

PINK LANTERN

Milady Horákové park, Ostrava

ATELIER SITTA - CHMELOVÁ
FA CTU IN PRAGUE
WINTER SEMESTER 2022

by

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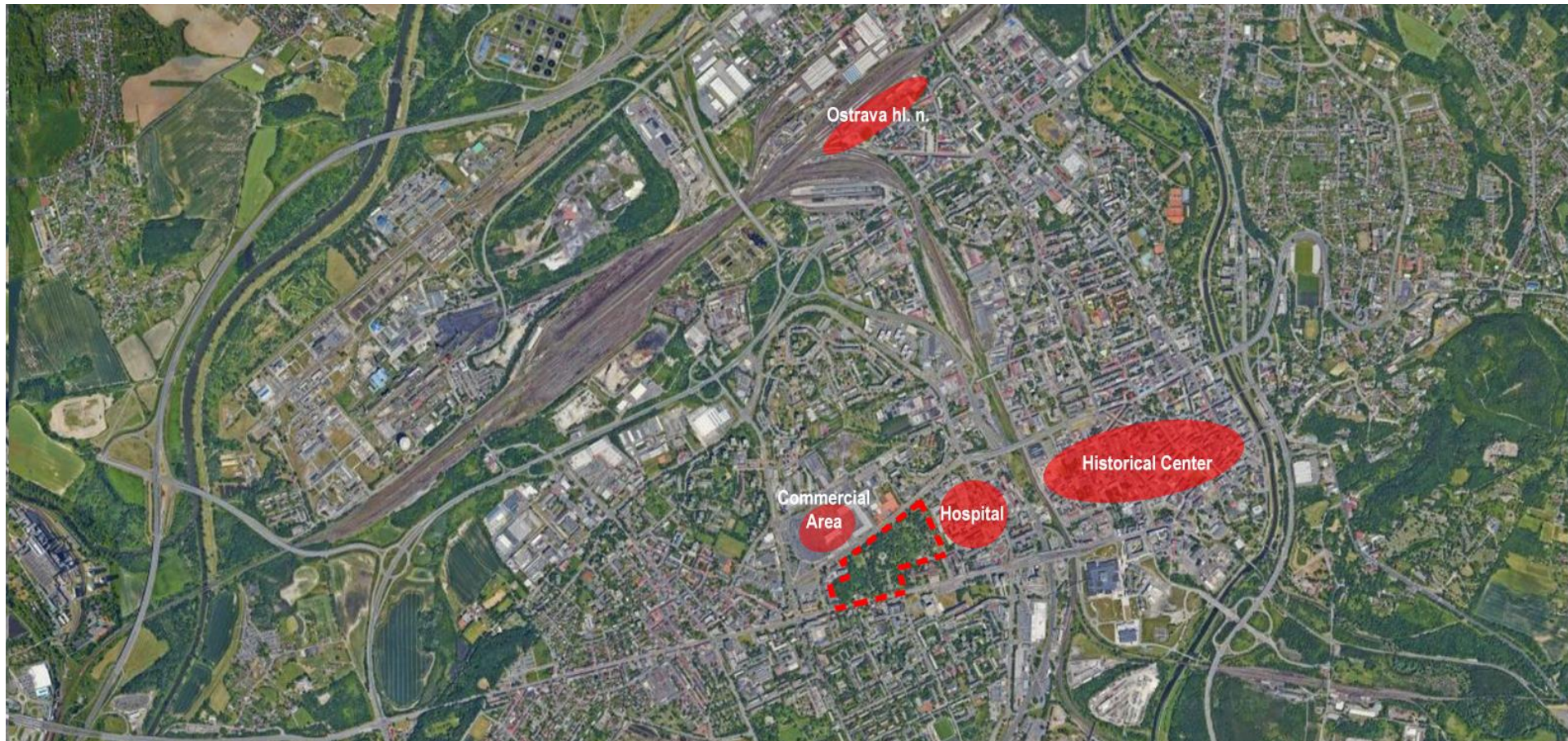
ANALYSIS

Ostrava

Ostrava is a city situated in the Moravian-Silesian Region of the Czech Republic. It is the third largest city in the country, boasting stunning natural and architectural beauty. From a geographic perspective, Ostrava lies in the center of a basin and is surrounded by four large mountains - Lysa, Hůrka, Radhošť and Smrk. The terrain is quite flat, with the tallest point (mount Lysa) rising 793 meters above sea level.

Ostrava's swift growth, which began in the 19th century and continues to this day, is due to its mining industry. To the south and southeast of the city, coal mining has had a huge impact on the geological underpinnings of the city, creating the "Ostrava Basin".

The layout of the city itself follows a grid structure, with numerous buildings of varying heights dotted around. Several main streets run through Ostrava, connected by a number of lesser roads and boulevards. Amongst these, impressive architectural structures can be seen, such as the Town Hall and the Church of Estates.



ANALYSIS

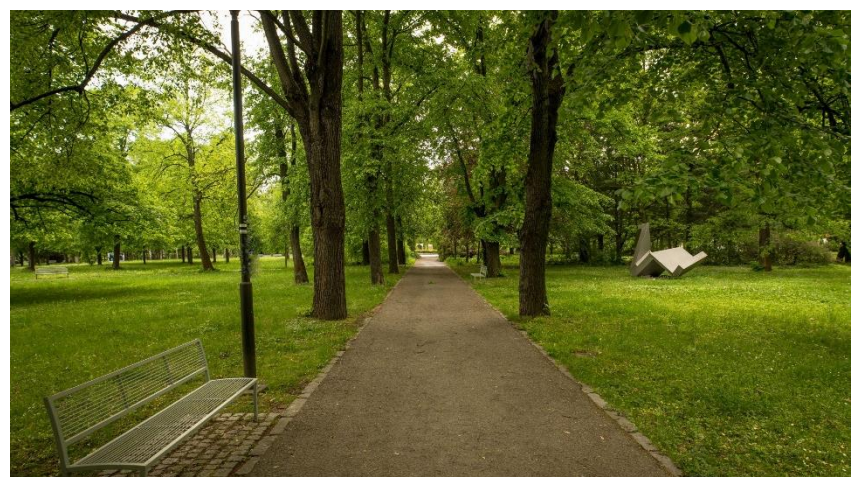
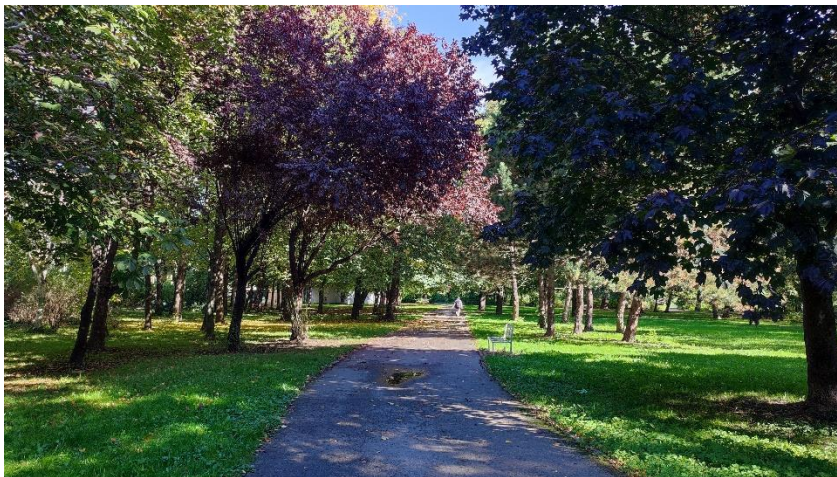
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A N A L Y S I S

MILADY HORÁKOVÉ PARK

The park holds a range of activities for tourists and locals alike. There are numerous outdoor gyms for exercise enthusiasts, as well as a giant outdoor chessboard and plenty of open grassland for picnics or sports. For those seeking a more meditative and peaceful experience, there are plenty of ponds and paths full of nature and trees to explore. There is also a cafe located in the park, where visitors can take a break and enjoy a beverage.

The true highlight of Milady Horákové Park, however, is its wide array of animal and plant life. There are a large number of avian species living among the trees, and anglers come from near and far to fish the rivers and aquariums located throughout the grounds. Wild deer and other species of animals often roam the area, making it a beautiful place to go nature watching. Of course, the park also boasts a wide variety of plants, from large trees to tiny flowers.

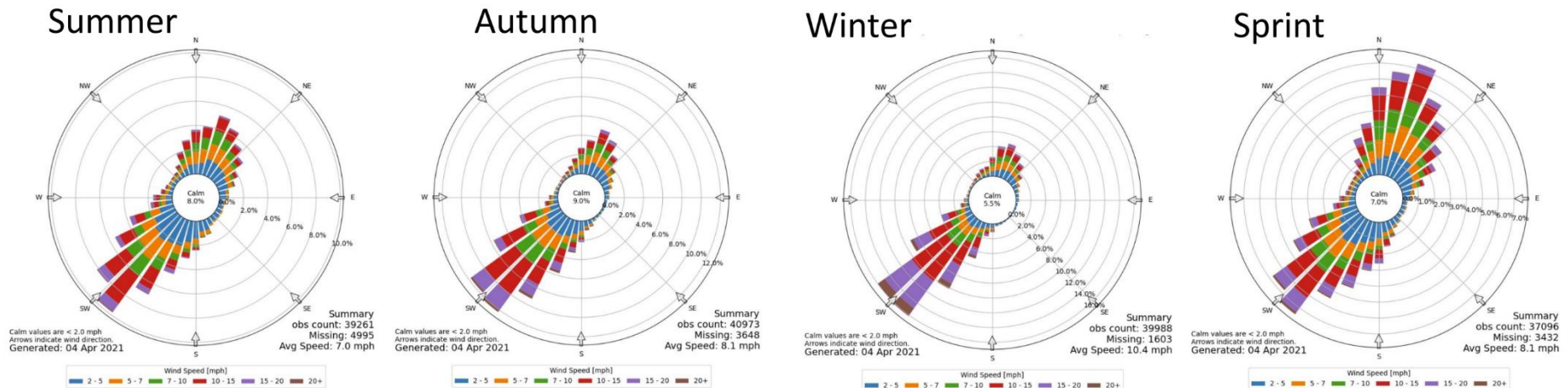


CLIMATE

From the perspectives of temperature, Ostrava has the warmest temperatures in July with the average high being 24°C, while the coldest temperatures can be found during the winter from December to February with the average low only a few degrees above freezing. Throughout the year, the average temperature in Ostrava is 7°C. As for precipitation, Ostrava typically receives around 4 inches (100 mm) of rain a month, with more in the spring and summer and less in the winter. Snowfall has a more significant presence in the area, especially when compared to other areas in the Czech Republic. During the winter season, the temperatures in Ostrava generally remain below freezing, which makes it possible for severe snowstorms and accumulations of snow on the ground. Milady Horákové is a large and diverse green space beloved by locals. Spanning over 80 hectares, it is one of the largest parks in the region and an amazing natural escape for all visitors.

The area surrounding Milady Horákové Park was once an industrial mining and manufacturing zone; however, it was extensively renovated in the 1970s. Asphalt was replaced with grass and trees, and charming parks were developed. This transformation from an industrial cityscape to the verdant environment that we see today is a testament to the local pride and commitment that the Ostrava citizens have to their recreational area.

Wind roses



CONCEPT

PINK LANTERN

This project proposes the construction of a bistro-bar located in the Milady Horákové park in Ostrava. The project aims at utilizing the richness in vegetation, historical value and abundance of visitors together with the new upcoming concert hall construction. Respecting the existing trees as much as possible, the bistro-bar is located on a plain where only two trees would need to be cut down. This position also takes advantage of the sun path, shows itself up to the main street to the North and creates a direct link from the Hospital area on the East side and the park.

The name of the project is inspired by the purple light coming from the LED lights found in hydroponic greenhouses.

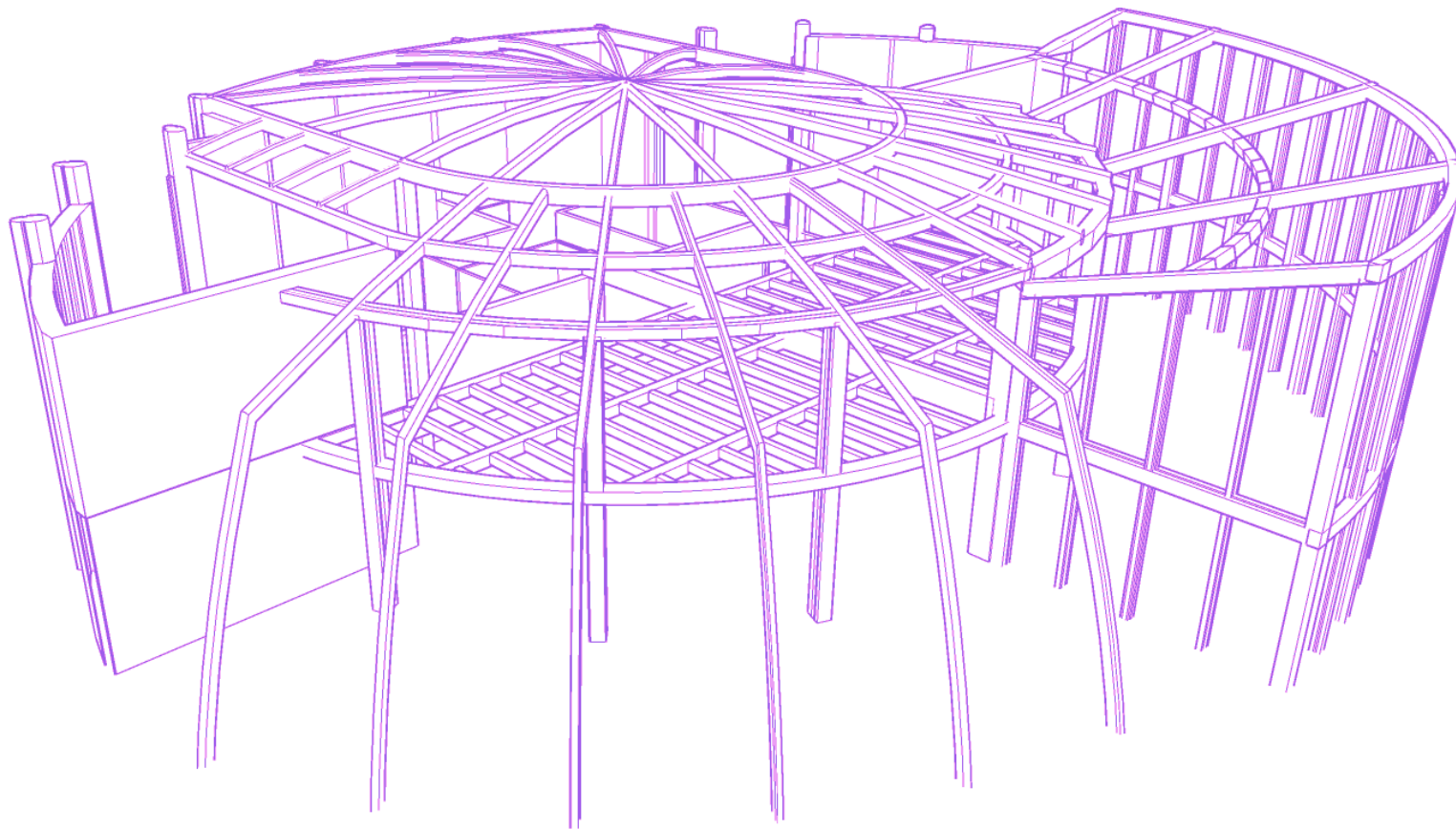


STRUCTURE

This structure proposes a solution where the center of the building can be left free of columns. Two main loading beams provide support for the upper floor without compromising the free movement in the kitchen and dinning area. On these two beams rest a joists structure that remains hidden inside the sealing for the ground floor and the floor of the first floor.

To support the glass structure forming the characteristic shape of the building a steel skeleton is anchored to the foundations of the building. This allows natural light to penetrate the building and take full advantage of the views to the park.

The North side is built out of a thick concrete wall to provide a better climate shell as well as the support needed for the structure to function.



CONCEPT

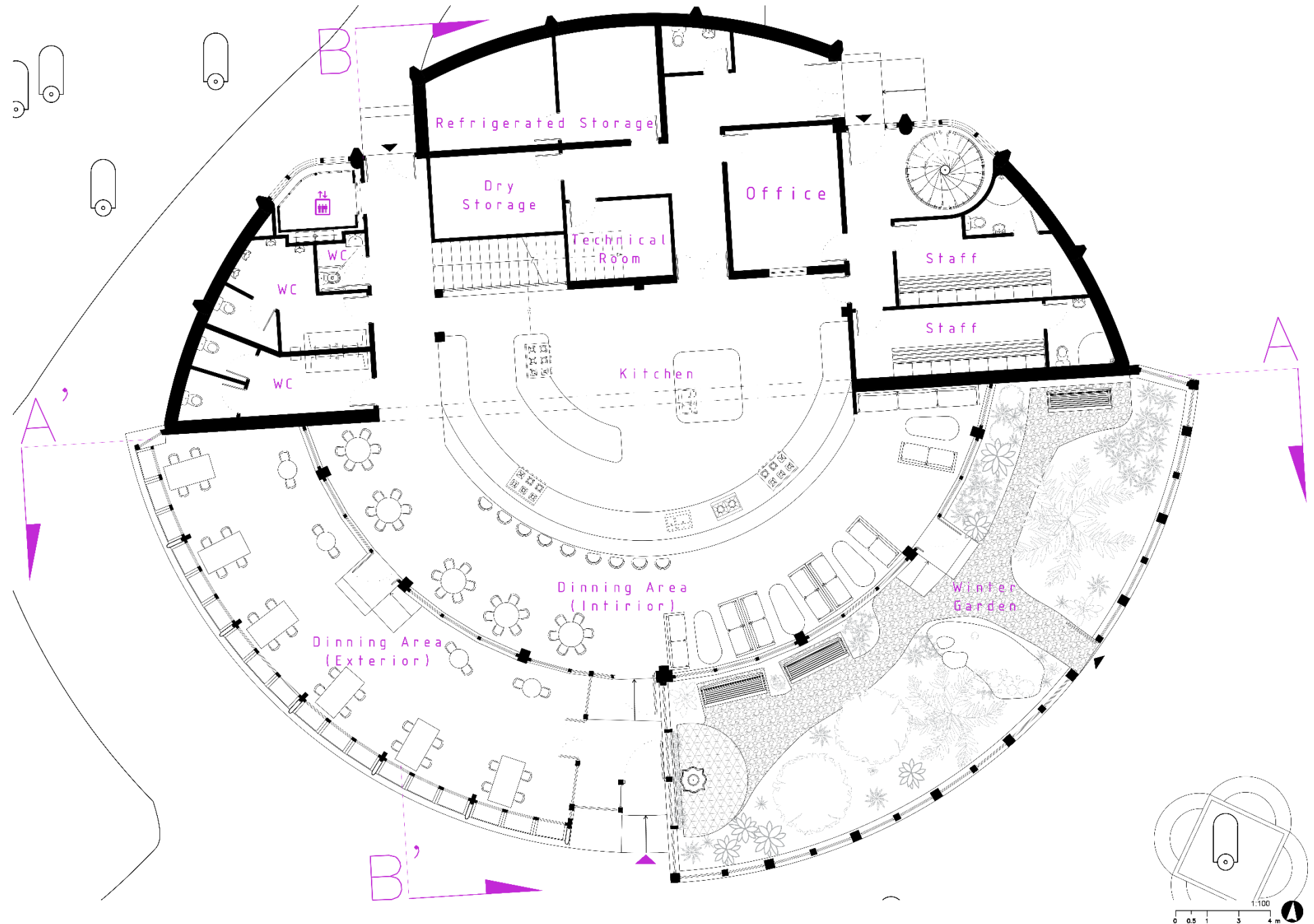
SITE

Pink Lantern proposes the construction of a bistro-bar at the North East side of Milady Horákové park. The project aims at utilizing the richness in vegetation, historical value and abundance of visitors together with the new upcoming concert hall construction. Respecting the existing trees as much as possible, the bistro-bar is located on a plain where only two trees would need to be cut down. This position also takes advantage of the sun path, shows itself up to the main street to the North and creates a direct link from the Hospital area on the East side and the park. Small modification to the parks' walking paths is proposed to encourage the pedestrian flow from North to South of the park, connecting the bistro-bar to the concert hall with a pleasant walk. Also, a new opening from the main street to the bistro-bar is proposed, meant to provide accessibility to service vehicles to the restaurant



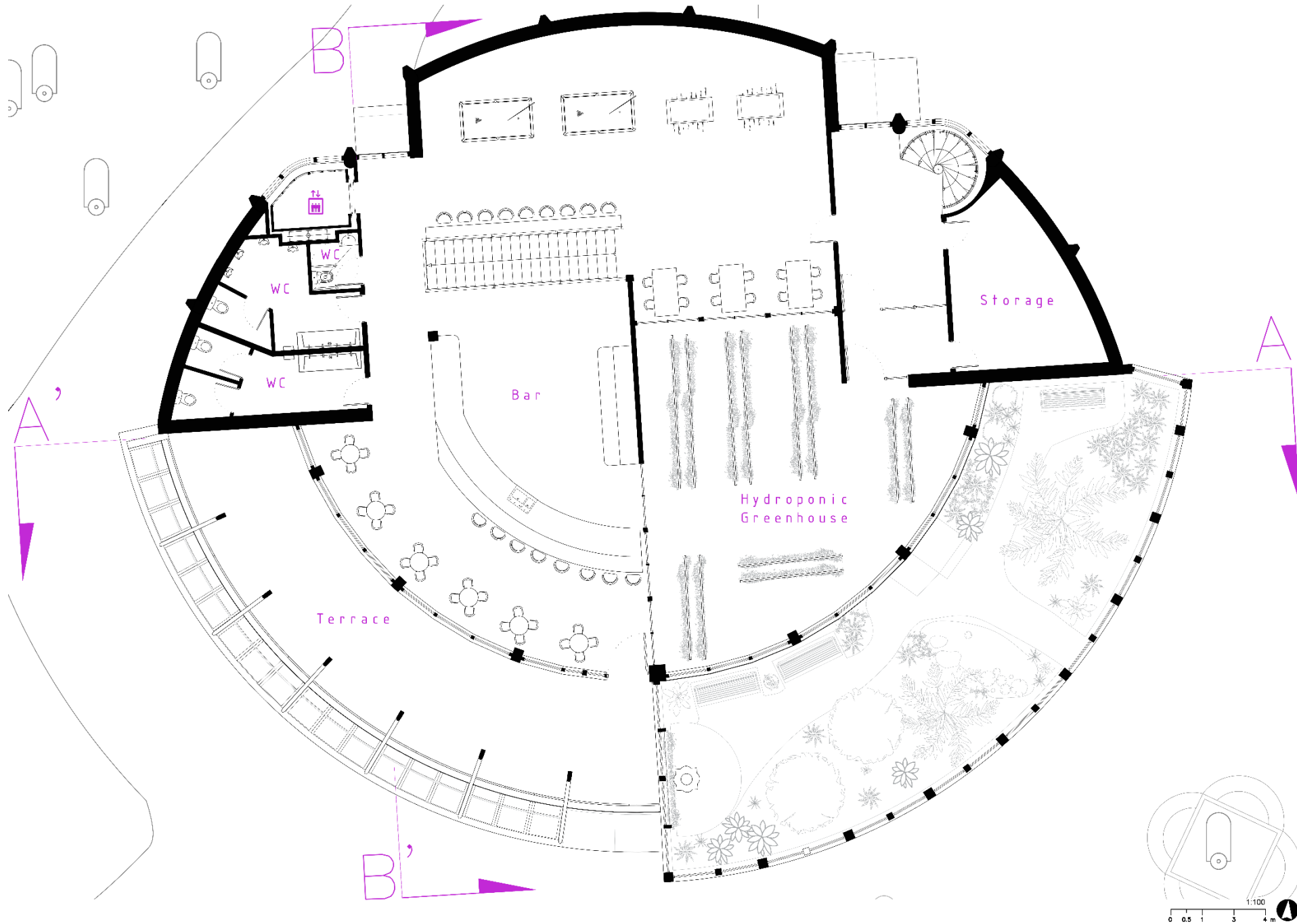
GROUND FLOOR

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CONCEPT

FIRST FLOOR



SECTION A-A'

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SECTION B-B'



WINTER GARDEN

The winter garden would be open to the public, bringing exotic plants and trees for the visitors to enjoy. The structures would also feature automatized windows that would open to regulate the inner climate.



NORTH FAÇADE

This façade is the most private part of the building since, unlike the rest of the facades, it doesn't show much of the inside, this is due to climate reasons. The concrete wall is clad in polished steel, aiming to reflect the light coming from the inner side of the columns that support the glass dome. This effect is meant to attract people passing Varenská, the main street found to the North of the park.



DINING AREA

This open kitchen allows the visitors to see how their meals are being prepared as a part of the experience of visiting the Bistro-bar.



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BAR ON THE FIRST FLOOR

This bar not only grants stunning views to the park from above but is also fully equipped with a playing area that could eventually be used as a dancefloor, a terrace, toilets, different sitting areas. From this floor the visitors can also enjoy the architecture of the building as its structure is being exposed all around this floor. The visitors also have the possibility of watching how a hydroponic greenhouse looks like from up close.



HYDROPONIC GREENHOUSE

This room consists of 85 square meters which would be used for growing high quality vegetables. By utilizing this system for food growth, the vegetables used in the kitchen could be grown in the same building that they have grown in, saving on time and emissions. This method also uses 10 times less water with a 30 to 50% faster growing rate than traditional farming methods, this would help paying back the cost of the building with time. To give an example of a vegetable that could be grow here, 4 square meters in these conditions could produce 300-400 tons of lettuce per year.

The low energy consuming LED lights would stay on during seasons with low sunlight. They would be powered partly by the solar panels on the roofs emitting a particular pink light from the inside that gives the building its name.

