MIND THE GAP

INHABITING LAUSANNE'S RESIDUAL SPACES

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Projet de Master
EPFL - ENAC - SAR
2025

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In a context where cities are already built, it becomes essential to engage with what is already materialized and to work within the existing. Often overlooked, potential lies in the in-between. Gaps, interstices, residual space, everyday places are full of undefined voids. Lausanne is no exception. A mapping process revealed 379 gaps scattered throughout the city. Found in various types and facing strong constraints, they call for creativity. 9 sites are selected as exploration grounds for precise, small-scale interventions. Whether filling a void, keeping it open or making room for the unknown, each project takes root with a distinct intention. ONE protects a void, recognizing existing qualities and choosing not to build. TWO removes dividing lines. Going against a juxtaposition of private parcels, it invites shared use of the space to gain more from it. With minimal means, THREE defines a public function for an overlooked space. FOUR and FIVE tackle time: one provides support for future extensions and the other embraces flexible use. SIX, SEVEN and EIGHT insert themselves between buildings. Staying autonomous, extending the existing or connecting neighbors, they react to their surroundings in different ways. NINE extends upwards from the existing, embracing dualities such as open/closed and individual/collective. Through these varied responses, a common attitude emerges: making the most of what's already there, doing more with less and reclaiming the city's forgotten gaps.

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I. CARTOGRAPHY

What if we start raising awareness on gaps? Our cities are full of forgotten in-between spaces - yet those spaces are also brimming with potential in the saturated urban context. A few hours of walking with alert attention is all it takes to realize the multitude of unseen places we pass by every day.

What if we choose to value them? Let's think of a punctual densification within the built fabric, a densification that infiltrates and values the gaps of the city. Then, it is first about finding and mapping those sites.

The in-between spaces we are looking for are nameless places. Poorly-defined, unassigned, neglected, forgotten, they are "blank space". They are usually the white areas on our maps. Here however they are precisely the spaces we want to bring to the surface. Starting from the entire surface of the city, it is about removing matter, removing what is already defined. Layer by layer, built matter, but also certain voids - those with names and functions, such as roads, public spaces, gardens - are subtracted until only the anonymous remain.

Thus, the mapping process follows a logic of subtraction and asks to set a few rules. Here are the first ones:

"Remove all built matter
**Exception: building trapped between higher surroundings"*
"Remove all voids with names (water, forests, parks, fields, main roads, public squares, airfields, railway, sports ground)
**Exception: bridges and underpasses, galleries"*
"Remove all voids between two public programs (churches, schools, hospitals…)"

"Remove all voids with a length greater than 100m"
"When free-standing, remove all voids with floor area greater than 300 m^2"
"When surrounded, remove all voids with a distance to boundaries greater than 8m"
Now, inserting into these gaps requires a careful and sensible reading of the existing in order to densify while preserving quality. In Lausanne, one must first notice that it is a particularly open city. While the historic city center follows a contiguous urban logic, it is surrounded by a looser urban fabric defined by the typical "plots lausannois". Urban villas dispersed in the strong topography, they open visual escapes towards the lake, turning gaps into true belvederes. Therefore, some voids really are part of the city's identity and our rules need to be sharpened:

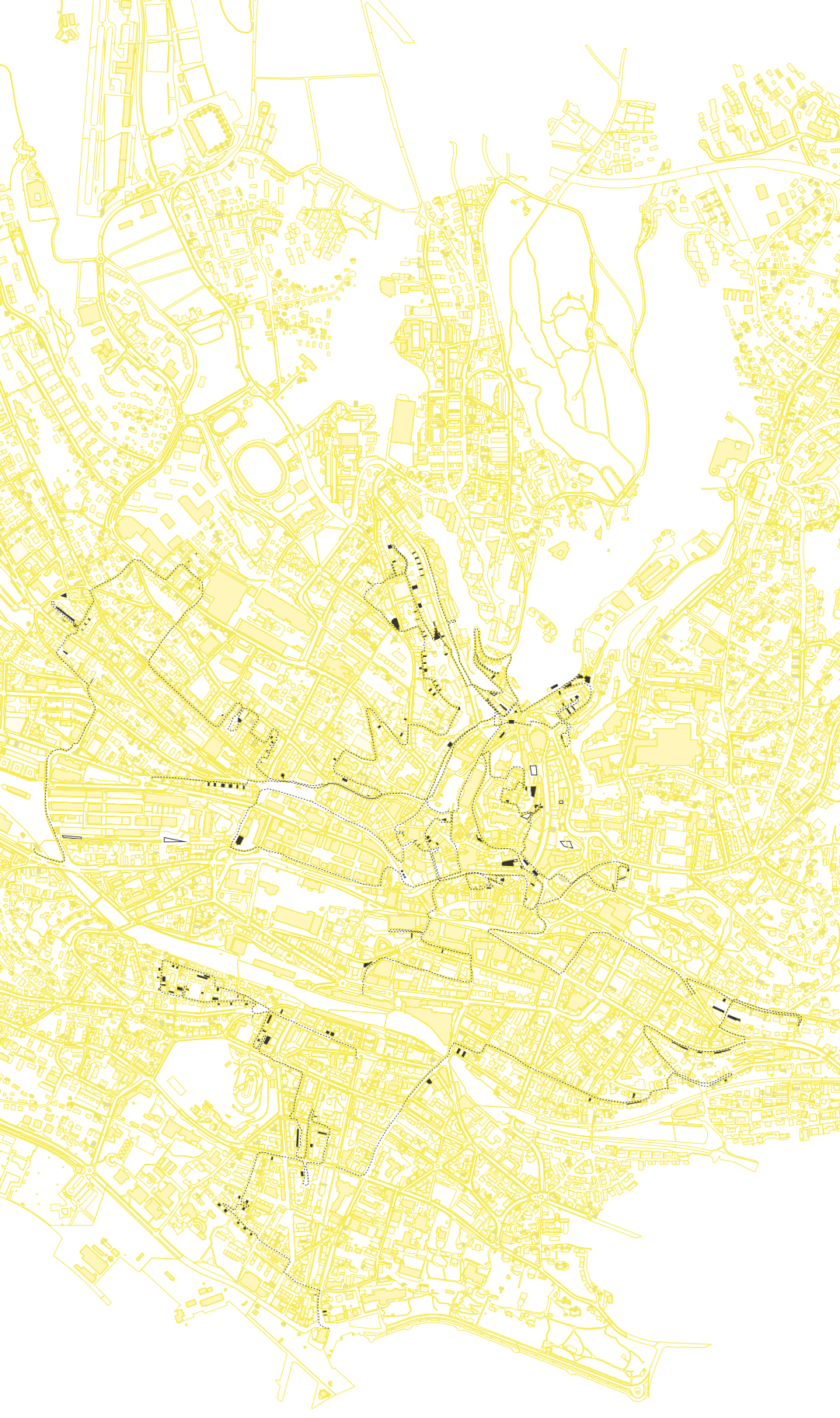
"Remove all voids part of Lausanne's identity, namely all voids satisfying one or many of the following:
**Typology: remove all deliberate voids in-between the «plots lausannois»*
**Orientation and View: remove all sites orientated North-South and offering a breakthrough, especially one towards the lake*
**Topography: remove all gaps benefitting from a belvedere effect*
**Nature: remove all gaps containing valuable green spaces or gardens"*

Finally, thinking of qualitative densification, also means ensuring a good ratio between taking away and giving back. It is about finding the right proportion between open and closed, and think of a densification that compensate: for every built volume, an equivalent gesture of openness; for every intervention, a return of space, of breath, of quality. This leads us to a final rule, a rule of compensation:

"For every new volume closing a gap, the equivalent space needs to be kept open and valued"

This is not a masterplan, but rather a method. A way of seeing, mapping and acting. A strategy for cities that are already built, yet far from finished. This is above all a call to notice gaps and to start imagining through them.

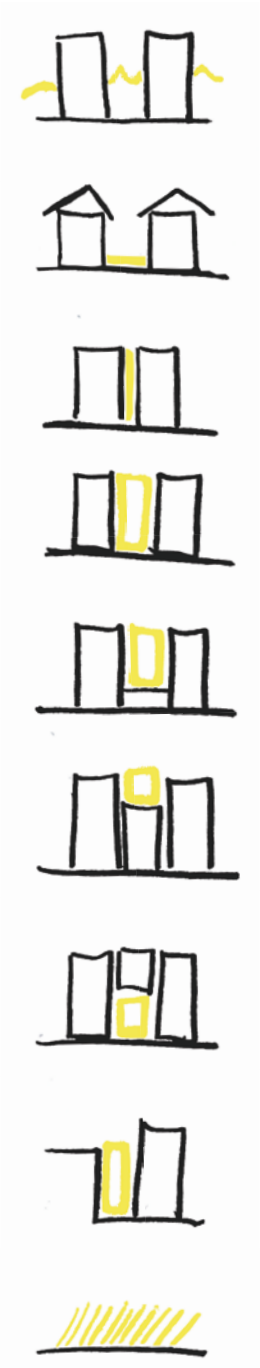
Constellation of interstitial sites
resulting of the substraction process
1 : 25’000



Exploration by foot of interstitial sites
1 : 25’000


TRAITEUR BOSPHO

TYPES OF GAPS
THAT CAN BE FOUND TROUGHOUT THE CITY



SHOULDERED GAP

GAP WITH BASE

OVERHEAD GAP










TRAITEUR

UNDERLYING GAP

TOPOGRAPHICAL GAP

RESIDUAL GAP









LAUSANNE'S URBAN FABRIC
TWO TYPES OF ORDER : CONTIGUOUS AND DISPERSE

LAUSANNE'S CONTIGUOUS ORDER:
DENSE FABRIC OR THE CITY CENTER

LAUSANNE'S DISPERSE ORDER :
LOOSE FABRIC MADE OF THE TYPICAL «PLOT LAUSANNOIS»

PLOT LAUSANNOIS
TYPICAL TYPOLOGY OF URBAN VILLAS

Definition: small residential buildings set into the topography that open up visual gaps between the masses and give the town its bucolic and open character. [1]

[1] Benoit Jacques, Rui Filipe Pinto, «Villa Urbaine/Urban Villa, L'Exemple Lausannois/ The Lausanne Example», Birkhäuser, 2021

Map of the typical «plots lausannois»
1 : 25’000

LAUSANNE'S TYPICAL GAPS
PARTICULAR TYPES OF SHOULDERED GAPS

BELVEDERE GAP

«PLOT LAUSANNOIS» GAP

GAP IN THE DISPERSE ORDER

GAP IN THE CONTIGUOUS ORDER













GAP TO PROTECT
GAP TO ASSESS
GAP TO INVEST

Map of all 379 gaps of Lausanne
1 : 25’000

DATA
OF ALL 379 GAPS OF LAUSANNE

N° GAP NUMBER	CATEGORY	FLOORS POSSIBLE	FLOOR AREA [m²]	USABLE SURFACE [m²]
1	SHOULDERED GAP	4	37.39	149.576
2	TOPOGRAPHICAL GAP	1	339.79	339.791
3	RESIDUAL GAP	3	424.58	1273.736
4	RESIDUAL GAP	4	420.59	1682.351
5	RESIDUAL GAP	1	128.35	128.354
6	RESIDUAL GAP	1	33.06	33.059
7	TOPOGRAPHICAL GAP	1	65.99	65.995
8	GAP WITH BASE	3	62.00	185.998
9	TOPOGRAPHICAL GAP	1	138.42	138.424
10	SHOULDERED GAP	4	43.62	174.487
11	SHOULDERED GAP	3	33.21	99.616
12	SHOULDERED GAP	3	21.57	64.714
13	SHOULDERED GAP	4	25.80	103.196
14	RESIDUAL GAP	6	141.23	847.395
15	SHOULDERED GAP	6	68.19	409.157
16	SHOULDERED GAP	3	42.13	126.398
17	SHOULDERED GAP	3	82.08	246.248
18	GAP WITH BASE	4	30.75	123.013
19	SHOULDERED GAP	3	39.16	117.491
20	UNDERLYING GAP	1	29.29	29.293
21	RESIDUAL GAP	1	339.17	339.175
22	OVERHEAD GAP	3	60.44	181.324
23	SHOULDERED GAP	2	8.16	16.317
24	RESIDUAL GAP	1	740.07	740.066
25	GAP WITH BASE	3	60.66	181.974
26	SHOULDERED GAP	4	40.33	161.304
27	RESIDUAL GAP	1	41.66	41.660
28	RESIDUAL GAP	5	214.36	1071.807
29	SHOULDERED GAP	4	65.27	261.078
30	RESIDUAL GAP	1	334.53	334.530
31	RESIDUAL GAP	1	303.58	303.582
32	RESIDUAL GAP	1	285.58	285.577
33	RESIDUAL GAP	3	419.78	1259.351
34	SHOULDERED GAP	7	52.89	440.200
35	RESIDUAL GAP	4	571.15	2284.584
36	OVERHEAD GAP	3	140.70	422.093
37	SHOULDERED GAP	5	41.00	205.010
38	OVERHEAD GAP	3	108.09	324.261
39	GAP WITH BASE	3	156.90	470.693
40	OVERHEAD GAP	4	62.12	248.472
41	SHOULDERED GAP	5	76.74	383.680
42	SHOULDERED GAP	6	40.15	240.890
43	OVERHEAD GAP	2	130.41	260.815
44	OVERHEAD GAP	3	45.30	135.890
45	SHOULDERED GAP	5	28.22	141.103
46	SHOULDERED GAP	3	22.91	68.731
47	SHOULDERED GAP	5	26.44	132.202
48	RESIDUAL GAP	1	185.00	185.002
49	RESIDUAL GAP	1	240.70	240.703
50	SHOULDERED GAP	4	13.09	52.345
51	RESIDUAL GAP	1	65.11	65.106
52	TOPOGRAPHICAL GAP	1	163.08	163.083
53	TOPOGRAPHICAL GAP	1	118.48	118.478
54	TOPOGRAPHICAL GAP	1	389.78	389.779
55	UNDERLYING GAP	1	763.51	763.510
56	SHOULDERED GAP	5	62.74	313.711
57	RESIDUAL GAP	4	306.28	1225.105
58	RESIDUAL GAP	1	125.18	125.177
59	RESIDUAL GAP	3	974.50	2923.487
60	RESIDUAL GAP	1	141.15	141.146
61	RESIDUAL GAP	1	360.61	360.606
62	SHOULDERED GAP	3	72.56	217.673
63	SHOULDERED GAP	3	62.84	188.526
64	RESIDUAL GAP	4	470.99	1883.965
65	GAP WITH BASE	3	53.83	161.495
66	GAP WITH BASE	3	52.65	157.962
67	GAP WITH BASE	4	99.71	398.830
68	GAP WITH BASE	4	77.55	310.204
69	OVERHEAD GAP	2	90.94	181.886
70	OVERHEAD GAP	2	75.06	150.128
71	OVERHEAD GAP	2	76.90	153.800
72	SHOULDERED GAP	4	75.33	301.313
73	RESIDUAL GAP	1	246.17	246.170
74	SHOULDERED GAP	3	53.50	160.515
75	GAP WITH BASE	6	53.57	321.397
76	GAP WITH BASE	2	41.56	83.129
77	GAP WITH BASE	2	52.40	104.797
78	SHOULDERED GAP	4	12.87	51.473
79	GAP WITH BASE	3	97.58	292.739
80	OVERHEAD GAP	2	23.69	47.372
81	GAP WITH BASE	4	96.87	387.490
82	SHOULDERED GAP	3	63.91	191.725
83	SHOULDERED GAP	3	69.85	209.542
84	SHOULDERED GAP	5	111.60	558.003
85	RESIDUAL GAP	6	341.00	2045.983
86	SHOULDERED GAP	5	74.71	373.531
87	SHOULDERED GAP	6	40.34	242.050
88	SHOULDERED GAP	7	26.39	184.738
89	OVERHEAD GAP	2	86.42	172.839
90	RESIDUAL GAP	4	230.29	921.151
91	SHOULDERED GAP	6	183.04	1098.227
92	SHOULDERED GAP	6	57.71	346.287
93	SHOULDERED GAP	7	43.23	302.620
94	SHOULDERED GAP	6	39.87	239.230
95	SHOULDERED GAP	6	86.22	517.347
96	GAP WITH BASE	4	150.49	601.978
97	GAP WITH BASE	4	158.87	635.468
98	SHOULDERED GAP	5	29.95	149.757
99	GAP WITH BASE	4	180.25	721.008
100	OVERHEAD GAP	2	283.85	567.696
101	GAP WITH BASE	4	51.32	205.280
102	SHOULDERED GAP	3	32.01	96.039
103	SHOULDERED GAP	5	107.06	535.314
104	SHOULDERED GAP	5	82.50	412.490
105	SHOULDERED GAP	4	16.88	67.506
106	SHOULDERED GAP	4	28.63	114.520
107	SHOULDERED GAP	3	59.34	178.030
108	GAP WITH BASE	2	39.49	78.990
109	SHOULDERED GAP	6	45.59	273.561
110	RESIDUAL GAP	1	640.22	640.218
111	GAP WITH BASE	3	77.02	231.051
112	SHOULDERED GAP	4	86.21	344.851
113	SHOULDERED GAP	4	107.52	430.094
114	GAP WITH BASE	4	57.68	230.715
115	GAP WITH BASE	4	52.39	209.562
116	RESIDUAL GAP	6	155.60	933.590
117	RESIDUAL GAP	5	151.50	757.508
118	OVERHEAD GAP	3	92.39	277.157
119	OVERHEAD GAP	2	65.19	130.374
120	OVERHEAD GAP	1	191.10	191.105
121	OVERHEAD GAP	2	81.88	163.767
122	GAP WITH BASE	3	51.03	153.104
123	GAP WITH BASE	3	62.45	187.345
124	GAP WITH BASE	3	56.81	170.429
125	GAP WITH BASE	3	54.77	164.313
126	RESIDUAL GAP	1	20.25	20.249
127	UNDERLYING GAP	1	513.60	513.598
128	SHOULDERED GAP	3	8.58	25.728
129	RESIDUAL GAP	2	34.34	68.675
130	OVERHEAD GAP	2	15.18	30.362
131	TOPOGRAPHICAL GAP	1	64.14	64.137
132	TOPOGRAPHICAL GAP	1	193.34	193.342
133	TOPOGRAPHICAL GAP	1	298.43	298.430
134	TOPOGRAPHICAL GAP	1	81.47	81.473
135	TOPOGRAPHICAL GAP	1	262.20	262.198
136	GAP WITH BASE	3	39.16	117.468
137	TOPOGRAPHICAL GAP	1	139.58	139.575
138	GAP WITH BASE	5	108.78	543.923
139	GAP WITH BASE	4	188.33	753.302
140	OVERHEAD GAP	2	295.35	590.696
141	UNDERLYING GAP	1	58.94	58.938
142	UNDERLYING GAP	1	39.54	39.543
143	UNDERLYING GAP	1	33.52	33.521
144	OVERHEAD GAP	2	80.35	160.691
145	RESIDUAL GAP	1	202.67	202.673
146	RESIDUAL GAP	3	309.26	927.783
147	OVERHEAD GAP	3	177.22	531.669
148	OVERHEAD GAP	4	82.95	331.798
149	OVERHEAD GAP	3	131.93	395.801
150	GAP WITH BASE	2	91.51	183.028
151	OVERHEAD GAP	4	174.26	697.035
152	GAP WITH BASE	4	115.81	463.231
153	GAP WITH BASE	4	118.40	473.608
154	SHOULDERED GAP	3	23.02	69.072
155	TOPOGRAPHICAL GAP	1	143.31	143.309
156	TOPOGRAPHICAL GAP	1	232.08	232.080
157	TOPOGRAPHICAL GAP	1	329.60	329.600
158	GAP WITH BASE	4	55.98	223.909
159	TOPOGRAPHICAL GAP	1	144.08	144.075
160	TOPOGRAPHICAL GAP	1	47.65	47.649
161	TOPOGRAPHICAL GAP	1	42.66	42.662
162	GAP WITH BASE	4	67.55	270.191
163	TOPOGRAPHICAL GAP	1	101.89	101.889
164	UNDERLYING GAP	1	2258.07	2258.067
165	UNDERLYING GAP	1	789.38	789.381
166	UNDERLYING GAP	1	750.50	750.504
167	UNDERLYING GAP	1	769.71	769.708
168	SHOULDERED GAP	4	64.27	257.064
169	SHOULDERED GAP	4	67.65	270.609
170	GAP WITH BASE	5	131.58	657.920
171	SHOULDERED GAP	5	93.56	467.776
172	GAP WITH BASE	2	58.25	116.505
173	GAP WITH BASE	2	136.17	272.350
174	SHOULDERED GAP	2	8.93	17.852
175	GAP WITH BASE	4	22.62	90.478
176	SHOULDERED GAP	5	49.54	247.707
177	SHOULDERED GAP	5	166.27	831.358
178	OVERHEAD GAP	3	371.73	1115.187
179	GAP WITH BASE	4	51.99	207.960
180	GAP WITH BASE	4	51.07	204.269
181	GAP WITH BASE	4	233.00	932.009
182	SHOULDERED GAP	3	16.24	48.720
183	SHOULDERED GAP	4	25.38	101.508
184	GAP WITH BASE	3	116.35	349.042
185	GAP WITH BASE	4	40.61	162.450
186	RESIDUAL GAP	1	541.22	541.220
187	RESIDUAL GAP	4	22.44	89.760
188	GAP WITH BASE	2	67.30	134.591
189	GAP WITH BASE	3	93.57	280.722
190	SHOULDERED GAP	6	82.06	492.335

191	GAP WITH BASE	3	43.78	131.339
192	OVERHEAD GAP	3	72.84	218.515
193	SHOULDERED GAP	1	15.58	15.576
194	SHOULDERED GAP	3	80.69	242.064
195	SHOULDERED GAP	5	29.65	148.250
196	OVERHEAD GAP	3	78.85	236.547
197	GAP WITH BASE	4	116.44	465.741
198	SHOULDERED GAP	3	53.64	160.922
199	GAP WITH BASE	2	105.09	210.178
200	GAP WITH BASE	4	18.28	73.111
201	SHOULDERED GAP	4	44.31	177.259
202	GAP TO PROTECT	5	97.27	486.33
203	GAP TO PROTECT	5	74.41	372.04
204	GAP TO PROTECT	5	68.57	342.87
205	GAP TO PROTECT	4	51.91	207.66
206	GAP TO PROTECT	4	91.47	365.87
207	GAP TO PROTECT	4	90.62	362.50
208	GAP TO PROTECT	4	98.82	395.29
209	GAP TO PROTECT	4	85.21	340.84
210	GAP TO PROTECT	4	91.88	367.51
211	GAP TO PROTECT	4	102.51	410.05
212	GAP TO PROTECT	5	114.91	574.53
213	GAP TO PROTECT	5	114.00	570.02
214	GAP TO PROTECT	3	57.34	172.03
215	GAP TO PROTECT	3	68.98	206.94
216	GAP TO PROTECT	4	78.58	314.34
217	GAP TO PROTECT	3	103.96	311.87
218	GAP TO PROTECT	5	75.77	378.83
219	GAP TO PROTECT	5	78.91	394.53
220	GAP TO PROTECT	5	105.24	526.19
221	GAP TO PROTECT	3	68.59	205.77
222	GAP TO PROTECT	4	81.52	326.08
223	GAP TO PROTECT	5	82.38	411.90
224	GAP TO PROTECT	4	63.88	255.50
225	GAP TO PROTECT	3	60.07	180.21
226	GAP TO PROTECT	3	52.02	156.06
227	GAP TO PROTECT	3	58.65	175.94
228	GAP TO PROTECT	3	60.38	181.13
229	GAP TO PROTECT	3	31.75	95.26
230	GAP TO PROTECT	3	31.09	93.26
231	GAP TO PROTECT	5	83.27	416.37
232	GAP TO PROTECT	2	62.69	125.38
233	GAP TO PROTECT	2	58.16	116.32
234	GAP TO PROTECT	2	59.67	119.34
235	GAP TO PROTECT	2	60.78	121.56
236	GAP TO PROTECT	3	52.16	156.47
237	GAP TO PROTECT	3	66.20	198.59
238	GAP TO PROTECT	3	69.92	209.76
239	GAP TO PROTECT	3	80.46	241.39
240	GAP TO PROTECT	3	62.00	186.00
241	GAP TO PROTECT	3	61.77	185.31
242	GAP TO PROTECT	3	81.68	245.03
243	GAP TO PROTECT	3	101.41	304.24
244	GAP TO PROTECT	3	100.93	302.78
245	GAP TO PROTECT	3	105.23	315.69
246	GAP TO PROTECT	4	83.94	335.75
247	GAP TO PROTECT	4	82.66	330.66
248	GAP TO PROTECT	3	103.27	309.82
249	GAP TO PROTECT	3	65.82	197.46
250	GAP TO PROTECT	3	49.29	147.87
251	GAP TO PROTECT	3	88.71	266.12
252	GAP TO PROTECT	3	96.46	289.38
253	GAP TO PROTECT	3	77.07	231.22
254	GAP TO PROTECT	3	80.00	239.99
255	GAP TO PROTECT	3	77.08	231.23
256	GAP TO PROTECT	3	76.83	230.49
257	GAP TO PROTECT	3	81.37	244.10
258	GAP TO PROTECT	3	77.29	231.87
259	GAP TO PROTECT	3	79.34	238.01
260	GAP TO PROTECT	2	64.50	128.99
261	GAP TO PROTECT	3	60.33	180.99
262	GAP TO PROTECT	4	86.00	344.01
263	GAP TO PROTECT	4	93.52	374.07
264	GAP TO PROTECT	3	74.40	223.21
265	GAP TO PROTECT	3	71.43	214.30
266	GAP TO PROTECT	4	69.22	276.87
267	GAP TO PROTECT	4	60.34	241.38
268	GAP TO PROTECT	4	63.52	254.09
269	GAP TO PROTECT	4	63.74	254.95
270	GAP TO PROTECT	6	108.58	651.48
271	GAP TO PROTECT	6	78.64	471.83
272	GAP TO PROTECT	6	122.11	732.67
273	GAP TO PROTECT	5	79.75	398.75
274	GAP TO PROTECT	6	74.93	449.58
275	GAP TO PROTECT	4	57.52	230.08
276	GAP TO PROTECT	5	65.86	329.28
277	GAP TO PROTECT	3	80.16	240.47
278	GAP TO PROTECT	4	64.45	257.78
279	GAP TO PROTECT	3	61.39	184.18
280	GAP TO PROTECT	3	65.05	195.14
281	GAP TO PROTECT	3	113.16	339.48
282	GAP TO PROTECT	4	72.86	291.45
283	GAP TO PROTECT	3	72.17	216.51
284	GAP TO PROTECT	4	105.28	421.11
285	GAP TO PROTECT	2	54.37	108.73
286	GAP TO PROTECT	3	56.88	170.65
287	GAP TO PROTECT	3	48.25	144.74
288	GAP TO PROTECT	5	93.24	466.20
289	GAP TO PROTECT	3	79.37	238.11
290	GAP TO PROTECT	3	61.18	183.55
291	GAP TO PROTECT	4	90.19	360.77
292	GAP TO PROTECT	4	79.22	316.89
293	GAP TO PROTECT	4	86.95	347.79
294	GAP TO PROTECT	3	84.29	252.86
295	GAP TO PROTECT	4	71.30	285.20
296	GAP TO PROTECT	2	62.83	125.67
297	GAP TO PROTECT	2	68.87	137.74
298	GAP TO PROTECT	2	56.82	113.63
299	GAP TO PROTECT	3	48.72	146.16
300	GAP TO PROTECT	3	44.89	134.68
301	GAP TO PROTECT	3	42.77	128.30
302	GAP TO PROTECT	3	56.12	168.36
303	GAP TO PROTECT	3	72.54	217.62
304	GAP TO PROTECT	5	72.44	362.18
305	GAP TO PROTECT	4	62.03	248.12
306	GAP TO PROTECT	5	88.49	442.46
307	GAP TO PROTECT	5	127.42	637.08
308	GAP TO PROTECT	5	79.55	397.74
309	GAP TO PROTECT	5	94.74	473.70
310	GAP TO PROTECT	5	88.49	442.43
311	GAP TO PROTECT	2	36.63	73.27
312	GAP TO PROTECT	2	43.08	86.15
313	GAP TO PROTECT	2	41.54	83.07
314	GAP TO PROTECT	4	46.55	186.19
315	GAP TO PROTECT	4	84.83	339.31
316	GAP TO PROTECT	5	85.04	425.21
317	GAP TO PROTECT	4	39.06	156.23
318	GAP TO PROTECT	4	76.67	306.67
319	GAP TO PROTECT	4	78.02	312.09
320	GAP TO PROTECT	4	37.54	150.15
321	GAP TO PROTECT	4	45.24	180.95
322	GAP TO PROTECT	3	75.67	227.01
323	GAP TO PROTECT	3	85.07	255.20
324	GAP TO PROTECT	4	45.02	180.10
325	GAP TO PROTECT	4	45.19	180.76
326	GAP TO PROTECT	4	50.15	200.61
327	GAP TO PROTECT	4	92.74	370.97
328	GAP TO PROTECT	3	106.24	318.72
329	GAP TO PROTECT	3	77.54	232.61
330	GAP TO PROTECT	3	71.73	215.19
331	GAP TO PROTECT	3	37.19	111.58
332	GAP TO ASSESS	5	82.98	3357.44
333	GAP TO ASSESS	5	83.76	3357.44
334	GAP TO ASSESS	4	77.93	3357.44
335	GAP TO ASSESS	3	62.12	3357.44
336	GAP TO ASSESS	3	63.79	3357.44
337	GAP TO ASSESS	3	67.01	3357.44
338	GAP TO ASSESS	3	60.83	3357.44
339	GAP TO ASSESS	3	68.16	3357.44
340	GAP TO ASSESS	3	80.12	3357.44
341	GAP TO ASSESS	3	72.71	3357.44
342	GAP TO ASSESS	2	47.33	3357.44
343	GAP TO ASSESS	2	46.54	3357.44
344	GAP TO ASSESS	2	47.02	3357.44
345	GAP TO ASSESS	2	42.01	3357.44
346	GAP TO ASSESS	3	74.97	3357.44
347	GAP TO ASSESS	3	75.84	3357.44
348	GAP TO ASSESS	3	96.29	3357.44
349	GAP TO ASSESS	6	86.04	3357.44
350	GAP TO ASSESS	3	67.70	3357.44
351	GAP TO ASSESS	3	71.46	3357.44
352	GAP TO ASSESS	6	58.64	3357.44
353	GAP TO ASSESS	3	56.71	3357.44
354	GAP TO ASSESS	5	62.84	3357.44
355	GAP TO ASSESS	4	86.83	3357.44
356	GAP TO ASSESS	2	35.13	3357.44
357	GAP TO ASSESS	2	49.86	3357.44
358	GAP TO ASSESS	4	70.40	3357.44
359	GAP TO ASSESS	5	53.32	3357.44
360	GAP TO ASSESS	4	84.27	3357.44
361	GAP TO ASSESS	3	72.86	3357.44
362	GAP TO ASSESS	3	47.36	3357.44
363	GAP TO ASSESS	4	69.88	3357.44
364	GAP TO ASSESS	2	38.52	3357.44
365	GAP TO ASSESS	3	66.23	3357.44
366	GAP TO ASSESS	3	67.23	3357.44
367	GAP TO ASSESS	4	68.85	3357.44
368	GAP TO ASSESS	4	70.19	3357.44
369	GAP TO ASSESS	3	80.94	3357.44
370	GAP TO ASSESS	3	81.37	3357.44
371	GAP TO ASSESS	3	81.08	3357.44
372	GAP TO ASSESS	4	89.93	3357.44
373	GAP TO ASSESS	4	102.60	3357.44
374	GAP TO ASSESS	4	92.15	3357.44
375	GAP TO ASSESS	4	83.01	3357.44
376	GAP TO ASSESS	3	129.15	3357.44
377	GAP TO ASSESS	4	75.08	3357.44
378	GAP TO ASSESS	3	55.00	3357.44
379	GAP TO ASSESS	4	53.41	3357.44

GAP TO PROTECT :
SATISFIES ALL CONDITIONS MAKING THE CITY'S IDENTITY

GAP TO ASSESS :
MEETS CERTAIN CONDITIONS MAKING THE CITY'S IDENTITY

GAP TO INVEST :
DOES NOT CONTRIBUTE TO THE CITY'S IDENTITY

379
GAPS THROUHGHOUT THE CITY OF LAUSANNE
120'000 m²

130
GAPS TO PROTECT
35'500 m²
GROUND SURFACE : 9'500 m²

48
GAPS TO ASSESS
11'800 m²
GROUND SURFACE : 3'400 m²

201
GAPS TO INVEST
71'700 m²
GROUND SURFACE : 42'900 m²

80
GAPS TO KEEP OPEN
28'700 m²
FOR PUBLIC SPACE

121
GAPS THAT CAN BE CLOSED
43'000 m²
FOR HOUSING

> 1'100
PEOPLE THAT COULD BE ACCOMMODATED
with **37 m²/person**
(average in Lausanne)

SOME LEGAL QUESTIONS
SPECIFIC TO IN-BETWEEN SPACES

LAND OWNERSHIP ISSUES (*propriété foncière*):

An infill space can be located within a single plot or span across multiple plots. It may belong to a single owner, but more often it involves several owners.

PUBLIC PLANNING LAW ISSUES (*droit public de l'aménagement*):

A project within an infill space is governed by the following construction regulations:

The Municipal Zoning Plan (*plan d'affectation communal*): Defines whether the infill space is in a buildable zone or not, the type of construction permitted, and the allowed density (e.g., low or medium-density residential zone, or high-density mixed-use central area).

The Municipal Building Regulations (*règlement communal de construction*): Provide detailed applicable rules, such as maximum building height, building envelope, setbacks (distance to property lines and whether construction on the boundary is allowed), floor area ratio, specific land use, rules on roofs, materials, aesthetic aspects, outdoor facilities, and mandatory parking provisions.

PRIVATE LAW ISSUES (droit privé):

Neighbor Rights (*droit des voisins*): These protect the individual interests of neighboring property owners and fall mainly under civil law (e.g., damage caused to neighbors, rules on property boundaries, and shared walls). This is crucial for infill spaces, which are often very close to or right on property lines, raising issues such as encroachment, light, or privacy.

KEY CONCEPTS:

Setback - distance to boundary (*prospect*): The minimum required distance between a façade and the property line, which varies by zone. In narrow sites, setbacks can be highly restrictive and often require exemptions.

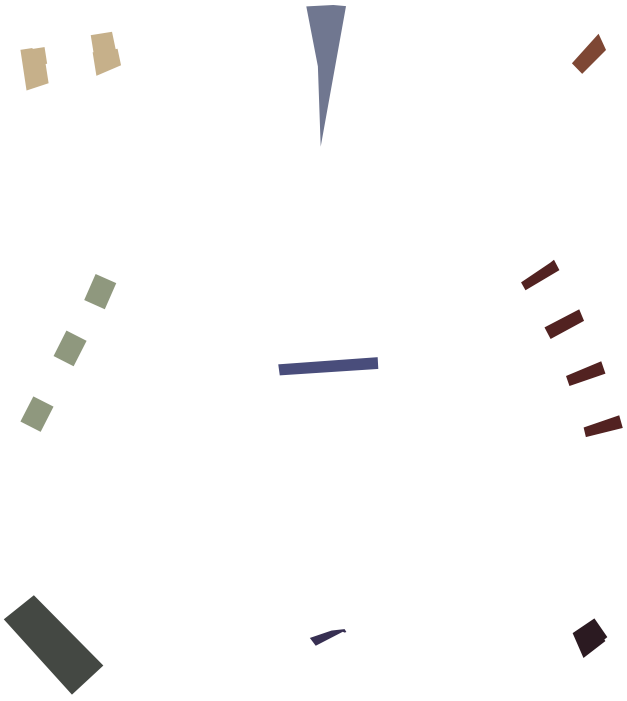
PPA - Partial Zoning Plan (*Plan Partiel d'Affectation*): A tool that allows for exceptions to standard regulations. It helps resolve complex situations such as small plots or «gap sites,» and allows the rules to be adapted to a specific context. For example, it can reduce the required setback from 4 meters (standard rule) to 0 meters for a shared wall construction. For infill sites, standard regulations are often too rigid, and in most cases, construction would be impossible without an exemption.

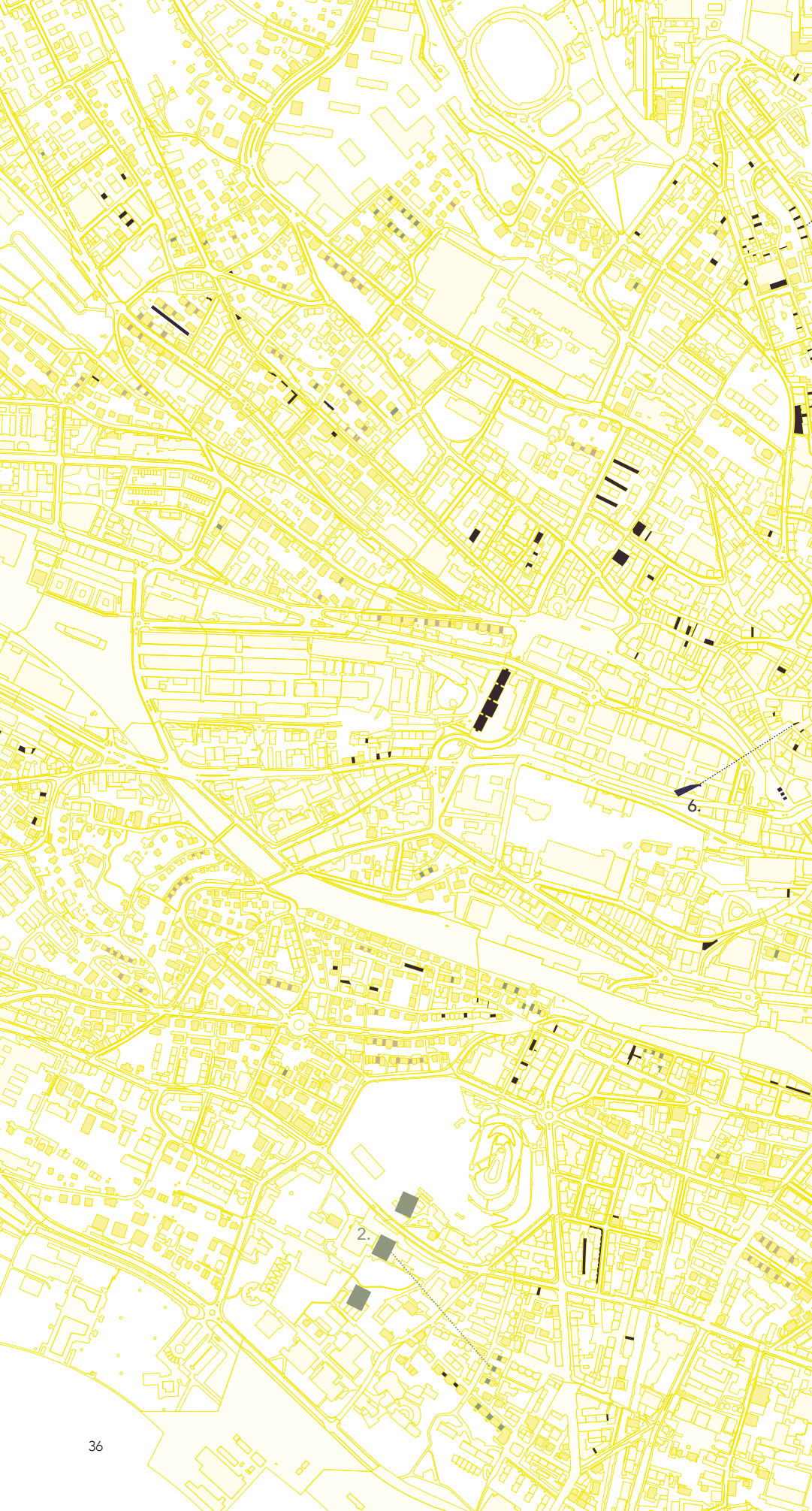
Easements (*servitudes*): Rights granted to a third party. These can help bypass certain limitations through negotiation with neighbors. Notable examples include right of way (to access a landlocked plot), view easement (preventing obstruction of certain windows), and height easement (preserving views or sunlight by limiting building height).

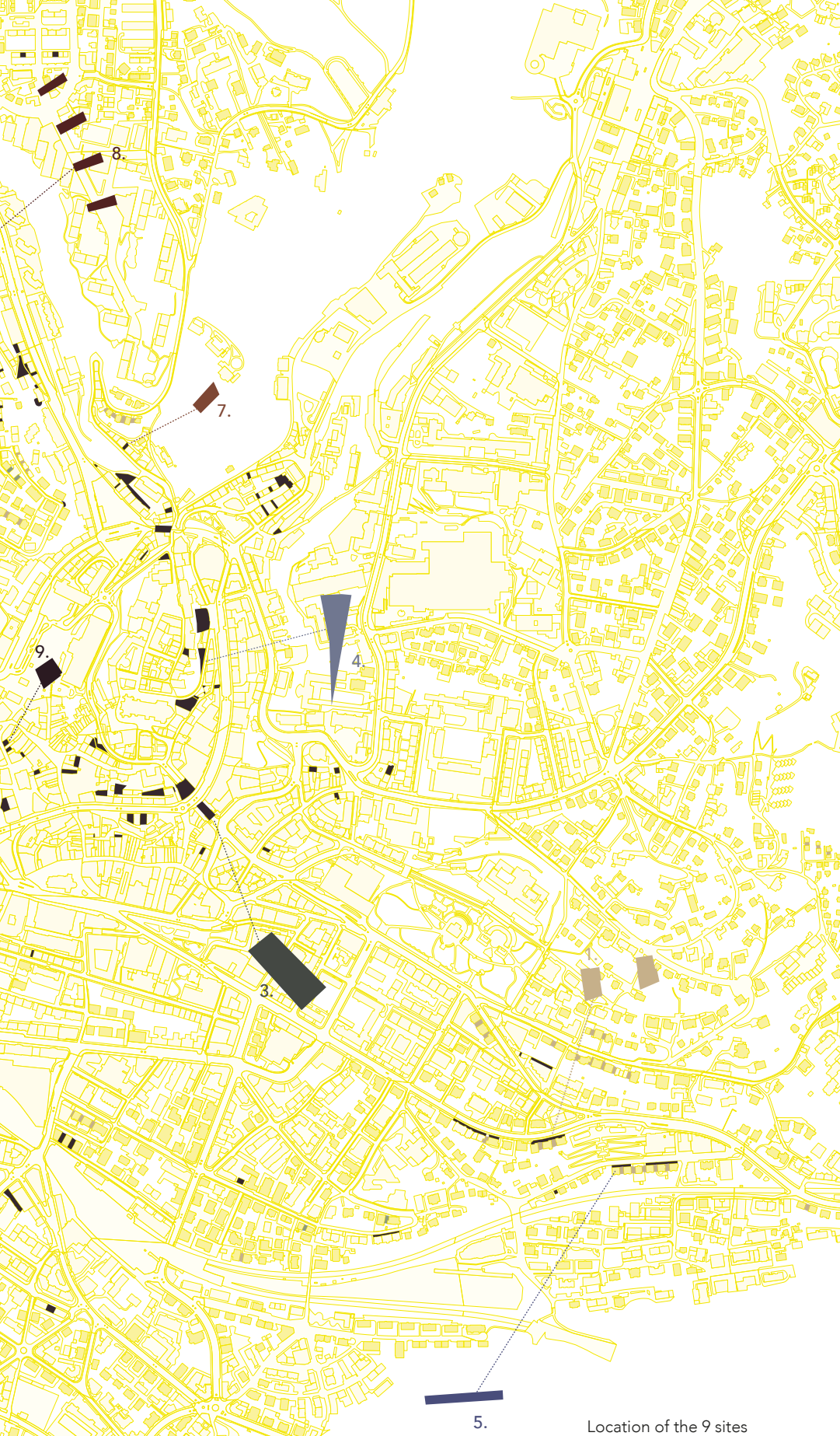
Party Wall Ownership (*mitoyenneté*) : Joint ownership of the dividing wall between two plots. Party walls are particularly important in dense urban areas.

Surface Rights (*droit de superficie*): The right to build on land owned by someone else. This allows a project to be carried out without purchasing the land (commonly used for densification projects, social housing, cooperatives, or public interest projects).

II. SITES




6.
2.



Location of the 9 sites
1 : 10’000

1.
AVENUE DE RUMINE

TYPE:
BELVEDERE GAP

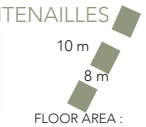
FLOOR AREA :
2x 114 [m²]

HEIGHT: 21 m
up to 5 floors

SURFACE:
up to 570 [m²]

2.
RUE DES FONTENAILLES

TYPE:
«PLOT LAUSANNOIS»



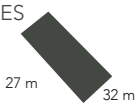
FLOOR AREA :
3x 80 [m²]

HEIGHT: 13m
up to 3 floors

SURFACE:
up to 243 [m²]

3.
PONT BESSIERES

TYPE:
UNDERLYING GAP



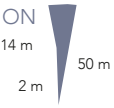
FLOOR AREA :
1'300 [m²]

HEIGHT: 11 m
1 floor

SURFACE:
up to 1'300 [m²]

4.
AVENUE MENTHON

TYPE:
RESIDUAL GAP



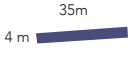
FLOOR AREA :
306 [m²]

HEIGHT: 12 m
up to 4 floors

SURFACE:
up to 1'225 [m²]

5.
AVENUE EUGENE-RAMBERT

TYPE:
TOPOGRAPHICAL
GAP



FLOOR AREA :
143 [m²]

HEIGHT: 5 m
1 floor

SURFACE:
up to 143 [m²]

6.
RUELLE GRAND SAINT-JEAN

TYPE: GAP IN
CONTIGUOUS
ORDER

FLOOR AREA :
28 [m²]

HEIGHT: 23 m
up to 5 floors

SURFACE:
up to 141 [m²]

7.
AVENUE LOUIS-VULLIEMIN

TYPE: GAP IN
DISCONTIGUOUS
ORDER

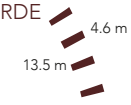
FLOOR AREA :
73 [m²]

HEIGHT: 16 m
up to 3 floors

SURFACE:
up to 218 [m²]

8.
RUE DE LA BORDE

TYPE:
GAP WITH BASE



FLOOR AREA :
4x 57 [m²]

HEIGHT: 12.5 m
up to 3 floors

SURFACE:
up to 170 [m²]

9.
RUE DE LA LOUVE

TYPE:
OVERHEAD GAP

FLOOR AREA :
92 [m²]

HEIGHT: 17m
up to 4 floors

SURFACE:
up to 277 [m²]


1.


4.


7.


2.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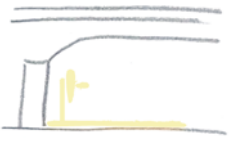
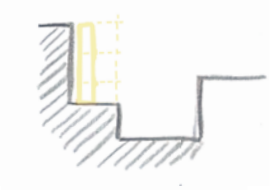
9.

III. PROJECTS





1 DO NOTHING.

Protect the void. One is among Lausanne's typical gaps. Set on the hillside, the gap becomes a belvedere, offering an impressive visual escape towards the lake. Truly contributing to the city's identity, it is part of the voids to protect and keep open. For this site it is then about refraining from building and rather preserve existing quality. With a simple bump in the fence, the project creates a small balcony aiming to highlight what is already there and invite people to step forward to the view.

2 GET RID OF DIVIDING LINES.

Share the space. Two is an ensemble of 6 plots lausannois. It represents a large part of the city's urban fabric, made up of a series of individual houses with their private gardens, each time clearly delimited with fences. To counter this fragmented layout of private parcels, the strategy for the site is to remove the dividing lines and instead imagine a shared space. In other words, it follows a logic of taking away to gain more. With an idea of living together in a park, the project invites to consider how the different apartments connect with the garden. The six small houses each host three apartments stacked one on top of the other. In order for everyone to get their own access to the garden, three staircases are going down, like a carpet laying towards the garden. Bringing each inhabitant down to a different point in the garden, the staircases also house garden sheds or walls. Inhabiting the space underneath the construction, the staircases take on a spatial organizing role helping to define zones and guide movement within the park.

3 PROGRAM.

Define a public space. Three is a gap under a bridge. The big area of the site is divided into two parts with a road crossing in the middle. Except for some parking zones, the space is rather poorly defined. Therefore, the strategy for this site is to actually define it, giving it clear function and program. In the topic of densification, planning public spaces is just as important as planning housing. A good location for a public orientated intervention, this third site is designed to stay open and foster encounter. With few means, mainly some floor work, it is about planning a public space for sport. Each side of the road is invested by halves basketball fields, allowing to play around the pillars of the bridge. As far as the road in the middle is concerned, a project

is underway to close it to traffic and make the entire area pedestrian. In the meantime, the floor work would force cars to drive slower and once the road is close the two halves could join together and become one complete field, taking over across the space.

4 OCCUPY PROGRESSIVELY.

Leave room for evolution. Four is a residual gap, a typical forgotten space no one uses. Leaned on one side to a high retaining wall, the triangular plot is dealing with strong limits. Starting from the important existing wall, the strategy is to invest the space progressively, to take it over gradually. Attached to the boundary, a first part of the house is built. Containing the services, technics and the vertical circulation it becomes the core of a house. Stepping forward, a second layer is made of the main structure with slabs stepping back in terraces. From there, the floors can be invested over time, filling and progressively closing up the given framework. Following an idea of giving support for future extensions the project aims to leave room for evolution an consider changing needs.

5 OCCUPY WITH TEMPORALITIES.

Choreograph activities. Five is another gap quite recurrent in Lausanne, one that is due to the strong topography and a height difference often present between the road and the house. The main challenge probably lies in the awkward condition of the site with light coming mainly from the top. In addition, the space is very limited in general with a footprint under 50m2 on a single floor. To face the constraints, the project proposes to alternate functions over time. Thinking of flexible use, the house becomes a changing space with inhabited wall sliding through the entire length. The house can then modify over the course of the day, allowing different activities to take place in the single space.

6 INSERT AUTONOMOUSLY.

Organize through verticality. Six is a really narrow gap in the dense fabric of the city center. With 3.5 meters at the widest point and only 1 meter at the narrowest it is among the smallest plots revealed through the cartography. The project for this site inserts itself in-between its two neighbors without touching them. Totally detached with glass facades on each side, the narrow house chooses to stay autonomous. If the footprint is of only 13m2, the house can go up to 5 floors, inviting to organize it through verticality. Instead of floors stacked on top of one another, the whole house becomes a

vertical ascent. Divided into 4 parts, the floorplan rises gradually and the entire life in the house is fragmented. Platform by platform, activities follow one another and the living is distributed over the entire height.

7 EXTEND THE EXISTING.

Provide outside space. Seven is a gap between two houses located at the border between continuous and disperse order. Not yet part of the loose fabric of the city, the two houses have very little outside space. Based on this observation, the project wants to extend the houses towards the outside and provide the apartments on each side with access to balconies. Interventions on the existing are minimal with only a few perforations to transform windows into passageways and connect interior and exterior spaces. In the middle, an entire new structure is inserted. On each side, the in-between is bordered with existing chimneys, which led to the introduction of one also on the outside. Becoming a central figure, different terraces, with various levels of openness are organized around it. More like a balcony in the front and more like a summer kitchen in the back, each of the terrace benefits from a different relationship with the fireplace. Sculpted in a way to offer places to sit or cook around, the chimney is ensuring also the role of structural core. Becoming narrower towards the top, the massive element is stepping back in order to support the beams for the slabs. At times resting on it, at others hanging from it, the new floors aim to continue the existing ones, drawing movement towards the exterior.

8 CONNECT HOUSES.

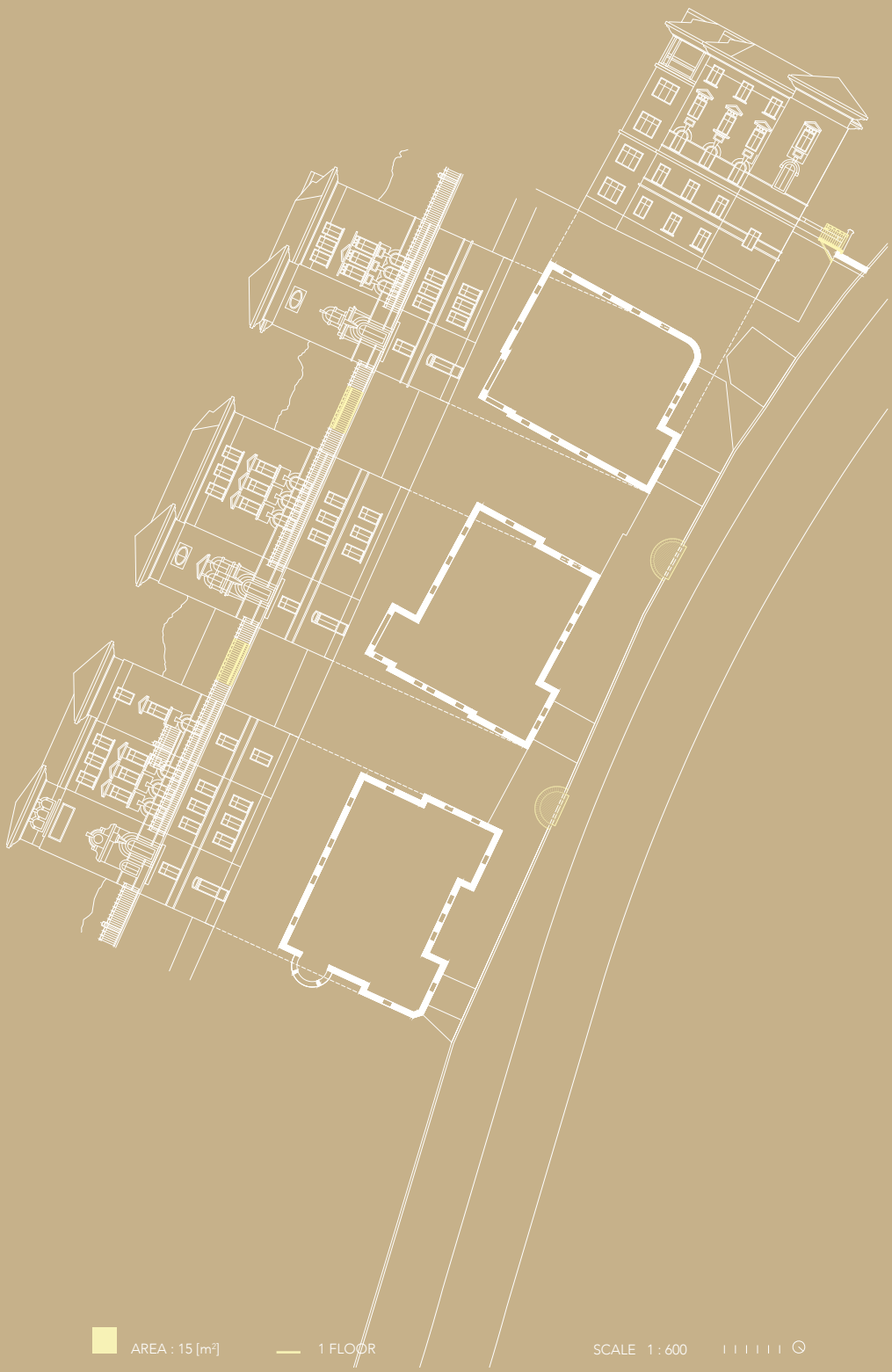
Offer different configurations. Eight is a series of gaps between three identical blocs connected on the ground floor. The existing floorplans are really repetitive with all the houses having two identical apartments of 56m2 per floor. The project thus aims to bring some variation. Connecting the existing houses through an additional volume of 35 m2 in the middle, it allows different configurations, offering different types and sizes of apartments. If some stay untouched, others are reorganized through the in-between space. The first two floors are connected with a double spiral staircase, that offer two duplex apartments. To enter and understand the spatial arrangement, one apartment starts in the bottom back of the existing with a day enfilade that is continued through the in-between. From there the stairs lead to the upper front of the other existing that host the night enfilade. The second apartment does the opposite resulting in a sort of cross typology. On the third floor

the two apartments on each side are turned into one big shared apartment. Four private rooms are set within the existing and open onto a common space that occupies the in-between. By reconfiguring circulation and connections, the project aims to reshape not only the apartments, but also the relationship between them.

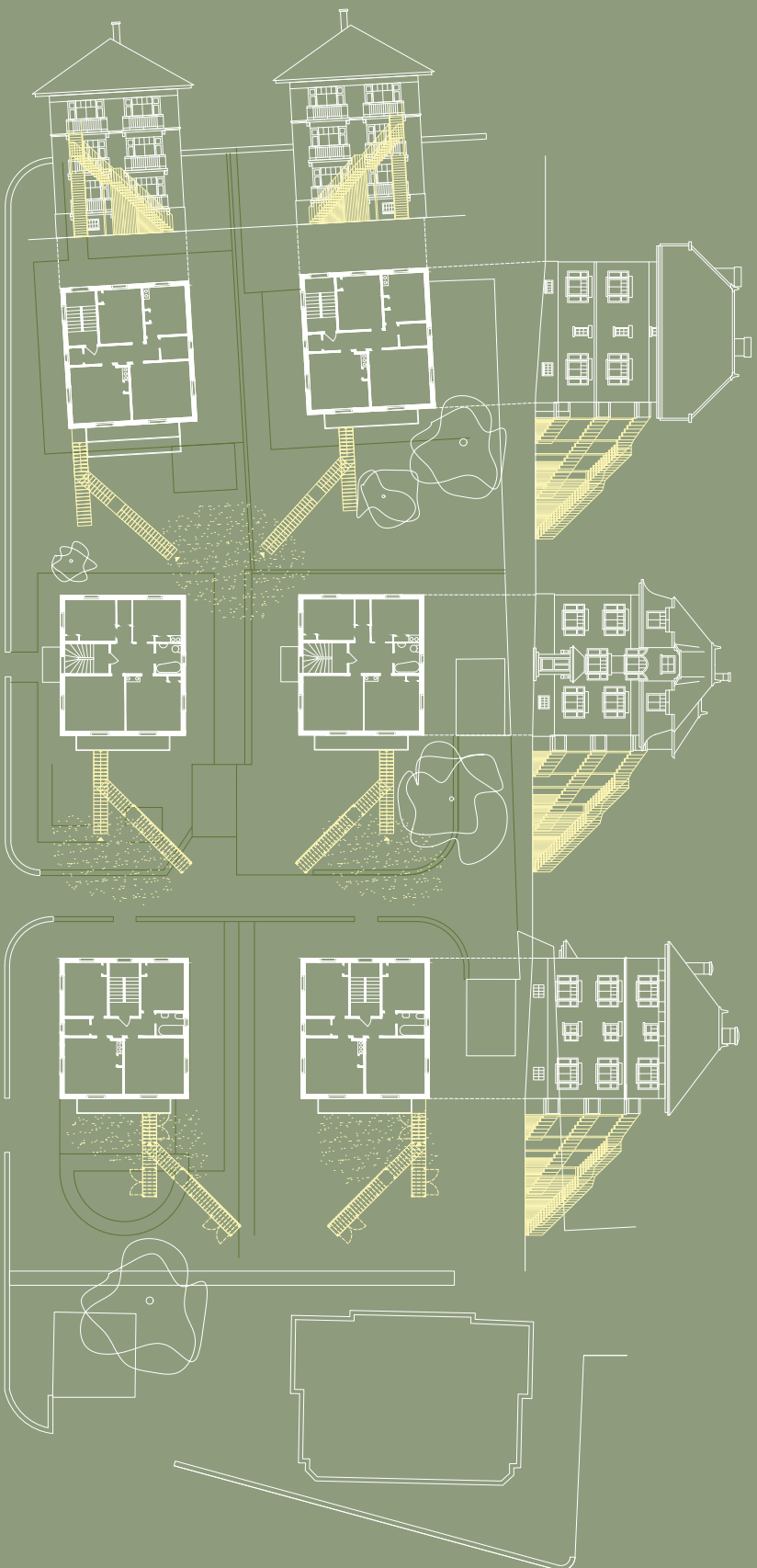
9 TOP-UP PARTIALLY.

Keep some room open. Nine is a gap on top of an existing. Bordered on each side with blind facades, a third neighbor located behind, will ask to be considered, in particular regarding the access to light. The strategy implemented is then to build half of the volume and keep openness on the back. The section is shaped along a strong diagonal and the project appears as a roof capping the existing. Perched on the sloping form, a stairway rises all the way to the top. Given the steep incline, the stairs follow a zig-zagging path to make the ascent possible. From there, along the path, the different apartments on every floor are distributed. Entering them, the zig zag continues on the inside and layer the floorplan. Kitchens and bathrooms are followed by very small bedrooms with built-in furniture. Arriving at the façade, a final layer is left more undefined, allowing rooms to expand or contract through it by moving a curtain. Playing with the limit between private and shared, open and closed, inhabitants can choose whether to have minimal room and bigger shared space or the other way around, and this last layer intend to remain a freer space, allowing appropriation.

1.
DO NOTHING
PROTECT THE VOID


AREA : 15 [m²]
1 FLOOR
SCALE 1 : 600

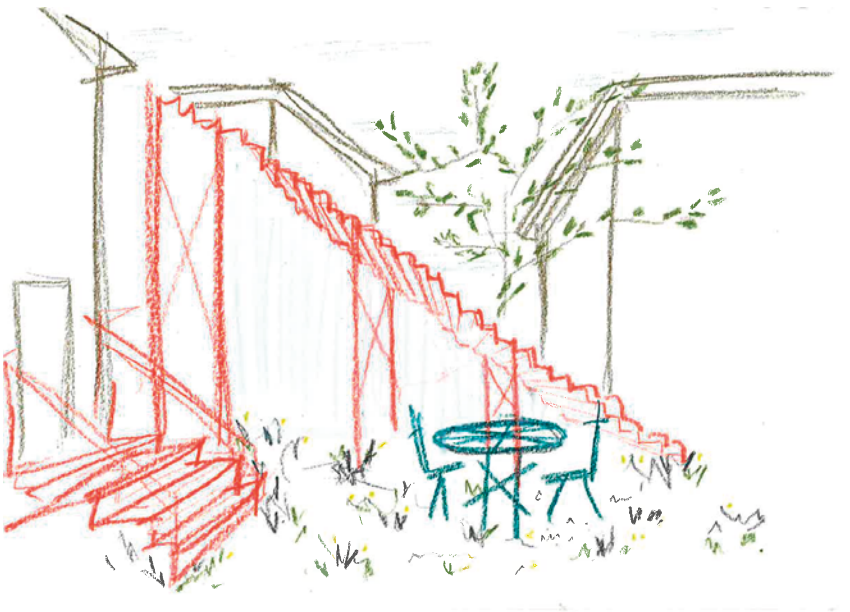
2.
GET RID OF DIVIDING LINES
SHARE THE SPACE

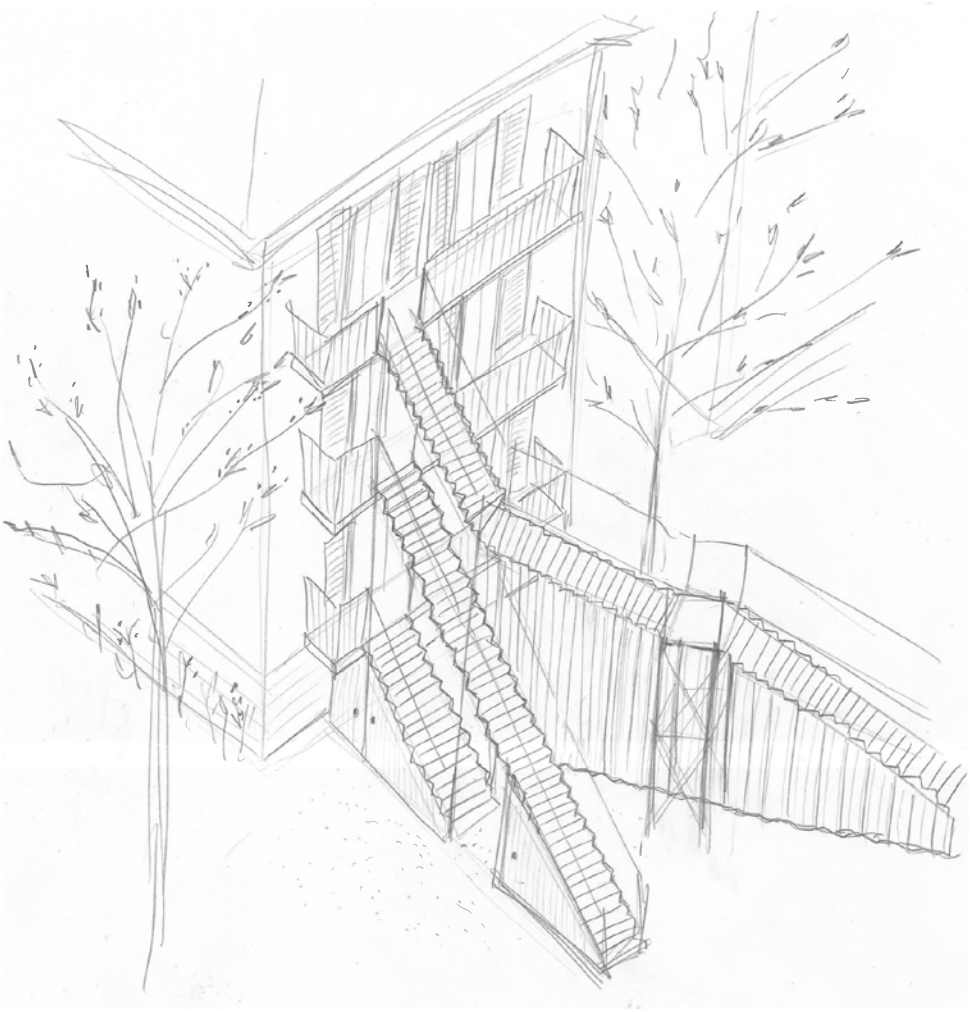


AREA : 1900 [m²]

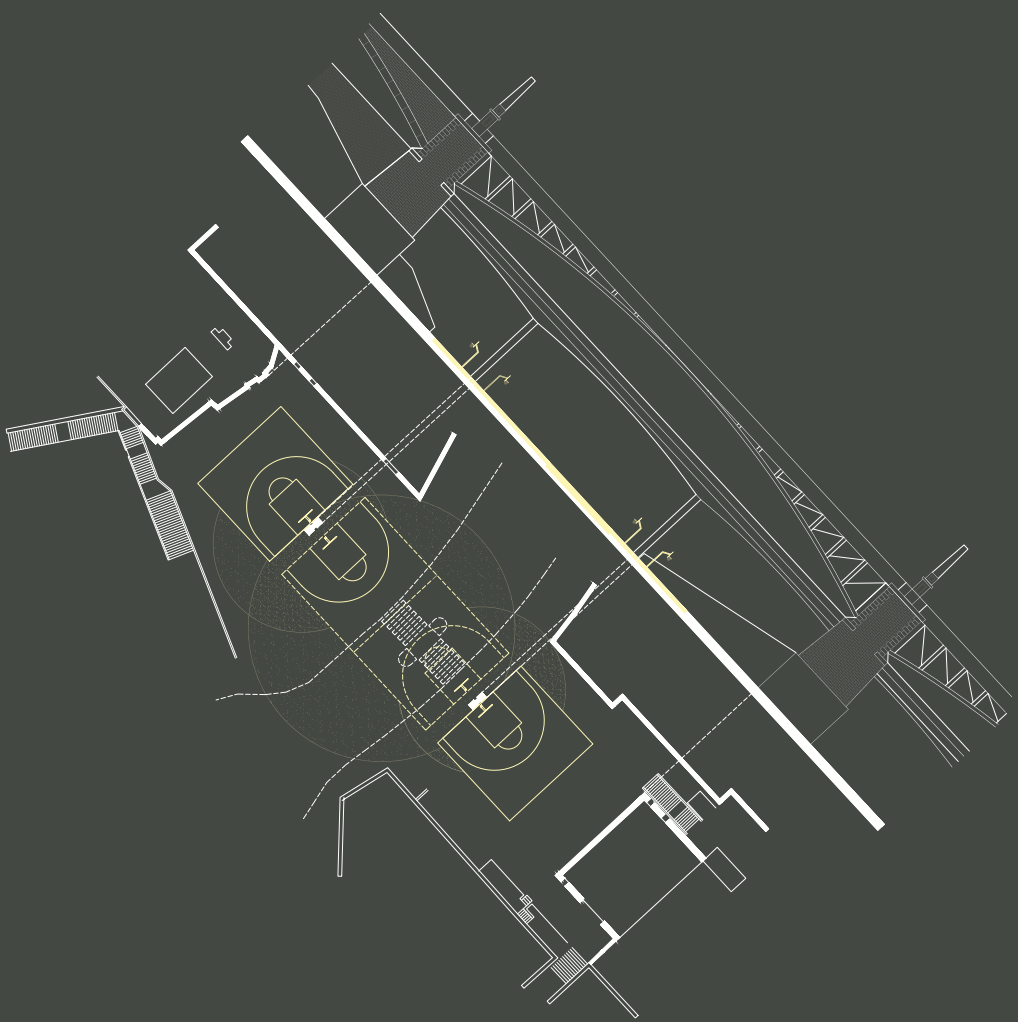
1 FLOOR

SCALE 1 : 500





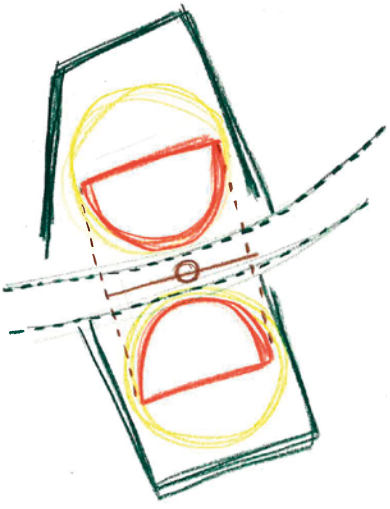
3.
PROGRAM
DEFINE A PUBLIC SPACE

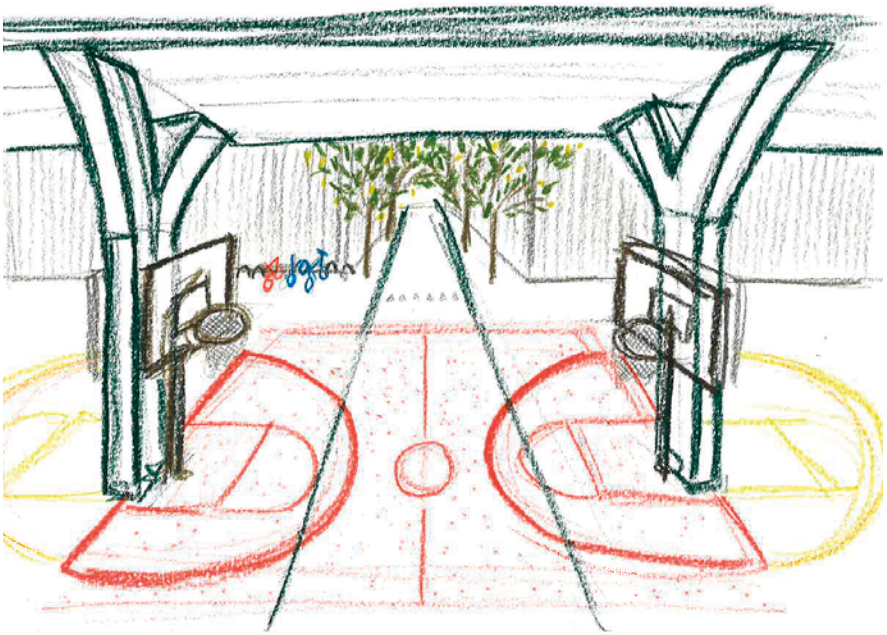


AREA : 2200 [m²]

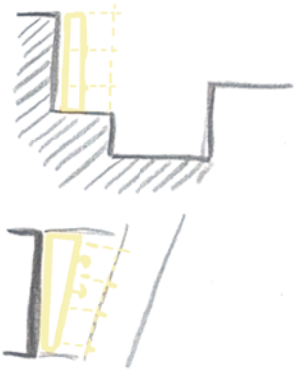
1 FLOOR

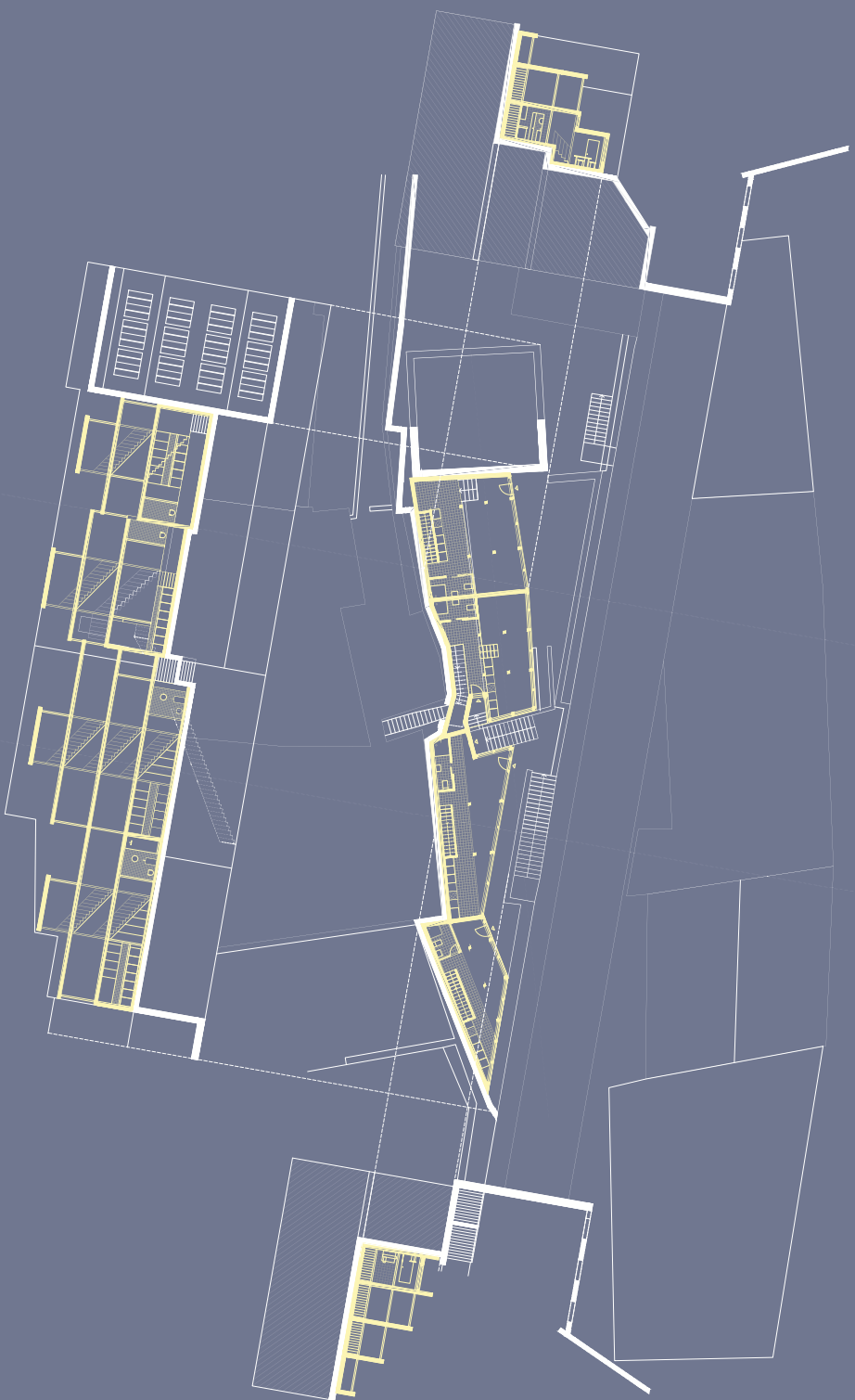
SCALE 1 : 1'000





4.
OCCUPY PROGRESSIVELY
LEAVE ROOM FOR EVOLUTION

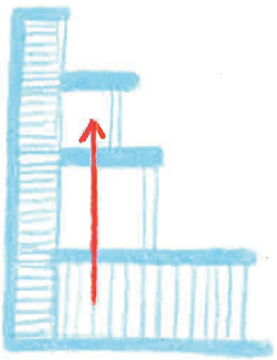


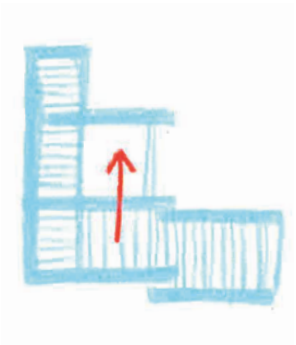


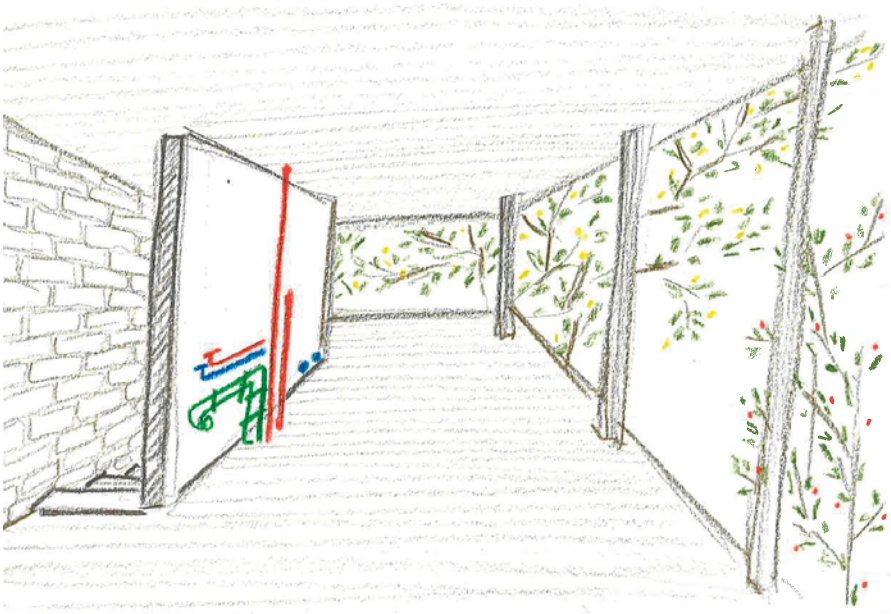
AREA : 200 [m²]

2 - 4 FLOORS

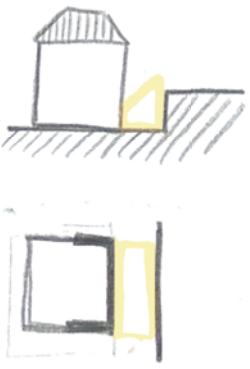
SCALE 1 : 500

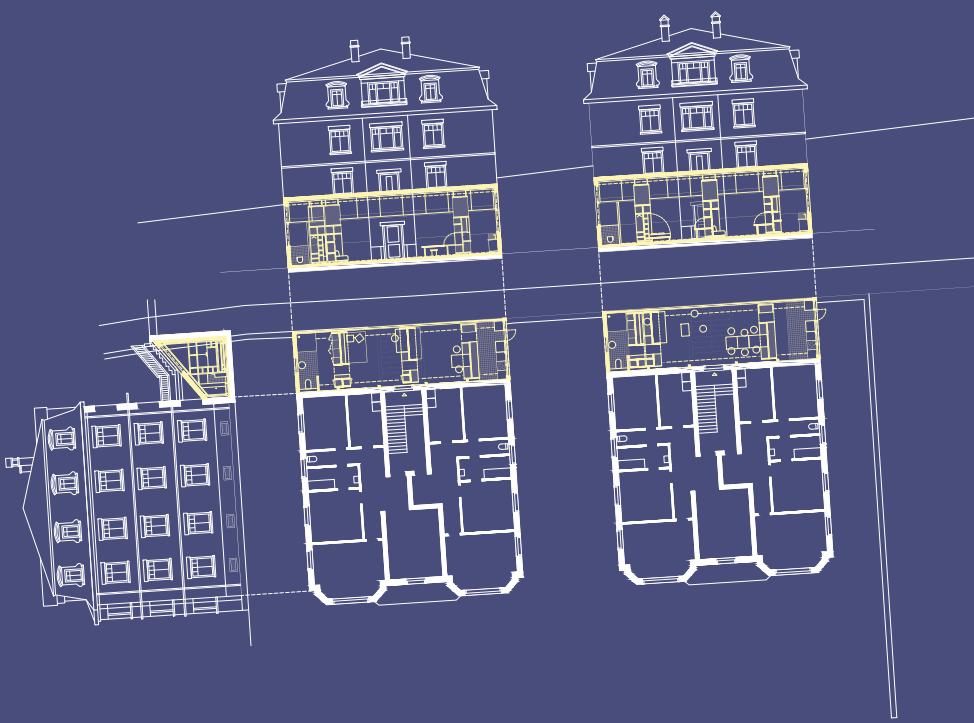






5.
OCCUPY WITH TEMPORALITIES
CHOREOGRAPH ACTIVITIES

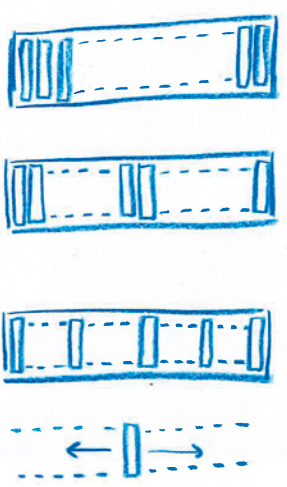


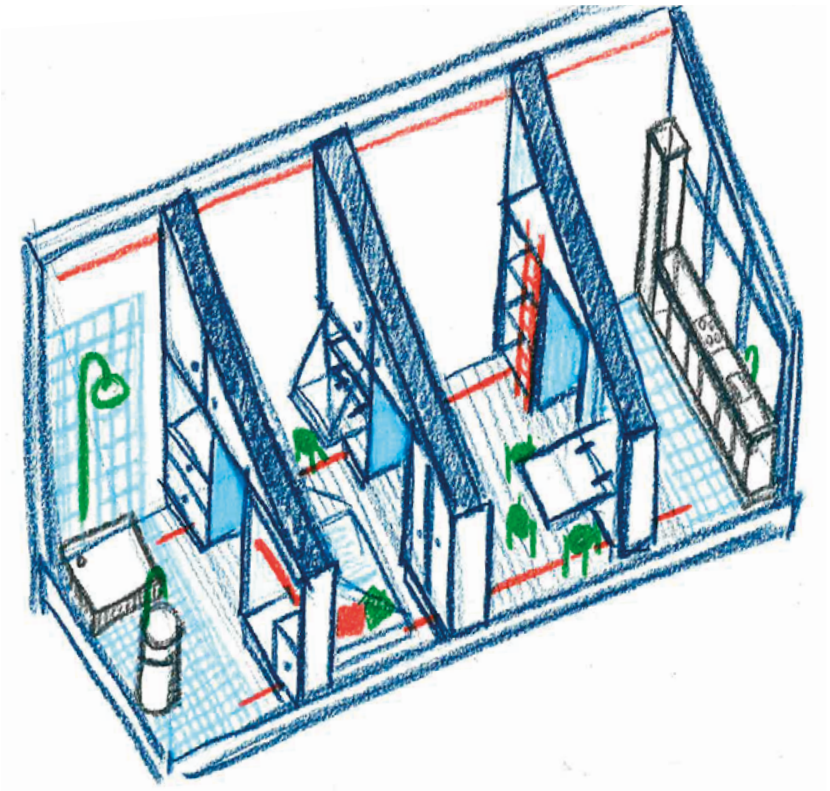


AREA : 104 [m²]

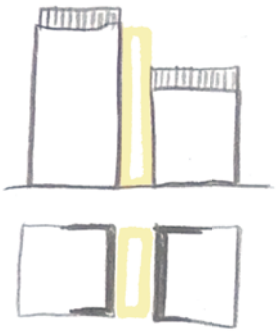
1 FLOOR

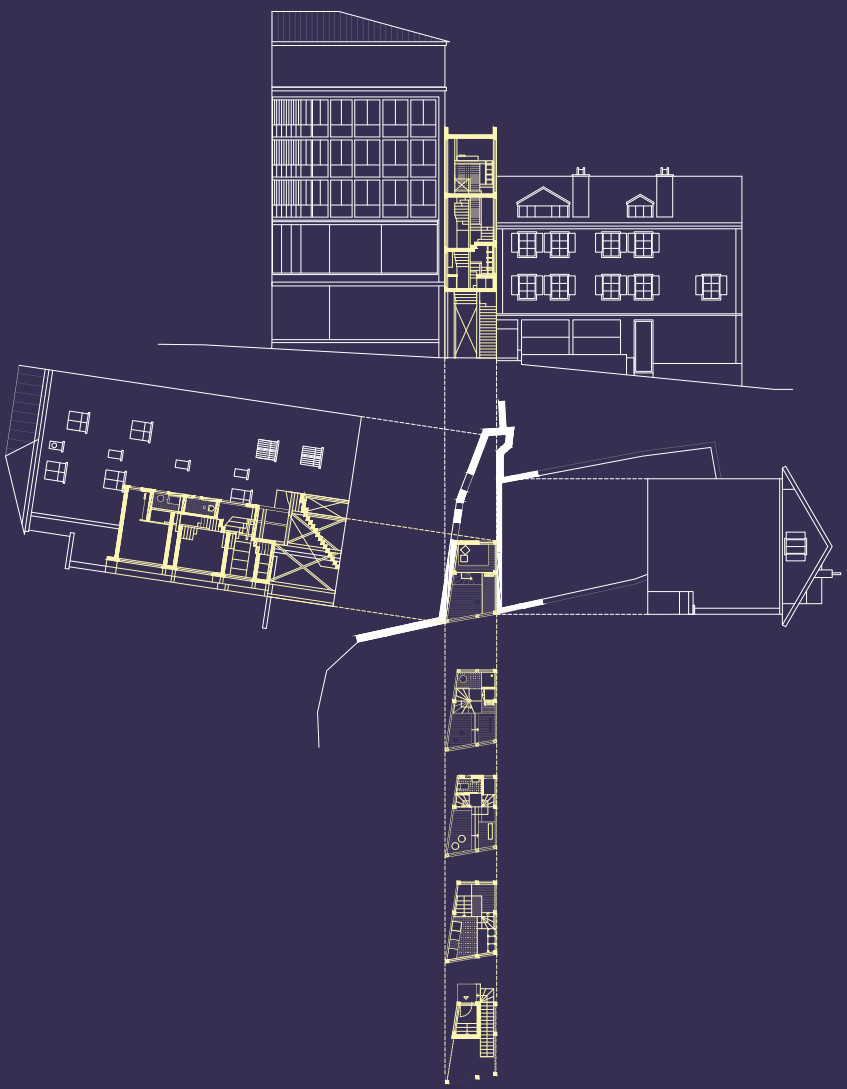
SCALE 1 : 500





6.
INSERT AUTONOMOUSLY
ORGANIZE THROUGH VERTICALITY

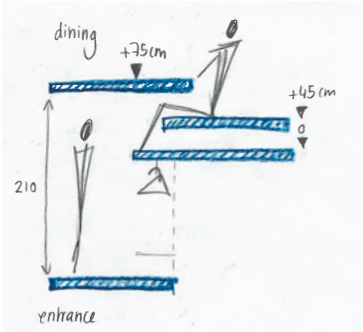


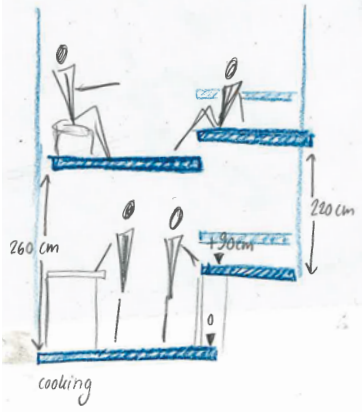


AREA : 13 [m²]

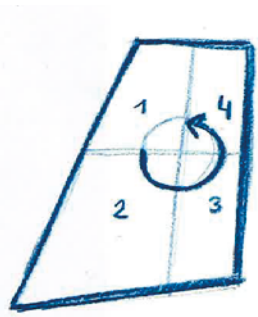
4 FLOORS (52 m²)

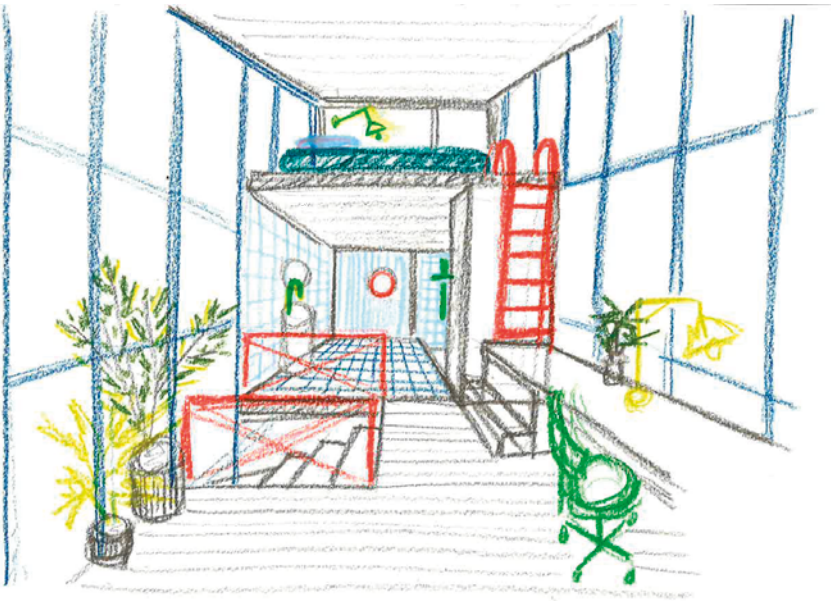
SCALE 1 : 500

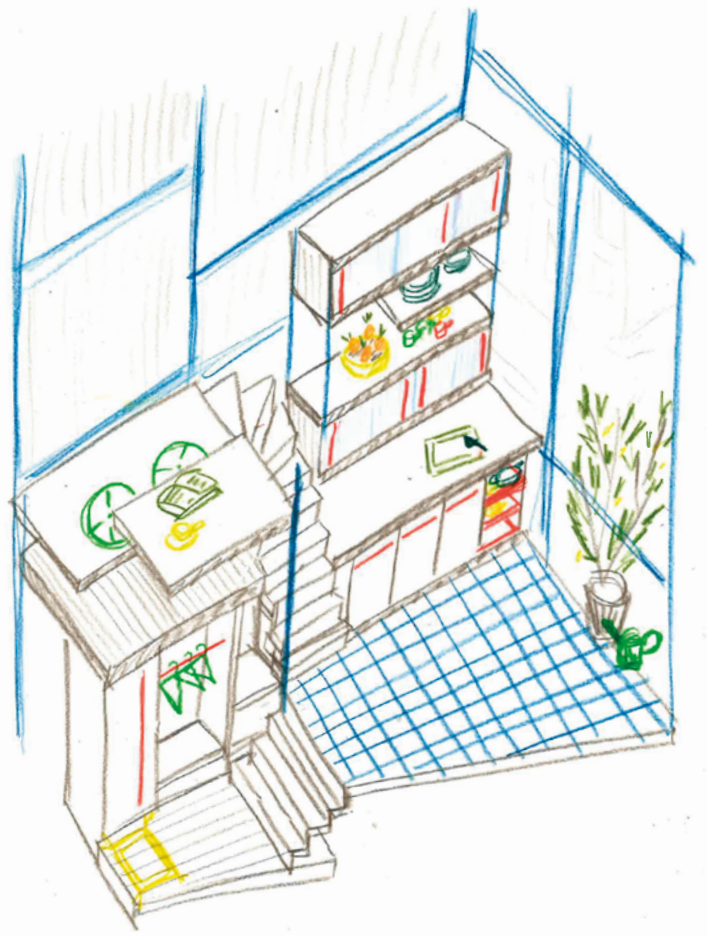

dining
+75cm
+45cm
0
210
entrance


220cm
260 cm
+90cm
0
cooking

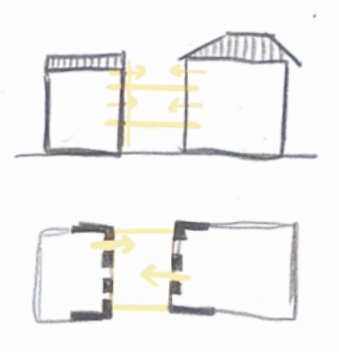

sleeping
showering

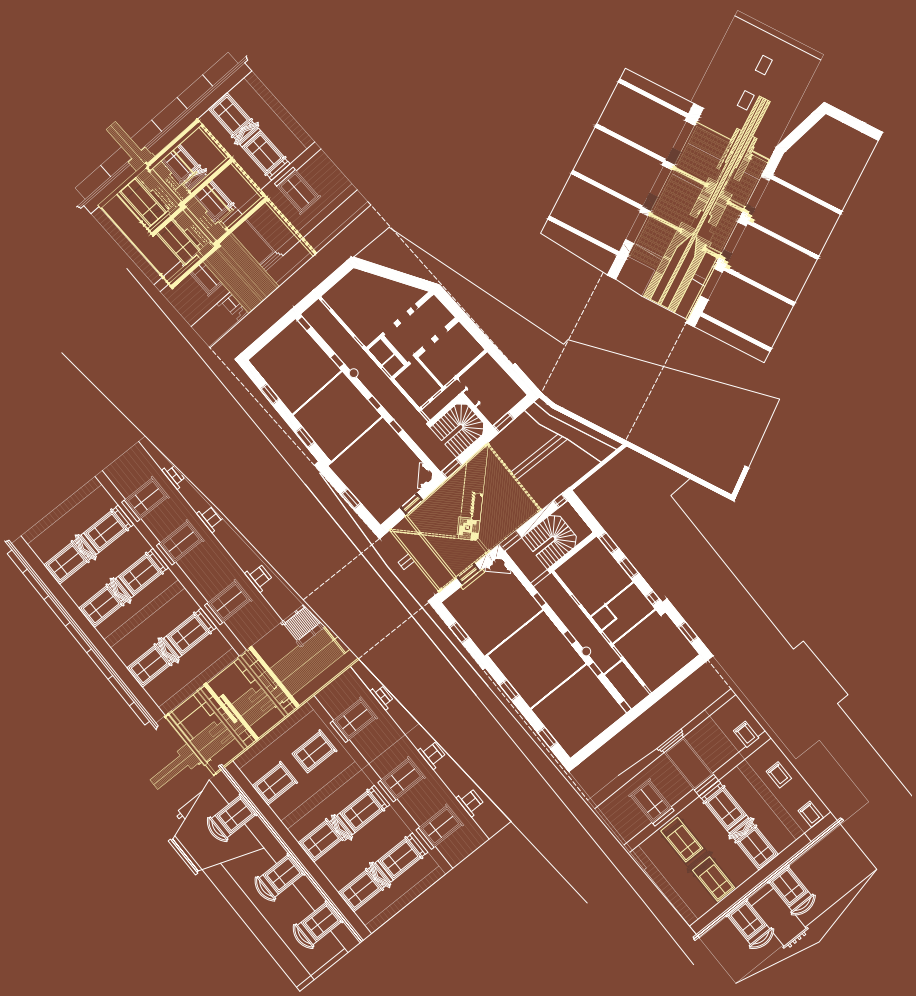

1
4
2
3





7.
EXTEND THE EXISTING
PROVIDE OUTSIDE SPACE

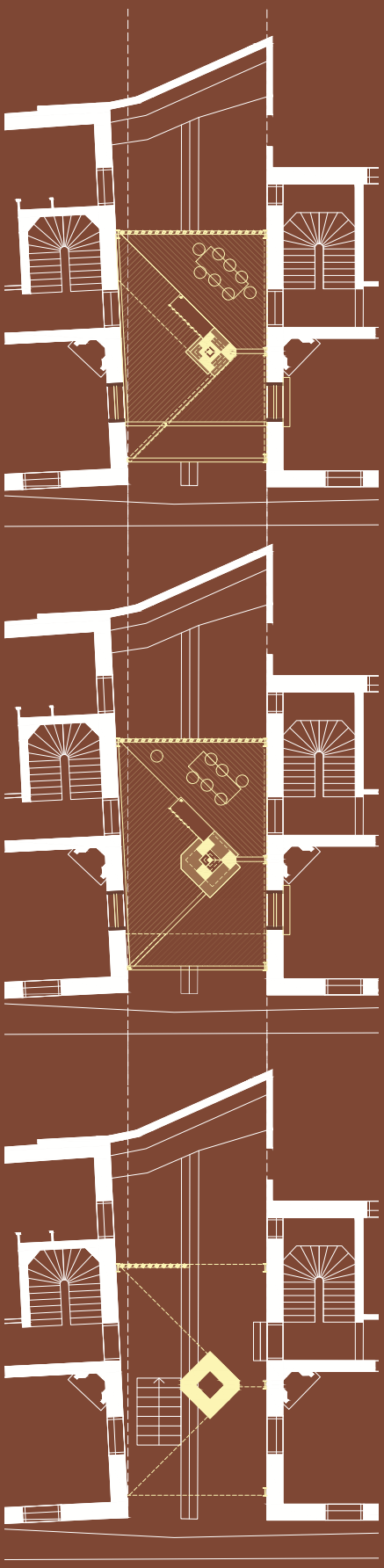




AREA : 45 [m²]

2 FLOORS (84 m²)

SCALE 1 : 500



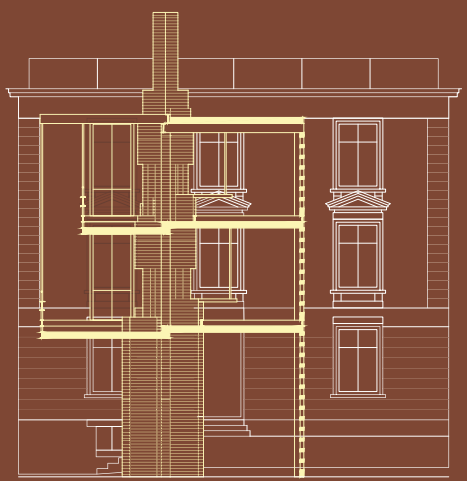
2ND FLOOR

1ST FLOOR

GROUND FLOOR

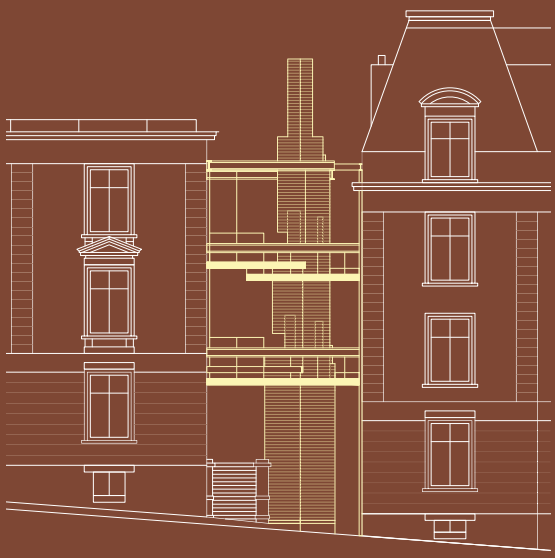
SCALE 1 : 250

CHIMNEY

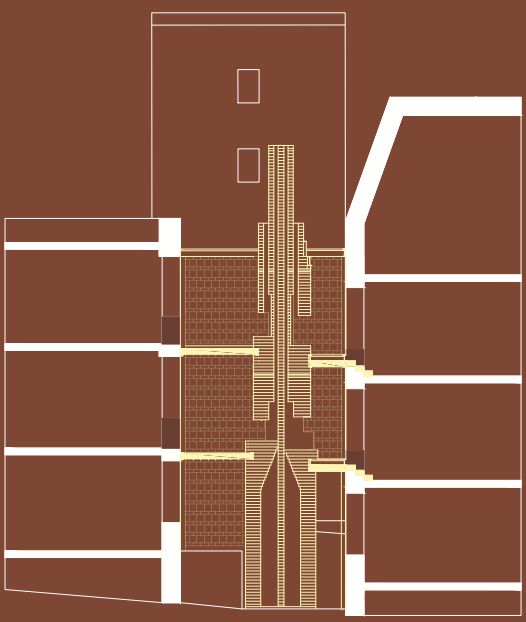


LONGITUDINAL SECTION

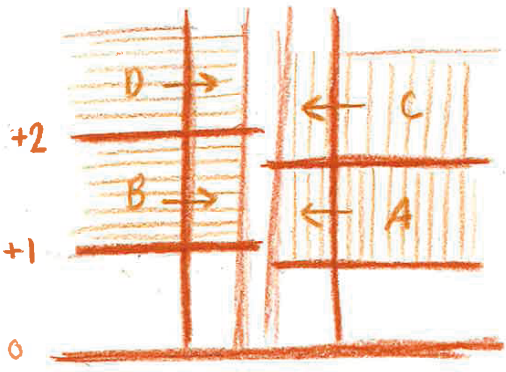
SCALE 1 : 250

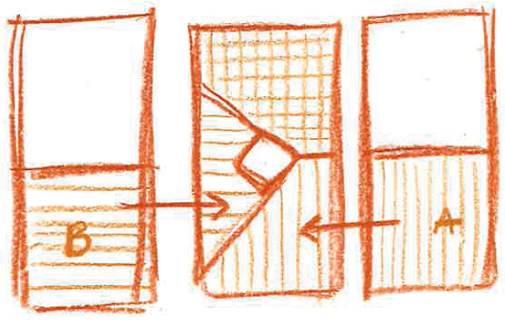


STREET ELEVATION

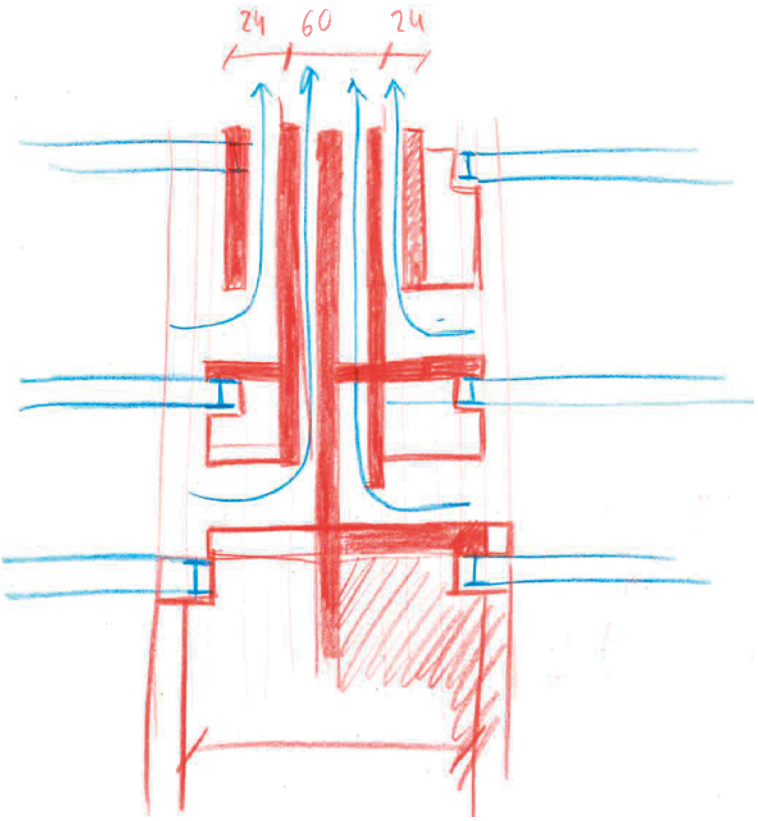


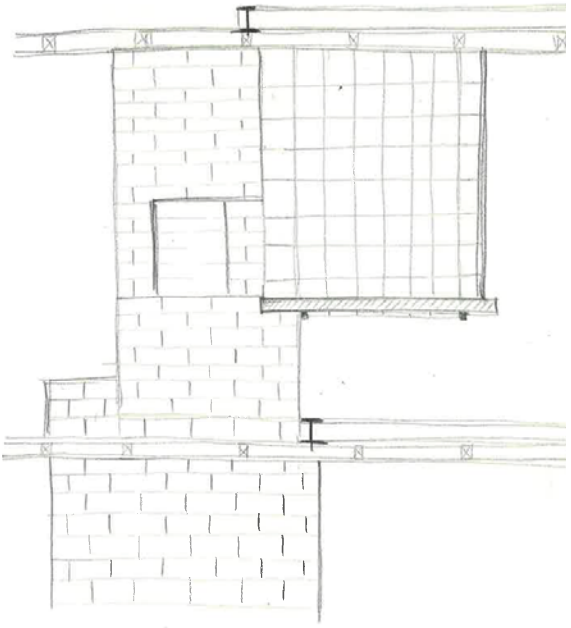
TRANSVERSE SECTION

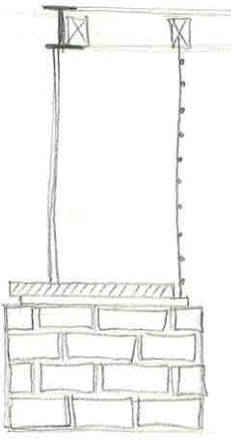


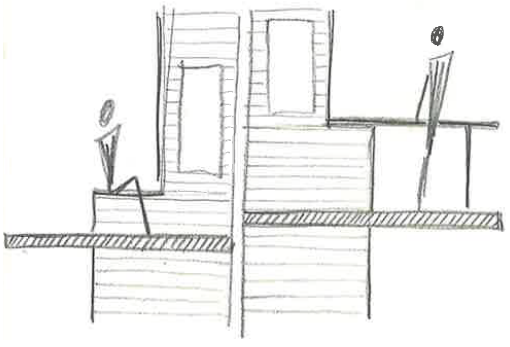


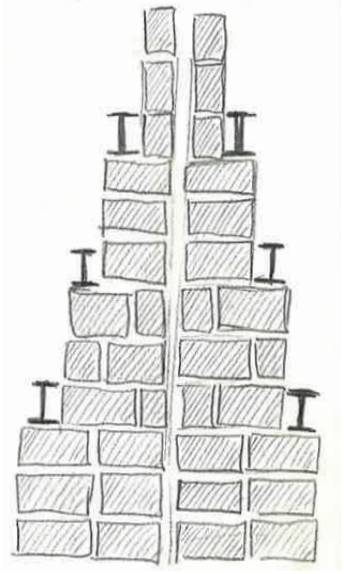
APARTMENTS ORGANISATION : AROUND SHARED BALCONIES


24
60
24

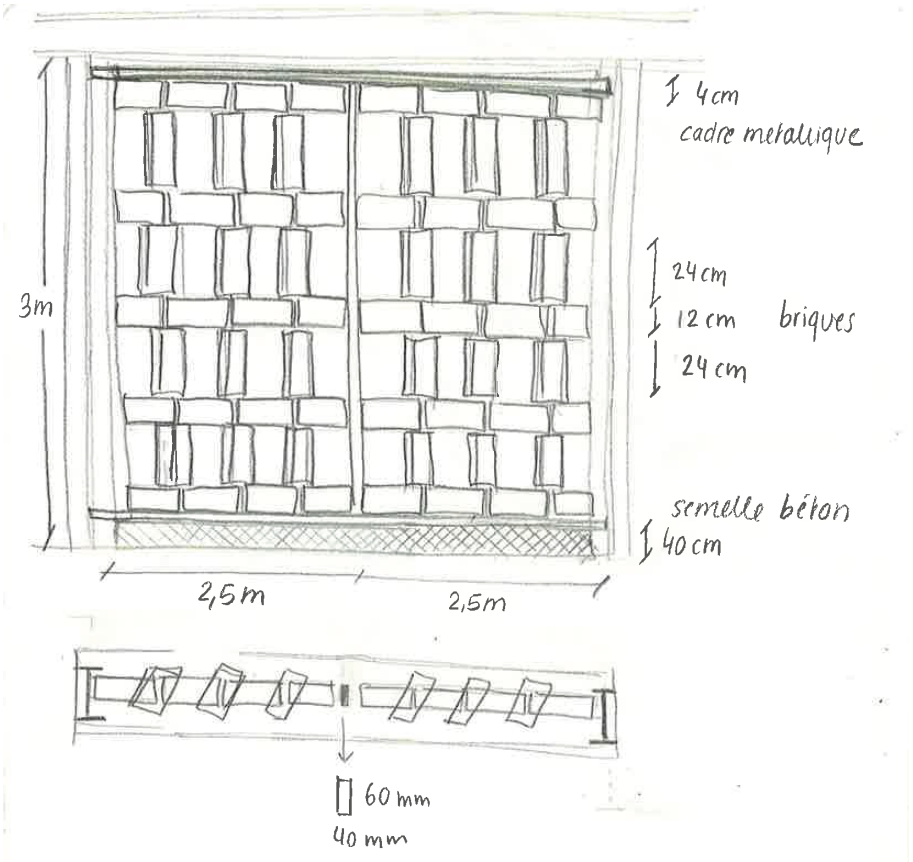




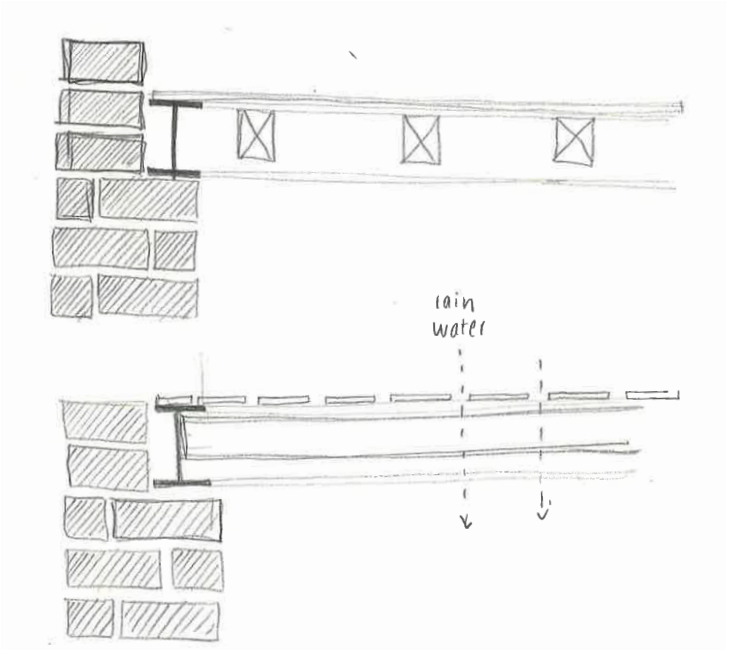




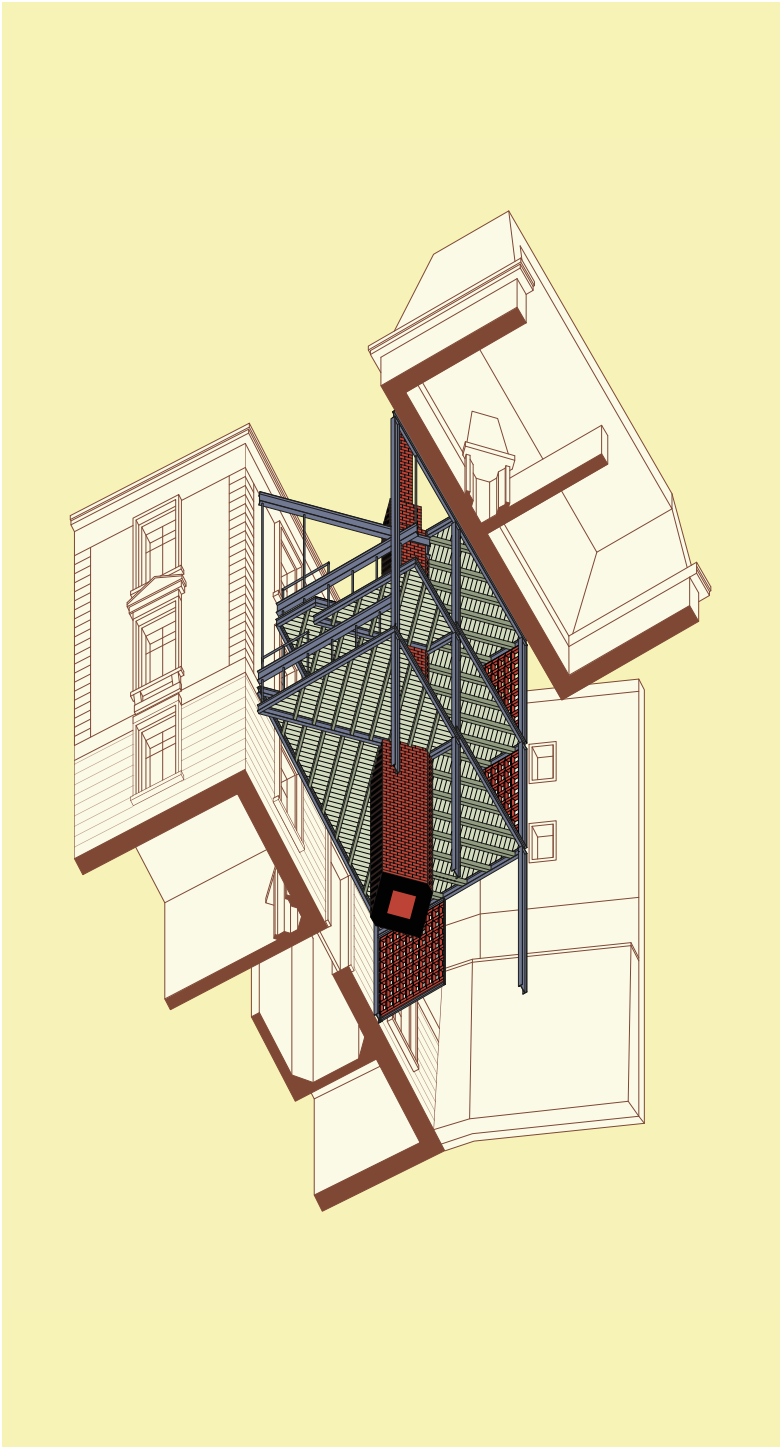
CHIMNEY AS CENTRAL ELEMENT : STRUCTURAL CORE



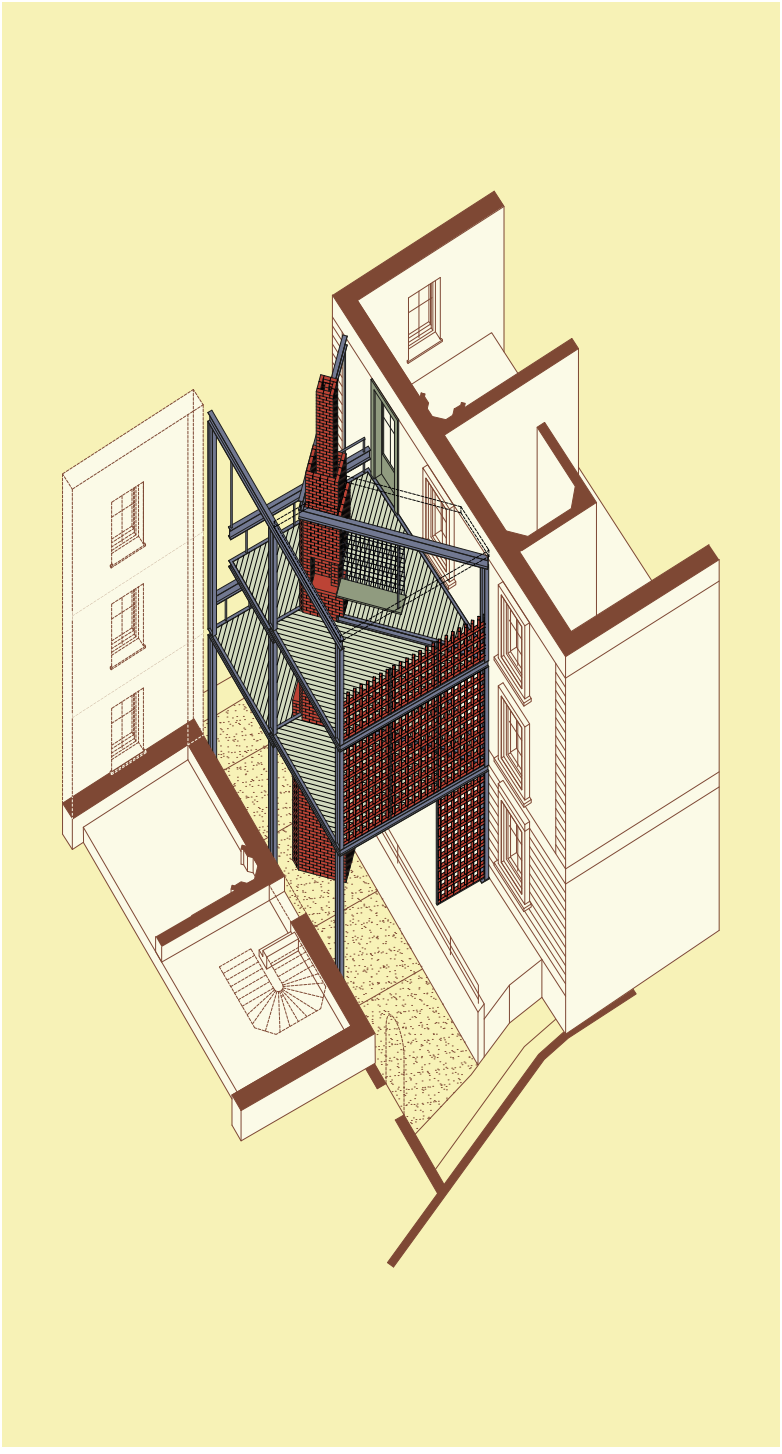
OPENWORK BRICK WALL DETAIL



OPEN-JOINT TIMBER DECK DETAIL



SCALE 1 : 250

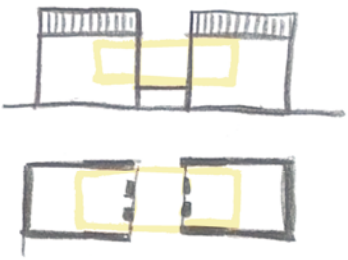


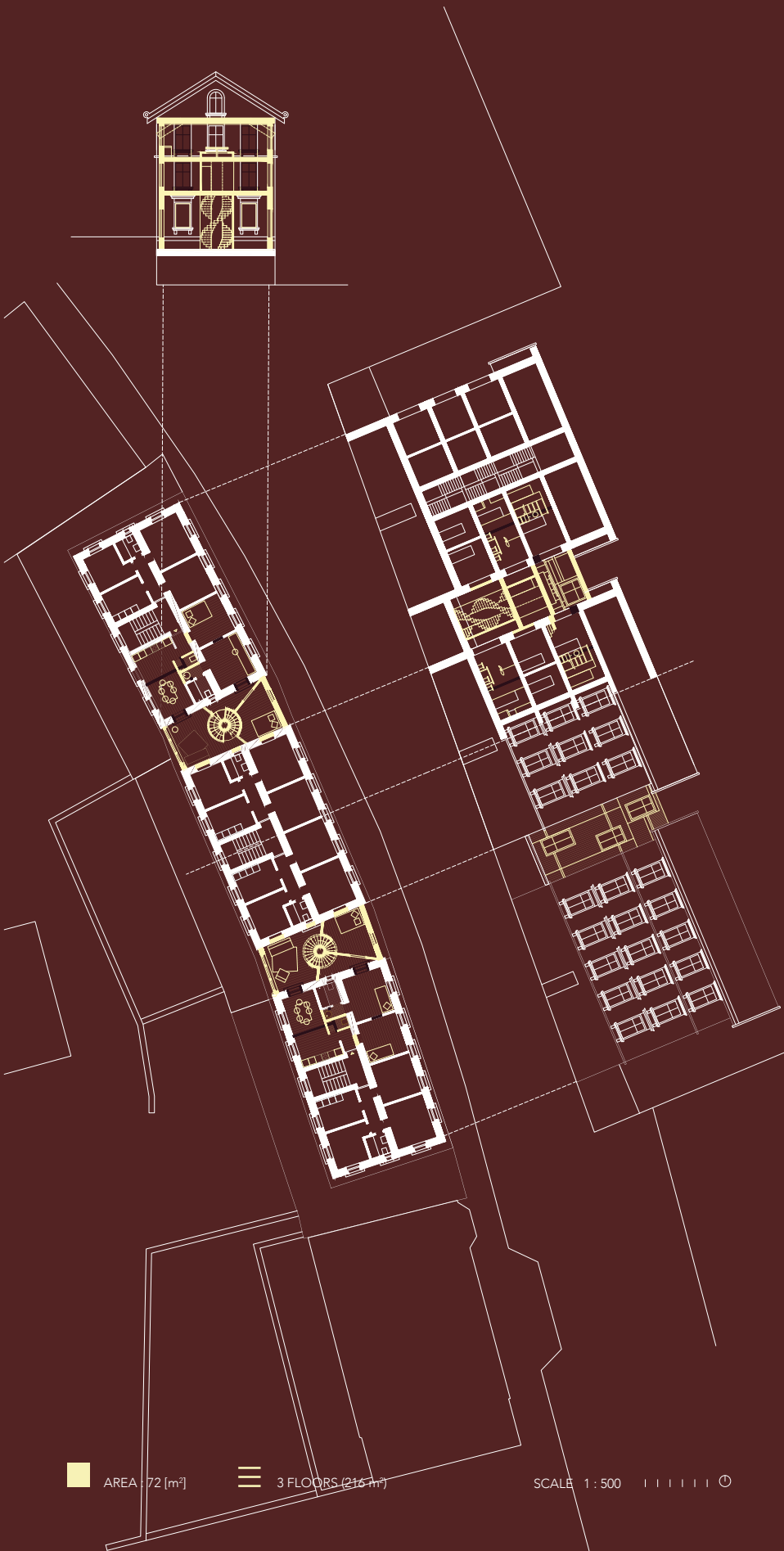
SCALE 1 : 250

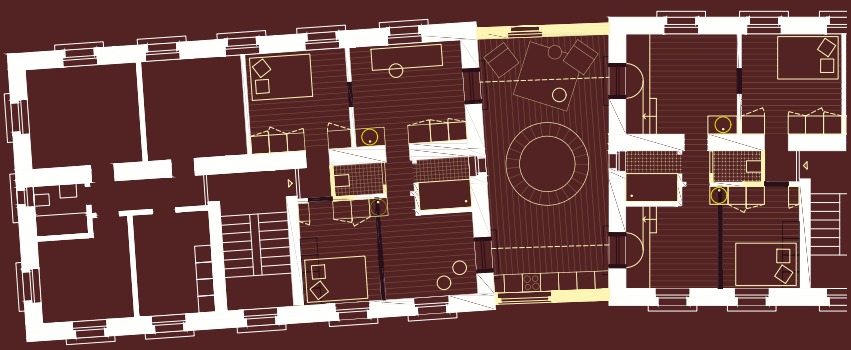
VIEW FROM FIRST FLOOR

VIEW FROM SECOND FLOOR

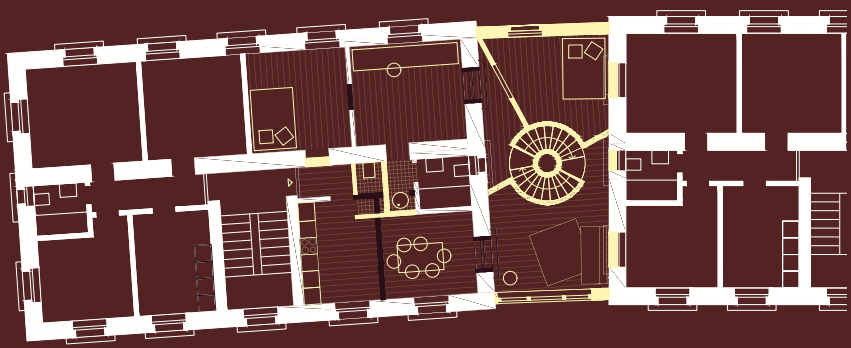
8.
CONNECT HOUSES
OFFER DIFFERENT CONFIGURATIONS



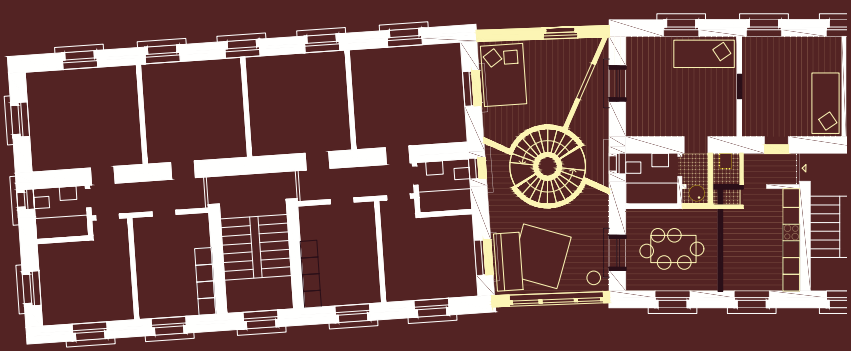

AREA : 72 [m²]
3 FLOORS (216 m²)
SCALE 1 : 500



2ND FLOOR

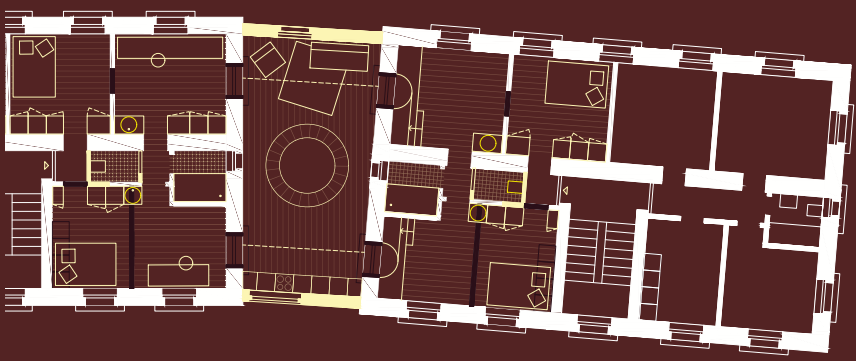


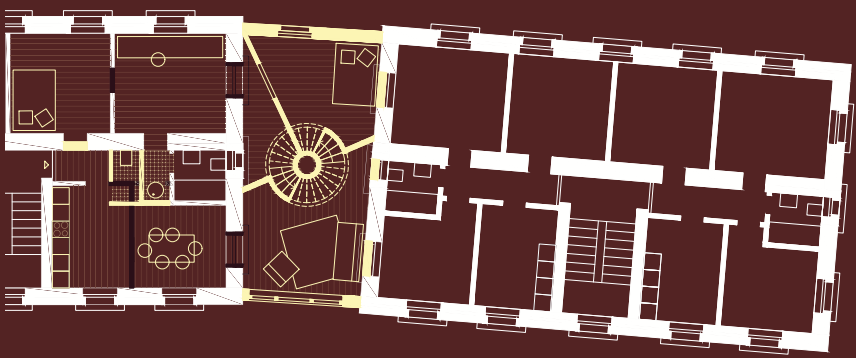
1ST FLOOR

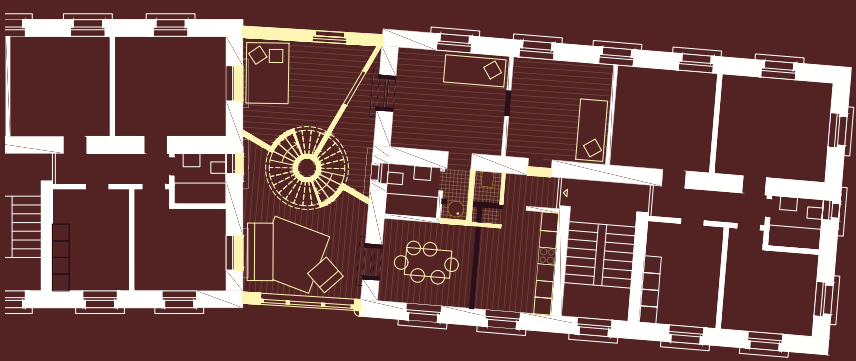


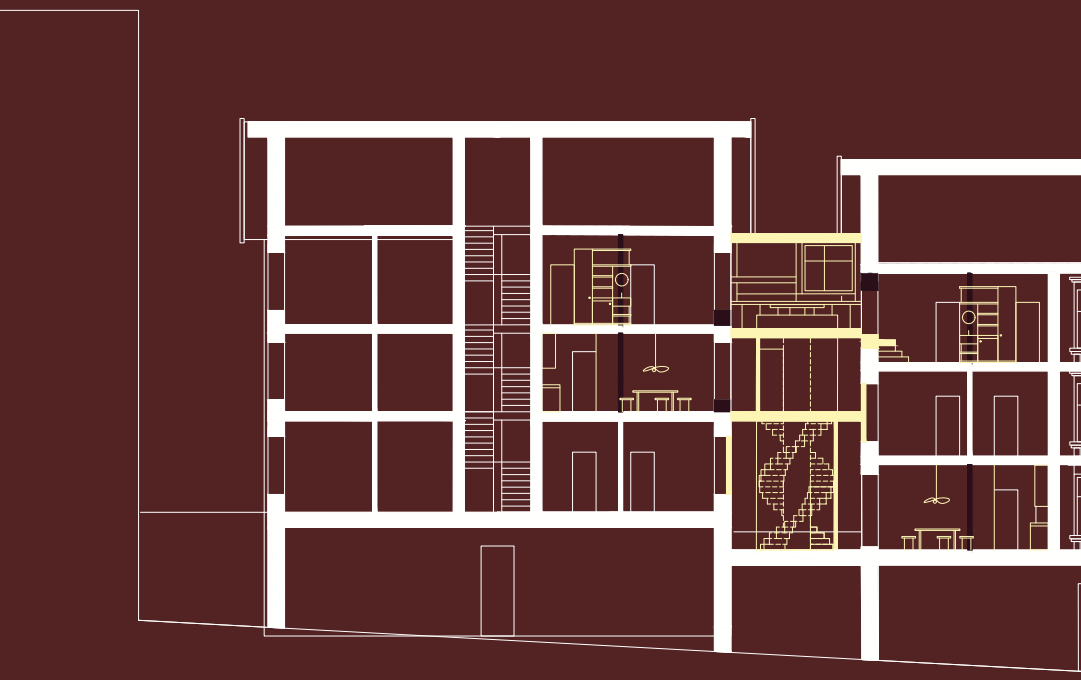
GROUND FLOOR

SCALE 1 : 250





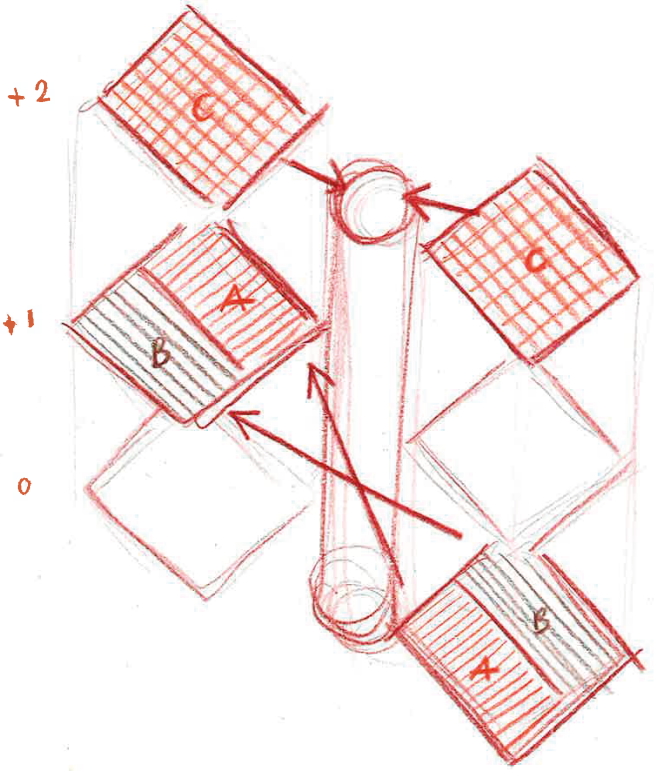




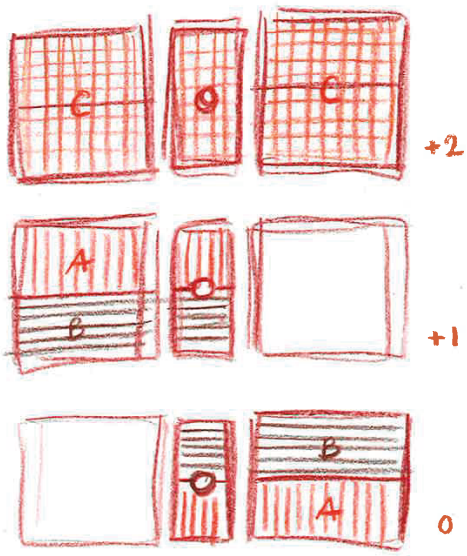
TRANSVERSE SECTION

SCALE 1 : 250

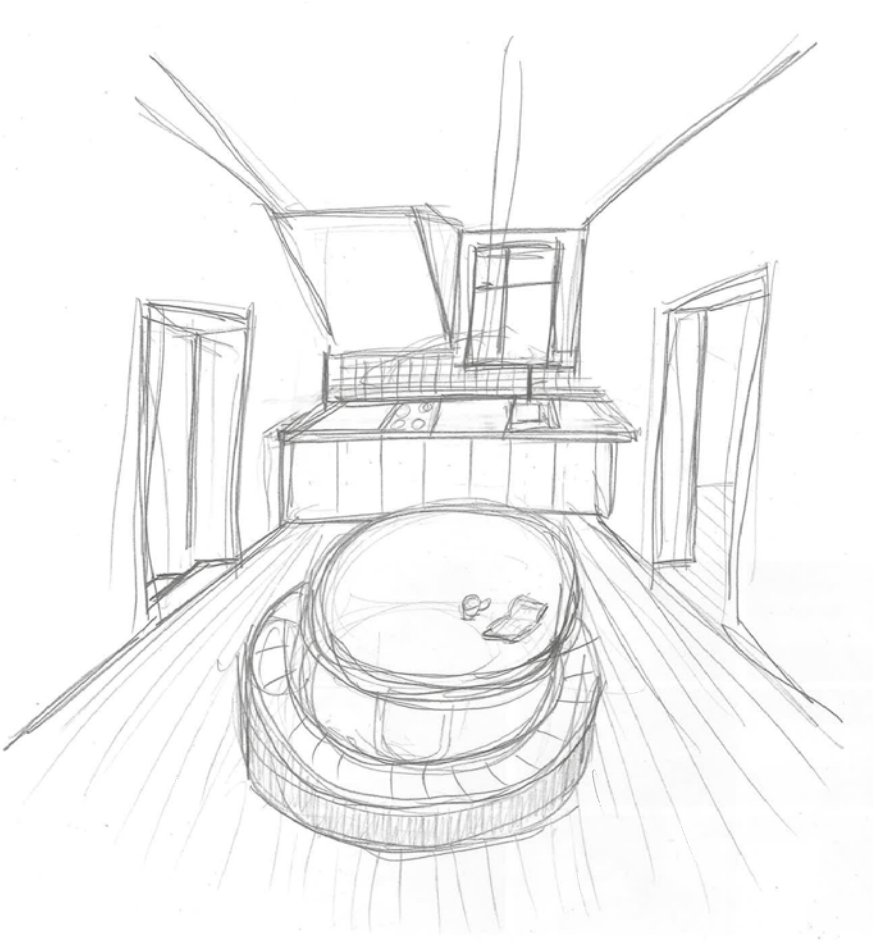
STREET ELEVATION



APARTMENTS ORGANISATION : CROSSED DUPLEX (A-B) AND SHARED TYPOLOGY (C)

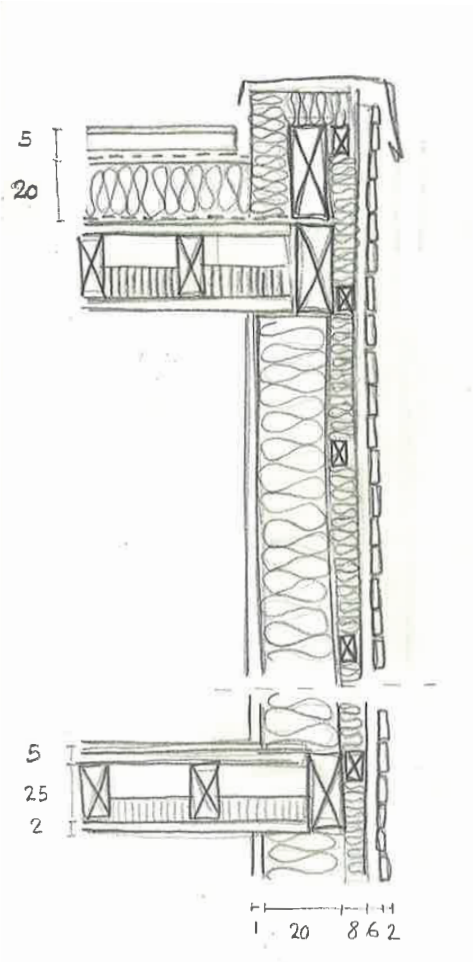

C
G
C
+2
A
B
+1
B
A
0

DUPLEX TYPOLOGY (FLOOR 0-1) : DAY ENFILADE

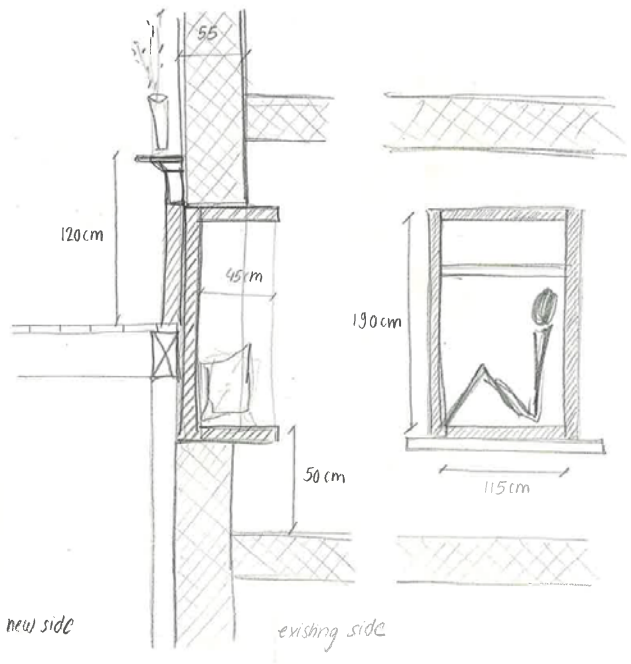


SHARED TYPOLOGY (FLOOR 2) : COMMON SPACE

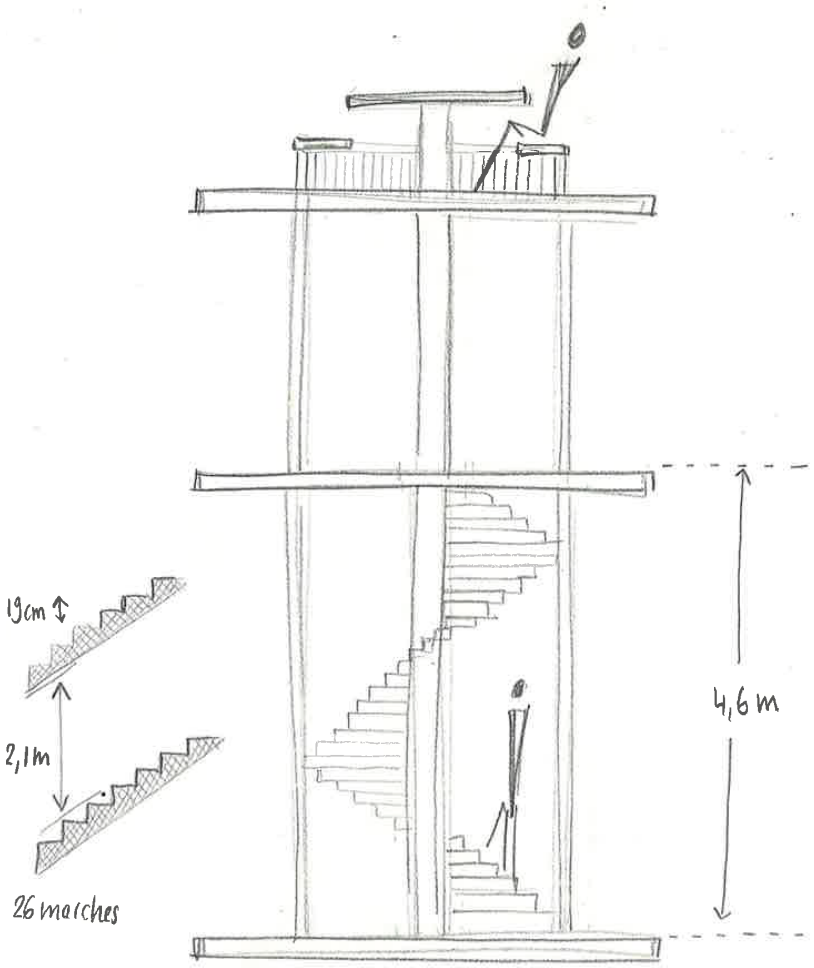
SHARED TYPOLOGY (FLOOR 2) : PRIVATE ROOM

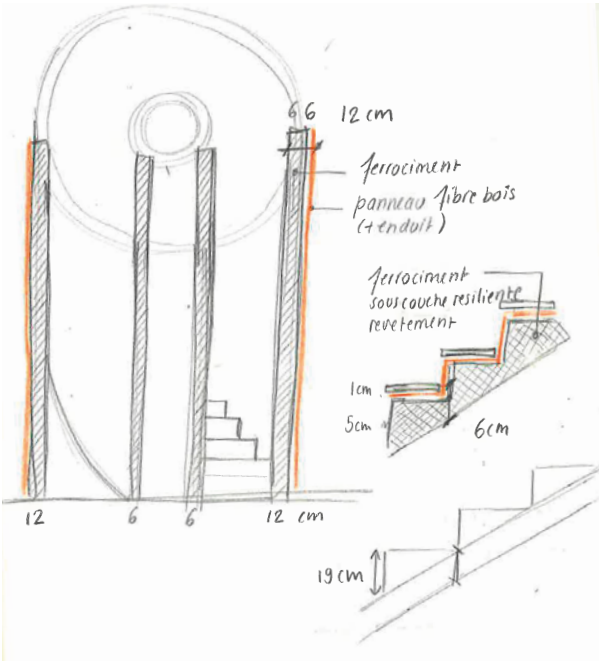


FACADE, SLAB AND ROOF DETAILS
(WOODEN CONSTRUCTION)

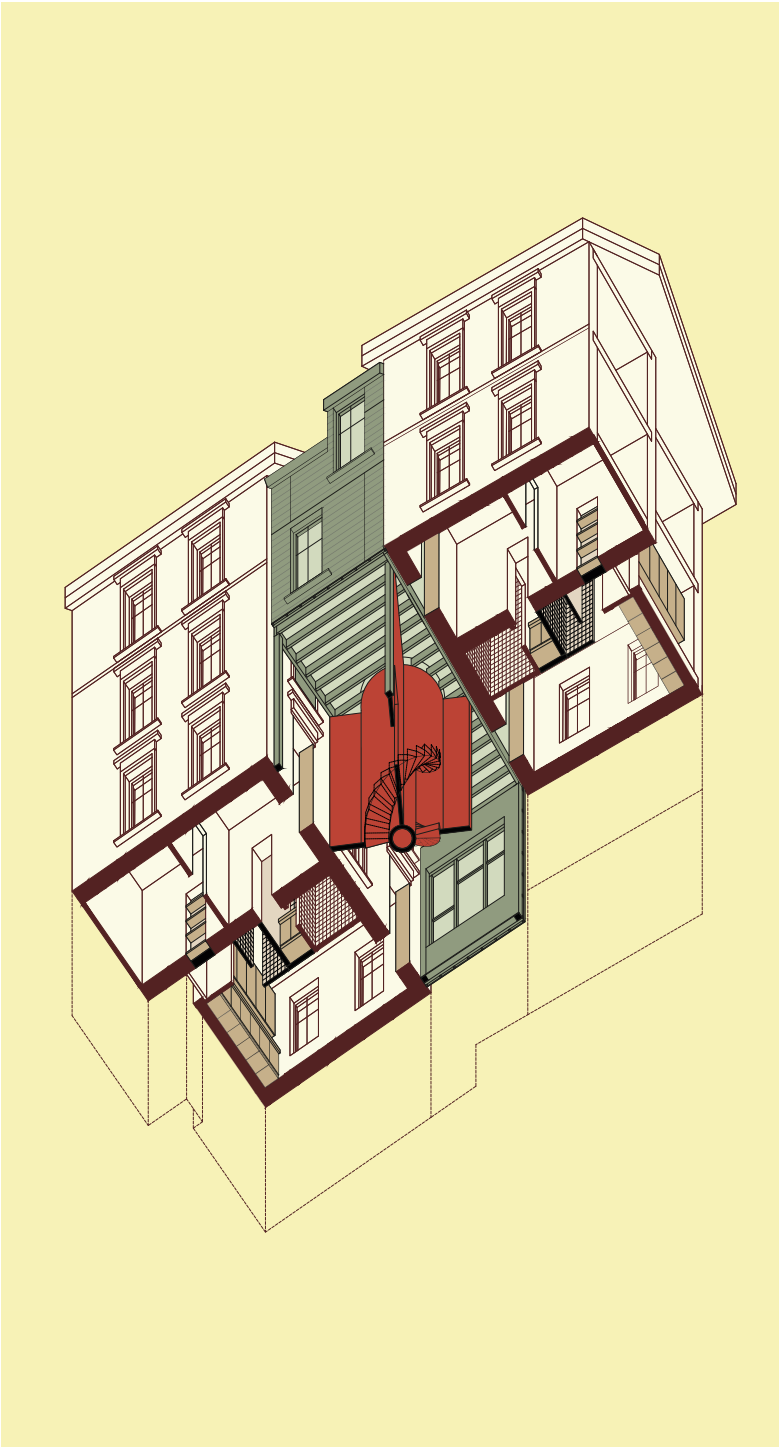


BLOCKED WINDOWS DETAIL





DOUBLE SPIRAL STAIR DETAIL
(FERROCEMENT)



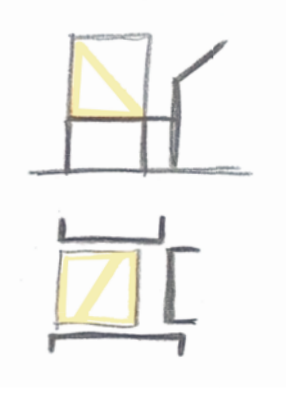
SCALE 1 : 250

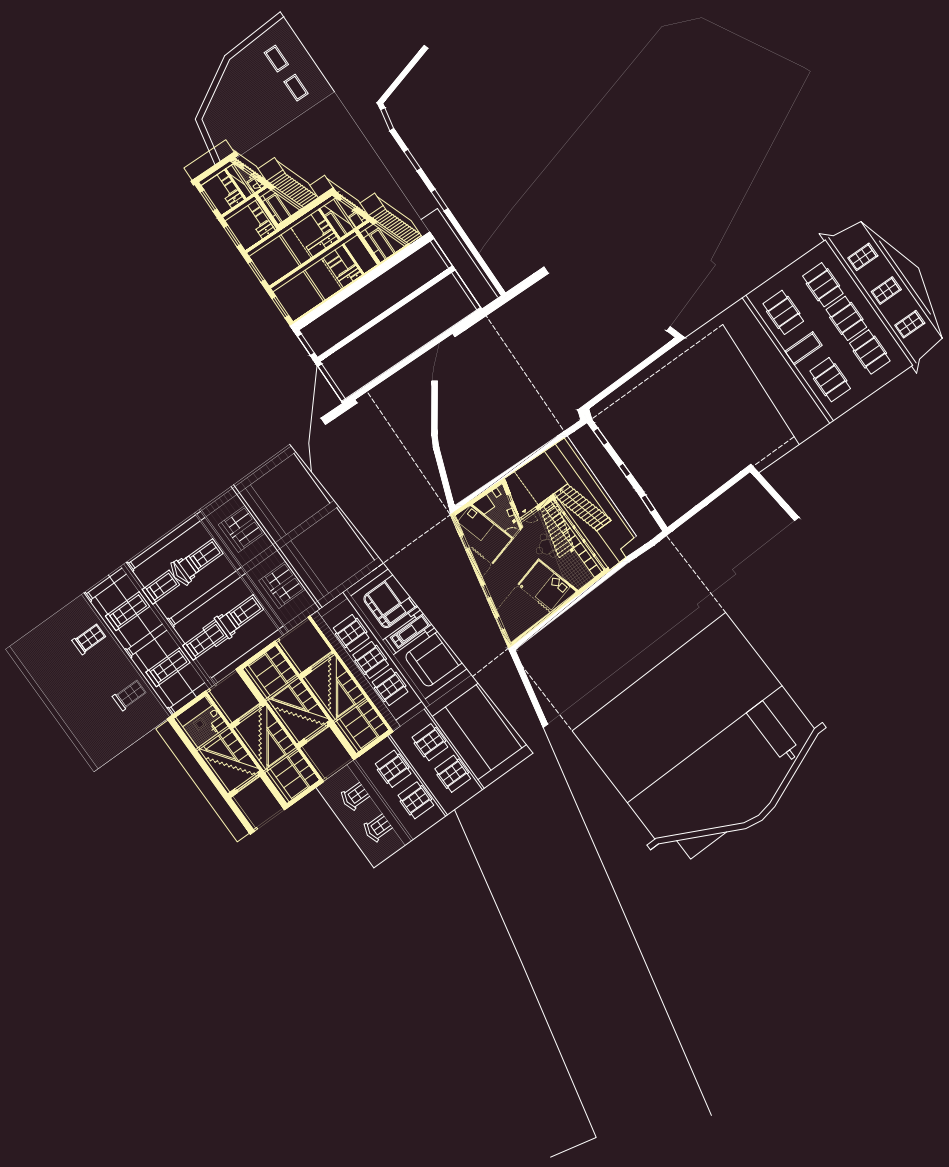
SCALE 1 : 250

VIEW FROM GROUND FLOOR

VIEW FROM SECOND FLOOR

9.
TOP-UP PARTIALLY
KEEP SOME ROOM OPEN



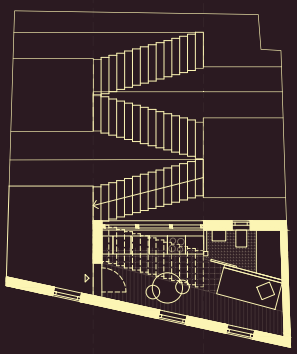


AREA : 75 [m²]

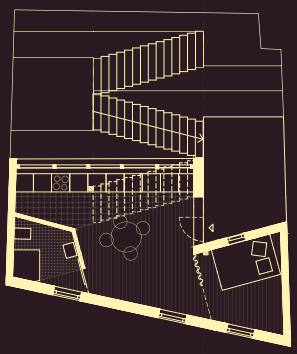
4 FLOORS (190 m²)

SCALE 1 : 500

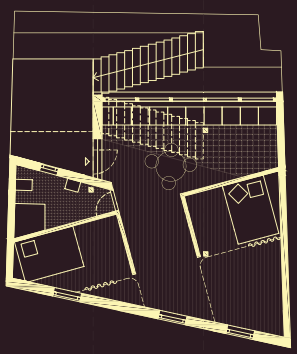
3RD FLOOR



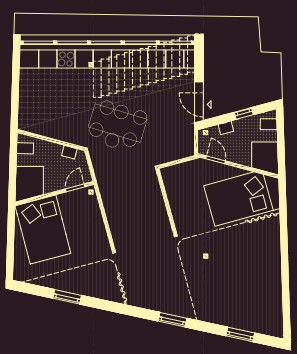
2ND FLOOR



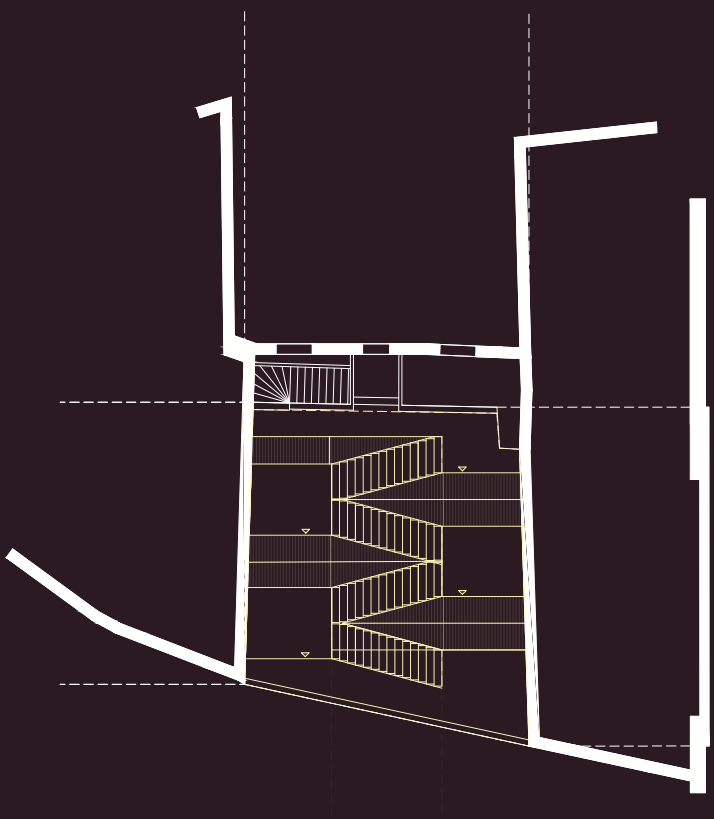
1ST FLOOR



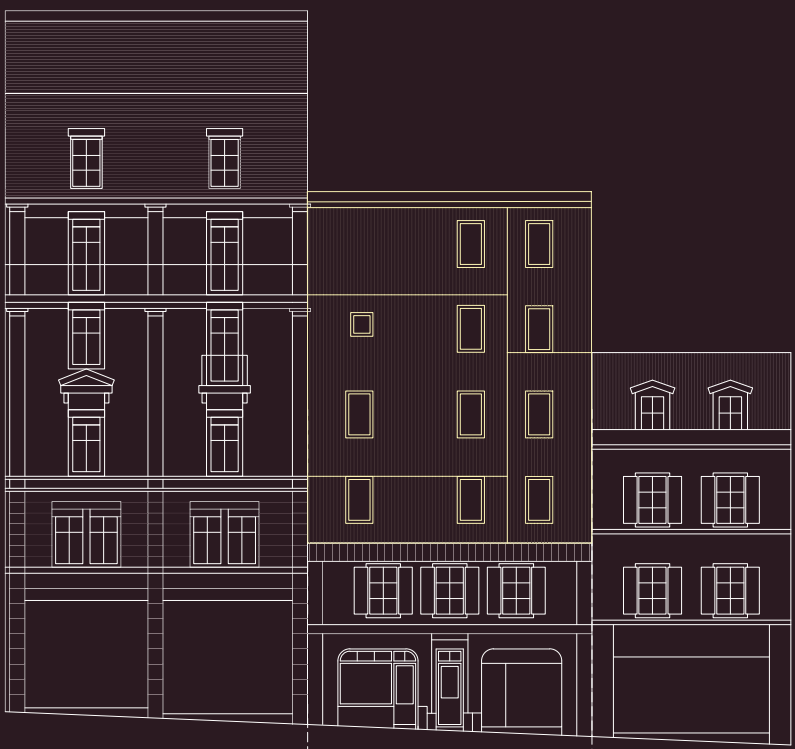
GROUND FLOOR



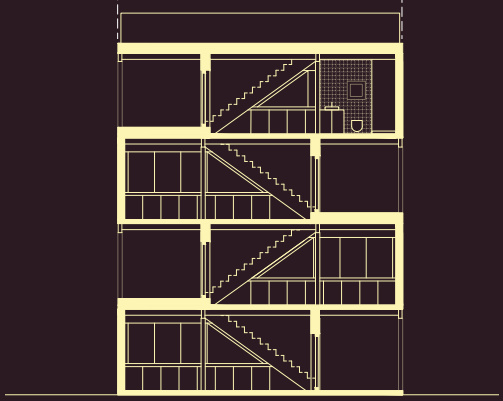
SCALE 1 : 250



ROOF

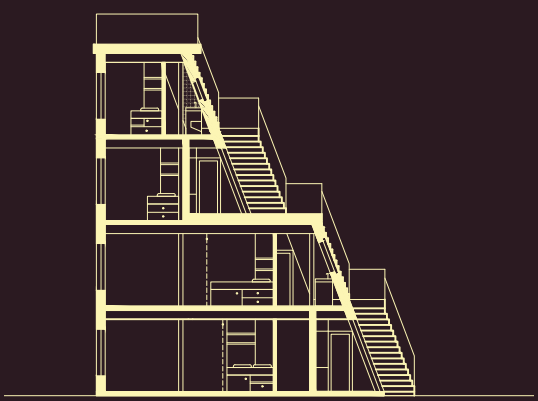


STREET ELEVATION

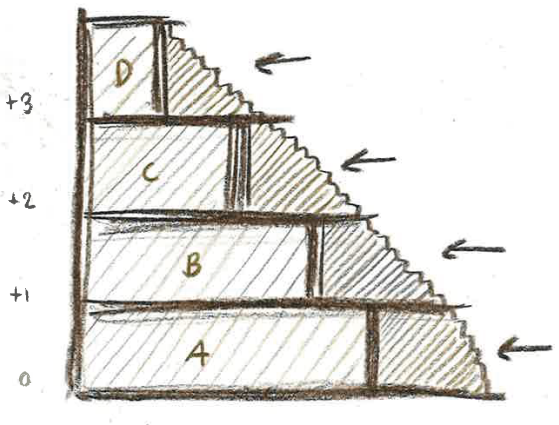


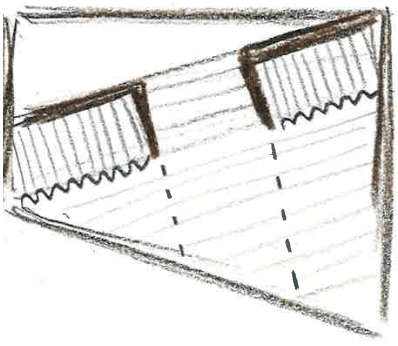
TRANSVERSE SECTION

SCALE 1 : 250

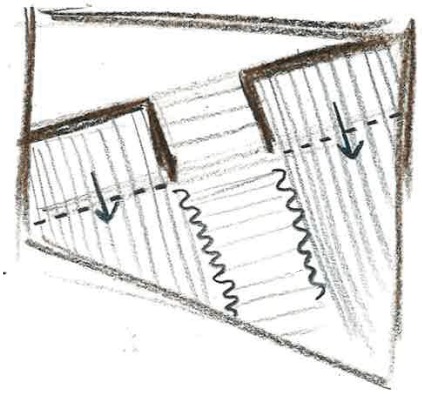


LONGITUDINAL SECTION

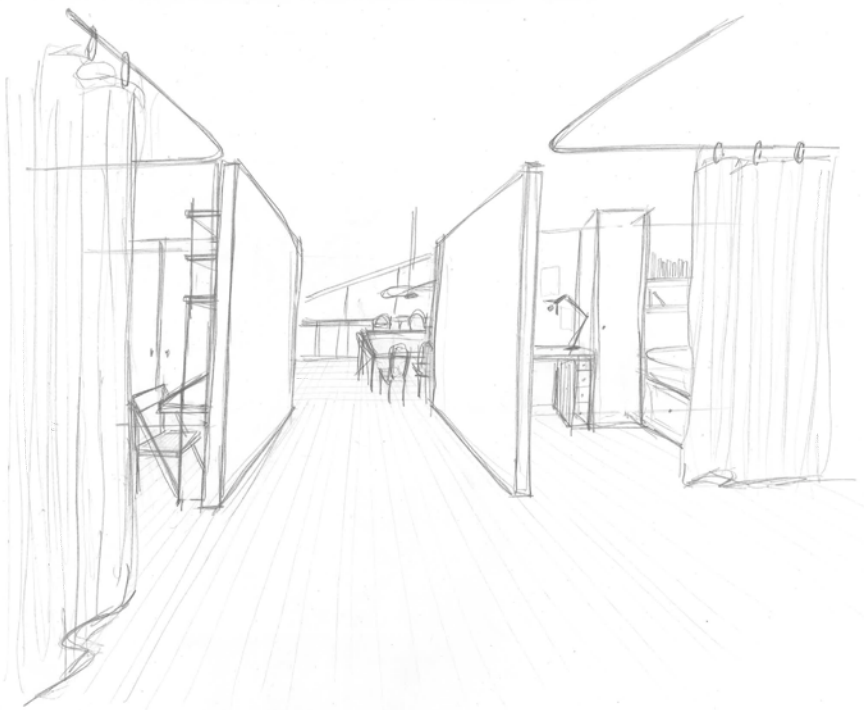

D
C
B
A
+3
+2
+1
0

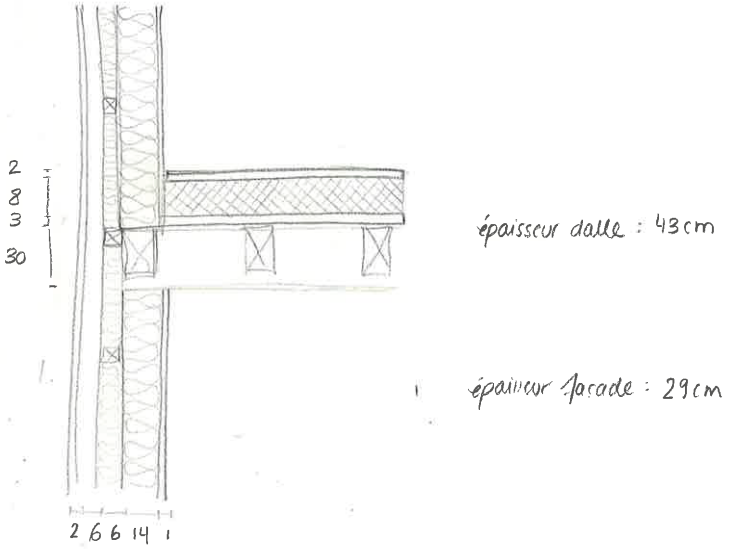


BUFFER SPACE : BIGGER COMMON SPACE

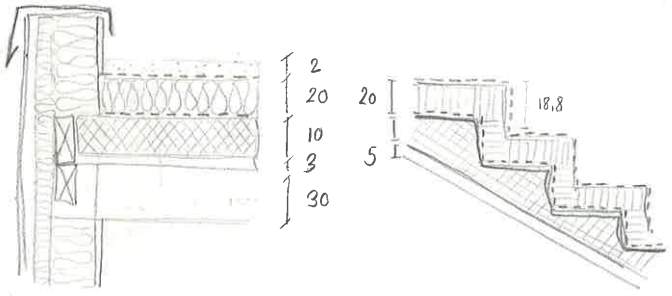


BUFFER SPACE : BIGGER PRIVATE ROOMS

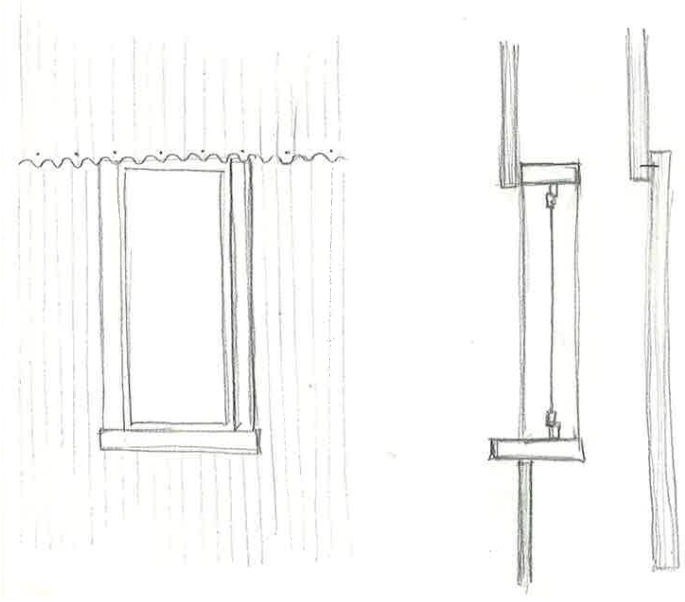




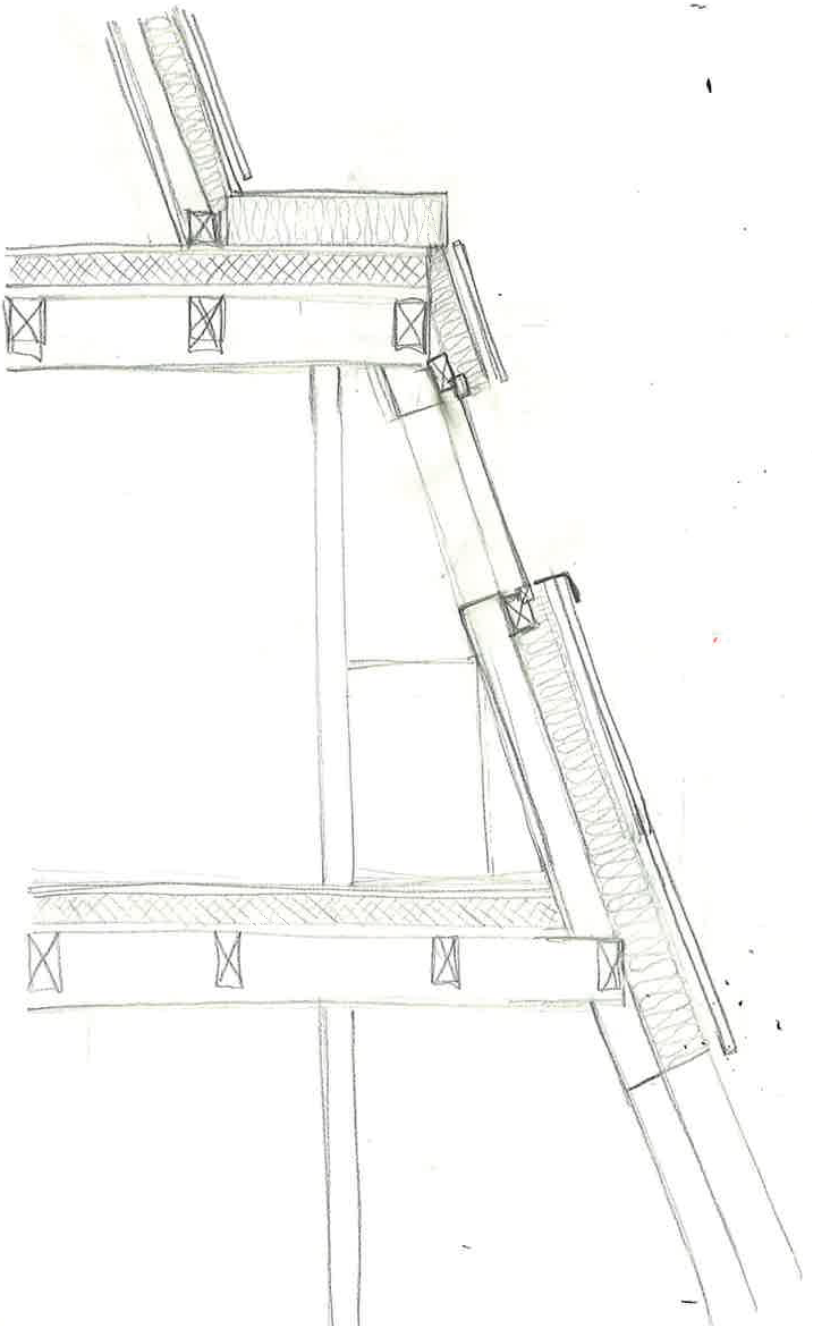
STRAIGHT FACADE AND SLAB DETAILS



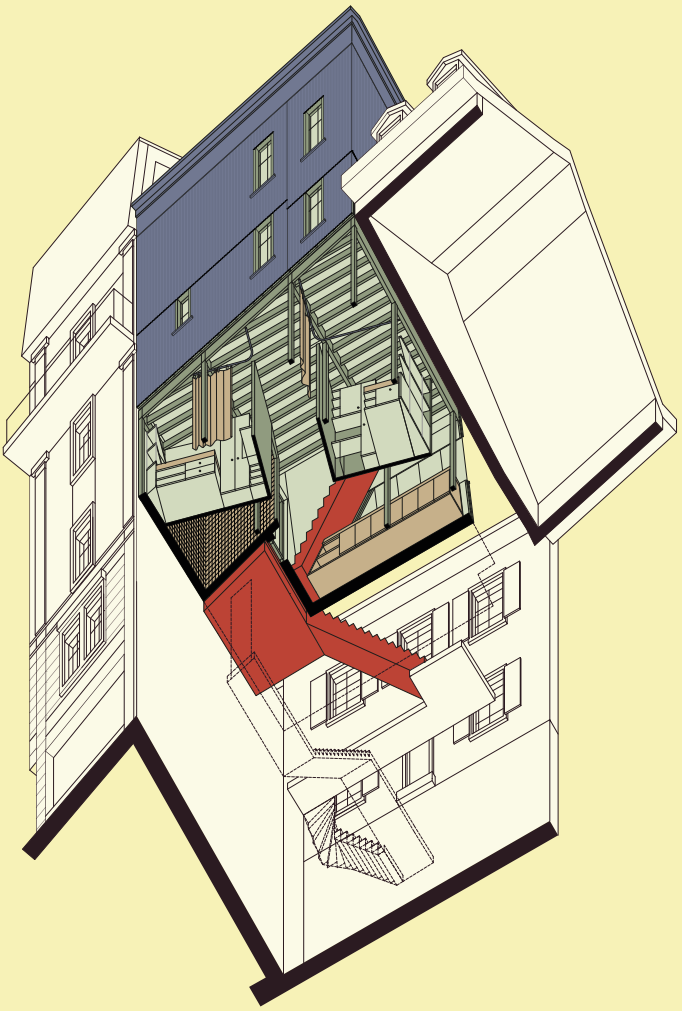
ROOF AND STAIRS DETAILS



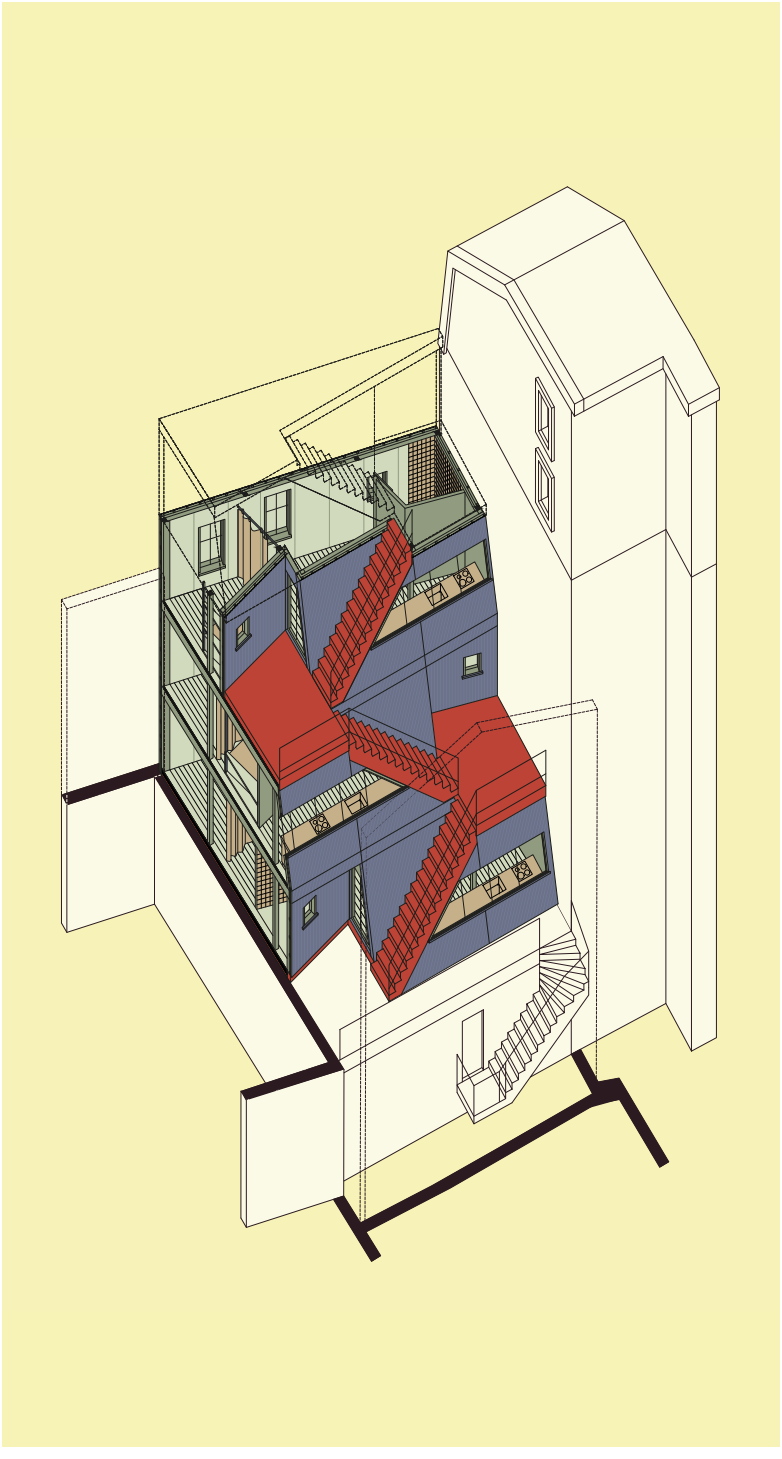
CORRUGATED SHEET METAL CLADDING



INCLINED FACADE AND SLAB DETAILS
(WOOD-CONCRETE HYBRID SYSTEM)



SCALE 1 : 250



SCALE 1 : 250

VIEW FROM GROUND FLOOR

VIEW FROM SECOND FLOOR

IV. A COMMON ATTITUDE

Looking back at the projects altogether, a number of recurring concerns begin to emerge. Prioritizing, enhancing and bringing forward existing qualities, working with interstices calls for a minimalist mindset, one that seeks minimal intervention with maximal effect. The projects rely on precise and attentive gestures, leading to small-scale interventions shaped by constraints where every centimeter, every small detail and every-day habit matters. Taken together, they point toward something larger: a scattered constellation of actions across the city, each project being part of a whole. Despite the varied responses, a common attitude takes shape – one that values what already exists and reclaims the city's forgotten gaps.

In the end the project is mainly a way of thinking, a call to become more aware of what surrounds us. It offers a strategy for cities that are already built and yet still full of potential. Above all, it invites us to notice the gaps and to start imagining through them.

ACKNOWLEDGMENTS

To Jo and Mattia for the follow-up, the inspiring discussions and for allowing me to have fun pushing these projects further,

A Nolan pour son aide précieuse et pour m'avoir partagé un peu de son amour des cartes,

A Claude et Caroline pour avoir toujours été là et avoir su trouver les mots justes,

A Jacqueline pour le soutien constant,

Et à Sab, Jean-Luc et Remo pour avoir rendu ces mois intenses pleins de vie et de beaux souvenirs.