



ENTRAIN

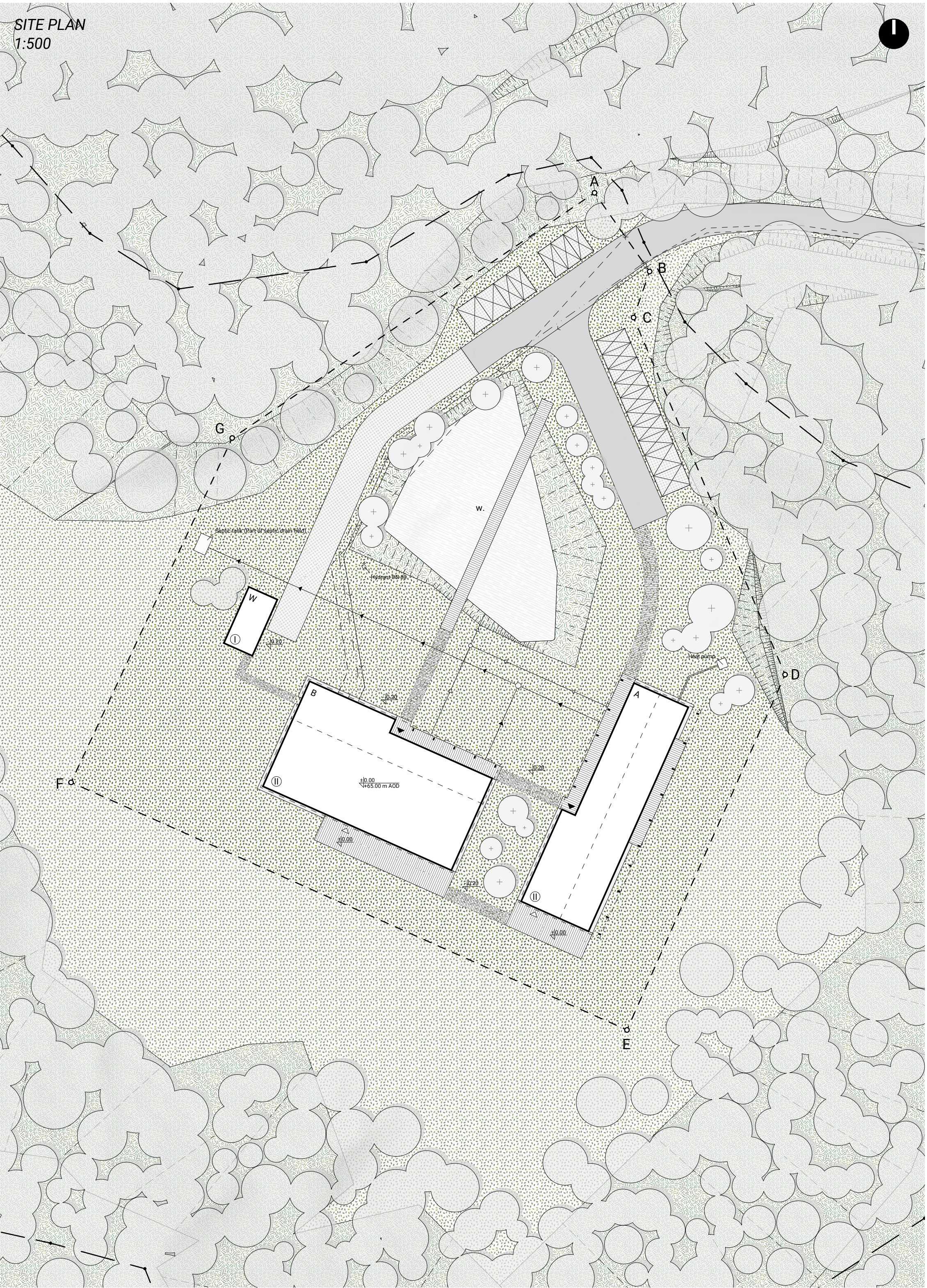
Retreat Center for the Recalibration of Biological Rhythms
Dawna Żwirownia, ul. Polanki, Oliwa, Gdańsk



Modern lifestyles systematically disrupt human biological rhythms. Artificial light, fragmented schedules, continuous sensory stimulation and urban noise push the body out of alignment with its natural cycles of activity, rest and recovery. The result is reduced sleep quality, impaired concentration and long-term physical and mental fatigue.

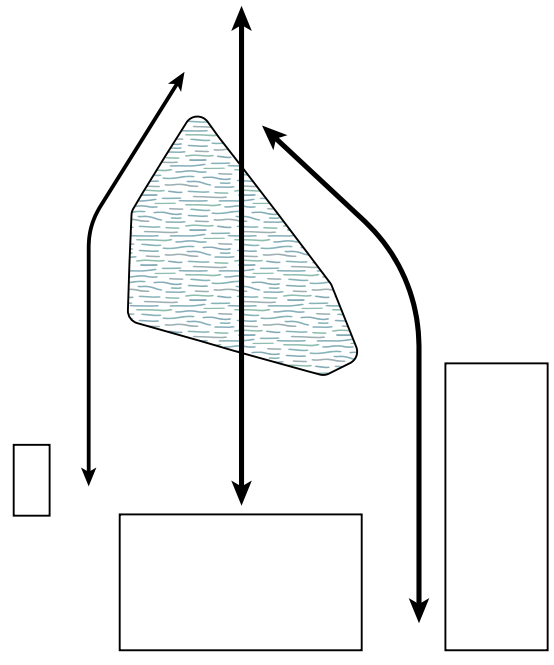
This project proposes a retreat center for the recalibration of biological rhythms, located at Dawna Żwirownia, ul. Polanki, Oliwa, Gdańsk. The site, a former gravel pit, offers natural isolation, low acoustic disturbance and direct exposure to natural light. The landscape itself becomes part of the therapeutic framework of the project.

The retreat is a place where guests step aside from everyday routines for a defined period, not to change, but to return to a stable physiological state and to carry that rhythm back into daily life. Structured daily schedules, morning light exposure, movement, workshops, communal meals and evening quiet are the means through which the architecture supports biological resynchronisation. Rather than prescribing recovery, the project creates the conditions for it.



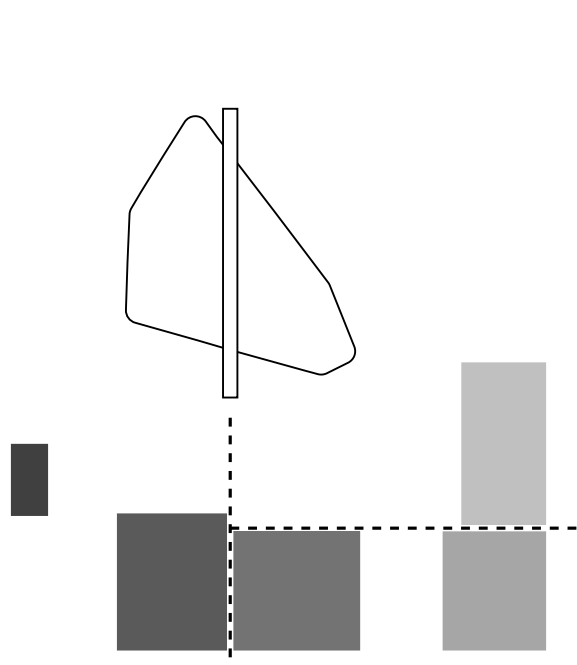
FLows

Three independent circulation axes structure the site and separate public, private and service access. The lake forms the primary arrival axis toward the workshop building, establishing the entrance logic and initial placement of the building volumes.



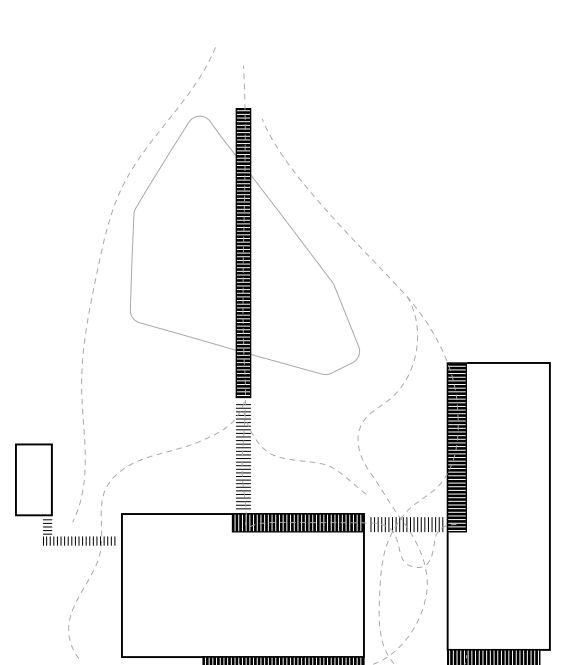
COMPOSITION

Five proportional volumes are organised along primary axes. The public arrival axis divides the workshop building and establishes its entrance toward the lake. This logic extends into the accommodation building, creating a gradient from public to private functions.



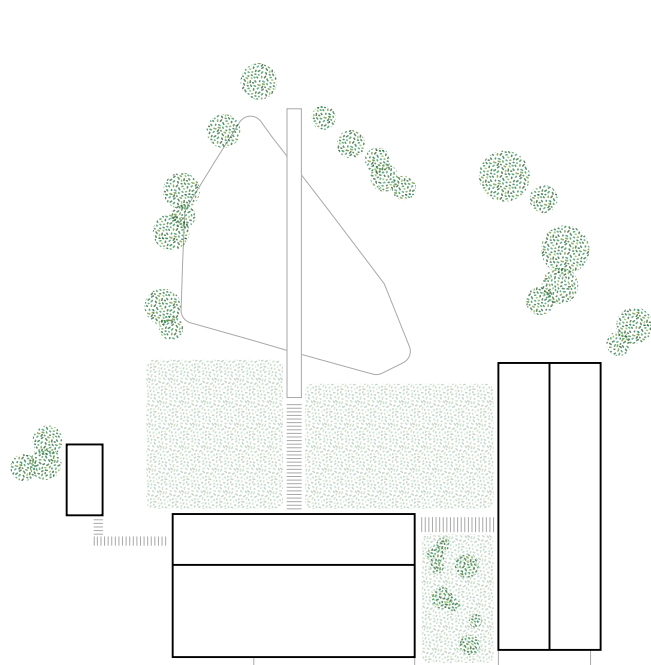
CONNECTIONS

Wooden walkways, gravel paths and outdoor terraces form continuous circulation. The bridge over the water body leads to the workshop entrance, while covered pathways extend beneath the roofs, blurring interior and exterior boundaries.

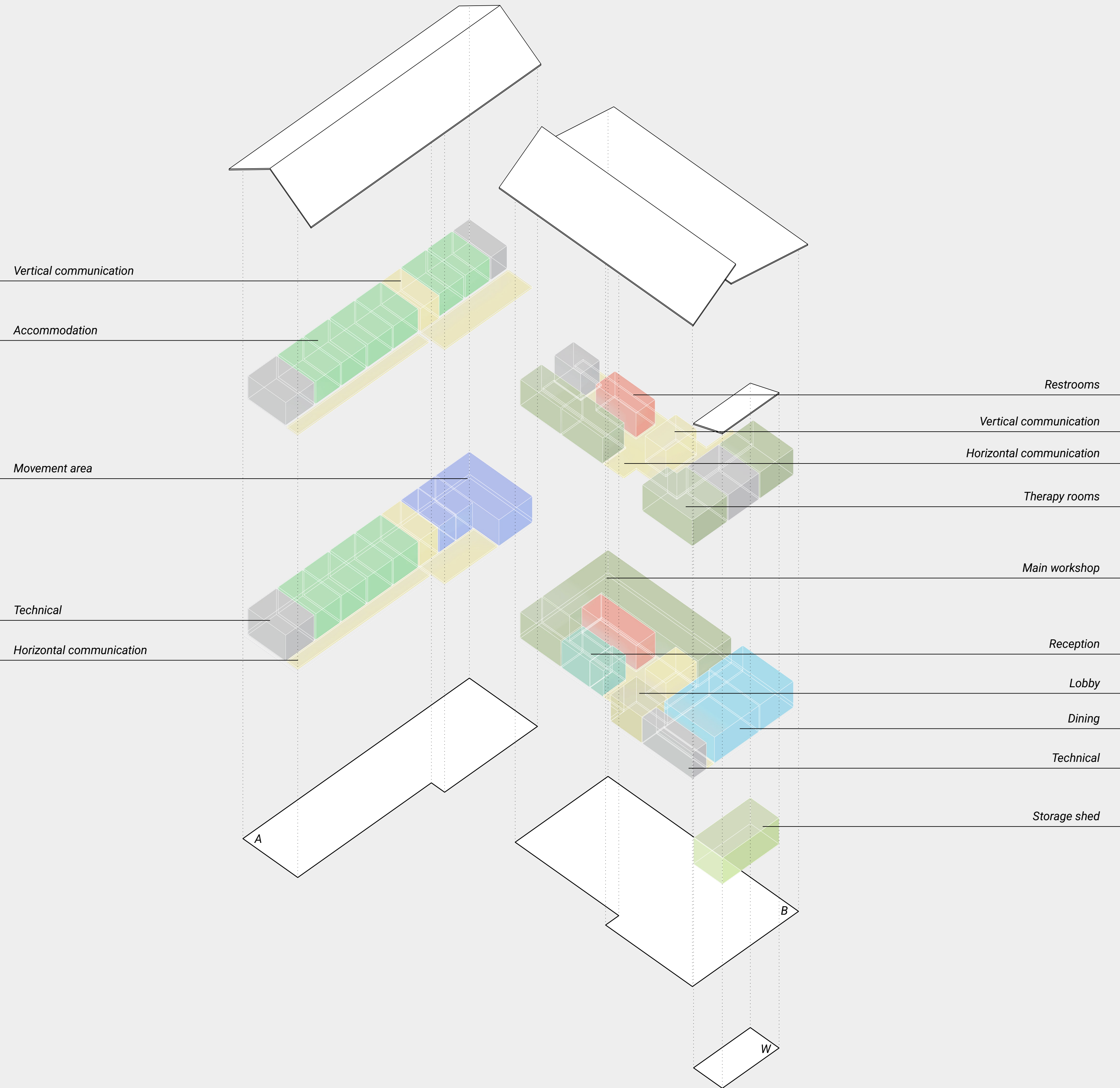


GROVE

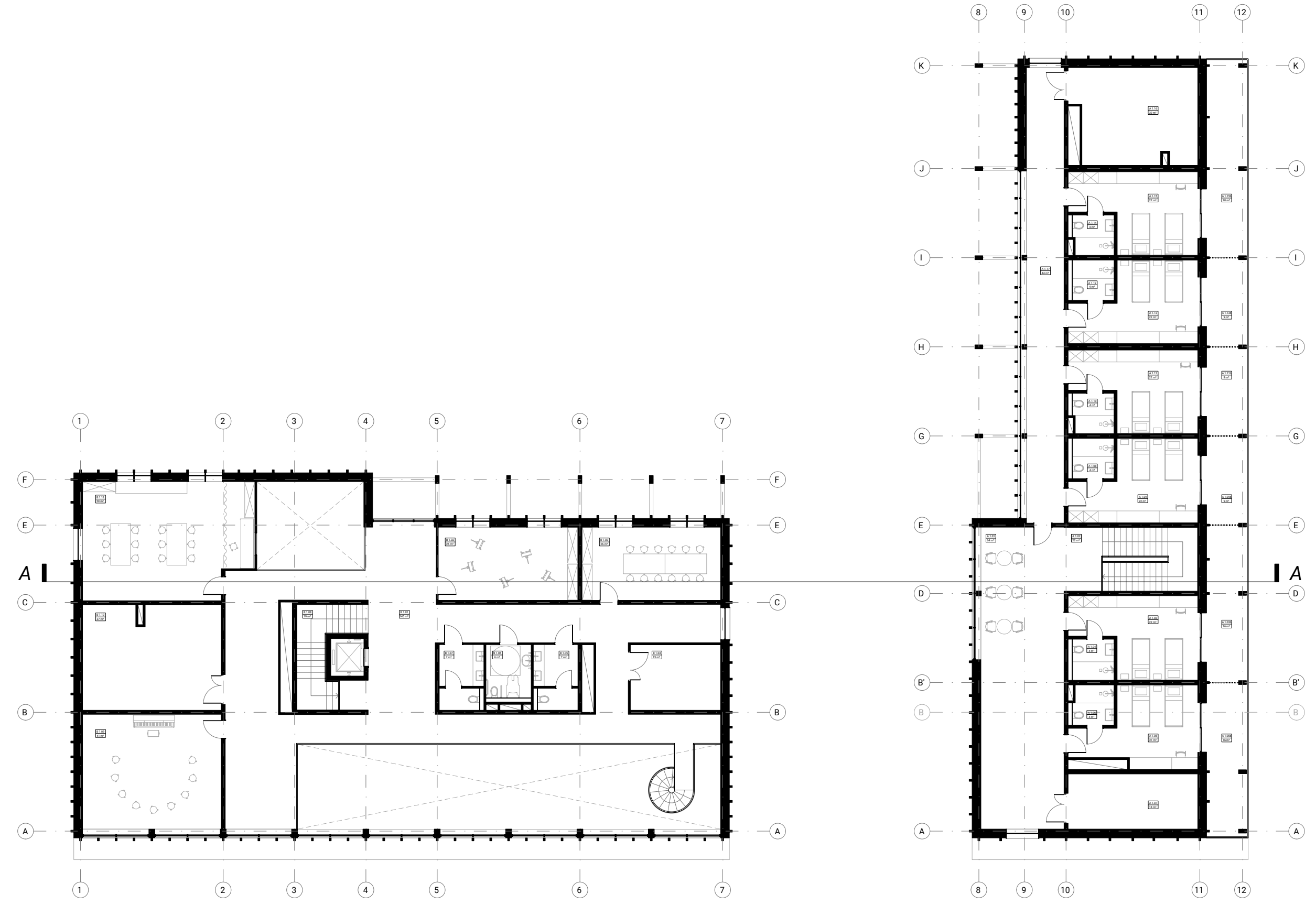
New planting reinforces the character of the forest clearing and defines semi-private outdoor spaces between buildings. Trees screen the accommodation block for privacy and woodland transition, while the shared green space forms an informal outdoor room.



PROGRAM DIAGRAM



FIRST FLOOR PLAN
1:200



SECTION A-A
1:200



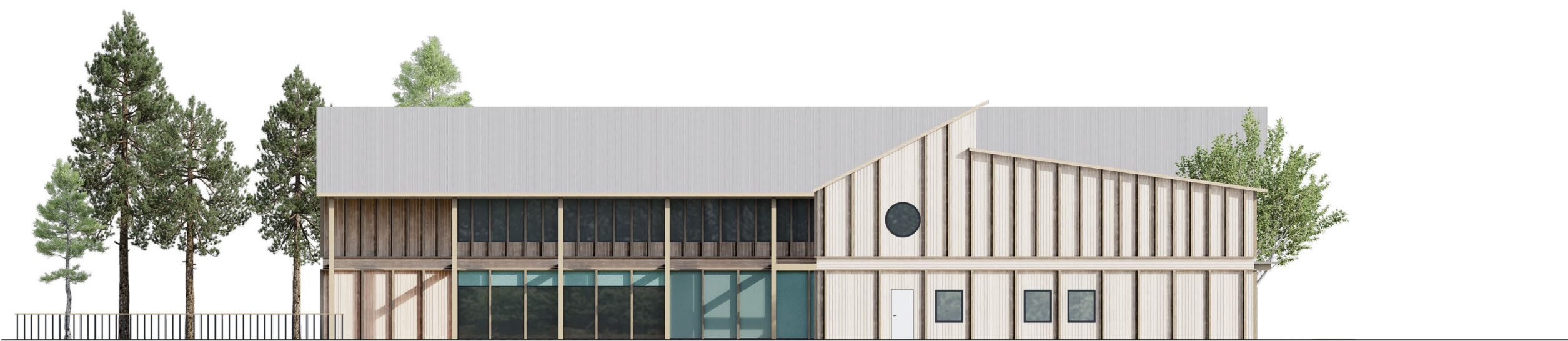
NORTH-EAST ELEVATION
1:200



NORTH-WEST ELEVATION
1:200



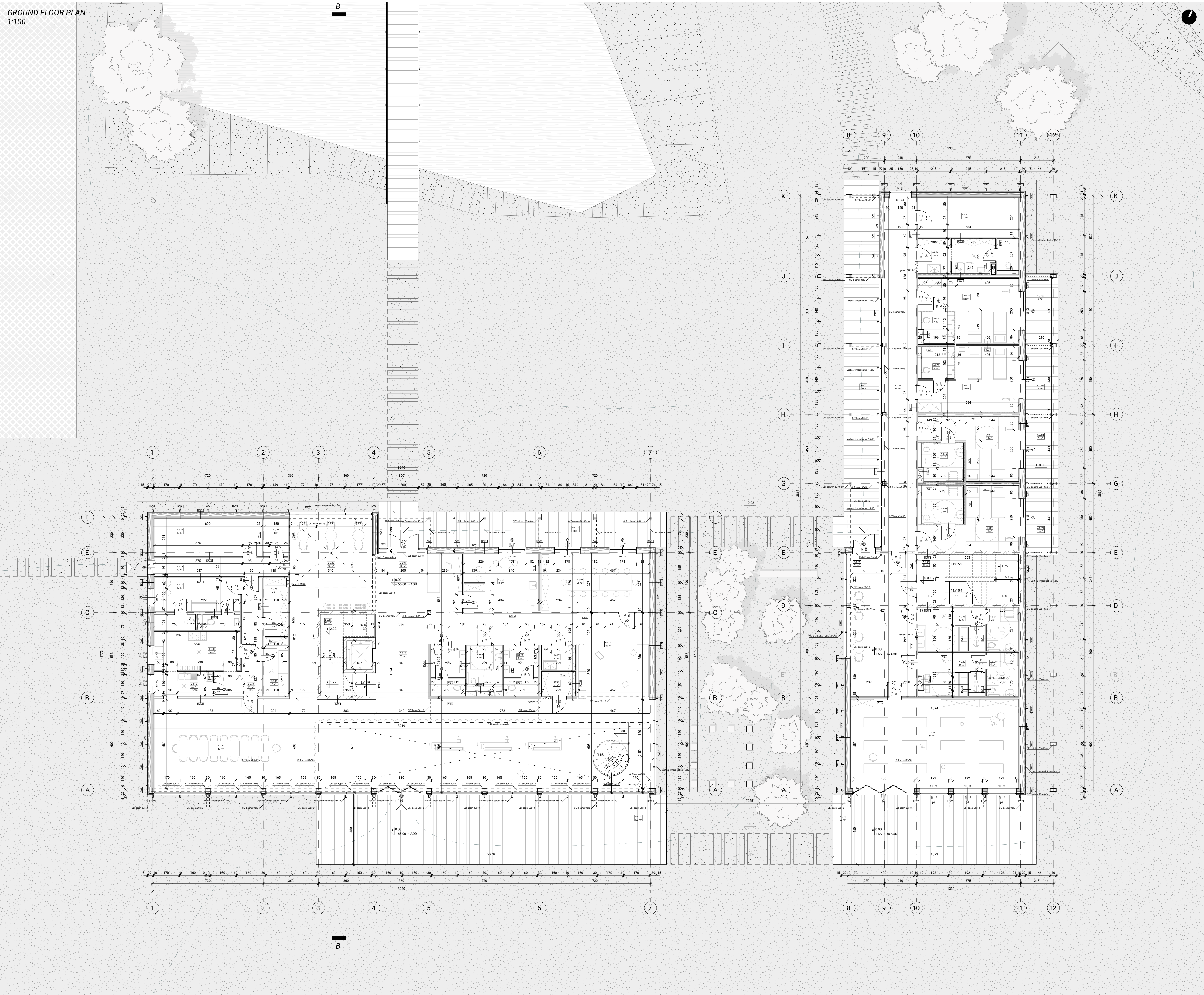
SOUTH-WEST ELEVATION
1:200



ROOM SCHEDULE: GROUND FLOOR AND FIRST FLOOR

Number	Name	Area	Floor finish
A 0.01	Communication and common area	39 m²	Epoxy resin
A 0.02	Staircase	21 m²	Microcement
A 0.03	Men's changing room	12 m²	Microcement
A 0.04	Accessible toilet (Men)	6 m²	Stone tiles
A 0.05	Women's changing room	11 m²	Microcement
A 0.06	Accessible toilet (Women)	6 m²	Stone tiles
A 0.07	Movement room	64 m²	Epoxy resin
A 0.08	Accessible guest bathroom 1	7 m²	Stone tiles
A 0.09	Accessible guest room 1	20 m²	Wood flooring
A 0.09b	Guest terrace 1	9 m²	Composite decking
A 0.10	Accessible guest bathroom 2	7 m²	Stone tiles
A 0.11	Accessible guest room 2	19 m²	Wood flooring
A 0.11b	Guest terrace 2	9 m²	Composite decking
A 0.12	Guest bathroom 3	4 m²	Stone tiles
A 0.13	Guest room 3	22 m²	Wood flooring
A 0.13b	Guest terrace 3	9 m²	Composite decking
A 0.14	Guest bathroom 4	4 m²	Stone tiles
A 0.15	Guest room 4	22 m²	Wood flooring
A 0.15b	Guest terrace 4	9 m²	Composite decking
A 0.16	Social room	15 m²	Epoxy resin
A 0.17	Heat pump room	17 m²	Epoxy resin
A 0.18	Communication	48 m²	Epoxy resin
A 0.19	Outdoor communication	56 m²	Composite decking
A 0.20	Outdoor terrace	60 m²	Composite decking
B 0.01	Entrance hall with reception	22 m²	Epoxy resin
B 0.02	Lobby	35 m²	Epoxy resin
B 0.03	Social room for employees	18 m²	Wood flooring
B 0.04	Workshop room	26 m²	Epoxy resin
B 0.05	Workshop open space	133 m²	Epoxy resin
B 0.06	Workshop storage	4 m²	Epoxy resin
B 0.07	Social room	4 m²	Epoxy resin
B 0.08	Women's toilet	7 m²	Stone tiles
B 0.09	Accessible toilet	6 m²	Stone tiles
B 0.10	Men's toilet	7 m²	Stone tiles
B 0.11	Staircase with elevator	19 m²	Microcement
B 0.12	Canteen	54 m²	Epoxy resin
B 0.13	Scullery	6 m²	Epoxy resin
B 0.14	Kitchen communication	13 m²	Epoxy resin
B 0.15	Cold room	6 m²	Microcement
B 0.16	Kitchen	14 m²	Epoxy resin
B 0.17	Kitchen social room	18 m²	Wood flooring
B 0.18	Kitchen storage	6 m²	Microcement
B 0.19	Communication	10 m²	Epoxy resin
B 0.20	Utility room	17 m²	Microcement
B 0.21	Water meter room	4 m²	Epoxy resin
B 0.22	Communication	83 m²	Epoxy resin
B 0.23	Outdoor communication	44 m²	Composite decking
B 0.24	Outdoor terrace	103 m²	Composite decking
A 1.01	Communication and common area	64 m²	Epoxy resin
A 1.02	Staircase	22 m²	Microcement
A 1.03	Guest room 5	22 m²	Wood flooring
A 1.03b	Guest balcony 5	16 m²	Composite decking
A 1.04	Guest bathroom 5	4 m²	Stone tiles
A 1.05	Guest room 6	21 m²	Wood flooring
A 1.05b	Guest balcony 6	16 m²	Composite decking
A 1.06	Guest bathroom 6	4 m²	Stone tiles
A 1.07	Ventilation room	18 m²	Microcement
A 1.08	Guest bathroom 7	4 m²	Stone tiles
A 1.09	Guest room 7	22 m²	Wood flooring
A 1.09b	Guest balcony 7	9 m²	Composite decking
A 1.10	Guest bathroom 8	4 m²	Stone tiles
A 1.11	Guest room 8	22 m²	Wood flooring
A 1.11b	Guest balcony 8	9 m²	Composite decking
A 1.12	Guest bathroom 9	4 m²	Stone tiles
A 1.13	Guest room 9	22 m²	Wood flooring
A 1.13b	Guest balcony 9	9 m²	Composite decking
A 1.14	Guest bathroom 10	4 m²	Stone tiles
A 1.15	Guest room 10	22 m²	Wood flooring
A 1.15b	Guest balcony 10	20 m²	Composite decking
A 1.16	Ventilation room	30 m²	Microcement
A 1.17	Communication	44 m²	Epoxy resin
B 1.01	Communication and common area	145 m²	Wood flooring
B 1.02	Therapy room 1	26 m²	Wood flooring
B 1.03	Therapy room 2	26 m²	Wood flooring
B 1.04	Ventilation room	15 m²	Microcement
B 1.05	Women's toilet	7 m²	Stone tiles
B 1.06	Accessible toilet	6 m²	Stone tiles
B 1.07	Men's toilet	7 m²	Stone tiles
B 1.08	Staircase with elevator	19 m²	Microcement
B 1.09	Therapy room 3	41 m²	Wood flooring
B 1.10	Ventilation room	37 m²	Microcement
B 1.11	Therapy room 4	50 m²	Wood flooring

Total:
82 rooms1946 m²



1. Zinc roofing sheets	2. GLT structural beam	3. Intermediate level cornice	4. Vertical timber battens	5. Timber cladding boards	6. Aluminium frames
Standing seam system, RHEINZINK-CLASSIC walzblank Sheet width 650 mm	Glued laminated timber beam 180 x 300 mm Exposed, weather treated	Two horizontal battens 60 x 150 mm with horizontal cladding boards between, matching elevation boarding	Vertical spruce battens 150 x 100 mm, Weather treated	Spruce board width 120–140 mm, gap 8–10 mm, Vertical shadow gap profile	Aluminium joinery, RAL 7016
7. External solar shading	8. Fixed glazing panel	9. Folding terrace doors	10. Balustrade	11. Tilt window	12. Roof overhang lining
Exterior roller blinds, screen fabric, RAL 6033	Double-glazed fixed unit, aluminium frame, non-openable U _g ≤ 0.6 W/m ² K	Full-height aluminium folding door system, 4 panels, Aluminium frame, RAL 7016	Steel flat bar profile, height 1100 mm, powder coated	Double-glazed tilt unit, aluminium frame, RAL 7016	Horizontal spruce boarding, thermally modified spruce, Matching cladding species

The architectural drawings for the 'House on the Water' project are presented in three main views: a site plan, an elevation, and a section.

- Site Plan:** Located on the left, it shows the building's footprint on a rectangular plot. The plot is bordered by a road to the north (indicated by a dashed line and a north arrow) and a body of water to the south. The building is oriented with its long side facing the water. Elevation markers on the site plan include +9.80, +6.18, +3.50, +2.90, and +1.10.
- Elevation:** A long, horizontal section of the building's facade is shown in the center. It features a series of vertical elements, possibly columns or fins, and a large, open area. The elevation is marked with +10.00, +9.80, +6.18, +3.50, +2.90, and +1.10.
- Section:** A detailed cross-section of the building is shown on the right. It illustrates the internal structure, including a staircase, a large open space, and a smaller room. The section is marked with various elevation levels: +10.00, +9.80, +6.18, +3.50, +2.90, +1.10, and +0.20. The section also shows the building's foundation and its relationship to the surrounding landscape.

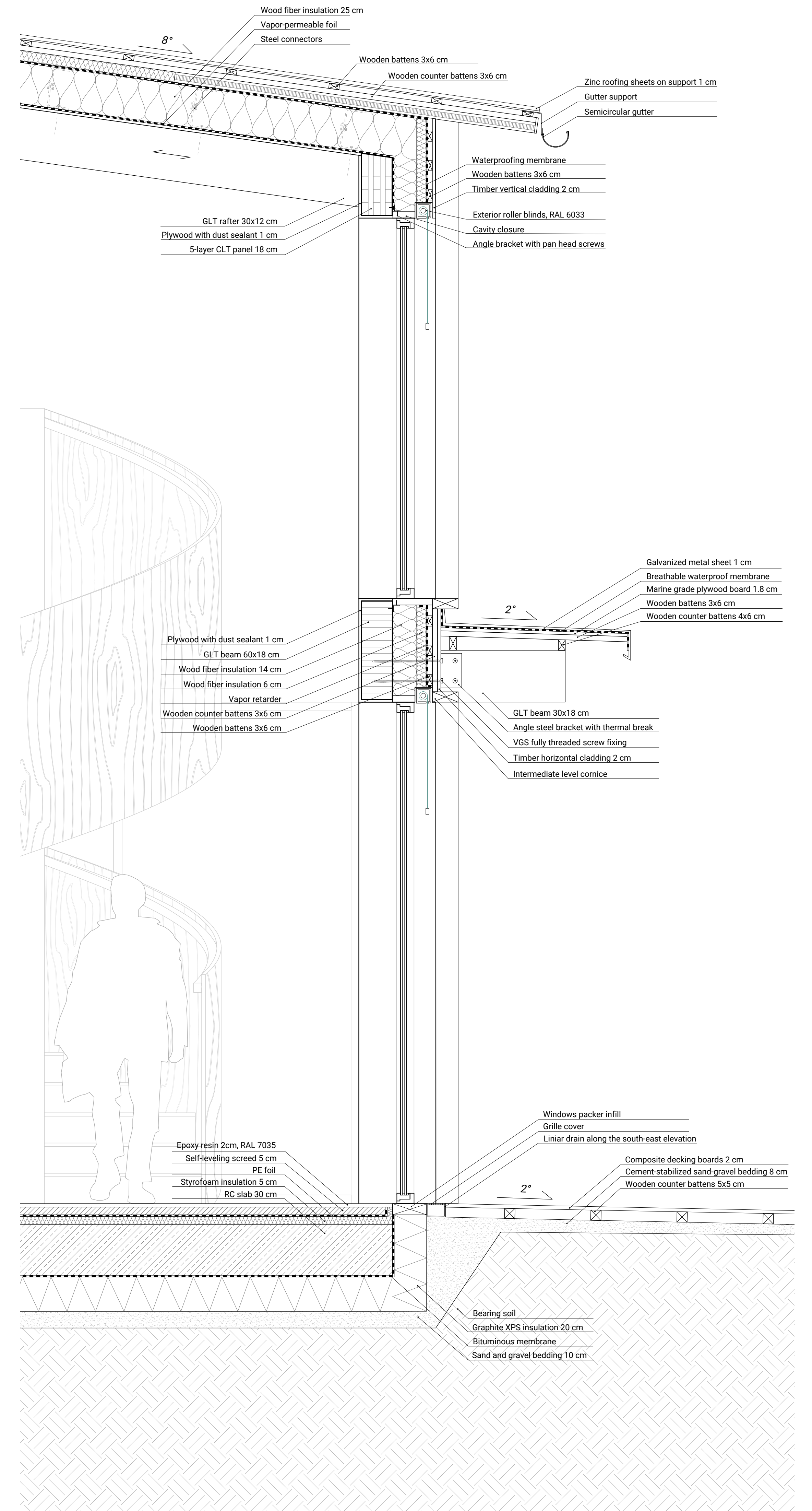
[illegible]

S1 - Foundation RC slab		P1 - Gravel splash strip around the building	
REI 60	42 cm		13 cm
Floor finish (Microcement, epoxy resin)	2 cm	Coarse gravel	5 cm
Concrete screed	5 cm	Sand and gravel bedding	8 cm
PE foil	-	Bearing soil	-
Graphite XPS insulation	5 cm		
RC slab	30 cm		
Bituminous membrane	-		
Graphite XPS insulation	20 cm	P2 - Wooden terrace	15 cm
Sand and gravel bedding	10 cm		
Bearing soil	-		
		Composite decking boards	2 cm
		Wooden battens	5x5 cm
		Sand and gravel bedding	8 cm
		Bearing soil	-
S2 - Intermediate CLT slab			
REI 60	30 cm		
Floor finish (Wood flooring)	2 cm		
Concrete screed	5 cm		
PE foil	-		
Acoustic insulation	3 cm		
5-layer CLT panel, Impregnated	20 cm		
R1 - Roof			
RE 15, U = 0.14 W/m²K	40 cm		
Zinc roofing sheets	1 cm		
Wooden battens	3x6 cm		
Wooden counter battens	3x6 cm		
Waterproofing membrane	-		
NOVATOP-STATIC - Multi-layer board	6 cm		
Wood fiber insulation on steel profiles	25 cm		
Vapor-permeable foil	-		
Wooden panel, impregnated	2 cm		
GLT rafter	30x12 cm		





ELEVATION DETAIL
1:15



AXONOMETRIC VIEW

