UPPER-HOOD

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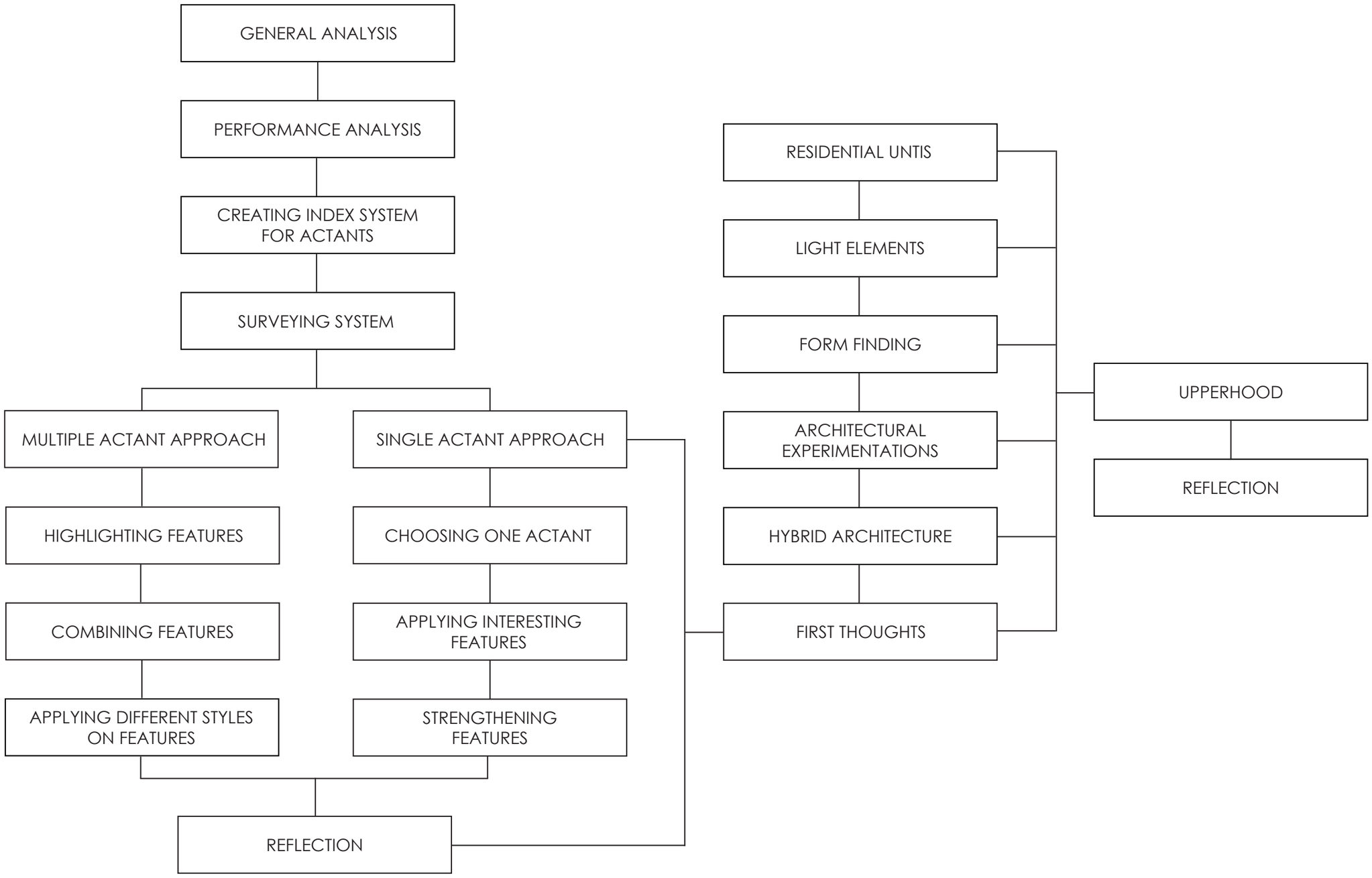
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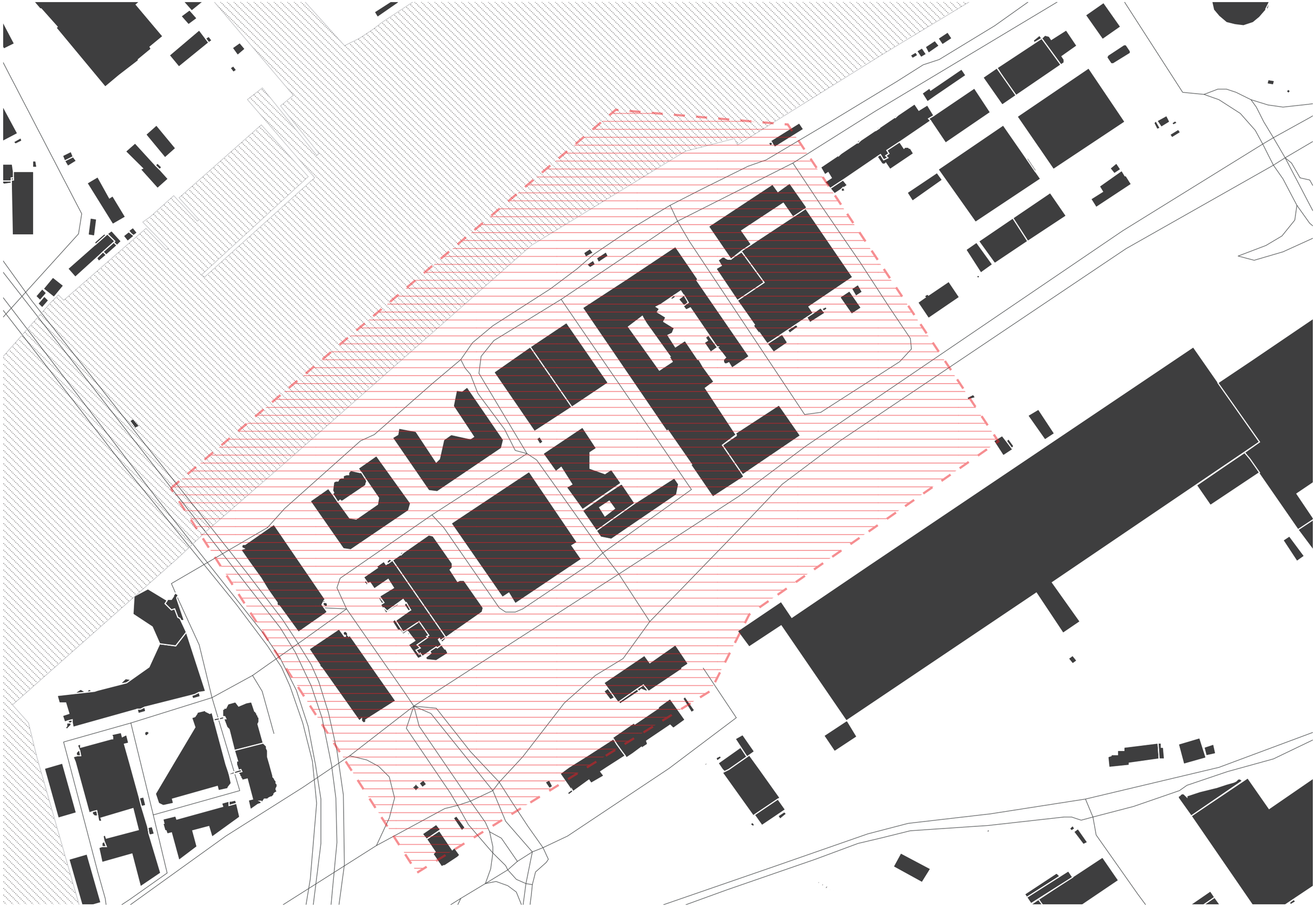
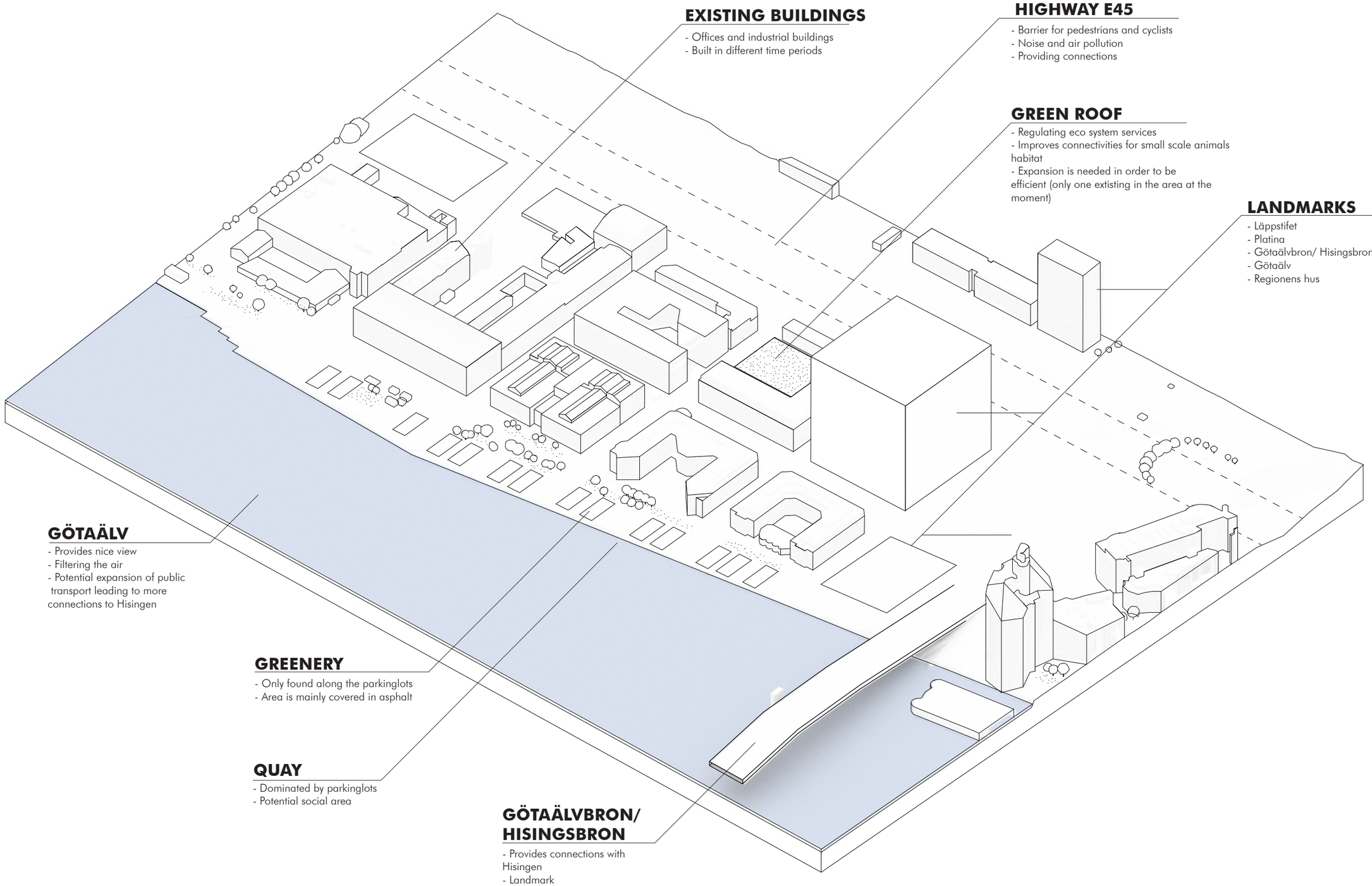
NEIGHBORHOOD OVERVIEW

Gullbergsvass is a central part of Gothenburg. It is fairly underdeveloped and has potential for great connections in the city. We have been working with Götaälvbron which is the north-western and most developed part of Gullbergsvass. In the first step we did a SWOT-analysis to compile the assets and challenges in the existing neighborhood. Further on we filtered out objects of low interest and quality to create a base for further analysis.

SITE PLAN 1:10 000



SITE PLAN 1:2 500



EXISTING BUILDINGS
- Offices and industrial buildings
- Built in different time periods

HIGHWAY E45
- Barrier for pedestrians and cyclists
- Noise and air pollution
- Providing connections

GREEN ROOF
- Regulating eco system services
- Improves connectivities for small scale animals habitat
- Expansion is needed in order to be efficient (only one extisting in the area at the moment)

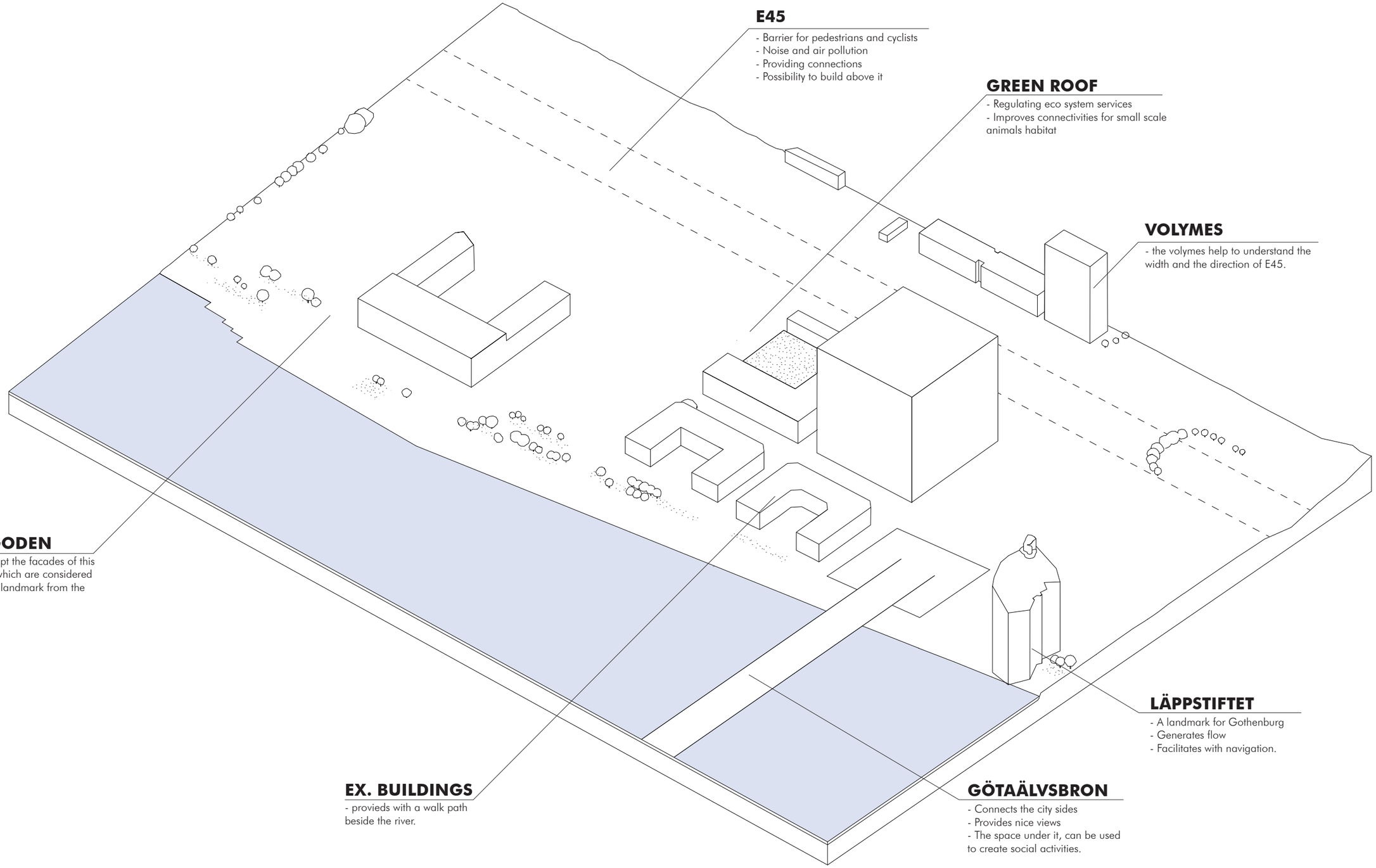
LANDMARKS
- Läppstifet
- Platina
- Götaälvbron/ Hisingsbron
- Götaälv
- Regionens hus

GÖTAÄLV
- Provides nice view
- Filtering the air
- Potential expansion of public transport leading to more connections to Hisingen

GREENERY
- Only found along the parkinglots
- Area is mainly covered in asphalt

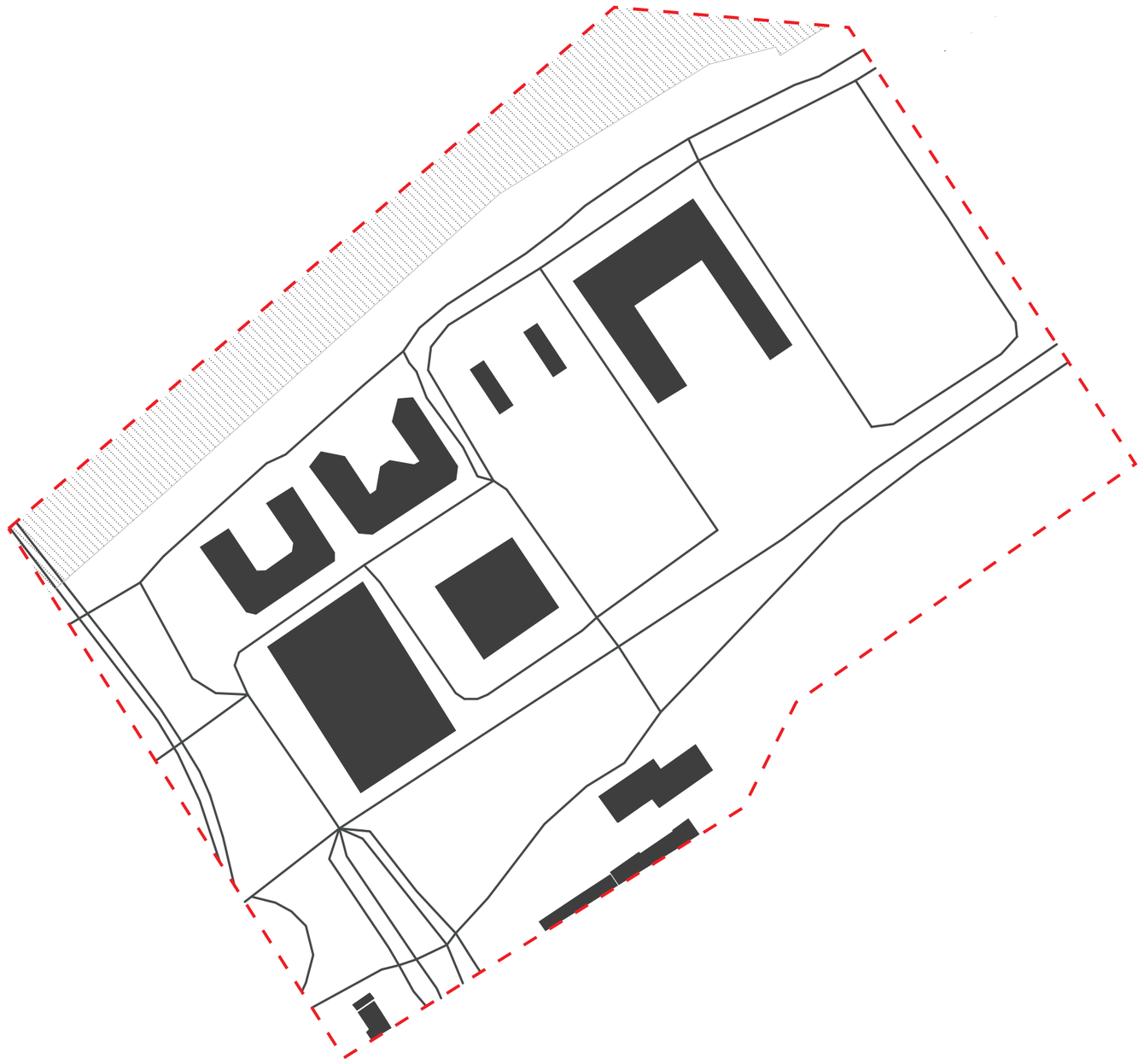
QUAY
- Dominated by parkinglots
- Potential social area

GÖTAÄLVBRON/ HISINGSBRON
- Provides connections with Hisingen
- Landmark
- Provides view over the “Götaälvbron-area”

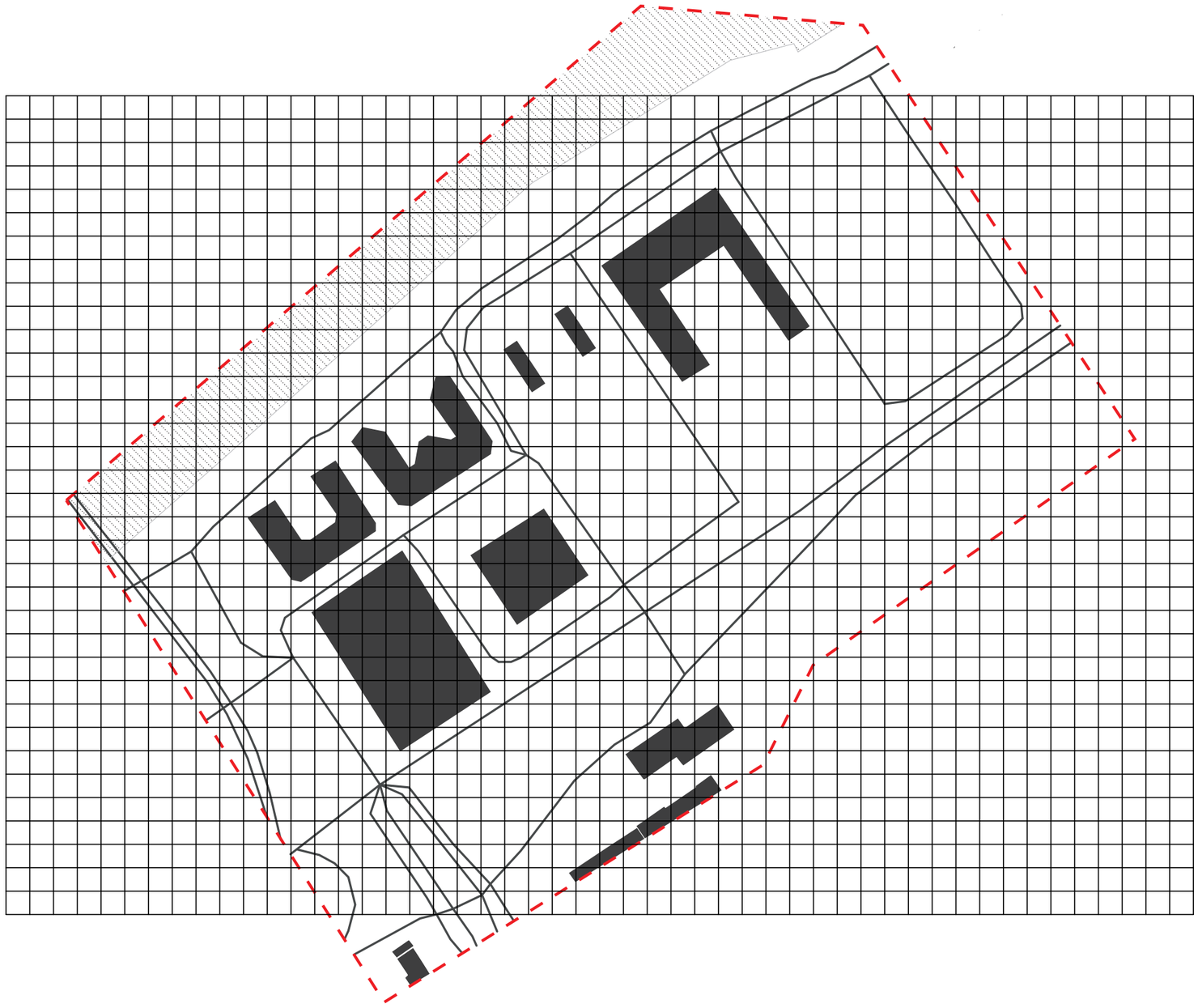

E45
- Barrier for pedestrians and cyclists
- Noise and air pollution
- Providing connections
- Possibility to build above it
GREEN ROOF
- Regulating eco system services
- Improves connectivities for small scale animals habitat
VOLYMES
- the volymes help to understand the width and the direction of E45.
PAGODEN
- We kept the facades of this house which are considered to be a landmark from the 1920s.
EX. BUILDINGS
- provieds with a walk path beside the river.
GÖTAÄLVSBRON
- Connects the city sides
- Provides nice views
- The space under it, can be used to create social activities.
LÄPPSTIFTET
- A landmark for Gothenburg
- Generates flow
- Facilitates with navigation.

NEIGHBORHOOD PERFORMANCE ANALYSIS

To understand how the neighborhood performs, we conducted analysis using the five different actants: water, ventilation, ecosystems, mobility and daylight. We created a grid and overlayed it on the area. For each analysis, there is a grid showing how the neighborhood performed.

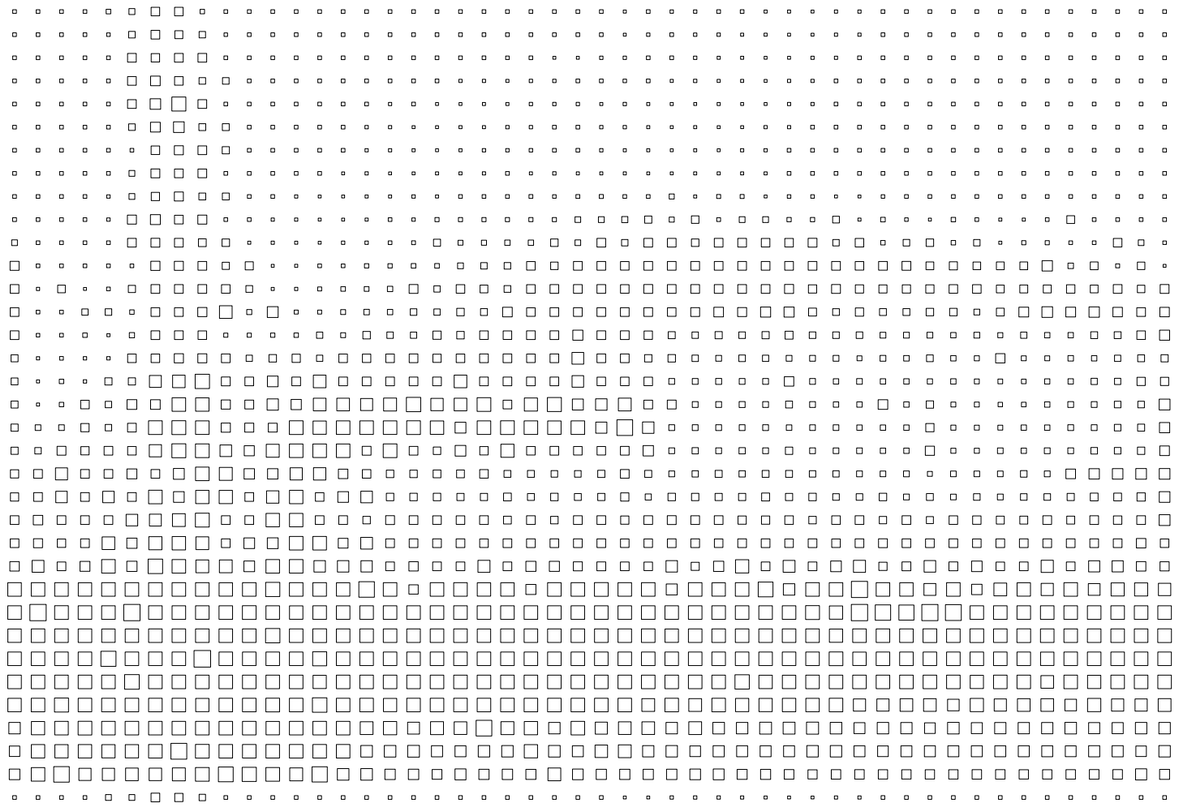


DEFINE THE BOUNDARIES OF THE FILTERED SITE



A GRID 13*13 M IS CREATED AND OVERLAYED ABOVE THE SITE

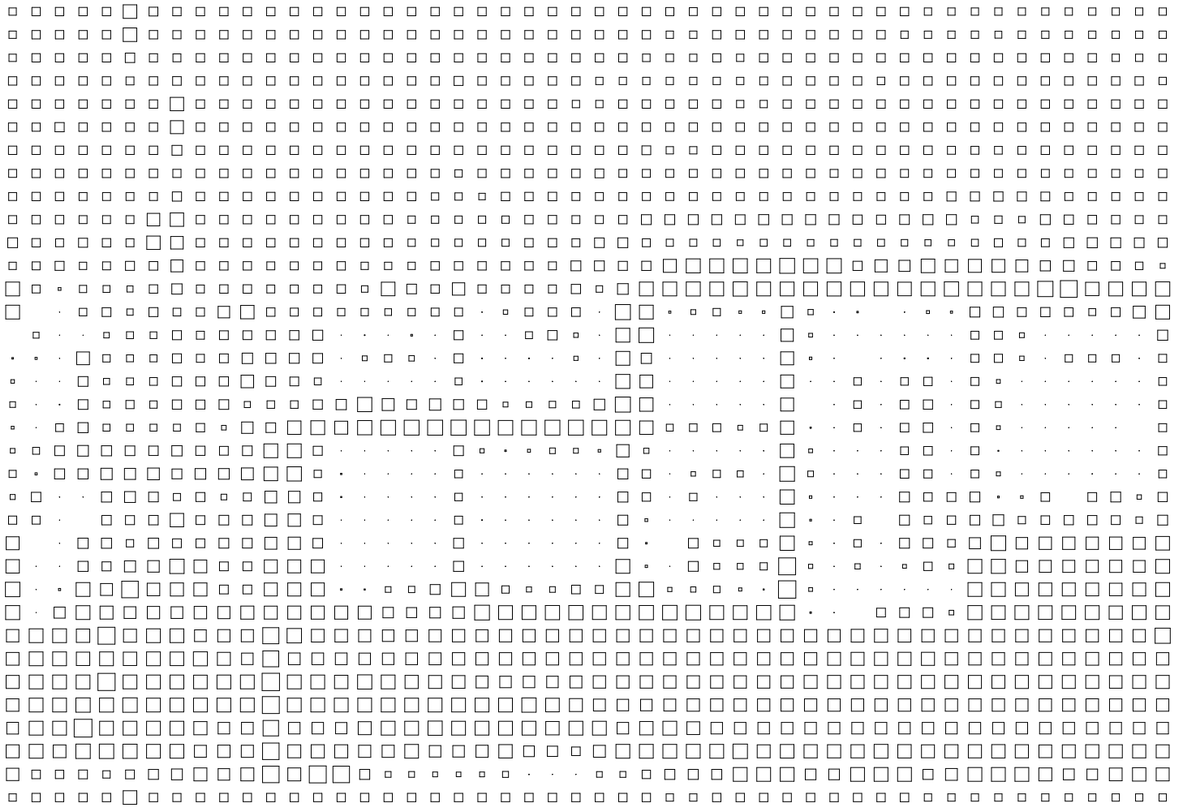
OVERLAYED GRID



AIR POLLUTION

MORE AIR POLLUTION

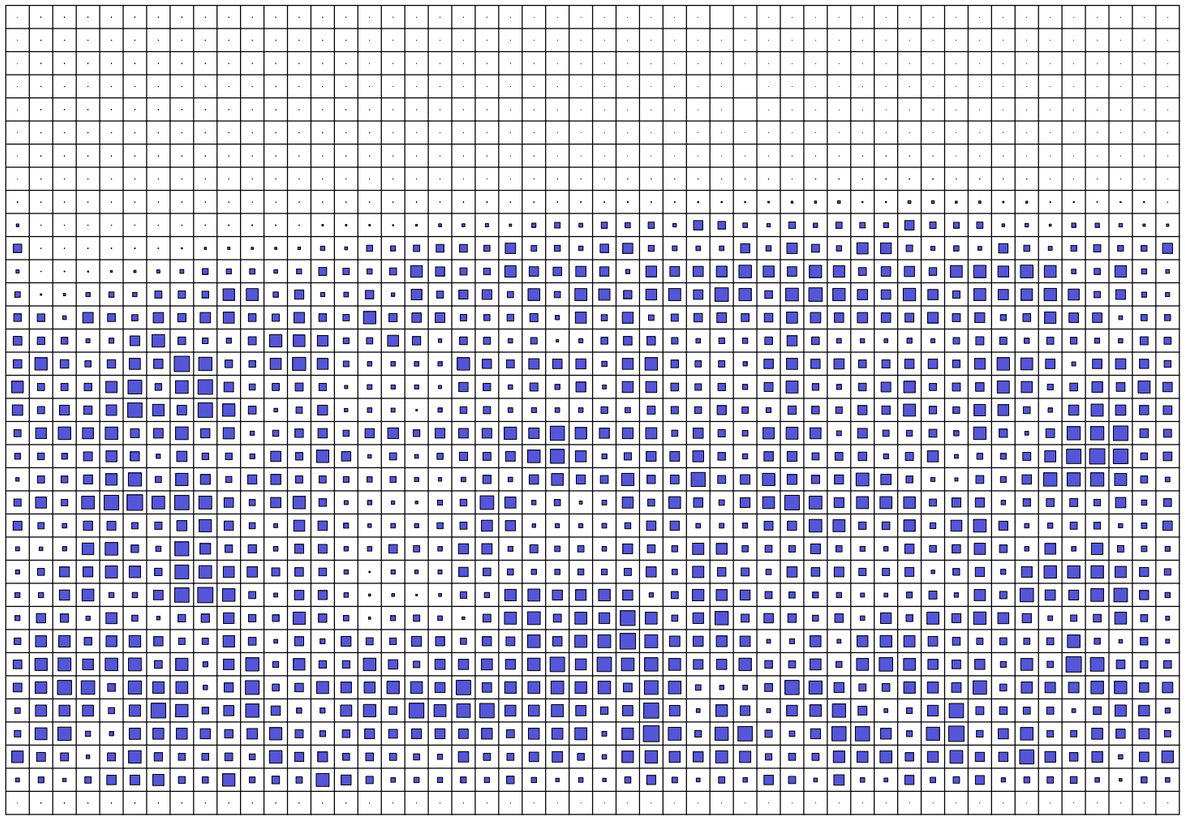
LESS AIR POLLUTION



NOISE POLLUTION

MORE AIR POLLUTION

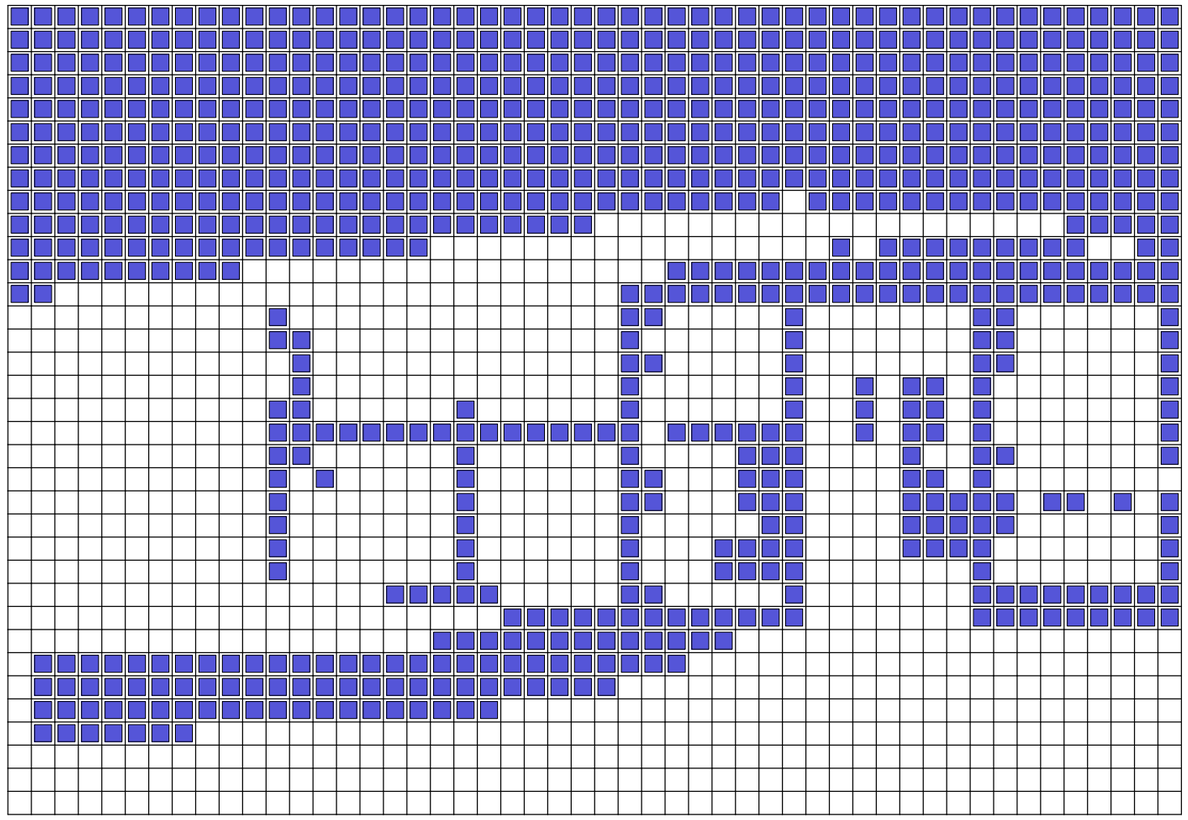
LESS AIR POLLUTION



RAINWATER

MORE RAINWATER

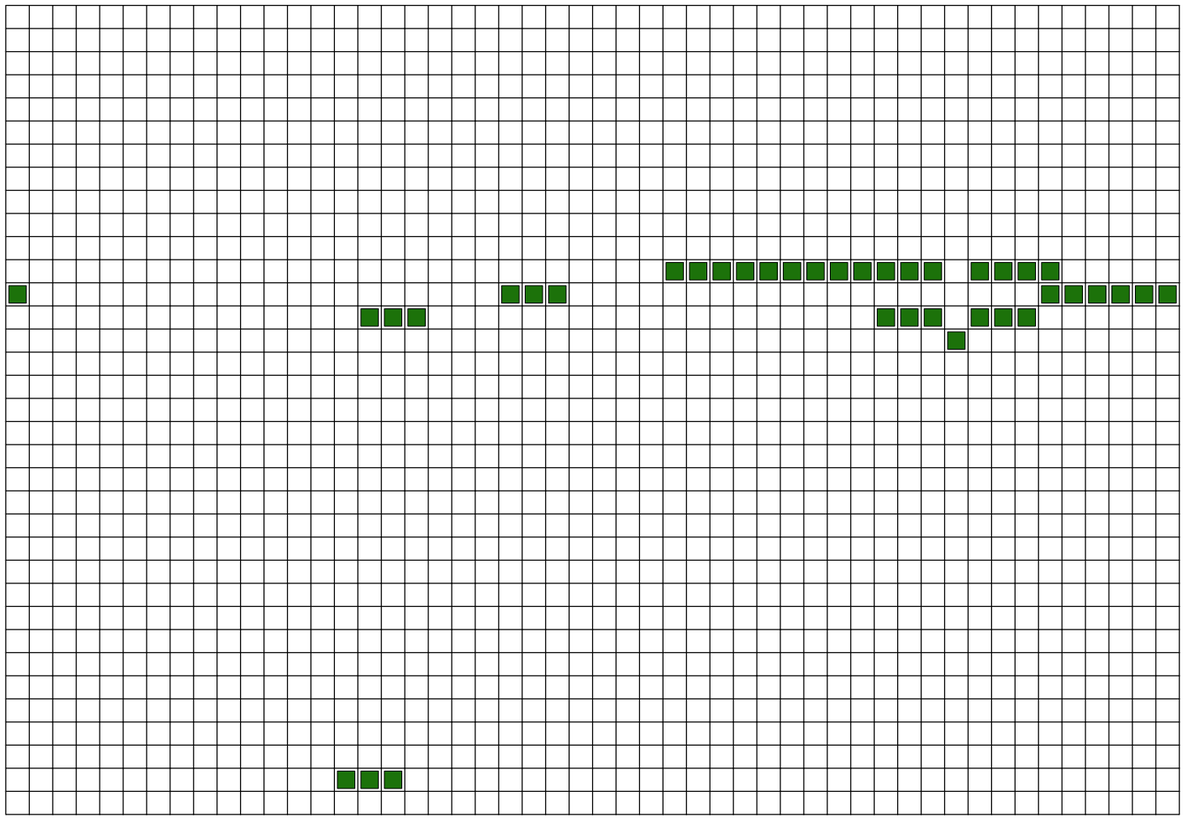
LESS RAINWATER



FLOODING

HIGH RISK FOR FLOODING

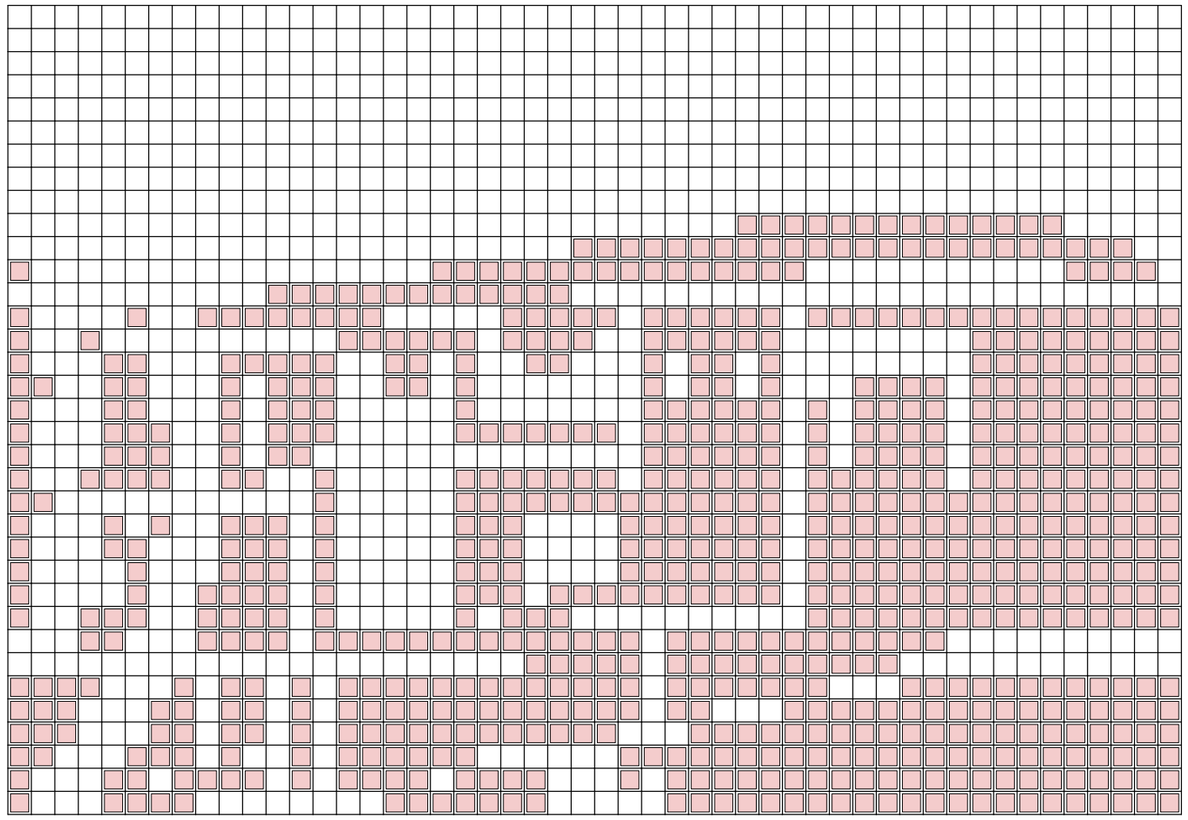
LOW RISK FOR FLOODING



GREENERY

GREENERY

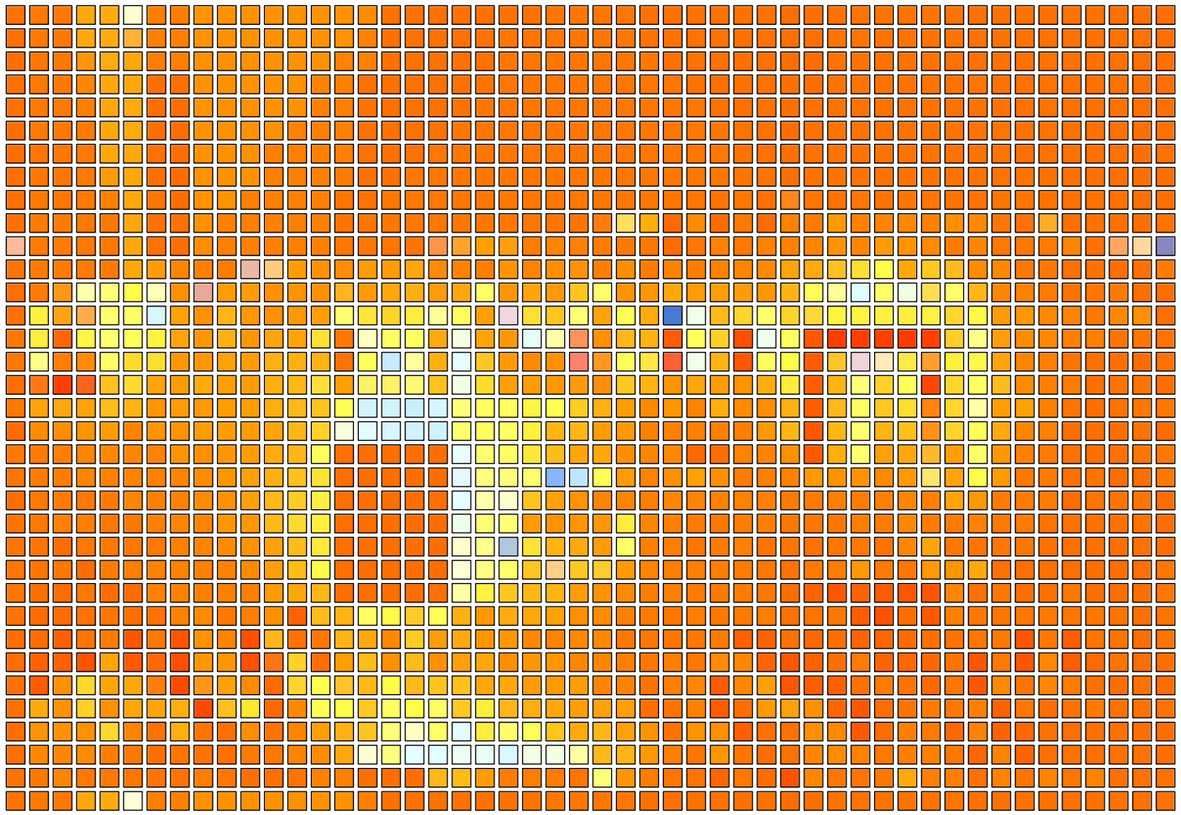
LACK OF GREENERY



EMPTINESS

EMPTY SPACE

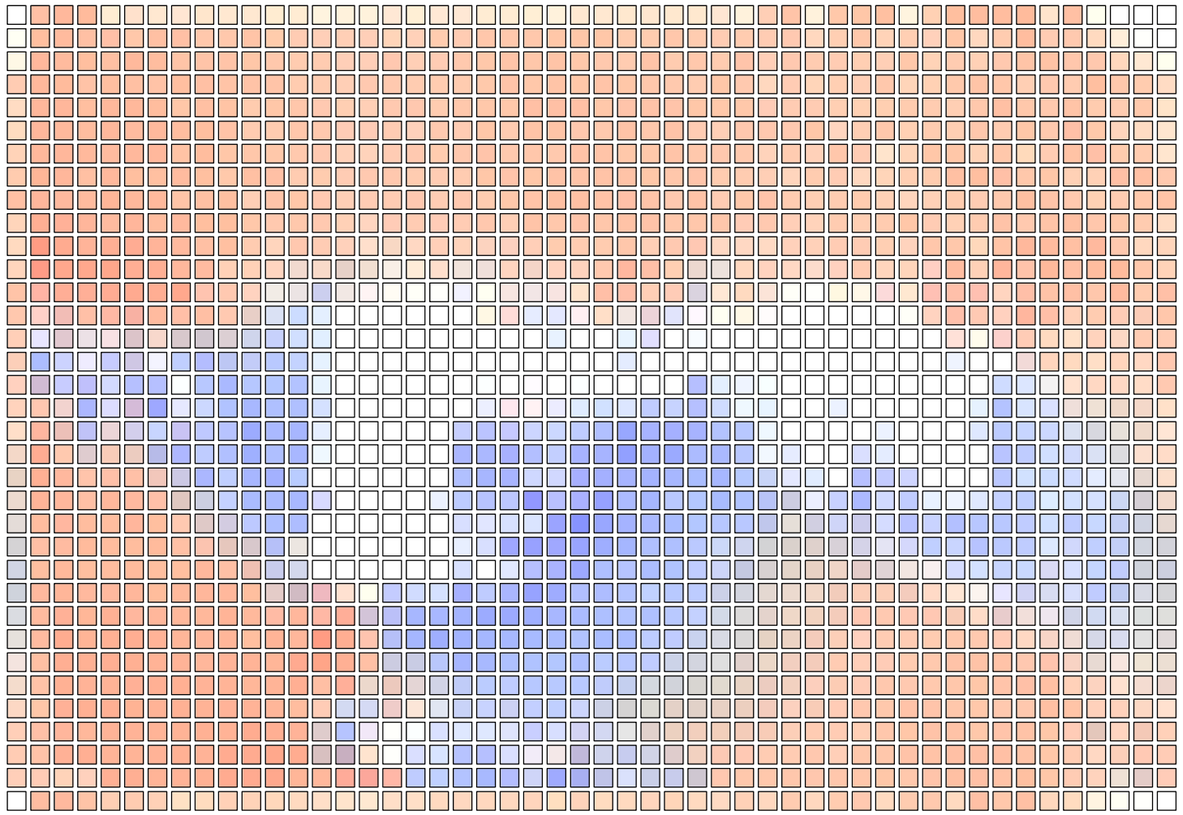
OCCUPIED SPACE



SOLAR RADIATION

HIGH SOLAR RADIATION

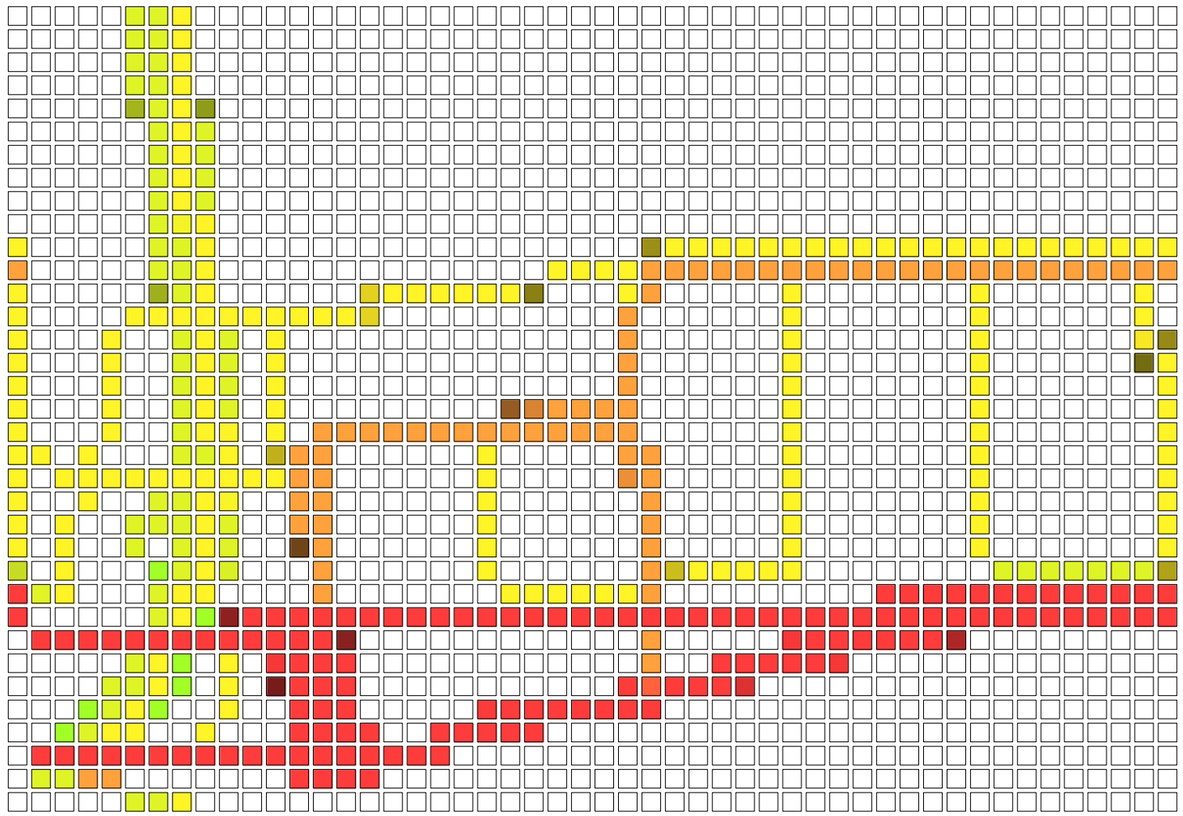
LOW SOLAR RADIATION



WIND

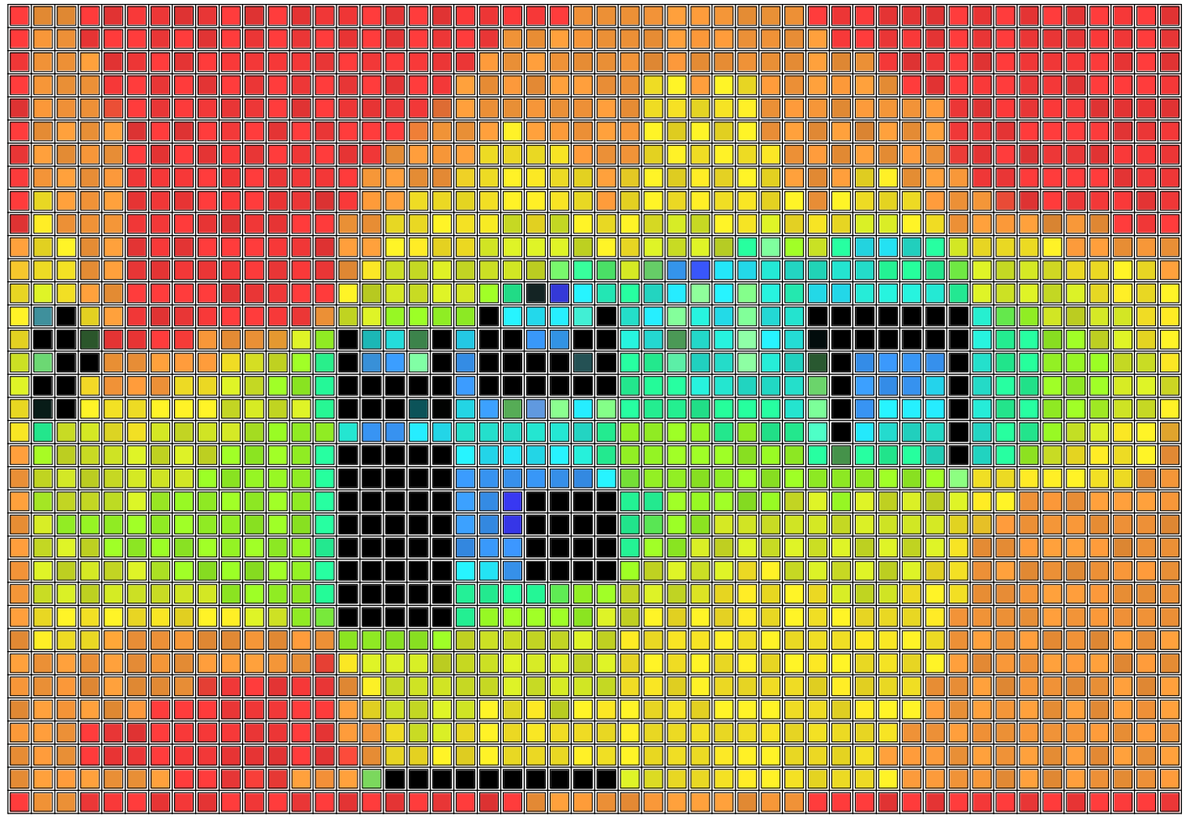
HIGH WIND SPEED

LOW WIND SPEED



STREET CONNECTIVITY

HIGH CONNECTIVITY — LOW CONNECTIVITY

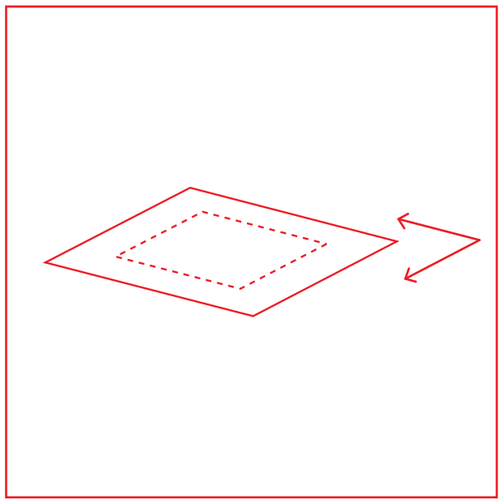


VISIBILITY

HIGH VISIBILITY — LOW VISIBILITY

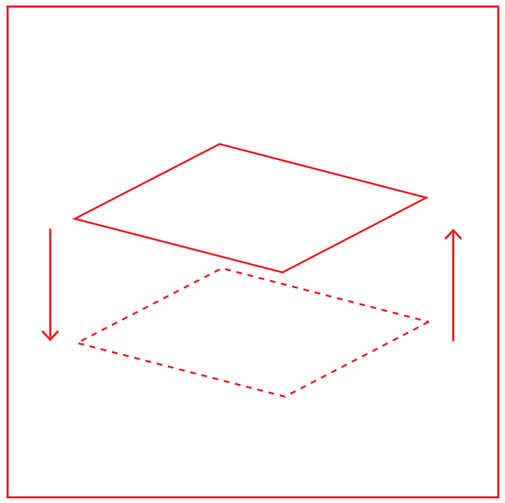
CARTOGRAPHY

Using a square as the base shape, the different actants have different effects on the shape. Combining that with the grid-system created the surveying system which consists of different volumes adapted to the actant analyzes. When integrating the buildings, some of them stand alone and some are integrated with the new volumes.



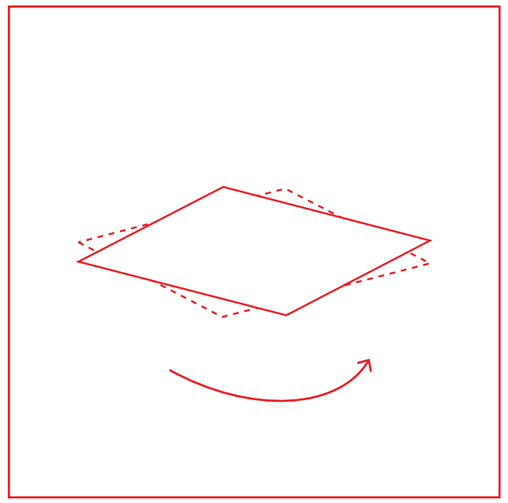
MOBILITY - FLOW
DENSITY

The size of the index is scaled by how dense the flow is.



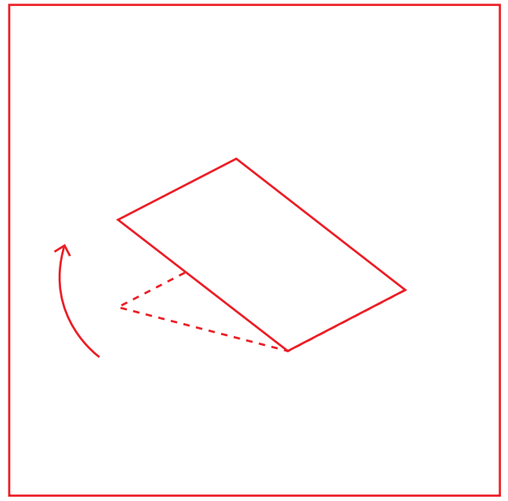
WATER - FLOODS/
RAIN

The height of the index is defined by how dense the water is.



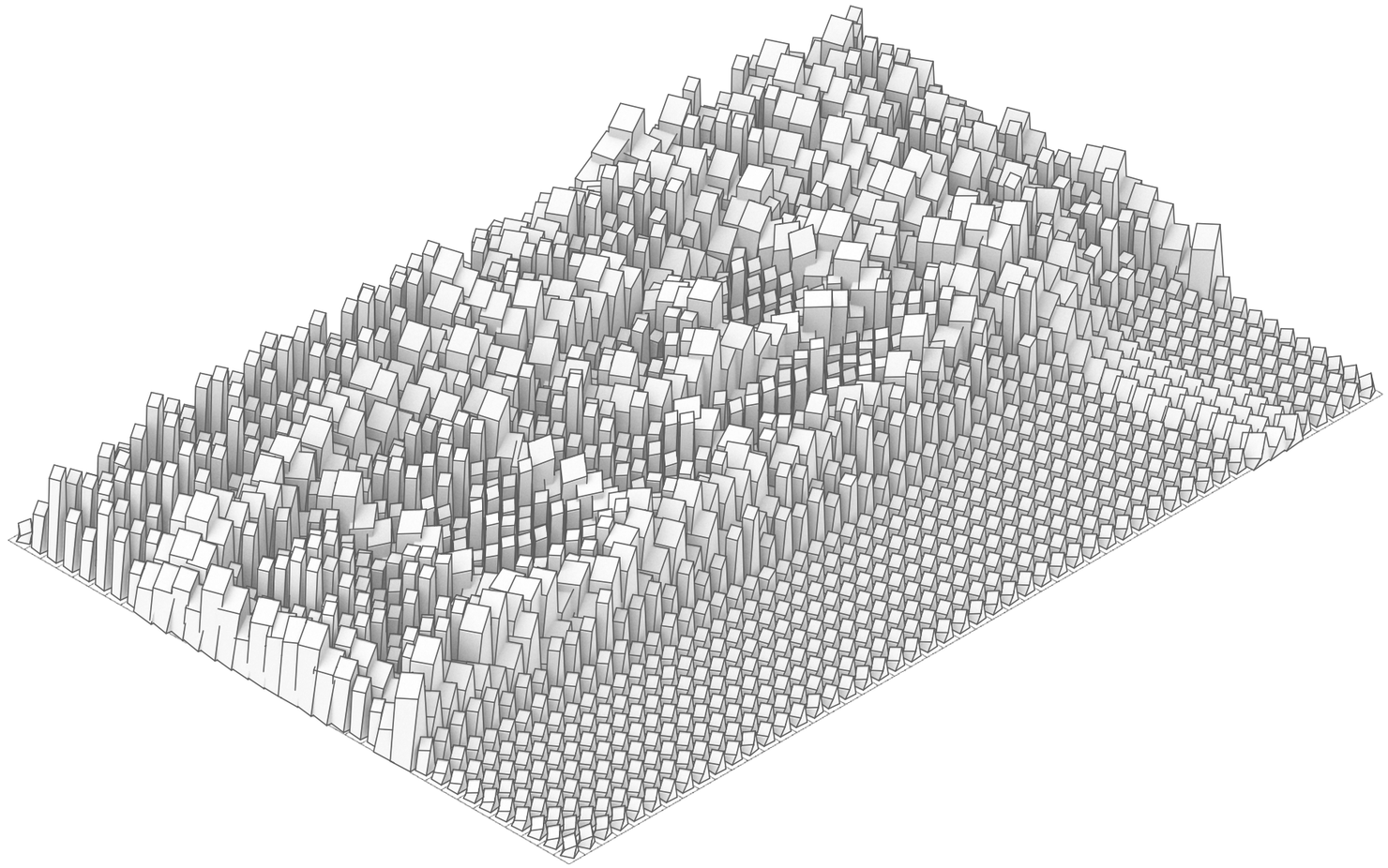
VENTILATION - WIND
STRENGTH/DIRECTION

The degree of the rotation (2D) of the index is defined by the strength/direction of the wind.

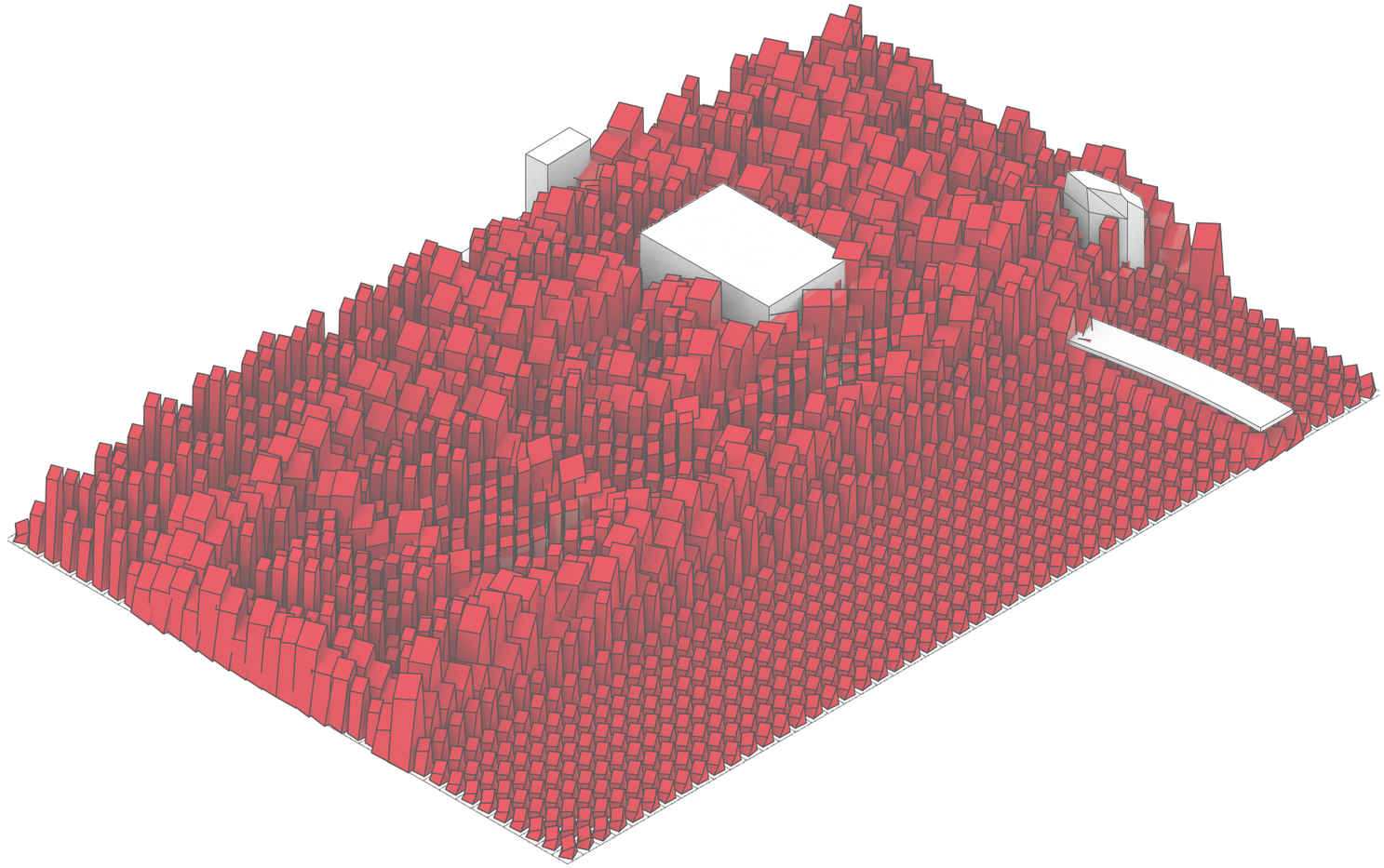


DAYLIGHT - SOLAR
RADIATION

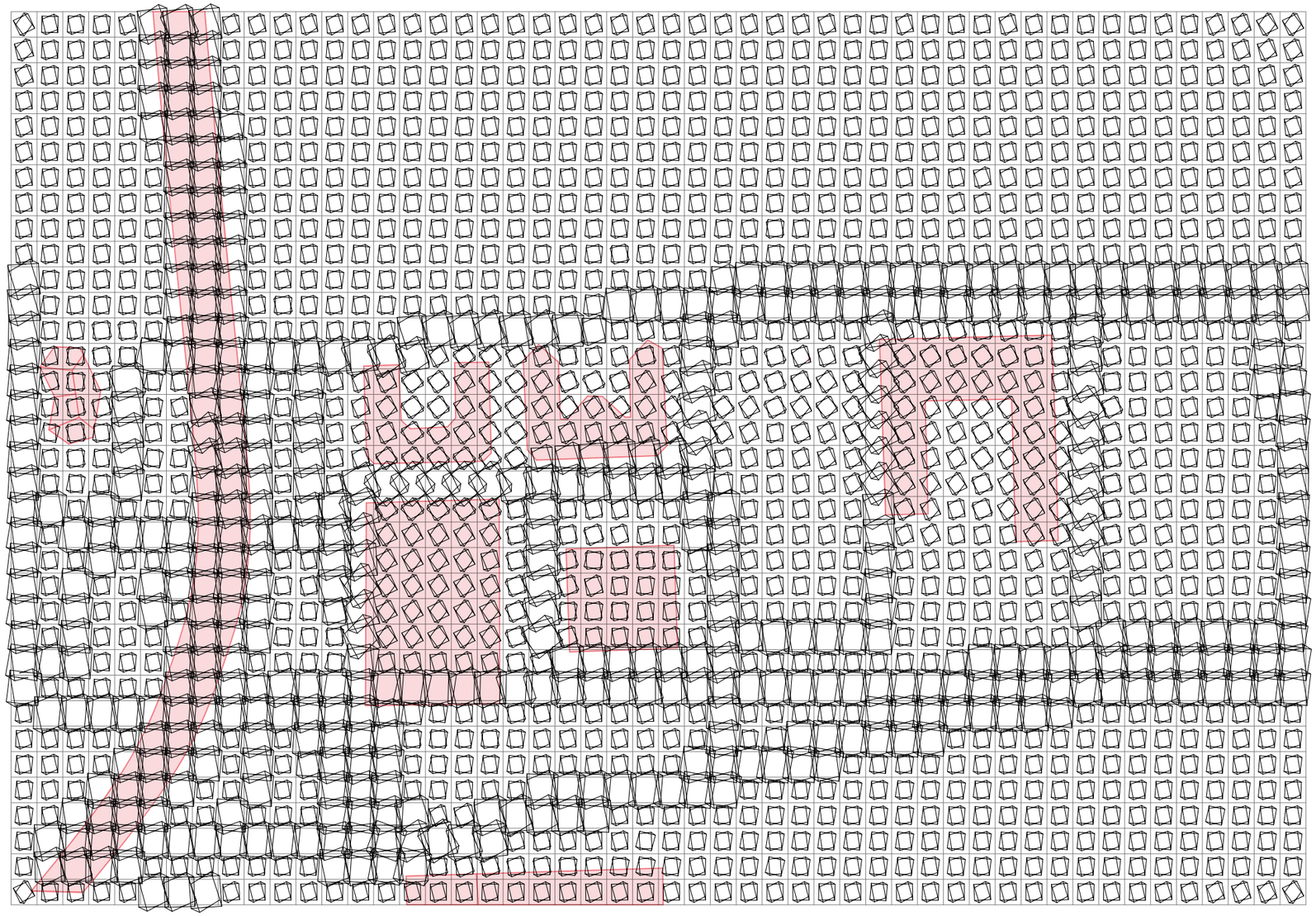
The degree of the rotation (3D) of the index is defined by the strength of the sun radiation



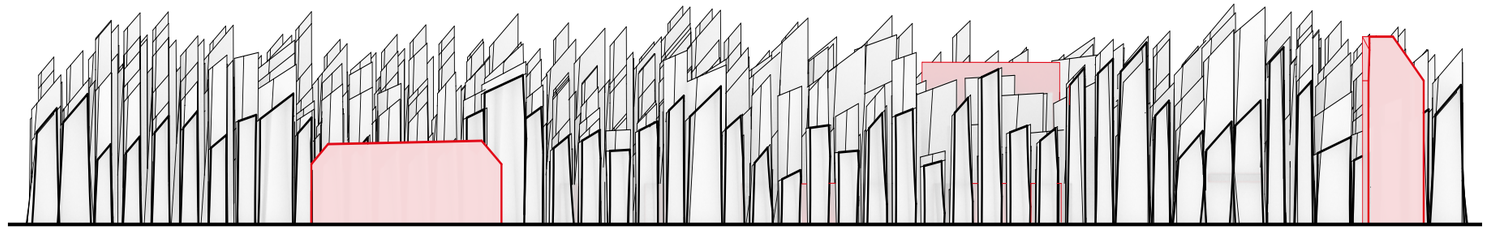
APPLYING THE INDEX SYSTEM ON THE GRID



THE ASSETS ARE PLACED BACK IN THE SURVEYING SYSTEM



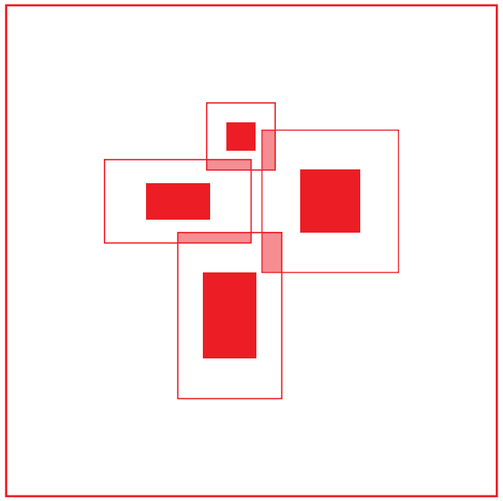
PLAN SHOWING THE SURVEYING SYSTEM WITH THE ASSETS INTEGRATED IN IT



SECTION SHOWING THE SURVEYING SYSTEM WITH THE ASSETS INTEGRATED IN IT

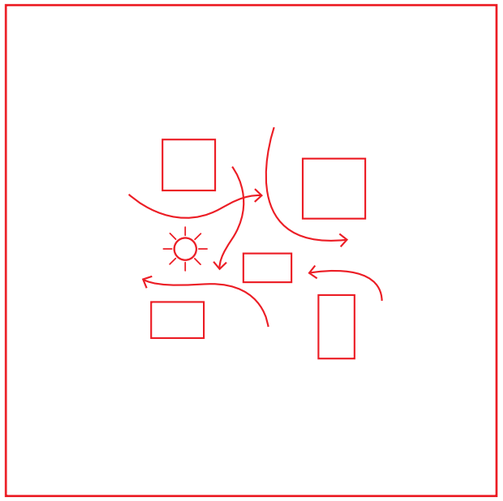
ARCHITECTURAL EXPERIMENTATION

In the architectural experimentation, we decided to go down deeper into the surveying system that we have created. A multiple actant approach was followed, where we overlapped different features from the performance analyzes and highlighted them in axonometries. Theses new features helped us understand where are the potentials for development & even understand which areas are exposed for problems that need to be solved.



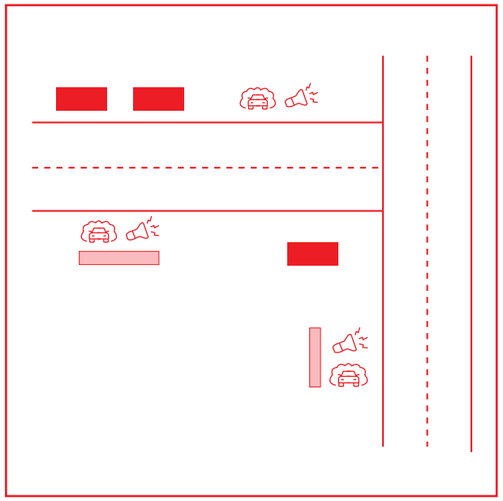
OFFSET THE OBJECT,
INTERSECTIONS

potential common space,
entrances



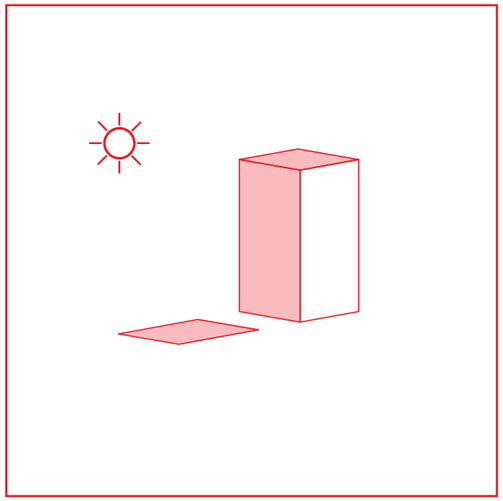
FLOW + LIGHT

social connections



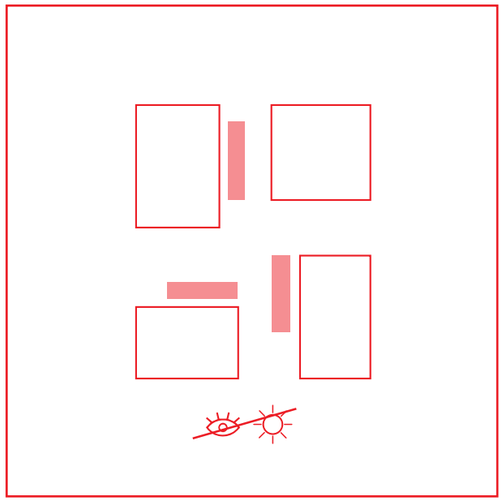
AIR/NOISE POLLUTION +
EMPTY SPACES

redensification, potential



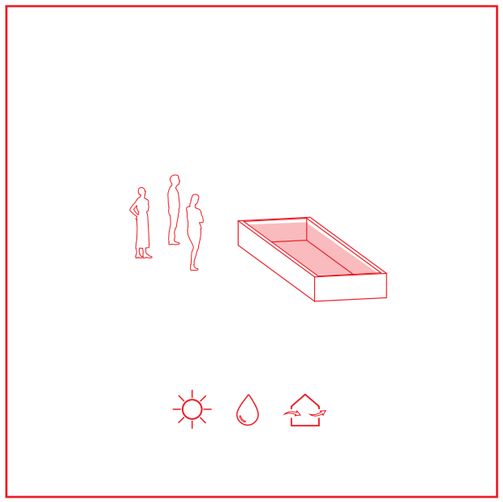
DAYLIGHT + EMPTY
SPACES/BUILDINGS

energy production



LOW VISIBILTY + LOW
LIGHT

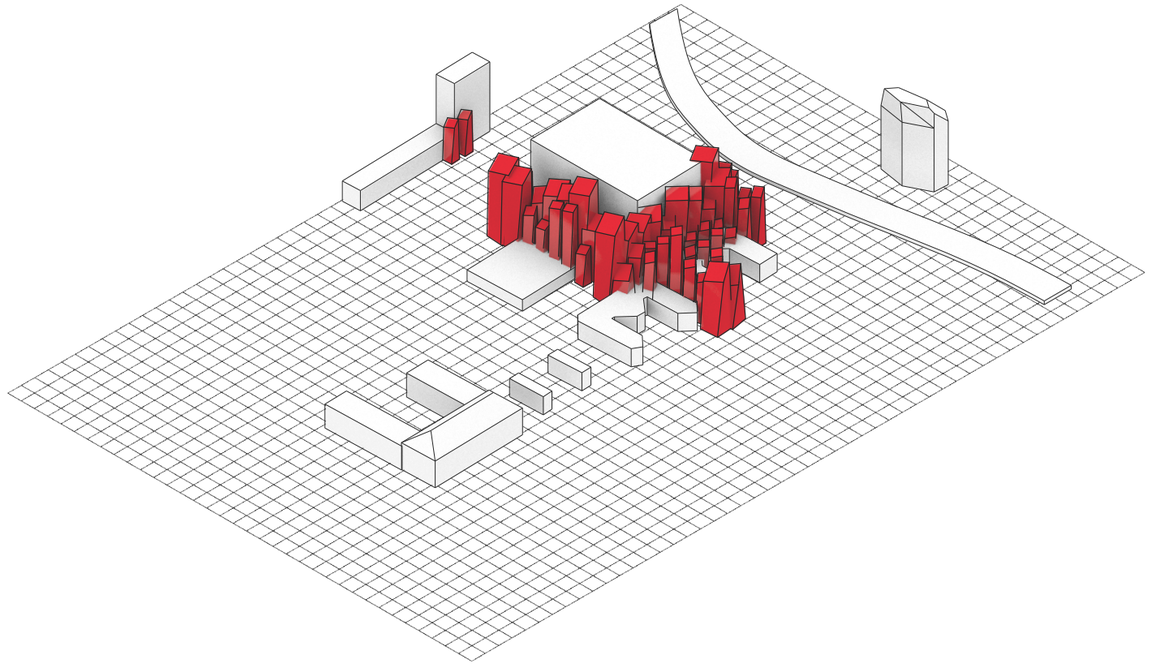
no safety, security potential



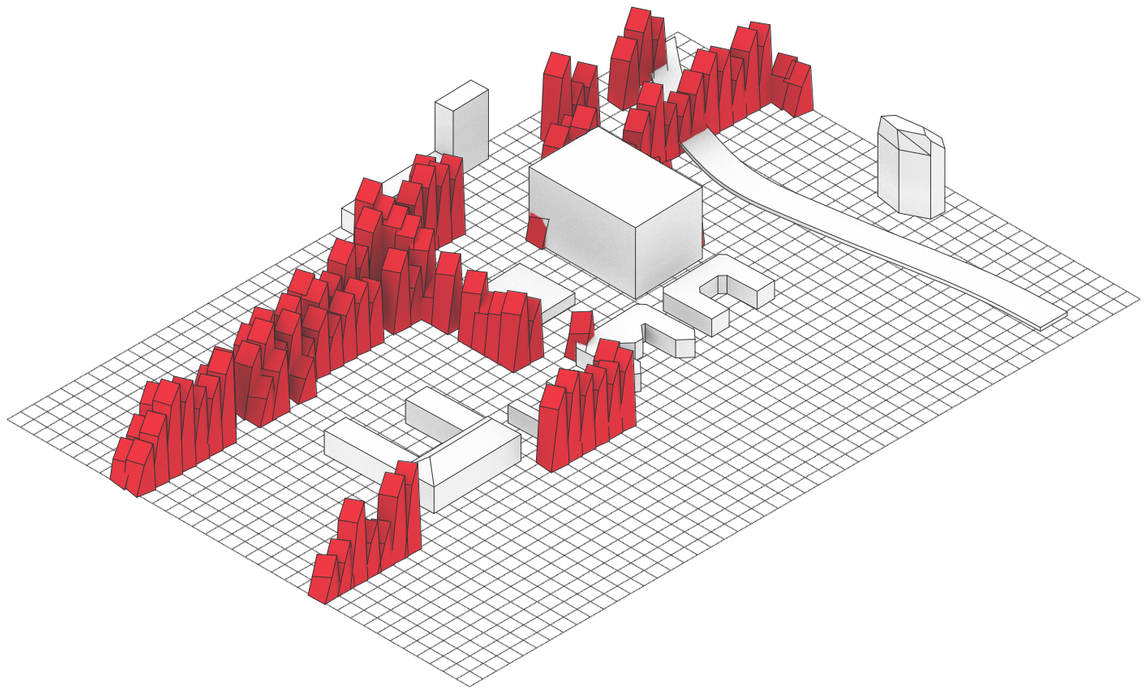
WATER + LIGHT +
VENTILATION

social space, urban agriculture

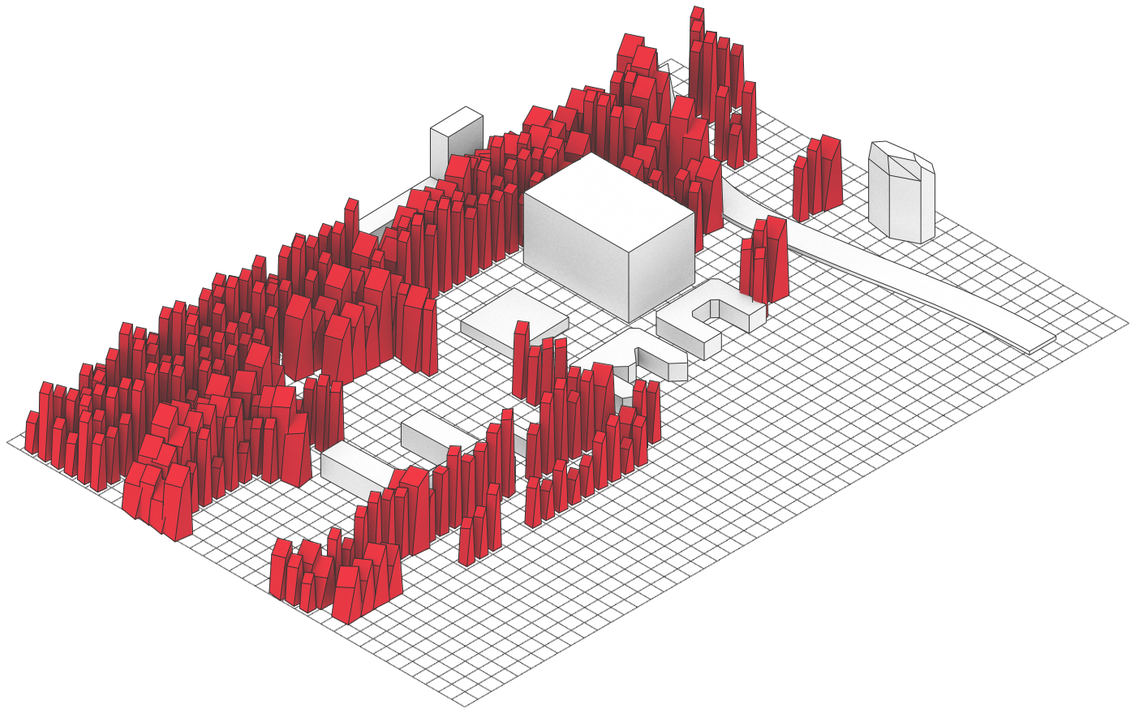
MULTIPLE ACTANT FEATURES



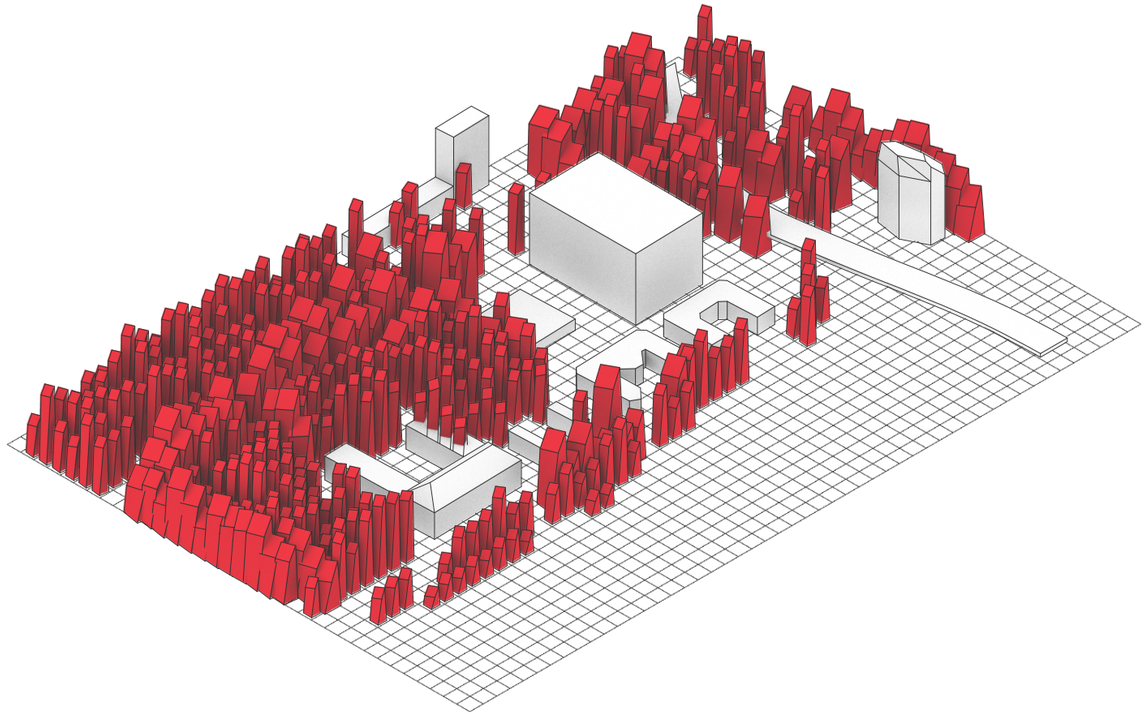
INTERSECTIONS OF OFFSETTED OBJECTS



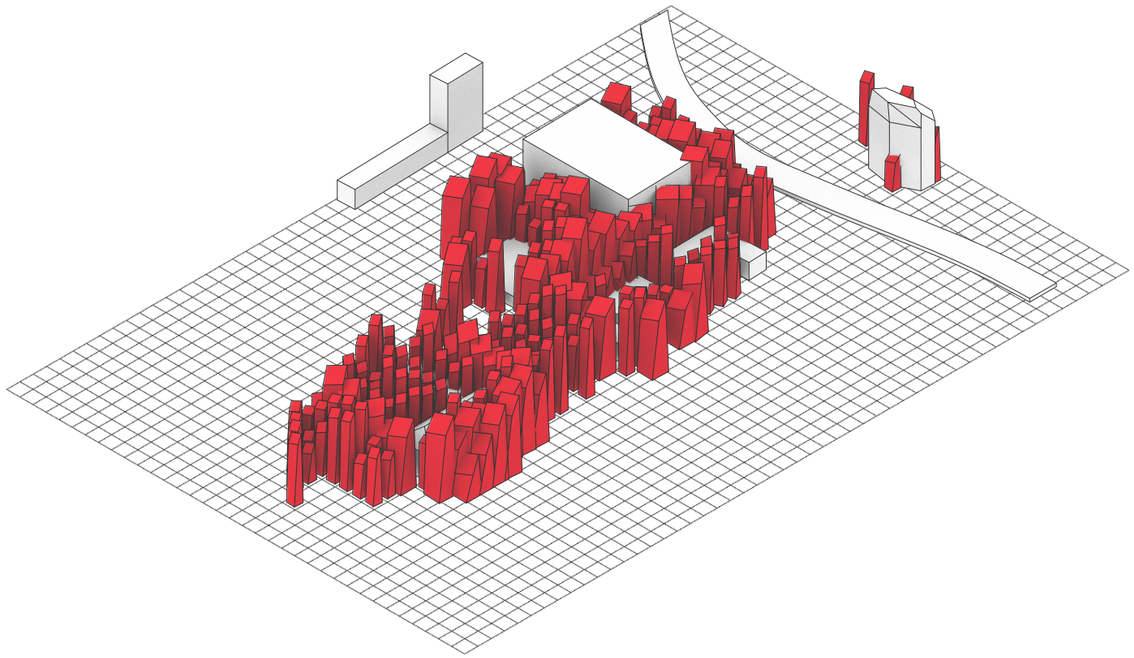
FLOW + LIGHT



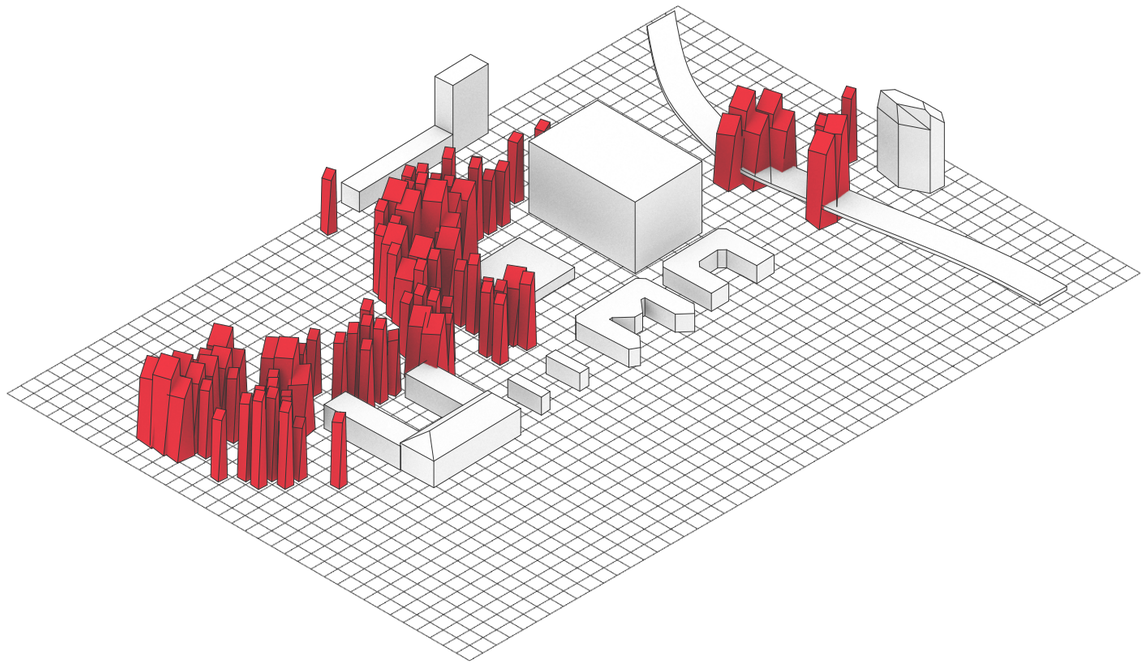
NOISE POLLUTION & EMPTY SPACE



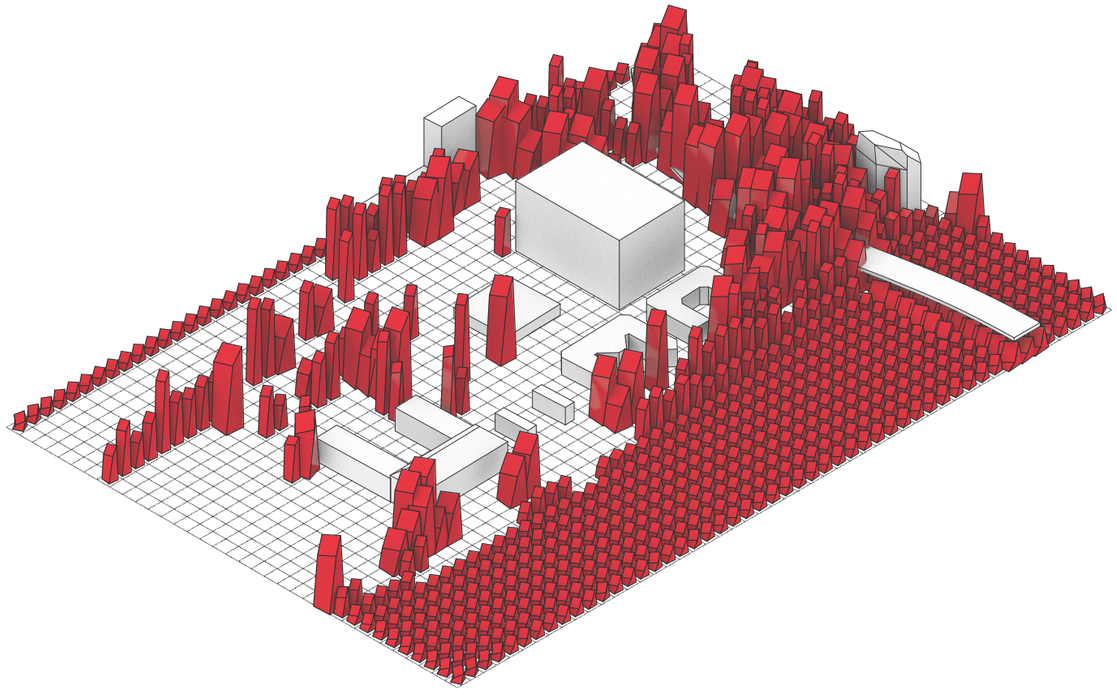
DAYLIGHT & EMPTY SPACE



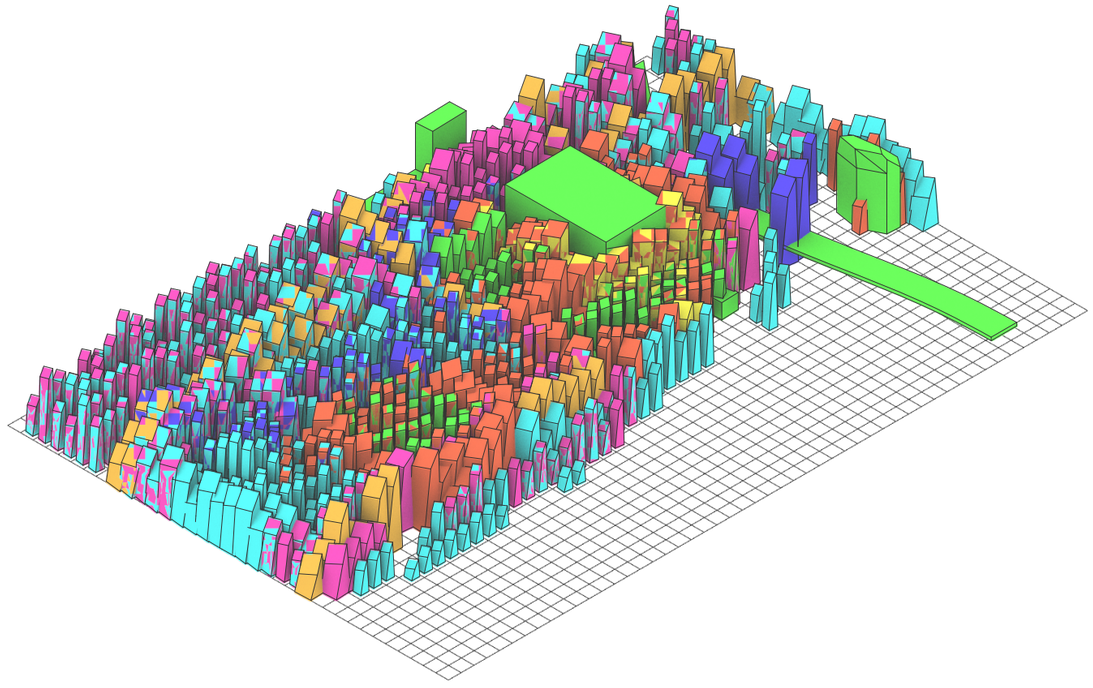
LOW VISIBILITY & LOW LIGHT



WATER & LIGHT & VENTILATION



UNHIGHLIGHTED FEATURES



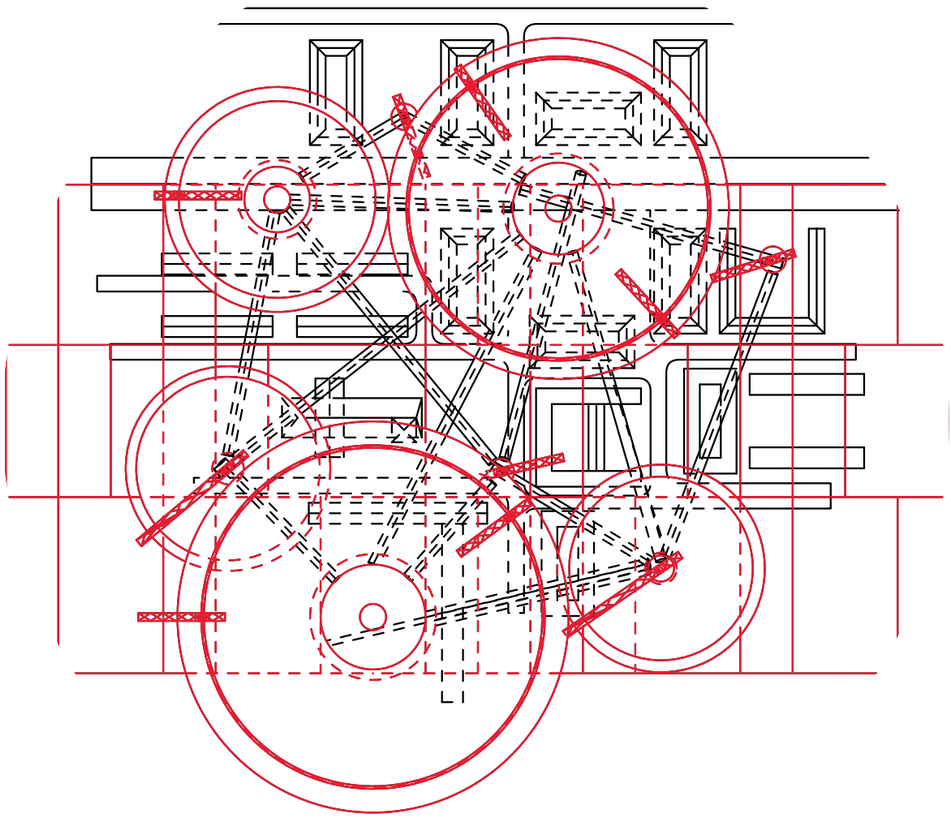
COMBINED FEATURES

HIGHLIGHTING FEATURES

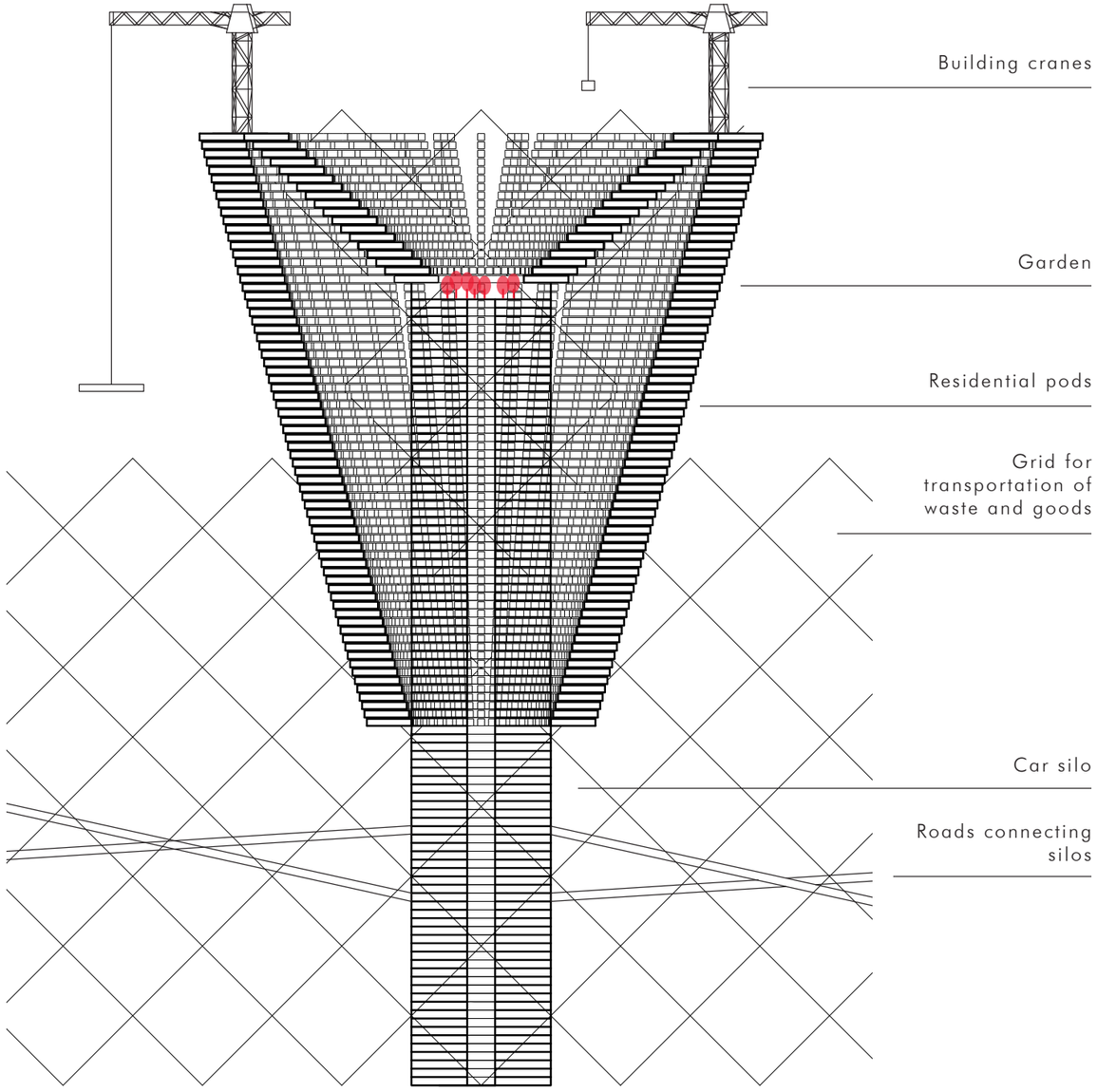
HYBRID ARCHITECTURE

My intentions for the in-depth project have been from the first beginning to occupy the sky. That's why I have looked into the Plug In City as a case study. Where the idea of it comes from a combination of criticising the glorification of suburbia and the huge construction site that was Europe around 1960.

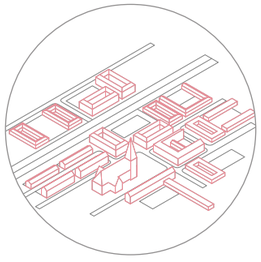
In the Plug In City, a superstructure in the form of a grid would be implemented to an exisiting city world. This grid cassies waste and supply throughout the city. Large cilos would be constructed to provide a core for further construction whilst also providing parking. Between the silos, roads are connected above the exisiting city. Lastly the conical shape of housing and lessure in constructed using the permanent construction cranes. The housing pods can be modified and moved whenever suited. The city were never due be finished, but rather under permanent construction.



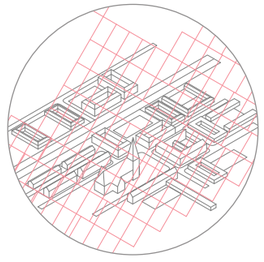
Aerial view



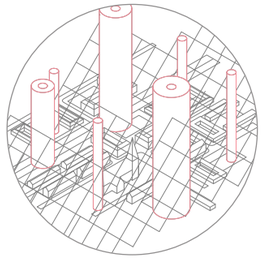
Section



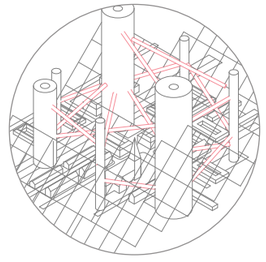
Traditional city



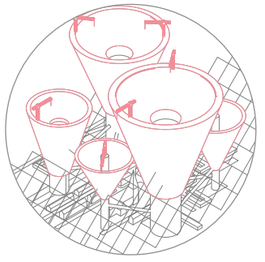
Adding the grid



Adding the silos



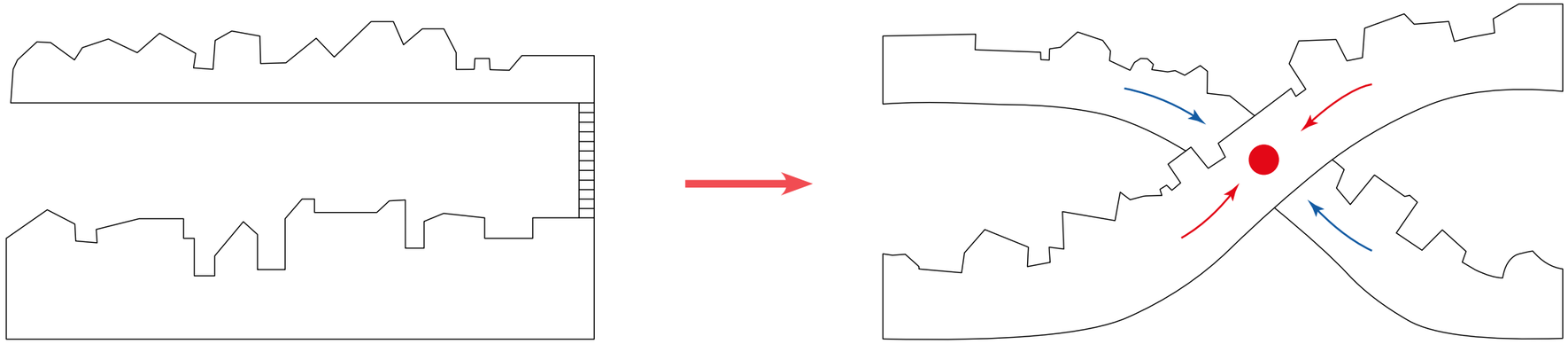
Adding the roads



Adding the residential units

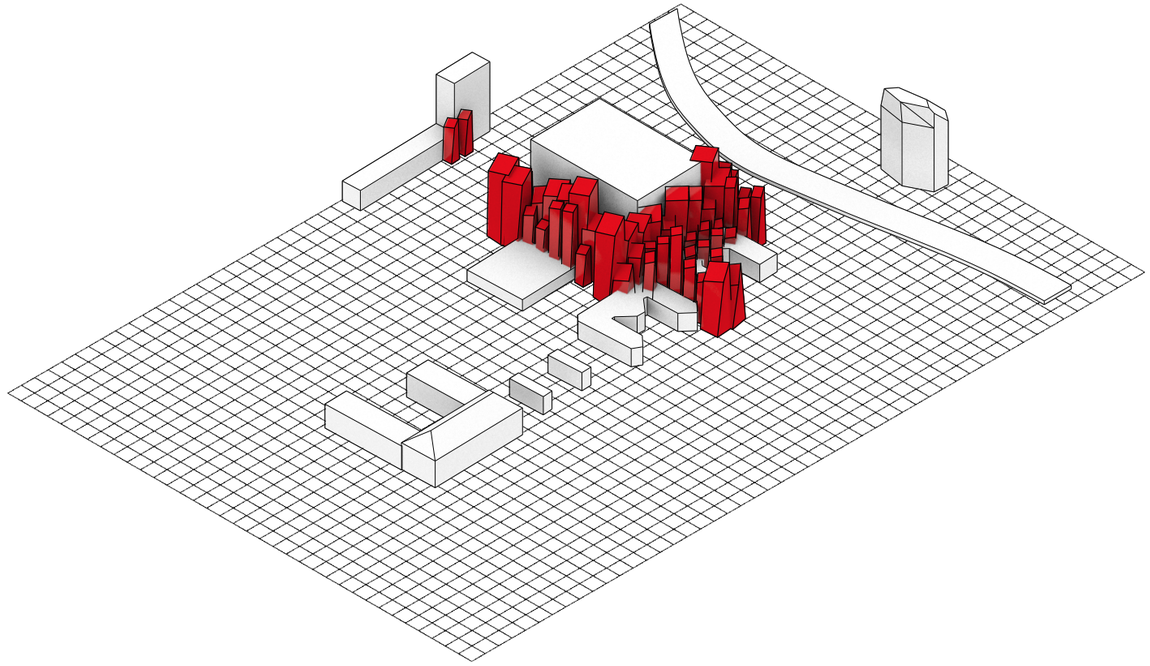
FIRST THOUGHTS

My first initial thoughts regarding the project in depth module is that I didn't want to deal with the overlapping from the first beginning. So what I have been thinking about is to create a structure that will occupy the sky. Not in a way that it feels that it is two sperate levels, rather in a way that both structures help and provide each others with different quailities. This structure will adapt itself for whatever happens on the ground level.

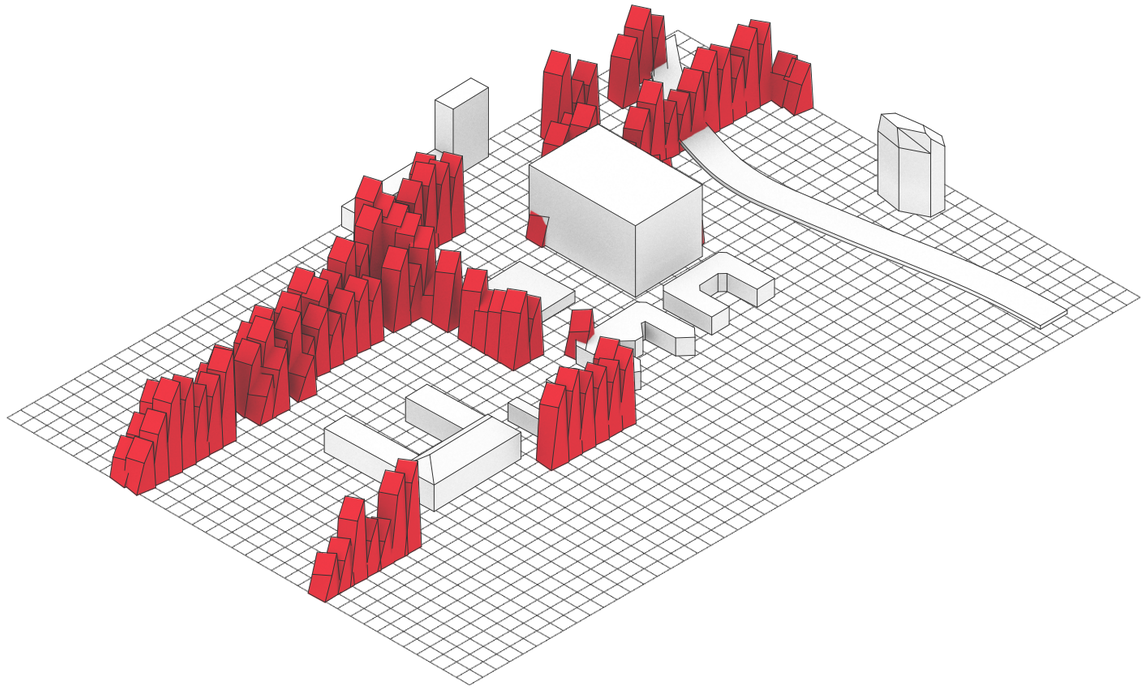


FORM FINDING

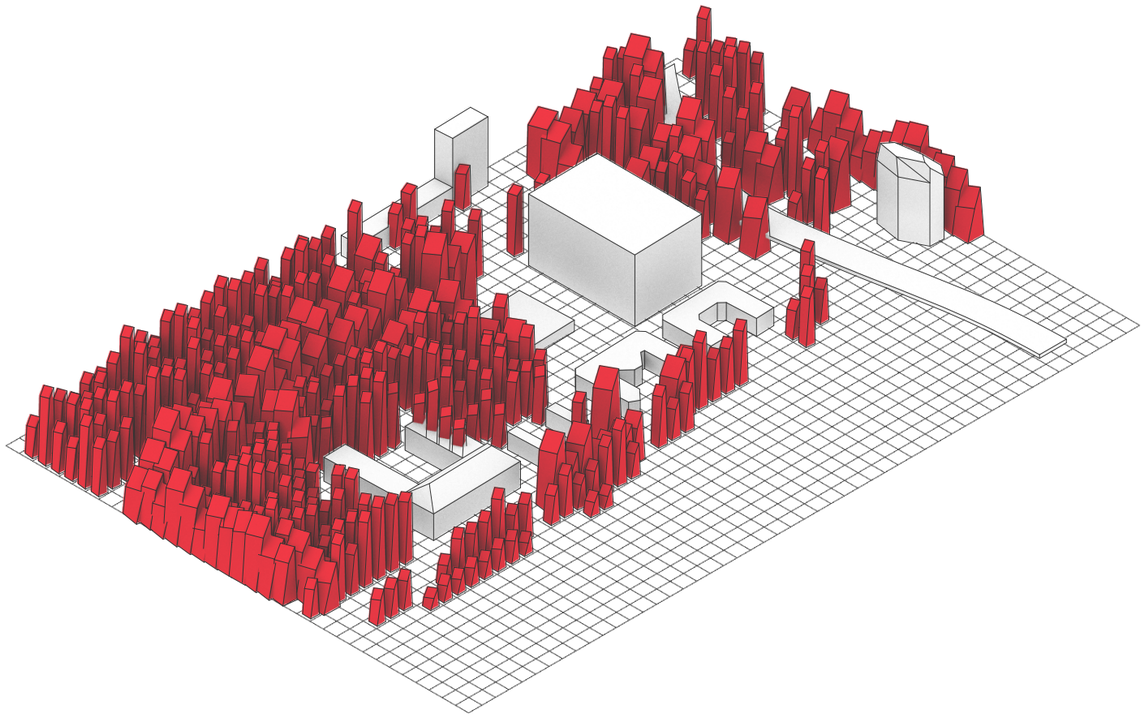
In the form finding, the features that have been created in the architectural experimentation part have been used to generate a form for the new supra-structure. All the index that has a social potential have been combined together and then a few of them have been selected and laborated with to generate the form. The form finding part shows as well how the conecpt got developed and all the light elements that have been used in the design.



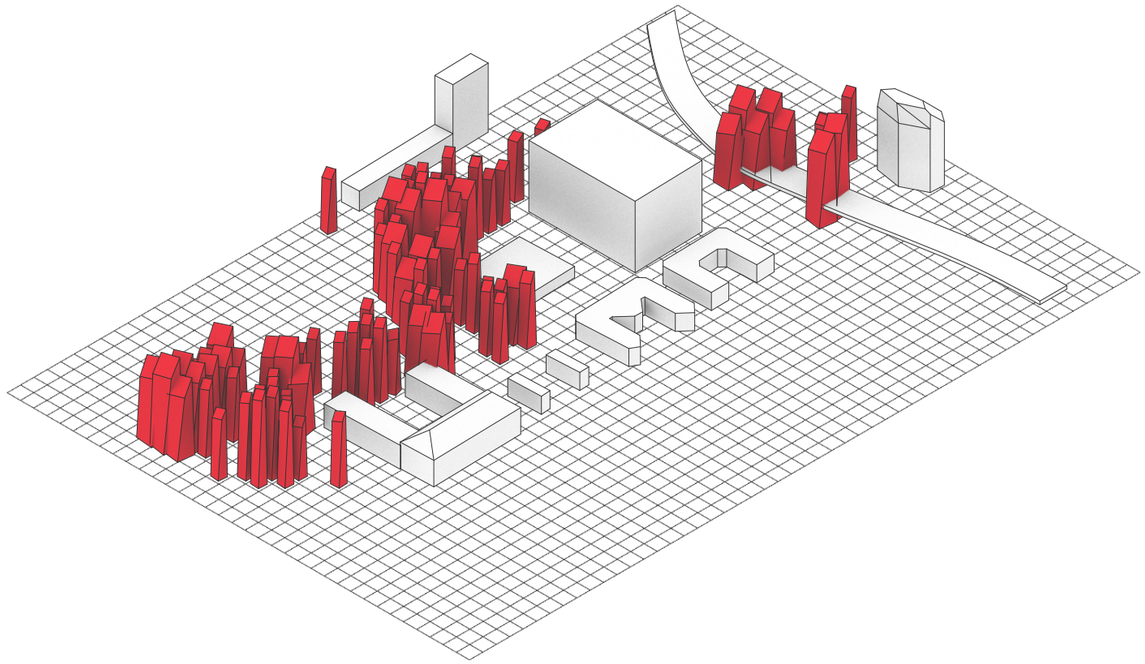
INTERSECTIONS OF OFFSETTED OBJECTS



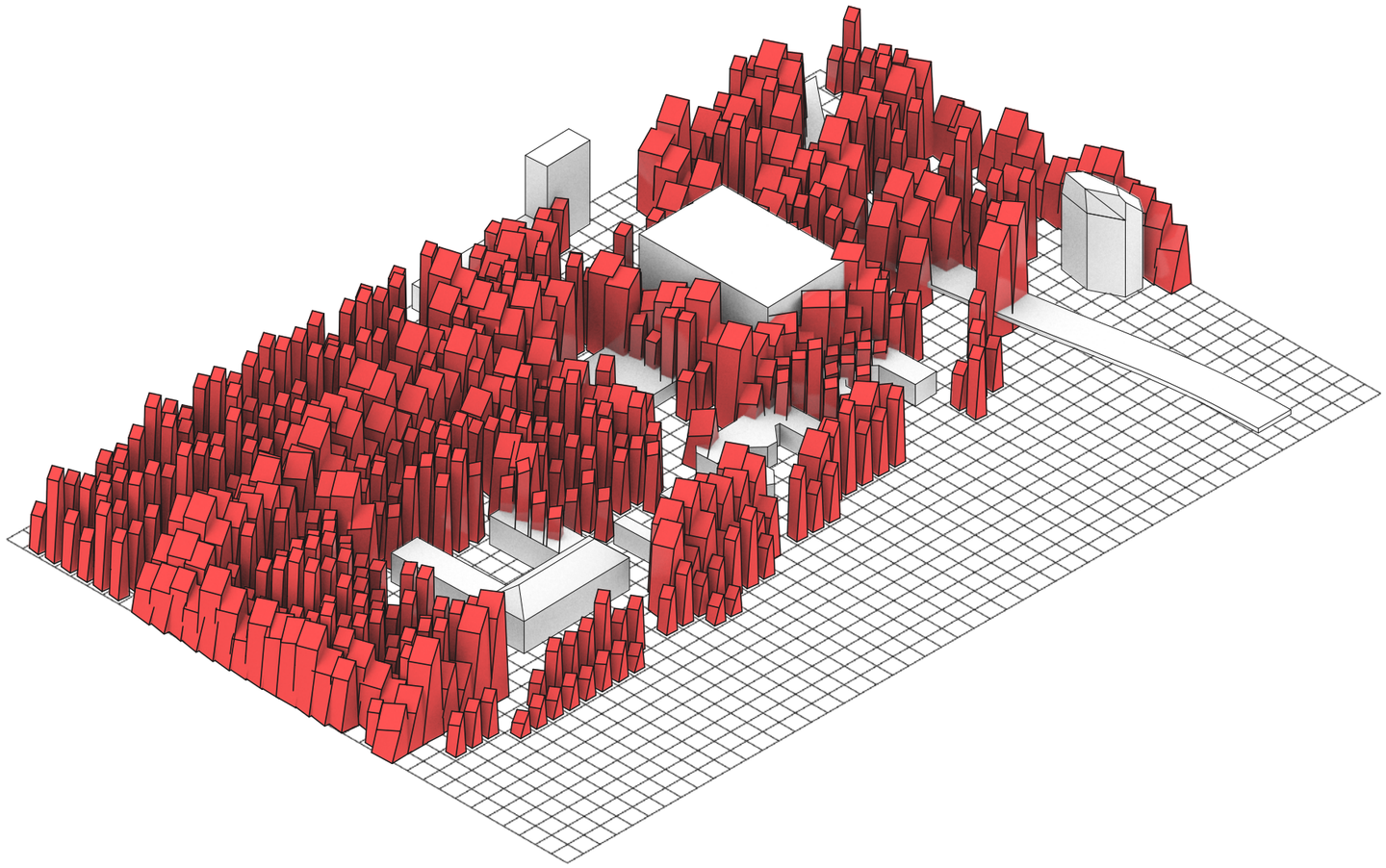
FLOW + LIGHT



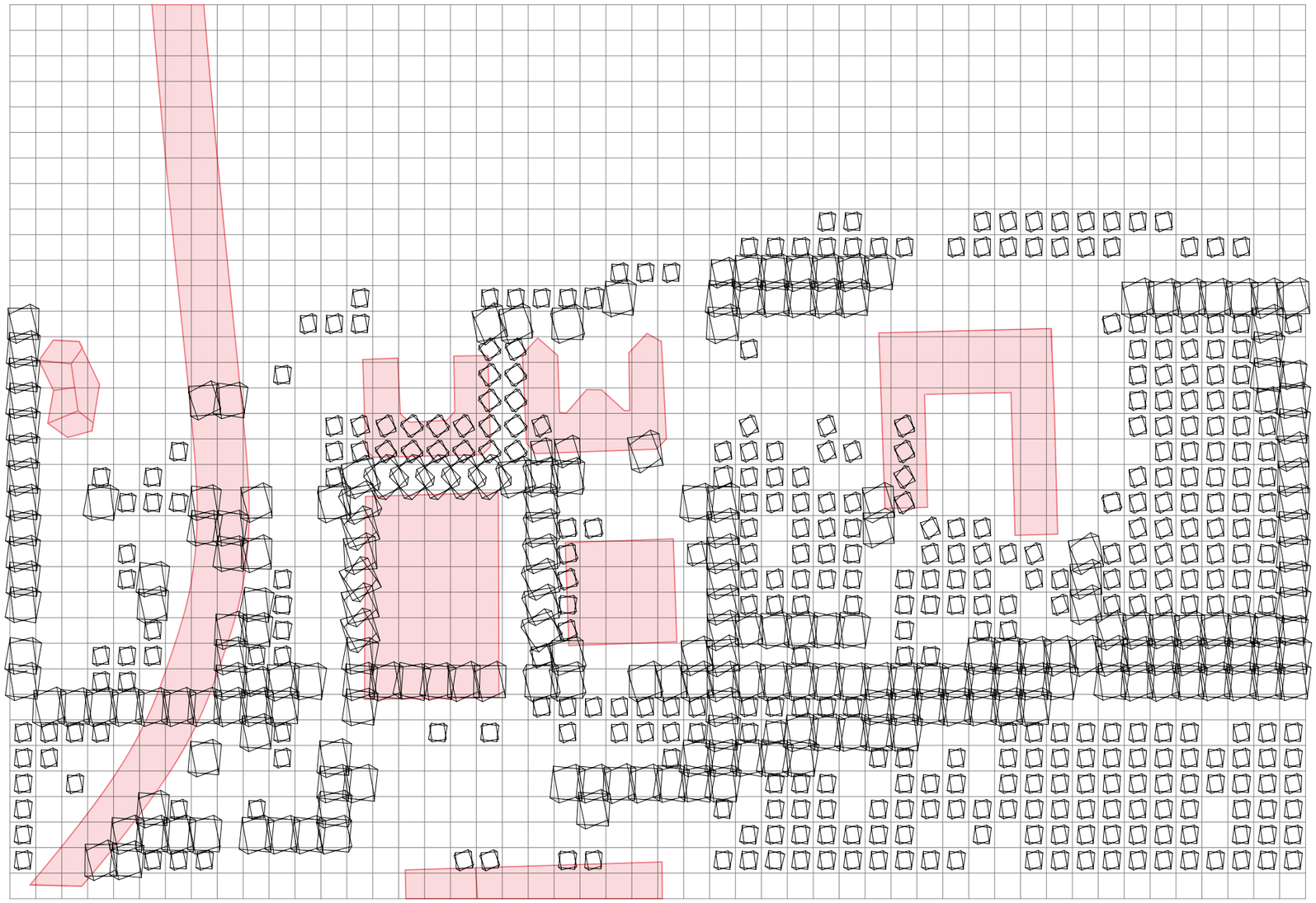
DAYLIGHT & EMPTY SPACE



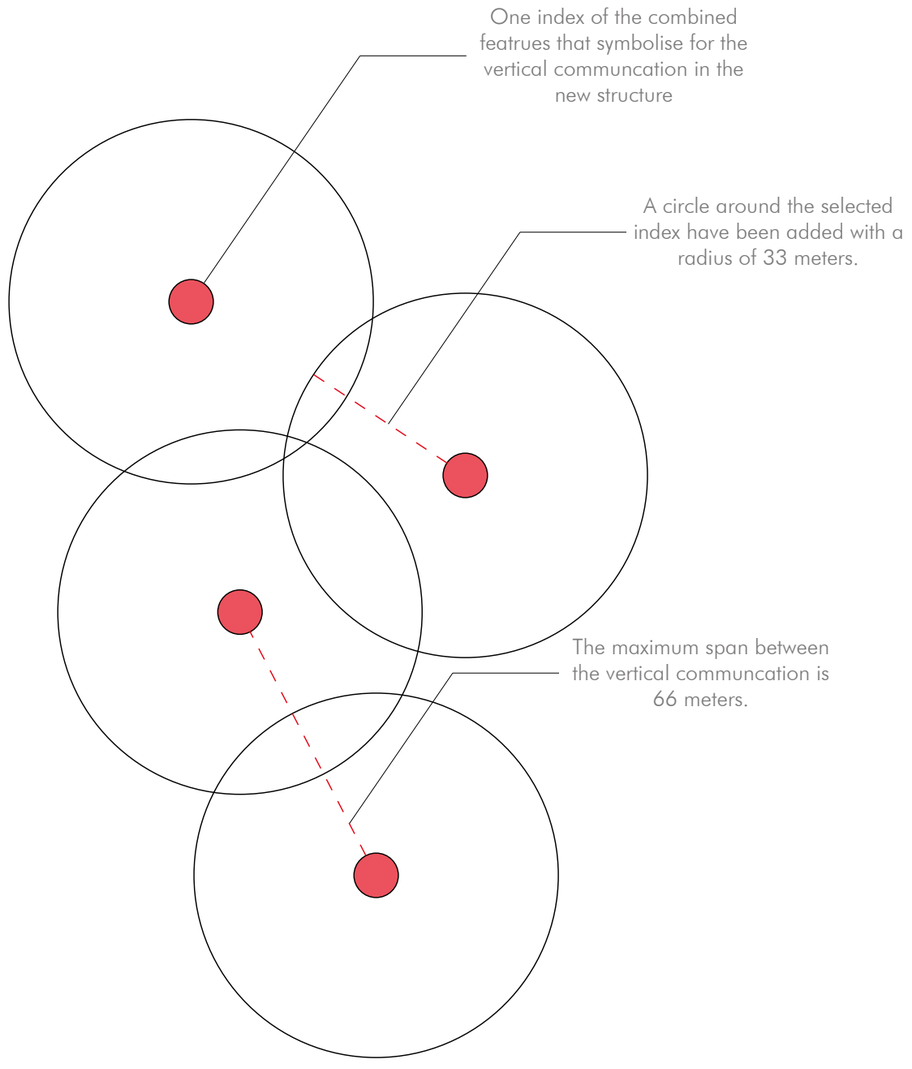
WATER & LIGHT & VENTILATION



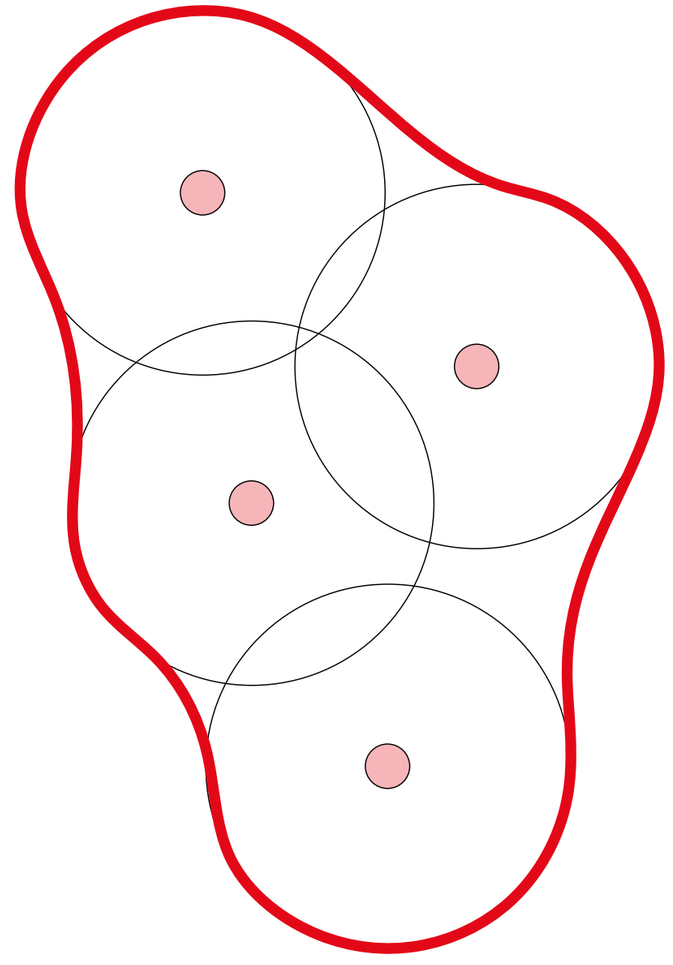
COMBINED FEATURES THAT CONTRIBUTE FOR SOCIAL ACTIVITIES



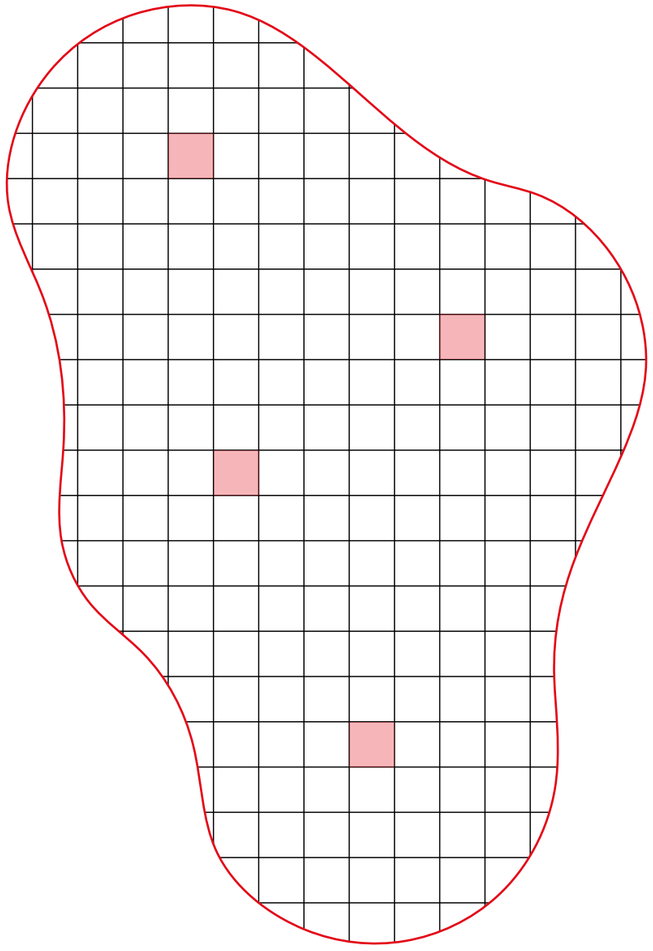
PLAN-VIEW MAP SHOWING THE COMBINED FEATURES THAT HAS A SOCIAL POTENTIALS



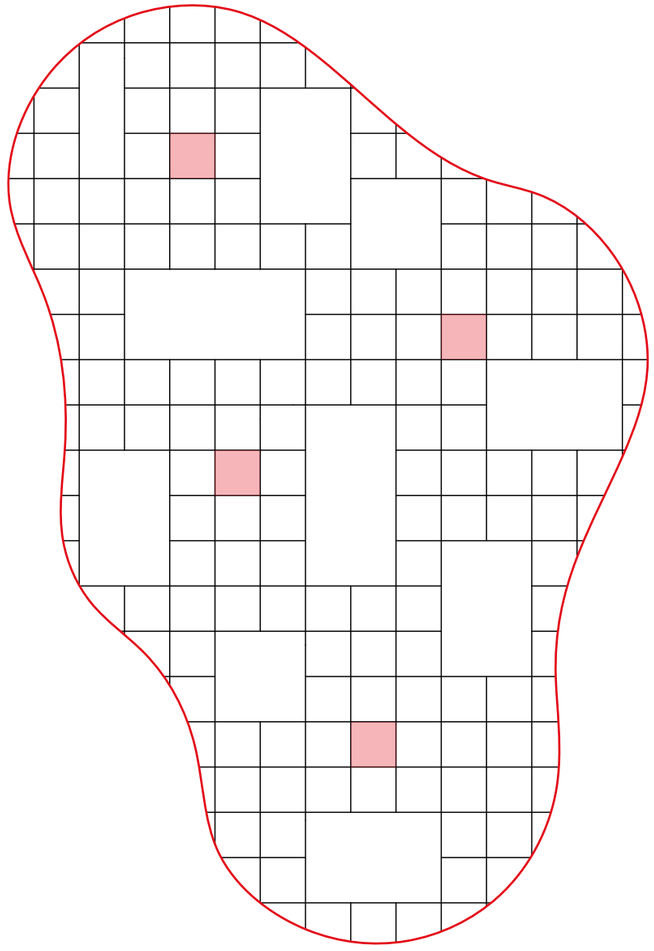
THE SELECTED INDEX ARE CONNECTED TO BE ABLE TO CARRY THE MODULES



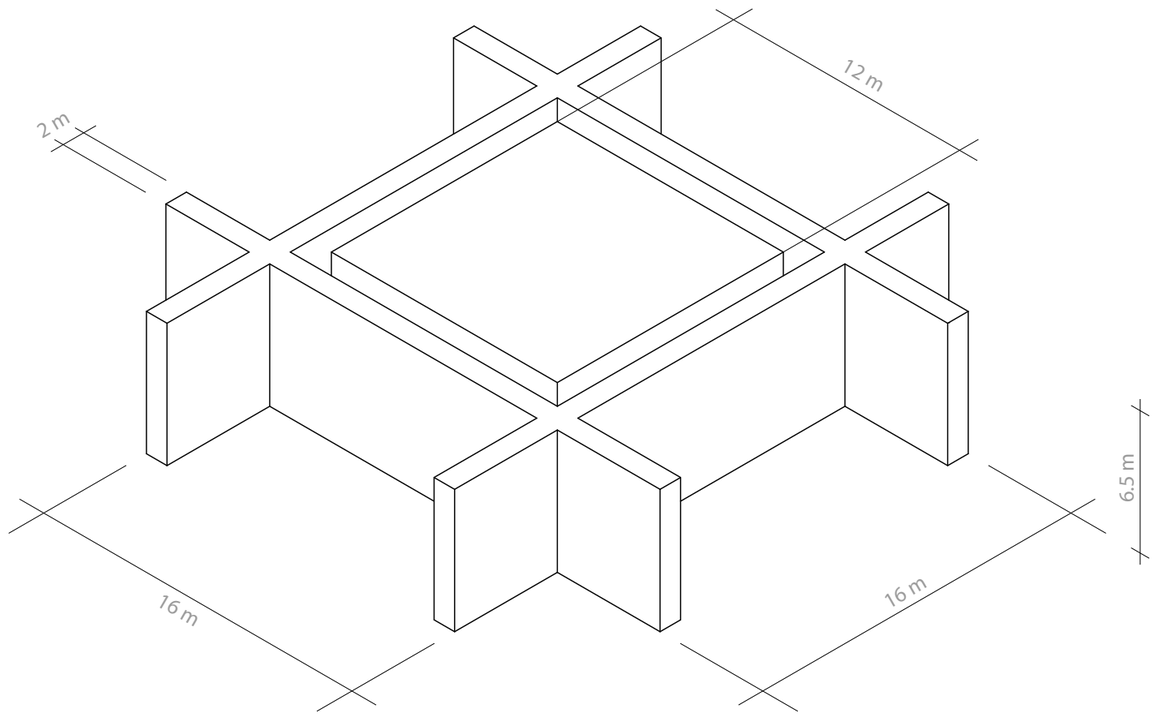
THE OUTLINE OF THE NEW STRUCTURE HAVE BEEN GENERATED



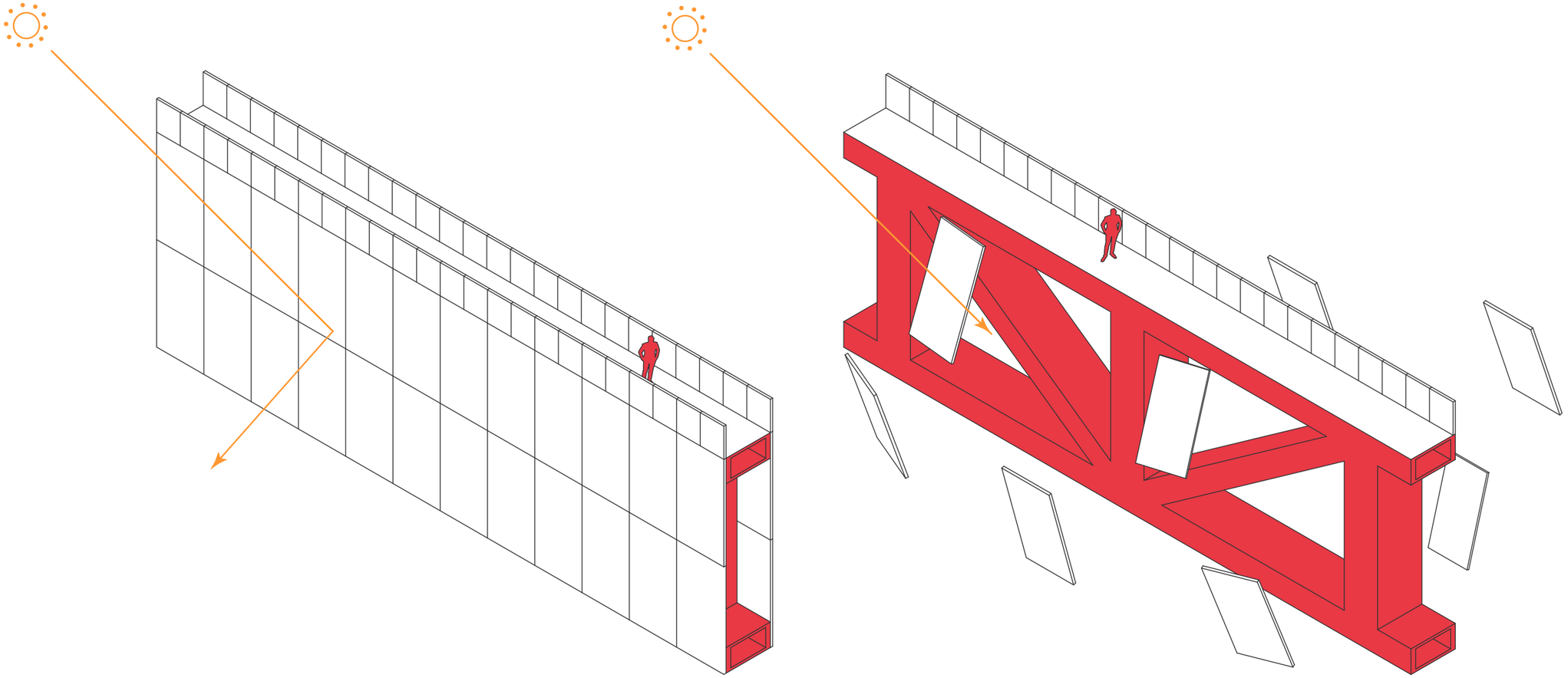
A GRID 13 * 13 METERS HAVE BEEN CREATED



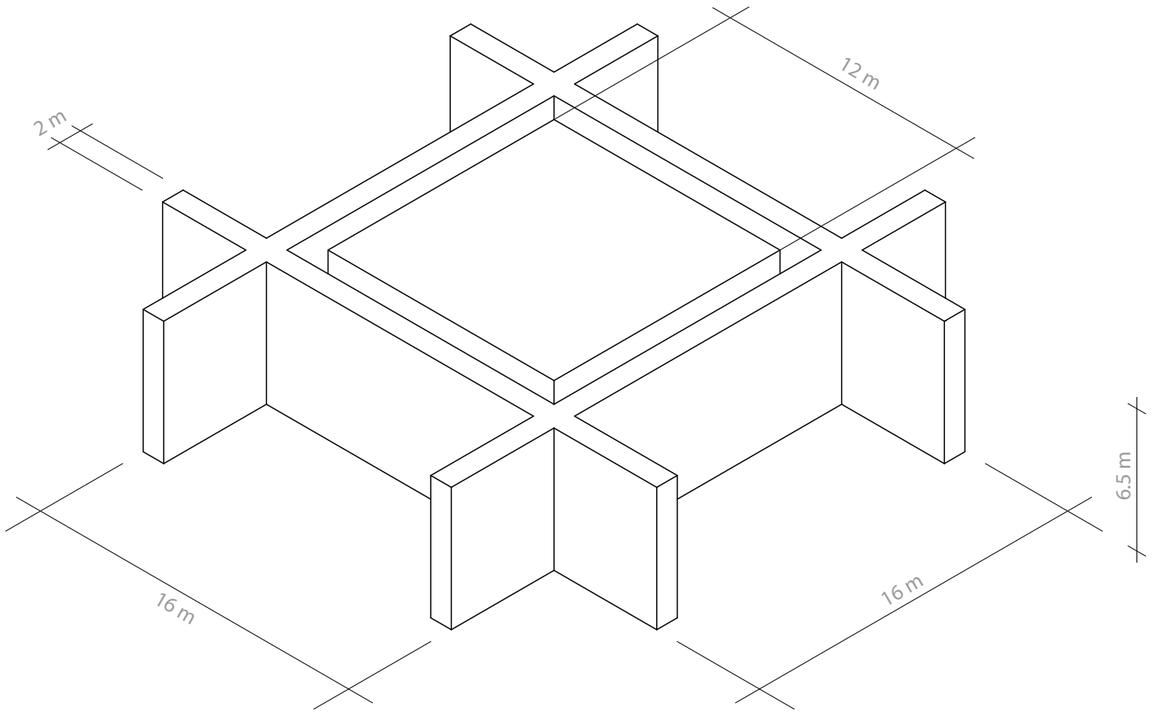
OPENINGS HAVE BEEN CREATED TO ALLOW MORE LIGHT

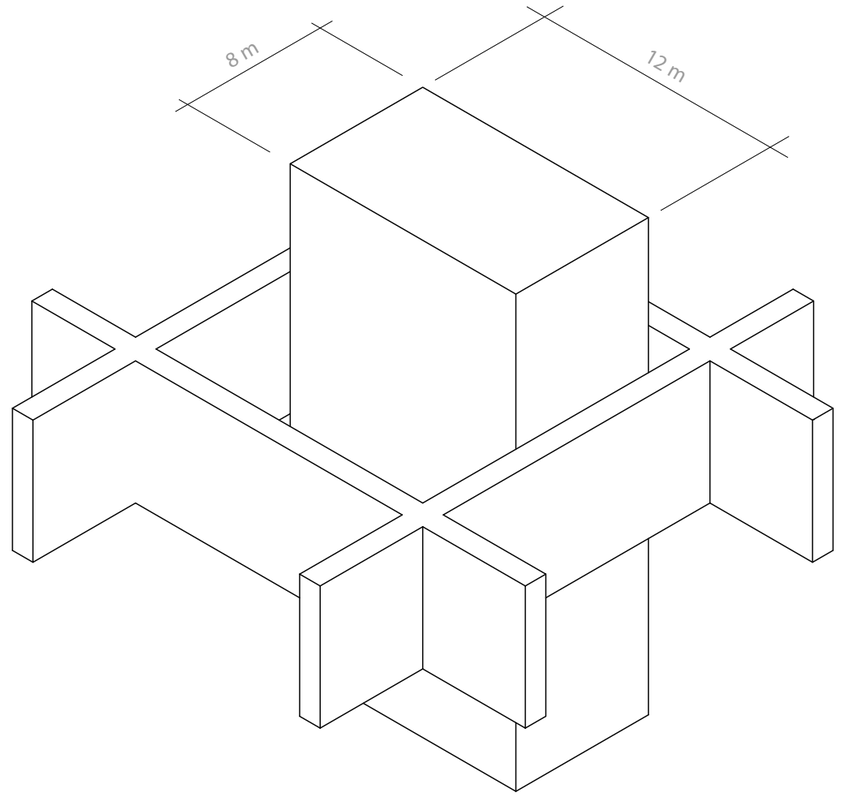


THE DIMENSIONS OF THE STREETS AND THE STRUCTURE HAVE BEEN DECIDED

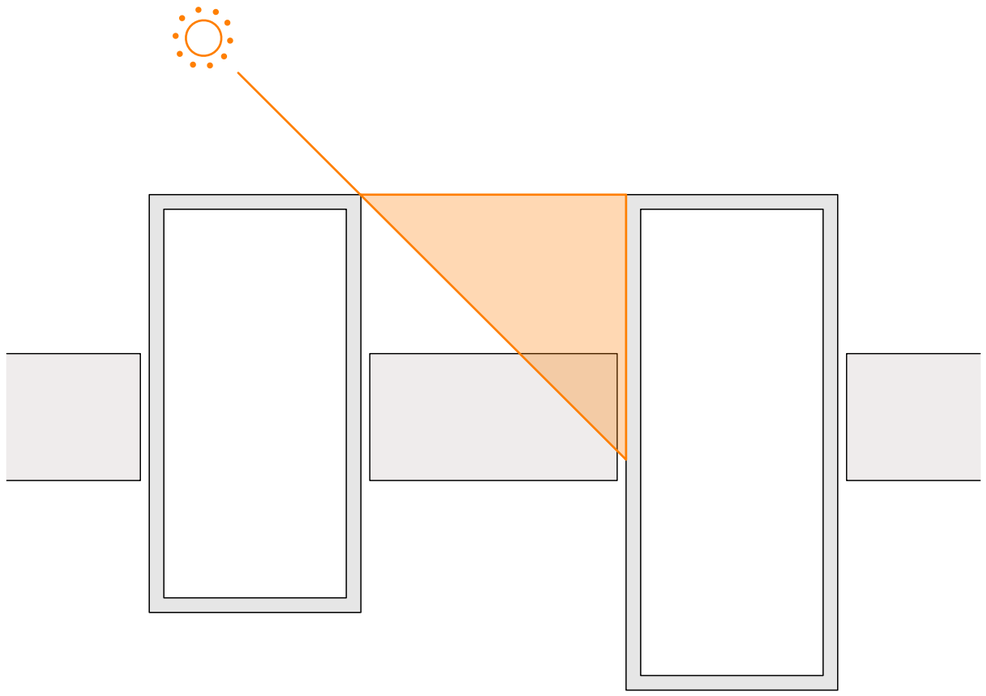


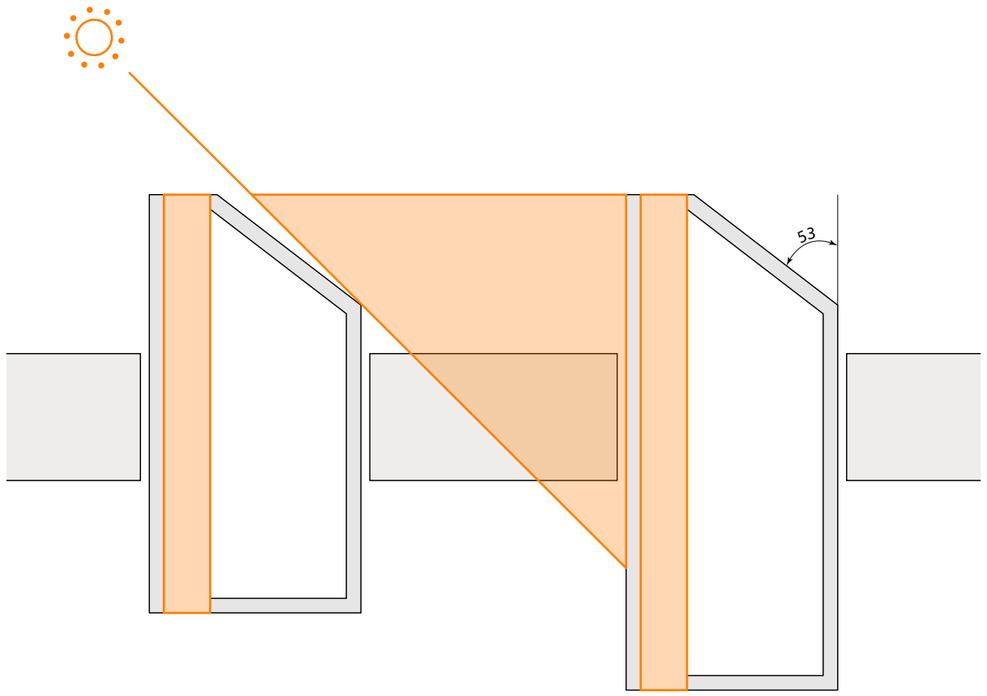
USING A TRUSS STRUCTURE INSTEAD OF WALL STRUCTURE



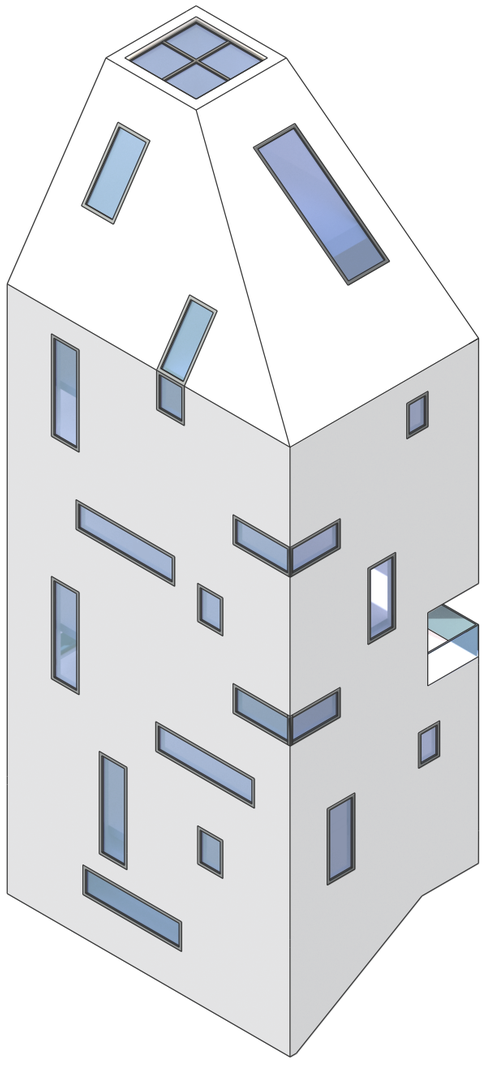


THE SIZE AND THE PLACEMENT OF THE MODULE TO ALLOW MORE LIGHT

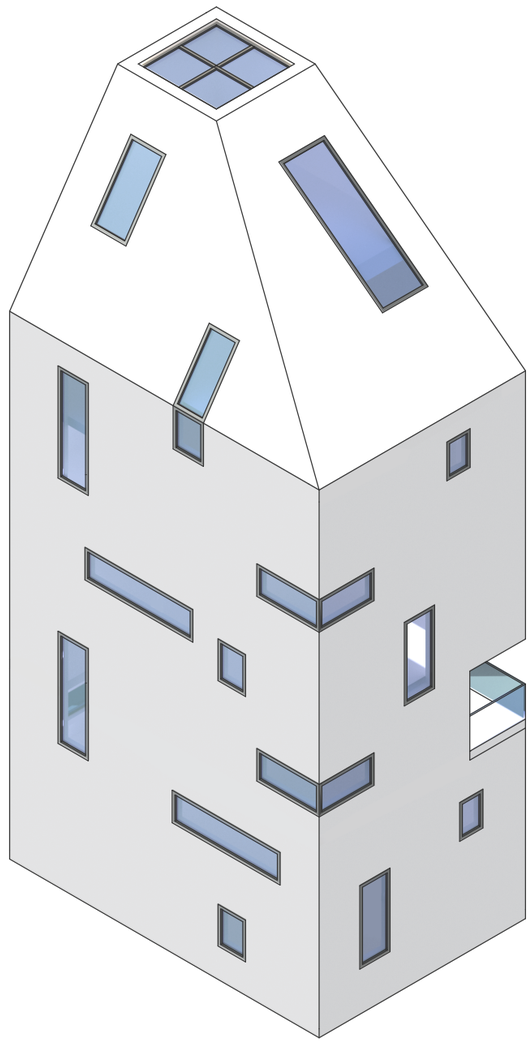




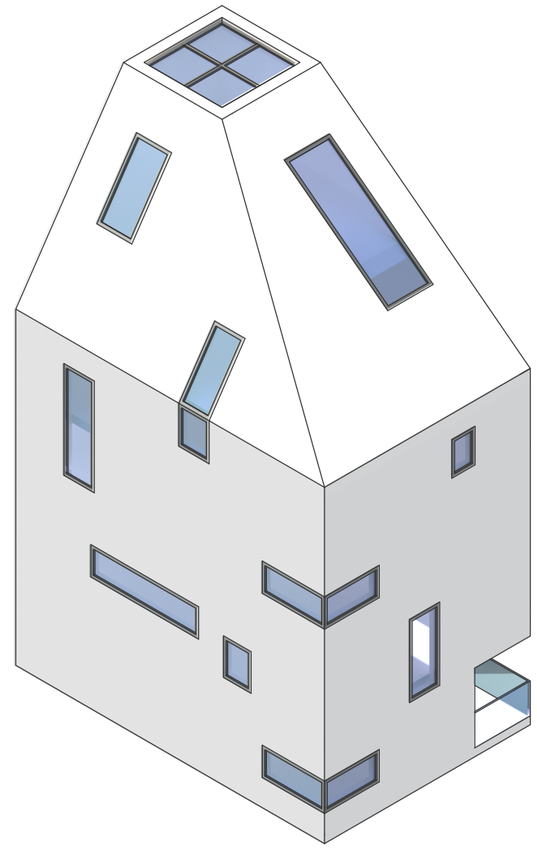
THE ROOF OF THE MODULES GOT TITLED BY 53 DEGREES TO ALLOW MORE LIGHT



MODULE C



MODULE B



MODULE A

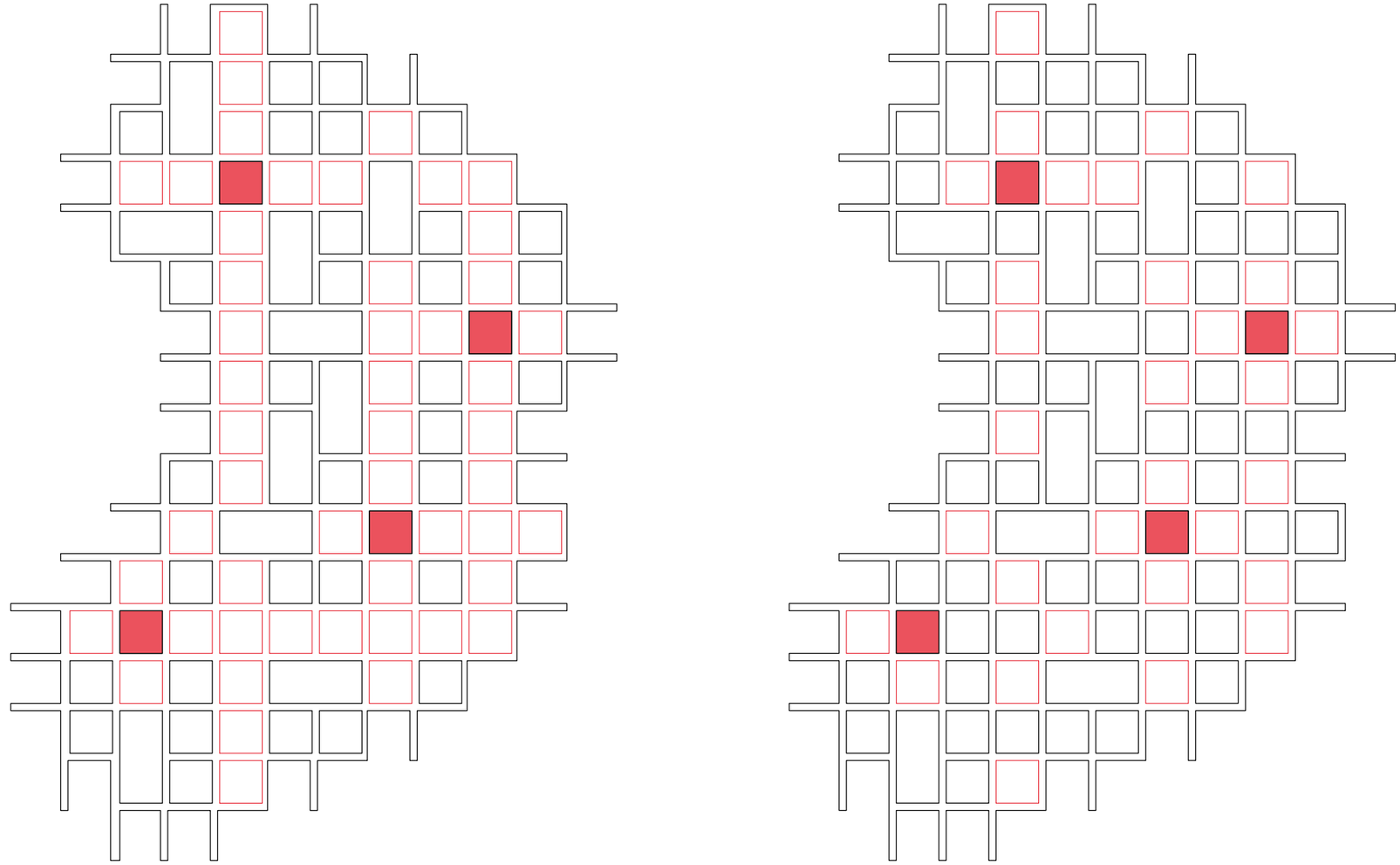


DIAGRAM SHOWING THE POSSIBILITIES AND DISTRIBUTION OF MODULE B & C

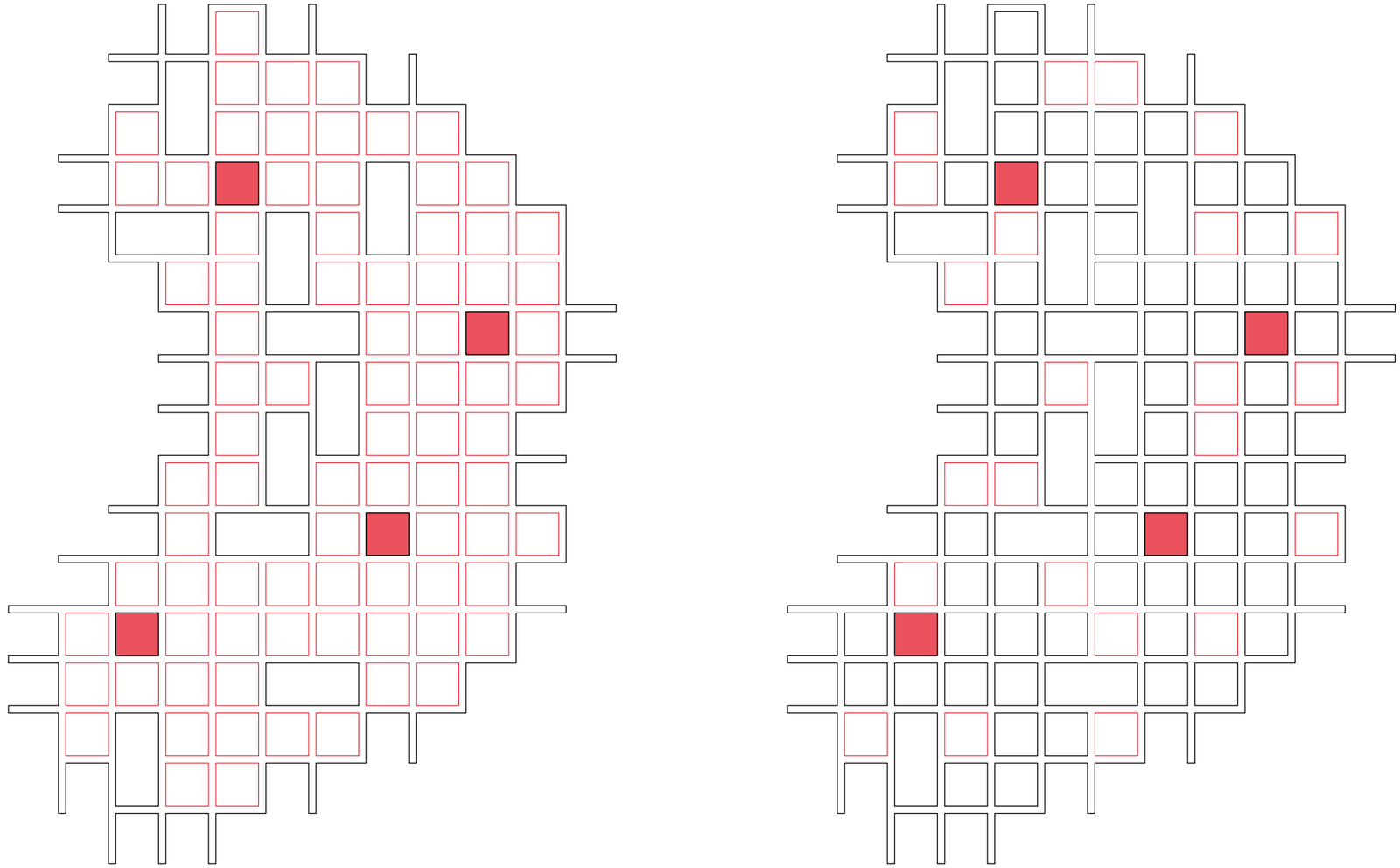
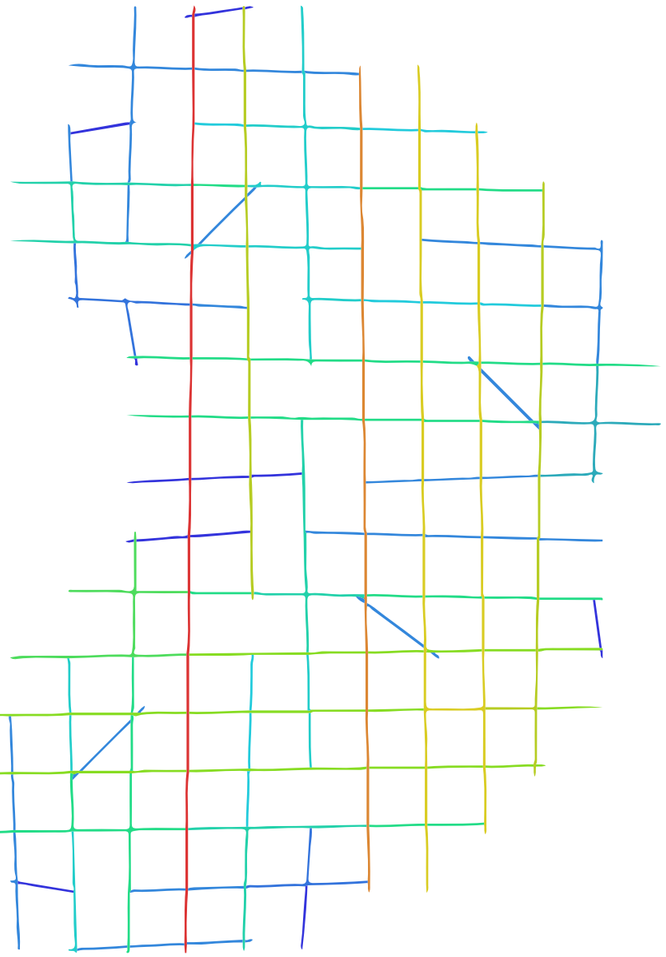
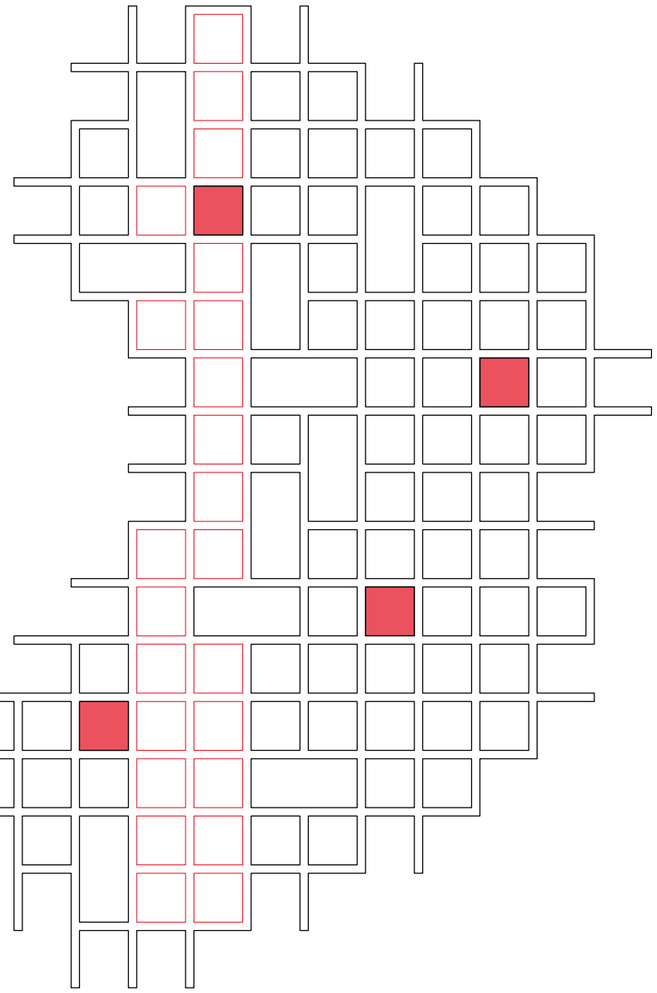


DIAGRAM SHOWING THE POSSIBILITIES AND DISTRIBUTION OF MODULE A

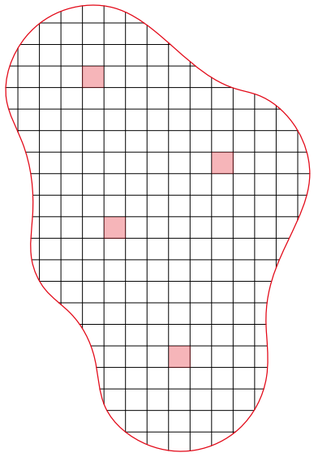




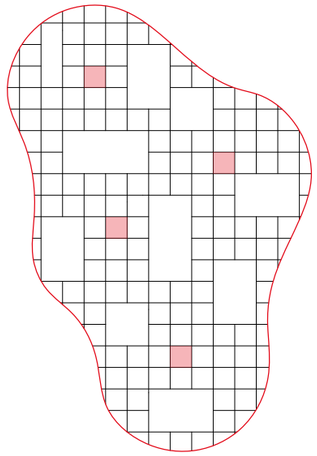
HIGH CON-
NECTIVITY

LOW CON-
NECTIVITY

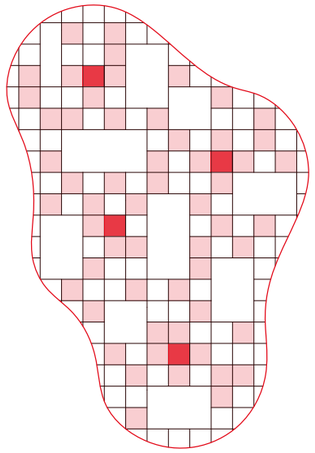
CONNECTIVY ANALYSIS HAVE BEEN MADE TO DETERMINE THE SOCIAL UNITS



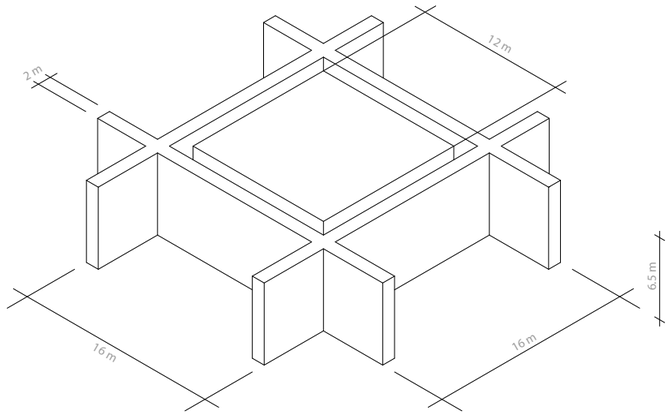
The size/ height/ rotation of the structure



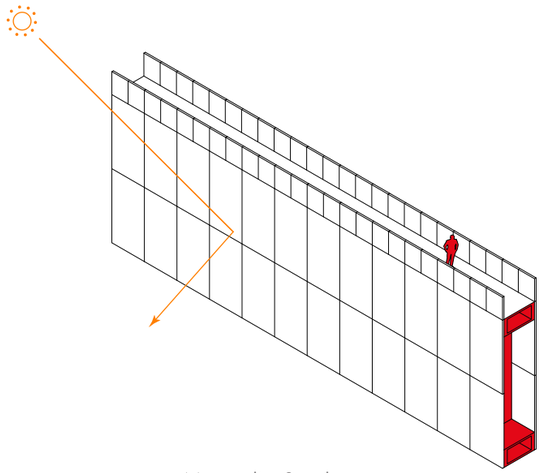
Having openings for the light demanding surfaces



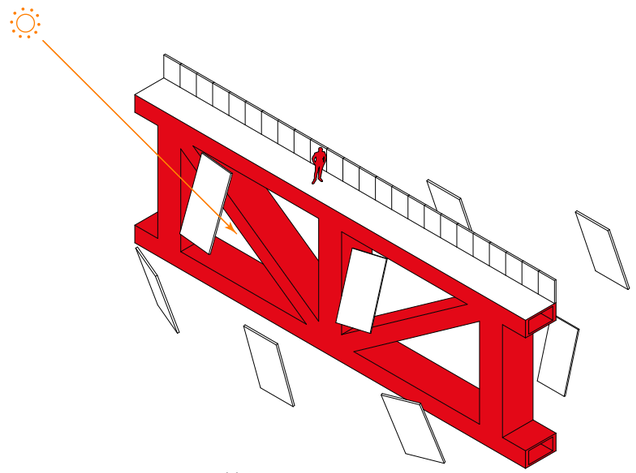
The distribution of the modules



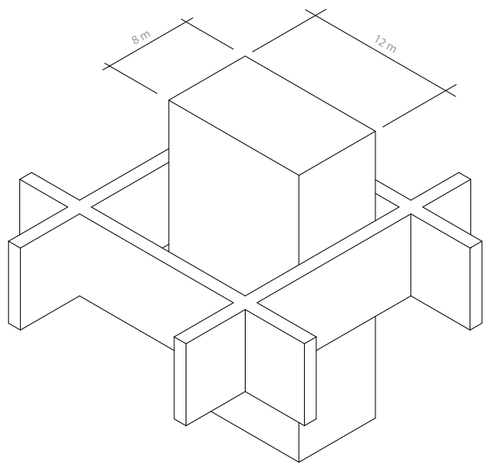
The thickness of the new structure



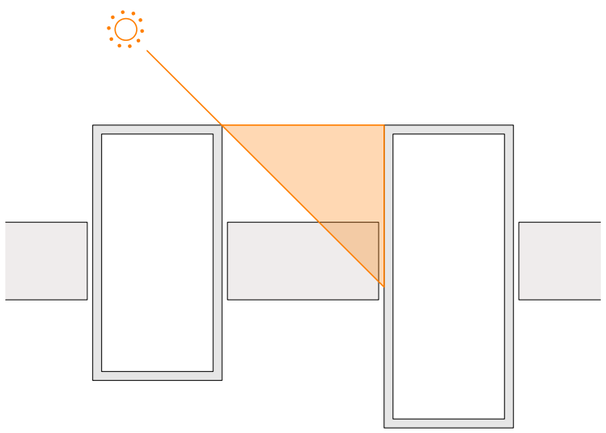
Materiality & color



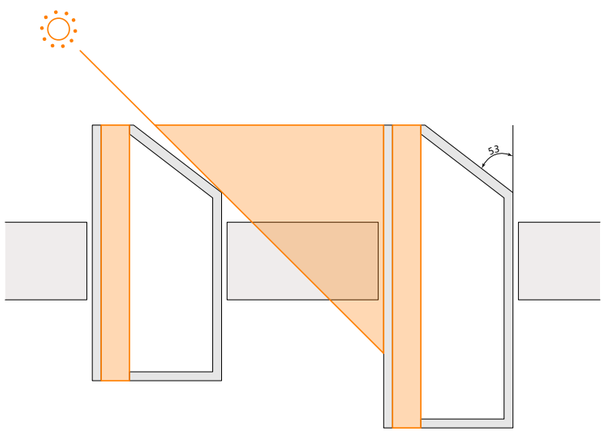
Using a truss structure



The size of the module



The placment in relation to each other

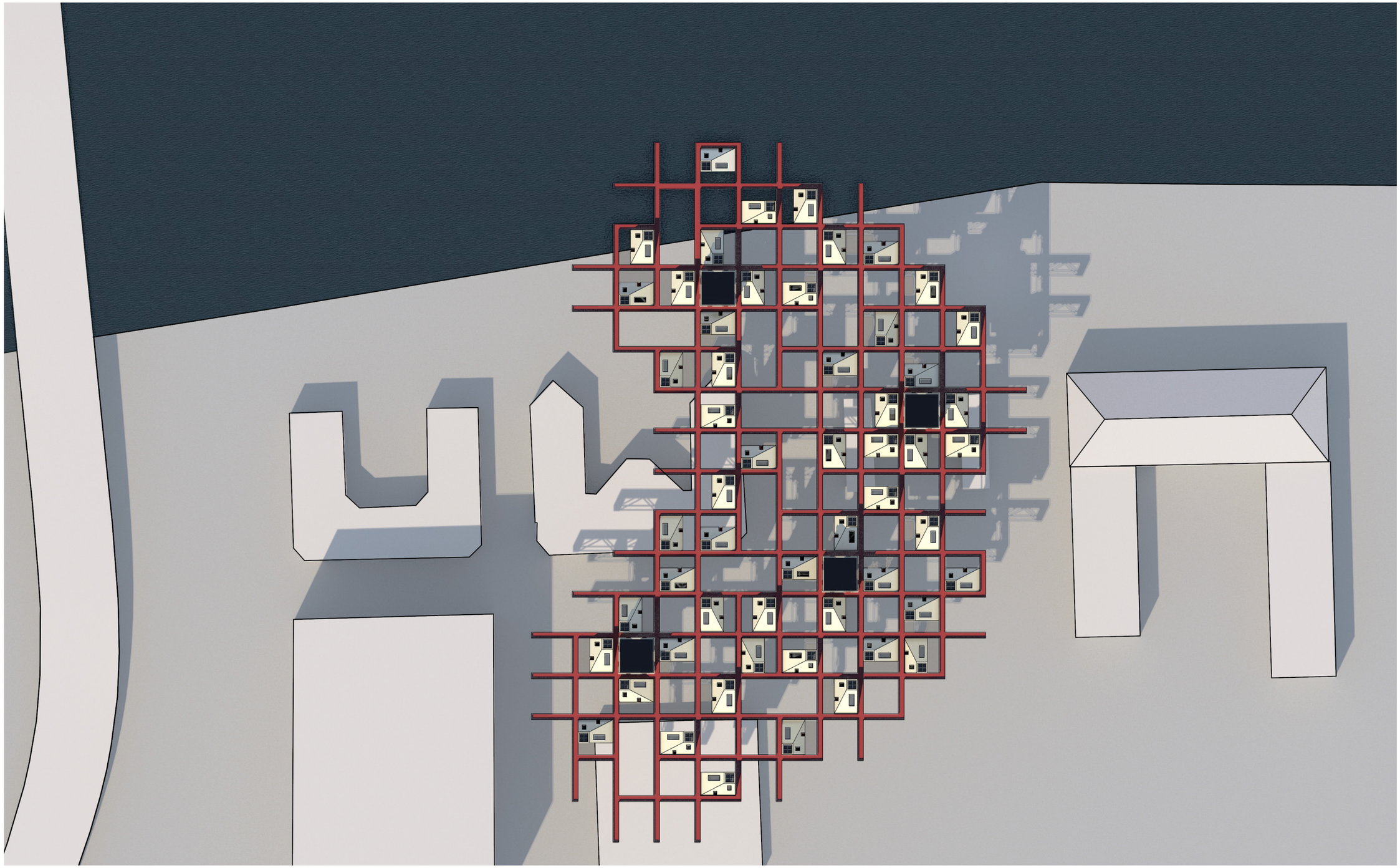


The shape of the module

UPPER-HOOD

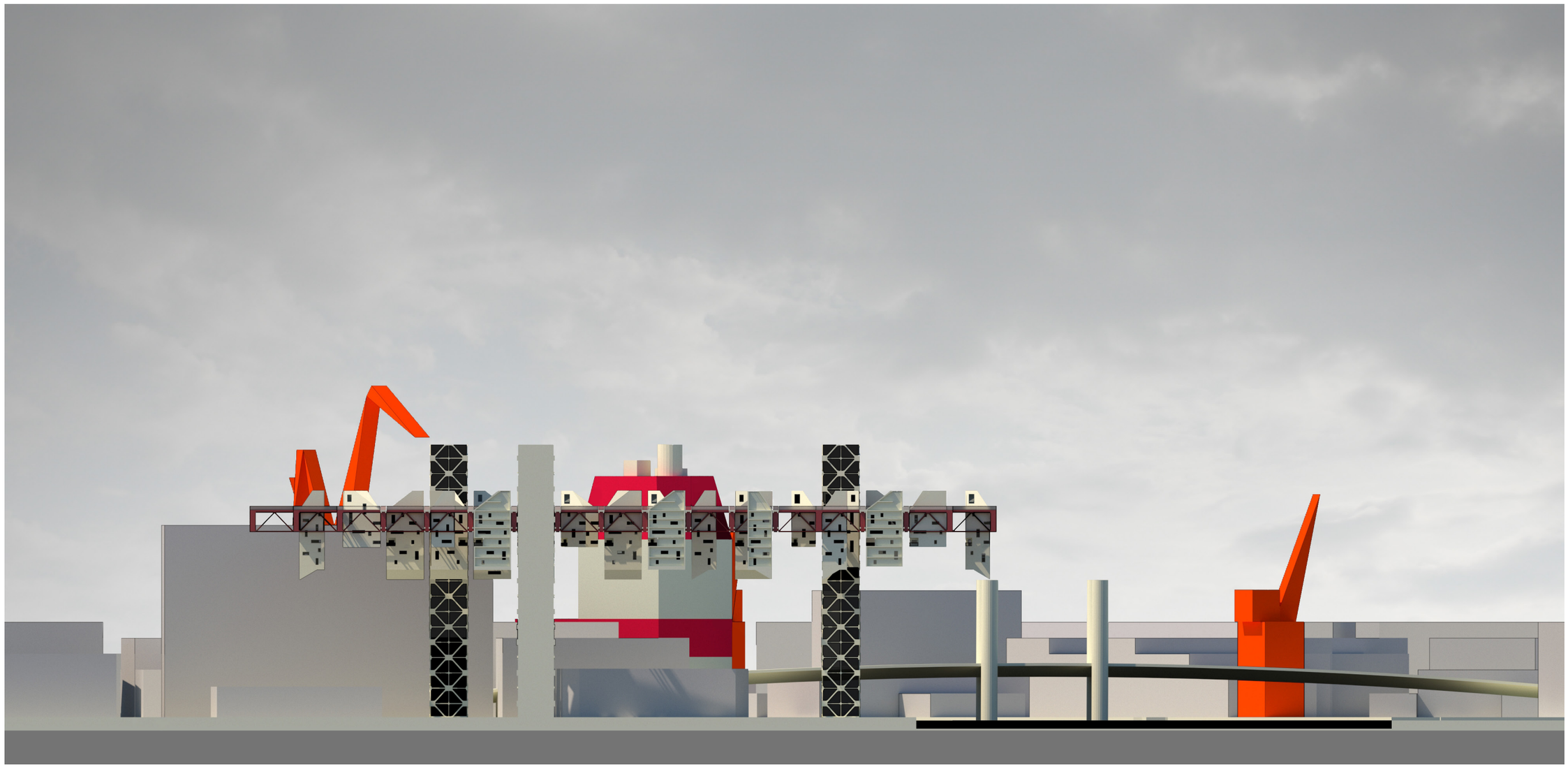
SITE PLAN SHOWING THE PLACEMENT OF THE UPPERHOOD

SITE PLAN 1:8 000



PLAN SHOWING UPPERHOOD WITH ITS SURROUNDINGS

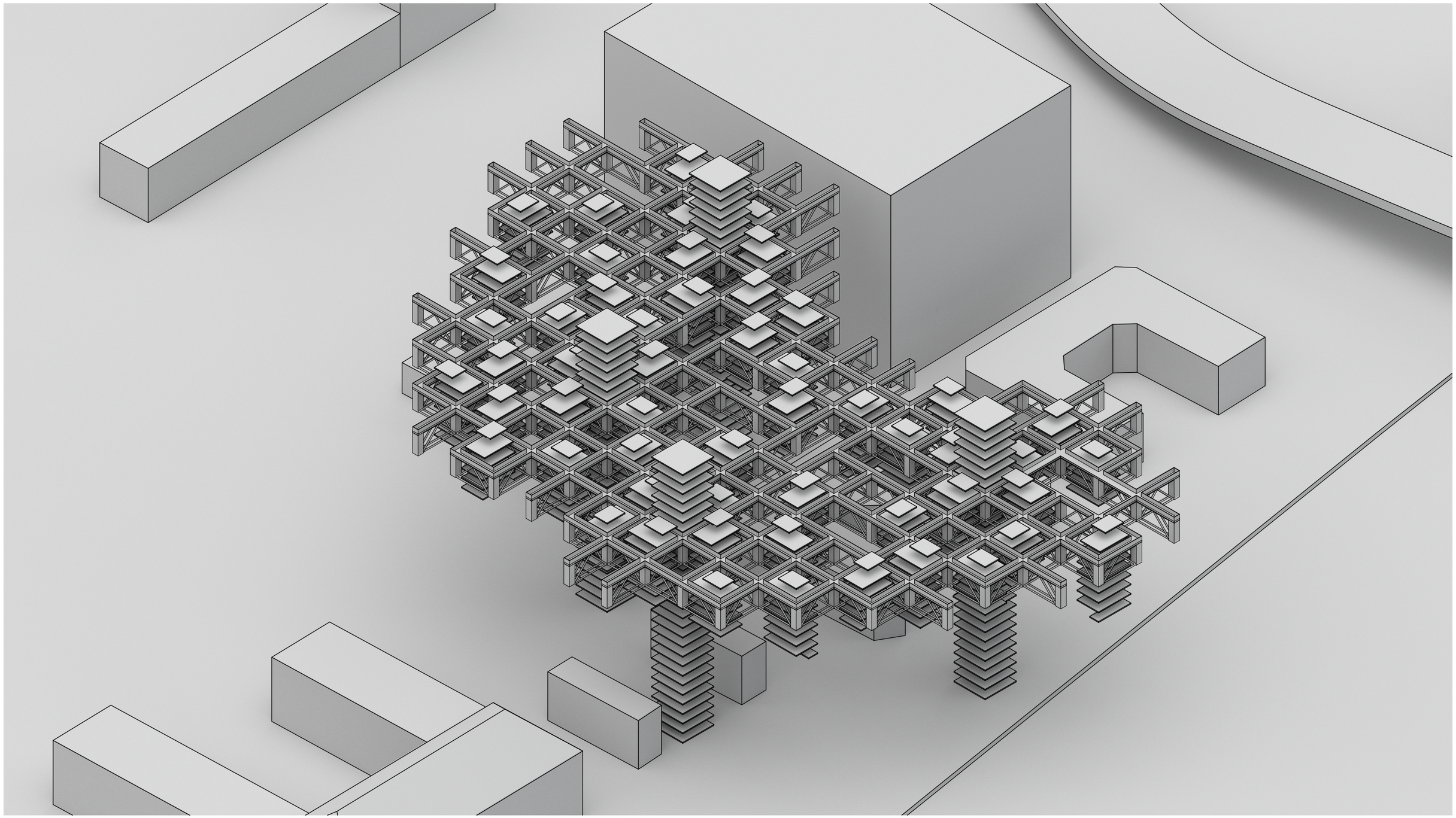
PLAN 1:1 000



SECTION SHOWING UPPERHOOD WITH ITS SURROUNDINGS

SECTION A-A


Come
UP!



GFA: 37000 SQM