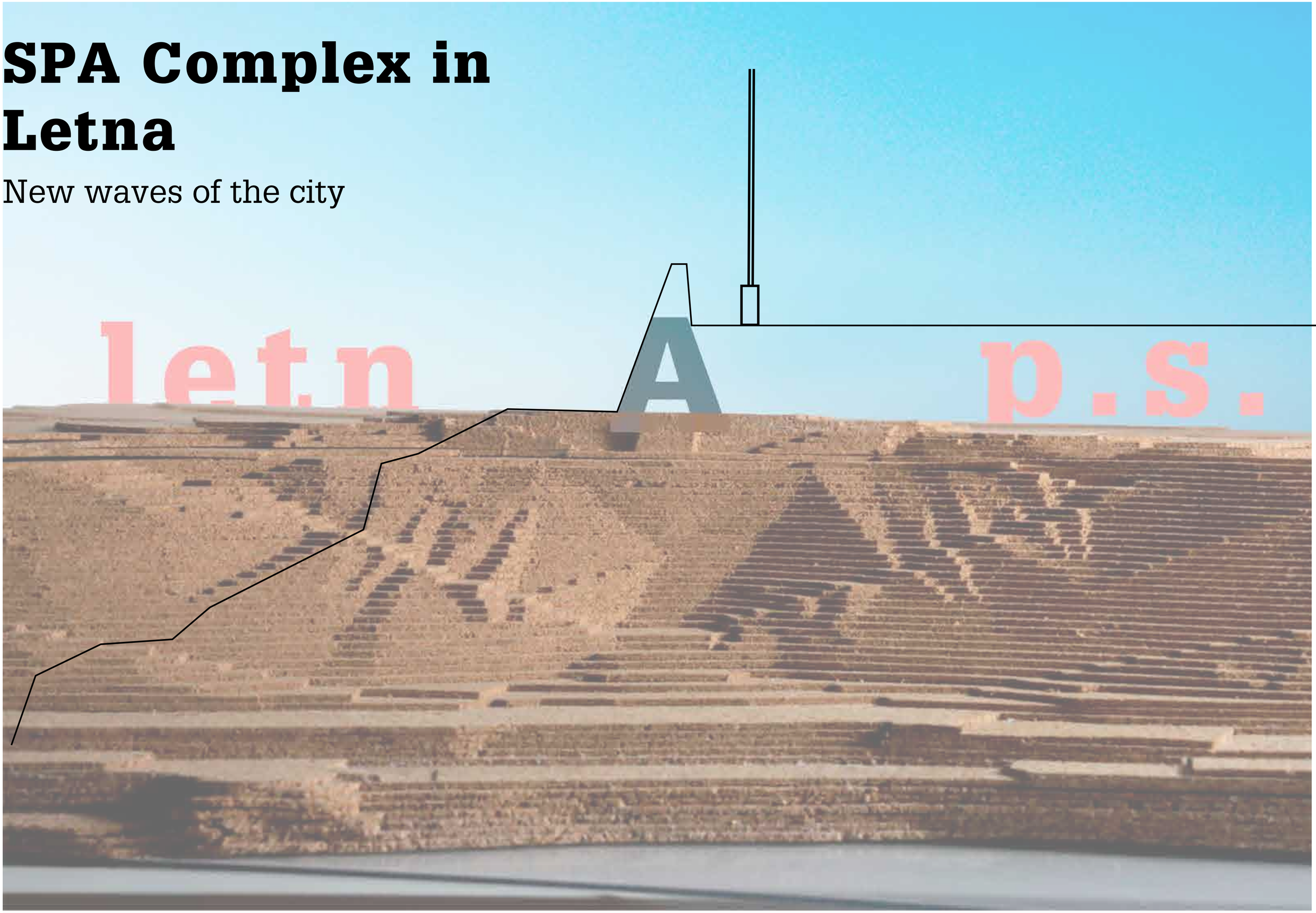
SPA Complex in Letna

New waves of the city



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1. Introduction

For Bachelor's project I have chosen to work on the project located in Letna, Prague 7.

The main focus is on the area where metronome is located, with bunker, which was built after 2nd World War.

The place is also highly associated with political aspects due to previously hosting statue of Stalin and being located not far from Ministry of interior affairs and being not far from Embassy district.

One of the main issues to be solved is to make site usable throughout whole year, not only during warm season.

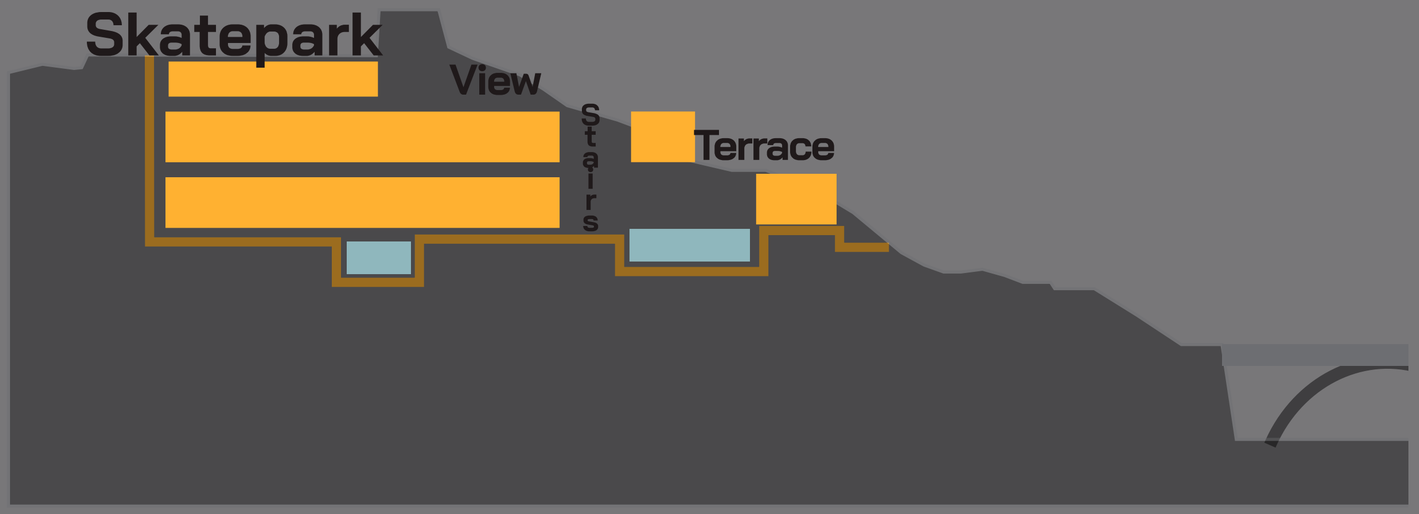
Second problem to be solved is to make site more accesible from the river side.

And the third problem to solve is to make site more welcoming, as now it is full of graffity and not very well enlightened, which makes it usable only during day time and "pass by" area.

Due to the metronome being part of the site and one of great examples of kinetic structures in Prague, our new design proposal should include kinetic architecture elements, which makes the site more usable throughout the year.

Kinetic elements should mainly solve accesibility issue from Czech's bridge by the stairs and make it more usable during cold and rainy weather days, as it is an open plane in th park.

2. Project Brief



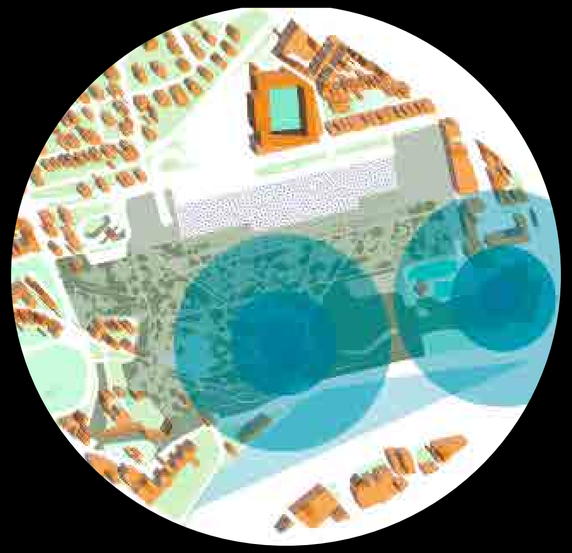
Concept diagram of structure and main features

Czech Republic has long spa history, which takes its routes from the 14th century. Following the tradition of Prague`s river swimming pools and public baths, the new spa is to revitalise the public use of the south west facing site with remains of totalitarian monument on site with wide panoramic views of the city.

The main topic, which should be covered is sharing. The idea of sharing is to be developed by redesigning the existing space and make it more pleasant for all the users. The redevelopment of the area is needed to attract more people and make it accessible for people with disabilities and make it more safe during night.

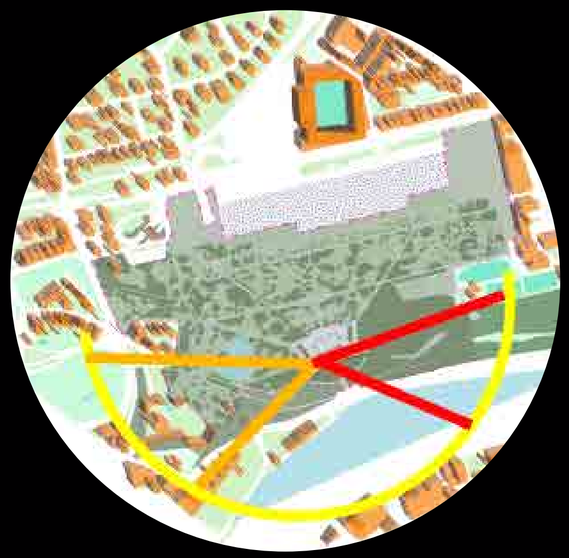
3. Site Analysis

The site can be accessed from 4 sides. All of the main entrances are located nearby public transportation stations

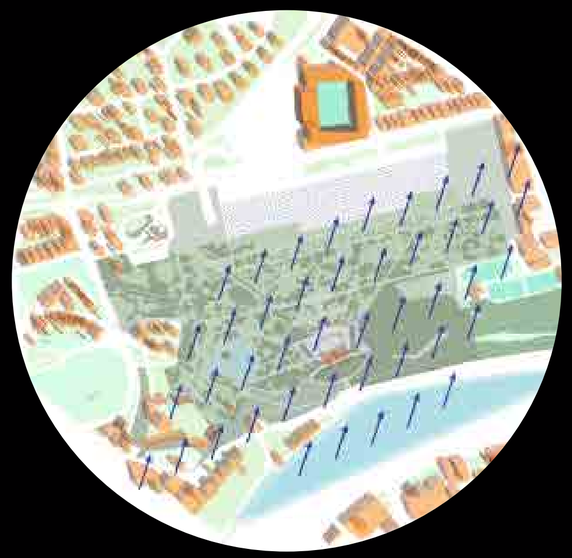


The site is huge, but most of the peo-ple spend their time at Metronome and Letna's beer garden.

As main part of the site is greenery it is mainly pedestrian zone with a few cycling paths



Sun Path:
Summer: 12 h 12 min
Winter: 8 h 37 min



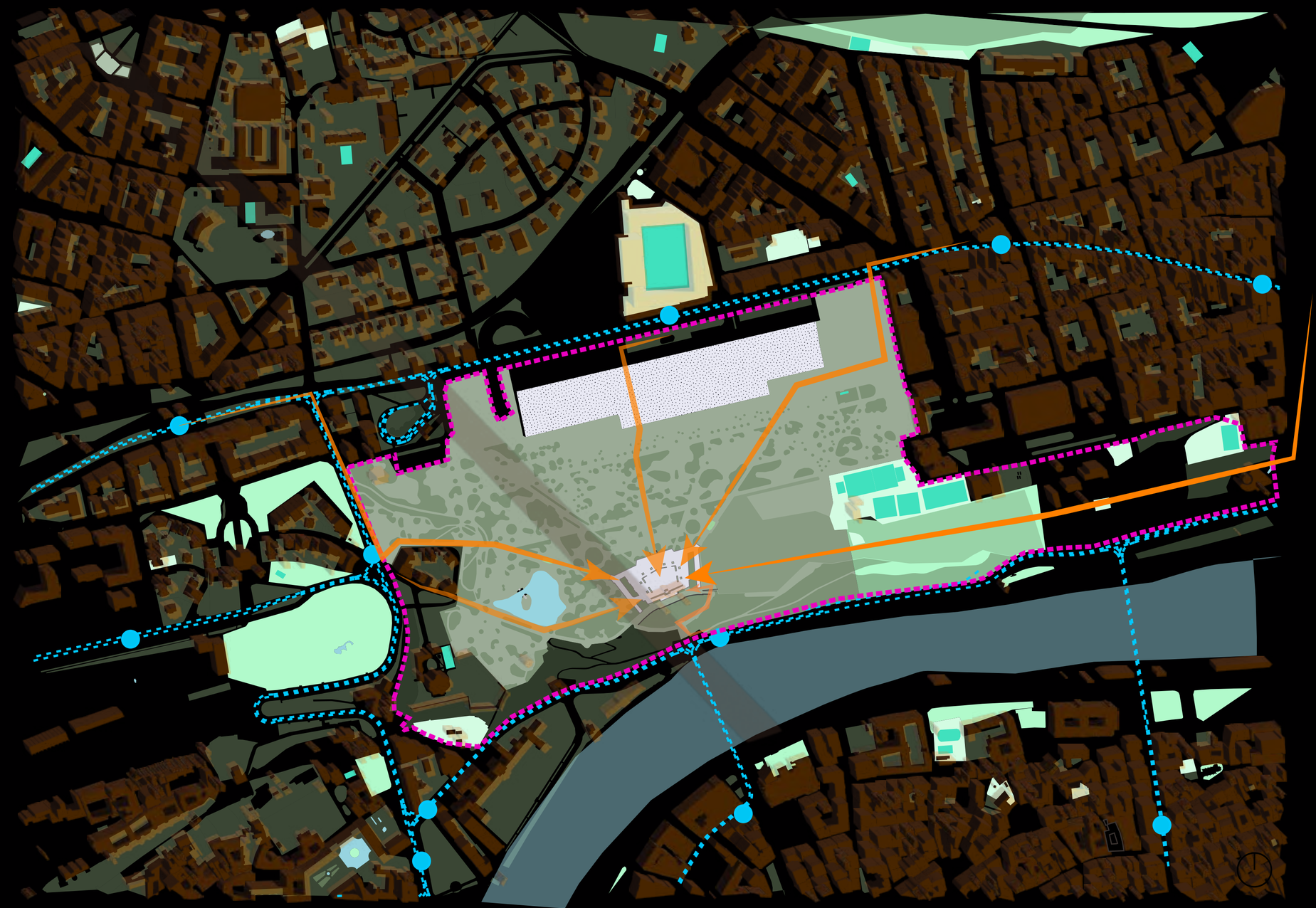
Wind direction:
North-East
South-West

As Letna is located on the hill and height differences reaches 40 meters it is also famous for view points

3. Site Analysis

Public Transportation:

The site is located between a lot of transport stops. Also on the western and eastern sides of the park within 15 minute walk metro stations could be found. The variety of trams which come to the area includes 10 lines.



3. Site Analysis

As Letna is one of the highest public points in Prague and due to its location there’re a lot of sights to be seen.
Sights are: Prague Castle, Charles bridge, National theatre, Rudolfinum, Zizkov TV Tower, Parliament, Old Town.

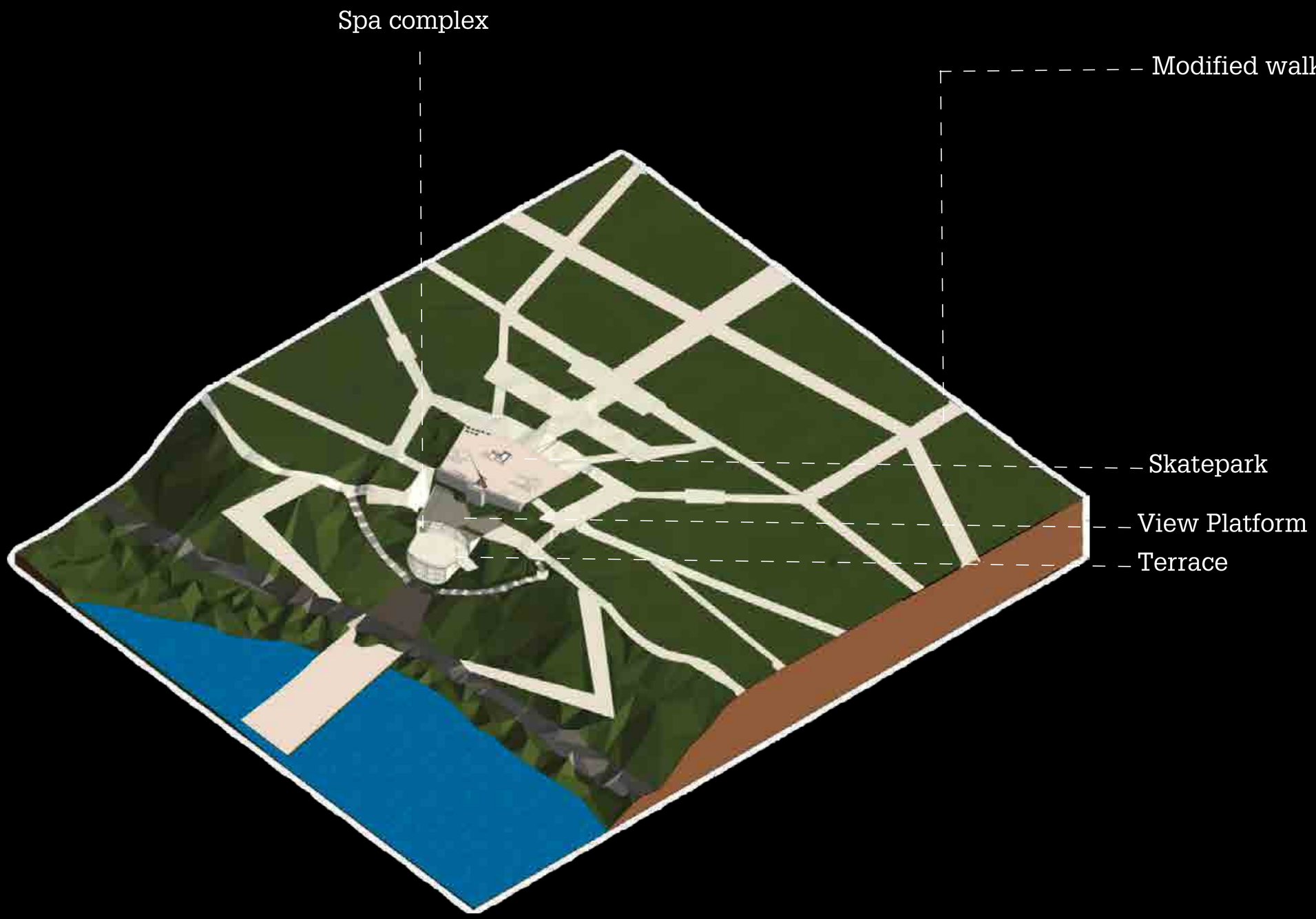
Attractions
View Point

3. Site Analysis

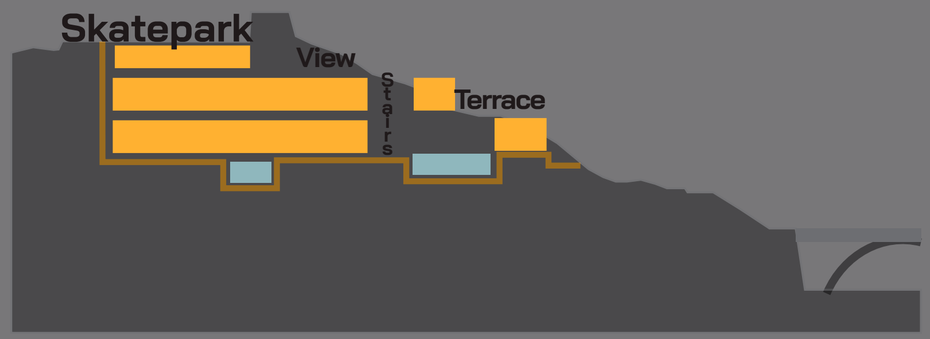
For my project I was researching Czech spa tardi-tions. In the area there was one spa complex located in Klarov, but also there were swimming pools on Vlta-va's riverbank.
As Letna is the one of the edges of city center, I was looking into accomodation possibilities, as my first idea was to cdevelop a spa boutique hotel view on the whole city.

4. Diagrams

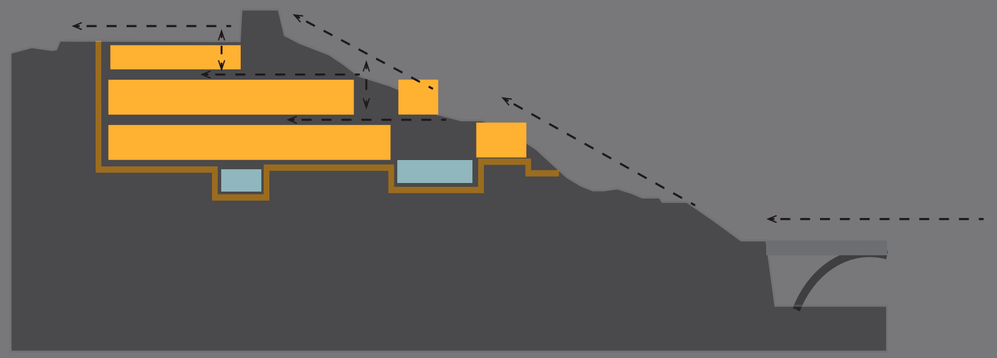
Axomometry of the site: modfications



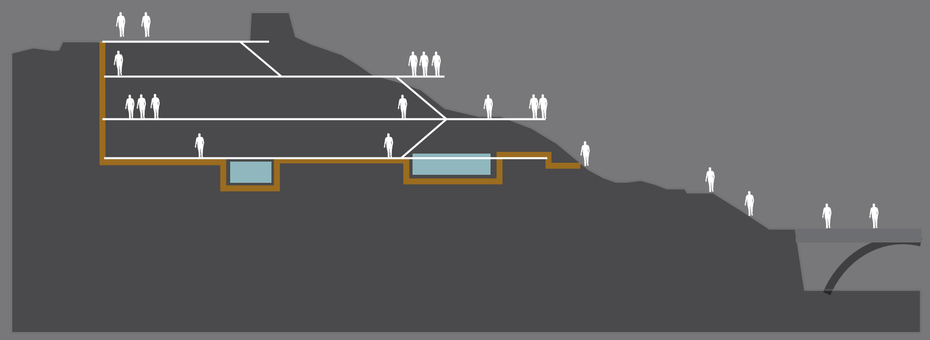
4. Diagrams



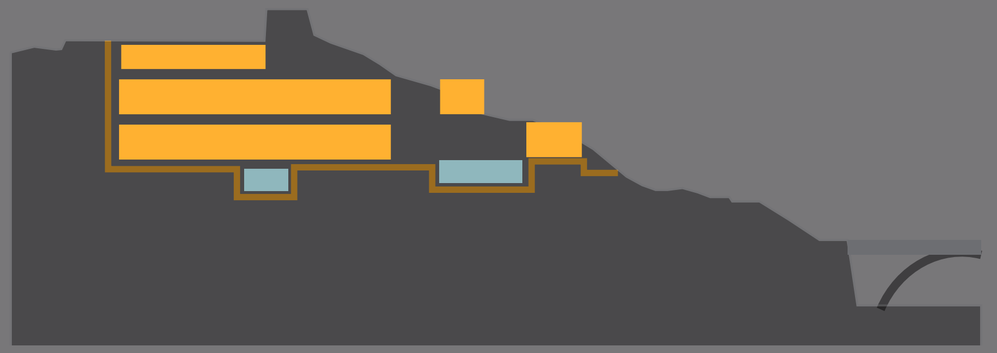
Building & Functions



Circulation in the area

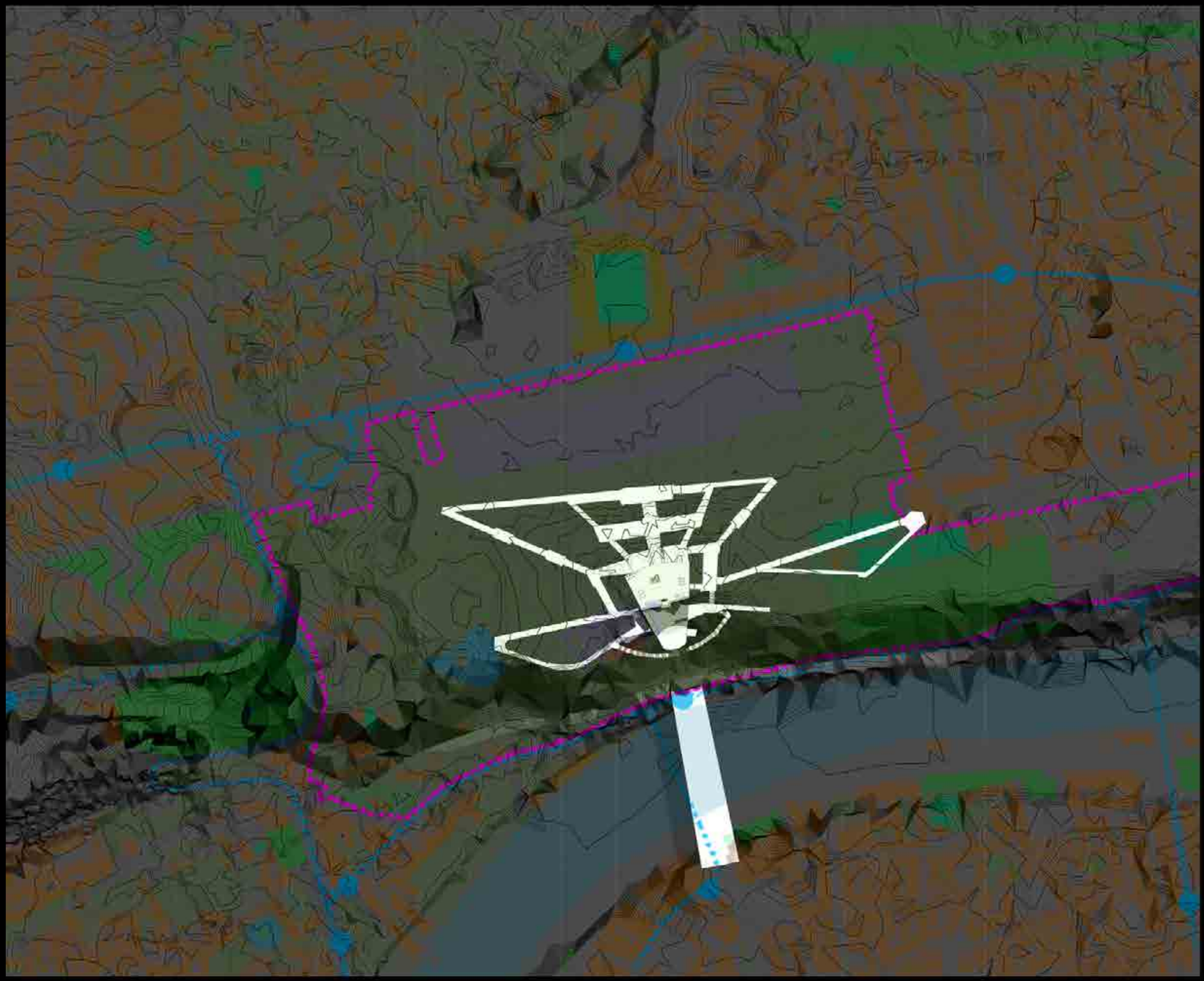


Experience



Topography

4. Site Plan



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EXPLODED DIAGRAM

LEVELS AND FUNCTIONS

1

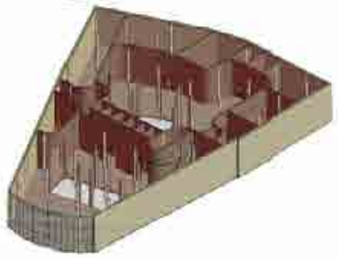
SKATEPARK
METRONOME
SITTING AREA

0

RAMP STORAGE
TECHNICAL AREA

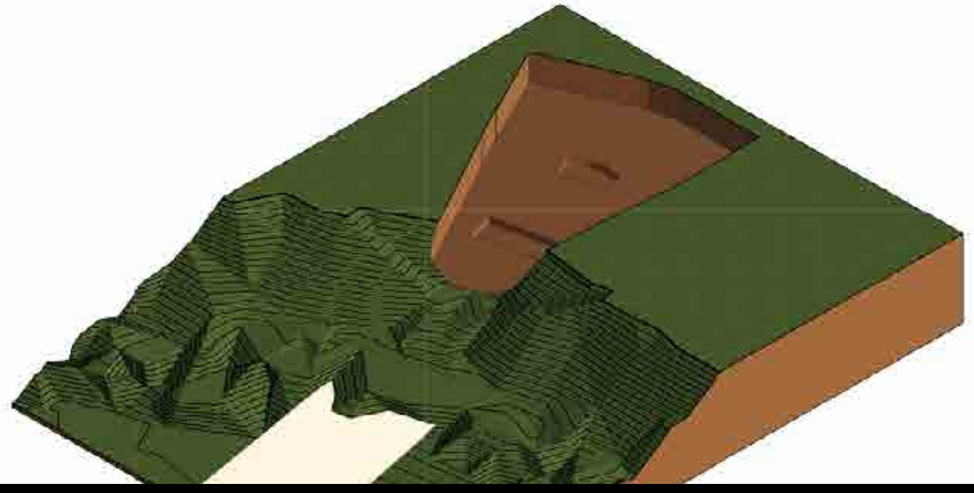
-1

ENTRANCE
MASSAGE ROOMS
CHANGING ROOMS
JACCUZZI
TERRACE



-2

STEAM SAUNA
STONE SAUNA
INFRARED LOUNGE
SWIMMING POOL
ICE FONT
HAMMAM
UTILITIES ROOM



Exploded diagram shows what are the functions of the structure and on which floor they are located.

Main functions are focused underground, which are representing spa traditions.

Levels at the monument wall and where metronome is, are dedicated for skatepark and its seasonal functioning.

Cut down trees

Existing trees

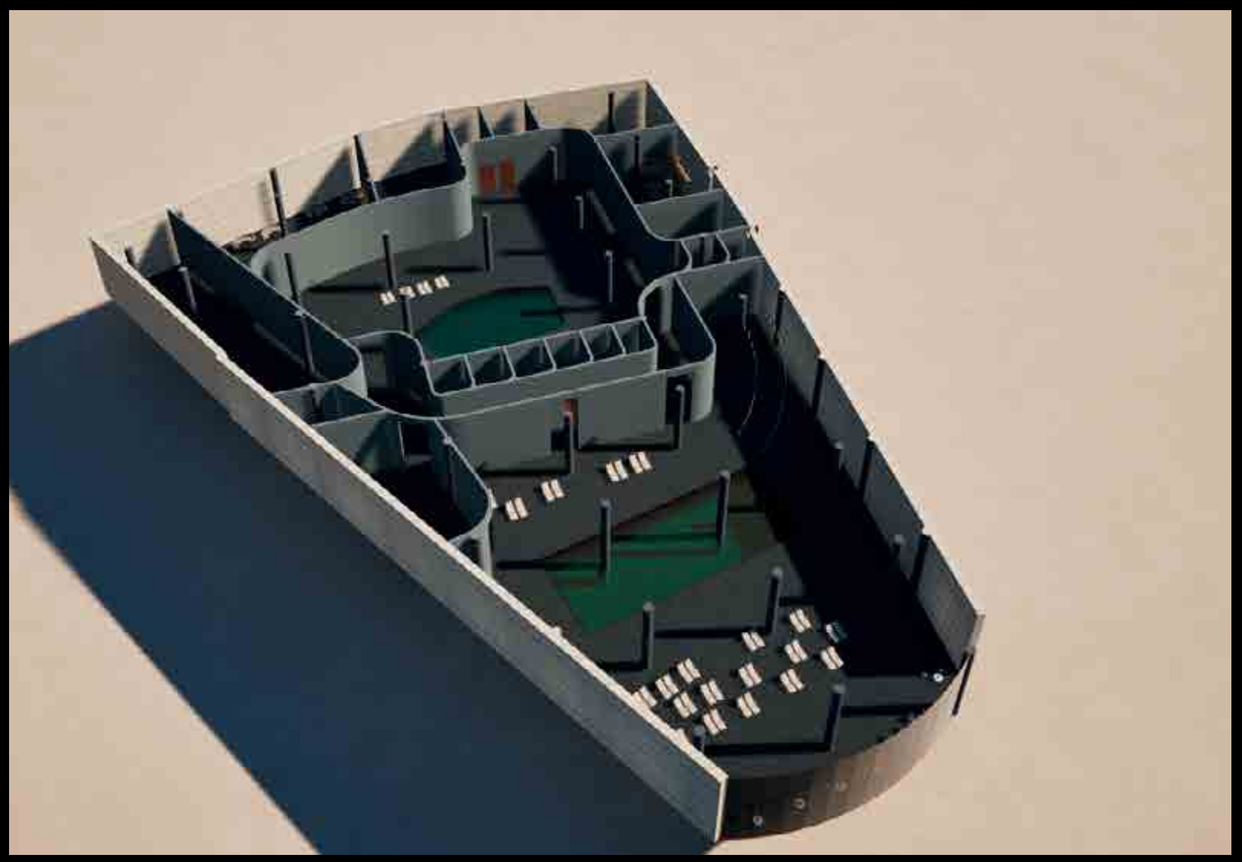
Replanted trees

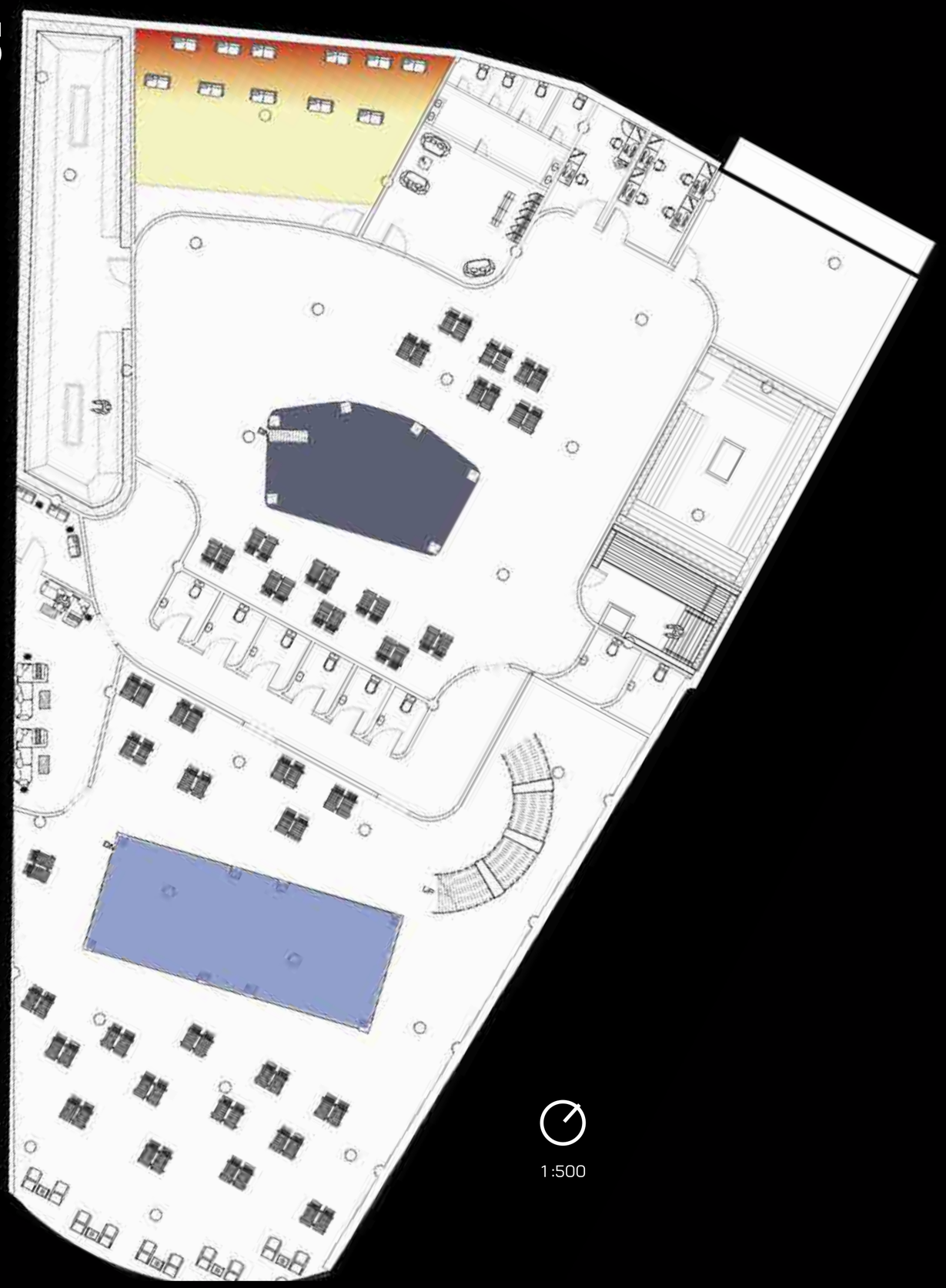
New trees

5. Technical Drawings

Ground floorplan

Swimming pool
Ice Font
Stone Sauna
Infrared Lounge
Steam Sauna
Utilities
Staff rooms





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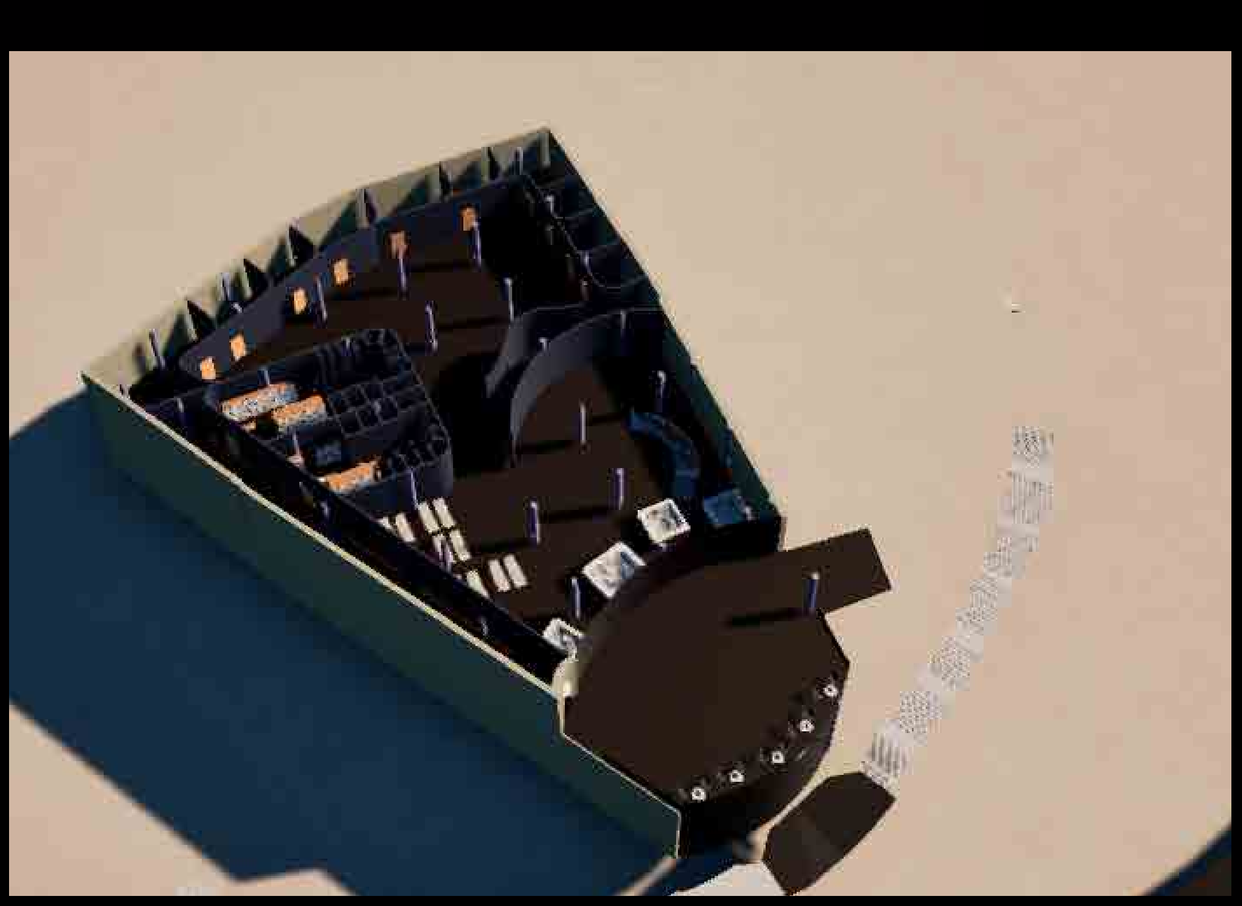
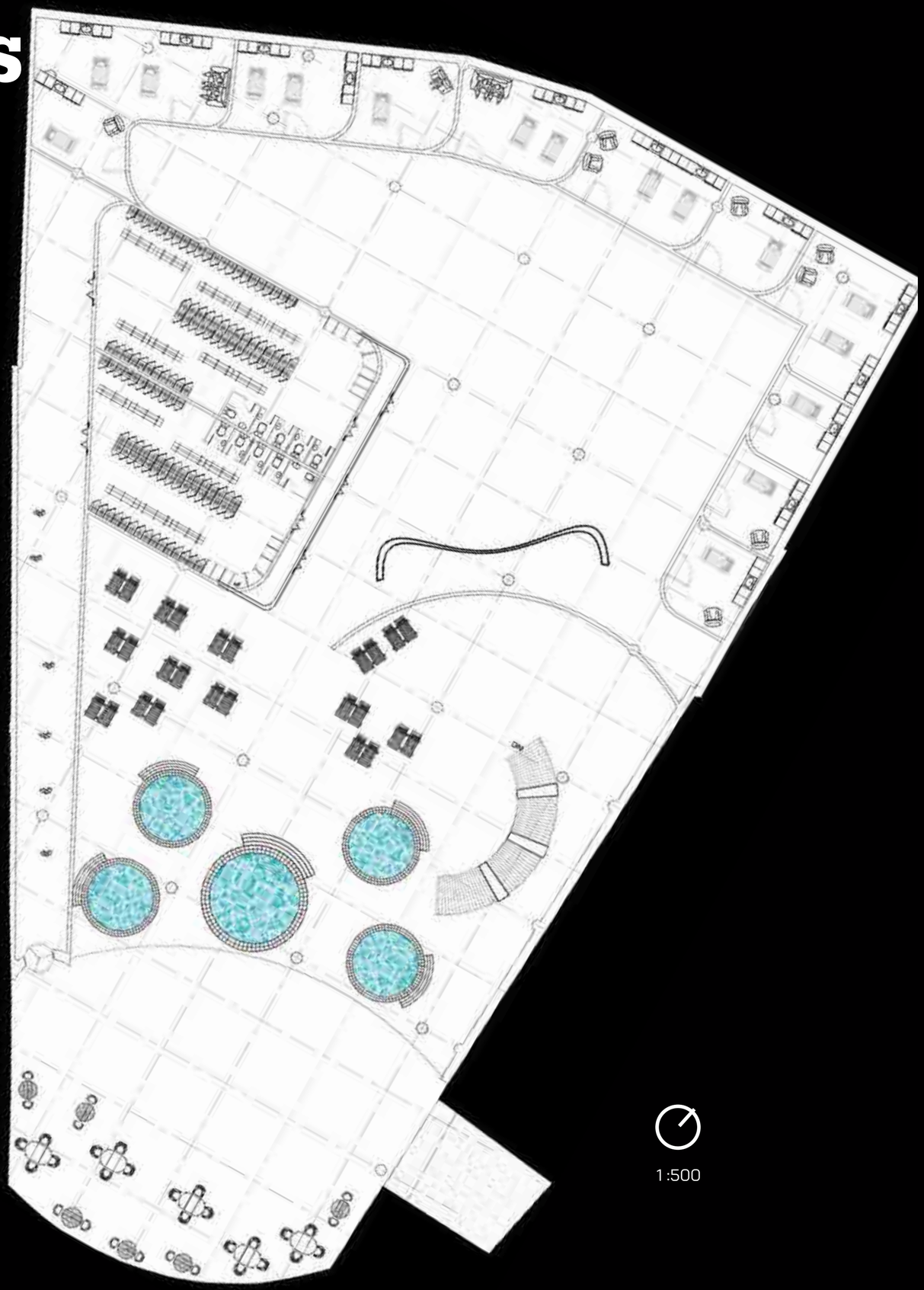
5. Technical Drawings

2nd Floor Floor plan

Entrance hall
Jacuzzi area
Changing rooms
Outdoor terrace
Massage rooms





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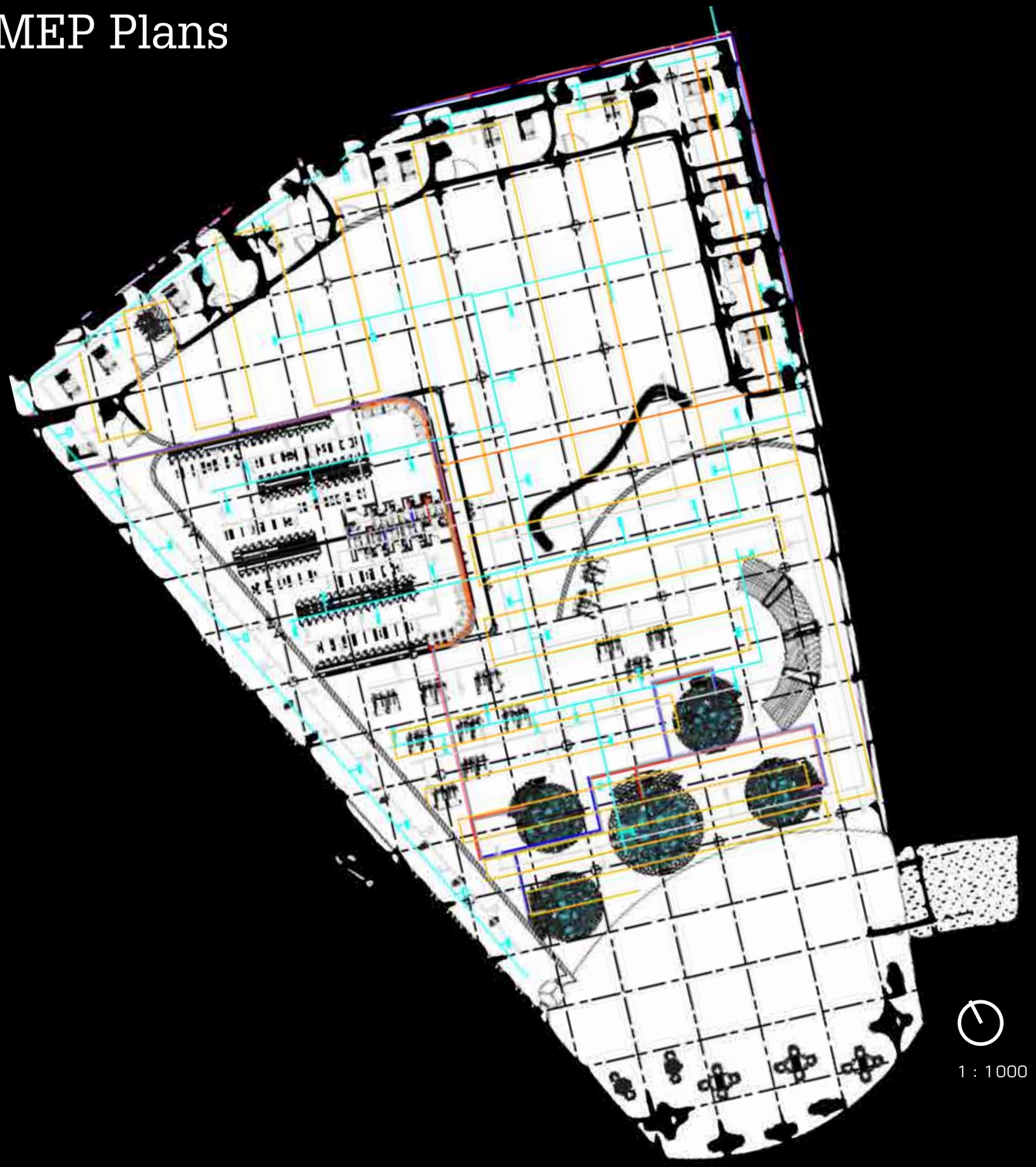
5. Technical Drawings

MEP Plans



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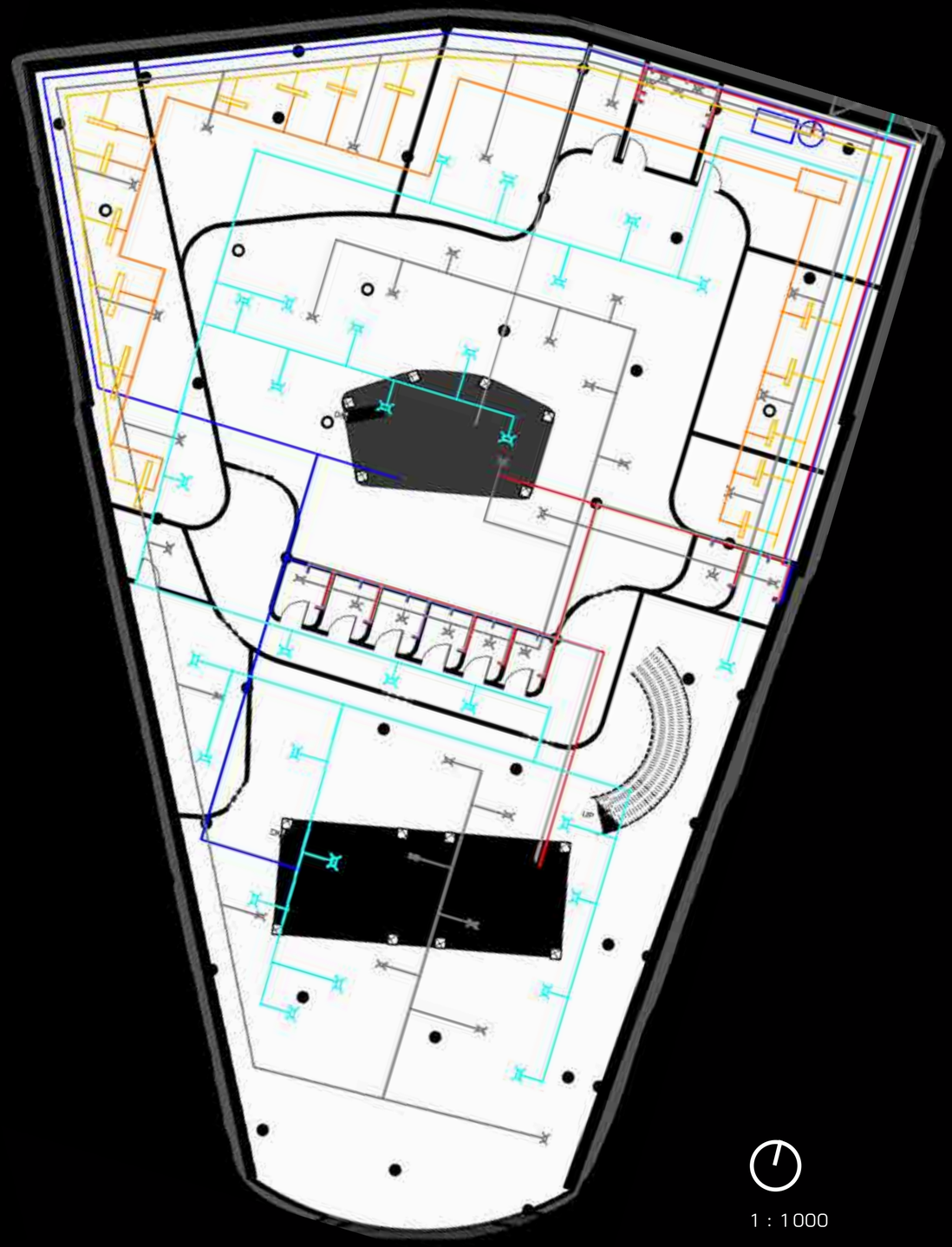

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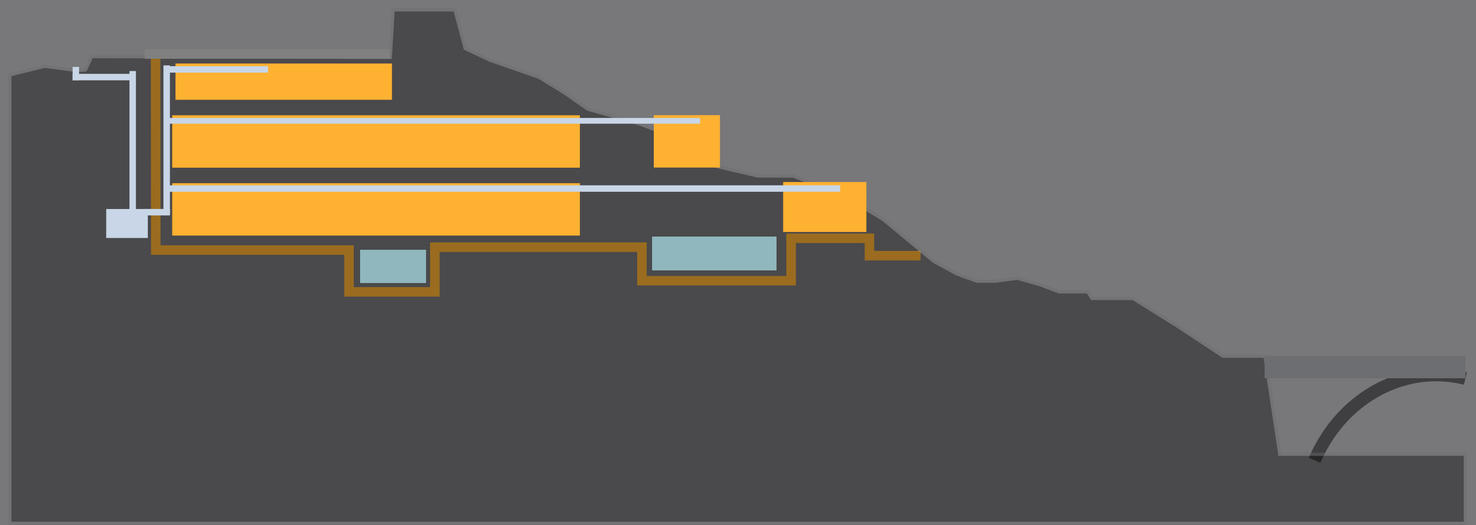
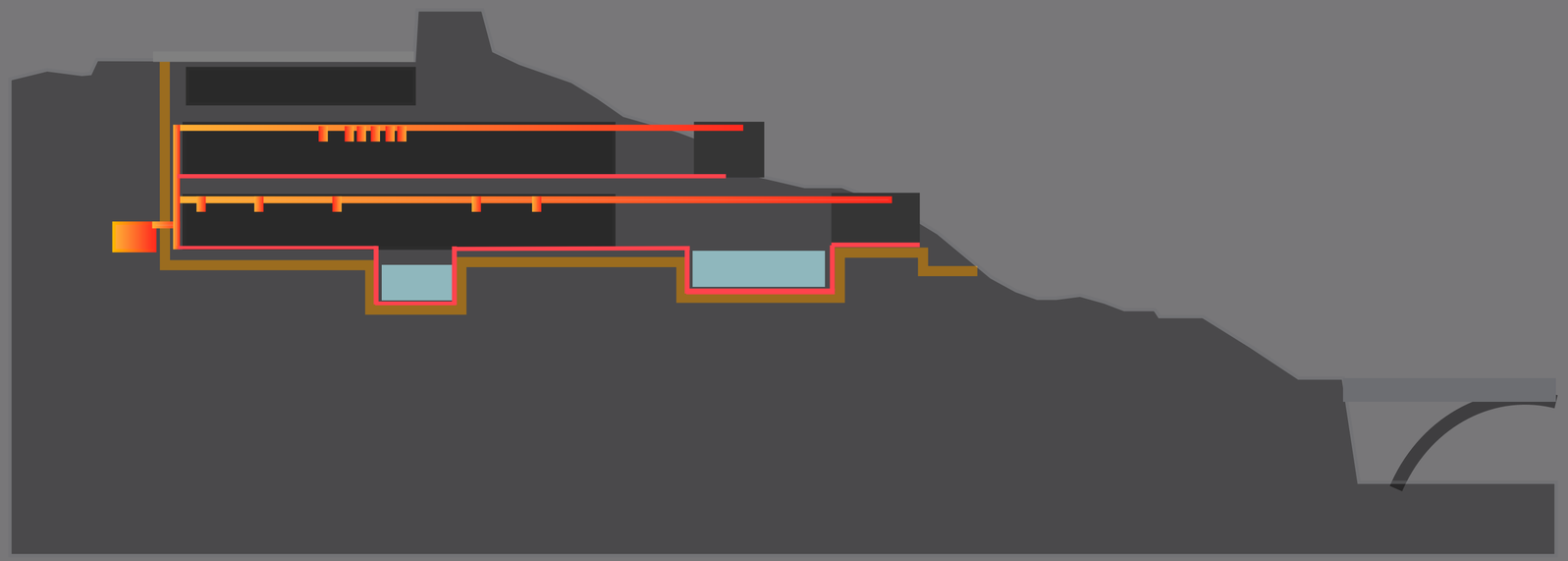
5. Technical Drawings

MEP diagrams



One of the difficulties to solve is ventilation of the structure. Air unit is placed behind the furthest wall.

It is connected to the landscape behind the skatepark, where is less people concentarted and air unit will not cause difficulties and unpleasant atmospehere for the users.



One of the aspects of the project is sustainability and one of the main featurec is heat recovery system.
The system works in a way, that it collects heat from warm zones e.g. saunas and then reuses it for again heating the building.
The system is efficient as spa complex requires quite a lot of heat and not to gain it it is necessary to reuse it.

5. Technical Drawings

As one of the problems in the area are skaters, who use area by metronome for skateboarding and destroy the existing benches and use them for tricks.

So my idea is to develop a proper skate-park for skaters, but it is a seasonal sctiv-ity, so for cold time of the year the ramps will be hidden and removed till March.

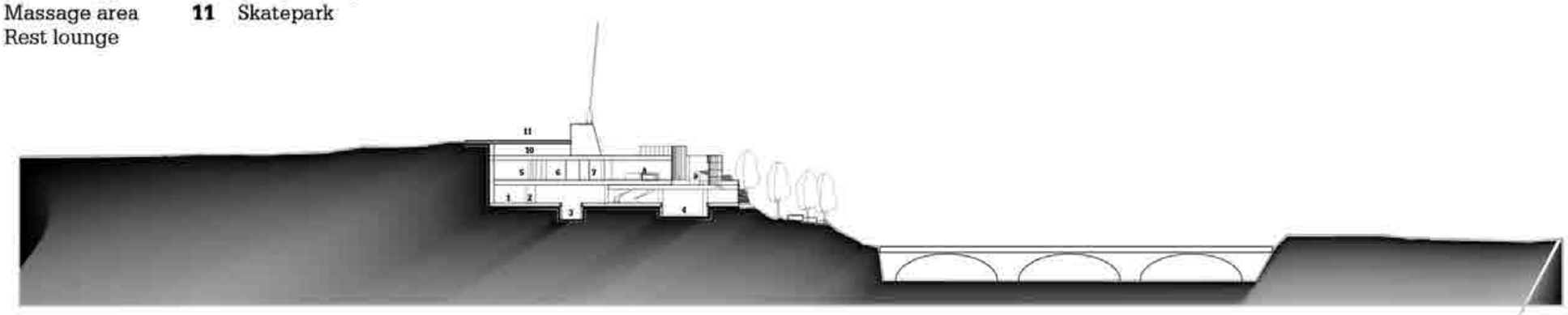
They will be stored under the concrete slab and on top of the roof of spa complex.

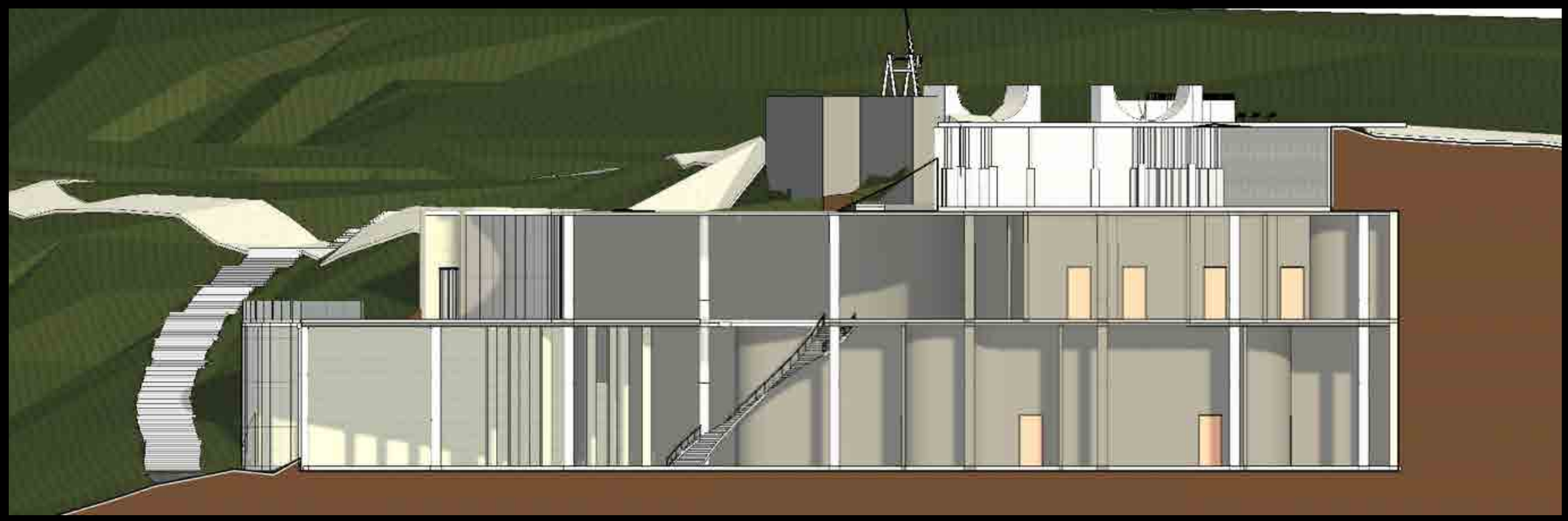
1 : 1000

5. Technical Drawings

Section
throught the hill

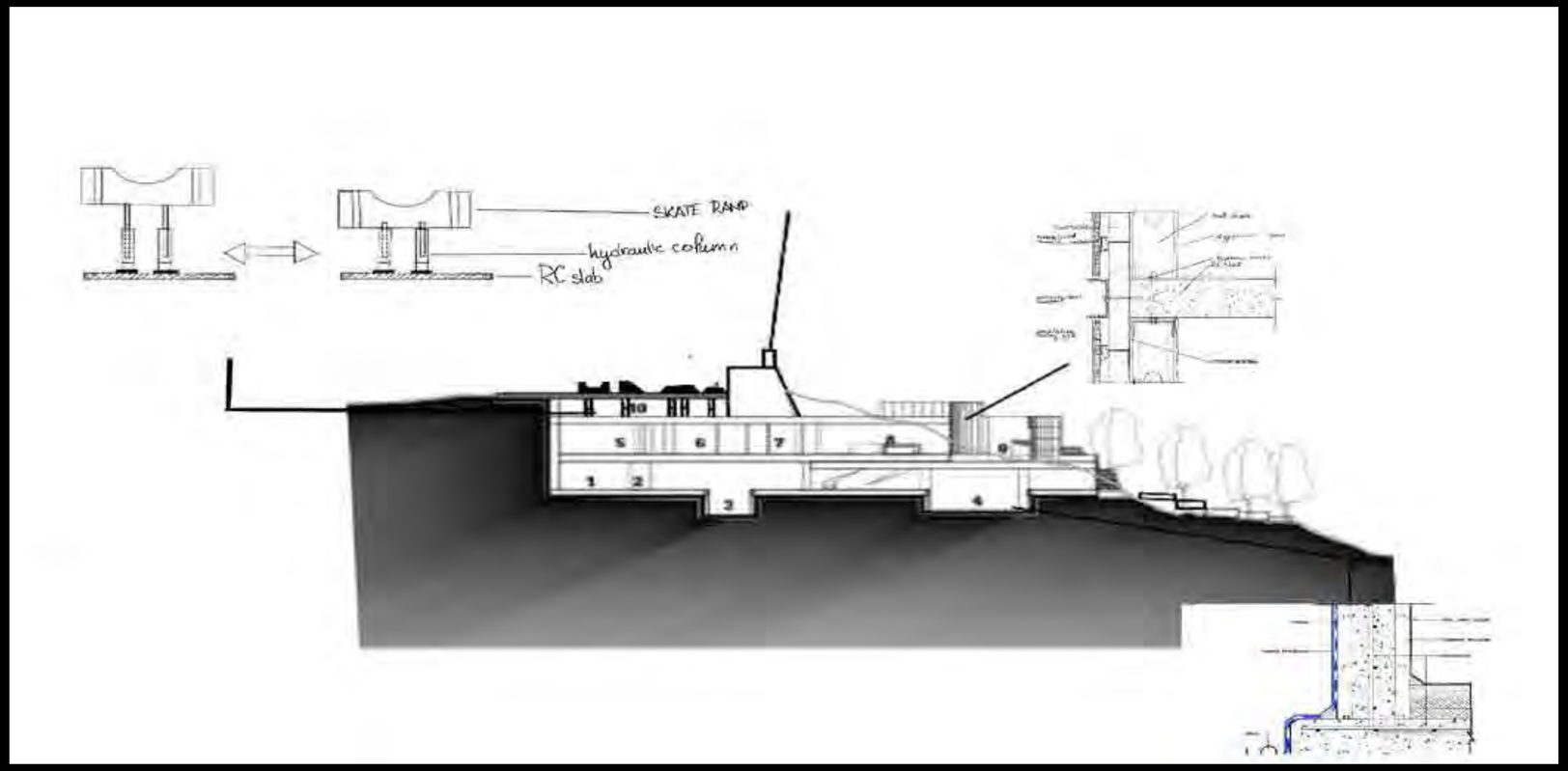
1 Infrared lounge
2 Steam Sauna
3 Ice font
4 Swimming pool
5 Massage area
6 Rest lounge
7 IChanging rooms
8 Jacuzzi
9 Outdoor Terrace
10 Ramp storage
11 Skatepark





5. Technical Drawings

Technical details



3 main details, which have to be considered in the project are swimming pool, traslucent facade and movable skater-amps.

Those drawings show how the elements are made. As for the columns, which are responsible for ramps movement, I decided to show the movement.

6. Visualization

6. Visualization

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6. Visualizations