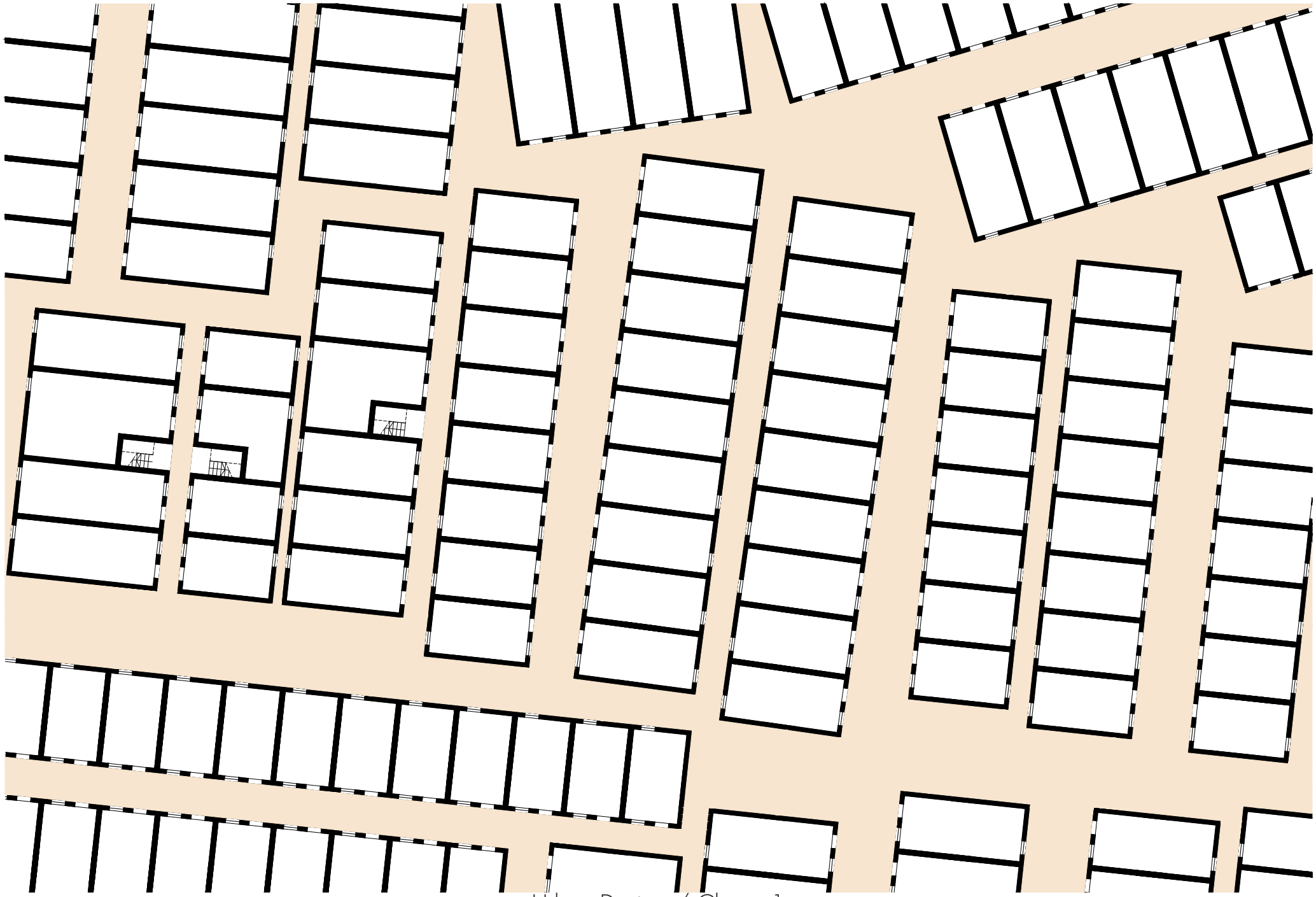


Urban Design / Development Strategy

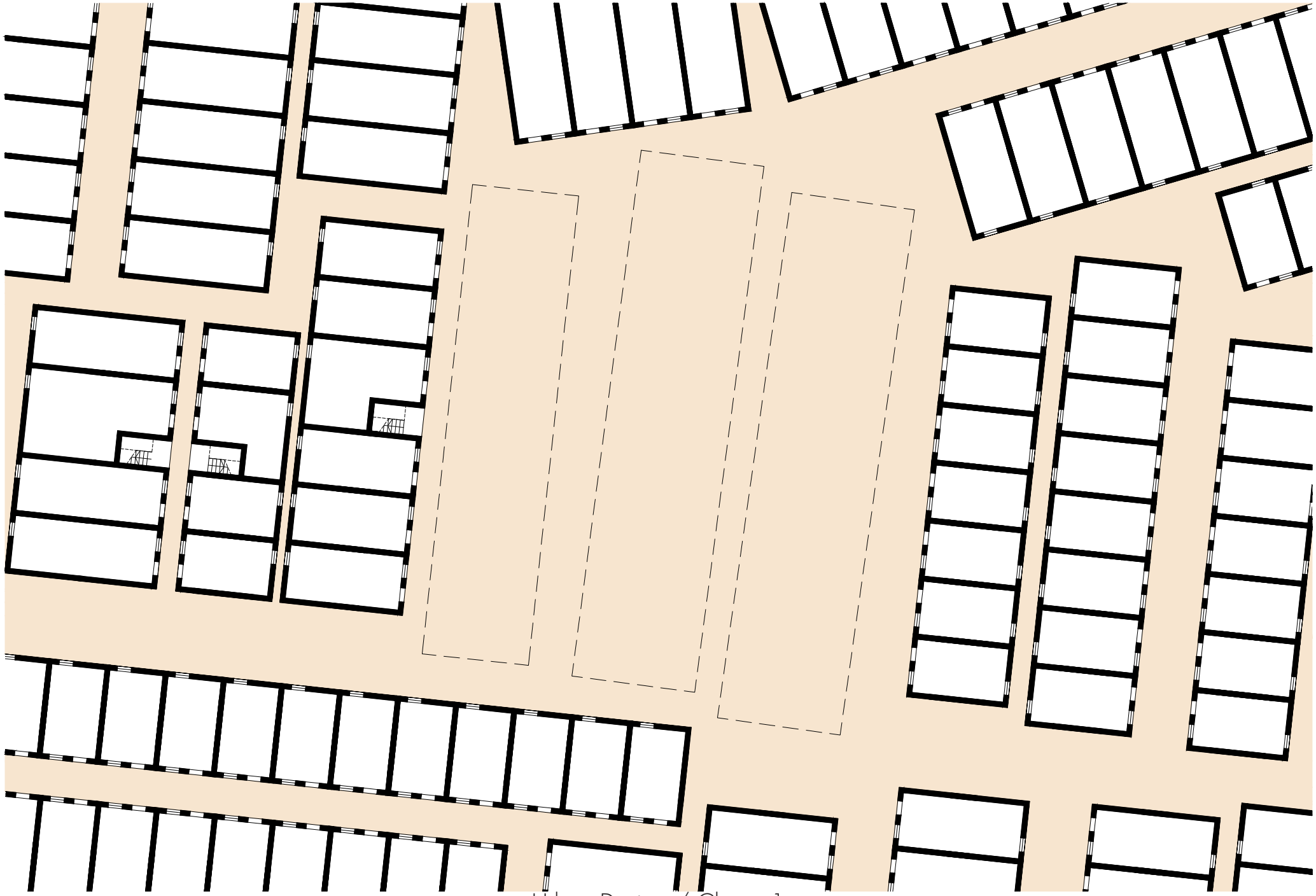


Urban Design / Location Clusters

Urban Design / Location Cluster 1



Urban Design / Cluster 1



Urban Design / Cluster 1

Urban Design / Cluster 1

Urban Design / Location Cluster 2

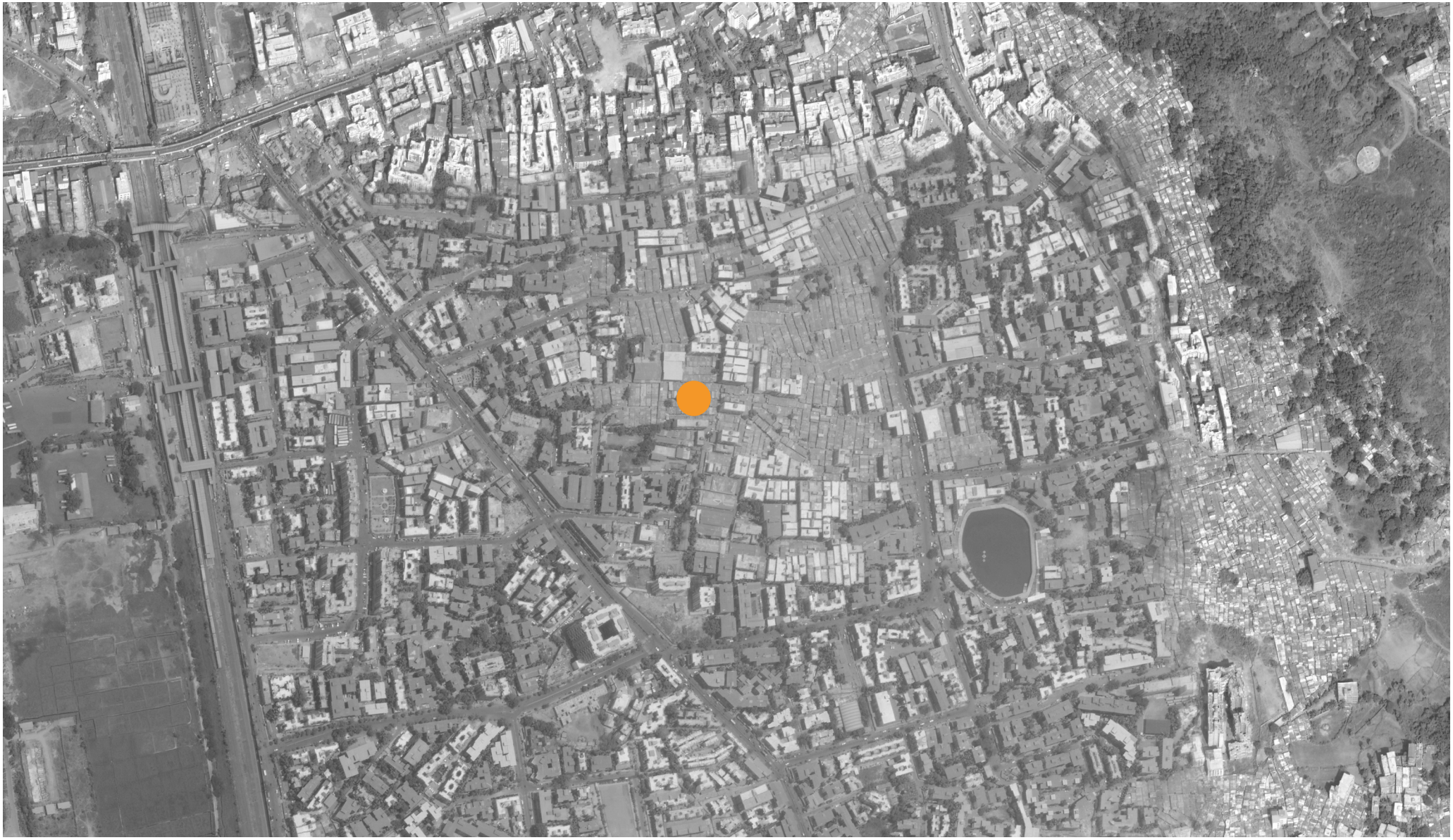
Urban Design / Cluster 2

Urban Design / Cluster 2

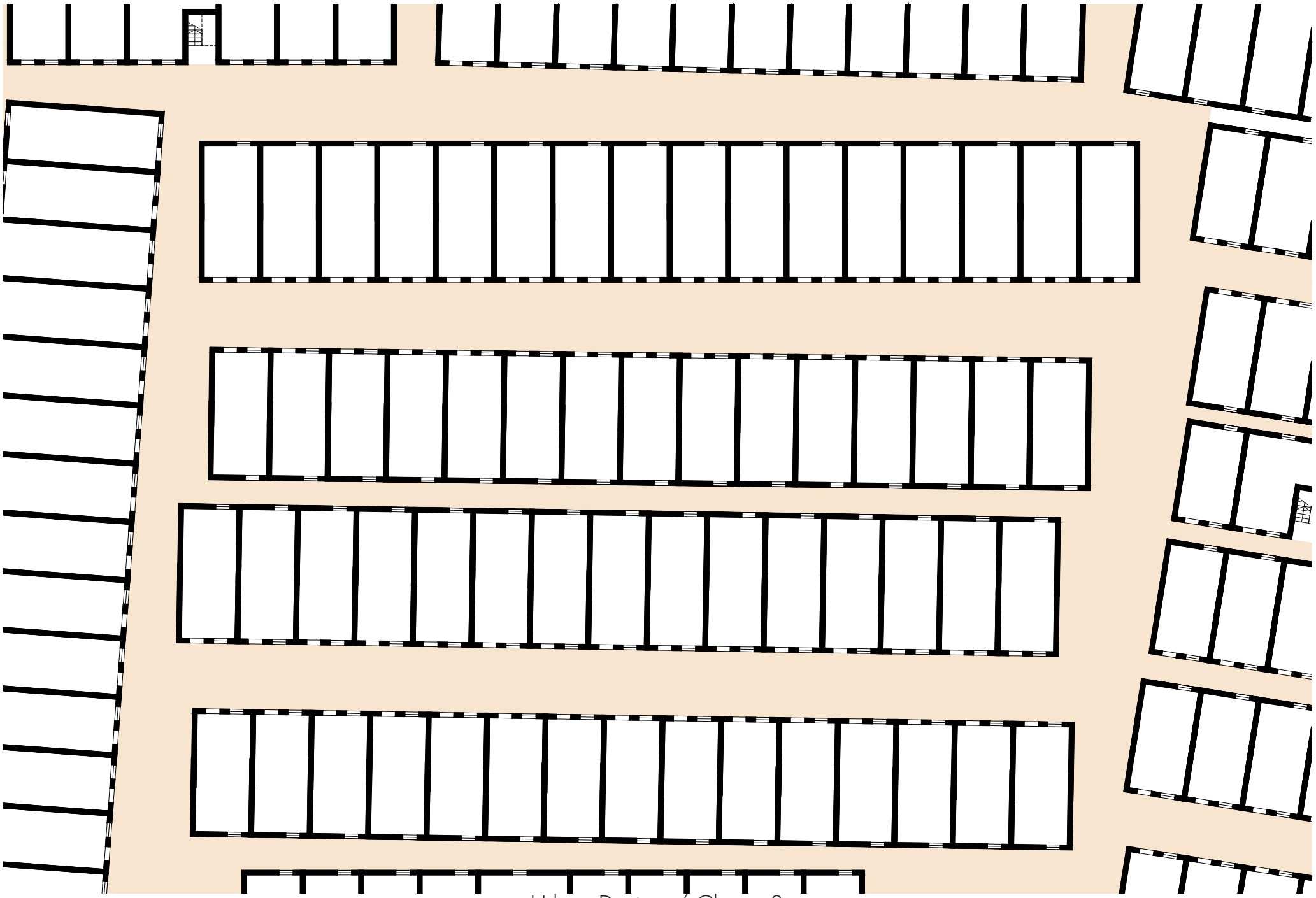
Urban Design / Cluster 2

BANK

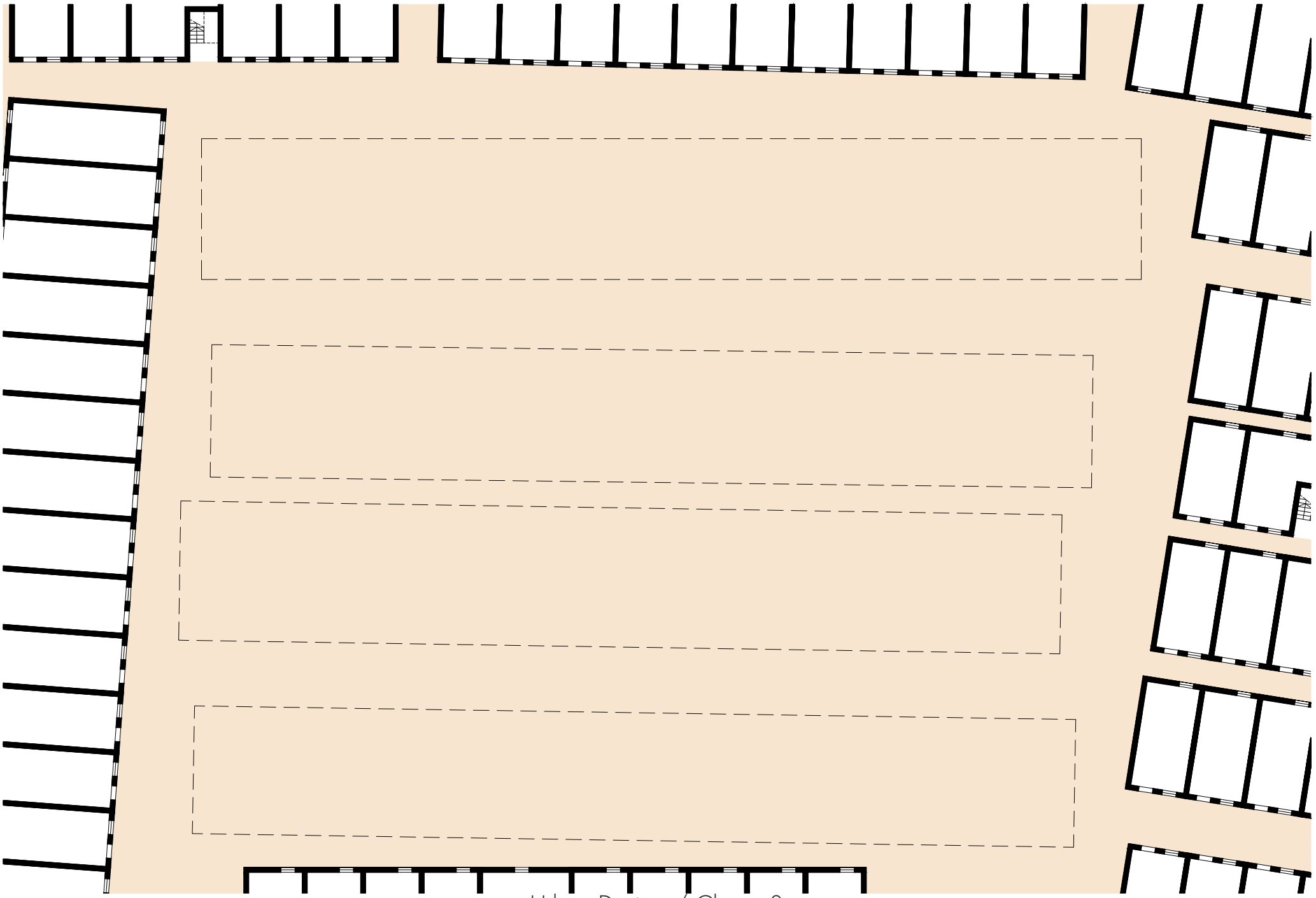
APARTMENTS



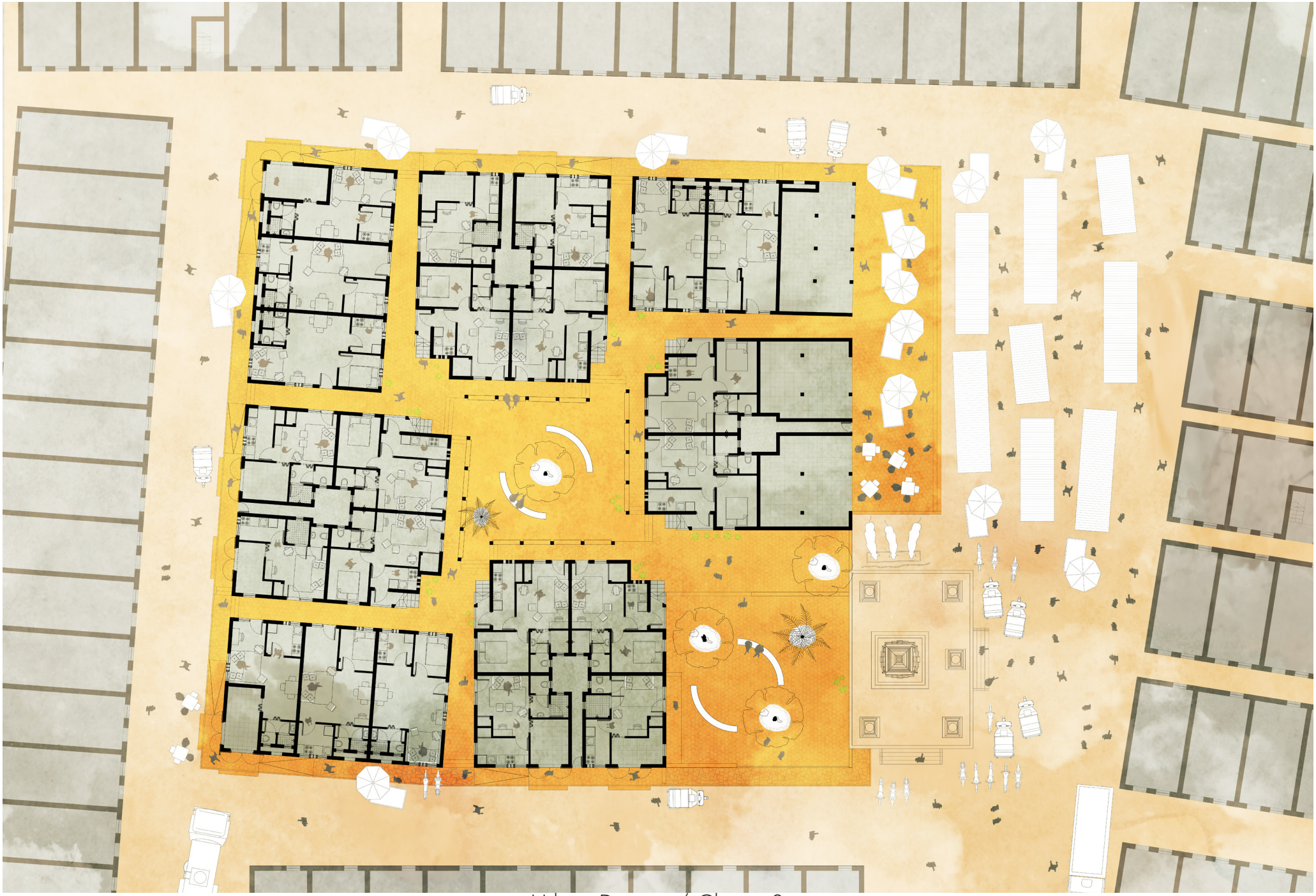
Urban Design / Location Cluster 3



Urban Design / Cluster 3



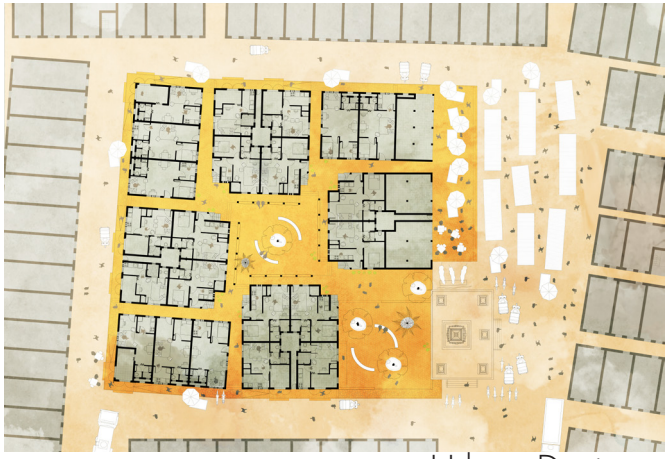
Urban Design / Cluster 3



Urban Design / Cluster 3

	Old Situation	New Situation
FSI :	0,6	1,1
Open Space (m^2) :	585,4	873,3
Amenities (m^2) :	0	0
#Dwellings EWS :	26	24
#Dwellings LIG :	0	14
Open Space/Dwelling (m^2) :	22,5	25,0

FSI :	0,6	1,2
Open Space (m^2) :	796,1	1206,4
Amenities (m^2) :	0	96,1
#Dwellings EWS :	39	36
#Dwellings LIG :	0	23
Open Space/Dwelling (m^2) :	20,4	25,4



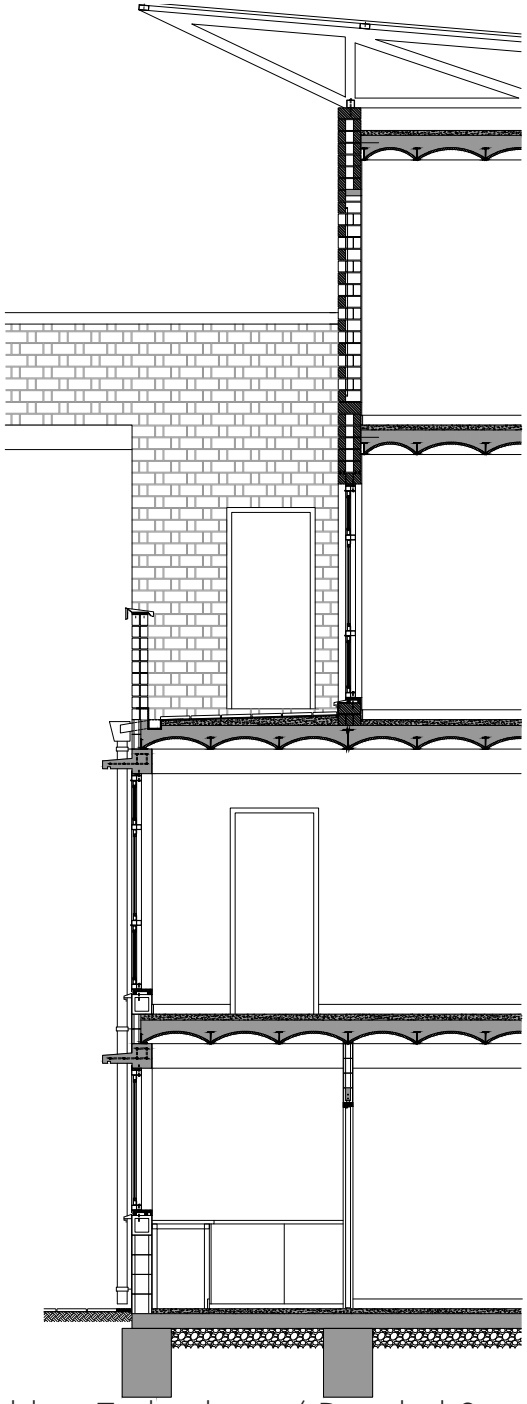
FSI :	0,6	1,0
Open Space (m^2) :	1357,5	2292,2
Amenities (m^2) :	0	97,5
#Dwellings EWS :	61	51
#Dwellings LIG :	0	32
Open Space/Dwelling (m^2) :	22,3	27,6

Urban Design / Cluster Comparison

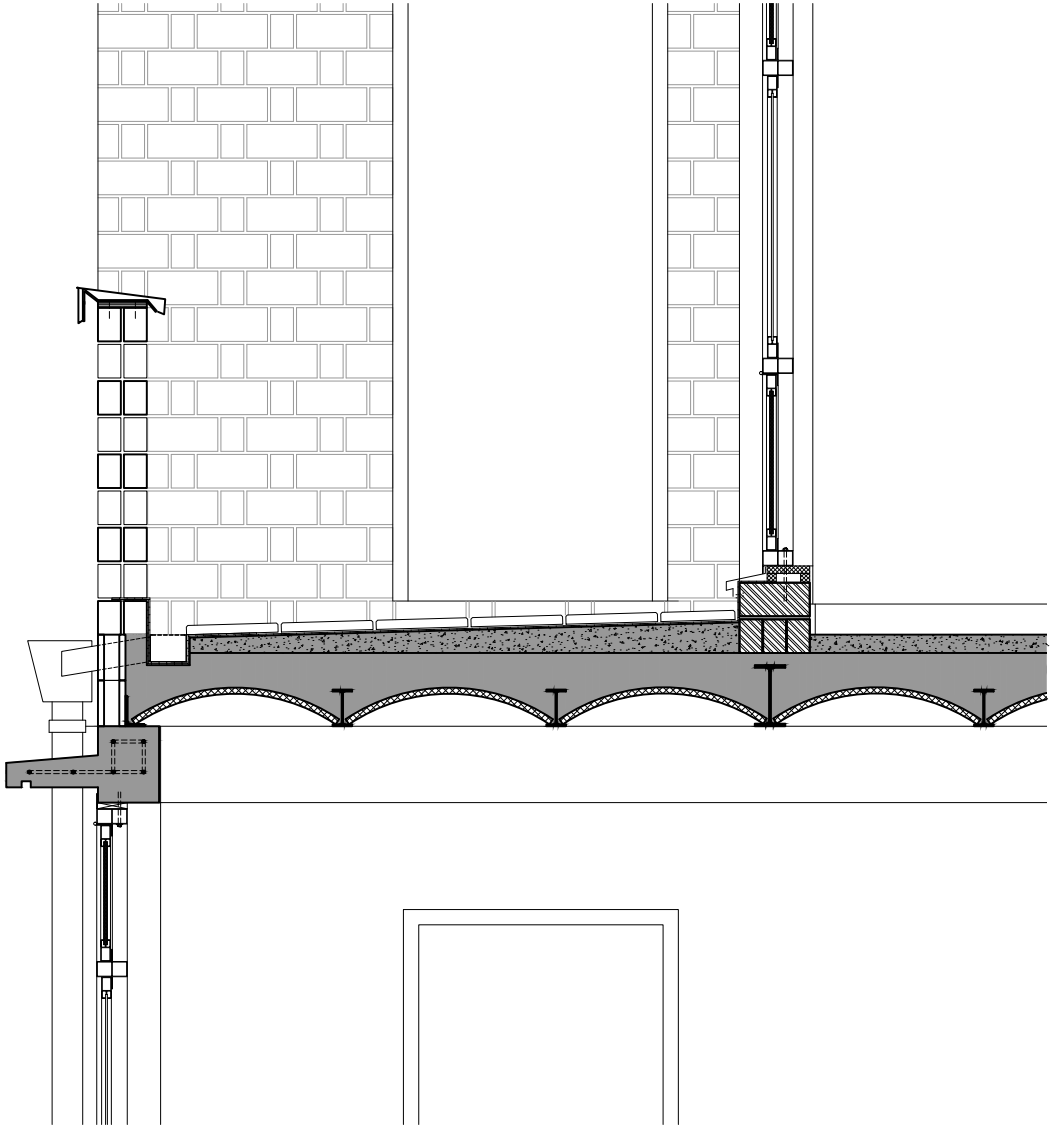
BUILDING TECHNOLOGY

Building Technology / Section

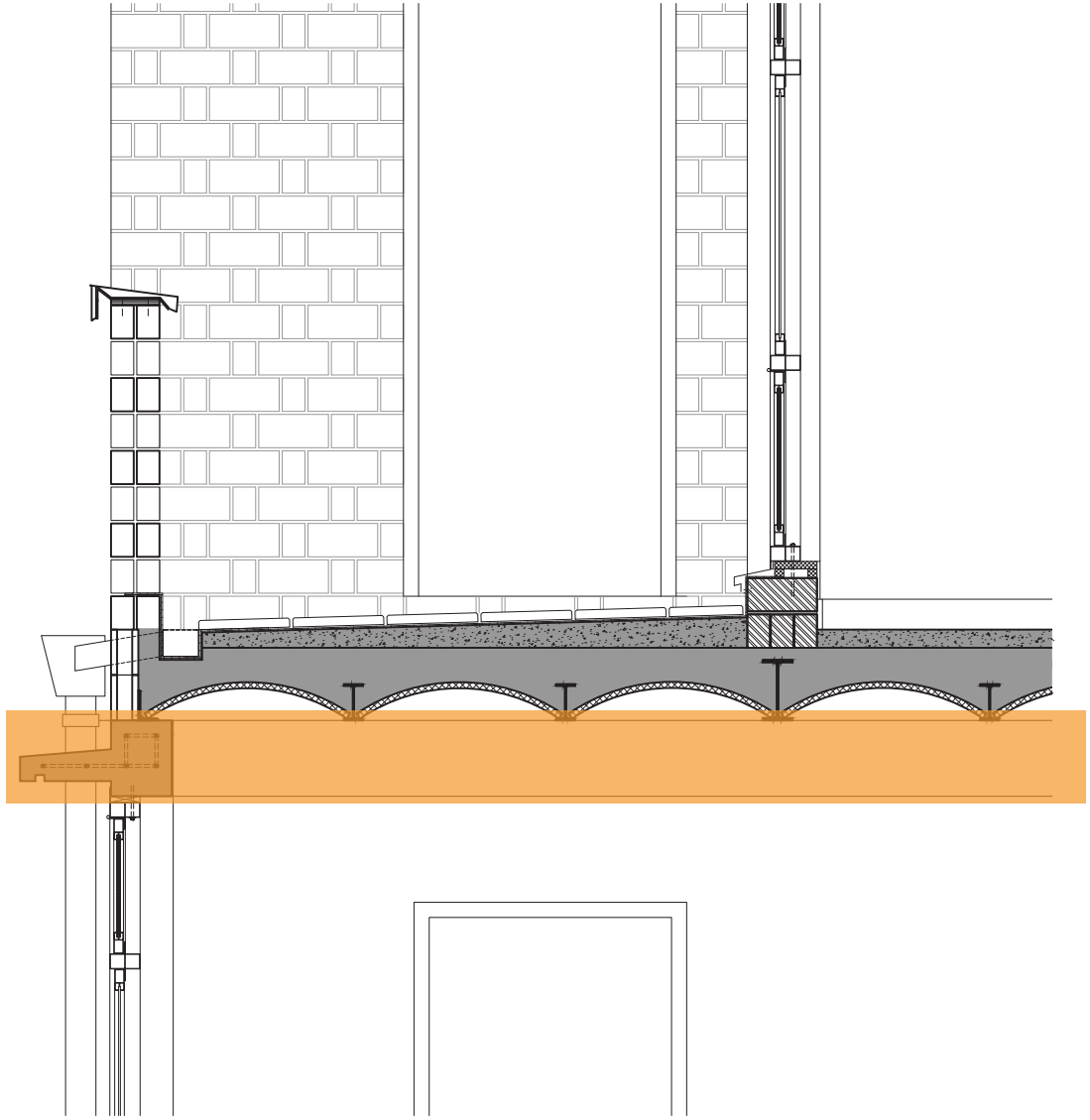
Building Technology / Section



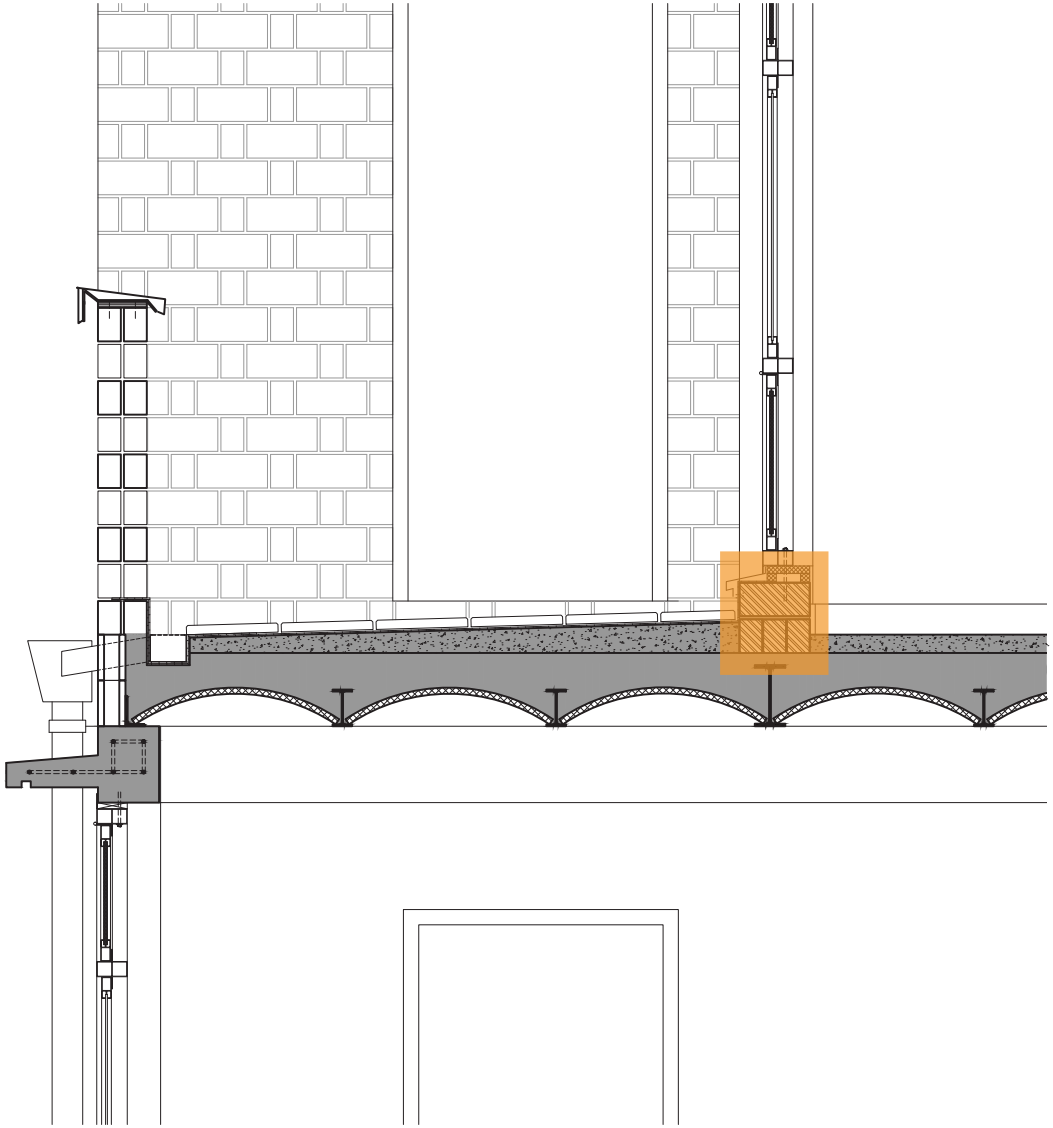
Building Technology / Detailed Section



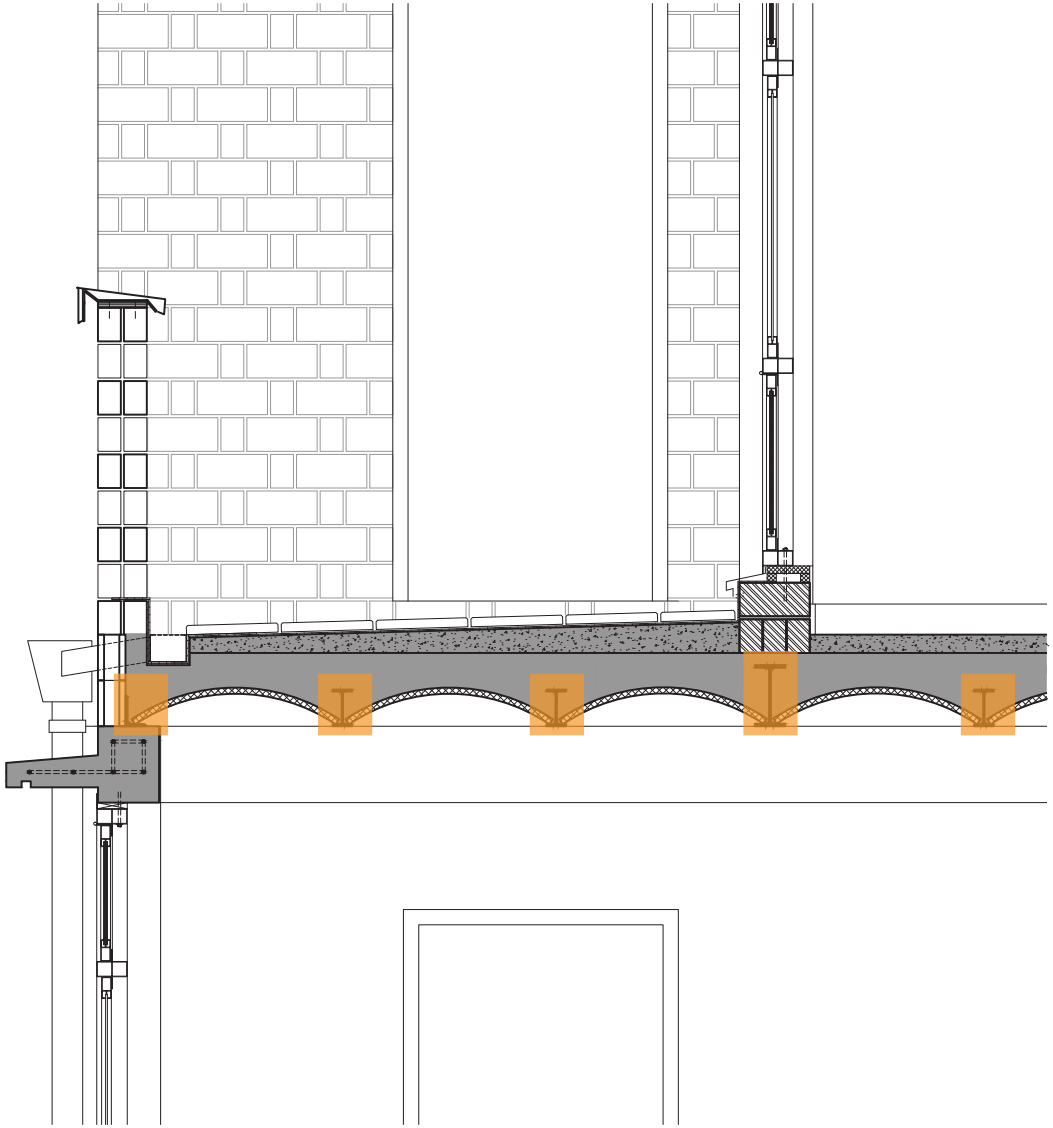
Building Technology / Detailed Section



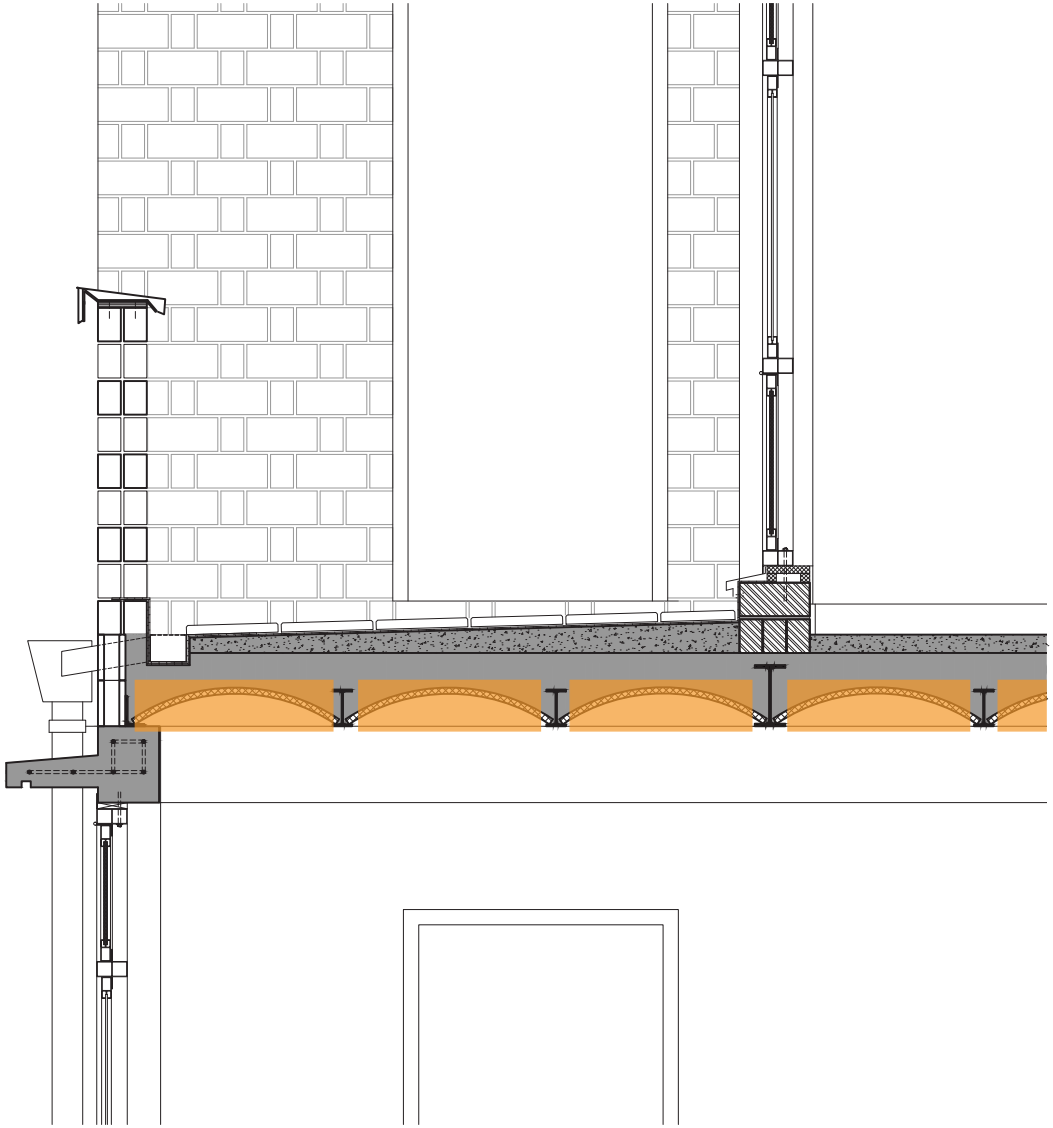
Building Technology / Detailed Section - Concrete Beams



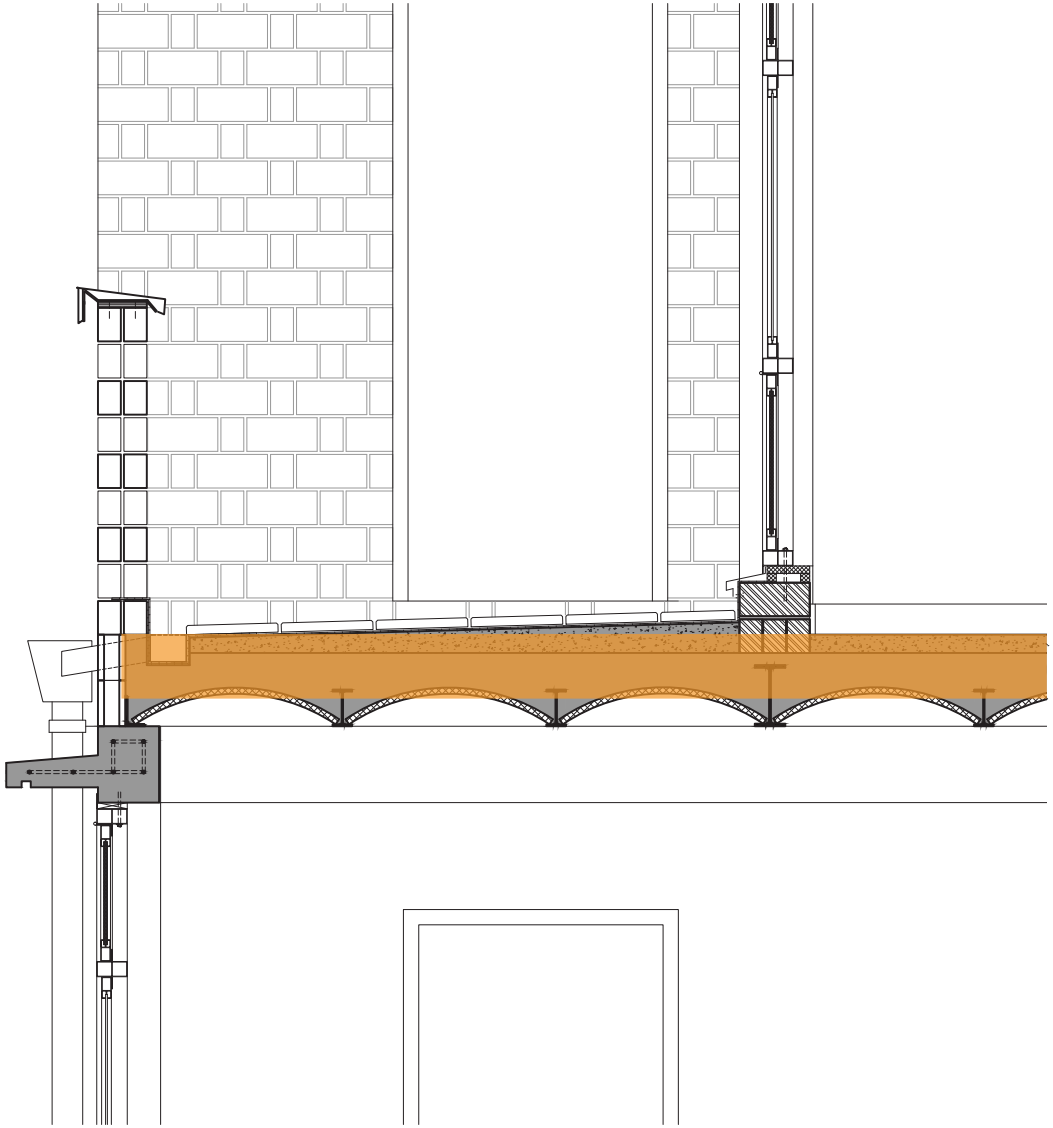
Building Technology / Detailed Section - Brick Wall



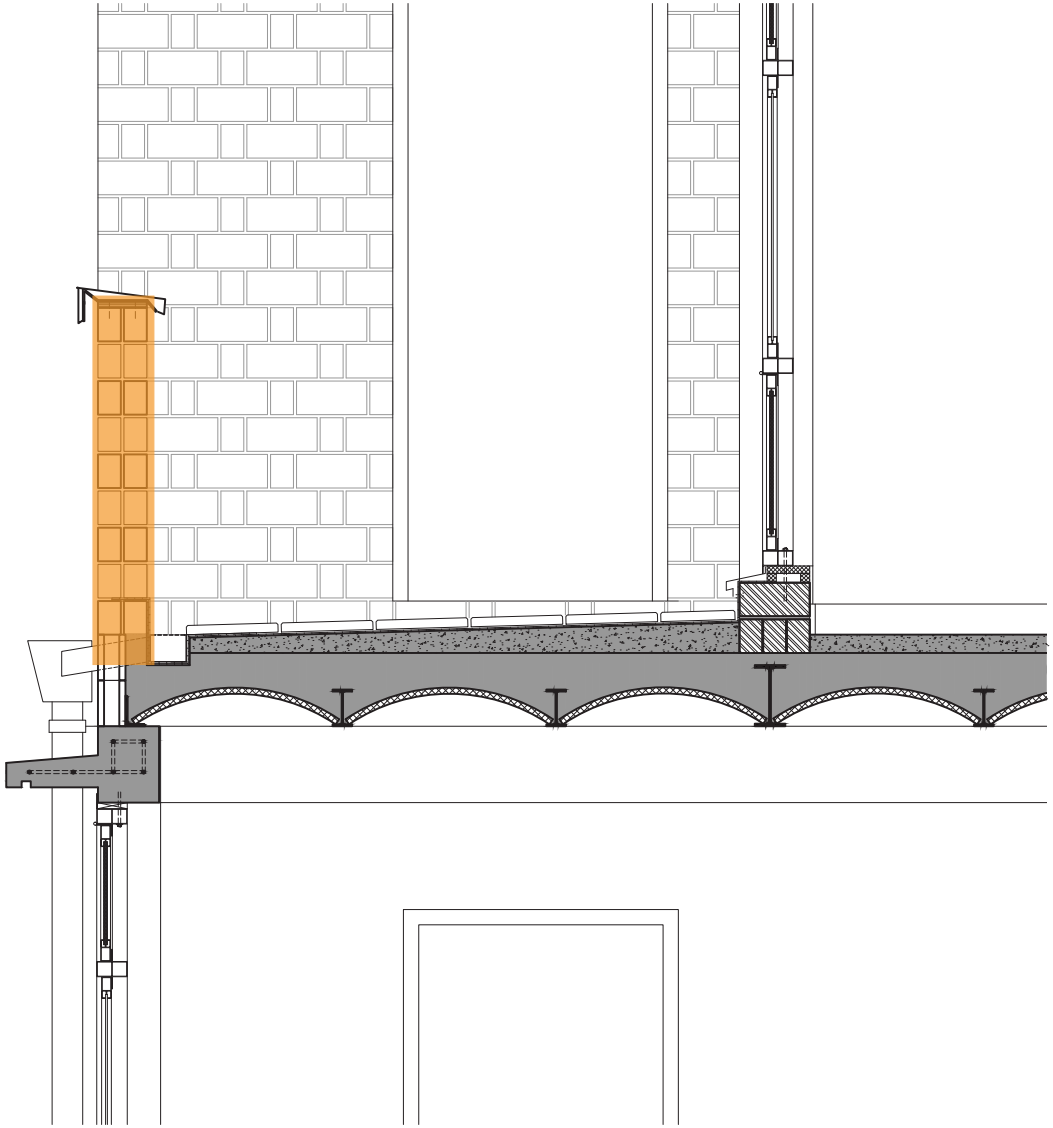
Building Technology / Detailed Section - Steel Beams



Building Technology / Detailed Section - Ceramic Elements



Building Technology / Detailed Section - Concrete Floor

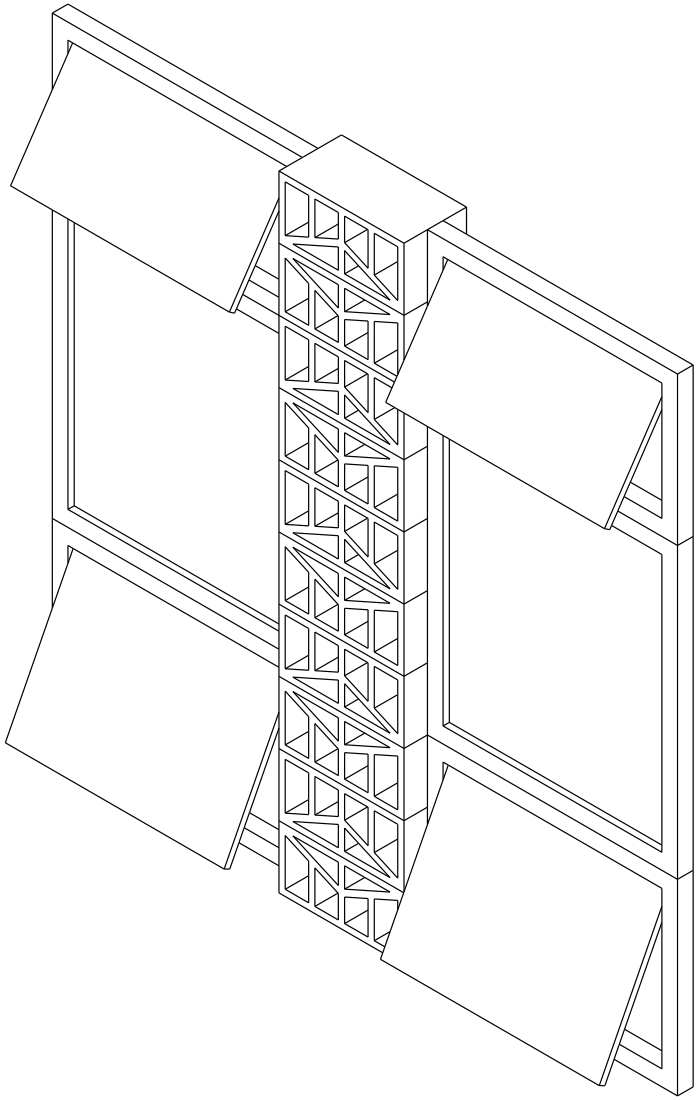


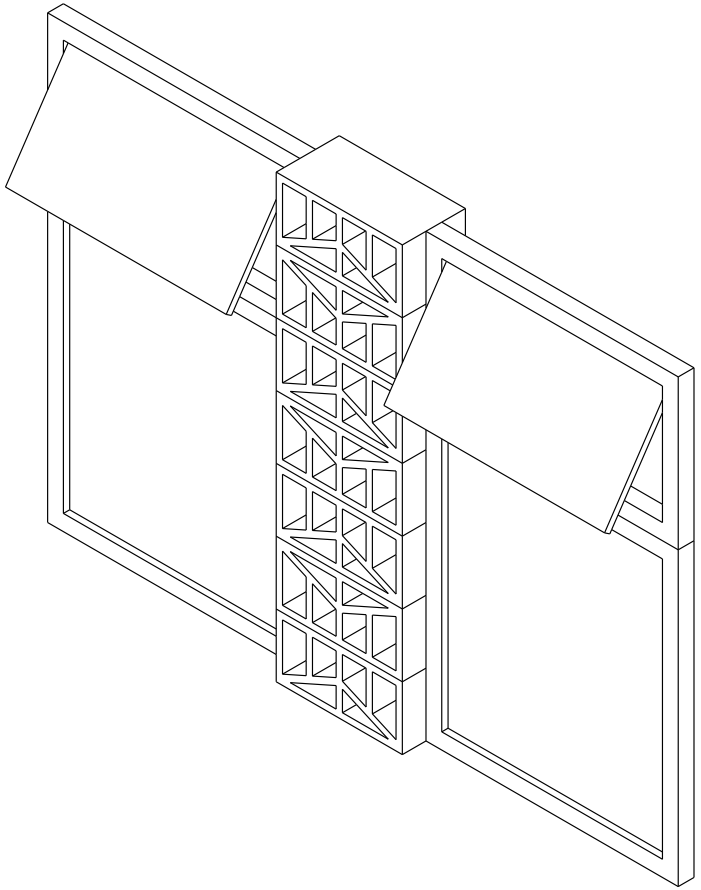
Building Technology / Detailed Section - Brick Balustrade

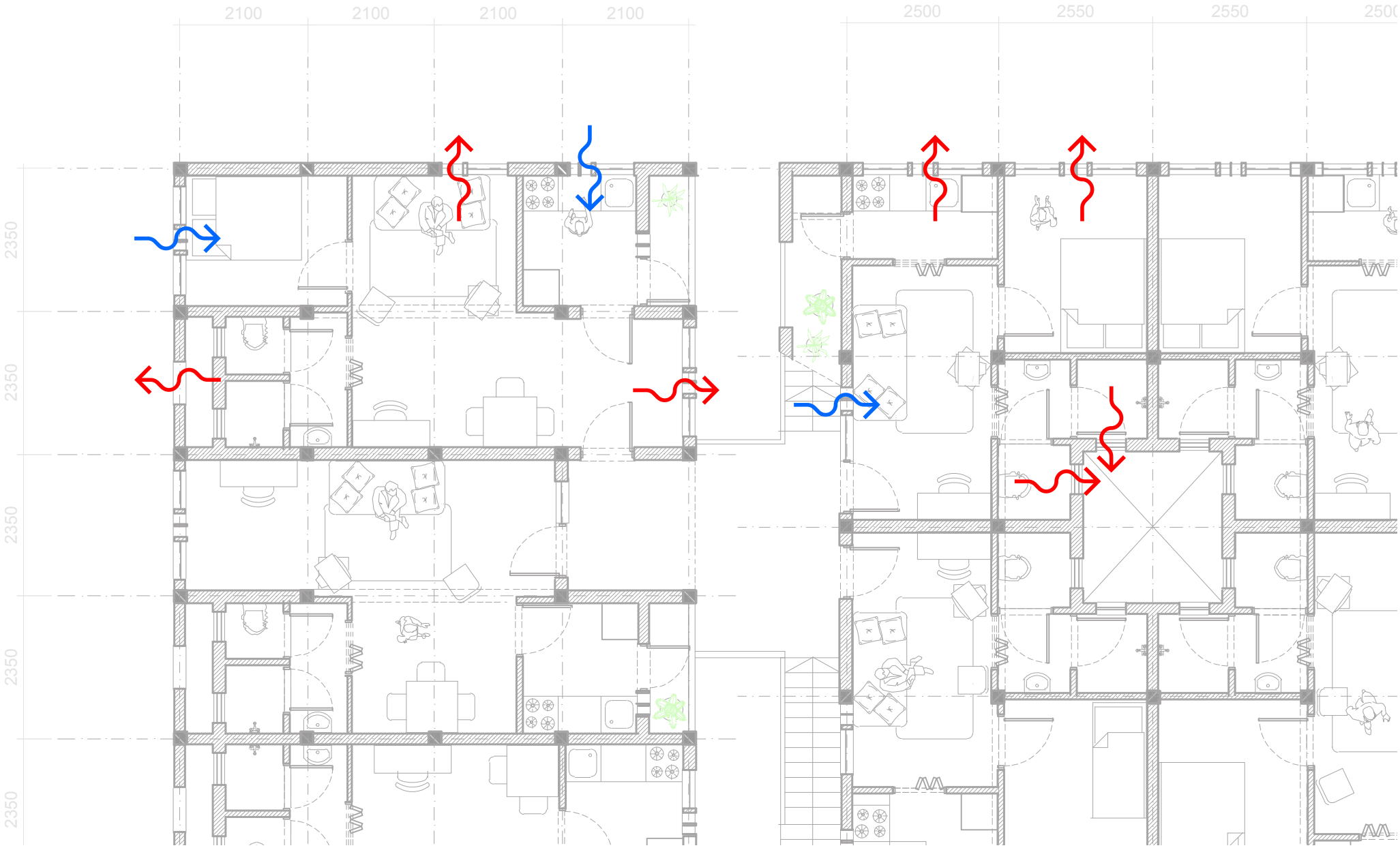
Building Technology / Water Management

Building Technology / Concrete Plinth

Building Technology / Concrete Plinth



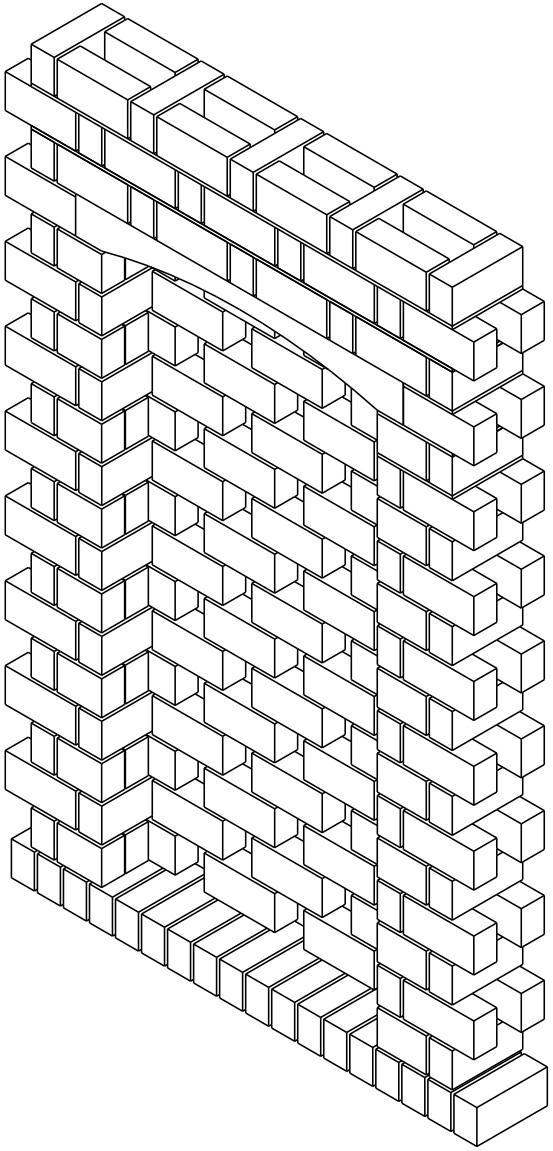


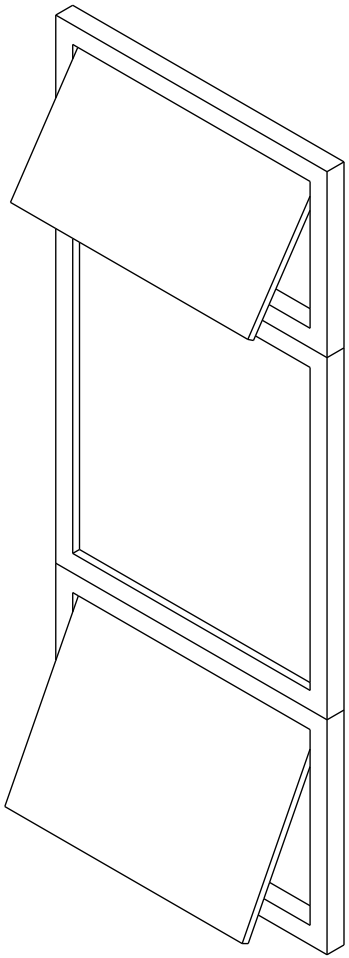


Building Technology / Ventilation

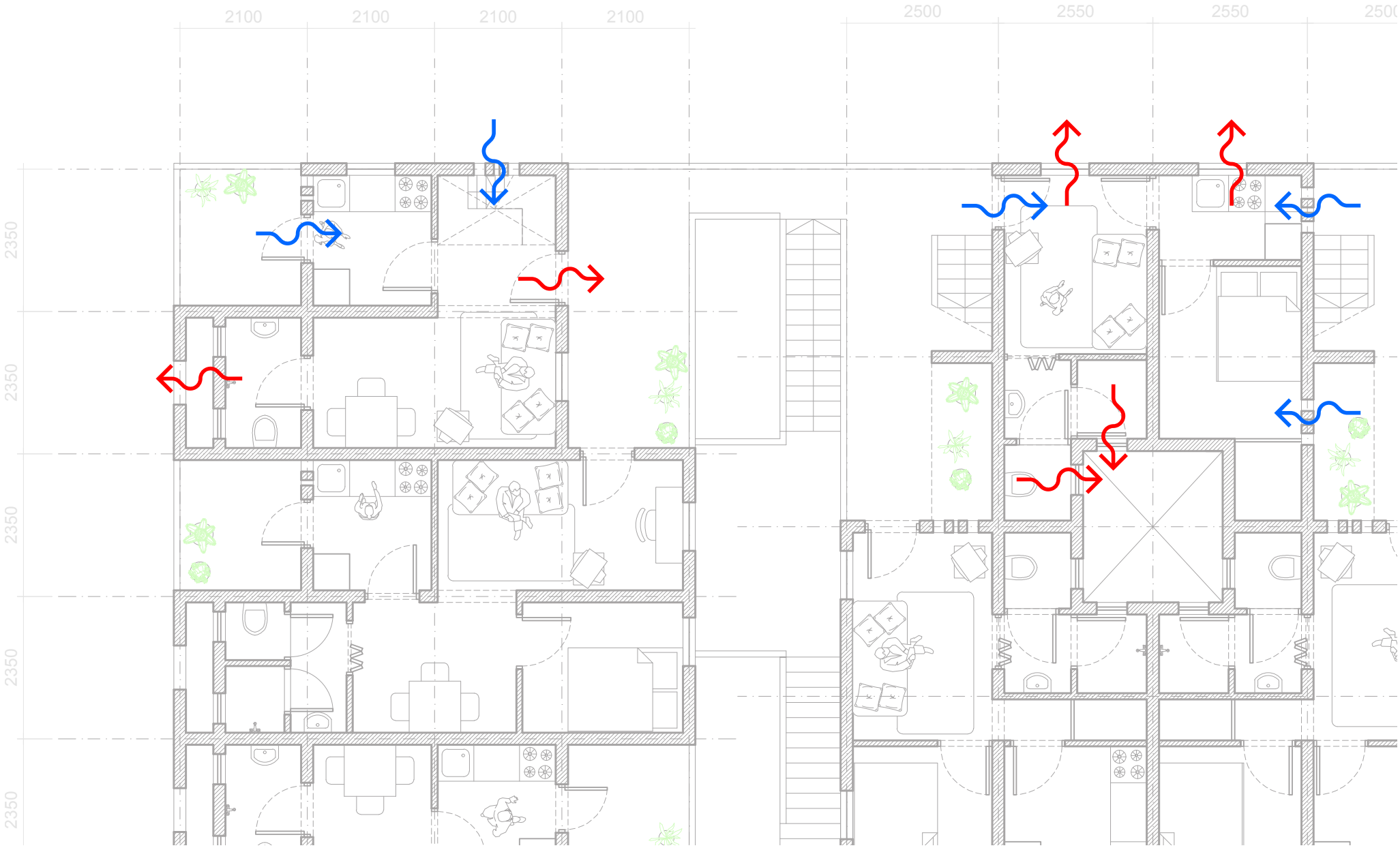
Building Technology / Brick Crown

Building Technology / Brick Crown

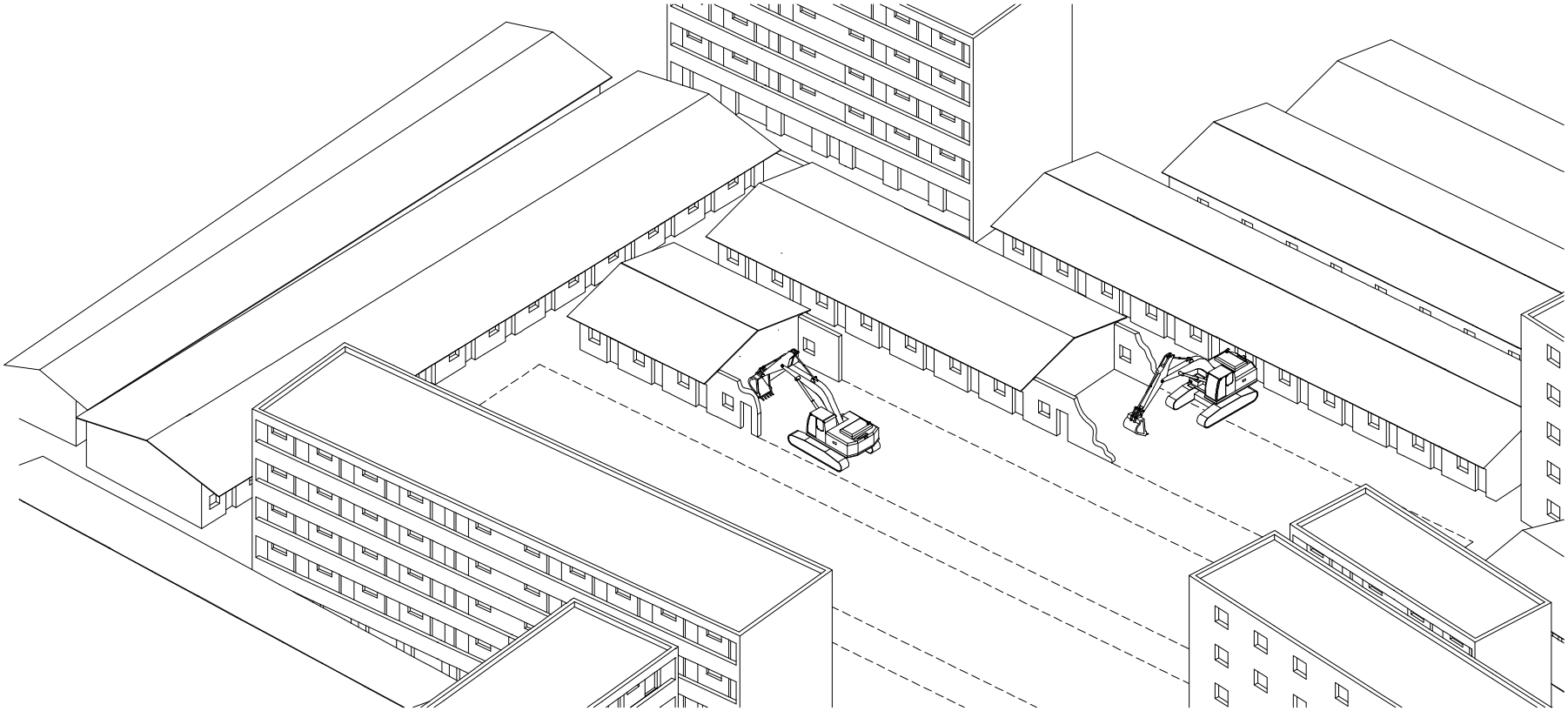




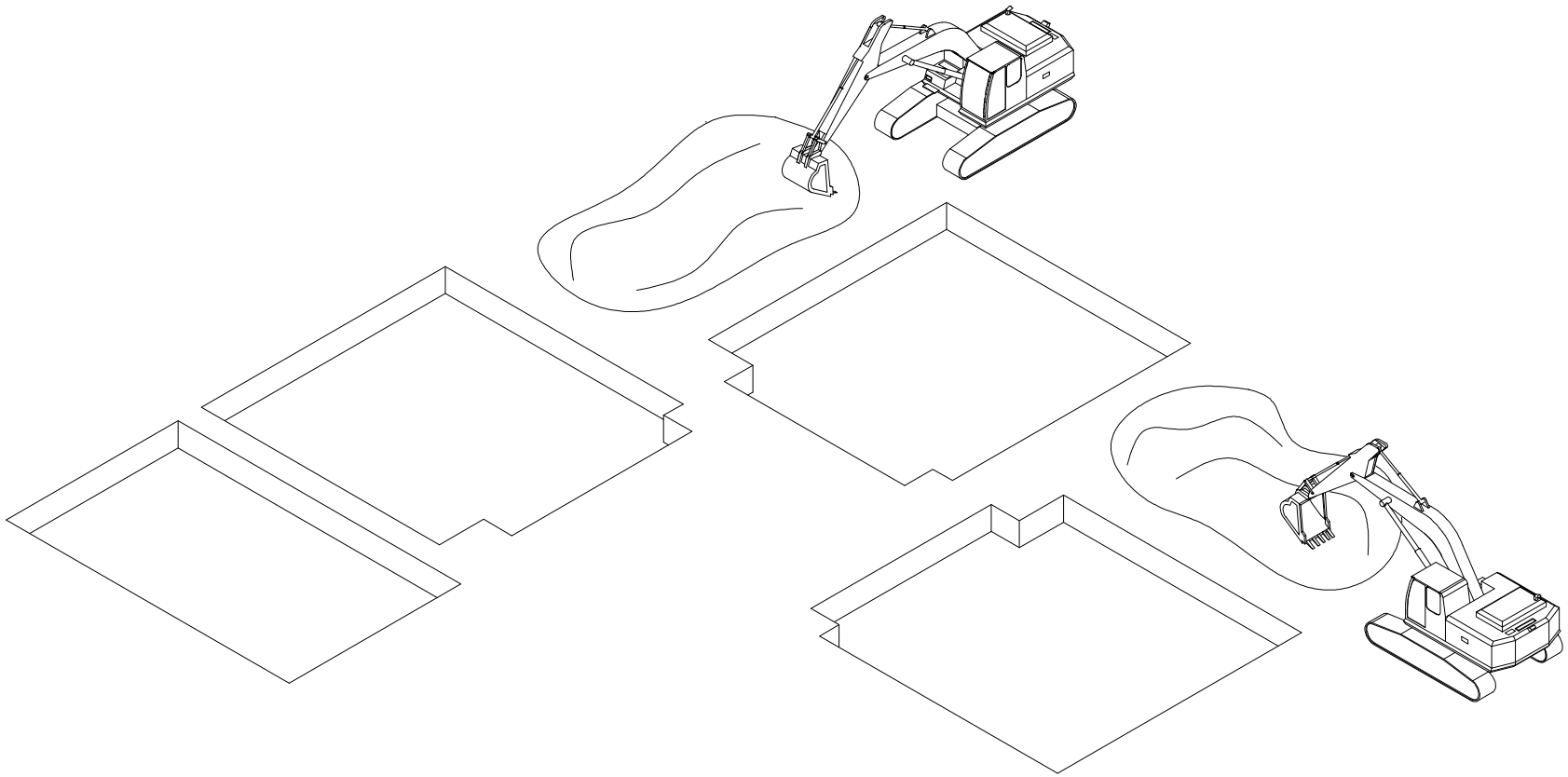
Building Technology / Window & Jali



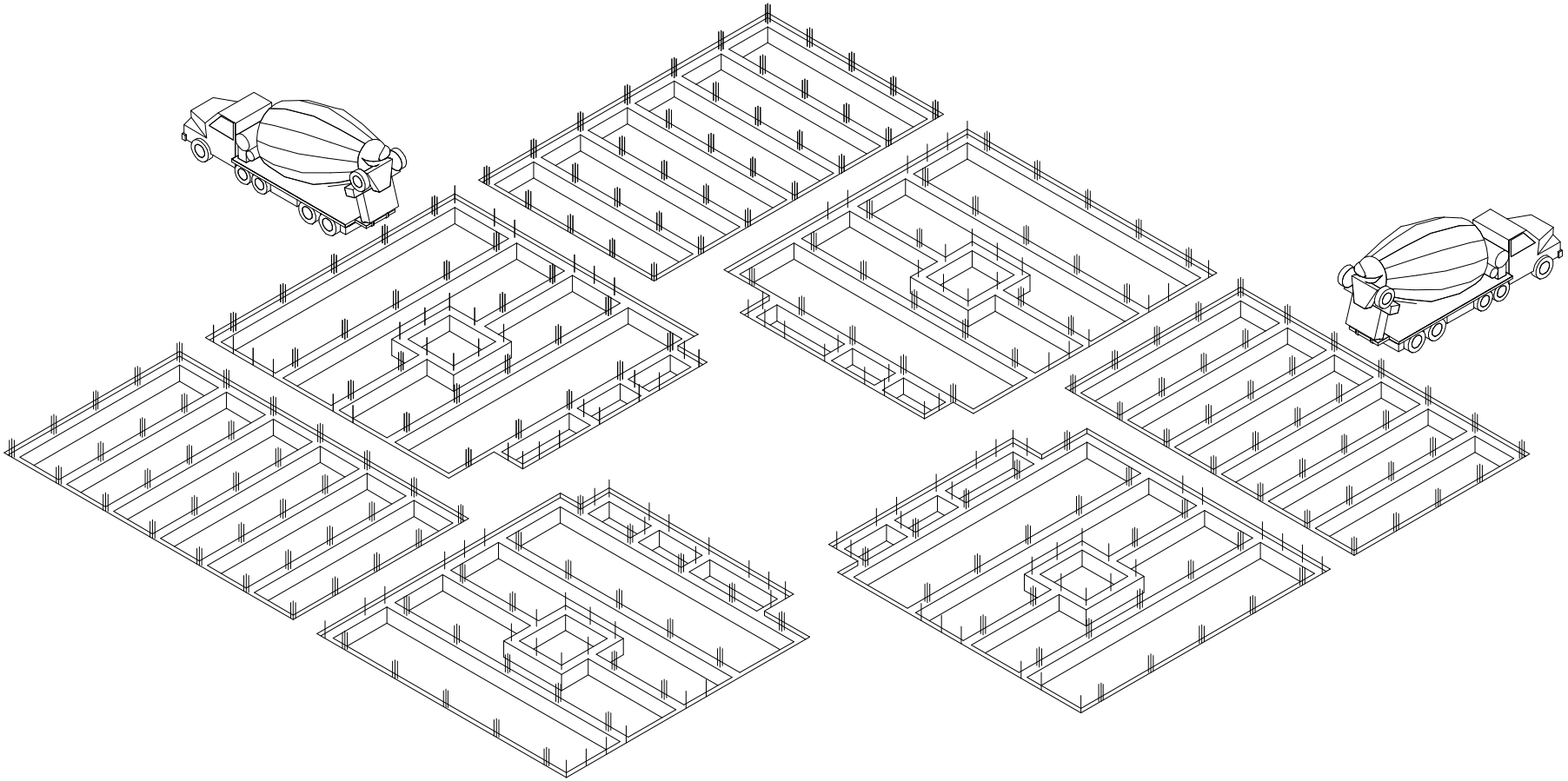
Building Technology / Ventilation



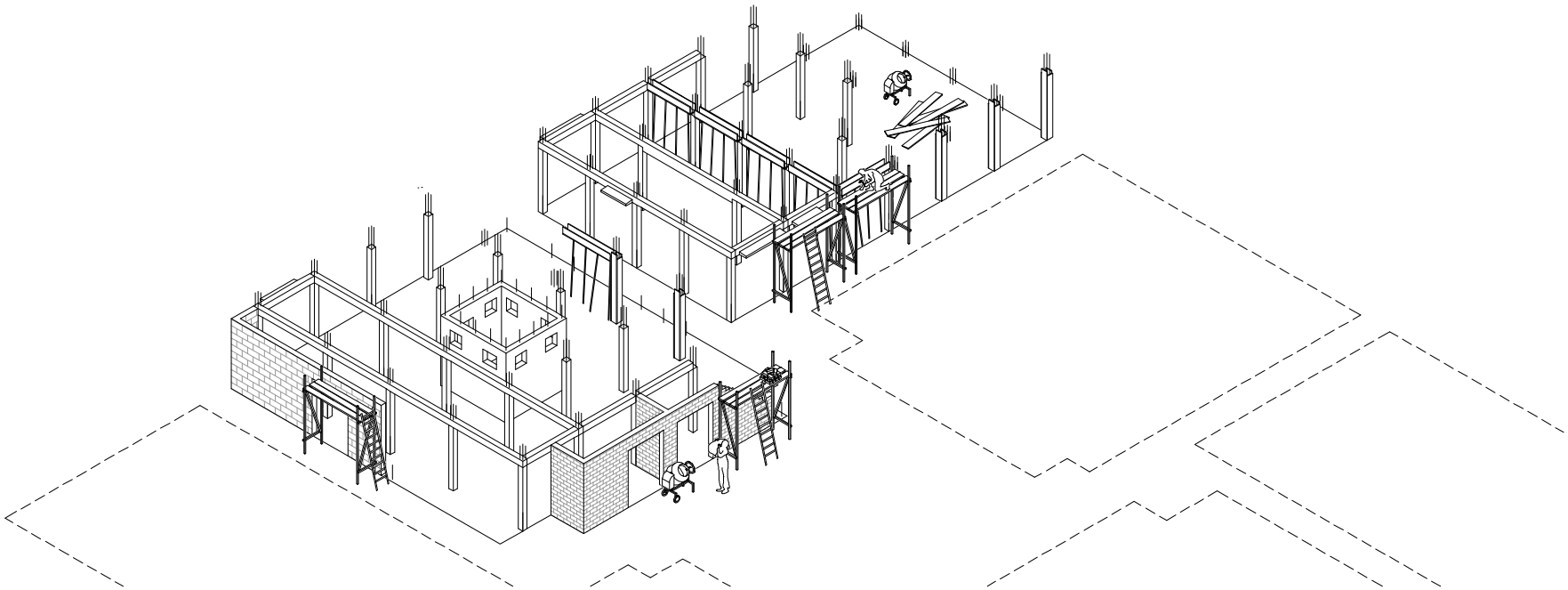
Building Technology / Construction Process



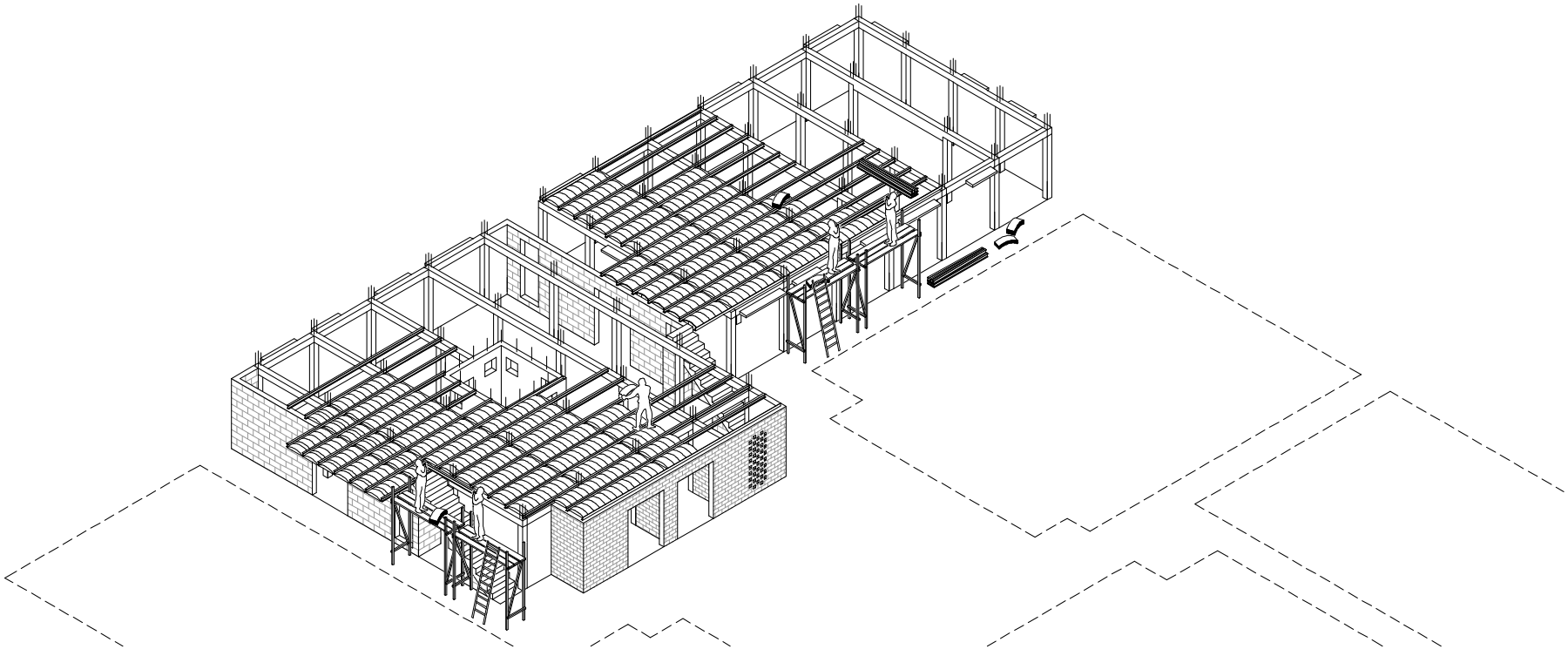
Building Technology / Construction Process



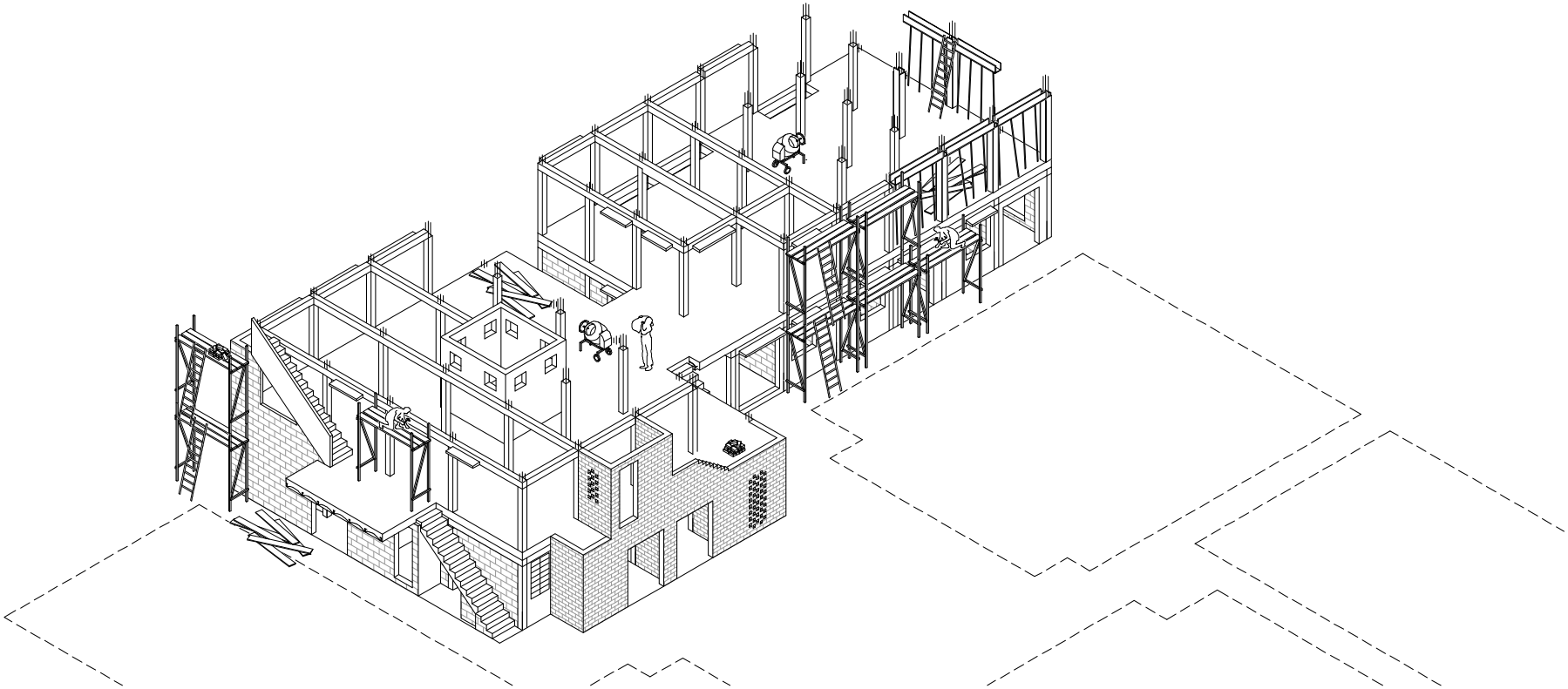
Building Technology / Construction Process



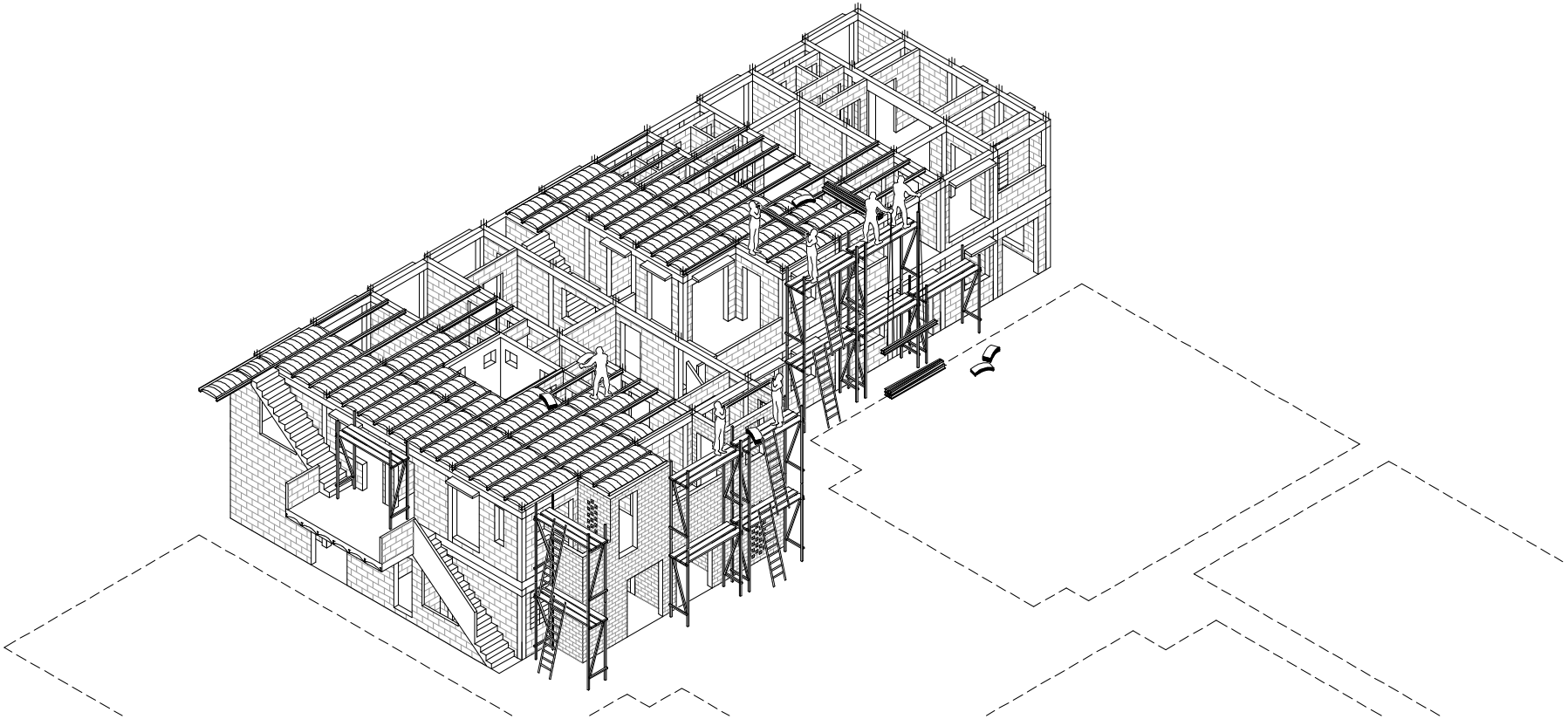
Building Technology / Construction Process



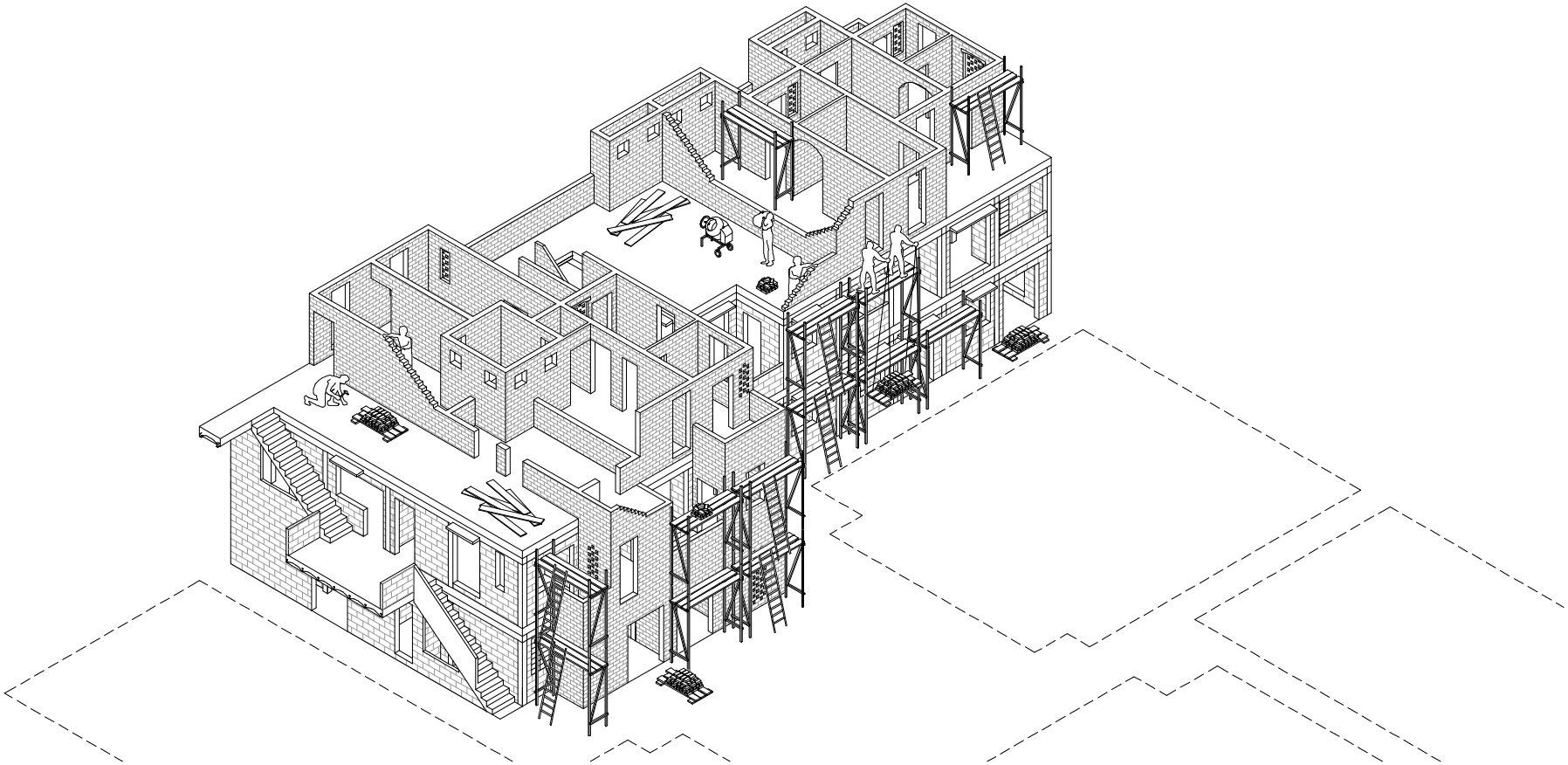
Building Technology / Construction Process



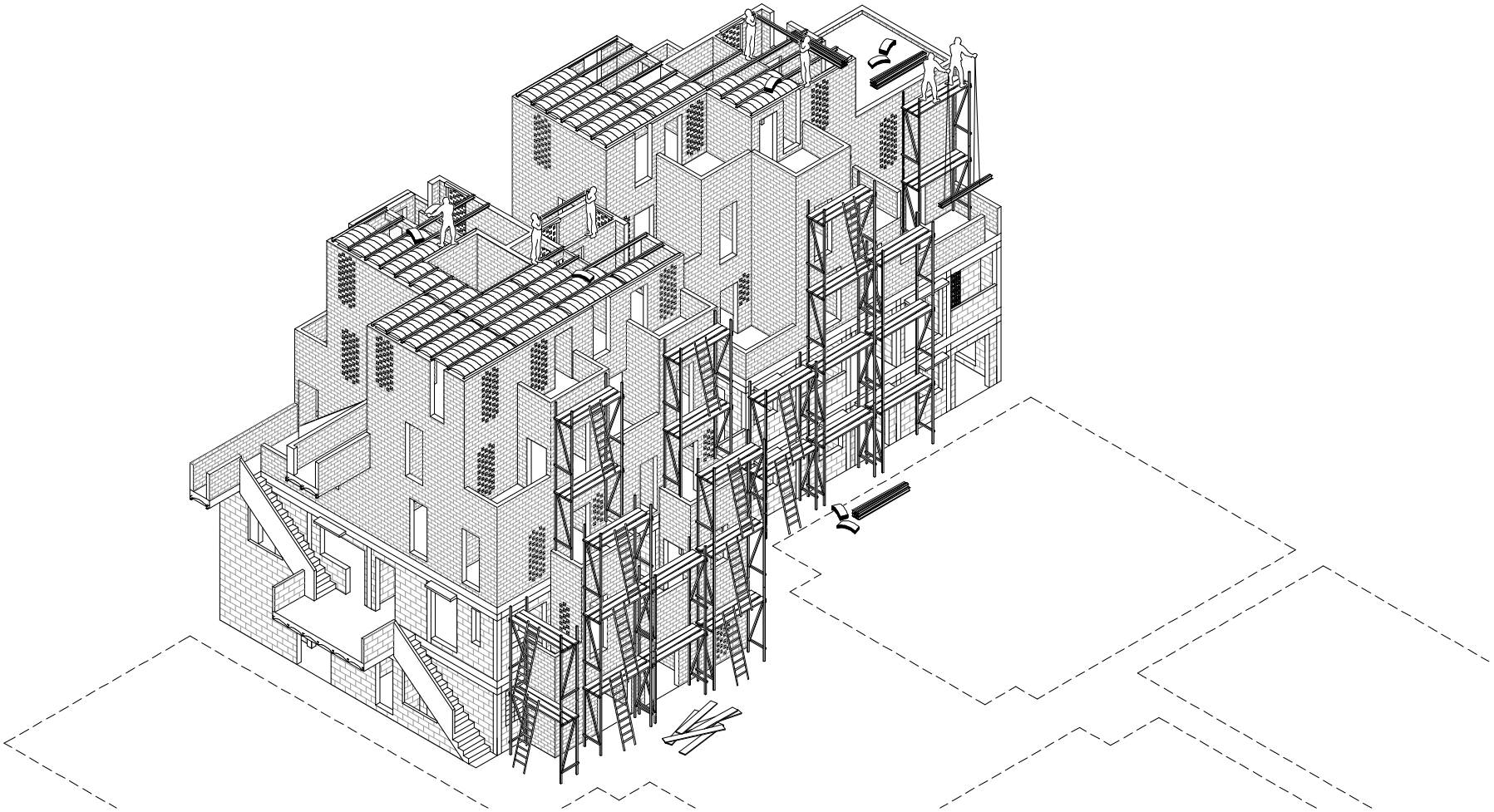
Building Technology / Construction Process



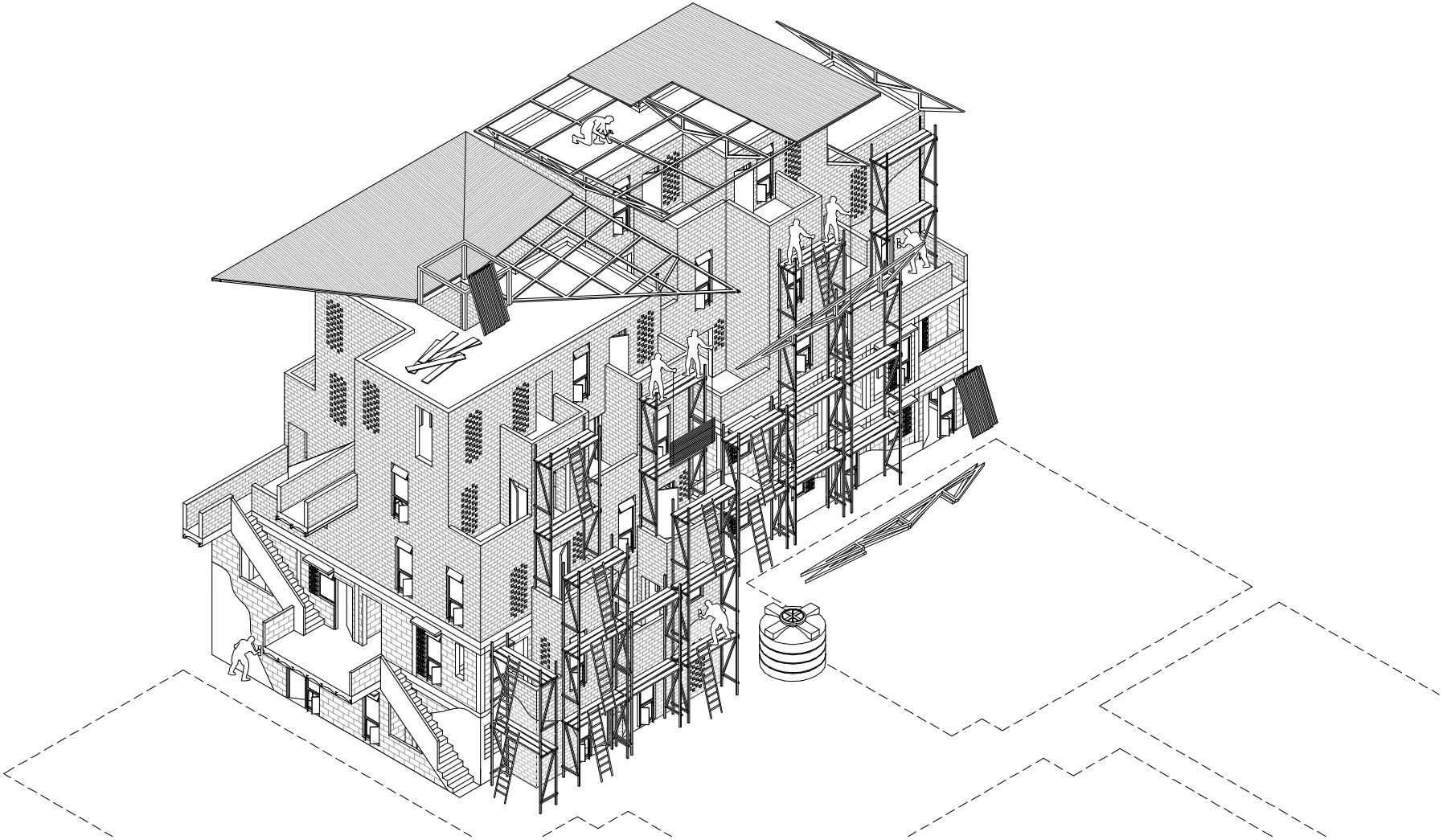
Building Technology / Construction Process



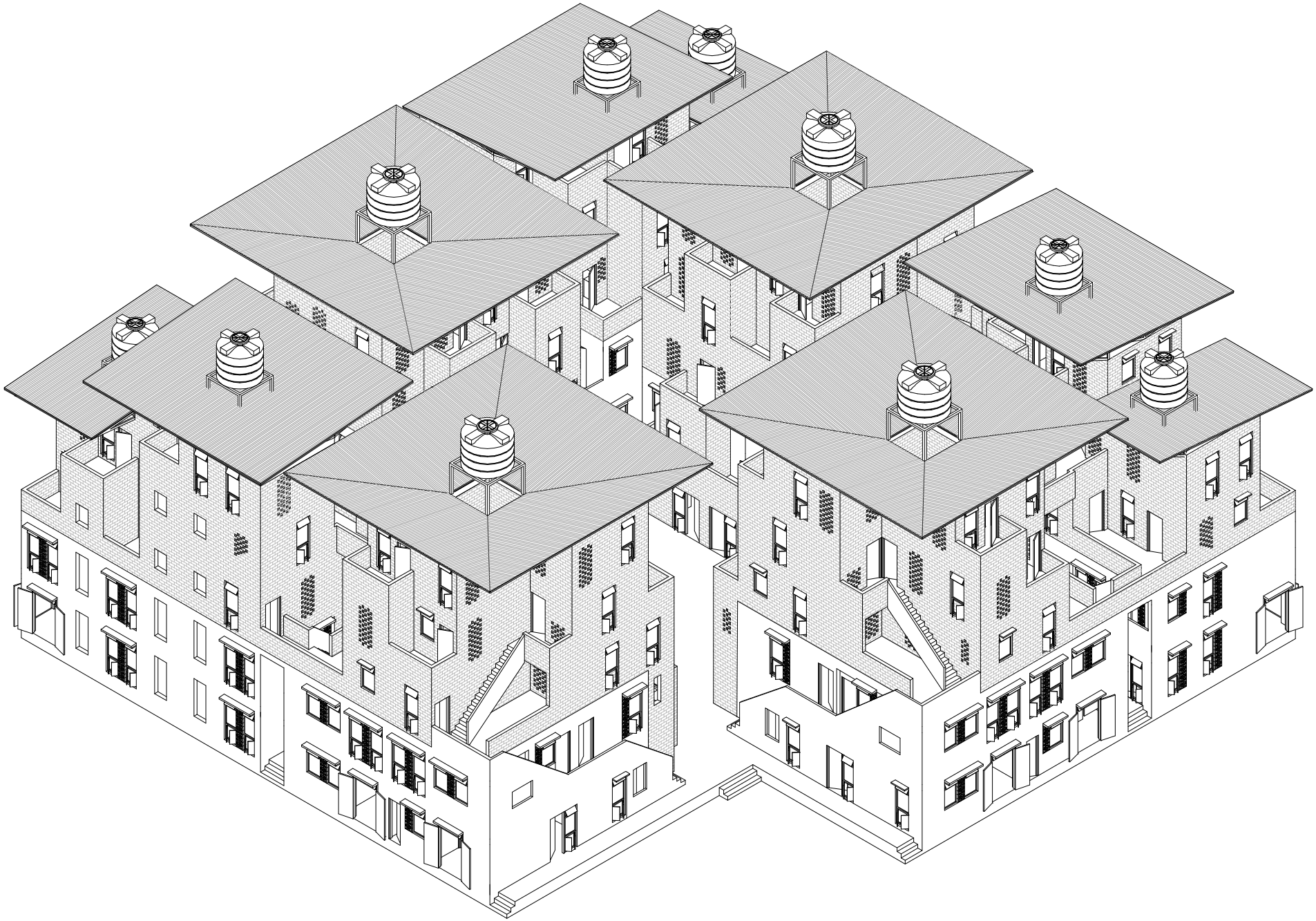
Building Technology / Construction Process



Building Technology / Construction Process

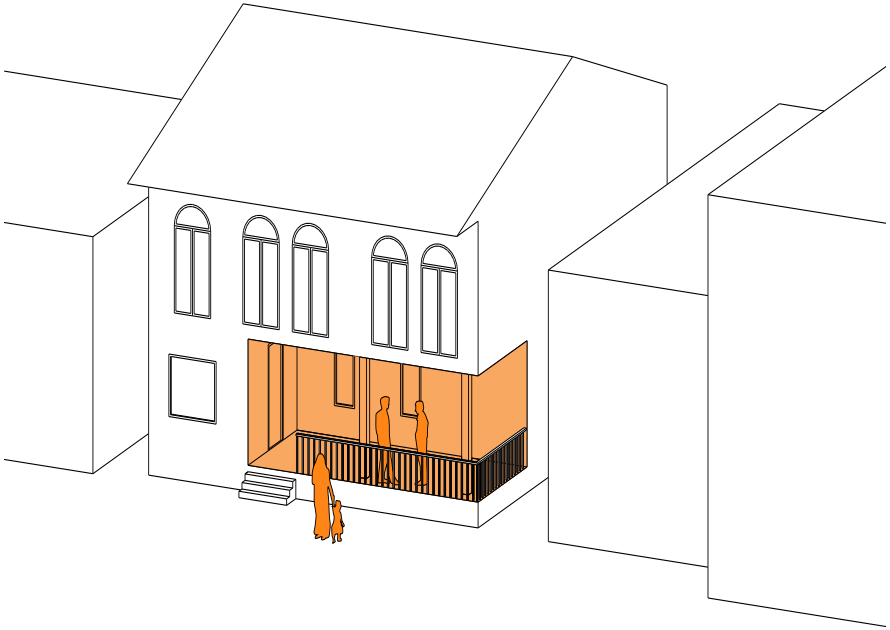


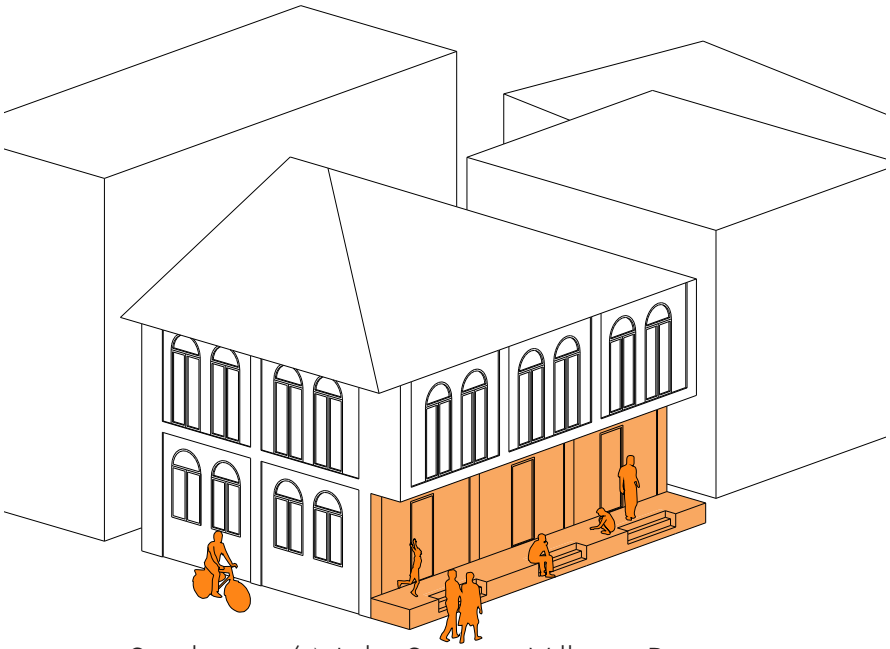
Building Technology / Construction Process



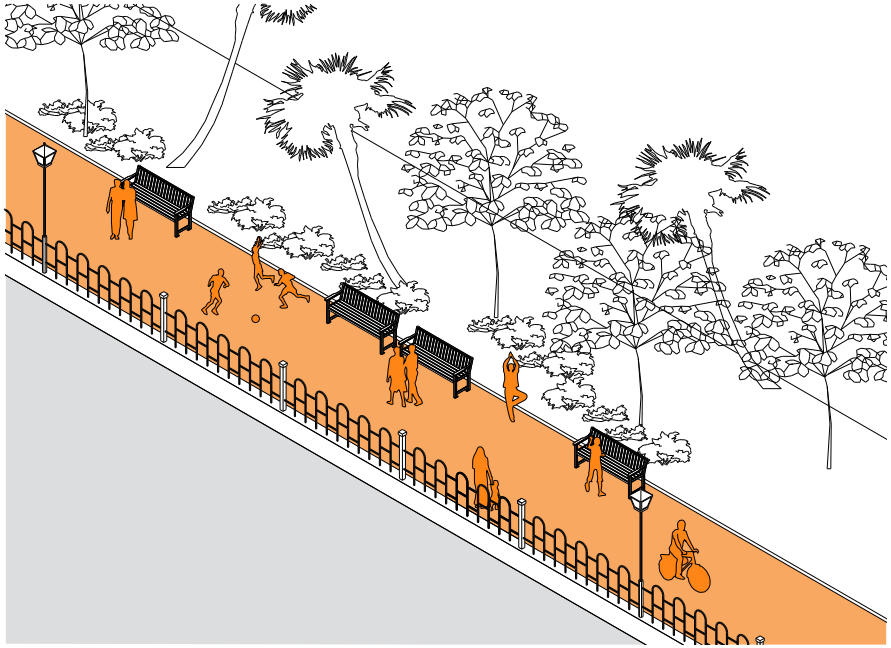
Building Technology / Construction Process

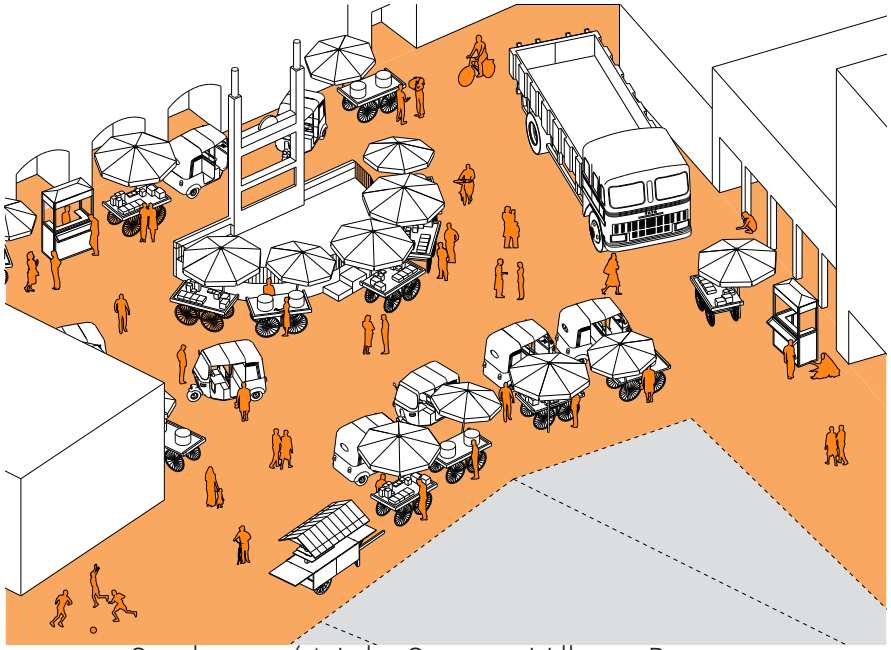
SYNTHESIS



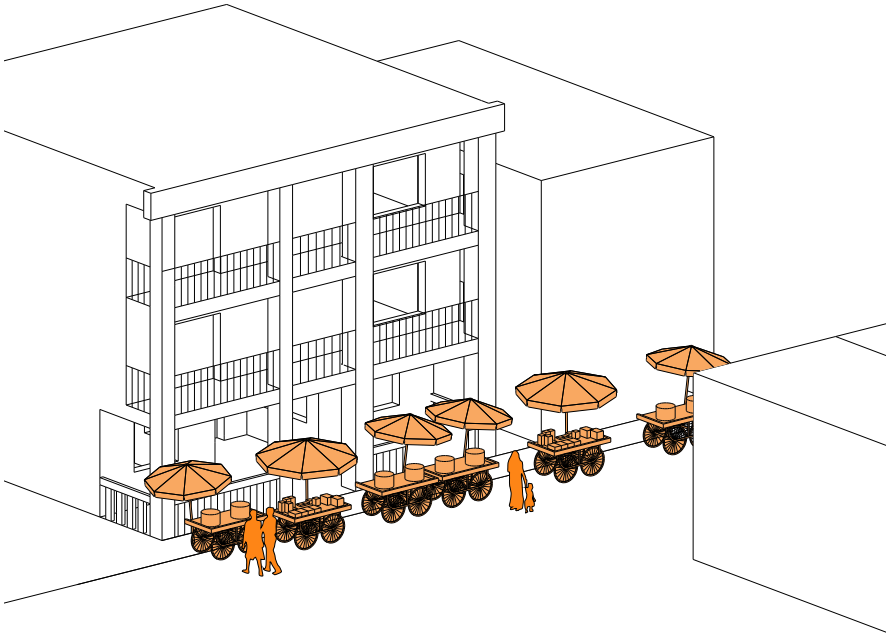


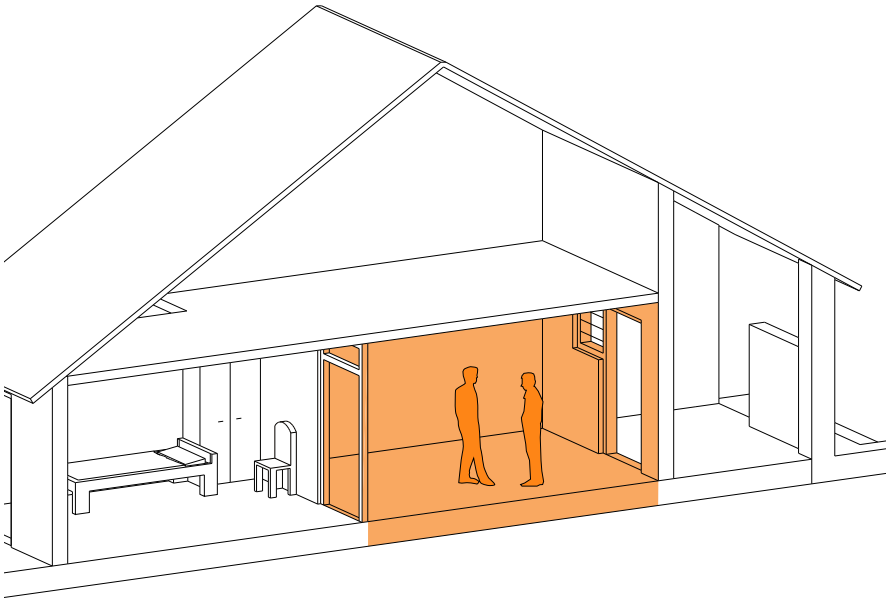
Synthesis / Nala Sopara Village Patterns





Synthesis / Nala Sopara Village Patterns



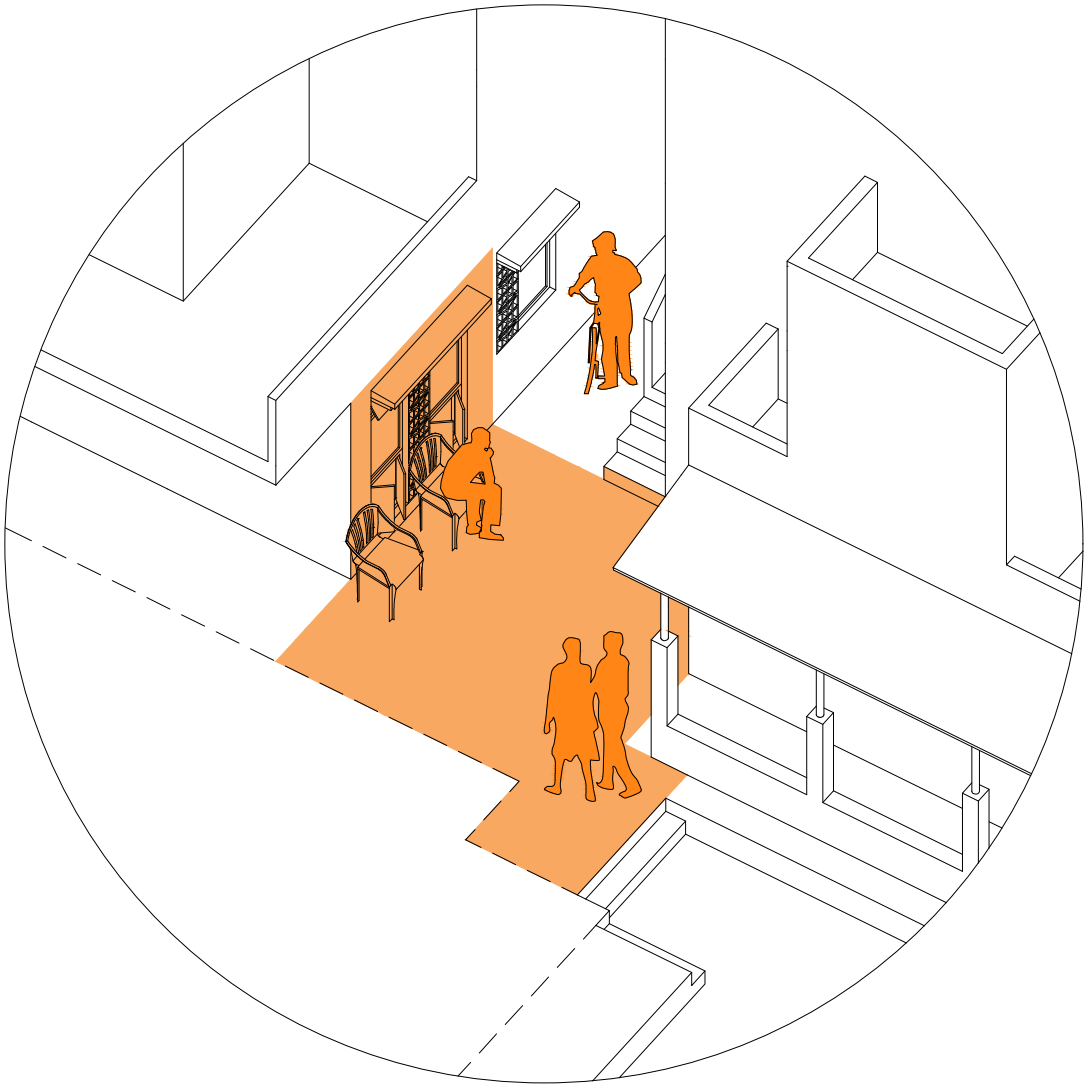


Synthesis / Nala Sopara Village Patterns

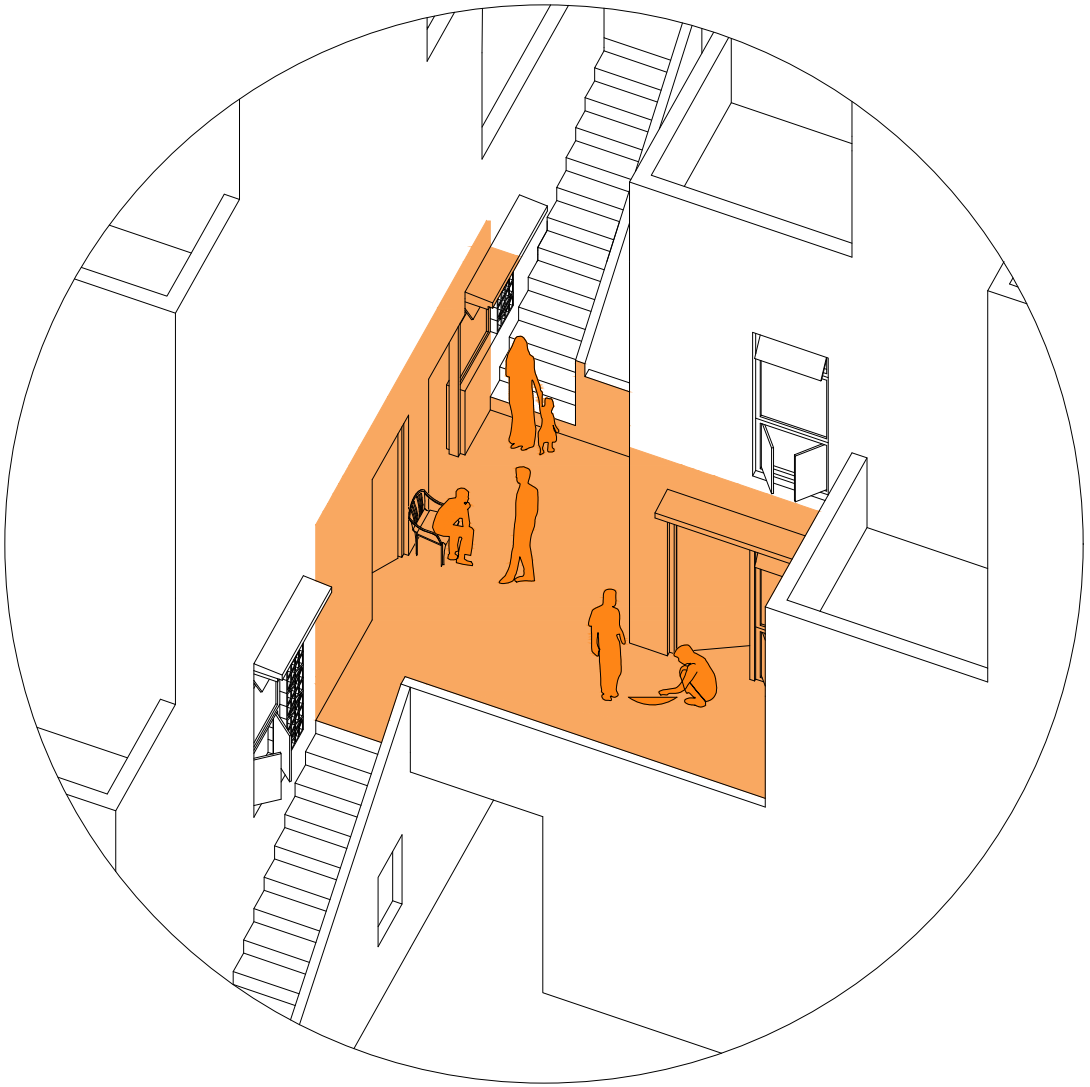
hierarchy in space

open-to-sky-space

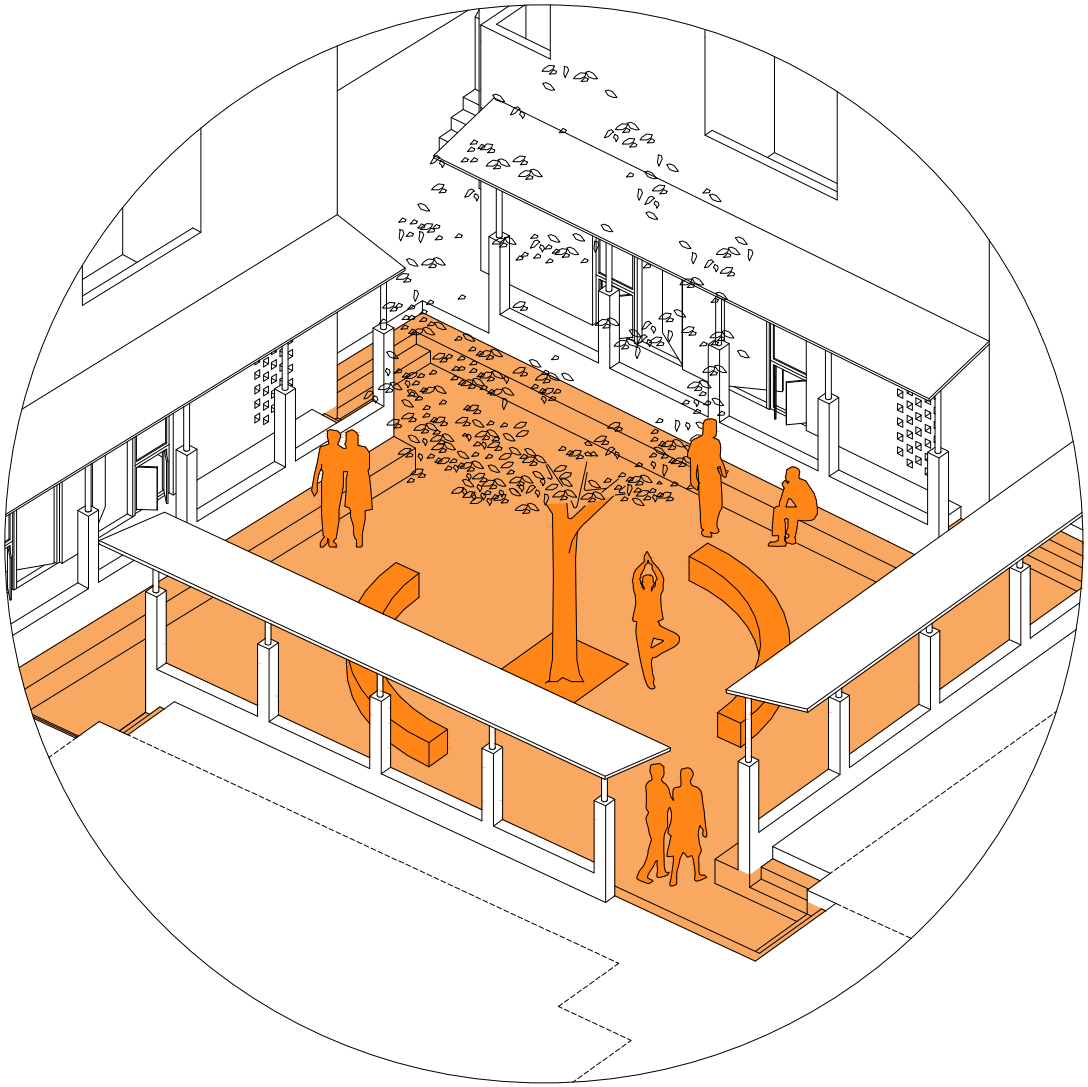
space for income generation



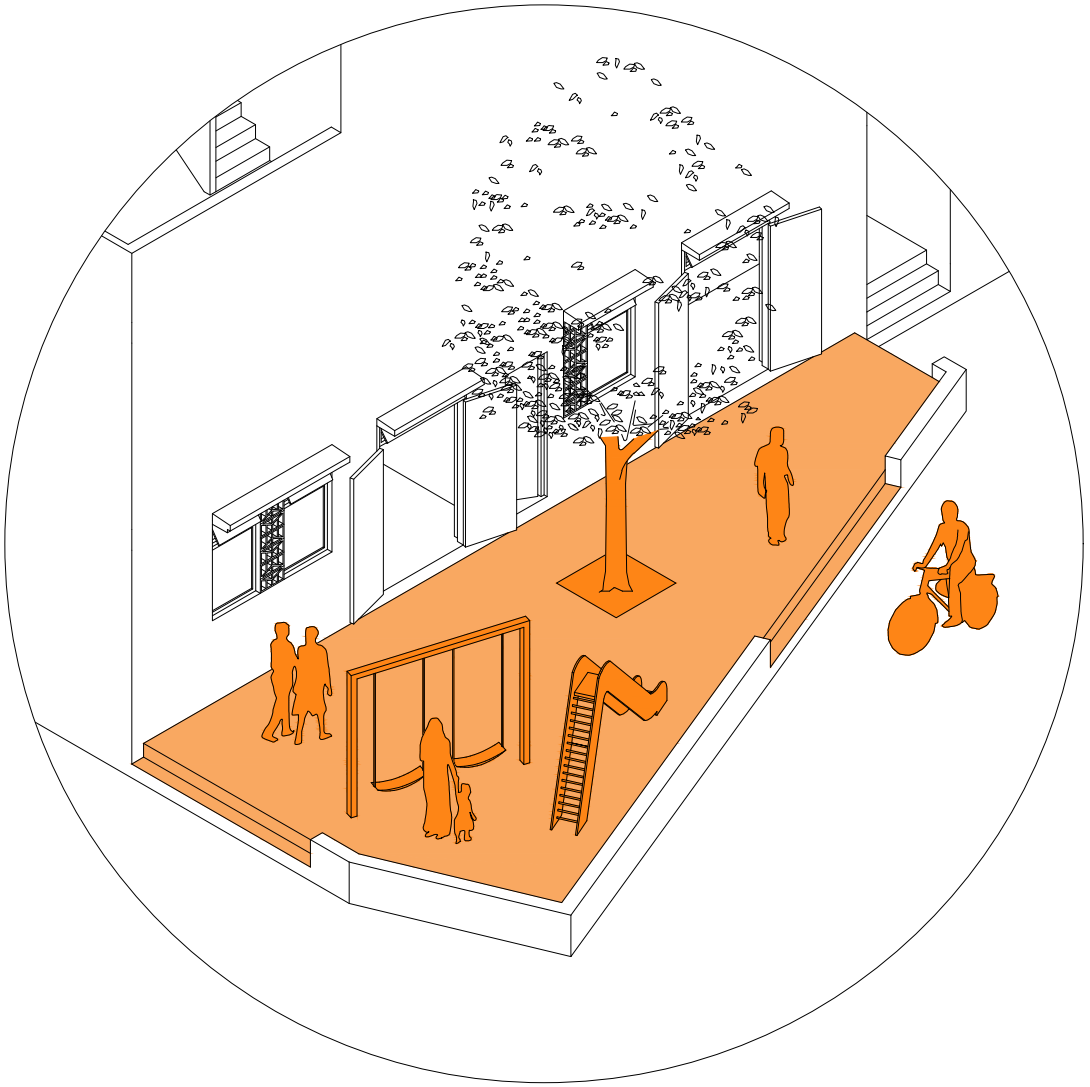
Synthesis / Reinterpretation Of Village Patterns - Hierarchy In Space



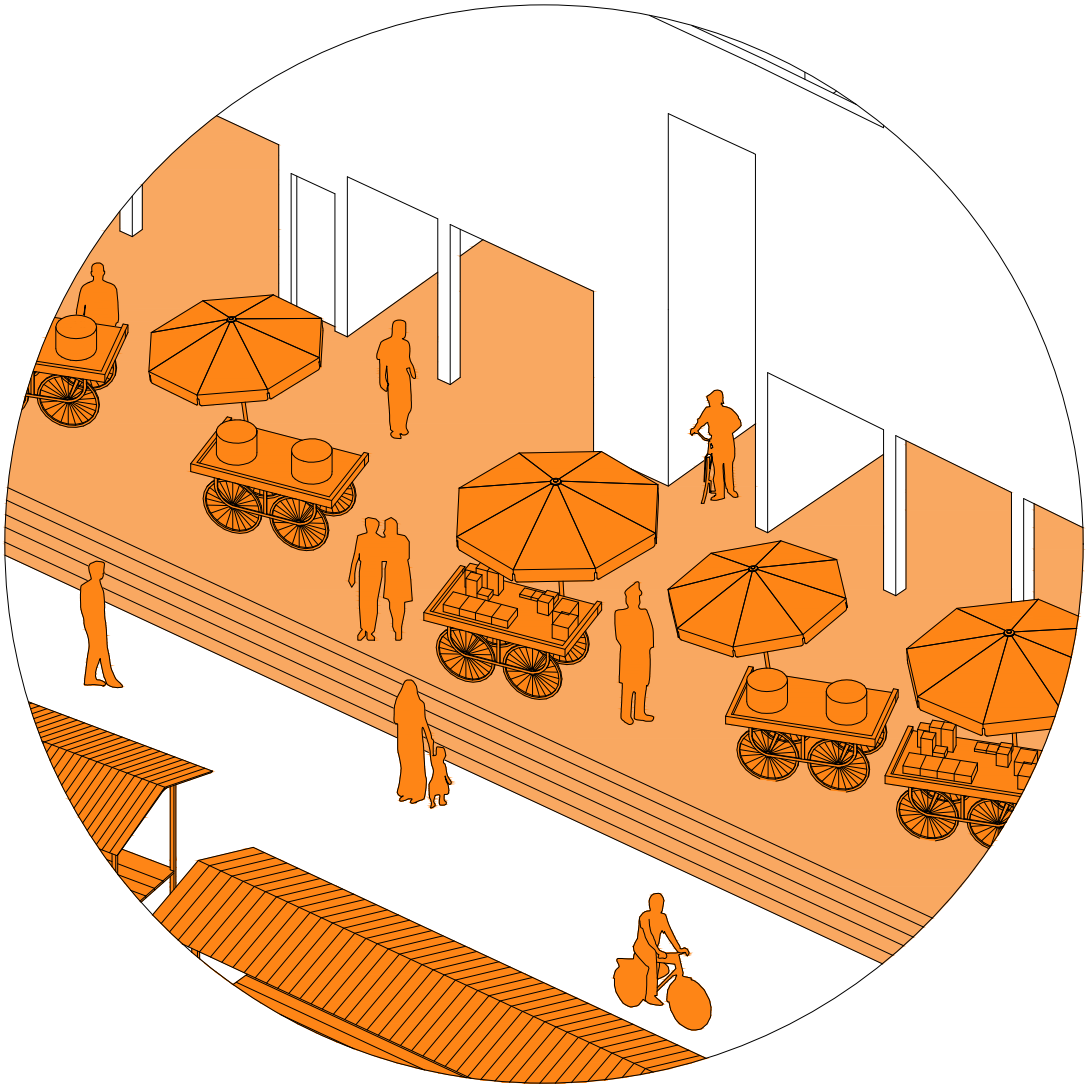
Synthesis / Reinterpretation Of Village Patterns - Hierarchy In Space



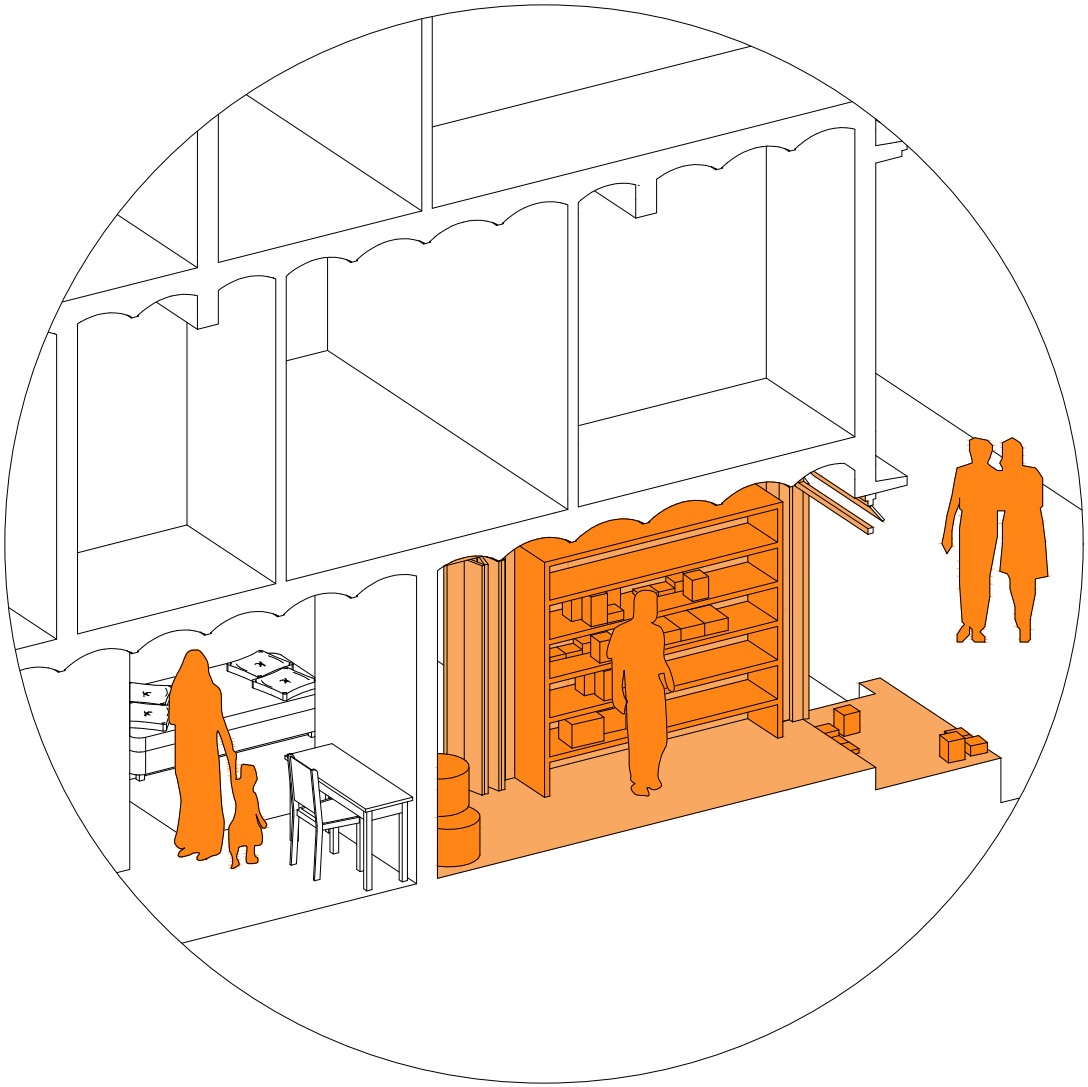
Synthesis / Reinterpretation Of Village Patterns - Open-To-Sky-Space



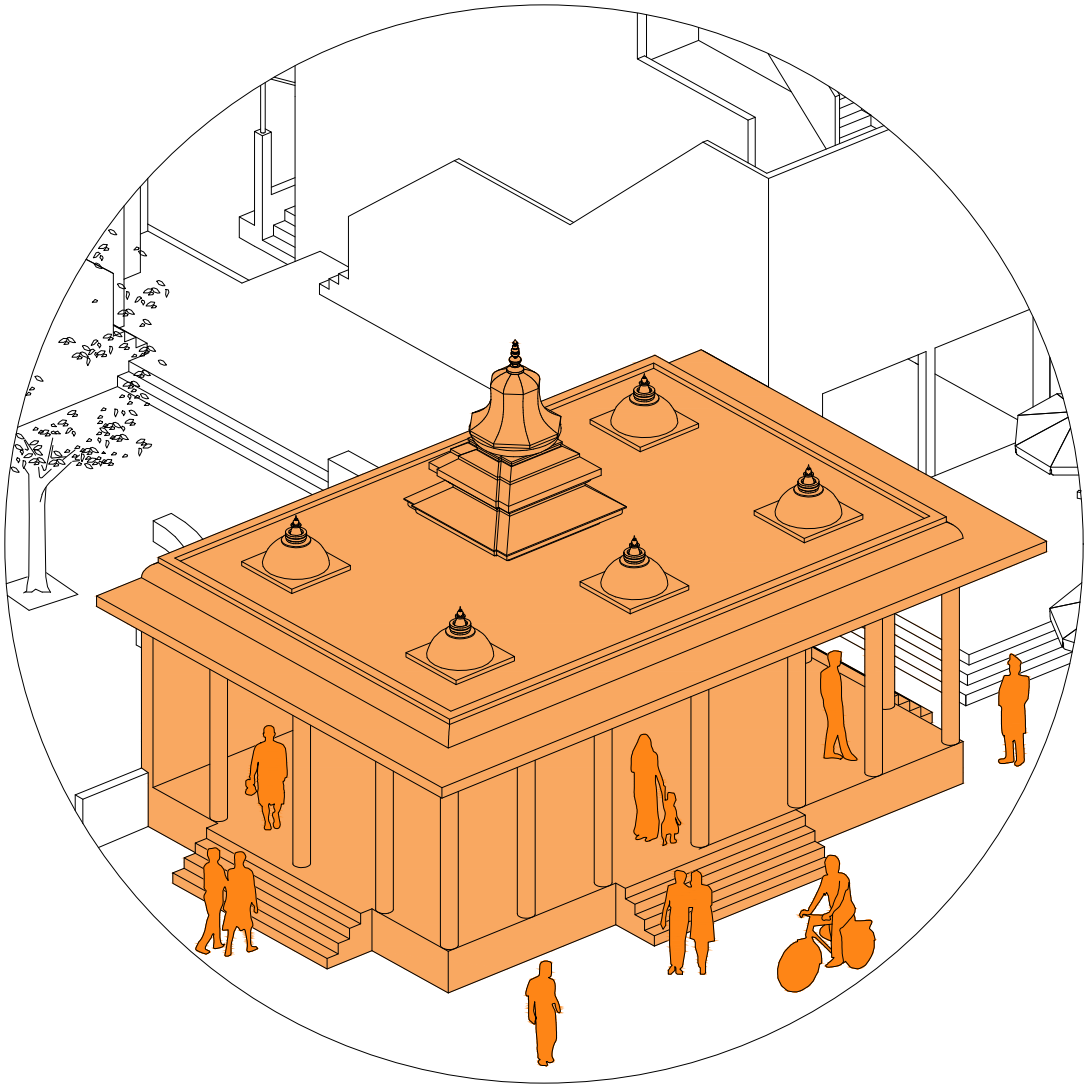
Synthesis / Reinterpretation Of Village Patterns - Open-To-Sky-Space



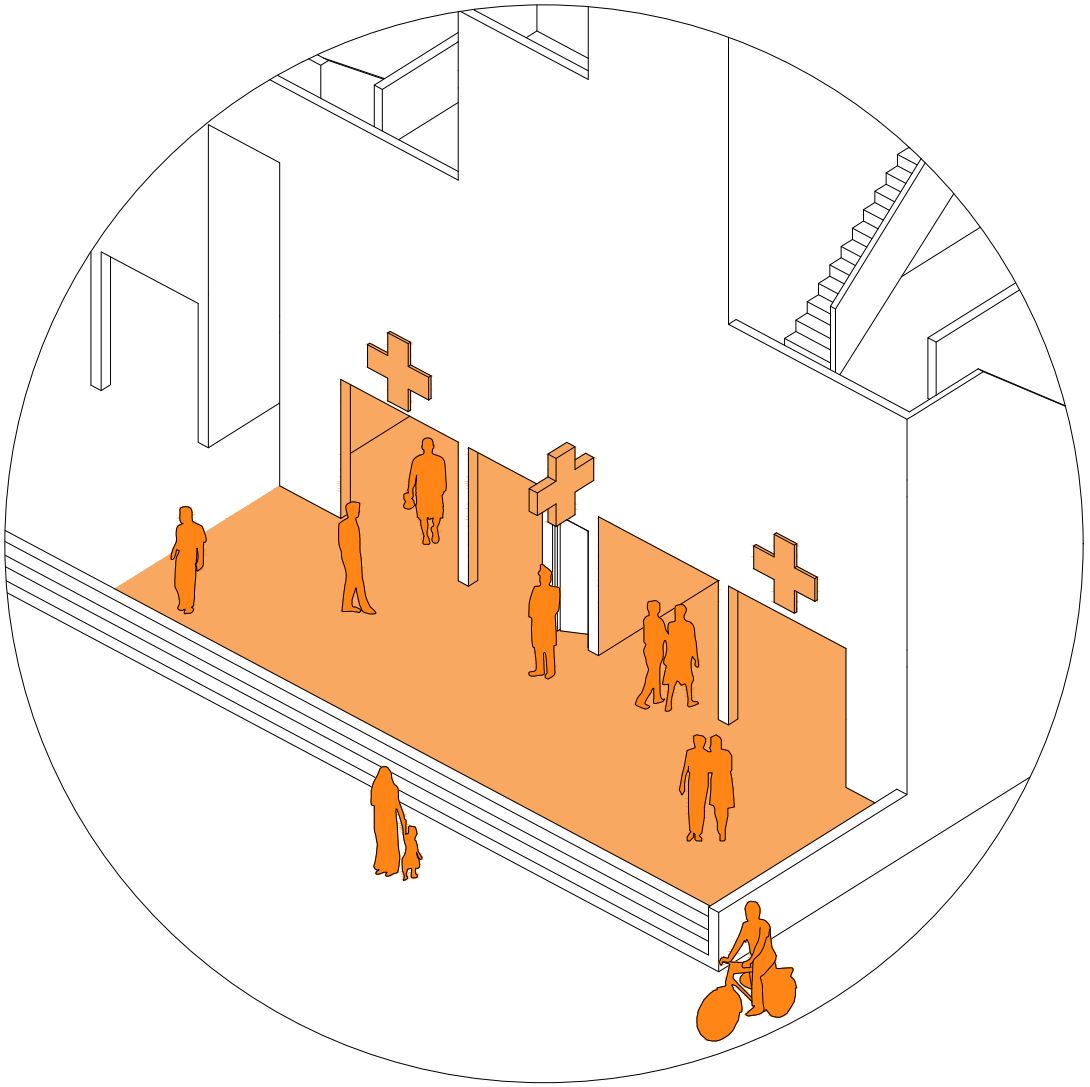
Synthesis / Reinterpretation Of Village Patterns - Income Generation



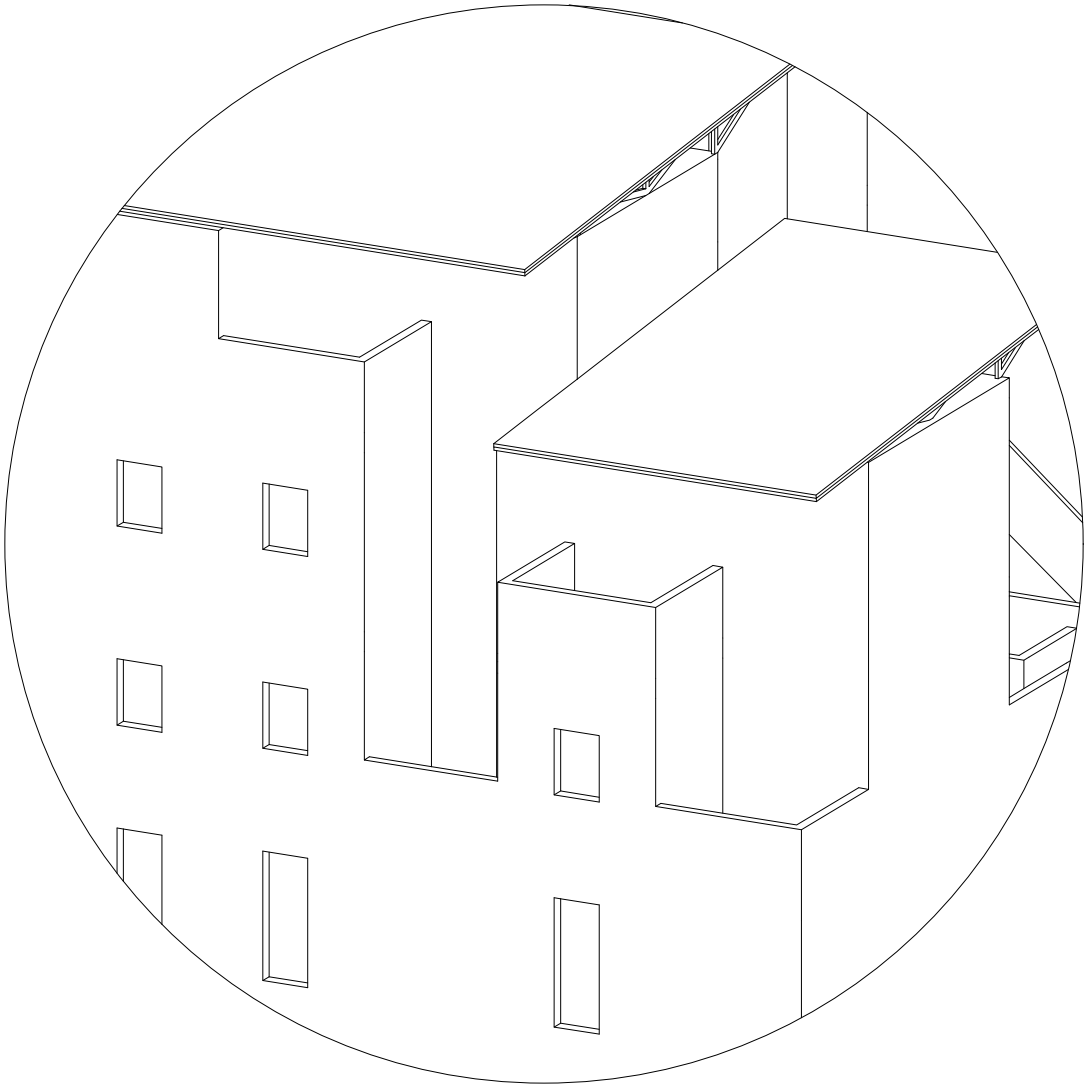
Synthesis / Reinterpretation Of Village Patterns - Income Generation



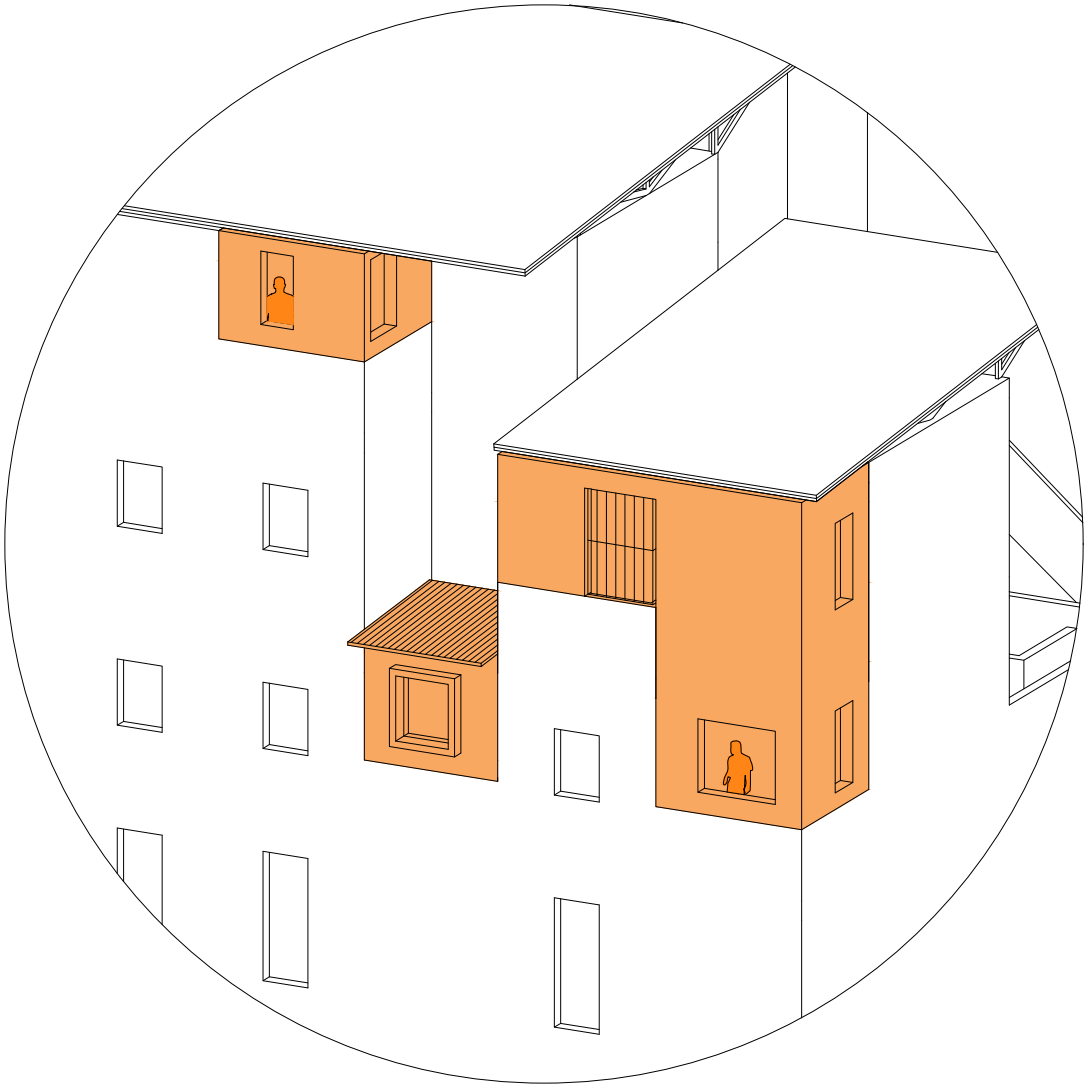
Synthesis / Reinterpretation Of Village Patterns - Space For Amenities



Synthesis / Reinterpretation Of Village Patterns - Space For Amenities



Synthesis / Reinterpretation Of Village Patterns - Appropriation Of Space



Synthesis / Reinterpretation Of Village Patterns - Appropriation Of Space

Synthesis / Reinterpretation Of Village Patterns

THANK YOU