master design studio, 10 ECTS, 260.796 | TU wien, FB städtebau, summerterm 2023 tutors: andreas hofer, andrea überbacher

students: laura sánchez fernández | 01623349 | laura.sanchez.216@gmail.com anna panni till | 01619950 | tillpanni97@gmail.com











Department of Architectural Design Lviv Polytechnic National University





#### lviv social resilient city 2.0 | urban density lab ukraine 2023 | vienna-lviv.info

Office of architecture and urban planning

**=** Federal Ministry Republic of Austria Education, Science and Research



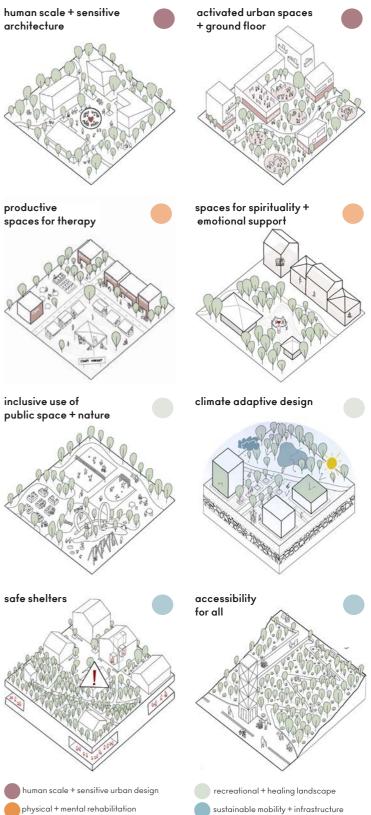
# **URBAN DESIGN REFERENCES**

#### GREEN LINK | hanna müller | sofiya lukyanchenko | laura sipple

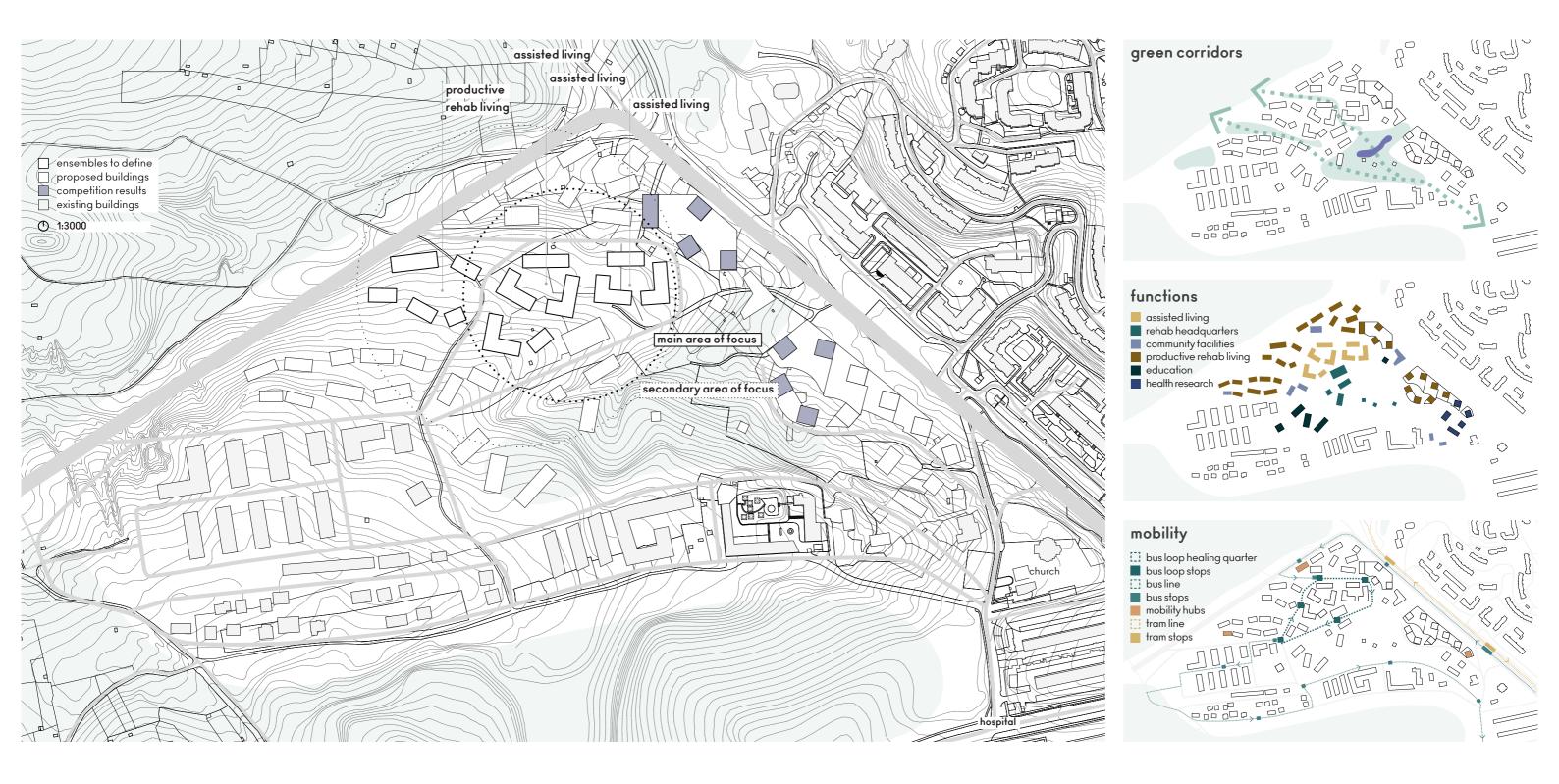
productive connecting green spaces protecting from traffic noise aligning according to the topogragraphy and cardinal directions inclusive use of safe shelters activating the park Ē storey legend 1:6000



### **DESIGN PRINCIPLES**



## GENERAL URBAN DESIGN PROPOSAL



#### modularity

#### materiality & human scale modular timber construction

arktithema / kronborg strandby



#### integration in topography & identity

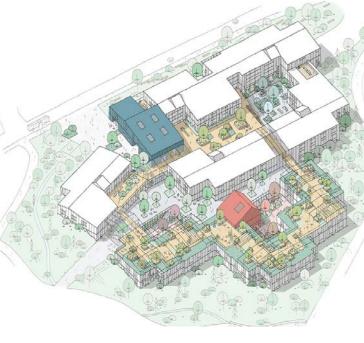
busarchitektur / nursing home in wienerwald, competition entry





### **REFERENCES**

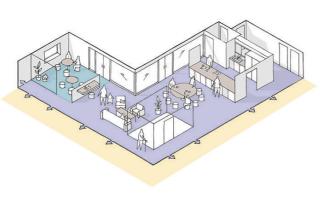
### courtyard system

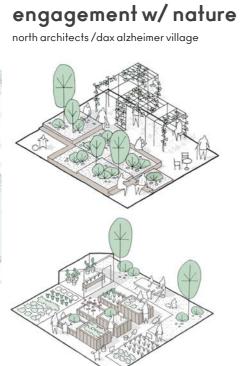


#### common rooms

north architects / olsrod nursing home





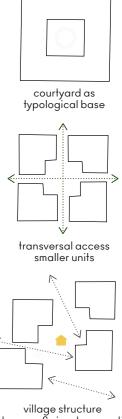


oopeaa / puukuokka housing block

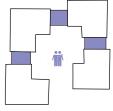


# SPATIAL & TYPOLOGICAL CONCEPT



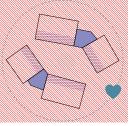


rich space & visual connection



creation of community spaces as binding elements

adaptation to topography connection towards nature

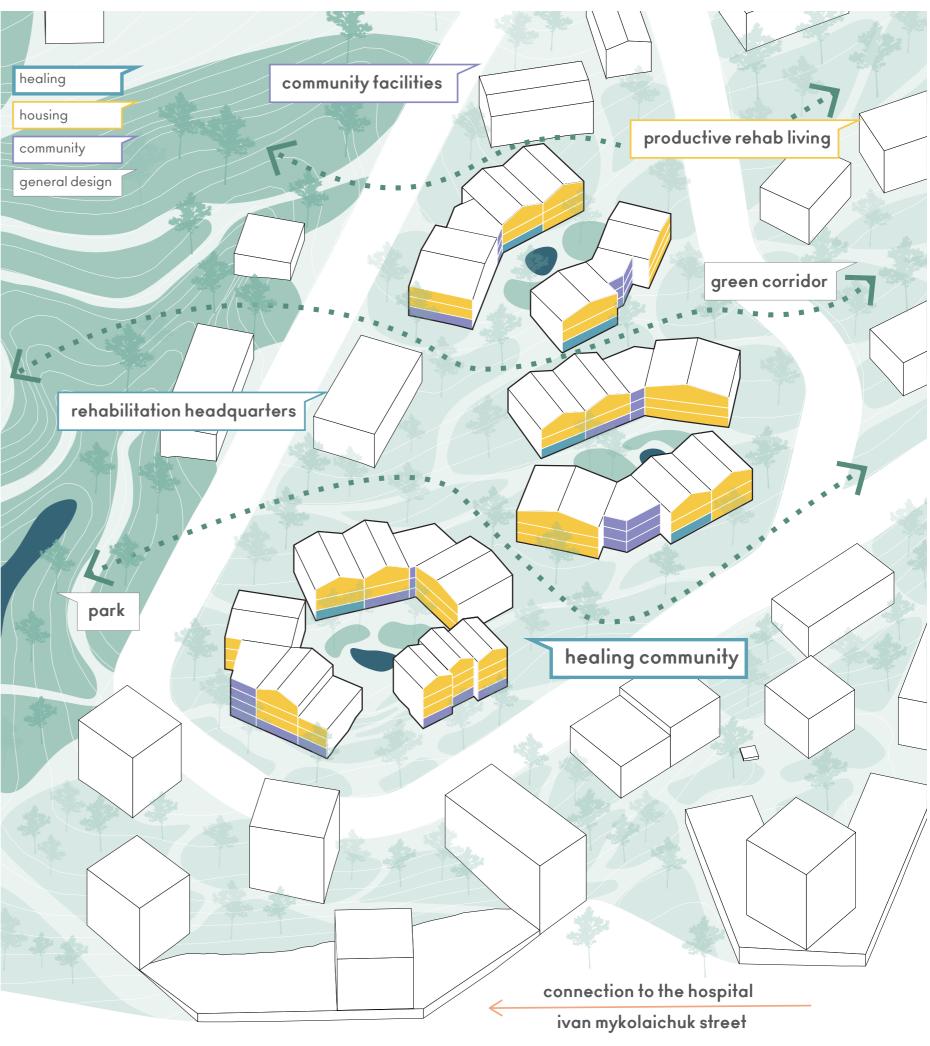


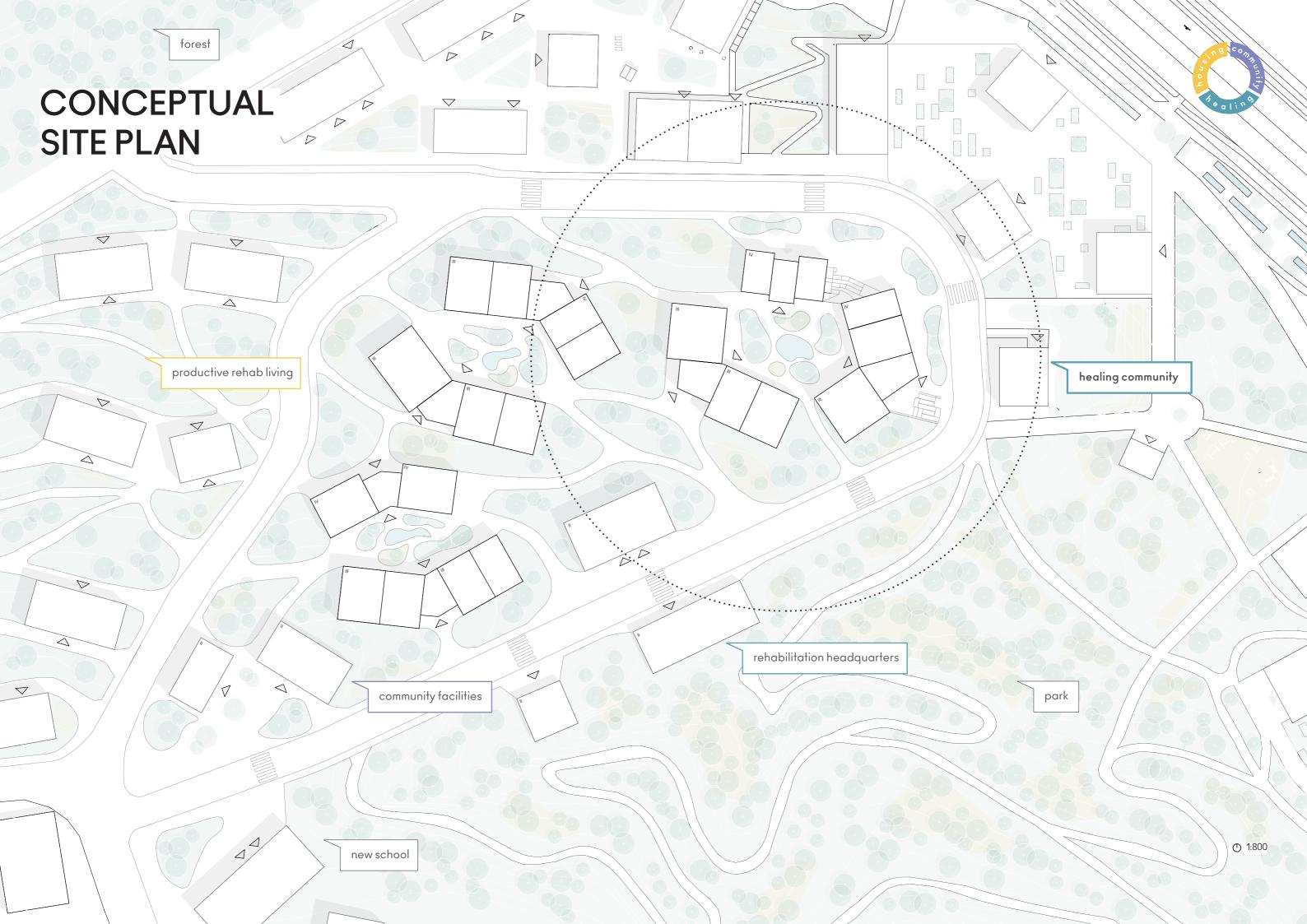
covered community spaces to foster interaction

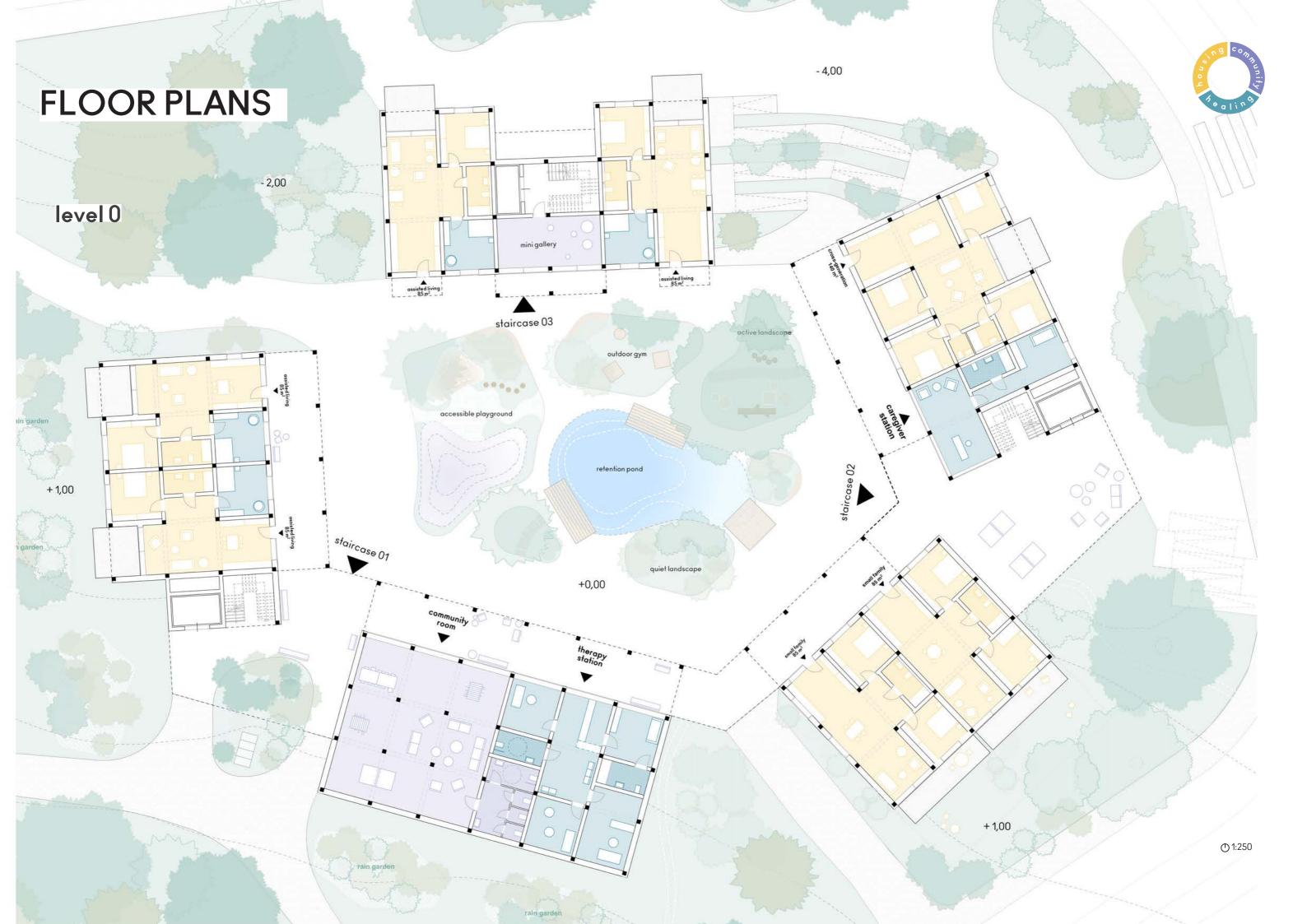
housing community Ø nature covered open space healing community

# TARGET GROUPS & **CONCEPT GRAPHIC**

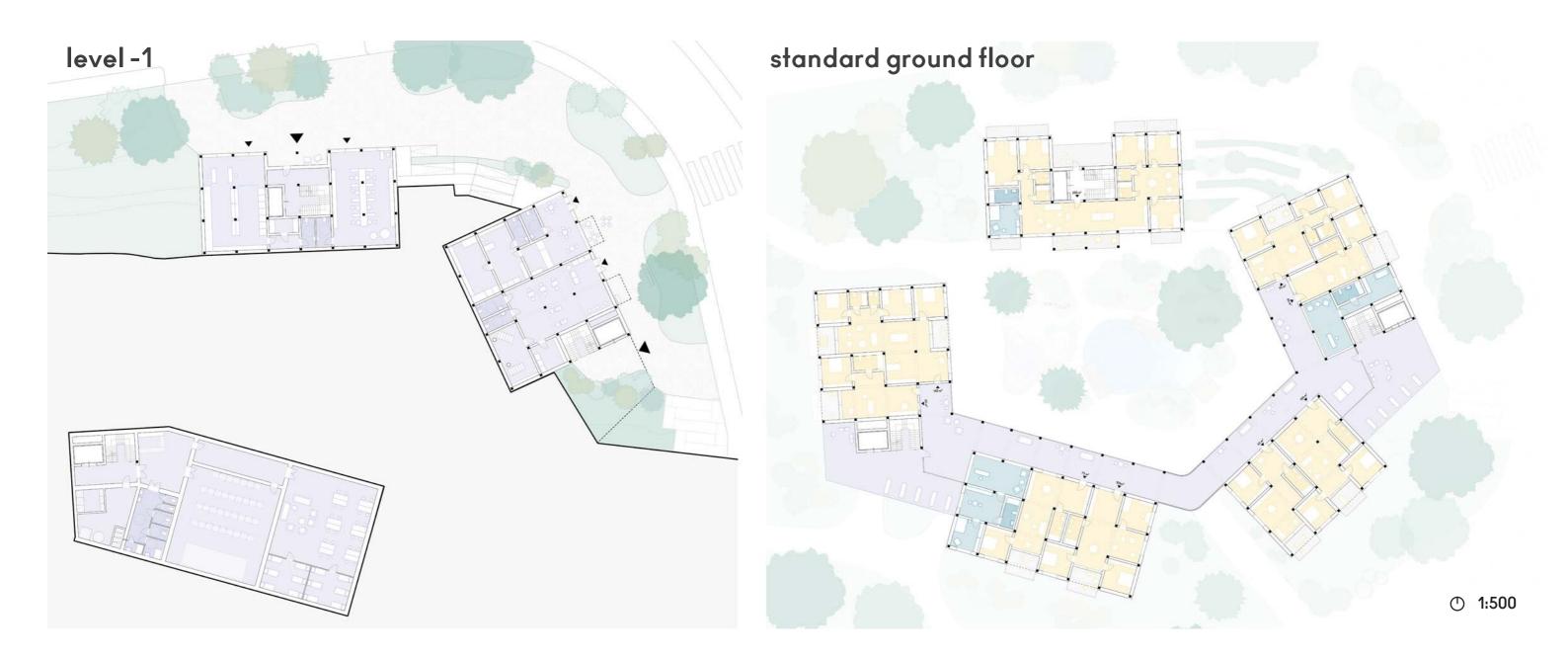






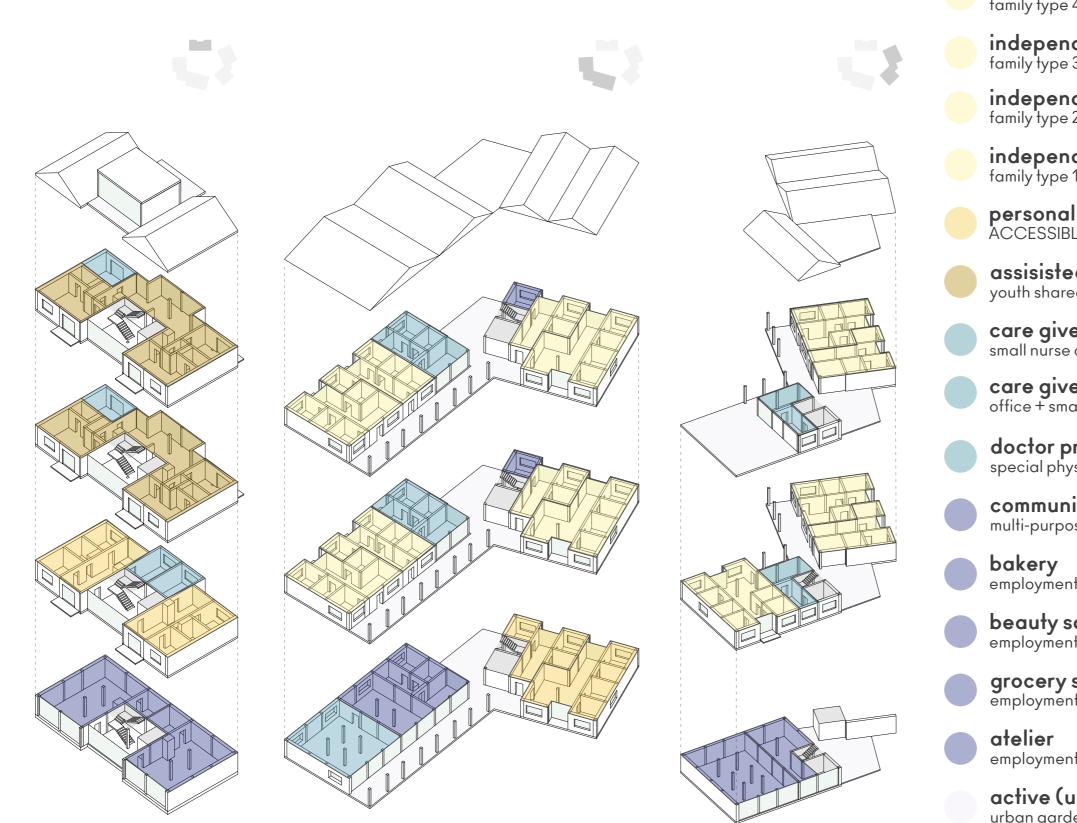


# **FLOOR PLANS**





# FUNCTIONAL DISTRIBUTION



**independent residental apartment [4]** family type 4 [4 bedrooms/up to 6 residents]

**independent residental apartment [4]** family type 3 [3 bedrooms/up to 5 residents]

**independent residental apartment [4]** family type 2 [2 bedrooms/up to 4 residents]

**independent residental apartment [7]** family type 1 [1 bedroom/up to 2 residents]

**personal assisisted living [4]** ACCESSIBLE family type 1 [1+1 bedrooms/up to 2 residents + 1 care giver]

**assisisted youth living [2]** youth shared aparment [5+1 bedrooms/up to 10 assisted residents]

**care giver residence [4]** small nurse apartment [up to 2 care workers]

**care giver office & residence [4]** office + small nurse apartment [up to 2 care workers]

**doctor practice** special physical/mental therapy [up to 4 care workers]

**community room** multi-purpose flexible room for activities

**bakery** employment & occupational therapy [up to 4 employed residents]

**beauty salon** employment & occupational therapy [up to 4 employed residents]

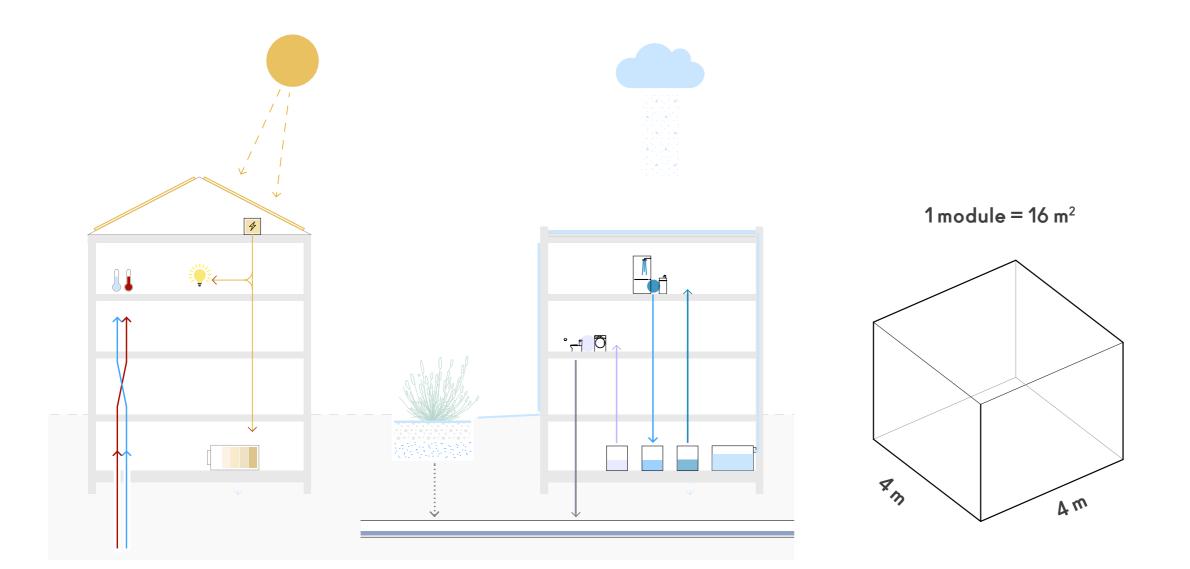
**grocery shop** employment & occupational therapy [up to 4 employed residents]

**atelier** employment & occupational therapy [up to 4 employed residents]

active (un)covered rooftop urban gardening, comm. activities



### SUSTAINABILITY & SOCIAL RESILIENT CONCEPT

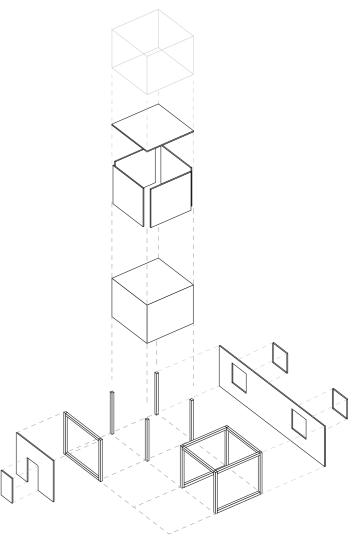


**energy concept** independent energy production through solar panels & geothermal heat pumps

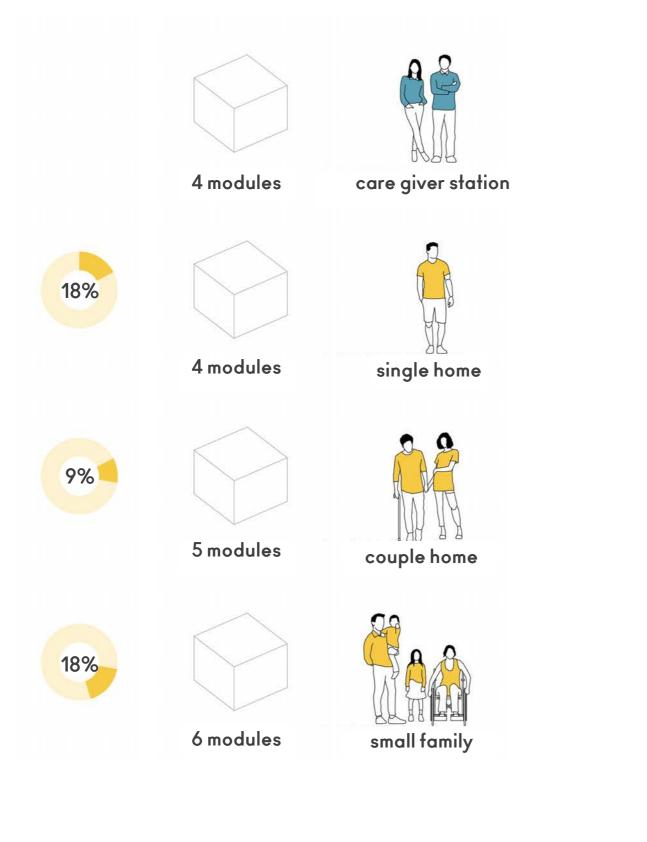
**water management** rain water harvesting & water depuration and reuse

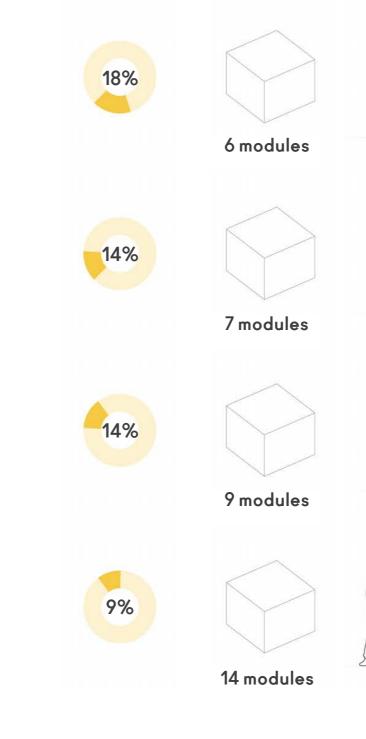
## timber modular construction system reduced carbon footprint, flexibility,

easy repair & rapid assembly



# **DIVERSITY OF INHABITANTS**







couple apartments [2] 4 people [5%]

small family apartments [4] 16 people [21%]

family apartments [3] 15 people [20%]

multigenerational family apartments [1] 8 people [10,5%]

assisted living [4] 8 people [10,5%] 4 care givers







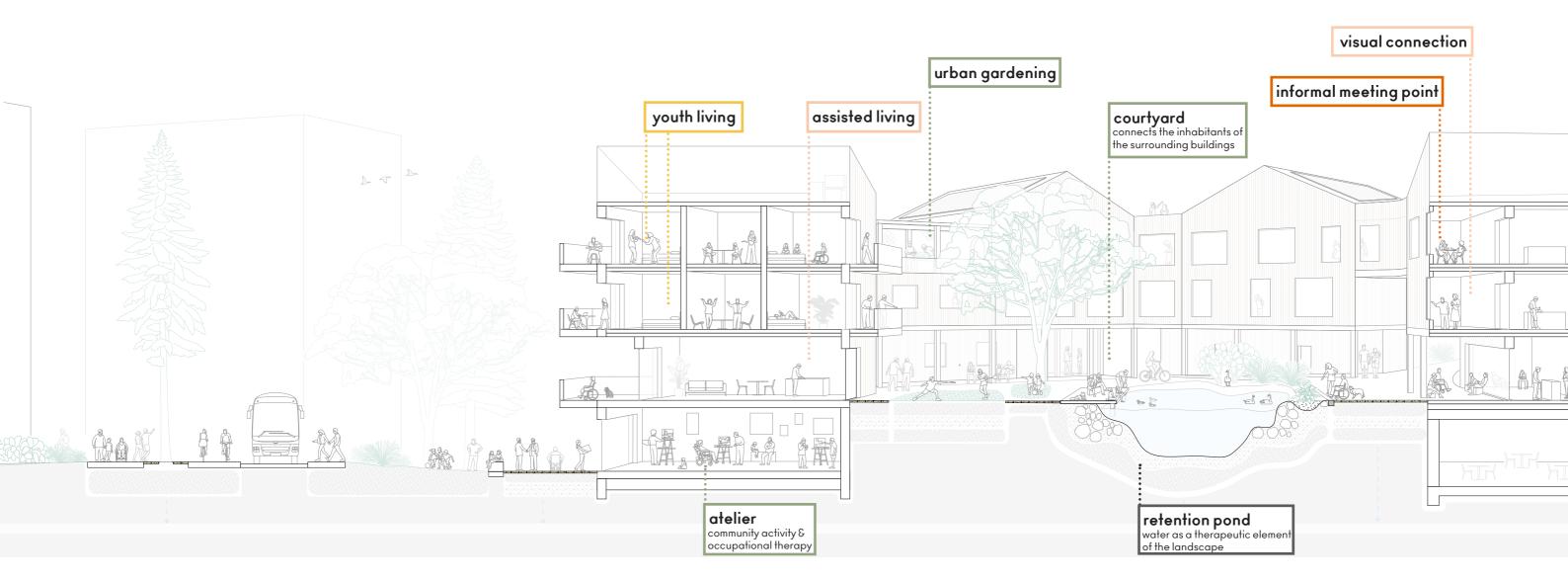




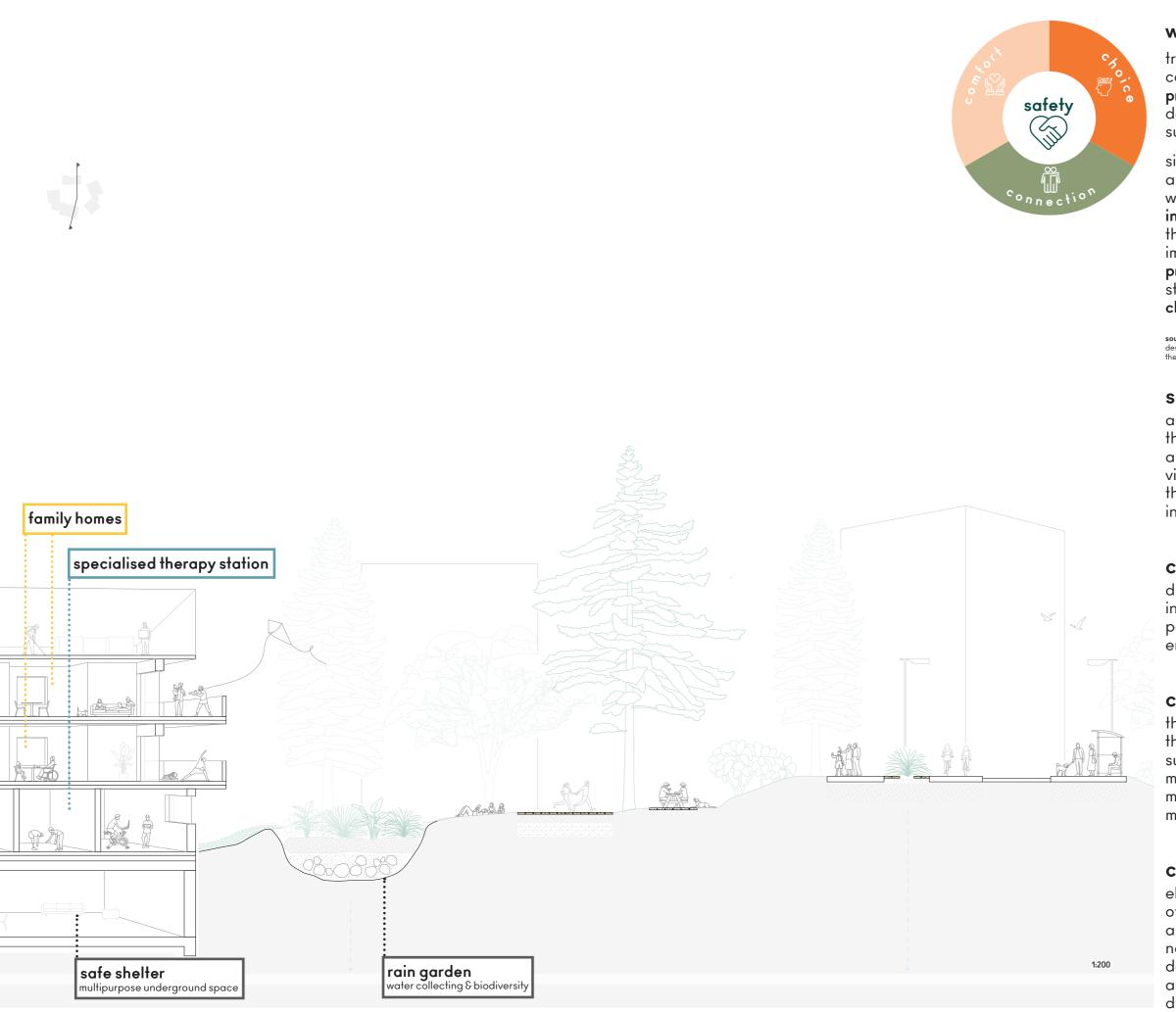
assisted living for minors [2] 20 people [26,5%] 4 care givers

= 21 apartments =76 people = 8 care givers

## SECTION THROUGH COURTYARD







trauma-informed design is a framework combining **trauma-informed care** with the **design process**. this framework focuses on ways to design a building to help regulate the body and support therapeutic approaches.

since trauma lives and works through the body, and the body reacts to physical space before we cognitively process it, **the built environment is integral to how one experiences trauma**.

the spatial principles and design values should be implemented hand-in-hand with a **participatory pre-design process** [interviewing residents and staff] and a **focus on comfort, community, and choice inside a safe environment**.

**source:** grabowska, sam, et al. 2021. architectural principles in the service of trauma-informed design. denver, CO: shopworks architecture, center for housing and homelessness research at the university of denver, and group 14 engineering.

#### safety

above all, to support the process of healing in the built environment, the spaces have to offer a sense of safety, being able to have direct visual connection with the care giver station and the landscape. other aspects regarding safety include proper orientation and lighting.

#### choice

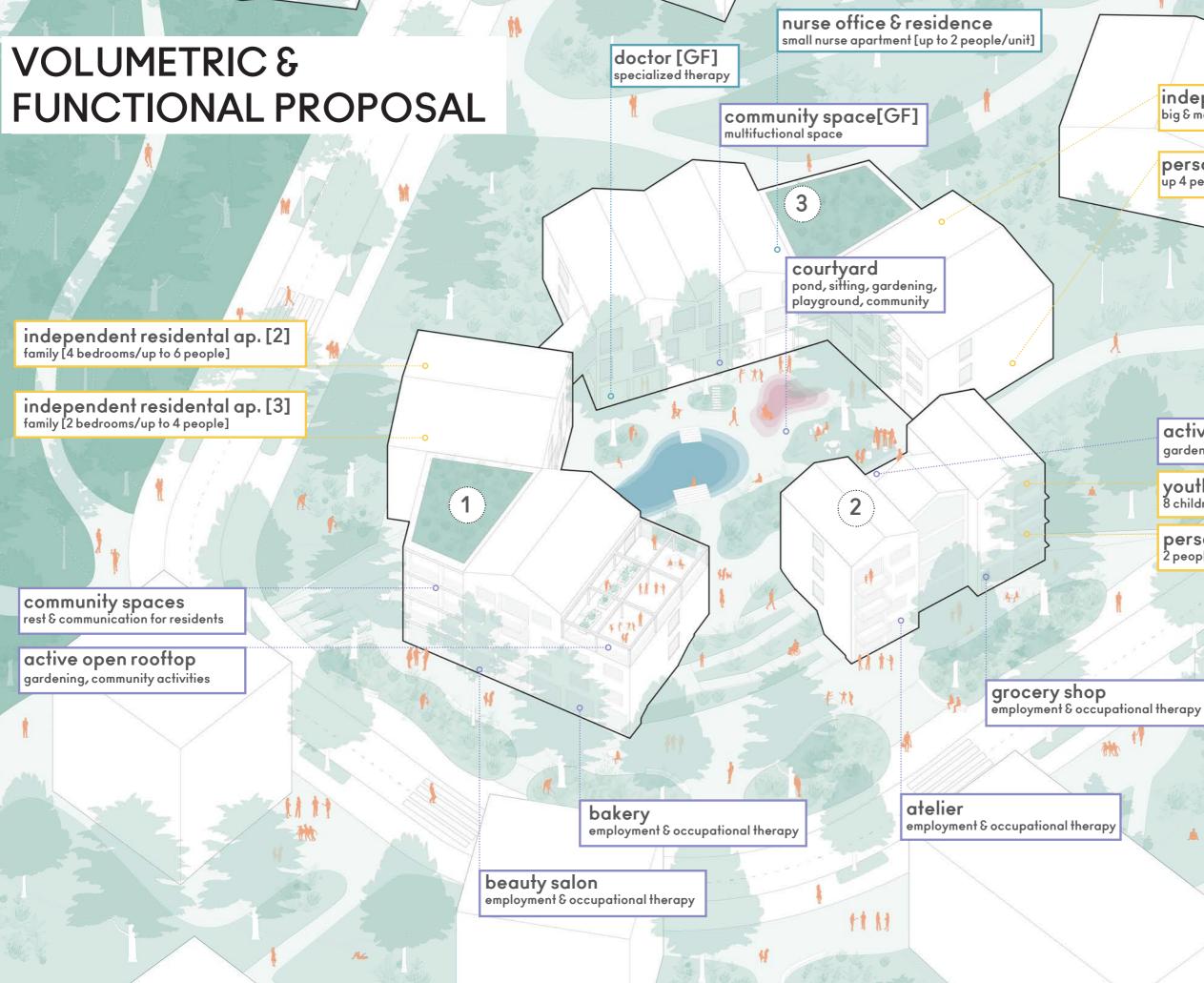
different settings for sitting , resting, activities in- and outdoors, offering the chance to be part of social activities or to enjoy solitude... to encompass each user's needs in time.

#### connection

the residents must be able to connect with themselves, other residents, the staff, the surroundings and the building. to achieve this multi-level connection, the built environment must be curated to allow these to happen in many different ways.

#### comfort

elements that influence the percieved comfort of a space are related to physical aspects, such as the quality and abundance of light, the use of natural materials, a good ventilation, and also design elements in the built environment that are aesthetically pleasing which comminicate dignity and worth.





personal assis. living [2] up 4 people + 1 caregiver per unit

active covered rooftop gardening, community activities

N.

youth assisted living [2] 8 children + 2 caregivers per unit

personal assis. living [2] 2 people + 1 caregiver per unit