



ARCHITECTURE STUDENT CONTEST
20th INTERNATIONAL EDITION, NORD ISÈRE 2025

OUR TEAM n°17 | Estonia

Faculty of Architecture of the Tallinn University of Technology
Teacher: Jaan Kuusemets



Mari Liis
Aader



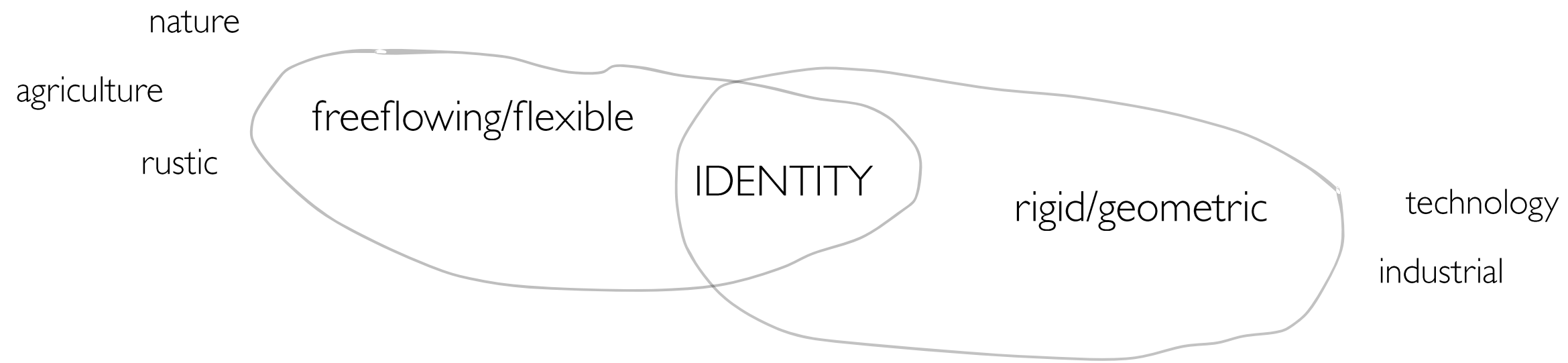
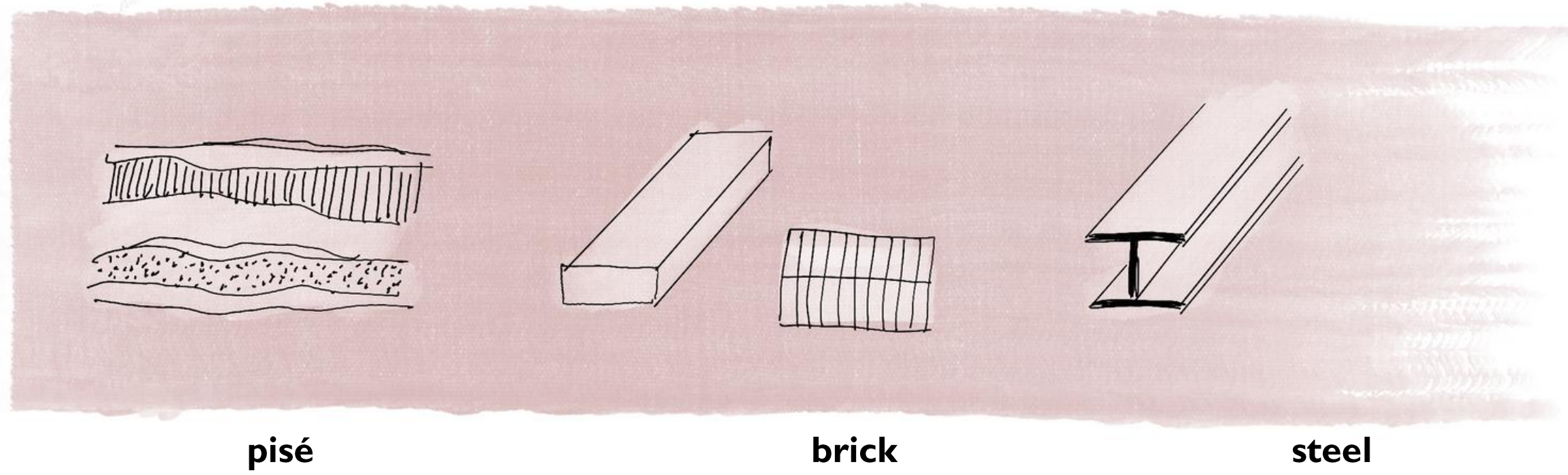
Andra
Palla



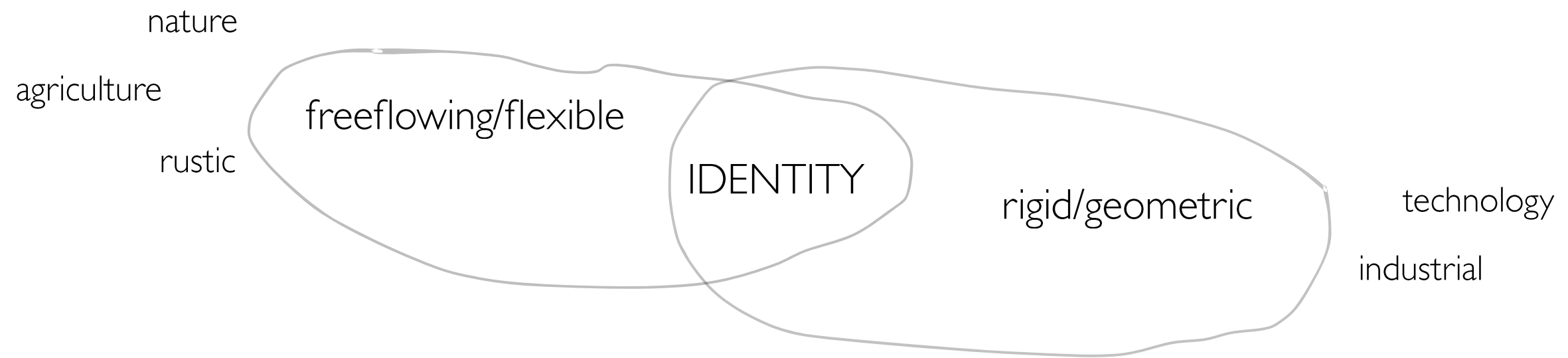
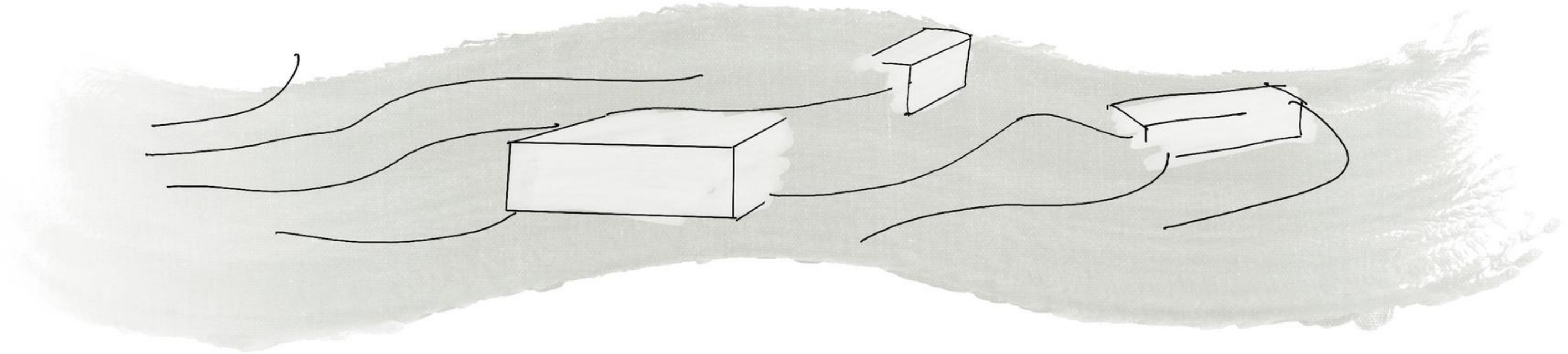
Elise-Irene
Lensment

SENSE OF COMMUNITY

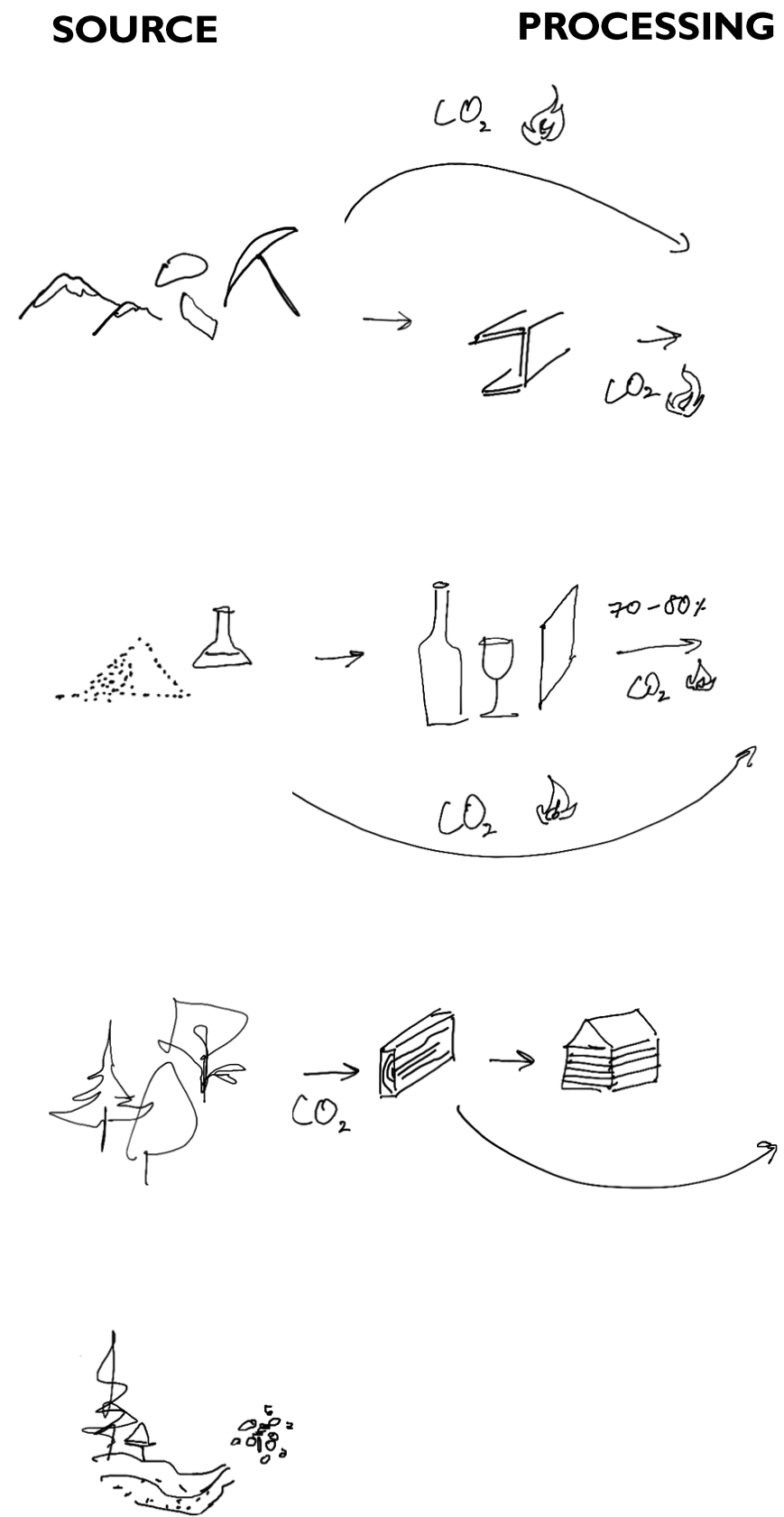
Nord Isère - Chimilin & Les Grands Ateliers

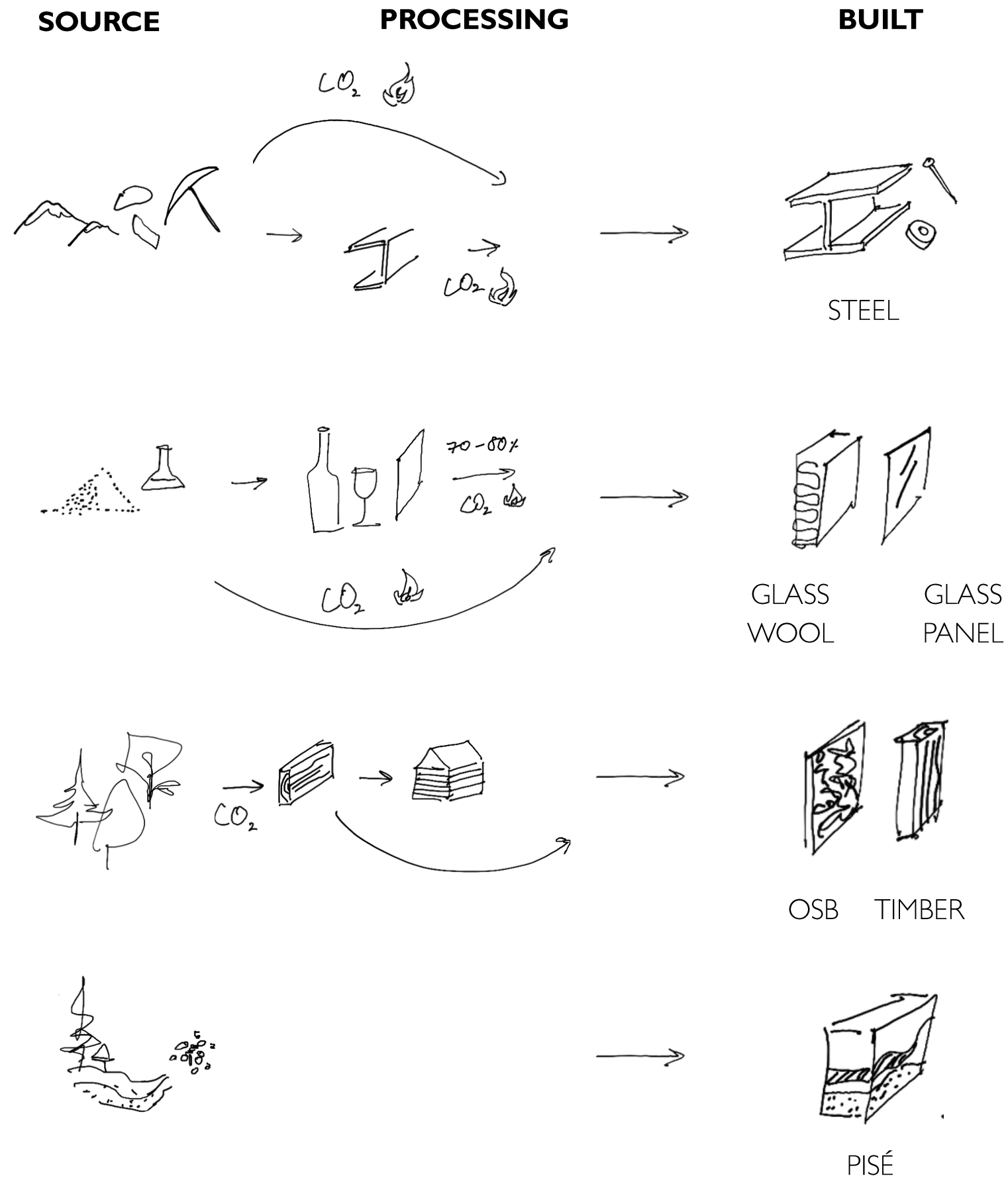


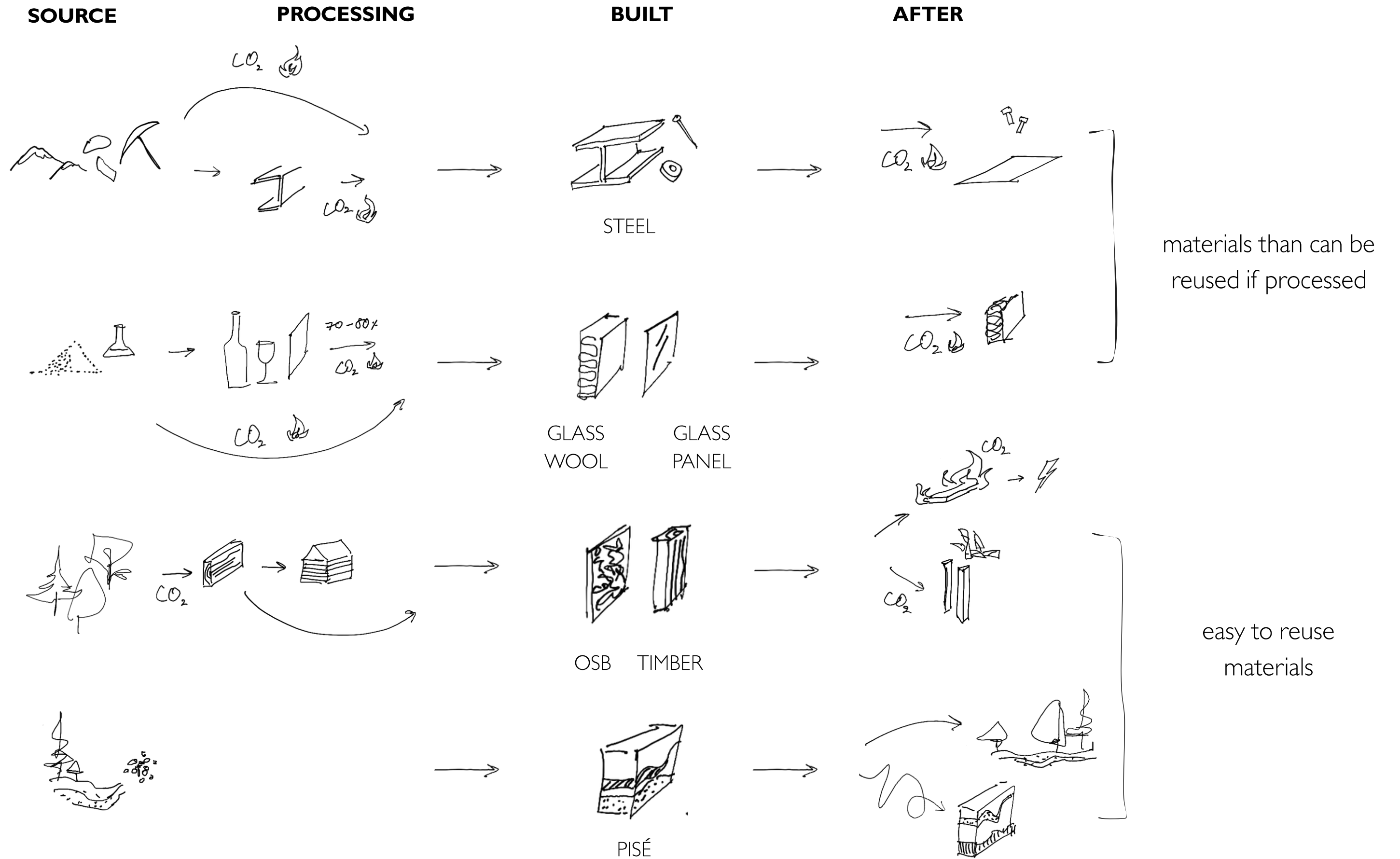
harmony of old and new building technology



harmony of old and new building technology

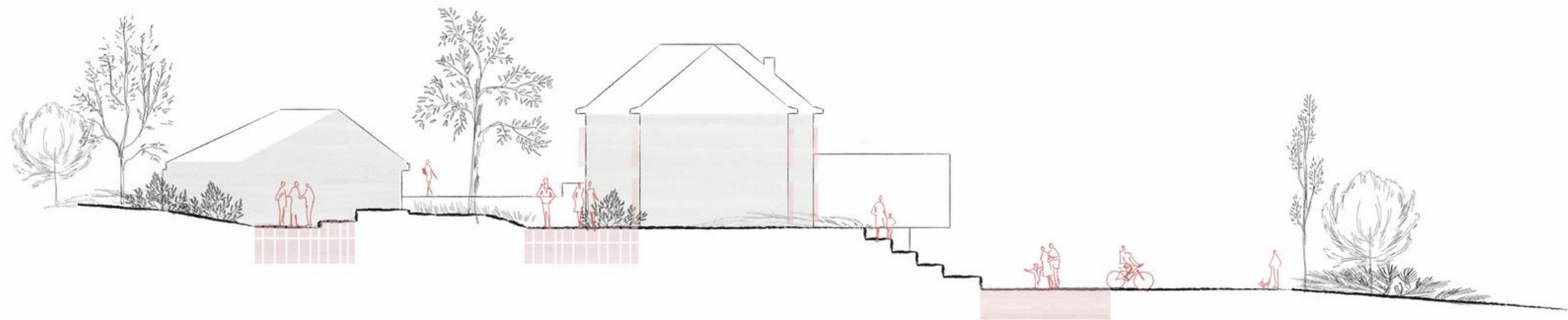




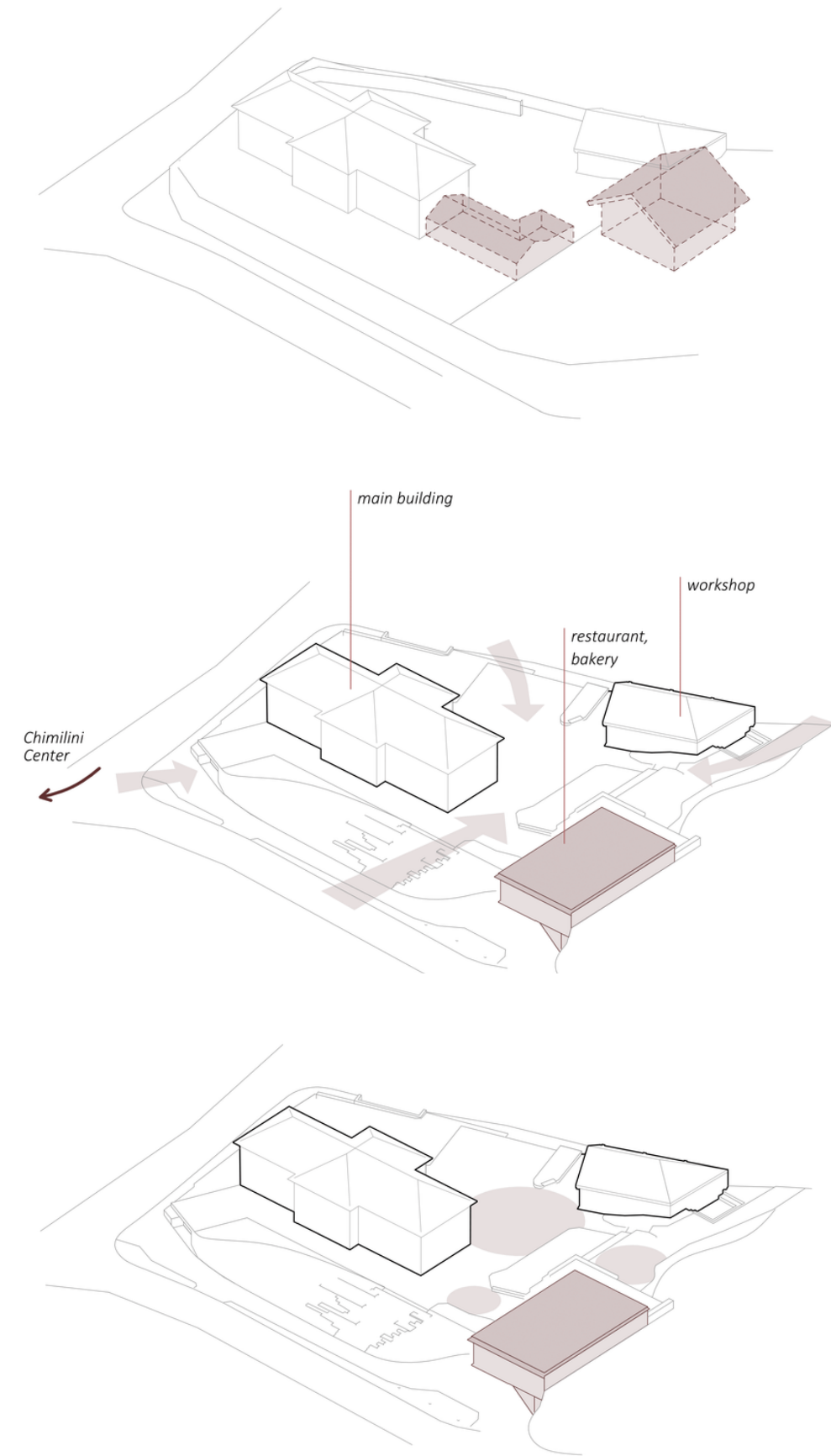
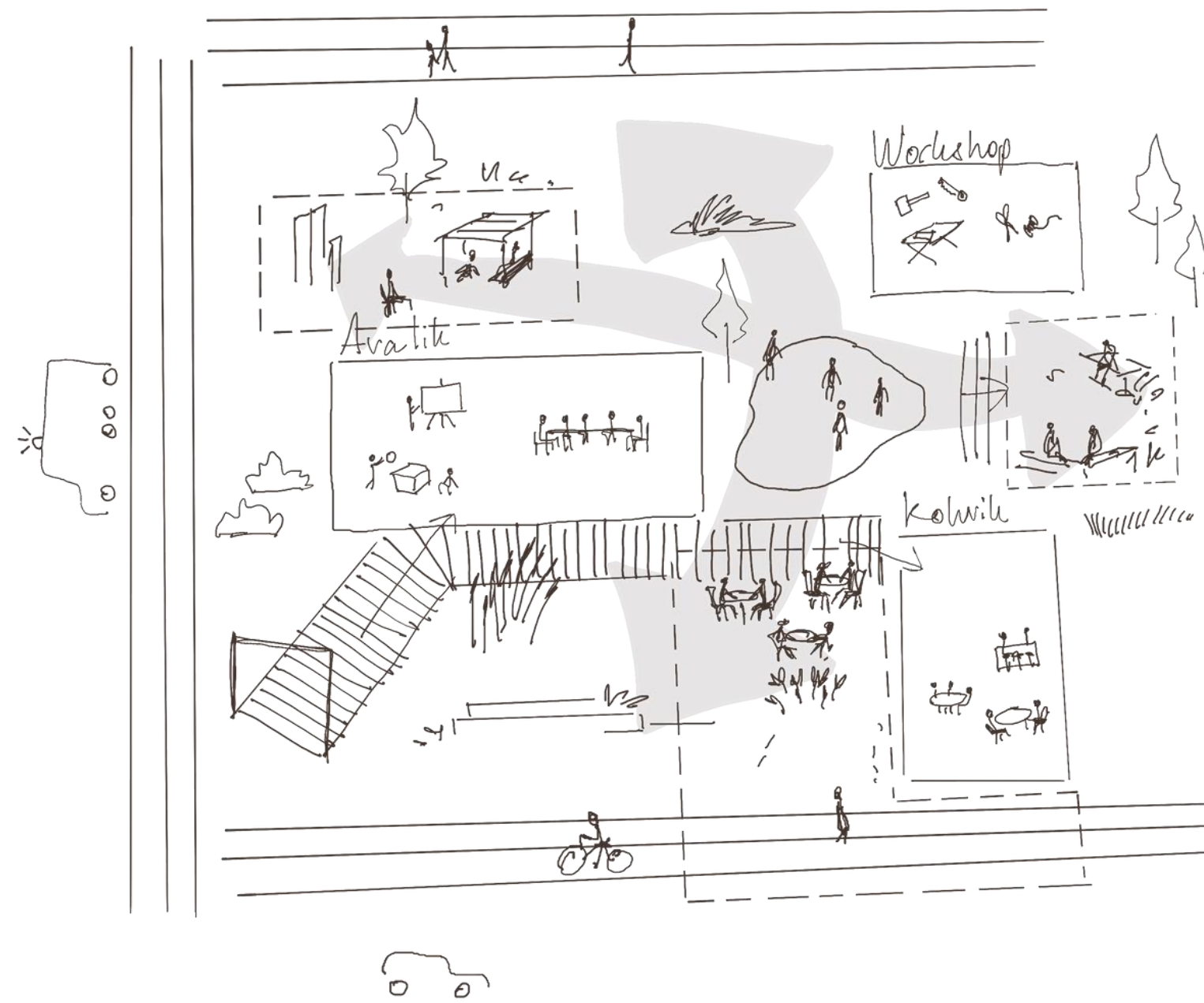


Saint-Gobain

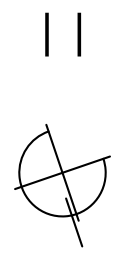
CHIMILIN



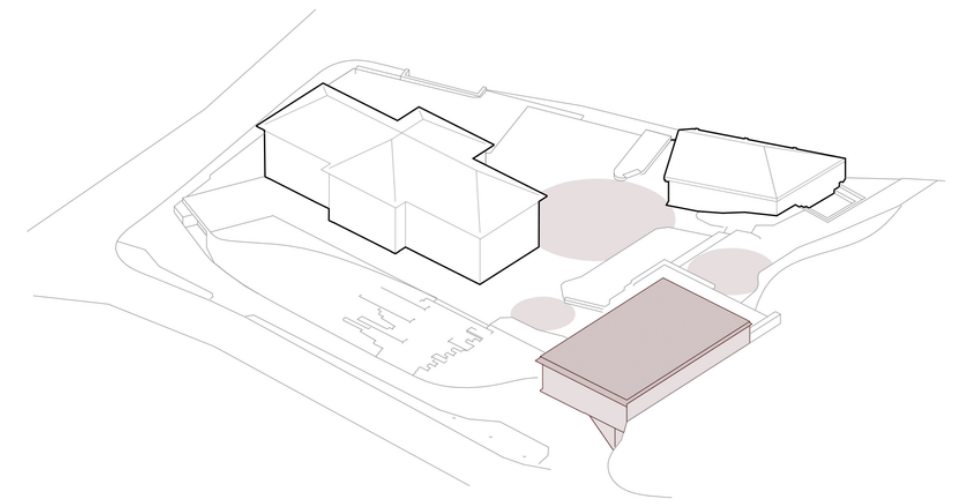
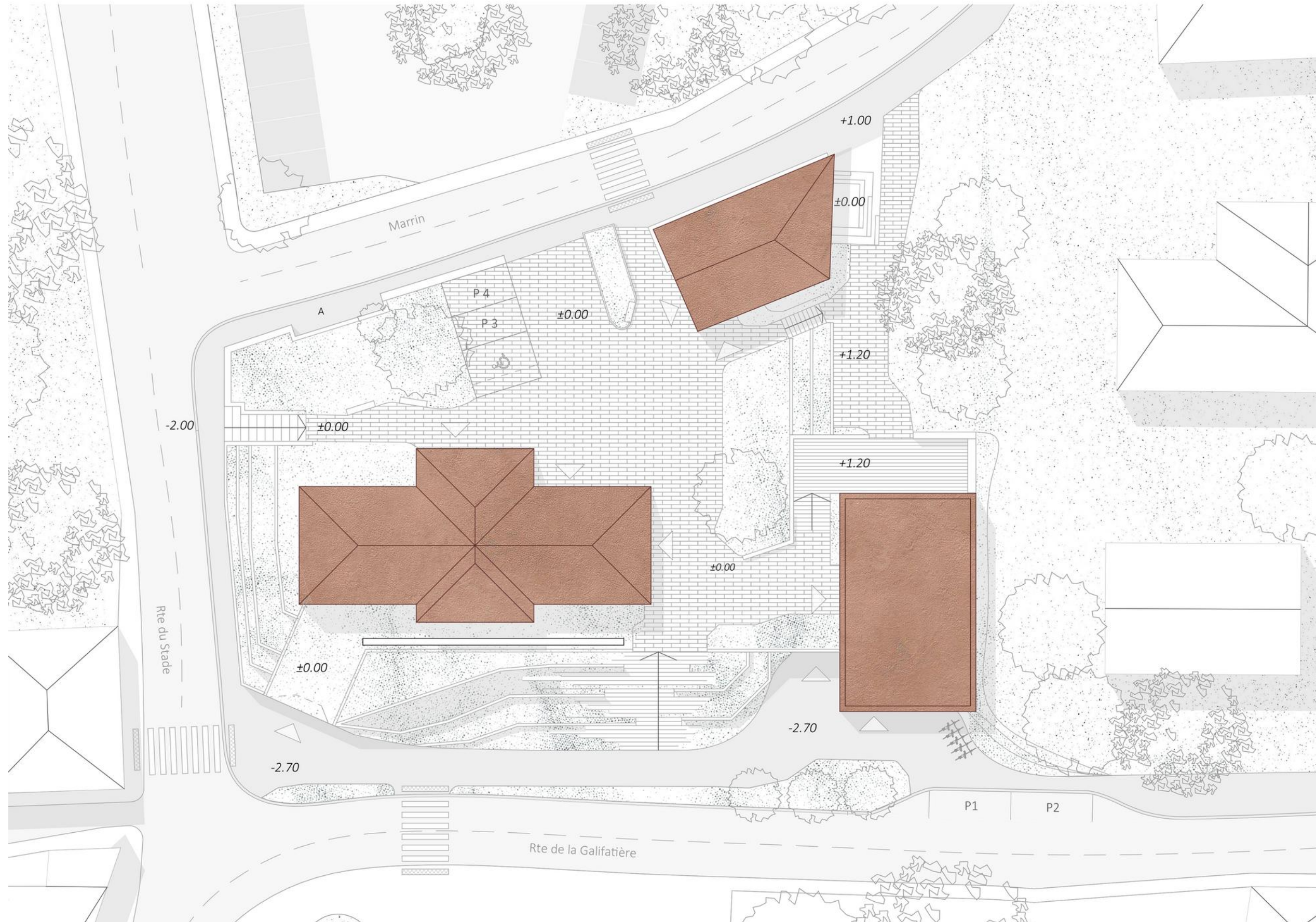
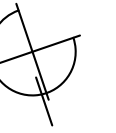
AREA CONCEPT



AREA CONCEPT



MASTERPLAN



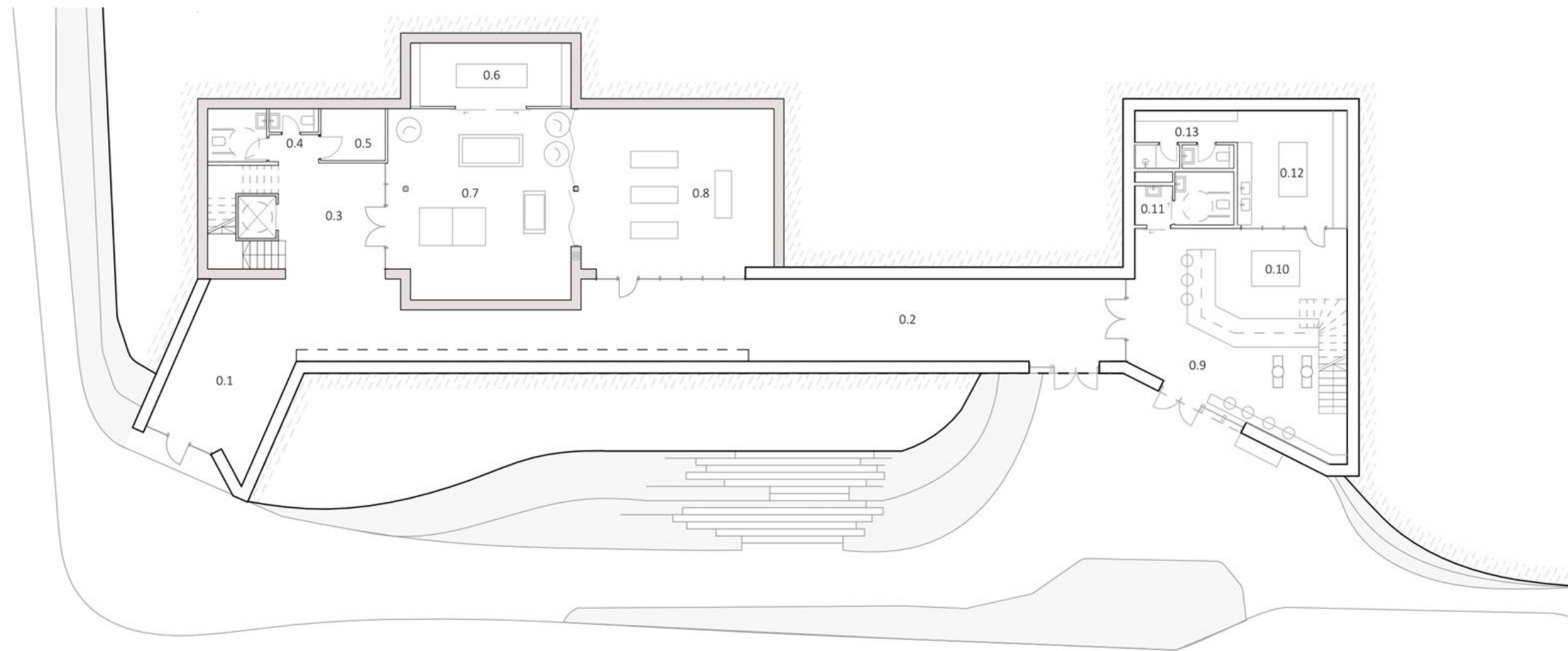
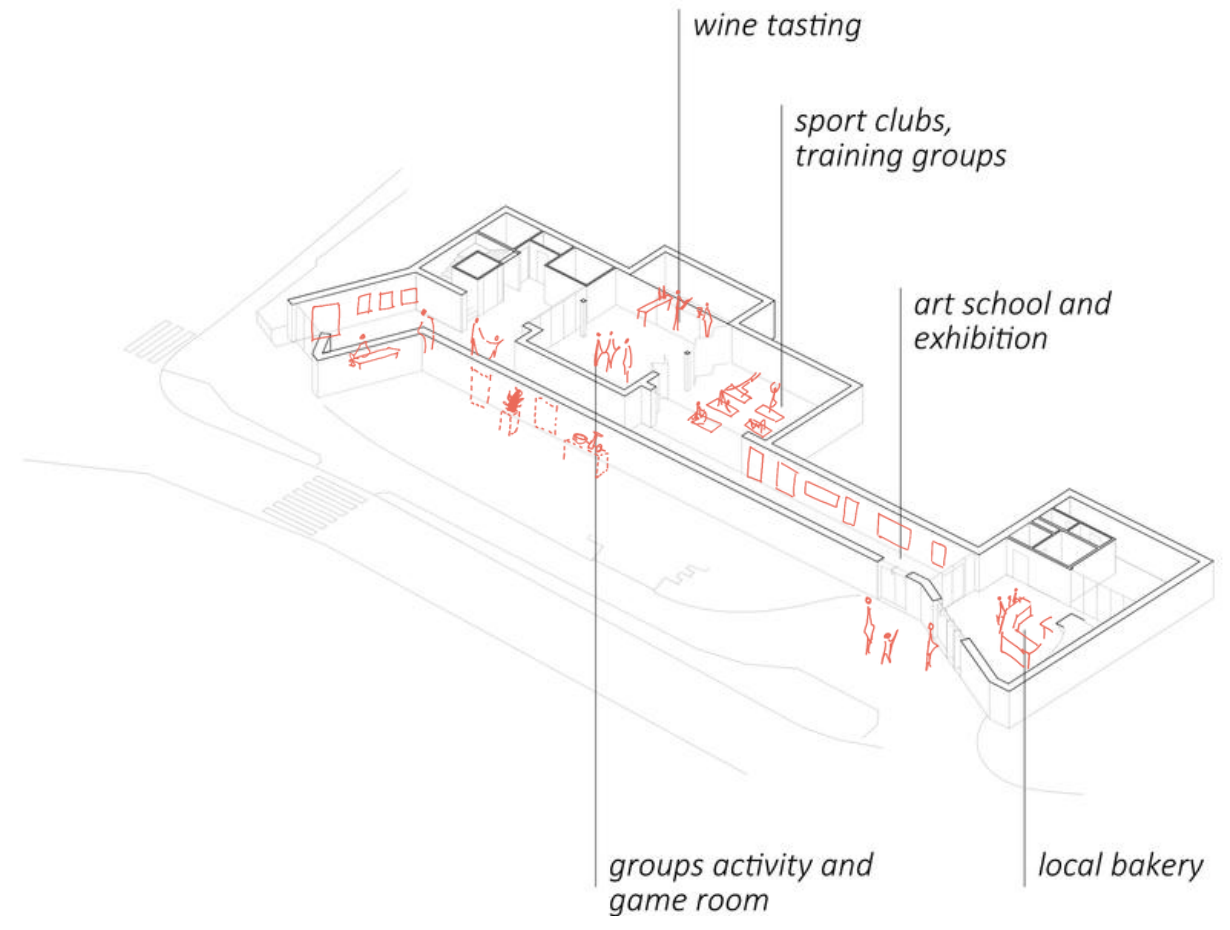
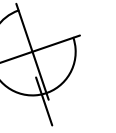
- Building
- Green area
- Terrace
- Roadway
- Sidewalk
- Footpath
- Parking
- Main entrance
- Side entrance



Boulangerie
de Chumuni

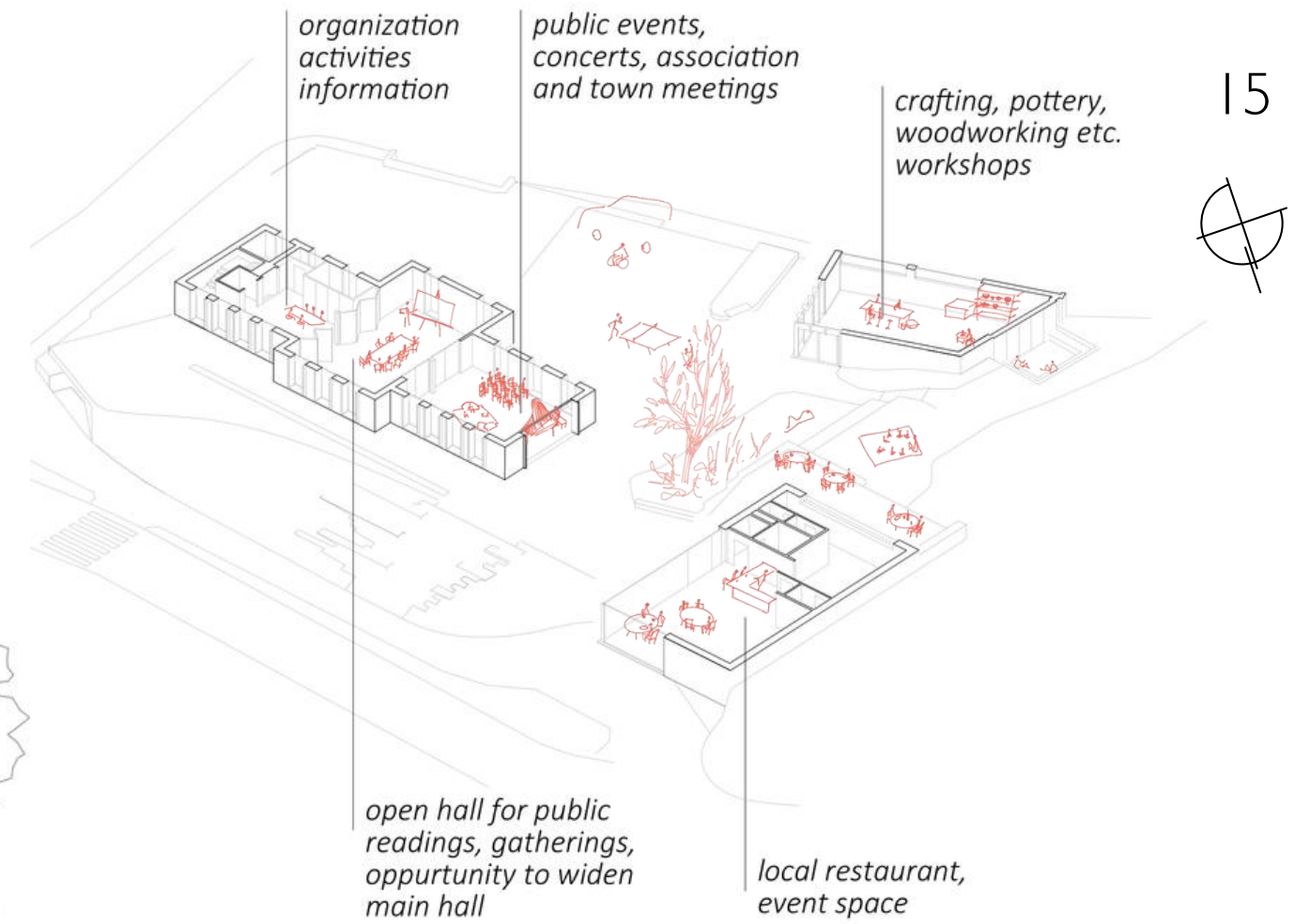
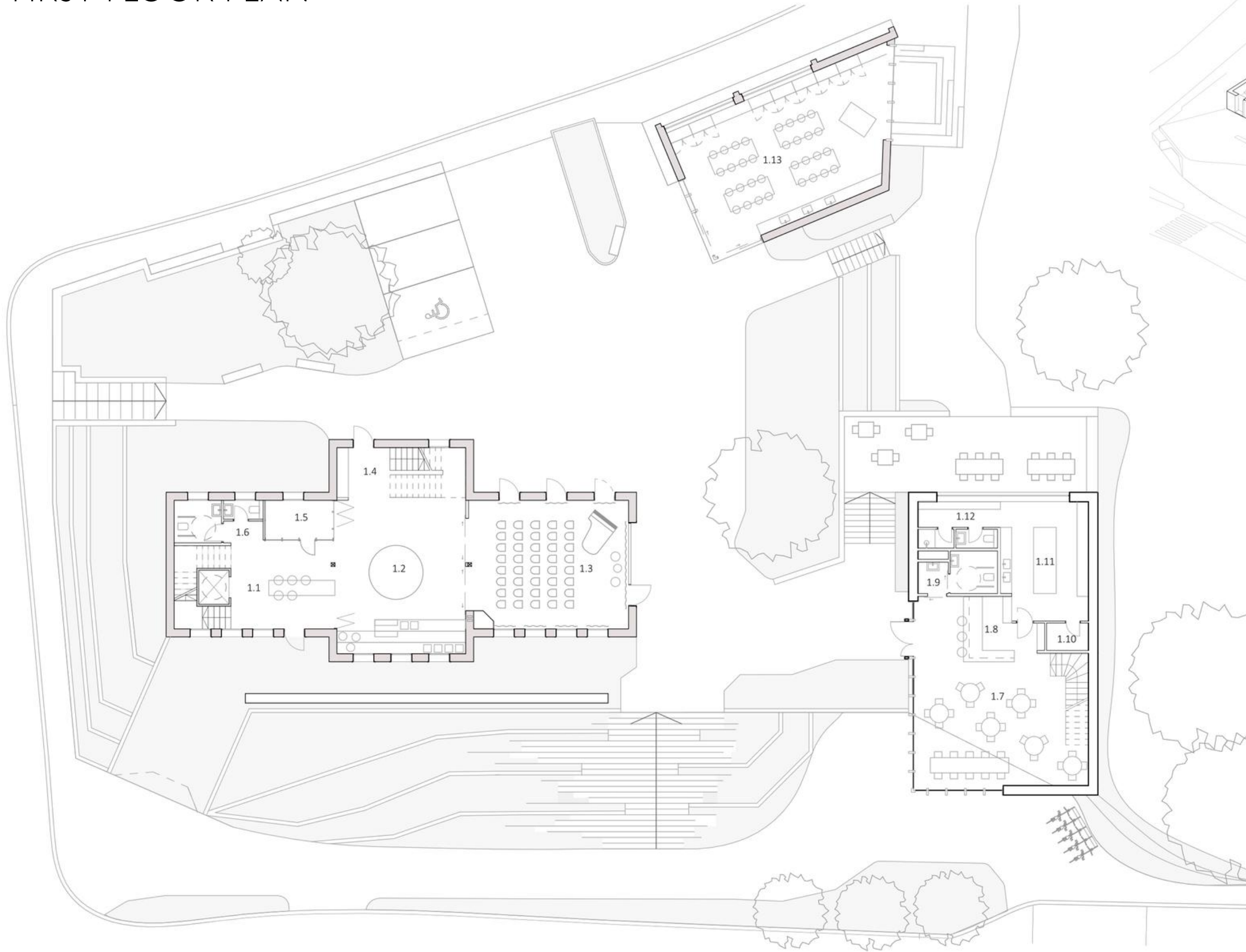
les
de Chumuni

GROUND FLOOR PLAN



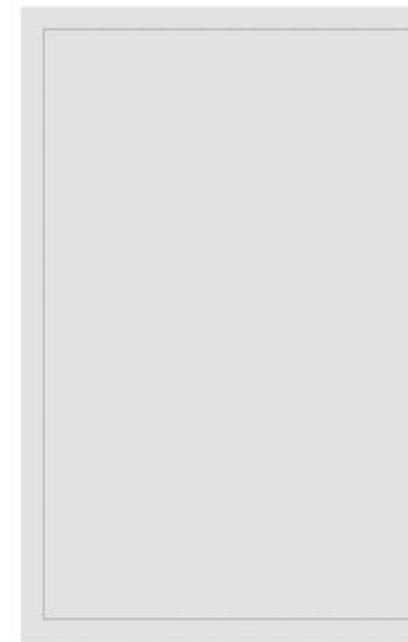
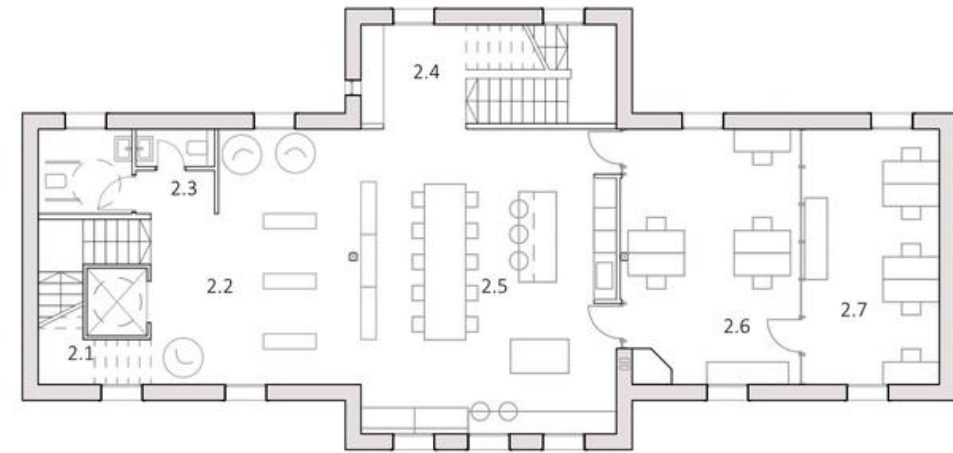
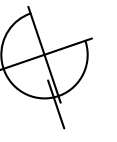
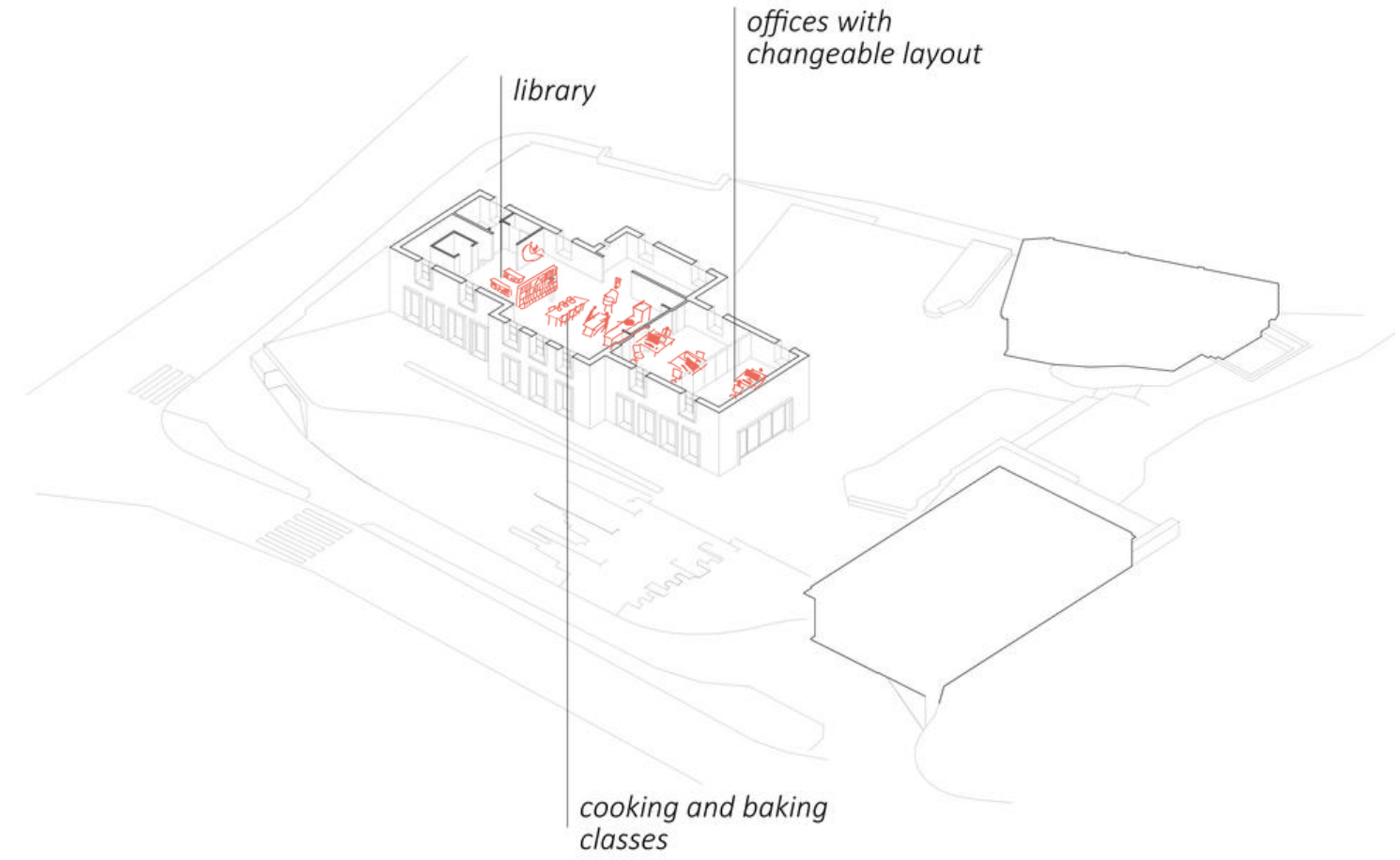
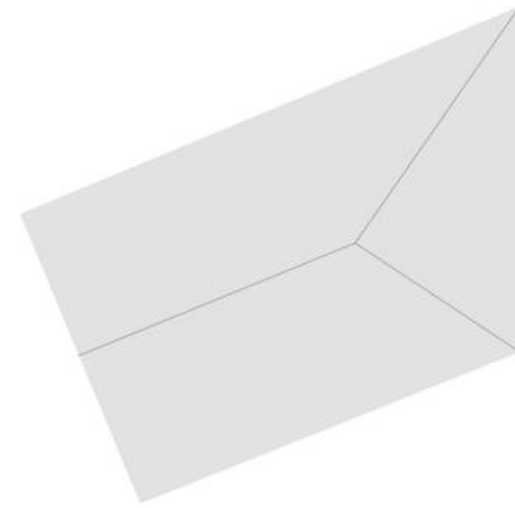
0.1	exhibitor room	33,17
0.2	exhibitor room	112,48
0.3	entrance hallway	36,29
0.4	toilets	10,35 6,01
0.5	storage	18,73
0.6	wine cellar / tasting	61,78
0.7	gaming / movie room	57,55
0.8	training/theatre room	45,44
0.9	bakery	27,41
0.10	open kitchen	14,28
0.11	toilets	22,73 5,87
0.12	kitchen	452,09 m ²
0.13	storage	

FIRST FLOOR PLAN

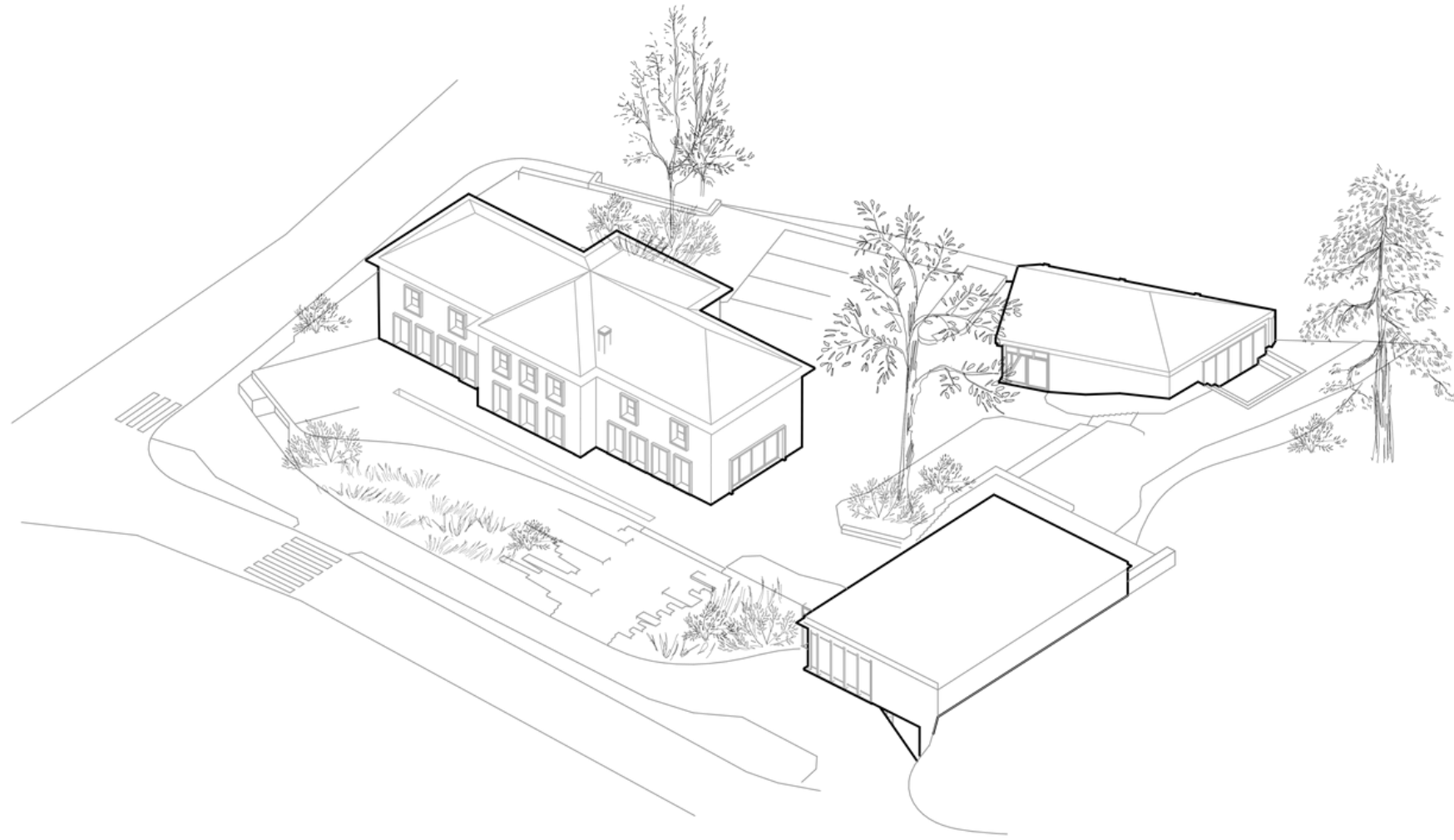


1.1	Ktchen	16,83
1.1	Open kitchen	20,84
1.1	Restaurant	95,82
1.1	Entrance hallway	36,71
1.2	Mulyfunctional hall	55,18
1.3	Multifunctional event hall	57,46
1.4	Wardrobe / stairwell	18,85 8,17
1.5	Mulypurpose room	10,83
1.6	Toilets	68,95
1.7	Restaurant	11,59
1.8	Open bar	14,28 3,21
1.9	Toilets	27,90 6,02
1.10	Storage	75,99
1.11	Multipurpose hall	528,63 m ²
1.12	Storage	
1.13	Workshop	

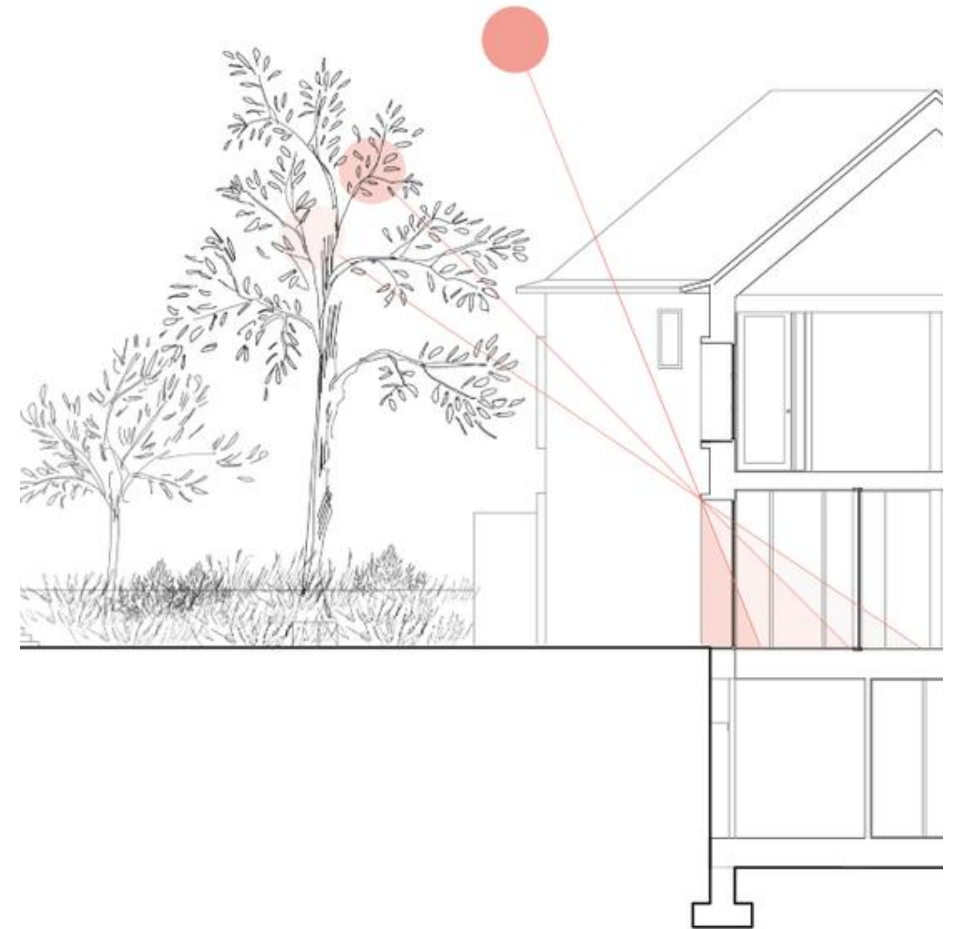
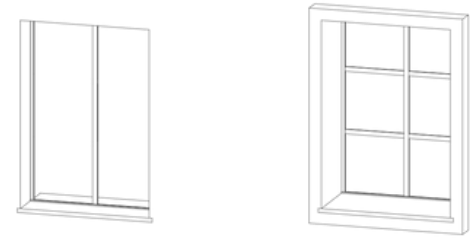
SECOND FLOOR PLAN

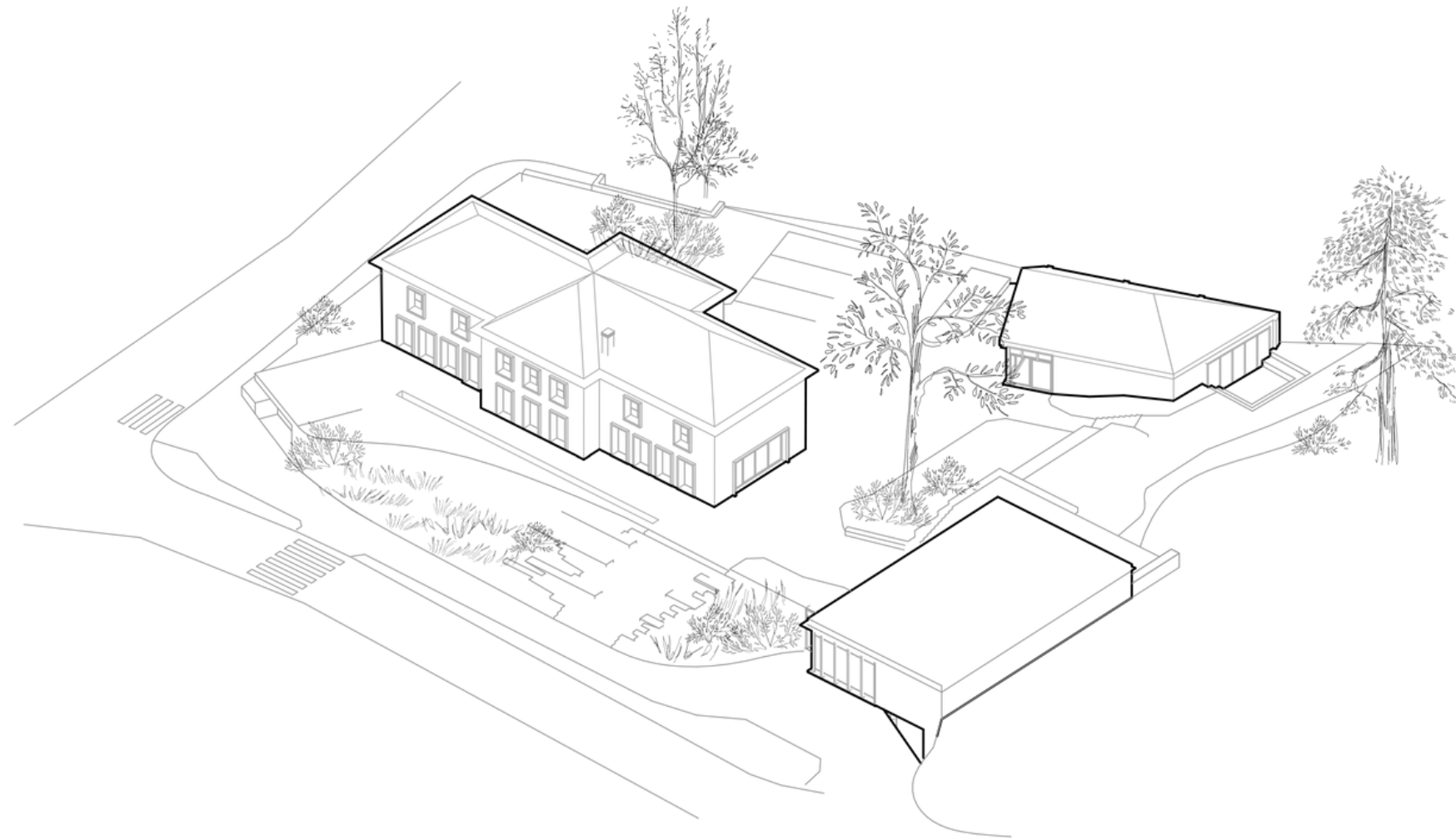


2.1	Entrance hallway	13,20
2.2	Library	34,03
2.3	Toilets	10,58
2.4	Wardrobe / stairwell	18,25
2.5	Open kitchen	55,18
2.6	Offices	18,46
2.7	Offices	31,32
		181,02 m ²

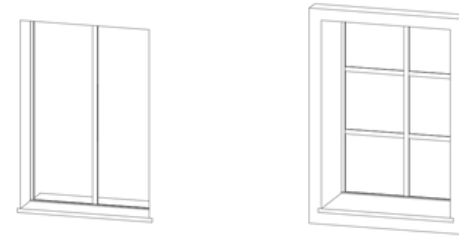


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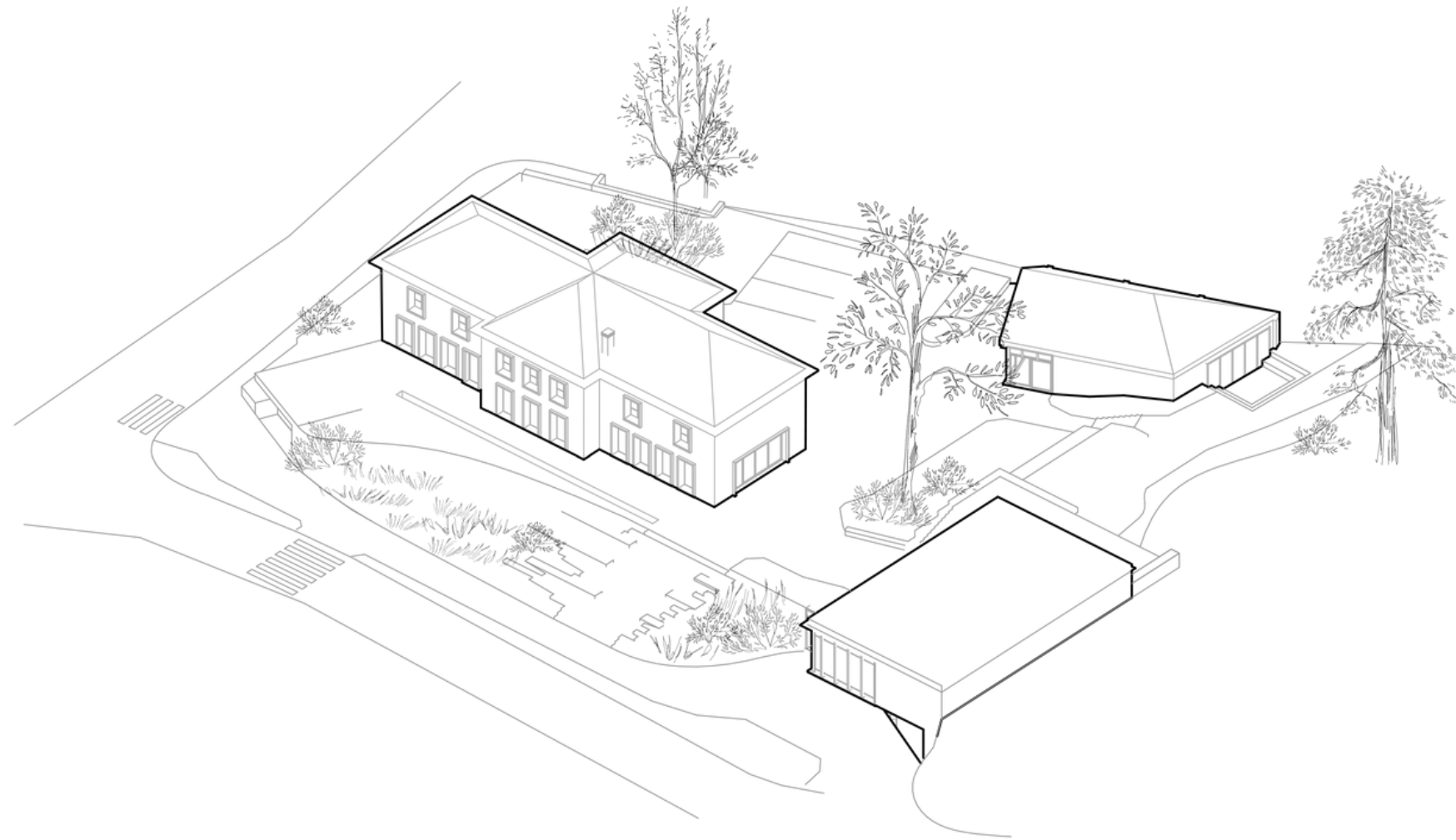


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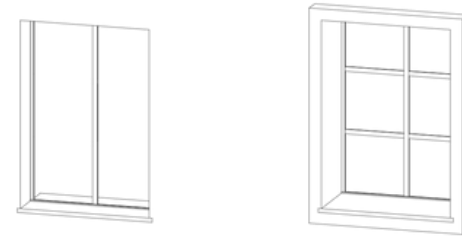


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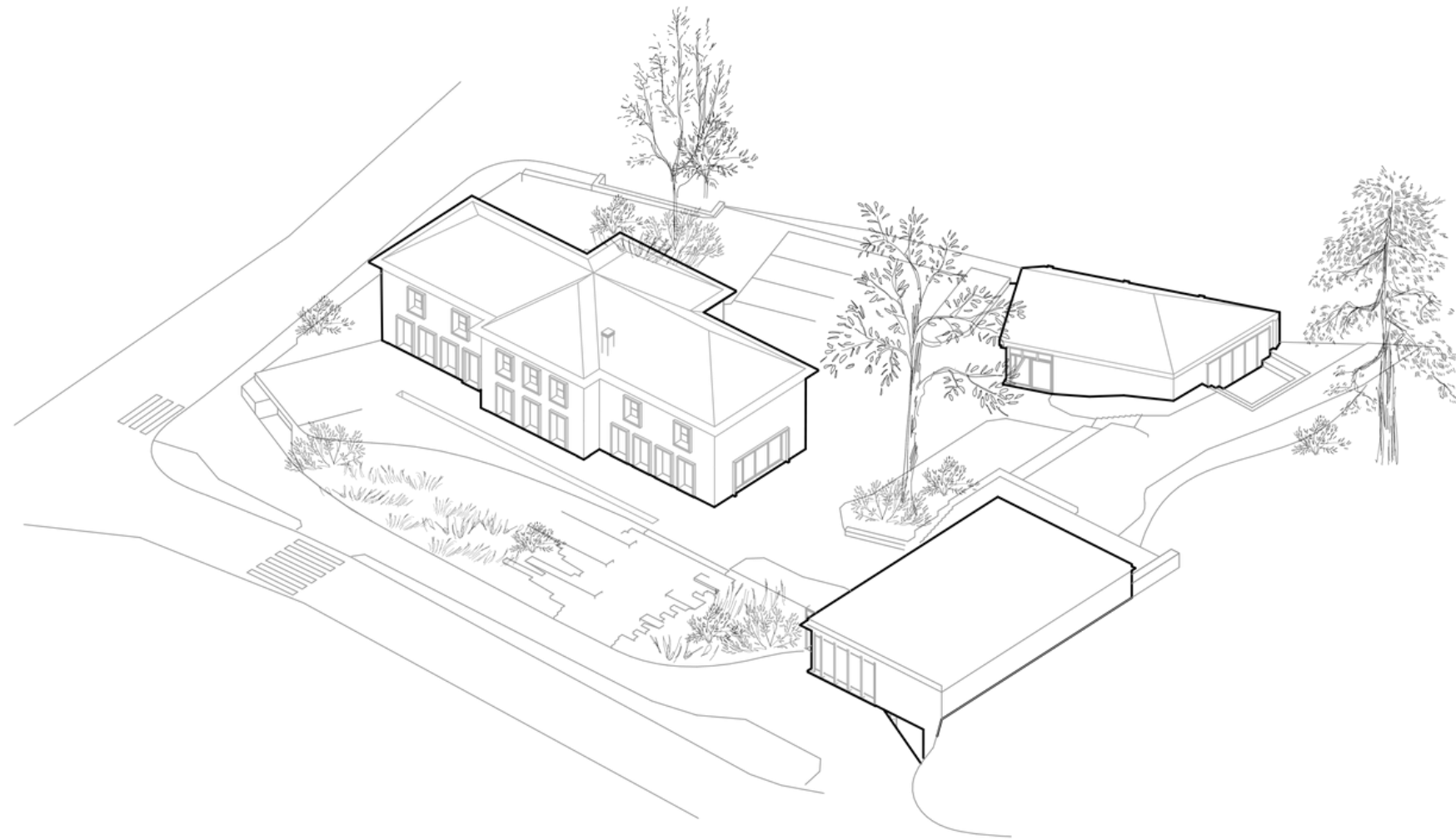


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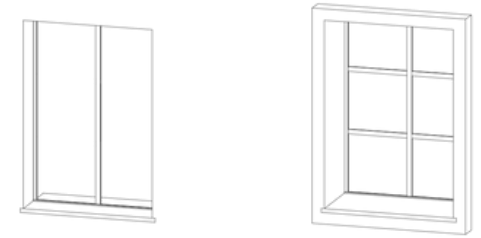


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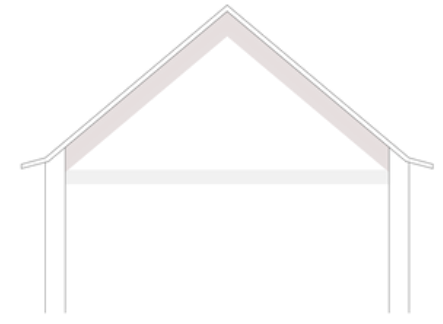
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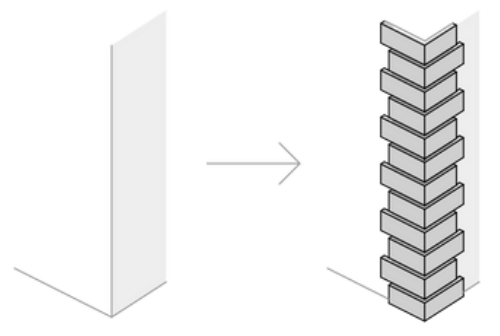
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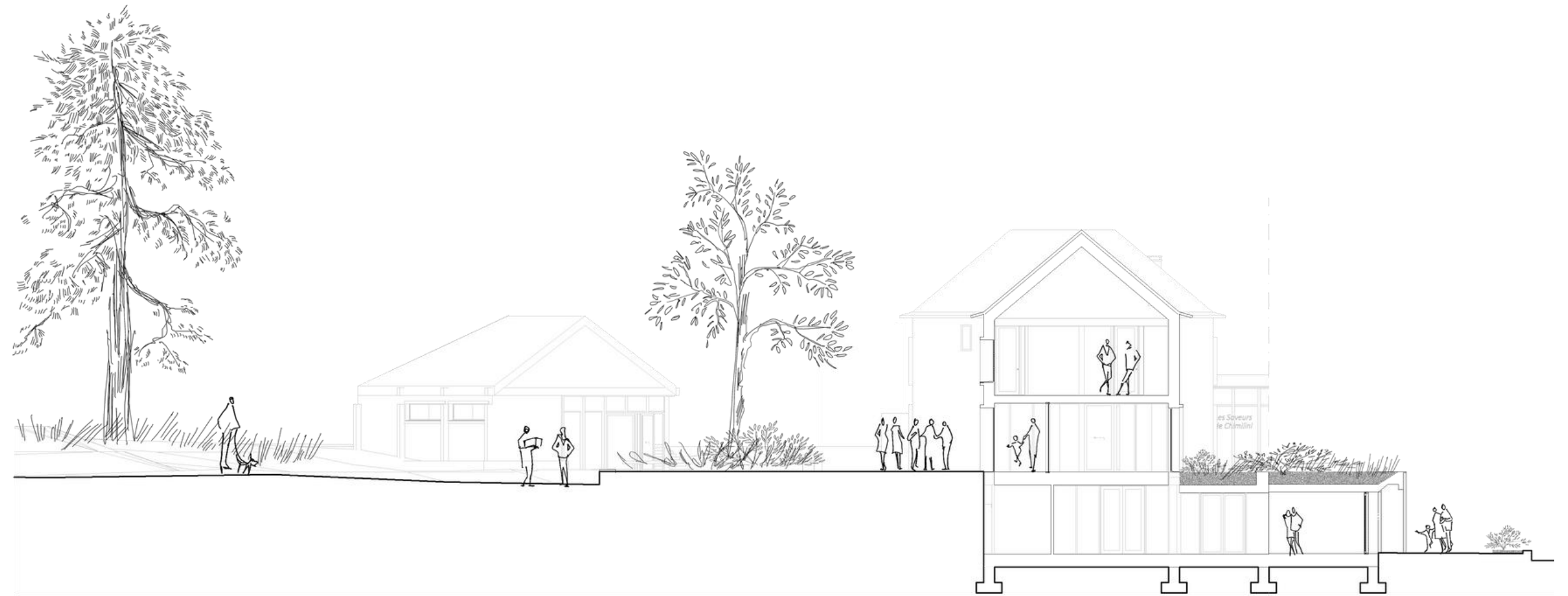
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4









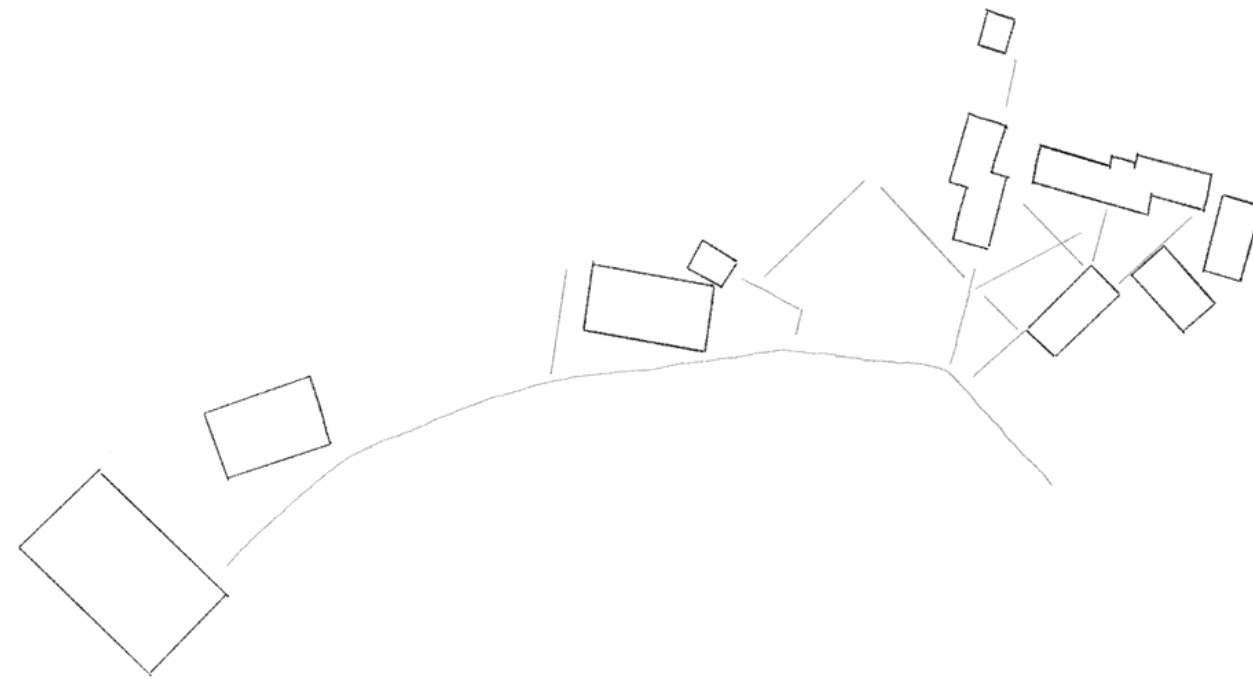
Maison
communautaire
de Chimilini

Les Saveurs
de Chimilini

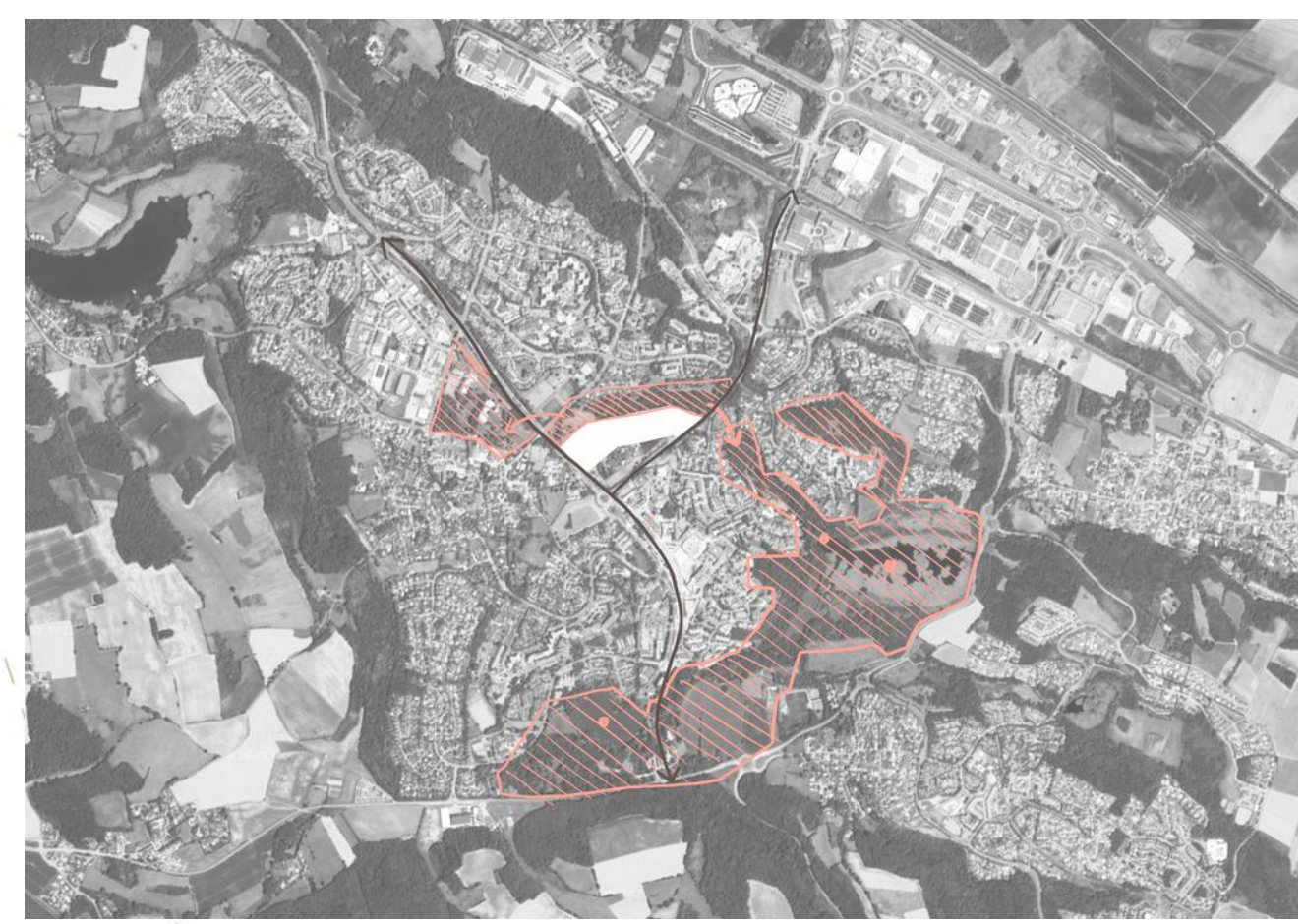
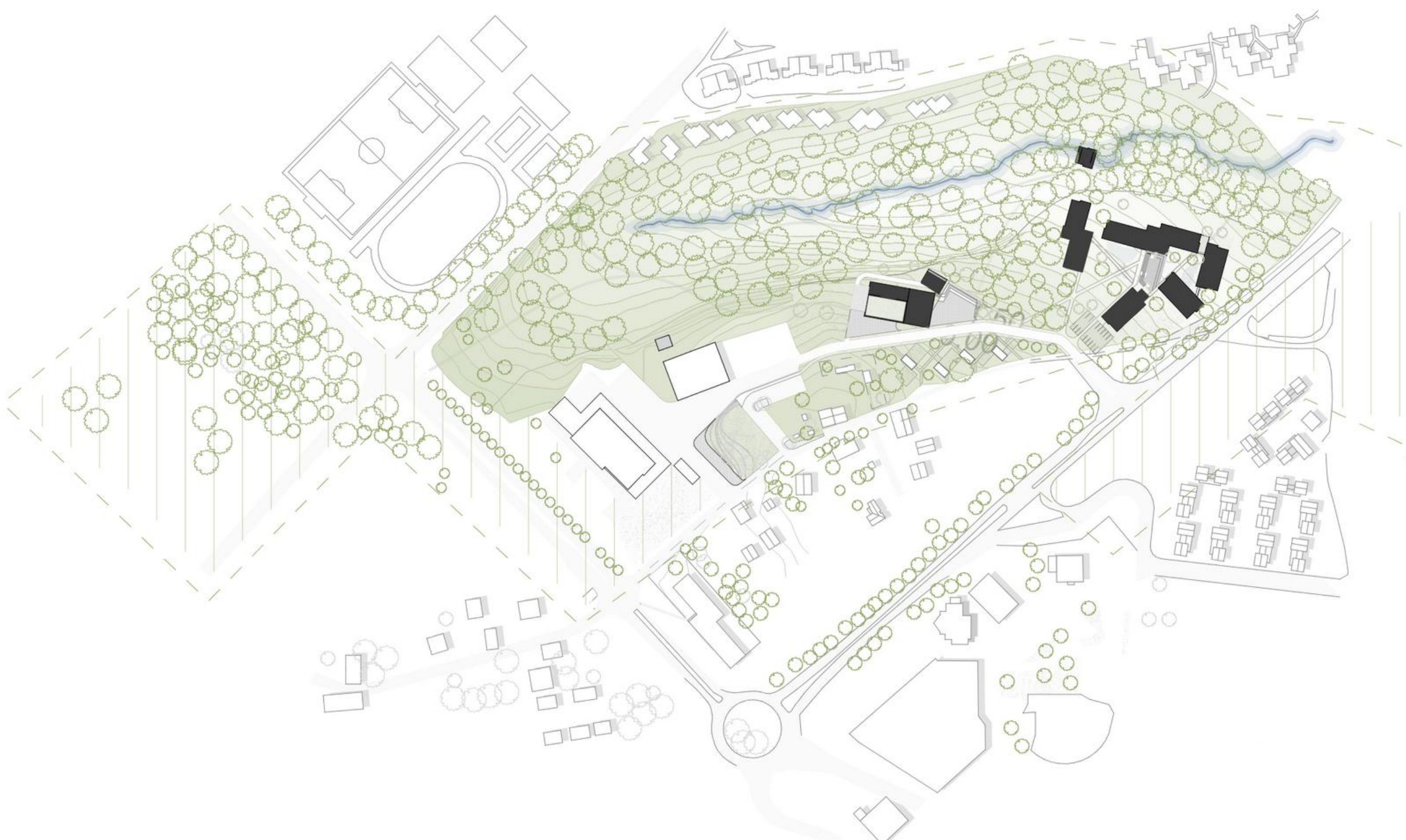
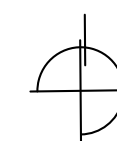
lumina

Saint-Gobain

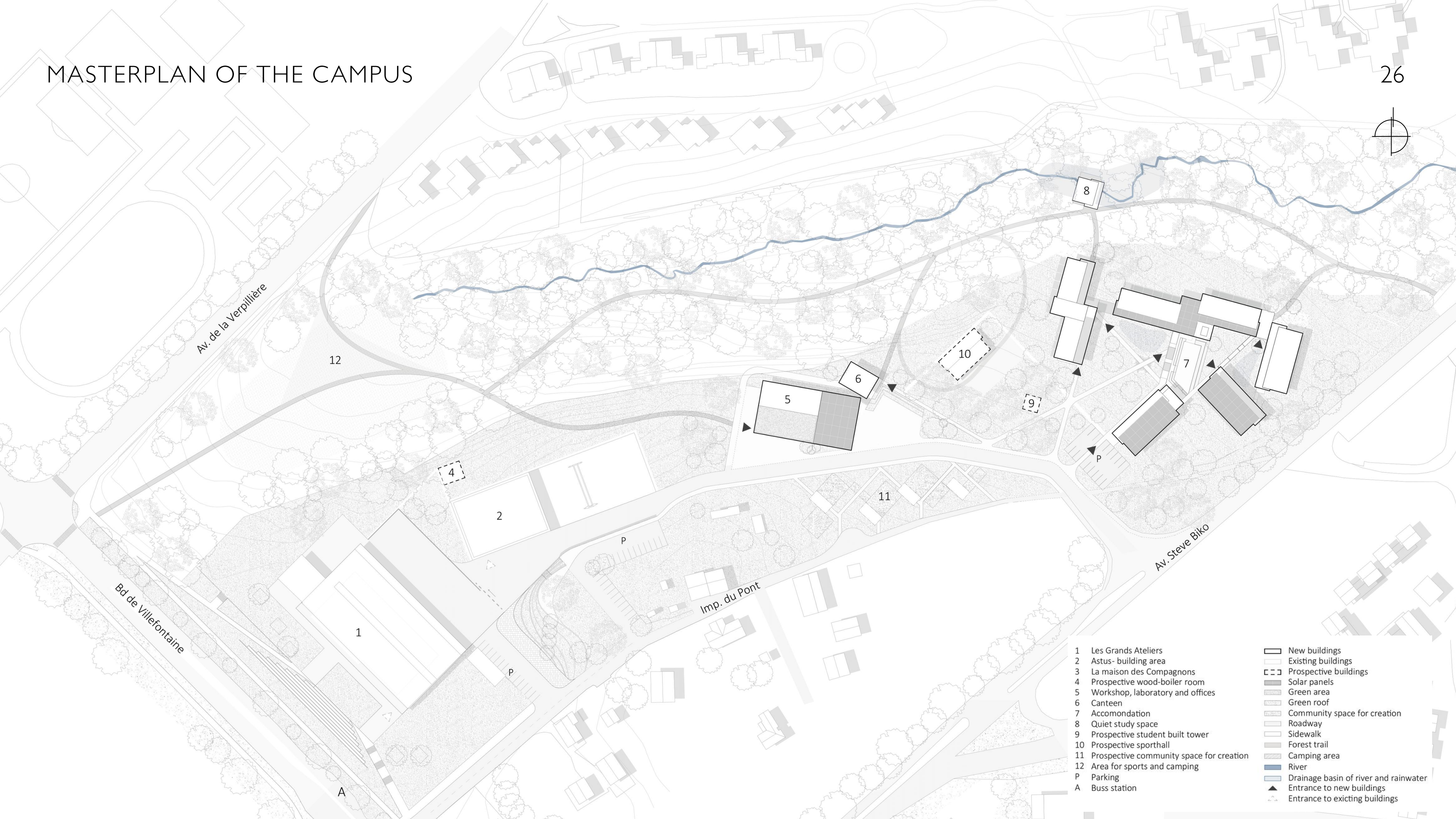
LES GRANDS ATELIERS



NATURE TRAIL

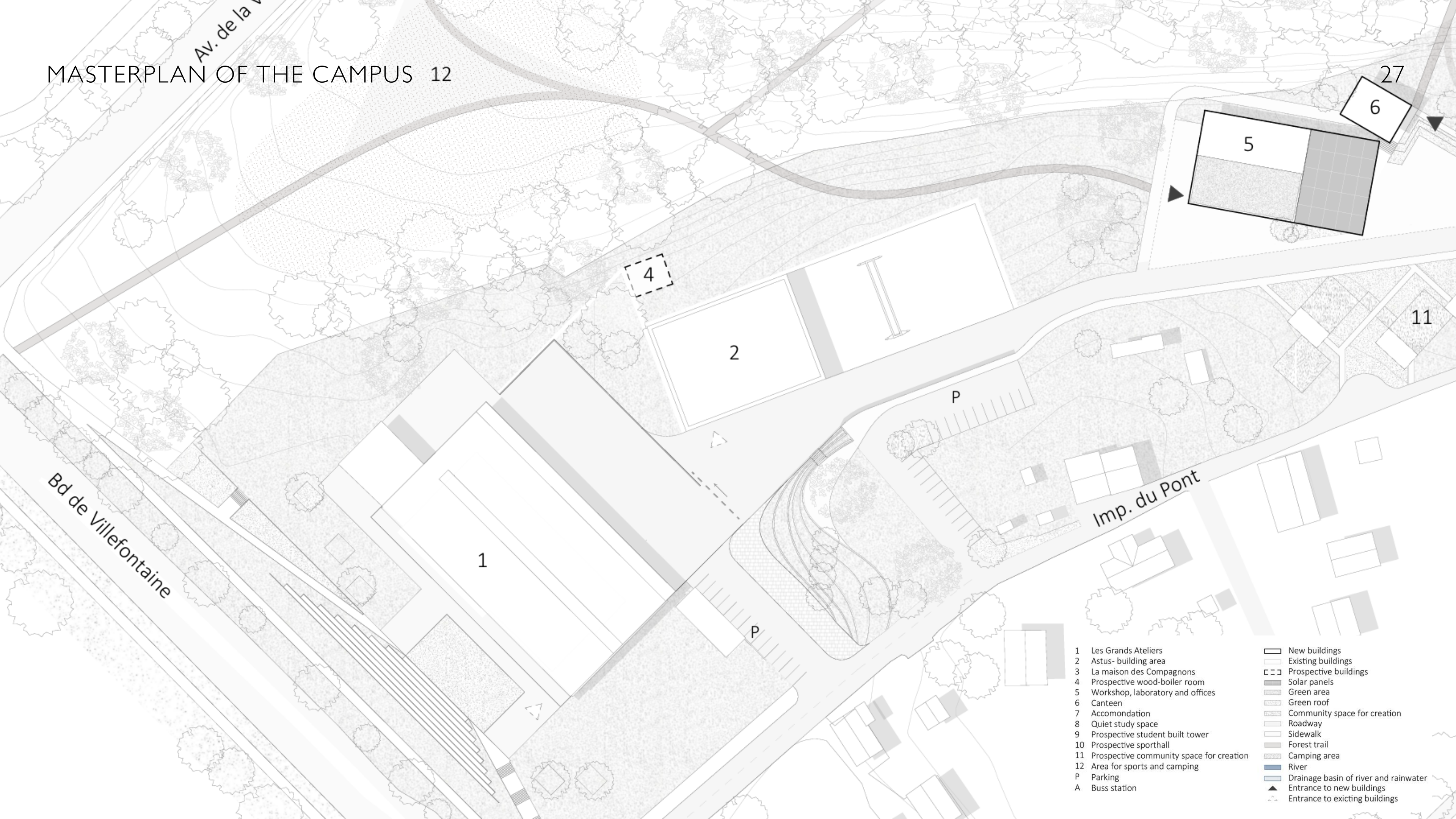


MASTERPLAN OF THE CAMPUS



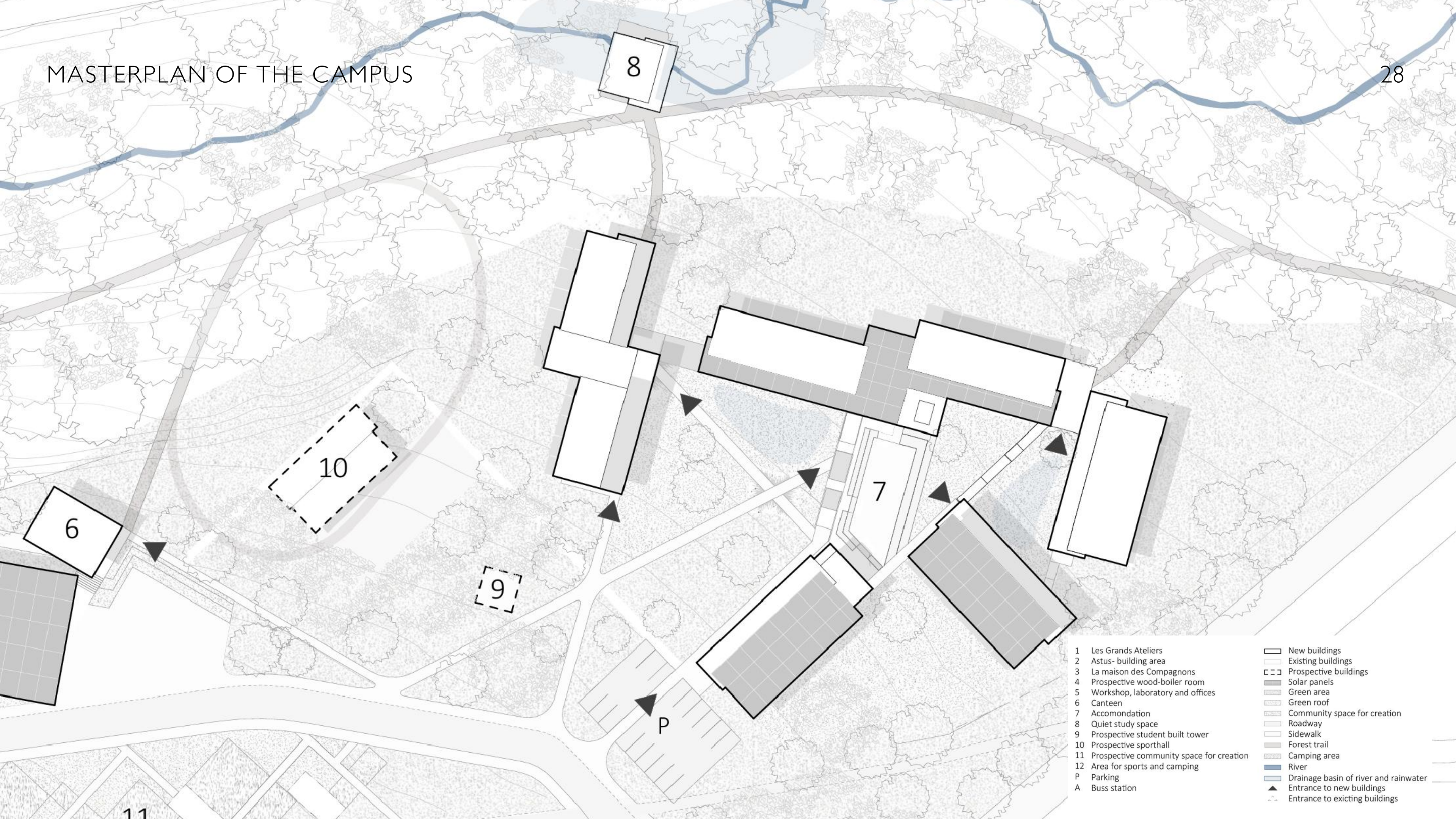
- | | | | |
|----|------------------------------------------|--|---------------------------------------|
| 1 | Les Grands Ateliers | | New buildings |
| 2 | Astus- building area | | Existing buildings |
| 3 | La maison des Compagnons | | Prospective buildings |
| 4 | Prospective wood-boiler room | | Solar panels |
| 5 | Workshop, laboratory and offices | | Green area |
| 6 | Canteen | | Green roof |
| 7 | Accommodation | | Community space for creation |
| 8 | Quiet study space | | Roadway |
| 9 | Prospective student built tower | | Sidewalk |
| 10 | Prospective sporthall | | Forest trail |
| 11 | Prospective community space for creation | | Camping area |
| 12 | Area for sports and camping | | River |
| P | Parking | | Drainage basin of river and rainwater |
| A | Buss station | | Entrance to new buildings |
| | | | Entrance to existing buildings |

MASTERPLAN OF THE CAMPUS 12



- 1 Les Grands Ateliers
 - 2 Astus- building area
 - 3 La maison des Compagnons
 - 4 Prospective wood-boiler room
 - 5 Workshop, laboratory and offices
 - 6 Canteen
 - 7 Accomodation
 - 8 Quiet study space
 - 9 Prospective student built tower
 - 10 Prospective sporthall
 - 11 Prospective community space for creation
 - 12 Area for sports and camping
 - P Parking
 - A Buss station
- ▭ New buildings
 - ▭ Existing buildings
 - ▭ Prospective buildings
 - ▭ Solar panels
 - ▭ Green area
 - ▭ Green roof
 - ▭ Community space for creation
 - ▭ Roadway
 - ▭ Sidewalk
 - ▭ Forest trail
 - ▭ Camping area
 - ▭ River
 - ▭ Drainage basin of river and rainwater
 - ▲ Entrance to new buildings
 - ▲ Entrance to existing buildings

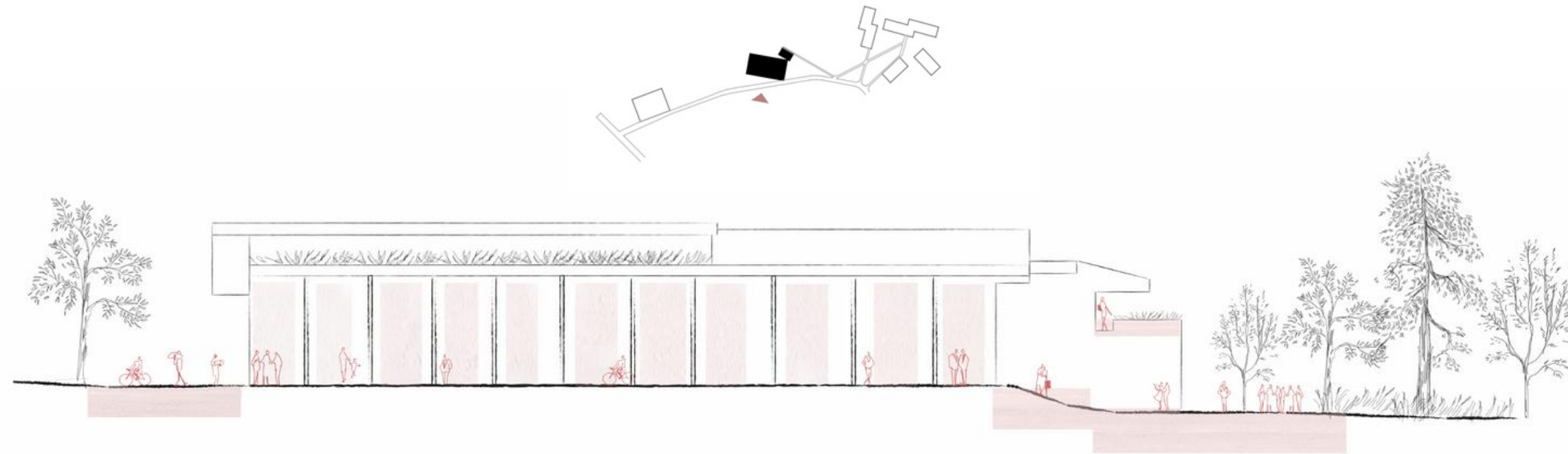
MASTERPLAN OF THE CAMPUS

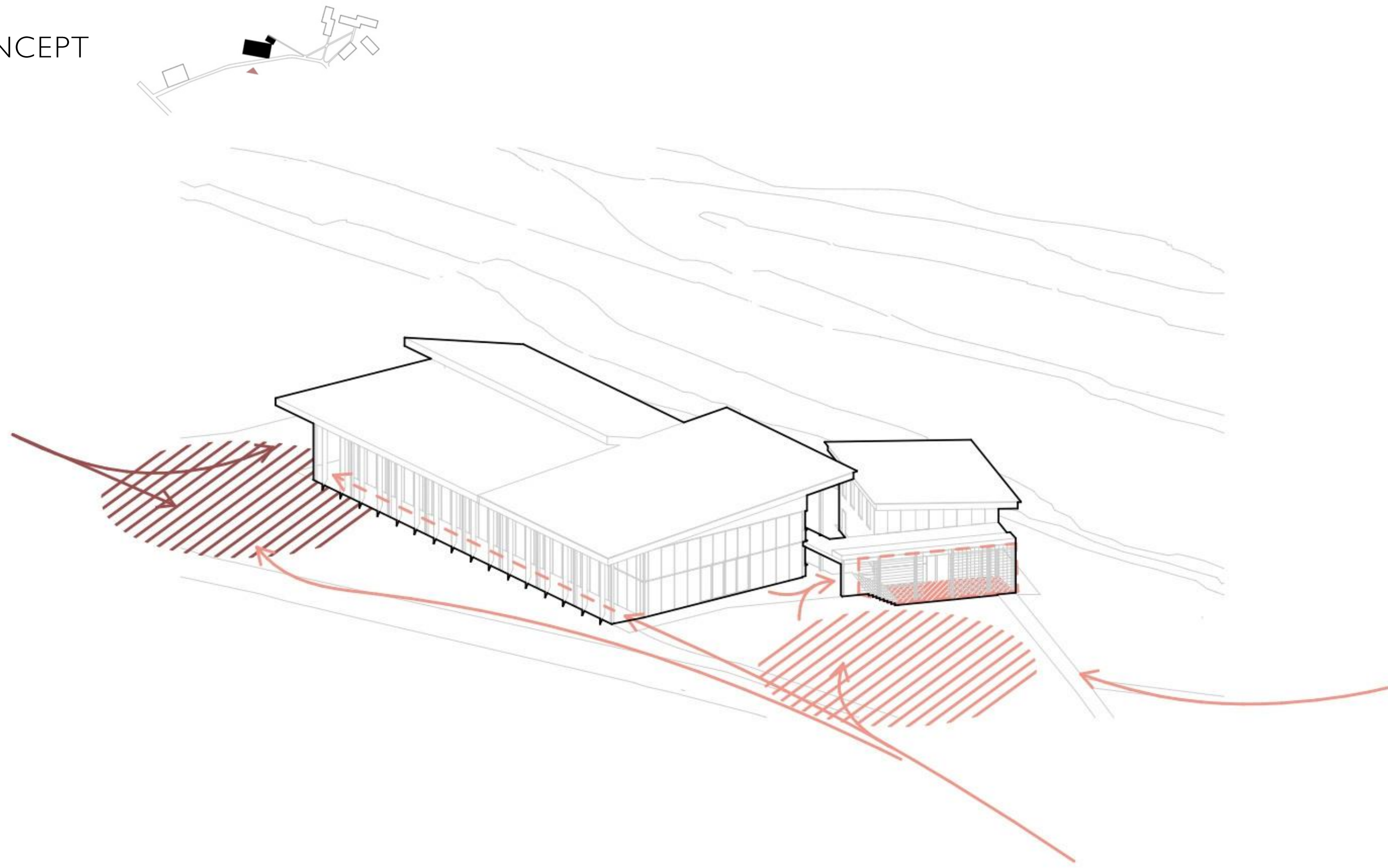


- | | |
|---------------------------------------------|---------------------------------------|
| 1 Les Grands Ateliers | Existing buildings |
| 2 Astus- building area | Prospective buildings |
| 3 La maison des Compagnons | Solar panels |
| 4 Prospective wood-boiler room | Green area |
| 5 Workshop, laboratory and offices | Green roof |
| 6 Canteen | Community space for creation |
| 7 Accomodation | Roadway |
| 8 Quiet study space | Sidewalk |
| 9 Prospective student built tower | Forest trail |
| 10 Prospective sporthall | Camping area |
| 11 Prospective community space for creation | River |
| 12 Area for sports and camping | Drainage basin of river and rainwater |
| P Parking | Entrance to new buildings |
| A Buss station | Entrance to existing buildings |

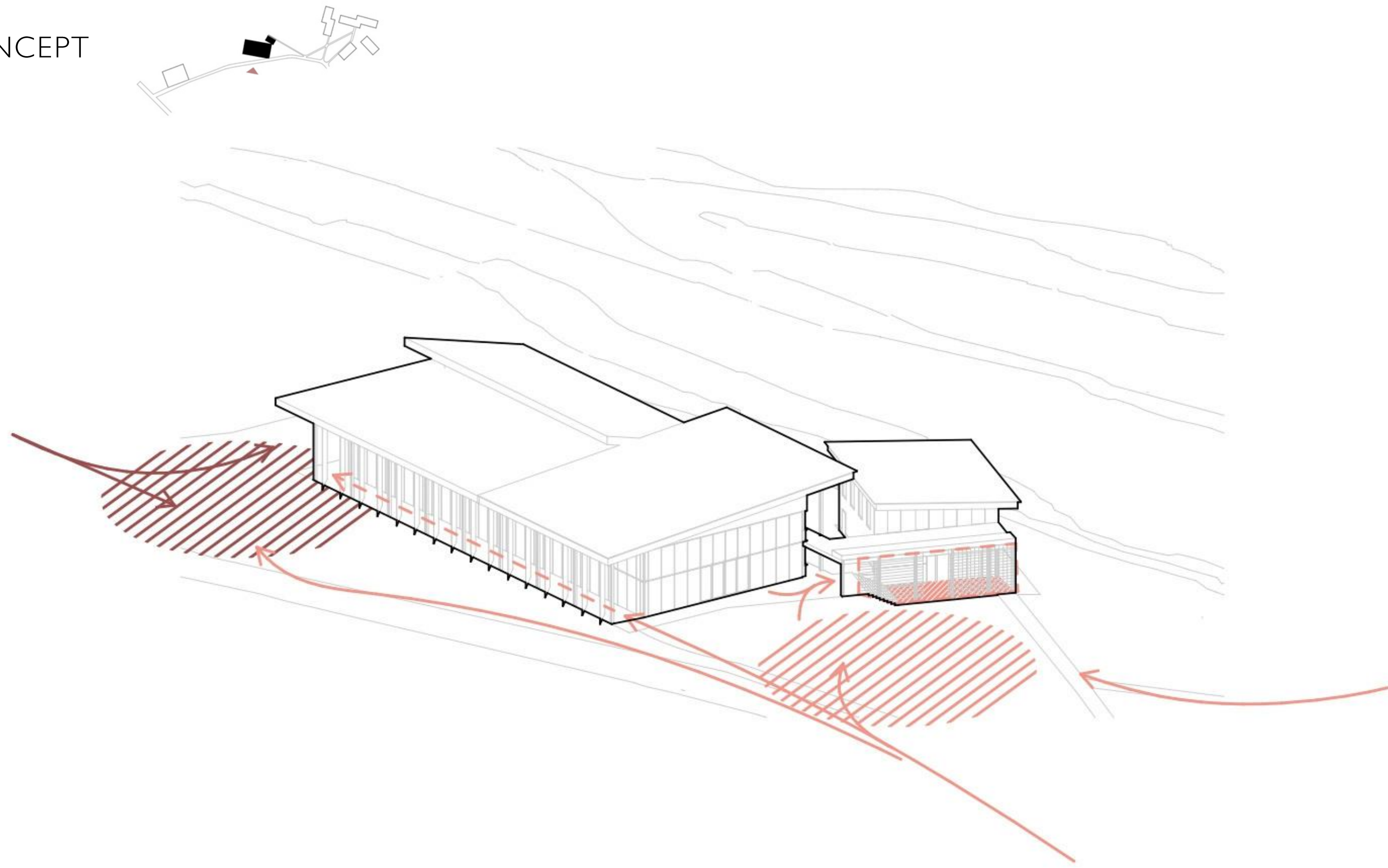
Saint-Gobain

LABORATORY FOR CO-CREATION



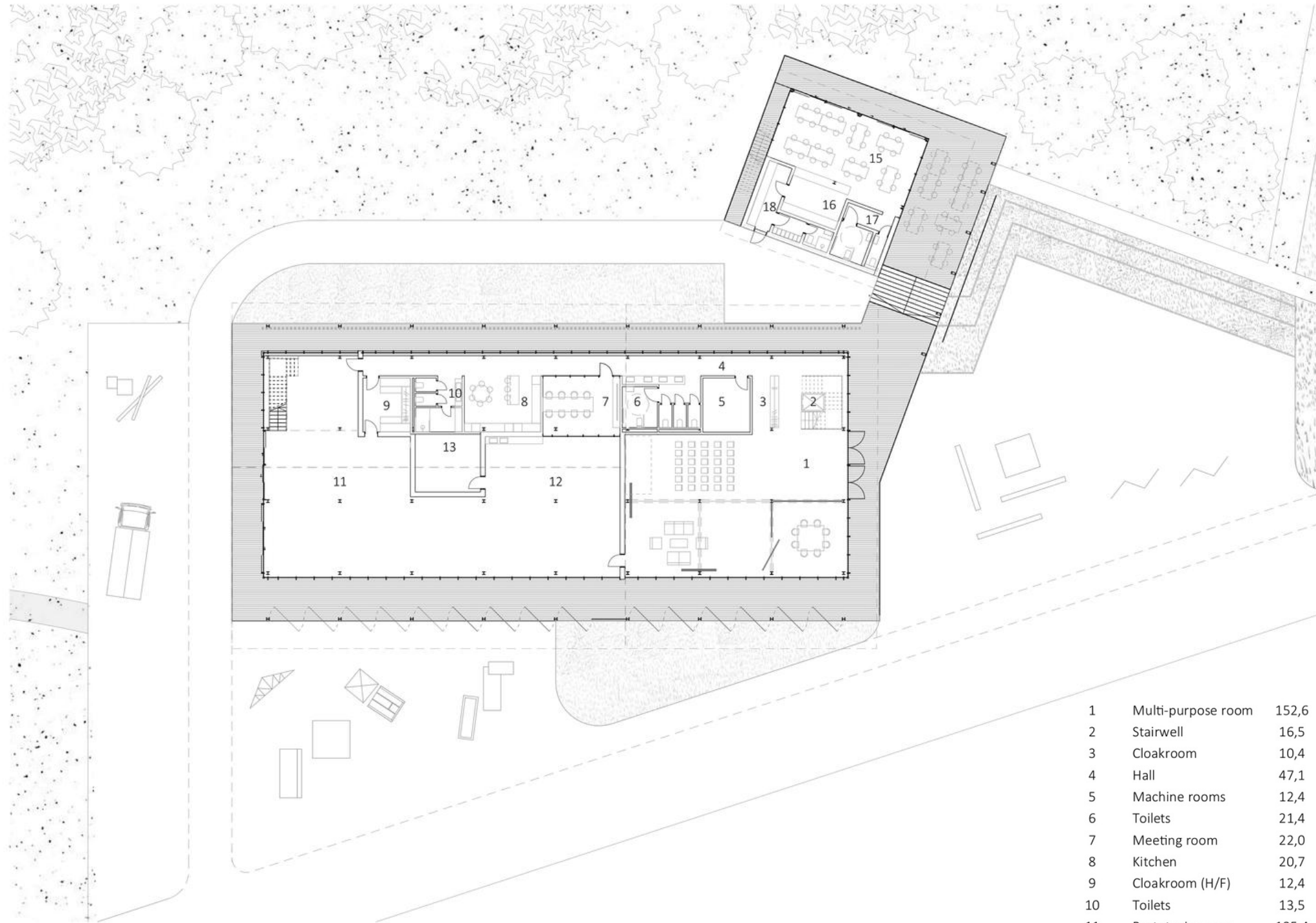
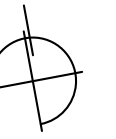
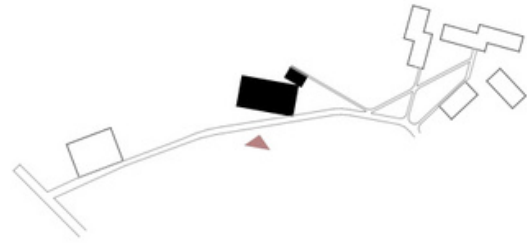








FIRST FLOOR PLAN

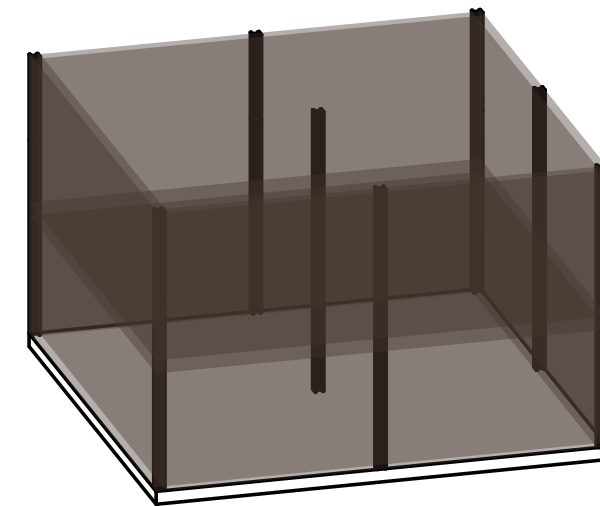
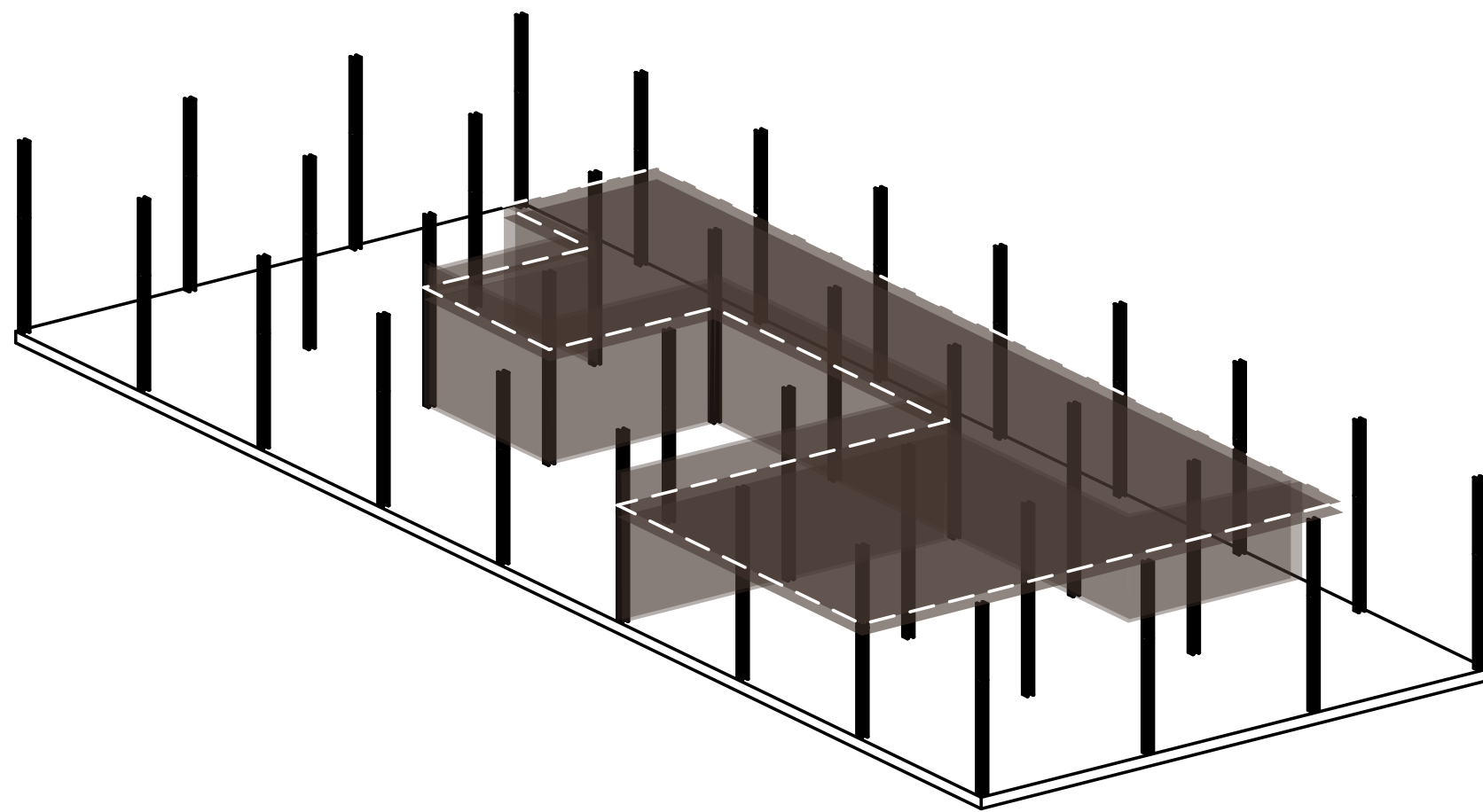
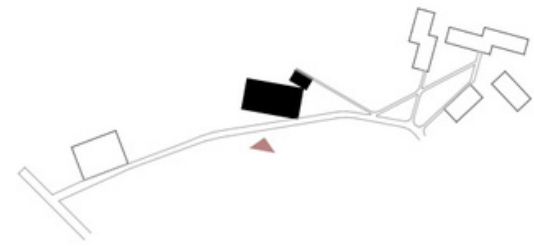


1	Multi-purpose room	152,6
2	Stairwell	16,5
3	Cloakroom	10,4
4	Hall	47,1
5	Machine rooms	12,4
6	Toilets	21,4
7	Meeting room	22,0
8	Kitchen	20,7
9	Cloakroom (H/F)	12,4
10	Toilets	13,5
11	Prototyping area	135,4
12	Laboratory	120,2
13	Machine rooms	18,1
14	Canteen	51,8
15	Serving bar	13,1
16	Kitchen / storage	14,1
17	Toilets	12,9
		694,6 m²

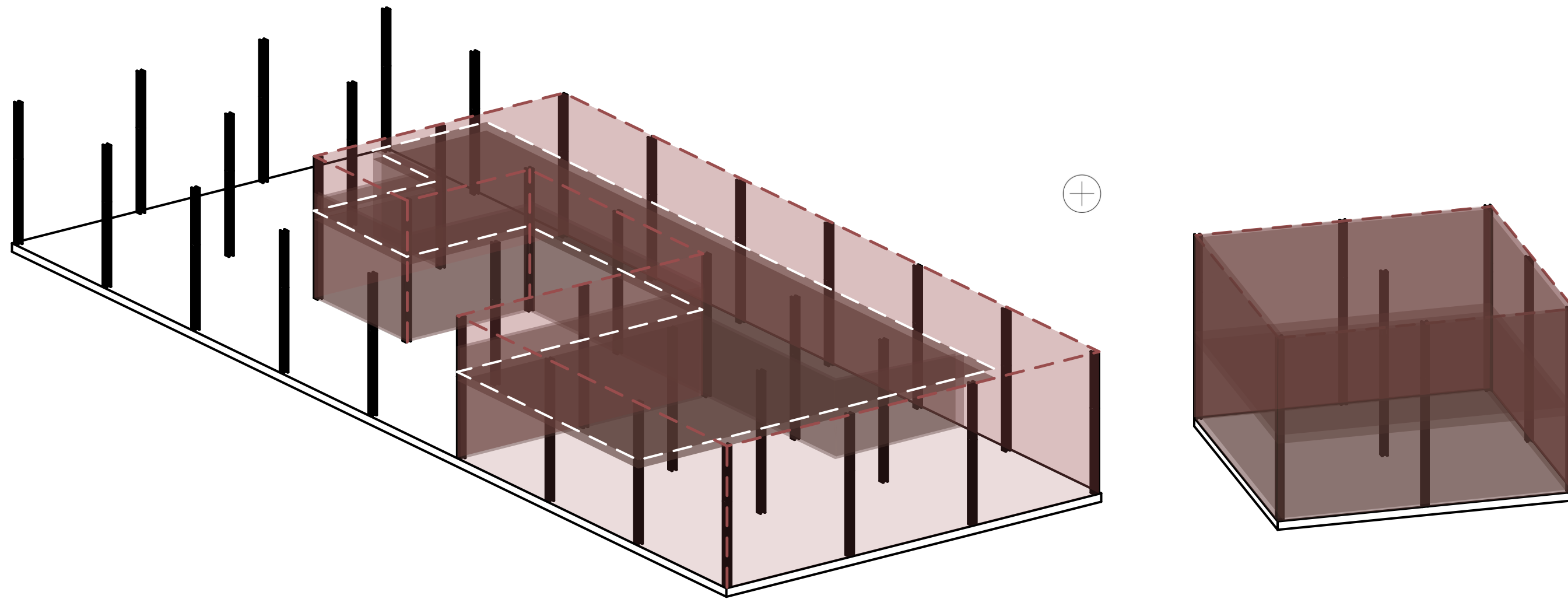
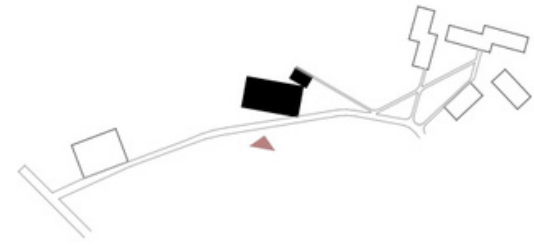


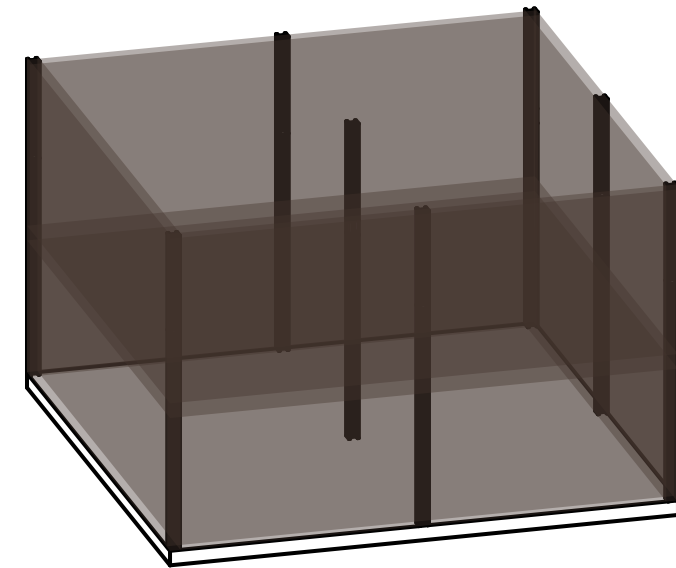
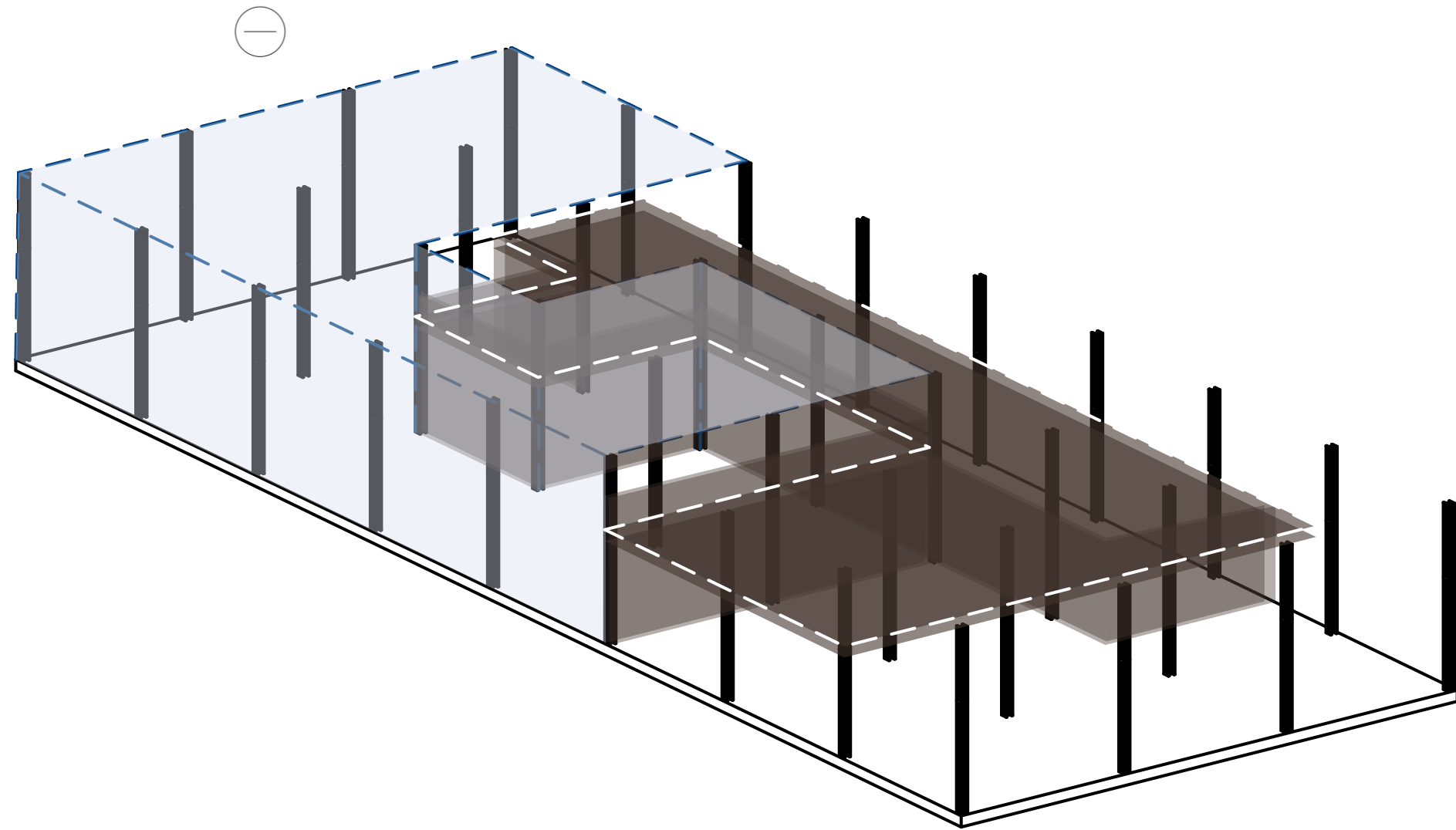
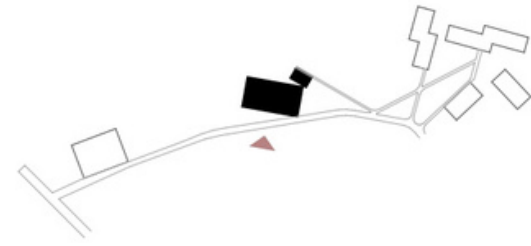
1	Office space	220,9
2	Meeting room	19,7
3	Meeting room	25,1
4	Open kitchen / lounge	27,5
6	Stairwell	11,7
6	Stairwell	21,6
7	Office space	96,0
		422,5 m²

STRUCTURAL CONCEPT

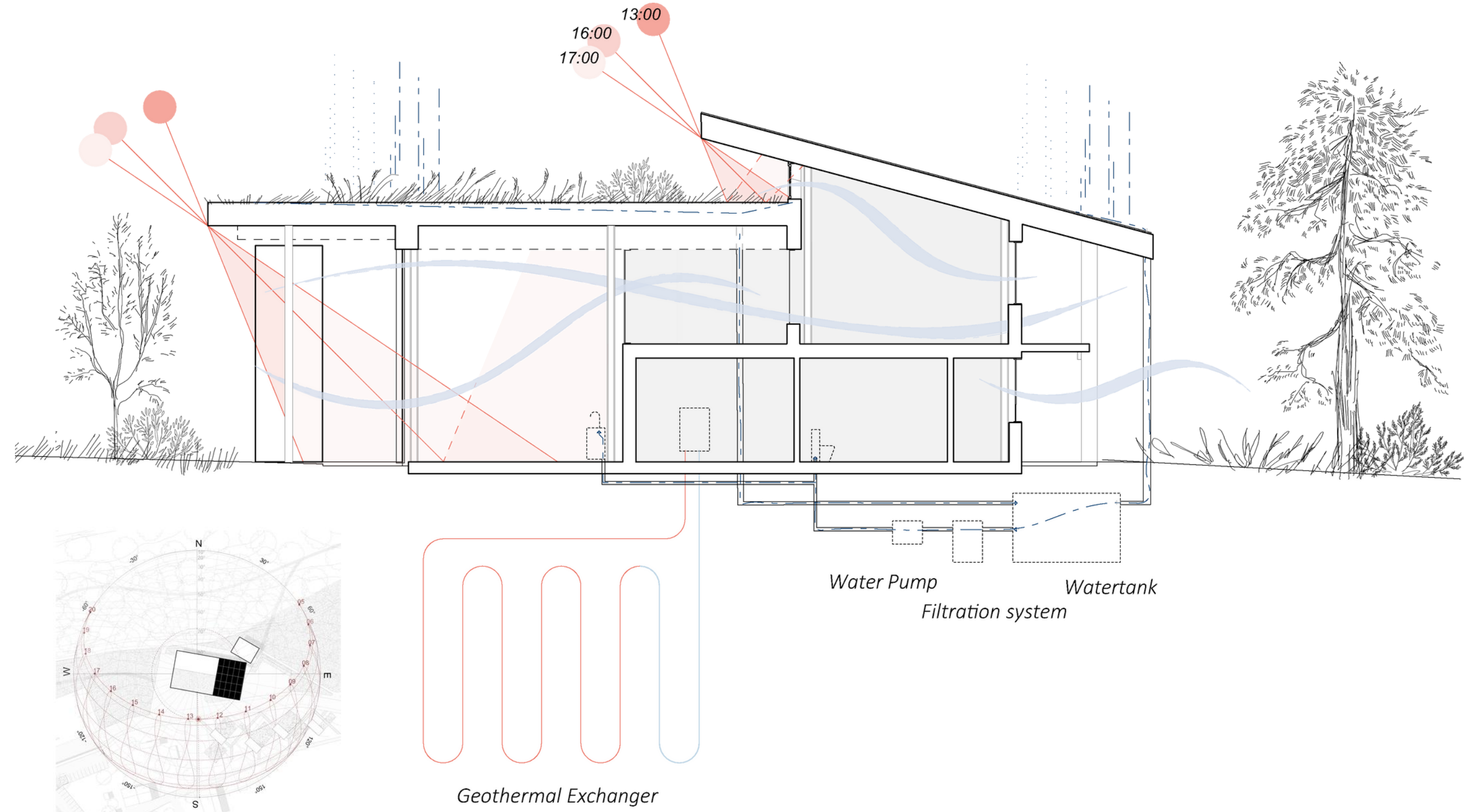
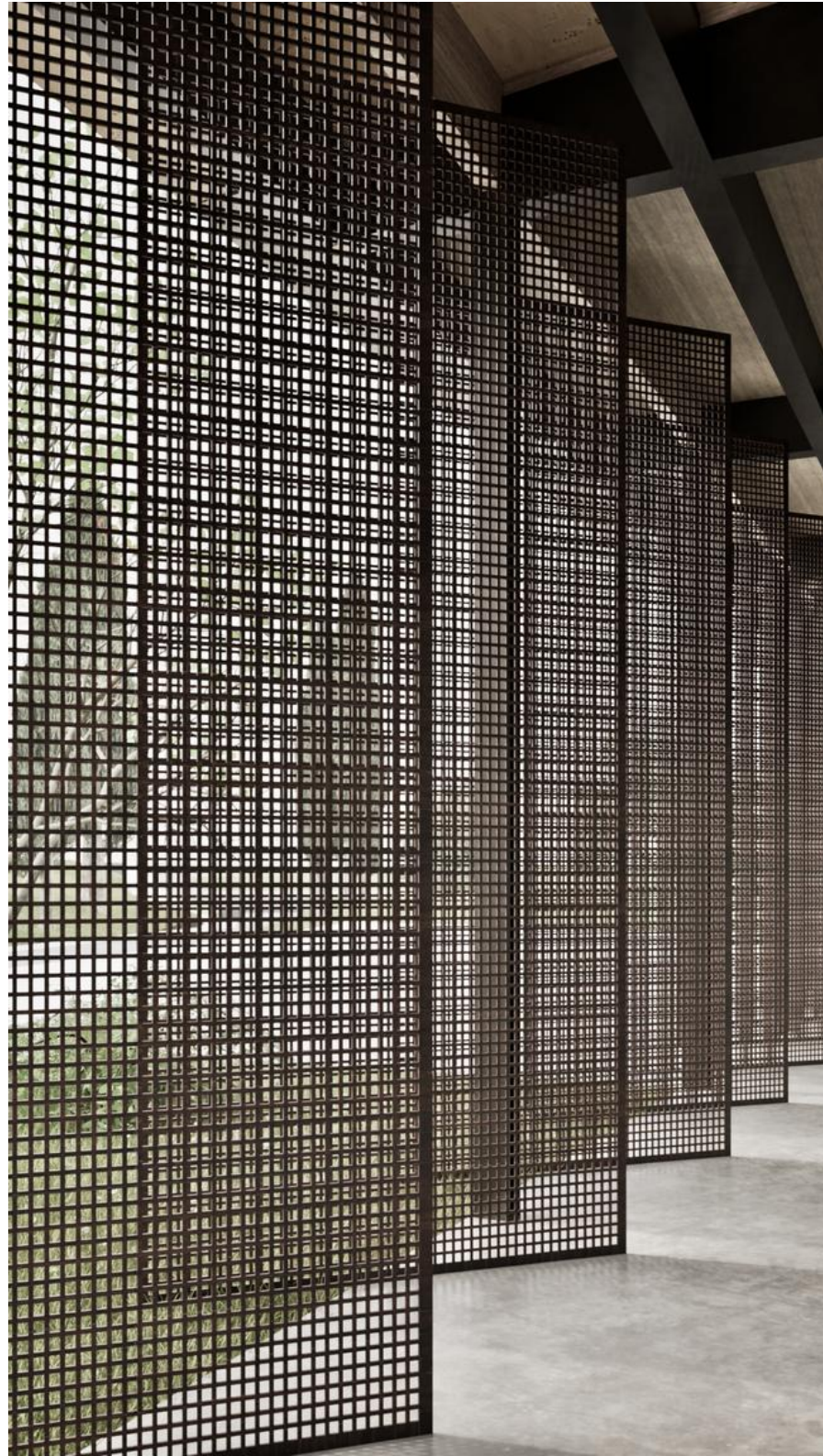




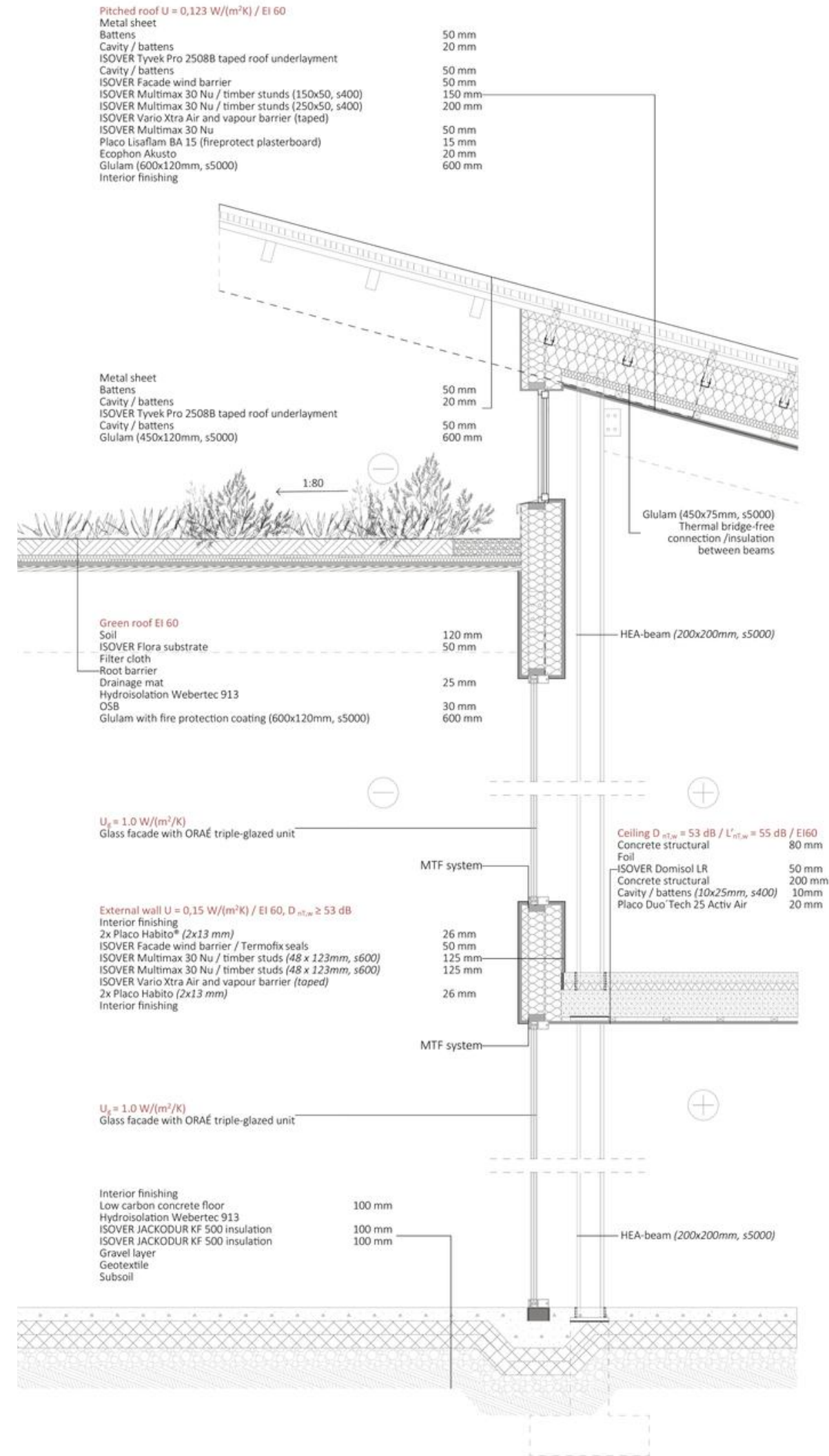
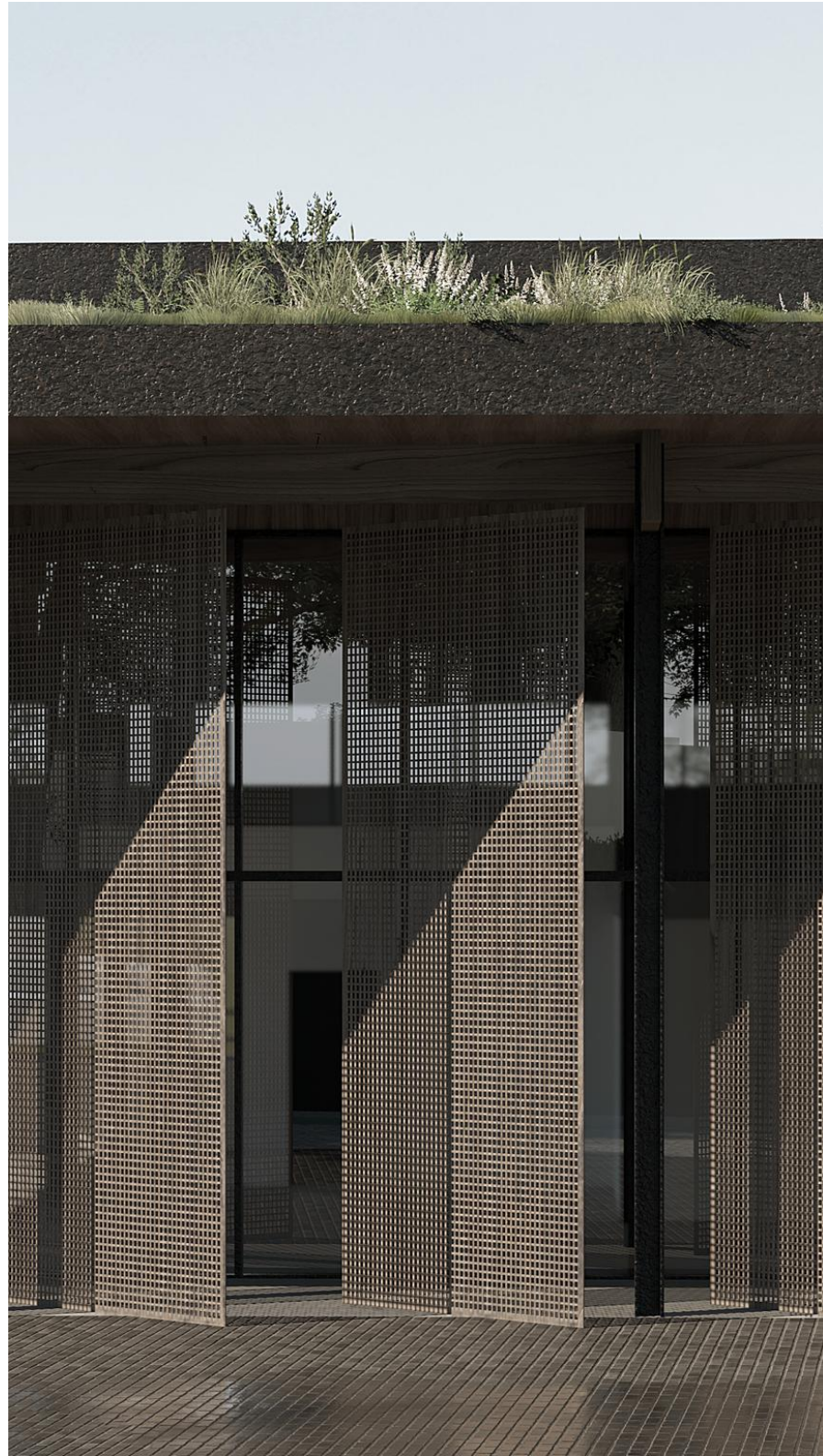








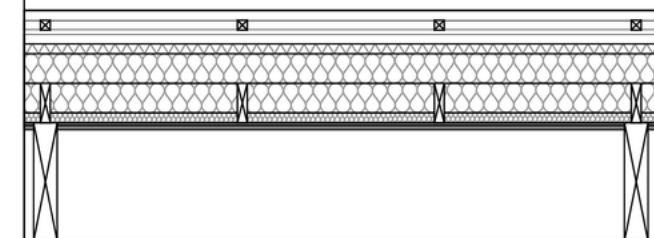
DETAIL SECTION



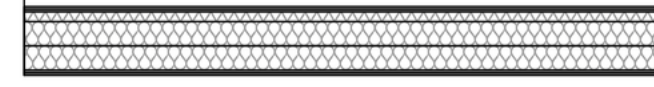
Green roof Ei 60	
Soil	120 mm
ISOVER Flora substrate	50 mm
Filter cloth	
Root barrier	
Drainage mat	25 mm
Hydrosolation Webertec 913	
OSB	30 mm
Glulam with fire protection coating (600x120mm, s5000)	600 mm



Pitched roof U = 0,123 W/(m²K) / Ei 60	
Metal sheet	50 mm
Battens	20 mm
Cavity / battens	50 mm
ISOVER Tyvek Pro 2508B taped roof underlayment	50 mm
Cavity / battens	50 mm
ISOVER Facade wind barrier	50 mm
ISOVER Multimax 30 Nu / timber studs (150x50, s400)	150 mm
ISOVER Multimax 30 Nu / timber studs (250x50, s400)	200 mm
ISOVER Vario Xtra Air and vapour barrier (taped)	50 mm
ISOVER Multimax 30 Nu	50 mm
Placo Lisaflam BA 15 (fireprotect plasterboard)	15 mm
Ecophon Akusto	20 mm
Glulam (600x120mm, s5000)	600 mm
Interior finishing	



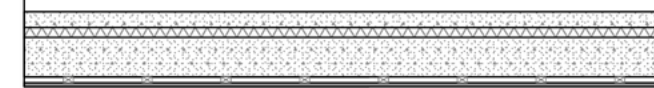
External wall U = 0,15 W/(m²K) / Ei 60, D _{nt,w} ≥ 53 dB	
Interior finishing	26 mm
2x Placo Habito® (2x13 mm)	50 mm
ISOVER Facade wind barrier / Termofix seals	125 mm
ISOVER Multimax 30 Nu / timber studs (48 x 123mm, s600)	125 mm
ISOVER Multimax 30 Nu / timber studs (48 x 123mm, s600)	125 mm
ISOVER Vario Xtra Air and vapour barrier (taped)	26 mm
2x Placo Habito (2x13 mm)	
Interior finishing	



Internal wall - D _{nt,w} = 55 dB / Ei 60	
2x Placo Habito® (2x13 mm)	26 mm
Steel frame Gypsteel ELPR 66, S. 600. Mineral wool GR 30 kraft	66 mm
Airspace	20 mm
Steel frame Gypsteel ELPR 66, S. 600. Mineral wool GR 30 kraft	66 mm
2x Placo Habito® (2x13 mm)	26 mm

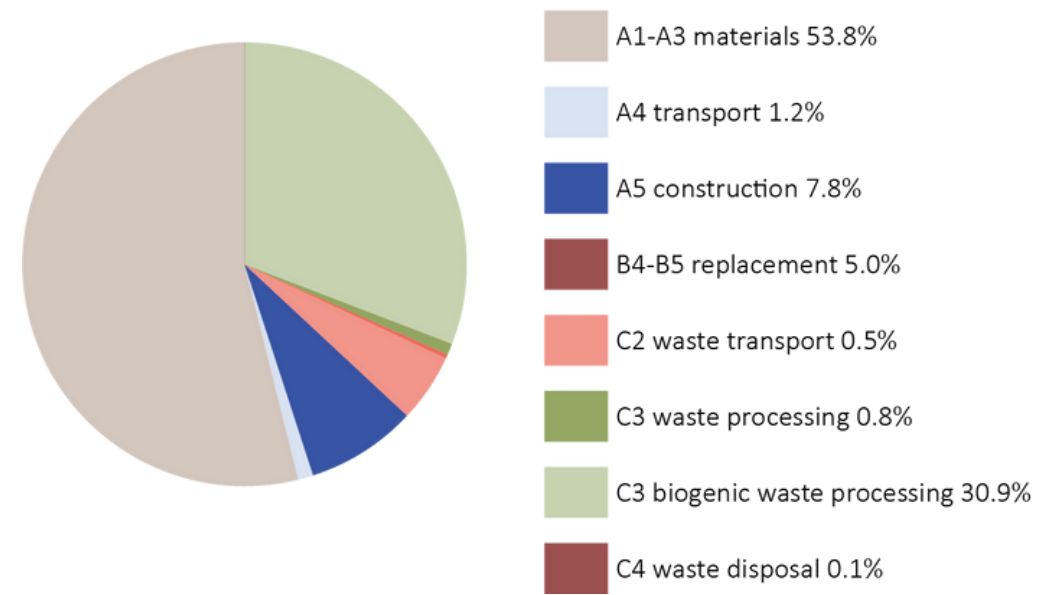


Ceiling D _{nt,w} = 53 dB / L' _{nt,w} = 55 dB / Ei60	
Concrete structural	80 mm
Foil	
ISOVER Domisol LR	50 mm
Concrete structural	200 mm
Cavity / battens (10x25mm, s400)	10 mm
Placo Duo Tech 25 Activ Air	20 mm

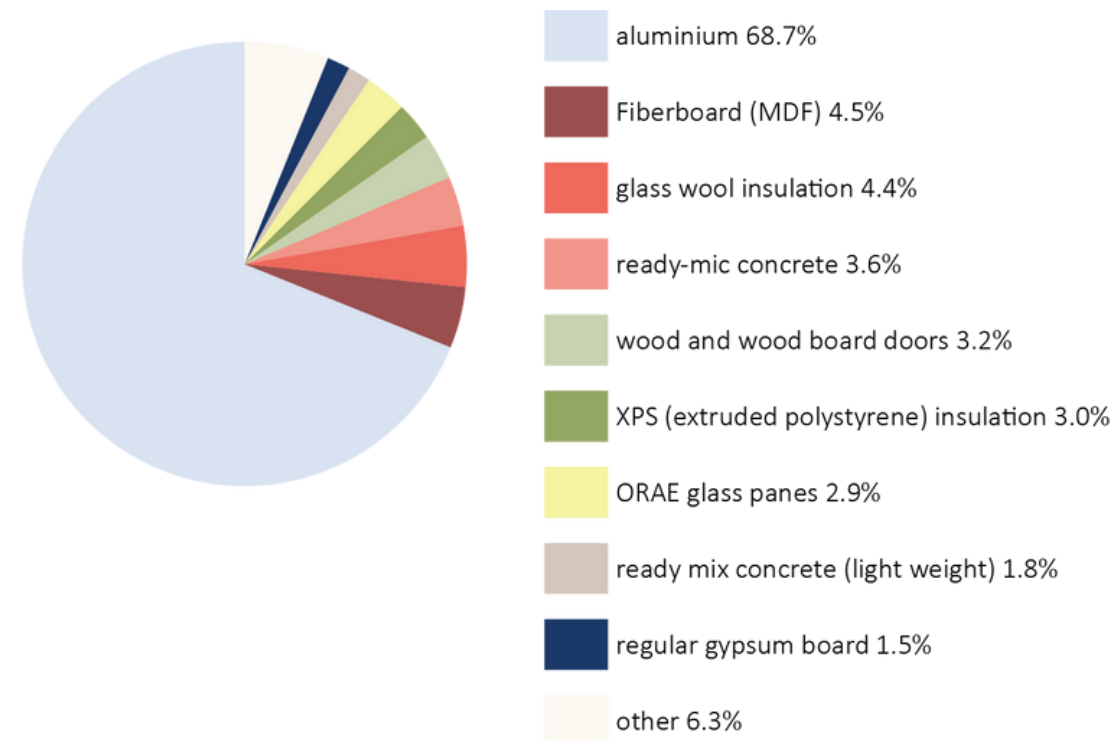


LCA RESULTS

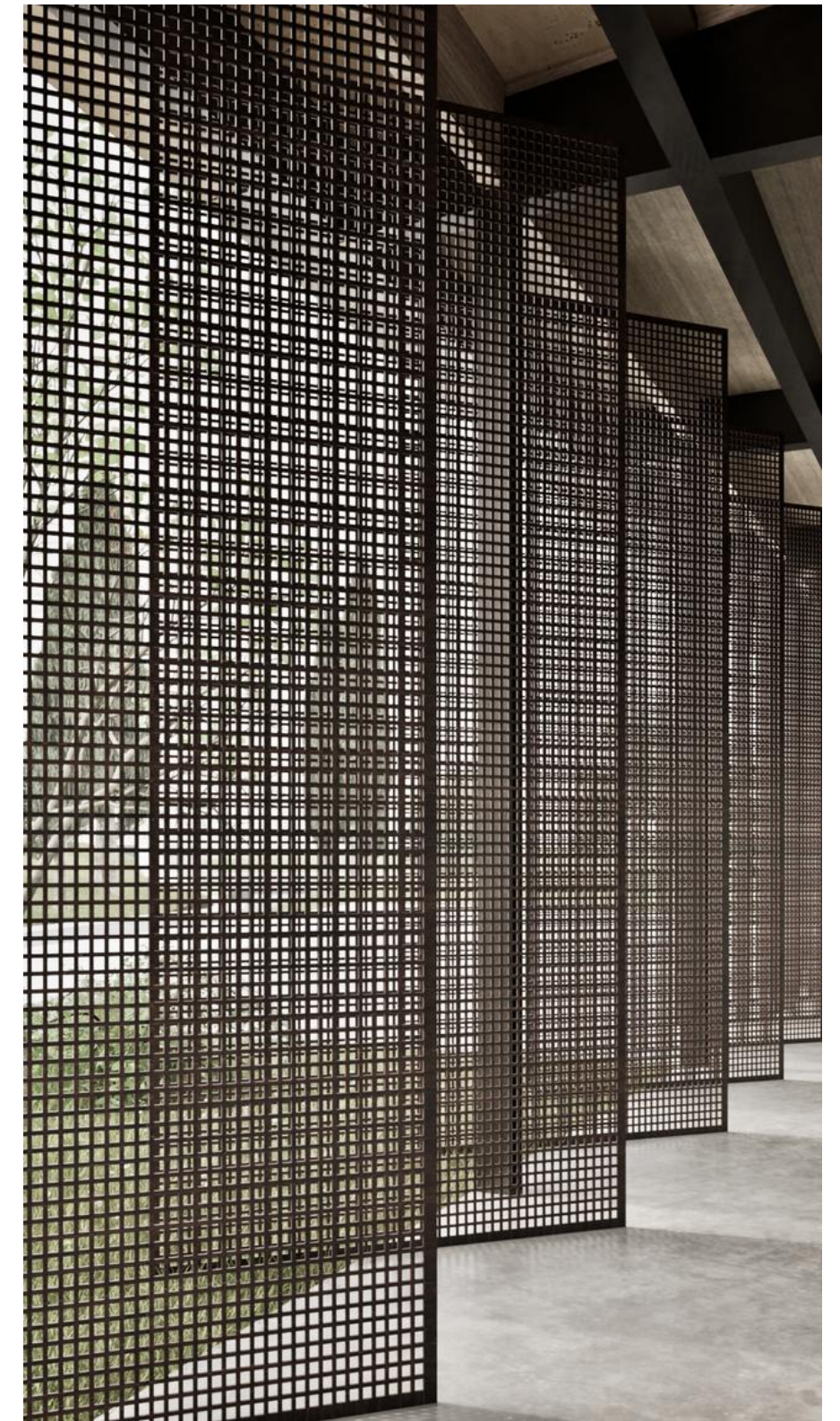
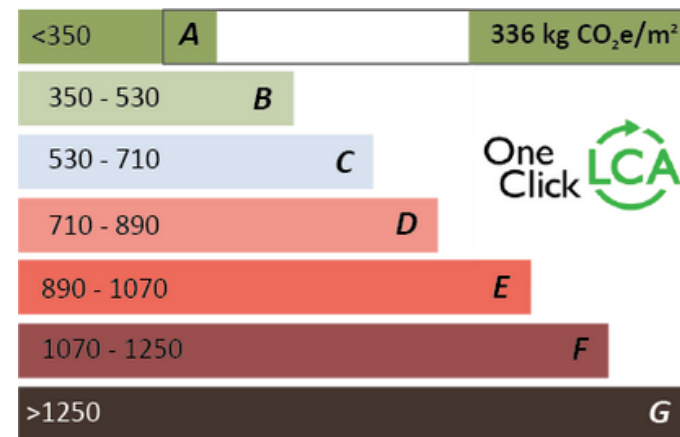
Global warming potential total kg CO2e - life cycle stages



Global warming potential total kg CO2e - recourse types

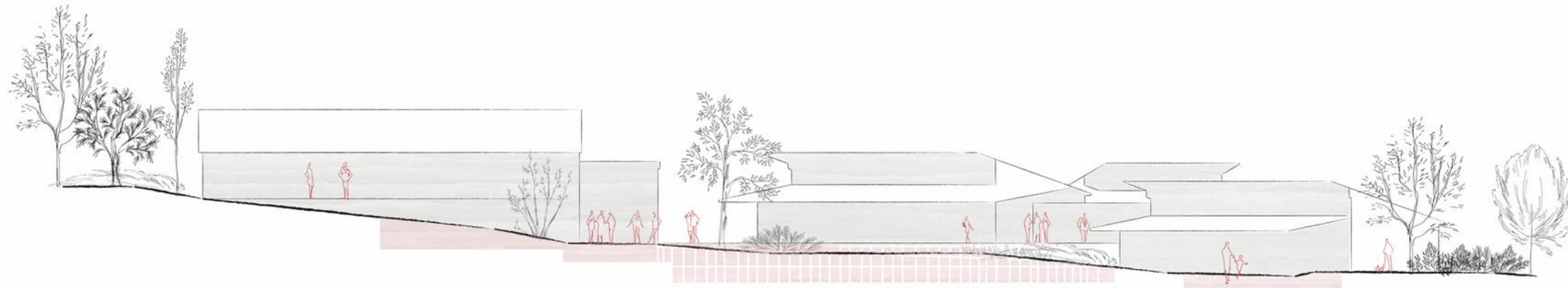


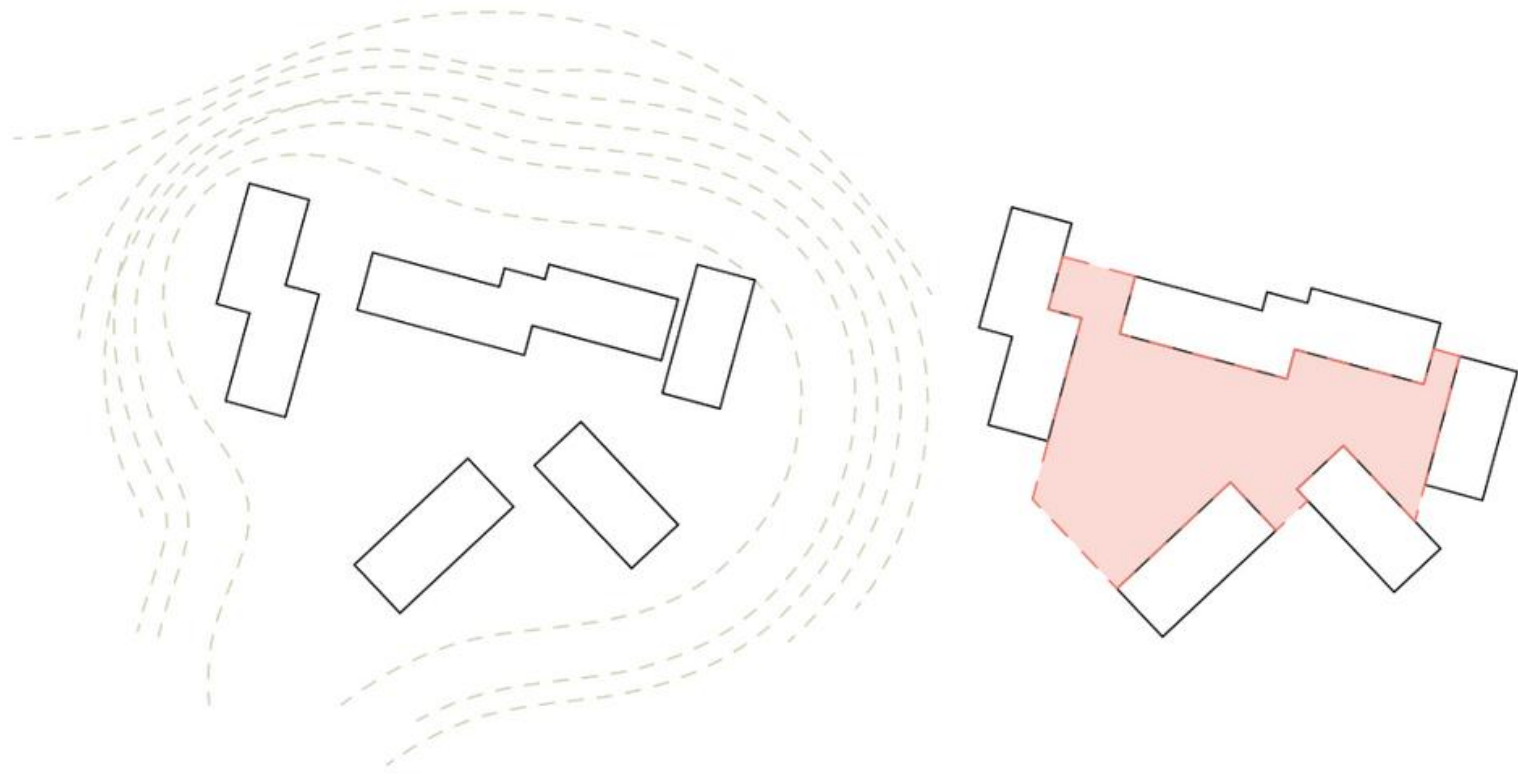
Results



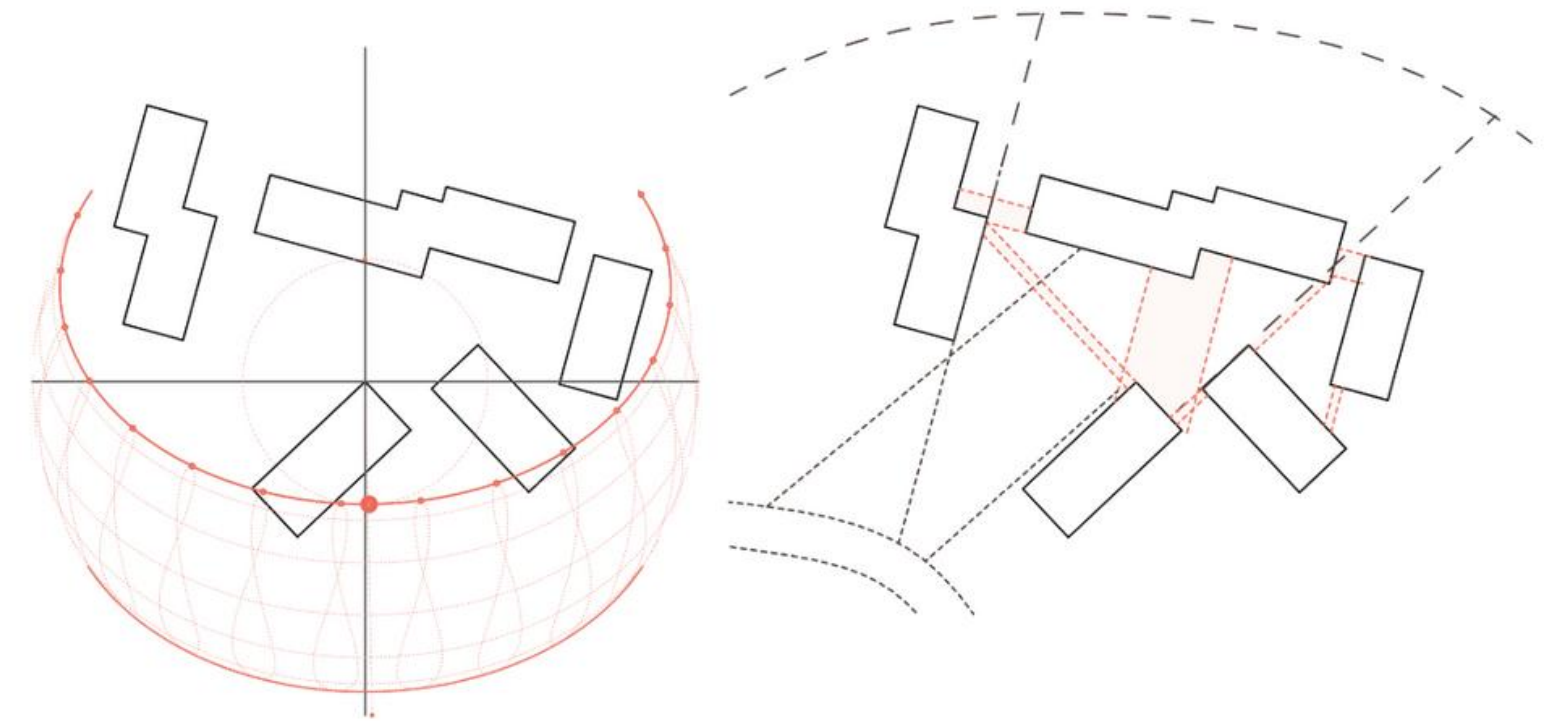
Saint-Gobain

ACCOMMODATION



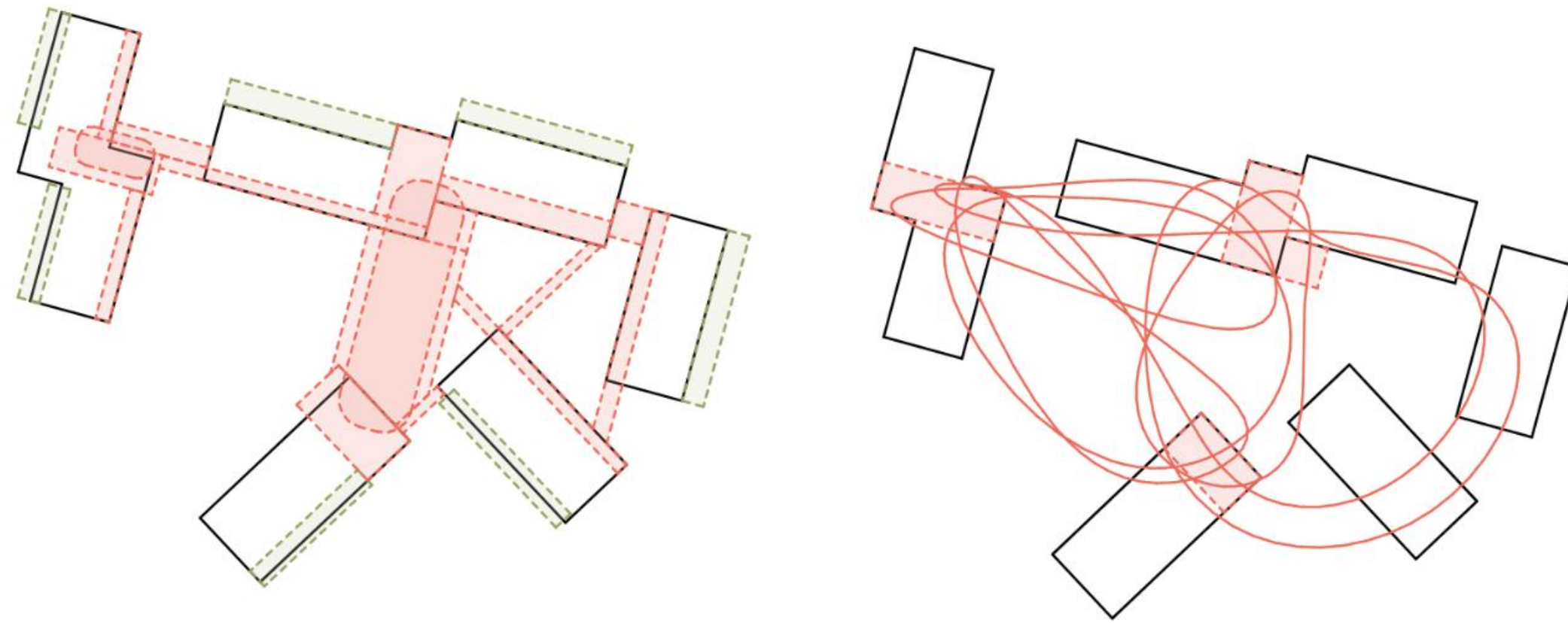


1. Sense of comfort and safety inside



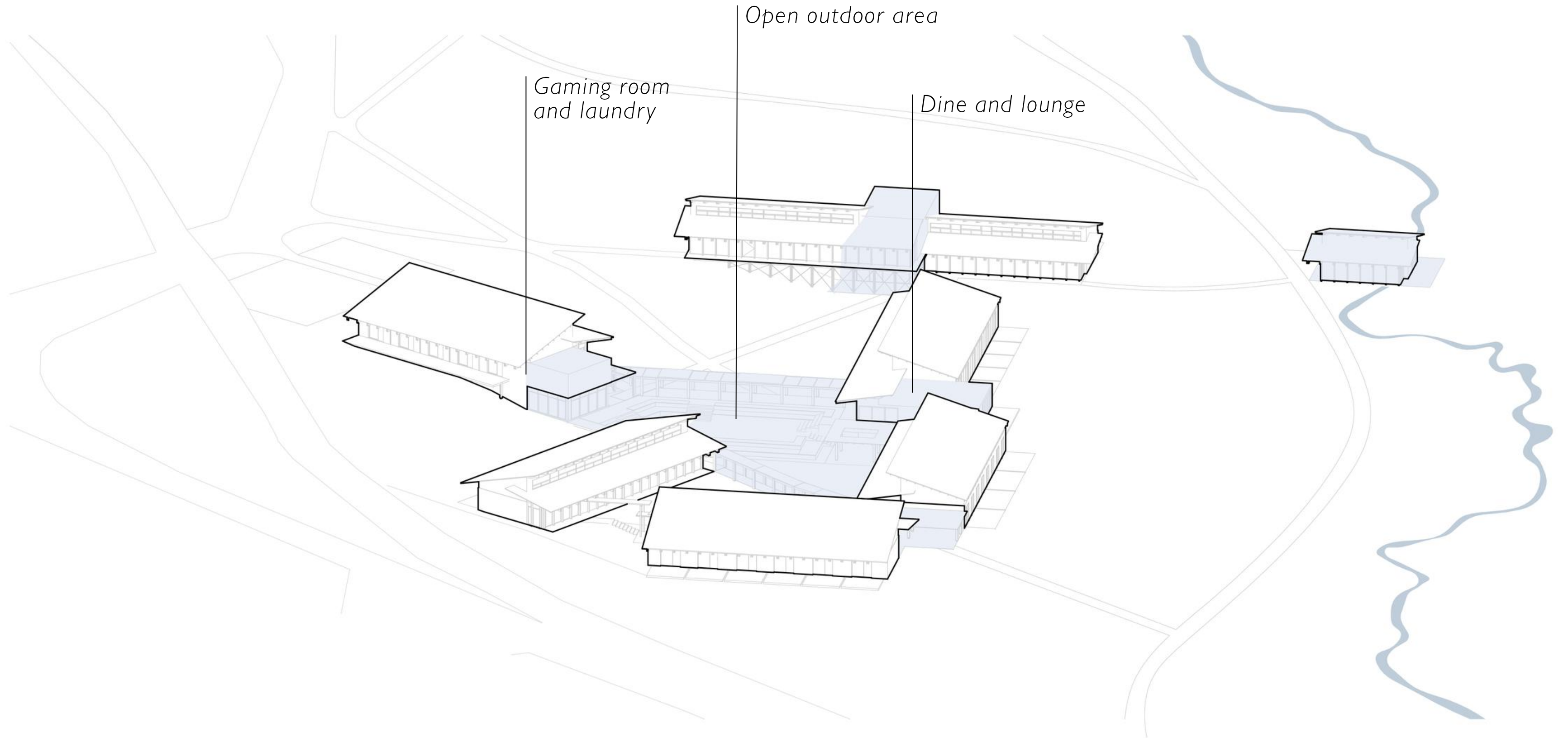
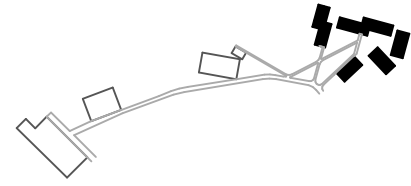
2. Connection and openness to the outside





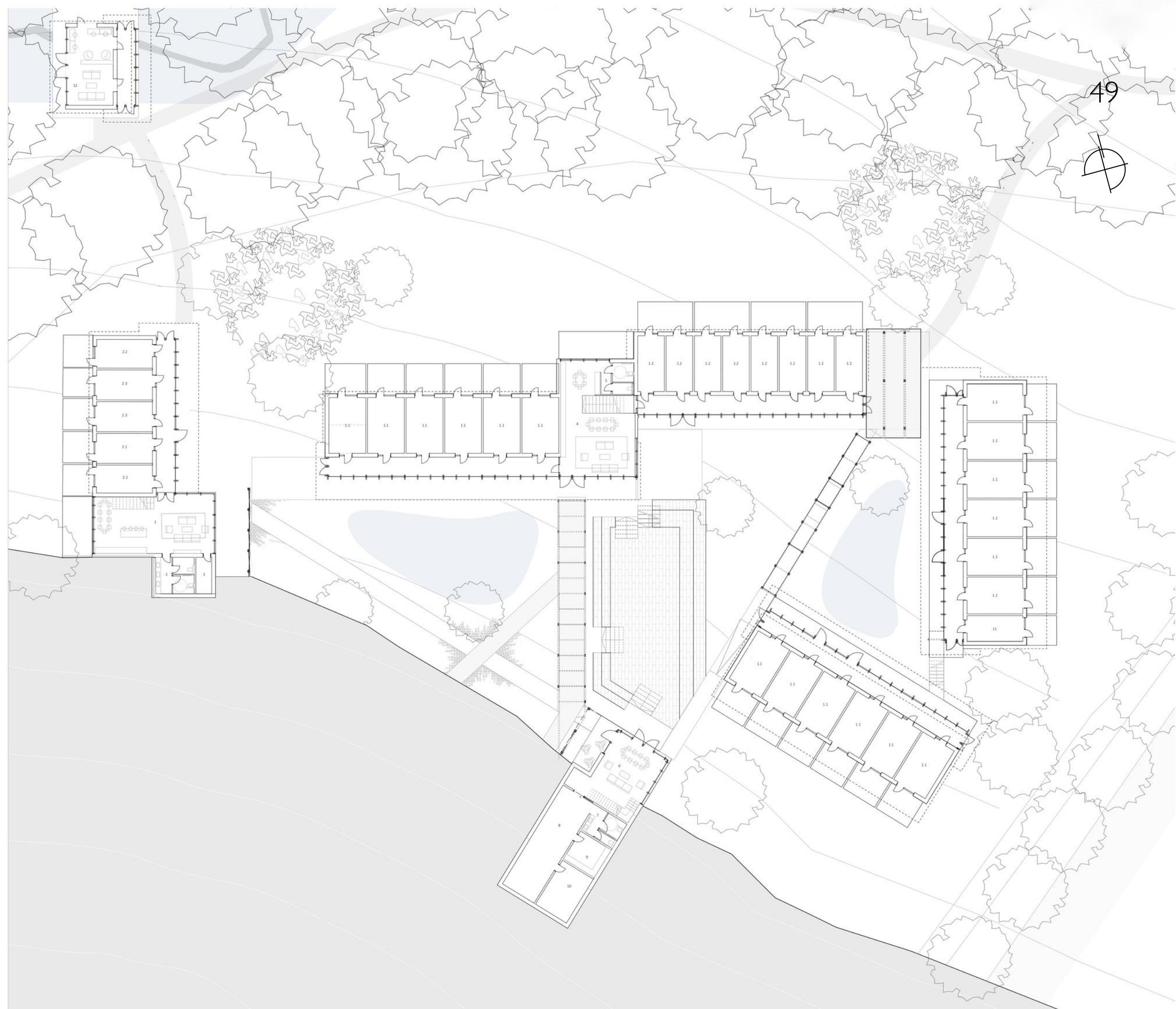
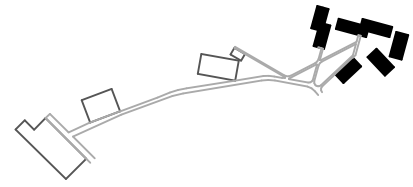
3. Connecting people in space and through common routines

AXONOMETRIC VIEW



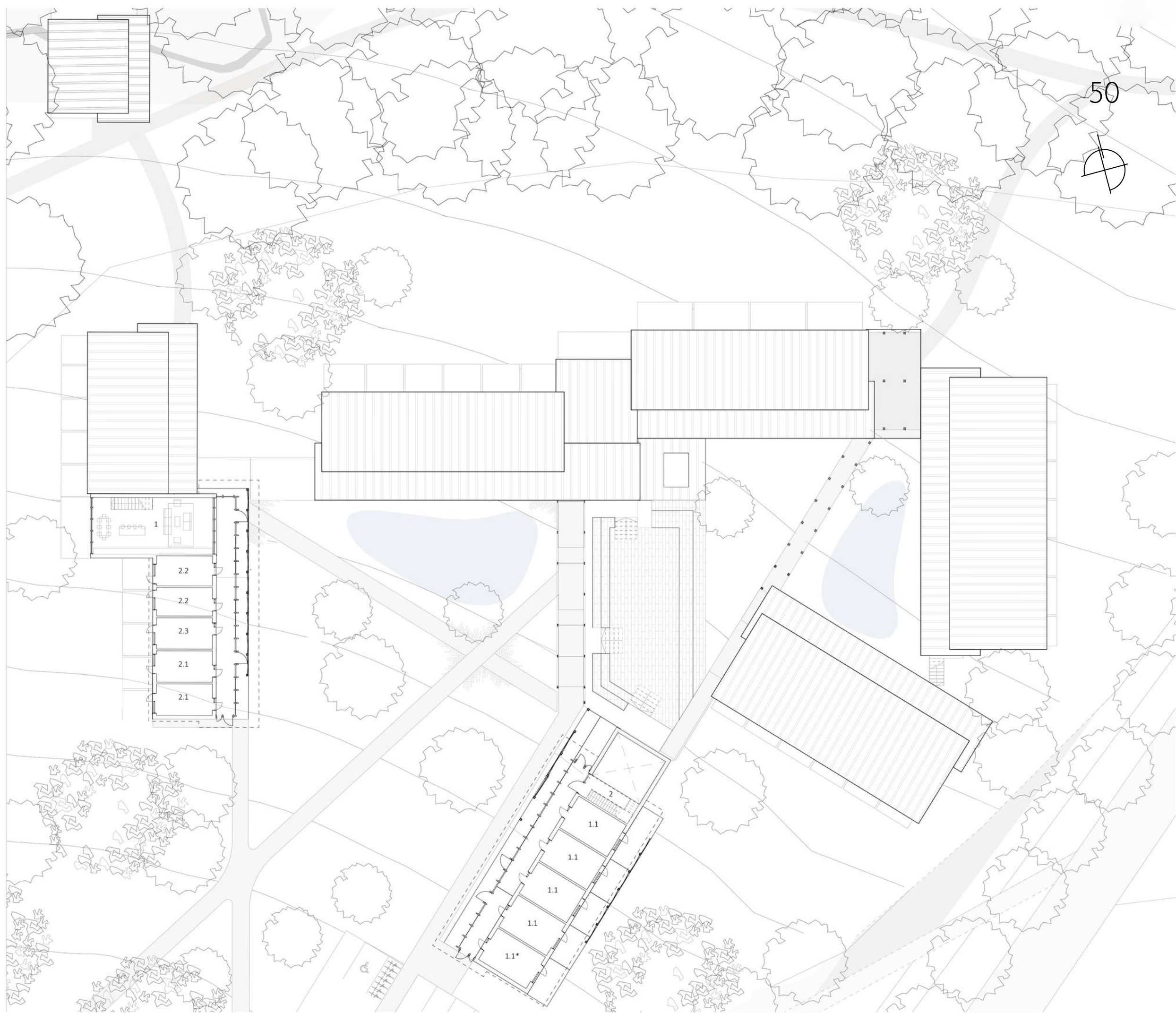
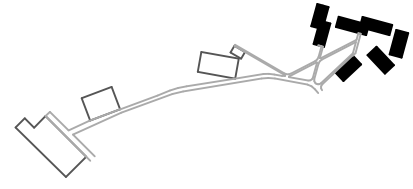


GROUND FLOORPLAN

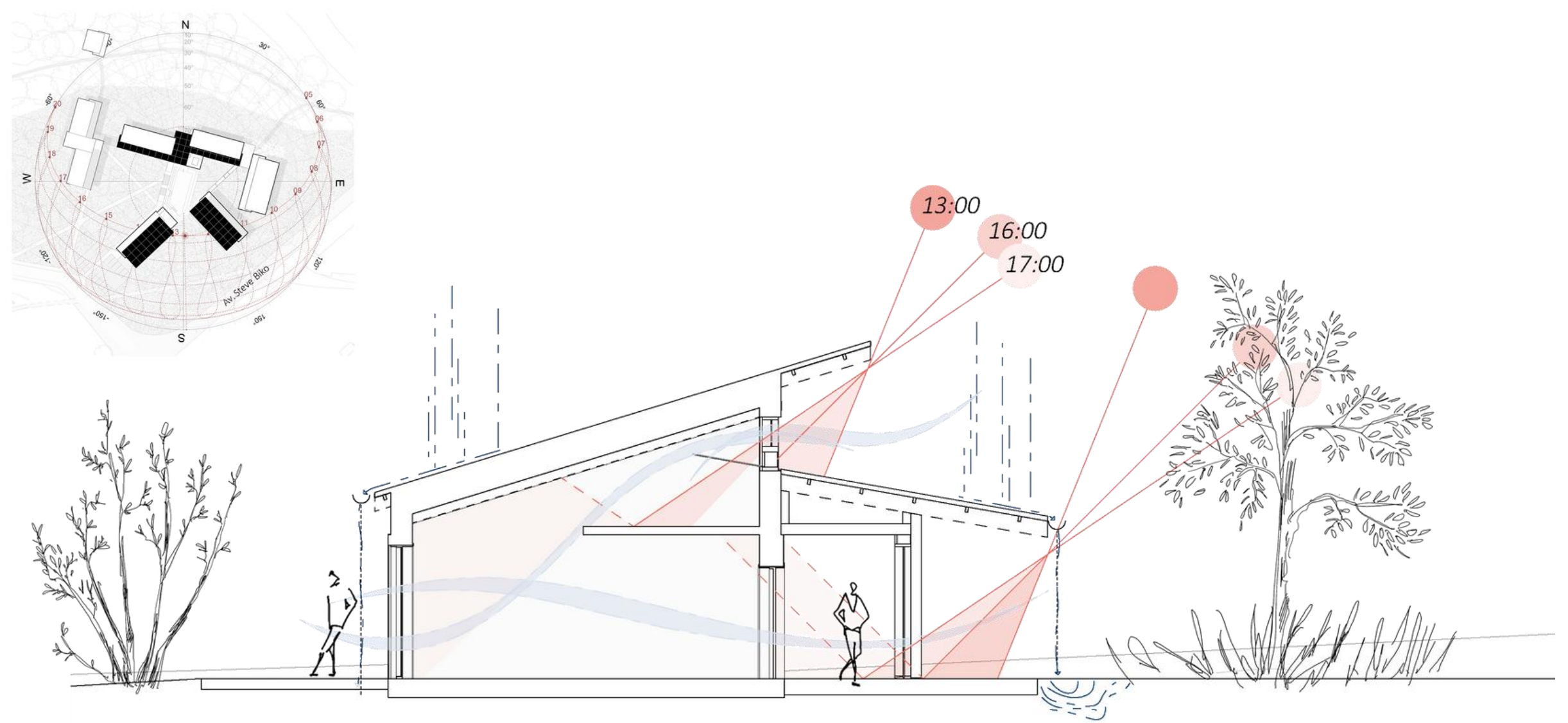


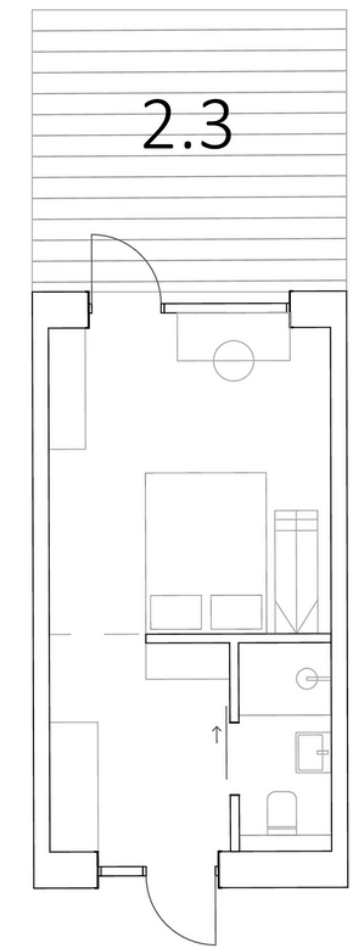
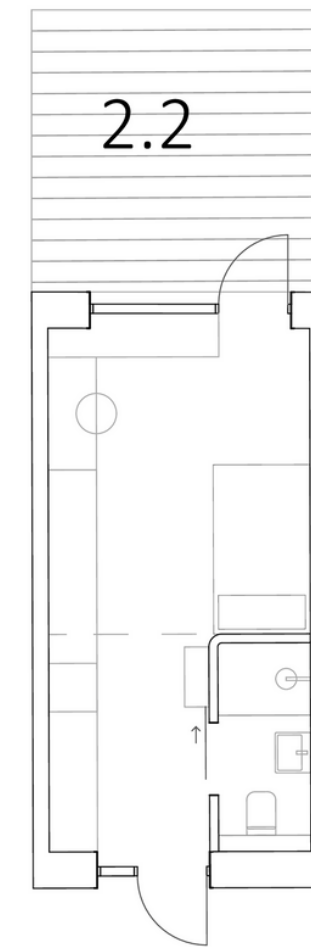
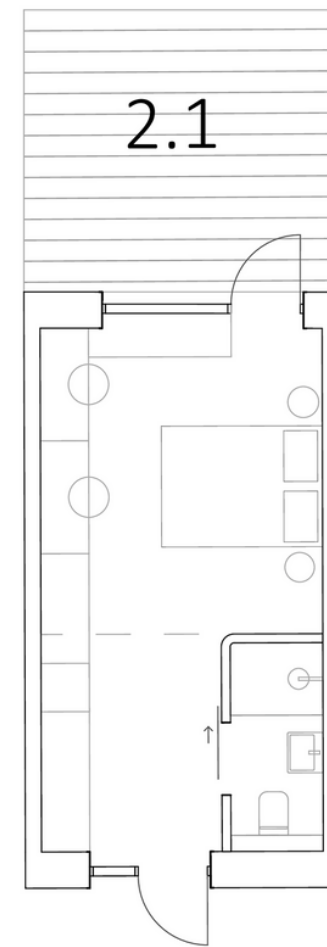
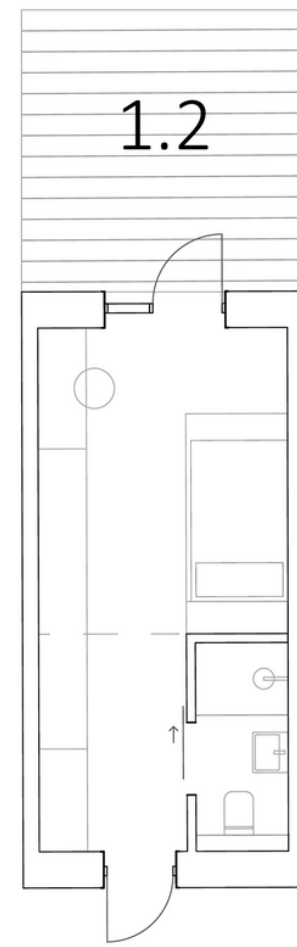
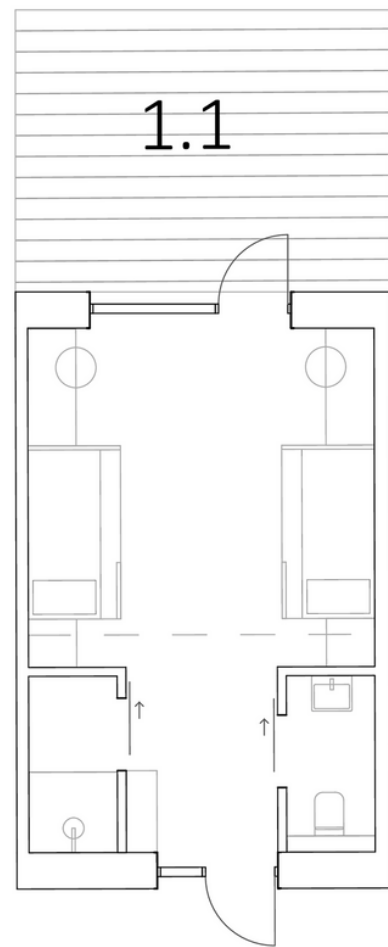
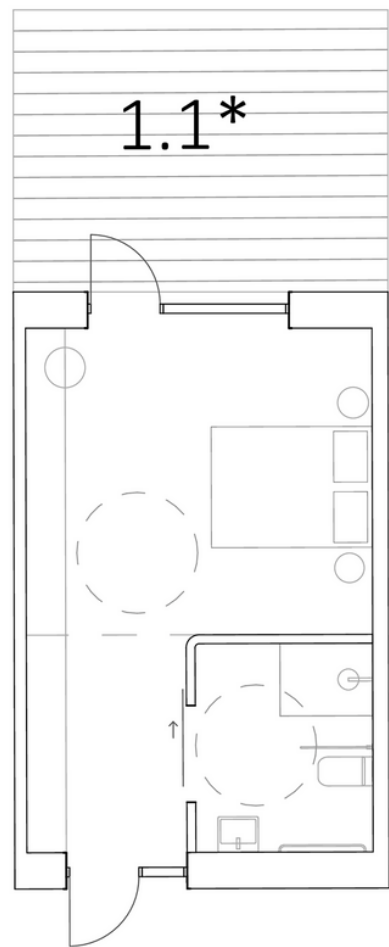
1	1.1	Dine and lounge	91,9
1	1.2	Room type 1	504,0
2		Room type 2	161,6
2	2.1	Toilets	20,2
2	2.2	Room type 3	22,9
2	2.3	Room type 4	43,1
3		Room type 5	45,6
4		Technical room	8,3
5		Dine and lounge	99,5
6		Toilets	14,6
7		Dine and lounge	60,3
8		Toilets	16,8
9		Gaming room	59,6
10		Laundry	17,6
11		Technical room	26,4
12		Technical room	19,5
		Study	47,7
			1259,6 m ²

FIRST FLOORPLAN

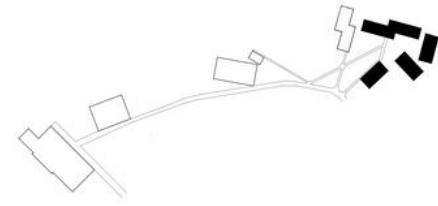


1	Dine and lounge	91,6
1.1	Room type 1	112,0
1.1*	Room type 1	28,0
2	Stairwell	18,8
2.1	Room type 3	47,4
2.2	Room type 4	44,3
2.3	Room type 5	23,7
		365,8 m ²

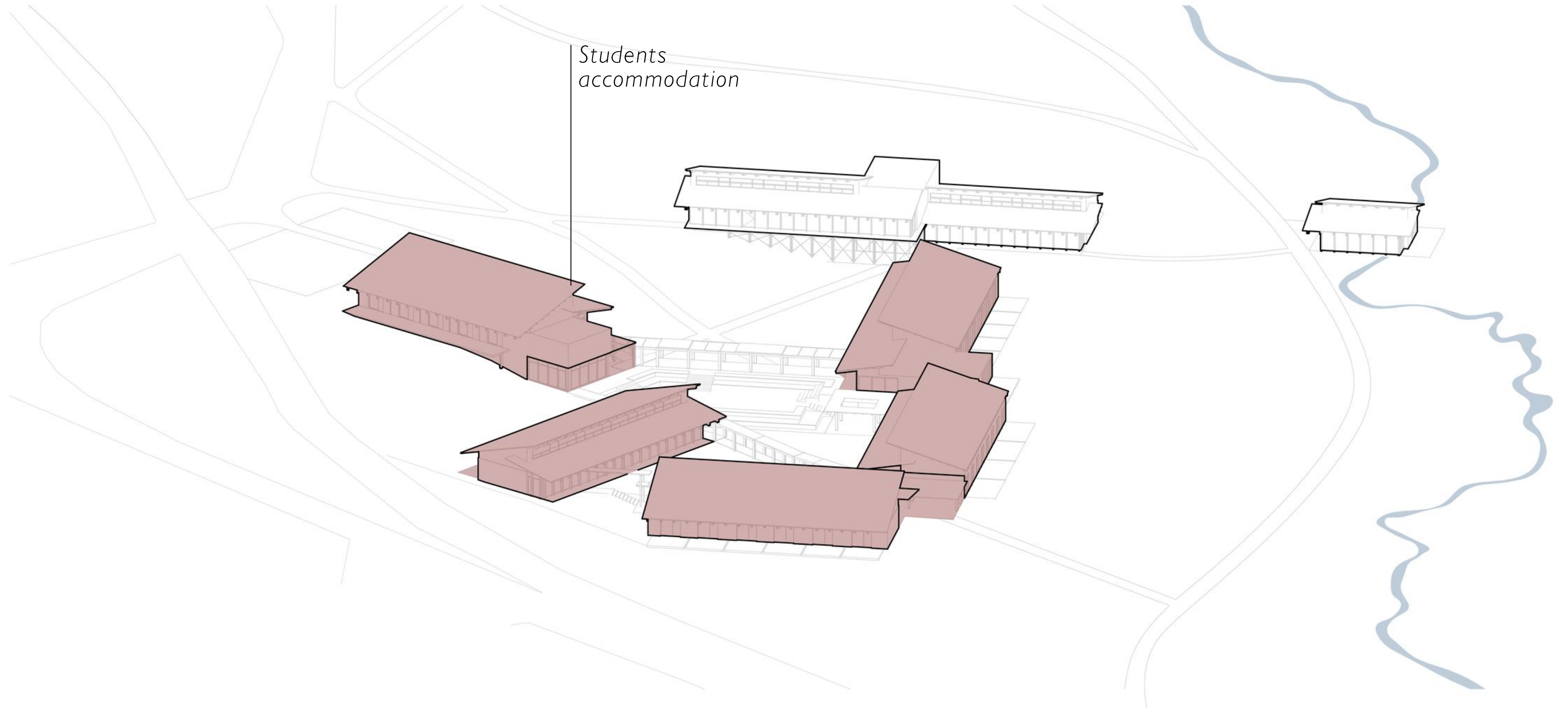




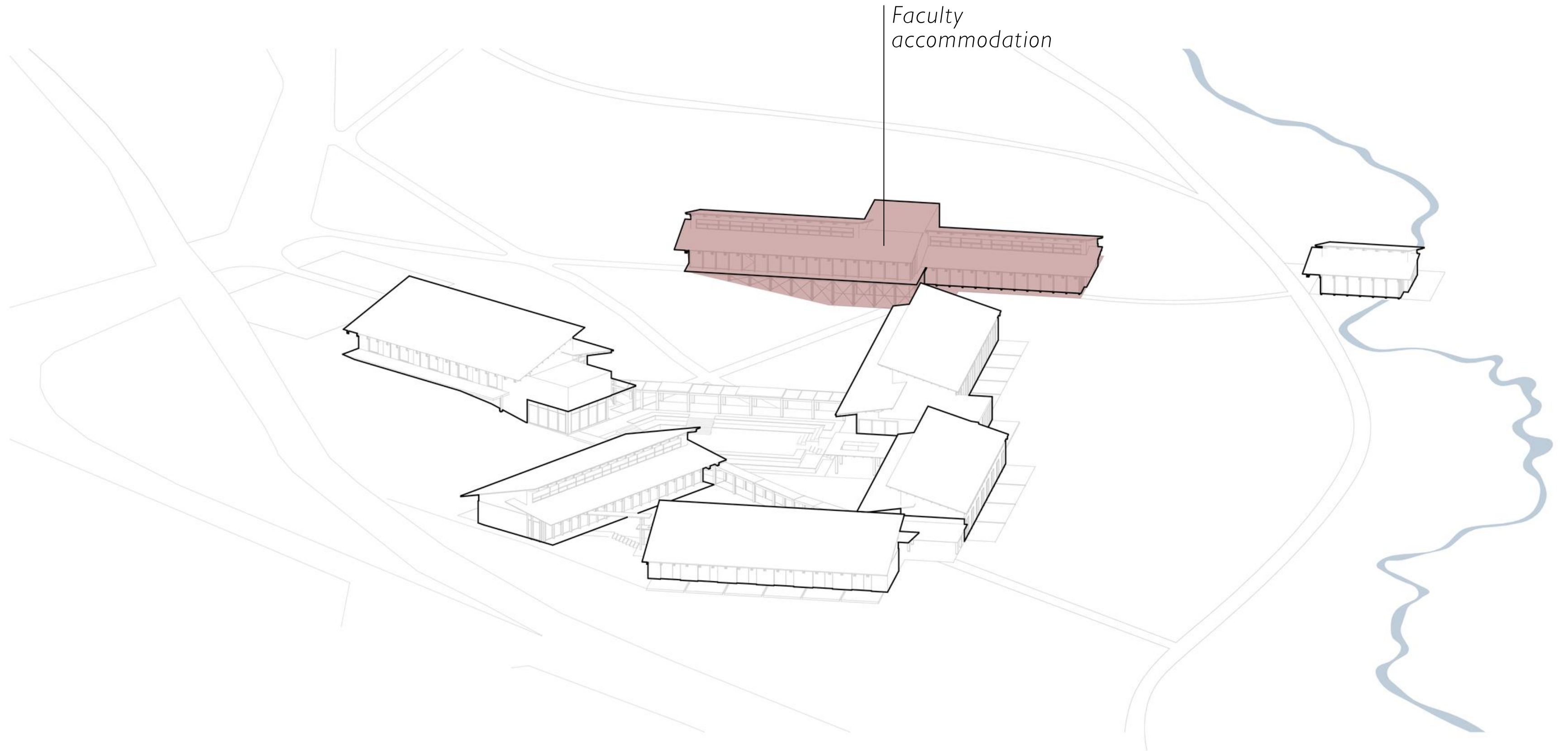
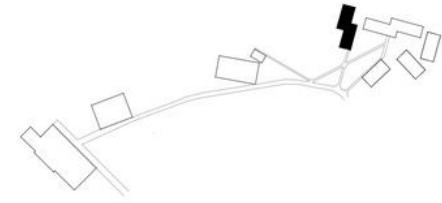
AXONOMETRIC VIEW



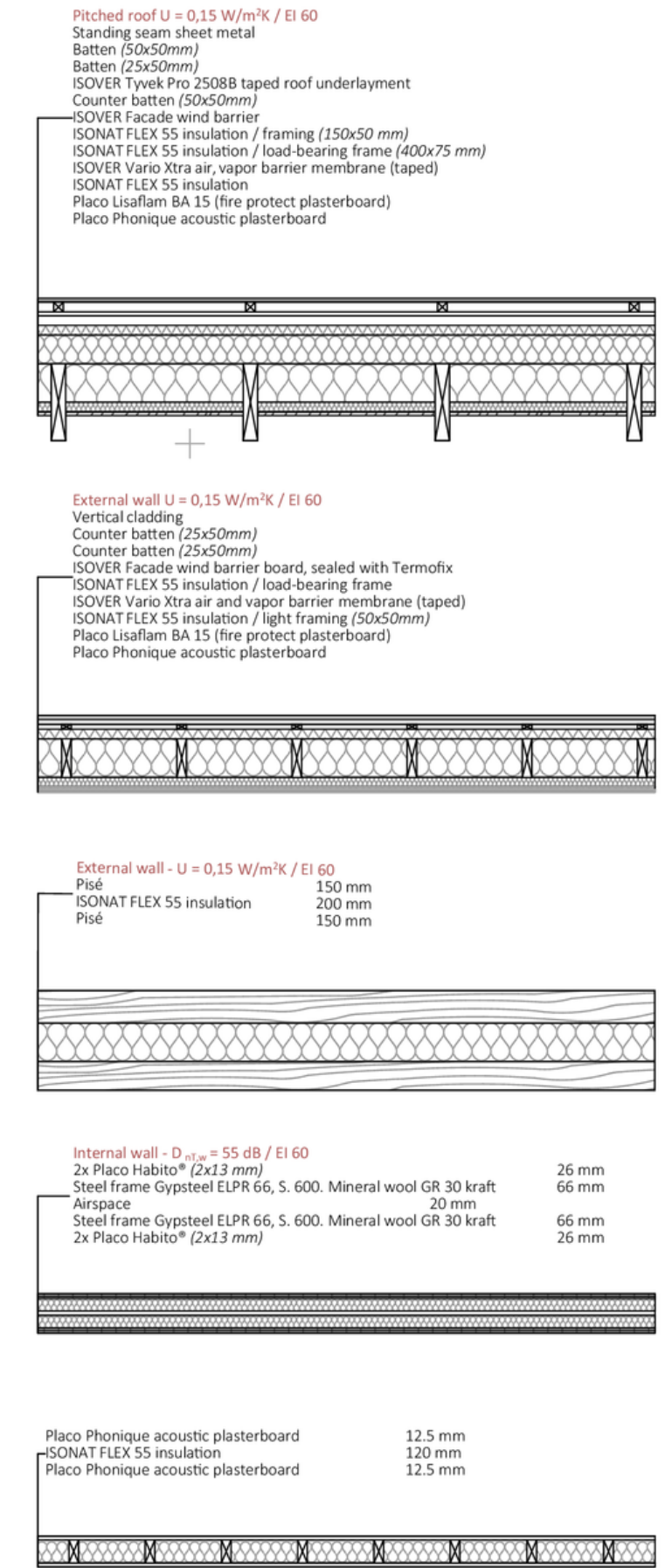
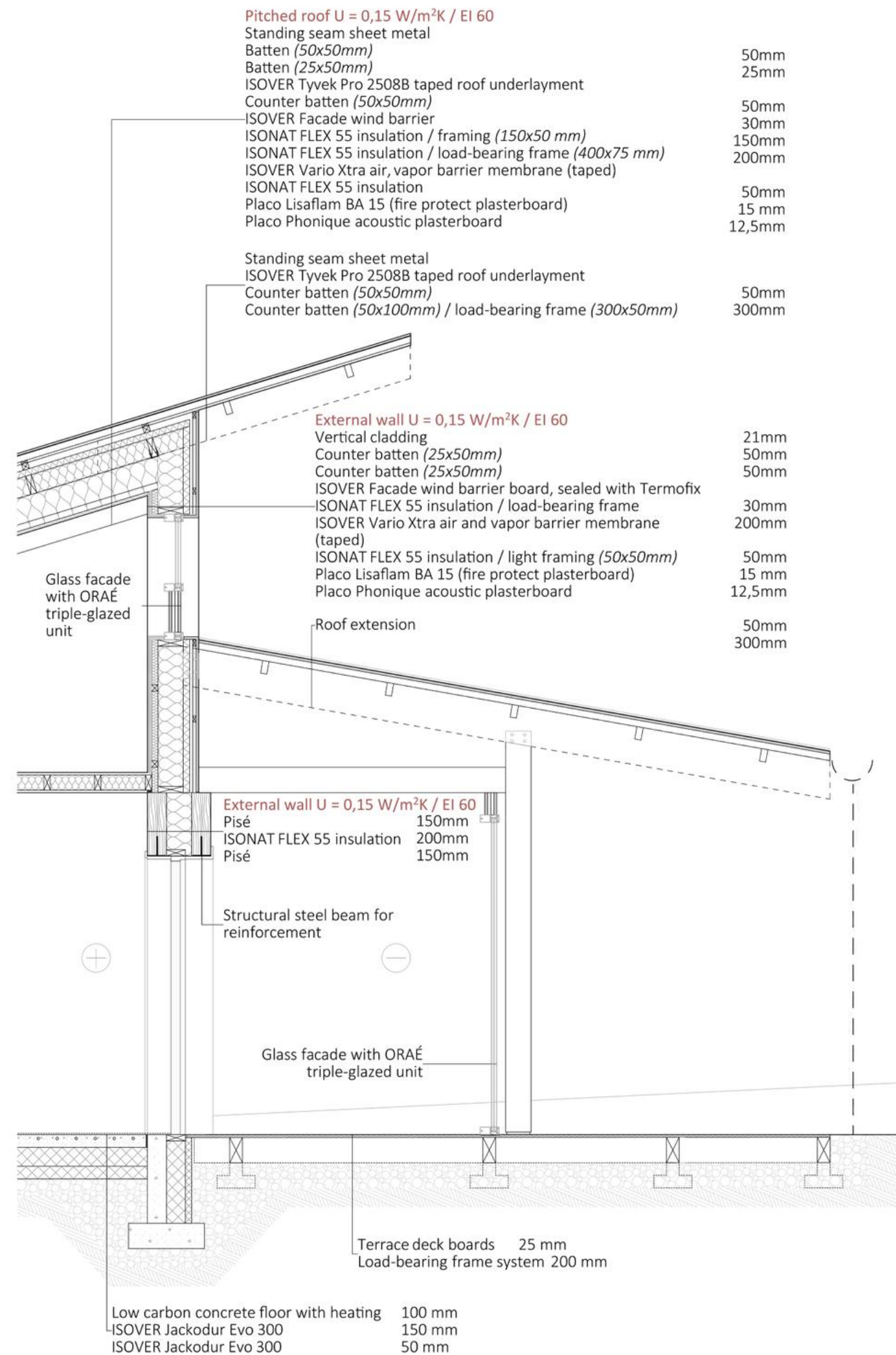
Students
accommodation



AXONOMETRIC VIEW

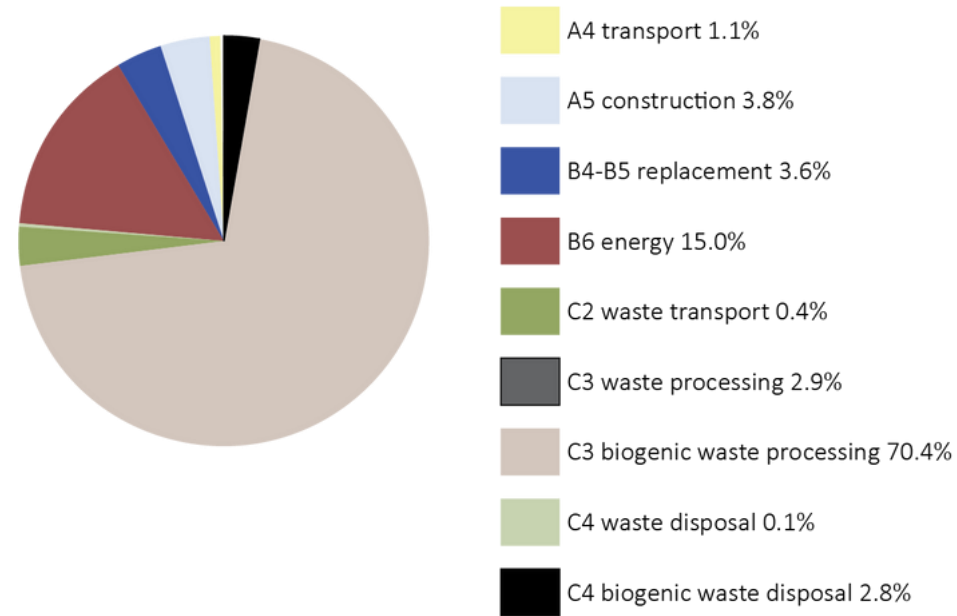


DETAIL SECTION

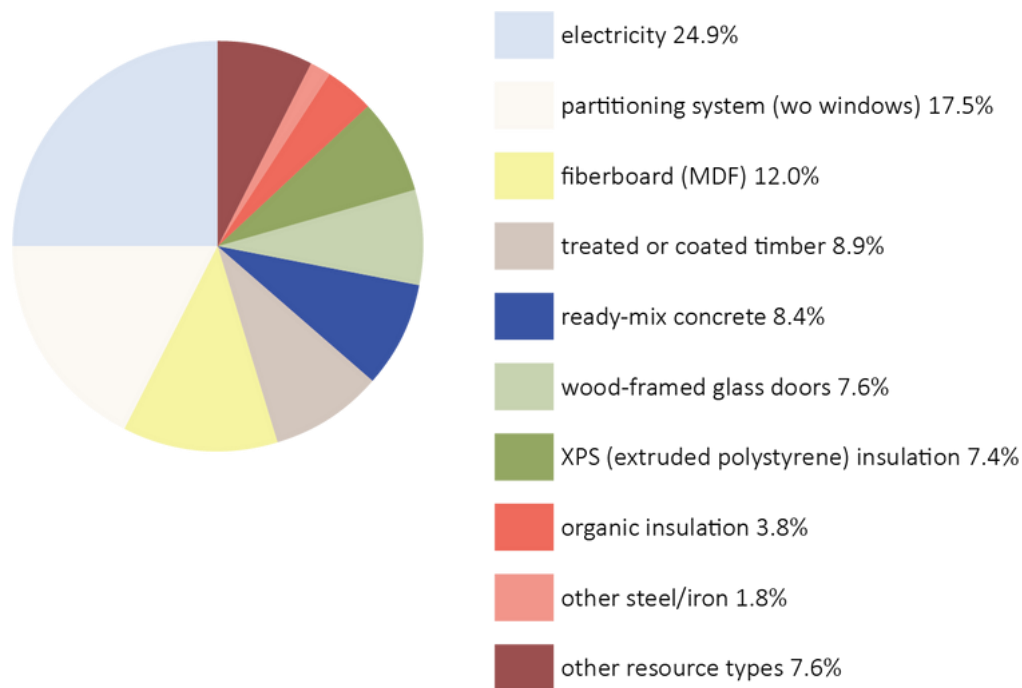


LCA RESULTS

Global warming potential total kg CO2e - life cycle stages



Global warming potential total kg CO2e - resource types



Results

