

This is home, surely?

Retrofitting Singaporean Public Housing
for Domestic and Climatic Collectivity



This project seeks to
problematise 'home' in
Singapore.

Home, Kit Chan (1998)

This is home, truly

Where I know I must be

Where my dreams wait for me

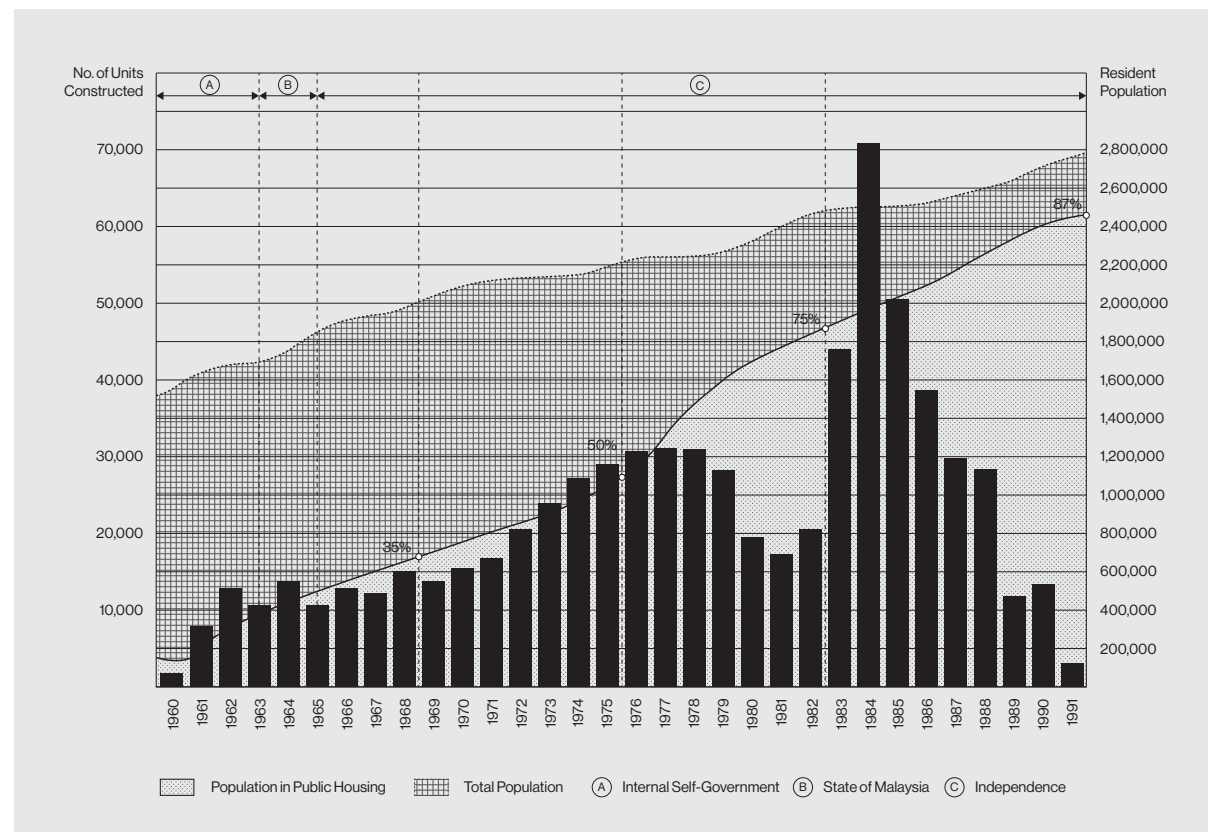
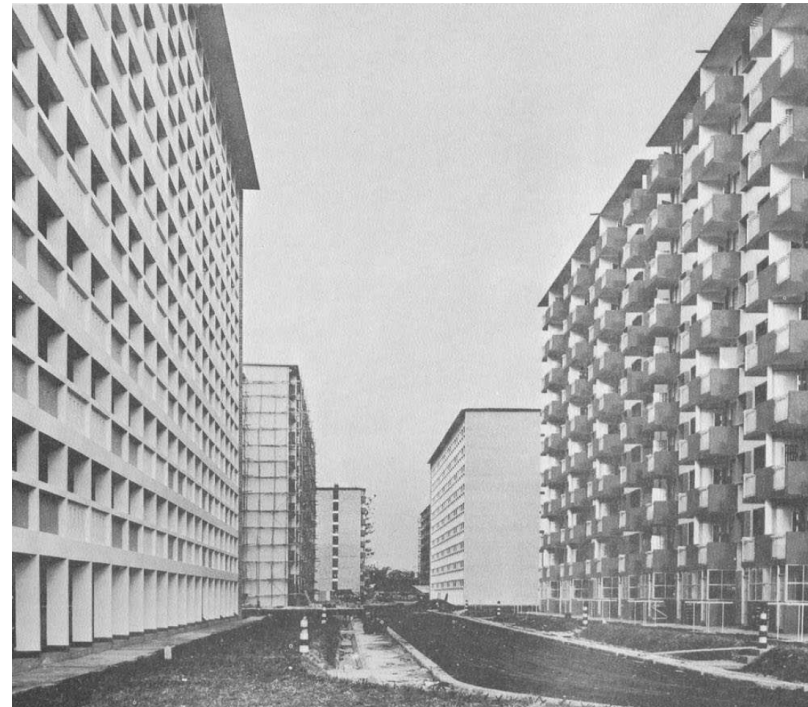
Where that river always flows

This is home, surely (?)

As my senses tell me

This is where I won't be alone

For this is where I know it's home



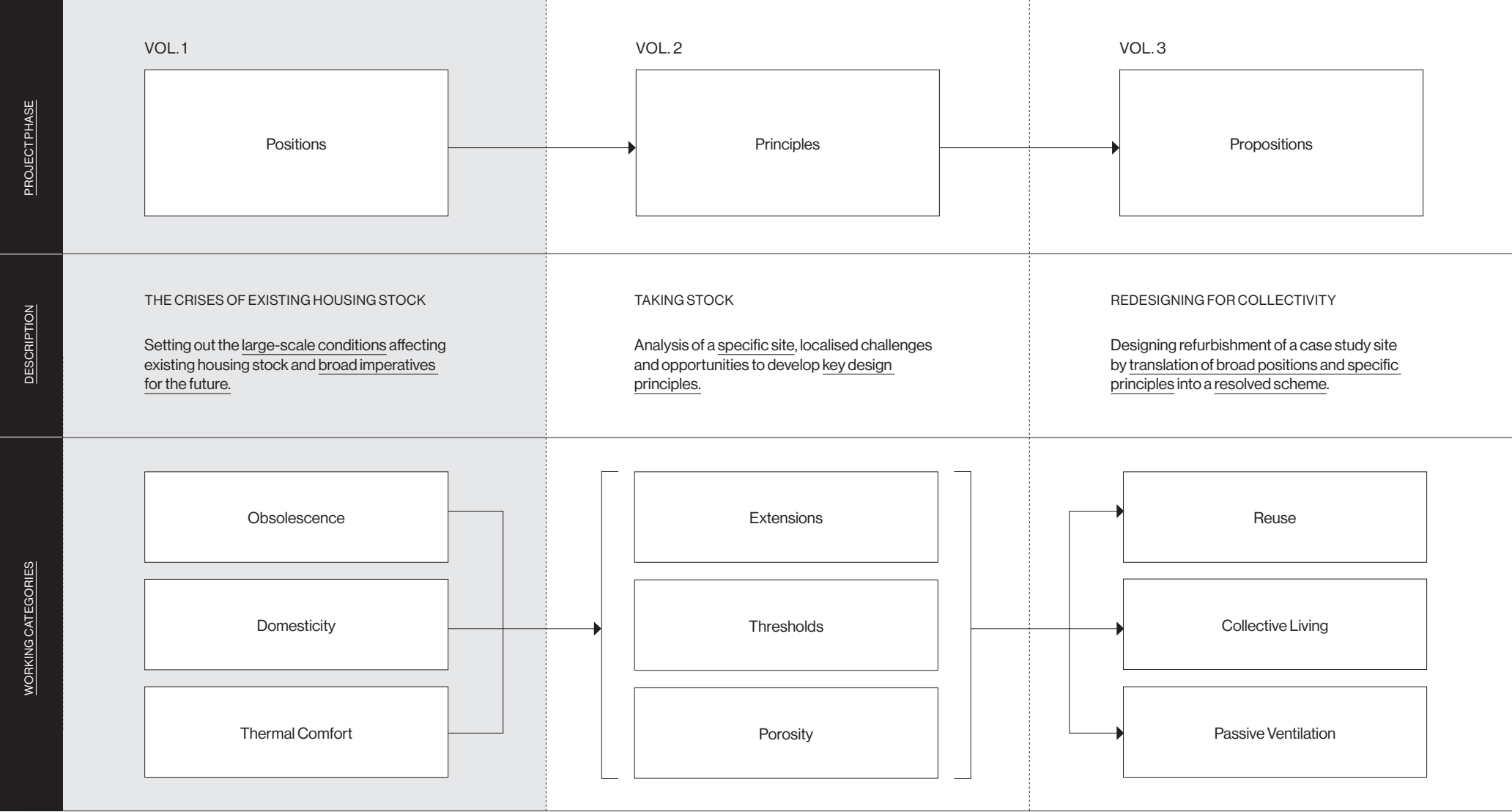
Singapore, a 735km² post-colonial island nation, underwent *tabula rasa* modernist reconstruction from 1959.

Fig. 1
Toa Payoh New Town under construction, c.1967. Source: National Archives of Singapore (NAS)

Fig. 2
Housing & Development Board (HDB) estate, c.1967. Source: HDB Annual Report 1967.

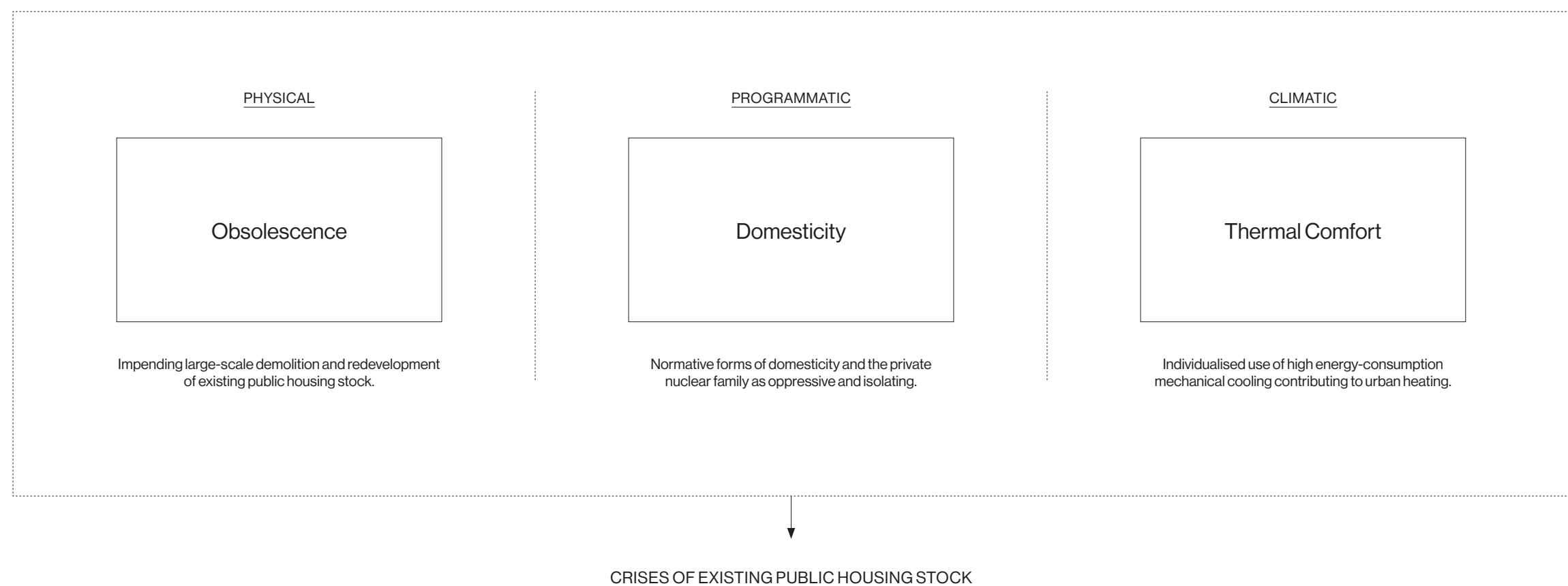
Fig. 3
Blair Plain Housing Estate, c.1968. Source: HDB Annual Report 1968.

Fig. 4
Graph of public housing construction; proportion of population housed in public housing. Source: data.gov.sg / Author.



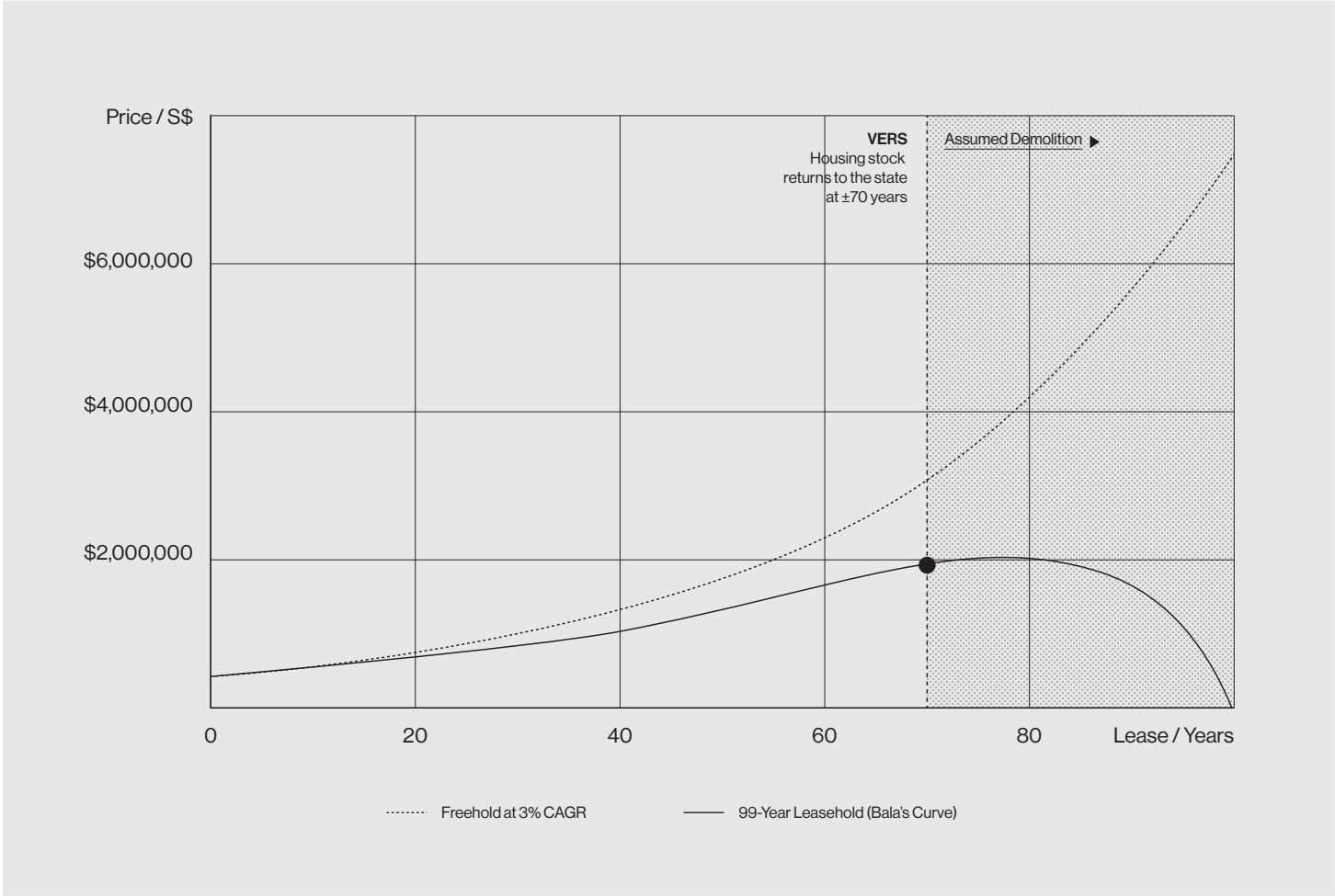
The Multiple Crises of Singaporean Public Housing

Vol. 1
Positions



Crisis 1

Obsolescence



CONTRADICTIONARY CONDITIONS

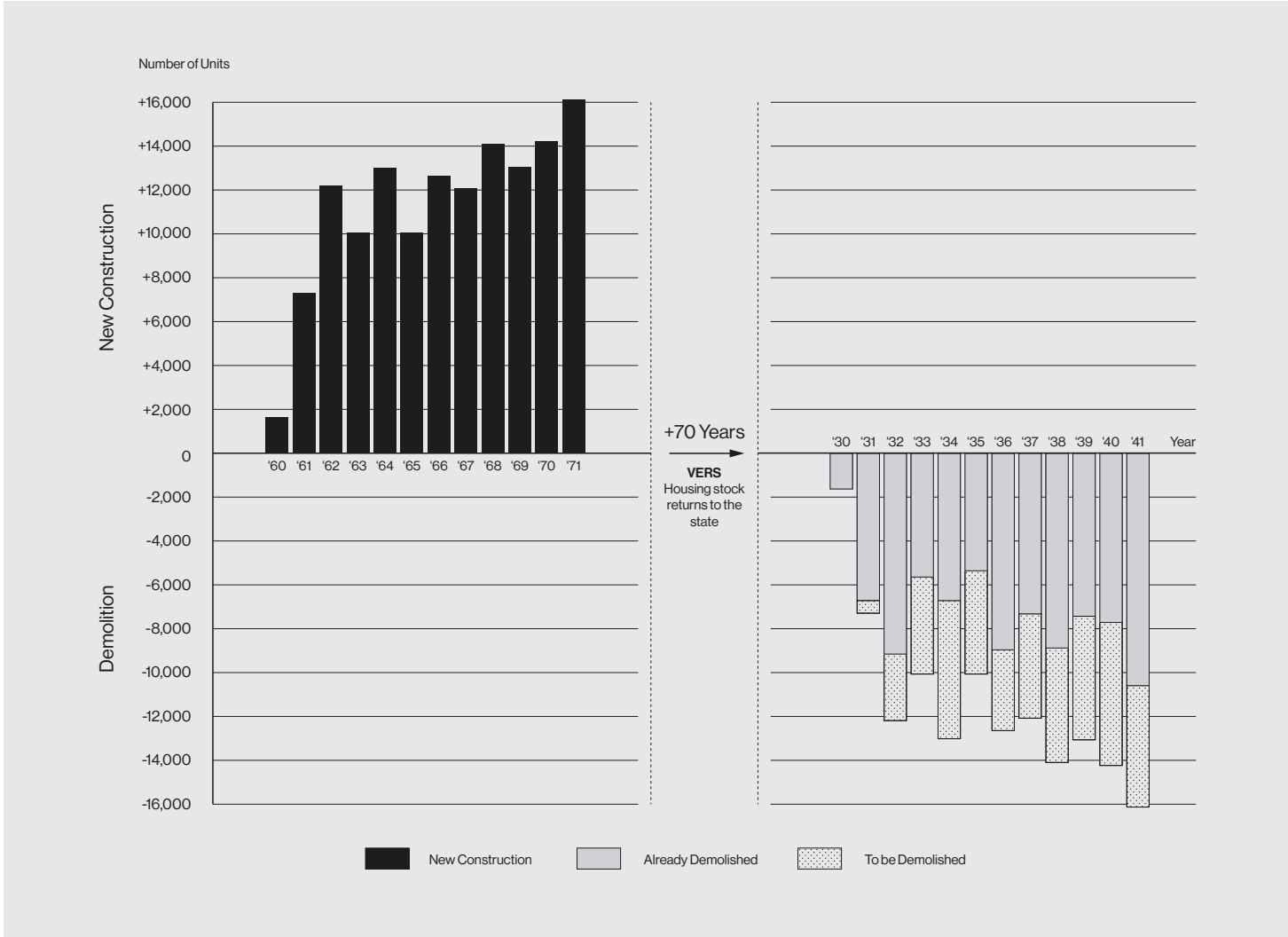
Singapore's system of leasehold public housing tenures and asset-based retirement savings has created an impending condition of cyclical demolition and new construction.



Fig. 5
'Bala's Curve': graph of 99-year leasehold and freehold values; demolition risk following VERS at 70-year mark. Source: InvestmentMoats / Author.

Crisis 1

Obsolescence



CYCLICAL DEMOLITION

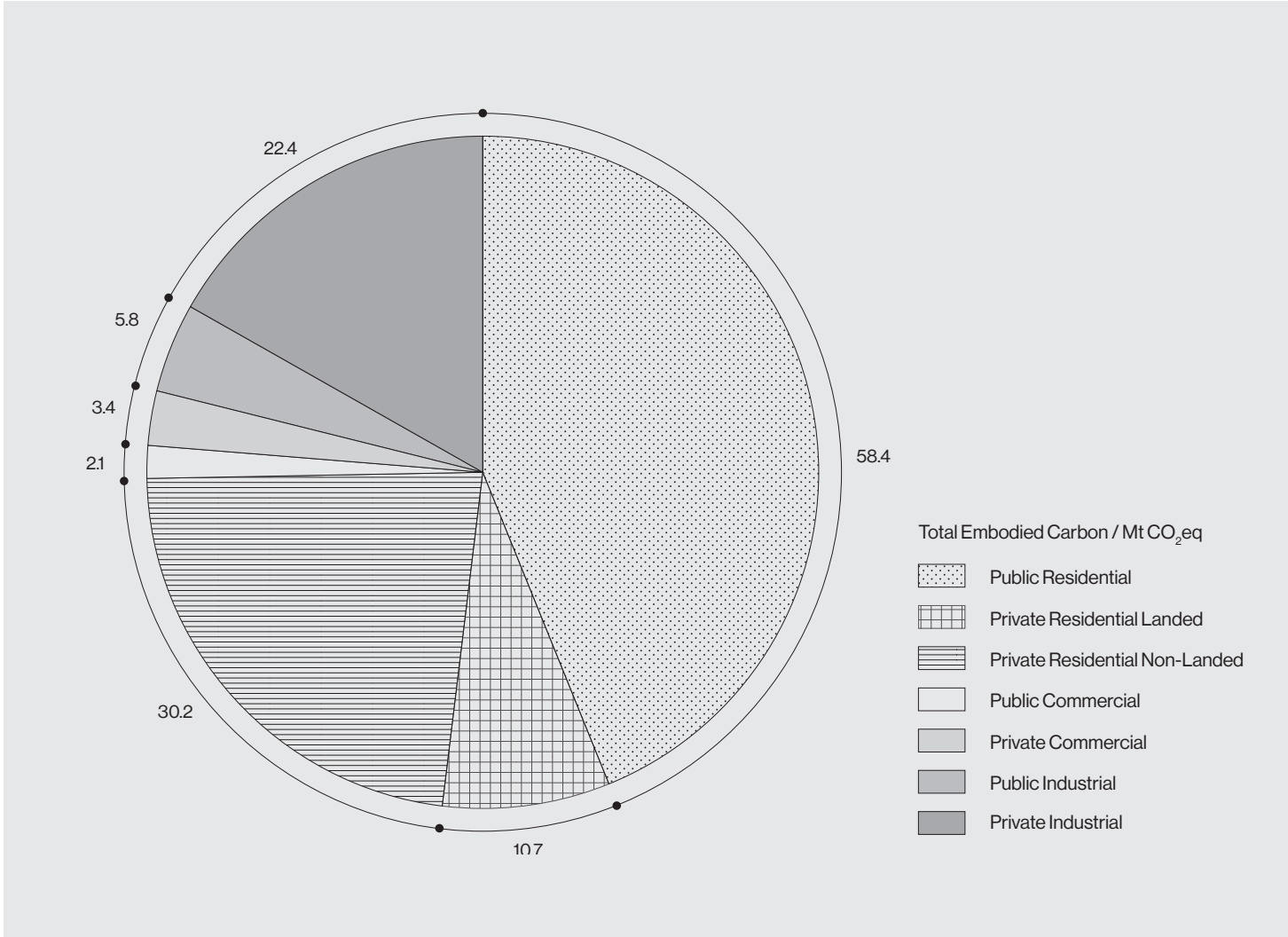
Approximately 49,826 housing units are at risk of cyclical demolition under VERS between 2030 and 2040.



Fig. 6
Graph of anticipated cyclical demolition of public housing stock between 2030-40.
Source: data.gov.sg / Author.

Crisis 1

Obsolescence



EMBODIED CARBON

Singapore's public housing contains the largest proportion of embodied carbon in the country's building stock.



Fig. 10
Embodied carbon in Singapore's building stock. Source: Anthony Meijer et al., "Material stock-service and circularity prospects of buildings in Singapore", *Resources, Conservation, and Recycling* 208 (September 2024).

Fig. 11
Construction of Kallang Estate, c.1962. Source: National Archives of Singapore.

Crisis 2

Domesticity



LIVING ALONE, LESS CONVENTIONALLY, AND LONELIER

The proportion of Singaporeans living in non-nuclear family households and alone is rapidly increasing; the prevalence of loneliness is growing.

How often do you feel isolated from others?

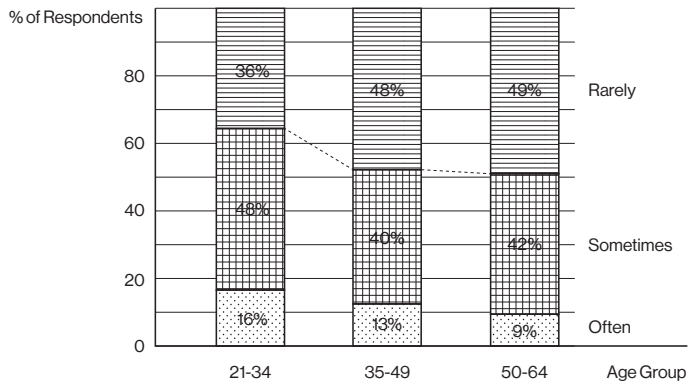


Fig.12
Graph illustrating proportion of single person and non-nuclear family households (1998-2024). Source: data.gov.sg / Author.

Fig.13
Chart of loneliness in Singapore by age group. Source: Institute of Policy Studies (IPS), National University of Singapore.

Crisis 2

Domesticity



0 1 2 5 10m

SMALLER HOUSEHOLDS BUT LARGE HOMES

Standard housing types have not changed to accomodate evolving lifestyles, household compositions, and sizes.

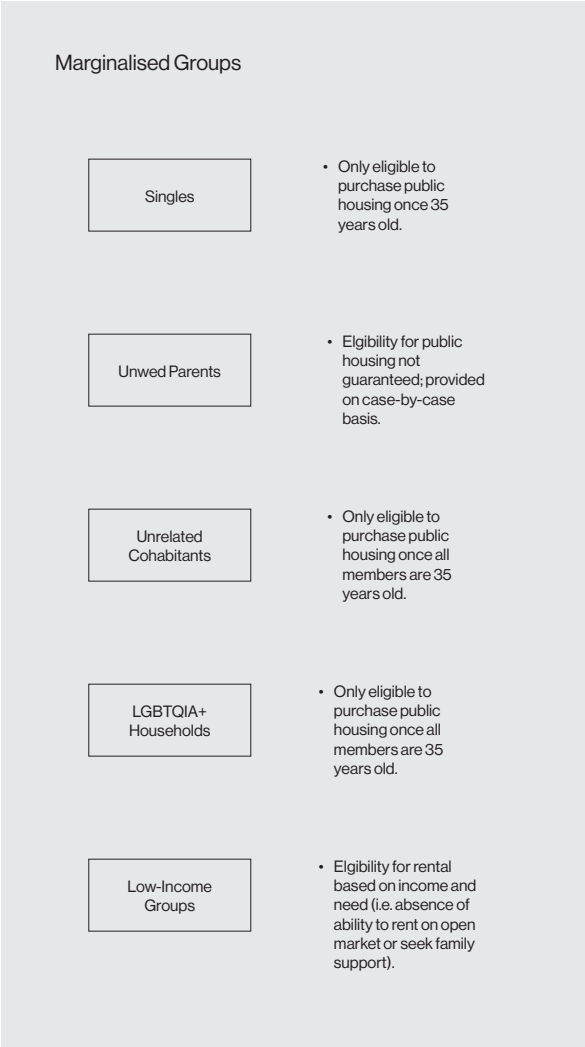
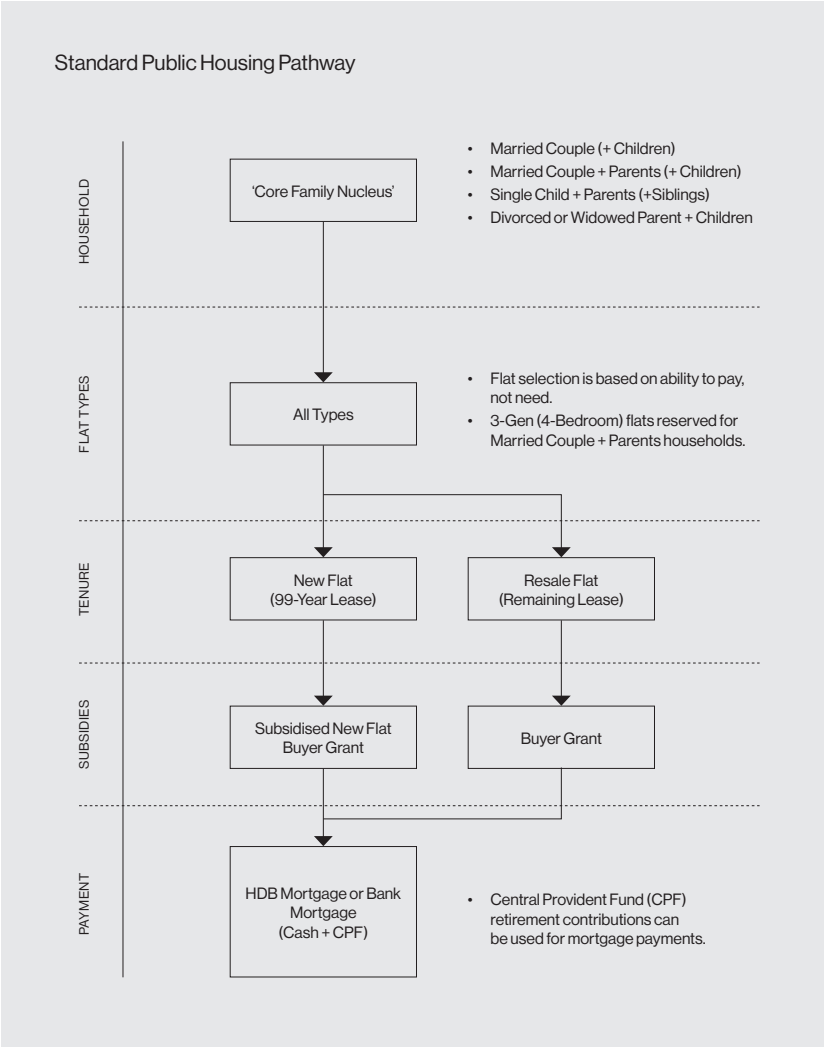


Fig. 16
Typical public housing flat types, c.1965 and 2025. Source: HDB Annual Report 1965 / HDB BTO Brochure 2025 / Author.

Fig. 17
Interior of a HDB 3-Room Standard Flat, c.1970. Source: Heritage Singapore Facebook Group.

Crisis 2

Domesticity



PUBLIC HOUSING AS SOCIAL ENGINEERING TOOL

Access to the Singaporean public housing system systematically privileges the heteronormative, (extended) nuclear family, while discriminating against non-nuclear households.

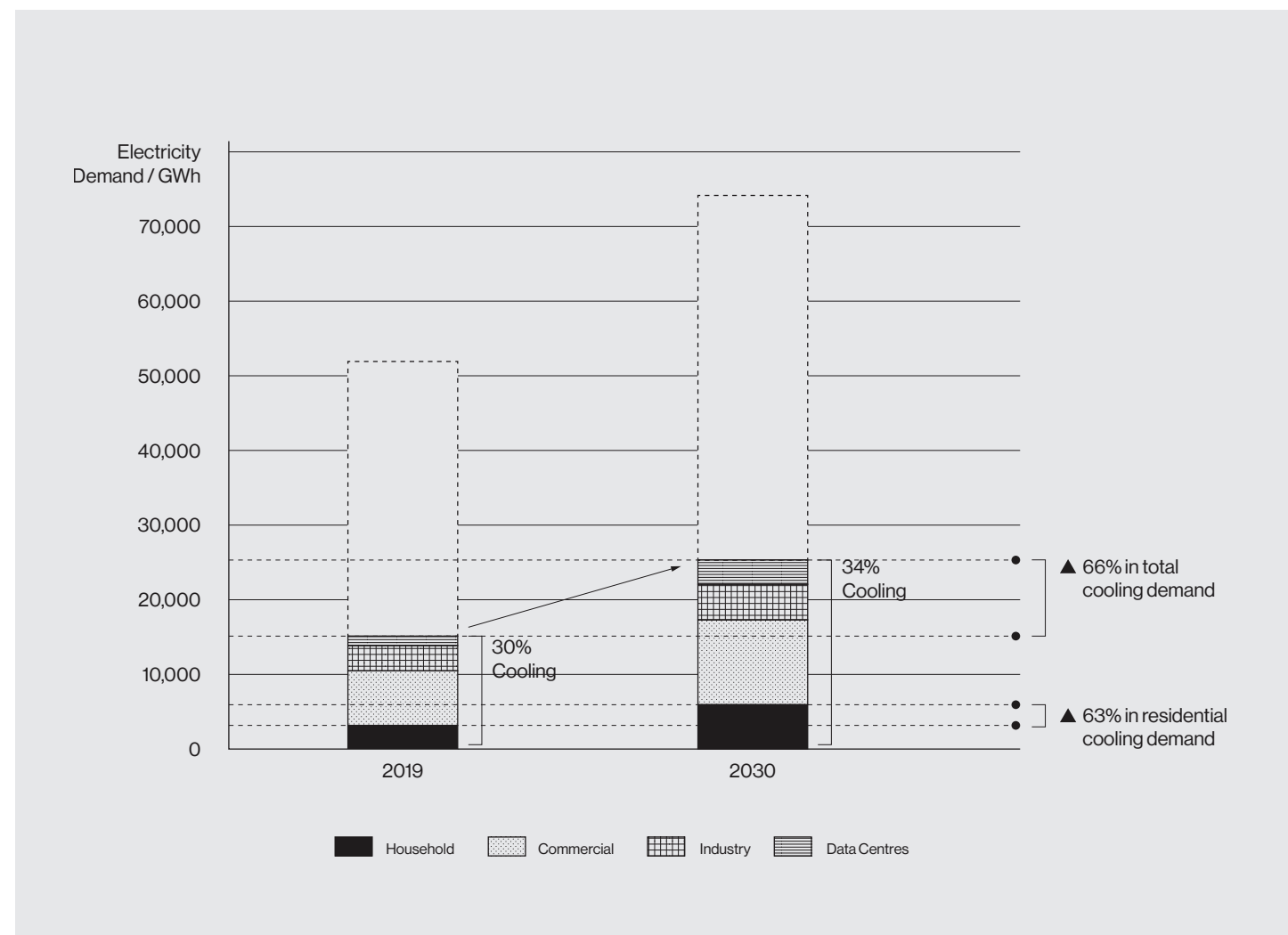


Fig. 18
Pathways for public housing access in Singapore. Source: HDB Flat and Grant Eligibility / Author.

Fig. 19
Advertisement for Build-to-Order (BTO) HDB flats, 2024. Source: HDB Facebook Post.

Crisis 3

Thermal Comfort



THE AIR-CONDITIONED NATION

82% of Singapore's households rely on air-conditioning; cooling is the single largest household energy consumer and demand is rapidly increasing.

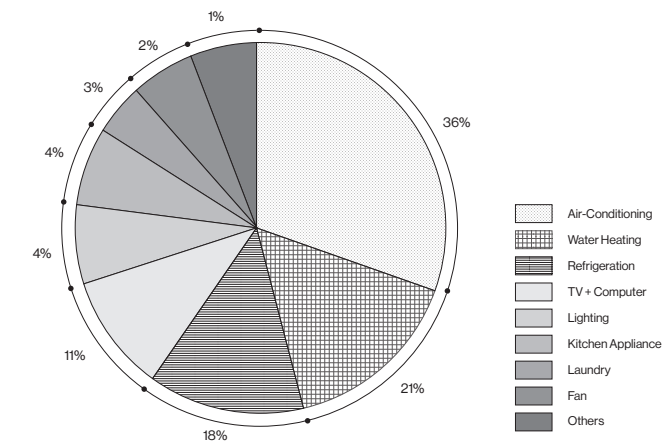


Fig. 25
Chart showing anticipated increases
in cooling energy demand, 2019-2030.
Source: WWF Singapore / Author.

Fig. 26
Chart showing household energy
consumption, 2022. Source: National
Environment Agency / Author.

Crisis 3

Thermal Comfort



THE AIR-CONDITIONING PARADOX

Individualised air conditioning creates an inequitable cycle of increasing urban temperatures and demand for cooling.

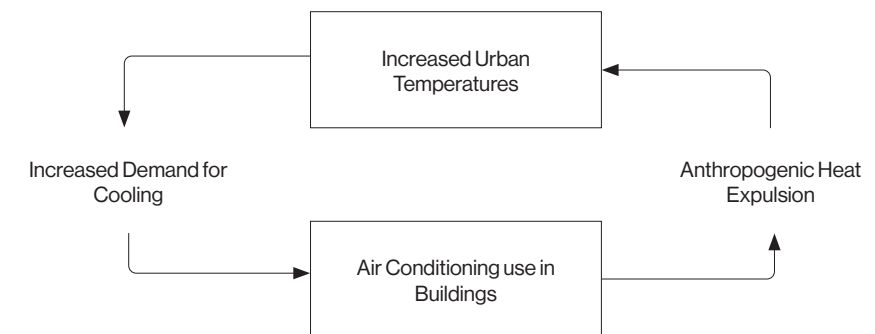


Fig. 27
Public housing block facades showing individual household air conditioning compressors. Source: Torsten Scheel.

PROBLEMS

PHYSICAL

Obsolescence

Impending large-scale demolition and redevelopment of existing public housing stock.



Reuse

→ We must refuse the assumed future of mass cyclical demolition and make use of existing housing stock.

PROGRAMMATIC

Domesticity

Normative forms of domesticity and the private nuclear family as oppressive and isolating.



Collective Living

→ We must realise more collective, plural, and convivial forms of home.

CLIMATIC

Thermal Comfort

Individualised use of high energy-consumption mechanical cooling contributing to climate breakdown.



Passive Ventilation

→ We must embrace comfort sufficiency and equity through bioclimatic design.

POSITIONS

Taking Stock

Selegie House

Vol. 2
Principles

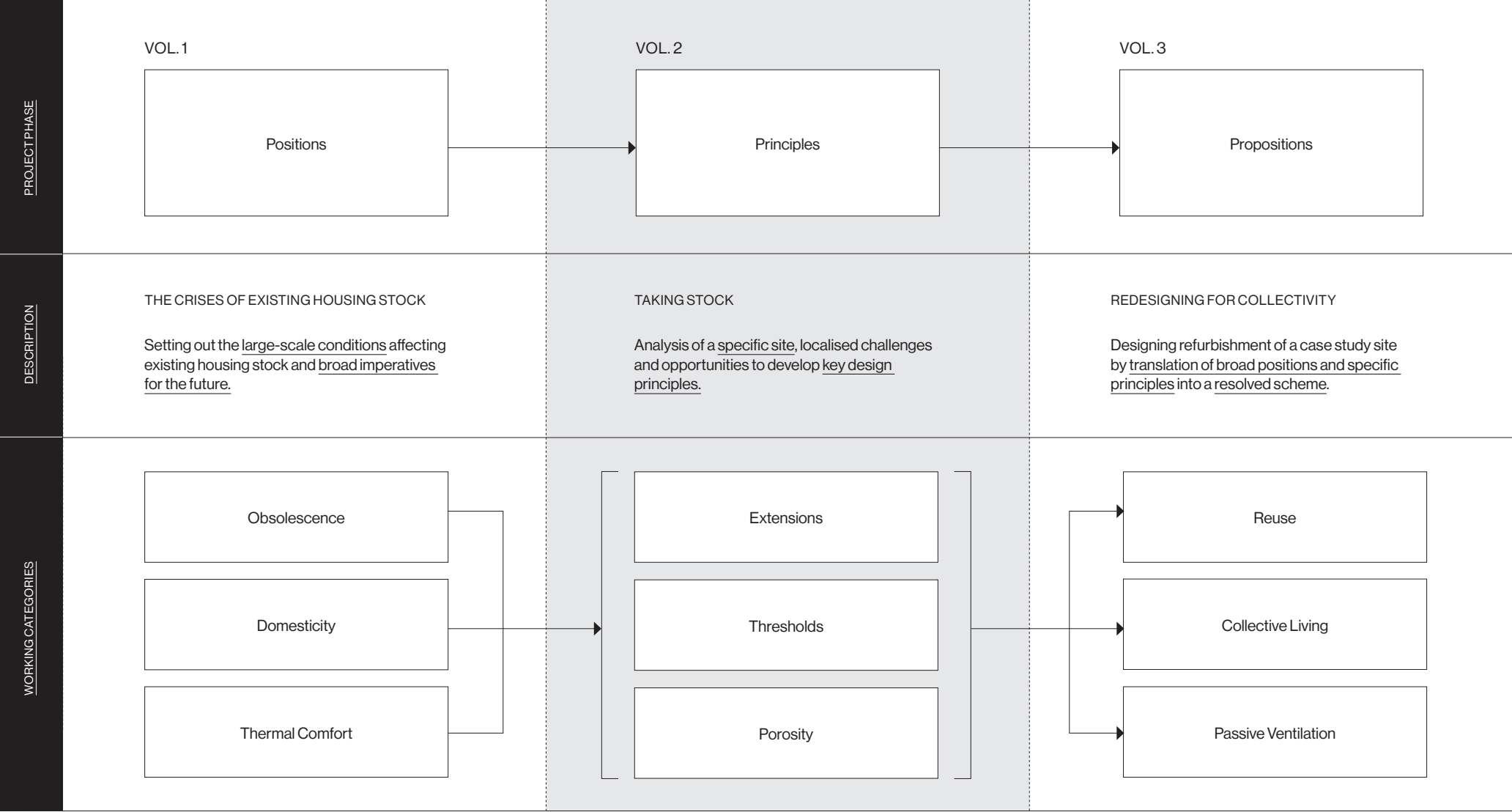




Fig. 29
Selegie House on the cover of the HDB
Annual Report 1963. Source: HDB
Annual Report 1963 / National Library
Board Singapore.



■ Site







GREEN AREAS

- Designated Green Areas
- Undesignated Green Areas



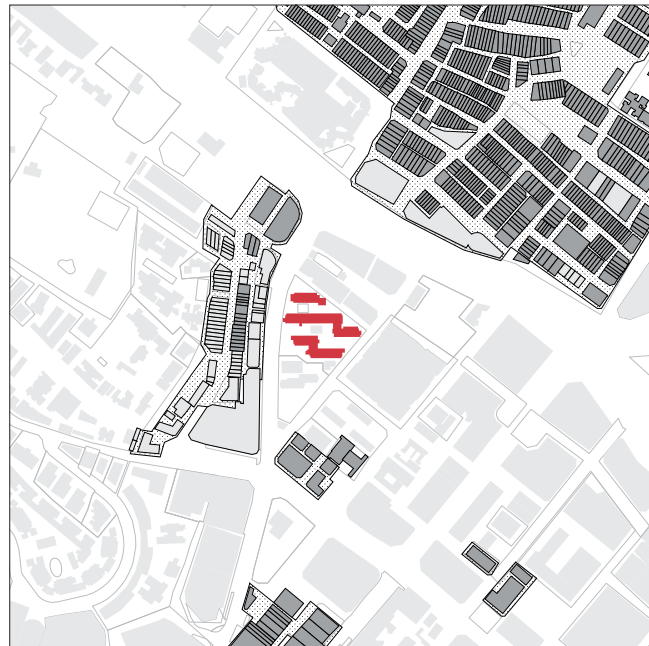
USAGE & NEIGHBOURHOOD

- Mixed Use
- Commercial
- Civic / Institutional
- Residential



TRANSPORTATION & ACCESS

- Major Road
- ➔ Secondary Road
- Pedestrian Thoroughfare
- Subway Line
- Subway Stop
- △ Bus Stop



HERITAGE

- Conservation Zone
- Conserved Building
- Not Conserved Building

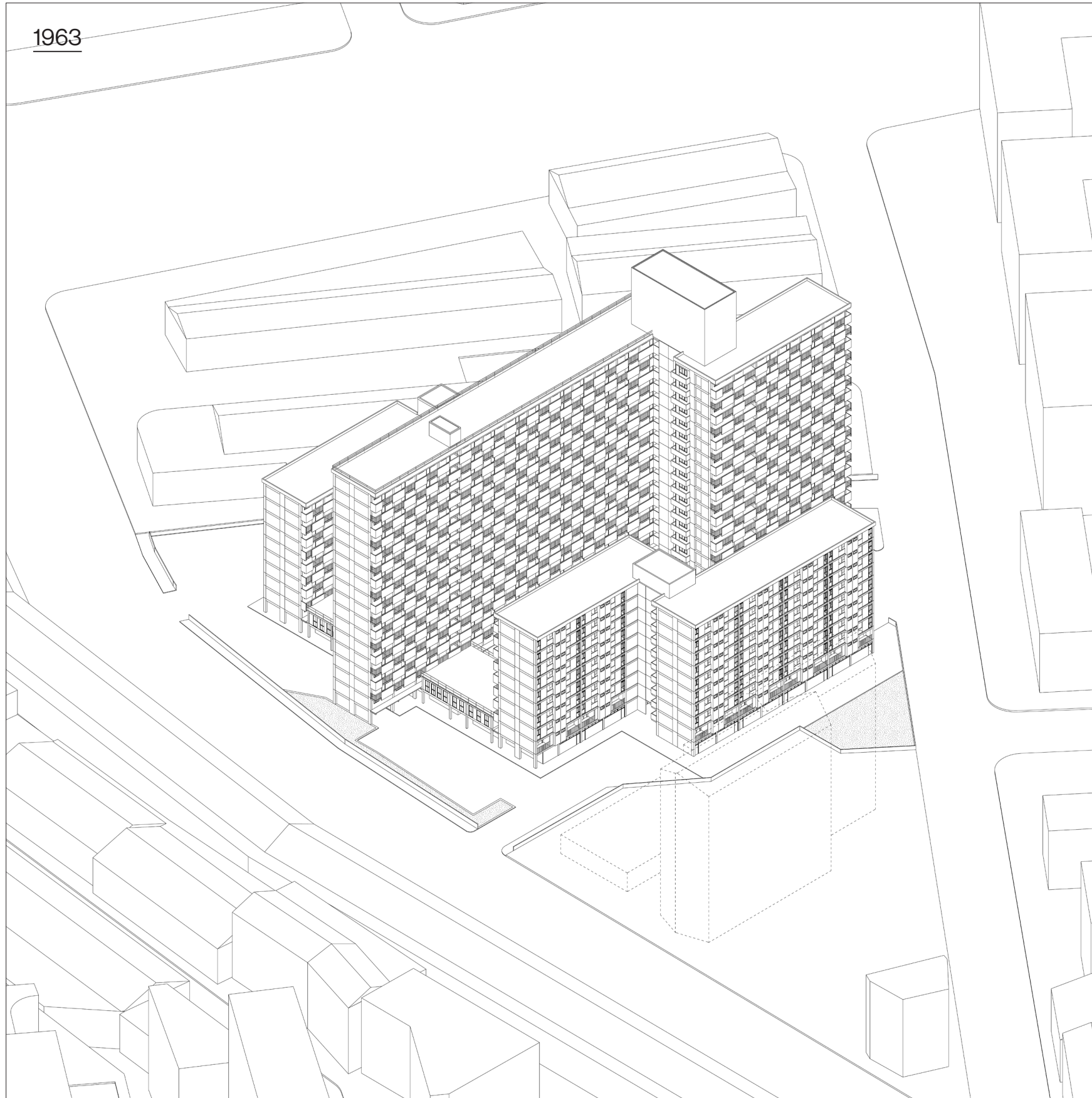


Site Plan
1:5000





1963



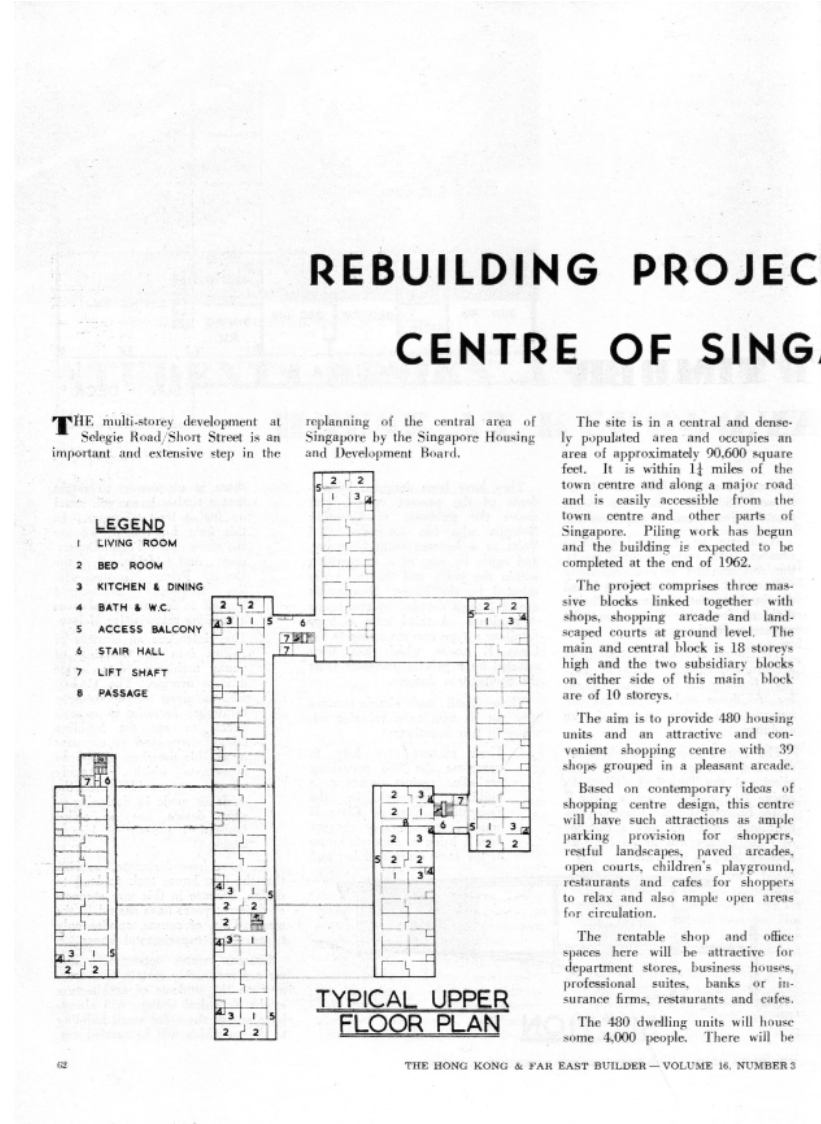


Fig. 31
"Rebuilding Project for Centre of Singapore", article on Selegie House. Source: *The Hong Kong & Far East Builder* 16, no. 3 (April 1962) / HKU Digital Archives.

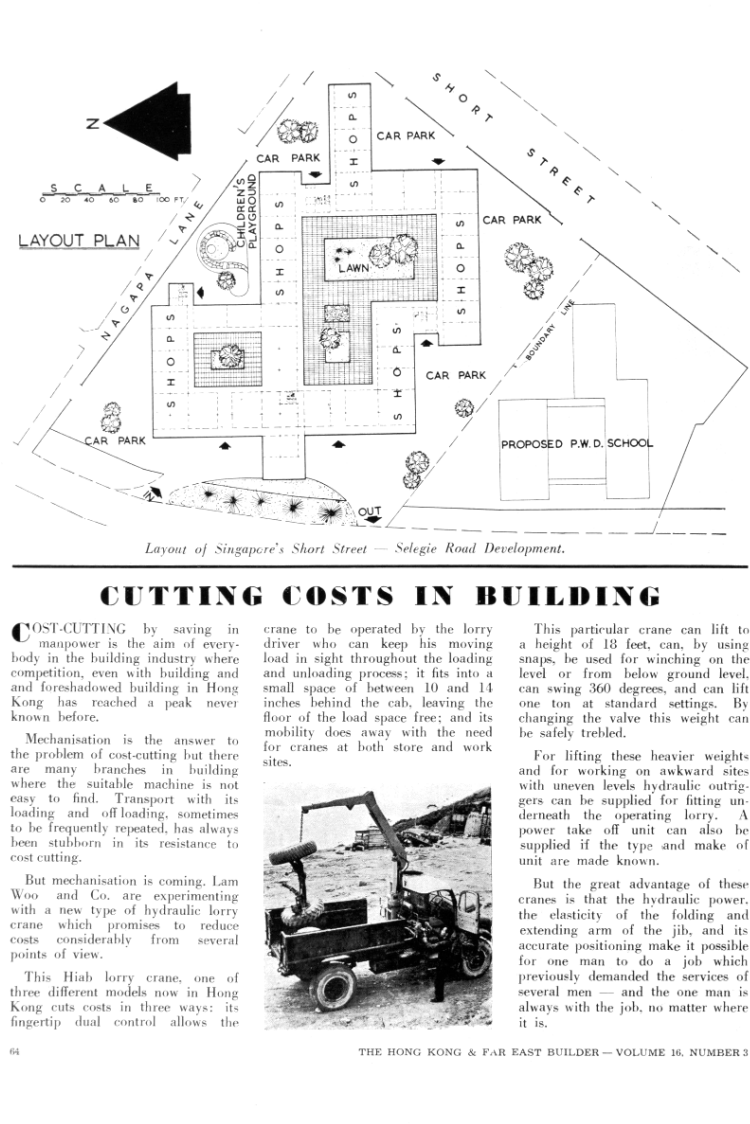
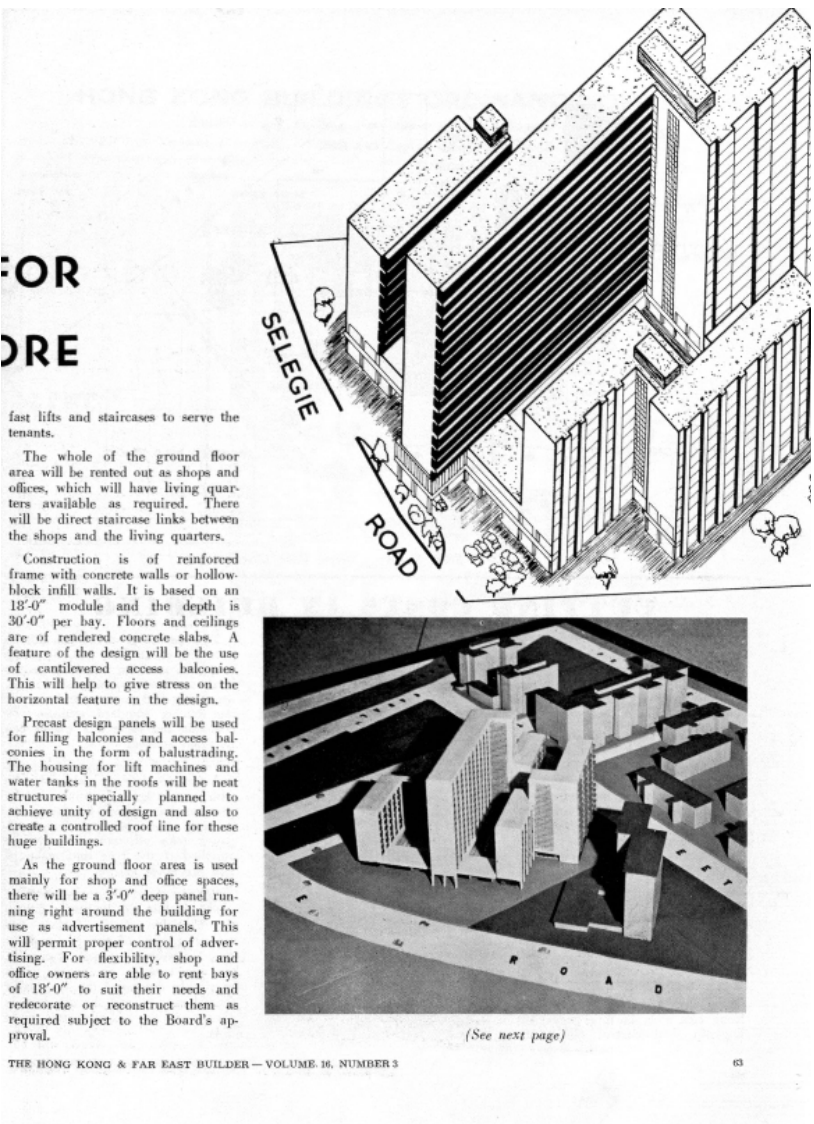




Fig. 32
Opening of Selegie House, 30 May 1963.
Source: National Archives of Singapore.



Fig. 33
Singapore's founding Prime Minister
Lee Kuan Yew speaking at the opening
of Selegie House, 30 May 1963. Source:
National Archives of Singapore.



Fig. 34
Opening of Selegie House, 30 May 1963.
Source: National Archives of Singapore.



Fig. 41
Aerial photograph of Selegie House,
c.1963. Source: HDB Annual Report
1963.

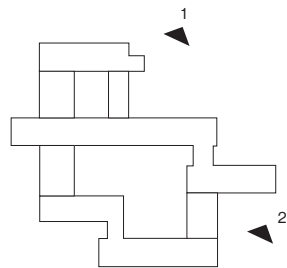
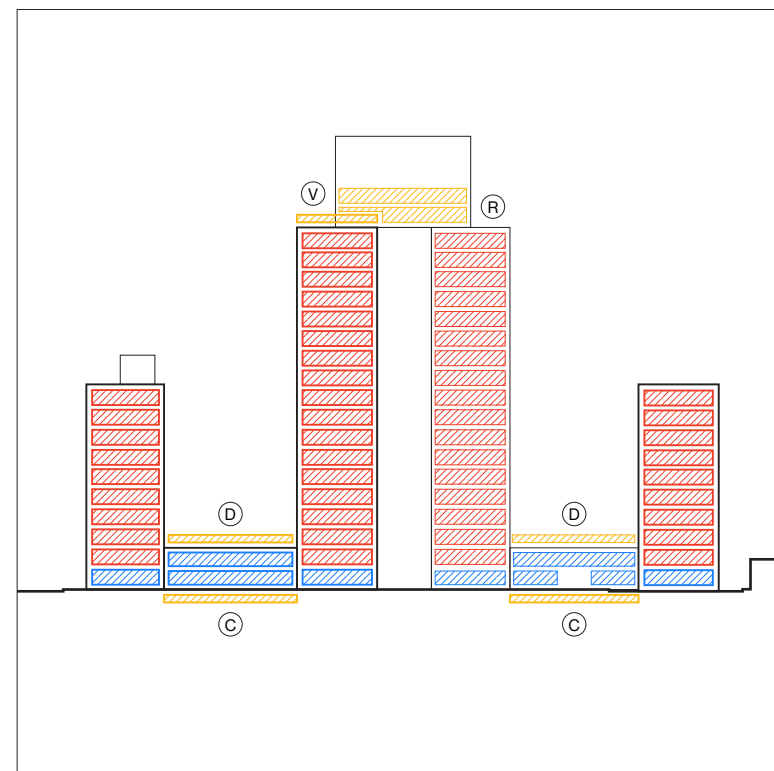


Fig. 42
Photograph of Selegie House and
construction workers, c.1960s. Source:
Brian Brake / National Museum of New
Zealand.

A MODEL OF MODERNIST CONVIVIALITY

Selegie House was conceived of as a model for a mixed-use, modernist urban renewal, with an emphasis on collective life.



PROGRAMMED DISTRIBUTION

- ▨ Residential
- ▨ Commercial
- ▨ Collective
- C Courtyard
- D Deck
- V Viewing Gallery
- R Recreation Club

	25.200m ²
	2.855m ²
	2.935m ²

Schematic Plan Evolution
1:2000



1963

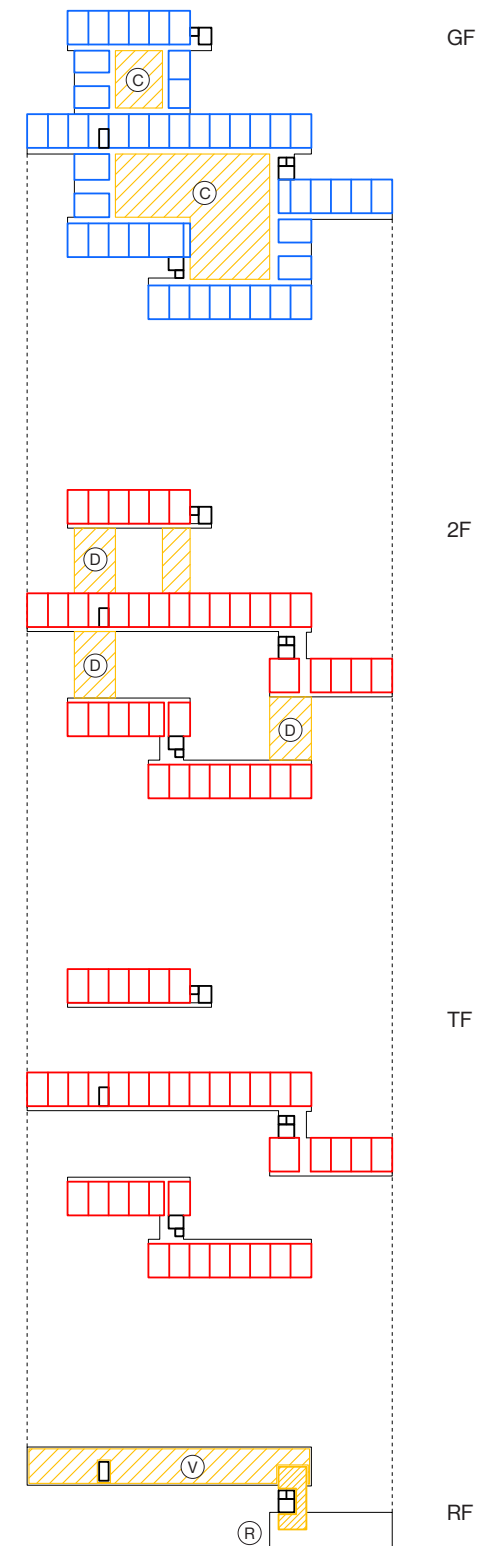
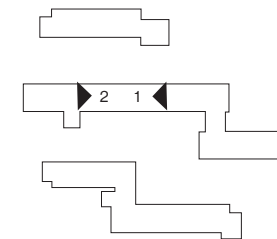


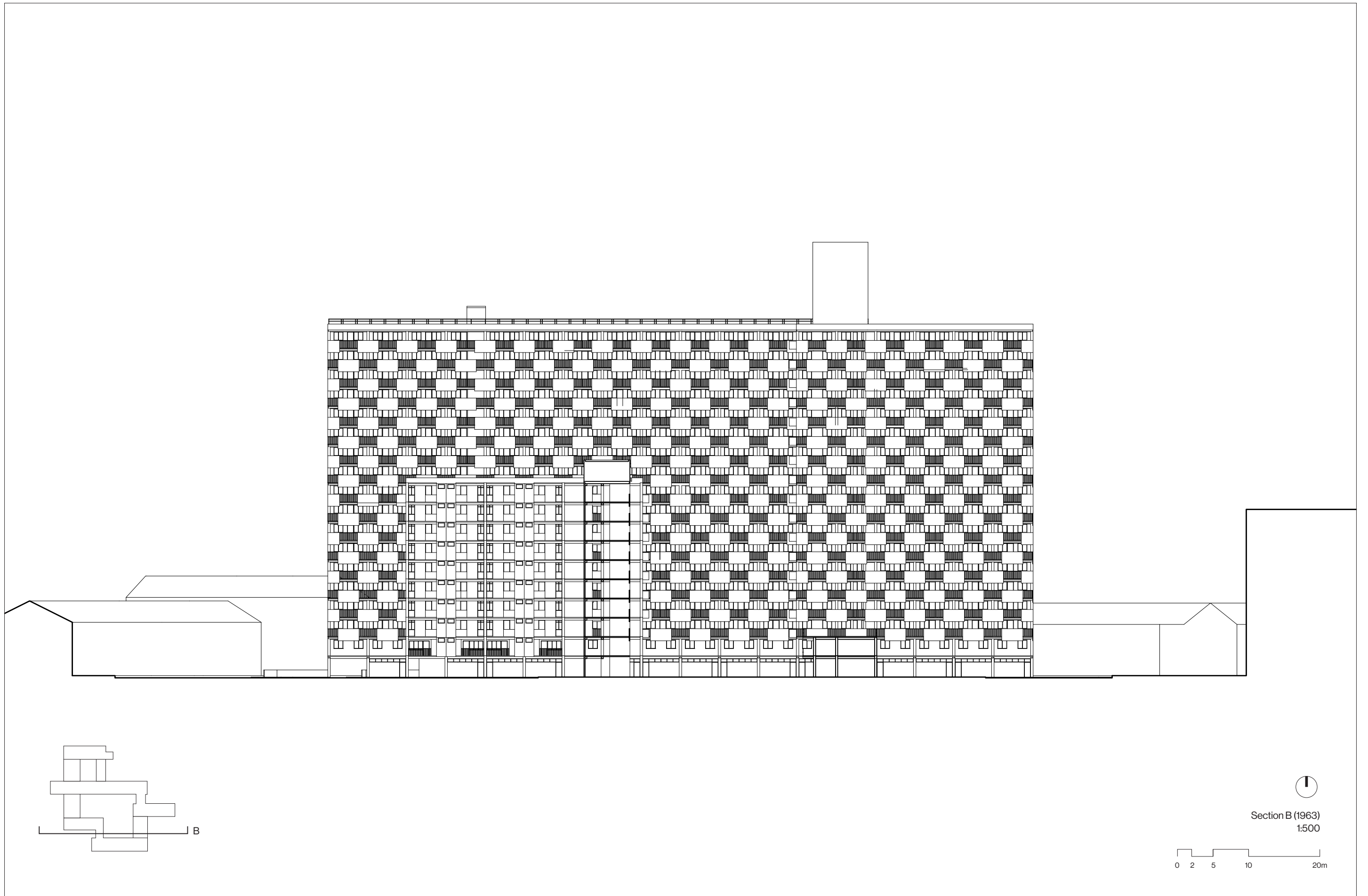


Fig. 45-47
View from viewing gallery, Selegie House, 1969. Source: National Archives of Singapore.



Fig. 48-49
Opening of HDB Recreation Club on roof of Selegie House, 1964. Source: National Archives of Singapore.





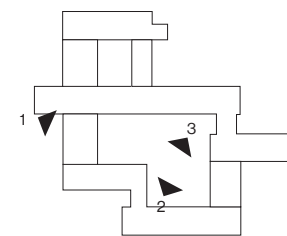


Fig. 50-51
Photographs of Selegie House podium
and courtyard prior to opening, 1963.
Source: National Archives of Singapore.

A NEW 'SINGAPOREAN' HOME

Selegie House was a harbinger of a new Singaporean way of life, built around the nuclear family and the three-room public housing flat.

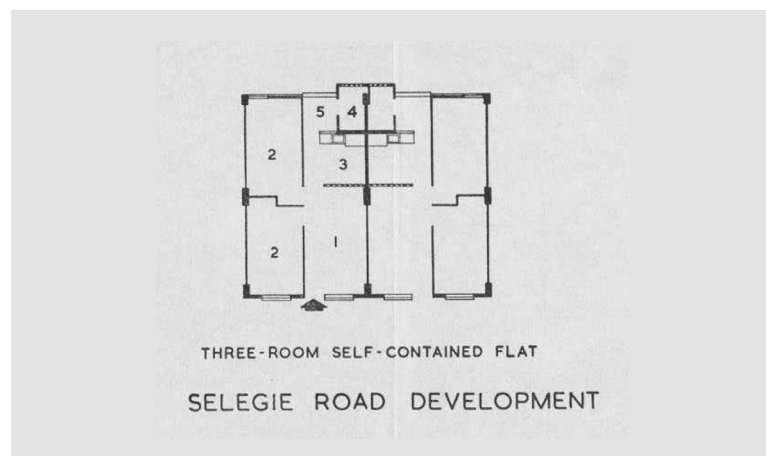


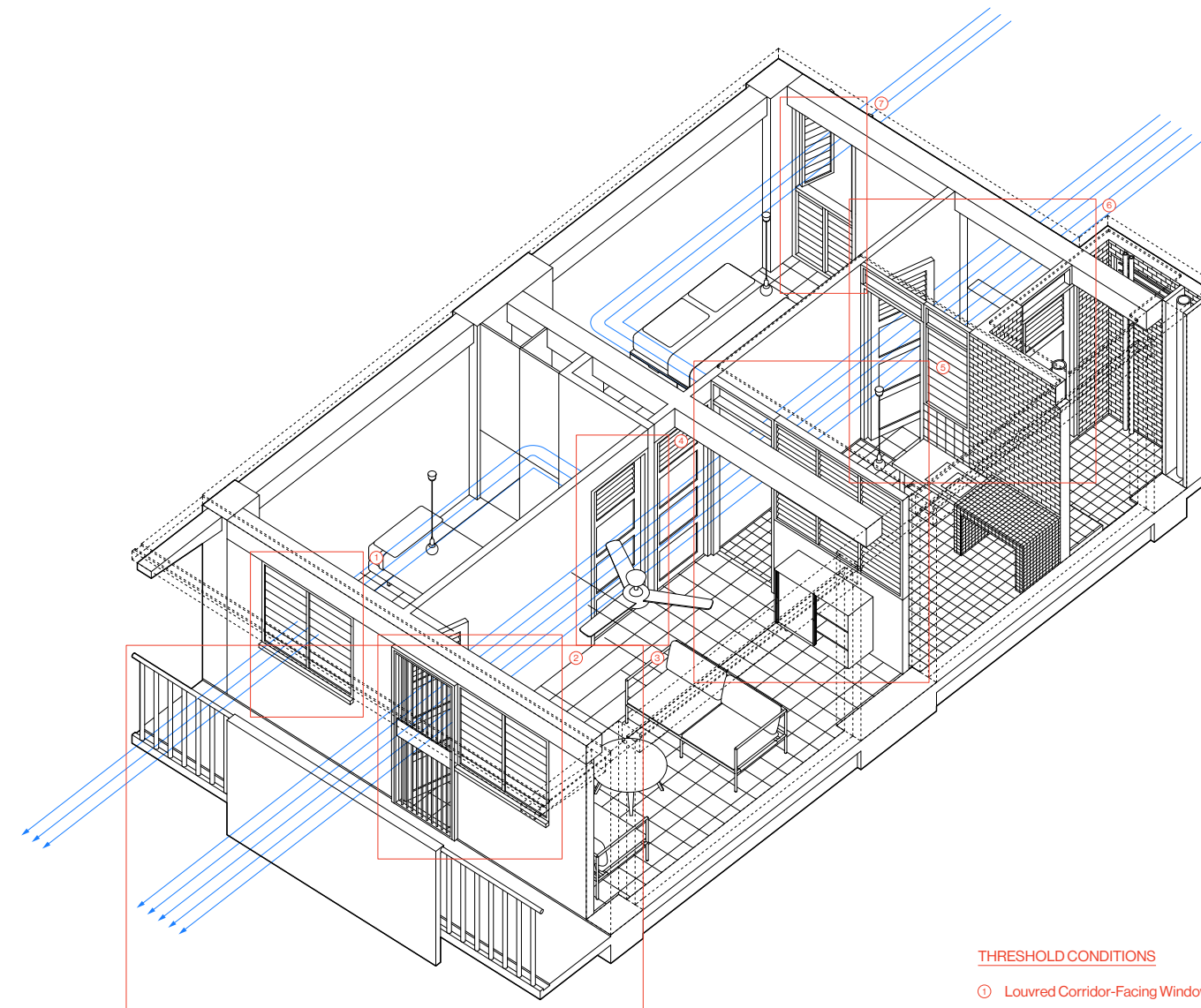
Fig. 58
3-Room 'self-contained' flat floorplan,
Selegie House. Source: HDB Annual
Report 1963.



Fig. 59
3-Room Standard HDB flat interior,
c.1965 Source: HDB Annual Report
1965.

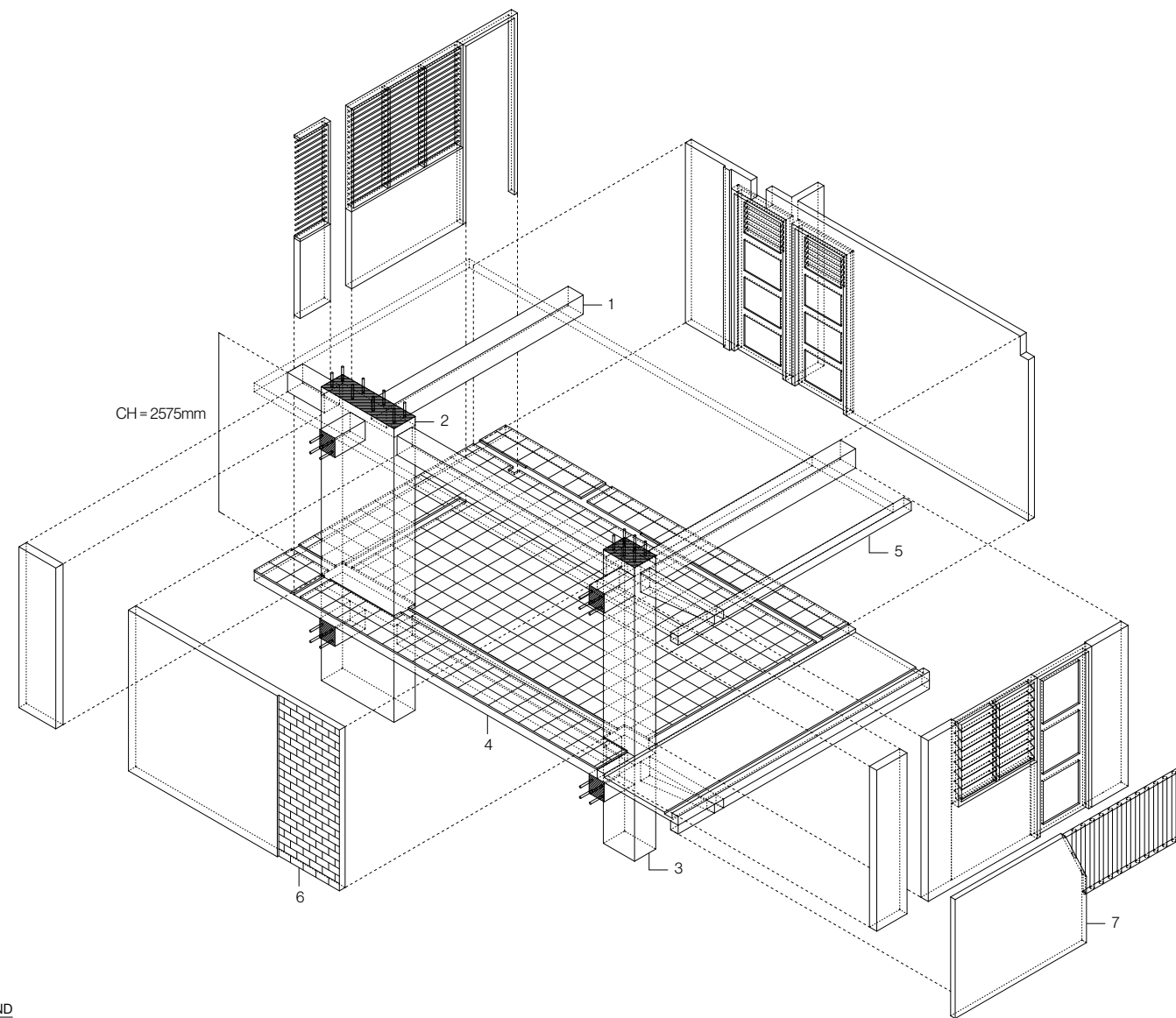
1963

The Three-Room Flat



THRESHOLD CONDITIONS

- ① Louvred Corridor-Facing Windows
- ② Double-Gated Front Door
- ③ Shaded Access Corridor Balcony
- ④ Ventilated Doors
- ⑤ Ventilated Partition Screen
- ⑥ Shaded Private Balcony
- ⑦ Full-Height Louvred Window



LEGEND

- | | |
|--------------------------------|-------------------------------|
| 1. Beam | 5. Corridor structure |
| Reinforced concrete 250x275mm | Reinforced concrete 100x100mm |
| 2. Column | 6. Partition wall |
| Reinforced concrete 1200x350mm | Concrete hollow block t=100mm |
| 3. Column | Cement render t=5mm |
| Reinforced concrete 515x350mm | 7. Parapet wall |
| 4. Floor slab | Precast concrete t=75mm |
| Reinforced concrete t=125mm | |
| Floor finishing t=50mm | |

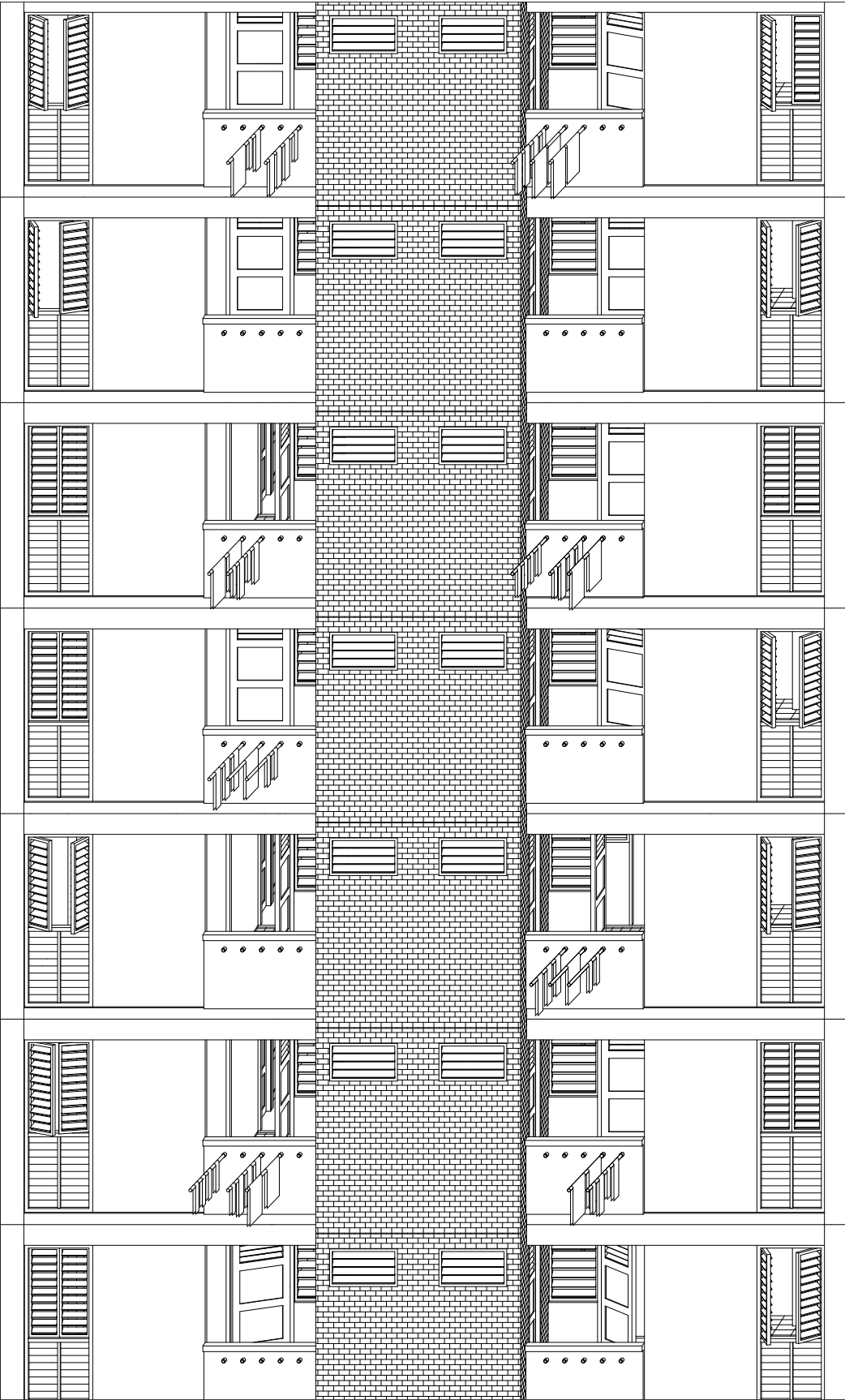
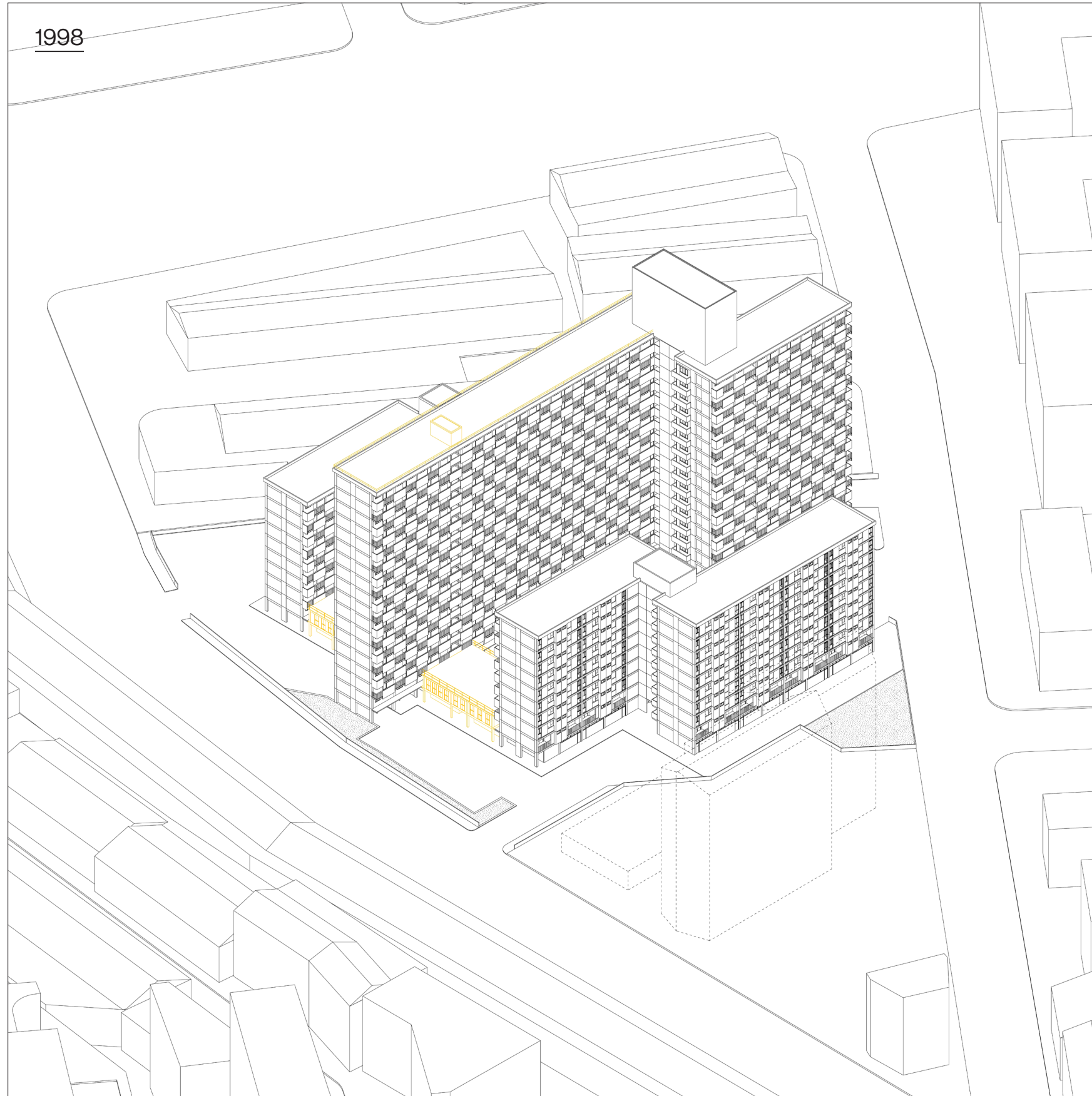




Fig. 43
Article on Selegie House Main Upgrading Programme (MUP) works. Source: *The Straits Times*, 9 May 1998.

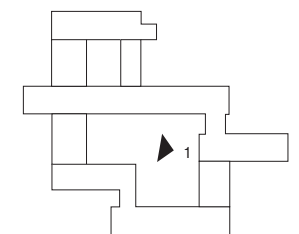
Fig. 44
Rendering of Selegie House Main Upgrading Programme (MUP) proposal. Source: *Houseword* May 1998.



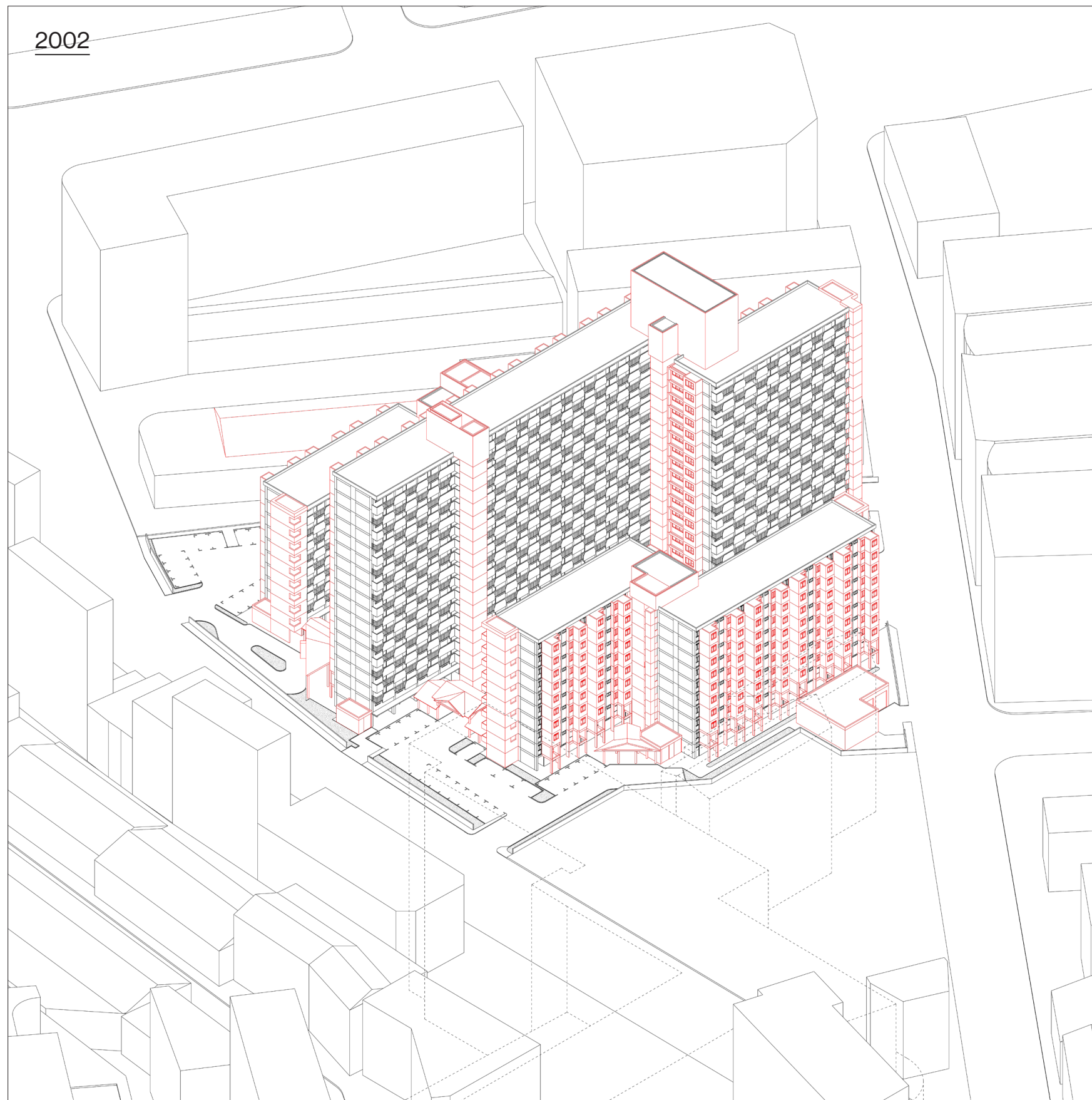
 Demolished



Fig. 51
 Photograph showing demolition of commercial podium during upgrading works, c.2001. Source: Tan Kar Lin



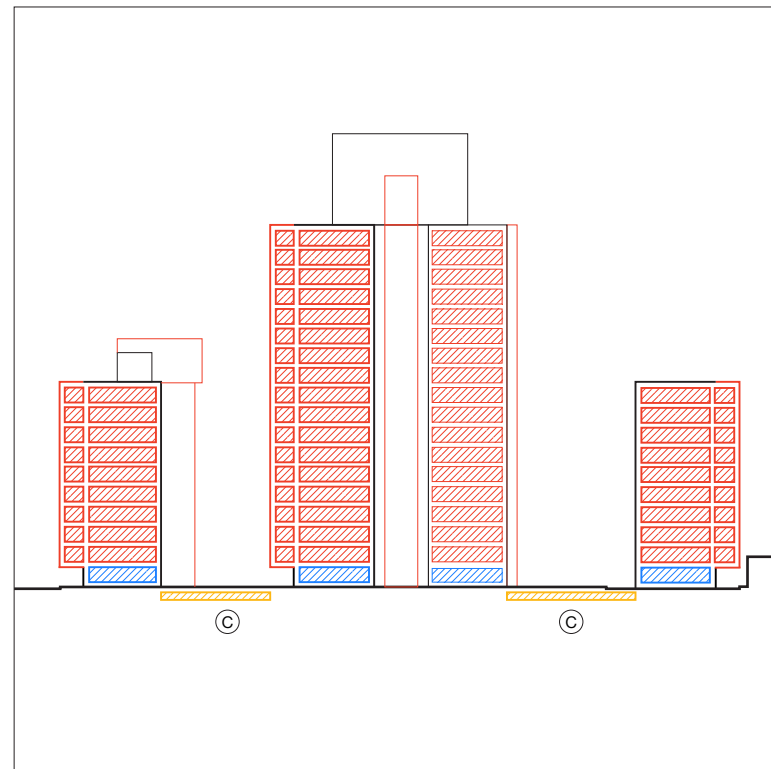
2002



 Added

MODERNISM PRIVATISED

Selegie House was transformed in the early-2000s to facilitated a shift away from communal life toward greater privacy.



PROGRAMME DISTRIBUTION

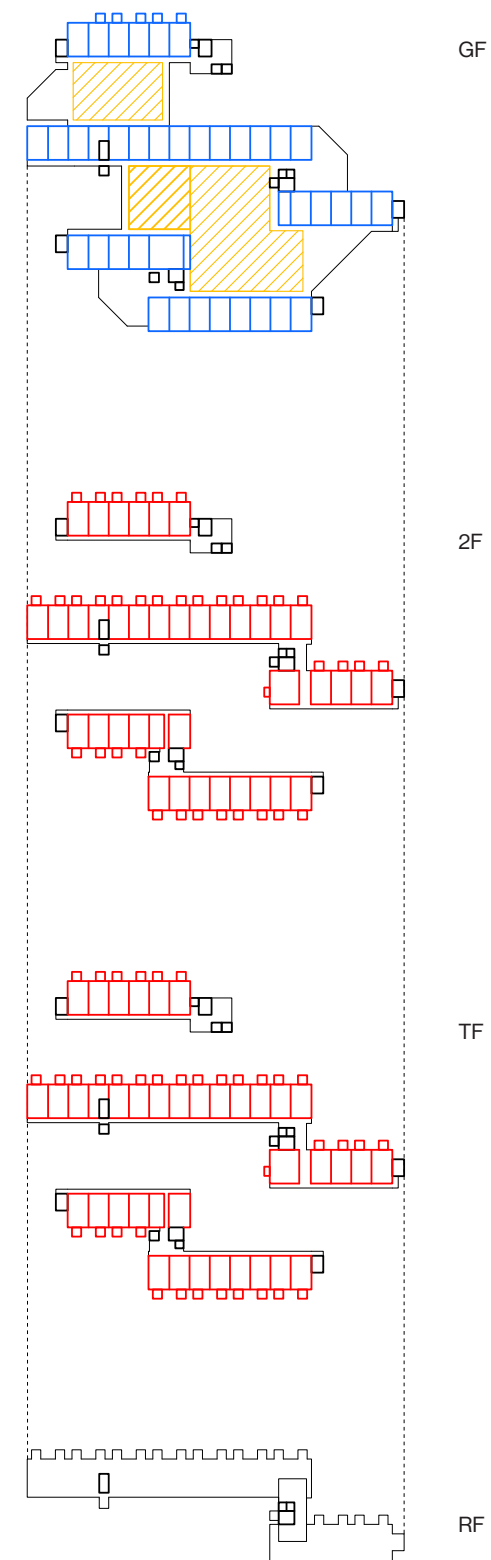
- ▨ Residential
- ▨ Commercial
- ▨ Collective
- C Courtyard
- D Deck
- V Viewing Gallery
- R Recreation Club

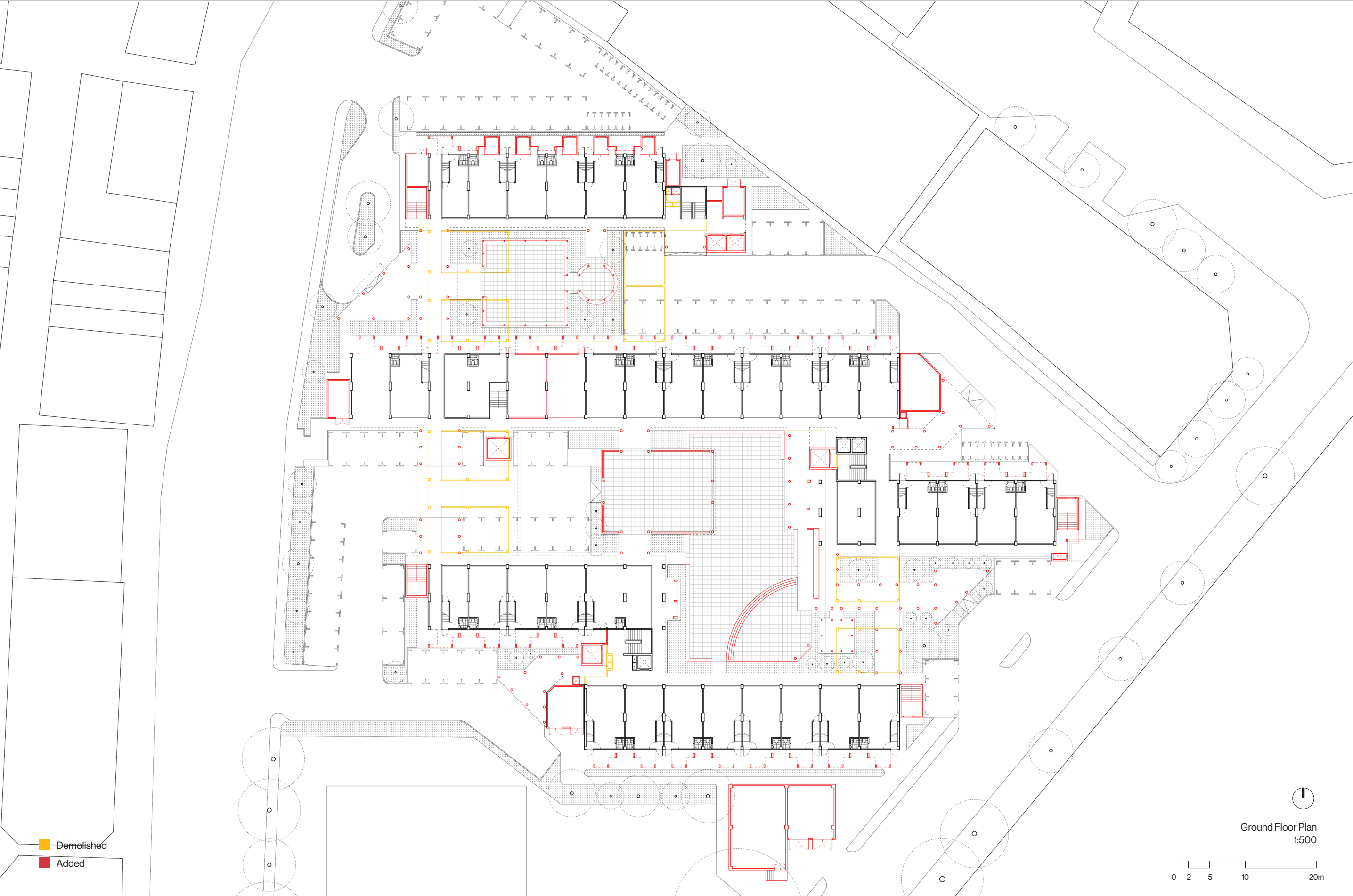
	28,690m ²	+14%
	1,865m ²	-35%
	1,460m ²	-50%

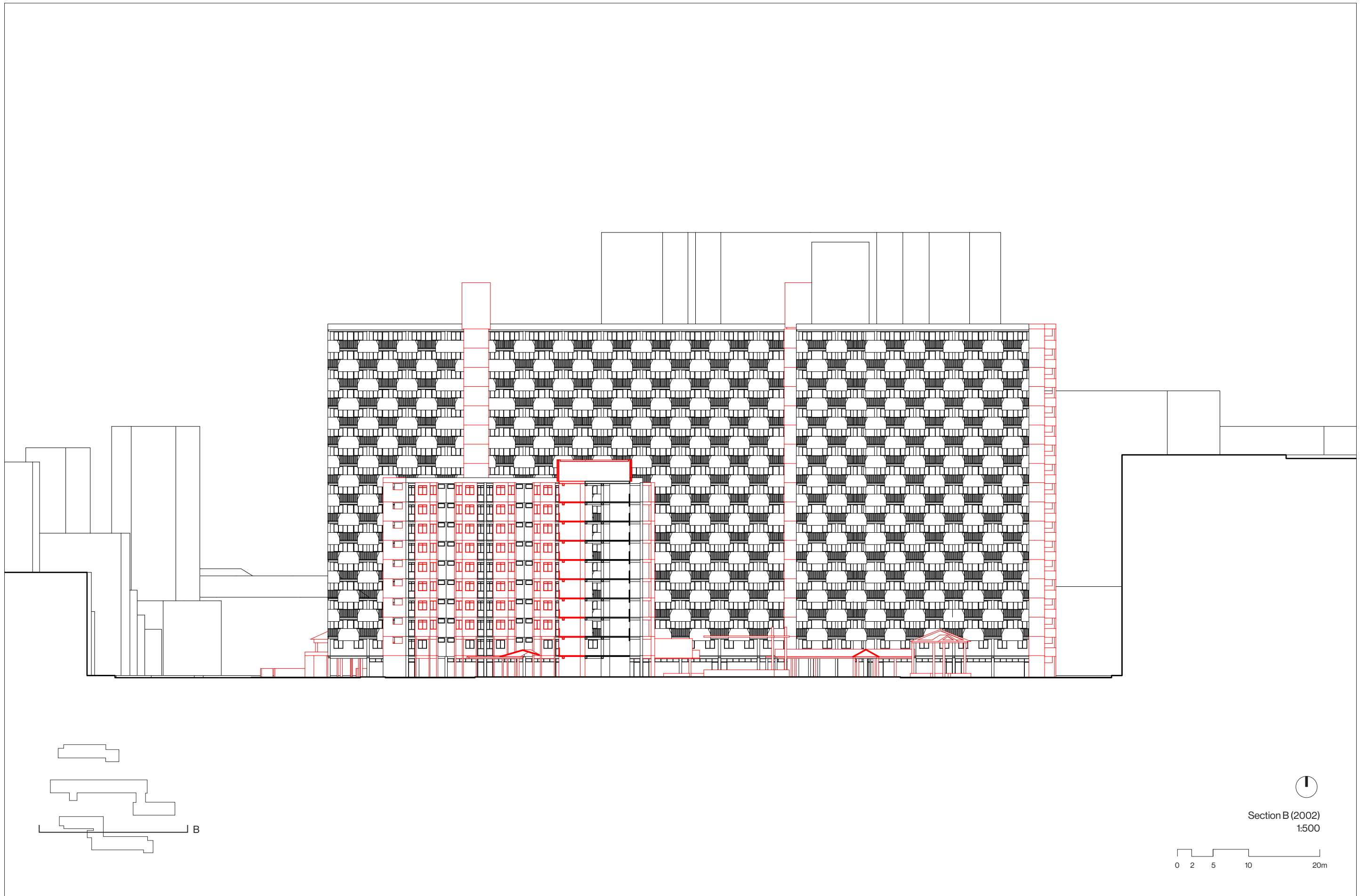
Schematic Plan Evolution
1:2000

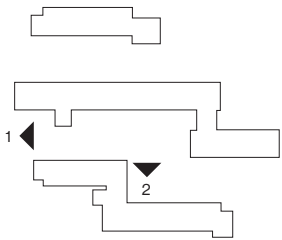


2002









KEEPING THE COOL AIR IN, EVERYTHING ELSE OUT

By the 1990s, Selegie House had succumbed to the proliferation of air-conditioning and a new regime of domestic enclosure.

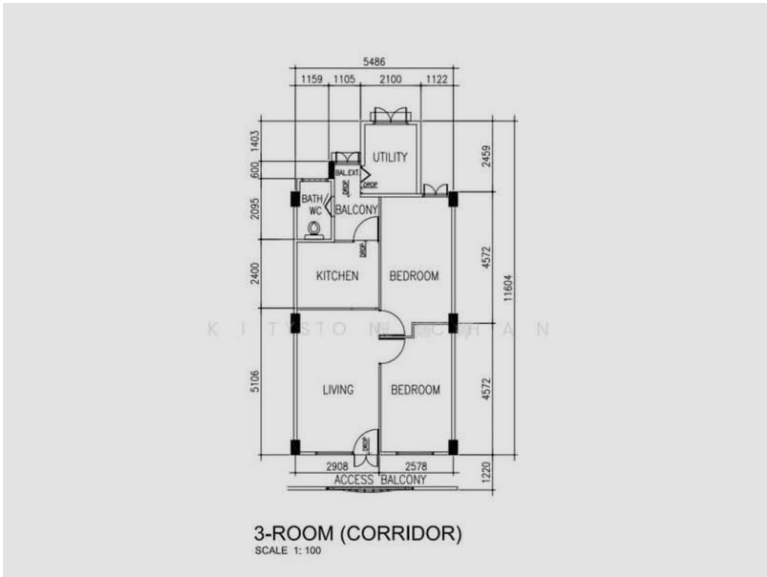
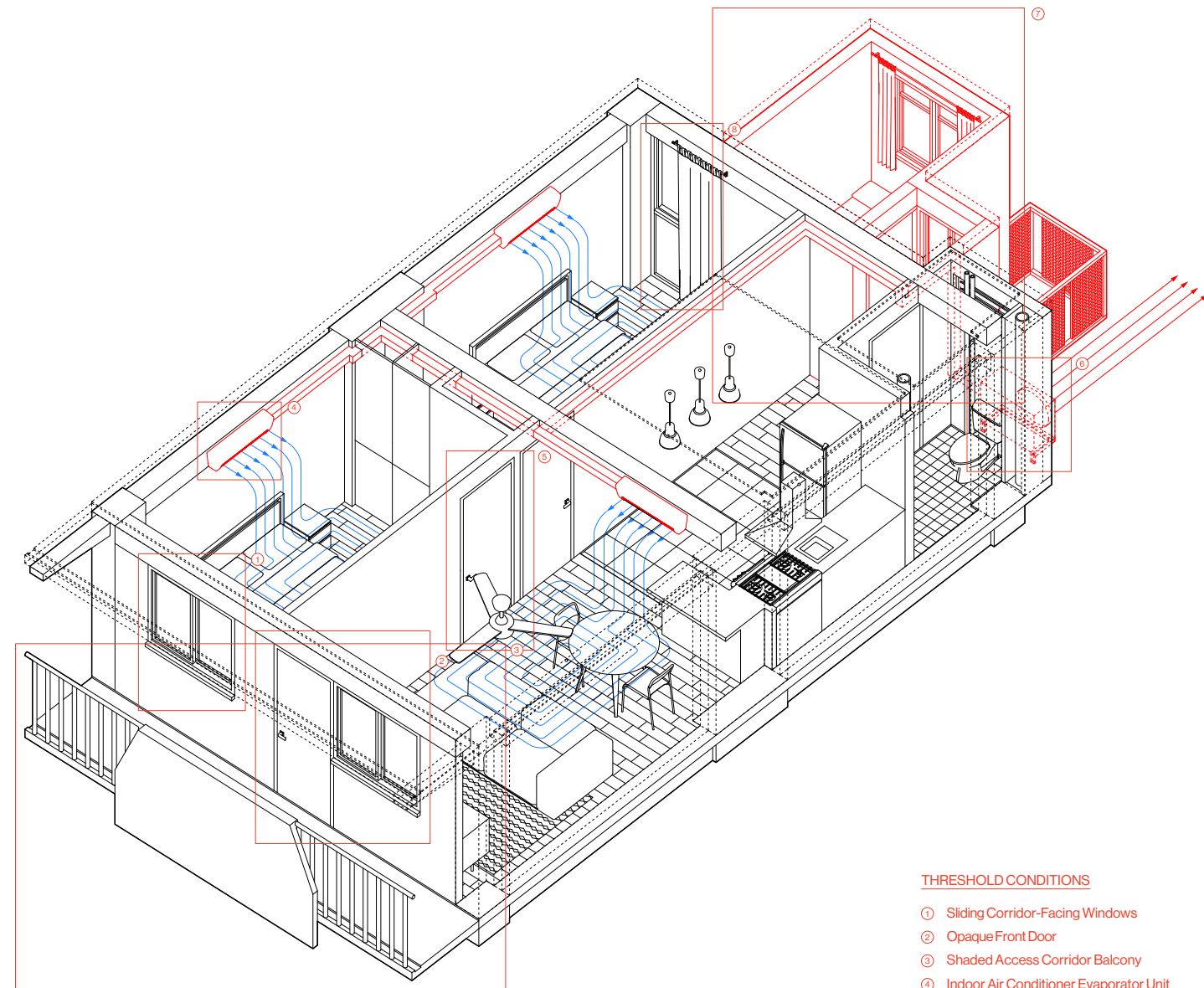


Fig. 60
3-Room 'upgraded' flat at Selegie House, c.2002. Source: HDB Online Portal.



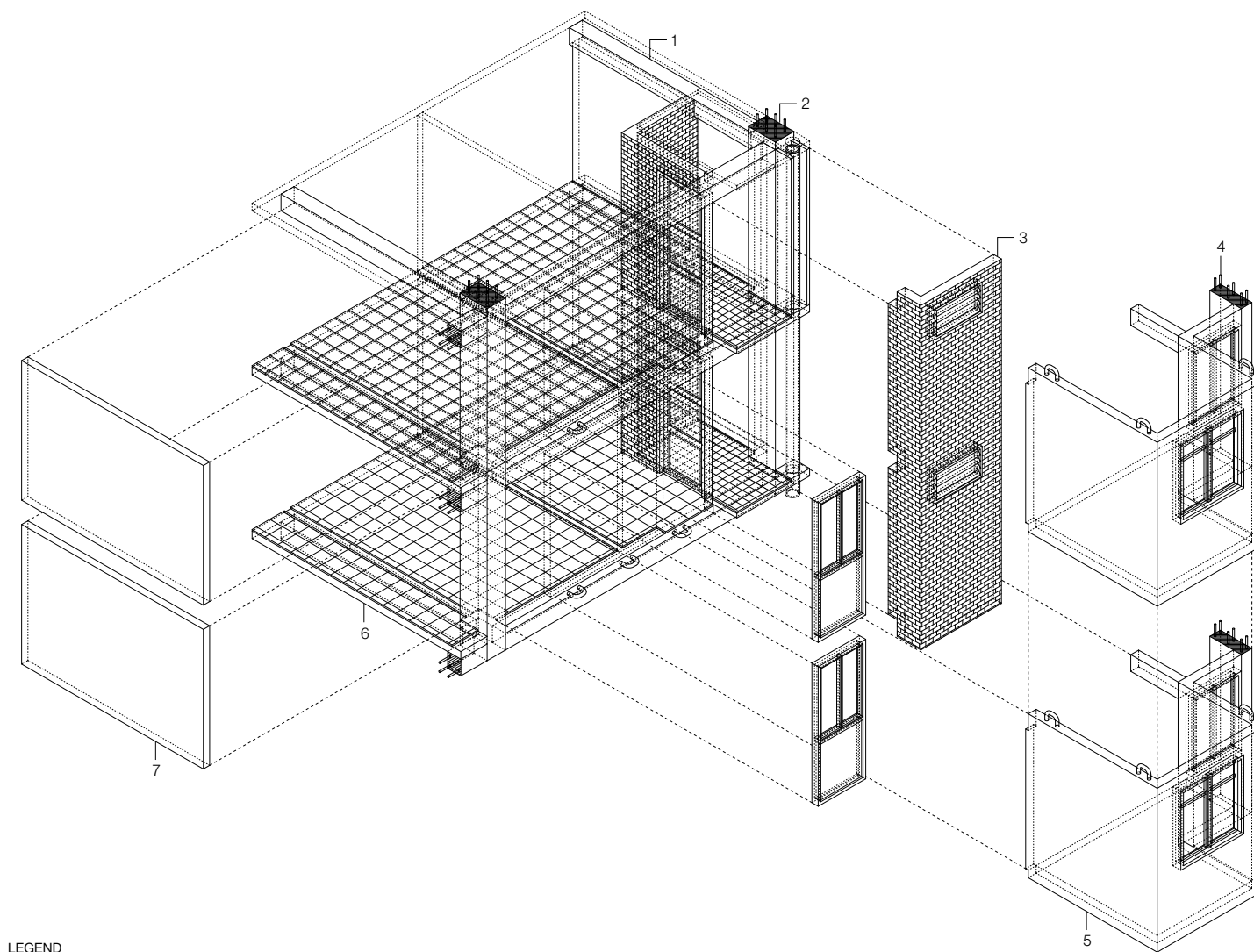
Fig. 61
Interiors of Selegie House listed on on-line property portals, c.2025. Source: PropertyGuru

2002
The Upgraded Flat



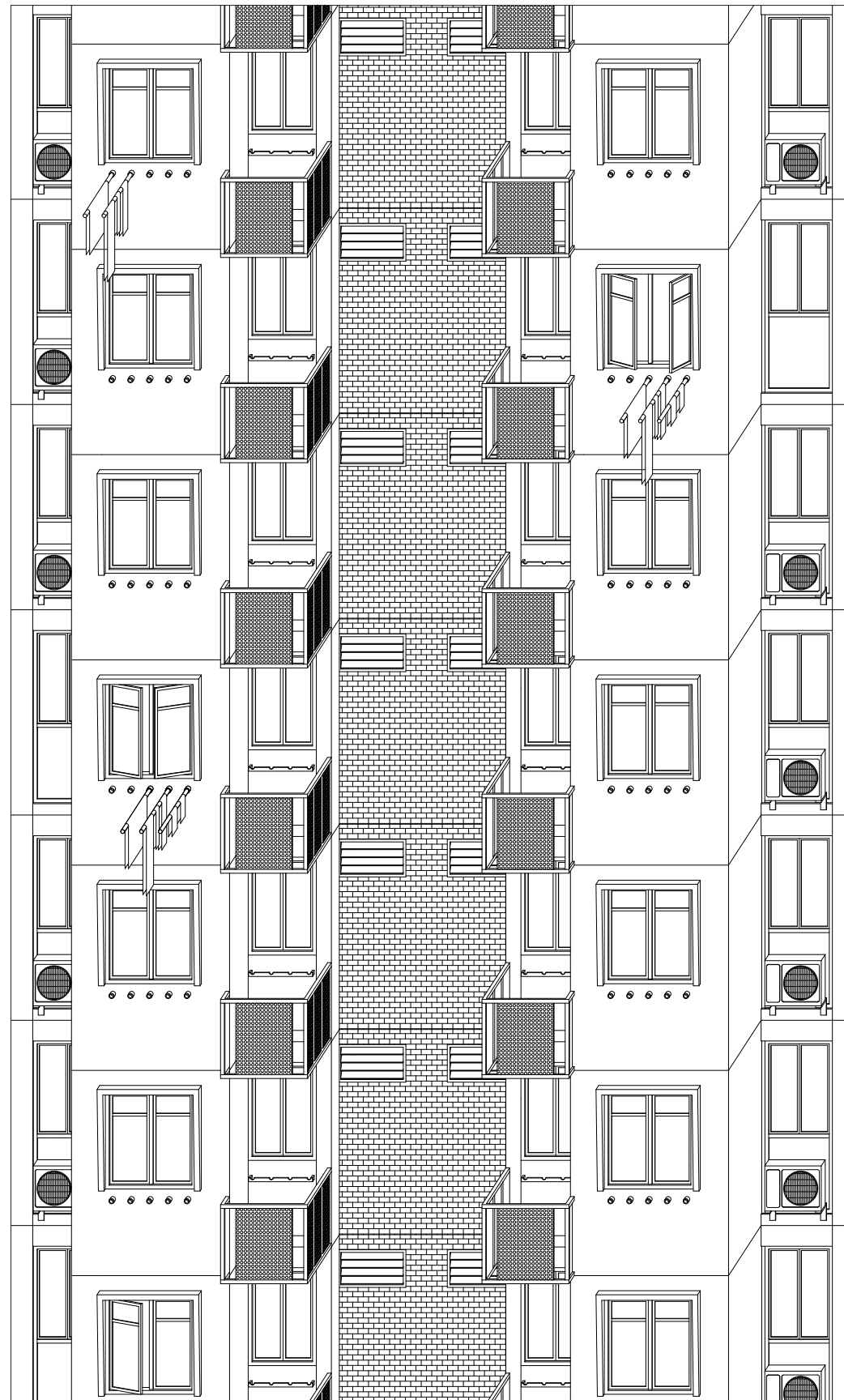
THRESHOLD CONDITIONS

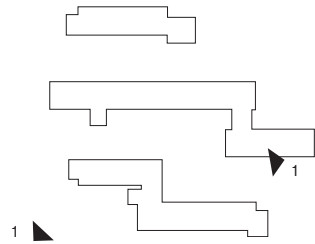
- ① Sliding Corridor-Facing Windows
- ② Opaque Front Door
- ③ Shaded Access Corridor Balcony
- ④ Indoor Air Conditioner Evaporator Unit
- ⑤ Opaque Internal Doors
- ⑥ Outdoor Air Conditioner Condenser Unit
- ⑦ Enclosed Space Extension
- ⑧ Full Height Casement Window

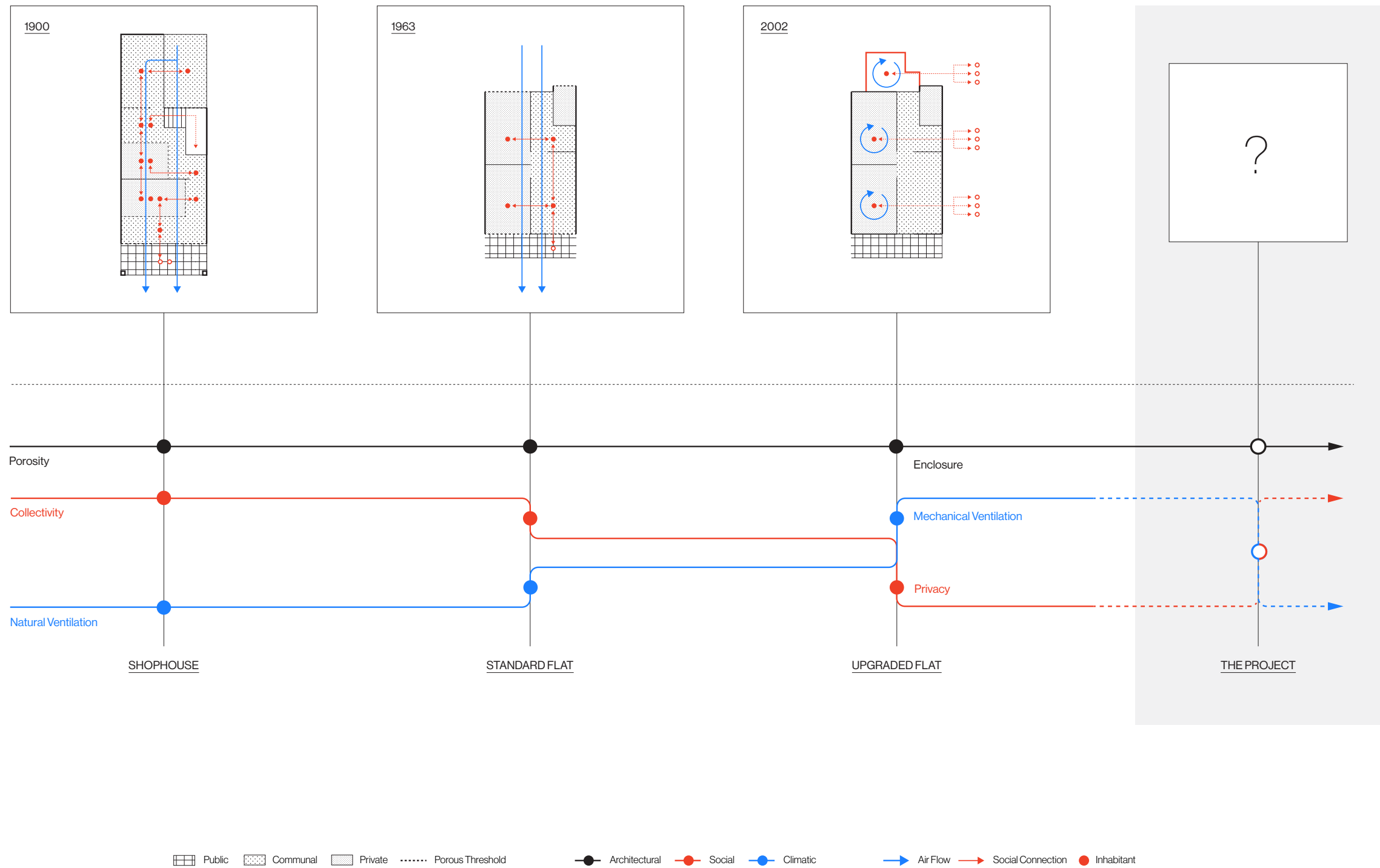


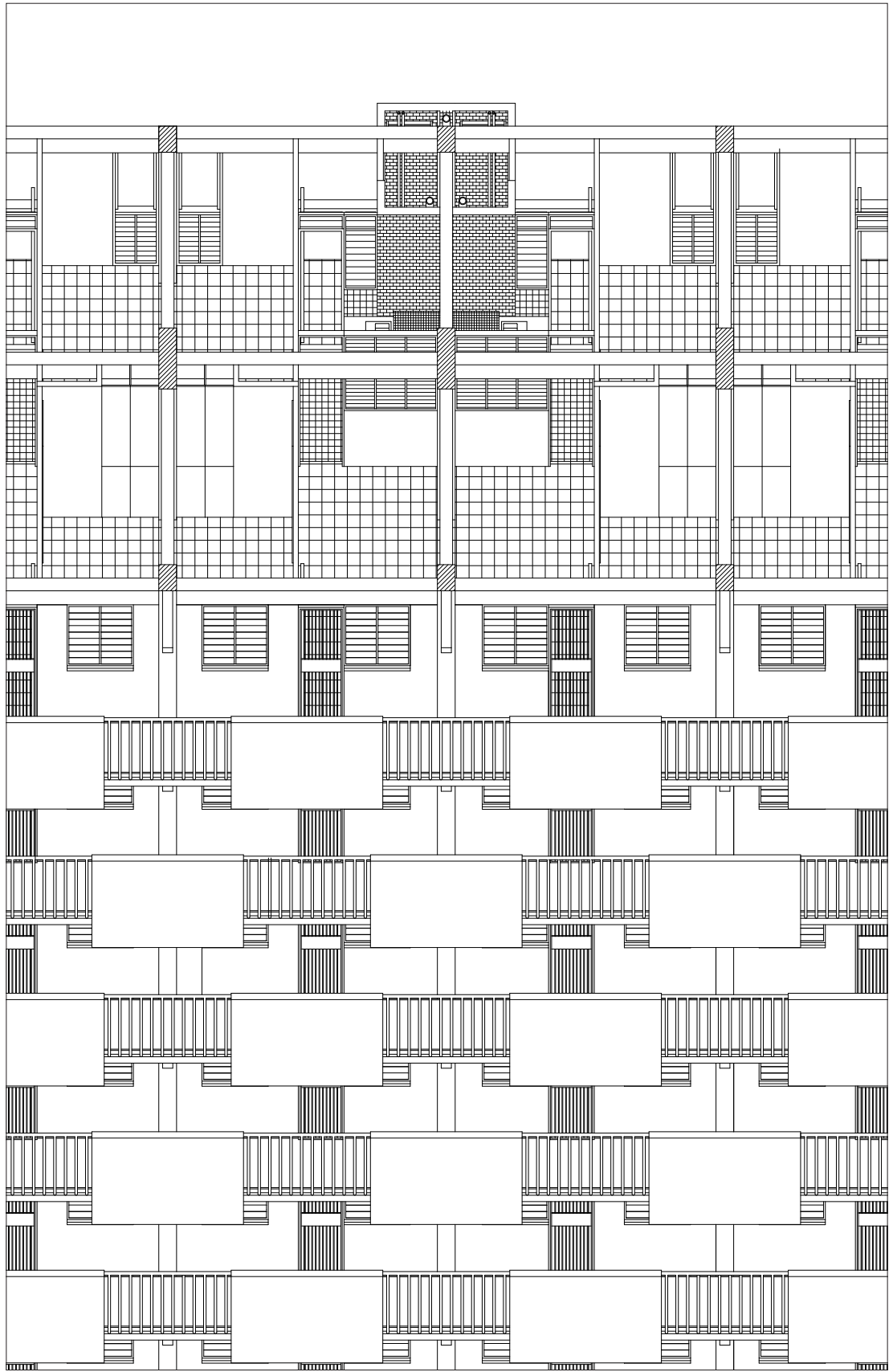
LEGEND

- | | |
|-------------------------------|-------------------------------------|
| 1. Beam | 5. SAI volumetric |
| Reinforced concrete 250x275mm | Precast reinforced concrete t=120mm |
| 2. Column | 6. Floor slab |
| Reinforced concrete 515x350mm | Reinforced concrete t=125mm |
| 3. Bathroom Stack Wall | Floor finishing t=50mm |
| Brick t=120mm | 7. Partition wall |
| 4. SAI column | Concrete hollow block t=100mm |
| Reinforced concrete 600x200mm | Cement render t=5mm |



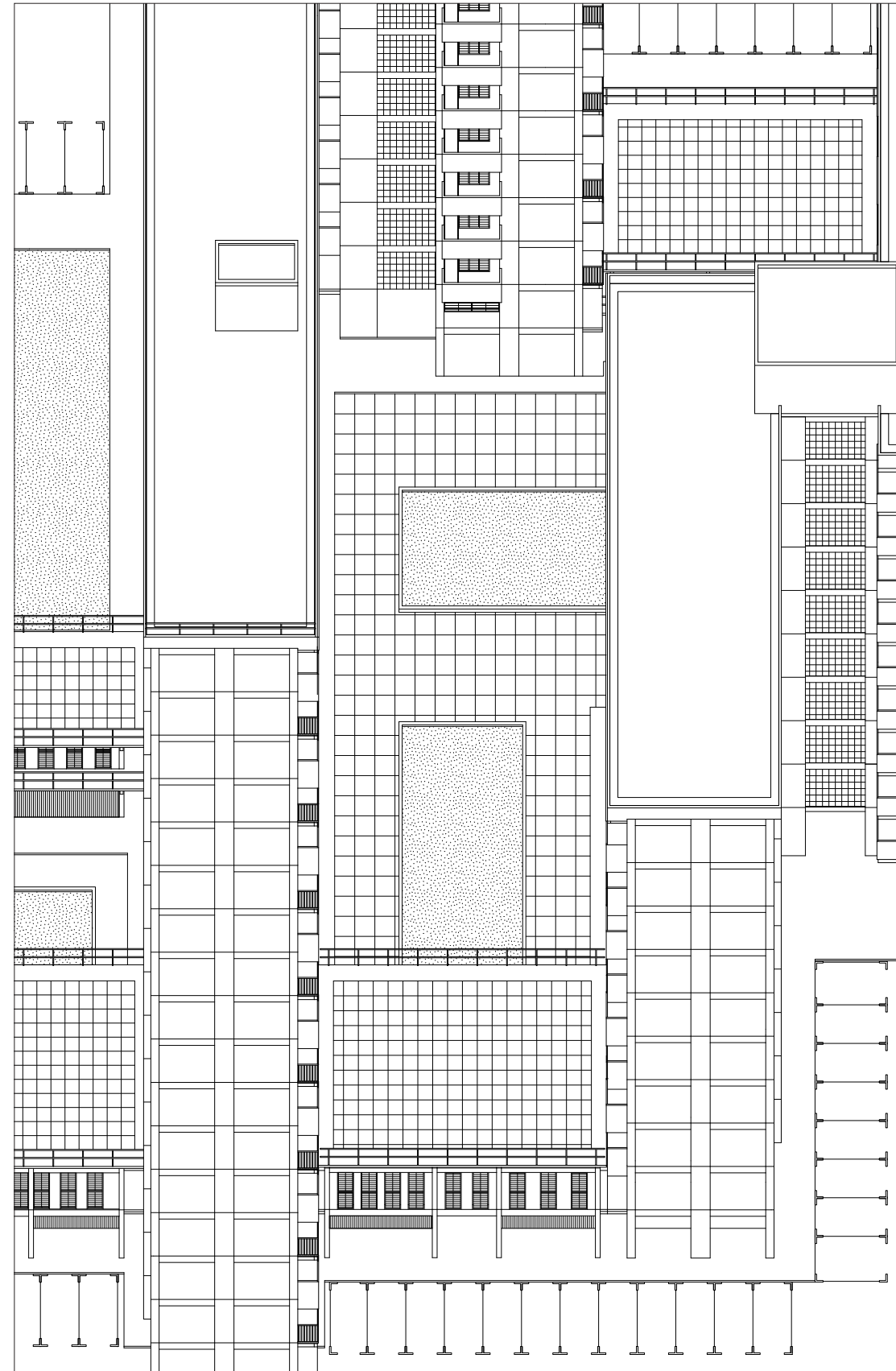






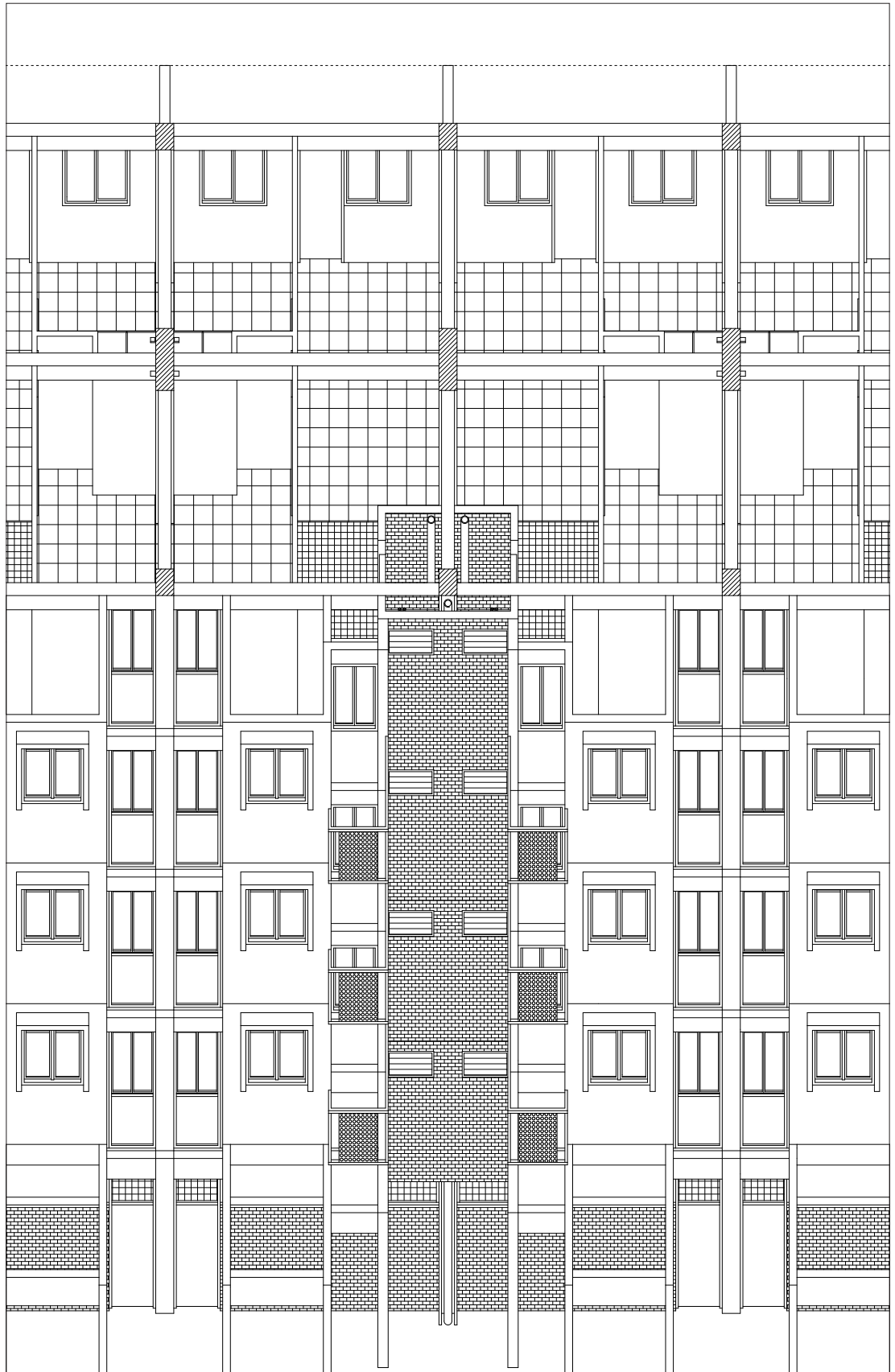
TRIPTYCH1_1

POROSITY



TRIPTYCH1_2

LAYERING



TRIPTYCH1_3

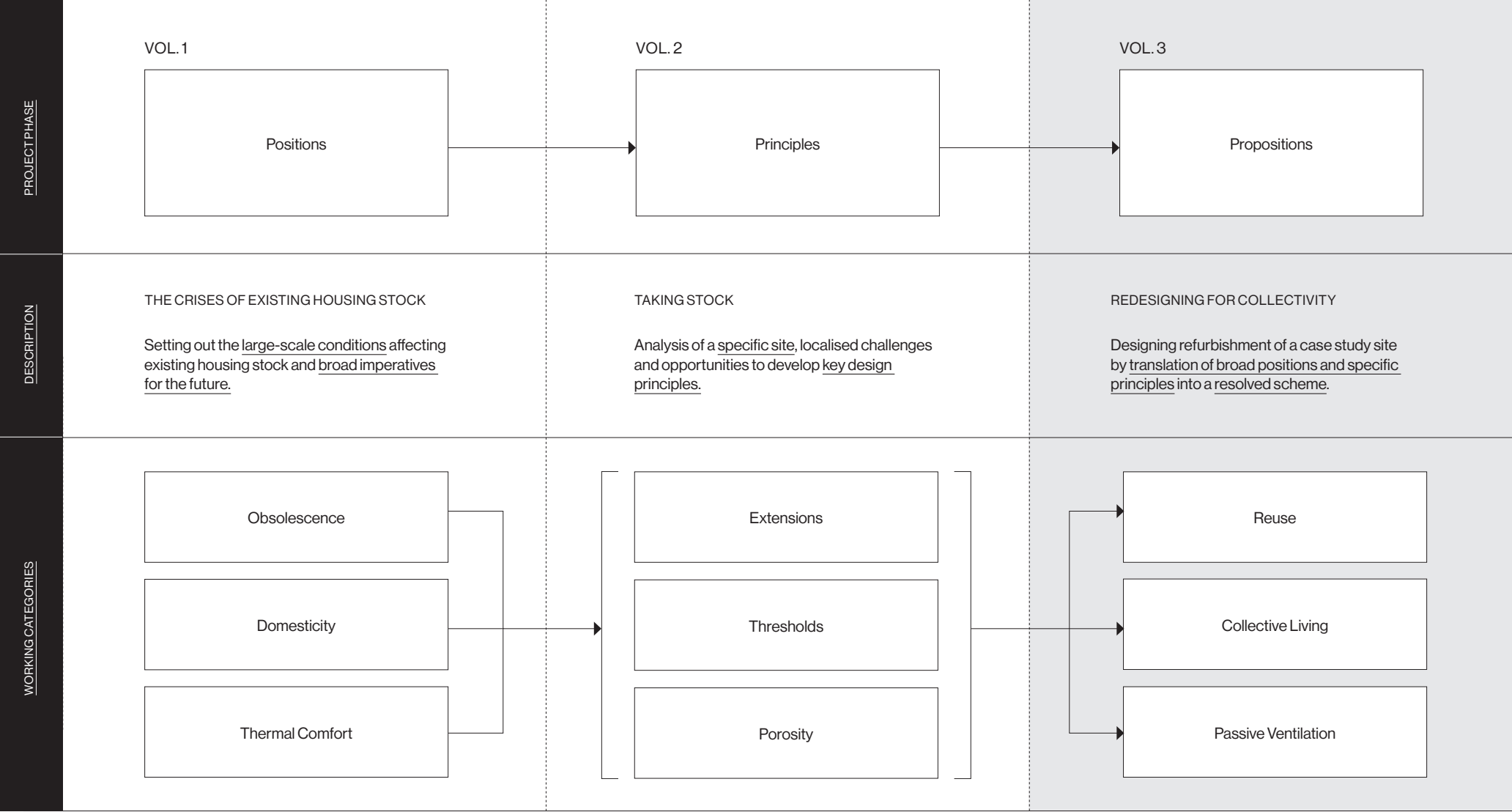
EXTENSIONS

Redesign

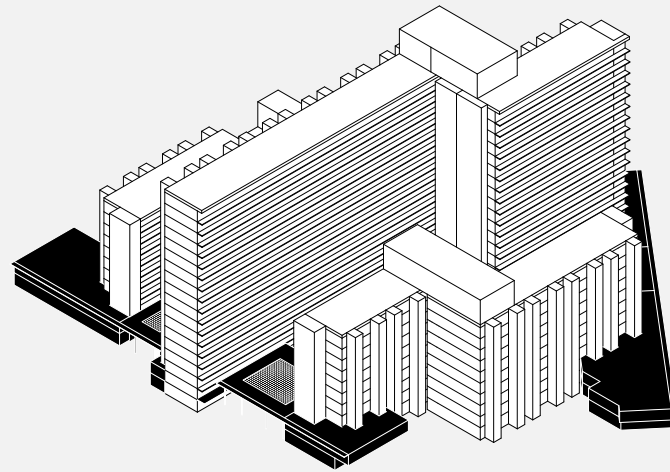
Adaptation, Collectivity, and Porosity

Vol. 3

Propositions

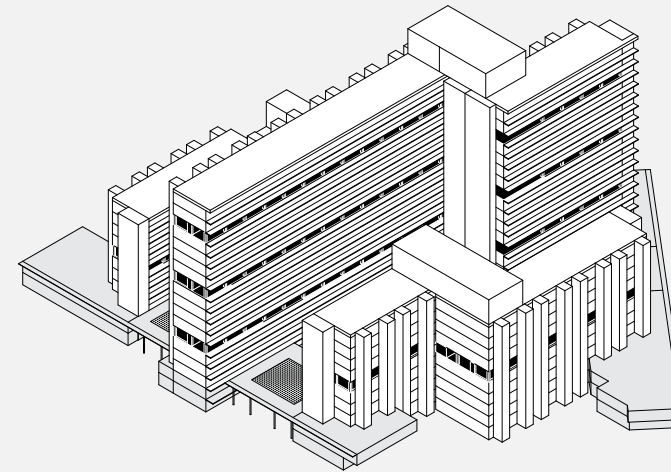


THE PLINTH



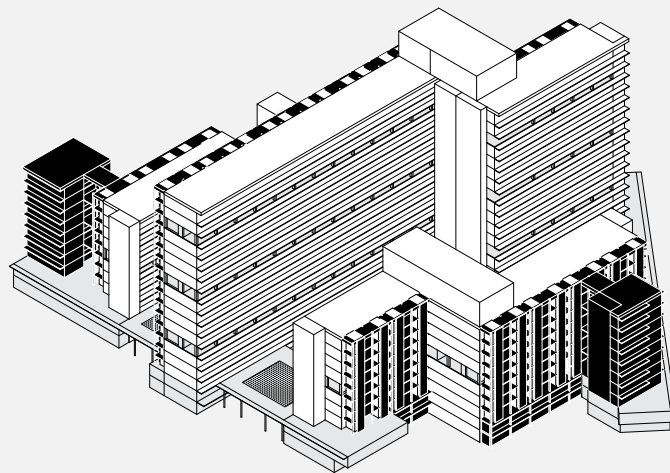
+ COMMUNAL SPACES
+ COURTYARD THRESHOLD

THE DECKS



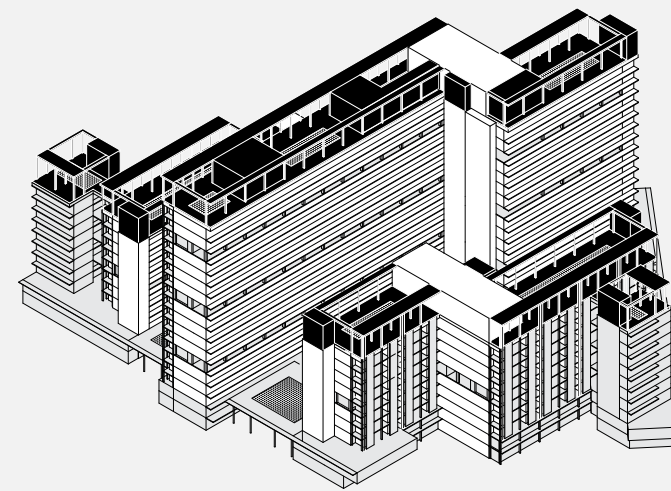
+ FLEXIBLE WORK SPACES
+ COMMUNAL RECREATION

THE VEIL

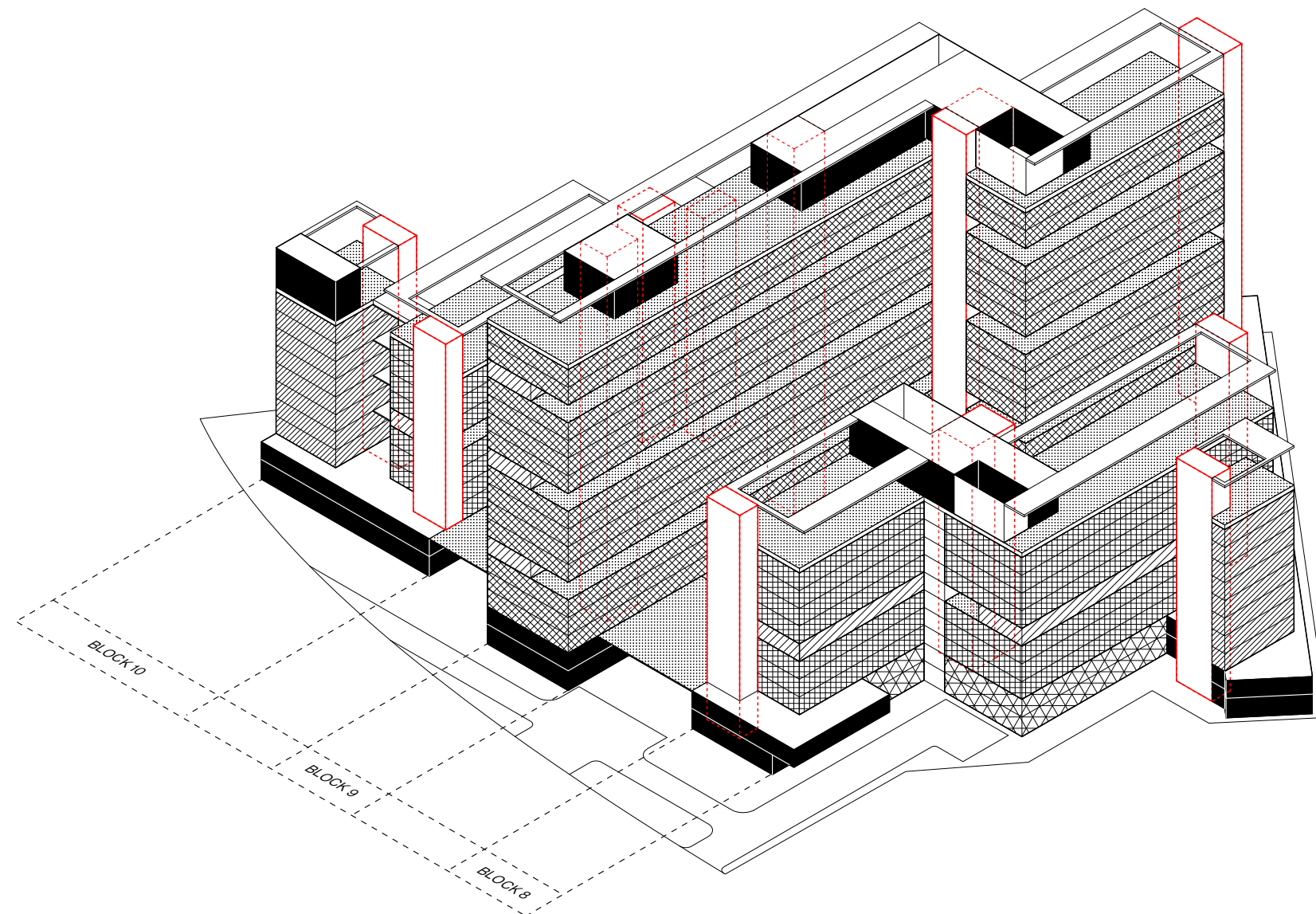


+ CLIMATIC BUFFER
+ ADDITIONAL LIVING AREA

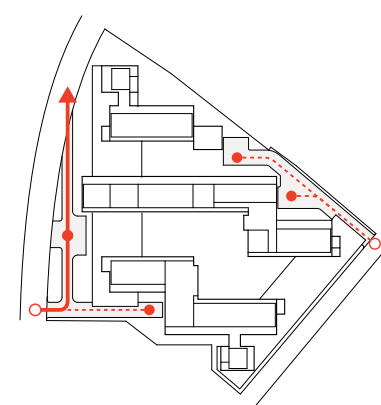
THE CROWN



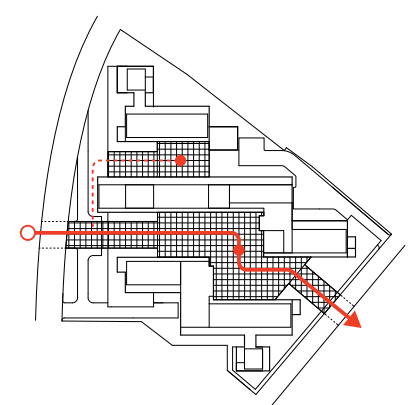
+ PASSIVE EXHAUST
+ ACTIVATION OF ROOFSCAPE



- PROGRAMMATIC ZONING
- Communal Facilities
 - Publicly Accessible Space
 - Flexible Workspaces
 - Type-A (Live-Work Ateliers)
 - Type-B (Enfilade Studio)
 - Type-C (Group House)
 - Type-D (Cluster House)
 - Vertical Circulation



VEHICULAR ACCESS



COURTYARDS + URBAN ACCESS



APARTMENT ACCESS

- ACCESS ROUTES
- Primary Access
 - Secondary Access

TV70KMB

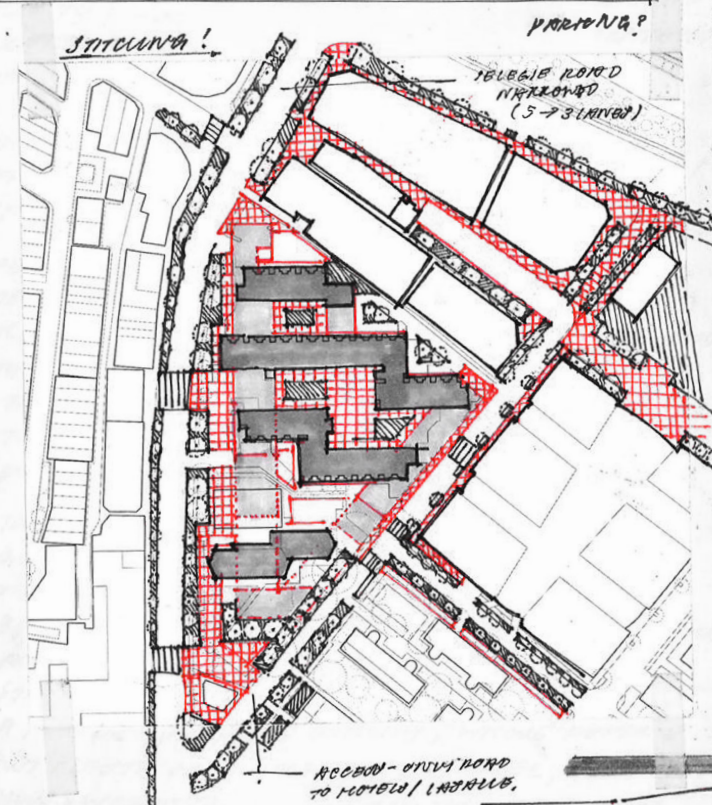
17 WHAT HAPPENS TO THE PEOPLE

→ COLLECTIVE PLINTH (PROBABLY AFFORDANCE)

3 FLORIAN BEIGEL HALF MOON

↳ HOW CAN HOME BE USED AS A SPACE FOR PRODUCTION?

17 CREATING A SPACE FOR MENINGEAL
FRACITION, DISCONTINUITY.

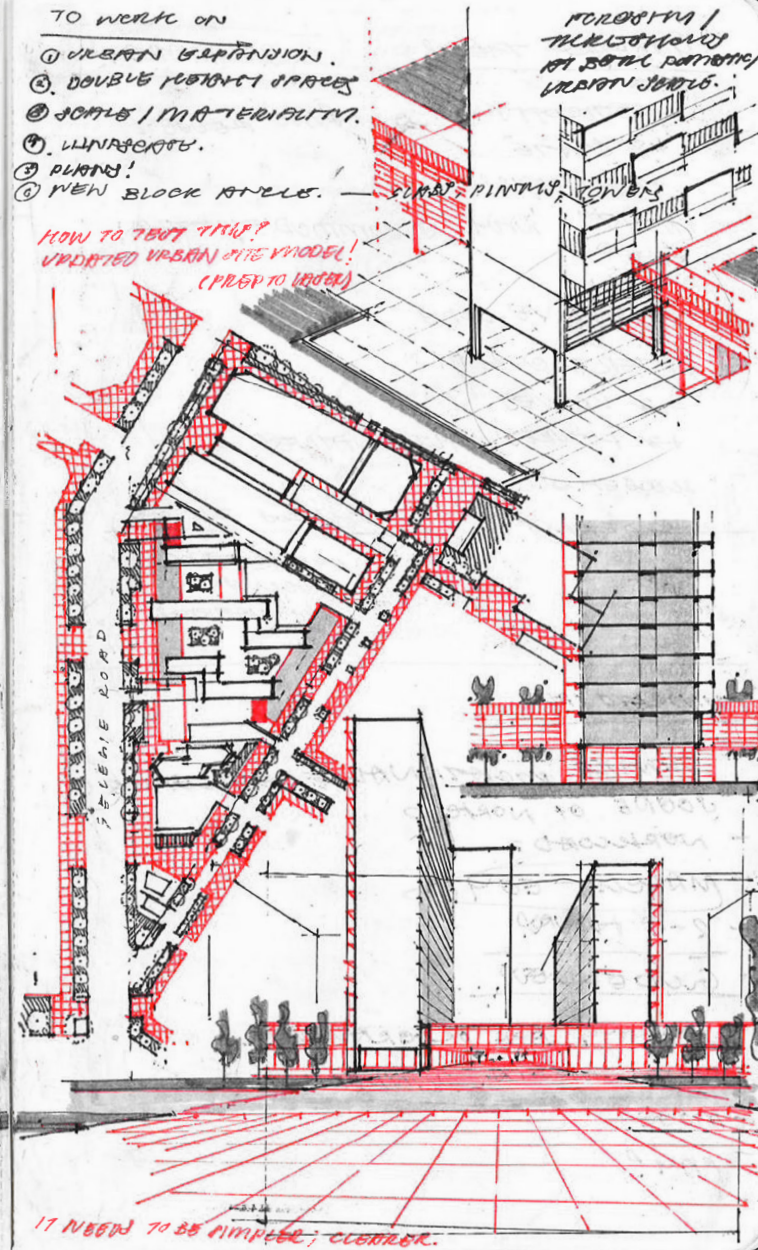


['BRIDGING THE ISLAND' / TAMING THE ROAD.]

TO work on

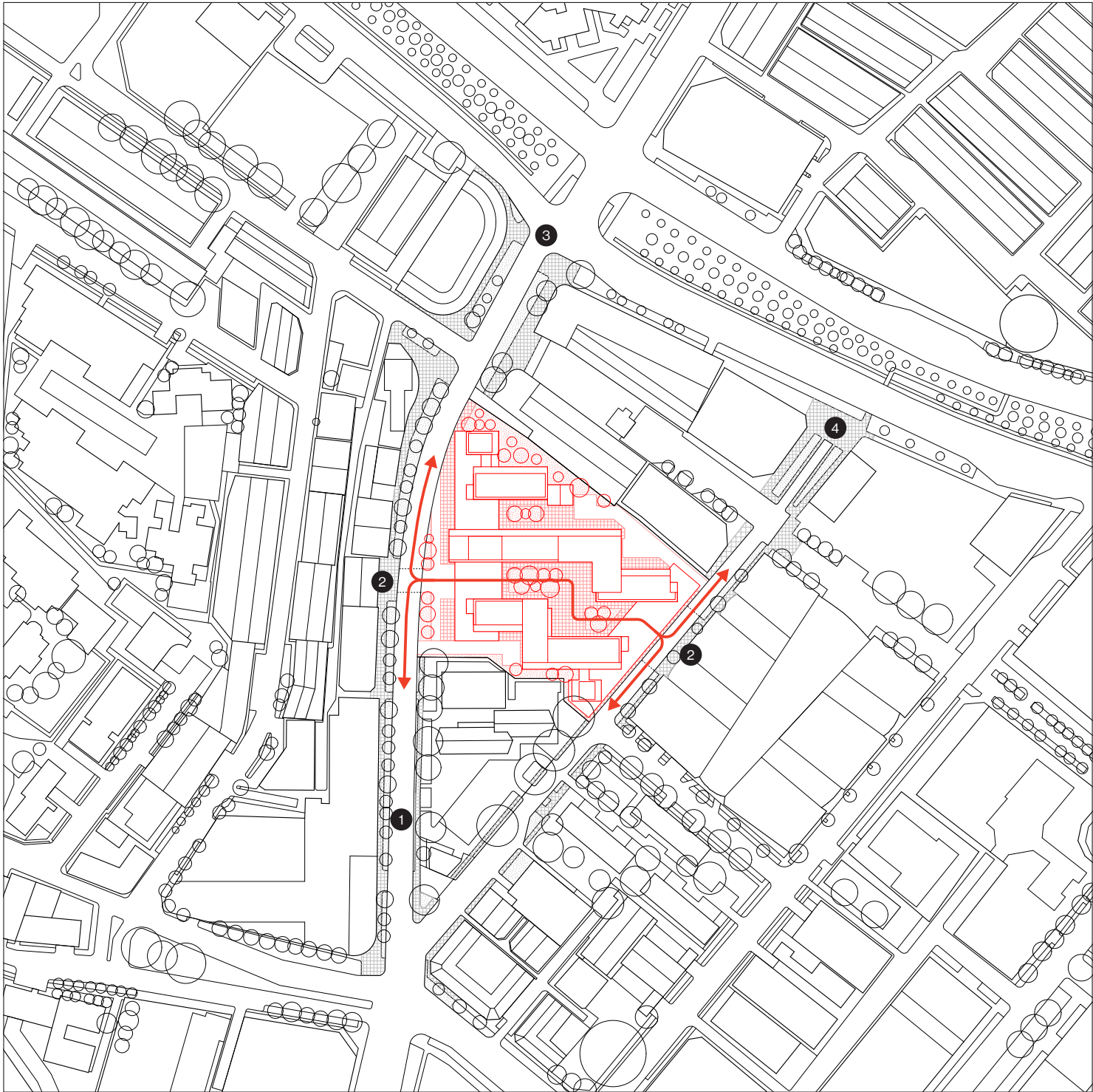
- ① URBAN EXPANSION.
- ② DOUBLE POTENTIAL SPACES
- ③ SCALE / MATERIALITY.
- ④ LANDSCAPE.
- ⑤ PLANNING!
- ⑥ NEW BLOCK MODELS. —

HOW TO TEST THIS?
UPDATED URBAN SITE MODEL!
(PREP TO UNDER)



17 NEED TO BE SIMPLER; CLEARER

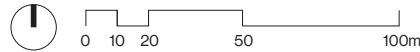
THRESHOLDS - STICHING URBAN FABRIC



URBAN STITCHING

- 1 Narrowing of Selegie Road
- 2 Enlarged Pedestrianised Crossing
- 3 Narrowing Road Junction
- 4 Access-Only Short Street

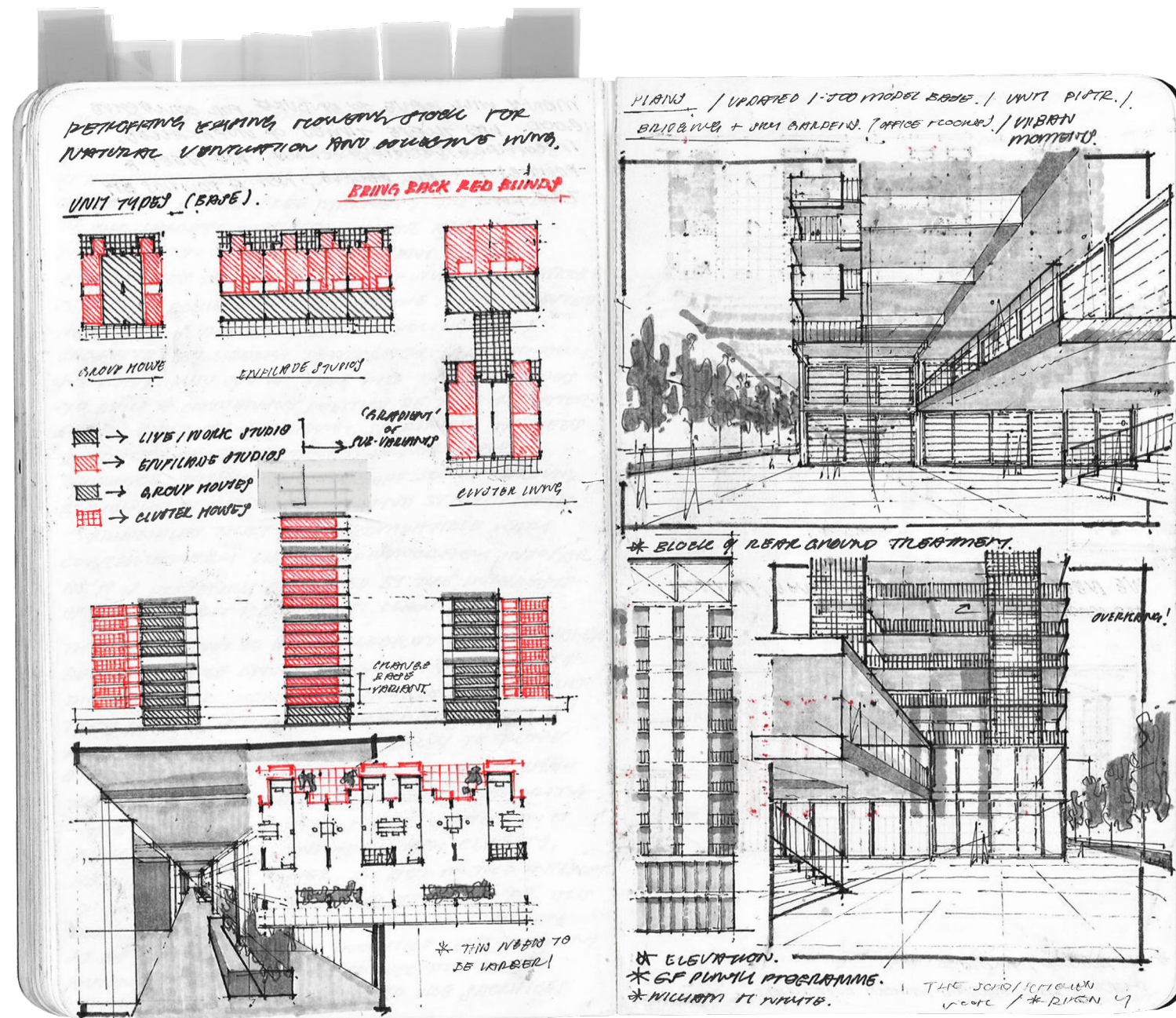
Site Plan
1:2500



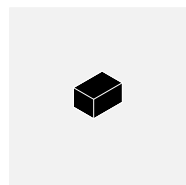


URBAN SITUATION

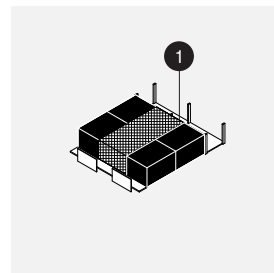
Site Model
1:1000



THRESHOLDS - NESTED SCALES / COLLECTIVE ANCHORS

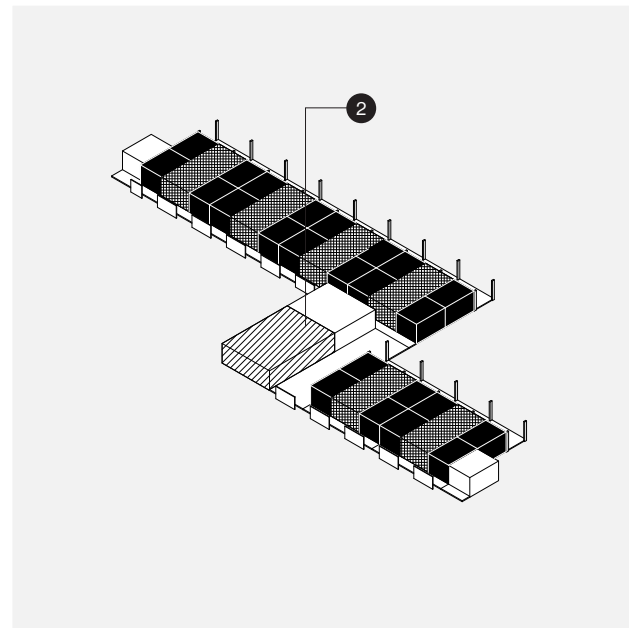


ROOM



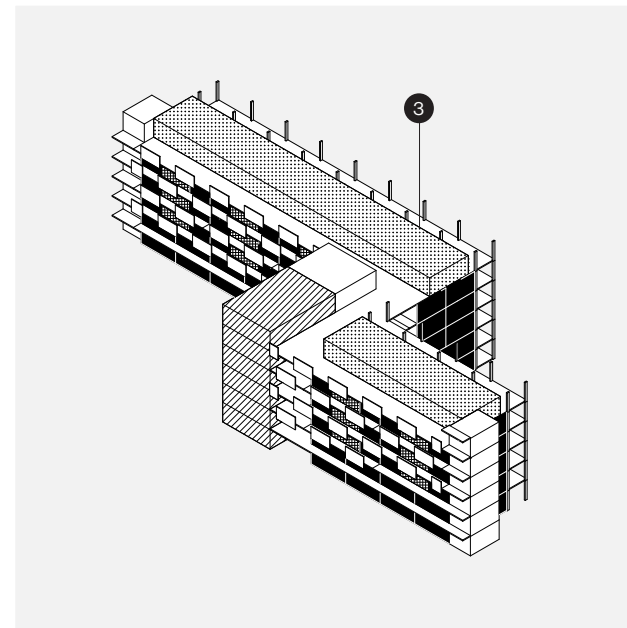
UNIT

**4-12
Rooms**



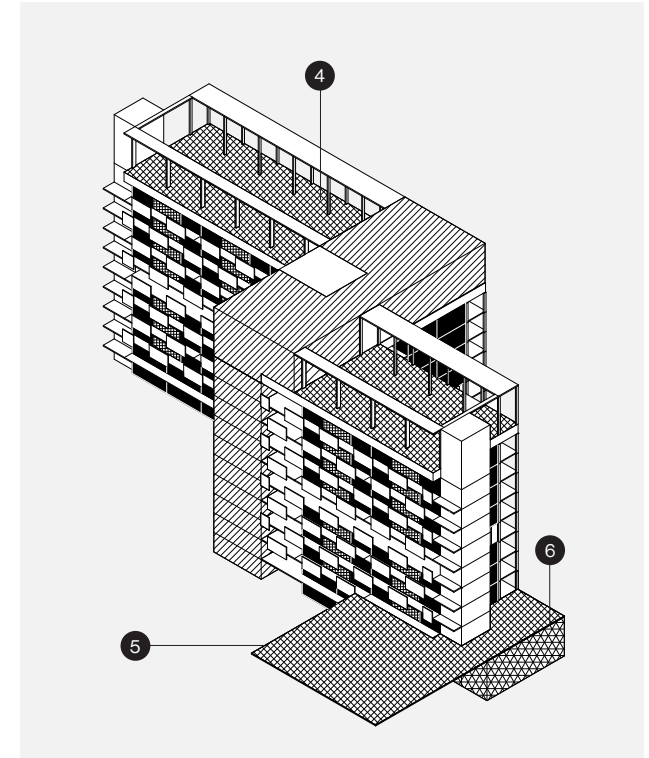
FLOOR

**3-12
Units**



STACK

**2-4
Floors**

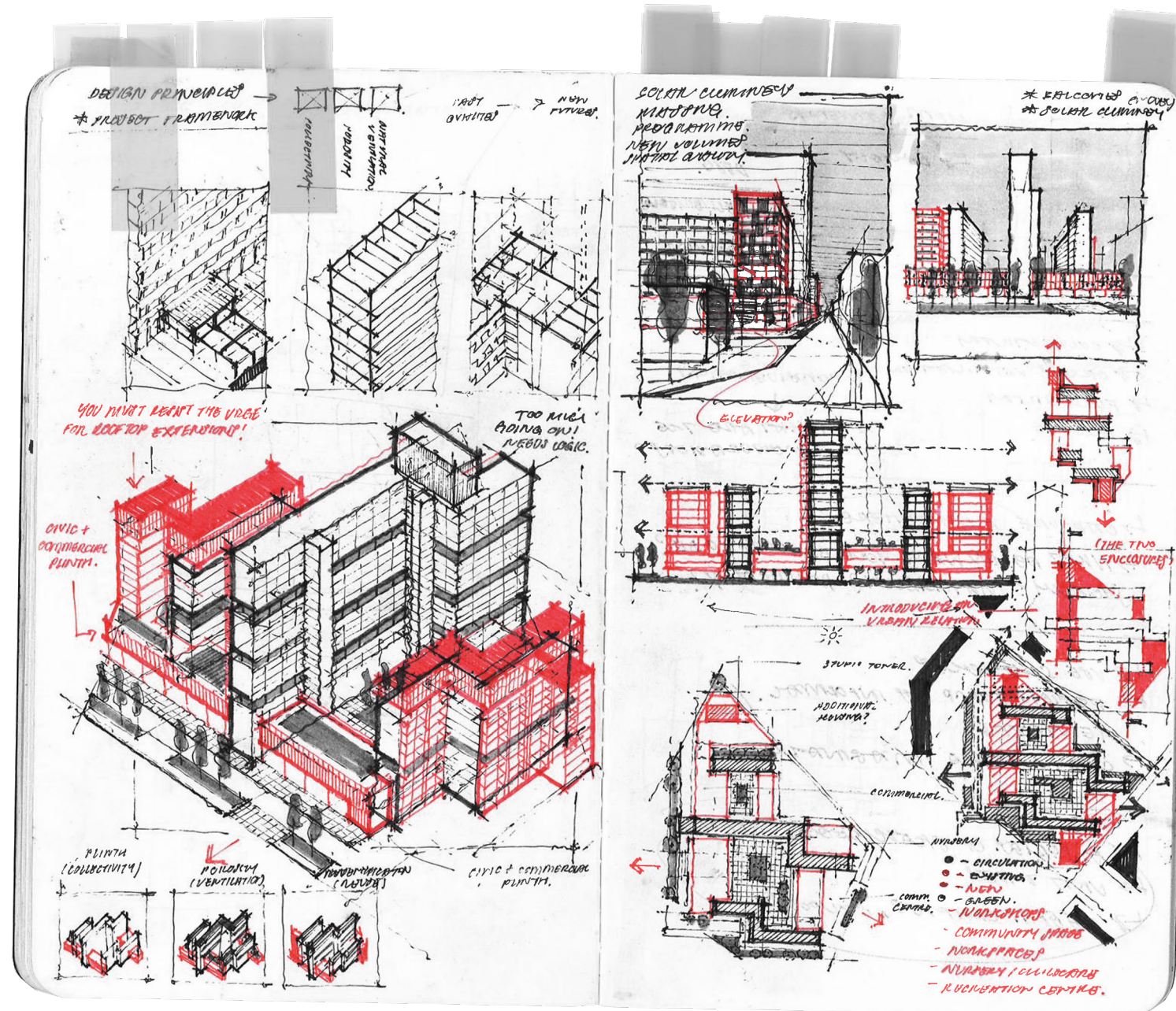


BLOCK

**2-4
Stacks**

NESTED SCALES OF COLLECTIVITY

- ① Shared Living Space
- ② Common + Laundry Room
- ③ Co-working + Recreation Deck
- ④ Crown Roof Terrace
- ⑤ Plinth Roof Terrace
- ⑥ Community Centre / Amenities



EXTENSIONS - A NEW-OLD ENSEMBLE

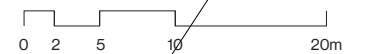


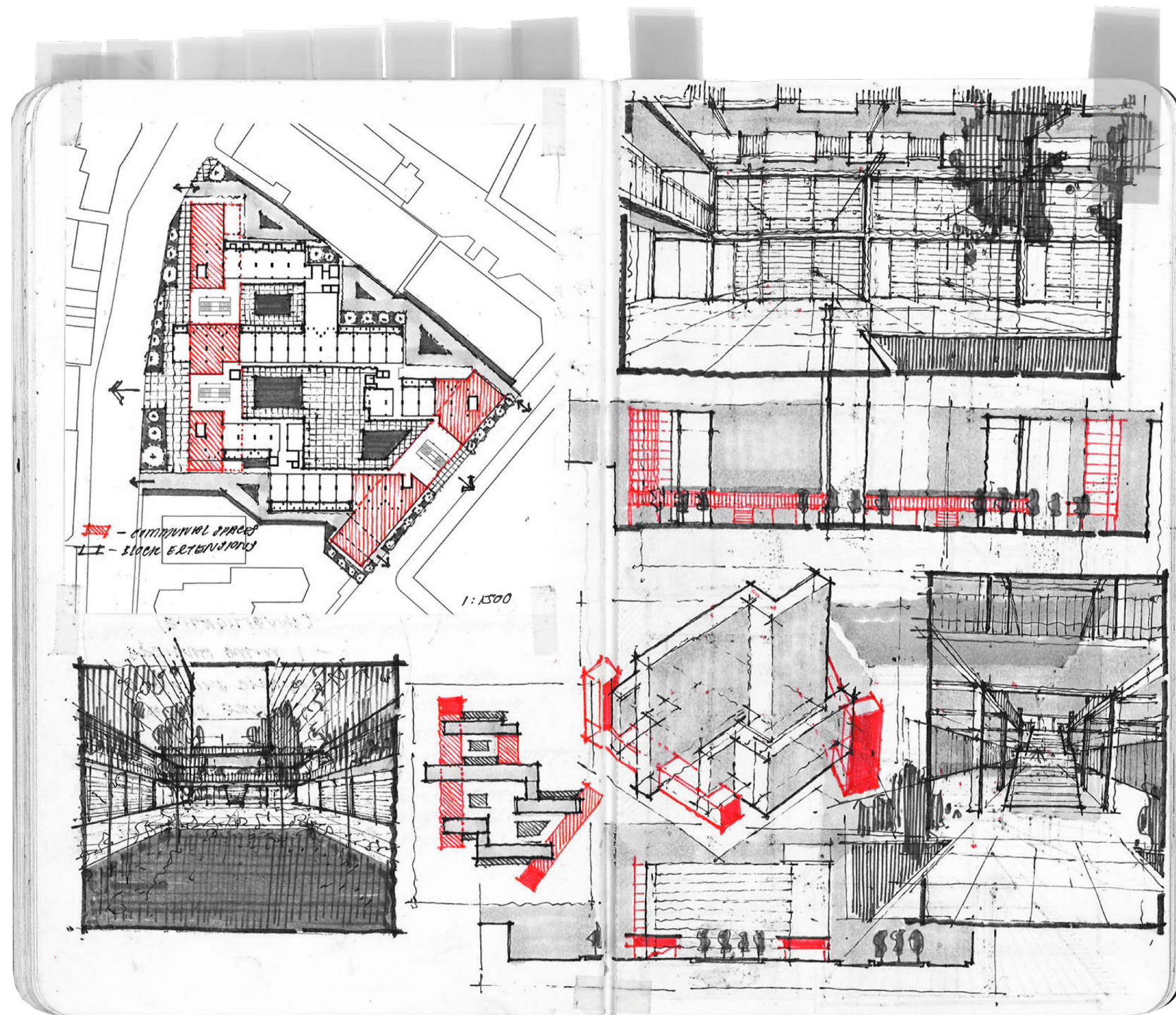
LEGEND

- 1 Community Centre
- 2 Coffee Shop
- 3 Childcare
- 4 Management Office
- 5 Food Court
- 6 Elderly Care Centre
- 7 Public Courtyard
- 8 Live-Work Atelier



Ground Floor Plan
1:500





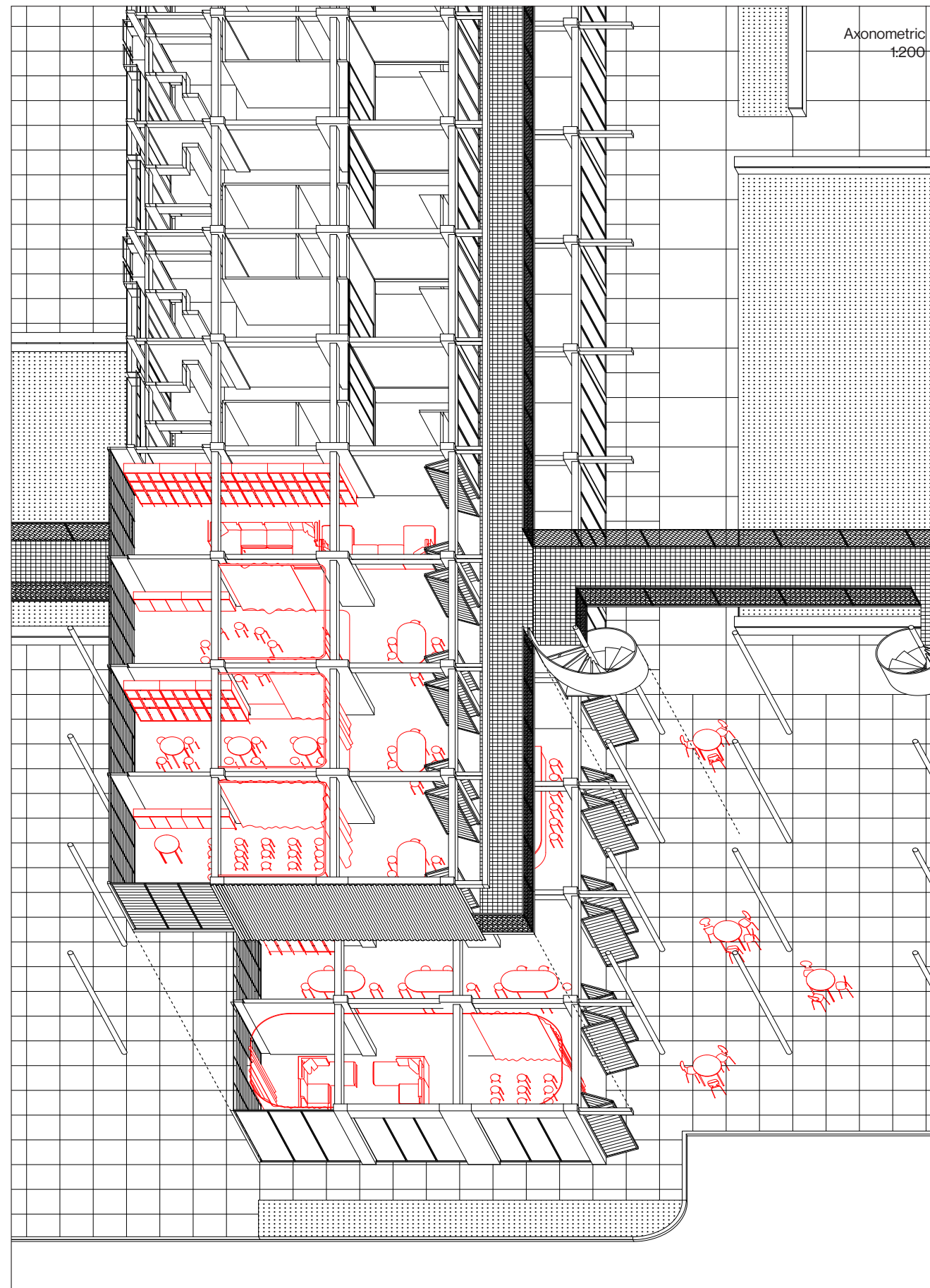
THRESHOLDS - PLINTH GESTURES AND MOMENTS



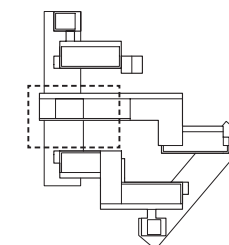
LEGEND

- 1 Community Centre
- 2 Social Service Centre
- 3 Childcare
- 4 Community Arts Centre
- 5 Eldercare Centre
- 6 Live-Work Atelier



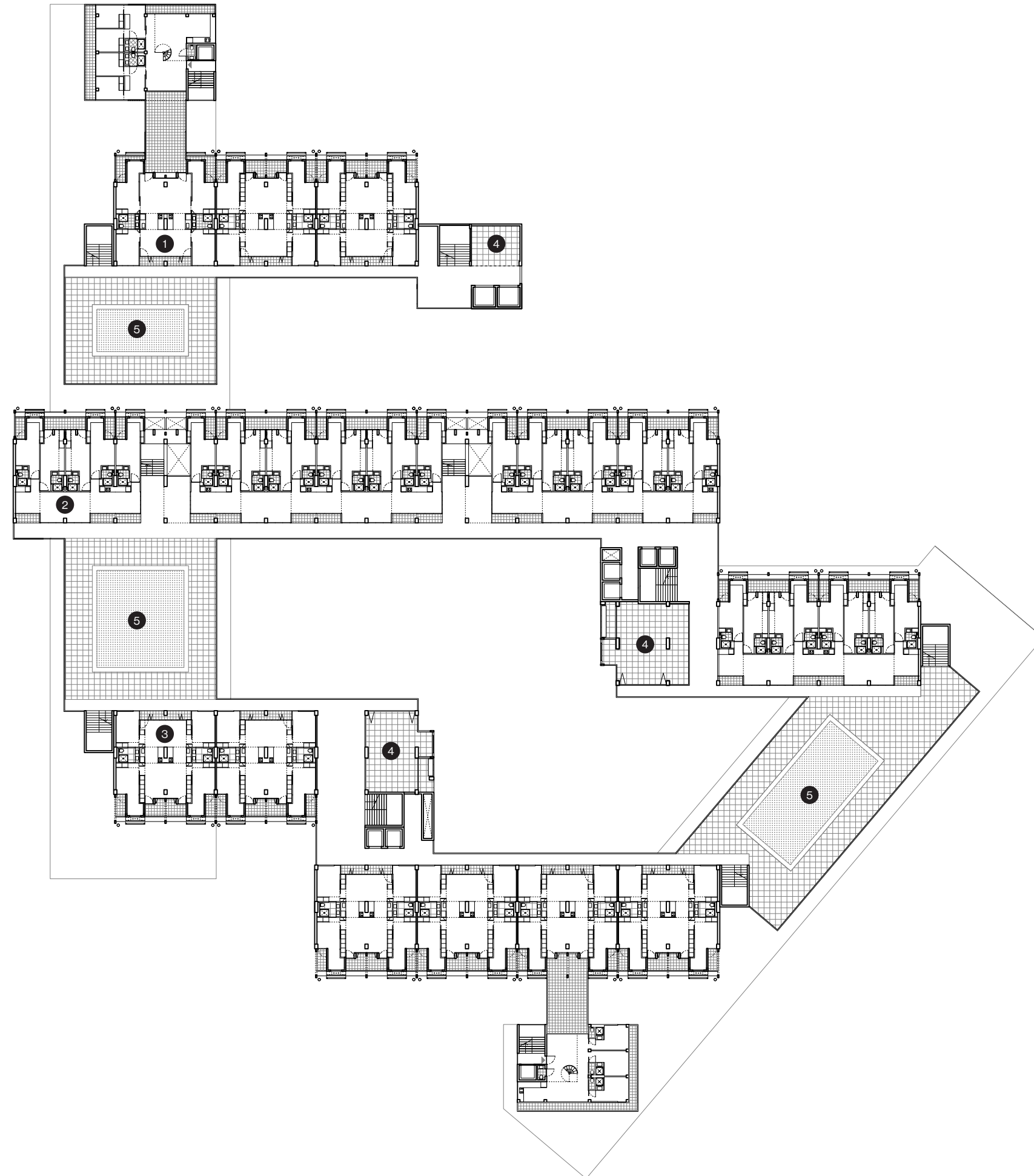


Axonometric
1:200



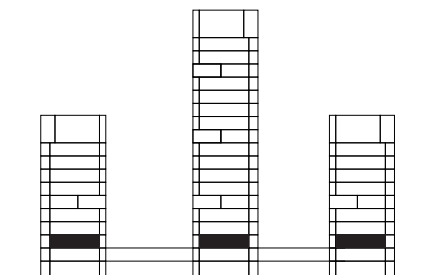
COMMUNAL PLINTH





LEGEND

- 1 Cluster Apartment
- 2 Enfilade Studio
- 3 Group House
- 4 Common + Laundry Room
- 5 Collective Roof Garden

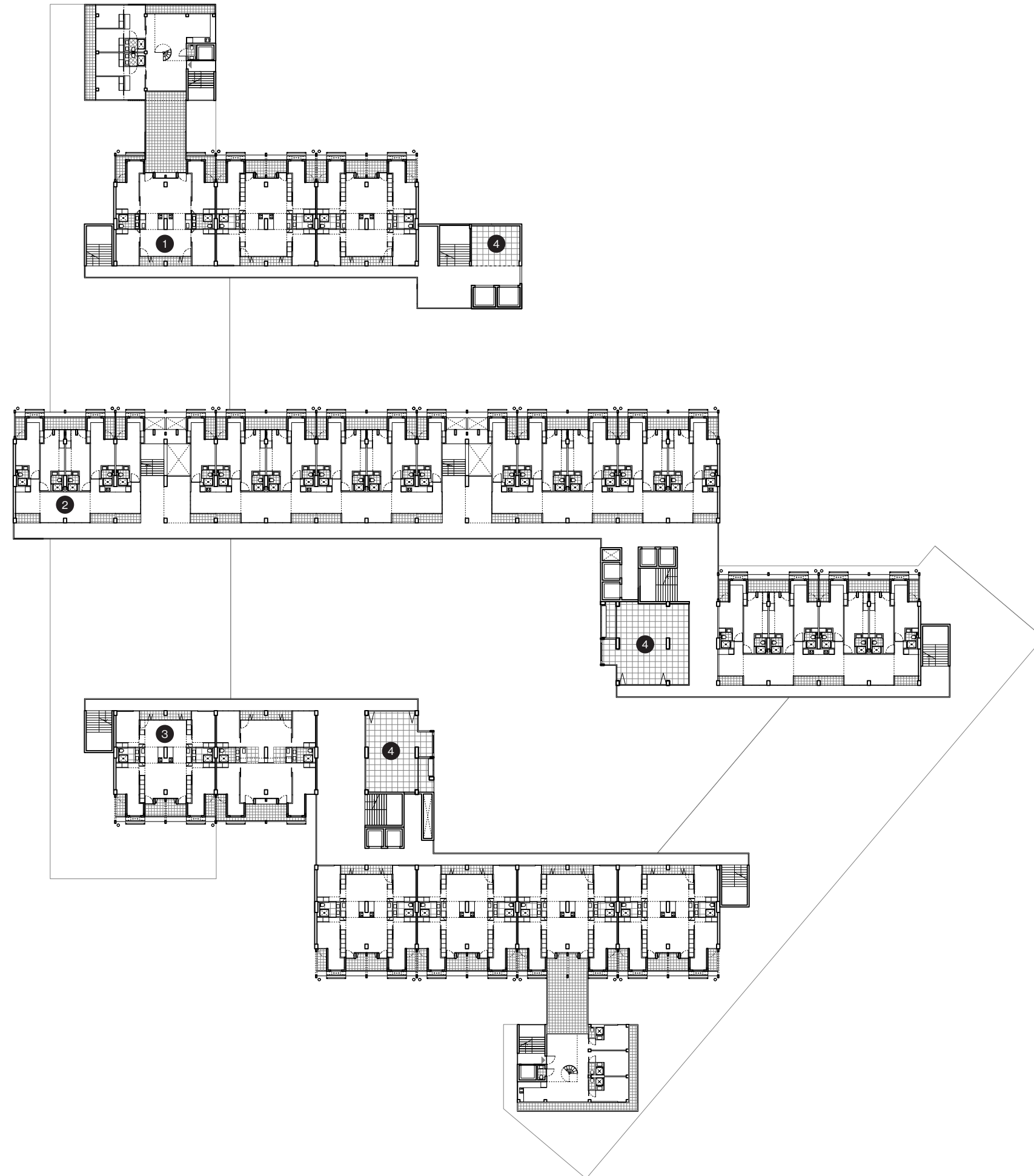


Second Floor Plan
1:500



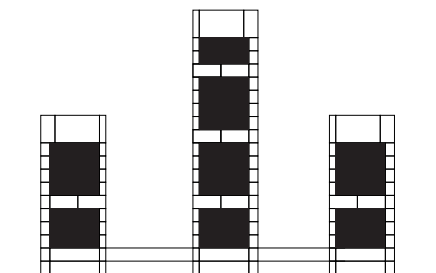


FRAGMENT MODEL
1:100

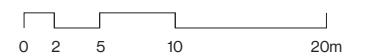


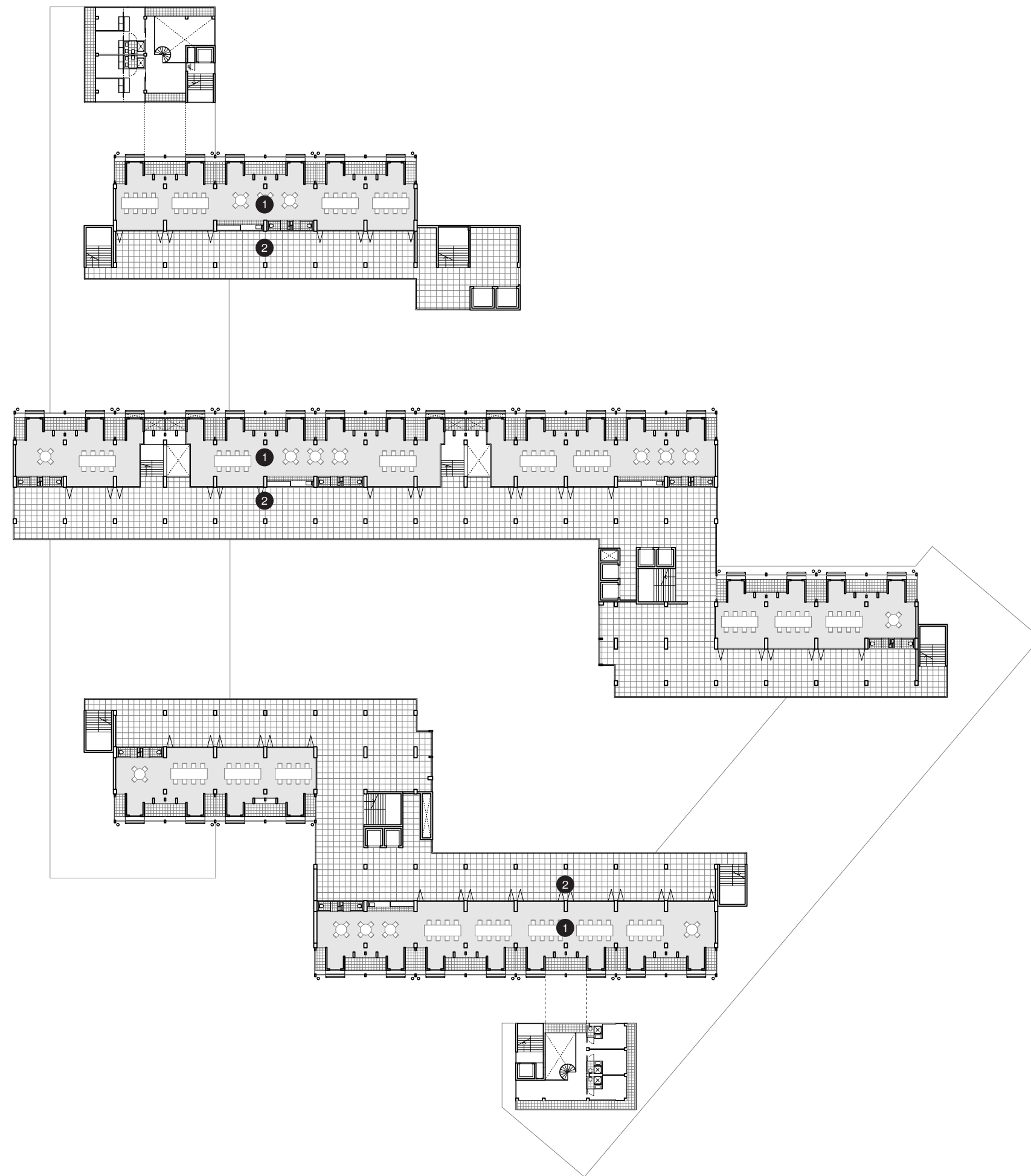
LEGEND

- 1 Cluster Apartment
- 2 Enfilade Studio
- 3 Group House
- 4 Common + Laundry Room



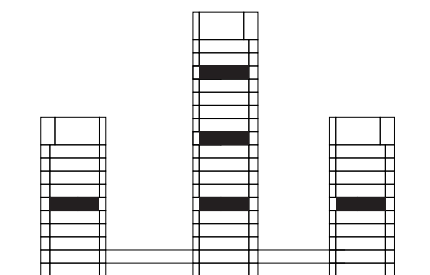
Typical Floor Plan
1:500



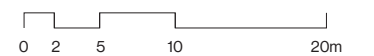


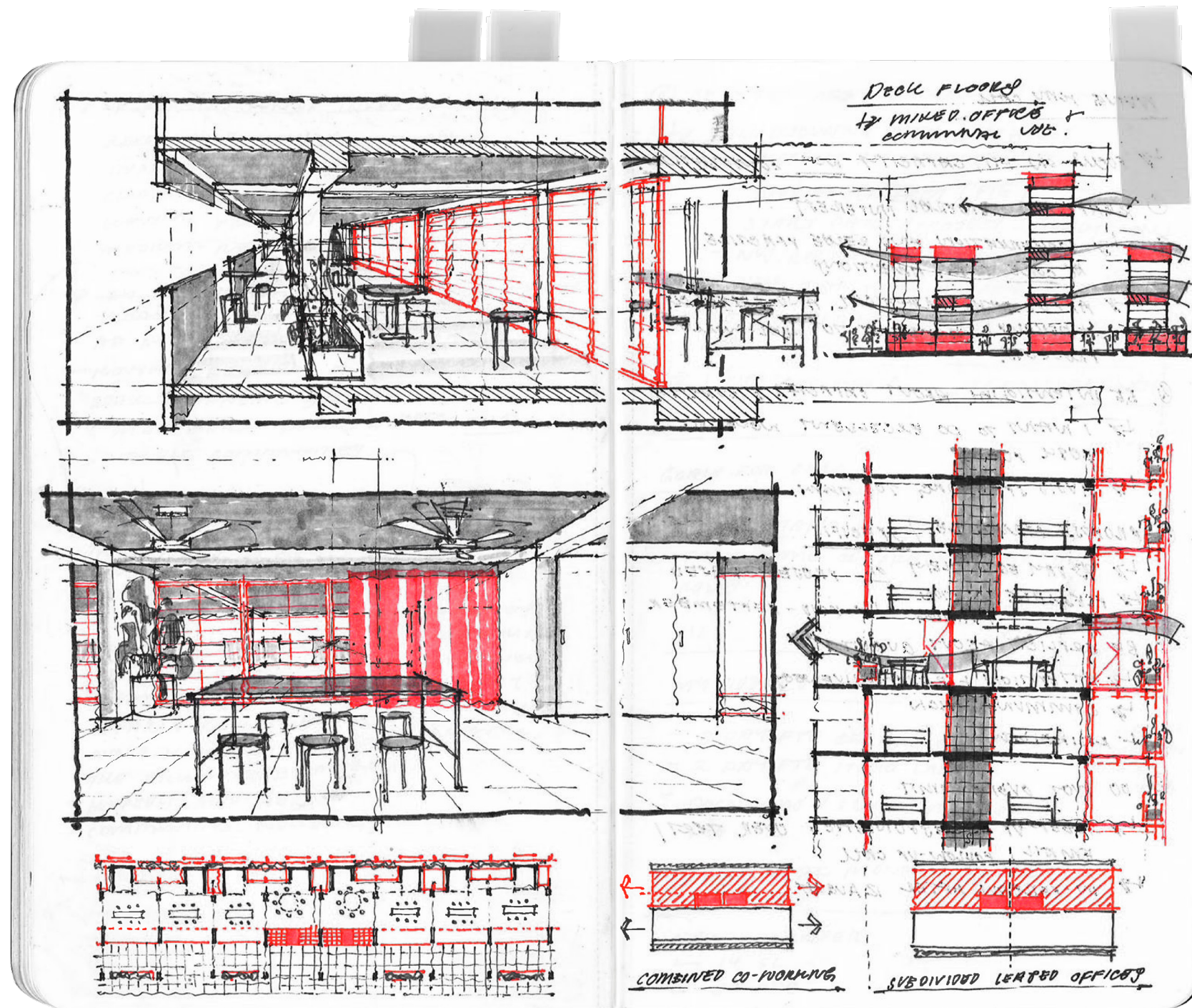
LEGEND

- 1 Flexible Working Space
- 2 Recreation Deck



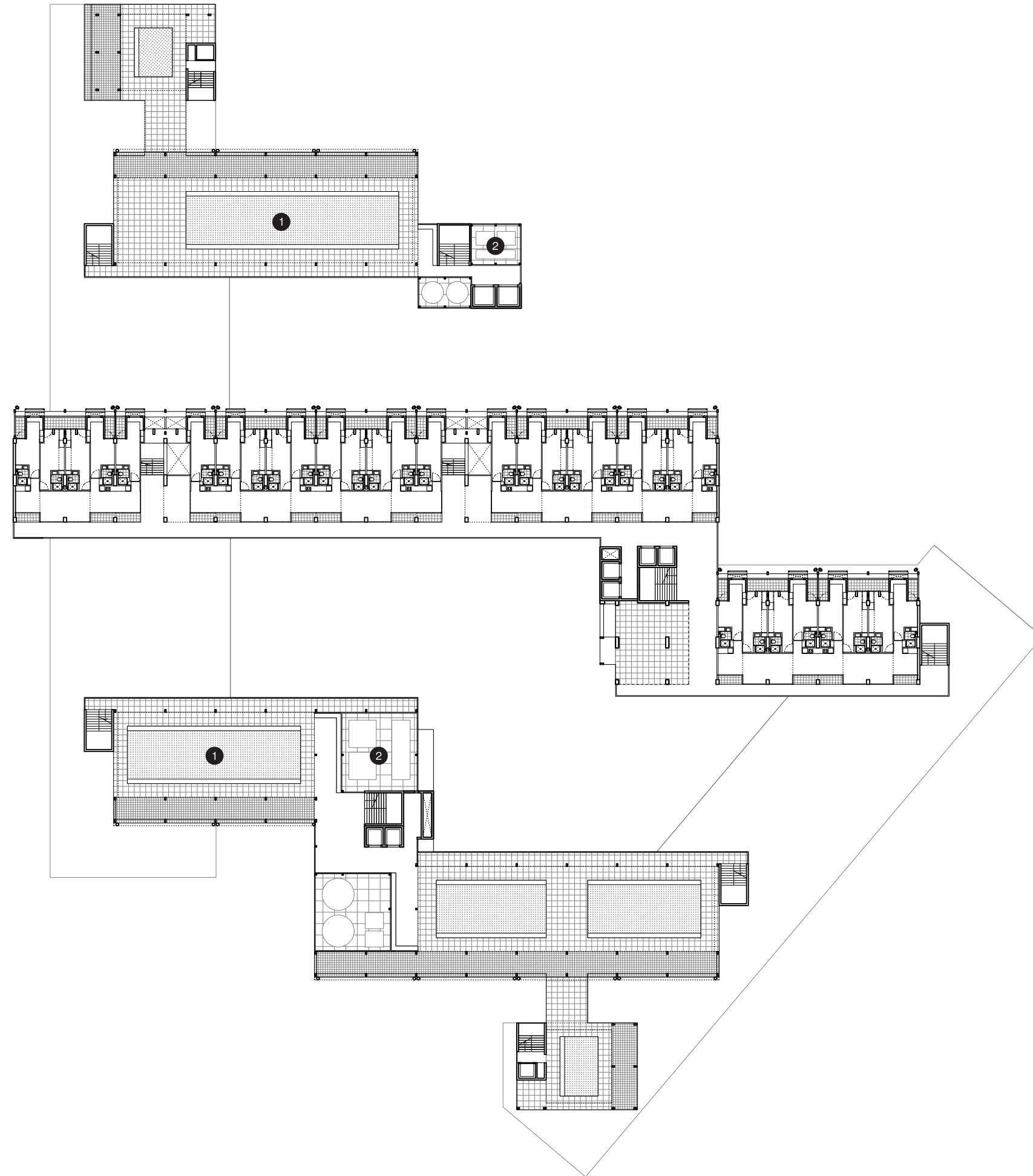
Intermediary Floor Plan
1:500





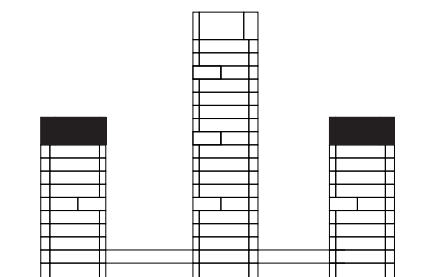
LAYERING - THE COMMUNAL DECK



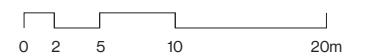


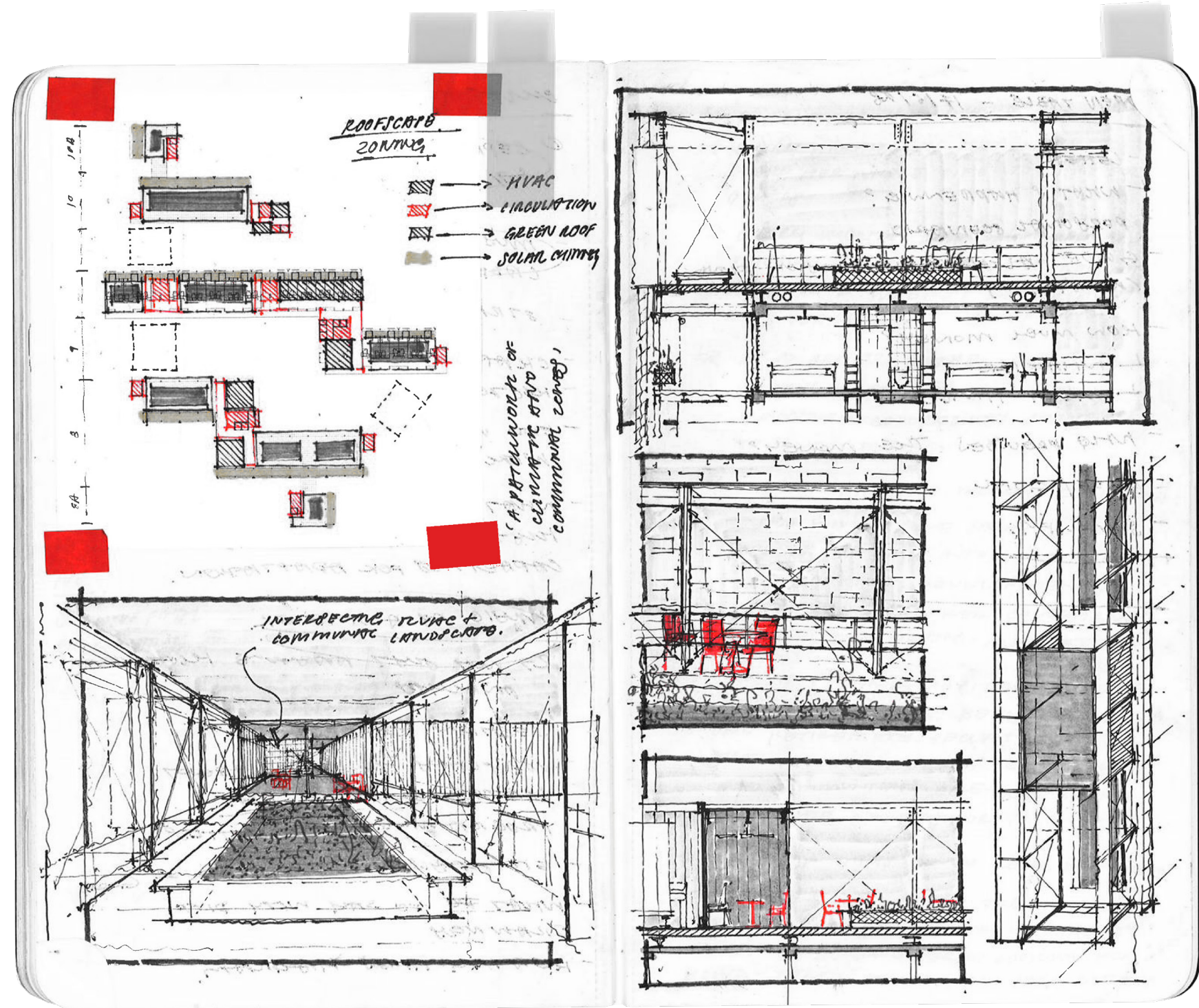
LEGEND

- 1 Public Roof Deck
- 2 M&E Space

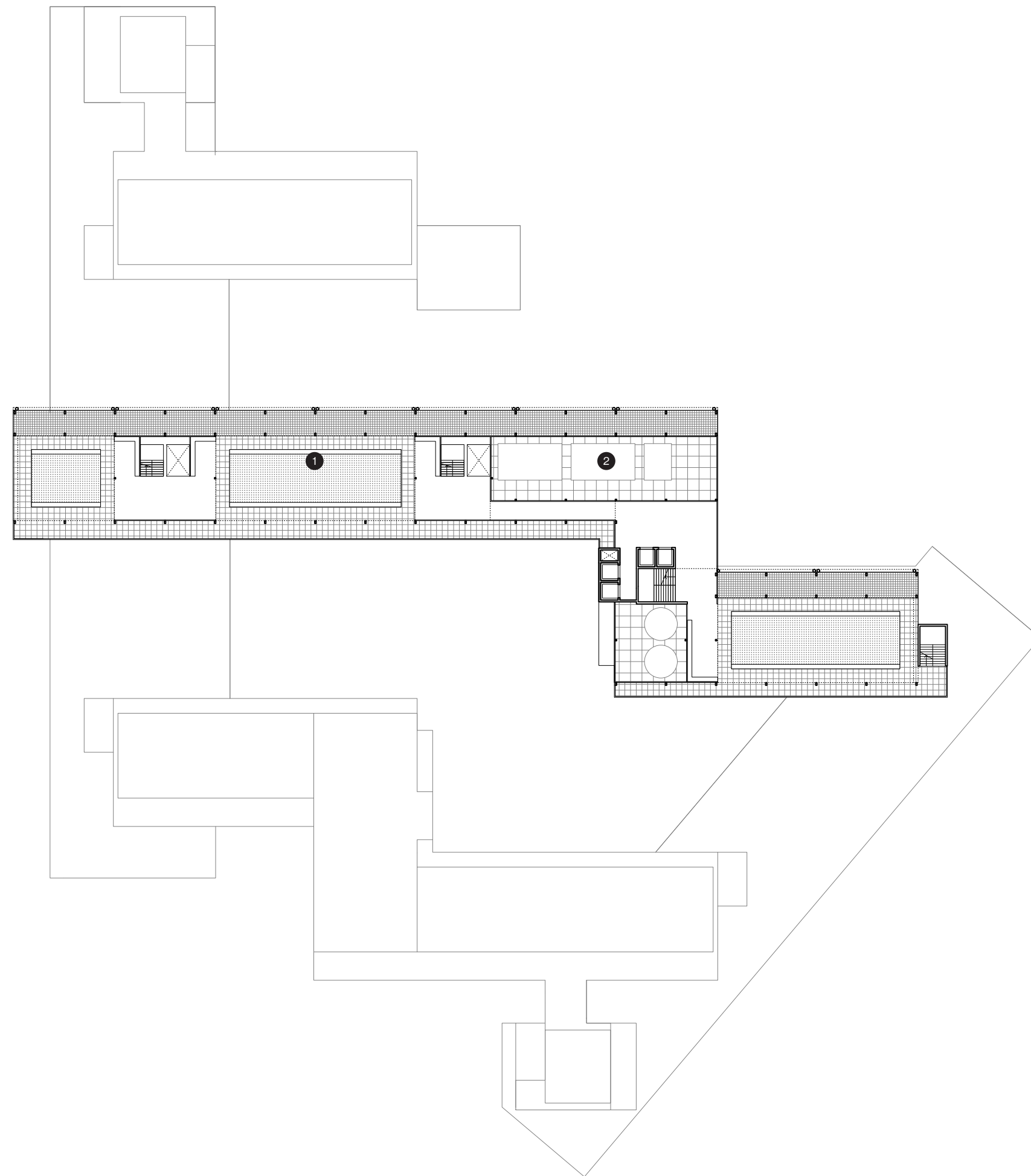


Eleventh Floor Plan
1:500



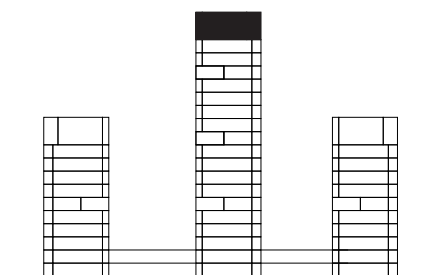




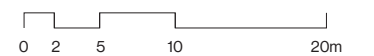


LEGEND

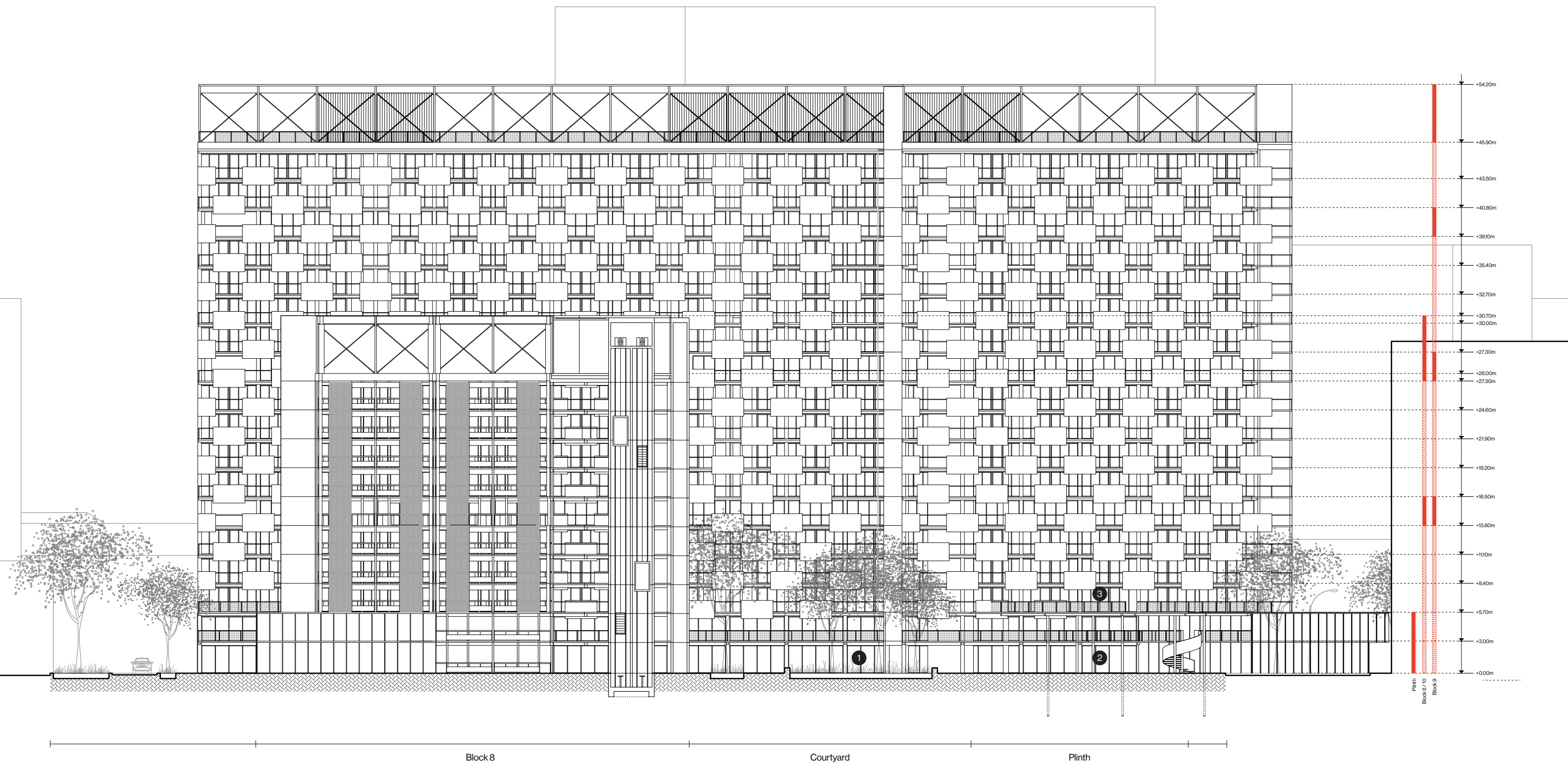
- 1 Public Roof Deck
- 2 M&E Space

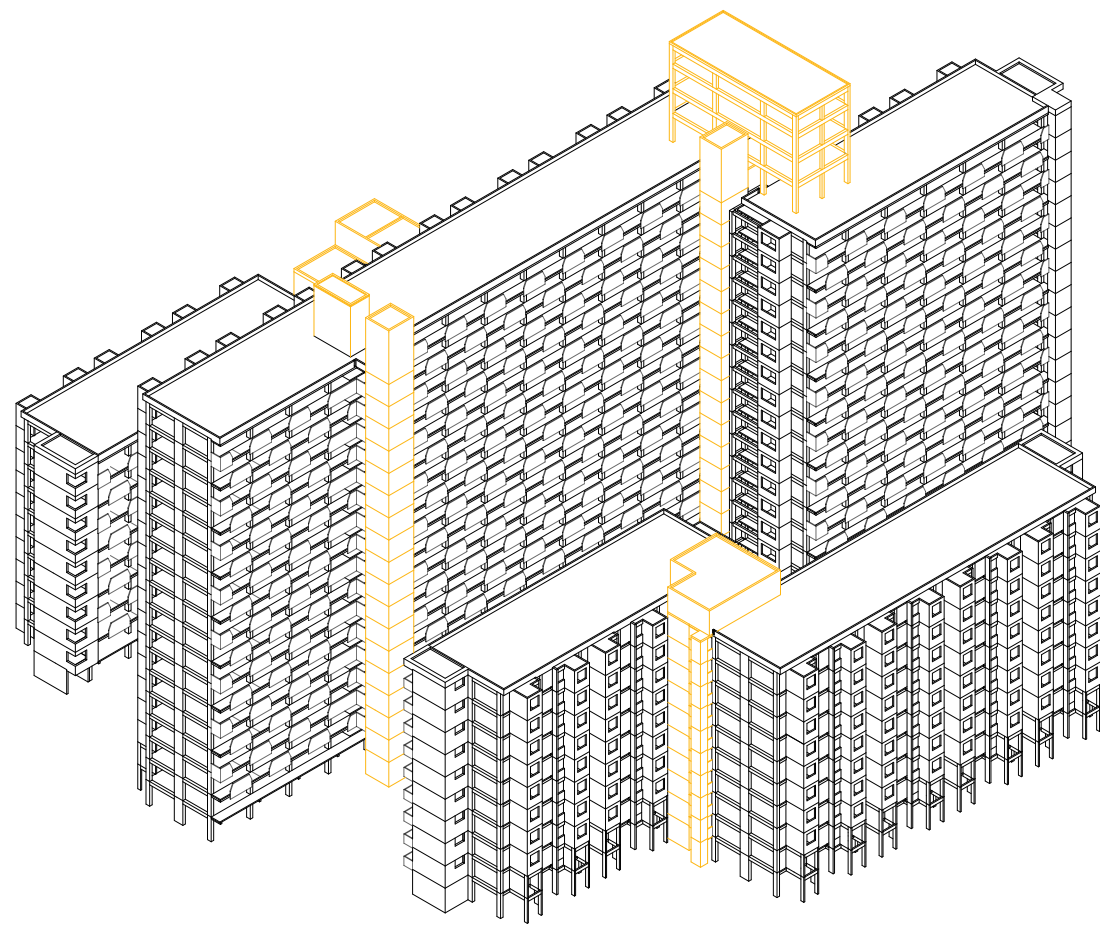


Eighteenth Floor Plan
1:500

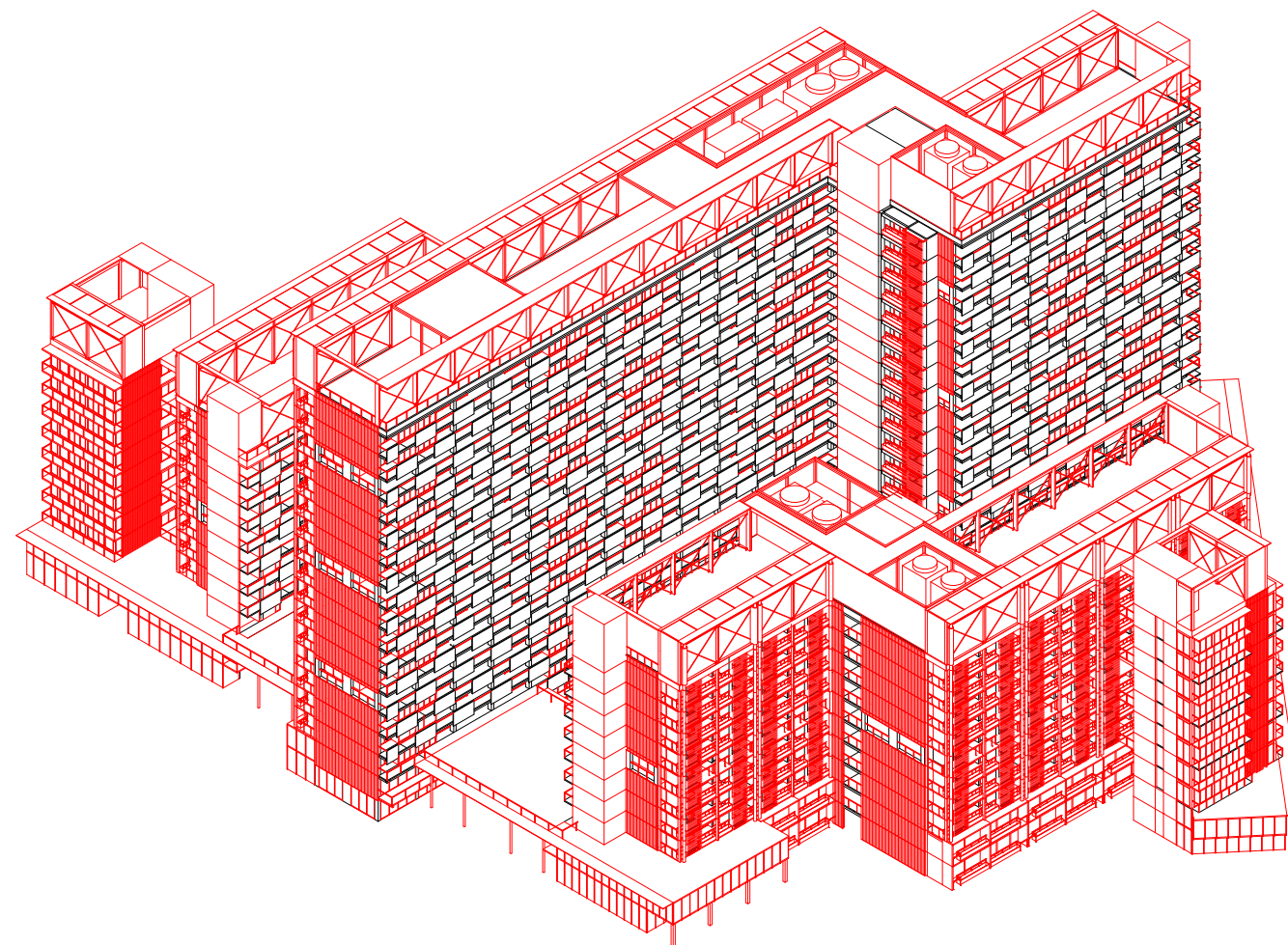








EXISTING STRUCTURE
REINFORCED CONCRETE SKELETON



ADDED STRUCTURE
HYBRID STEEL + CONCRETE FRAMING

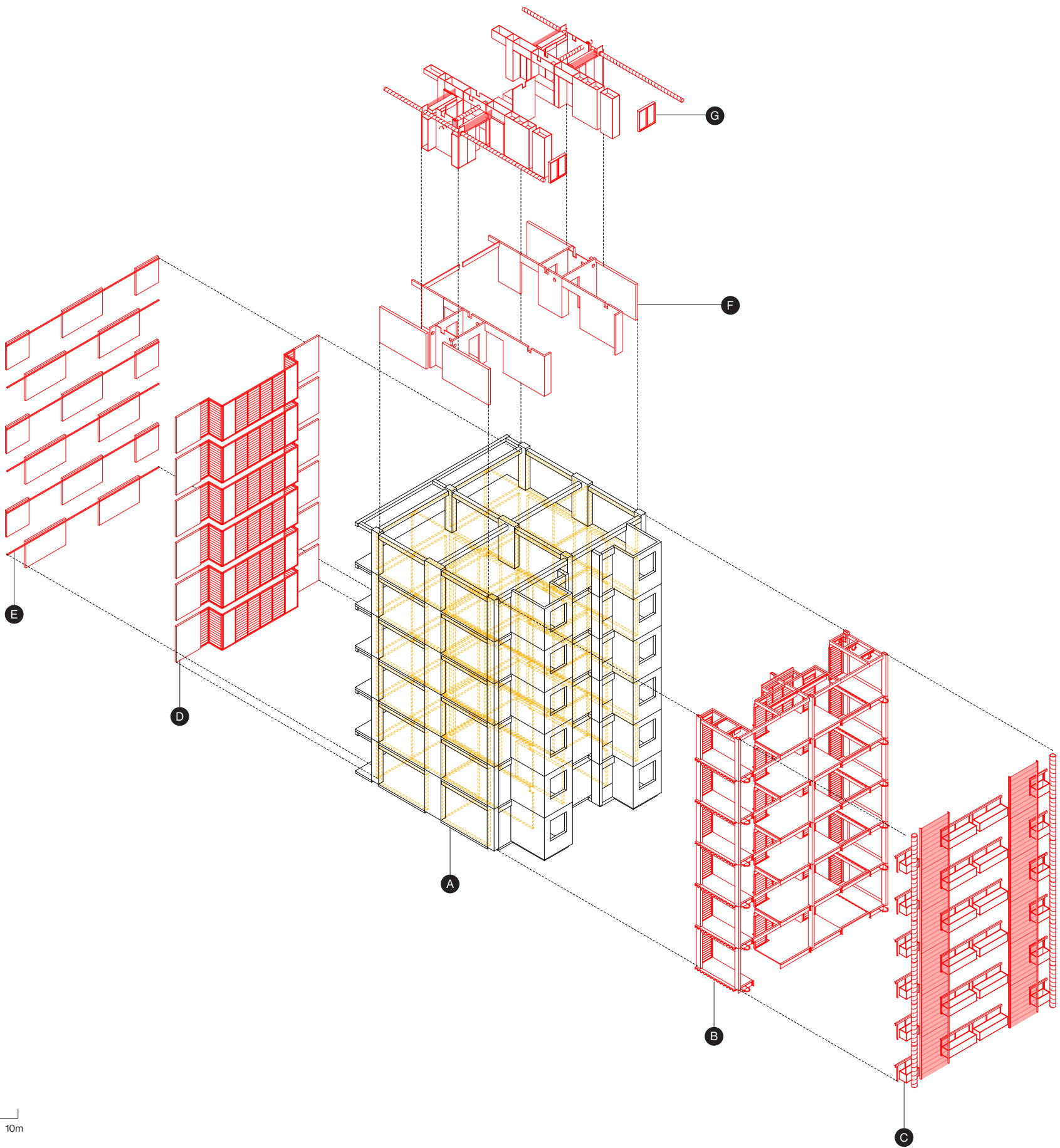
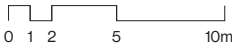
STRUCTURAL LOGIC
DRAPING THE VEIL

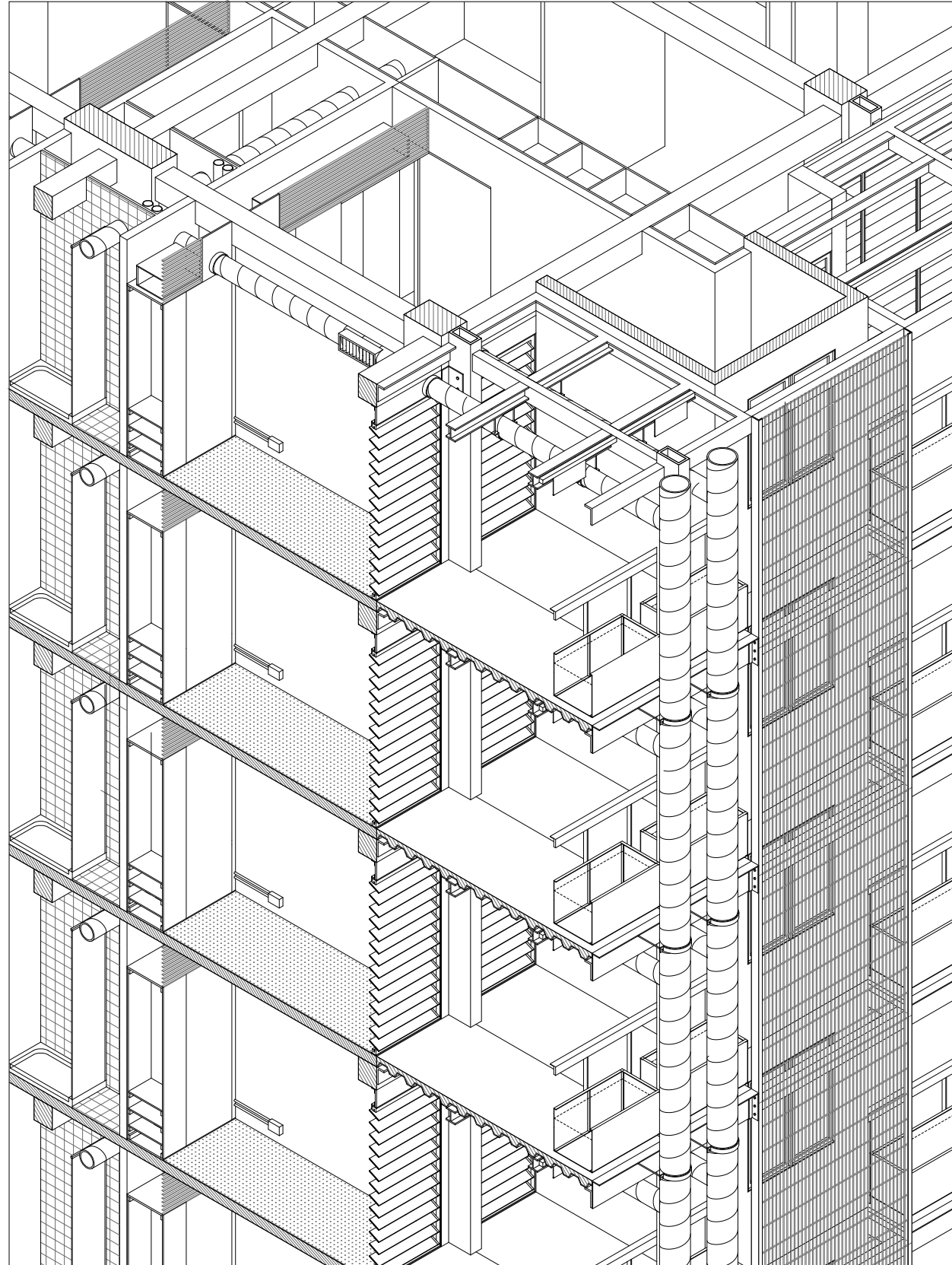
Demolished Added

EXPLODED STRUCTURAL AXONOMETRIC

- A Existing Reinforced Concrete Skeleton Structure**
Reinforced concrete beam 250x275mm
Reinforced concrete column 515x350mm
Reinforced concrete slab 150mm
Precast concrete volumetric 150mm
- B New Balcony Structure**
Galvanised steel column 150x300mm
Galvanised steel beam 200x100mm
Reinforced concrete and steel decking 150mm
Aluminium framed glass louver windows
Aluminium framed glass louver doors
- C New Balcony Cladding**
Galvanised steel mesh 2100mm
Galvanised steel dutcing 400mm
Painted steel planter boxes
- D Access Balcony Elevation**
Cement block partition wall 150mm
Aluminium framed glass louver windows
Aluminium framed glass louver doors
- E Existing Balustrade**
Precast concrete balustrade 1700x3000mm
- F Internal Walls**
Cement block partition wall 100mm
- G Internal Fit-Out**
Built-in plywood cabinetry 15mm
Galvanised steel ducting 200mm

Demolished Added



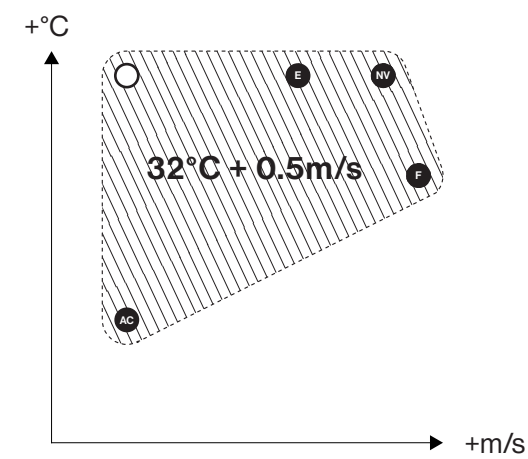
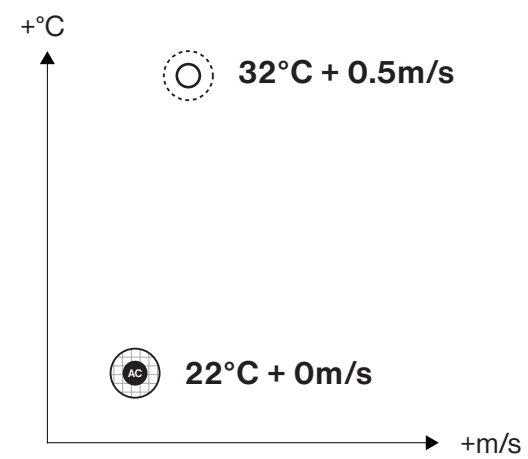
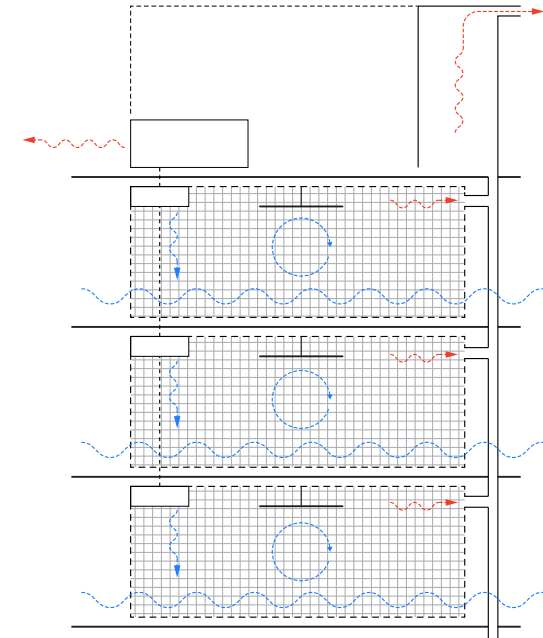
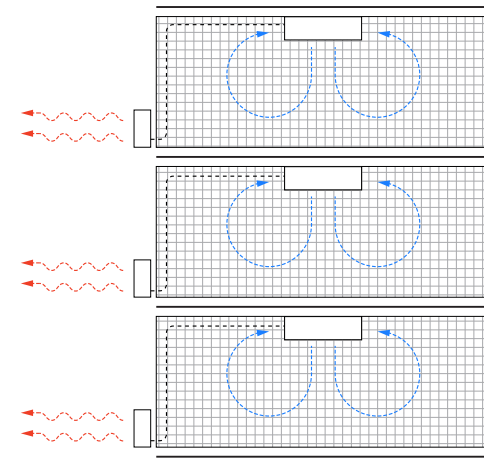


BALCONY EXTENSION DETAIL AXONOMETRIC

1:50



FACADE SECTIONAL MODEL
1:50

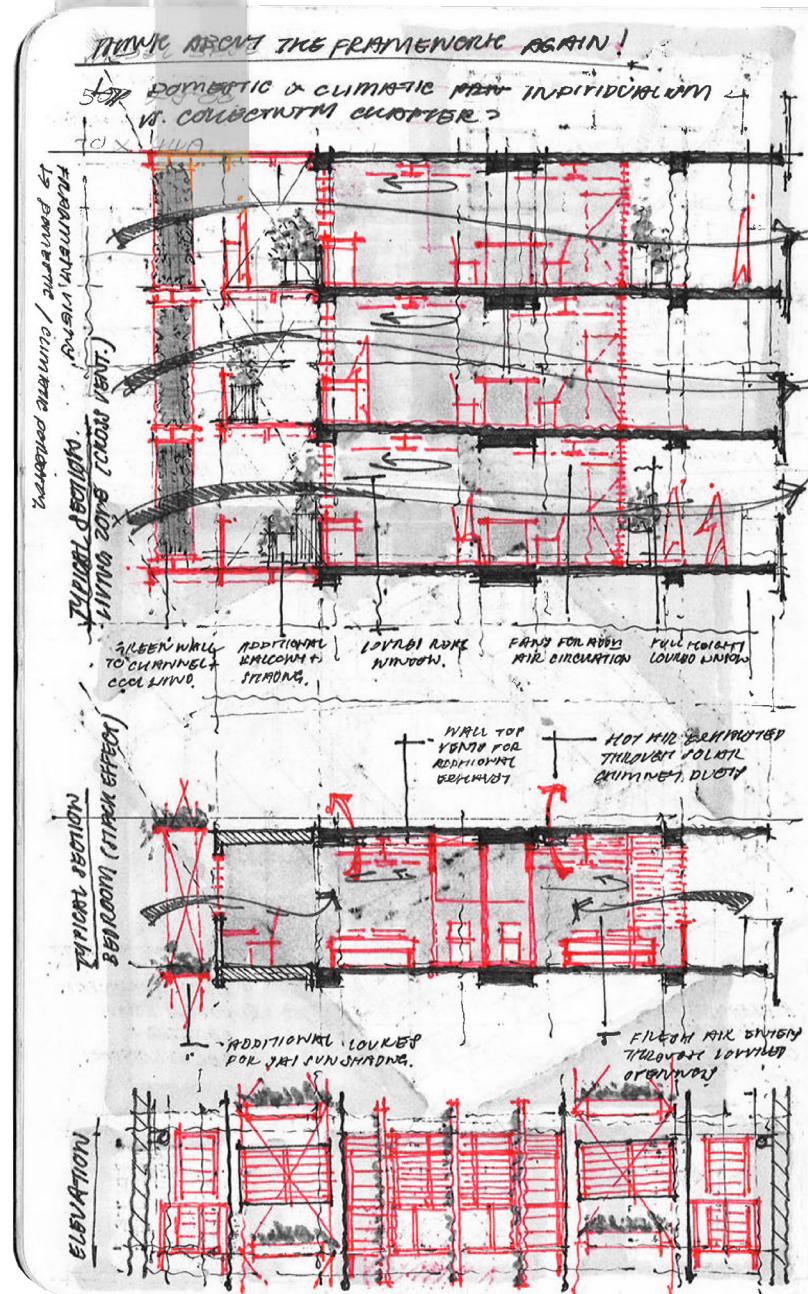


CONVENTIONAL COOLING

- ISOLATED NATURAL/MECHANICAL
- HIGH ENERGY USE
- POOR AIR QUALITY

HYBRID COOLING

- + INTEGRATED NATURAL/MECHANICAL
- + LOW ENERGY USE
- + HIGH AIR-FLOW
- + IMPROVED AIR QUALITY



* MAKE YOUR DELIVERABLES RESPONSIBLE!
* ORGANISE!

① THE PROBLEM

② TAKING STOCK - WHAT DO WE HAVE TO WORK WITH?

THE SITE (SELECTED ROUTE)

KNOWLEDGE TYPOLOGIES

GRAPHS OF HOUSEHOLDS

PRIVATE (CONVENTIONAL?)
NUCLEAR FAMILY (SHARED KITCHEN)
EXTENDED FAMILY (UTILITY)

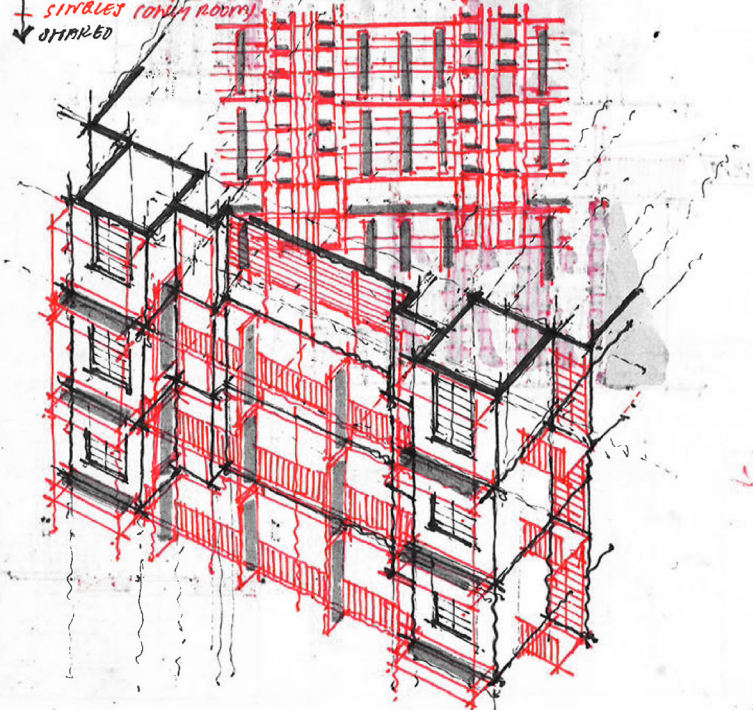
* SITUATE

→ SITE INTRODUCTION
→ VENTILATION
→ BUILDING MATERIALS
→ STRUCTURAL STRUCTURE
→ CLIMATE RESPONSE

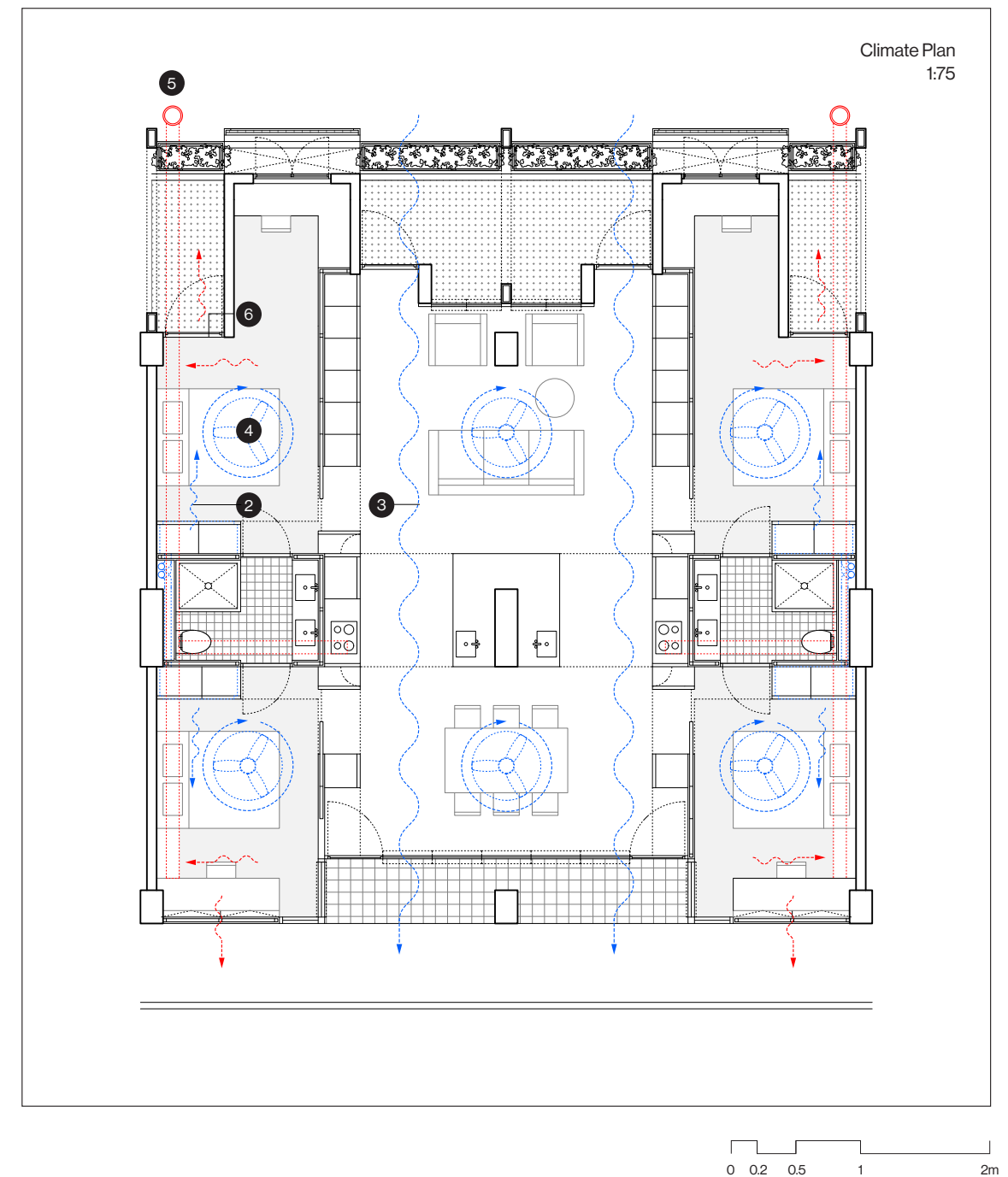
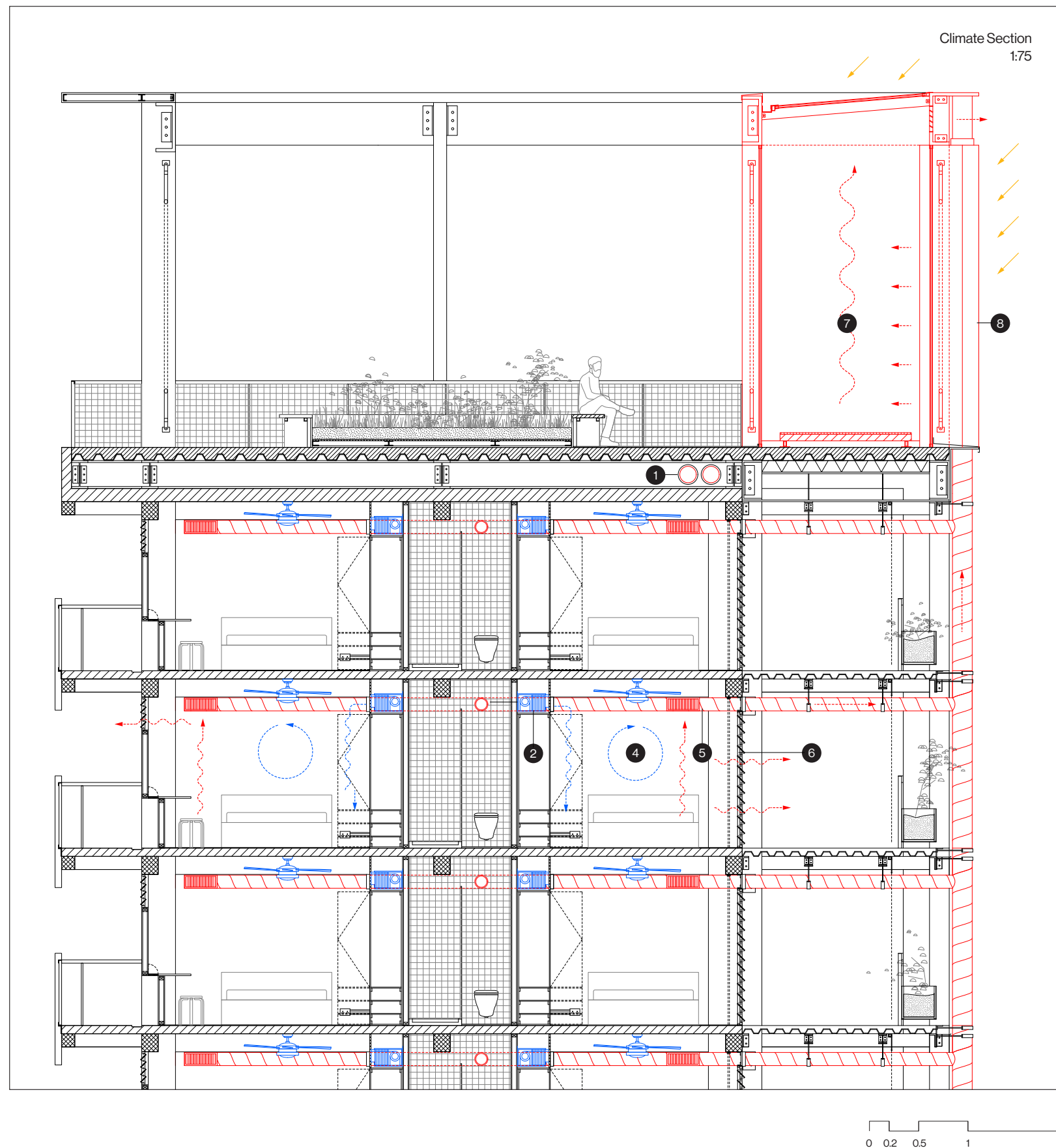
CLIMATE-PRIVATE
GRADIENT RESPONSE
TYPOLOGICAL

→ HISTORICAL TYPOLOGICAL RESPONSE
(CLIMATE-PRIVATE GRADIENT)
→ SOCIAL RESPONSE
(CLIMATE-PRIVATE GRADIENT)

→ ELDERLY (STAYING)
→ FRESH AIR CIRCULATION (WIND)
→ SINGLES (ONLY ROOM)
→ SHARED

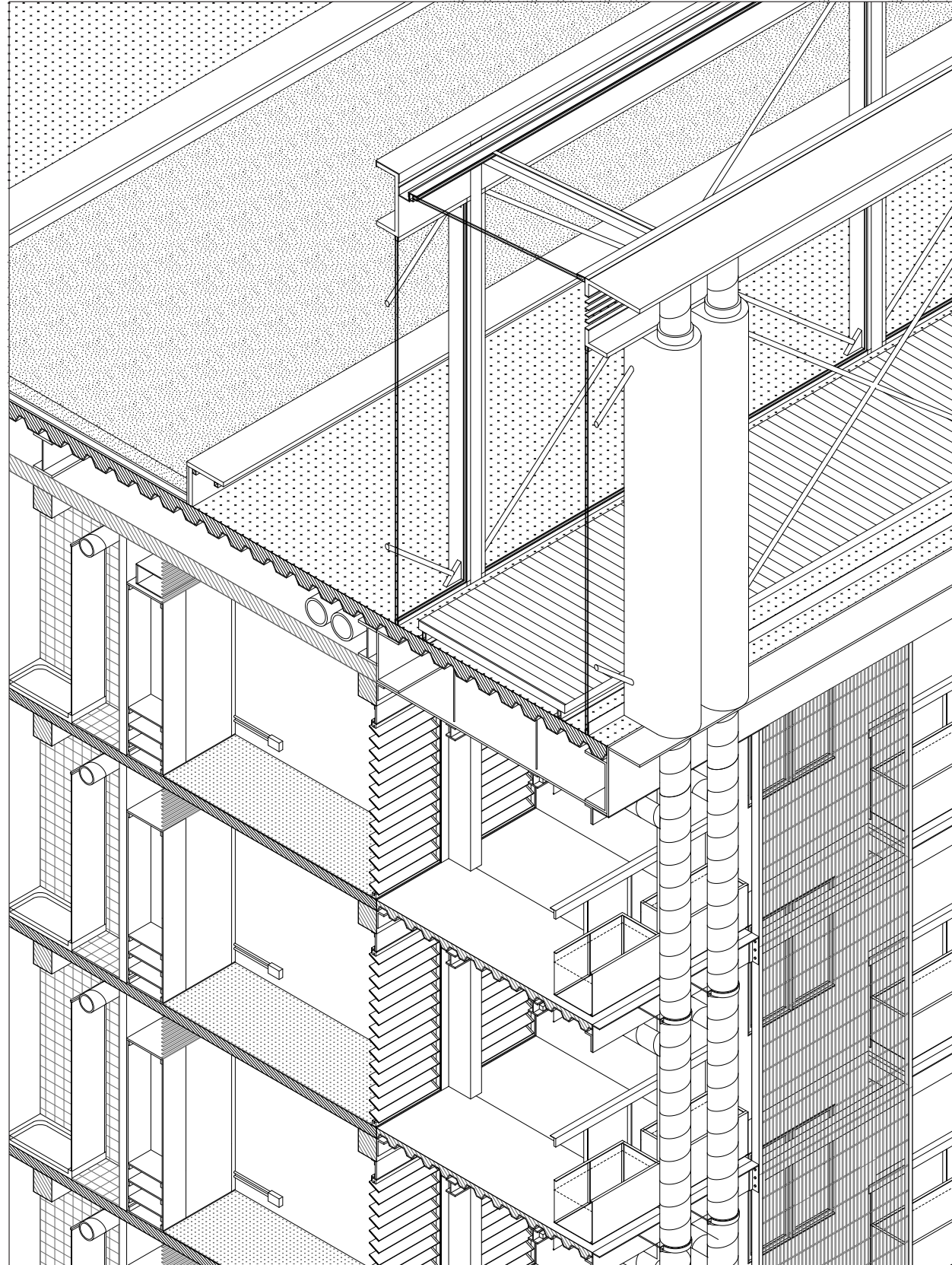


NATURALLY VENTILATED CLIMATIC GRADIENT



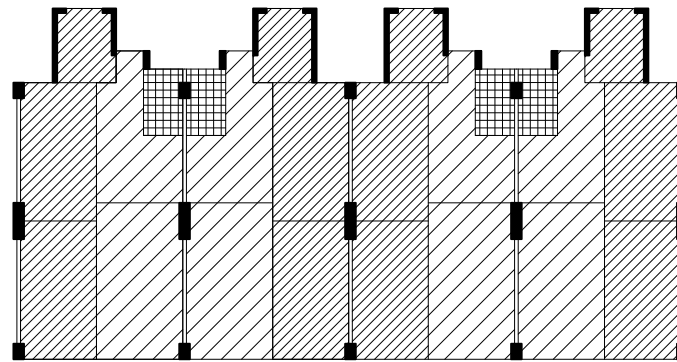
CLIMATE SECTION + PLAN

- | | | |
|-------------------------------|---------------------------|------------|
| 1 Chilled Water In / Out | 5 Exhaust Ducting | ☐ Cooling |
| 2 Lightly-Tempered Air (27°C) | 6 Porous Facade | ☐ Exhaust |
| 3 Passive Cross Ventilation | 7 Solar Chimney Collector | ☐ Sunlight |
| 4 Ceiling-Mounted Fan | 8 Centrifugal Fan Exhaust | |

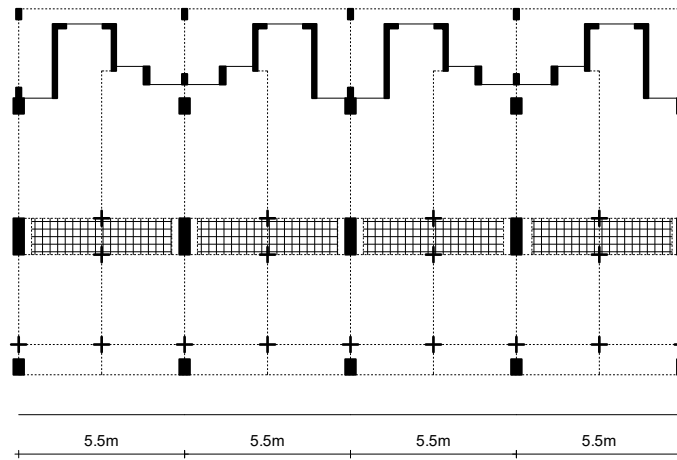


CROWN DETAIL AXONOMETRIC

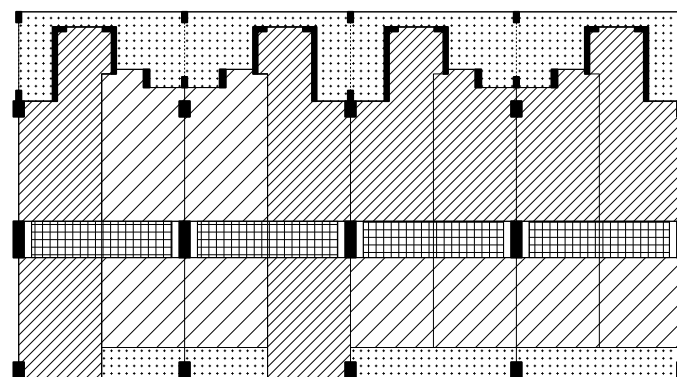
1:50



EXISTING



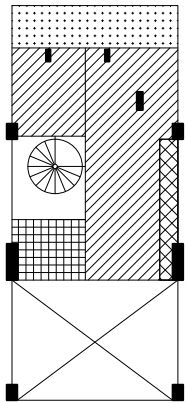
NEW GENERIC ORDER



PROPOSED

PLAN LOGIC

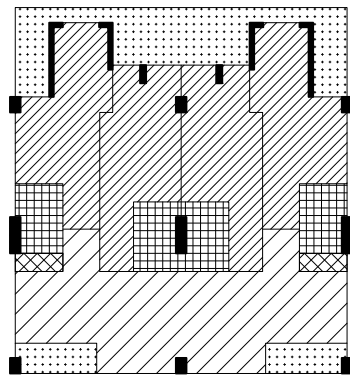
-  Common Living
-  Sleeping
-  Wet Core
-  Covered Outdoor



TYPE-A
LIVE-WORK ATELIER

+ PRODUCTION

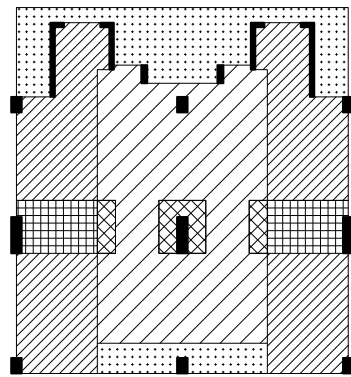
23 ROOMS



TYPE-B
ENFILADE STUDIO

+ PRIVACY

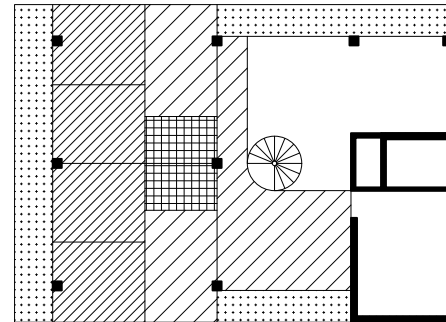
416 ROOMS



TYPE-C
GROUP HOUSE

+ SHARING

196 ROOMS



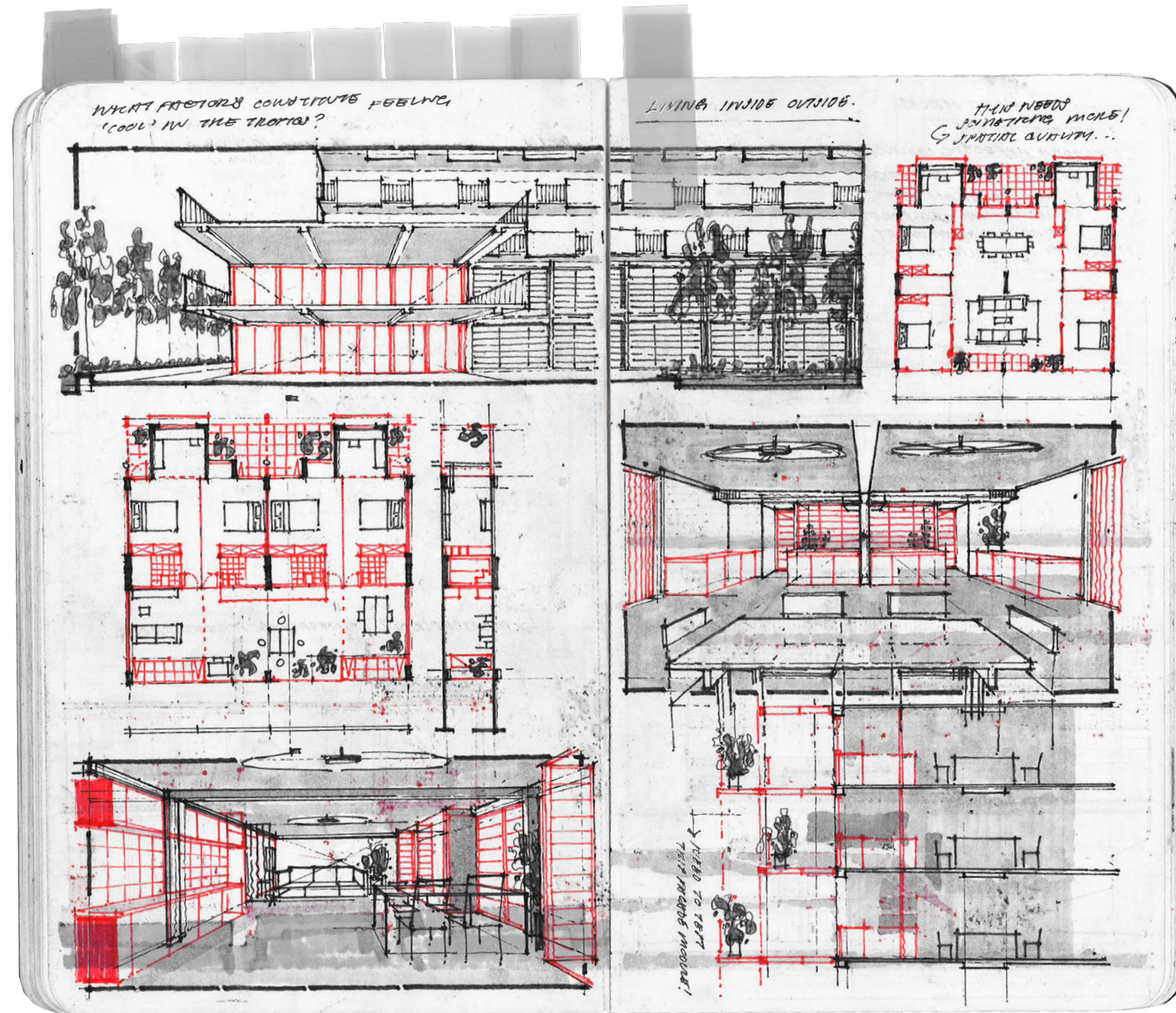
TYPE-D
CLUSTER HOUSE

+ CONVIVIALITY

105 ROOMS

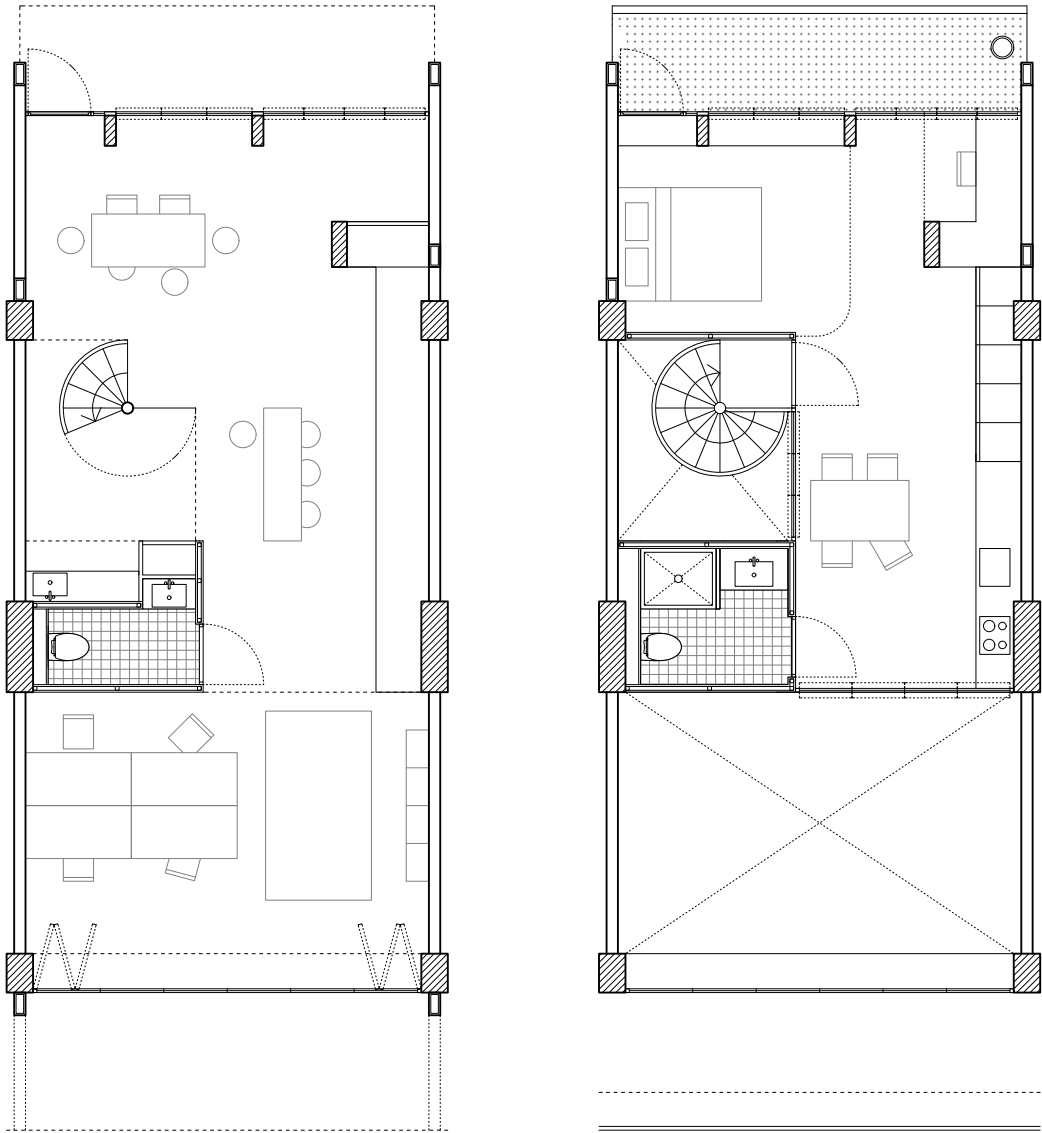
UNIT TYPOLOGIES

- Structural Frame
- Shared Living + Dining
- Bedroom
- Bathroom
- Kitchen
- Covered Outdoor Space



APARTMENT TYPOLOGY DEVELOPMENT

Typical Plan
1:100



0 1 2 5m

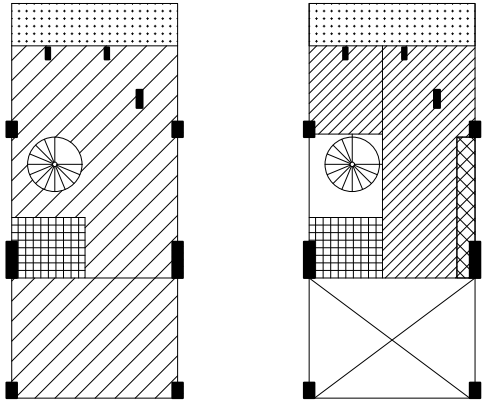
TYPE-A
LIVE-WORK ATELIER

+ PRODUCTION

Plan Logic Diagrams
1:250

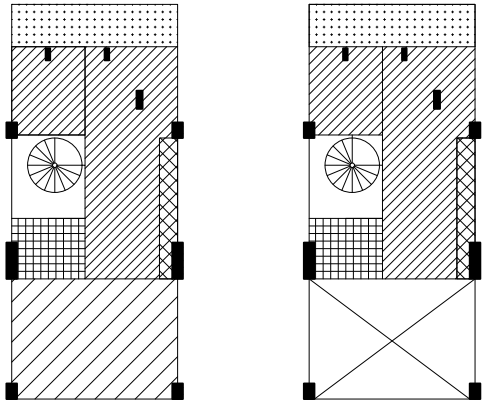
STANDARD CONFIGURATION

10 (Max) En-Suite Bedrooms + Shared Living + Kitchen

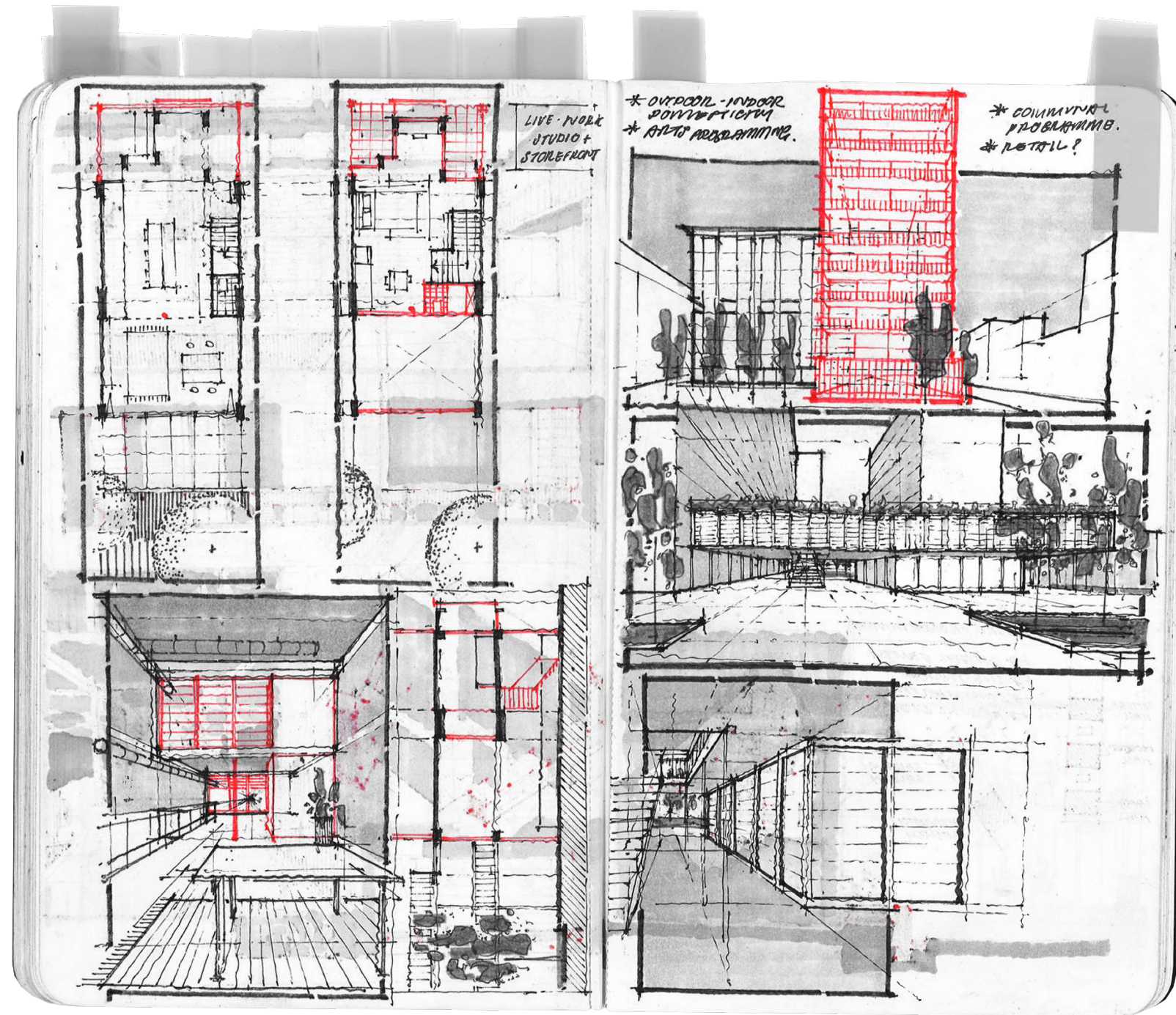


ALTERNATIVE CONFIGURATION

2 (Min) En-Suite Bedrooms + Shared Living + Kitchenette

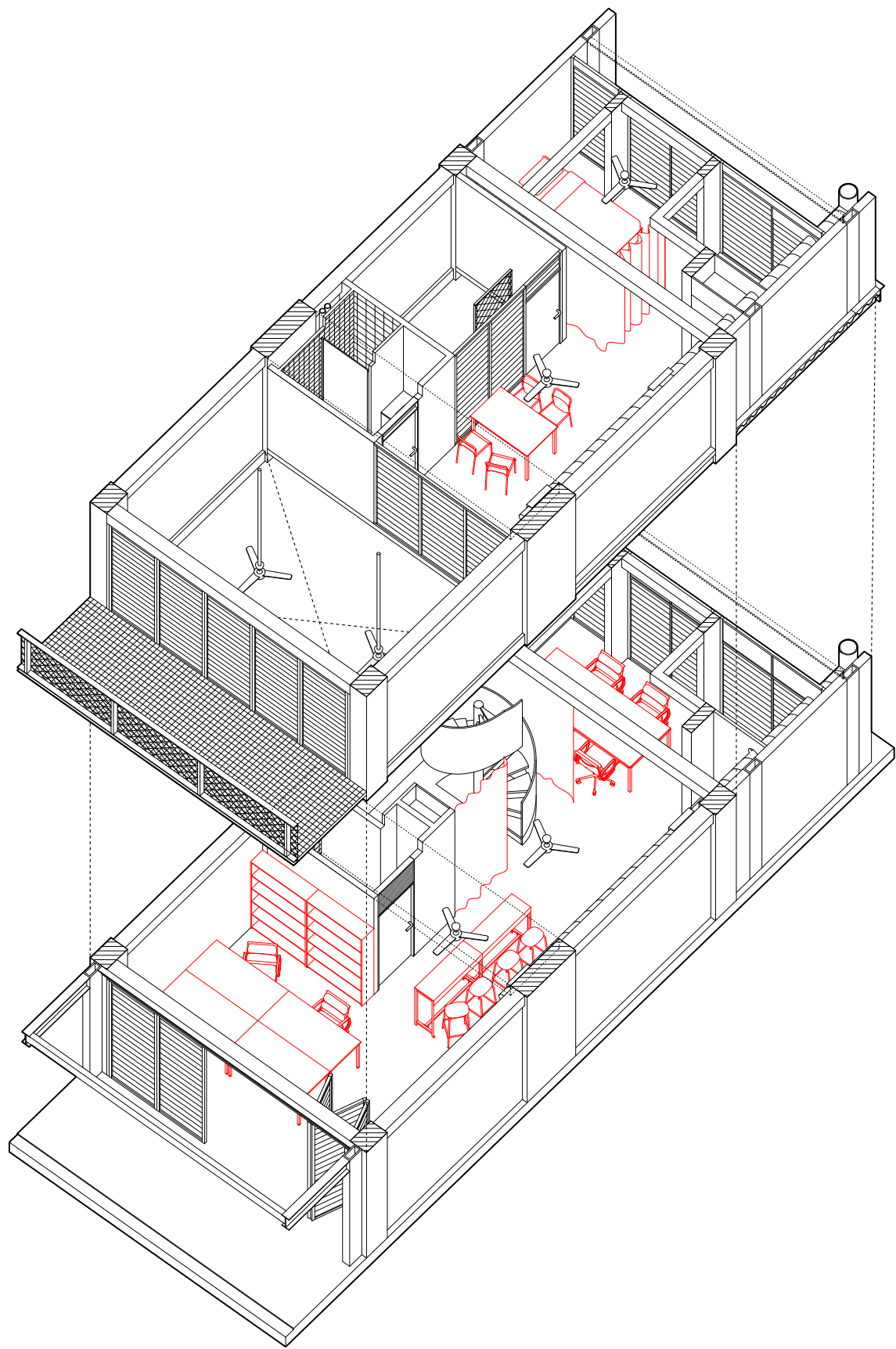


0 1 2 5 10m

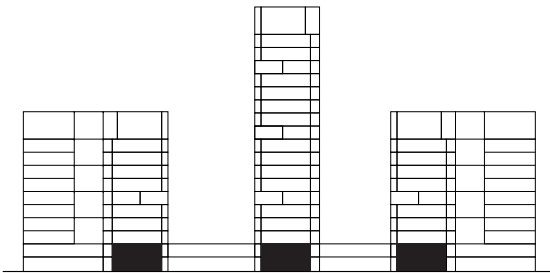


LIVE-WORK ATELIER - PROCESS AND GROUND

Axonometric
1:100



KEY SECTION

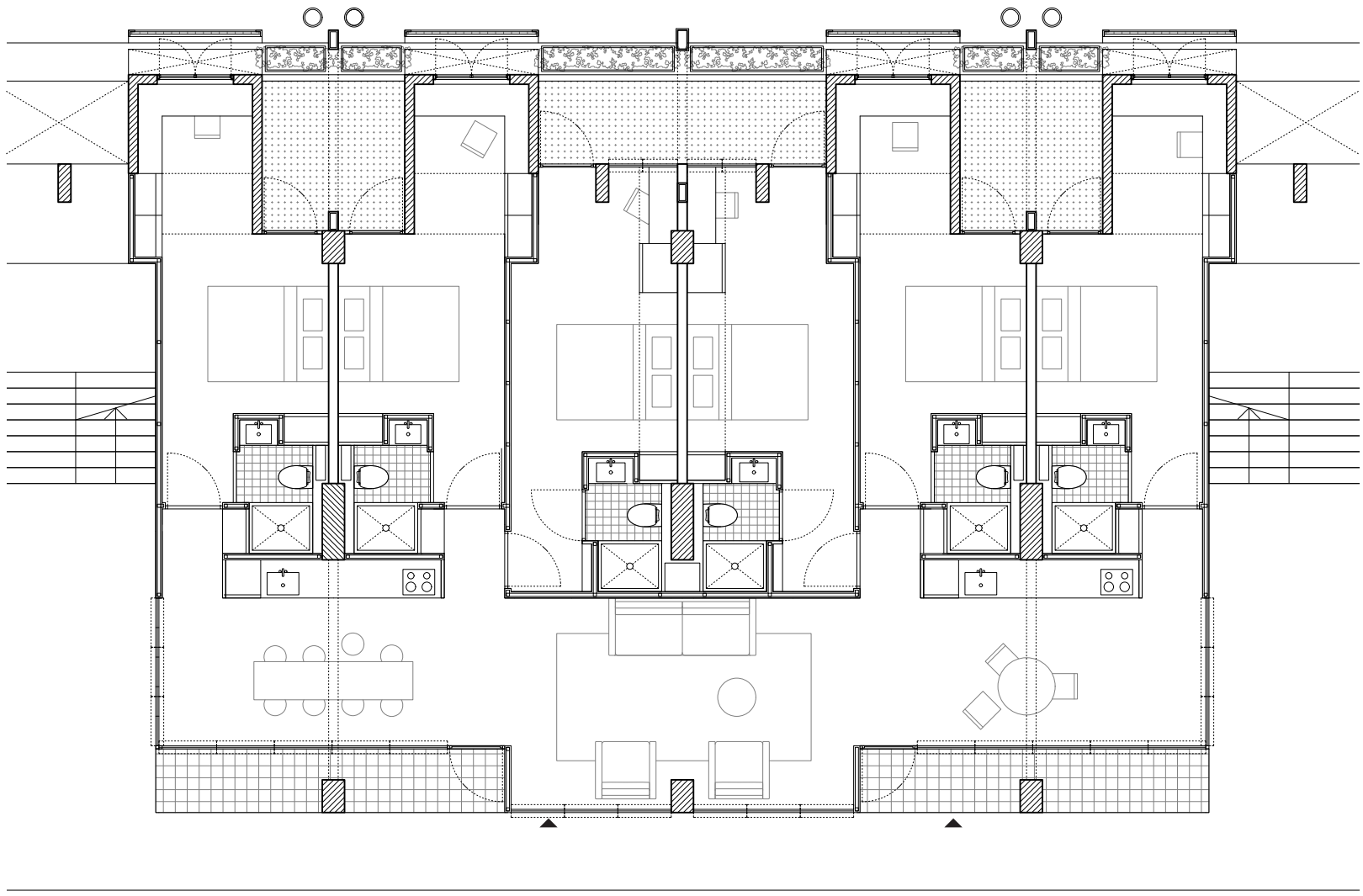


TYPOLOGY DETAILS

Total Floor Area: 120m²
Total Number of Units: 23 Units
Bedrooms per Typical Unit: 1



Typical Plan
1:100



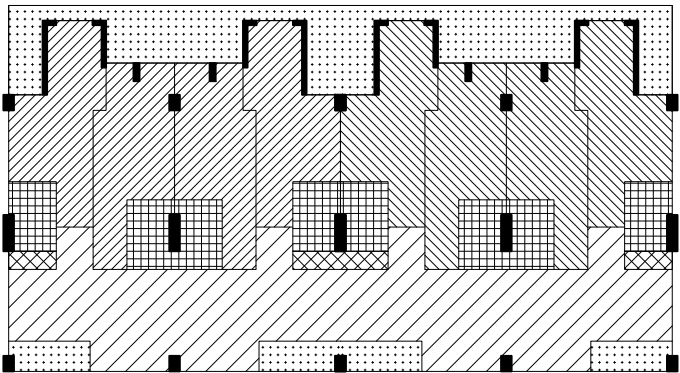
0 1 2 5m

TYPE-B
ENFILADE STUDIO

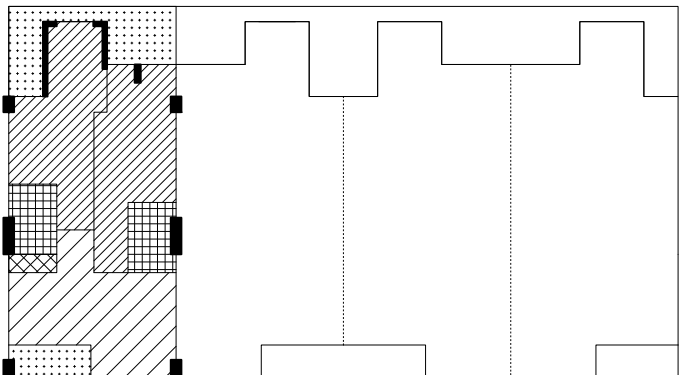
+ PRIVATE SPACE

Plan Logic Diagrams
1:250

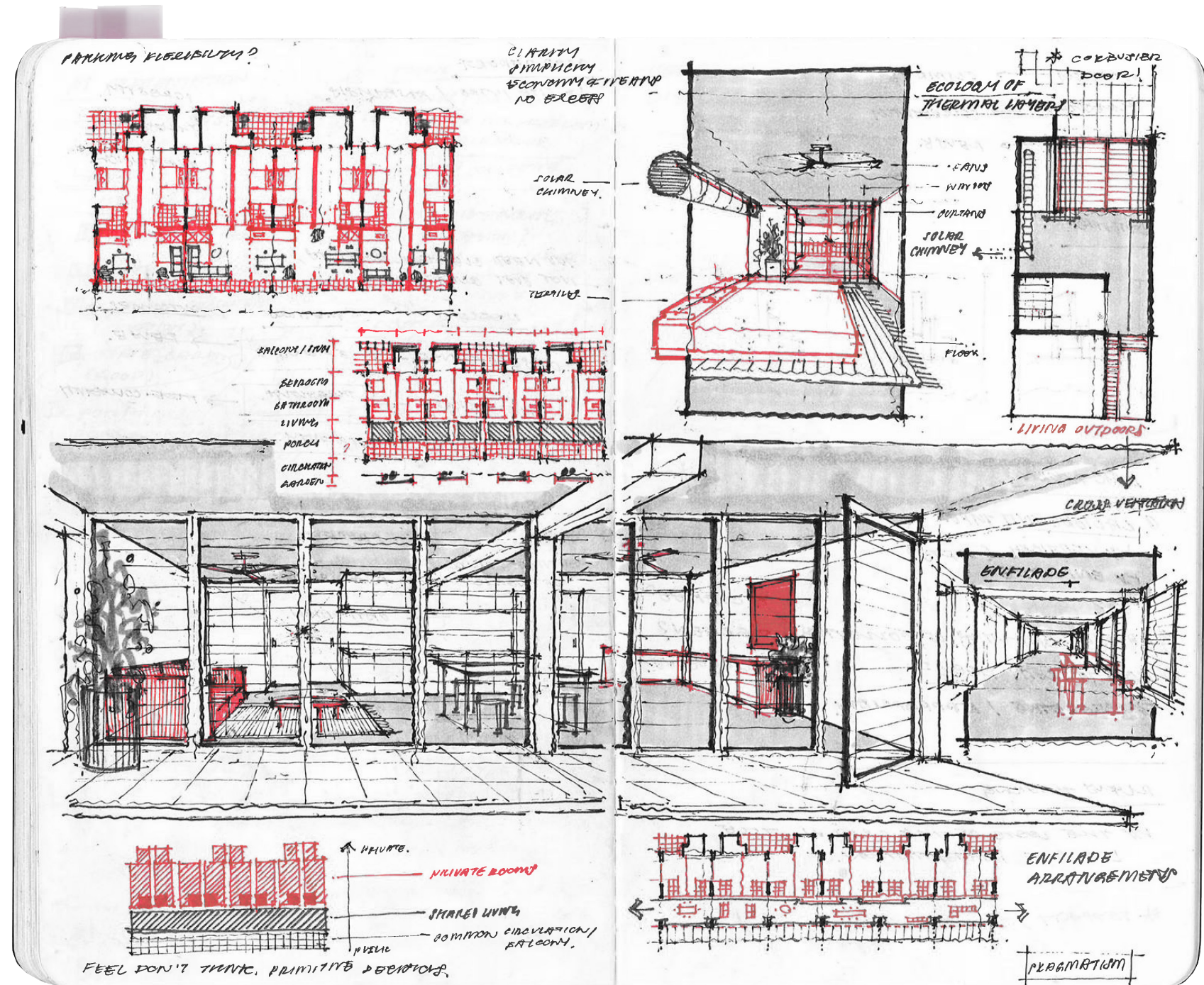
STANDARD CONFIGURATION
10 (Max) En-Suite Bedrooms + Shared Living + Kitchen



ALTERNATIVE CONFIGURATION
2 (Min) En-Suite Bedrooms + Shared Living + Kitchenette

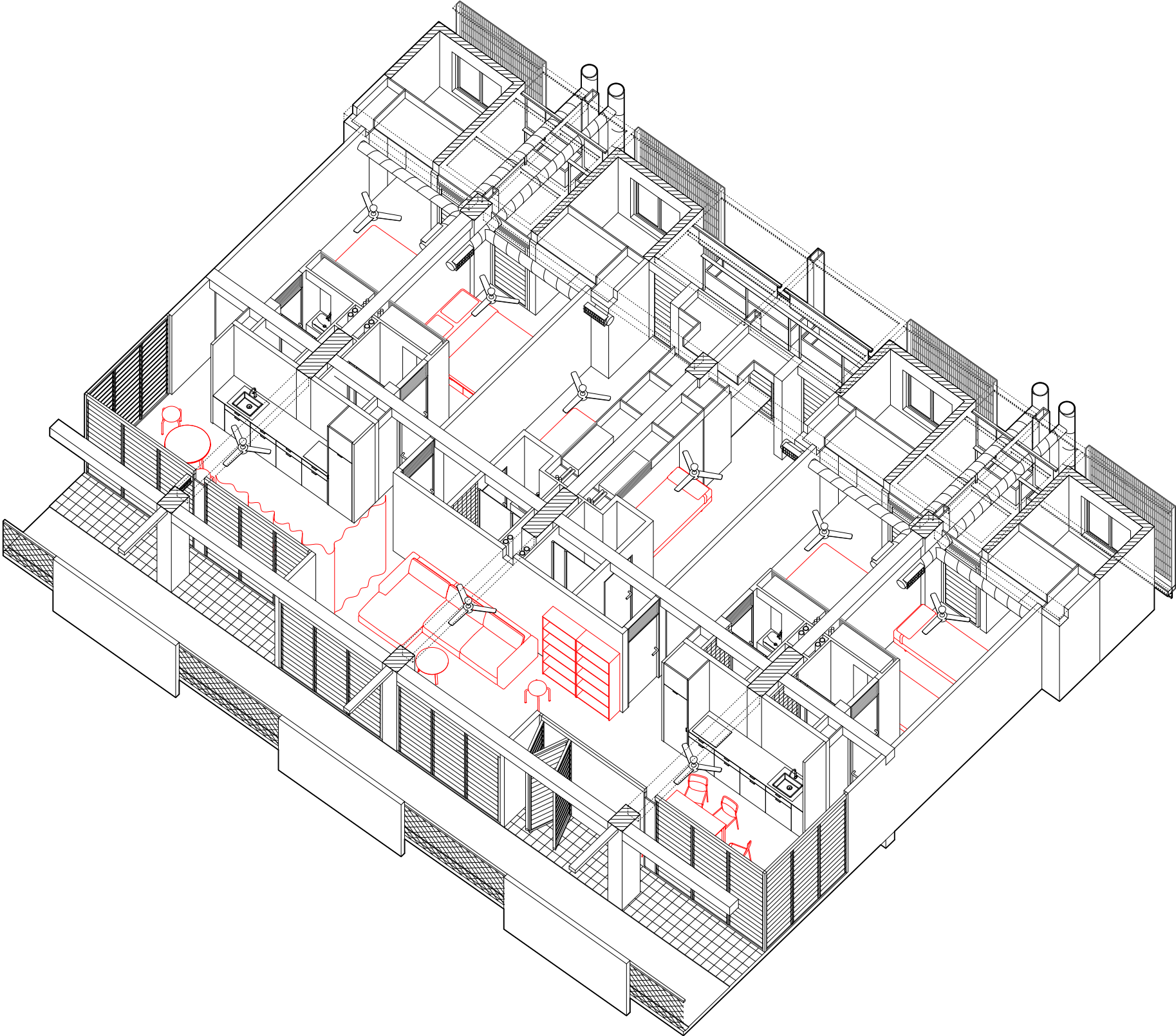


0 1 2 5 10m

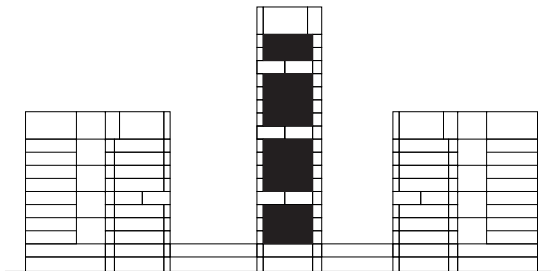


ENFILADE STUDIO - COMMUNAL LIVING CORRIDOR

Axonometric
1:100



KEY SECTION

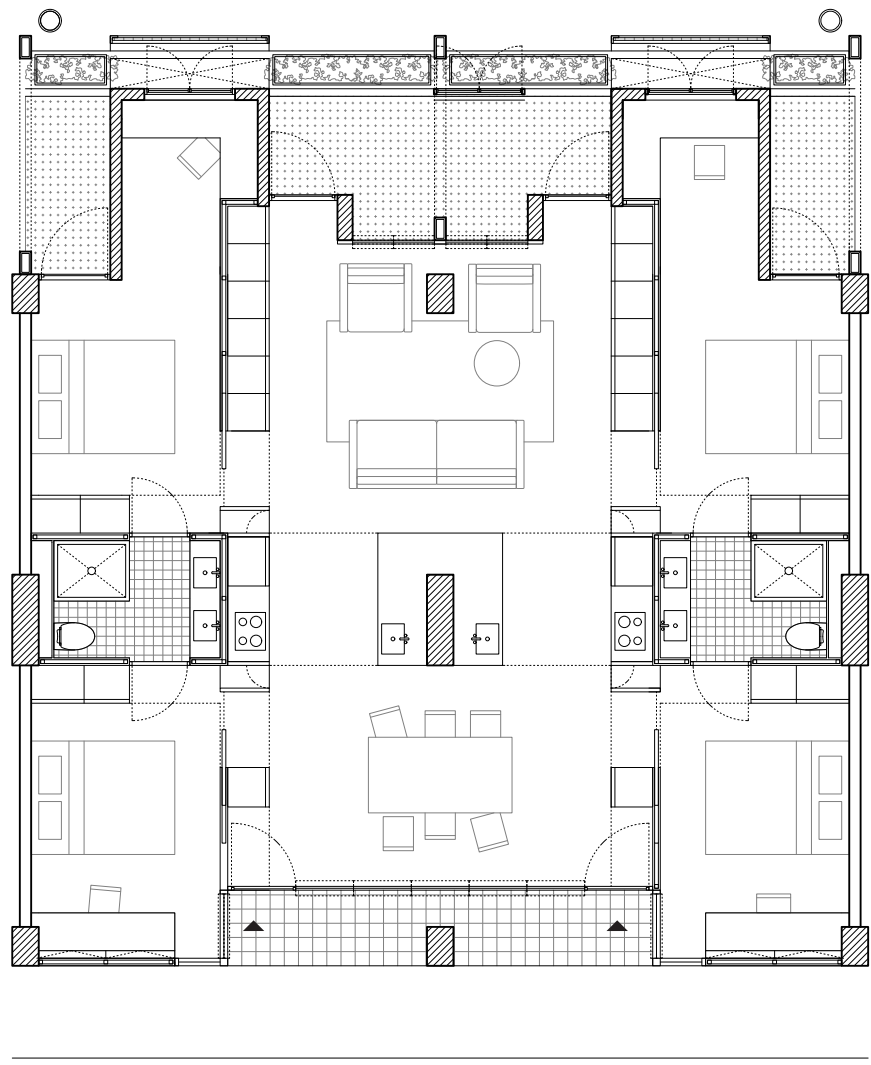


TYPOLOGY DETAILS

Total Floor Area: 315m²
Total Number of Units: 52 Units
Bedrooms per Typical Unit: 6



Typical Plan
1:100



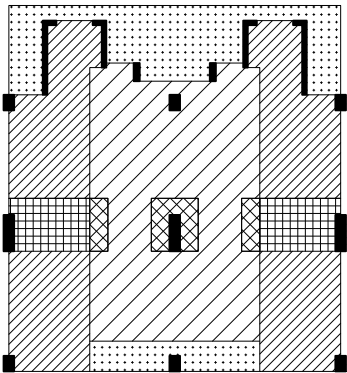
0 1 2 5m

TYPE-C
GROUP HOUSE

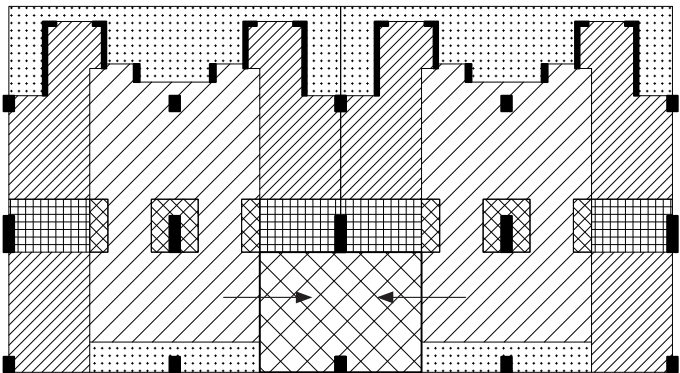
+ SHARED SPACE

Plan Logic Diagrams
1:250

STANDARD CONFIGURATION
4 Bedrooms + Shared Living + Kitchen



ALTERNATIVE CONFIGURATION
6 Bedrooms + 2 Shared Living + 2 Kitchen + Nucleus Room



0 1 2 5 10m

* NIKEN 4TH FLOOR - LOCAL COMMUNITY STAY.
 * "POSSIBLE BUT NOT COMPULSORY"
 * IDENTIFICATION IN SECTION.

DO NOT JUMP TO CONCLUSIONS!

LEVEL OF COMBINATION! (CRIBLES)

PRIVATE

① NUCLEAR FAMILY

② NUCLEAR FAMILY + PARENTS / ADULT CHILDREN

③ GROUP EXT FLAT

④ SDO.

PUBLIC.

TPOLOGY OF DWELLING

WAY OF LIVING



TPOLOGY ①

NUCLEAR FAMILY WITH SHARED KITCHEN

→ TWO FAMILIES WHO LIVE TOGETHER...



THE COMBINED TYPE

→ MODERATE SHARING (KITCHEN AND VERANDA)

→ MODERATE ROOMS (SHARED)

→ NUCLEAR FAMILY / EXTENDED FAMILY

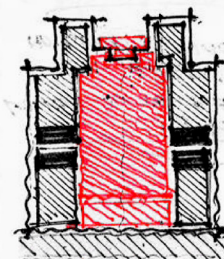
EXERCISE 37

→ 2 WEEKS (WED / FRI)

→ 2 WEEKS AFT (WEEKENDS + 5...)

* SPEAK TO NATURAL VENTILATION EXPERT?

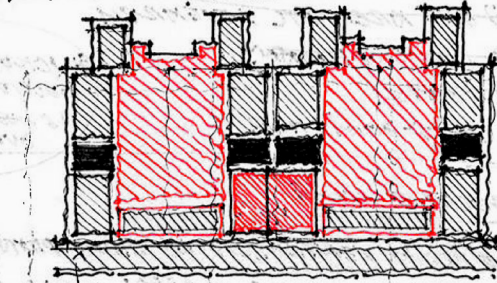
* DEGREE OF MODULARITY? CONTINUAL...



TPOLOGY ②

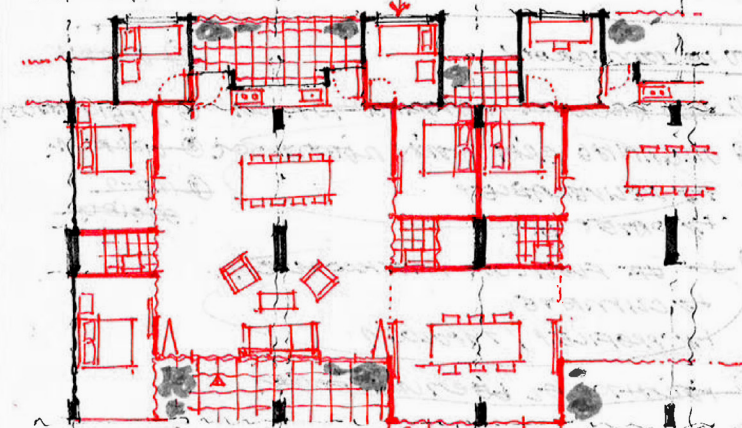
SHARED FLAT

* CAN BE DAILY-CHANGED!



THE BALANCE OF THE SHARD

FLEXIBLE ROOM (GUEST ROOM OR STUDY OR BEDROOM ETC)



SEMI-PUBLIC TERRACE

SHARED ROOM FLEXIBLE WORKING / CHILDREN

WHAT DO TYPES HAVE IN COMMON?

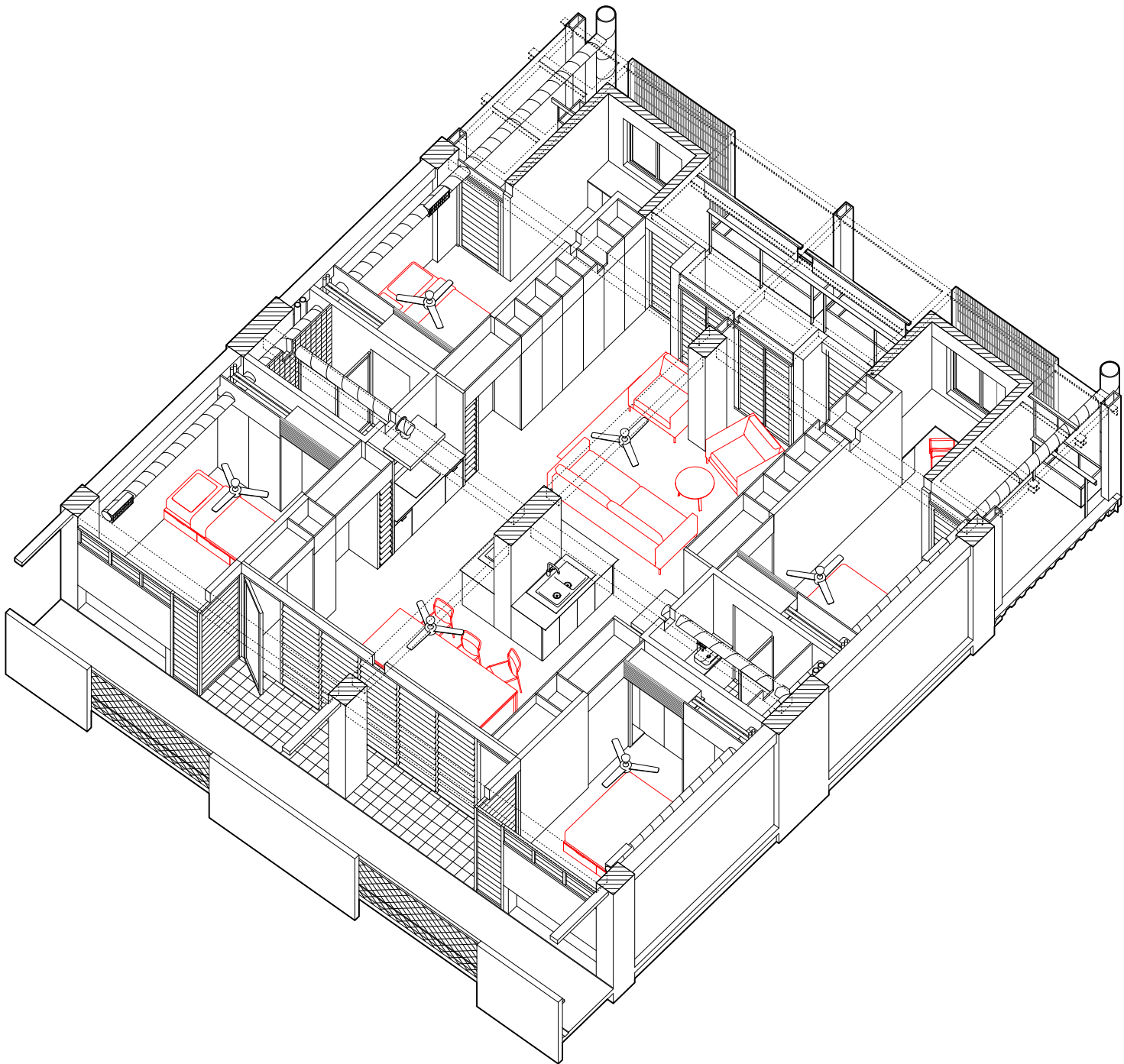
FLEXIBILITY / INTERCULTURAL EXCHANGE?

SOPHIE DELUM (BERLIN)

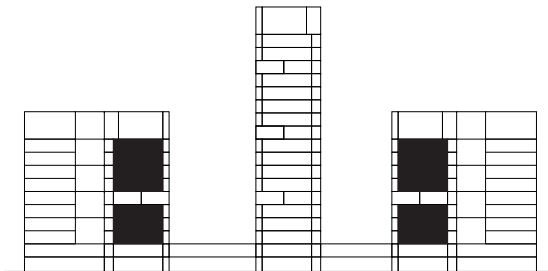
→ NOT JUST TYPE 1, 2, 3 BUT MANY DIFFERENT TYPES TO MIRROR SOCIETY... A NEW ARCHITECTURE

GROUP HOUSE - TYPOLOGICAL CONFIGURATIONS

Axonometric
1:100



KEY SECTION



TYPOLOGY DETAILS

Total Floor Area: 125m²
Total Number of Units: 49 Units
Bedrooms per Typical Unit: 4



Typical Plan
1:100



0 1 2 5m

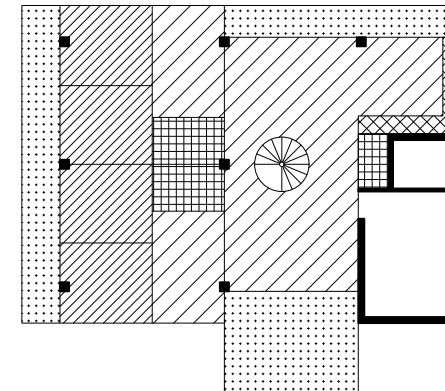
TYPE-D
CLUSTER HOUSE

+ CONVIVIALITY

Plan Logic Diagrams
1:250

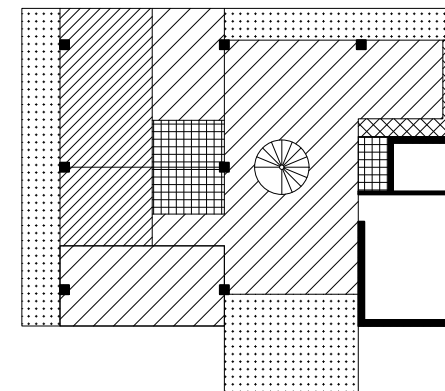
STANDARD CONFIGURATION

4 Bedrooms (Extensions) + Shared Living + Kitchen

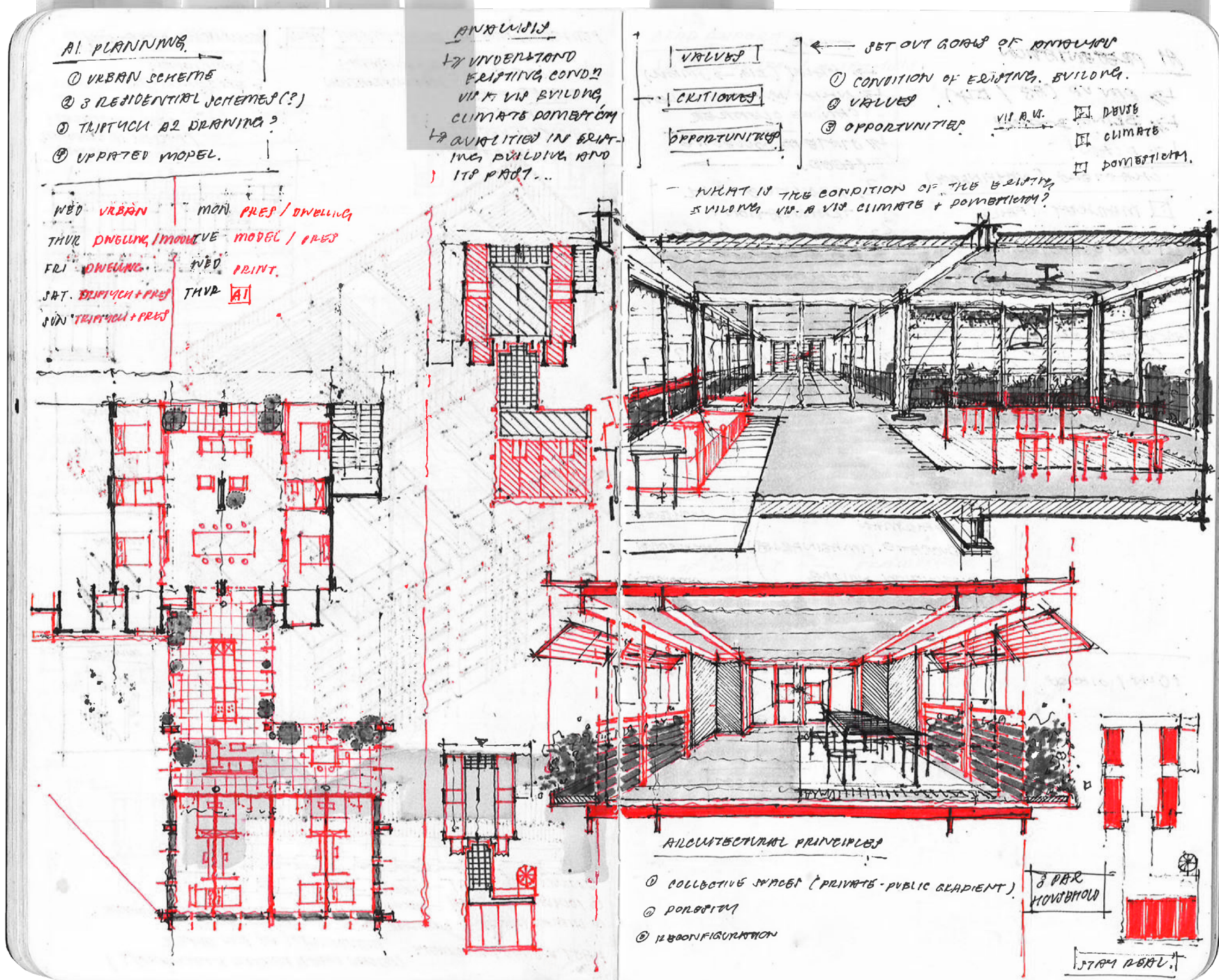


ALTERNATIVE CONFIGURATION

2 Bedrooms (Extensions) + Shared Living + Kitchen + Office



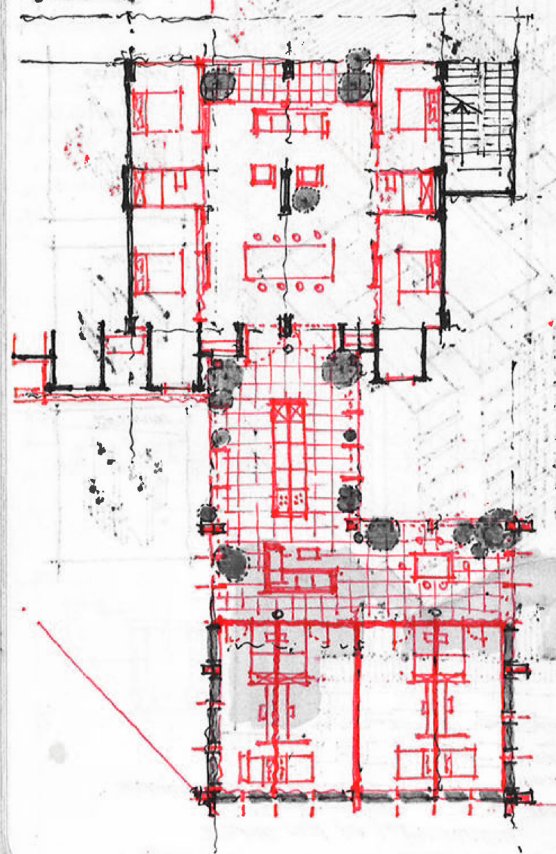
0 1 2 5 10m



A1. PLANNING

- ① URBAN SCHEME
- ② 3 RESIDENTIAL SCHEMES(?)
- ③ TYPICAL A2 DRAWING?
- ④ UPDATED MODEL.

WED URBAN MON PRES / DWELLING
THUR DWELLING / MODULAR MODEL / PRES
FRI DWELLING WED PRINT
SAT. DESIGN + PRES THUR A1
SUN. DESIGN + PRES



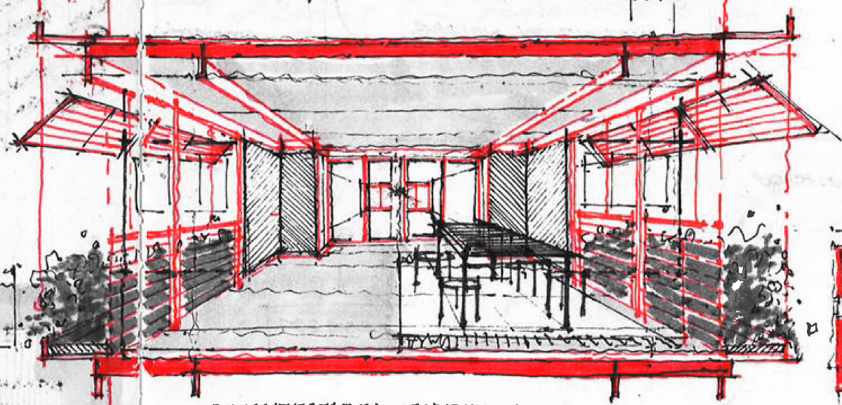
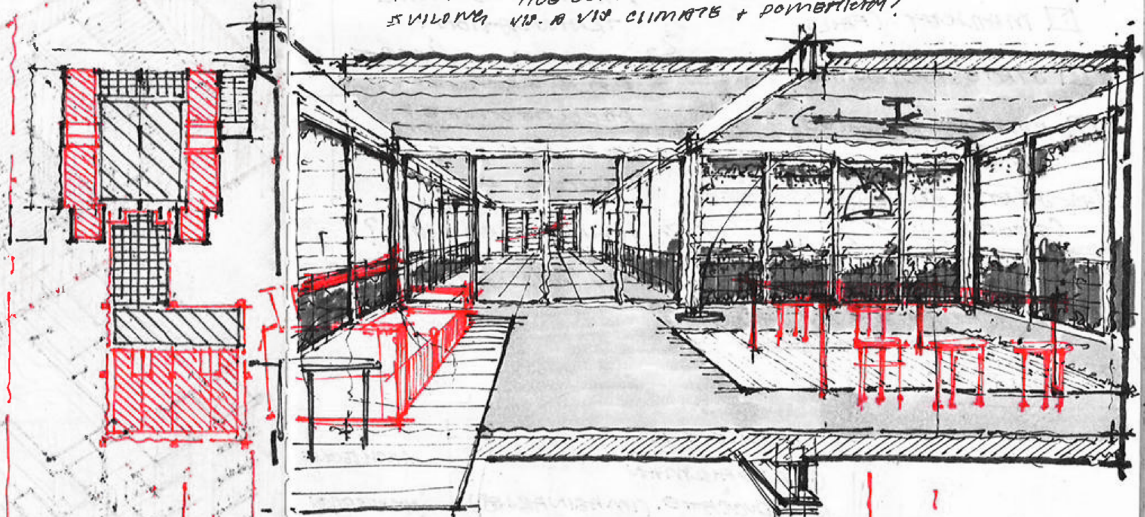
ANALYSIS
→ UNDERSTAND
EXISTING COND
VIA VIS BUILDING
CLIMATE DOMESTIC
→ ANALYSIS IN EXIST-
ING BUILDING AND
ITS PART...

- VALUES
- CRITERIA
- OPPORTUNITIES

GET OUT GORGE OF DOMESTIC

- ① CONDITION OF EXISTING BUILDING
 - ② VALUES
 - ③ OPPORTUNITIES
- VIA VIS. ☐ DANCE
☐ CLIMATE
☐ DOMESTIC

WHAT IS THE CONDITION OF THE EXISTING
BUILDING VIA VIS CLIMATE + DOMESTIC?



ARCHITECTURAL PRINCIPLES

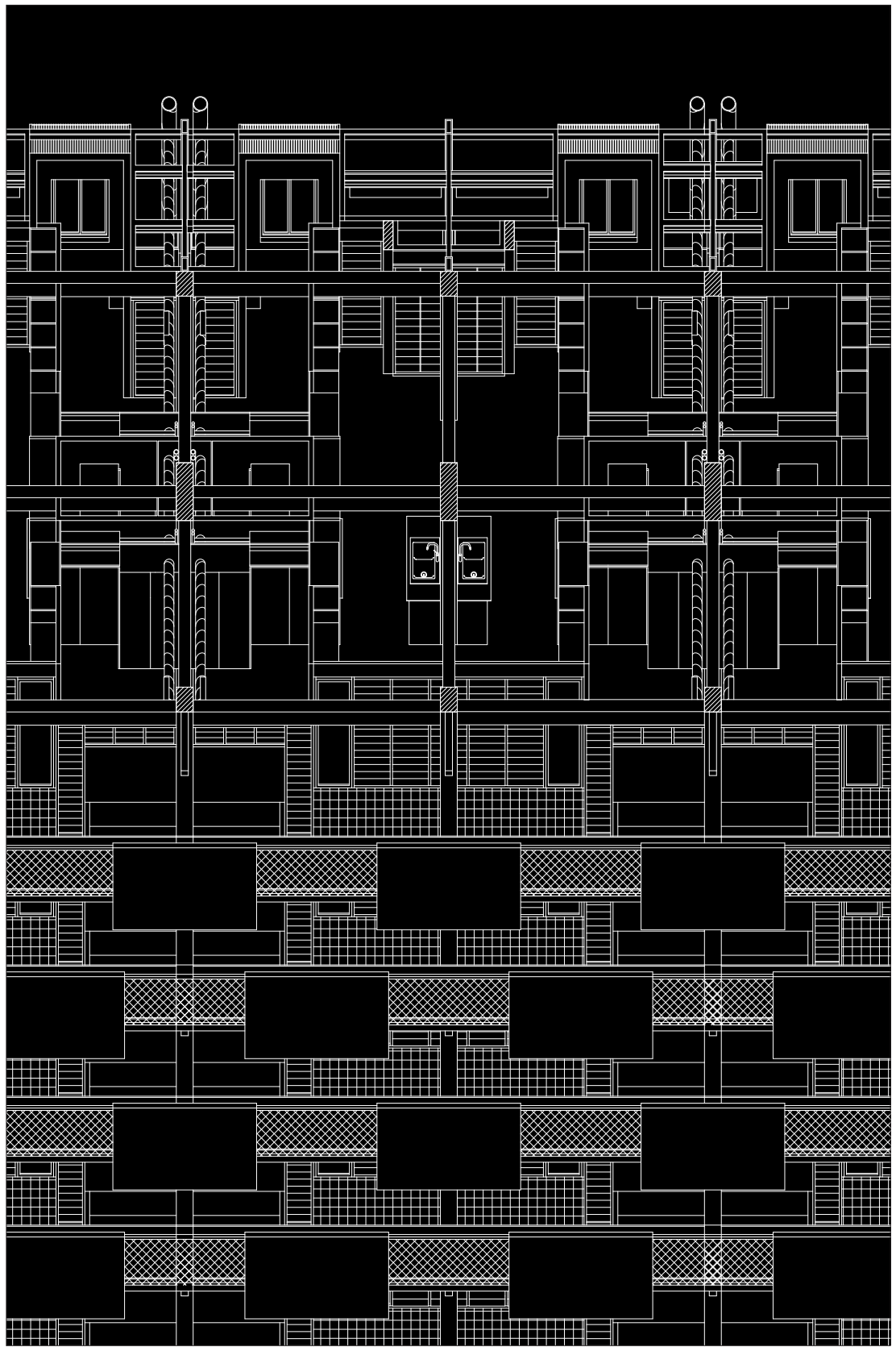
- ① COLLECTIVE SPACE (PRIVATE - PUBLIC GRADIENT)
- ② POROSITY
- ③ RECONFIGURATION

3 PER
HOUSEHOLD

STAIR AREA

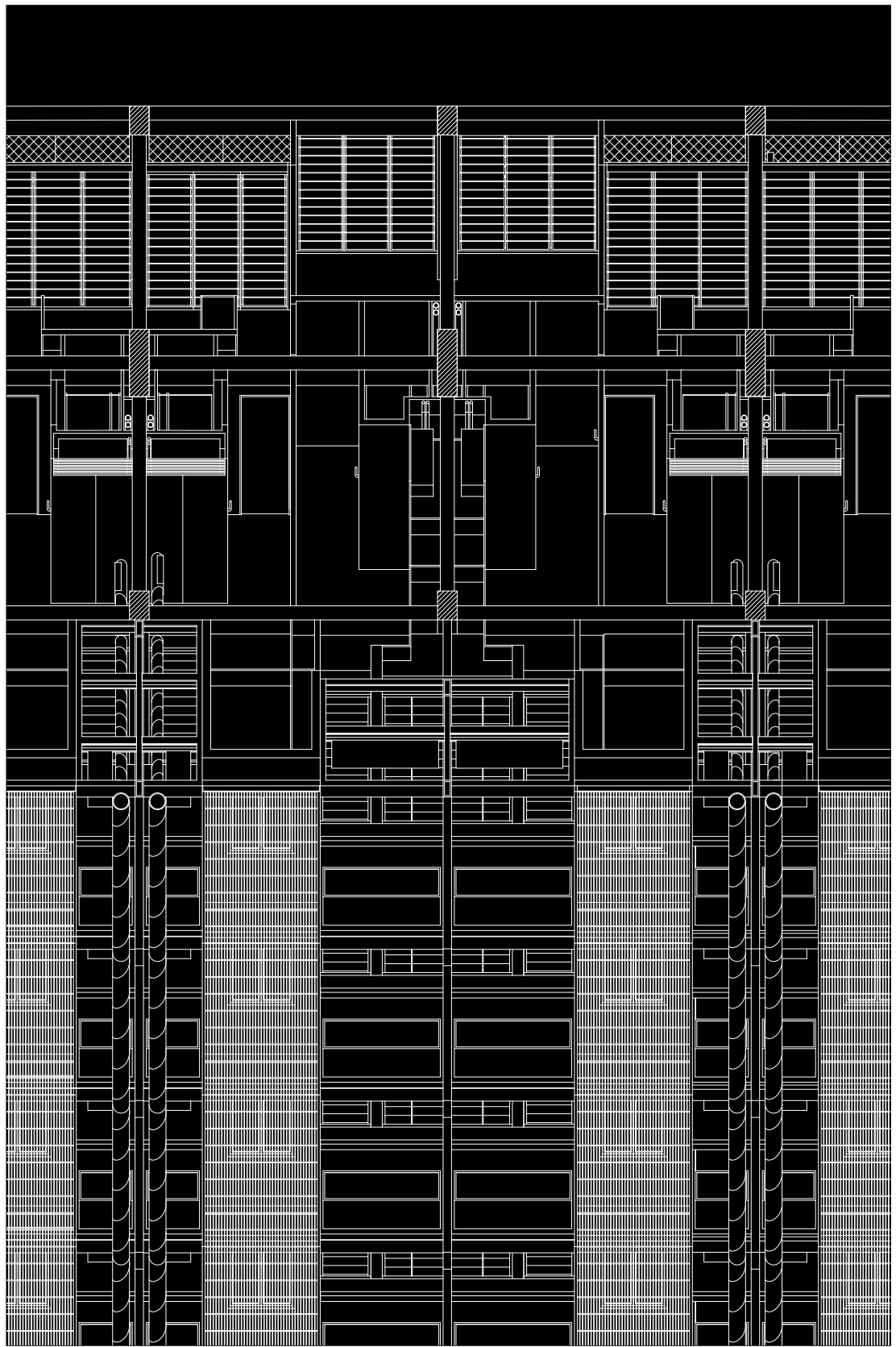
CLUSTER HOUSE - INDOOR-OUTDOOR LIVING





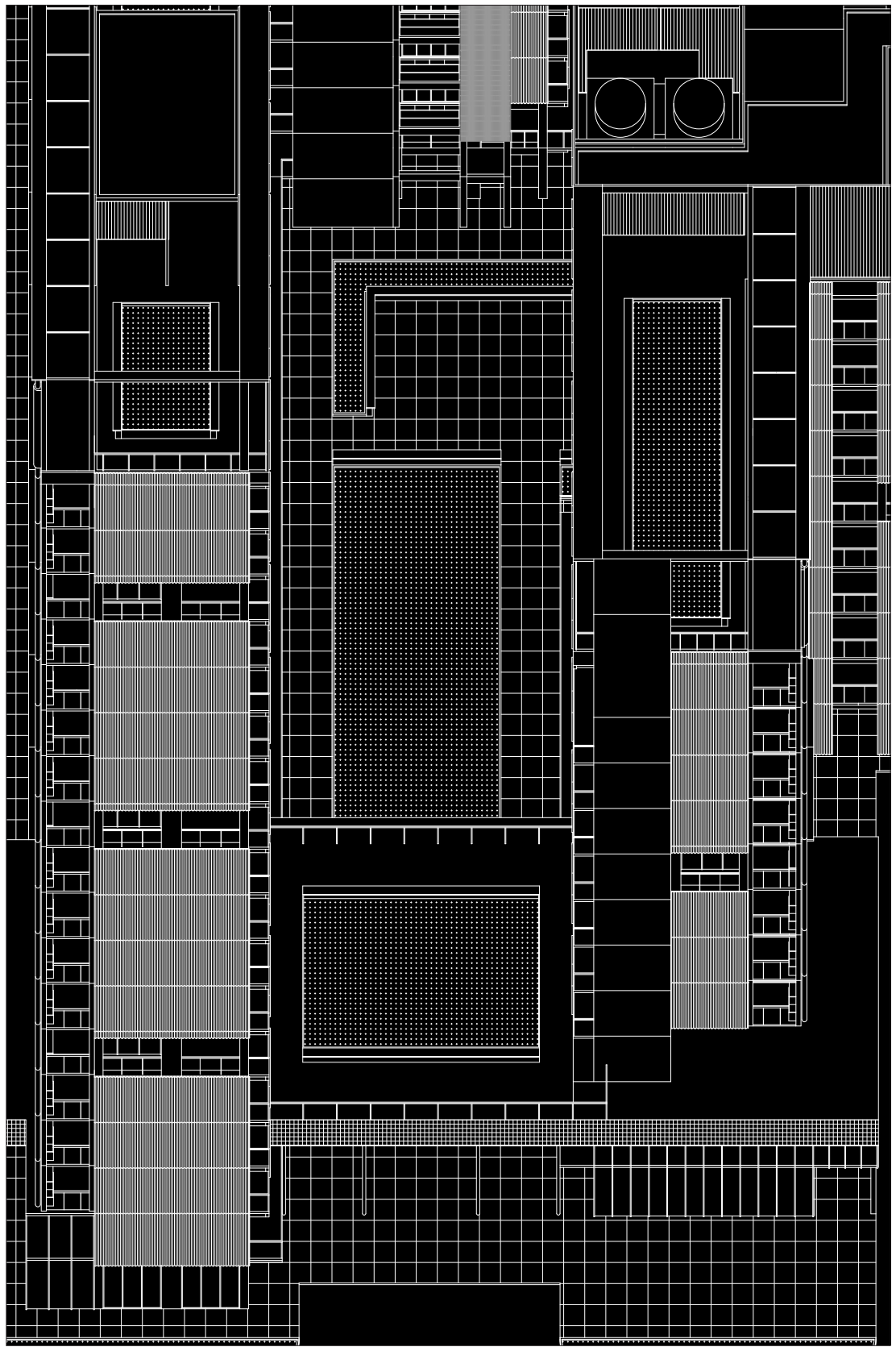
TRIPTYCH2_1

POROSITY



TRIPTYCH 2_2

EXTENSIONS



TRIPTYCH 2_3

LAYERING

What next?

Advocating for Mass Housing Transformation

Docomomo Research Fiche

Selegie House

Appendix

Jacob Meyers

MINIMUM DOCUMENTATION FICHE – DRAFT 04/02/2026

Selegie House

Composed by working part of: Docomomo Singapore

0. Name of Building, Selegie House



Selegie House, c.1963.
Source: Housing and Development Board, 50,000 Up: Homes for the People (Singapore: The Straits Times Press, 1963), 75.



Aerial view of Selegie House, c.1963.
Source: Housing and Development Board, Housing and Development Board Annual Report 1963 (Singapore: The Straits Times Press, 1966), 35.

HDB's First Five-Year Plan (1960-65), the agency aimed to construct 50,000 dwellings, the majority of which would take the form of high-rise modernist flats. The HDB's early work involved the completion of the British-planned Queenstown Estate, development on city-fringe hill sites, and rapid construction of 'emergency' flats to house fire victims.

Parallel to this immediate work, the agency had the medium-term goal of undertaking urban renewal in the congested city centre. In 1960, the agency therefore acquired a plot of public land in central Singapore bound by Selegie Road, Short Street, and Nagappa Lane (the plot also contained 'tenaga Chetty Lane and Annamalai Lane which were subsequently expunged), on which shophouses had stood before the expiry of their 99-year leases from 1958. While planning was underway for a new high-rise 'government skyscraper', the HDB staged a Low-Cost Housing Exhibition on the Selegie Road site in 1960. The significant exhibition was the first large-scale publicity project launched by the HDB in the year of its inception, and featured models and drawings of its ambitious public housing plans. Notably, the exhibition also included a mural painted by students from the newly established Singapore Polytechnic School of Architecture, alongside a full-scale mock-up of a one-room flat with flexible furniture designed by then-student Tan Cheng Seng (later notable Singaporean post-independence architect who would design significant housing projects including Pearl Bank Apartments and Panden Valley).

Announced in 1961, Selegie House was the first project in the HDB's urban renewal programme, featuring subsidised rental housing in 505 two-, three-, and four-room flats, alongside 39 ground-floor shophouses, a large restaurant, and a rooftop recreation club for HDB staff members, distributed across two 10-storey blocks, four 2-storey connecting blocks, and one 20-storey block, the tallest public housing structure and fifth tallest building in Singapore at the time. As part of the urban renewal programme, the flats prioritised resident applicants who required resettlement due to other urban development projects, while supporting mixed-use commercial activities in the city core. Designed to serve as a showcase project for the new public housing agency and its urban renewal ambitions, Selegie House received considerable public attention, including its opening by Singapore's founding Prime Minister Lee Kuan Yew on 31 May 1963, publication in international construction journals, a dedicated six-page special 'Selegie House Supplement' in the national broadsheet newspaper *The Straits Times*, and feature on the cover of the 1963 HDB Annual Report.

2.2 Dates of commission/completion:

Commissioning, planning, and site preparation by HDB began in 1960.

Public announcement, piling works, and start of construction in 1961.

Official opening ceremony on 31 May 1963.

2.3 Architectural and other designers:

Architect: Housing and Development Board (HDB)

Chief Architect: Tan Cheang Wan (1928-1986), B.Arch (Sydney), ARAIA, ARIBA, Chief Architect, Housing and Development Board (as at 1963)

Architect-in-charge: Tan Seng Seeng (Unknown - Unknown), B.Arch (Sheffield), Cert. in Tropical Arch (A), London), ARIBA, Assistant Architect, Housing and Development Board (as at 1963)

Main Upgrading Programme (MUP) Architect: Design Environment Group Architects (DEG)

MUP Architect-in-charge: Chan Seng Kee (Unknown - Unknown), Dip. Arch (Singapore Polytechnic), MSIA, APAM, RIBA, Principal Architect, DEG (as at 1998)

2.4 Others associated with building:

Main Contractor: Lip Seng Construction Limited

2.6 Current use:

The estate remains mixed-use, with commercial units on the ground floor, attached shophouse flats on the first floor, and standard flats on floors above. The current residential unit mix includes 8 two-room flats, 96 three-room flats, and 4 four-room flats in Block 8; 15 two-room flats, 247 three-room flats, and 37 four-room flats in Block 9, and 48 three-room flats in Block 10.

2.7 Current condition:

The building remains in good, albeit significantly modified condition. The HDB is responsible for maintenance, including cleaning, repainting, and concrete repairs, which are carried out regularly.

3. Description

3.1 General description:

Selegie House is composed of three deck-access (single-loaded corridor) slab blocks, located on a trapezoidal site bounded by Selegie Road and Short Street. Block 8 is a 10-storey structure, with two volumes joined by a central circulation core. Block 9 is an 18-storey structure (20-storey when including the now-defunct rooftop recreation club floors), with two volumes joined by a central circulation core. Block 10 is the most compact of the ensemble, as a single volume 10-storey structure with a circulation core at its end.

Selegie House was designed as a mixed-use 'podium and slab' type development, with commercial programmes on the first and second floors. Four 2-storey commercial volumes connected each of the three blocks on both the Selegie Road and Short Street elevations, creating two enclosed courtyards, connected by a ground floor passageway passing underneath Block 9. The publicly accessible courtyards were paved with fenced lawns, planting, and public furniture. The roof of each 2-storey commercial volume served as a recreational deck for residents, with mosaic tiles floor finishes in a abstracted graphic pattern of the Selegie House estate. The perimeter of the site featured carparks, paved plazas, and lawns, with a covered driveway passing underneath Block 9 facing Selegie Road. The four 2-storey commercial blocks were demolished in 1998 as part of estate upgrading works, with the ground floor reconfigured for larger surface carparks, planted lawns, pavilions, and an amphitheatre.

In addition to these public spaces, Selegie House featured numerous recreational facilities that were exceptional among early HDB projects. These included a publicly accessible glass-enclosed viewing gallery on the rooftop of Block 8, and the HDB's own staff recreation club in a two-storey volume in the same block. Neither the viewing gallery nor the recreation club are currently accessible, and their condition is unknown.

The estate originally featured 24 two-room, 409 three-room, and 33 four-room flats, alongside 39 shop units. Two- and three-room flats were of the early-1960s 'standard' arrangement, featuring a living room accessed from the common corridor, two bedrooms, a kitchen, recessed balcony and combined WC and bathroom. Four-room flats were of non-standard arrangements, located at the gable ends of Block 8 and 9, with a kitchen balcony. Notably, flat layouts were designed to facilitate passive shading and ventilation, with interior partitions of timber bouvered screens and bouvered windows, while recessed balconies and access corridors provided sun protection. During the 1998 upgrading works, two- and three-room flats were given a utility room extension, while four-room flats were given a kitchen balcony extension.

The estate's finishes comprised of an austere palette of materials reflective of cost saving imperative of the public housing programme and conventional construction methods in mid-20th century Singapore, including plastered and painted concrete, fair-faced brick work, ceramic mosaic tiles, timber framed windows, and mild steel railings. Notably, repeated precast concrete elements were used to provide both a visual identity to the estate and serve as climatic features. Precast concrete

Selegie House was also the site of numerous well-known commercial establishments including Gomez Curry, the eatery known for introducing fish head curry to Singapore; the Bookwork Club, a children's reading club and bookshop; and the Singapore Seafood restaurant.

4.3 Cultural & aesthetic:

Selegie House is culturally significant as a showcase project highlight the HDB's architectural and planning approaches during its First Five-Year Plan (1960-65). Selegie House represents numerous architectural characteristics from this era, including the commercial-podium and residential-tower typology, stepped blocks with central circulation cores, semi-enclosed open-to-sky courtyards, varied block heights, and the use of pre-cast concrete elements, including checkerboard balustrades and breezeblocks, as both ornamental and climatic regulating devices. Selegie House bears additional cultural significance as a rare 'one-off' early project by the HDB, whose early output otherwise largely comprised mass-produced block types.

The result was a refined modernist housing ensemble designed by young Singaporean architects, giving form to the nation-building ambitions and egalitarian housing goals of the newly independent state. Notably, Selegie House can be compared to other influential, mixed-use, urban, post-war modernist estates, including the Lipdon shopping area and flats in Rotterdam (Van den Broek and Bakema, 1959) and Golden Lane Estate in London (Chamberlin, Powell and Bon, 1962). Selegie House is therefore demonstrative of the transnational influence of post-war modernist planning and architectural principles, including the separation of vehicular and pedestrian traffic, provision of pedestrianised shopping areas, and design of multi-level communal spaces integrated into high-rise housing developments.

Despite these architectural merits, Selegie House's inaccessibility as a modernist ensemble has been significantly compromised by latter-day upgrading works, including the demolition of the commercial podium blocks, construction of flat extensions obscuring existing facades, and addition of postmodern landscaping elements at the ground level.

4.4 Historical:

Selegie House is of exceptional historical significance as the first urban renewal project undertaken by the HDB completed in 1963. Notably, Selegie House's planning and design preceded numerous key events that would shape subsequent urban renewal efforts, including visits by UN technical advisors in 1962-32, the identification of urban renewal precincts thereafter, the launch of the Sale of Sites programme in 1967, and the launch of the State and City Planning (SCP) project in 1967. In this light, Selegie House is an exceptional early example of the HDB's earliest urban renewal efforts that predates any other urban renewal project undertaken by the newly established Singaporean state.

Additionally, Selegie House is a historically significant showcase piece for the HDB's first Five-Year Plan, featuring on the cover of the agency's 1963 Annual Report, published in international construction journals, dedicated a six-page exclusive supplement in the national broadsheet and newspaper record *The Straits Times*, and opened by Singapore's founding Prime Minister Lee Kuan Yew in May 1963.

Selegie House bears further historical significance as the site of the HDB's Low Cost Housing exhibition in 1960, the high-profile public launch of the agency's public housing programme that would mark the rapid transformation of Singapore's physical landscape in the coming decades. The Low Cost Housing exhibition was an important event in the HDB's early history, marking the introduction to the public of the HDB's modernist planning and design principles and showcasing early design experiments, such as proposed flexible furniture systems for one-room flats.



Above: Selegie House, the HDB's first post-war renewal project completed in 1963. It cost \$2.8 million.
Selegie House, c.1965. Source: Housing and Development Board, Homes for the People (Singapore: Housing and Development Board, 1965).



Selegie House from across Selegie Road, c.1970. Note large Mitsubishi Electric billboard on Block 9's signage on gable-end walls.
Source: Housing and Development Board, First Decade in Public Housing 1960-69 (Singapore: Housing and Development Board, 1975).



Selegie House Supplement, *The Straits Times*, 31 May 1963, 16.

This is home, surely?
Retrofitting Singaporean Public Housing
for Domestic and Climatic Collectivity



