

# **Offline Together**

## **A Post Digital Detox Retreat for the Post-Digital Generation**

AR2A011 Design, Data, Society

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This project investigates the role of architecture in addressing digital dependency among young adults in an increasingly connected society. Situated within the transforming industrial landscape of Binckhorst, The Hague, the proposal reimagines a post-industrial waterfront site as a digital detox retreat that offers temporary withdrawal from the pressures of everyday urban life.

Through a carefully structured sequence of private, communal, educational, and therapeutic spaces, the project explores how architecture can support processes of reflection, grounding, and reconnection. Drawing on phenomenological theories of perception and contemporary critiques of digital culture, the design examines how spatial experience, materiality, and engagement with nature can encourage slower forms of attention and foster embodied ways of being.

The project proposes a new typology of urban retreat: a place where architecture becomes a tool for restoring balance between digital connectivity and human experience.

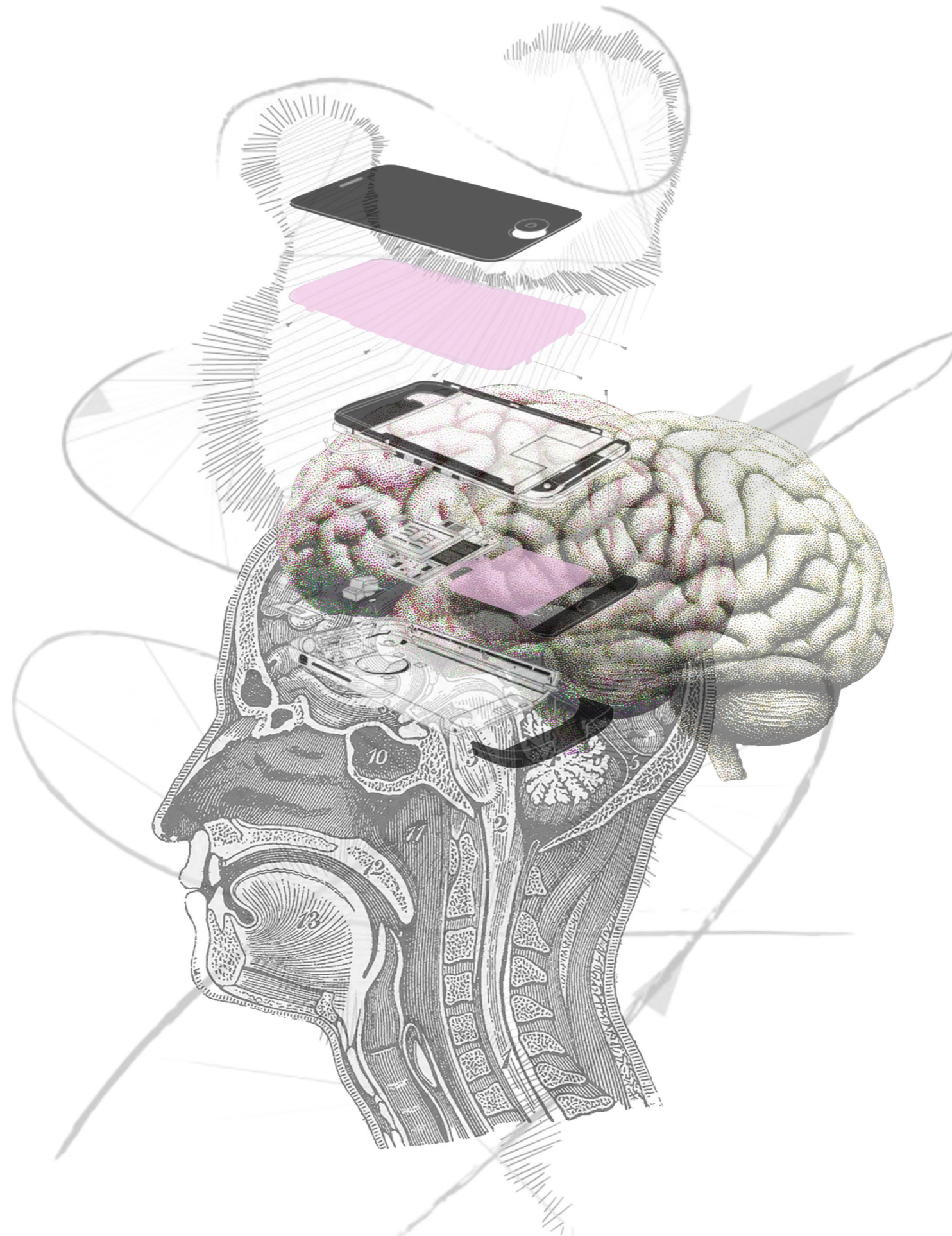


Figure 1. Conceptual collage. Source: Own work, 2026.

## introduction

### problem statement

The modern lifestyle, hyperconnected yet emotionally distant, has blurred the boundaries between work, rest, and reflection. This condition is especially evident among young people, who are growing up in a hyper-digital environment where screens and online media are deeply embedded in everyday life. Research by Trimbos Instituut (2026) shows that more than half of young adults (60%) feel they spend too much time in front of screens. Studies conducted during Media Literacy Week (2025) indicate that Gen Z (born between 1997 and 2012) spends on average 9.2 hours per day using screens, with smartphones alone accounting for approximately 4 hours and 27 minutes daily (Koning and Vossen 2025). Screen use is especially dominant at vulnerable moments, such as just before sleep (84%) and immediately after waking (65%).

While digital media enables connection, communication, and access to information, it also reinforces patterns of overuse. Young people are increasingly exposed to overstimulation, shortened attention spans, dopamine-driven behaviors, elevated stress levels, and disrupted sleep cycles (Ardesch, van der Vegt, and Kieffe-de Jong 2023). These effects contribute to growing concerns around digital well-being and mental health.

According to GGZ Interventie (2025), problematic internet use is difficult to recognise. The boundary between normal and excessive behaviour is blurred, as digital technologies are essential for education, social interaction, and daily functioning. As a result, many young people experience a paradox: they feel both dependent on and dissatisfied with their digital habits, often accompanied by a sense of shame or lack of control.

At the same time, stigma surrounding rehabilitation further limits access to support. This leaves many young people without appropriate spaces to address their behavior, while their dependency continues to impact their ability to pursue personal goals and well-being.

This project explores how architecture can become a tool for digital detox, emotional reset, and mindful living. As awareness grows around digital well-being and mental health, physical environments are increasingly recognized as powerful agents in shaping behaviour, focus, and emotional balance. This calls for a built environment where technology is intentionally minimized or excluded, and where spatial experience itself becomes the primary medium for restoration and healing.

## introduction

### relevance

Digital media has become a dominant environment in which young people socialize, learn, and form their identities. In the Netherlands, 96.8% of youth aged 12–25 use social media (Centraal Bureau voor de Statistiek, 2020), while in The Hague 13.2% of youth aged 12–18 are identified as problematic users (GGD Haaglanden, 2025). Platforms such as YouTube, TikTok, and Instagram rely on algorithm-driven content designed to capture attention (Commissariaat voor de Media, 2023).

Addiction rates vary, but remain significant. Jellinek (2026) reports figures ranging from less than 1% to as high as 38% internationally, while the Dutch Institute for Addiction Research (IVO) estimates a few percent in the Netherlands. Given the scale of internet use, this still represents a large and growing group, expected to increase with ongoing technological development. Despite this, there are currently no dedicated rehabilitation facilities for internet-addicted youth in the Netherlands. This project is therefore socially relevant as it addresses an emerging public health issue while reducing stigma through a more open and accessible approach to care.

## introduction

### motivation

I am motivated by a desire to support young people growing up in an increasingly digital world. I believe that reconnection begins with the body, through physical openness, learning by doing, and active participation in communities. Constant screen use often leaves people overstimulated and physically closed off, shaping both their posture and daily habits. Through this project, I aim to explore how architecture can help counteract these effects and create spaces that encourage movement, awareness, and meaningful connection.

## introduction

### objective

The objective of this graduation project is to design a post-digital detox retreat in Binckhorst, The Hague, where young people can temporarily step away from digital technologies and immerse themselves in a restorative environment. Through the integration of landscape, wellness, education, and community, the project aims to create a setting that supports their wellbeing.

introduction  
research questions

The main research question is:

“How can a new architectural typology of a digital detox retreat, “a soft rehabilitation” support young adults in disconnecting from digital technologies and reconnecting with themselves, others, and their physical environment?”

The sub-questions are structured into three categories:

Spatial experience:

1. What spatial and sensory qualities contribute to reducing digital overstimulation and promoting wellbeing?

Program:

2. How can a retreat program combining accommodation, wellness, therapy, education, and communal activities be translated into an architectural typology suitable for the post-industrial context of Binckhorst?

Context and appearance:

3. How can the industrial waterfront landscape of Binckhorst be transformed into an environment that supports restoration, learning, and community building?

This structured approach provides a clear framework for guiding the design process.

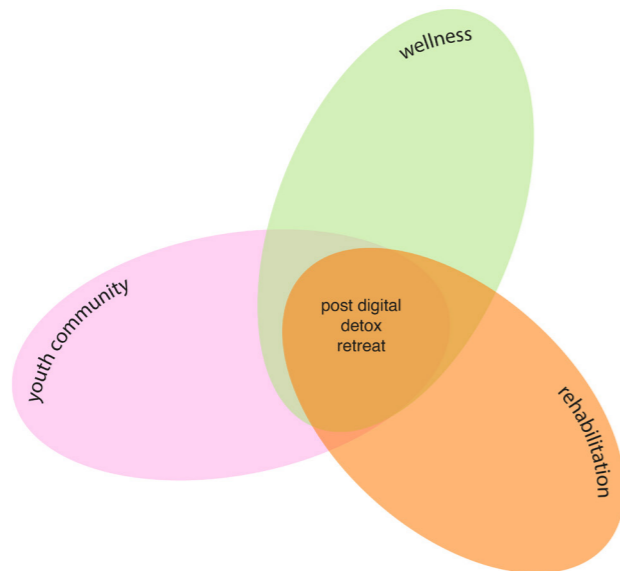


Figure 2. Concept diagram. Source: Own work, 2026.

introduction  
scope

This project investigates the design of a digital detox retreat for young adults within the post-industrial context of Binckhorst, The Hague (Gemeente Den Haag 2019; 2020; 2025; BURA 2025). Located along the waterfront, the proposal transforms a former industrial site into an urban retreat that offers temporary withdrawal from the demands of contemporary digital life. A detailed site analysis can be found in Appendix B.

The retreat accommodates up to 80 guests and is structured around a seven-day digital detox program. The architectural program includes private accommodation, wellness facilities, therapy spaces, educational environments, workshops and communal dining area. The integration of the Binckhorst Waterfront Park and using water, vegetation, and outdoor spaces to strengthens the relationship between architecture, nature, and wellbeing.

The project investigates how architecture can support digital detoxification through spatial experience, sensory design, and programme organisation. While the proposal addresses the effects of digital dependency and overstimulation, it does not seek to provide a clinical treatment model. Instead, it explores a form of soft rehabilitation that focuses on reflection, restoration, learning, and community building through architectural and landscape interventions.

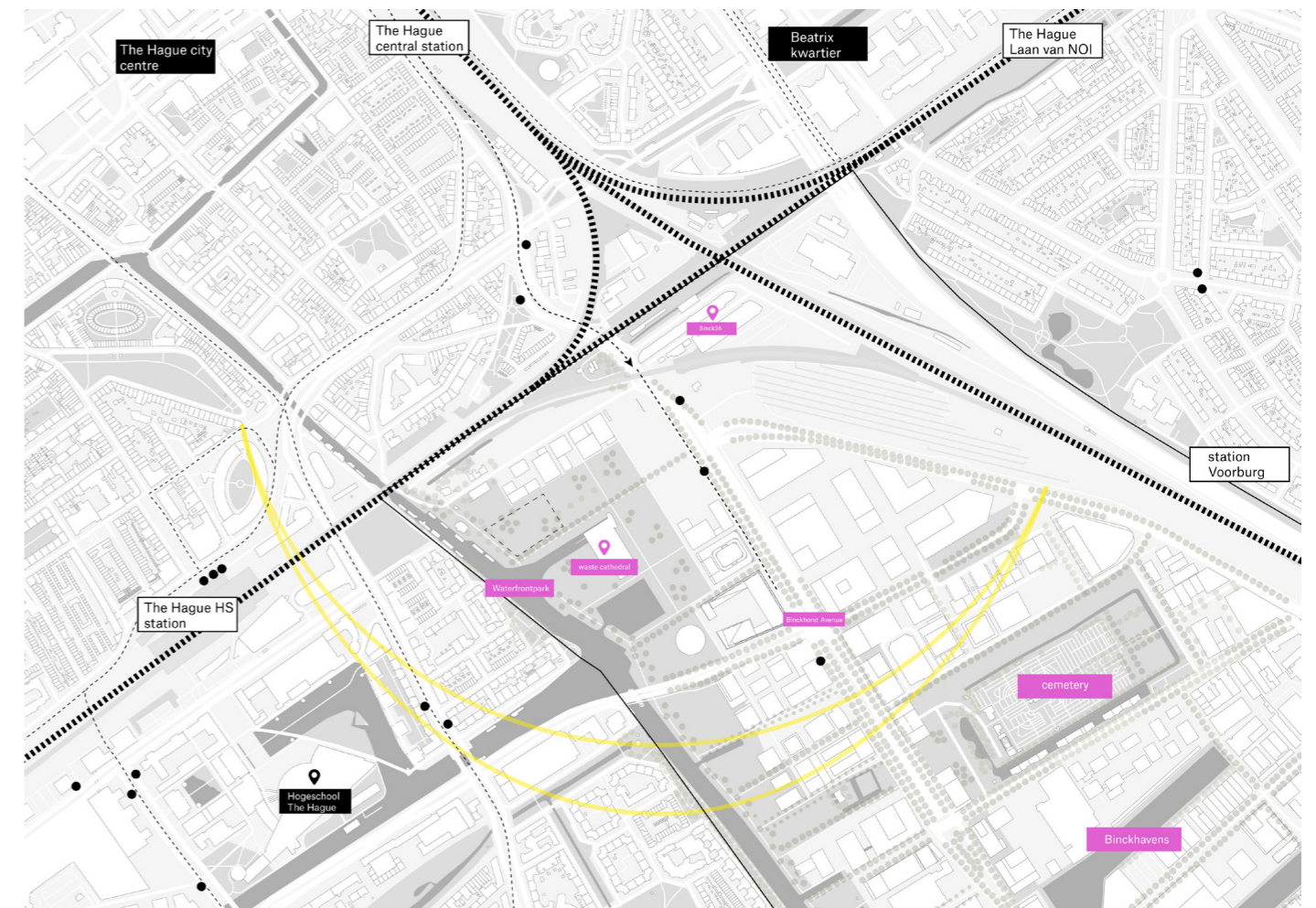


Figure 3. Site analysis summary. Source: Own work, 2026.

introduction  
**scope | program**

The core programmatic functions include (see appendix C for full program):

**Arrival**

- Entrance
- Lobby
- Reception/welcome desk
- Lockers or “digital drop-off” area

**Individual area**

- Retreat cabins

**Therapy area**

- Individual therapy room
- Group therapy room
- Consultation room
- Family room
- Yoga/ meditation studio

**Communal area**

- Communal lounge
- Communal dining
- Kitchen
- Multipurpose workshop area

**Education and awareness area**

- Seminar hall/ Exhibition area
- Classrooms

**Spa and wellness area**

- Swimming pool
- Sauna
- Fitness centre

**Service**

- Offices
- Meeting room
- Breakroom
- Staff stays
- Storage
- Maintenance
- Mechanical rooms
- Toilets

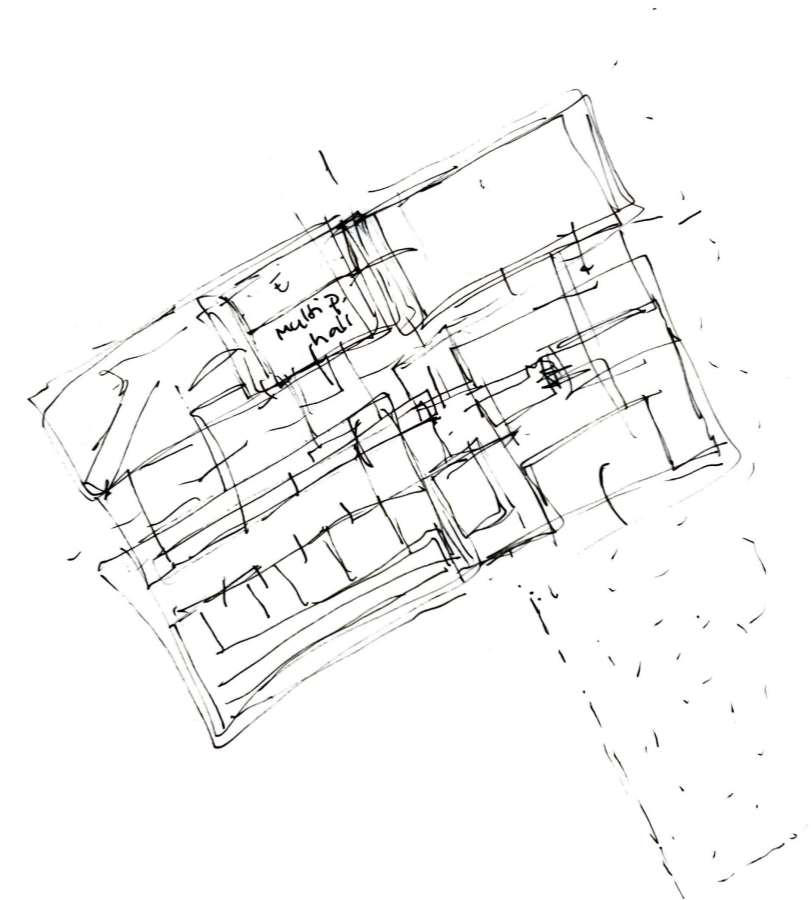


Figure 4. First concept sketch. Source: Own work, 2026.

## approach methods

This project adopted a research-by-design methodology in which research and design continuously informed one another throughout the process. Due to the interdisciplinary nature of the topic, combining digital wellbeing, architecture, and urban transformation, multiple research methods and design techniques were employed to develop the final proposal. The approach consisted of precedent studies, contextual analysis, user and programmatic research and an iterative design process.

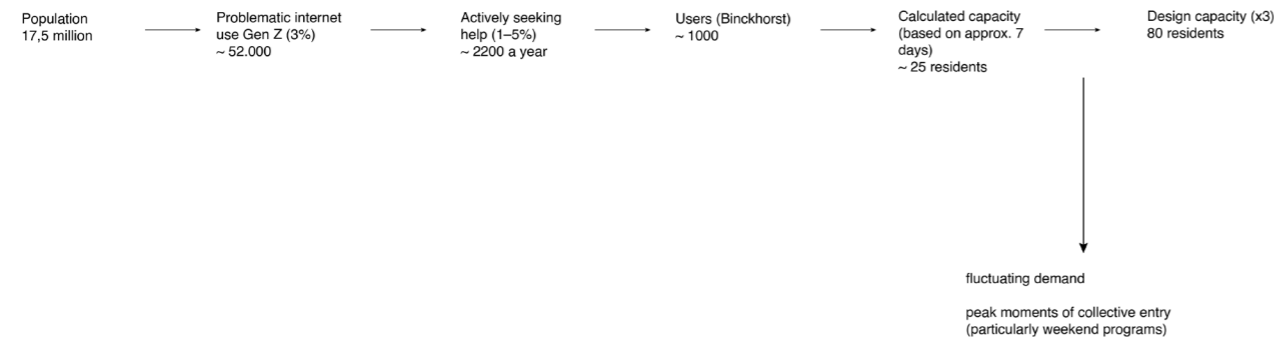
### methods **precedent and contextual analysis**

I used precedent studies to analyse existing projects related to youth, rehabilitation, community spaces, and wellness environments. These studies provide insight into spatial organization, programmatic composition, material use, and atmosphere, and help translate theoretical concepts, such as grounding, slowing down, and reconnection, into architectural strategies. A detailed analysis of these precedents can be found in Appendix E. As limited architectural precedents exist that specifically address digital detoxification, the research drew from a wider range of projects to identify spatial qualities that support my new typology. A detailed analysis of these precedents can be found in Appendix C.

As the Waterfront Park forms a key component of the ongoing redevelopment of Binckhorst, I gave particular attention to the relationship between the site and the water and looked at opportunities for integrating water vegetation and public routes into the design to create a stronger connection between the retreat and its surroundings. These findings informed the overall spatial strategy, resulting in a gradual transition from public to communal and ultimately private spaces. By extending the waterfront into the site and using landscape as both a connective and buffering element, the design creates an environment that balances openness, privacy, and engagement with nature.

### methods **user and program research**

Research was conducted into the potential demand for a digital detox retreat within the Binckhorst context. Demographic studies and population data were used to estimate the target group and determine the appropriate capacity of the retreat. In parallel, I looked at the program of rehabilitation centres, retreats and wellness programs. I translated this into a 7 day retreat program which resulted in determining spatial requirements and functional relationships throughout the design.



IVO (2013)  
GGD Haaglanden (2025)

Figure 5. Users framework. Source: Own work, 2026.

## methods

### iterative design methods

The design process was highly iterative and relied on a range of architectural tools and techniques. Initial concepts were explored through sketching, diagramming, zoning studies, and physical concept models. Different program configurations and spatial relationships were tested to evaluate how the retreat experience could be translated into architectural form. Throughout the process, plans, sections, and massing studies were used as design tools, as well as 3D modelling. This allowed me to enable continuous evaluation and refinement of the proposal.

## approach

### theoretical framework

The theoretical framework for this project drew upon theories of learning environments, phenomenology, wellbeing, and rehabilitation architecture.

### theoretical framework

#### learning through space

I drew on Hertzberger's principles of learning through spatial encounter (Hertzberger 2008) and Walls That Teach (Pietsch, S., & Mueller, A., 2015), that architecture can structure environments that encourage interaction, reflection and informal learning. Hertzberger emphasizes that architecture should not prescribe behavior, but instead create conditions for appropriation, encounter, and interpretation by users. His concept of "in-between spaces" highlights the importance of transitional zones, such as thresholds, stairs, and courtyards, as places where informal interaction, discovery, and a sense of ownership can emerge, especially in the case of youth.

### theoretical framework

#### digital detox and embodied experience

The project emerged from the observation that contemporary digital environments increasingly influence attention, behaviour, and wellbeing. Research has shown that excessive exposure to digital stimuli can contribute to cognitive overload, reduced concentration, stress, and mental fatigue (Kolhe and Naik 2025; Desai et al. 2024). Within this context, digital detoxification was understood not simply as the removal of technology, but as an active process of restoring attention and reconnecting with physical experience.

Studies suggest that activities such as movement, mindfulness, social interaction, creative practices, and time spent in nature can positively support mental wellbeing and cognitive recovery (Raypole 2025; Nashit 2025). At the same time, a growing interest in digital detox and "ping minimalism" reflects a broader desire for environments that reduce overstimulation and encourage presence and reflection (Marchese 2025).

## theoretical framework phenomenology and sensory architecture

Phenomenological theories provided an important foundation for the design. Drawing on the work of Husserl (2024), Norberg-Schulz (1980), and Pallasmaa (2005), the project explored how architecture is experienced through the body and senses. Norberg-Schulz emphasised the importance of orientation, identity, and connection to place (Norberg Schulz 1980, 5), while Pallasmaa highlighted the role of materiality, light, sound, scale, and movement in shaping human experience (Pallasmaa 2005, 41). These principles informed the spatial design of the retreat through the use of natural materials, carefully framed views, sensory transitions, and strong connections to the surrounding landscape.

## theoretical framework rehabilitation, community and wellness architecture

To develop the concept of a digital detox retreat as a form of “soft rehabilitation”, several rehabilitation and therapeutic environments were studied. Although digital detox facilities remain a relatively unexplored building type, rehabilitation centres provided valuable insights into how architecture can support wellbeing and behavioural change.

The Klimmendaal Rehabilitation Centre by Koen van Velsen (van Velsen 2011) is embedded within a forested landscape, establishing a strong connection between building and nature. It also demonstrated how circulation, movement, and visual connections can become active components of the healing process. The Bad Schallerbach Therapy Centre (Architects Collective ZT GmbH 2019) represents a transition from institutional healthcare to a holistic, spa-like environment. The design maximizes natural light and incorporates materials such as wood and stone to create a calming atmosphere. Variations in material and color define different programmatic zones and support intuitive wayfinding, while reinforcing the relationship between space, well-being, and the natural environment. Similarly, the 165 REHAB Clinic by Herzog & de Meuron highlighted the importance of flexible communal spaces that encourages social interaction, natural light, sensory qualities, and connections to nature.

These precedents informed the development of a retreat environment that moves away from traditional healthcare models and instead combines wellness, education, therapy, and community within a restorative architectural setting.

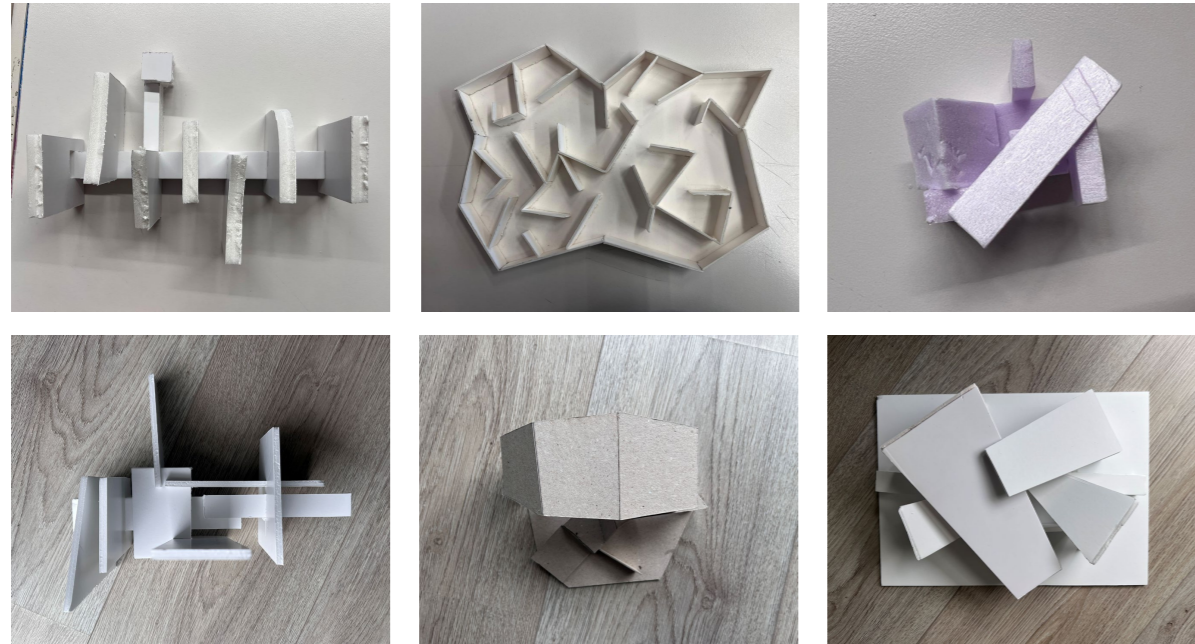


Figure 6. Concept models in plan. Source: Own work, 2026.



Figure 7. Concept models in plan. Source: Own work, 2026.

As a start, I explored spatial qualities by making concept models. These models were a start in thinking about the concept of diferent entryways, unexpected corners, playing with people's attention, distracted elements, height levels, playfulness and stacking different elements.

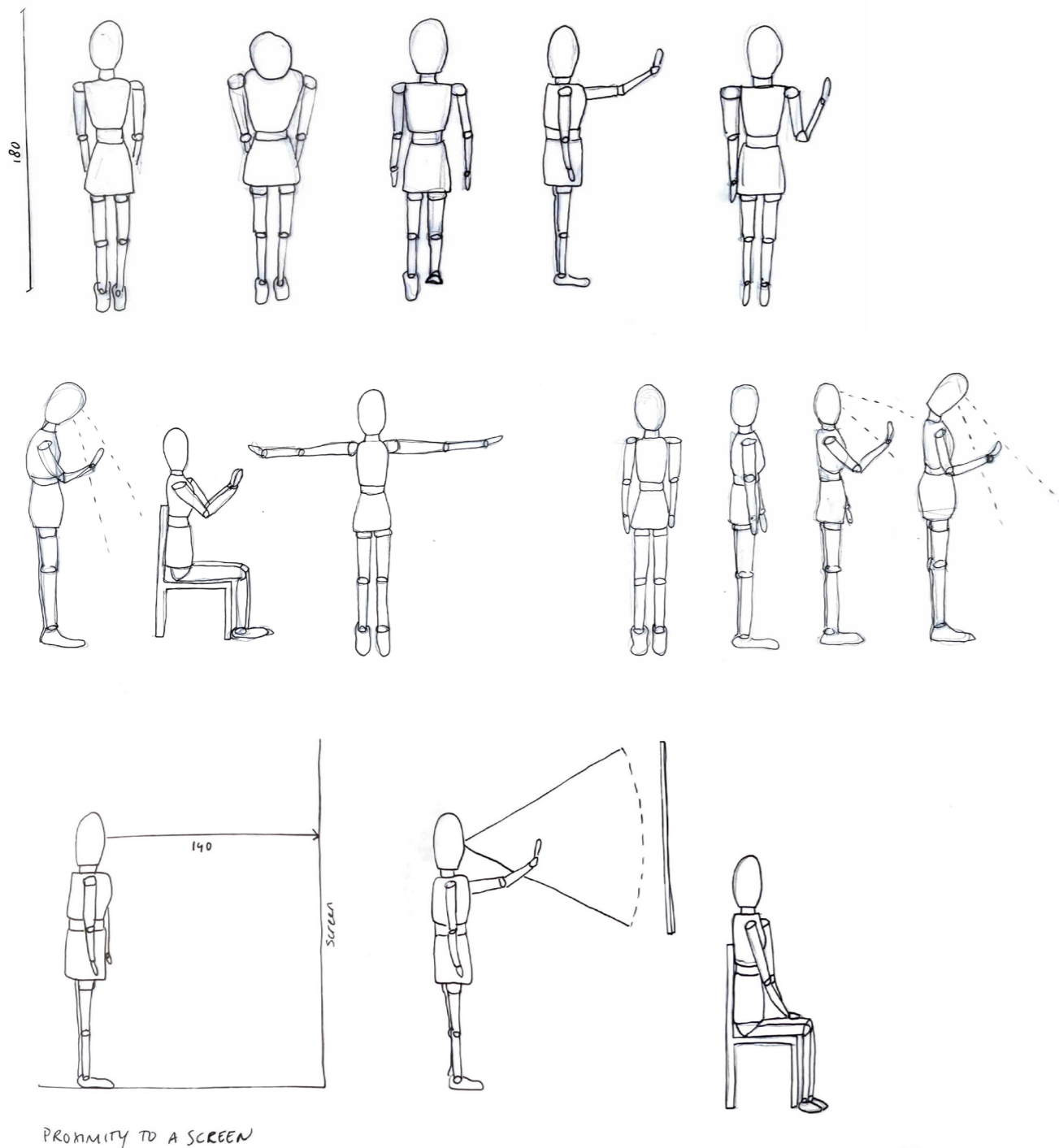


Figure 8. Binckhorst site model. Source: Own work, 2026.

As a group, we made a site model of Binckhorst.

The design process begins with a series of studies exploring the relationship between the body, space, and digital attention. Through analytical drawings, the project investigates how posture, movement, and proximity are influenced by screen use and how these conditions affect awareness of the surrounding environment and other people.

BODY SCALE



PROXIMITY TO A SCREEN

Figure 9. Body study. Source: Own work, 2026.

LEVEL OF INTIMACY IN SPACE 1:20

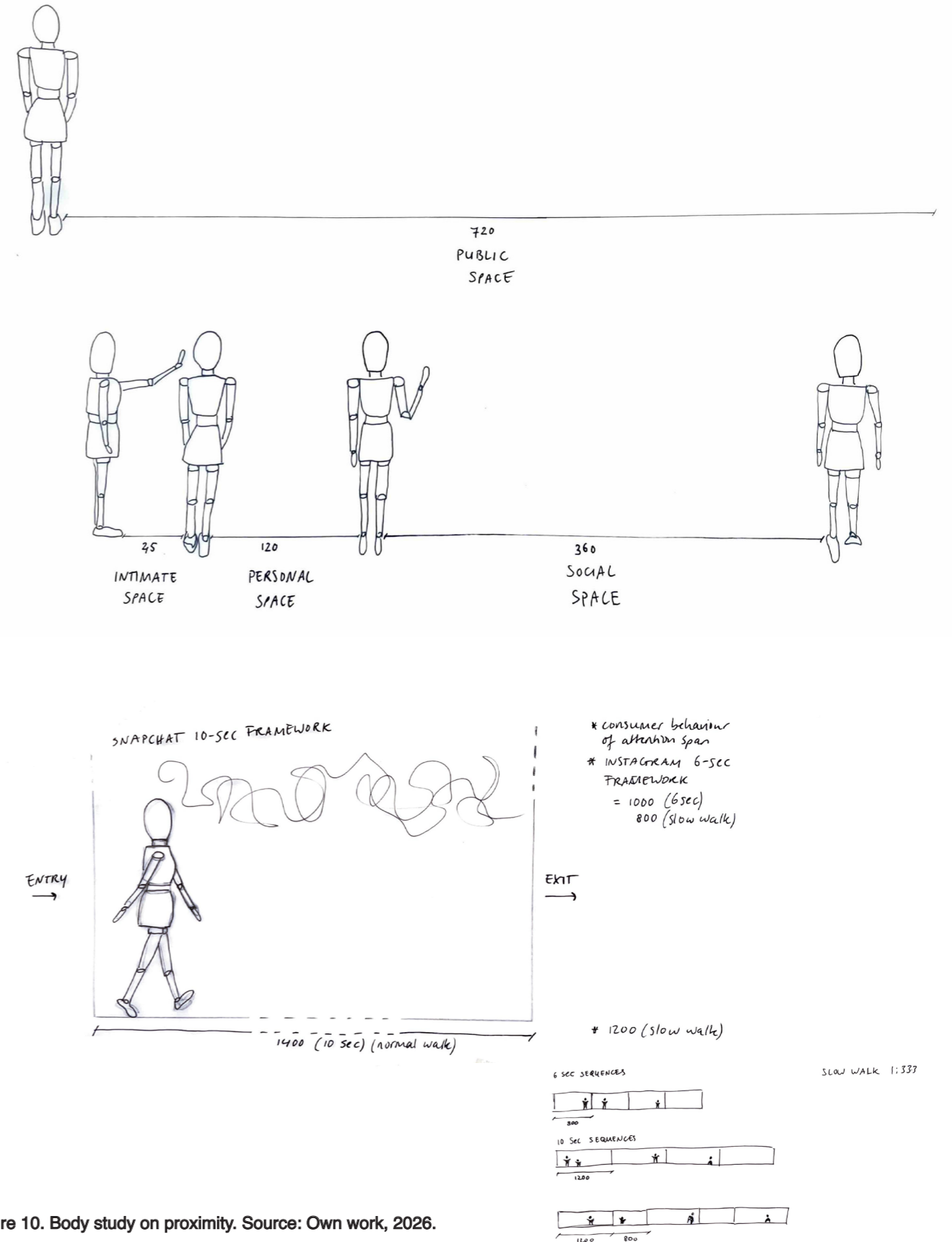
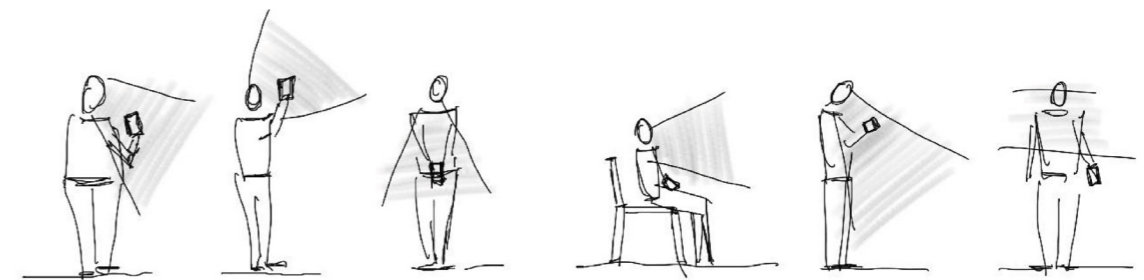
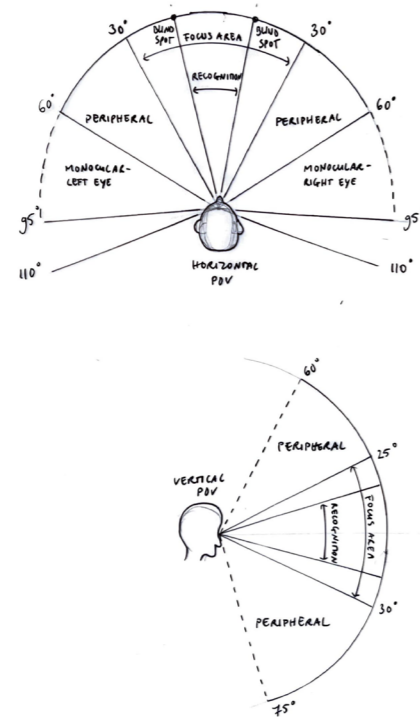


Figure 10. Body study on proximity. Source: Own work, 2026.

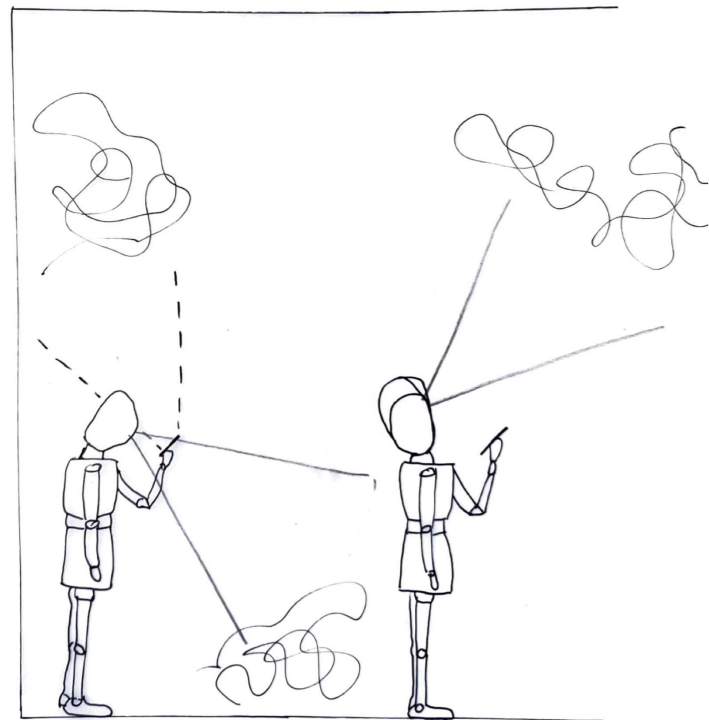
THE HUMAN EYE



phone focused holding phone no phone

Figure 11. Body study: vision. Source: Own work, 2026.

REFLECTION OF THE SCREEN



DIFFERENT ANGLES

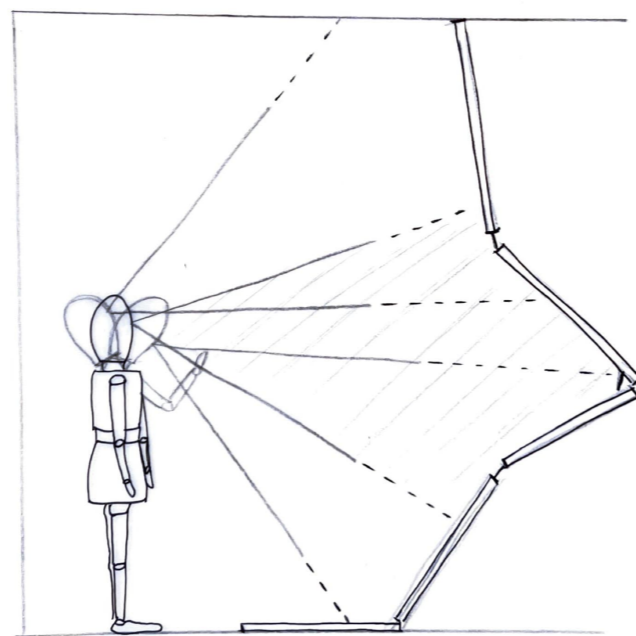


Figure 12. Body study: vision. Source: Own work, 2025.

These studies map different bodily states in relation to architectural elements such as walls and different angles.

Figure 13. Different body positions of phone use. Source: Own work, 2026.

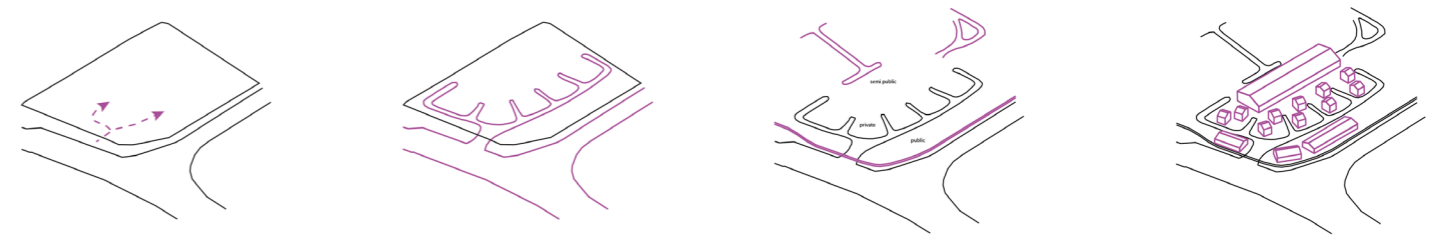
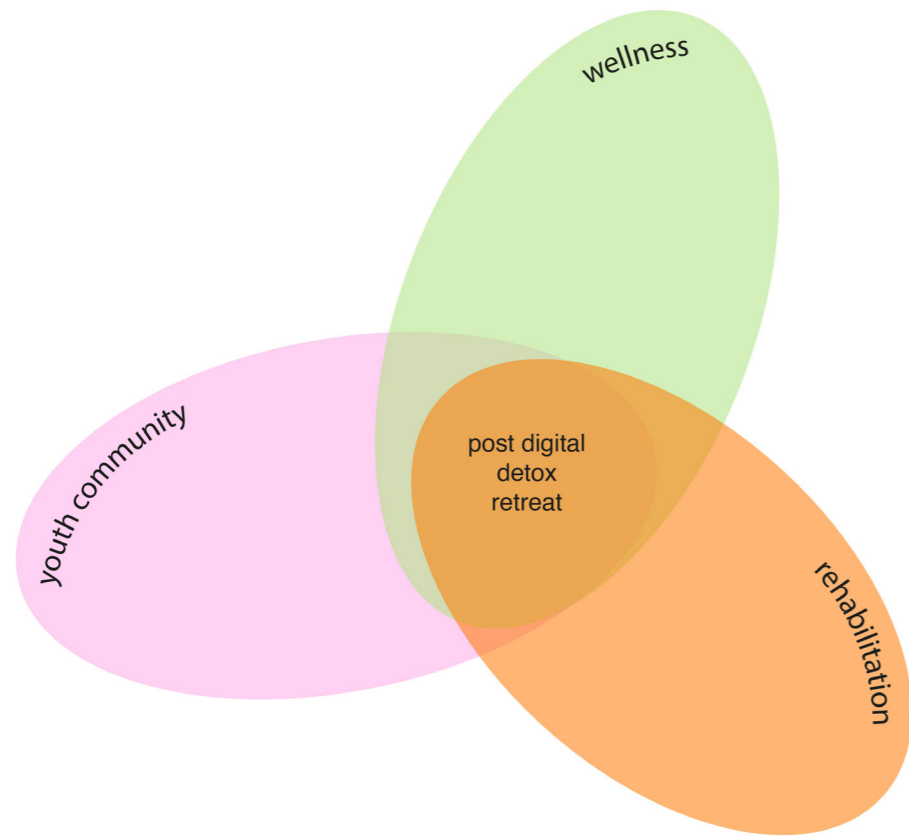


Figure 14. Concept development. Source: Own work, 2026.

Figure 15. Site zoning. Source: Own work, 2026.

	detox			retreat		
	day 2	day 3	day 4	day 5	day 6	day 7
day 1						
	yoga/meditation	yoga/meditation	yoga/meditation	yoga/meditation	yoga/meditation	yoga/meditation
	breakfast	breakfast	breakfast	breakfast	breakfast	breakfast
	analog workshop	analog workshop	analog workshop	analog workshop	analog workshop	analog workshop
	outdoor activity	outdoor activity	outdoor activity	outdoor activity	outdoor activity	outdoor activity
	lunch	lunch	lunch	lunch	lunch	lunch
check-in	therapy	therapy	education/reflection	group therapy	group therapy/reflection	check-out
digital drop-off & settle in	analog workshop	analog workshop	cooking together	cooking together	cooking together	
welcome and orientation	dinner	dinner	dinner	dinner	dinner	
personal time	personal time	personal time	storytelling/games/reflection	storytelling/games/reflection	storytelling/games/reflection	
medication	guided breathing	guided breathing	personal time	personal time	personal time	

Figure 16. Seven day retreat program. Source: Own work, 2026.

The program is organised around a seven-day retreat experience designed to gradually reduce digital stimulation and encourage reconnection with everyday physical and social experiences. Spaces are arranged to support different stages of the detox process, ranging from private retreat and reflection to shared learning, wellness activities, and communal engagement. The resulting program combines accommodation, therapeutic support, analog workshops, movement, wellness facilities, and social spaces within this landscape.

The first three days are for the individual to detox. The program is therefore more private. The last four days are more a retreat, where group therapy and activities are more encouraged.



Figure 17. Site plan 1:2000 rescaled. Source: Own work, 2026.



Figure 18. Site plan 1:500. Source rescaled: Own work, 2026.

The 1:500 site plan illustrates the spatial relationship between the communal building, wellness facilities, yoga pavilion, and residential cabins. The site is organised around a gradient of privacy, moving from more collective and accessible areas to secluded retreat spaces.

The northern part of the site accommodates the communal functions, including the main building, arrival area, and service access. This location allows for efficient logistics and guest drop-off while creating a central hub for dining, workshops, education, and social interaction. As the primary gathering space of the retreat, this zone forms the most active and communal part of the site.

The southern edge of the site engages with the public waterfront and pedestrian routes of Binckhorst. Here, the yoga pavilion, wellness facilities, and smaller pavilions are positioned to establish a stronger relationship with the surrounding landscape and waterfront. These facilities can also be accessed by visitors from outside the retreat, creating a gradual transition between the retreat community and the wider neighbourhood.

The residential cabins are situated at the centre of the site, forming the most private zone. To enhance a sense of retreat and separation from the urban environment, water from the Waterfront Park is extended into the site, creating natural buffers, framed views, and increased privacy. Trees further define these spaces, acting both as boundaries and as connectors between guests and the natural environment.



Landscape section 1:200

Figure 19. Landscape section. Source: Own work, 2026.

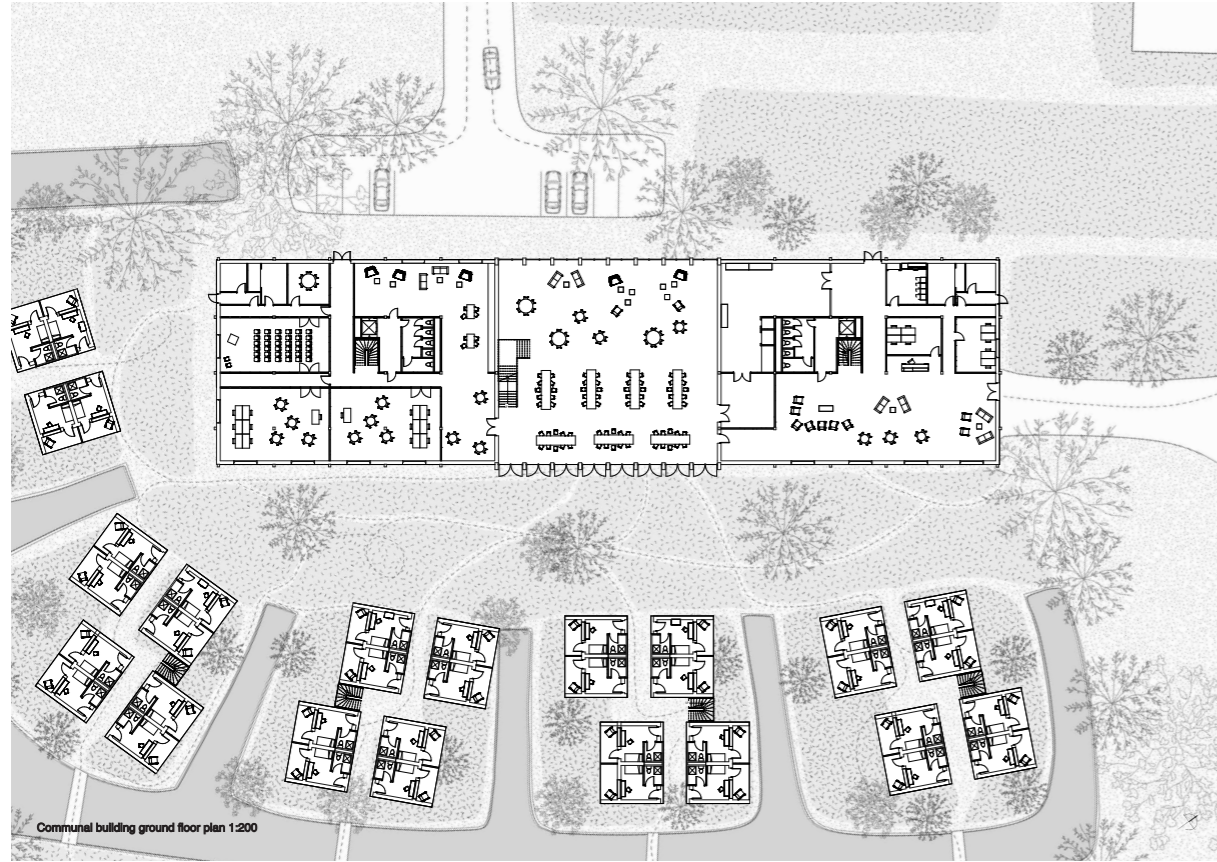


Figure 20. Communal building ground floor plan 1:200 rescaled. Source: Own work, 2026.

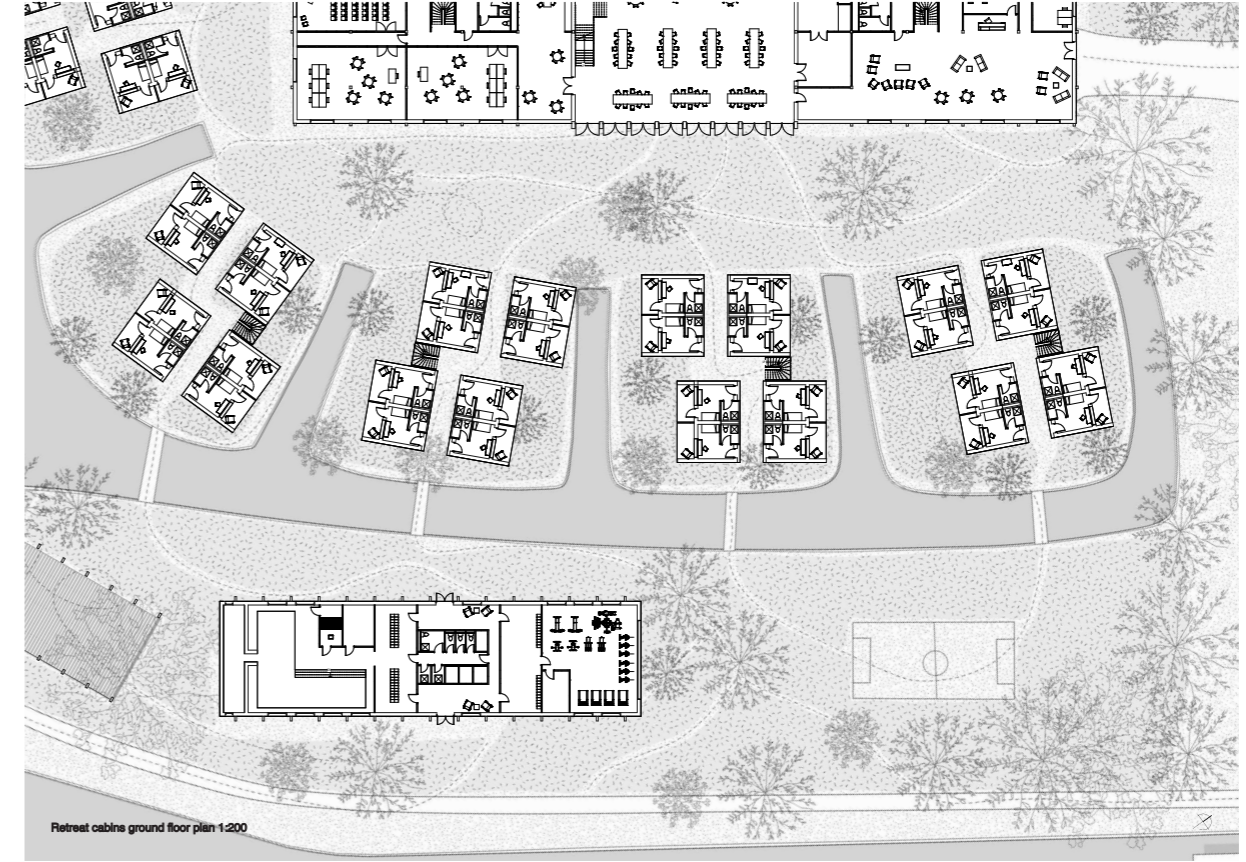


Figure 22. Private retreat cabins ground floor plan 1:200 rescaled. Source: Own work, 2026.

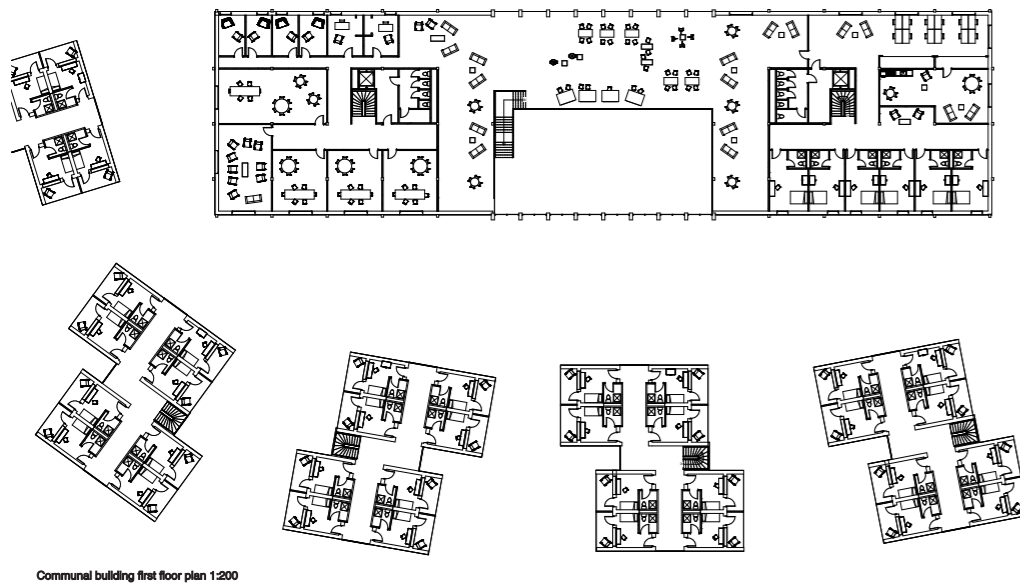


Figure 21. Communal building first floor plan 1:200 rescaled. Source: Own work, 2026.

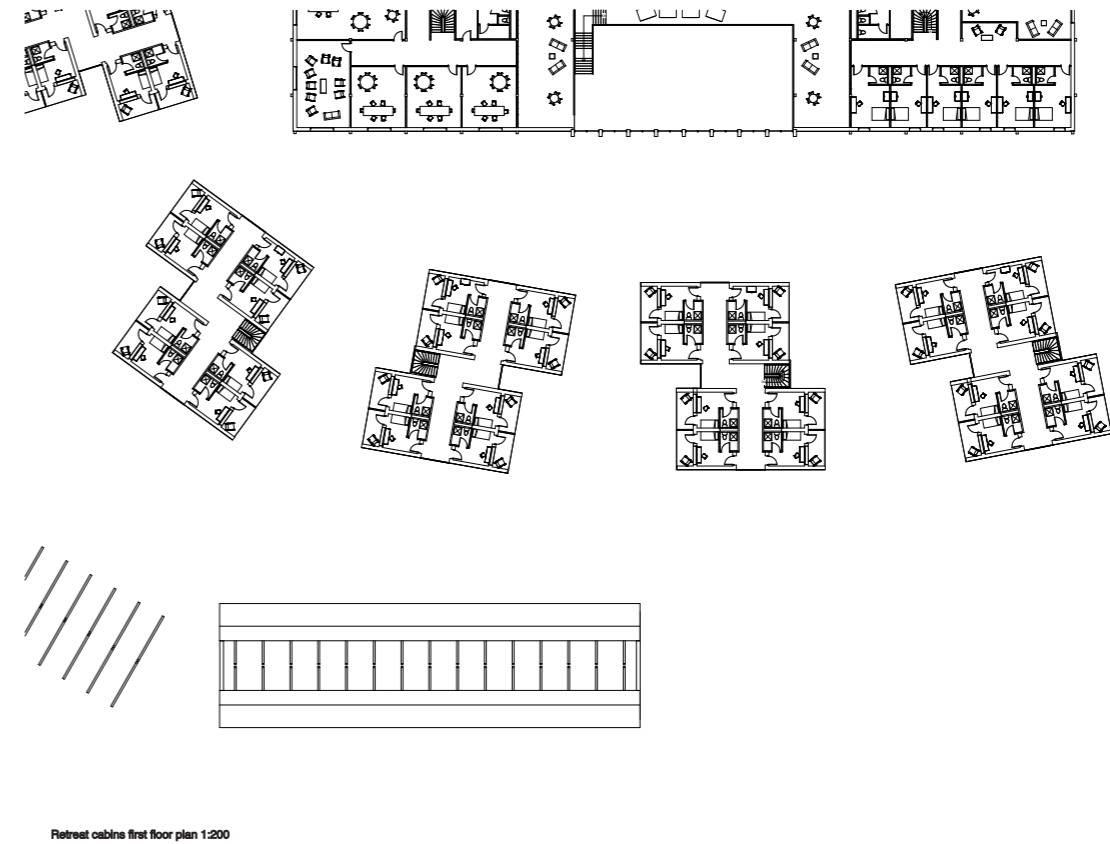


Figure 23. Private retreat cabins first floor plan 1:200 rescaled. Source: Own work, 2026.

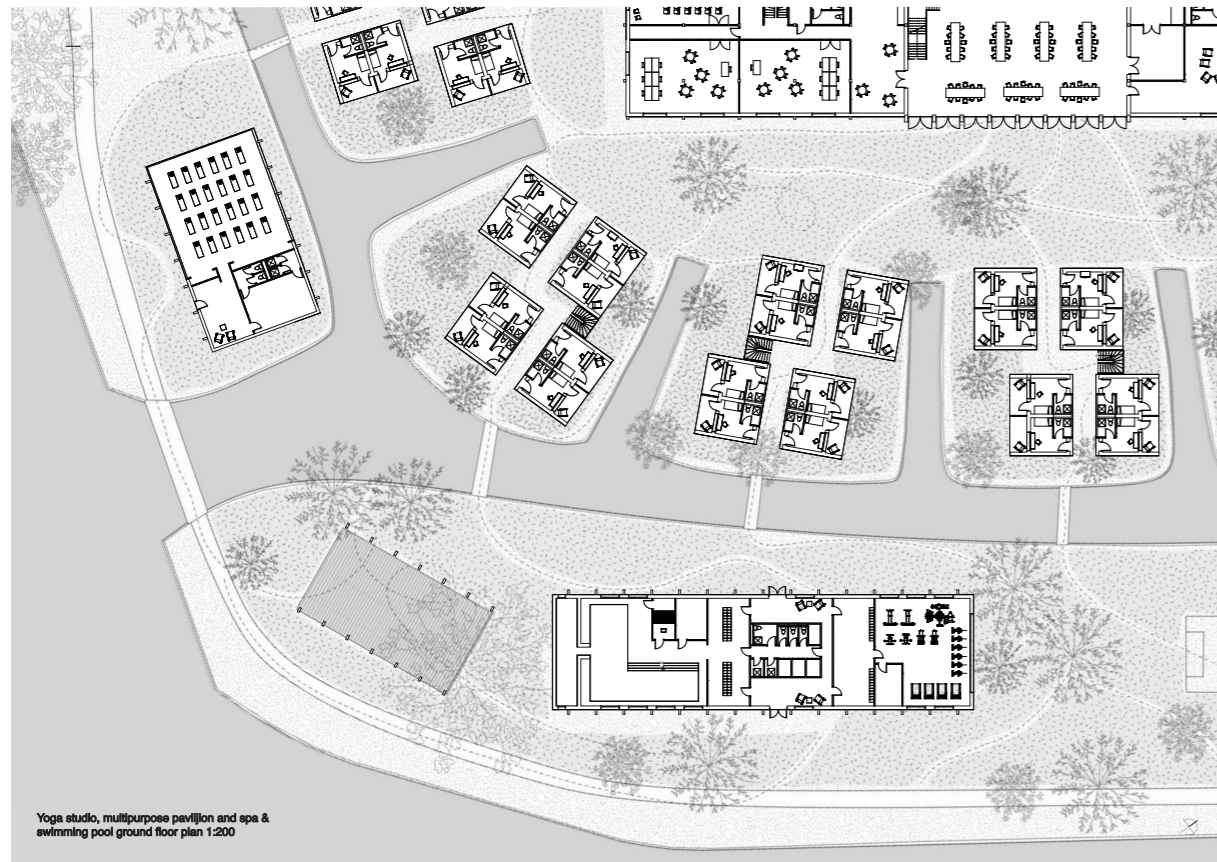


Figure 24. Yoga pavilion, wellness facility and multipurpose pavilion ground floor plan 1:200 rescaled. Source: Own work, 2026.

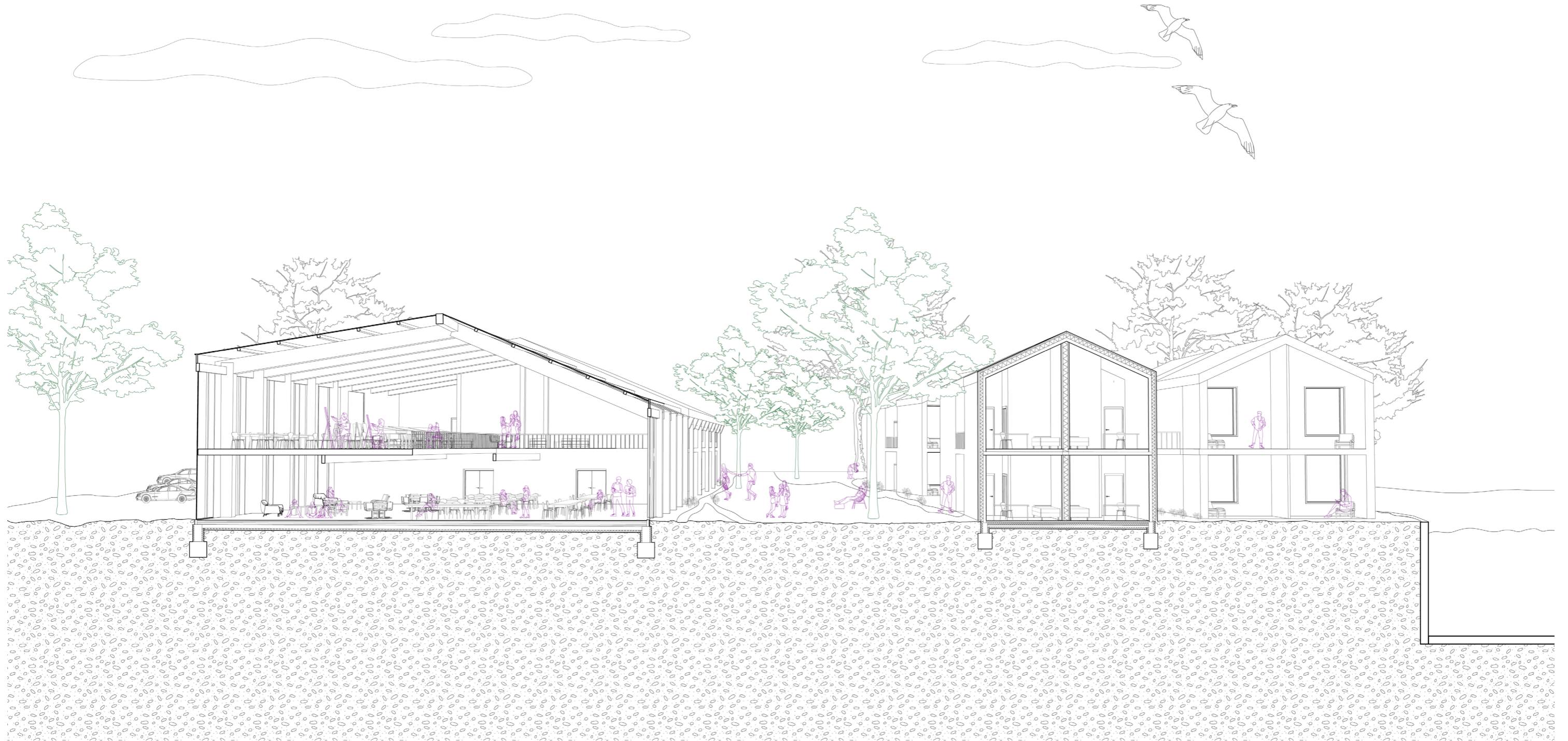
The floor plans of the communal building are organised around a central communal core that forms the social heart of the retreat and provides clear orientation throughout the building. Upon arrival, guests enter through the reception area on the ground floor, which is located alongside the administrative offices and staff workspaces.

At the centre of the ground floor, the communal dining space acts as the main gathering area for guests. Designed as a place for both nourishment and social connection, it incorporates a front kitchen where guests can participate in cooking activities, supported by a back kitchen that accommodates the operational requirements of food preparation and service. Adjacent to the dining area, the educational spaces provide room for lectures, exhibitions, and classes focussing on digital awareness.

The first floor accommodates functions that require greater privacy and concentration. Above the communal dining area, a flexible workshop zone provides space for creative and hands-on activities such as analog art, making, and other learning-by-doing workshops. Above the office wing, staff facilities are located, including break rooms and accommodation for employees and visiting facilitators who stay on site. The therapy area is positioned above the educational spaces, creating a quieter environment for individual consultations and group sessions while remaining connected to the building's overall programme. By organising the programme around a central communal space, the building maintains clear circulation and accessibility.

In addition to the communal building, the retreat includes dedicated facilities that support relaxation, mindfulness, and physical wellbeing. The yoga pavilion is positioned within the landscape to maximise views towards the surrounding greenery and water. Large openings and a strong visual connection to nature enhance the sense of retreat and encourage guests to slow down and become more aware of their surroundings.

The wellness building complements these activities by offering spaces focused on restoration and recovery. The spa includes a sauna, relaxation areas, and a swimming pool. The building also incorporates quieter detox swimming area where guests can simply spend time in silence.



The 1:50 sections illustrate both the architectural atmosphere and the construction principles of the project. The section of the private retreat stays and the communal show the contrast of the intimate space and the social space. The water and the park and trees support the privacy, but also acts as a gradient between these two spaces.

I used a timber construction system based on CLT floors and walls, supported by a glulam column-and-beam structure. The exposed timber elements contribute to the warm and calming character of the retreat while providing a sustainable and efficient structural solution. Particular attention is given to the relationship between structure, enclosure, and spatial experience, showing how natural light, views, and materiality shape the atmosphere of both collective and private spaces.

Figure 25. Perspective section 1:50 rescaled. Source: Own work, 2026.

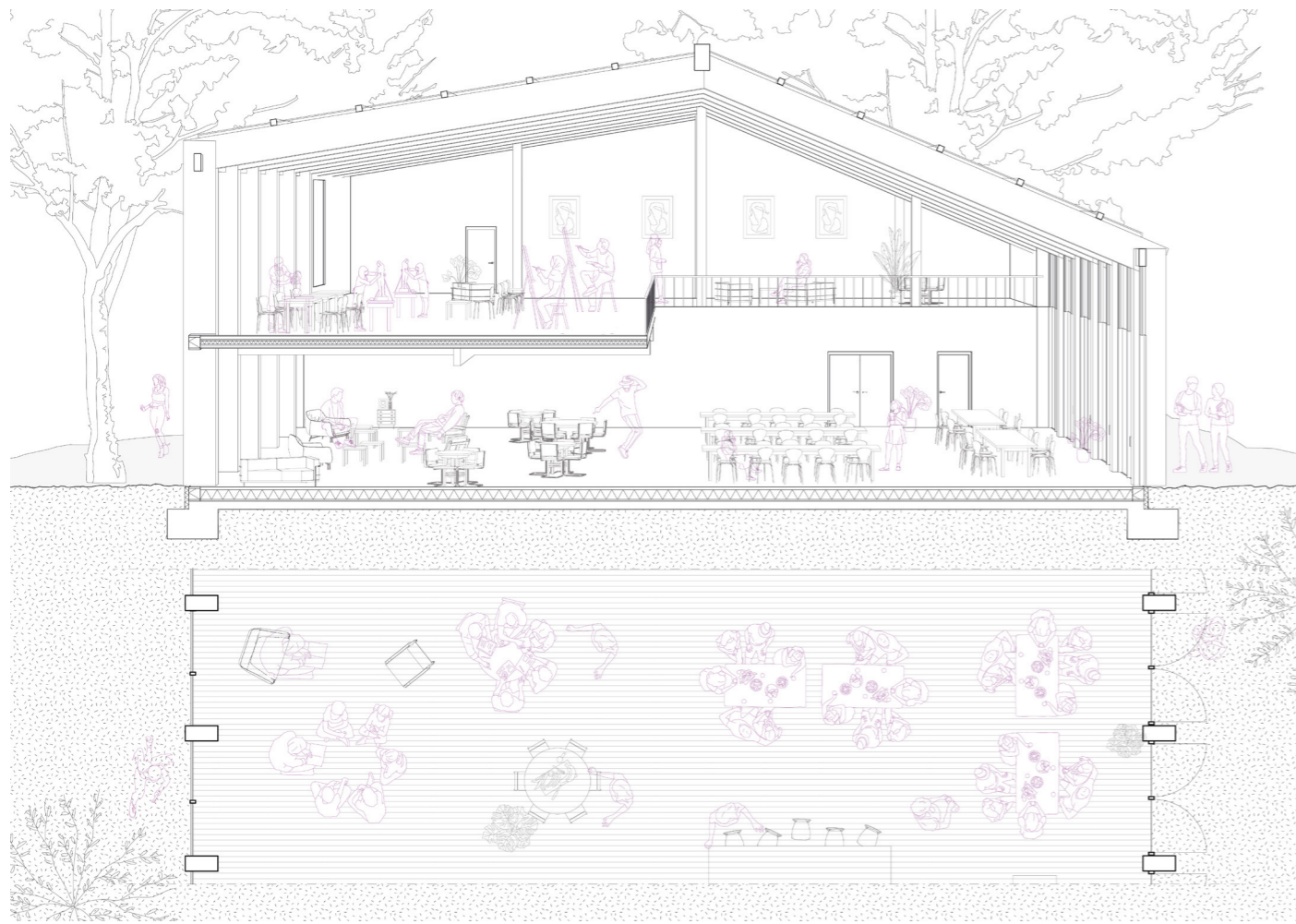


Figure 26. Perspective section 1:50 communal building. Source: Own work, 2026.

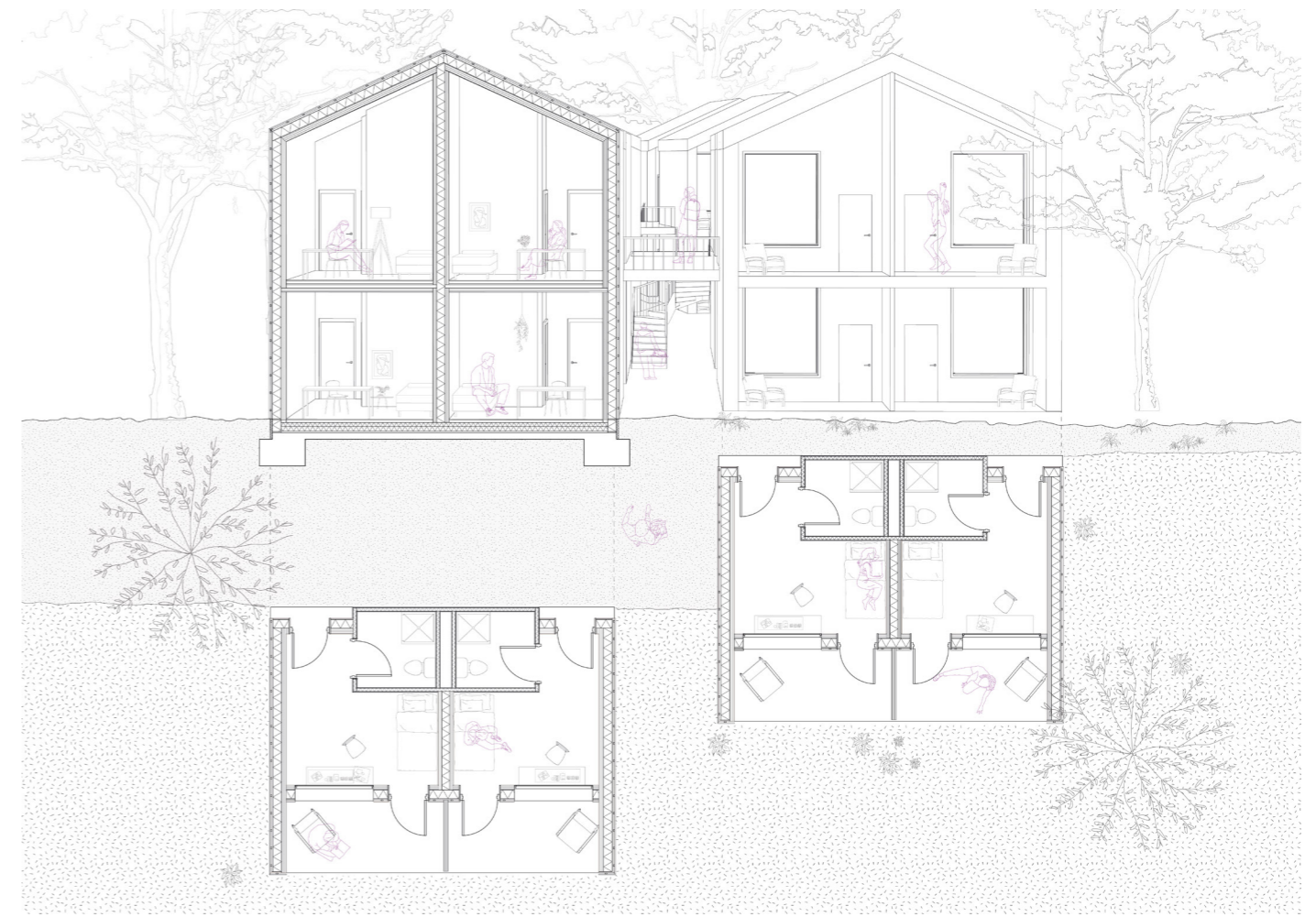


Figure 27. Perspective section 1:50 retreat stay. Source: Own work, 2026.

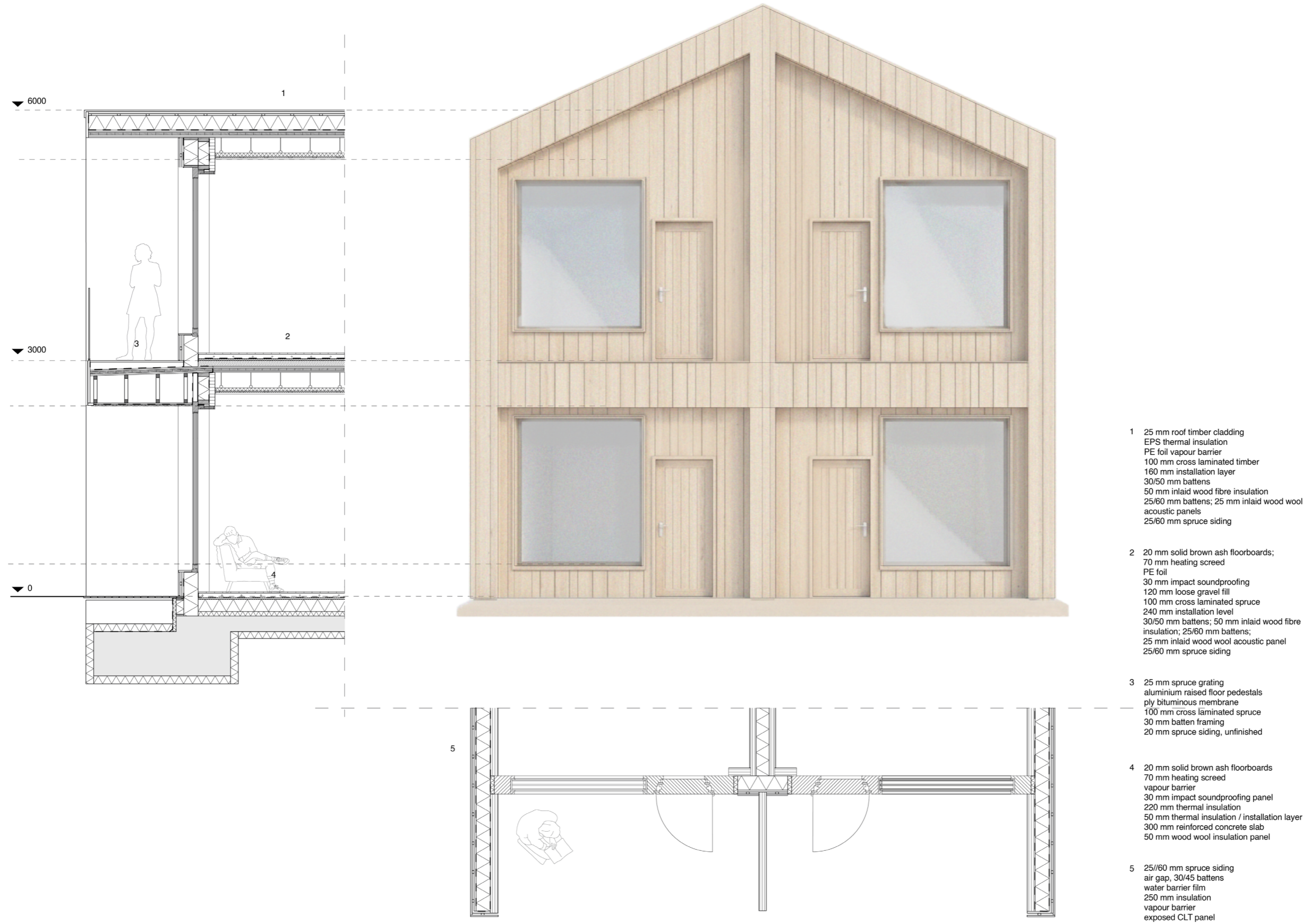


Figure 28. Facade fragment 1:20 rescaled. Source: Own work, 2026.

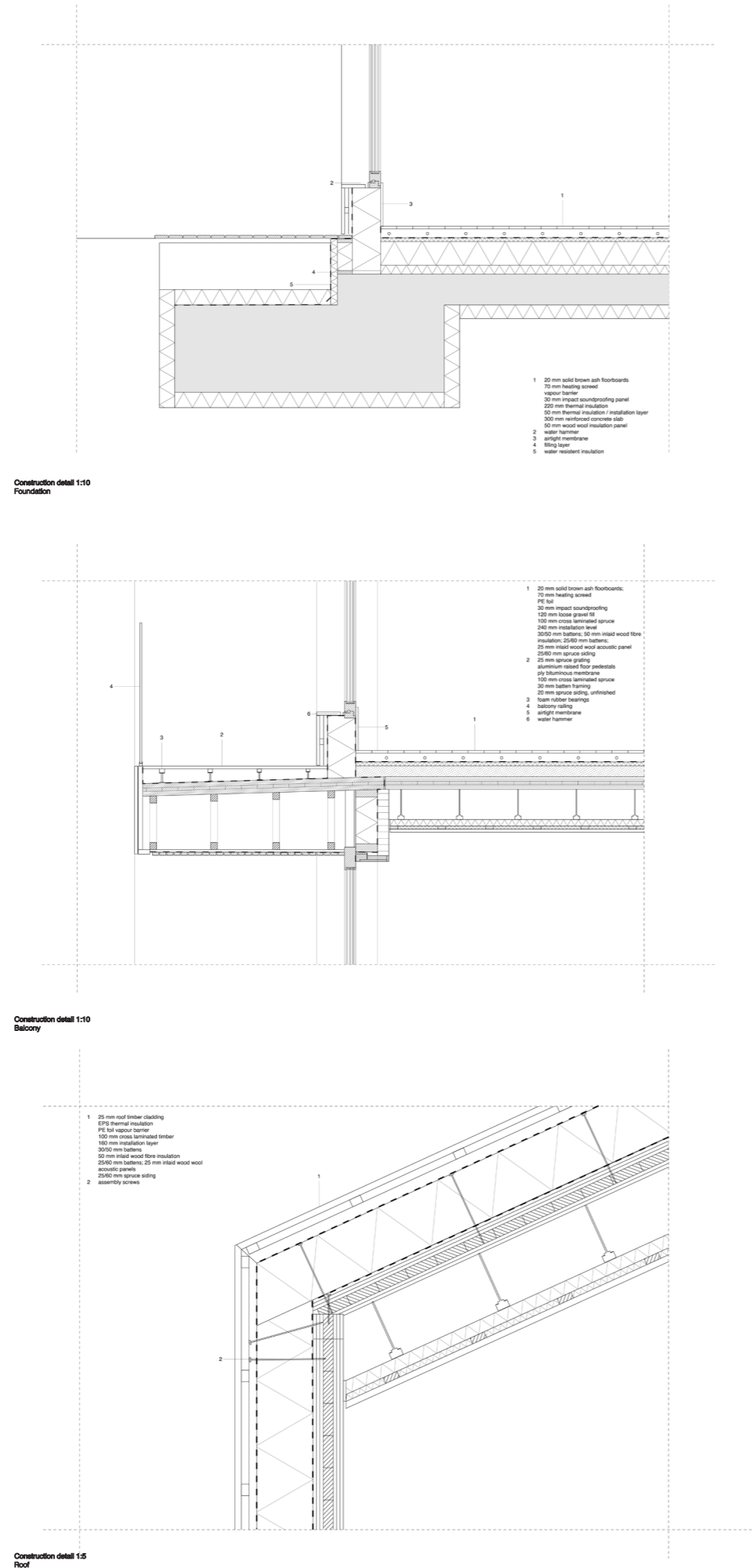


Figure 28. Details 1:10 rescaled. Source: Own work, 2026.



Figure 29. Impressions. Source: Own work, 2026.





This project investigated how a new architectural typology of a digital detox retreat, conceived as a form of “soft rehabilitation”, can support young adults in disconnecting from digital technologies and reconnecting with themselves, others and their environment. Through the design of a seven-day retreat in Binckhorst, the project explored how architecture can actively contribute to wellbeing in an increasingly digital society.

The design answers the main research question by demonstrating how architecture can actively support digital detoxification through a combination of spatial experiences, restorative landscapes and a carefully structured retreat program. The three sub-questions provided the framework for the design process and have been addressed through the final proposal.

Firstly, the research demonstrated that spatial and sensory qualities play a significant role in reducing digital overstimulation and promoting wellbeing. Throughout the design, natural materials, daylight, views towards water and vegetation and sequenced transitions between spaces were used to create a slower and more mindful environment. The combination of private retreat spaces, communal areas, and landscape experiences encourages users to shift their attention away from screens and towards their surroundings and to each other. Secondly, the project explored how a retreat program combining accommodation, wellness, therapy, education and communal activities can be translated into an architectural typology. The resulting design integrates these functions into a coherent spatial journey that supports different stages of the detox process. The communal building acts as the social and educational and heart of the retreat, while the cabins, yoga pavilion, wellness facilities spaces provide opportunities for reflection and healing. Together, these elements form a new typology that combines aspects of wellness, learning, and therapeutic support within a single architectural framework.

Finally, the project investigated how the industrial waterfront landscape of Binckhorst can be transformed into a urban detox landscape. Rather than isolating the retreat from its surroundings, the design works with the existing qualities of the site by extending the waterfront into the landscape, introducing planting, and creating a gradient of public, communal, and private spaces. This approach establishes a strong connection between the retreat and its context while providing the spatial conditions necessary for withdrawal but also community formation.

Technically, the ambitions of the project are supported by a timber construction system consisting of CLT and glulam elements, chosen for their environmental performance, structural efficiency, and warm material character. The integration of landscape, water, and timber construction reinforces the project’s ambition to create a environment that responds both to the challenges of digital dependency and to the ongoing transformation of Binckhorst.

In conclusion, architecture can play an active role in supporting digital detoxification by shaping environments that encourage mindfulness, social connection, sensory awareness and engagement with the physical world. As a new typology of urban retreat, the proposed digital detox center demonstrates how architecture can offer young adults a temporary alternative to the constant connectivity of contemporary life, helping to restore a healthier balance between digital engagement and human life.

As digital technologies increasingly influence daily life, the built environment has the potential to provide spaces that support meaningful social interaction. The proposed digital detox retreat demonstrates how architecture can contribute to mental wellbeing, not a closed institution but an open and recognisable place for public service.

For the architectural profession, the project highlights the potential for new typologies that respond to emerging social and behavioural challenges. While architecture cannot solve digital dependency on its own, it can create environments that encourage healthier relationships with technology and promote alternative ways of living, learning, and interacting.

Future research could further investigate the long-term effectiveness of architectural interventions on digital wellbeing and explore how the principles developed in this project might be integrated into more everyday environments, such as schools, workplaces, housing developments and public spaces. In this way, the lessons of the digital detox retreat could extend beyond specialised facilities and contribute to broader discussions about wellbeing-focused design in contemporary cities.

Throughout the graduation project, the research direction and design proposal evolved significantly. Initially, I intended to conduct interviews with young adults to better understand their experiences with digital technologies and social media. However, due to delays in receiving approval for the HREC application, these interviews could not be completed within the project timeframe. As a result, the research relied more heavily on literature studies, precedent analysis and observations.

One of the main challenges was translating the abstract topic of digitalisation into architecture. Unlike more tangible building programs, digital dependency is largely behavioural and difficult to spatialise. During the process, I realised that focusing solely on digital technologies was too broad and abstract. Instead, I shifted my attention towards identifying what kinds of environments, activities, and habits contribute to wellbeing. Research on digital overstimulation, mindfulness, and the growing interest among young people in analog activities helped shape the project towards the concept of a digital detox retreat.

Another challenge was the limited availability of architectural precedents. There is relatively little research on the spatial qualities of digital detox environments, and few examples that combine retreat, wellness, therapy, education, and temporary accommodation into a single typology. This required additional precedent studies and visits to retreat and wellness facilities to better understand their spatial organisation and atmosphere. Looking back, it would have been beneficial to define a clearer position on the role of technology earlier in the process. The project initially explored a broad spectrum between embracing digital technologies and rejecting them, whereas the final proposal focuses more explicitly on temporary disconnection and restoration.

Despite these challenges, the iterative nature of the process ultimately strengthened the project. It resulted in a proposal that addresses both architectural and societal questions. I am satisfied with the final outcome and believe that this emerging typology has the potential to contribute to future discussions about wellbeing, digitalisation, and the role of architecture in supporting healthier lifestyles. For younger generations, who have grown up in a permanently connected world, spaces that provide opportunities for disconnection may become increasingly relevant in the future.

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	<i>Traditional programmatic space</i>	<i>number of units</i>	<i>m2 per area</i>	<i>total m2</i>
accommodation	retreat cabins	80	18	1440
therapy	group therapy rooms	3	50	150
	individual therapy rooms	4	15	60
	consultation rooms	2	15	30
	family rooms	2	20	40
	yoga studio/ meditation hall	1	140	140
education	exhibition/ seminar hall	1	150	150
	classrooms	4	30	120
	multipurpose workshop space	1	150	150
communal heart	dining hall	1	280	280
	kitchen	1	160	160
	lounge	1	180	180
swimming pool	reading space	1	80	80
	sauna area	1	10	10
	pool	1	180	180
	changing rooms	1	50	50
	showers/lockers	1	40	40
service	technical pool room	1	60	60
	sportfield			
	staff cabins	6	25	150
	reception and arrival office	1	120	120
	office	4	20	80
	laundry/housekeeping/ storage	1	30	30
staff lounge	1	50	50	
Total:				3750

## appendix B site analysis The Hague



Figure B1. Context map The Hague. Source: Own work, 2025.



Figure B2. Mapped cultural and educational institutions in The Hague. Source: Own work, 2025.



Figure B3. Binckhorst Digital mapping: Own work, 2025.

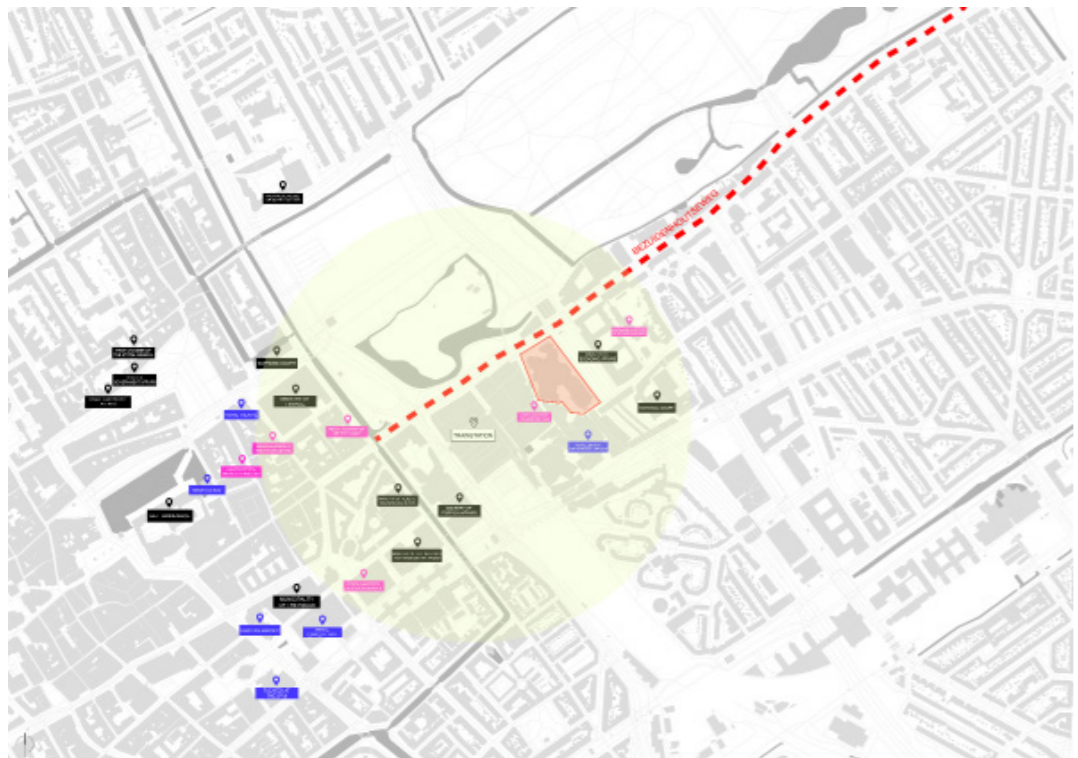


Figure B4. Mapped Institutions Bezuidenhoutseweg. Source: Own work, 2025.

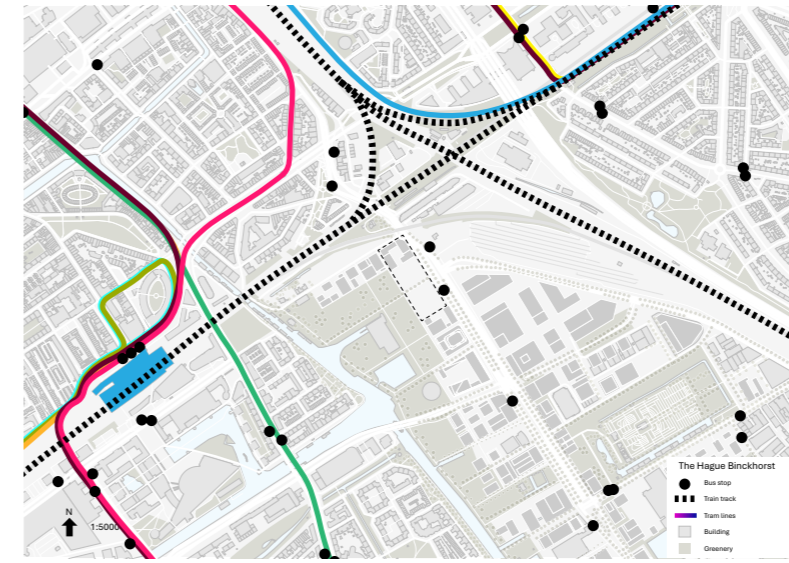


Figure B1. Binckhorst Transportation. Source: Ramon van Kessel, 2025.

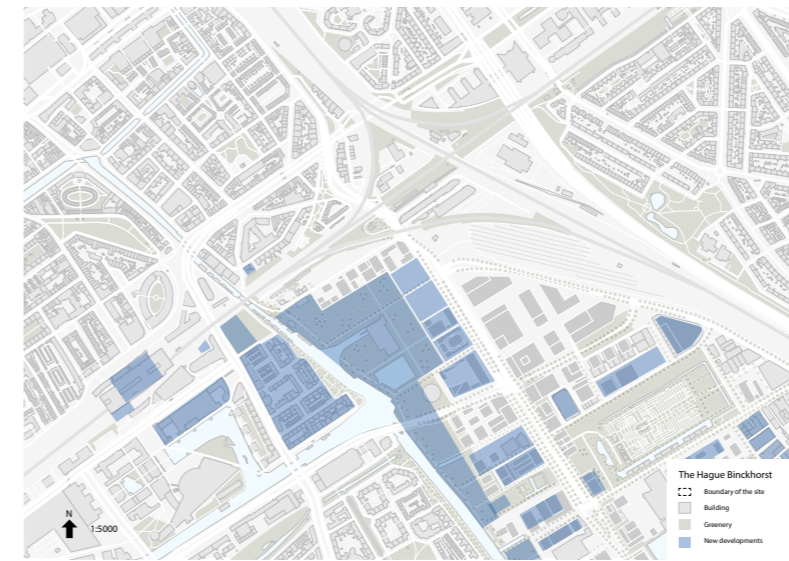


Figure B2. Binckhorst New Development. Source: Natalia Flair, 2025.

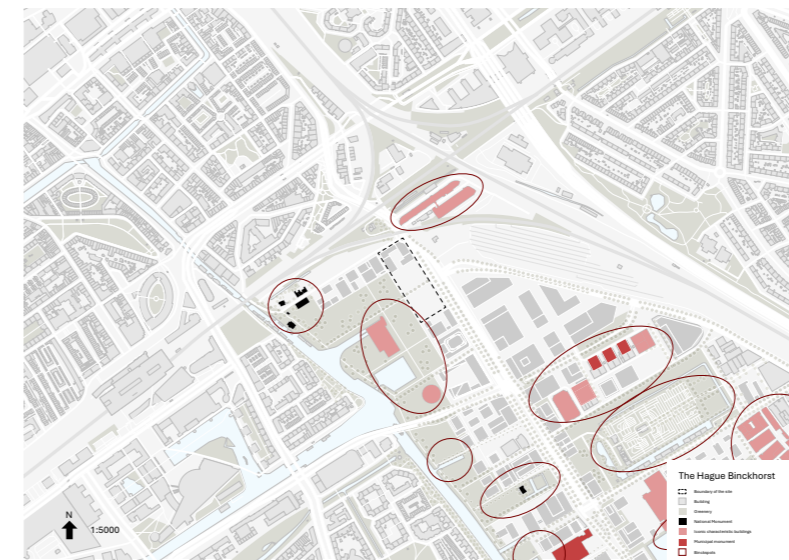


Figure B3. Binckhorst Binckspots. Source: Own work, 2025.

Location of Binckhorst in The Hague

- embedded in the wider urban network through:
  - Railway lines and train stations
  - Major road infrastructure (A12 motorway, Rotterdamsebaan, and city ring roads S100–S200)
  - The Trekvlies, part of the regional system of waterways and shipping routes
- (Gemeente Den Haag 2019)



Figure B4. Transportation network. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019, p. 5.

Transport around Binckhorst in The Hague

Binckhorst currently has good road connections to Voorburg, Rijswijk, and The Hague via the Centrumring and the A12/Rotterdamsebaan but limited bus service. The plan aims to improve public transport with more routes and dedicated lanes, expand and enhance pedestrian and cycling access, and manage car use by reducing on-street parking, enforcing parking on private sites, and promoting alternatives. Traffic management supports higher density and better-quality public spaces (Gemeente Den Haag 2019).

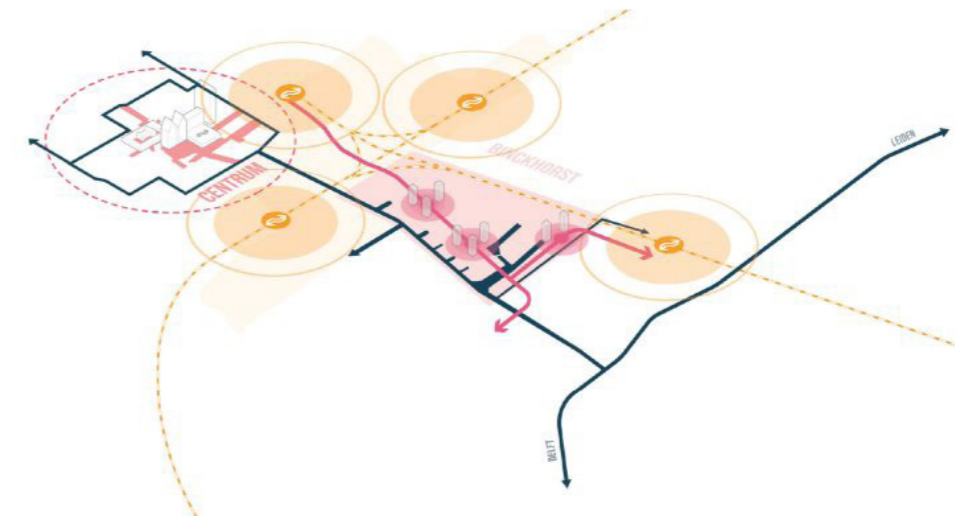
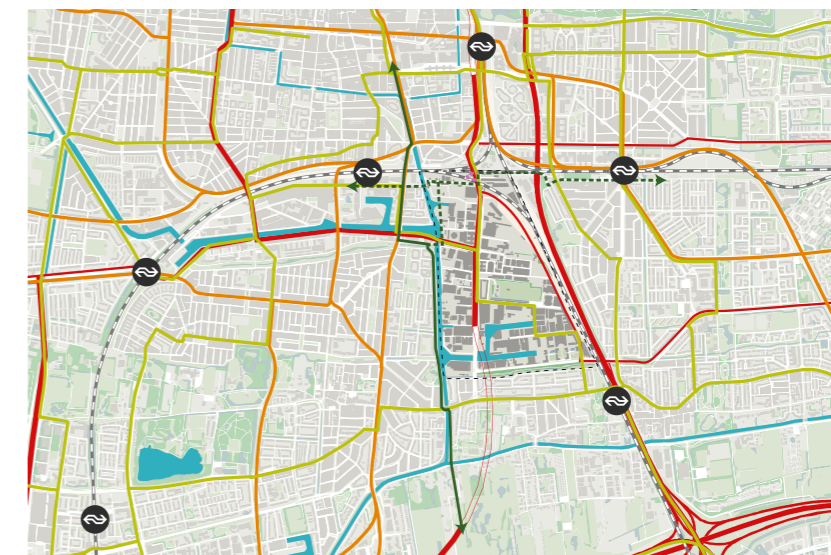
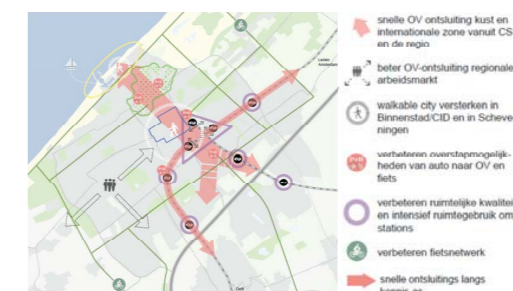


Figure D5. Binckhorst as a strategic location for densification in the most accessible places. Source: BURA, “Méér visie en regie op de doorontwikkeling van de Binckhorst,” 2025, <https://www.bura.city/projects/meer-visie-en-regie-op-de-doorontwikkeling-van-de-binckhorst/>



- Auto (Red line)
- Tram (Orange line)
- Bus (Yellow line)
- fiets (Green line)



bron kaart: Haagse mobiliteitsagenda: verdichting in samenhang met ov

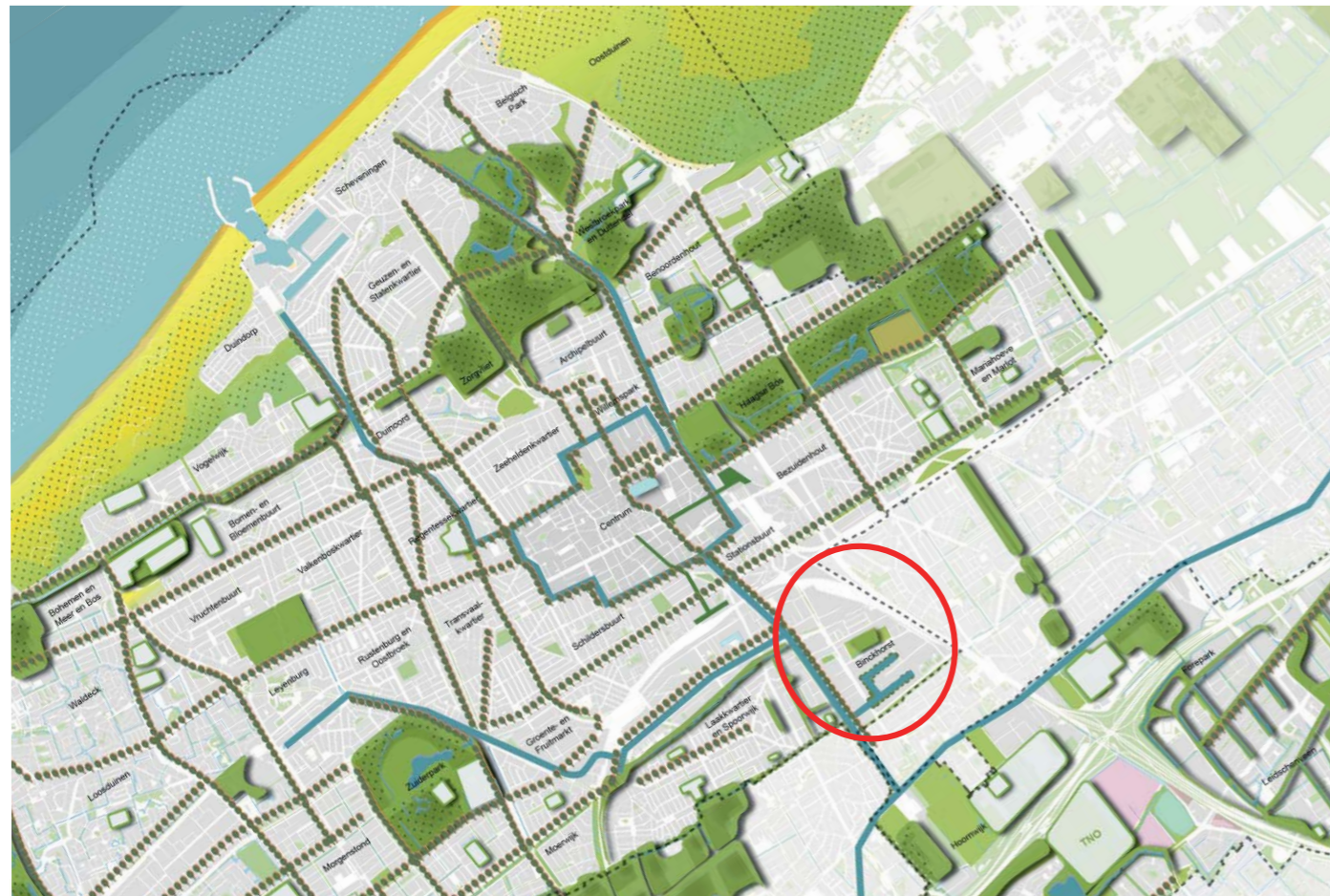
Figure B6. Mobility network in The Hague. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Green public space

The Hague's green spaces broadly consist of:

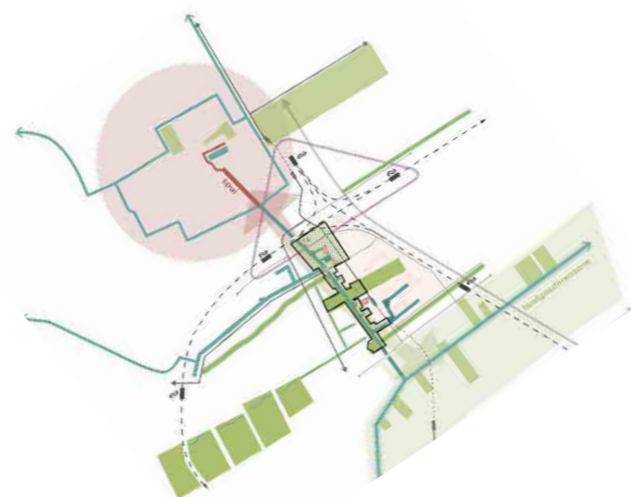
- The coastal dunes
- Parks, estates, and woods
- The characteristic avenues that connect these areas
- The countryside outside the city.

(Gemeente Den Haag 2019)



bron kaart: Agenda Groen voor de Stad

- Openbaar groen
- Semi-openbaar groen
- Groen buiten de stad
- Duingebied
- Waterstructuur
- Grachten, Singels en Vaarten
- Bomenlaan
- Gebiedsontwikkeling
- Kasgebied



bron kaart: waterfrontpark OKPA

Figure B7. Green public space. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### History

Binckhorst developed gradually from a polder landscape into an industrial area, with its current parcel structure and water system rooted in the historic strip landscape oriented toward the Trekvliet. The area is named after Castle De Binckhorst, built in the late 11th century along what is now the Binckhorstlaan (Gemeente Den Haag 2019).

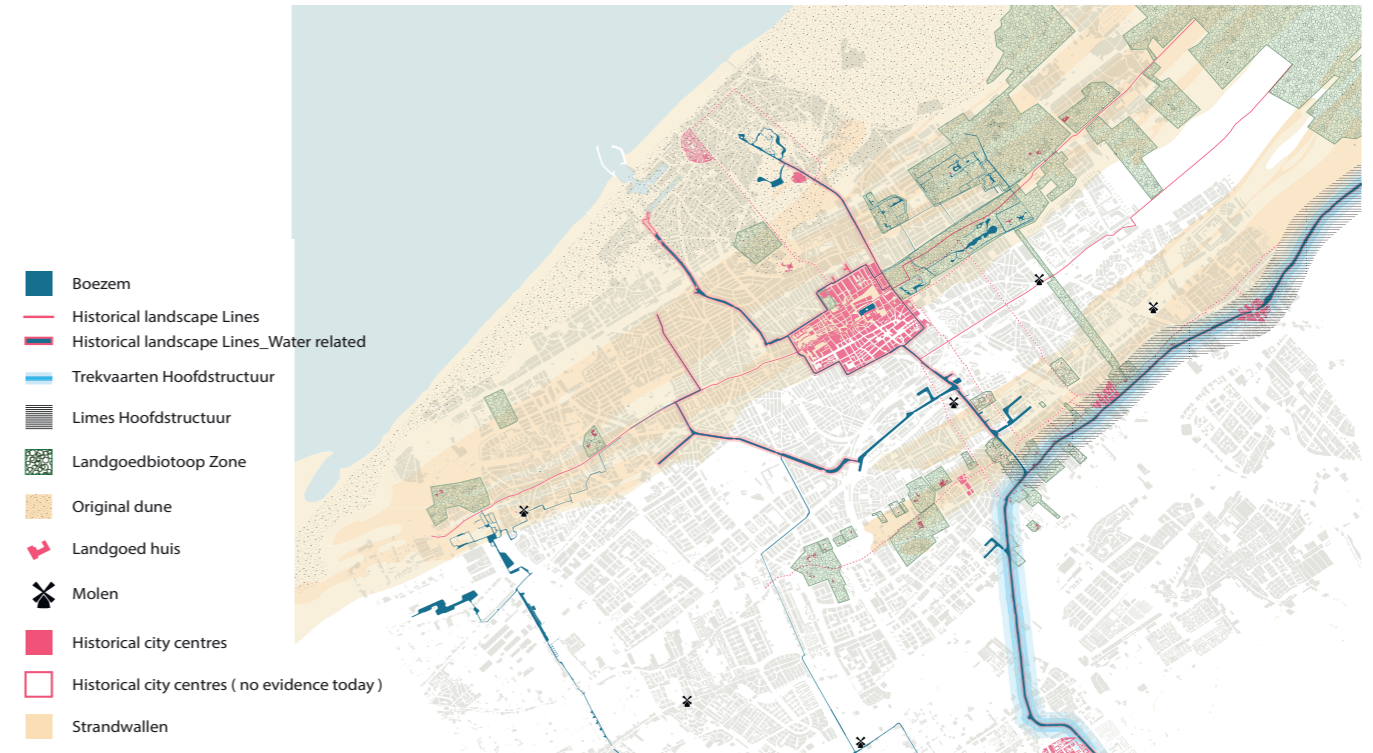
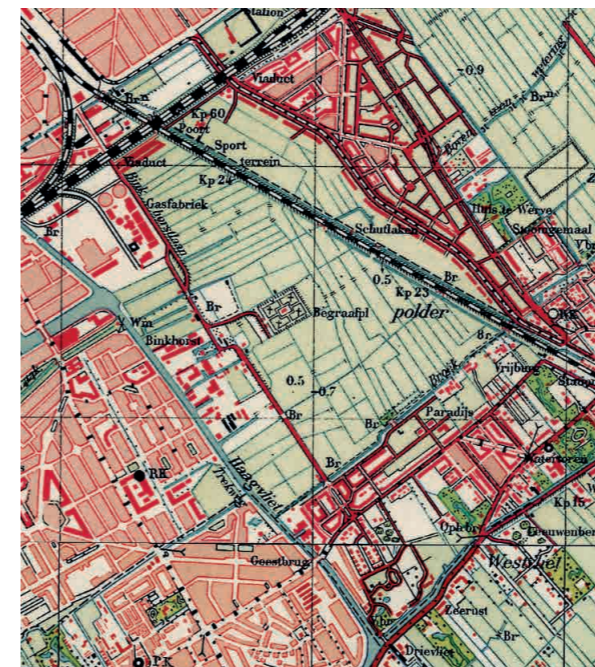


Figure B8. Historical context. Den Haag: Gemeente Den Haag.



topografische kaart 1950

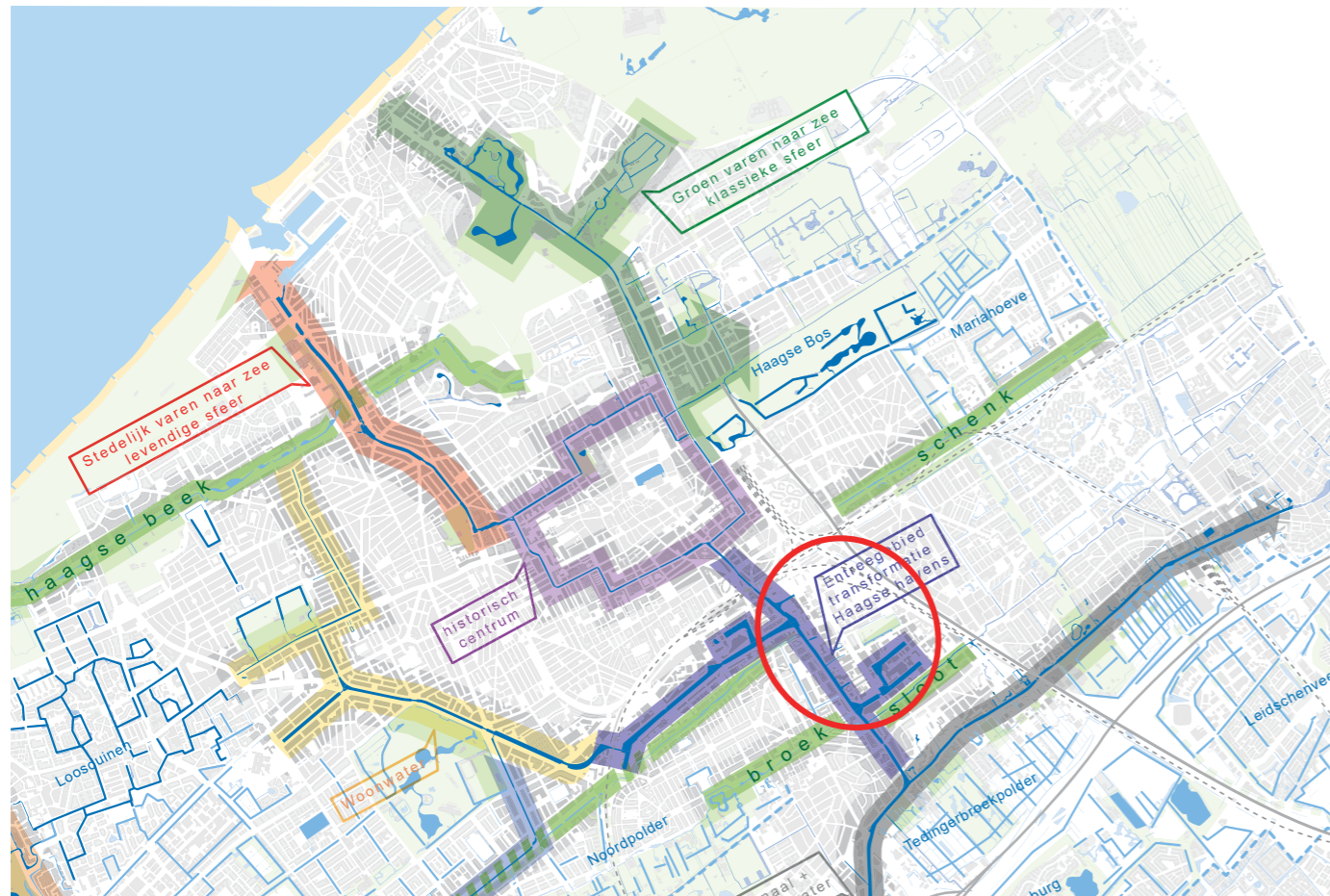


topografische kaart 1965

Figure B9. Topographical maps. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Water systems

Binckhorst's location along the Trekvlies, part of The Hague's historic water network, is a key urban and ecological asset. Green and water spaces support recreation, social interaction, and property value while enhancing the city's character. Climate adaptation requires a more robust water system through storage expansion and controlled drainage. The waterways also serve freight and recreational navigation, with increasing demand for mooring and access for pleasure craft (Gemeente Den Haag 2019).



bron kaart: studie Must

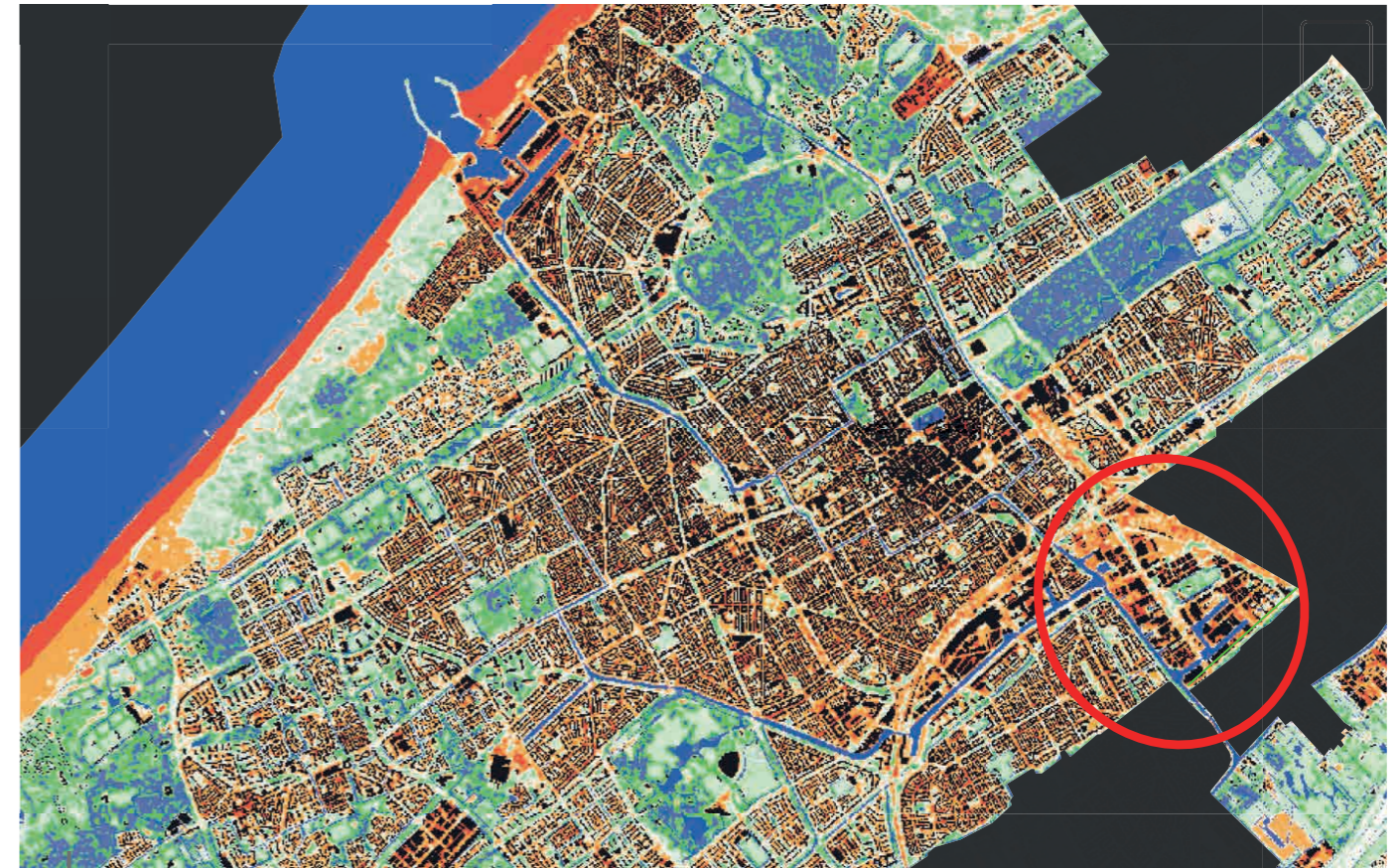
- Boezem gebied
- Hoogtepeil +0,6
- Boezem
- Poldergebied
- Polderwater
- Polderpeil -0,9
- Afvoergemaal
- Invoergemaal
- Gemaal



Figure B10. Water systems. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Heat stress

Binckhorst is a "hot spot" in The Hague due to extensive hard surfaces and limited greenery, causing high summer temperatures. Transforming the area into a climate-resilient neighborhood requires more green spaces, trees, water features, green roofs and façades, and building layouts that improve airflow, reducing heat stress and creating a more comfortable urban environment (Gemeente Den Haag 2019).



bron kaart: <https://denhaag.klimaatatlas.net/>

### Hittestress

- Aanzienlijk warmer
- Warmer
- Neutraal
- Koeler
- Aanzienlijk koeler
- Gebouwen
- Water



Figure B11. Heat stress. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Flooding

Parts of Binckhorst are vulnerable to extreme rainfall, which is expected to become more frequent and intense. Incorporating more green spaces and water storage in buildings and public areas will improve absorption and resilience, ensuring a comfortable and climate-adapted urban environment (Gemeente Den Haag 2019).



waterdiepte

- tot 10 cm
- tot 20 cm
- 20 cm en meer

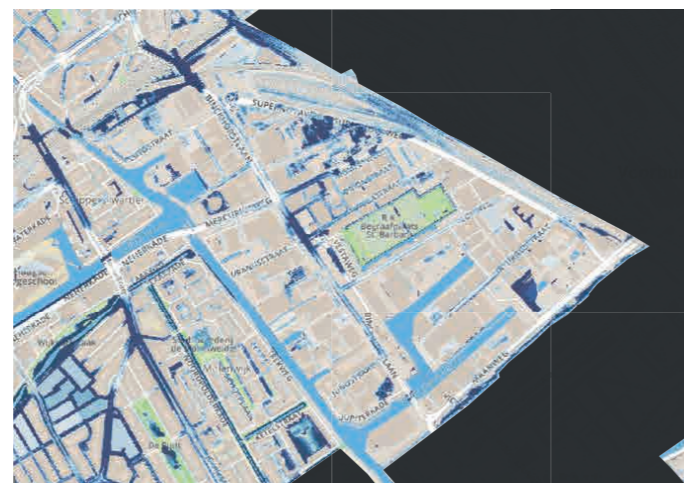


Figure B12. Flooding. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Primate living, prime work, indicative network of routes and public spaces



- primate wonen
- primate werken
- indicatieve netwerk van routes en openbare ruimtes

Figure B13. Primate living, prime work, indicative network of routes and public spaces. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

## Environmental plan

The Binckhorst Environmental Plan defines the transformation of the area into a high-density urban district, guided by four pillars:

1. regional city gateway,
2. economic significance
3. distinctive residential character
4. sustainability

The plan establishes the main public-space structure but does not fully meet the area's total spatial and infrastructural needs. Public space delivery is funded through municipal investment and mandatory and additional developer contributions aligned with the Public Space Plan (Gemeente Den Haag 2019).

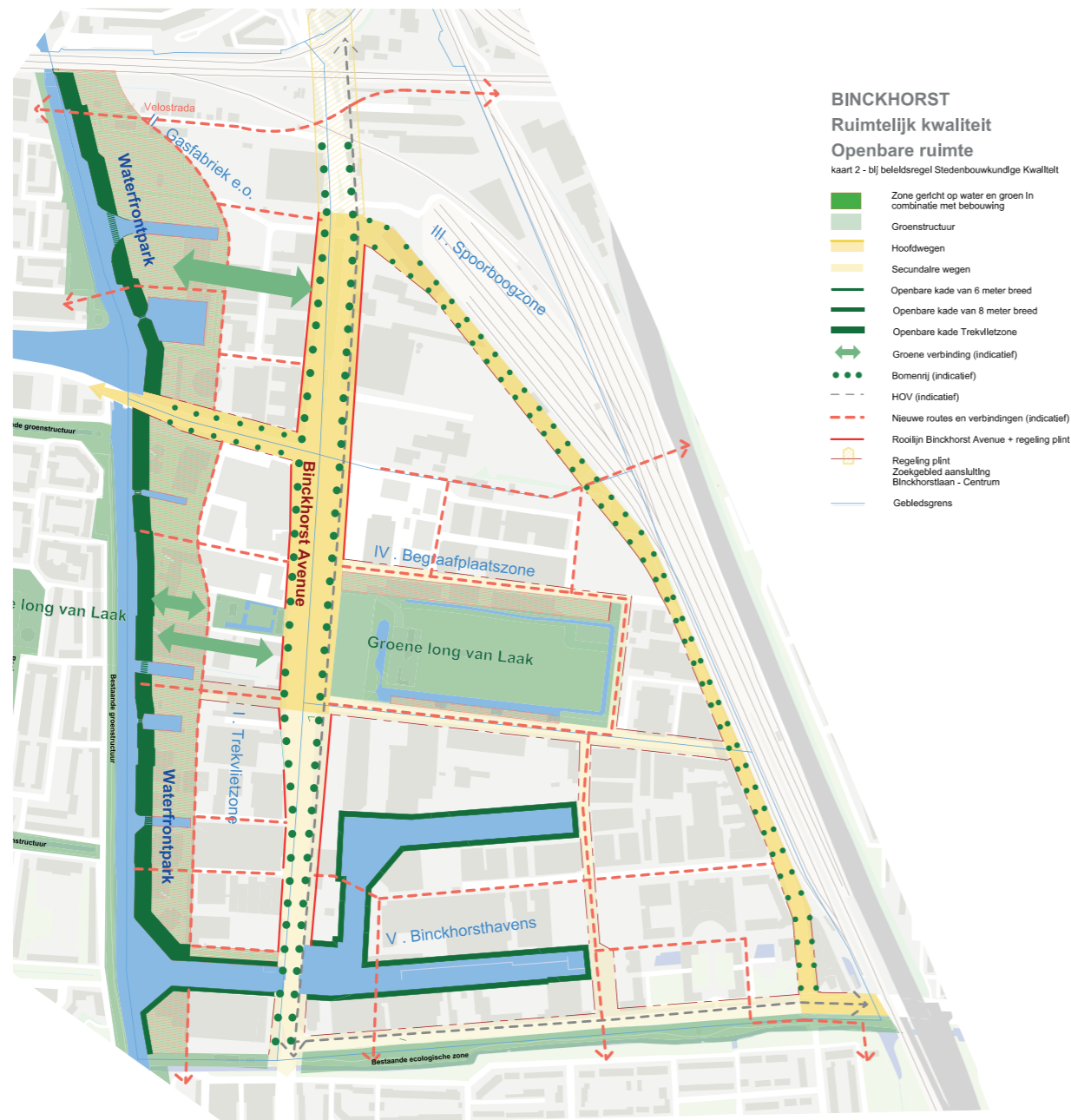


Figure B14. Ruimtelijke kwaliteit Openbare ruimte bij beleidsregel Stedenbouwkundige Kwaliteit. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

## Required public space including sustainability ambitions

Additional and greener public space is essential for infrastructure, climate adaptation, health, and social cohesion in a high-density urban environment.

- Binckplekken are key places that shape Binckhorst's identity; they are interconnected by public space routes,
- Many Binckplekken are waterfront spaces
- Binckplakken include: pre-industrial cultural-historical gems (castle, cemetery); industrial heritage (e.g., crane track, lift bridge); special spaces along the Trekvljet or around harbors (Gemeente Den Haag 2019).

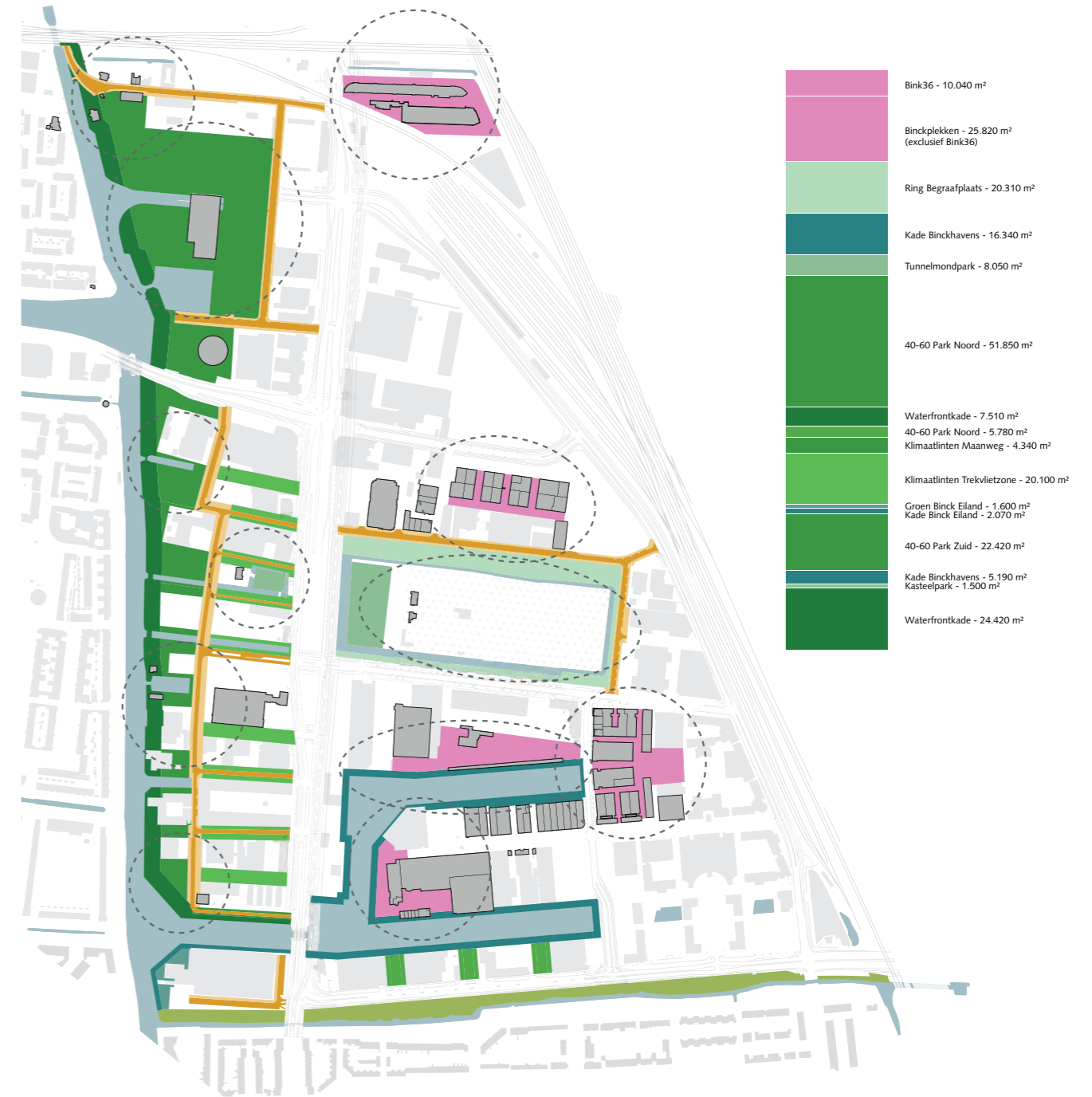


Figure B15. Benodigde openbare ruimte incl duurzaamheidsambities. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Public Space Network Binckhorst

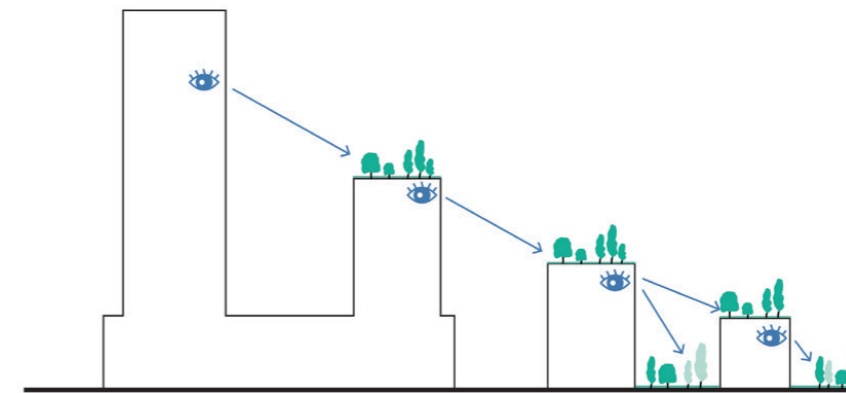
The Binckhorst Public Space Map integrates all thematic plans to create a multifunctional public-space network. Combined with “Binck spots,” it provides sufficient space for recreation, social interaction, and sports for 10,000 residents, supporting the Environmental Plan ambitions and connecting Binckhorst as a fully integrated extension of The Hague’s city center (Gemeente Den Haag 2019).



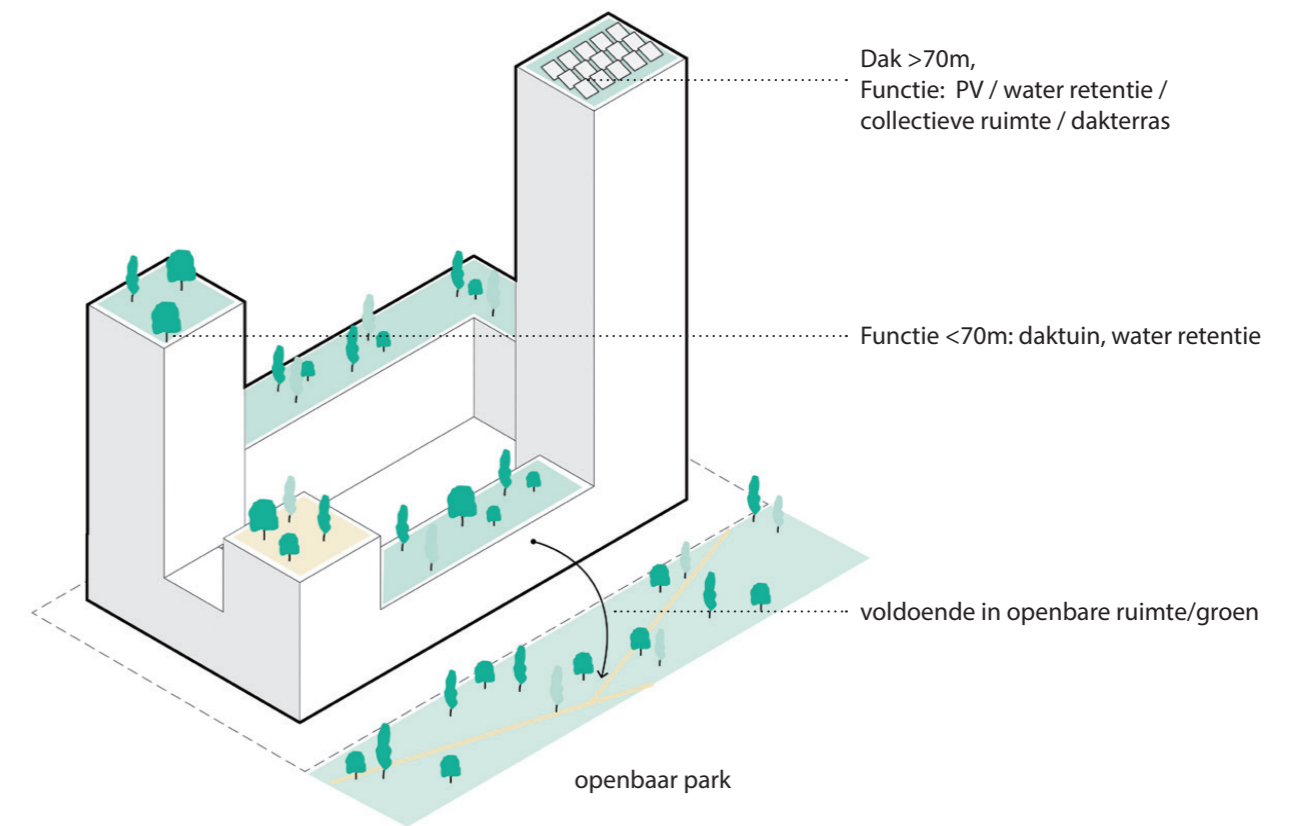
Figure B16. Public Space Network Binckhorst. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Multifunctional public outdoor space

Multifunctional public outdoor space in high-rise developments is provided through accessible and well-maintained roof gardens that support recreation, play, greening, and climate adaptation. At least 70% of roof areas must be green, with a minimum of 40% contributing to biodiversity, supported by sufficient soil depth and climate-appropriate planting. The integration of public space and collective building-based outdoor spaces is essential for creating a lively vertical city (Gemeente Den Haag 2019; Gemeente Den Haag 2020).



Uitzicht op groen daklandschap (<70m)



Groene daken en wisselwerking met openbare ruimte als ruimtelijke kwaliteit

Figure B17. Green roofs network. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Binck-network

“Binck spots” are key public spaces that combine industrial heritage, economic activity, and social interaction, creating unique, high-value destinations within the Binckhorst. Connected by the public-space network, they form lively clusters that enhance the area’s identity, support recreation, climate measures, and foster a vibrant, high-density urban environment (Gemeente Den Haag 2019).



Figure B18. Binck-network. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Binck-spots

Binck spots are authentic locations in Binckhorst, often near water or historic/industrial landmarks, designed as attractive, flexible public spaces. They combine heritage, green areas, and recreational opportunities to create vibrant meeting places with high-quality public space, daylight, and climate-adaptive features (Gemeente Den Haag 2019).



Figure B19. Binck-spots. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

“Binckplekken: plekken van betekenis voor de identiteit van de Binckhorst door intrinsieke cultuurhistorische waarden en een bijzonder programma met publieksaantrekkelijke werking.”



Figure B20. Binckspots. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020



Figure B21. Binck-spots photos. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

## Waste Cathedral/Poolsterhaven

The Afvalkathedraal/Poolsterhaven area, including the AVR waste facility and Dunea's former gas holder, could become a public-attracting zone with green spaces and high-density urban uses, supporting events, festivals, and sports for a wide audience (Gemeente Den Haag 2019).



### STEDENBOUW / OPENBARE RUIMTE

- onderdeel van Waterfrontpark
- sterk alzijdige gebouwen in het groen (park)
- gebouwen en omliggende openbare ruimte sterk verbonden (binnen-buiten)

### PROGRAMMA

- bij transformatie: mogelijke evenementenlocatie voor festivals, sport en cultuur
- publiek toegankelijk en aantrekkelijk interactiemilieu
- programmering gebouwen en openbare ruimte lopen in elkaar over (blurring)
- watergebonden activiteiten, passantenhaven en marina

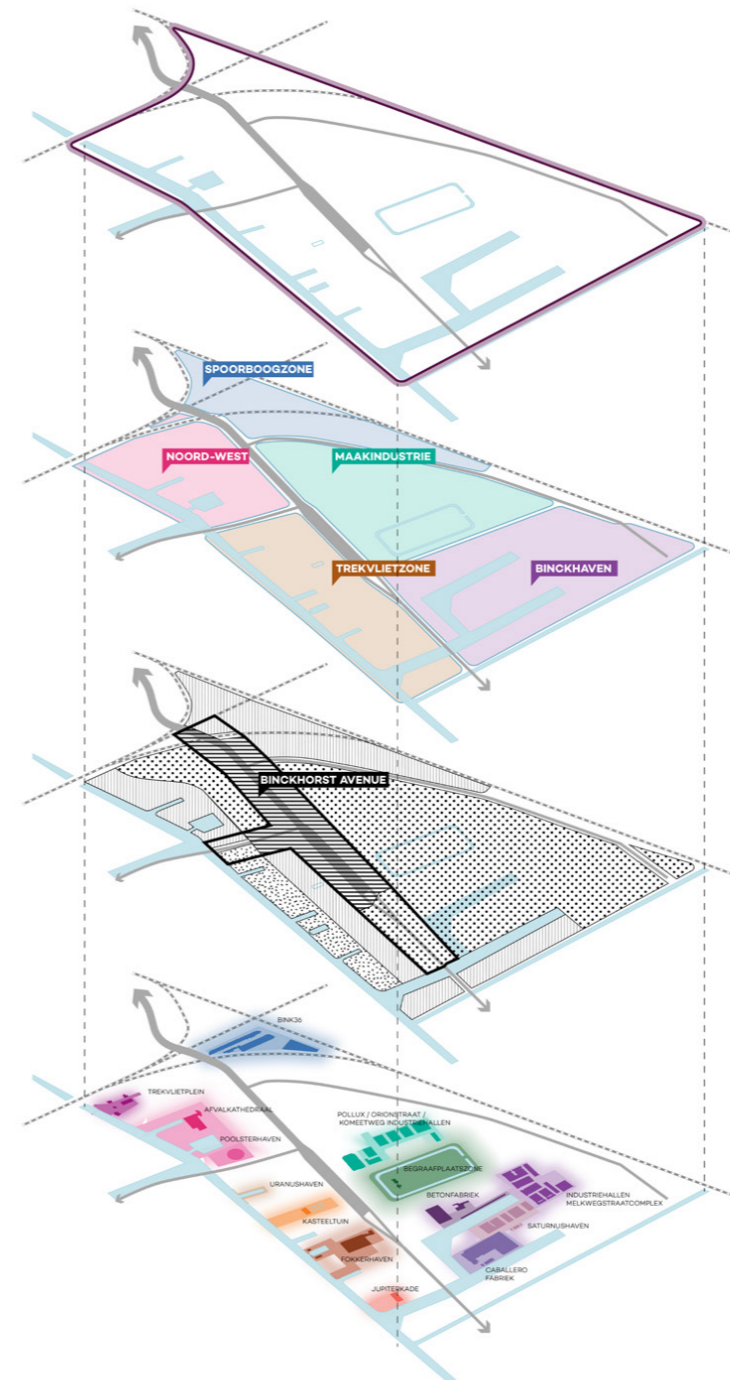
### ARCHITECTUUR

- behoud van beeldbepalende gebouwen en industrieel karakter (vuilkathedraal/gashouder)
- kenmerkende constructie en hoofdstructuur Afvalkathedraal blijft zichtbaar
- transformatie met passende functie waarbij architectonische eenheid bewaard kan worden (bv evenementenhal/culturele functie)

Figure B22. Waste Cathedral. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

## Binckhorst design principles & frameworks

The design principles and frameworks for Binckhorst are organized into four parts: area-wide principles, specific principles for each subarea, and detailed frameworks for “Binckse Hoogte” and Binck spots. Area-wide principles apply to all developments, subarea principles to their respective zones, and Binckse Hoogte/Binck spots principles only to those specific sites. Subareas are defined based on spatial and functional characteristics, largely aligned with the Environmental Plan, to provide a clear and manageable framework for design quality (Gemeente Den Haag 2020).



## 1. Algemeen

Binckhorstbrede principes

## 2. Deelgebieden

Ontwerpprincipes per deelgebied

## 3. Binckse Hoogte

Ontwerpprincipes & -kaders ten aanzien van hoogbouw op de Binckhorst

## 4. Binckplekken

Ontwerpprincipes & -kaders voor de Binckplekken

Figure B23. Design Principles & Frameworks. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Binckhorst design principles

The new role of Binck spots balances the public-space needs of future residents with climate and sustainability goals. Each spot is planned with sufficient greenery, climate-adaptive measures, and design principles (e.g., sunspots) to enhance both new buildings and the surrounding public space, creating a distinctive, green identity that contrasts with the area's industrial heritage (Gemeente Den Haag 2019).

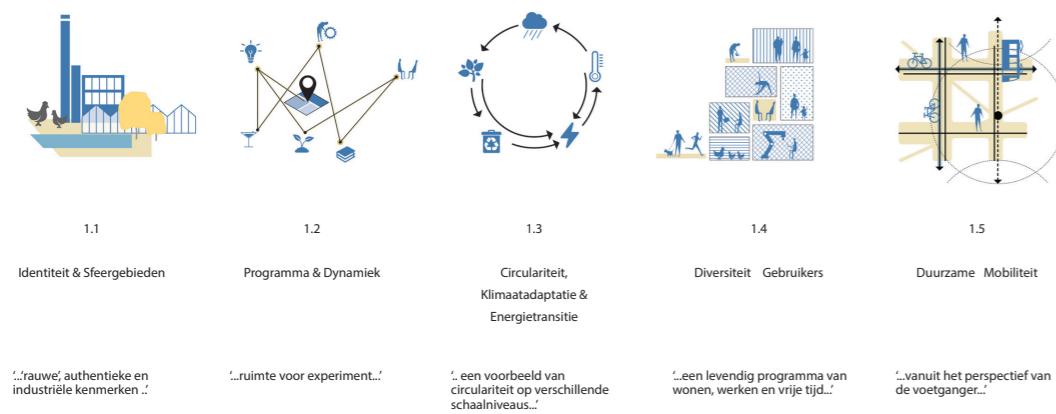


Figure B. General Design Principles . Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

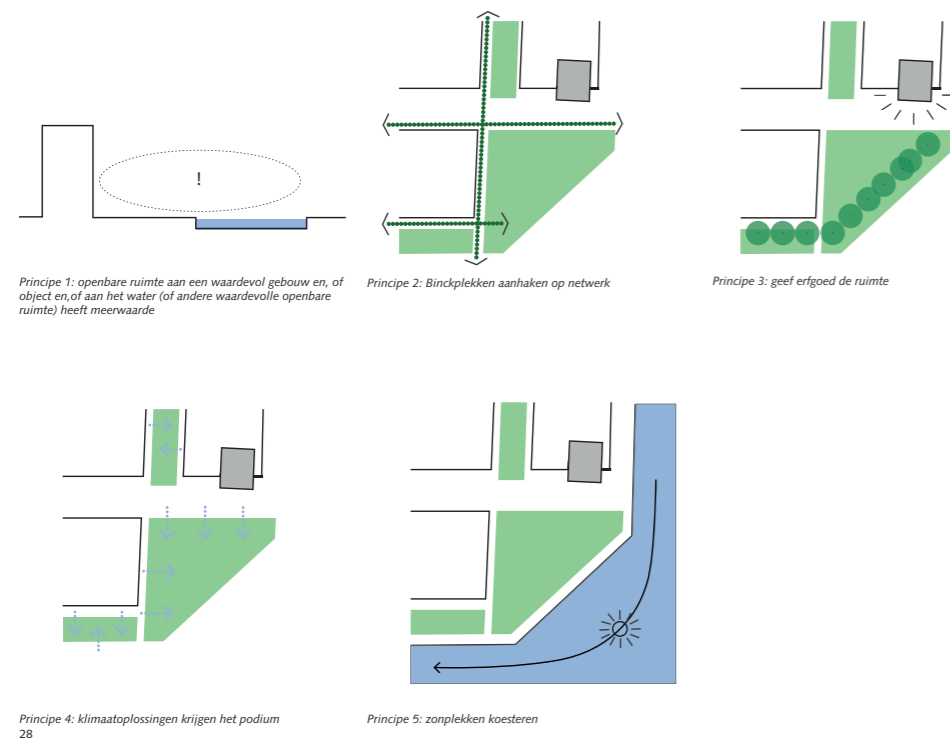


Figure B24. Design principles. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Mobility

Binckhorst's large, deep plots and existing road structure are being adapted for a mixed-use urban district. Mobility shifts toward sustainable transport, prioritizing pedestrians, cyclists, and high-quality public transit (Gemeente Den Haag 2019).

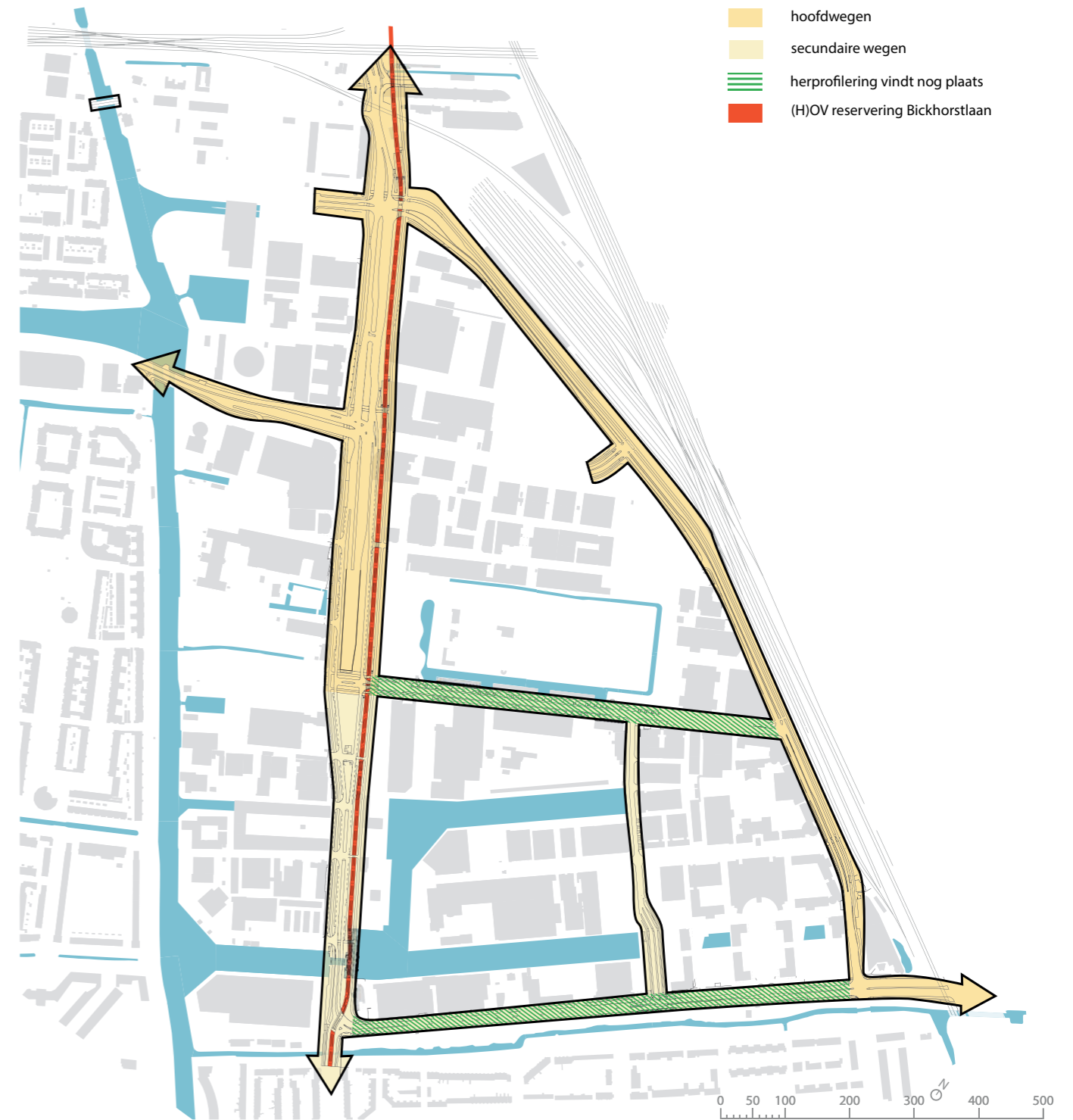


Figure B25. Mobility. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Car accessibility

Streets in Binckhorst will provide access to building blocks for essential traffic (deliveries, emergency services, accessibility) under a 30 km/h regime, with design tailored to local needs. Parking will be concentrated in shared garages near main roads, minimizing on-street parking and supporting more attractive, pedestrian-friendly public spaces. Limited multi-purpose curb space will accommodate short-term needs, such as parcel delivery (Gemeente Den Haag 2019).

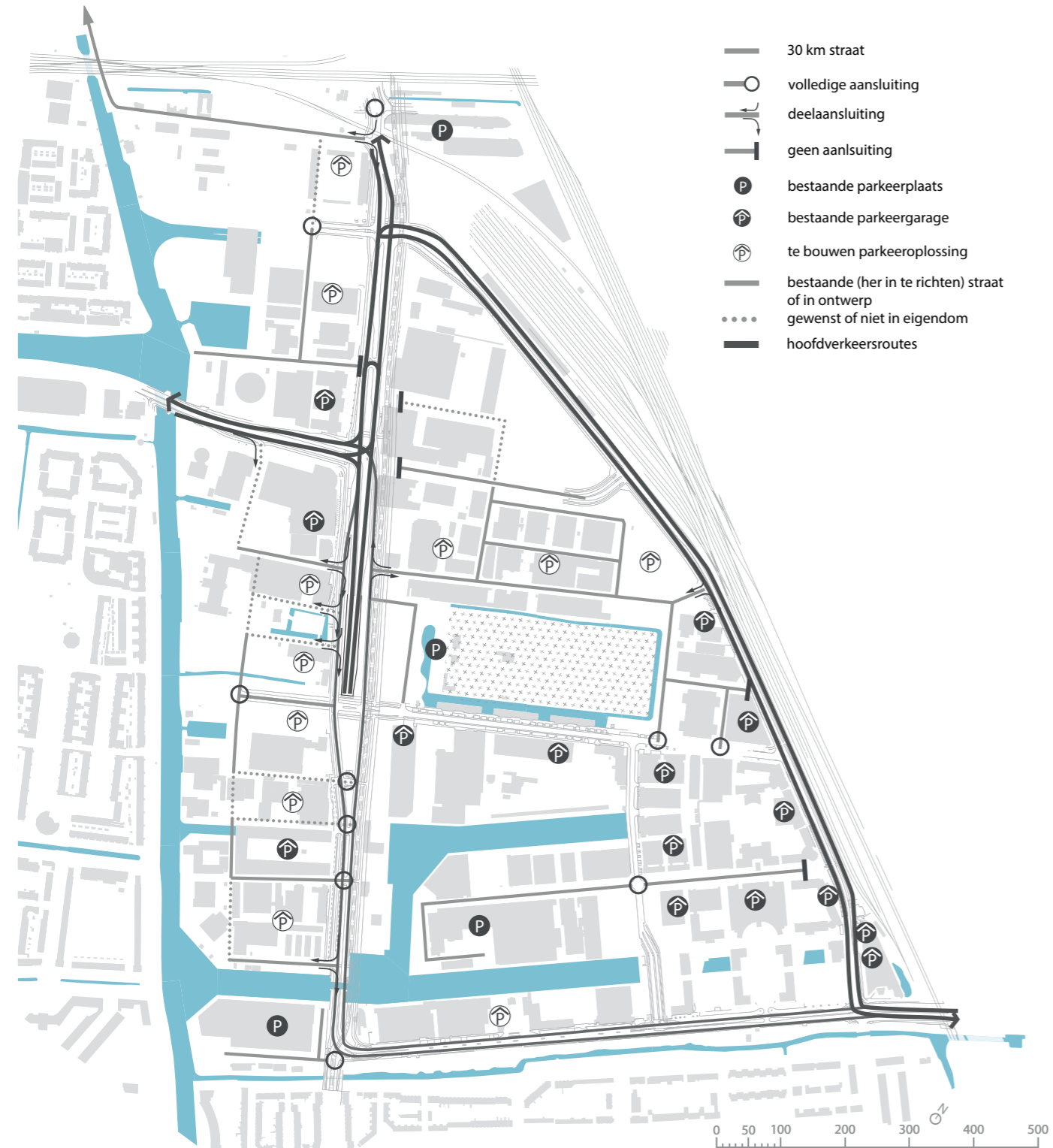


Figure B26. Car accessibility. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Pedestrian network

Transforming Binckhorst into a vibrant urban district prioritizes access to waterfronts and a pedestrian network connecting blocks and neighborhoods. Water-edge areas along the Trekvlief and Binckhorsthaven are designed to be low-traffic with high-quality public spaces. Routes should maximize connectivity, avoid dead-ends, and integrate loops, while maintaining flexibility in alignment to support a coherent slow-traffic network (Gemeente Den Haag 2019).



Figure B27. Pedestrian network. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Cycling network

Binckhorst will transition from a car-oriented industrial area to a cyclist-friendly urban district. Four types of cycling routes are planned: regional “star” routes, separated main-road paths, local street connections shared with cars, and recreational waterfront routes. Recreational routes prioritize slow, small-scale cycling and complement the fast, functional regional network, enhancing accessibility and leisure along the Trekvljet and other water edges (Gemeente Den Haag 2019).

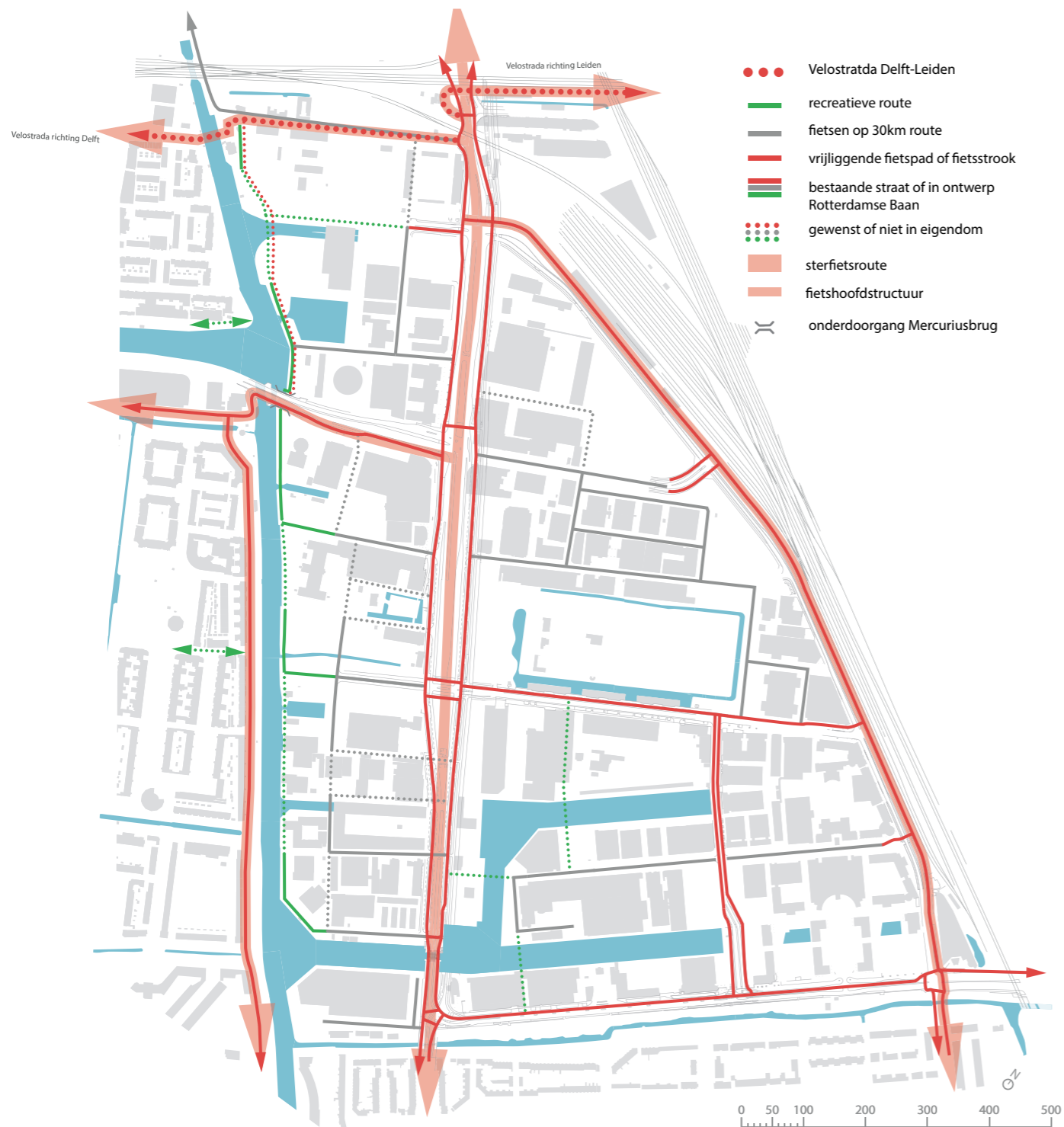


Figure B28. Cycling network. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Trees network

Trees in Binckhorst serve multiple roles: structuring streets, humanizing high-rise areas, supporting biodiversity, mitigating heat, wind, and pollution, and enhancing seasonal experience. The planned tree network follows the historic strip-landscape layout and connects routes to larger green areas, contributing to a healthy, attractive, and active urban environment, while integrating with underground infrastructure and climate-adaptive solutions (Gemeente Den Haag 2019).



Figure B29. Cycling network. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Sunspots

High-rise buildings in Binckhorst affect sunlight, shadow, and wind, impacting outdoor spaces. Key “sunspots” are mapped to ensure sufficient sunlight and comfort. Innovative building and façade designs are encouraged to minimize shading and wind impact, particularly around Binck spots, combining historic and new buildings to enhance the quality and usability of public spaces along the water (Gemeente Den Haag 2019).

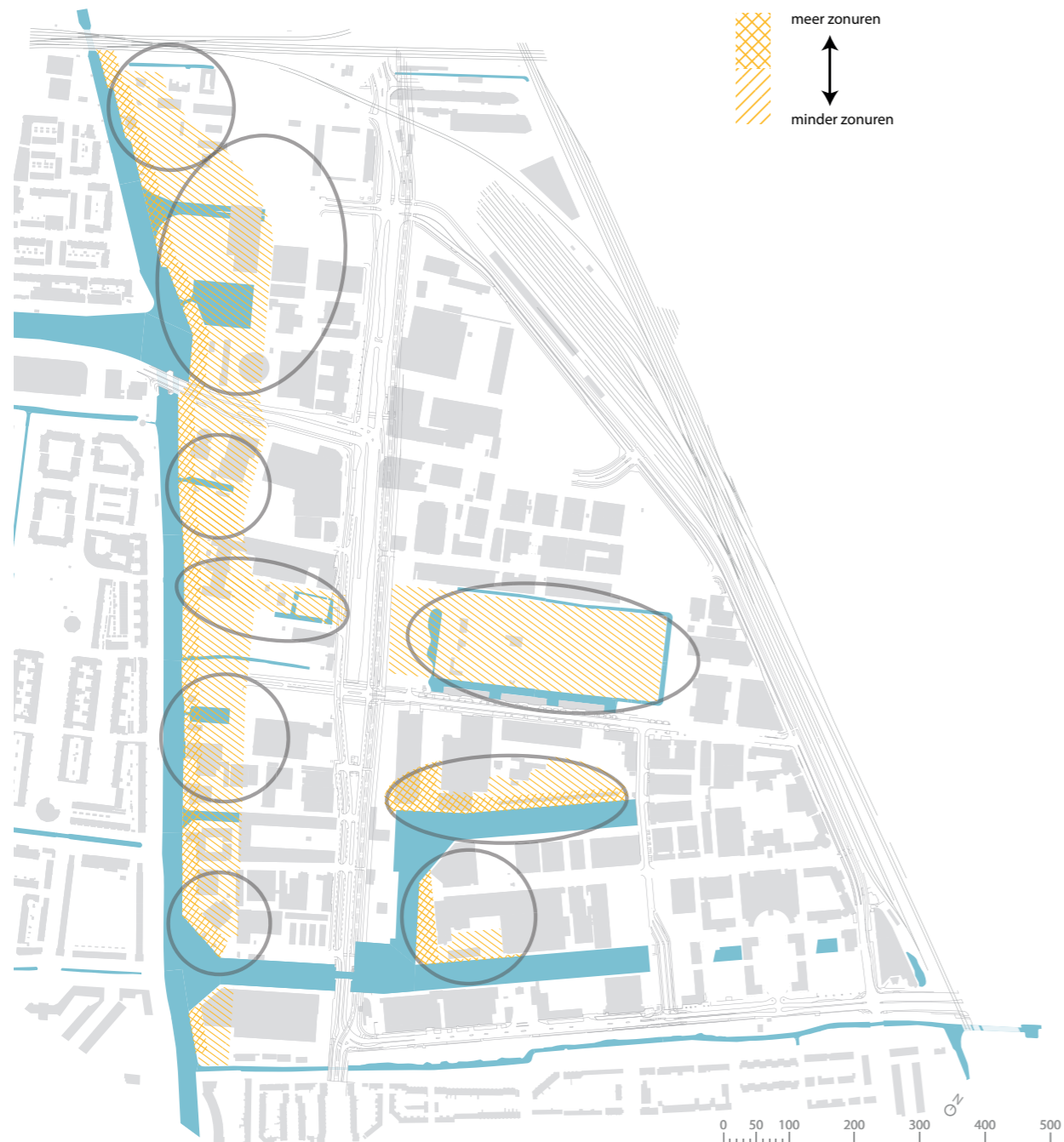


Figure B30. Sunspots. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Climate-proof Binckhorst

Binckhorst’s public spaces are designed for climate resilience, addressing heat, drought, and extreme rainfall. Measures include rainwater retention and delayed drainage (70 mm/100-year event), infiltration climate corridors, temporary storage in plazas or green areas, drought-resistant greenery, open space for ventilation, and green roofs and façades to provide shade and cooling. These strategies enhance livability, biodiversity, and the functionality of vital infrastructure under extreme conditions (Gemeente Den Haag 2019).

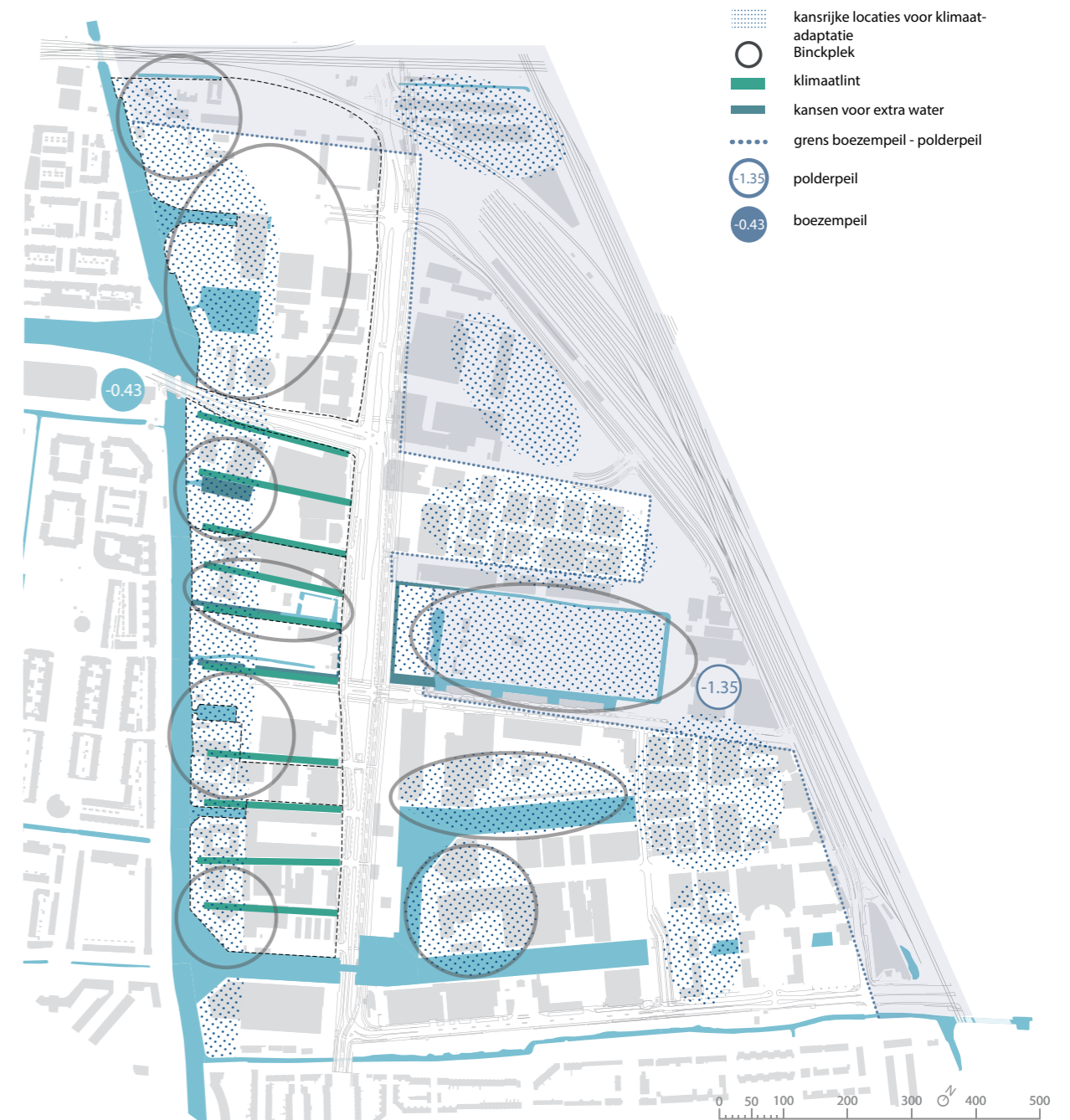


Figure B31. Climate-proof Binckhorst. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Ecology and Biodiversity

Binckhorst's public spaces support building-based ecology following the Nature-Inclusive Building guidelines. Five priority areas are designated for ecological measures, including bat-friendly lighting and foraging zones, flower-rich plantings for pollinators, native tree clusters, and linear connections that serve as wildlife corridors, linking key sites such as Maanweg, Waterfrontpark, Trekvliepark, Rotterdamsebaan, the Spoorzone, and the cemetery–castle park zone (Gemeente Den Haag 2019).



Figure B32. Ecology and Biodiversity. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Underground infrastructure relevant to planning

Binckhorst contains pipelines with building restrictions and safety zones. Any underground or aboveground activity near these pipelines requires coordination with the pipeline owners. These pipelines also affect external safety for nearby residential and work functions, as outlined in the Environmental Plan and Environment Impact Report (RIS299317 OER) (Gemeente Den Haag 2019).

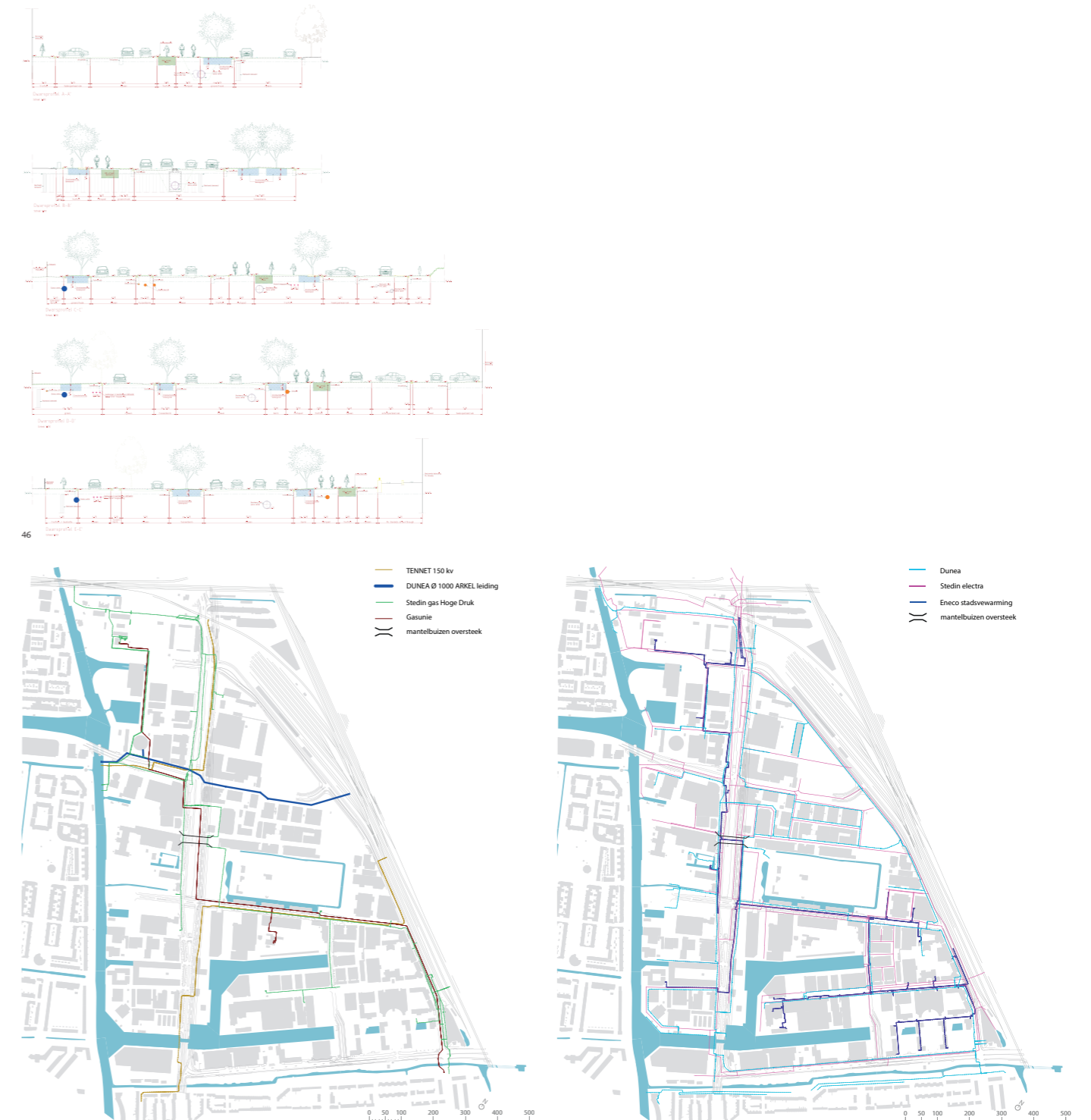


Figure B33. Underground infrastructure. Binckhorst. Source: Gemeente Den Haag, Plan Openbare Ruimte & Buitenruimte Binckhorst, 2019

### Principles of sub-areas

Binckhorst is divided into distinct subareas, defined by local features (e.g., cemetery, harbors) and major infrastructure. Each subarea shares a similar spatial layout and comparable current and intended functions, facilitating targeted design and planning (Gemeente Den Haag 2020).

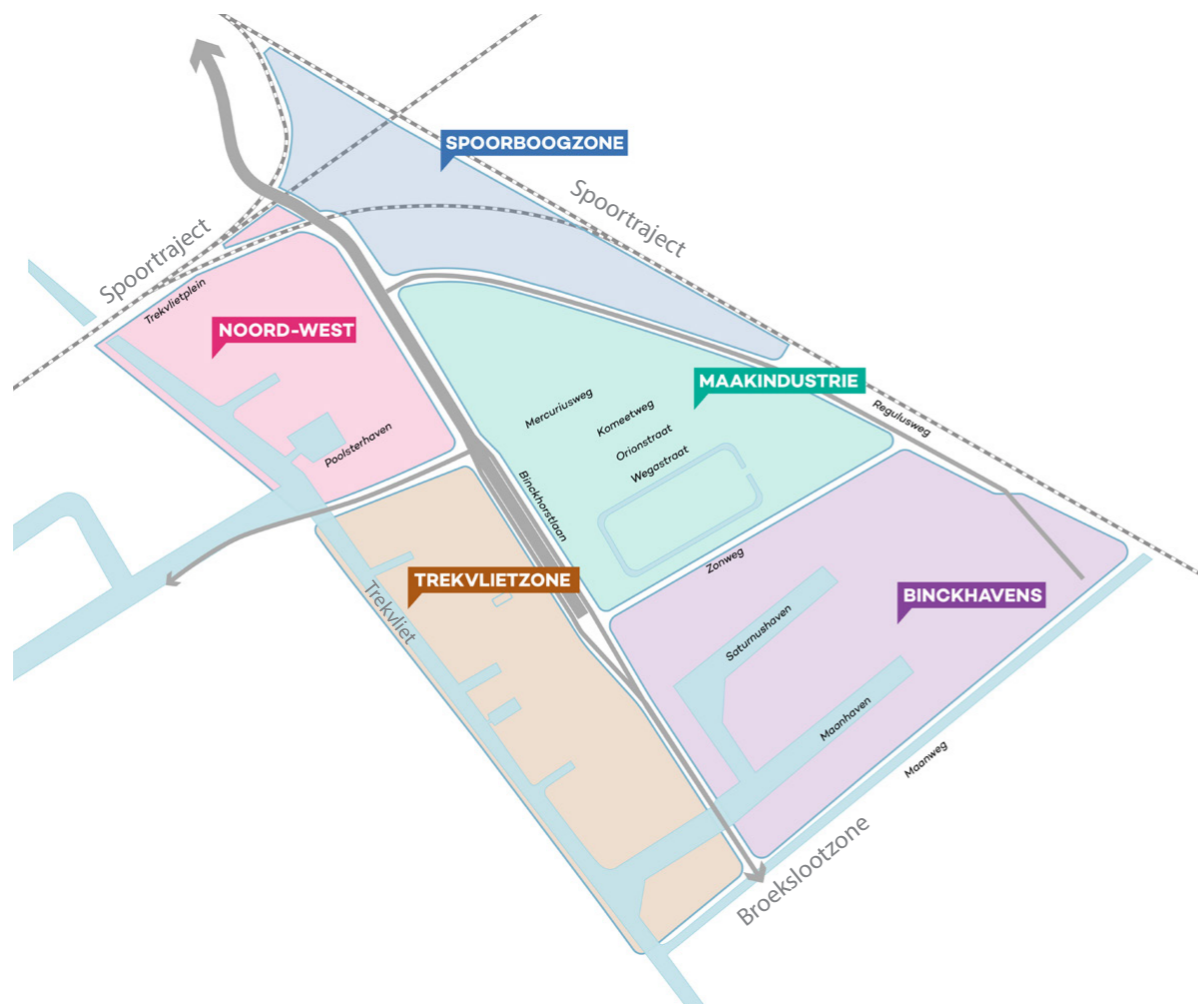
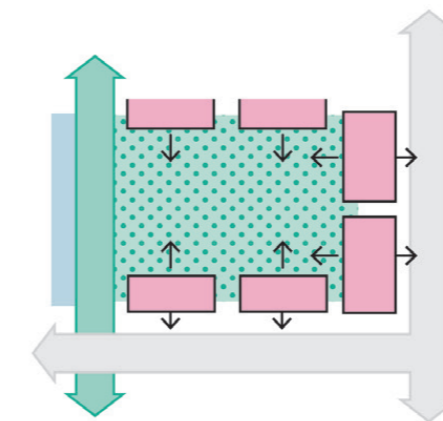


Figure B34. Principles of sub-areas . Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

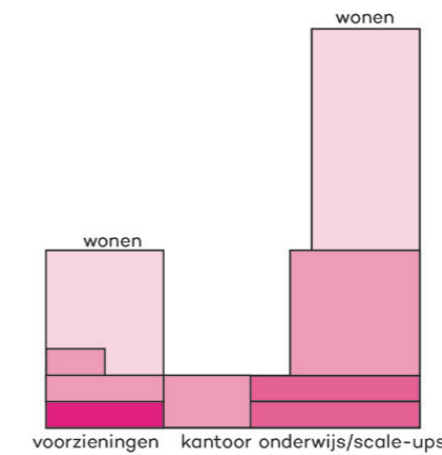
### North-west area

This area is where the site for the design is going to be. New developments should respect the character of each subarea, such as park-like settings with high-density edges, while preserving key heritage elements like buildings around Trekvlieplein, the Afvalkathedraal, and Dunea's former gas storage tank (Gemeente Den Haag 2020).



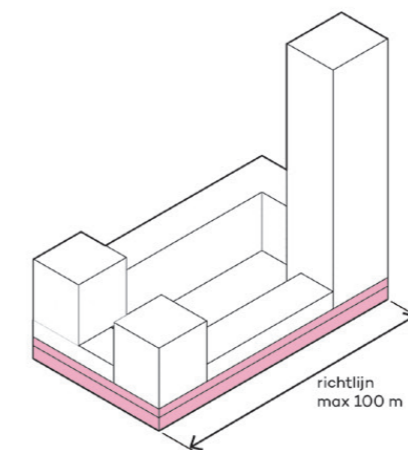
#### STEDENBOUW / OPENBARE RUIMTE

- Bouwmassa vormt een omzoming van het stadspark
- Alzijdige oriëntatie van (samengestelde) bouwblokken naar zowel hoofdinfrastructuur en park toe
- Programmatische synergie tussen park en bouwblok
- geen logistiek en utilitaire functies (expeditie) aan parkzijde, maar entrees en actieve zijdes
- hoge dichtheden langs randen park
- richtlijn lengte blok max 100m



#### PROGRAMMA

- ruimte voor grotere functies: bedrijven, onderwijs, maatschappelijke functies
- grote menging programma (verticale stad)



#### ARCHITECTUUR

- hoogbouw rondom park met dubbelzijdige oriëntatie: naar park en Binckhorstlaan/Mercuriusweg
- wisselende volumeopbouw: van kleine tot middelgrote en grote volumes
- gebouwen in park uitvoeren als alzijdige paviljoens
- groene parkachtige uitstraling: ook in gebouwen en architectuur

Figure B35. Principles of sub-areas. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Binckse Hoogte

The Hague's high-rise policy is set out in *Eyeline and Skyline* (2017), providing citywide guidance while allowing area-specific interpretations. For Binckhorst, these area-specific principles, called Binckse Hoogte, supplement the general policy and apply across scales, guiding the design, placement, and massing of high-rise developments (Gemeente Den Haag 2020).

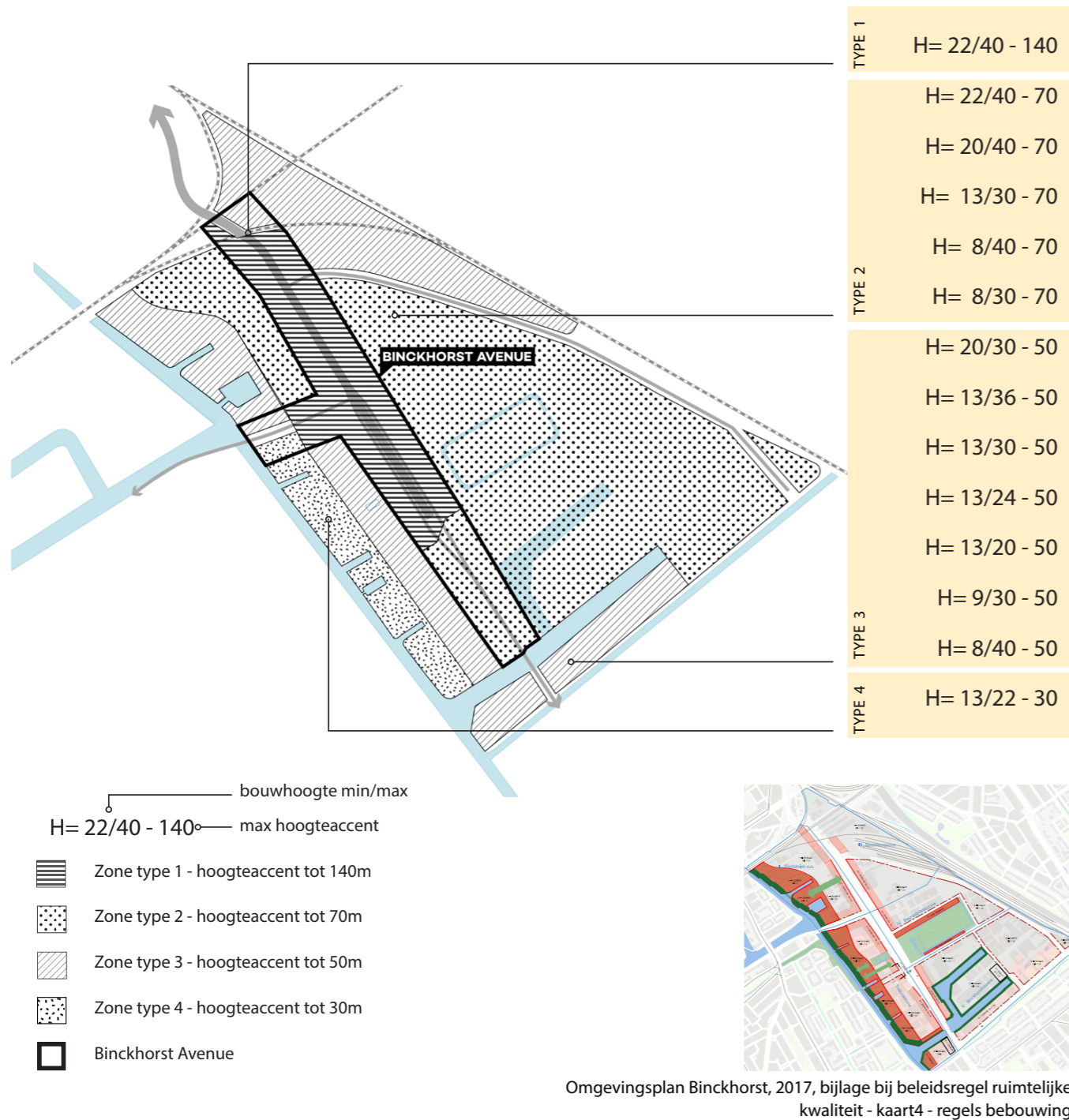
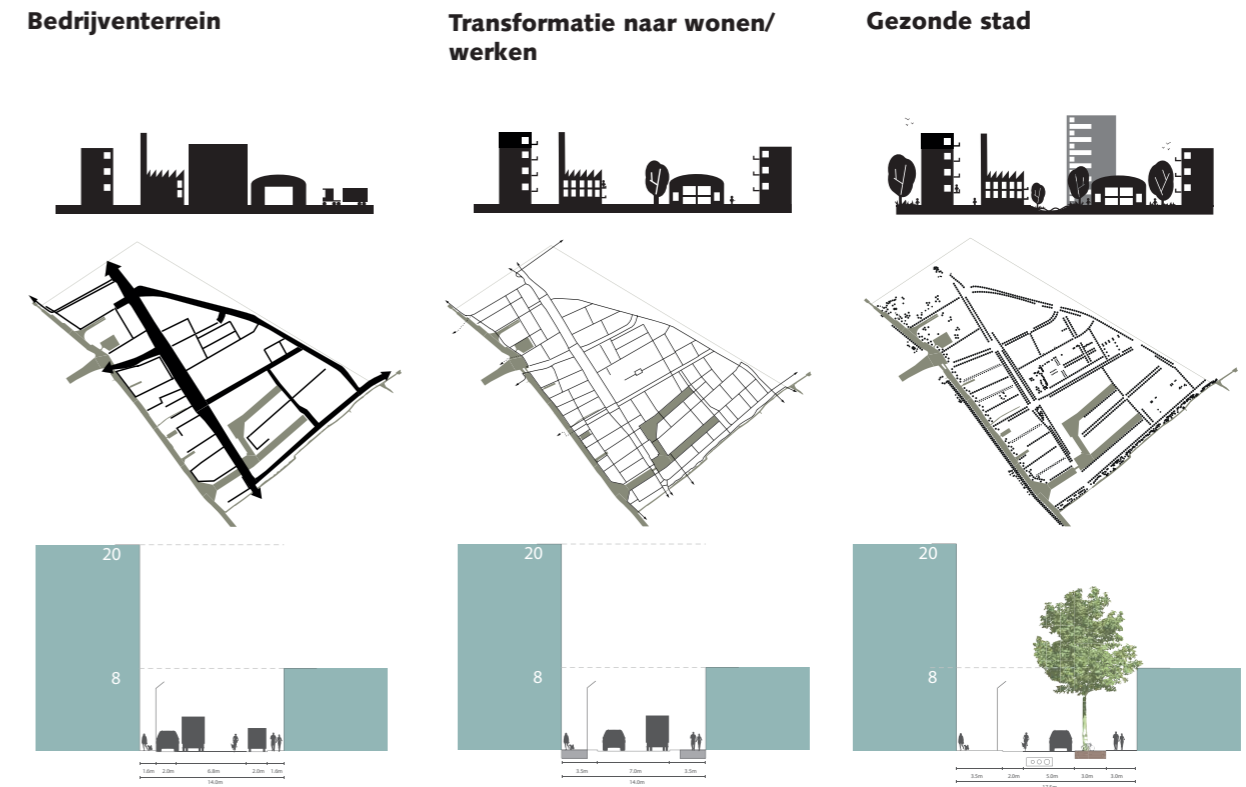


Figure B36. Binckse hoogte. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Binckhorst street profiles transformation and high rise

From Industrial estate to, transformation to residential/working space, to a healthy city (Gemeente Den Haag 2019).



Gemeente Den Haag. 2019. *Plan Openbare Ruimte & Buitenruimte Binckhorst*, Binckhorst street profiles transformation. Den Haag: Gemeente Den Haag.

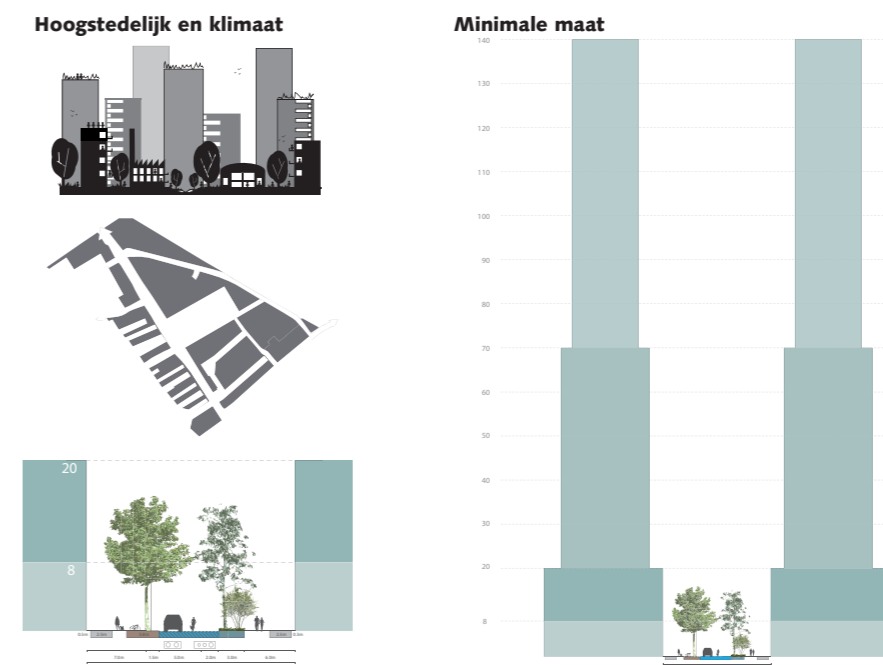
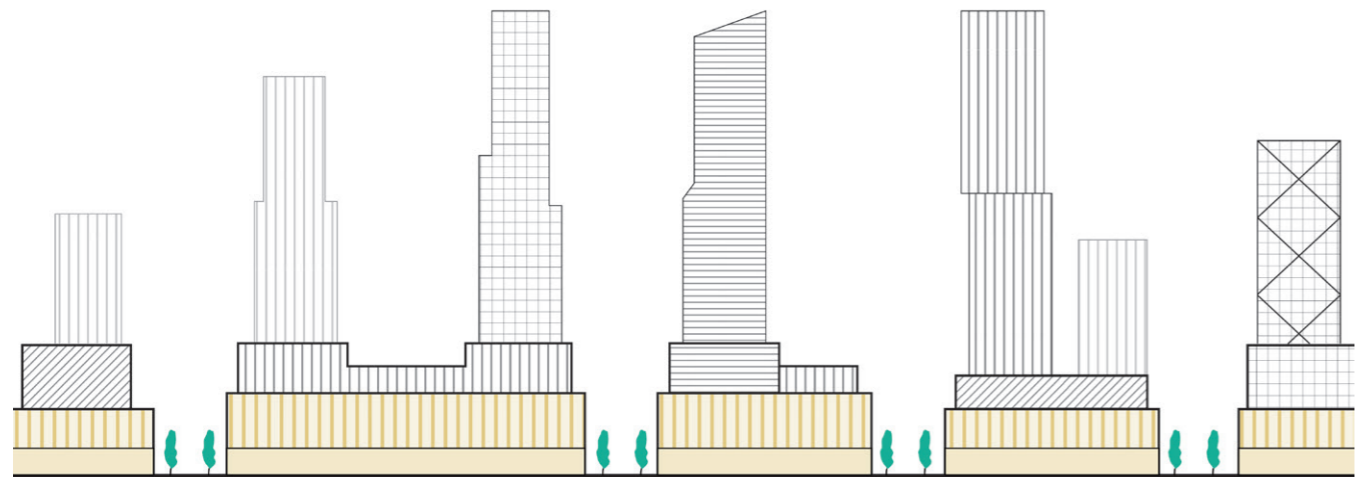


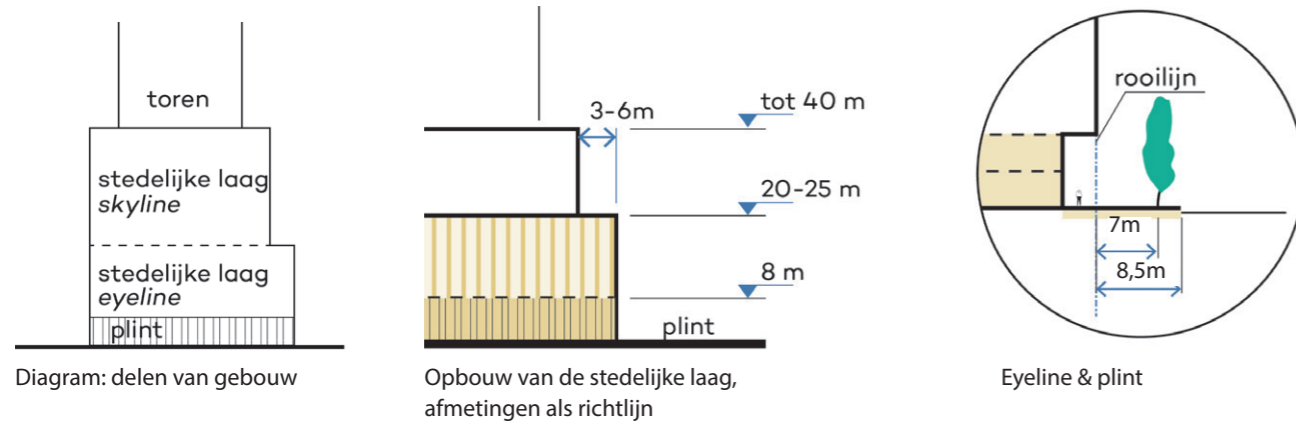
Figure B37. High rise. Den Haag: Source: Gemeente Den Haag, *Plan Openbare Ruimte & Buitenruimte Binckhorst*, 2019

### Binckhorst Avenue ensemble

Binckhorstlaan serves as the urban spine, framed by high-rise buildings with street-level active plinths (0–25 m, the eyeline) and towers above forming a dynamic skyline. Setbacks (3–6 m) and varied façades allow for height variation while respecting the Eyeline-Skyline guidelines. Plinths (min. 8 m) provide entrances, protection from weather, and lively street-level activity, creating a coherent and attractive urban environment (Gemeente Den Haag 2020).



Ensembles langs Binckhorstlaan: architectonische eenheid en verticale geleding in gevel in de stedelijke laag: het basement, daarboven stijl- en ontwerprijheid en dynamische volumeopbouw



#### STEDELIJKE LAAG EYELINE (BENEDENDEEL):

- architectonische eenheid met verticale geleding over hele Binckhorstlaan (zone Binckhorst Avenue)
- hoogte 20-25m (NB: richtlijn hoogte langs Binckhorstlaan min 22 m, eyeline & skyline beschrijft 25m hoogte)
- constante hoogte van stedelijke laag per blok

#### STEDELIJKE LAAG SKYLINE (BOVENDEEL)

- wisselende hoogtes (25-40m)
- verschillende stijlen tussen blokken
- binnen blok architectonische eenheid
- richtlijn setback 3-6 m

#### PLINT:

- bescherming tegen wind en regen, bijvoorbeeld: droogloper, arcades (geen luifels)
- voldoende ruimte om de overgang van binnen naar buiten te faciliteren
- richtlijn min 8 meter hoog (in één of twee lagen)

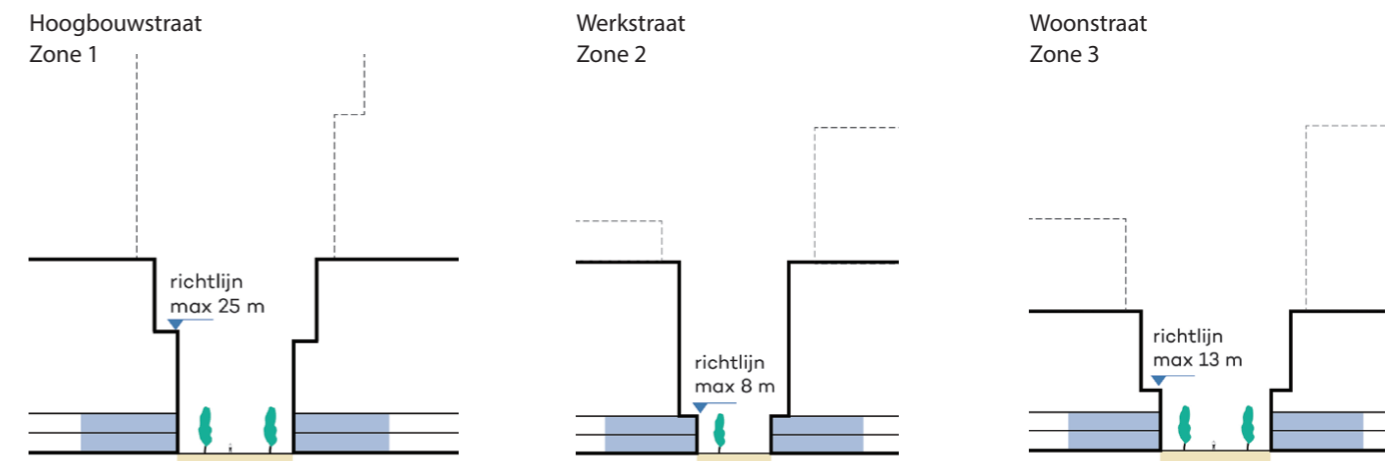
#### TOREN:

- verschillende gevelstijlen: passend in Binckhorst
- hoogteaccenten aan bijzondere plekken: kruispunt, tunnelmond RoBa en hoekpunten
- dynamische volumeopbouw: setbacks en uitkragingen

Figure B38. Binckhorst Avenue ensemble. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Streetprofiles

Street profiles in Binckhorst are designed for human scale, with favorable sun and wind conditions and “strolling zones” at entrances and active areas. Street widths (16–24 m) and setbacks at multiple heights (8–13–22 m) ensure light, air, and livability. The 25 m urban-layer limit from Eyeline-Skyline guides tower setbacks, while minimum building heights from the Environmental Plan maintain street-level massing and coherent public space (Gemeente Den Haag 2020).



De hierboven getoonde straatprofielen zijn indicatief, maatvoering en dimensionering dienen afgestemd te worden met het Handboek Openbare Ruimte. Zie RIS303176 Handboek Openbare Ruimte Binckhorst

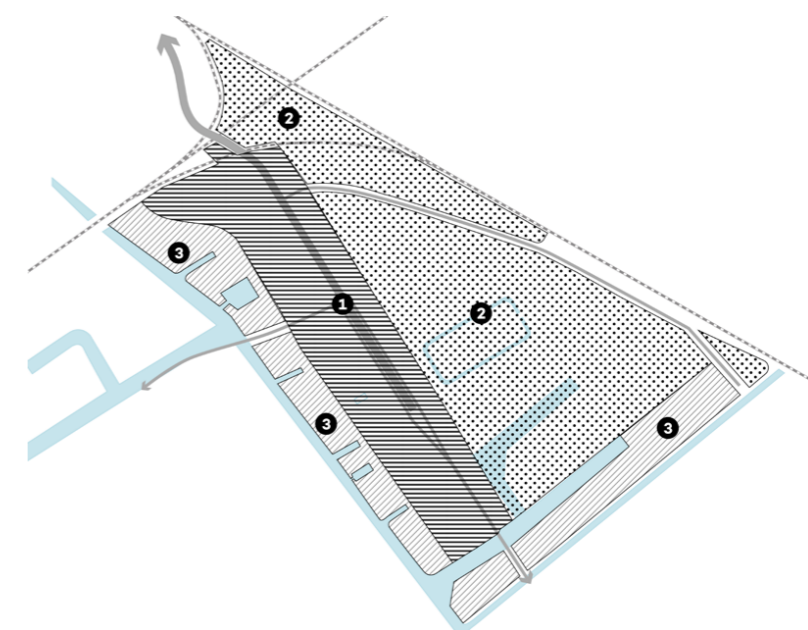


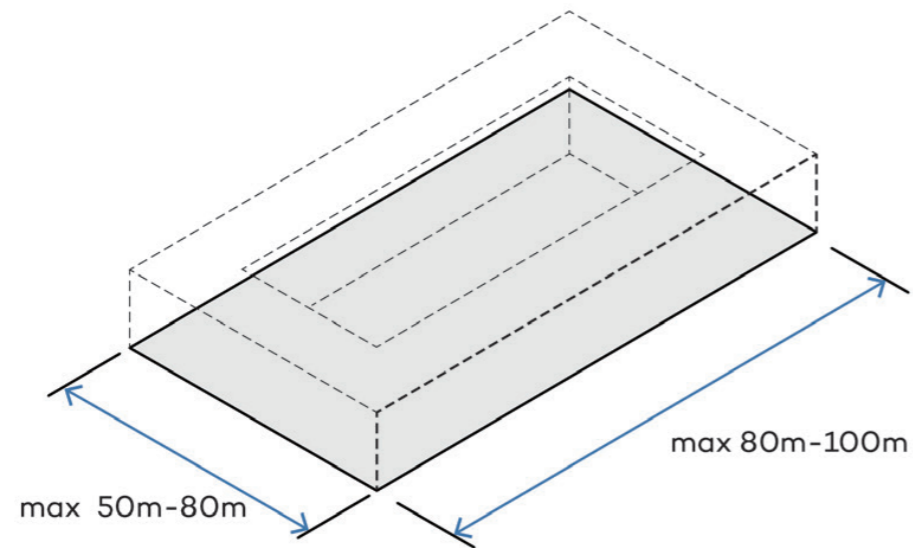
Diagram: zonering straatprofielen

Figure B39. Streetprofiles. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Block size

Binckhorstlaan serves as the urban spine, framed by high-rise buildings with street-level active plinths (0–25 m, the eyeline) and towers above forming a dynamic skyline. Setbacks (3–6 m) and varied façades allow for height variation while respecting the Eyeline-Skyline guidelines. Plinths (min. 8 m) provide entrances, protection from weather, and lively street-level activity, creating a coherent and attractive urban environment (Gemeente Den Haag 2020).

Richtlijn maximale afmetingen ontwikkelvelden



Opties bij grote ontwikkelvelden (voorbeeld 100x100m en groter)

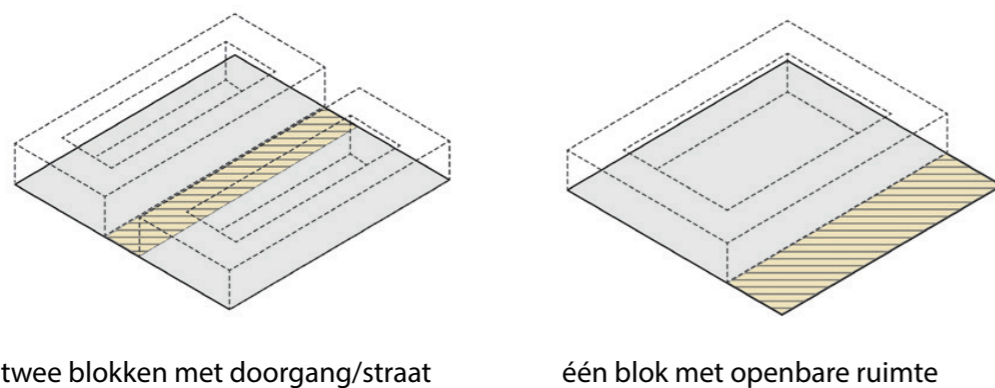


Figure B40. Block size. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Vertical city

Towers in Binckhorst are designed as mixed-use complexes combining housing, services, and commercial/office functions. They promote a high-density, flexible urban environment with collective outdoor spaces, adaptable floor layouts for future functional changes, circular construction principles, and façade-integrated energy solutions (Gemeente Den Haag 2020).

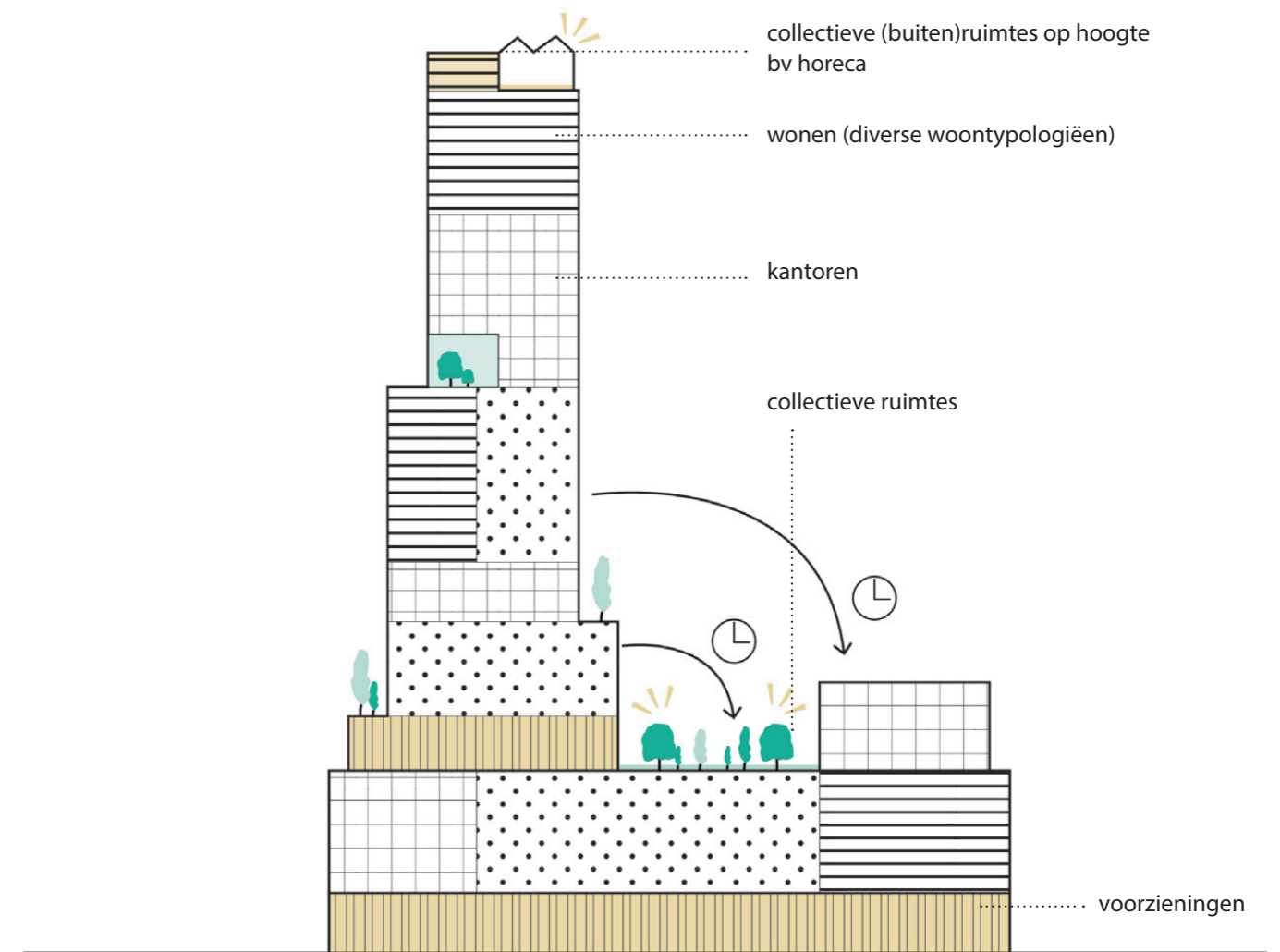


Figure B41. Vertical city. Source: Gemeente Den Haag, Beeldkwaliteitsplan Binckhorst: Uitwerking van de Gebiedsaanpak Binckhorst, 2020

### Jeugd ontmoetingscentrum Rabot

Jeugd ontmoetingscentrum Rabot  
Location: Gent, Belgium  
Architect: Beel & Achtergael Architects  
Completed: 2007  
Footprint: 1771 m<sup>2</sup>  
Floors: 2

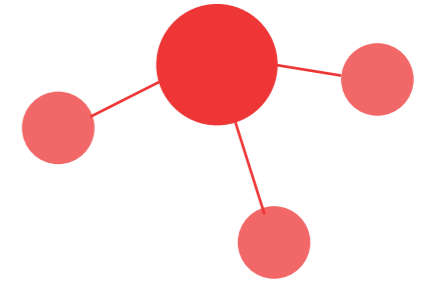
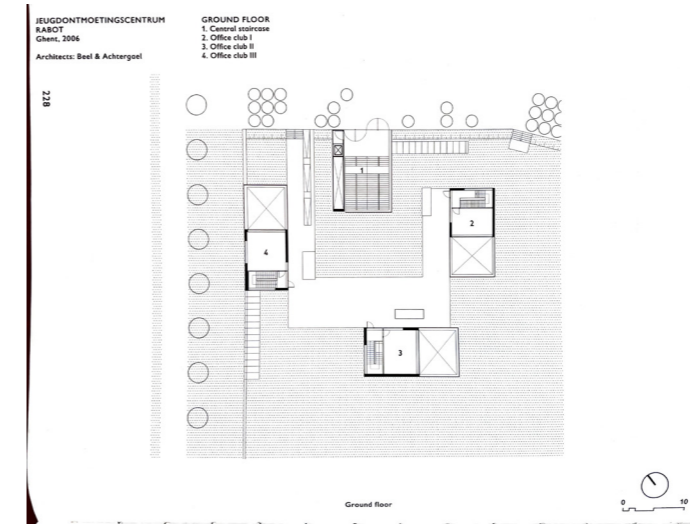


Figure C1. Ground floorplan Jeugd ontmoetingscentrum Rabot. Source: Walls that teach: On the Architecture of Youth Centres, 2015.

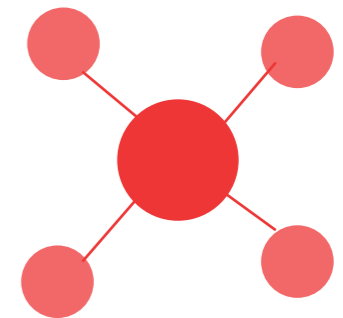
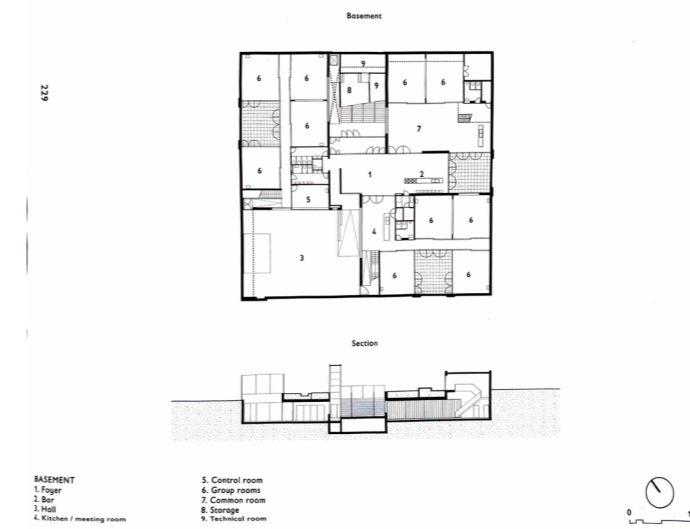


Figure C2. Basement floorplan Jeugd ontmoetingscentrum Rabot. Source: Walls that teach: On the Architecture of Youth Centres, 2015.

### Dynamo Eindhoven

Dynamo Eindhoven  
Location: Eindhoven, the Netherlands  
Architect: diederendirix  
Completed: 2005  
Footprint: 4000 m<sup>2</sup>  
Floors: 6

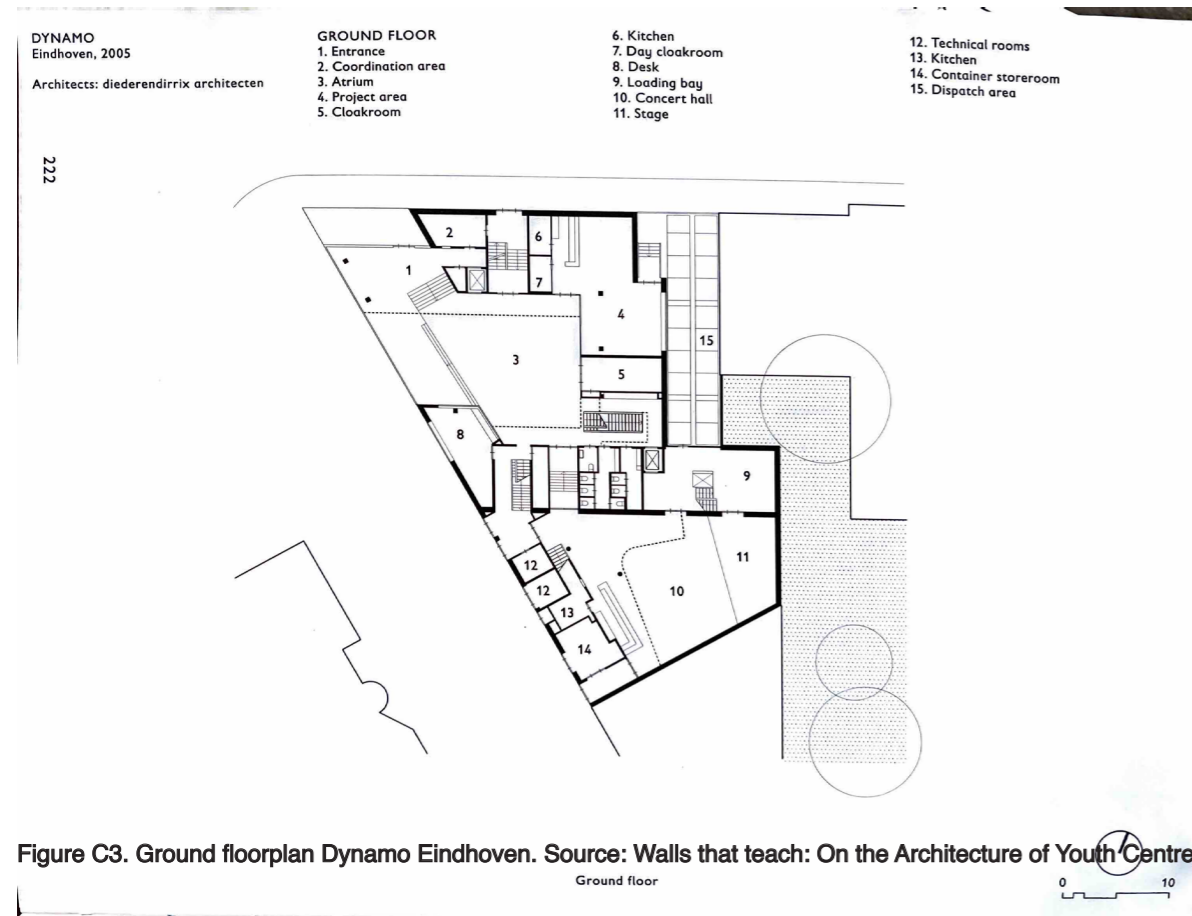


Figure C3. Ground floorplan Dynamo Eindhoven. Source: Walls that teach: On the Architecture of Youth Centres, 2015.

### Sterrenbos Youth Building

Sterrenbos Youth Building  
Location: Nazareth, Belgium  
Architect: Atelier Vens Vanbelle  
Completed: 2023  
Footprint: 653 m<sup>2</sup>  
Floors: 2

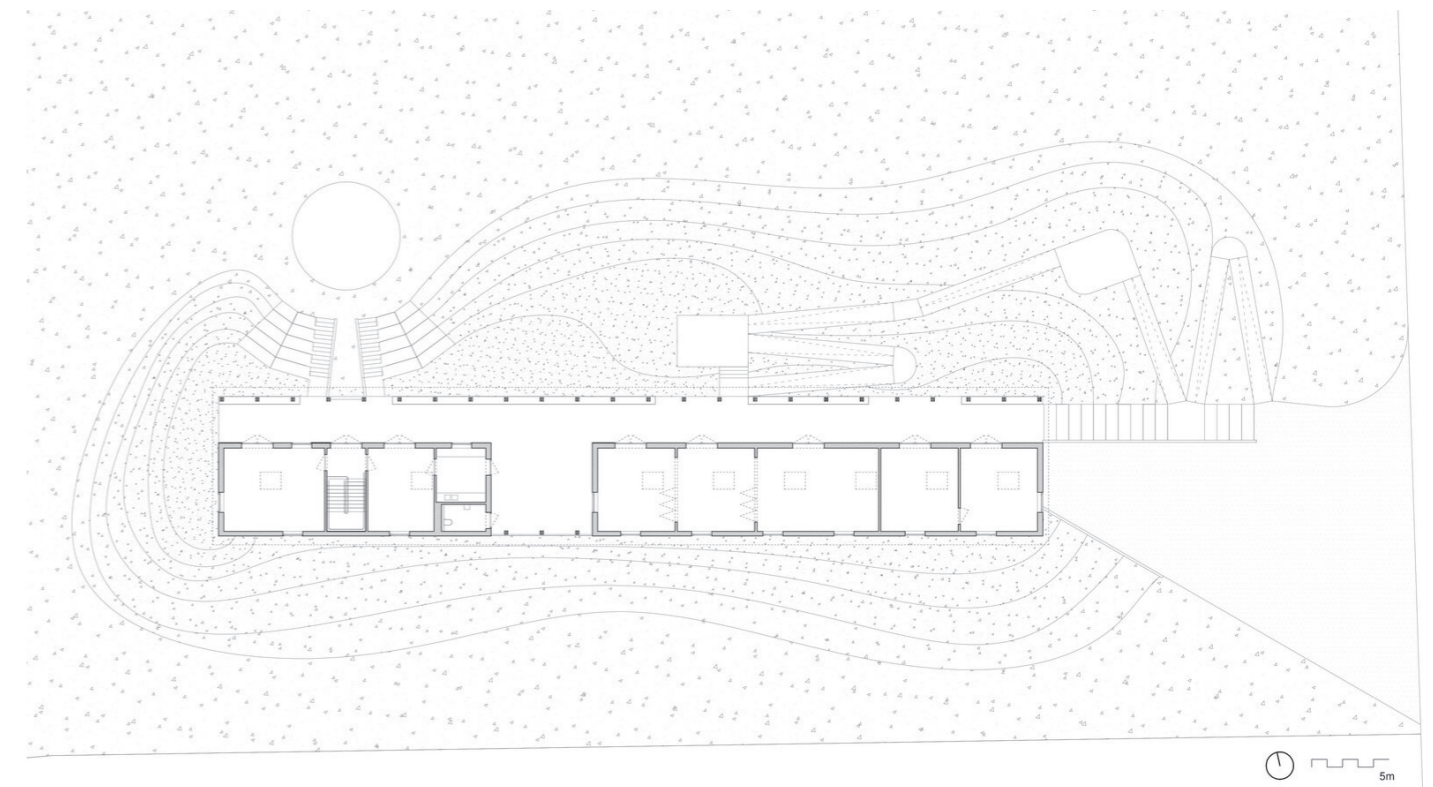
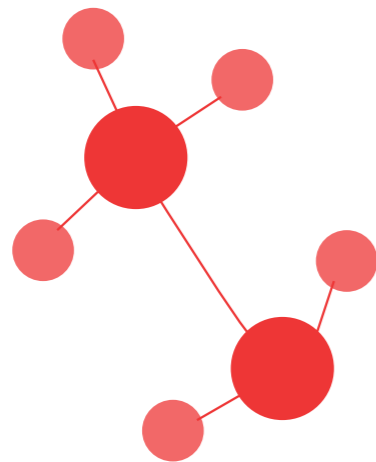


Figure C4. Ground floorplan Sterrenbos Youth Building. Source: ArchDaily, "Sterrenbos Youth Building / Atelier Vens Vanbelle," 2024, <https://www.archdaily.com/1018743/sterrenbos-atelier-vens-vanbelle>



### Kahlert Youth Media Arts Center

Kahlert Youth Media Arts Center  
 Location: Utah, United States  
 Architect: Atlas Architects Inc.  
 Completed: 2020  
 Footprint: 2283 m<sup>2</sup>  
 Floors: 3

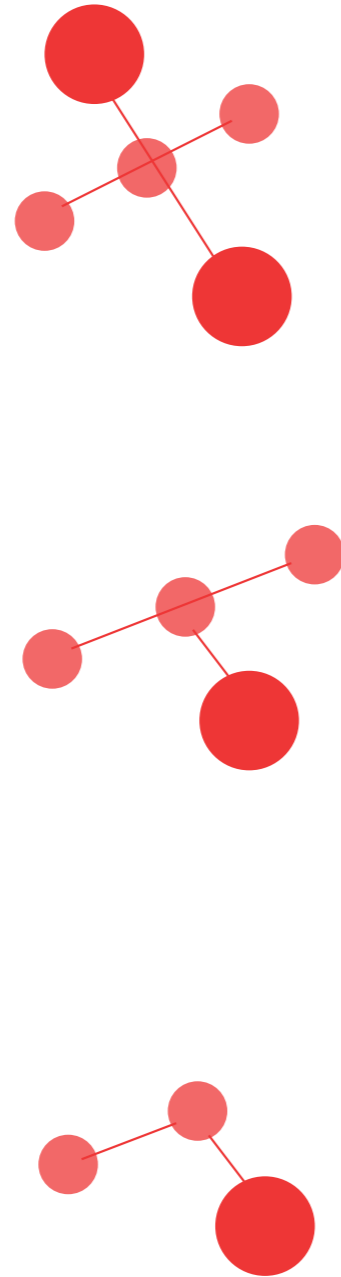
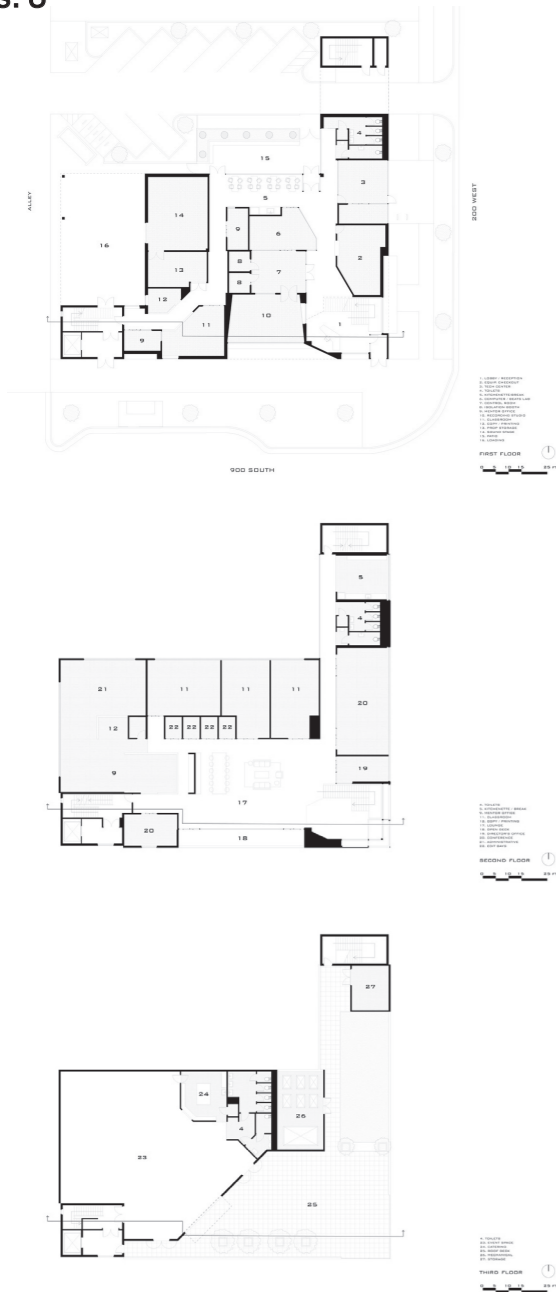


Figure C5. First, second, third floorplan Kahlert Youth Media Arts Center. Source: ArchDaily, "Spy Hop at The Kahlert Youth Media Arts Center / Atlas Architects Inc.," ArchDaily, September 25, 2022, <https://www.archdaily.com/989318/spy-hop-at-the-kahlert-youth-media-arts-center-atlas-architects>

### JOC De Lichting

JOC De Lichting  
 Location: Lichtervelde, Belgium  
 Architect: Raamwerk  
 Completed: 2018  
 Footprint: 420 m<sup>2</sup>  
 Floors: 1

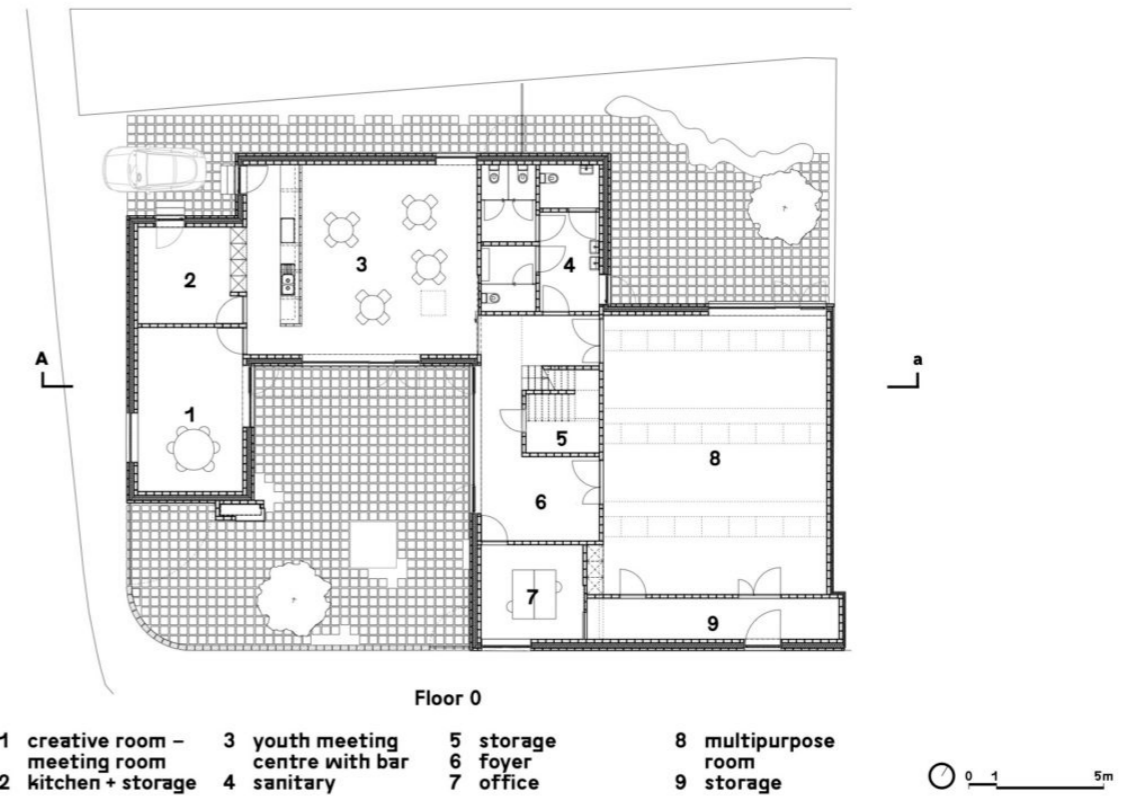
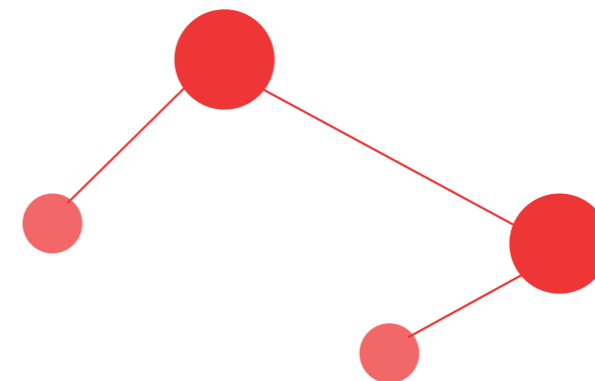


Figure C6. Ground floorplan JOC De Lichting. Source: A+ Architecture in Belgium, "Een groot huis," A+, March 30, 2020, <https://www.a-plus.be/nl/een-groot-huis/>



### Brookfield Youth and Community centre

#### Brookfield Youth and Community centre

Location: Tallaght, Dublin

Architect: Hasset & Ducatez

Completed: 2007

Footprint: - m<sup>2</sup>

Floors: 2

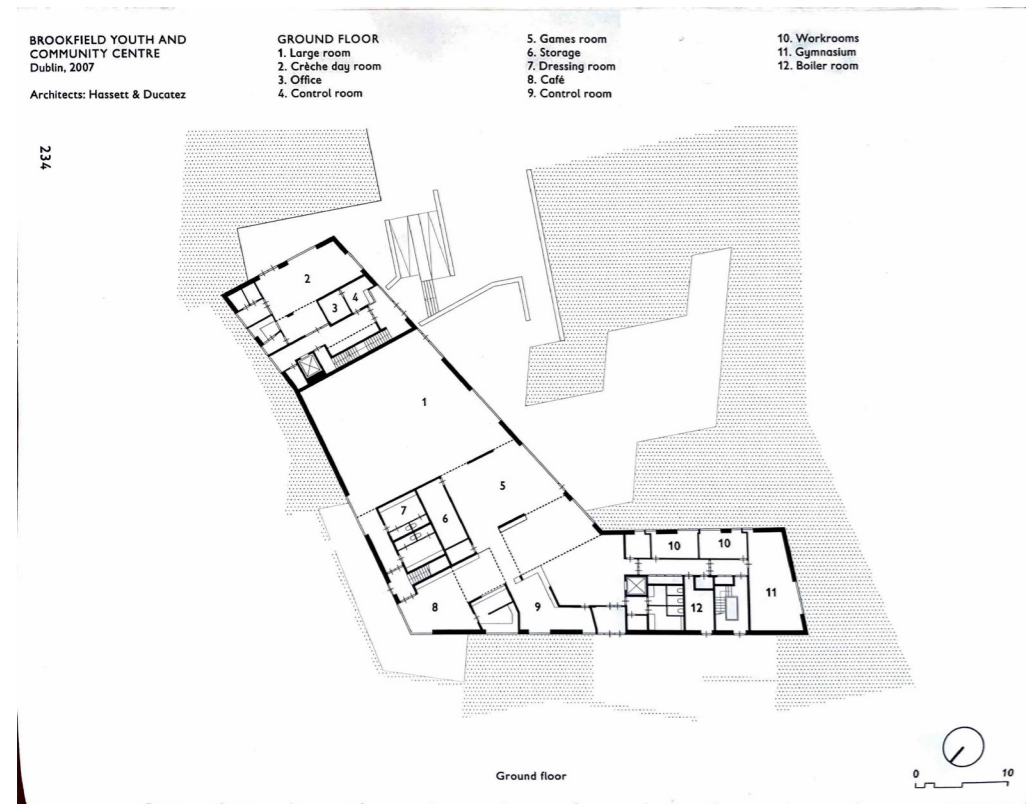


Figure C7. Ground floorplan Brookfield Youth and Community centre. Source: Walls that teach: On the Architecture of Youth Centres, 2015.

### La Casa mas Grande

#### La Casa mas Grande

Location: Rivas-

Vaciamadrid, España

Architect: Mi5 Arquitectos

Completed: 2009

Footprint: 1824 m<sup>2</sup>

Floors: 1

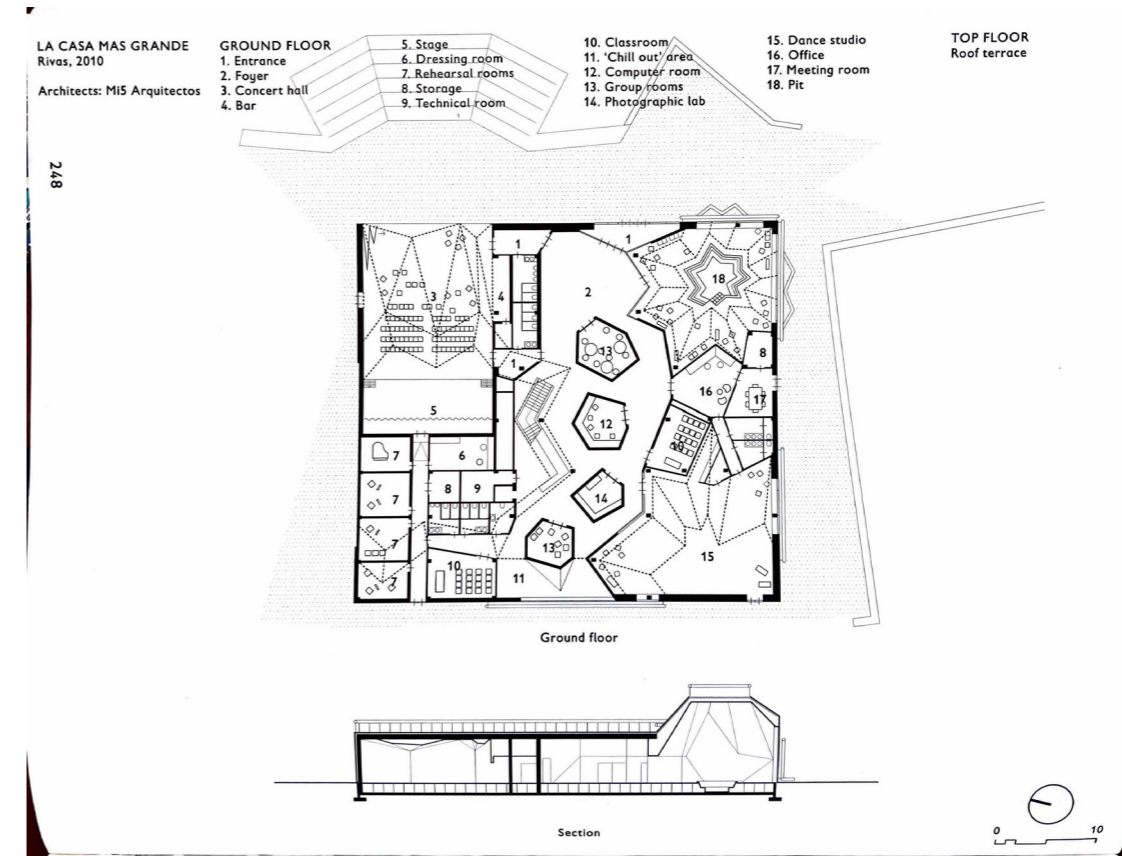
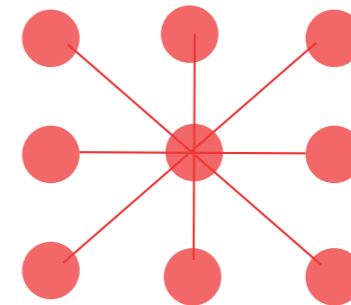
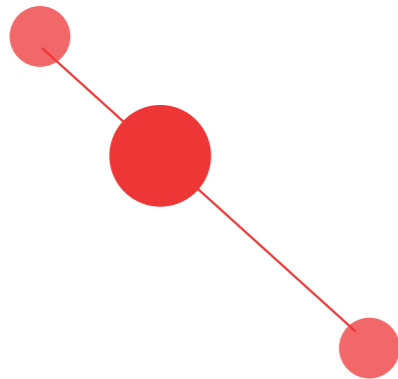


Figure C8. Ground floorplan La Casa mas Grande. Source: Walls that teach: On the Architecture of Youth Centres, 2015.

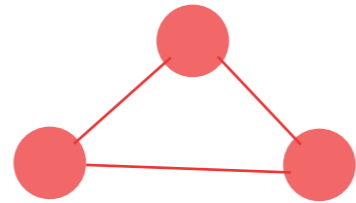
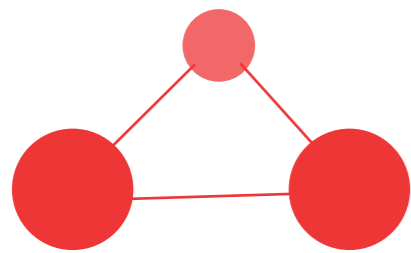


### TNG Youth & Community Centre

TNG Youth & Community Centre  
Location: London, United Kingdom  
Architect: RCKa architects  
Completed: 2014  
Footprint: - m<sup>2</sup>  
Floors: 3



Figure C9. Lower ground floorplan and first floor plan TNG Youth & Community Centre. Source: RCKa, "TNG Youth & Community Centre," RCKa, 2026, <https://rcka.co.uk/our-projects/tng-youth-community-centre/>



### Kiel Youth Center

Kiel Youth Center  
Location: Antwerp, Belgium  
Architect: awg architecten  
Completed: 2020  
Footprint: - m<sup>2</sup>  
Floors: 2

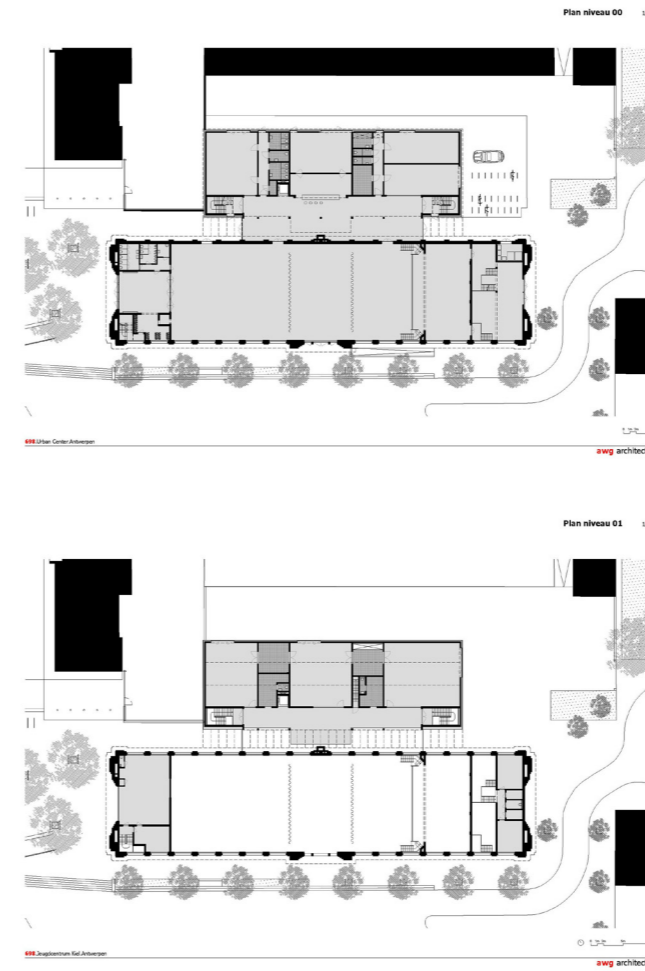


Figure C10. Ground floor and first floorplan Kiel Youth Center. Source: Archello, "Kiel Youth Centre / awg architecten," Archello, 2020, <https://archello.com/project/kiel-youth-center>

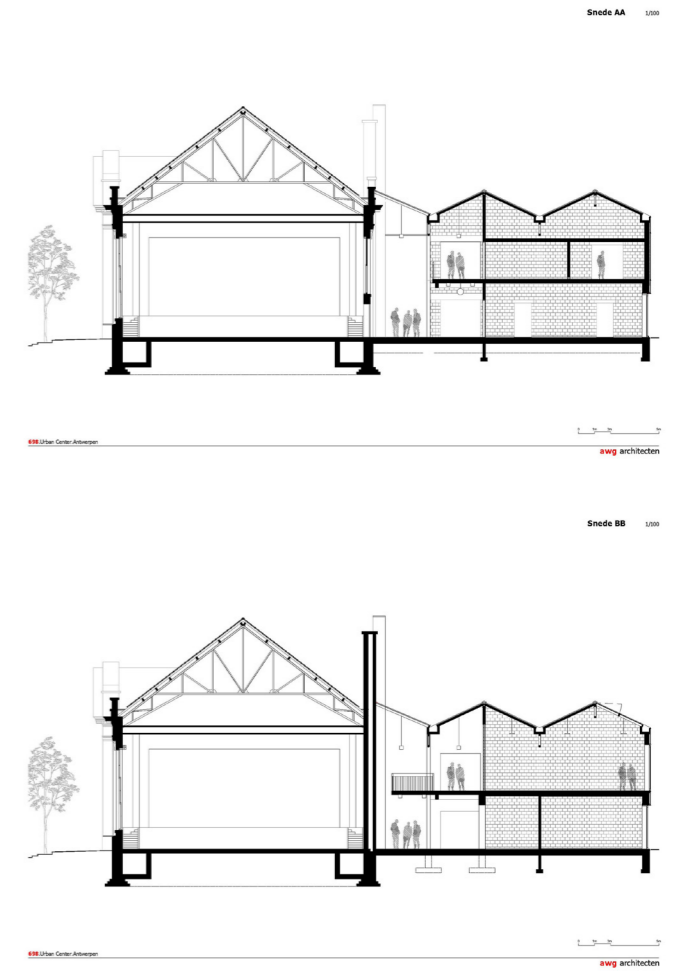


Figure C11. Section AA and BB Kiel Youth Center. Source: Archello, "Kiel Youth Centre / awg architecten," Archello, 2020, <https://archello.com/project/kiel-youth-center>



appendix D  
**precedent analysis rehabilitation, community and wellness**

# Rehabilitation Centre Groot Klimmendaal

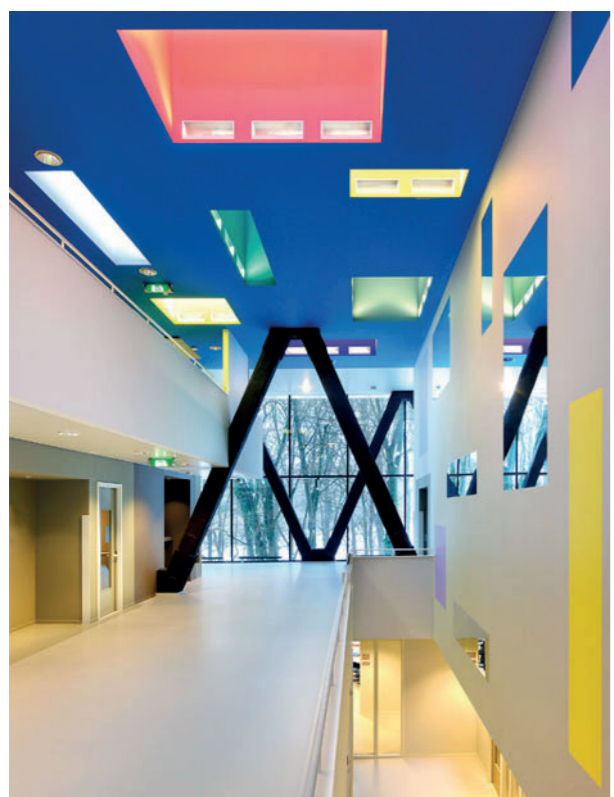
Location: Klimmendaal, The Netherlands

Architect: Koen van Velsen

Completed: 2011

Footprint: 14000 m<sup>2</sup>

Floors: 6



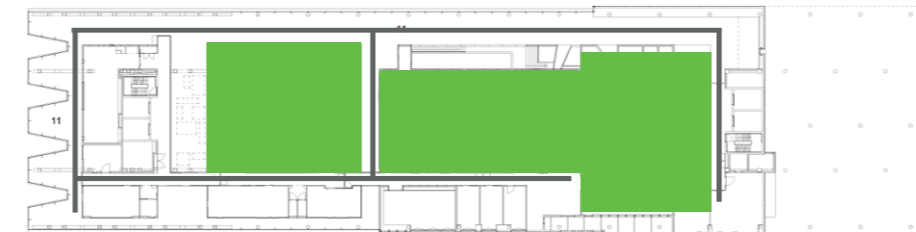
0 20 m level -1

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio



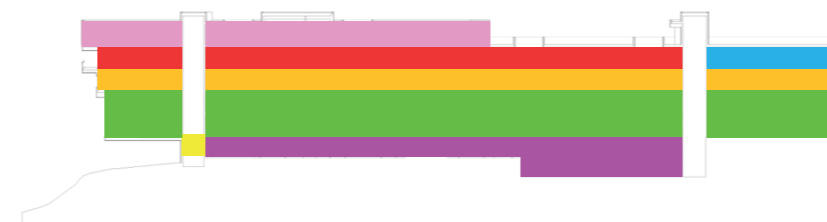
0 20 m level 0

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio

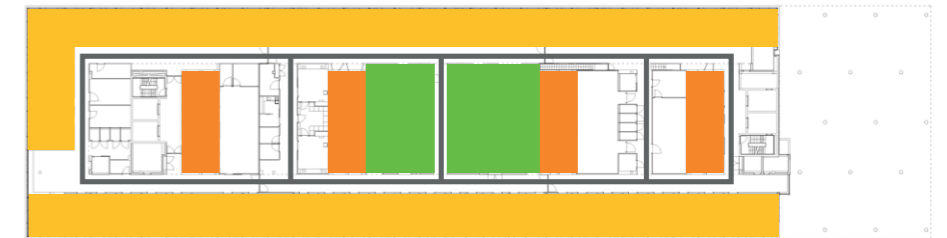


0 20 m level 1

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio

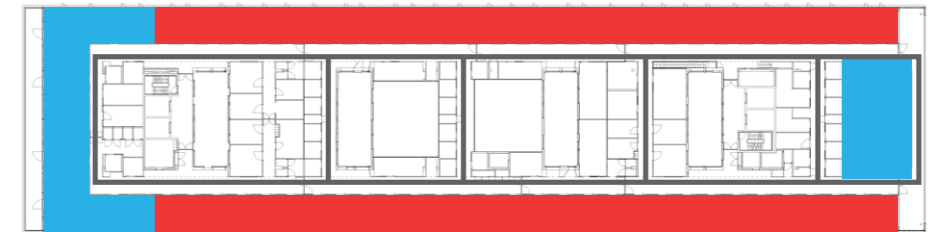


longitudinal section



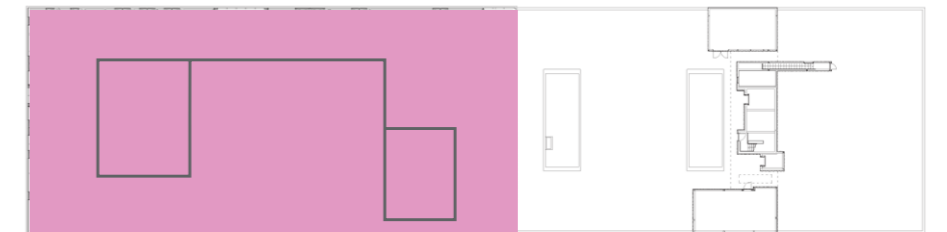
0 20 m level 2

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio



0 20 m level 3

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio



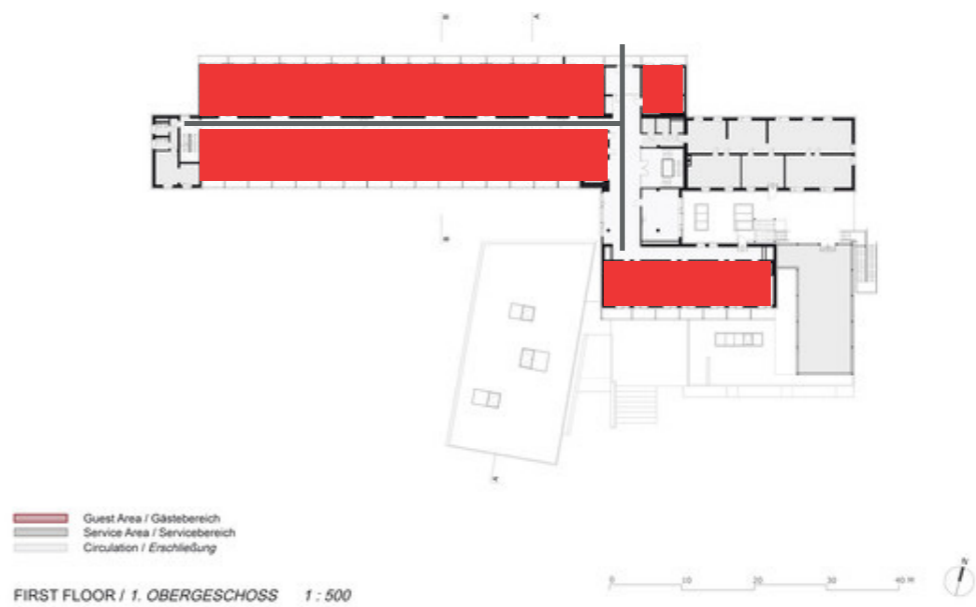
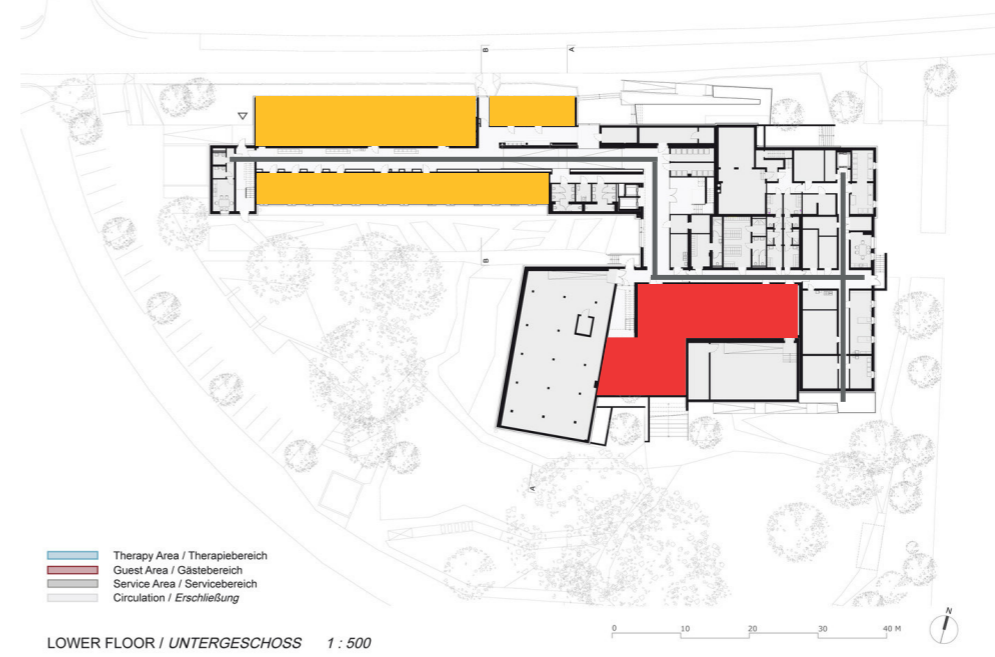
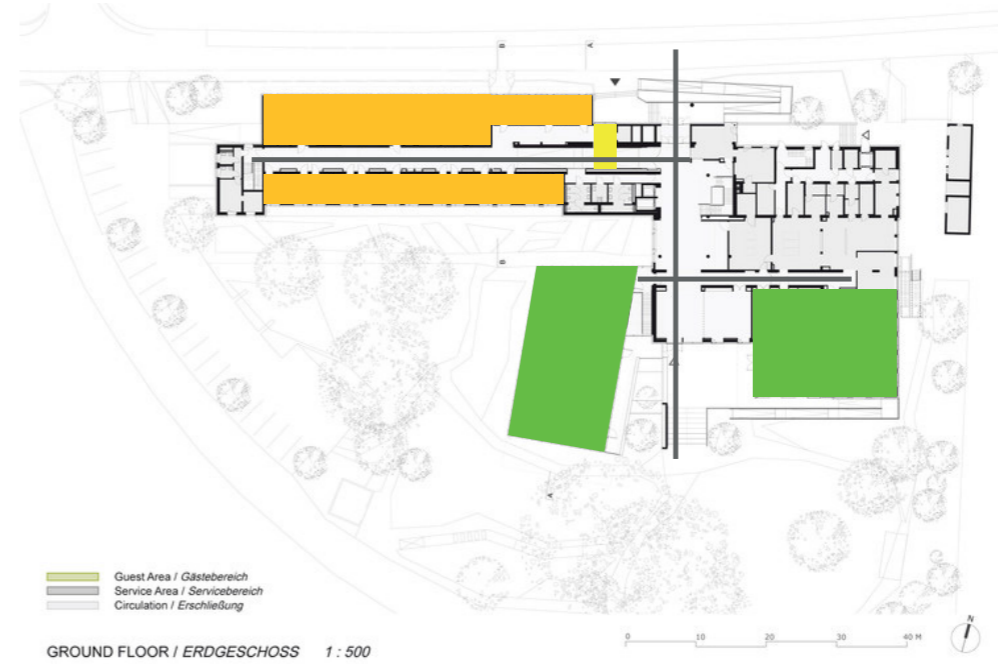
0 20 m level 4

- 1 entrance
- 2 office
- 3 gymnasium
- 4 swimming pool
- 5 theatre
- 6 restaurant
- 7 fitness centre
- 8 room for patient
- 9 living room
- 10 ronald mcdonald house
- 11 void
- 12 patio

- entrance
- recreational
- office
- patient therapy
- patient rooms
- patient living rooms
- family house
- courtyard
- circulation

# Medical Resort Bad Schallerbach

Location: Bad Schallerbach, Austria  
 Architect: Architects Collective ZT-GmbH (AC)  
 Completed: 2013  
 Footprint: 10200 m<sup>2</sup>  
 Floors: 5



- entrance
- recreational
- office
- patient therapy
- patient rooms
- patient living rooms
- family house
- courtyard
- circulation

# 165 REHAB, Clinic for Neurorehabilitation and Paraplegiology

Location: Basel, Switzerland

Architect: Herzog de Meuron

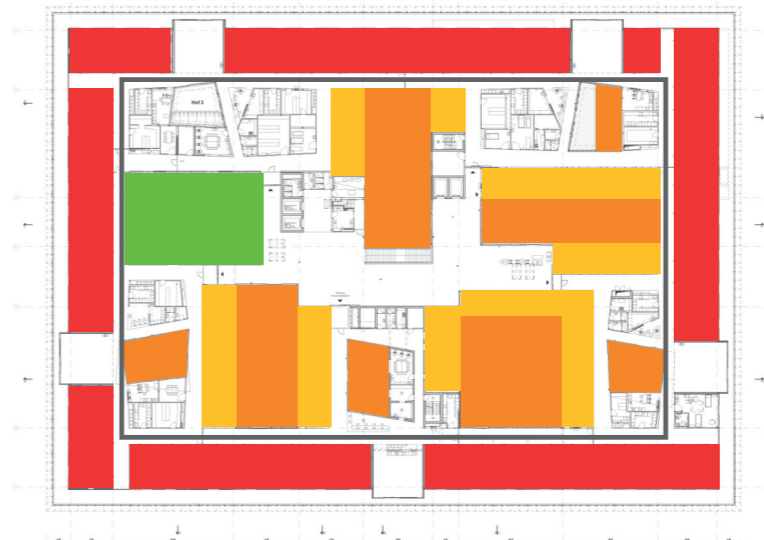
Completed: 1999-2002, renovation: 2018-2020

Footprint: 9500 m<sup>2</sup>

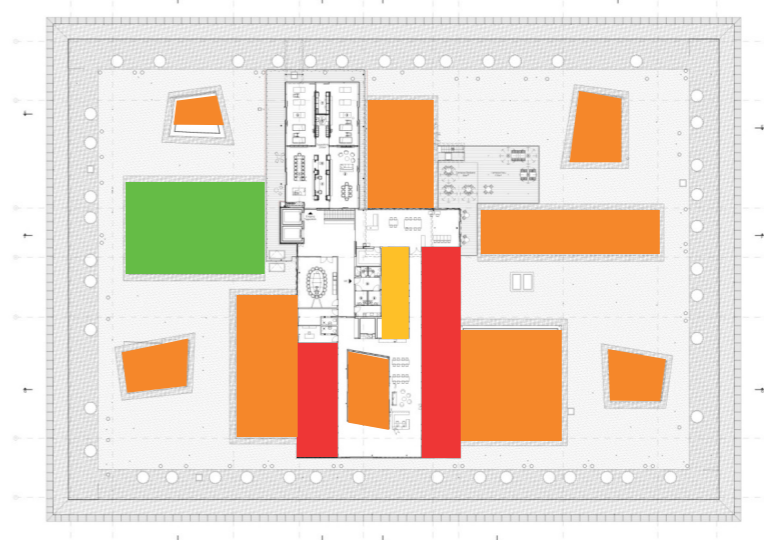
Floors: 4



Grundriss EG



Grundriss OG



Grundriss DG

- entrance
- recreational
- office
- patient therapy
- patient rooms
- patient living rooms
- family house
- courtyard
- circulation

**appendix E**  
**products**



urban plan 1:2000



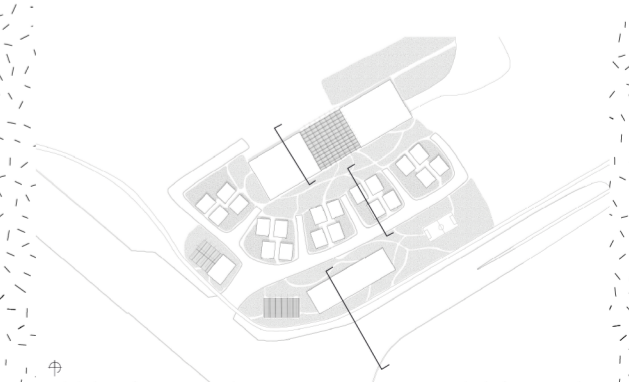


site plan 1:500



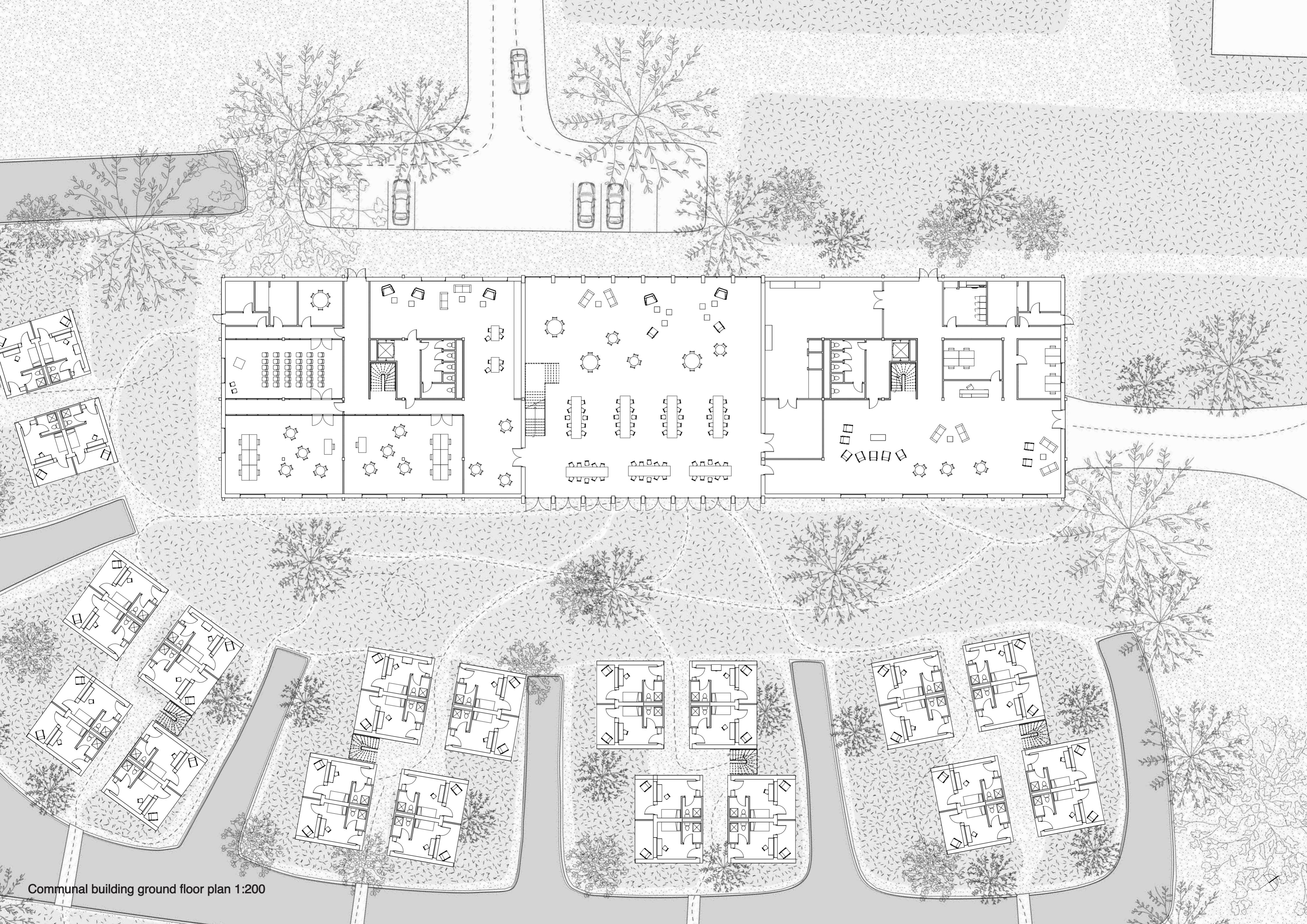


Landscape section 1:200

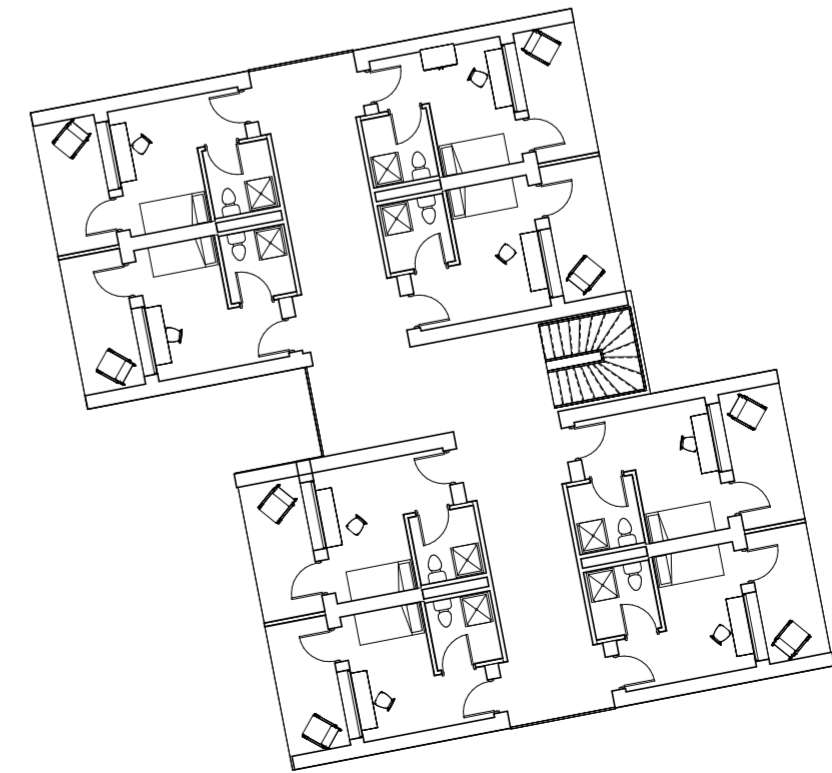
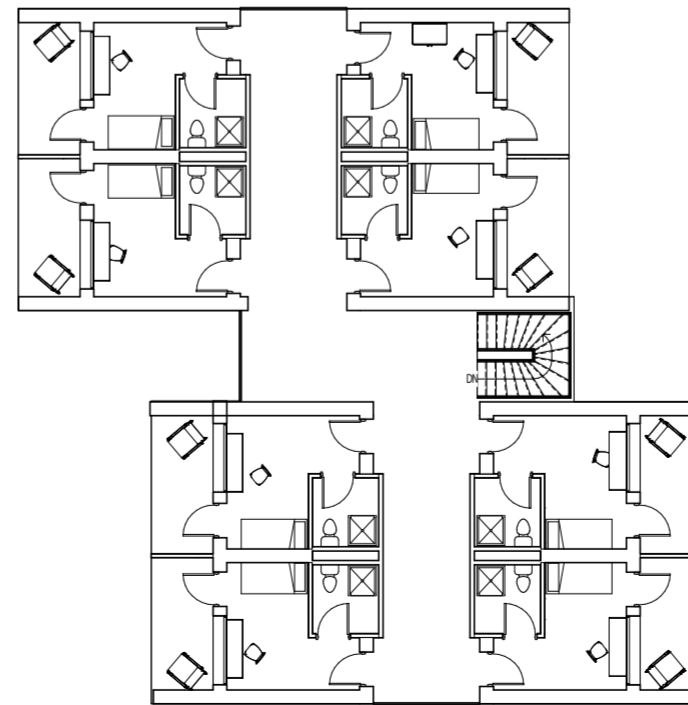
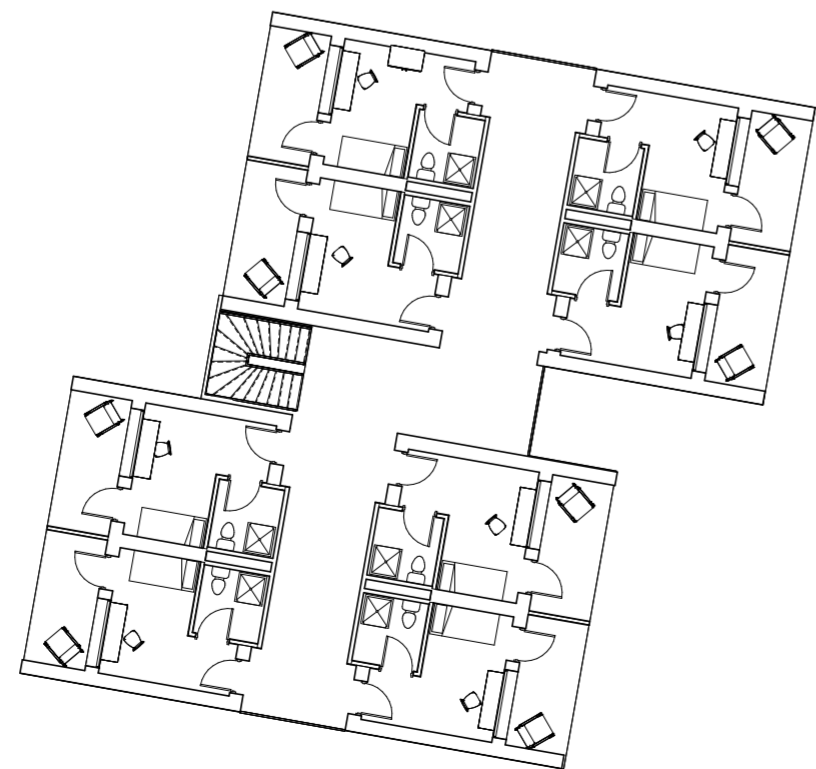
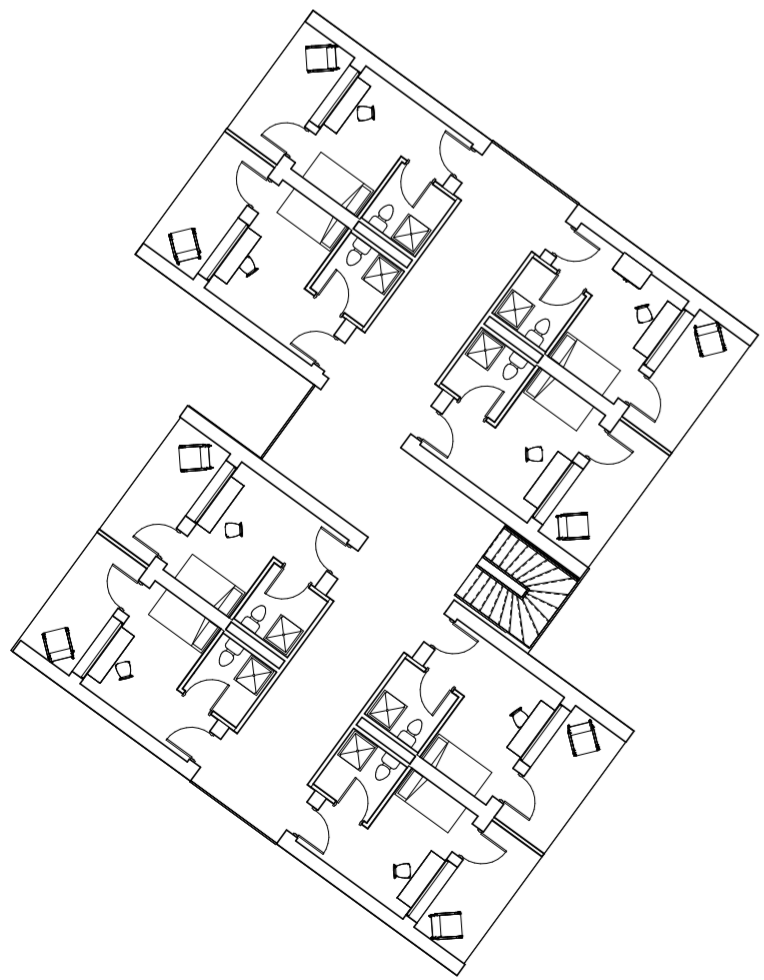
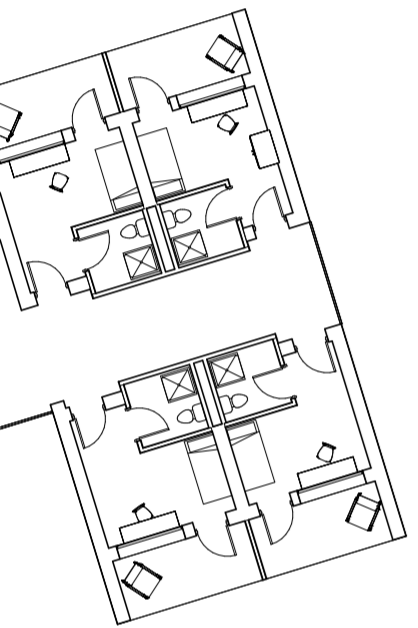
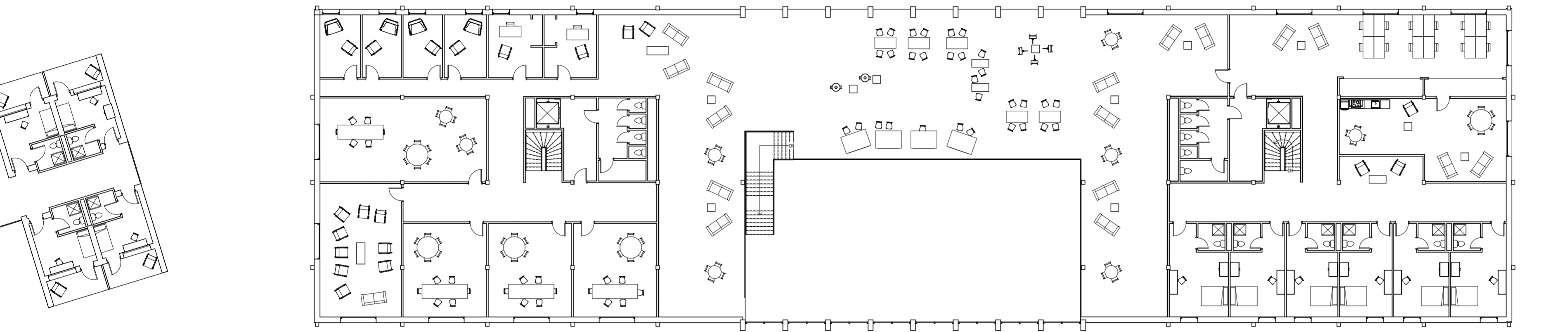


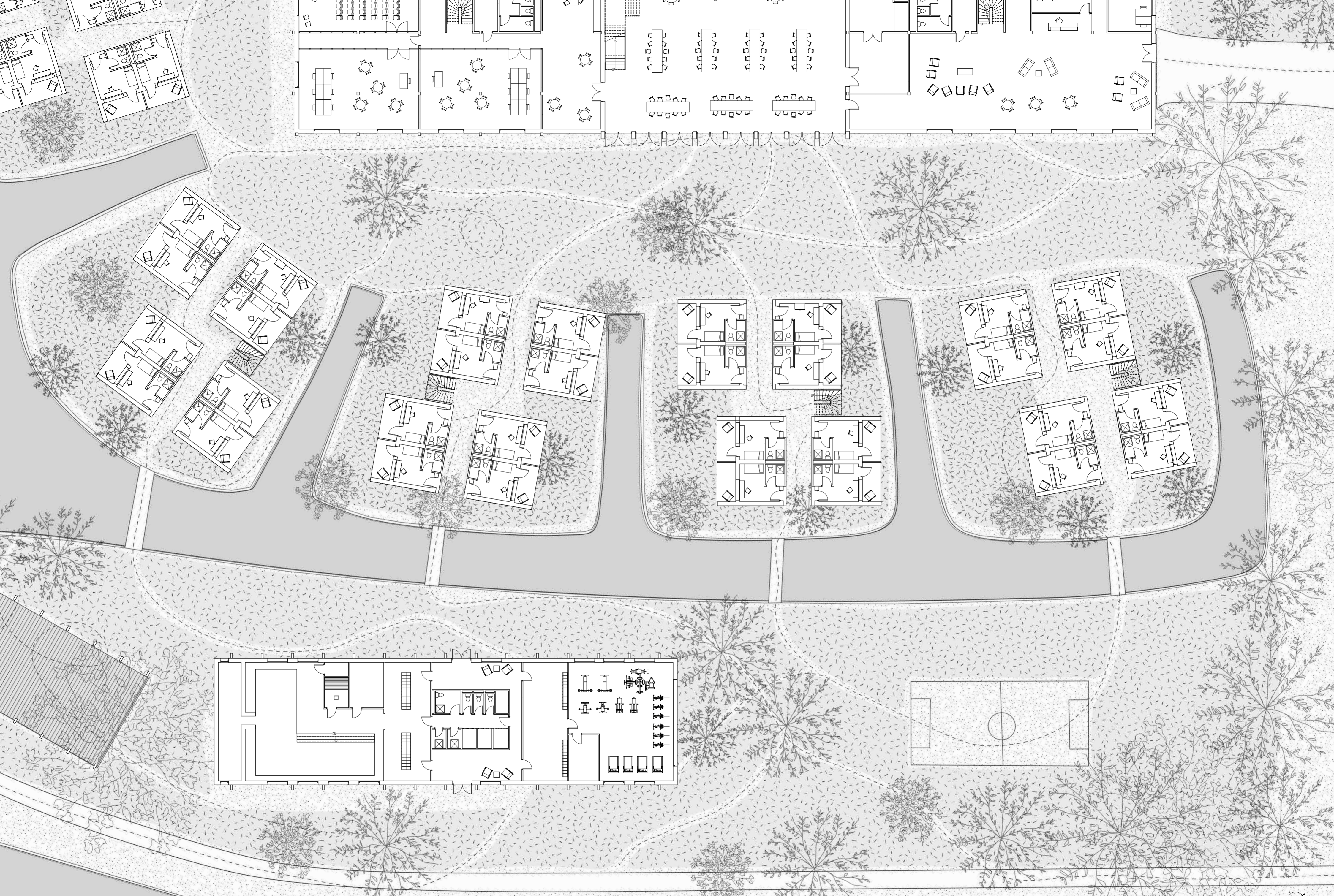


Perspective section 1:200  
Communal building - retreat cabins

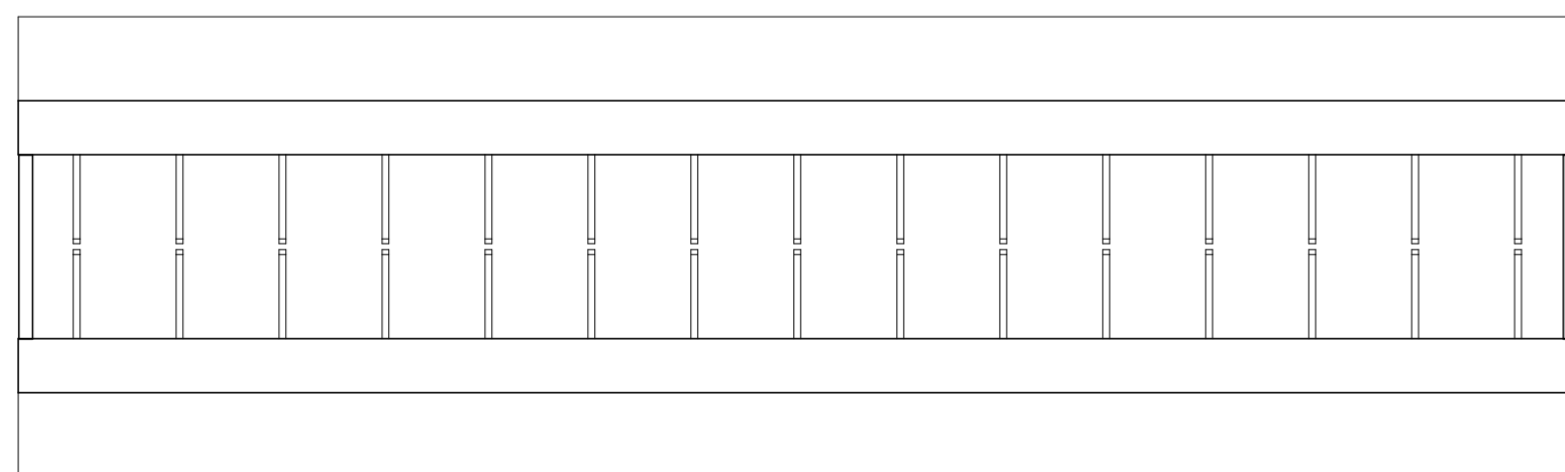
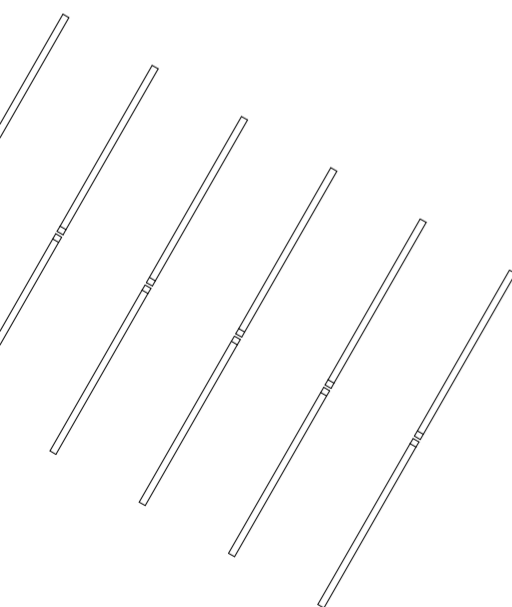
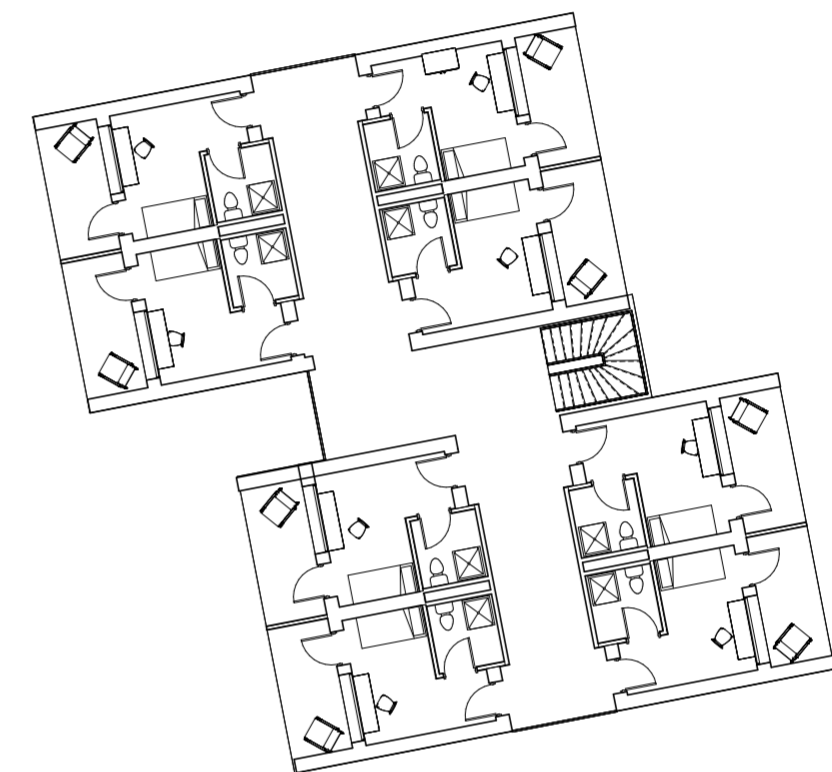
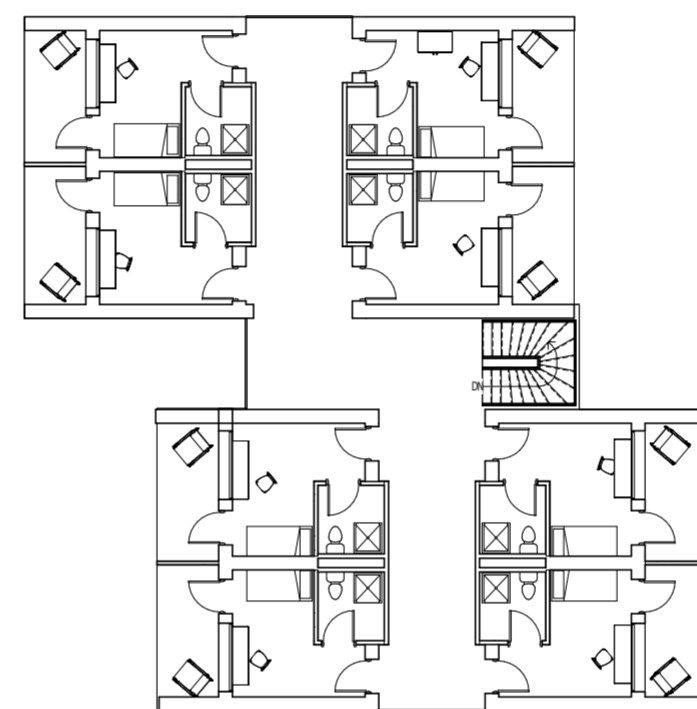
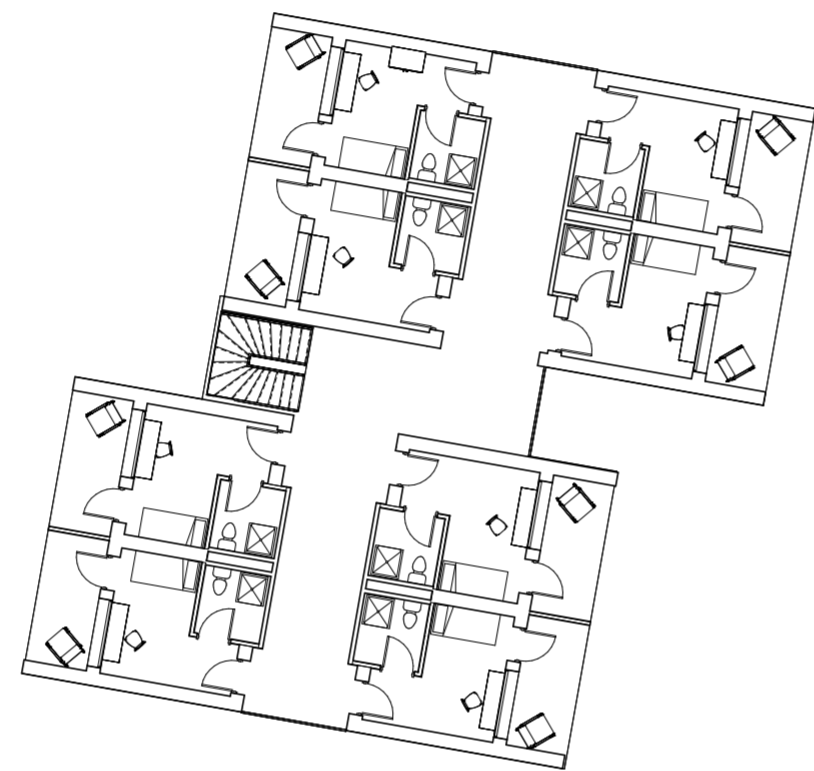
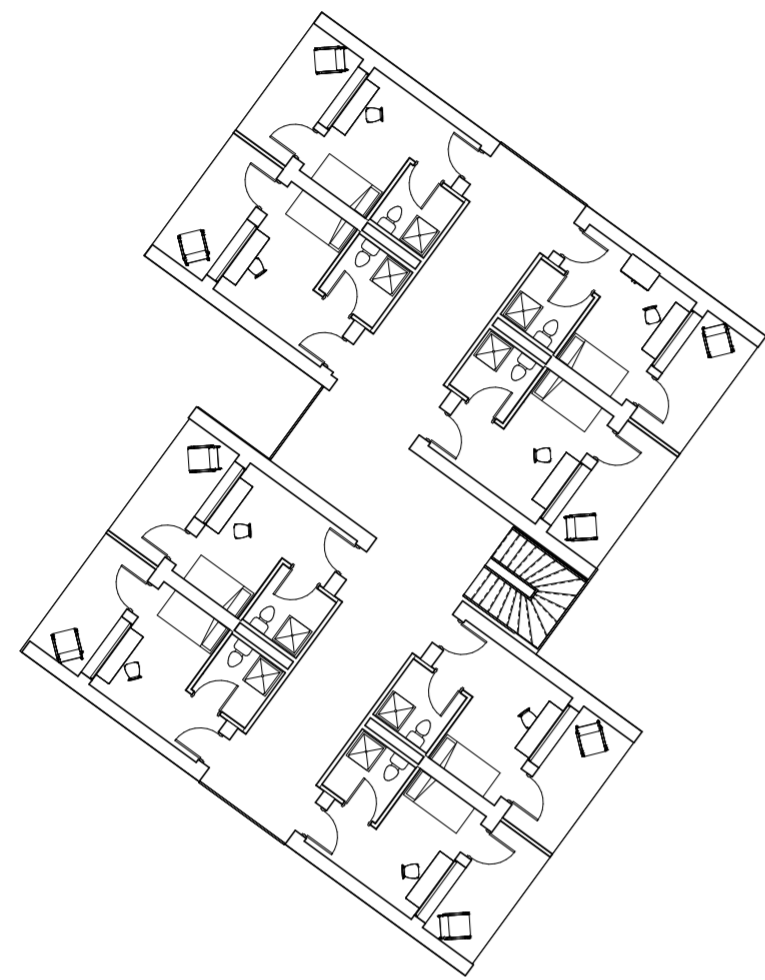
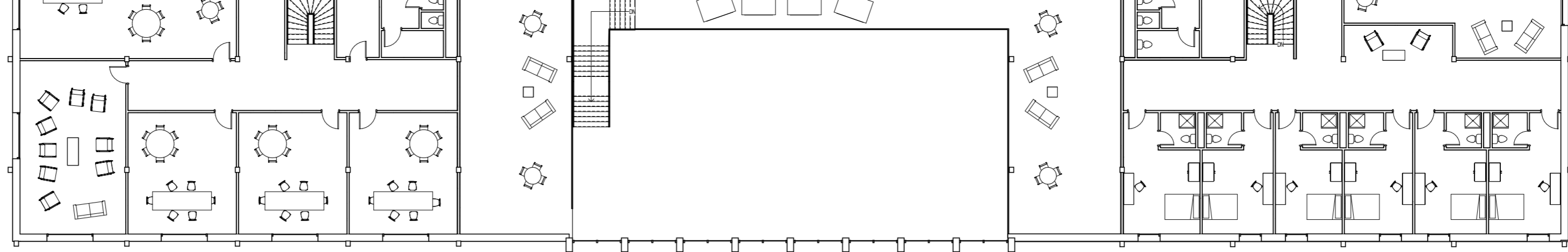
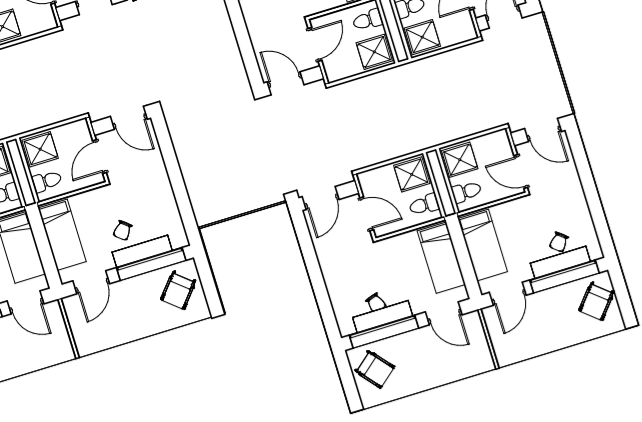


Communal building ground floor plan 1:200



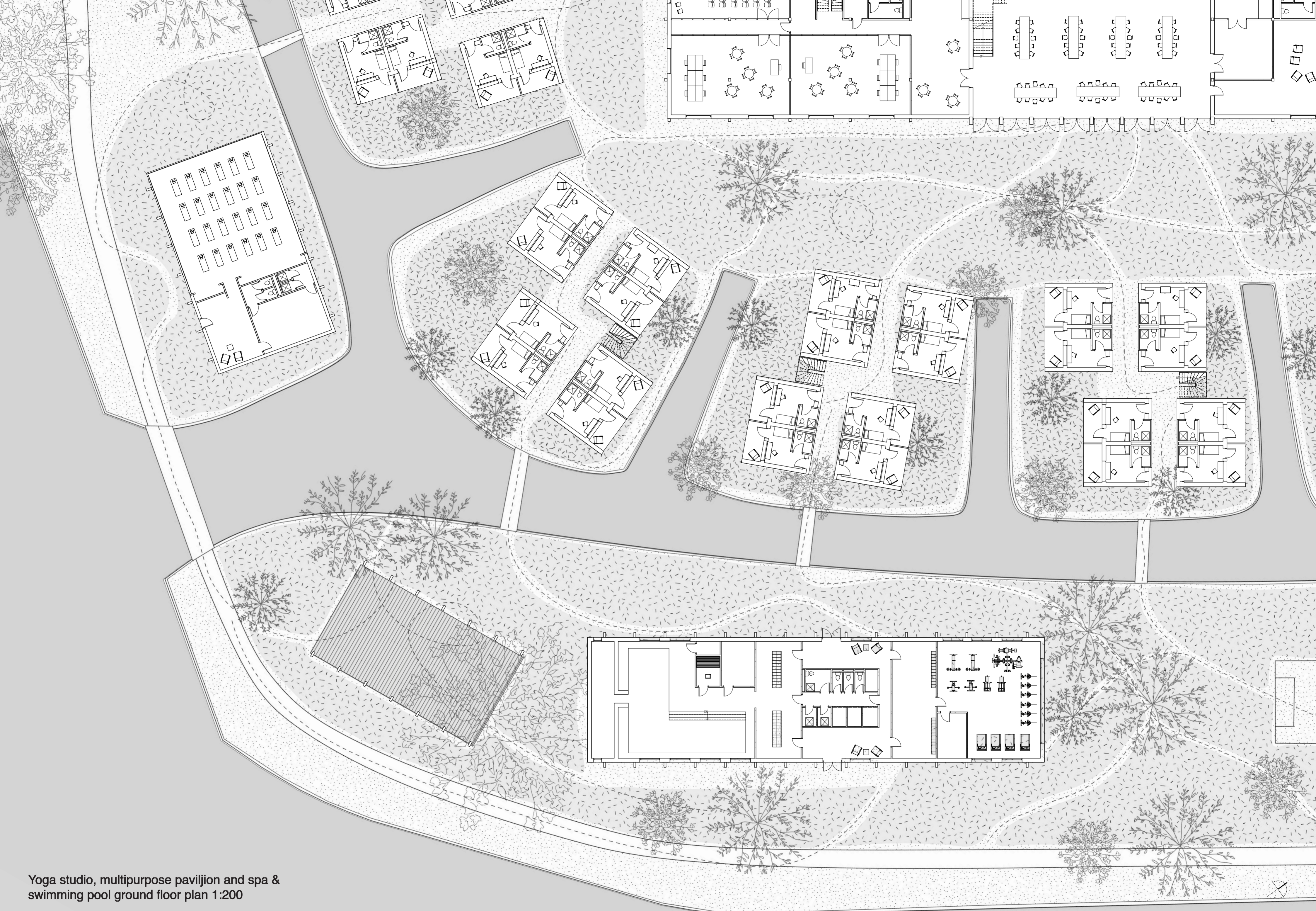


Retreat cabins ground floor plan 1:200

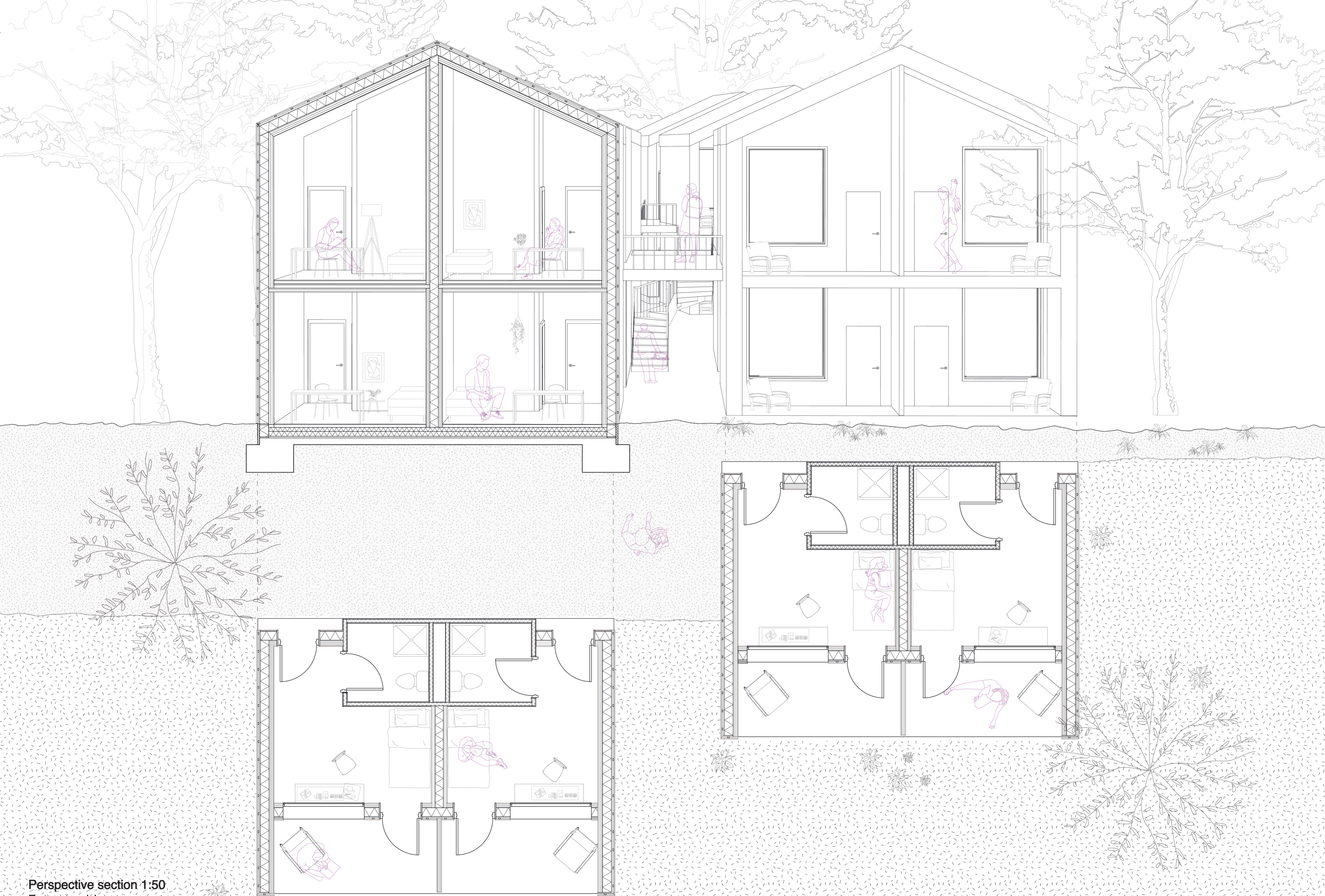


Retreat cabins first floor plan 1:200

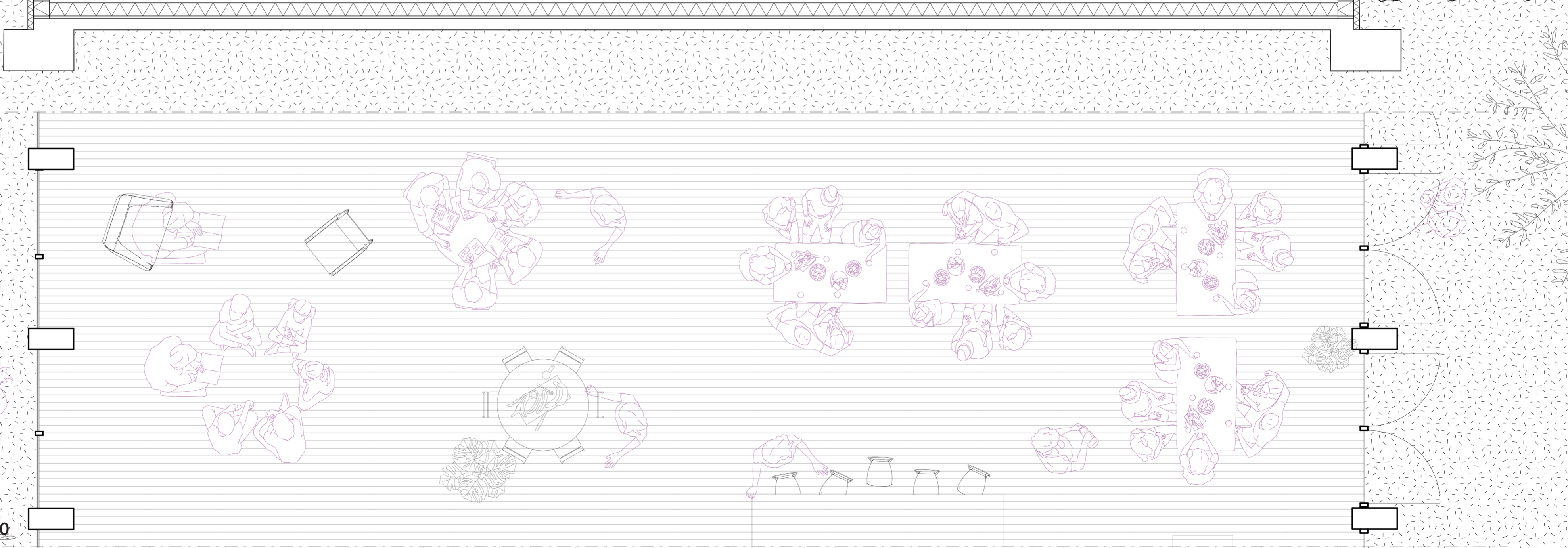
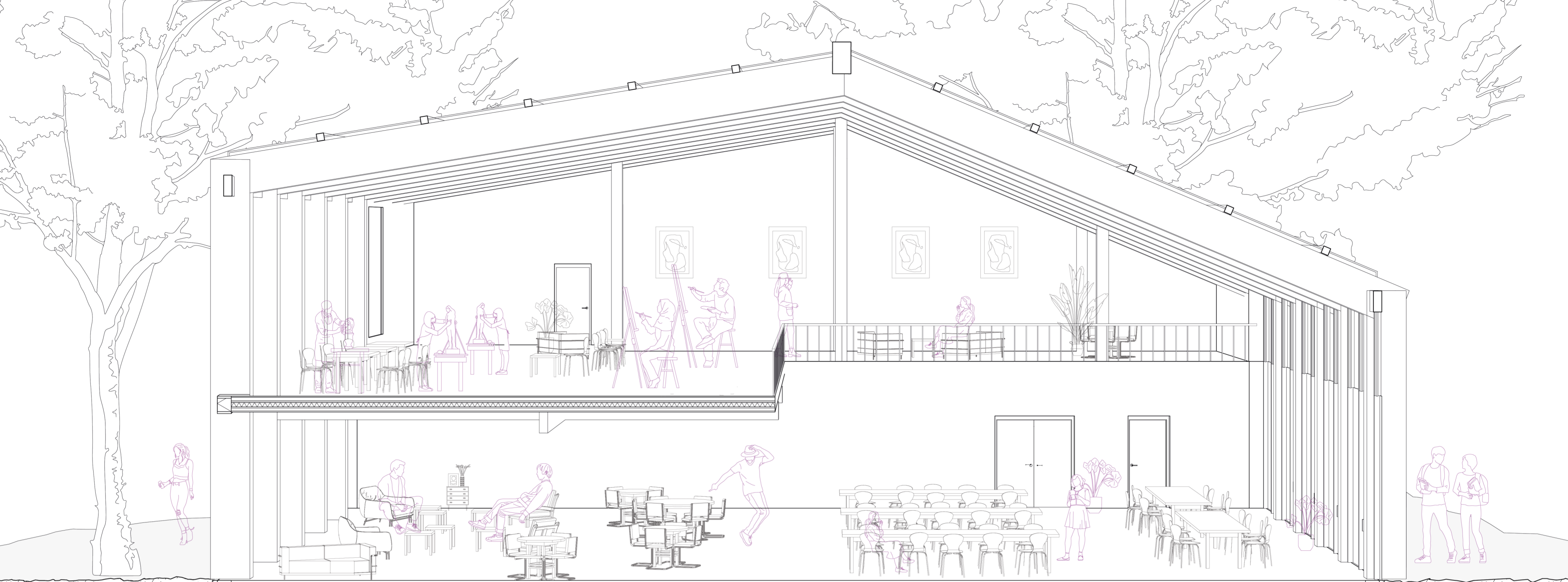




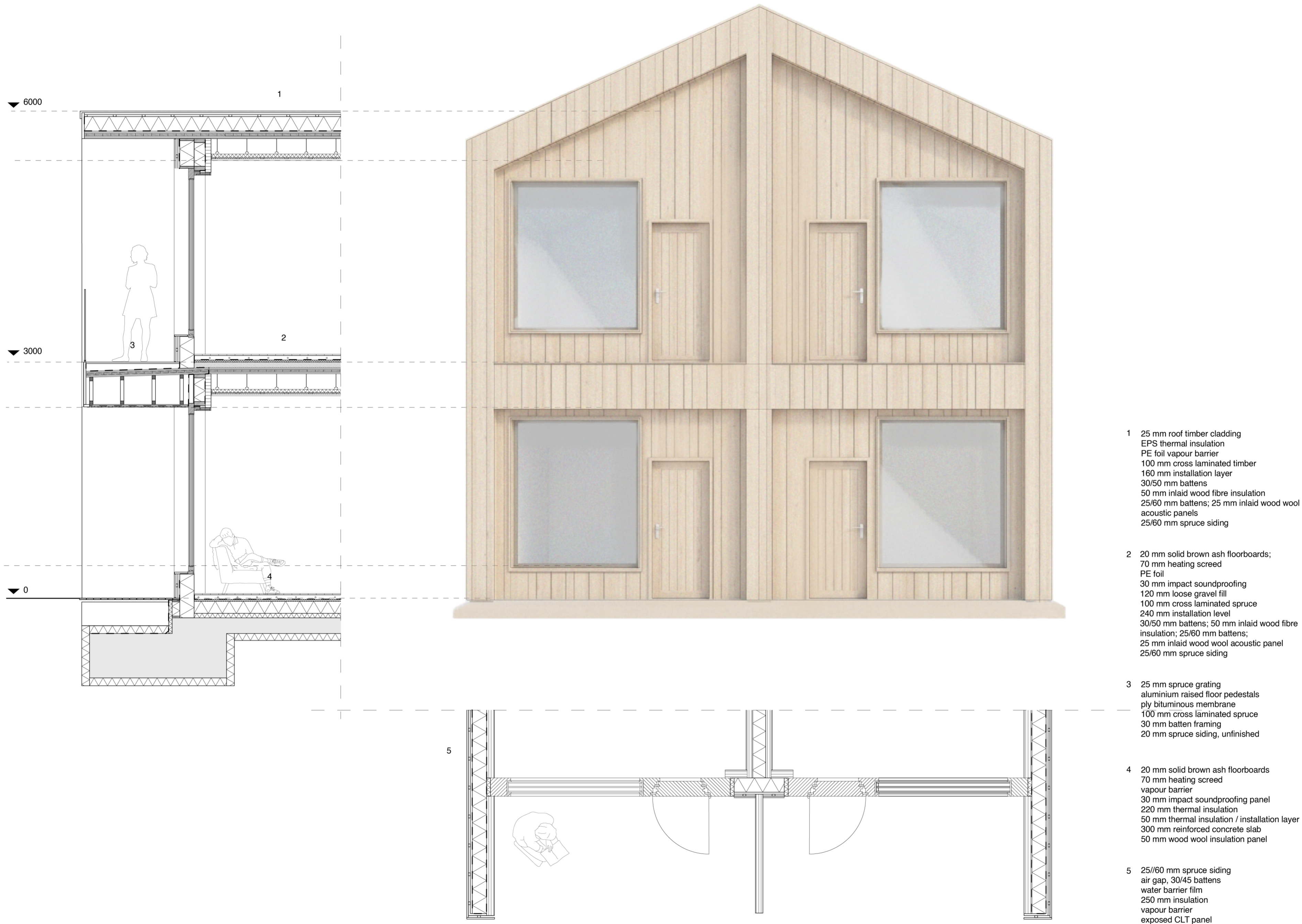
Yoga studio, multipurpose paviljon and spa & swimming pool ground floor plan 1:200



Perspective section 1:50  
Retreat cabins

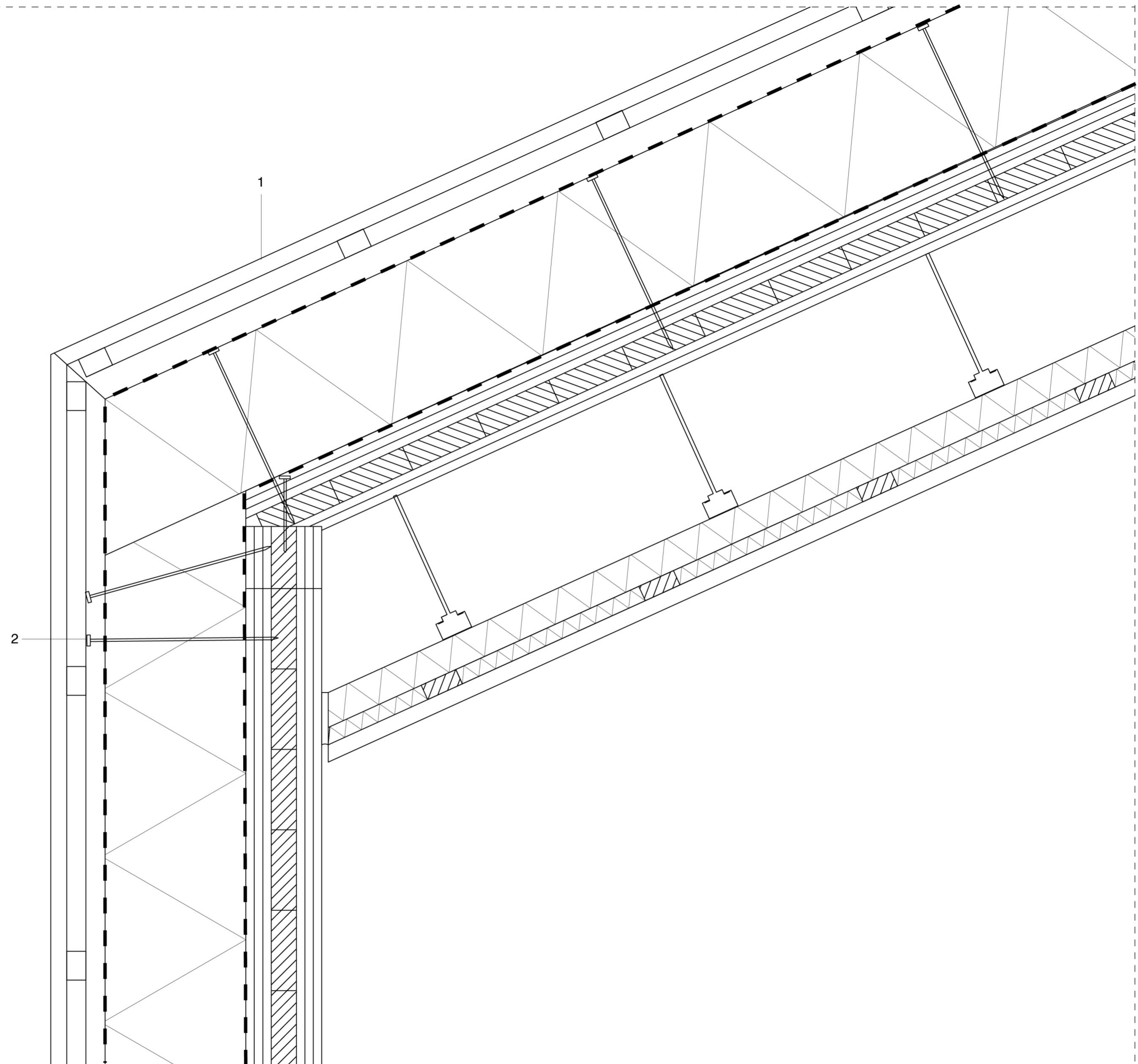


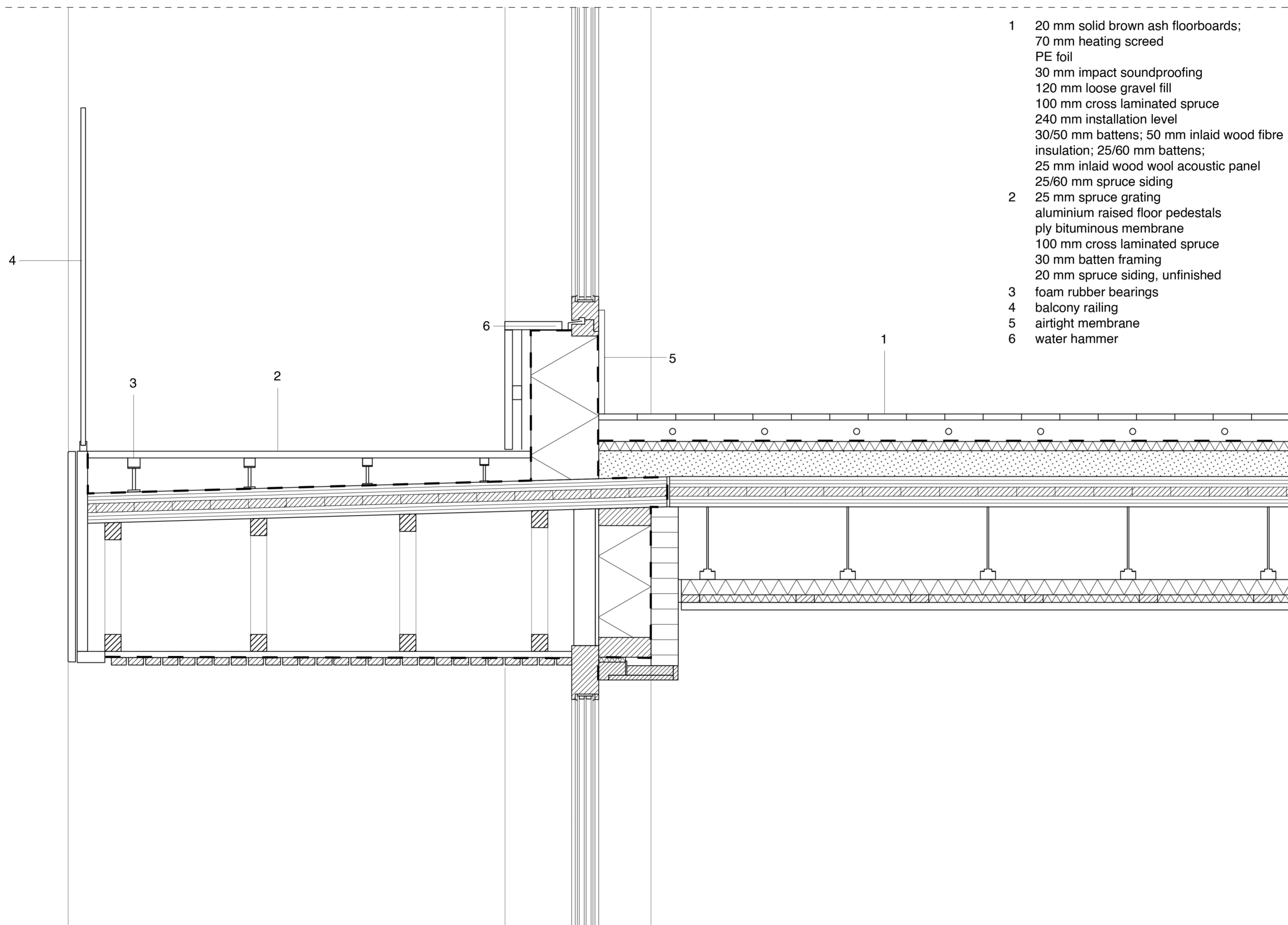
Perspective section 1:50  
Communal building



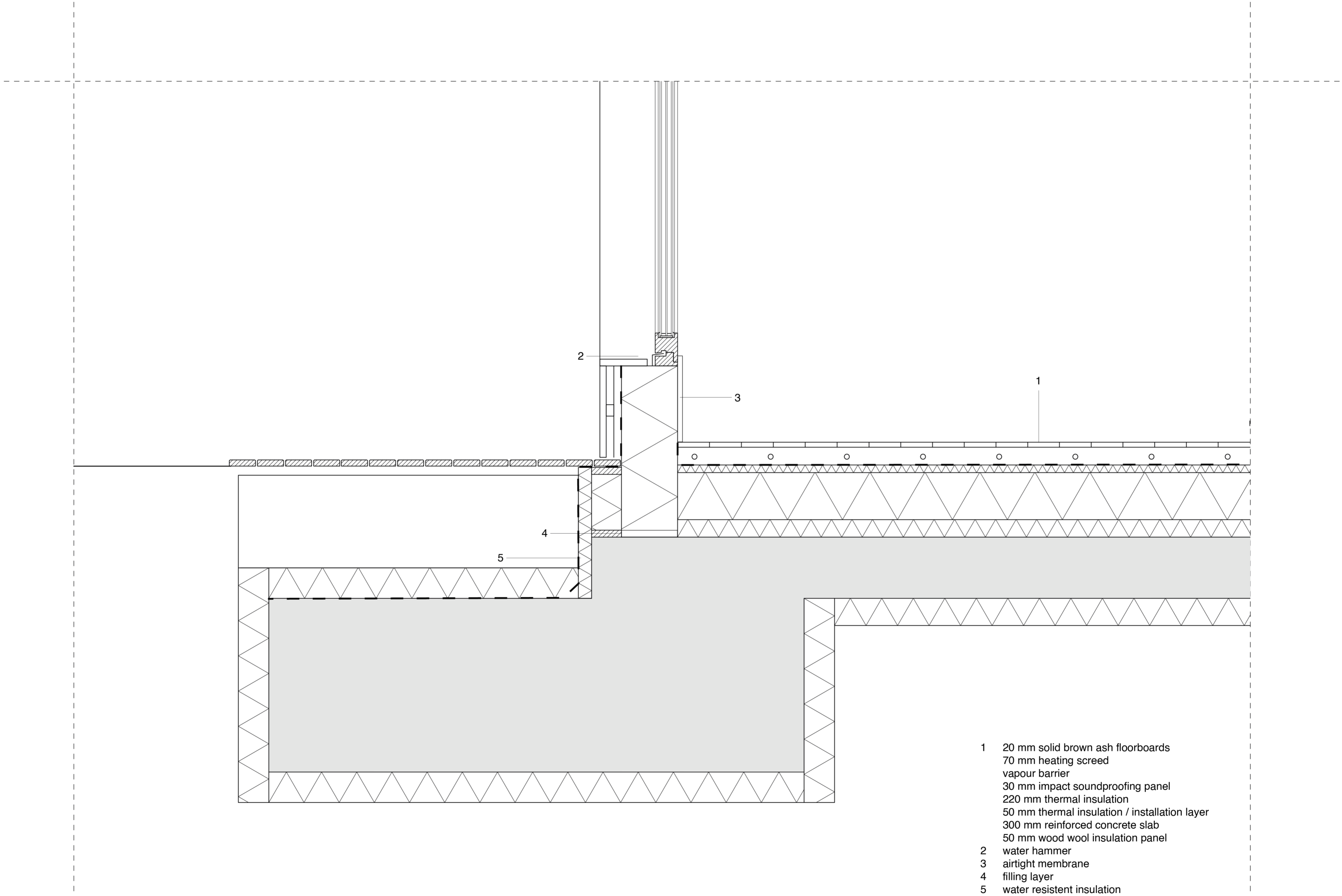
Detailed section 1:20 (rescaled 1:40)  
Retreat cabin

- 1 25 mm roof timber cladding  
EPS thermal insulation  
PE foil vapour barrier  
100 mm cross laminated timber  
160 mm installation layer  
30/50 mm battens  
50 mm inlaid wood fibre insulation  
25/60 mm battens; 25 mm inlaid wood wool  
acoustic panels  
25/60 mm spruce siding
- 2 assembly screws





- 1 20 mm solid brown ash floorboards;  
70 mm heating screed  
PE foil  
30 mm impact soundproofing  
120 mm loose gravel fill  
100 mm cross laminated spruce  
240 mm installation level  
30/50 mm battens; 50 mm inlaid wood fibre  
insulation; 25/60 mm battens;  
25 mm inlaid wood wool acoustic panel  
25/60 mm spruce siding
- 2 25 mm spruce grating  
aluminium raised floor pedestals  
ply bituminous membrane  
100 mm cross laminated spruce  
30 mm batten framing  
20 mm spruce siding, unfinished
- 3 foam rubber bearings
- 4 balcony railing
- 5 airtight membrane
- 6 water hammer



- 1 20 mm solid brown ash floorboards  
70 mm heating screed  
vapour barrier  
30 mm impact soundproofing panel  
220 mm thermal insulation  
50 mm thermal insulation / installation layer  
300 mm reinforced concrete slab  
50 mm wood wool insulation panel
- 2 water hammer
- 3 airtight membrane
- 4 filling layer
- 5 water resistant insulation

Construction detail 1:10  
Foundation



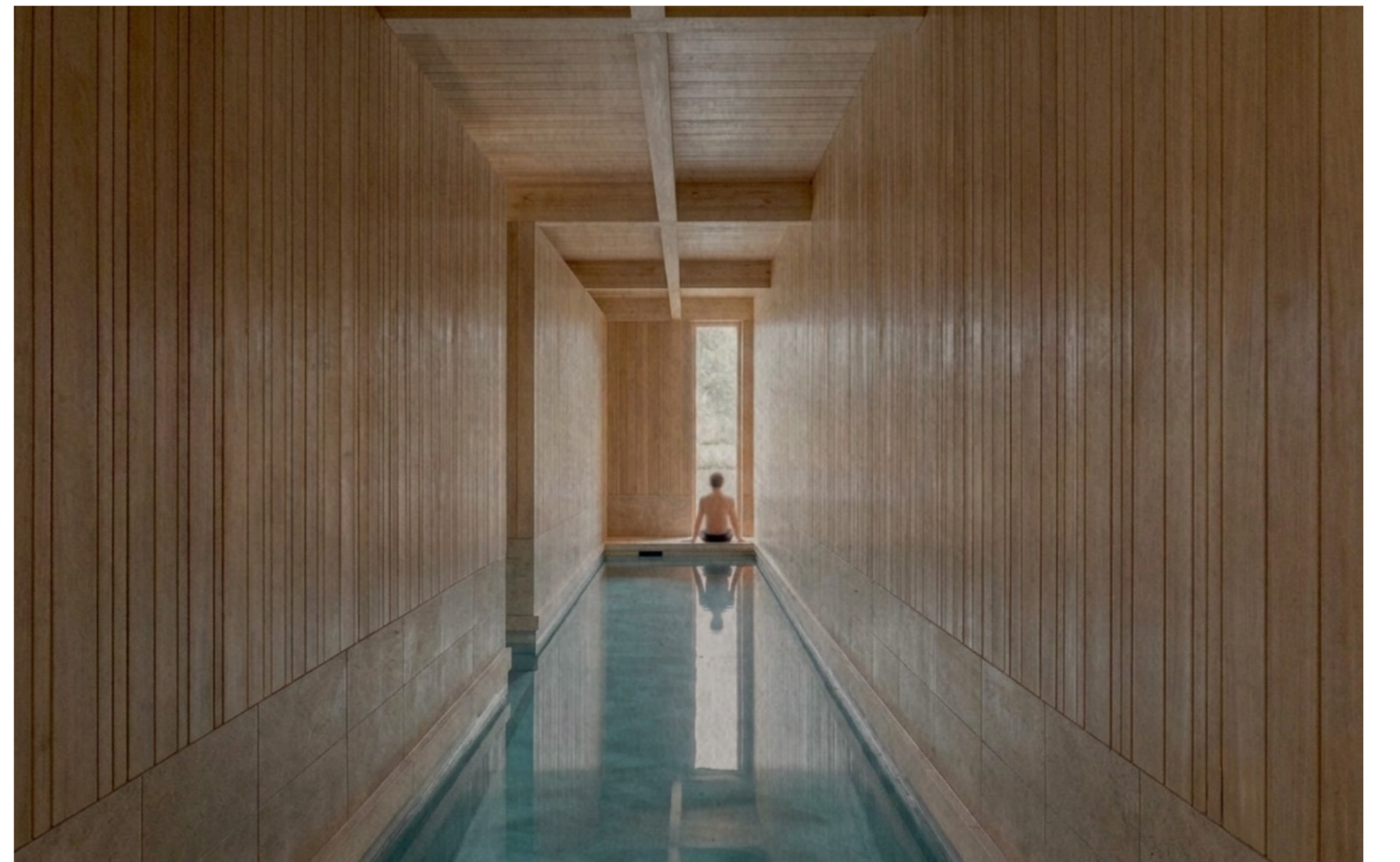
Entrance



Communal hall



Group reflection space



Detox pool



