

**DESIGNING A PUBLIC THRESHOLD**



## PERCEPTION

To remove something does not mean that it simply disappears, but rather that it is reduced. It, can be reassembled in a new context leaving a trace of memory behind within a cycle. In this case, the focus of the design project is set on the material cycle and the re-arrangements of material as substance.

The need to substantially reduce our impact on the planet must be translated into a significant change to our lifestyle and habits. One of these is to consume responsibly and consider that waste does not exist, but that all material can be transformed into something useful again following a circular ecological system.

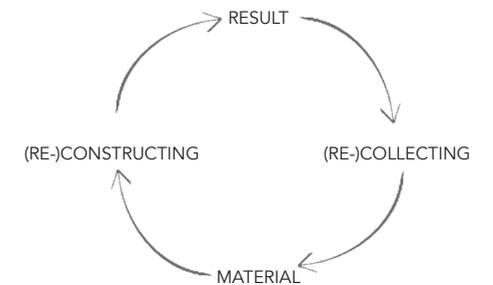
## CONCEPTION

This mindset attempts to raise more environmental awareness which also affects architects and future architects rather in the design process rather the final product. The re-use of timber and other materials is an attempt to close the material cycle. We would like to investigate that in different scales:

small scale: Timber waste is turned into furniture. The identity of the reclaimed material should be preserved.

medium scale: Collective gardening and maintenance supports neighbourly relations socially and spatially.

large scale: larger timbers can be easily upcycled to building material such as beams, terrace surfaces or stairs.



## (INDUSTRIAL) UPCYCLING PROCESS OF WOOD - RESEARCH

### A I - recycling, substantial recovery by conversion

natural or mechanically processed  
not treated with other materials  
e.g. laminated timber, transport wood (euro  
pallets, boxes) , solid wood, plywood

### A II - substantial recovery by crushing

material combinations (glued, coated, varnished)  
without halogen organic compounds  
e.g. MDF, furniture, glued laminated timber

### A III - energetic recovery

with halogen organic compounds

e.g. PVC

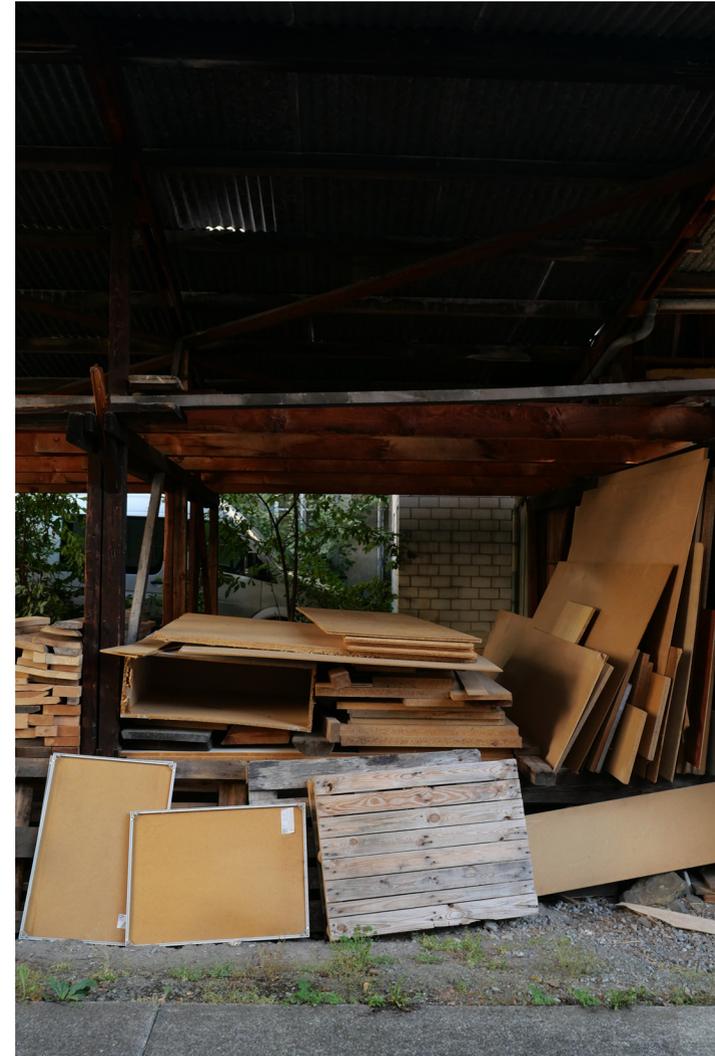
### A IV - residual material

Waste wood treated with preservatives  
with high pollutant content  
e.g. mould, impregnated wood, ...

Until now, waste wood has either been used thermally or shredded and processed into chipboard. The goal of the EU project CaReWood was therefore to recycle the raw material several times - for example for house construction or to make furniture from it.

X-ray fluorescence, LIBS (Laser Induced Breakdown Spectroscopy), the GC-Faims technique (Gas Chromatography-Field Asymmetric Ion Mobility Spectrometry) and near-infrared spectroscopy are used to determine whether woods are contaminated, how deep the impurities are and how many of the surface layers have to be removed, usually only a few millimeters.

Timber in categories A III and A IV is considered potentially contaminated according to the Waste Timber Ordinance. These wood wastes contain either plastics such as PVC or paints containing heavy metals such as lead white on their surfaces or wood preservatives such as DDT and PCB inside and must therefore be disposed of thermally.



## SITE-SPECIFIC TIMBER CATALOGUE

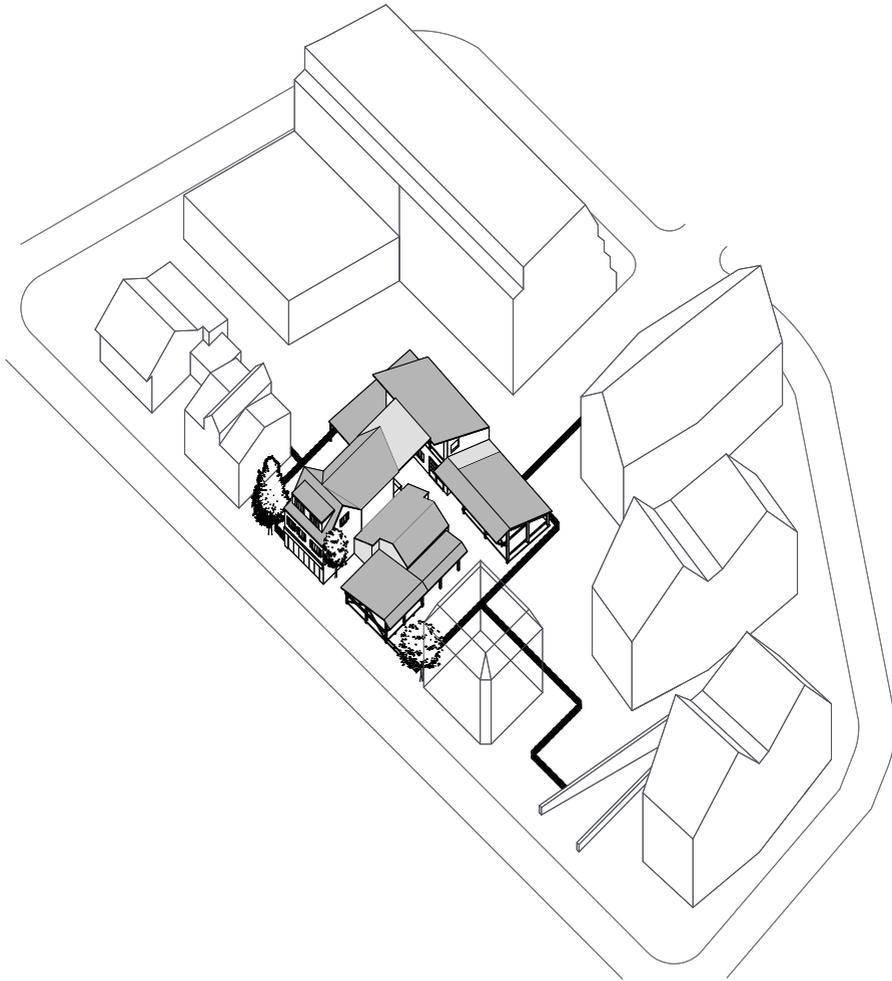
The site in Dietikon that is inhabited by Verein Zitrone is a former carpentry. Material and objects had been unconsciously collected during years by the former owner. When Zitrone moved to Dietikon, they were confronted with staged reduction processes. A lot of objects such as furniture has been sold at self-arranged flea markets. What is still left, is the amount of timber.

Timber storage takes up to 30% of the space available to Zitrone. It's the exactly same amount of space that the Verein sets out to use collectively for itself.

Thus, the logical first step would be start cataloguing the found material to get an overview of the material in presence. The collection is diverse in appearance, size, shapes and condition.



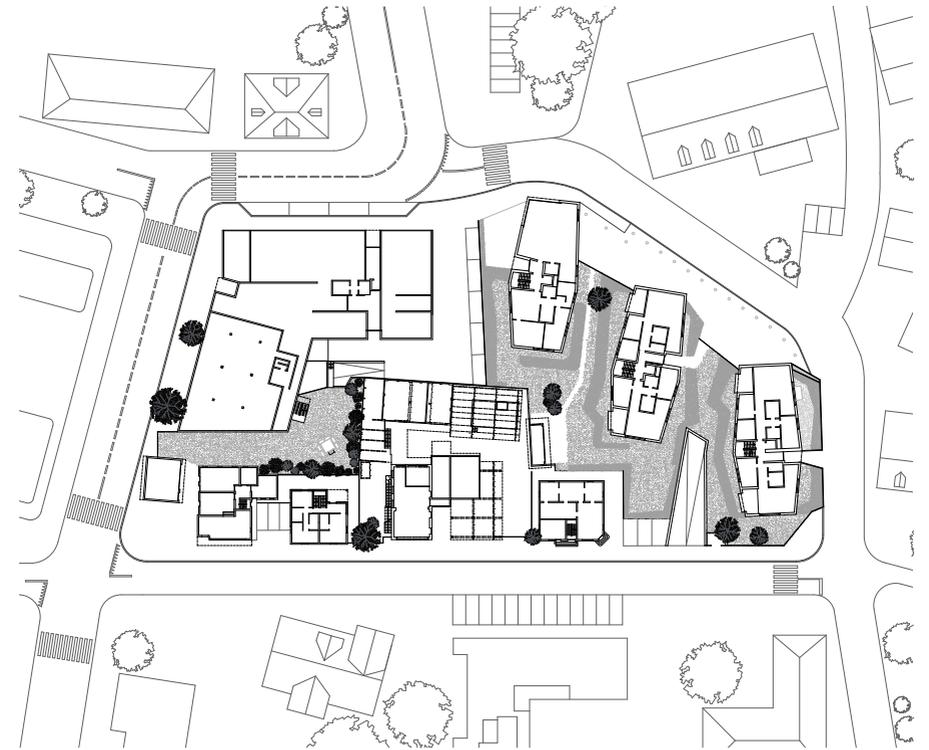
## STATUS QUO



## ZITRONE DIETIKON AS CASE STUDY

Kirchstrasse in Dietikon is part of the city center. Although it is only a few minutes' walk from the train station, the plot is an extremely quiet residential zone.

What makes the neighbourhood special is the architectural diversity that is evident in the buildings. Not only the personal collection of the former carpenter is a conglomerate, but also the entire neighbourhood.



## EVERY PLOT IS ON ITS OWN

A closer look at the plot and the immediate surroundings shows that each individual plot has its own fencing.

Through conversations with the stakeholders on site, it turns out that there is no kind of interaction within the neighbourhood and they have barely anything in common.

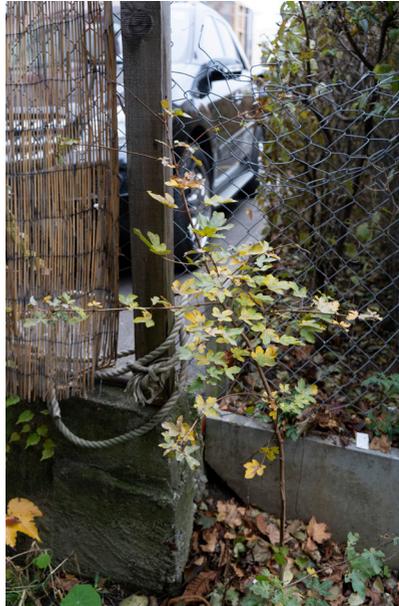
pink = commercial building and housing in upper floors

violet = imbiss booth „Crispy Chicken“

grey = Verein Zitrone, former carpentry Urech

blue = optician's shop, former butcher

green = housing units, newly built

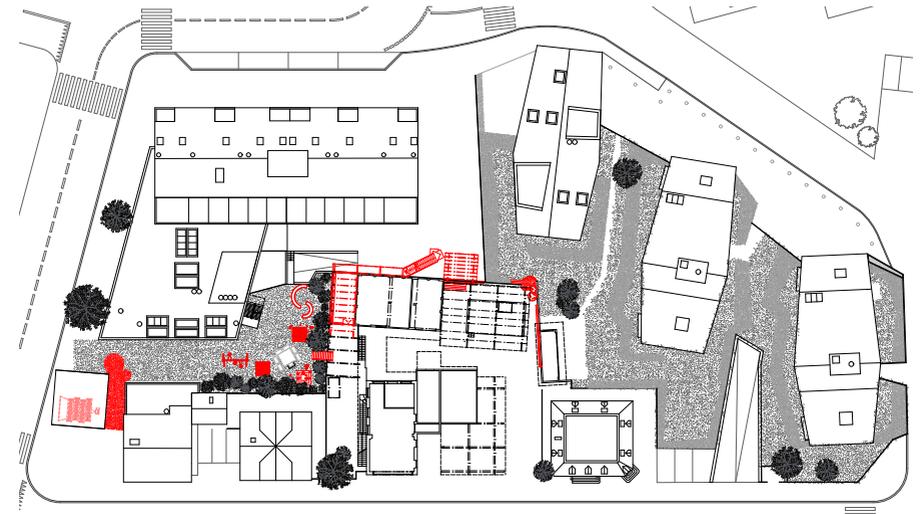


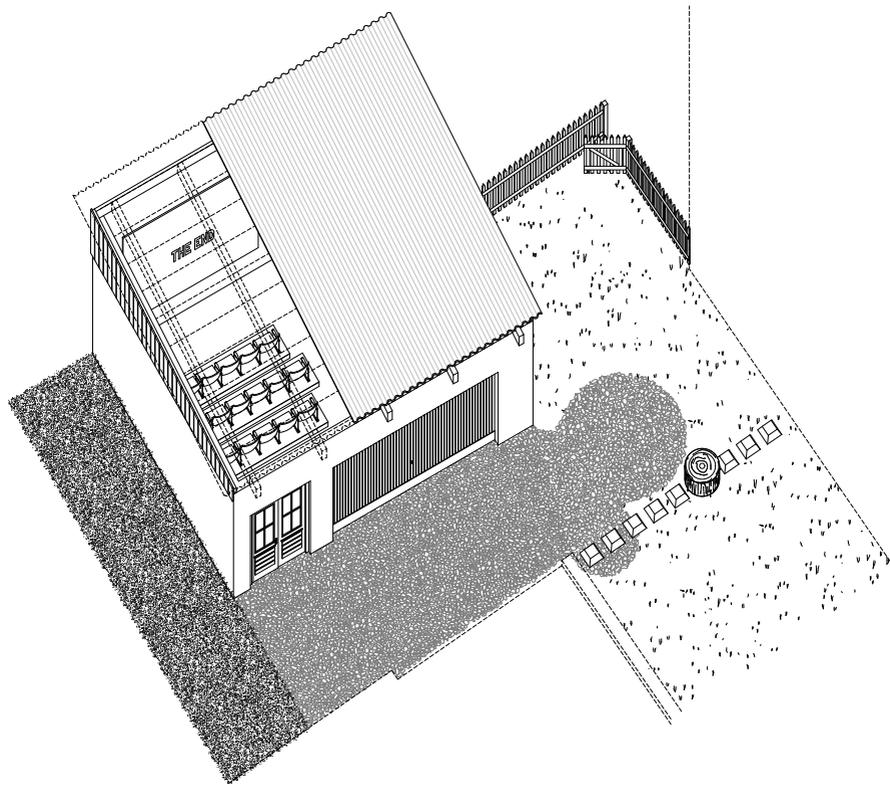
## POTENTIAL AT THE THRESHOLD

According to Verein Zitrone, there is a certain interest in encouraging such interactions within the neighbourhood on a semi-public level. Thus, Zitrone serves as a starting point for the interventions. They are located acupuncturally and rather minimal but specific, so the spatial potential of the existing is further exploited.

The design project suggests seven interventions (from left to right):

- CINEMA
- LINK
- BAR EXTENSION
- FAÇADE
- PAVILION
- BASIN
- COMMON ROOM

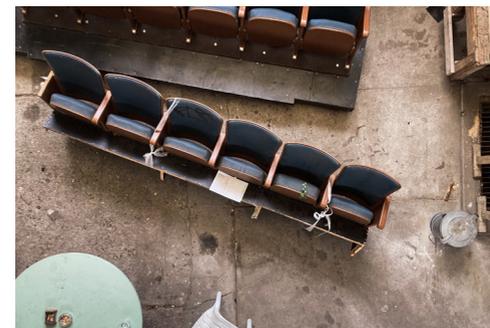


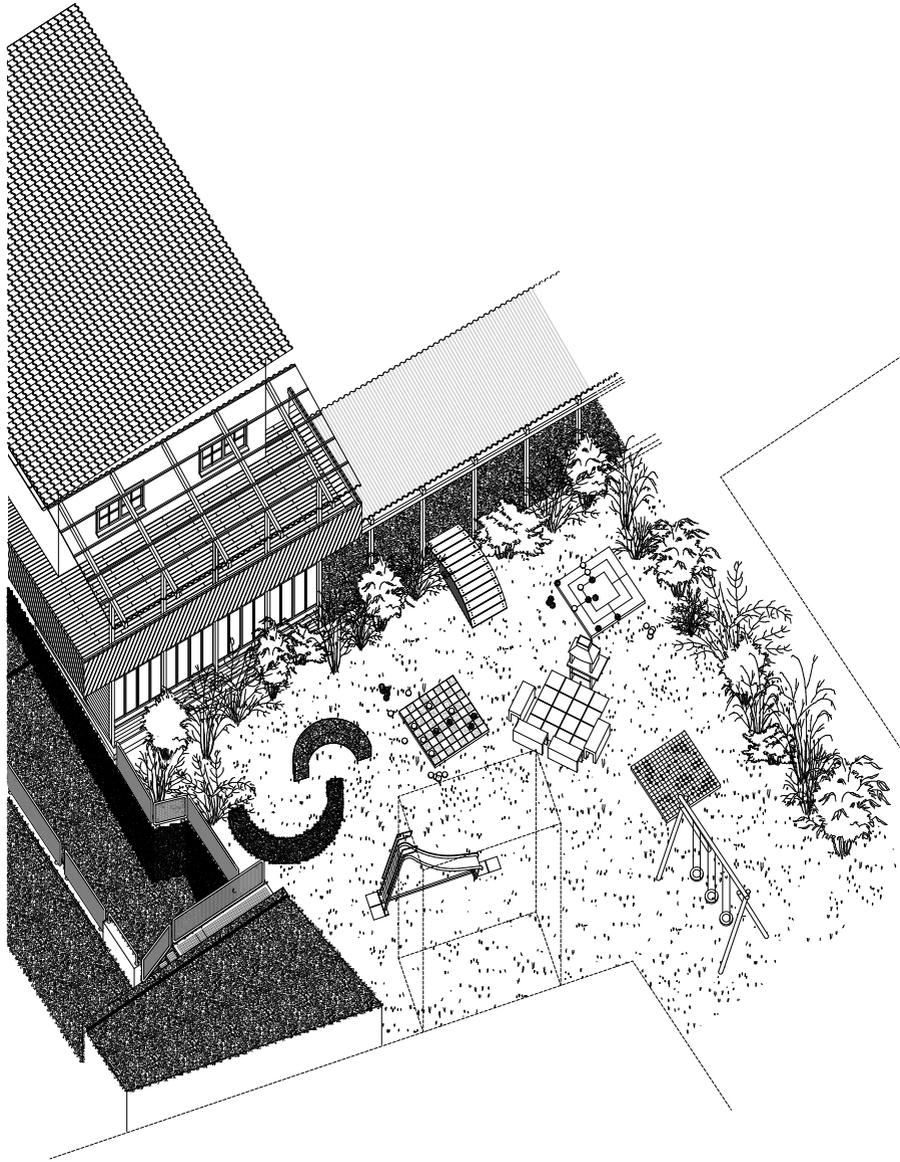


## CINEMA

Verein Zitrone owns several rows of old cinema chairs after a former owner of an old cinema lost interest in these. They are absolute intact and movable which is practical to set up an informal openair cinema in the main yard of the site.

To give them a more permanent use, the chairs are moved to the small garage. Pebble replaces the hard asphalt ground and forms the beginning of the public threshold, introducing the other interventions.





## LINK

Directly adjacent to the site of Zitrone, the neighbour's building has a large green space with a barbecue and a slide. The idyllic setting is due to the fact that it is hardly used and is often in the shade.

The intervention consists of turning it into a playground for children and adults with various smaller elements such as human scale board games. A modest bridge made of the reclaimed timber forms the link between the two plots.

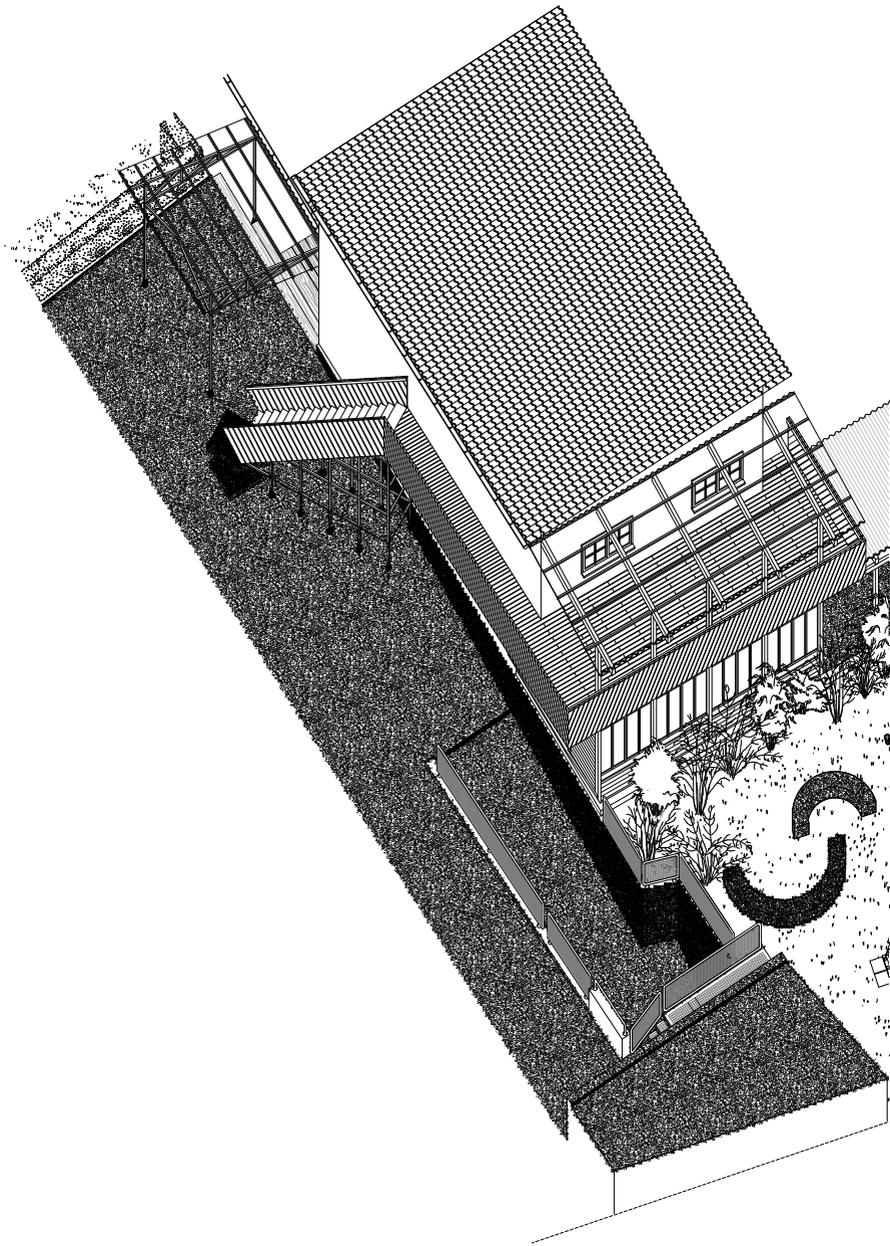


## BAR EXTENSION

The heart of Zitrone is the centrally located common room on the ground floor, which is equipped with a bar. According to the Verein, about 20 to 30 % of the total usable space should be shared.

Due to the dissolved thresholds and the fact that the neighbourhood becomes active users of the shared rooms, the space requirement increases. The extension of the bar responds inter alia to this demand and takes up the existing column structure of timber.





## PAVILION

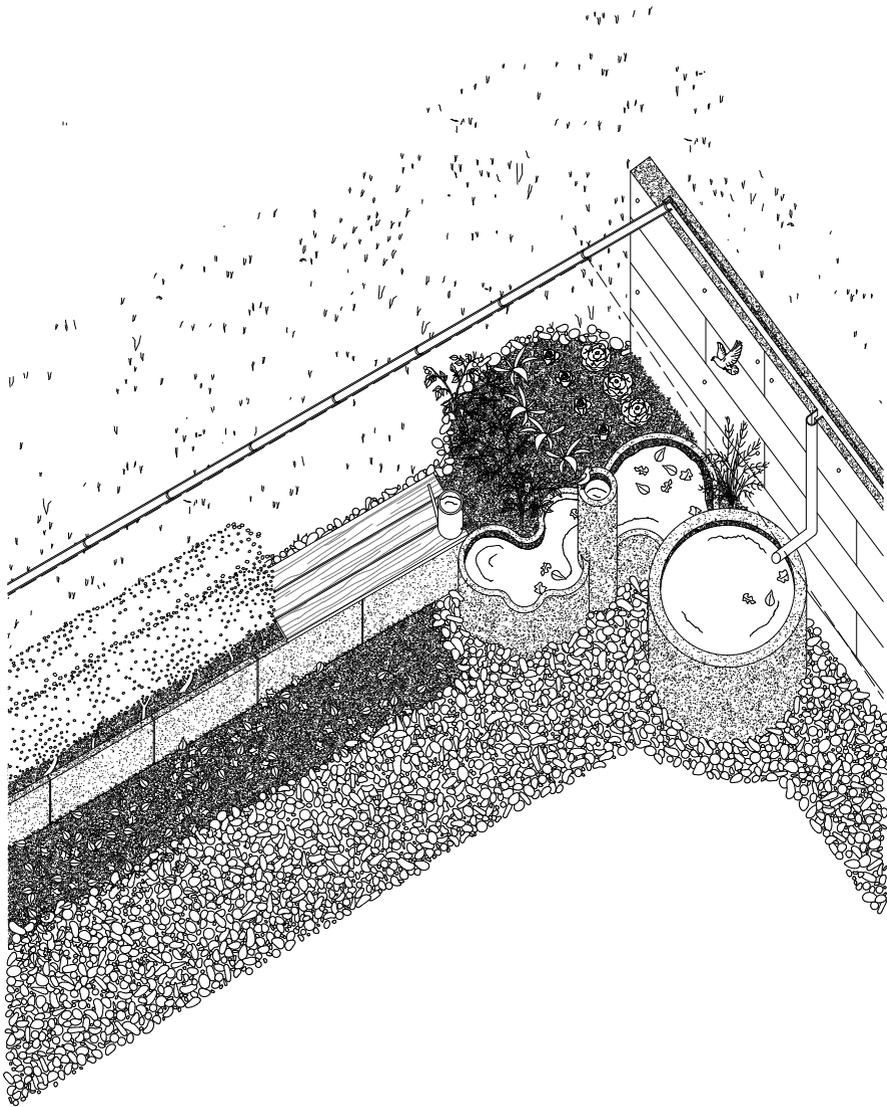
The middle of the isle of plots is mainly is a back yard that is mainly used by vehicles such as private cars in the basement garage or delivery for commerce. Even tough the South access to the isle is big, coming from Löwenstrasse, Zitrone does not have one.

A new entrance pavilion that takes up the inclination of the existing terrace roof and mirrors it welcoming users, neighbourhood and guests. It replaces the old timber fence that is reused.

## FAÇADE

The existing back façade of Zitrone is just a plain plaster wall. Being a blank canvas, it offers potential for additions. It is re-drawn by new stairs and first floor terrace. The former ground line that is now on display due to floor adjustments which is visible in the elevated concrete socle that supports the new light structure. The bend makes the stairs stand out from the building and they become an independent element rather than being just ,the back`.



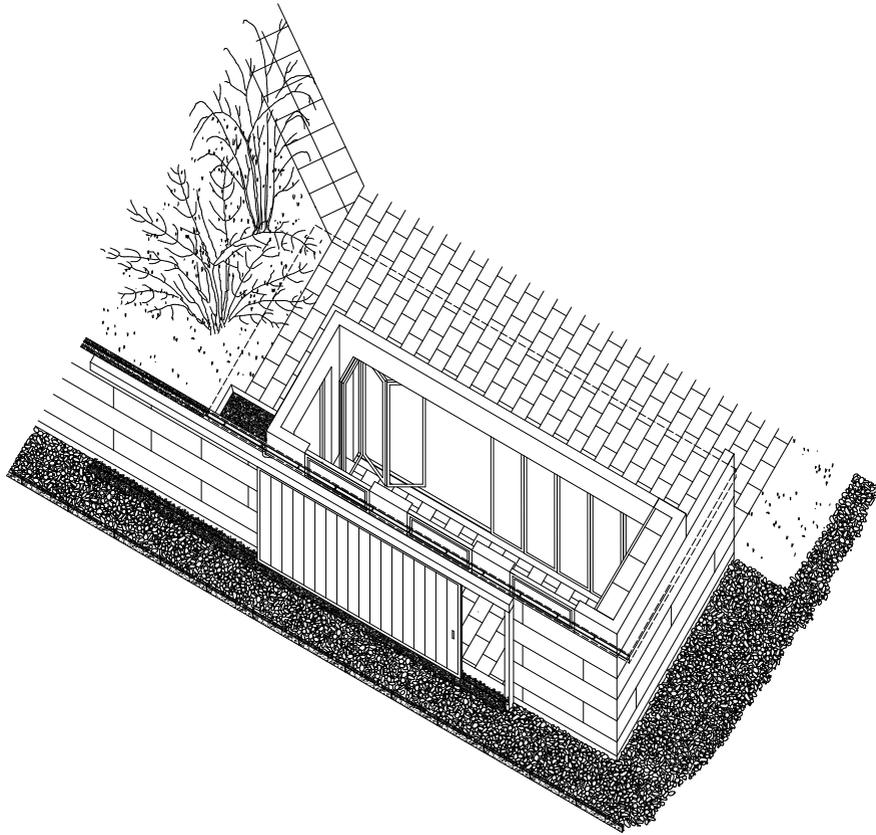


## BASIN

The course of the rain gutter becomes an architectural element. Water would be collected by the different roofs and directed to a new basin.

The existing threshold is marked by a concrete wall, hedges and fences. Two minimal but specific elements transform the corner: First, the communal garden that can be watered with the basin and simple wood planks as an additional ground texture provides accessibility from both sides and can be also used as a bench.



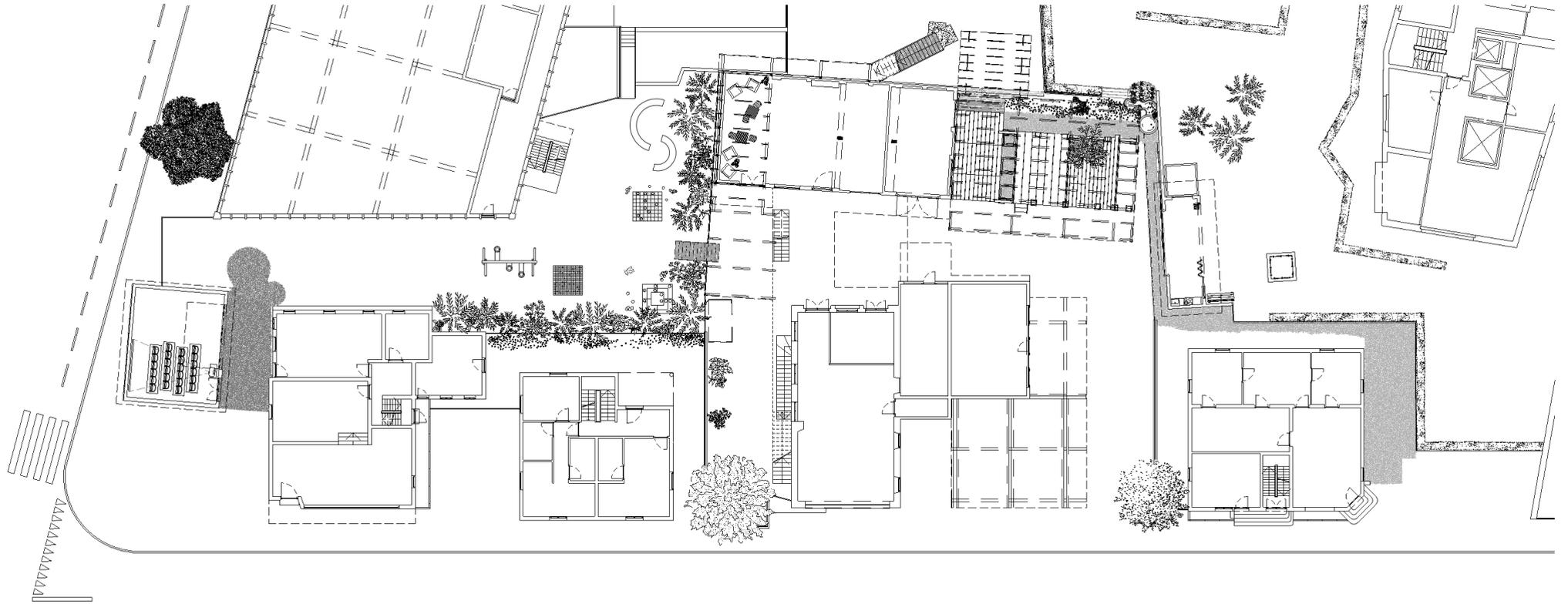


## COMMON ROOM

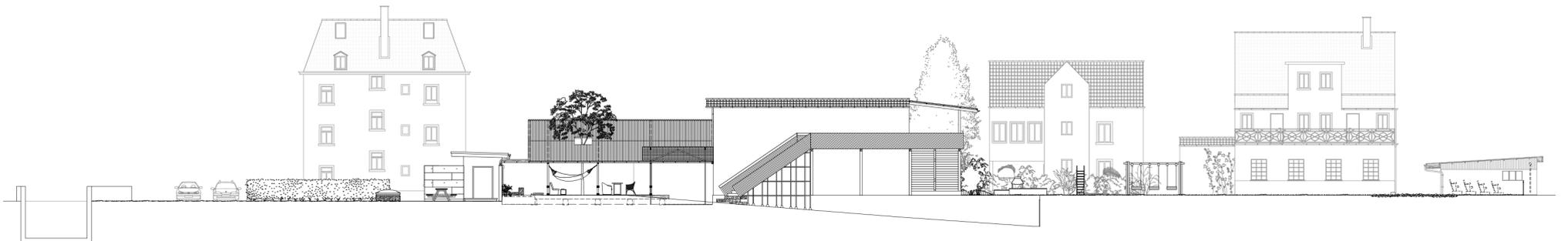
The new settlement consisting of three buildings from 2012 next to Zitrone also includes a small common room with a kitchen that is barely used but has much potential with a front facing South. The back is connected to the concrete wall that marks the plot borders. Cutting the wall makes the room accessible from the other side. The pavilion gets lighter since both sides can be completely opened up in different ways: folding doors on the existing and a big sliding door as a new entrance.



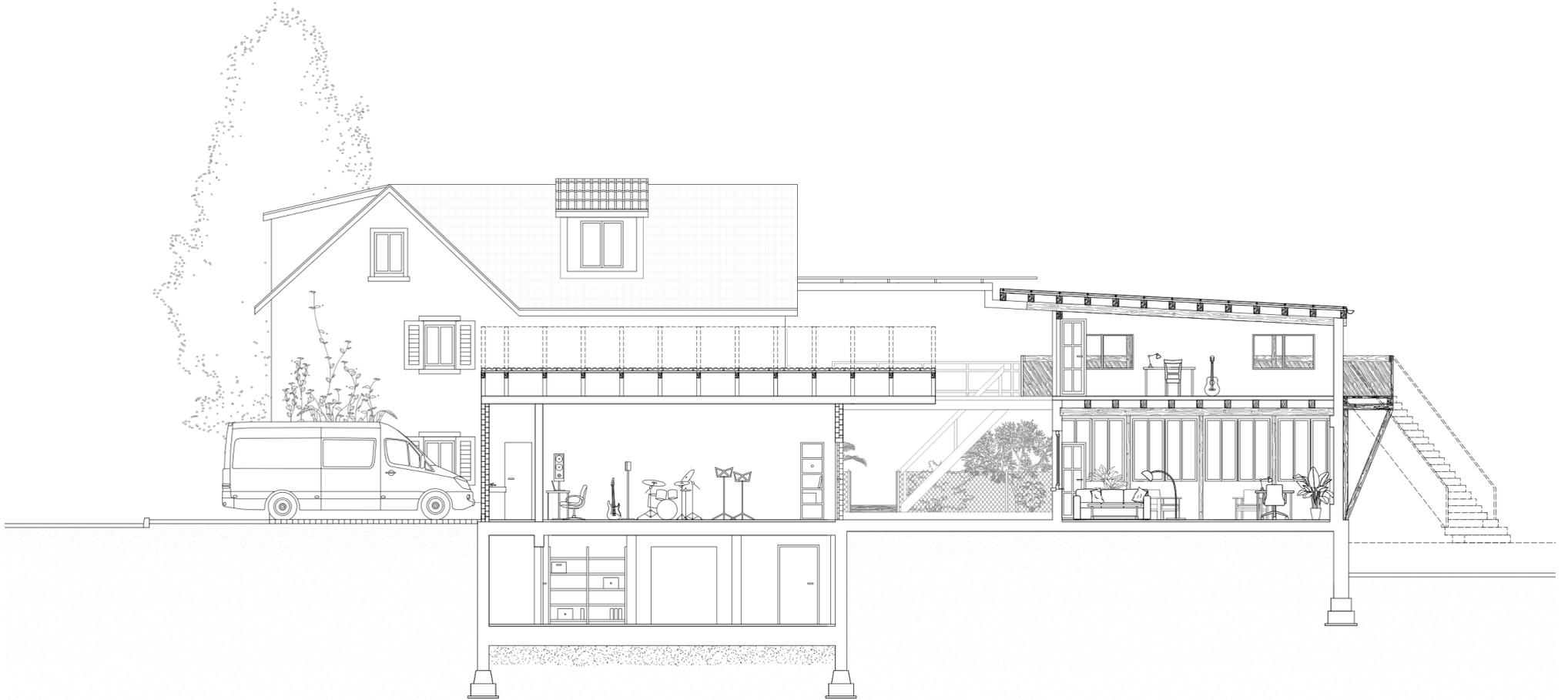
## THE DESIGNED THRESHOLD - FLOOR PLAN



## A NEW FAÇADE - SOUTH ELEVATION



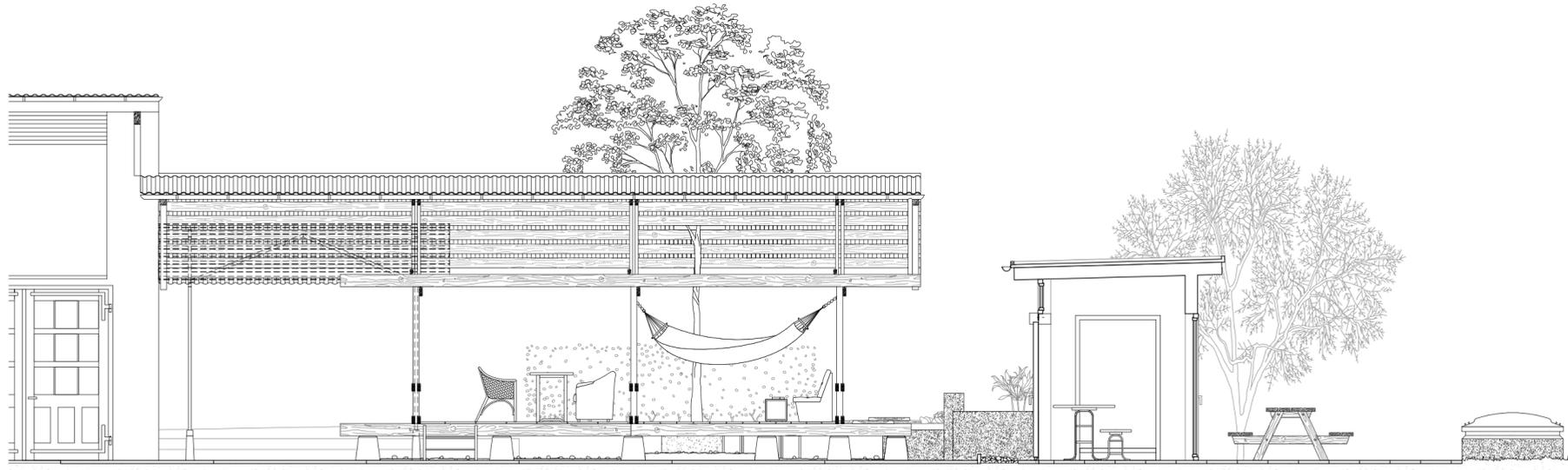
SECTION A



**SECTION B**



SECTION C



## SOCIAL SPHERE

We are aware that purely architectural interventions are not enough to re-activate and connect a neighbourhood.

Therefore, our design proposal includes a cultural aspect that addresses the demographic diversity of Dietikon.

The converted pavilion provides the Zitrone association with an additional space, which in return can be used for workshops in various fields (carpentry, pottery, etc.).



## **STUDIO CARUSO**

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Autumn Semester 2021

Final Review  
22/12/2021