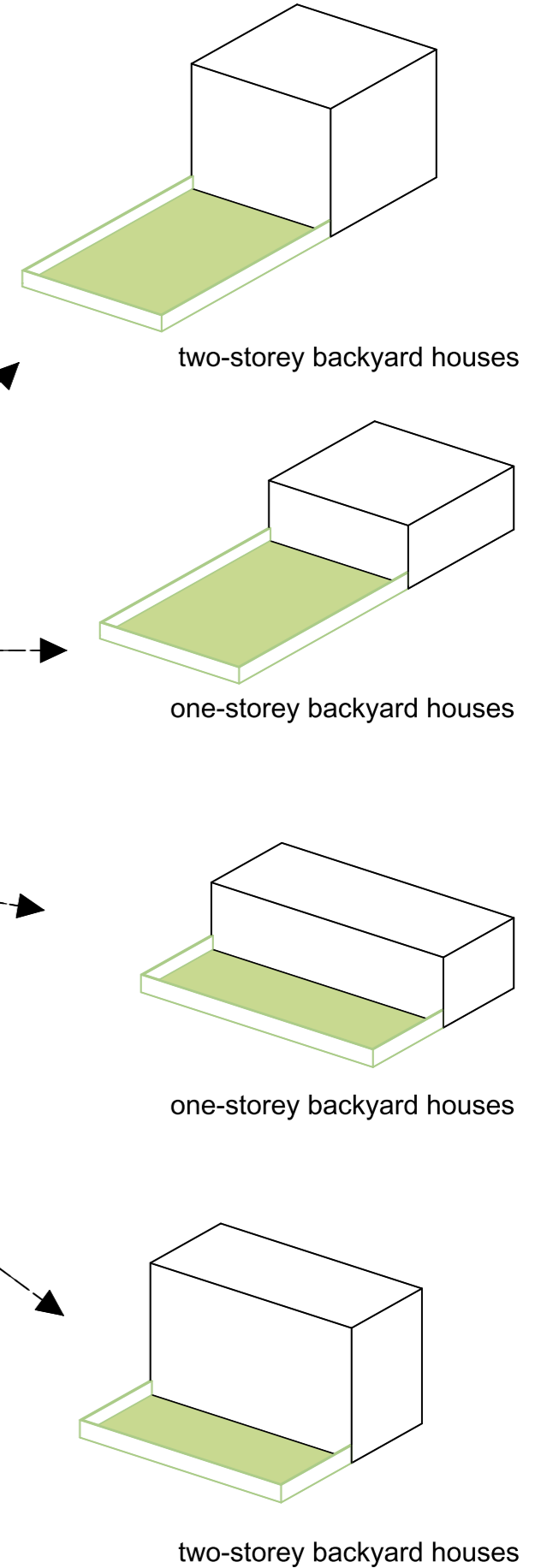
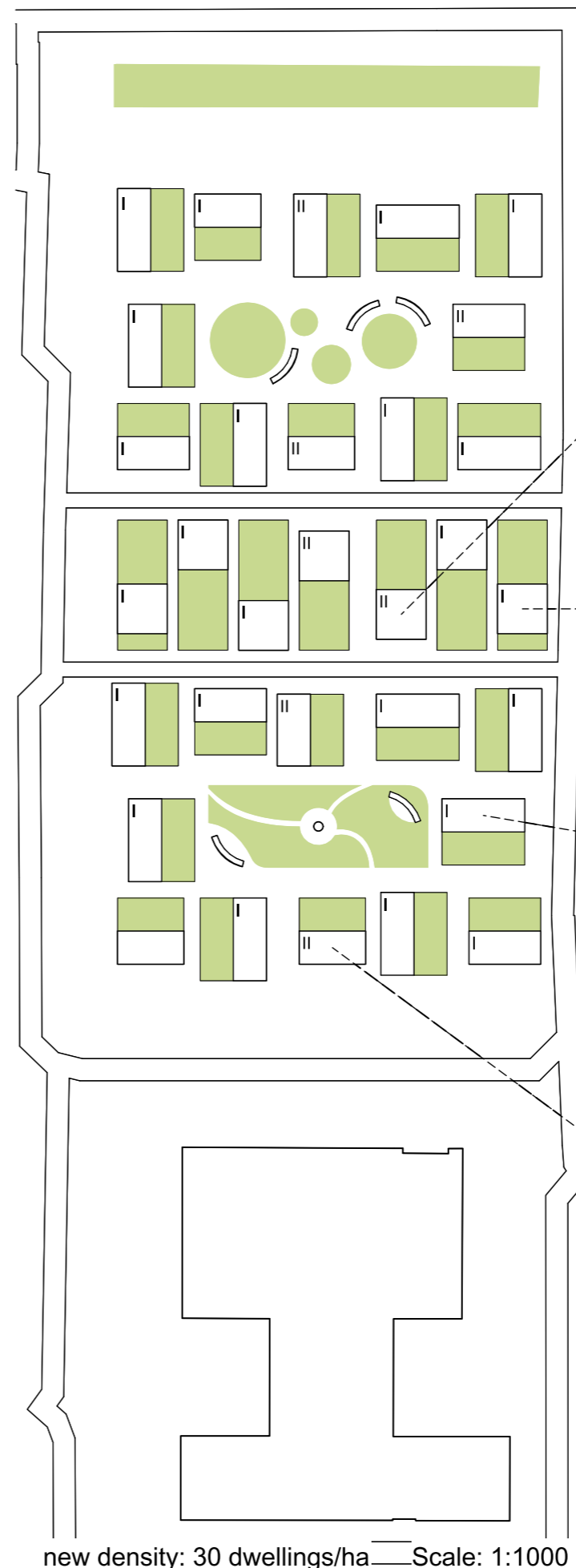
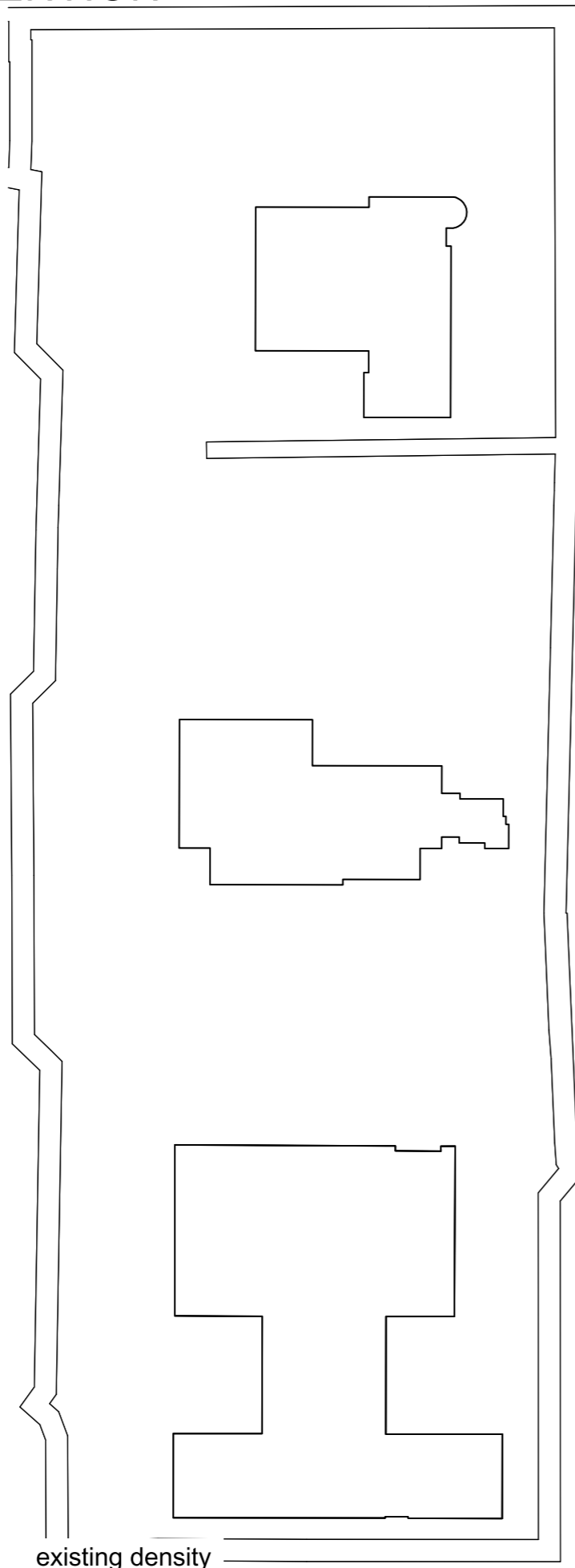


# 1. LOW-DENSITY INTERVENTION

The selected plot is located to the east of a residential area and next to other industrial buildings. There are currently three large industrial buildings on the area, two of whom we demolished and built a small garden city, oriented on the Garden City Puchenau in Austria. It combines Atrium and Courtyard Houses and is using the plot much better than a detached single-family house. This type of city structure allows a higher density of residents and still provides a high quality of living. Each unit has privacy, a garden or terrace.

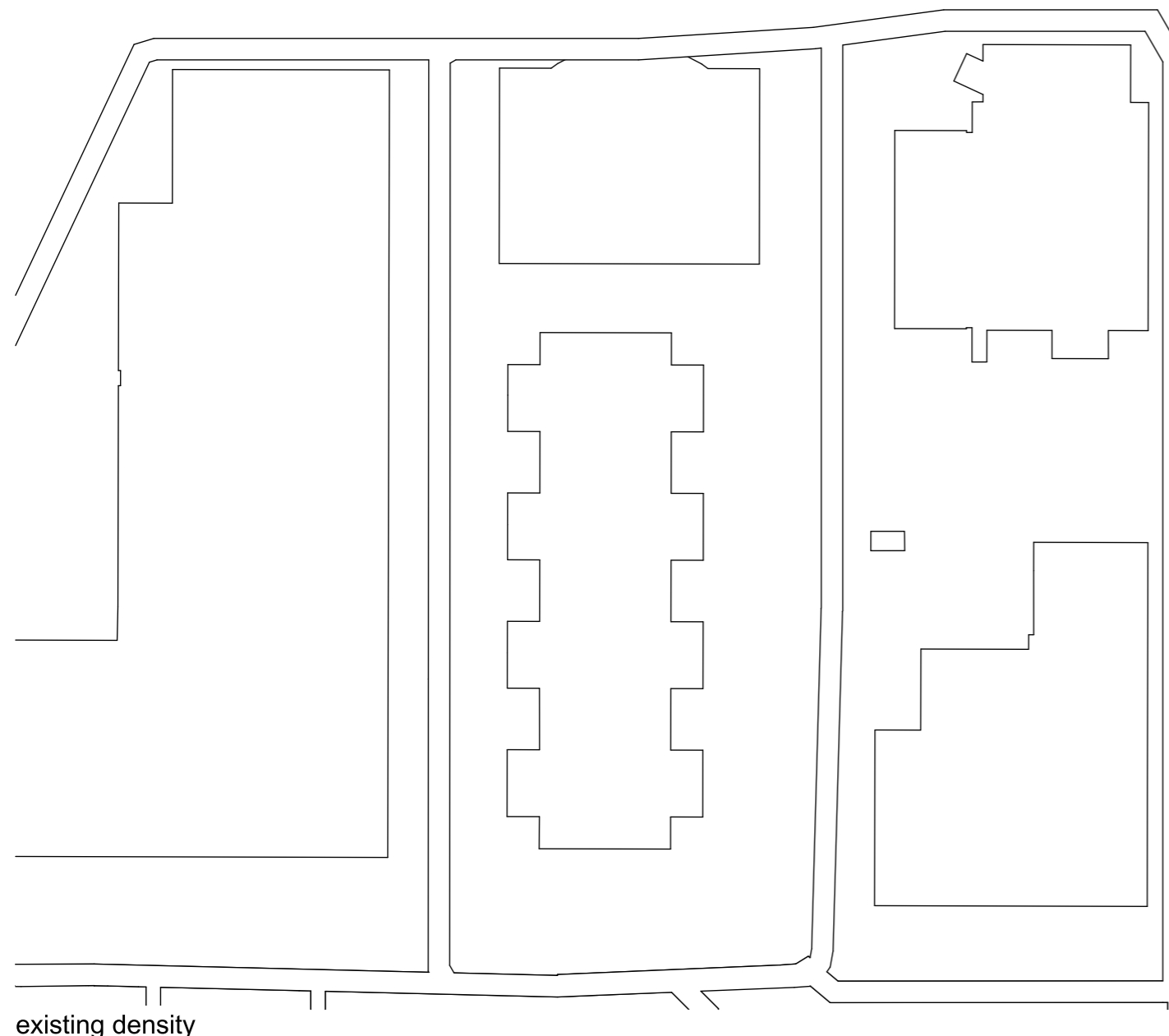
Located on the axes of the neighbouring housing estate, we have developed two block structures. Each house is single-storey, approx. 80-100qm in size and has a private garden. Between the blocks there are freestanding solitary houses arranged in a row as a link. There is a large amount of private and public green space.



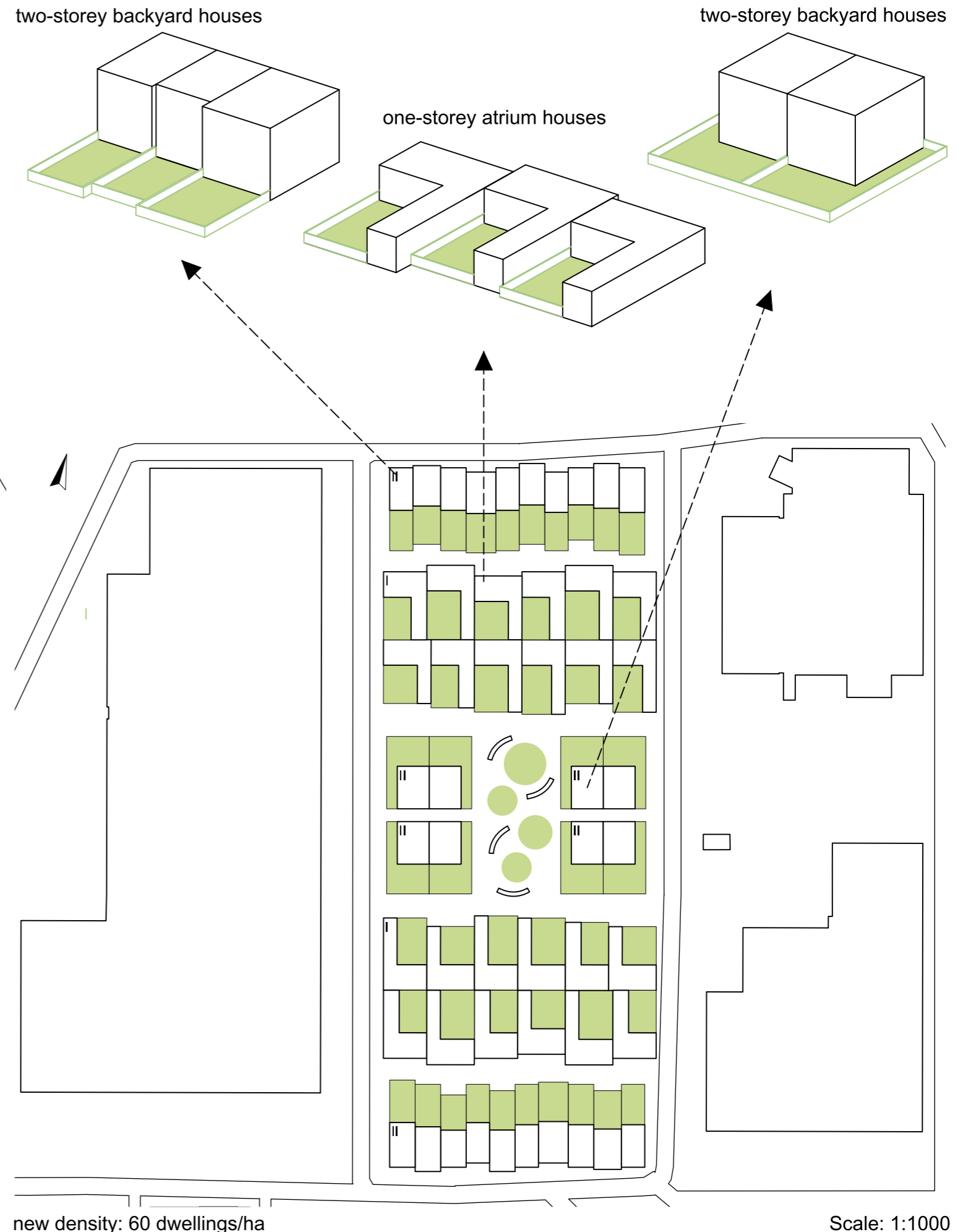
## 2. MIDDLE - DENSITY INTERVENTION

The selected plot is located to the east of a residential area and next to the area with low-density. There are currently five large industrial buildings on the area, two of them we demolished and built also a garden city. In the plot is no traffic noise for more comfort. On the east and west sides, a row of two-storey detached houses shield the site from the street.

Each house has a private garden and approx. 120 sqm of floor space. In front of each house, there is a smaller, single-storey house with a garden and approx. 80 sqm of floor space. These are arranged in loose rows. In the middle, there are two-storey semi-detached detached houses with approx. 150 sqm of floor space. These are arranged around the central square.



existing density



new density: 60 dwellings/ha

Scale: 1:1000

two-storey backyard houses

two-storey backyard houses

one-storey atrium houses

### 3. HIGH - DENSITY INTERVENTION

On the selected site, there is currently only one type of row houses with a density of approx. 50 dwellings/ha. So we only have to double the density to achieve the desired number.

Also here, we have adopted the atrium house/courtyard house type to enable high-quality living even with a higher density. Each apartment (between 42-104 m<sup>2</sup>) has a private open space. Each of the two-storey apartments have a garden on the ground floor flat and a spacious

terrace on the upper floor flat. The three-storey apartment building consists of 14 units on 3 floors each. This will create 42 apartments, each with 55 m<sup>2</sup> of living space plus a terrace. There is also a large public green space in the middle of the area for all residents.



# NEW DENSITY AREAS

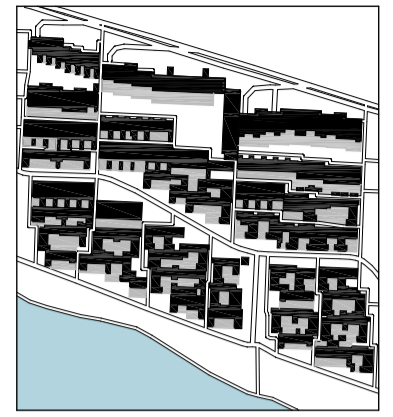


Scale: 1:2500

#### 4.A

#### Garden City Puchenau, Linz, Austria

The garden city of Puchenau in Linz, Austria, designed by Roland Rainer, was built between 1965 and 2000. The carpet structure, created by the interlocking courtyard- and atrium houses, is a special feature here. These types of housing estates became very popular in the post-war period as they brought back a quality that had been lost. The privacy of an own house, an own green space but also big community.



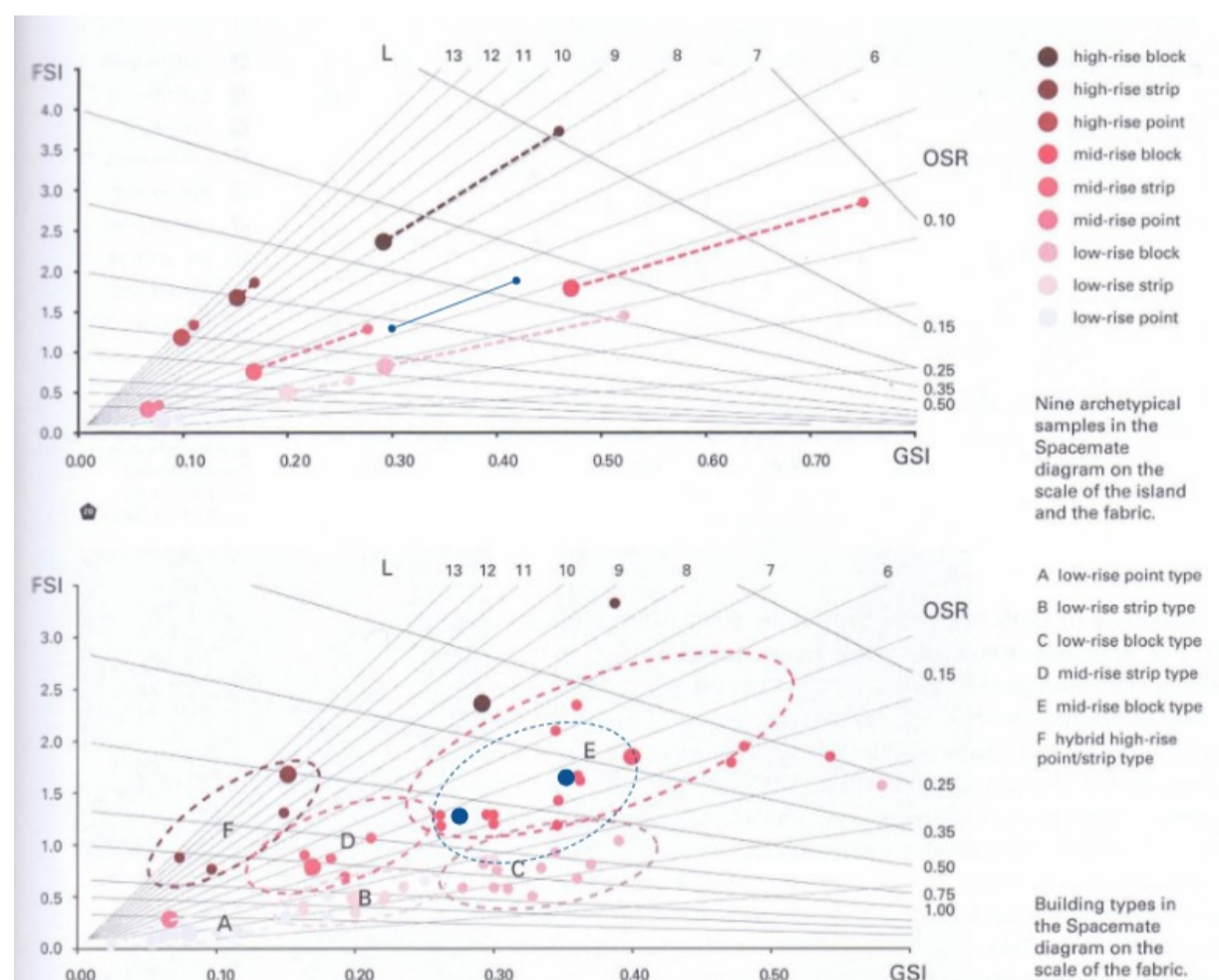
Site Plan, Scale 1:5000

Each house has its own garden or terrace. The houses also stepped down towards the river and became lower and lower. In this way, the view of nature is not blocked and the area is isolated from the main road. Low rise, high density - that is the theme of these carpet estates. There is space for many people in a small area without having to compromise on the quality of living. The typical angled building or atrium house saves a lot of space and can be built in rows without any problems. Residential complexes of this type only require around a quarter of the space of single-family housing estates. In addition, the area is mainly characterised by narrow lanes. Cars can only access the area via two parallel roads and must be parked slightly outside. This prevents noise pollution in the and is also save for kids playing on the streets.

#### 4.C

#### 4.B

- 1) Base land area : 4,138ha
- 2) Floor space index : FSI=1,806m<sup>2</sup>/m<sup>2</sup>
- 3) Ground space index : GSI=0,396m<sup>2</sup>/m<sup>2</sup>
- 4) Open Space Index : OSR=0,334 m<sup>2</sup>/m<sup>2</sup>
- 5) Layers : L=4.56 storeys
- 6) Network Density : N =0.116/m
- 7) Mesh width : W=17.285m
- 8) Profile width : b=4.9836m
- 9) Tare : T=49%



With around 60 dwellings per hectare, this type of urbanism allows a great diversity of housing typologies from point low rise strips to mid rise strips. This diversity of typologies allows to host many typologies of households and thus a greater social mix. Though this might be a far fetched projection that should be reinforced by policies. These density are adapted to the public transport, while allowing a great quantity of public spaces and a relatively good relation to nature with 50% of the base area remaining unbuilt.