

Trygghetboende (Senior Co-housing) Johanneberg, Gothenburg Vivid City

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· 12 Weeks / Sep. - Dec. 2015

· Individual

· Directed by Professor Inga MALMQVIST

Content

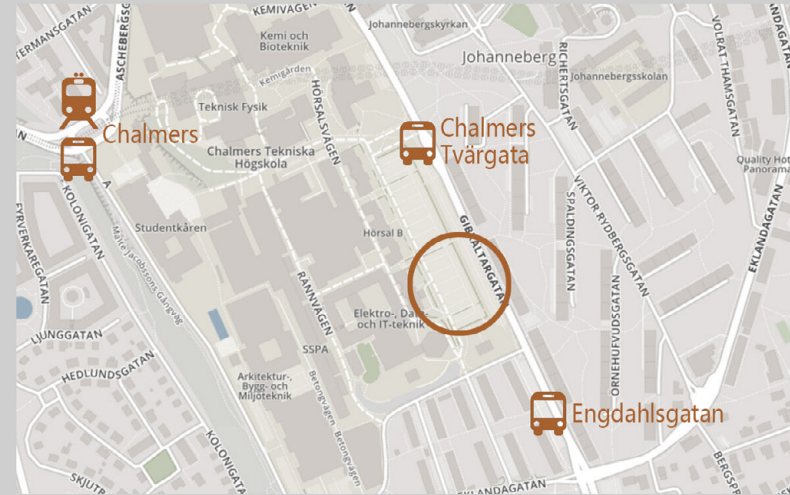
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- 3 GF Plan
- 4 2F Plan
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- 6 3F Plan | 4-6F Plan
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/ SITE



Johanneberg

- South of Göta River. 3km to Central Gothenburg.
- Gentleness in south city hilly area.
- Locates in Chalmers campus, surrounded by residence quarters.



Gibraltargatan

- Main city street.
- Travel by **TRAM**: Chalmers (700m), Kapellplatsen (1.0 km).
- Travel by **BUS**: Engdahlgatan (200m), Chalmers Tvärgata (250m).

/ CURRENT SITUATION



Streetside

- A trash station.
- Lineary parking.
- Long and high facade of existing buildings.
- A few kiosks only aim at students lack of other facilities.

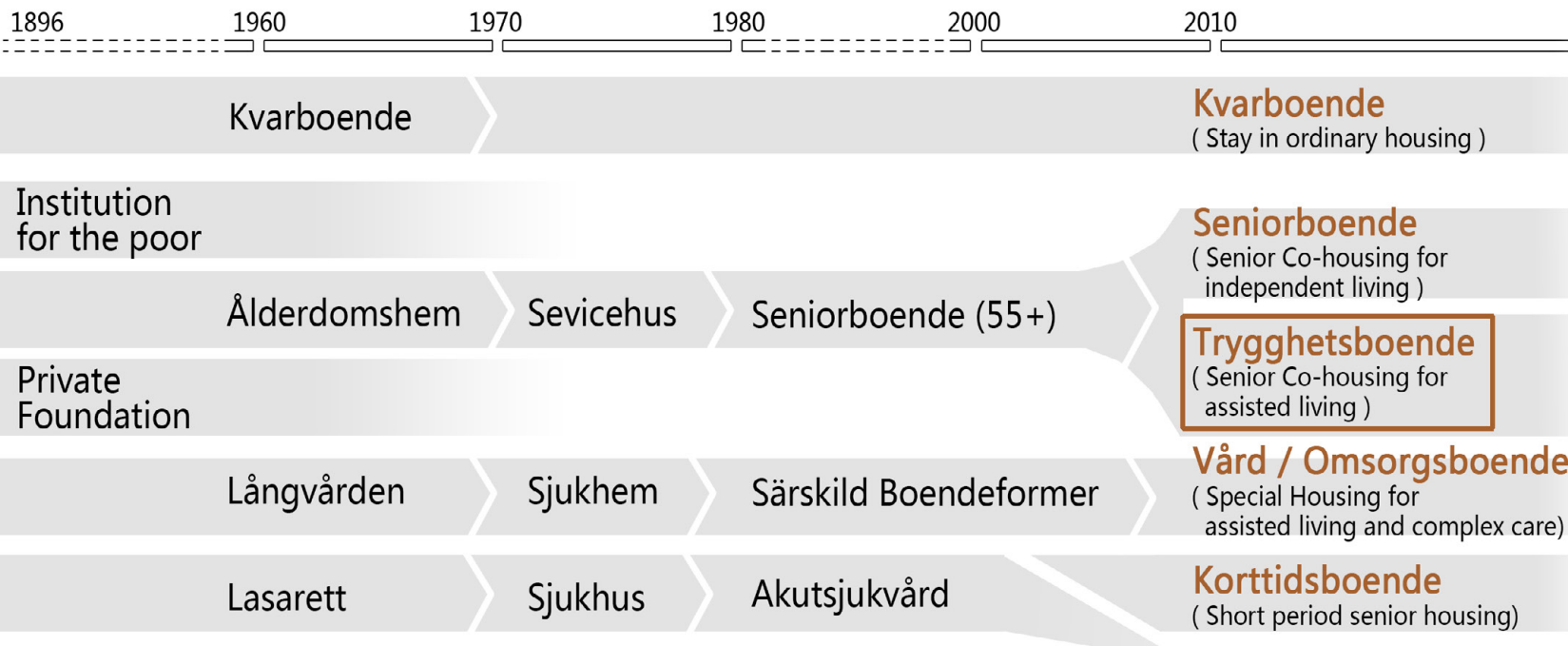


Inner area

- Massive parking.
- A secondary road.
- An existing villa with a slope and greenery.
- Frequently passed by Chalmers students.

/ HOUSING FOR ELDERLY IN SWEDEN

According to : *Äldreboendedelegationen 2009 & Lecture Housing for Seniors --- yesterday, today and tomorrow* by J. Paulsson 2015



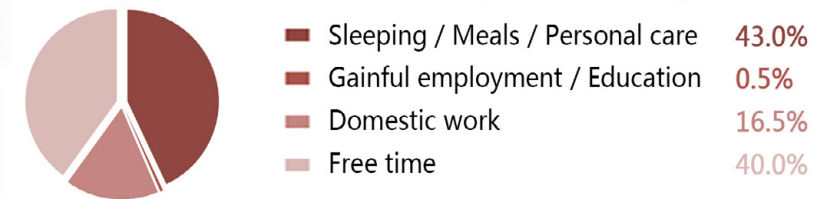
/ ELDERLY LIFESTYLE

According to : *Bygga Seniorboende tillsammans --- en handbok* by I. Blomberg & K. Kärnekull
Daily Life in Later Life --- Comparative Perspectives by K. Altergott

Health Condition: Average Expected Age of Health

Sweden 70.7 yrs old | Netherlands 58.9 yrs old | Finland 56.2 yrs old

Average Use of Time: Elderly Swedish Aged 70-74



Obvious Growth in Need of Leisure Time



Wishing List of Function of the Common Space

About 15 apartments building, Using 10% of the waive

Dining hall & Common kitchen
Lounge TV-room
Washroom Workshop
Sauna

About 40 apartments building, Using 10% of the waive

Dining hall & Common kitchen
Library / Reading room
Washroom Gathering room
Laundry room Workshop
Table-tennis room Leisure room
TV-room Weaving room
Sauna

/ TRYGGHETSBOENDE



Housing

- 1-2 person room
- Ordinary housing



Aged

- 70+
- Basically healthy



Assisted

- Partially assisted
- Staff requiring



Accessibility

- High accessible standard
- Specified arrangement



Commonality

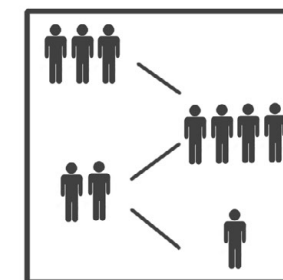
- Mandatory common space and facilities

/ CURRENT PROBLEMS



Loneliness

- Common space exists but rarely used.



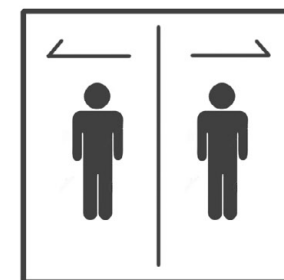
Low-efficiency

- Too much and separated staff space.



Inconvenience

- Long distance home.
- Indirect connection.



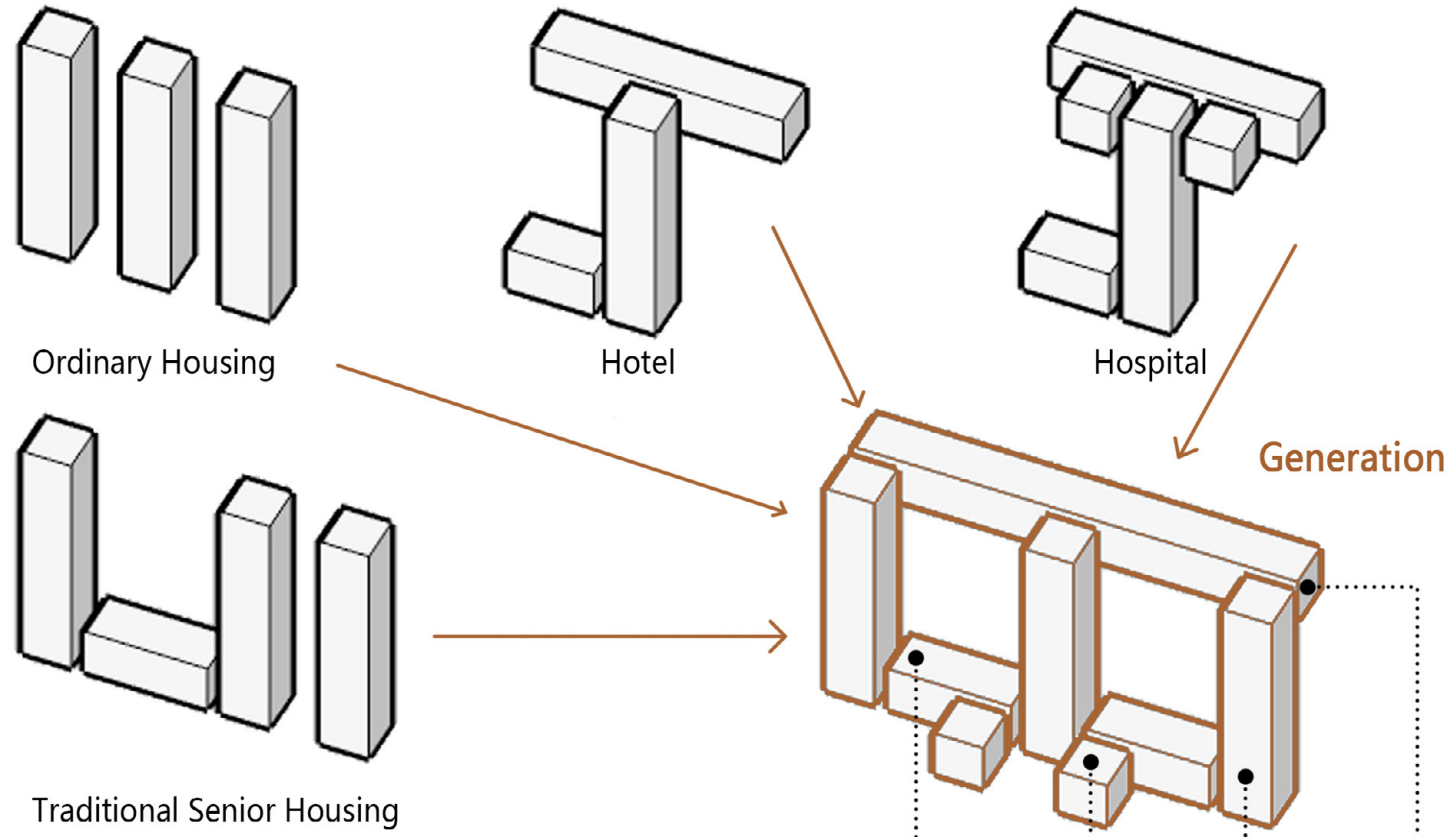
Isolation

- Weak connection between neighbourhood.

/ STRATEGIES & GENERATION

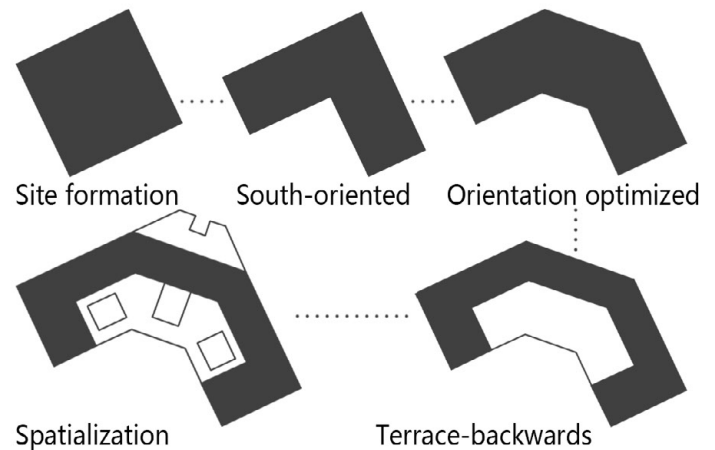
Housing and Healthcare Building Prototype

According to : Lecture *Aspect of Senoir Housing* by M. Andersson 2015

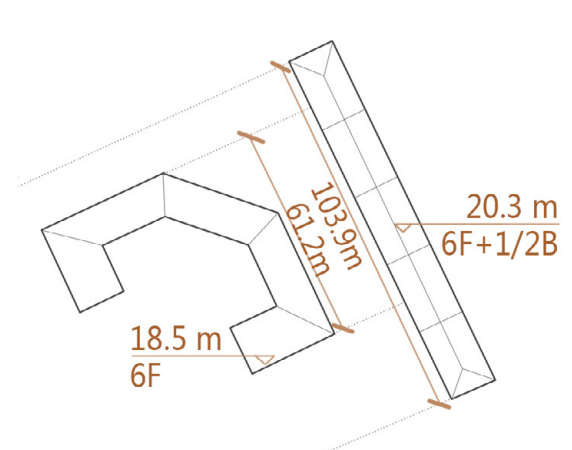


- Concentrated Common Space** ← Collect more people and creat more variety. Overcome the loneliness of the elderly.
- High-efficiency Staff Unit** ← Minimized and located in central monitoring area. Cut down the non-residential space and creat efficiency.
- Multi-located Traffic Shafts** ← Creat convenience and respond to the compact staff design.
- Connected Living Area** ← Enhance the sense of connection between resident.

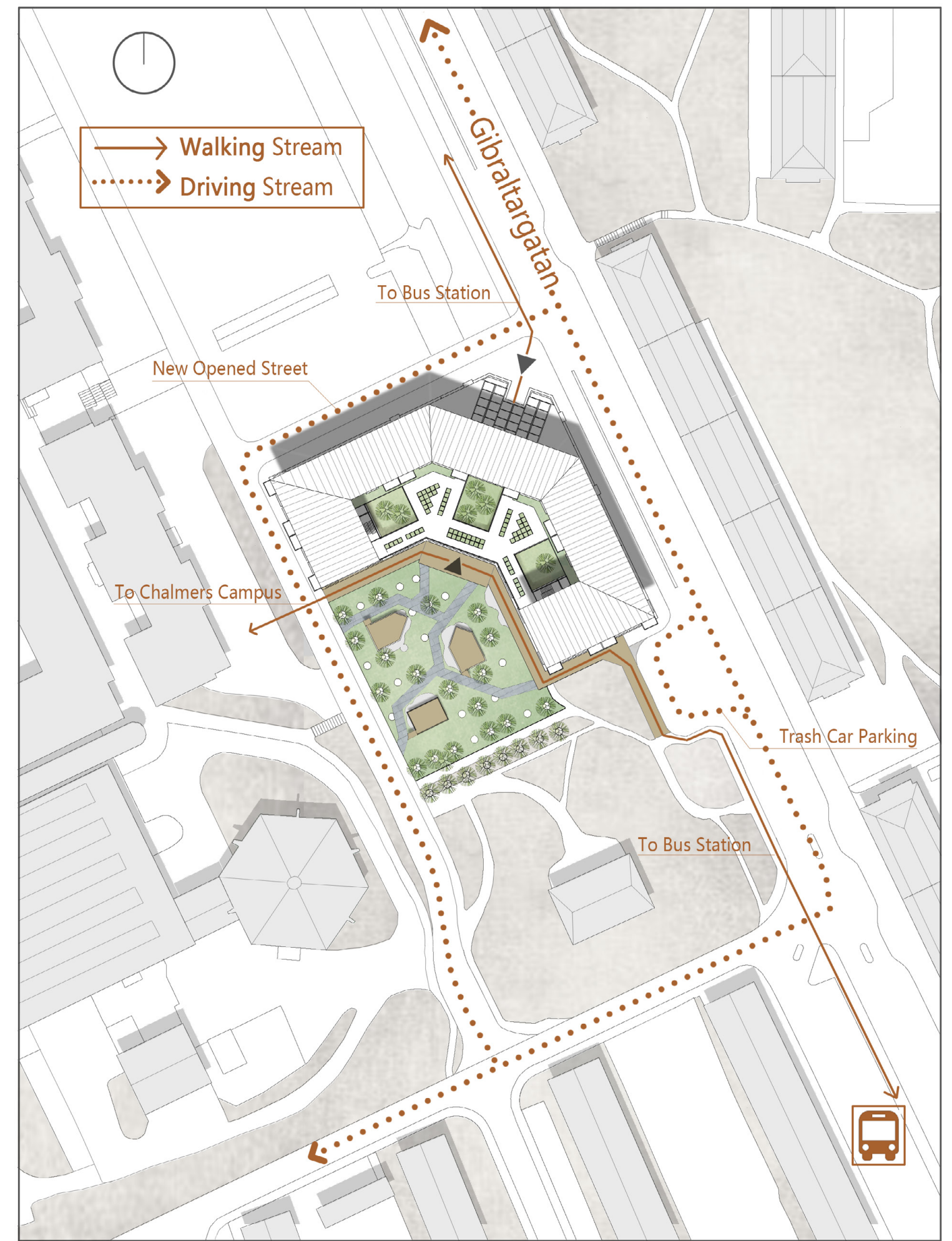
Volume Generation



Context Limitation



/ OVERALL PLAN (1:1000)



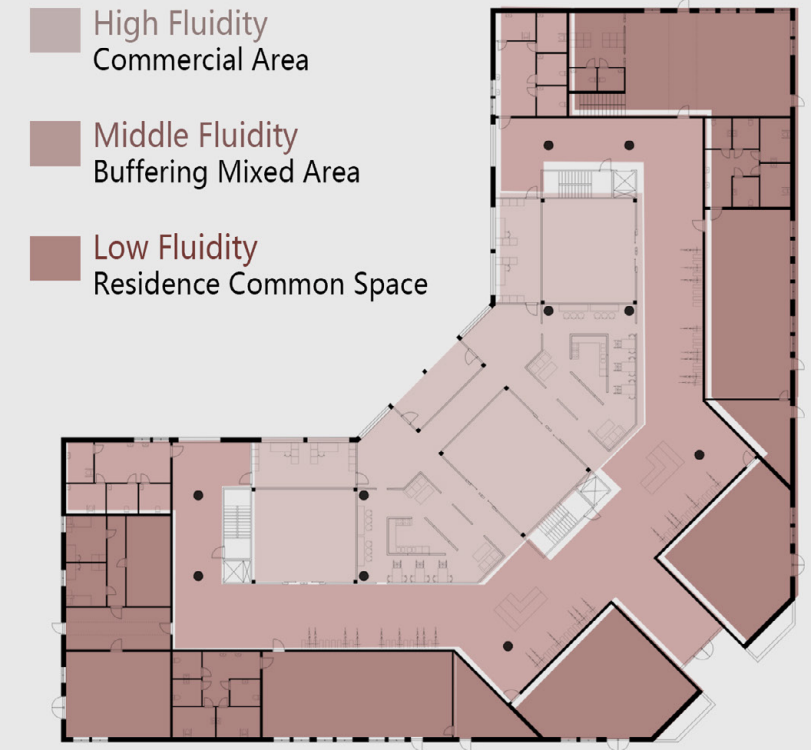
/ PLAN GF (1:250)

- 1 | Main Entrance
- 2 | Secondary Entrance
- 3 | Barber Shop
- 4 | Restaurant
 - 4.1 Guest Toilet
 - 4.2 Dining Hall
 - 4.3 Kitchen & Storage
- 5 | Wasteroom
- 6 | Drugstore
- 7 | Supermarket
 - 7.1 Guest Toilet
 - 7.2 Shopping Hall
 - 7.3 Storage
- 8 | Control Room
- 9 | Staff Apartment
- 10 | Gym (1F)

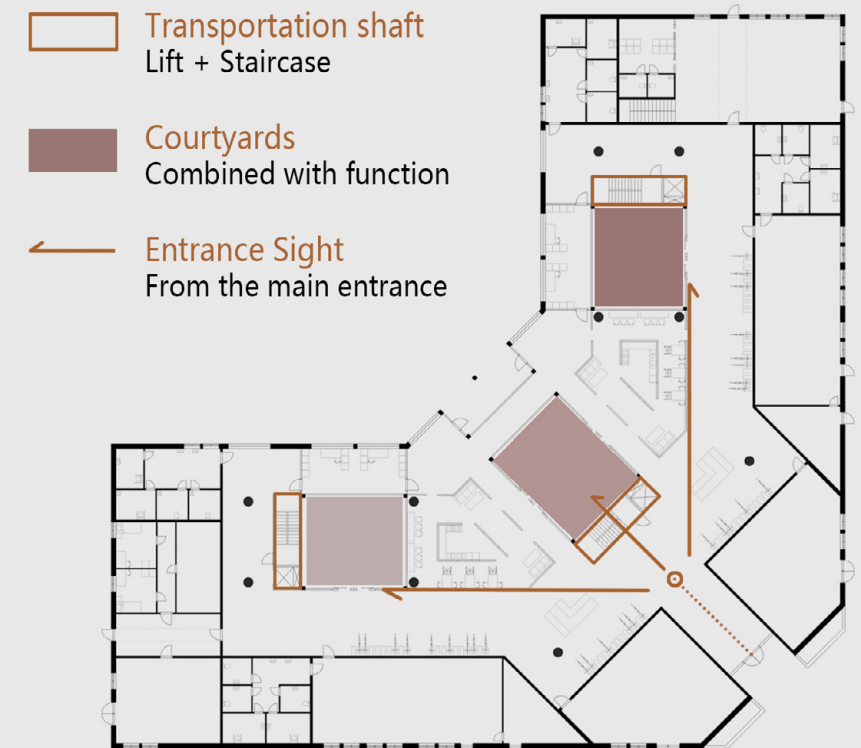
- I | Residence Toilet
- II | Staff Office & Reception
- III | Healthcare Unit
- IV | Common Kitchens
- V | Bicycles Parking
- VI | Courtyards



/ STRATEGY & ANALYSIS



Arranging space according to **fluidity and privacy**, which can guarantee the residence convenient enough for being surrounded by commercial area, at the same time, feel safe and apart from the public crowds by the buffering area.




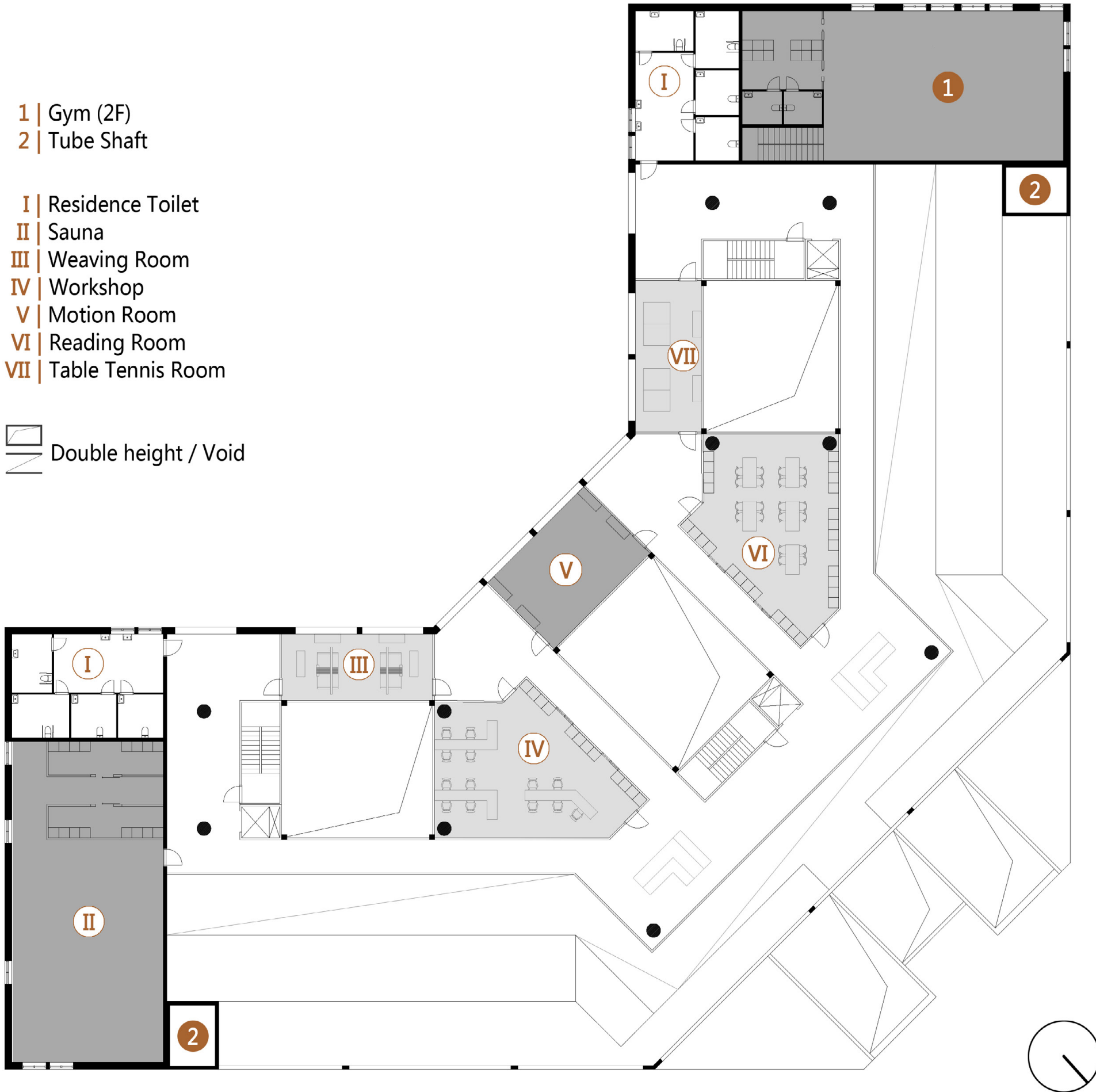
The combination of glazed **courtyards** and 3 **transportation shafts** is designed with the function of **orientation**. 3 courtyards can be firstly seen from the standing points of the main entrance. And they are decorated differently in landscape methods which are not only easier to show the way home, but can attract people to the nature.

/ PLAN 2F (1:250)

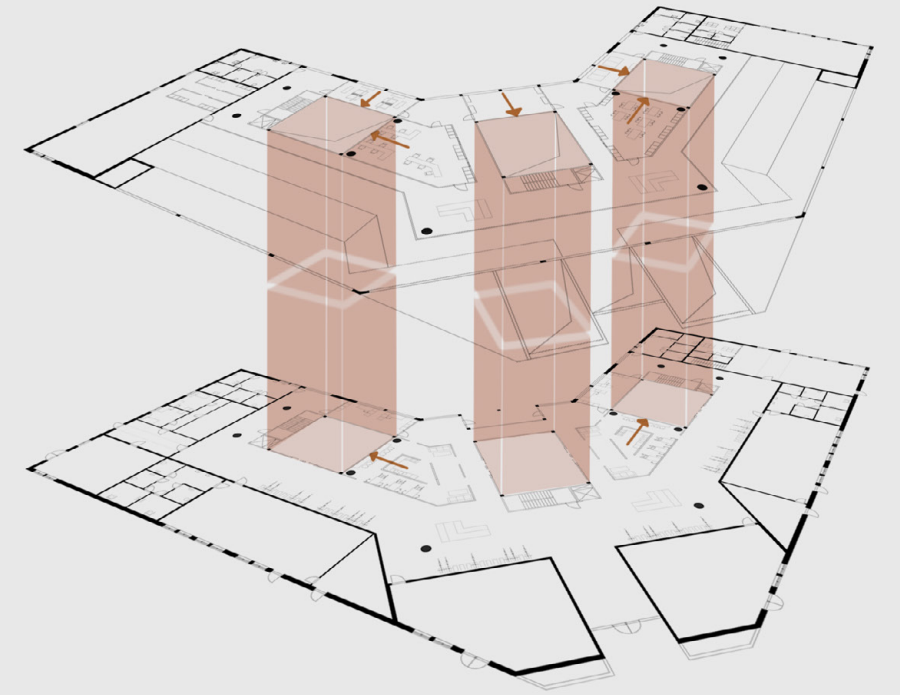
- 1 | Gym (2F)
- 2 | Tube Shaft

- I | Residence Toilet
- II | Sauna
- III | Weaving Room
- IV | Workshop
- V | Motion Room
- VI | Reading Room
- VII | Table Tennis Room

 Double height / Void

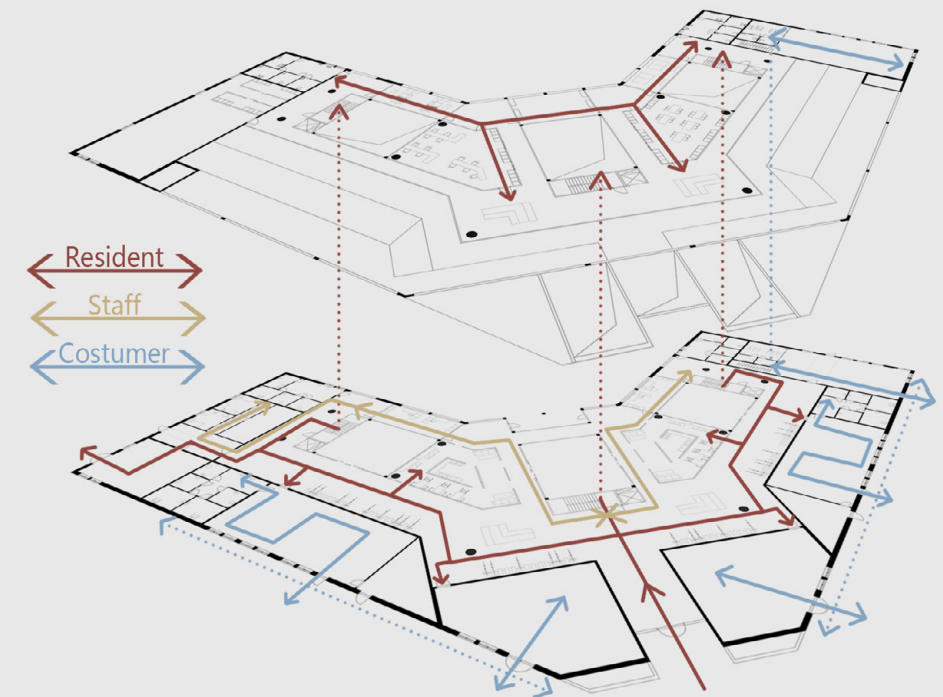


/ STRATEGY & ANALYSIS



The courtyards are not only **landscape elements**, but together with **traffic function**. Glazed facades can make the users in the multi-function room beside the courtyard see each other.

And this kind of **exposure** is to the people you are familiar with which will not make the elderly feel unsecure, on the contrary, will lead them to meet and participate each other.



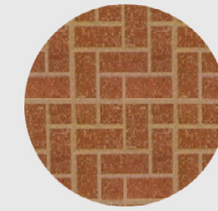
The **resident streamline** and **customer streamline** of the surrounding commercial facilities have **no intersection** in order to guarantee the security. But resident has **independent one-way-accessible entrances** to the commercial facilities in the ground floor.

The commercial types are all for the daily life which will encourage people to go out. And on the way, they have large possibility to be attracted by the common events and to take an active part in them.

/ SECTION

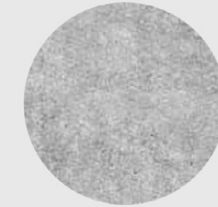


/ FACADE MATERIALS & DETAILS



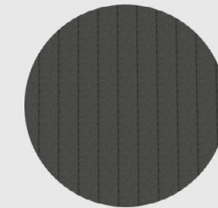
Red Bricks Facade

- Used as the main part of the facade.
- Easy to combine with insulation.
- Related to west side campus.



Concrete Construction & Facade

- Used for construction.
- Partially remains uncovered to divide the streetside long facade.
- Related to east side residential.



Color Steel Tile & Components

- Used for supplementary parts.
- High strength and mass produce.
- Color selection according to the surrounding building style.



Wooden Decoration

- Used as decoration components and part of the panels.
- Intimate to human feelings and create home-likeness.

/ ELEVATIONS (1:500)



Southwest Elevation (SW)



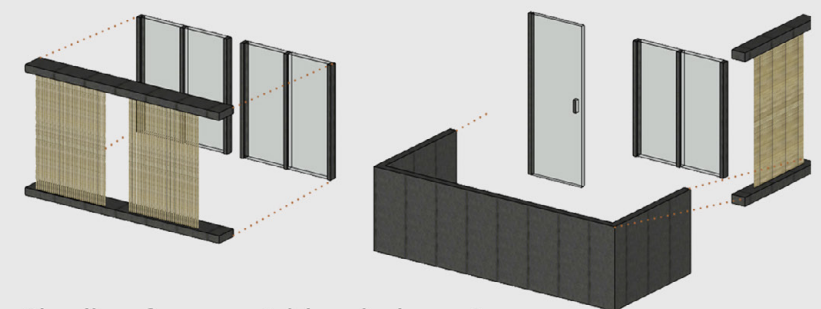
Southeast Elevation (SE)



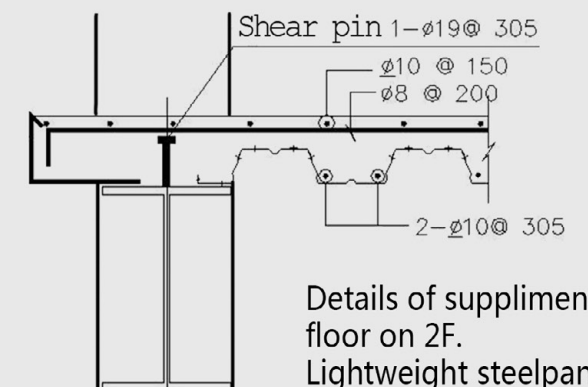
Northwest Elevation (NW)



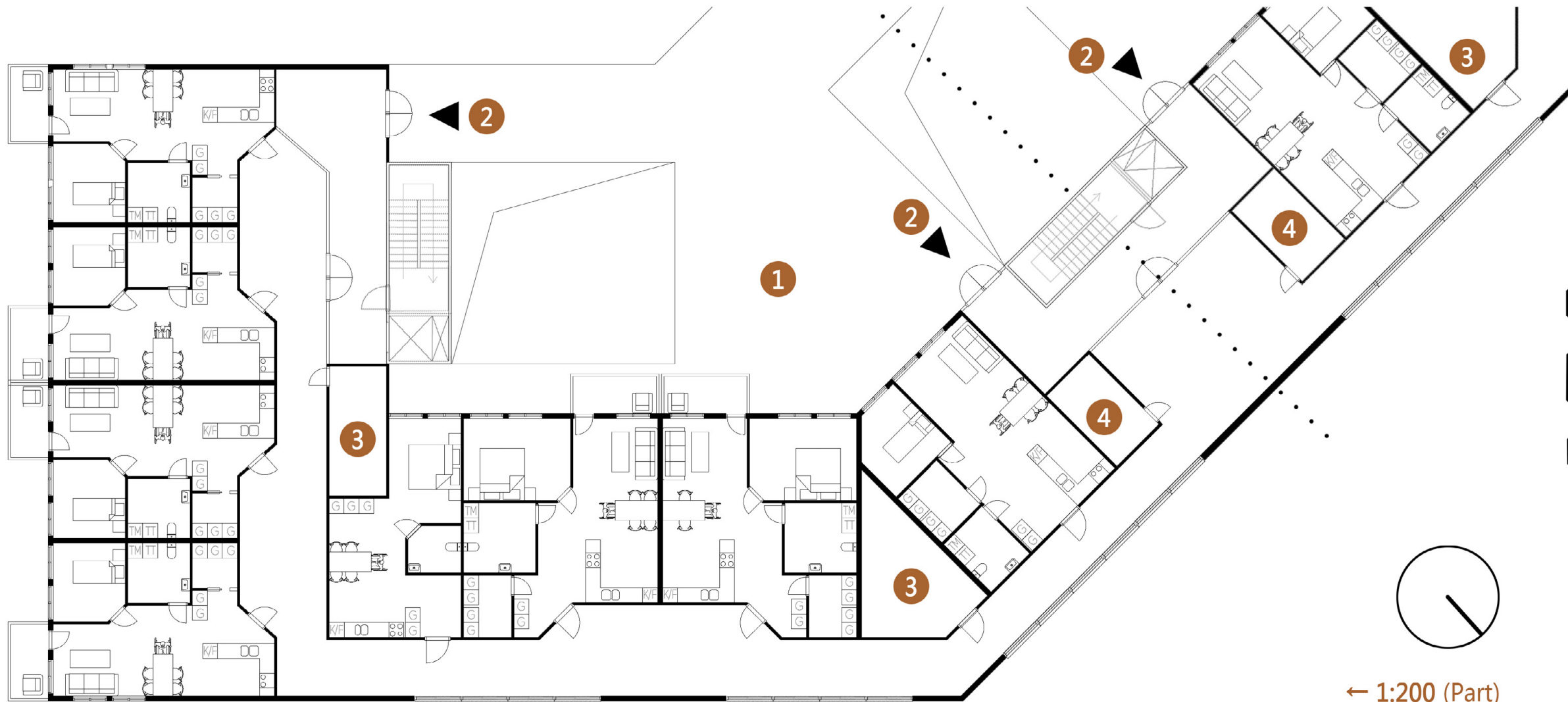
Northeast Elevation (NE)



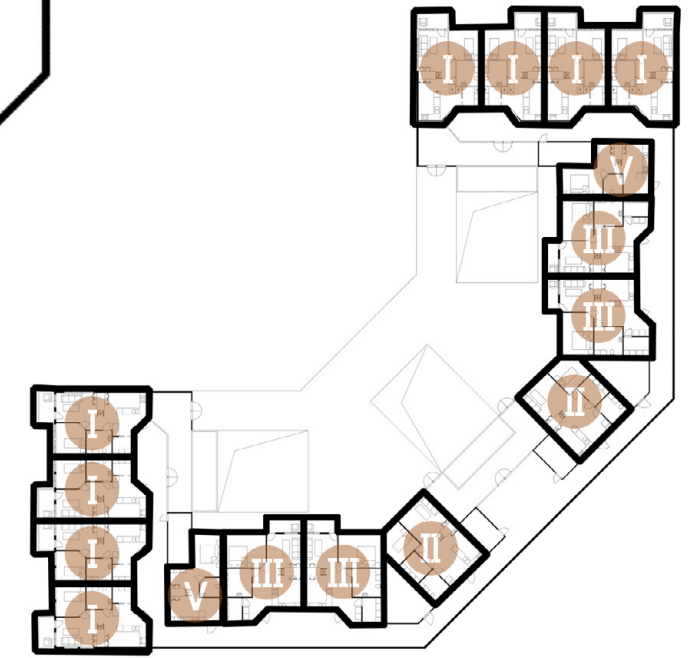
Shading fence outside windows & Combination of balcony and separation between flats.



Details of supplementary sandwich floor on 2F. Lightweight steelpanel + covering.



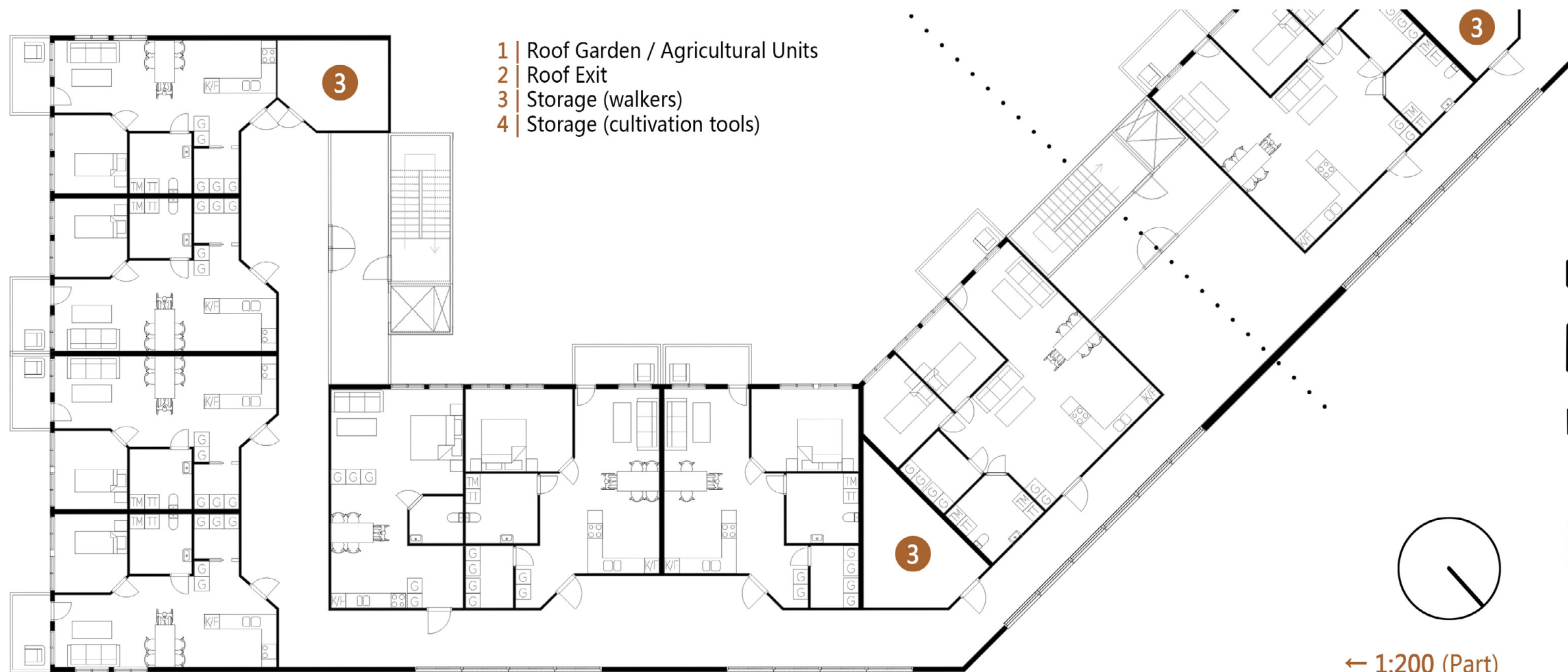
← 1:200 (Part)



- I | Single Flat A
- II | Single Flat B
- III | Double Flat A
- V | Visitor Hostel

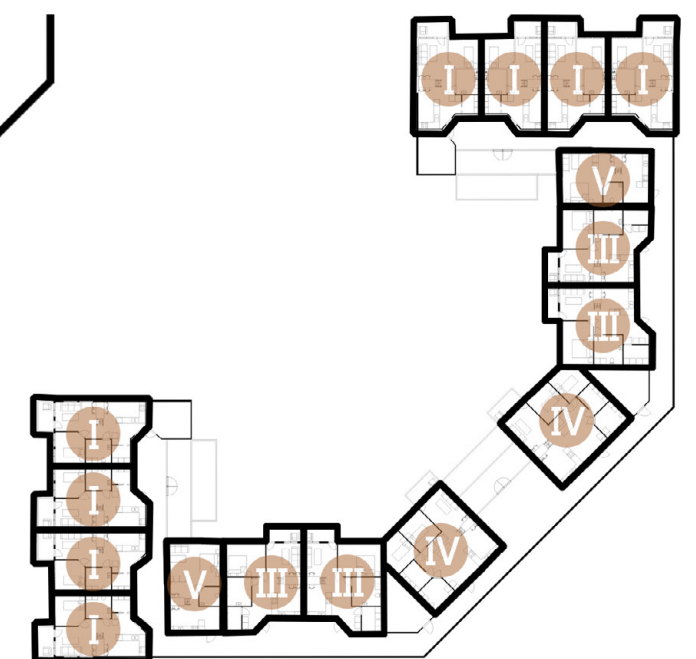
↑ 1:750

/ PLAN 3F



- 1 | Roof Garden / Agricultural Units
- 2 | Roof Exit
- 3 | Storage (walkers)
- 4 | Storage (cultivation tools)

← 1:200 (Part)

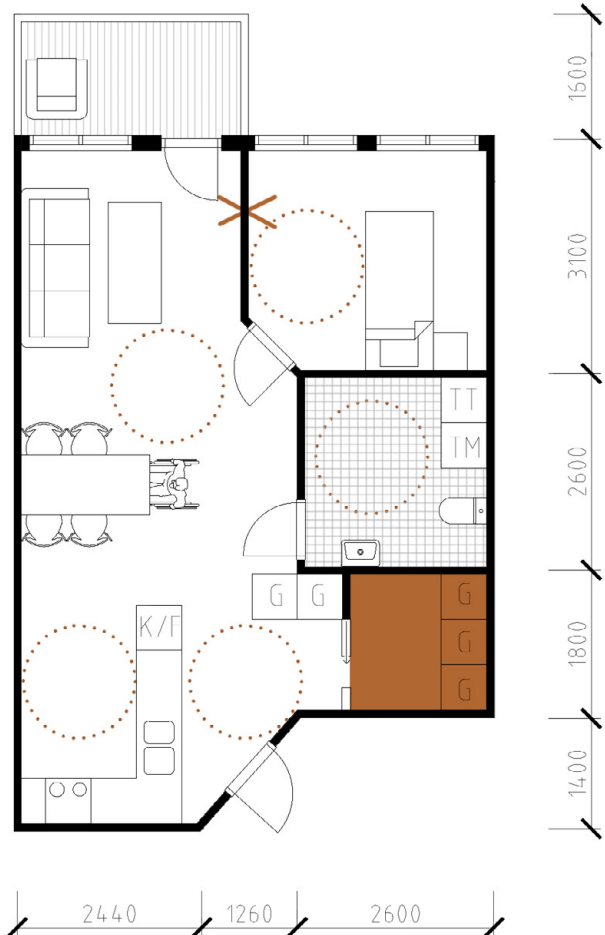


- I | Single Flat A
- III | Double Flat A
- IV | Double Flat B
- V | Visitor Hostel

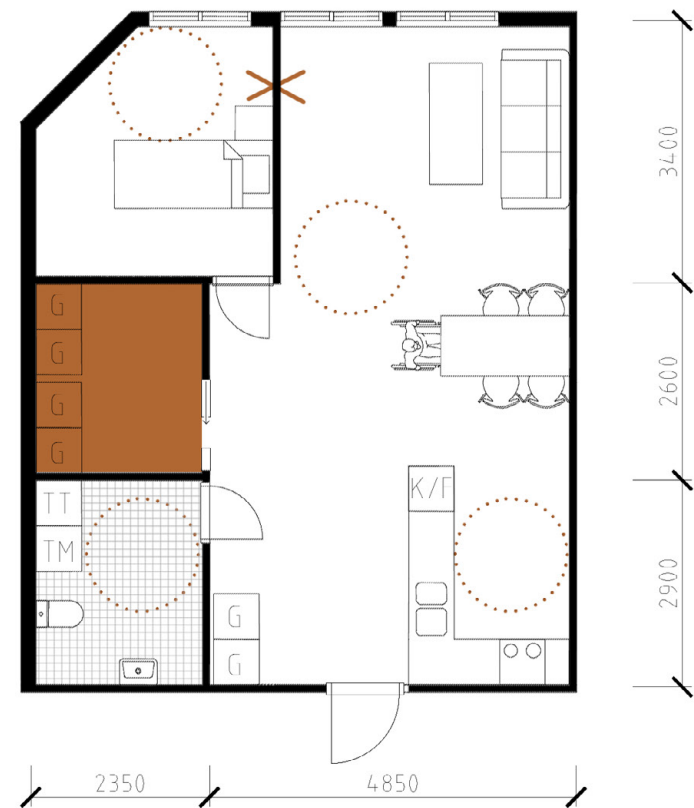
↑ 1:750

/ PLAN 4F-6F

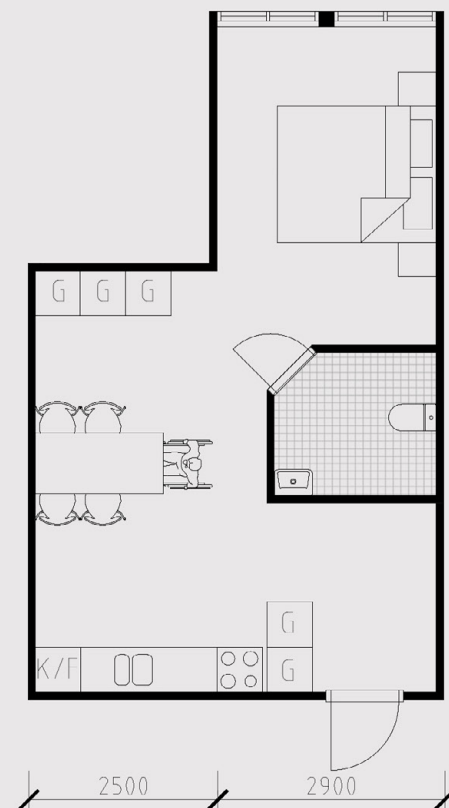
/ FLAT TYPES (1:100)



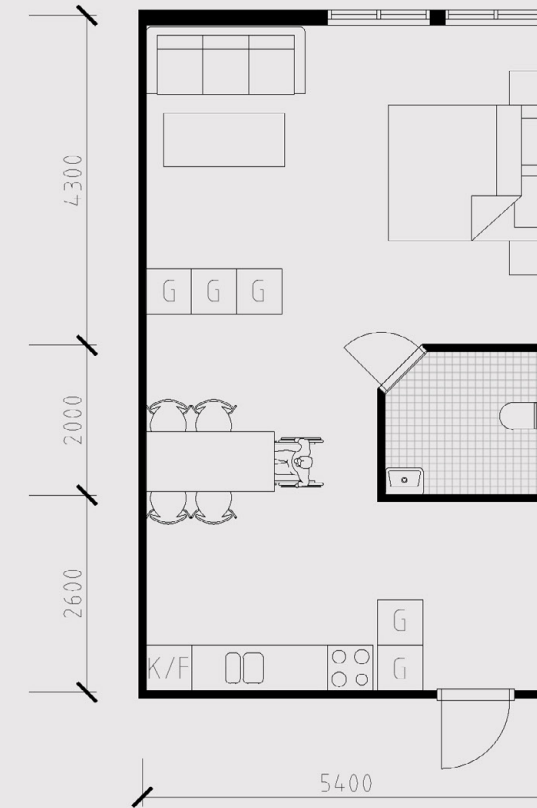
I | Single Flat A
49.8 sqm | 3 R.O.K | 3-6F | 32 st



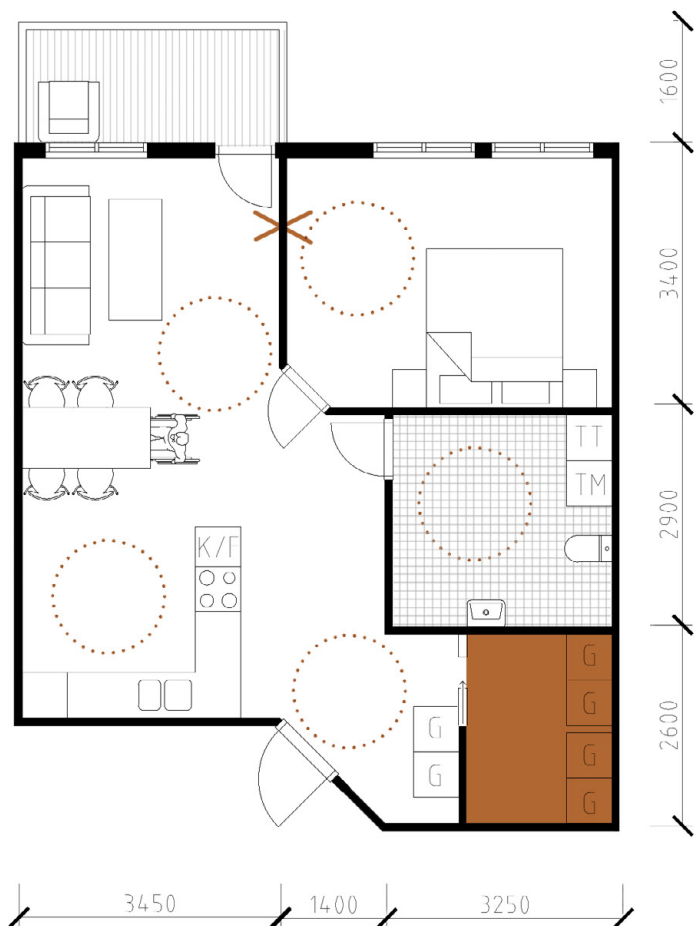
II | Single Flat B
58.4 sqm | 3 R.O.K | 3F | 2 st



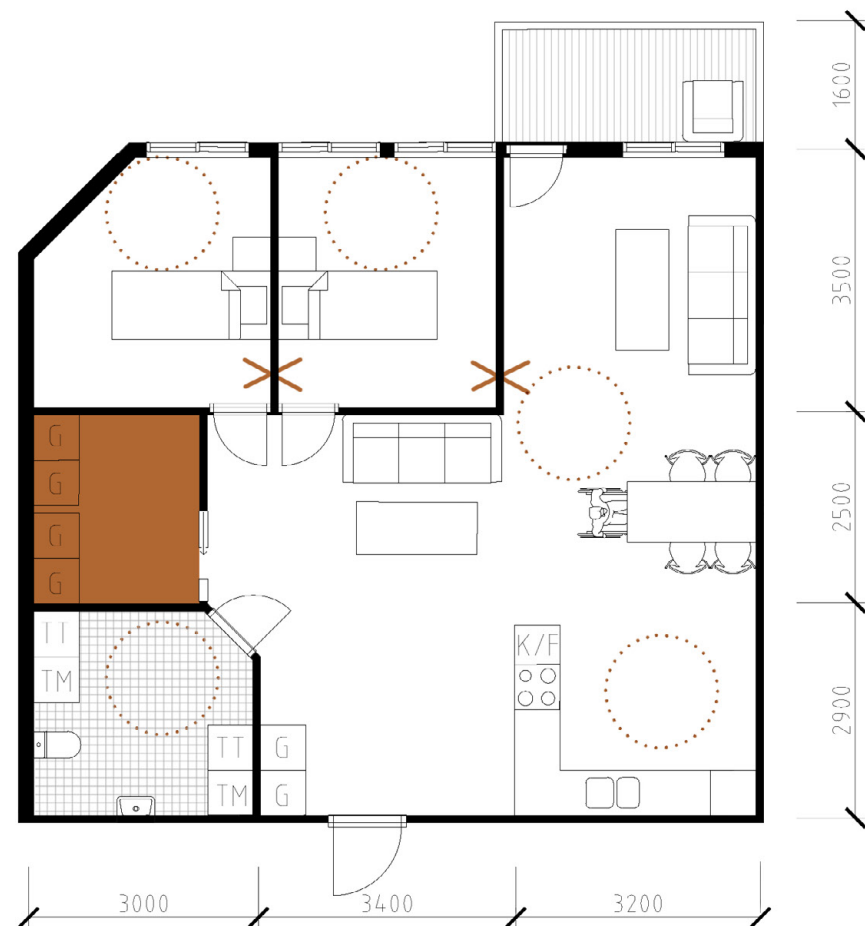
V | Visitor Hostel
36.7 sqm | 1 R.O.K | 3F | 2 st



V | Visitor Hostel
46.1 sqm | 1 R.O.K | 4-6F | 6 st



III | Double Flat A
60.4 sqm | 3 R.O.K | 3-6F | 16 st



IV | Double Flat B
80.2 sqm | 4 R.O.K | 4-6F | 6 st



Facts

- 6 Various Flat Types
 - Single Room 34 st (* 1 pr)
 - Double Room 22 st (* 2 pr)
 - Visitor Hostel 8 st (* 2 pr)
- 94 prs



High Accessibility

- **Passage:** Turning (d=1500mm) for wheelchairs.
- **Furniture:** Special room for wheelchair users.



Elderly Aiming Details

- **Entrance:** Direct connection with bedrooms.
- **Bedroom:** Both sides accessible beds.
- **Bathroom:** Large room for turning. / Handrails.
- **Decoration:** Color contrast for visual impairment.

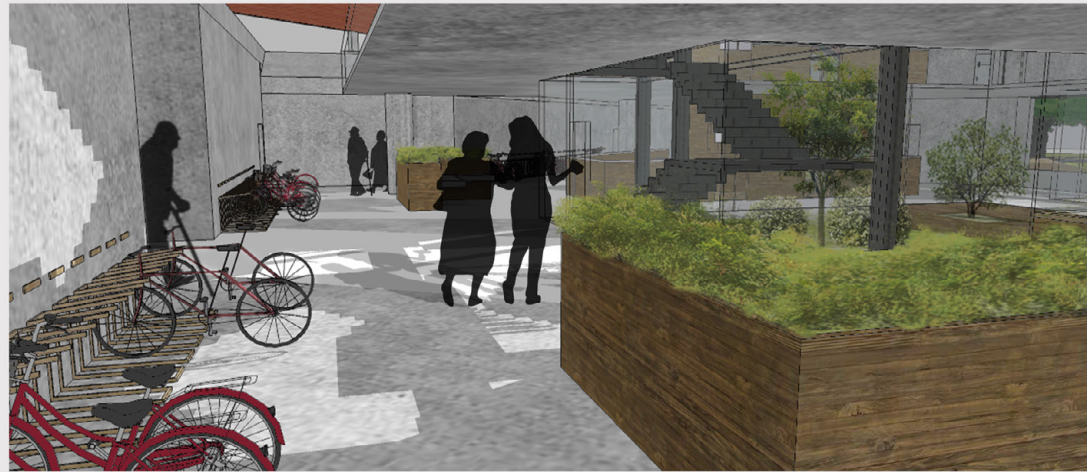


Flexibility

- Color-marked **personal storage** can be turned into home healthcare unit.
- Cross-marked **walls** can be taken away, turning into open layout.



/ RENDERING



Indoor Scene 1

A view of main entrance, public corridor and one of the courtyards. Daily activities happen on the way between going home and going out.



Indoor Scene 2

A view of common kitchen and dining space next to the courtyard. Public space surrounds the courtyard which can be seen each other and encourage people to join together.



Indoor Scene 3

A view of 3F entrance, which is also the entrance to the terrace with agriculture. Public space in each floor only applies short stay and leads people to the nature.



Outdoor Scene 1 ↑

A view of the terrace with agriculture. Autonomic growing units can remind the elderly of countryside life. And they can be seen from every apartment which will create a lot of participation and livelihood.

Outdoor Scene 2 ↗

A view of main entrance and street (Gibraltargatan). Main entrance is around the corner with glazed roof and green bed which is obvious enough for the residence to find. The green bed can also provide outdoor waiting seats.

Outdoor Scene 3 →

A view of secondary entrance and the garden. The building faces to the greenery which draws nature near.

