CROWDFUNDING for the **ENCLAWARENESS**

Shadan Sharafifar | FHK Master of Architecture Graduation studio 2021 - 2022

Essay + Research + Logbook



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Abstract

This design proposal of a discovery parc, including temporary pavilions and a water transportation hub in the south Maastricht region, will engage the public in the future of the ENCI legacy and the value of the site for nature and culture.

The manifesto "Crowd making for the ENCI heritage auction" gives an impulse to the post-industrial authenticity and the quality of life for the Maastricht region in an international European context.

The values of the ENCI area offer many more opportunities than are currently used for the economy and the life quality of the city for the residents and industry.

Instead, there is now the threat of complete demolition of all characteristic buildings and the associated main urban design scheme. Politicians stated that in the past, buildings would have no value for the city of Maastricht and its inhabitants and that the area should be completely returned to nature.

This alarming situation calls for a dialogue between the residents of Maastricht, and active professionals in the spatial domain such as architects, urban planners, project developers, government authorities, entrepreneurs, and educational institutions who want to help the city move forward and not backward.

The ENCI had international, national, regional, and municipal impact, and a discussion about the significance and the radiation power of this area extends beyond the municipal borders.

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Fact I - Heritage Must Stay.

Evidences: I: Checkpoint Charlie | Berlin II: Lange Jan | Heerlen

At the beginning of an engraving change, a truly new chapter in history, all traces of the previous chapter are often thoroughly erased first. Only later do people realize that this is an often irreparable error of thought. Checkpoint Charlie's story explicitly demonstrates this.

Checkpoint Charlie was a checkpoint on the border of the American and Russian sectors during the partition of Berlin, at a passageway in the Berlin Wall in Friedrichsstraße.

After The Second World War, both Germany and Berlin were divided into four occupation zones: an American, a British, a French, and a Soviet occupation zone. The American, British and French occupation zones jointly grew into the Federal Republic of Germany (informally: West Germany) and West Berlin, and the Russian zones to the German Democratic Republic (GDR) and East Berlin.

Between the Federal Republic and the GDR ran the heavily guarded German border and around it completely enclosed by the GDR was the Berlin Wall.

If you wanted to travel by road from the Federal Republic to East Berlin, they were obliged to travel via the so-called Transit Autobahns – the only road links between the Federal Republic and West Berlin

– to West Berlin and from there to East Berlin. Checkpoint Charlie was the third checkpoint to pass en route. The name is derived from the third letter of NATO's spelling alphabet.

Checkpoint Alpha was the border crossing at Helmstedt on the German-German border.

Checkpoint Bravo was located on the highway near Dreilinden, on the border between Potsdam and West Berlin. Checkpoint Charlie was the only checkpoint where foreigners (everyone except West Berliners, West Germans, and citizens of the Allied Control Council countries) could enter East Berlin by road. By public transport, the nearby Bahnhof Friedrichstraße was the only option.



American soldiers at Checkpoint Charlie, December 1961. Photograph: Keystone-France/ Gamma-Keystone via Getty Images



During the Cold War, Checkpoint Charlie became the symbol of both separation and freedom.

As a result of an attempt by the SED leadership to limit the power of the Western Allies, At Checkpoint Charlie in October 1961, Russian and American tanks with sharp ammunition faced each other for some time.

In the end, this incident ended with a scissor. Shortly after the opening of the Wall in 1989, the checkpoint was lifted. After the demolition of the Wall, the checkpoint was indicated with a stone silhouette on the asphalt (as with the rest of the Wall).

Checkpoint Charlie was finally completely demolished on June 22, 1990.

Today one would argue: How can you destroy such an important symbol of an era in our history? Of course, in the past, people wanted to get rid of this post, because it was connected to the system that was perceived as a burden.

course, irreparable.

But once the system is overcome, one realizes that these symbols must be preserved, because they are an essential part of our history and identity.

In the year 2000 - barely ten years after the demolition - an exact copy of the original guardhouse was placed back for this reason. But the mistake made was, of

Fact I - Heritage Must Stay.

Evidences: I : Checkpoint Charlie | Berlin **II: Lange Jan | Heerlen**

The second example of important heritage that has been erased is closer to the Netherlands.

After the closure of the mines in Limburg in 1965, the entire industrial stock, related to coal mining in Heerlen and its surroundings, was irretrievably erased.

The mine closure in the Dutch province of Limburg in the 1960s and 1970s began with a historic speech by the then Minister of Economic Affairs Joop den Uyl in the Stadsschouwburg van Heerlen. In this explanatory statement, the Minister indicated that the Limburg mines - both state and private mines - would all be closed within ten years.

The minister promised that no closures would follow without replacement employment.

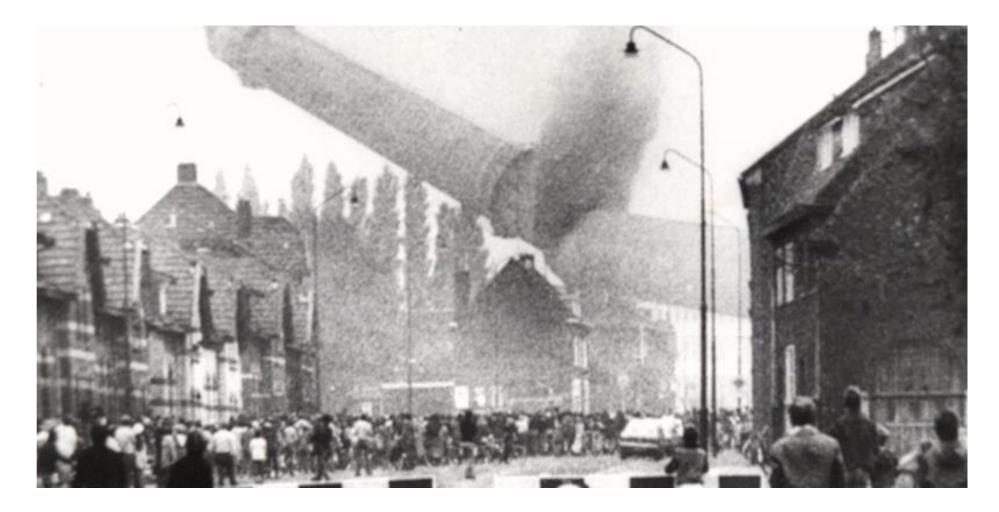
Despite this, the closure of the mines eventually created 45 000 direct and some 30 000 indirect jobs. On 31 December 1974, the last cargo of coal in the only remaining coal mine, the Oranje- Nassau I in Heerlen, was brought up.

In 1975, the operation Remediation mine sites ('From black to green') was launched. Economically worthless mining sites were given new destinations.

The cost of the 10-year program was estimated at 12 billion guilders.

Part of the buildings and facilities to be demolished also concerned two chimneys with landmark functions: Lange Jan and Lange Lies.

Lange Jan in particular, with its height of 135 meters, has been a landmark for the city since 1938.



On August 21, 1976, the chimney Lange Jan was blown up. However, the behemoth fell wrong and took a high-voltage line with it in its fall, leaving much of the city without electricity. In addition to the pipeline, de Lange Jan crushed a vacant office building intended for demolition. This building had - ironically - housed, among other things, the mine damage office. Nowadays, the old building of the Central Bureau of Statistics stands on the site where both chimneys used to be. On the former mine site, little reminds us of the former coal mine.

The year 2015 has been declared 'The Year of Mines' by the municipality of Heerlen. The municipality has taken the initiative to organize a theme year with events and activities with a national appearance.

In the development of the program, we work together with the Parkstad municipalities, the Parkstad city region, municipalities from the Western Mining Region, and Maastricht. The College of Heerlen has allocated 1 million euros for 'The Year of Mines'. Maurer United Architects initiated the plan to realize a media installation in the 'Year of Mines 2015' with two significant beams of light towards the night sky, exactly where the two chimneys Lange Jan and Lange Lies once stood.

With the beacons, a forward-looking signal is given. After the mine closures in the Parkstad Limburg region, the government initiated the radical transformation 'From black to green.

As a result, not only has important cultural heritage been lost but also an essential part of the identity of the mining residents has been compromised.

Fact II - How to keep heritage?

Evidences:

I: Landschaftspark | Duisburg-Nord

II : Zeche Zollverein | Essen

In Germany and Belgium, it has now been recognized that industrial heritage can also be preserved together with nature parks to be developed.

Good examples are the Land-schaftspark Duisburg-Nord, Zeche Zollverein Essen, C-Mine Genk and the Schachtbokken in Maasmechelen.

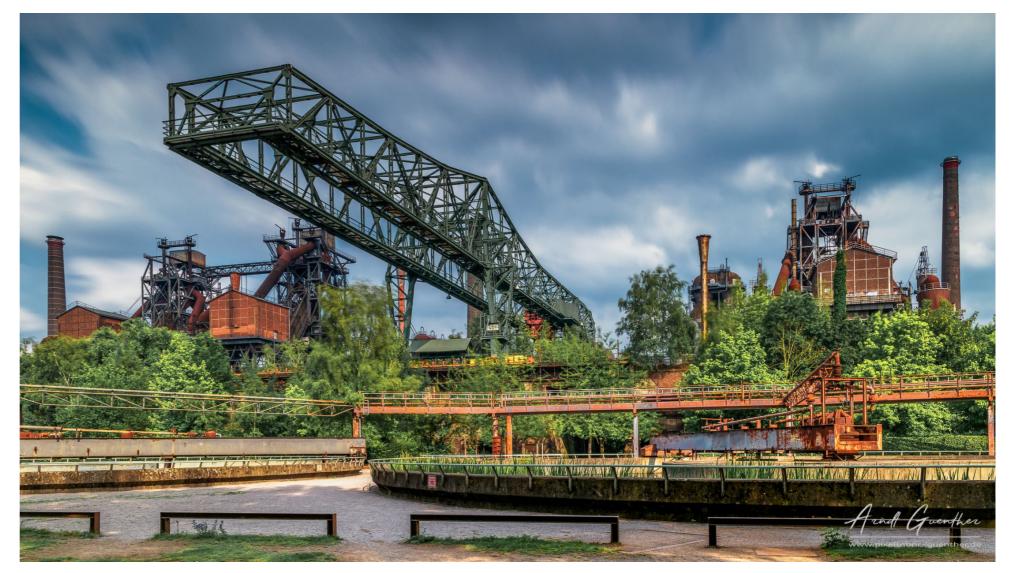
The 'Landschaftspark Duisburg-Nord' is a public park in Duisburg, Germany. The centerpiece of the park is the ruin of a blast furnace complex that was shut down in 1985. The blast furnace complex was built in 1902 by the Rheinische Stahlwerke zu Meiderich bei Ruhrort, and was later taken over by the Thyssen group.

It was badly damaged during World War II, but it was rebuilt in the 1950s. By 1985, the complex's blast furnaces had become too small to be profitable, and the complex was closed.

Between 1991 and 2002, the site was converted into a public park.

Most buildings in the park are now used for recreational purposes. For example, from the former blast furnace 5 one has a good view over Duisburg and its surroundings, one can dive into the gas tank, and in a part of the ore bunkers some climbing walls have been built and climbing routes have been mapped out.

The site is included in the 'Route der Industriekultur', which passes industrial sites in the Ruhr area.



Fact II - How to keep heritage?

Evidences:

I : Landschaftspark | Duisburg-Nord

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The 'Zeche Zollverein' industrial complex in Essen was one of the most modern coal mines and largest coking plants at the time of active operation.

As a 'representative example of the development of heavy industry in Europe', the 'Zeche Zollverein' mine and coke ovens were designated a World Heritage Site. 1986, after 55 of coal In vears the shut down. mine mining, was In 2010, when the Ruhr region was the European Capital of Culture, the site of the former mine was the mi-del point of the activities. Nowadays, 'Kokerei' and 'Schacht XII' together form a unique industrial complex of international rank with a lively cultural center.

In the field of the 'most beautiful mine in the world, one gets a good view of the modern times of the 1920s and 1930s as well as the development of the heavy industry. In an original area where the coal was extracted in opencast, the monument path was built.

It runs through the buildings of the former weaving and coal laundry along giant machines and conveyor belts. The coal mine, like the 'Land-schaftspark Duisburg-Nord', is included in the 'Route der Industriekultur.'

As part of Ruhr 2010, the 'Zeche Zollverein' mine shaft in Essen, Germany, has been repurposed as a cultural hotspot.

This success story has given a creative boost to the interconnected cities in the industrial Ruhr region of Germany.



Fact III - ENCI cement factory Historical values

The ENCI has a unique location due to Dutch landscape standards, where numerous fossilized plants and animals have been found. As a paleo-archaeological site, the Sint-Pietersberg and more specifically the quarry is therefore of national and international importance. The site of the ENCI is also valuable from a geological point of view because of the knowledge gained here about the Cretaceous.

Since the beginning of the era, the Sint-Pietersberg has been of great economic importance in the region because of the fertile limestone soils. The limestone of the mountain has been used in various applications over the centuries, including to enrich agricultural lands and as a base for building materials.

The scar in the Sint-Pietersberg shows very clearly how the industrial era has left its indelible traces. The enormous impact of heavy industry is so clear at Sint Pietersberg because of the contrast with the surrounding pastoral South Limburg hilly landscape and the proximity of the Maastricht city center. Despite the negative connotations associated with heavy industrial activities, especially for residents, the cultural-historical significance of factories and quarries should not be erased.

Cherishing the unique history of the Limburg landscape and the terrain on which the ENCI is located as one of the most unique and layered historical places in the Netherlands; as well as making sure that this richly layered history remains visible at all times in all new developments for the area will help not to brush the ENCI's illustrious past irreparably away, but to keep the contrasts visible and certainly not to replace it completely with a new layer of use.













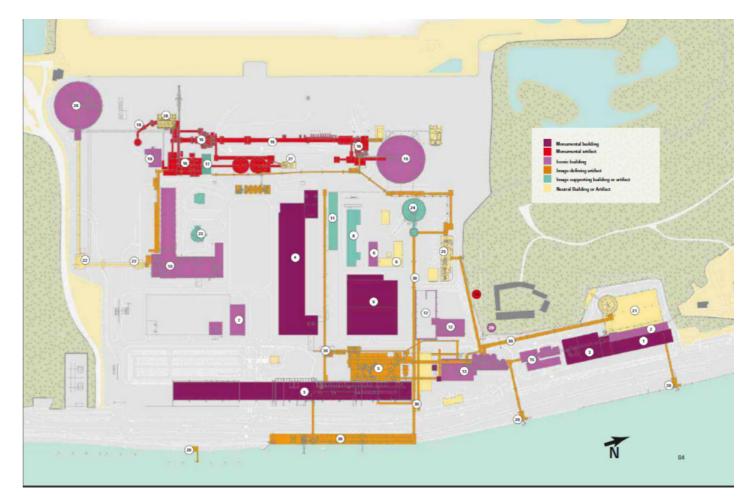
Fact III - ENCI cement factory Architectural-historical values

From a building-historical point of view, the ENCI site is important as a sample of twentieth-century concrete construction. The material that was present in abundance was used in the most diverse ways: the historical construction methods according to the Hennebique system in the packaging building, the wafer-thin shell roofs of the raw materials hall, the prestressed girders of the crane tracks, the B2 concrete blocks in the central control building, the works of art and the decorative application in the facade panels of the head office are just a few of a long list of concrete applications. The diversity makes the buildings on the ENCI site of high building-historical value. The enormous scale of many buildings means that all kinds of different supporting structures have been used, both in concrete and steel. These buildings were impressive

feats of engineering at the time, which were extensively published in the professional literature. The scale of the buildings meant that conventional construction methods could rarely be chosen. Many of the buildings, therefore, have a construction technique and appearance that is unique to the Netherlands.

Currently, there are no solid plans for reusing the site and the unique factory ensemble is at risk of being partly demolished. In 2009 ENCI was ordered to establish a study (Plan van Transformative) on the possibility of the transformation of a 165-hectare production landscape. In the study, it has been decided that the guarry should be turned into a nature area, and handed to the Society for the Preservation of Nature (Natuurmonumenten) in January 2020. The situation has changed unexpectedly with the announcement of the total production closure in 2020. The former plans of the site transformation became no longer relevant. At the end of 2020, during the development process of a new zoning plan, ENCI submitted demolition proposals within the plan area (demolition permit request for chimney and furnace 8). In February 2021, the issue was addressed by Erfgoedvereniging Bond Heemschut and Werkgroep Industrieel Erfgoed Limburg to the Minister of Education, Culture and Science and the city council of Maastricht. Both organizations described the urge of listing the factory ensemble as a national monument due to its cultural and historical value. But the industrial area remains in the hands of ENCI, which is willing to sell the site to the highest, though not necessarily the best, bidder.

Having this concern, I have come up with a manifesto that brings the specific target group of residents, professionals, stakeholders, and investors together. Via this opportunity and through a discovery route I educate the target group and will lead them to an endpoint which is on the other side of the ENCI. In this final destination, there are rooms designed for meetings, workshops, and lectures which can be used for deciding the potential future plan of the ENCI area



Fact IV - The blurry future of the ENCI site

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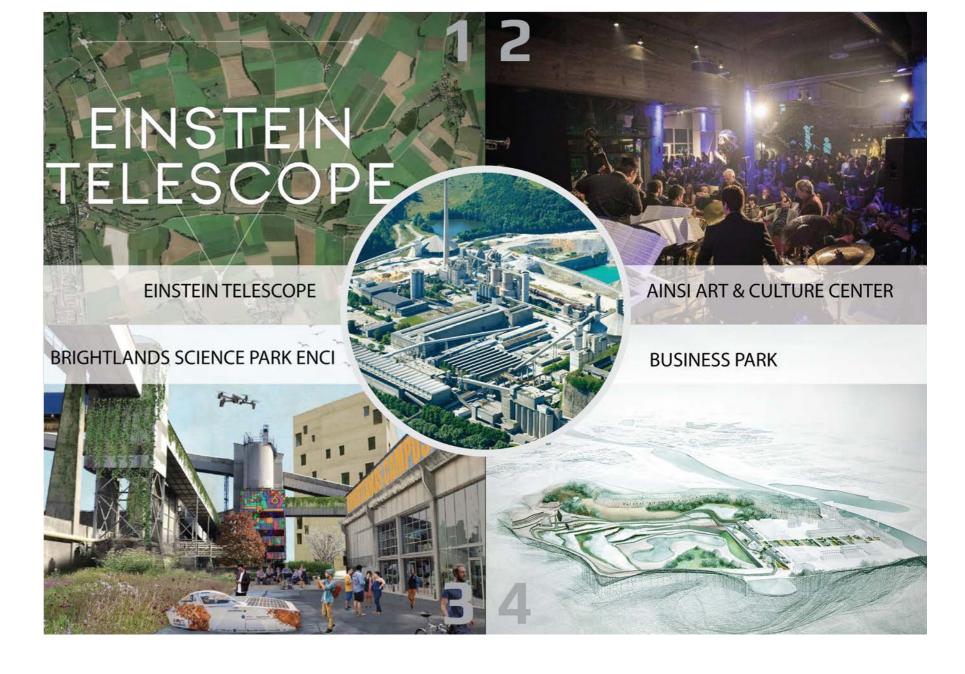
The rest of the factory has been divided into three zones.

1- The zone on the edge of the quarry has been given a recreational destination, 22 hectares of factory land has been assigned for a business park, while ENCI decided to retain 11 hectares. The situation has changed unexpectedly with the announcement of the total production closure in 2020. The former plans of the site transformation became no longer relevant.

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Essay conclusion

I want to start a movement by starting an ambitious development trajectory, based on the genius loci. I made my vision concrete in a coherent design for an urban experience parc, a center for area development, and a discovery route to the ENCI area. The experience parc is projected on the site of a peninsula located in the Meuse.

On the shore, there is a harbor for boats, a castle functioning as a hotel, and a sanctuary for nature recreationists.

The position of the shore is in front of the entrance building, the entrance to the ENCI area. Developing a new entrance from the east creates a new perspective.

The new spatial intervention concerns a "parc, the materials and architecture pavilions and a discovery route to the Enci area". The design with public functions and new public space brings people together in an informal way and symbolizes a social 'wake-up call'. Theoretical Research

Maastricht and the region

Introduction:

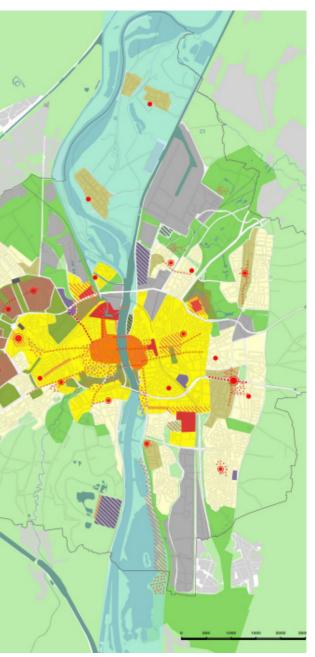
In thinking about the possible new future of the ENCI, in addition to the culturalhistorical context, it is also important to have a picture of the socio-economic dynamics in the region and the municipal and provincial ambitions for future development in the short and certainly also the longer term. term. This concerns both the opportunities for development and the possible limitations.

This chapter provides an overview of the most important ambitions of the city of Maastricht as laid down in the environmental vision, but also as collected during a workshop organized by Crimson and Atelier Rijksbouwmeester with representatives of the municipality of Maastricht, the province of Limburg and ENCI in the context of this project. research. Together with various policy documents and other relevant studies, this information forms the basis for this chapter.

Municipal, provincial, and national ambitions:

Maastricht's environmental vision identifies several tasks that the city wants to work on in the coming years. In addition to responding to the consequences of climate change, the transition to a CO2-neutral society, and improving the relationship between government and society, the municipality also expressly proposes working towards an inclusive society and strengthening the agglomeration power within the (EU) region central. The city is explicitly looking for a balance between preserving the existing qualities and stimulating new developments. But also between the urban dynamics in some places and relative tranquility in others, between metropolitan facilities and valuable nature, and between the preservation of cultural-historical heritage in combination with making the existing city more sustainable. For the physical living environment, this translates into three themes.

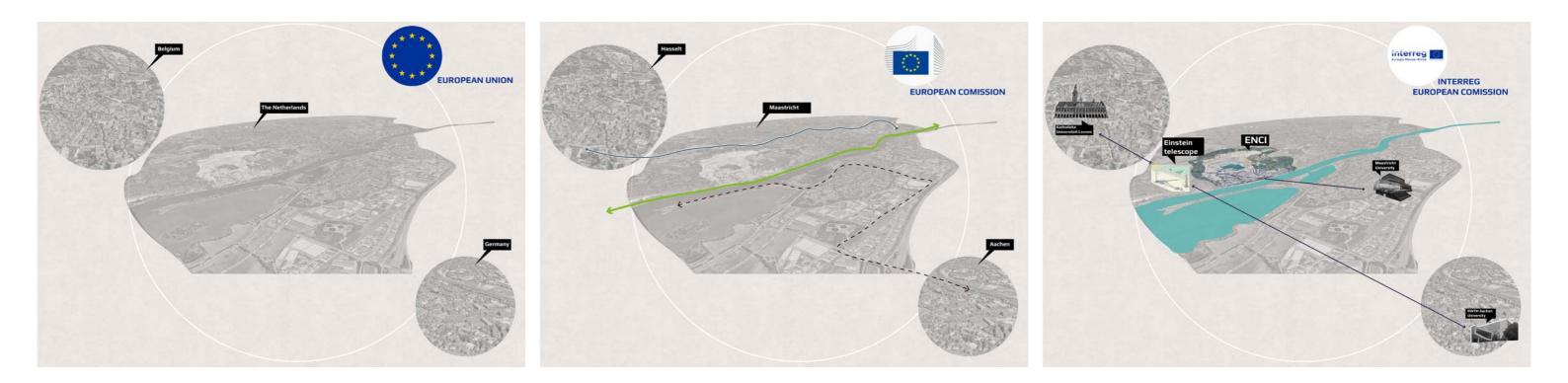




Municipal, provincial, and national themes

Theme I:

In the first theme, Maastricht is positioned within the Meuse-Rhine Euregion. This is an urban region with almost 4 million inhabitants, which also includes the German city of Aachen and the Belgian cities of Hasselt, Genk, and Liège. Within this context, Maastricht wants to develop into a strong knowledge region with innovative companies, a bustling city center, attractive residential areas, and plenty of space for greenery and quality of stay. To make optimum use of the regional agglomeration strength, the multimodal accessibility of regional centers must be increased and efforts are made to improve (cross-border) connections with, for example, inner cities, campuses, and work locations within the Euregio. Interesting to mention in this context are the plans for a tram line between Hasselt and Maastricht and the three-country train that is to run between Aachen, Maastricht, and Liège.



Theme II:

In the second theme, the environmental vision explicitly mentions the ambition to pursue an integrated perspective on a healthy and liveable environment in the future. This must be done by creating safe and attractive routes and public spaces for pedestrians and cyclists, but also by greening and spreading facilities and meeting places throughout the city.

Theme III:

A third spearhead focuses on maintaining and expanding meeting places that contribute to the attractiveness of Maastricht. Here too, the balance between urban dynamism and tranquility is central, with crowd pullers being concentrated in the centers, but also deployed at smaller-scale meeting places in the neighborhood. Finally, better use of the existing cultural heritage is also mentioned, as is the encounter of people in and with nature. The provincial environmental vision of Limburg also emphasizes an inclusive, healthy, and safe society, in which the characteristics and identity of areas are central. By dealing carefully with space and resources, the province wants to work towards 'More city and more land', or compact cities and villages by concentrating new spatial development within existing urban areas. Rural areas are cherished as a counterpart to urbanity.

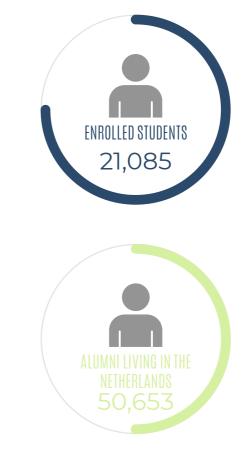
Significance of the ENCI

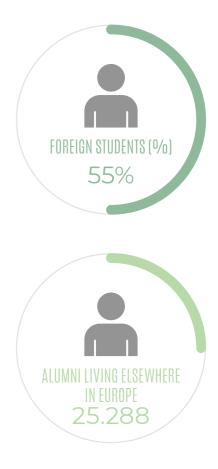
Based on these visions and ambitions, it is valuable to zoom in on several aspects that can guide the transformation of the ENCI site. While the provincial environmental vision does not say anything specific about the area and the heritage value, the vision does describe several general tasks that relate to or may relate to the factory site and the environment around the guarry. The municipal environmental vision, in turn, does provide a number of concrete starting points. For example, the ENCI site is mentioned as one of the transition areas, which also includes the Trega/ Zinkwit site, the Northeast bank of the Meuse, and the former Overmaze penitentiary. These areas are set aside for transformation, depending on future demographic, economic, and social developments. The ENCI site is described as an area that could eventually be transformed into an urban work location and/or a combination of more recreational and cultural functions. However, more research is needed for this, and the ENCI site poses a challenge. in being able to establish different types of activities such as business, recycling, nature experience, and recreation close to each other.

An important point of attention in the economic development of the region is that it is expected that 20,000 extra workers will be needed in the whole of Limburg until 2025, while the working population is declining and a shortage of 70,000 people in the entire province and 24,000 in South Limburg will arise. The city is therefore strongly committed to attracting talent and improving regional cooperation. The University and Higher Education in Maastricht play a very important role in this. Both institutions have significant growth ambitions, which will eventually create a need for new faculty buildings and student accommodation. The University of Maastricht in particular positions itself as a genuine European university with a global orientation, in which internationalization in education and research is central. As a large part of the education at the university is offered in English, unlike the universities in Germany and Belgium, the institution attracts many international students. Maastricht even has the most international student population in the Netherlands, with over 50% international students from more than 100 countries and 40% of the employees from abroad.

Economy and education

Despite its working-class past, which is still reflected in the socioeconomic composition of the population, Maastricht will focus in the future on developing a strong knowledge economy based on the Brightlands Maastricht Health Campus on Randwyck-Noord. More than 1,500 new jobs have been created in this area in the past 10 years, which, together with the inner city, provides the most employment in the city. There are also various initiatives for further development of the area, which is expected to further increase its economic importance in the coming years. Maastricht is also committed to a strong small and medium-sized enterprise (SME), further development of the (creative) manufacturing industry, and increasing international services in the city. There are also opportunities for further developments within the context of the circular economy. A series of opportunity maps for the circular economy drawn up by the Interprovincial Consultation (IPO) includes the further development of the Green Transformable Building Lab (GTB Lab©) in Heerlen, the expansion of Chemelot Circular Hub (CCH) as the first large-scale circular hub in Europe in 2025, and the setting up of a learning and knowledge network around circular procurement and tendering of waste processing.





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Art and culture

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Another important engine for the Maastricht economy is the cultural sector in the city, with the historic city center and the Sphinxkwartier as important hotspots. Maastricht has a rich cultural landscape with major crowd-pullers such as Center Céramique, Kumulus, the Natural History Museum, Theater aan het Vrijthof, The Bonnefantenmuseum, and Bureau Europa. Maastricht is, therefore, after Amsterdam, the second city of monuments and culture in the Netherlands. In addition, the city offers a wide range of art and culture courses, including the Academy of Visual Arts Maastricht (ABKM), the Jan van Eyck Academy and the Arts and Cultural Sciences course at the university. There are also numerous amateur associations in the city, many festivals and events are organized and the creative manufacturing industry (which also includes AINSI, located in the ENCI), is developing further. The TEFAF art and antique fair are organized in Maastricht every year, which attracts art collectors and representatives of museums from all over the world. This mix of activities and organizations has ensured that Maastricht next to the G4 cities Amsterdam, Rotterdam, Utrecht, and The Hague has been designated as one of the cultural focal points of the Netherlands. With more than 1,000 jobs, the cultural sector not only provides an 'interesting' business climate', but is also an economic factor that matters in itself. The municipality embraces this development and has the ambition to further diversify the art sector and make it more international.





Museumnacht Maastricht - Boekhandel Dominicanen

The Cave Experience - Maurer United Architects

Nature, tourism, and recreation

Many people come to Maastricht for the attractive city center with a rich range of cultural facilities and shops, but the surrounding green areas such as the Heuvelland also have an extraordinary attraction for visitors from home and abroad. To the north of the city, you will find the cross-border landscape park Maasvallei and the special Bunder and Elslooërbos. To the south of the city are the Savelsbos and the Jekerdal and the Sint-Pieterberg, which are popular among hikers, with many historical sights, including the underground tunnel system, the Lichtenberg farm, Fort Sint Pieter, and also the former ENCI quarry, the ENCI forest and the Observant. Many of these nature reserves have special ecological values, which means that they are largely included in the European Natura 2000 network and enjoy special protection. The municipality of Maastricht sees opportunities to make the green areas in and around the city much more part of its tourist profile, to better spread the visitors over the region. Yet many Natura 2000 areas around Maastricht are under pressure; for example, due to intensive recreational use or the deposition of nitrogen from the air. Any developments in the vicinity of these areas will have to be taken into account.

For the future, the municipality sees opportunities for more recreation around the Maas south of the city. There are plans for a public beach on the east side of the river, possibly with a connection across the water to the ENCI area. A possible parking facility for visitors to the beach could perhaps also be used by visitors to the ENCI area, provided a connection is created across the Maas, for example in the form of a ferry.



Industrial heritage

The final aspect that is reflected in the different visions is the handling of cultural heritage, which is seen by the municipality as a carrier for the urban development of Maastricht. The province also sees the heritage and monuments as important icons of Limburg's identity on which to build. The similarities in the architecture of historic buildings and the preserved museum objects in cities such as Maastricht, Heerlen, Tongeren, Aachen, and Liège are a powerful reflection of the long interconnectedness of the Meuse-Rhine Euregion. Both the municipality and the province are therefore committed to the careful handling of Limburg's heritage, including national monuments and municipal monuments. For new developments, respect for the monumental and archaeological values is central and the municipality prefers repurposing and transformation over demolition and new construction. The province also explicitly states that the heritage approach is not only about conservation, but also about sustainability, accessibility, and significance for today's society. Interesting in this context is the 'Heritage Deal', in which the national government, provinces, municipalities, and social organizations have made agreements about the preservation and use of heritage in the major spatial tasks of the moment, such as the energy transition and sustainability, climate adaptation and urban growth. and shrinkage. Within this heritage context, the ENCI does not expressly emerge as a focus area.



Sphinxkwartier - Maastricht

Spatial Research

Spatial development of Sint-Pietersberg

Map of Maastricht and surroundings, circa 1775

prepared by Joseph de Ferraris

This map was drawn up by the artillery general Joseph de Ferraris and therefore paid special attention to the differences in height in the landscape and the defenses of Maastricht. The shape of the Sint Pietersberg is easily recognizable and you can see that it was not so much a mountain, but more of a ridge that stretched from Maastricht towards the south, once created by the erosion of the Jeker in the west and the Maas in the east. The map also shows the sparse buildings on and around the Sint-Pietersberg, such as the Lichtenberg farm and the monastery of Slavante. The old ribbon village of Sint-Pieter was also situated along the Maas, named after the local St. Peter's parish that had been located here since the tenth century. Fort Sint-Pieter on the north side of the ridge was part of the extensive fortifications of the important State garrison city of Maastricht. The fortress was the latest addition in a series of defenses built on the hill over the centuries, starting at a Roman camp, followed by an early medieval motte-and-bailey castle (the current national monument 'De Tombe') and a medieval keep (the ruined tower at farmstead Lichtenberg).

1910

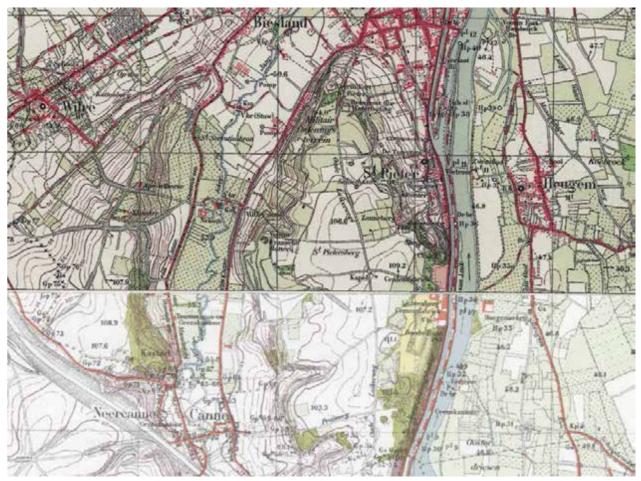
In about 150 years, little changed in the Sint-Pietersberg and its surroundings. The same buildings can still be seen on the map, with prominent buildings such as Fort Sint-Pieter, the Lichtenberg farm, and the Slavante monastery. The vegetation of the ridge is well indicated on this map.

The eastern slope is covered by a thickly vegetated grove that extends to the Belgian border. The vegetation on top of the hill was limited and the landscape was mainly determined by agricultural fields and meadows. The most important change in the area was the construction of the Liège-Maastricht Canal in 1846. The canal was parallel to the Meuse, but because it cut off shallows and bends, shipping traffic was now unimpeded with Antwerp. From Maastricht, the canal ran along the eastern limestone slopes of the Sint-Pietersberg and past the village of Sint- Pieter. The new water connection opened up the quiet farming village and its surroundings via the water and made it an attractive location for companies such as the limestone quarries of the NAKAM and the Limestone Company 'Sint-Pietersberg', who extracted marl there from 1916.



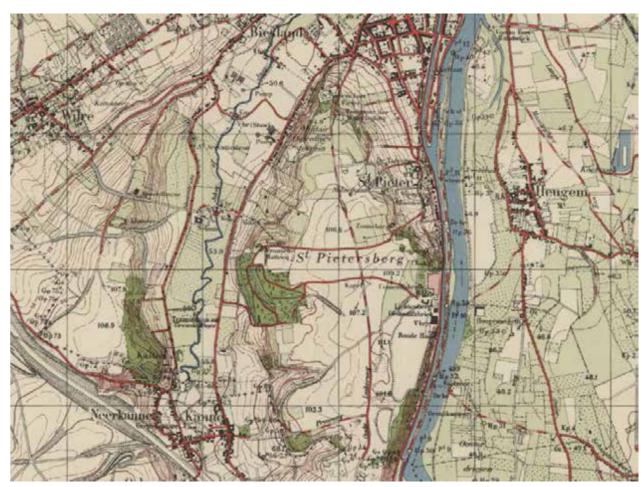
Map of Sint-Pietersberg, circa 1910 (Topotijdreis)

In 1921, the Belgian cement producer CBR took over the two limestone guarries, and in 1926, in collaboration with the Swiss Holderbank and the Belgian Gecima, they founded the First Dutch Cement Industry. The cement coalition had a huge factory built on the slope of the Sint Pietersberg for the production of clinker and cement. In addition to the factory, the ENCI received a concession to excavate above-ground limestone in a southerly direction. The situation just before World War II shows how great the cement company's influence has been on the area in just ten years of the company's presence. The small scale of the buildings, determined by the houses and farms of Sint Pieter and a few farms on the hill, was suddenly overshadowed by the factory halls and chimneys of the cemetery. That street wall of factory buildings was built on the green marl slope on the east side of the Sint-Pietersberg. The biggest impact on the landscape is, of course, the limestone excavations in the company's huge quarry. This quarry was still hidden from view from the Meuse by a 'backstage', a piece of marl slope of thirty meters wide that the ENCI excavators had emphatically spared to prevent a view.



1950

After the war, the ENCI was able to expand unbridled on the Sint-Pietersberg by extending the concession in 1948. This can already be seen on the map from the early 1950s in the growth of the quarry towards the south. In the process, even more of the groves that characterized the slopes of the ridge disappeared. To compensate for some of the devastating cultural landscape, the 'ENCI forest' was planted with native tree species along the western slope of the Sint-Pietersberg. This publicly accessible forest can be easily recognized in the aerial photo from 1949 and the vegetation map from 1950.



Map of Sint-Pietersberg, circa 1938 (Topotijdreis)

Map of Sint-Pietersberg, circa 1950 (Topotijdreis)

The demand for cement exploded in the post-war years due to the reconstruction task, the Delta Plan, and the construction of a modern road network. Growing demand has significantly accelerated the extraction rate at the ENCI quarry, seen in the extensions to the west in the 1956 aerial photo and 1959 map. Production capacity was also increased by the construction of new furnaces and a raw material hall along the canal. To make way for these factory expansions, the backstage with a large part of the last wooded limestone slope was demolished and ground into porridge for the clinker kilns. The map also shows how the city of Maastricht, with the Villapark district, came closer and closer to the Sint Pietersberg. The buildings directly at the north foot of the ridge is the 'ENCI village', a villa neighborhood built by the ENCI for its officials.

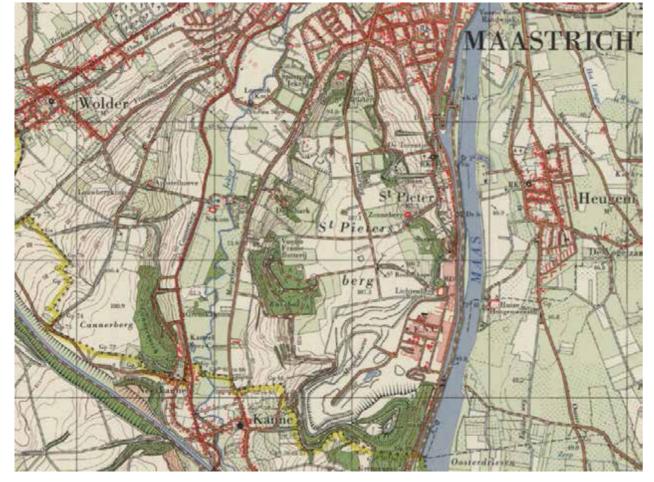


Map of Sint-Pietersberg, circa 1959 (Topotijdreis)



Aerial photo, 1956 (Archive ENCI)

In the 1960s, the ENCI increasingly determined the face of the Sint-Pietersberg. The map and aerial photo show how the quarry in the south has now reached the Belgian border and digs deeper into the hill in the west. In addition to the southern quarry expansion, the pouring of the covered soil has created a dumping mound that reaches no less than 170 meters into the air. Like the ENCI forest, the artificial mound was planted with native species and opened to the public in 1976 under the name 'D'n Observant'. The factory itself also expanded to include a workshop hall and various silos. The partial damping of the Liège-Maastricht Canal can also be seen on the map. The connection between the ENCI and the Maastricht port area was still maintained for the transshipment of goods.

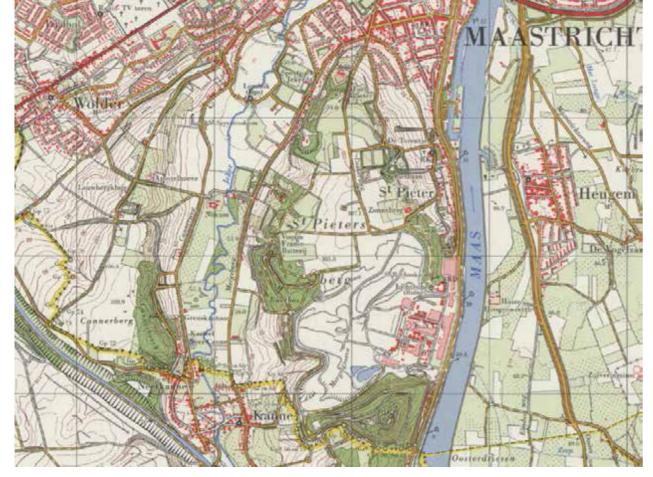


Map of Sint-Pietersberg, circa 1968 (Topotijdreis)



Aerial photo, 1965 (Archive ENCI)

Again the factory and quarry expanded. After a new concession in 1966, the ENCI was allowed to excavate considerably more limestone in a northerly and westerly direction. The factory was expanded with mixing and storage beds on the edges of the complex. The ENCI also asserted itself on the northern half of the hill with the construction of tennis courts, football fields, and allotments for the staff. The map and aerial photo also show how the last part of the Liège-Maastricht Canal has been filled in to make way for the Maasboulevard, an excellent connection for walking, cycling, and car traffic between Maastricht city center and the ENCI.



Map of Sint-Pietersberg, circa 1979 (Topotijdreis)



Aerial photo, 1981 (Archive ENCI)

With new excavations, the quarry penetrated deep into the northern half of the ridge. While expanding in the north, the ENCI divested part of the quarry on the south side for recreation. At the foot of D'n Observant, an artificial landscape design imitated a Limburg valley, complete with a fish pond.



Map of Sint-Pietersberg, circa 1989 (Topotijdreis)



Aerial photo, 1989 (Archive ENCI)

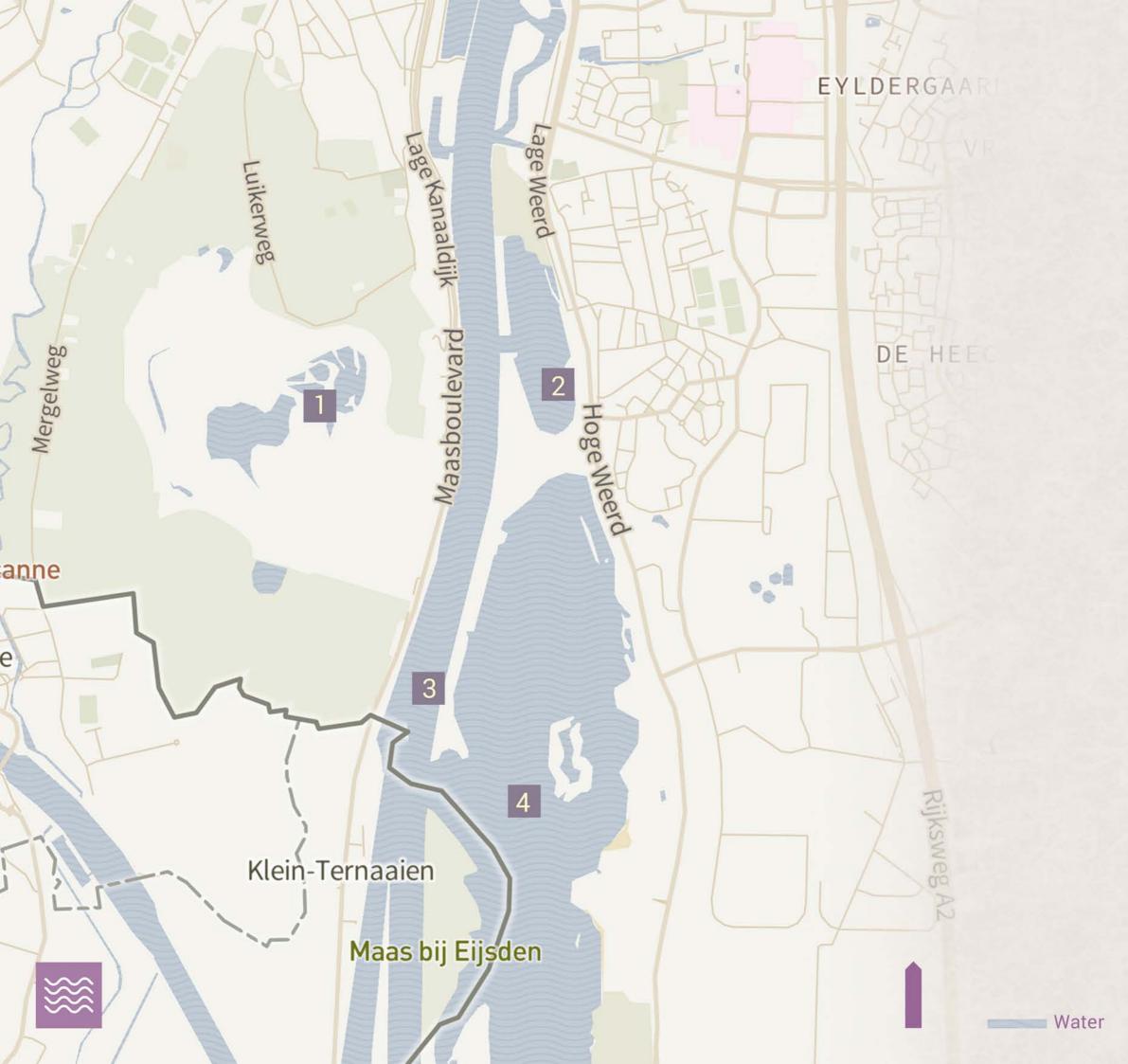
Because the ENCI already foresaw in the 1970s that it would not be able to excavate enough limestone on the Sint Pietersberg, the company made plans to found a new quarry on the nearby Plateau van Margraten. With the launch of this Margraten plan in 1989, the ENCI was limited to the concession area from 1966. Due to technical innovations and deeper excavation, limestone could still be extracted from the existing quarry. It can be seen how the depth extraction mainly took place within the quarry part directly next to the factory, while seven hectares of ENCI forest also fell prey to the quarry. The rest of the quarry was flooded, creating several pools of water. Nature gradually took over the quarry around the water.



Map of Sint-Pietersberg, circa 2006 (Topotijdreis)



Aerial photo, 2006 (Archive ENCI)





1.Jeker



2.Pieterplas

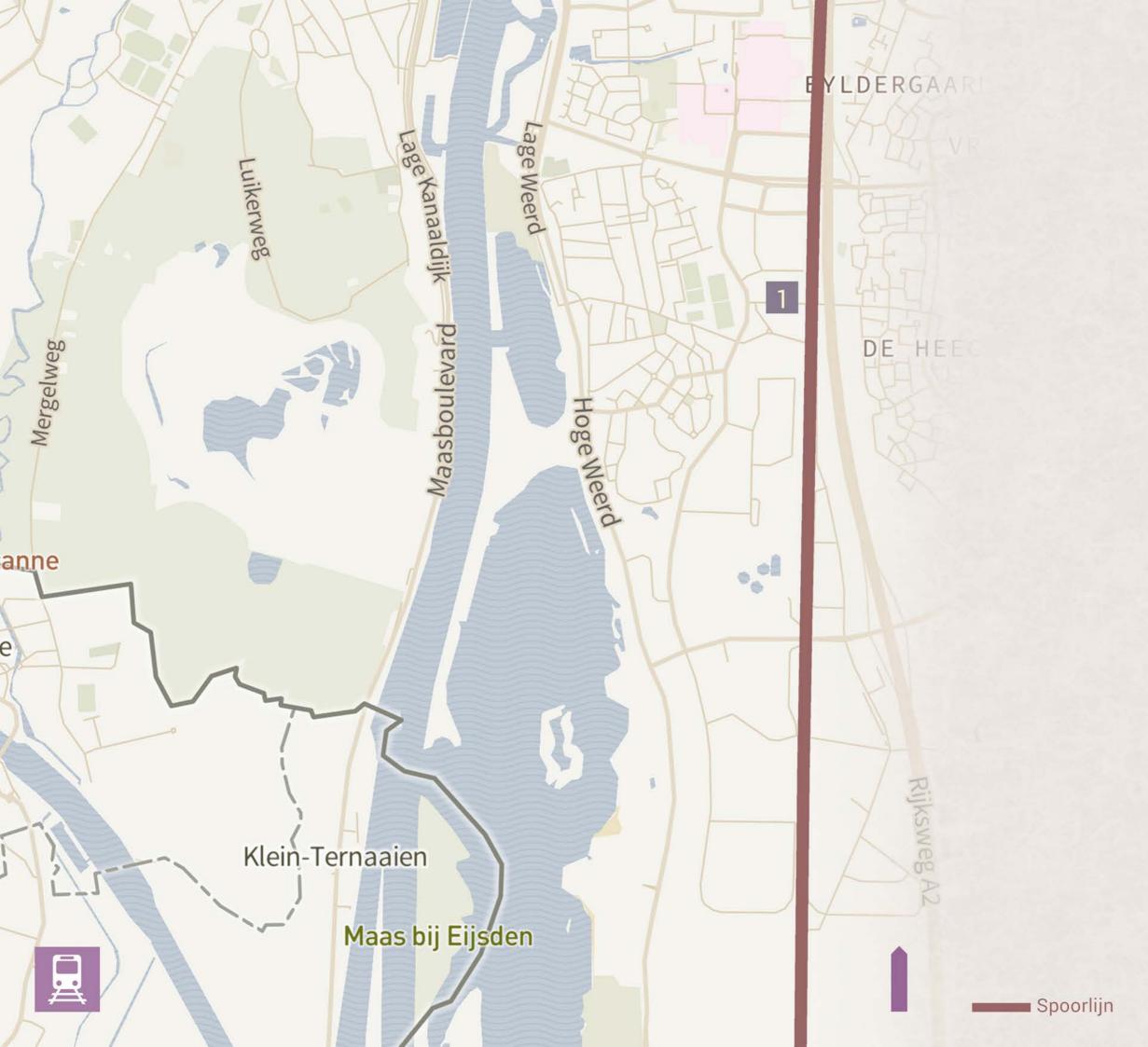


3.Maas



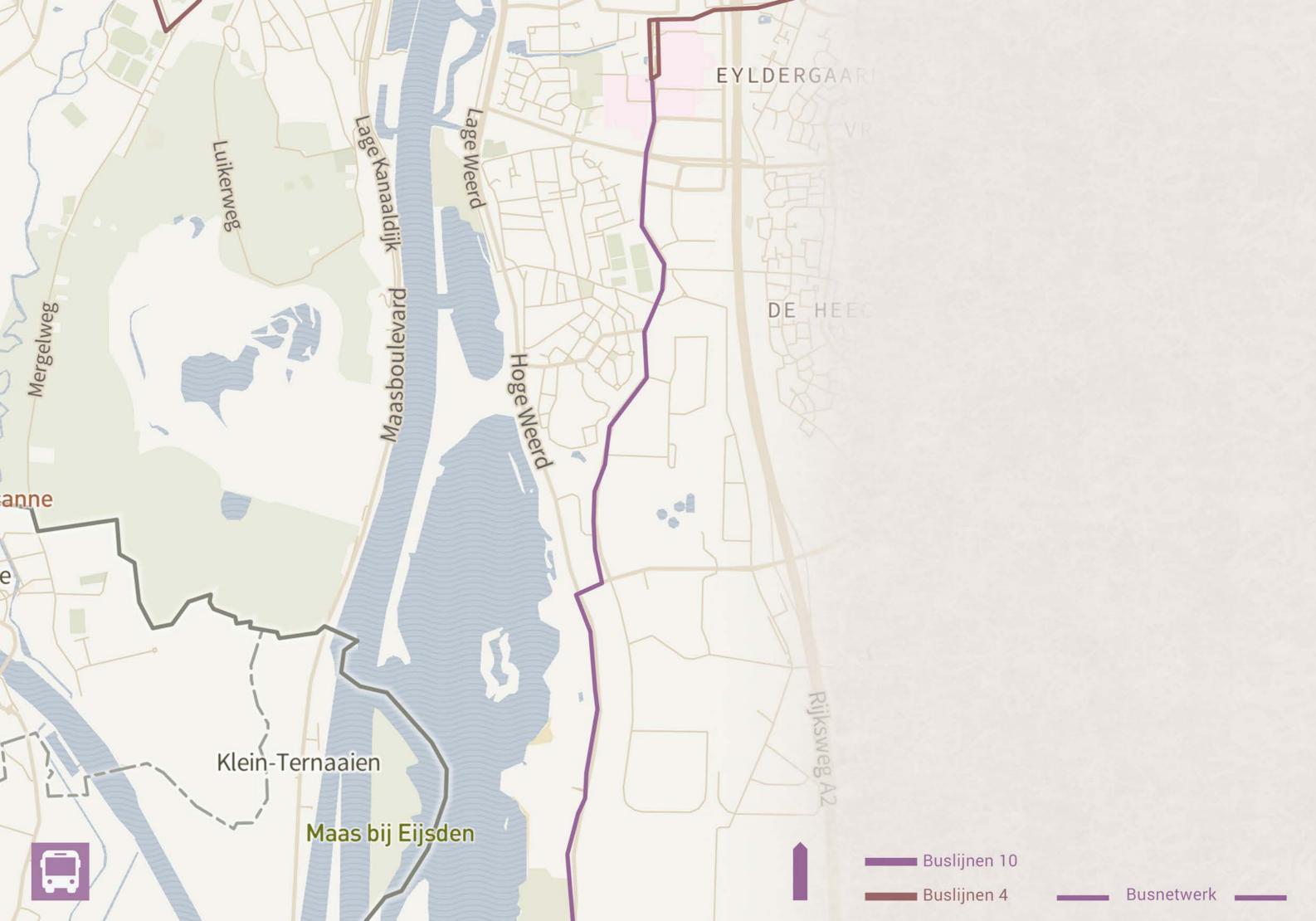
4. Grindafgraving Oost-Maartland

Waternetwerk





1.Station Randwyck

















10.Parkeervoorzieningen van hetAINSI-gebouw



2.Hoge Kanaaldijk met rechts de



4.Hoge Kanaaldijk met links Hal 1



5. Parkeervoorzieningen van Chalet Bergrust

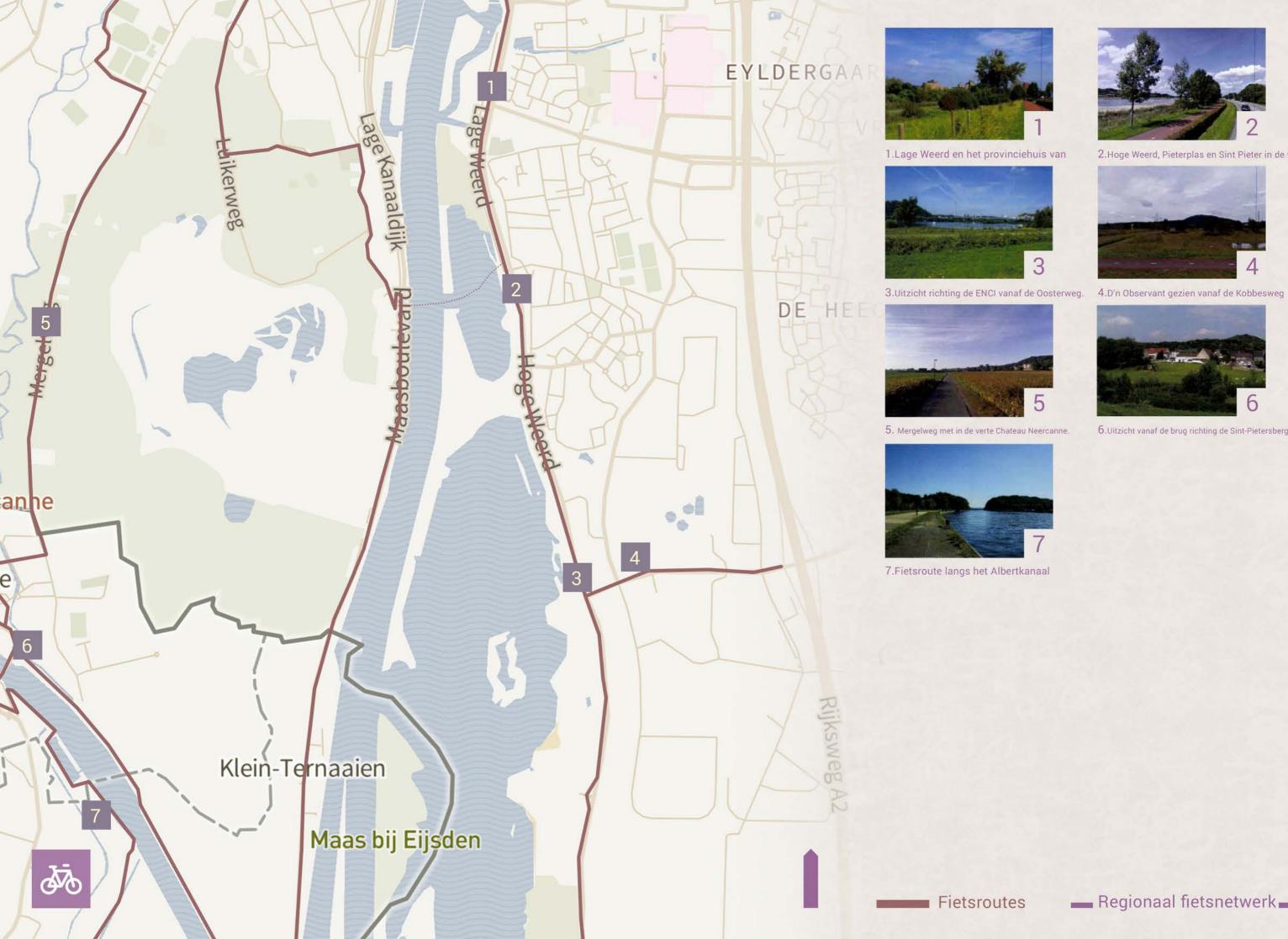


7. Parkeerplaats ter hoogte van de jachthaven



9. Parkeerplaats aan de voet van de Lichtenberg

Autonetwerk





2.Hoge Weerd, Pieterplas en Sint Pieter in de verte





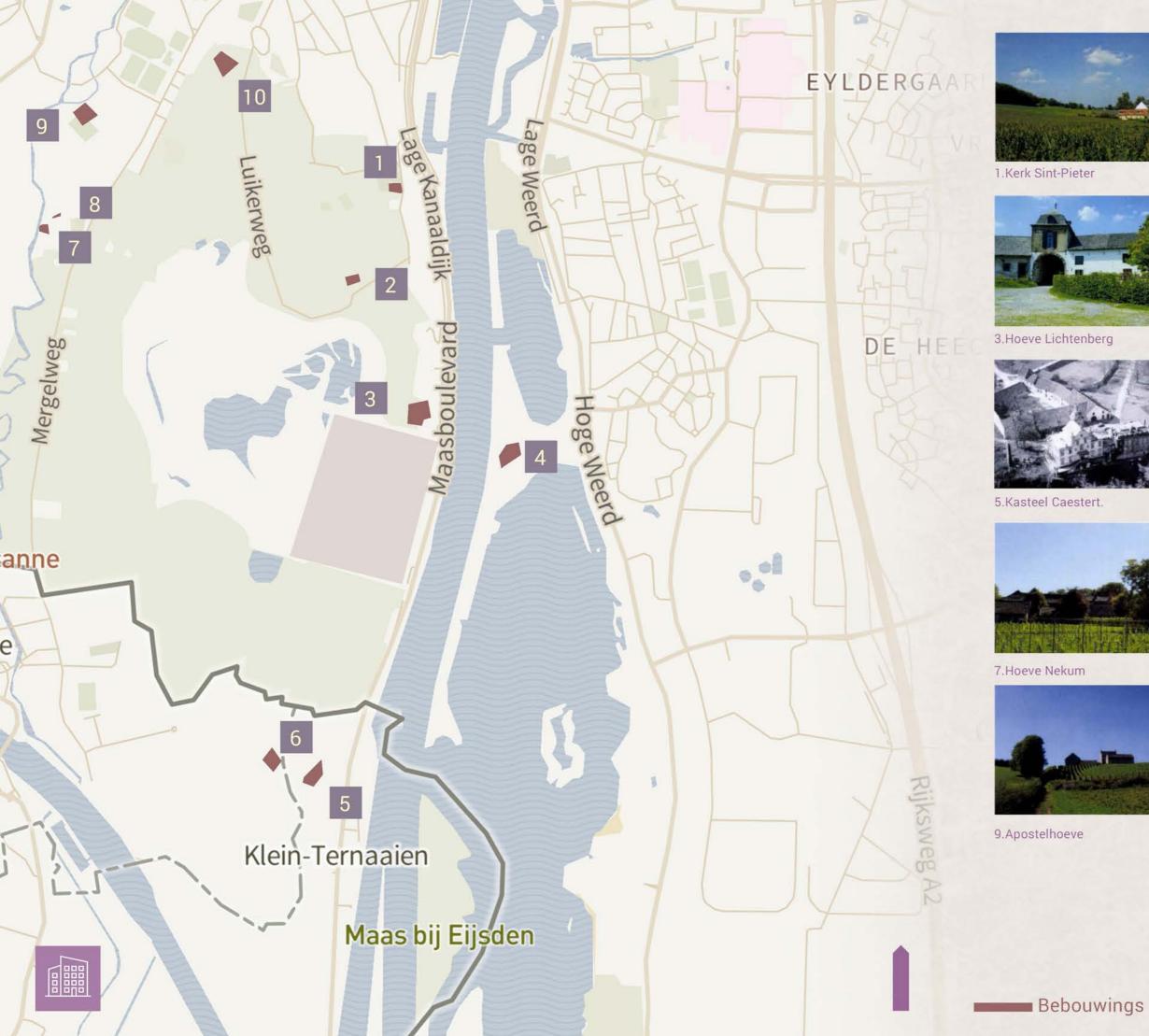
 $\boldsymbol{6}. \textsc{Uitzicht}$ vanaf de brug richting de Sint-Pietersberg



e

1

Sint-Pieterberg









2. Hoeve Zonneberg.



4.Kasteel de Hoogeweert



6.Hoeve Caestert



8.Jekermolen



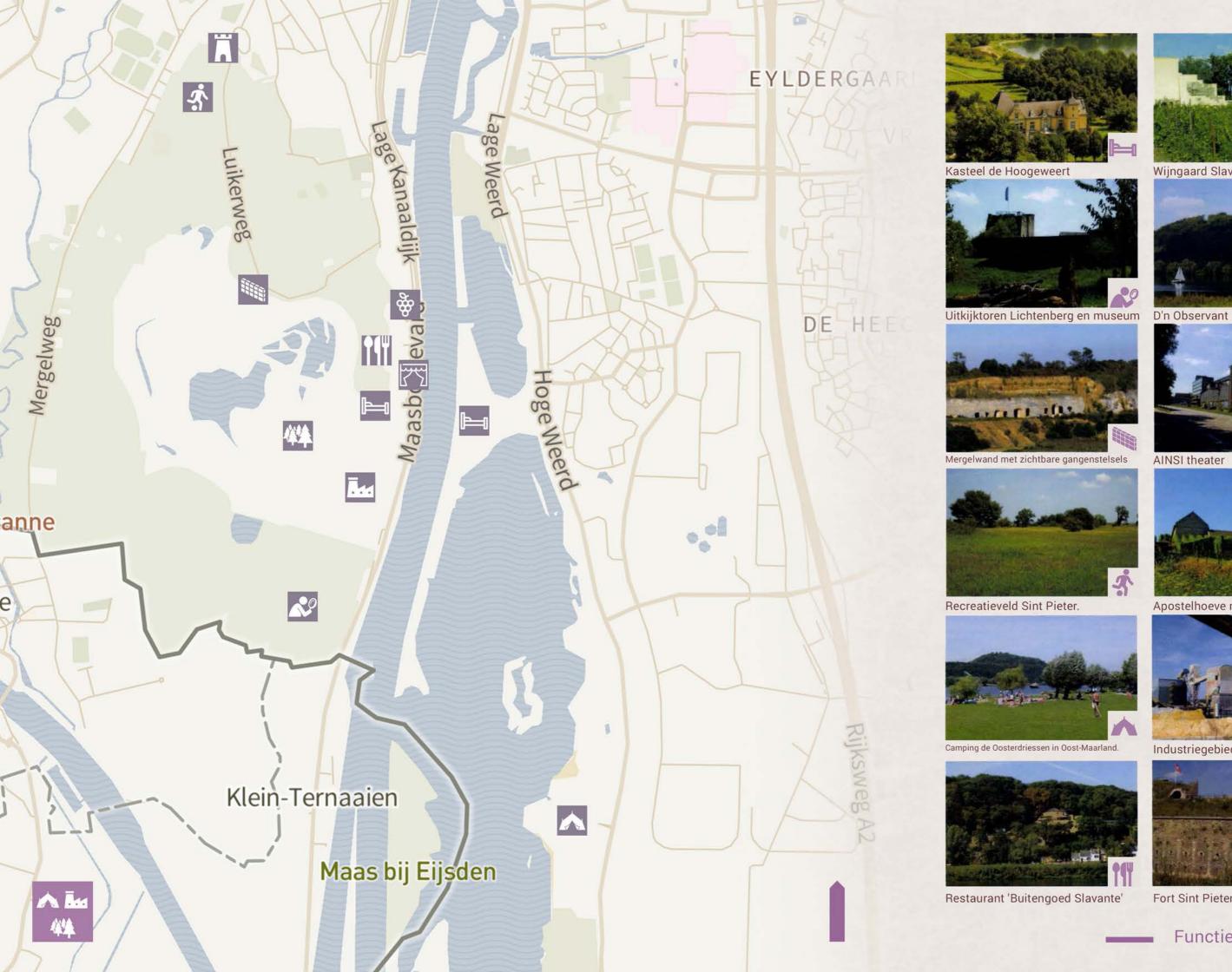
10.Chäteau Neercanne

Karakteristieke bebouwing























Wijngaard Slavante



AINSI theater



Apostelhoeve met de wijngaarden

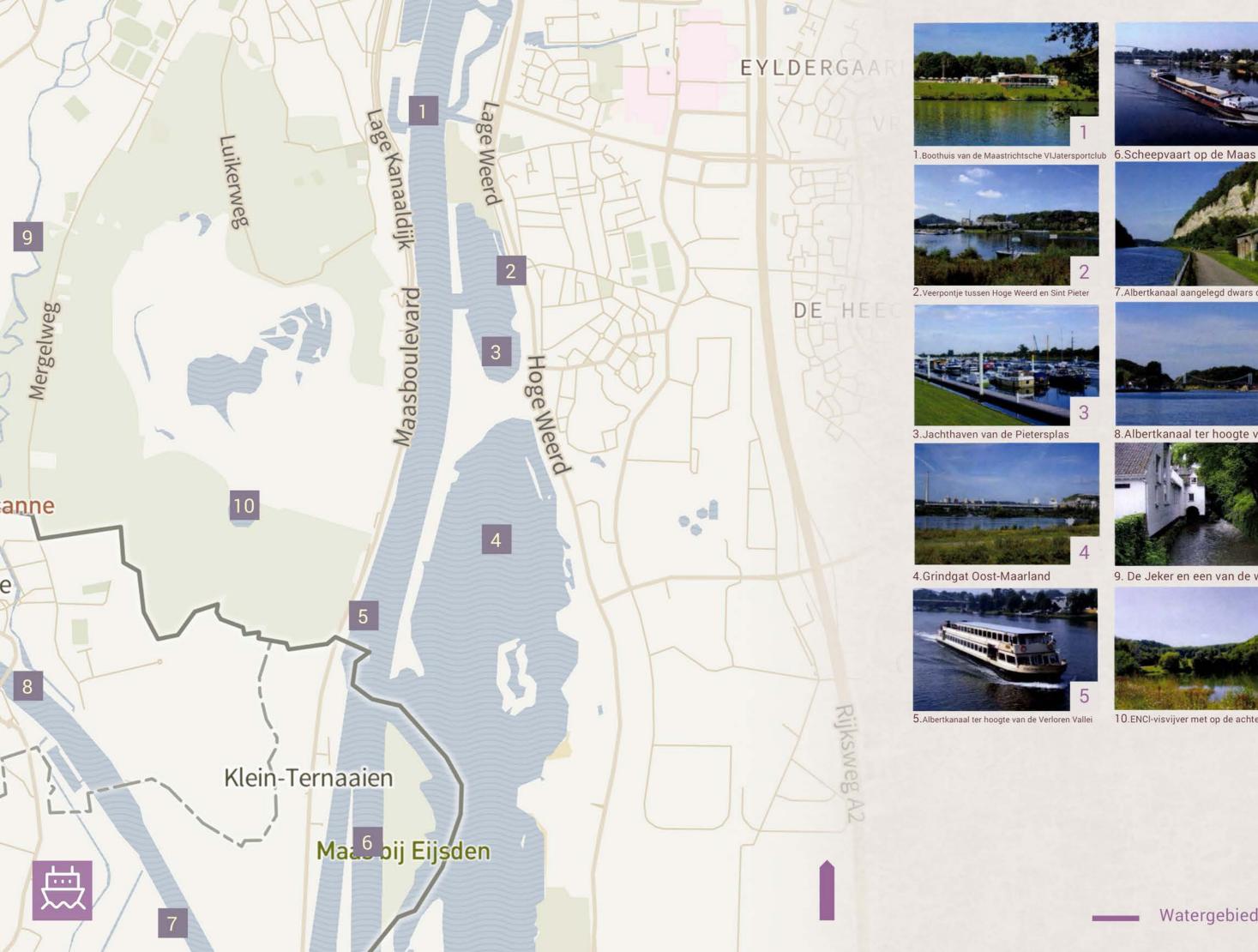


Industriegebied



Fort Sint Pieter.

Functiekaart







7.Albertkanaal aangelegd dwars door het plateau.



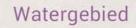
8.Albertkanaal ter hoogte van Kanne



9. De Jeker en een van de watermolens



10.ENCI-visvijver met op de achtergrond de groeve







Picknick- en recreatievoorzieningen.

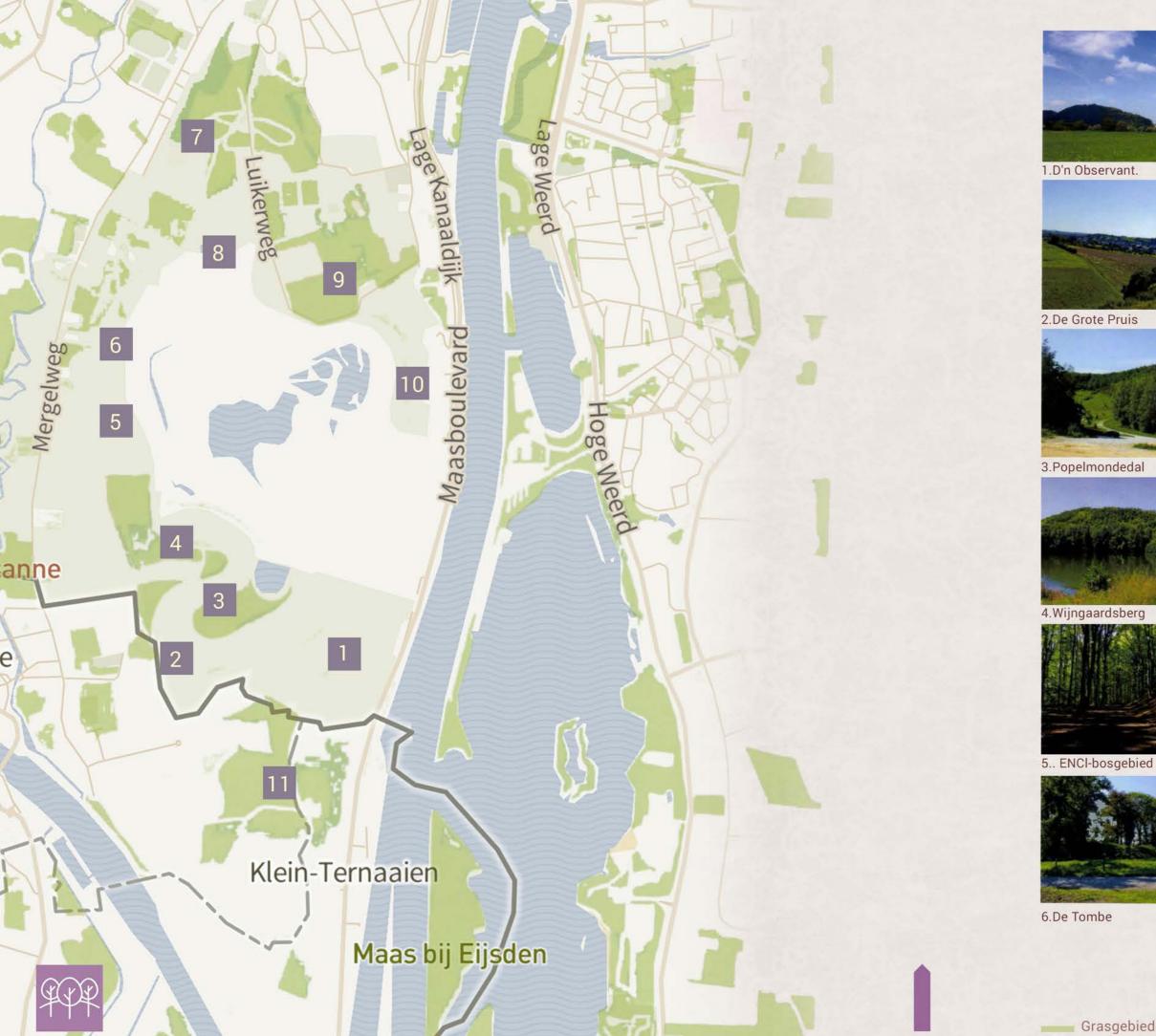


Overgang van D'n Observant naar het Jekerdal



Start- of eindput van het pieterpad

Picknick Uitkijk 180 Uitkijk 360 Startpunt Hondenuitlaat Route 3 km Route 5 km Route 5 km Route 7 km Route 9 km

















8.Oehoe-vallei



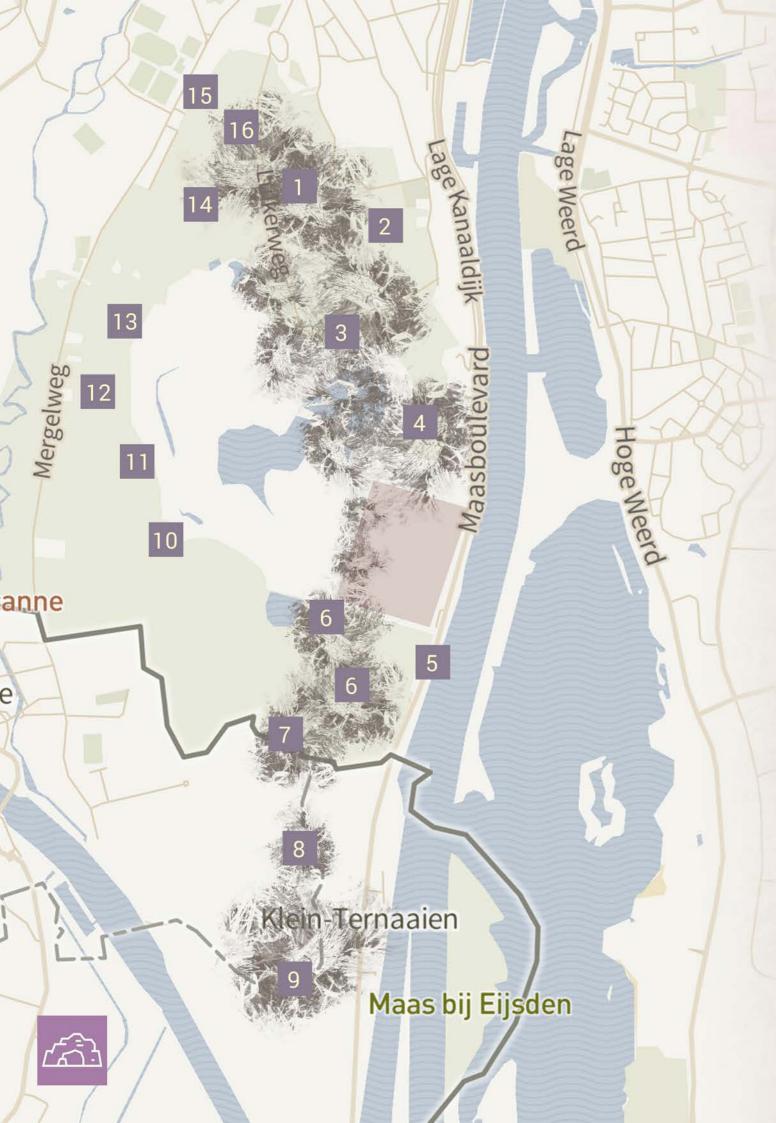
9.Onder d'n Olifant



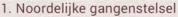
10.Zonneberg



11.Hellinhbossen Plateau van Caestert









2.Schaiktunnel



3. Zonneberg



4. Slavante I Lichtenberg



5.Groeve Feij & ENCI-springstofdepot





7.Caestert groeve



8. Ternaaien Boven (Aardappelberg)



9. Ternaaien Onder (De Vallei)



10.Duivelsgrot



11.Maarendalgroeve



12.De Tombe



13.Groeve de Schark



14.Ingang Schaiktunnel aan de westzijde



15.Voormalige Grote Ingang



16.Put Fort Sint-Pieter

Ondergronds mergelgroeves voor .1926

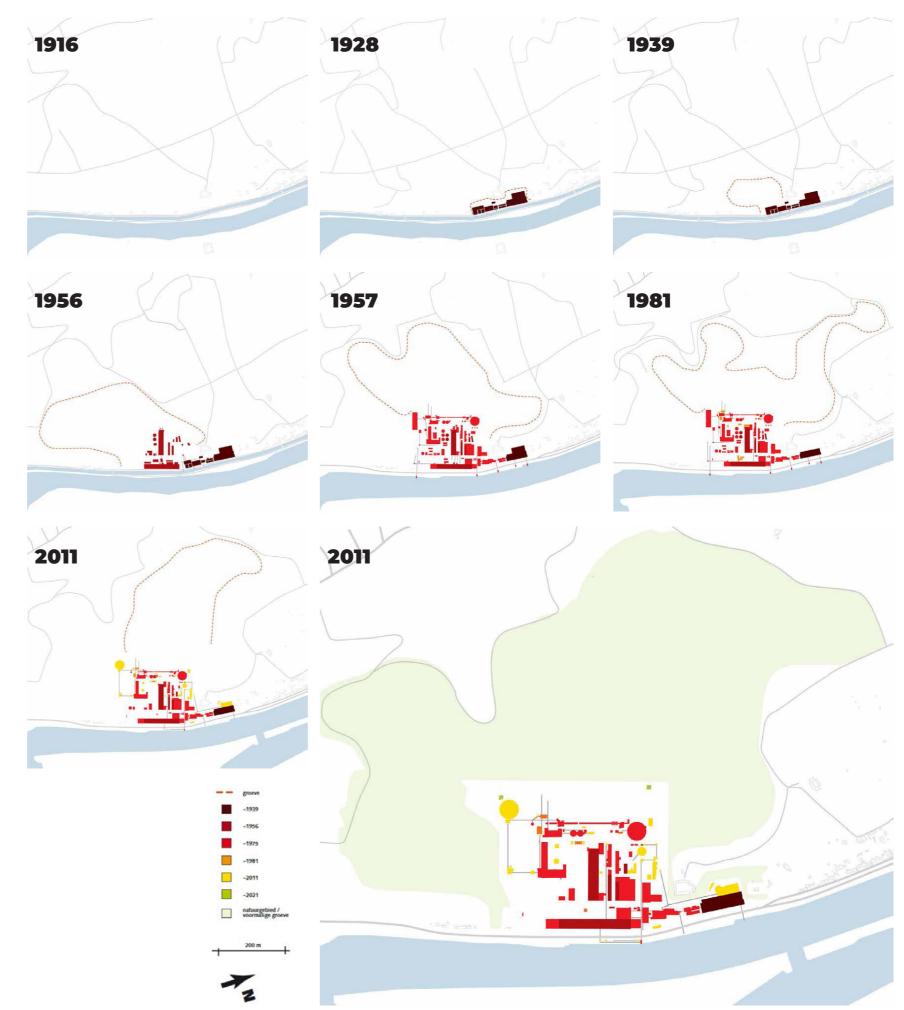
Spatial analysis of the factory site

Introduction:

Anyone visiting the ENCI site today will find an ensemble of dozens of large and smaller, mostly abandoned buildings and installations, all of which have something to do with the production of cement. The huge tube furnaces ran day and night and were shut down only for maintenance work. In the heyday of the ENCI, trucks came and went here that brought ENCI cement to customers at home and abroad. Ships brought raw materials to the quayside of the river Maas or transported cement in bulk for cement plants elsewhere in the country.

Because cement was made in different steps, there had to be large silos in the product line where semifinished products were temporarily buffered. A significant number of these silos were used to store fuels to keep the energy-intensive cement kilns running. A maze of conveyor belts above and below the ground made it possible to transport raw materials from one installation to another. Even now that production has come to a standstill, it is an impressive whole, not only because of the size of the objects but also because of the almost alienating multiplicity that one finds on the factory site. Yet behind this complexity lies an uncompromising logic that only reveals itself when the process of cement production is followed. Each of these buildings forms a link in that production process. A complicating factor for a good understanding of the whole is that the factory has been continuously adapted and expanded in its almost 100-year existence. Parts of product lines were divested or changed, some buildings were given new functions.

Anyone wishing to determine the significance and culturalhistorical value of the various objects within the factory ensemble cannot avoid analyzing the historical development of cement production in different periods. Below is described for each development phase how the production lines in the cement factory worked and what the various buildings and installations served. Not all objects that are described still exist, for example, the four tube furnaces of the pre-war factory were already demolished in the 1970s. The text aims to explain how and why the current factory complex came into being and how the factory generally worked at different moments in its history. Later in this study, all existing objects and buildings of ENCI Maastricht are briefly described and evaluated for their architectural and any other spatial qualities.



Research conclusion

This alarming situation calls for a dialogue between the residents of Maastricht, and active professionals in the spatial domain such as architects, urban planners, project developers, government authorities, entrepreneurs, and educational institutions who want to help the city move forward and not backward.

The ENCI has a unique location due to Dutch landscape standards, where numerous fossilized plants and animals have been found. As a paleo-archaeological site, the Sint-Pietersberg and more specifically the quarry is therefore of national and international importance. The site of the ENCI is also valuable from a geological point of view because of the knowledge gained here about the Cretaceous. Design

Site location as an enabler for the urban development

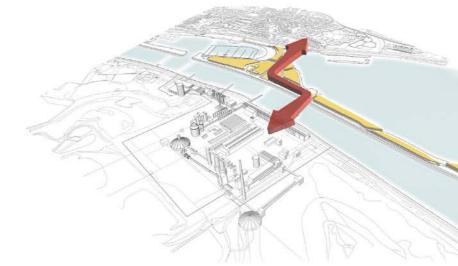
Infrastructure concept:

Based on the facts and conclusions of the research part, the design starts with an infrastructure concept. choosing a site as a power tool for the region development.

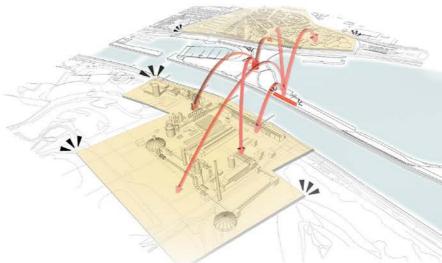
The experience Parc is projected on the site of a peninsula located on the Meuse. On the shore, there is a harbor for boats, a castle functioning as a hotel, and a sanctuary for nature recreationists. The position of shore is in front of the entrance building of the ENCI factory.

Developing a new connection from the east to the west creates a new horizon and access to the ENCI area. as a power tool it informs the locals, stakeholders, and investors to bring attention to this side of the city of Maastricht.

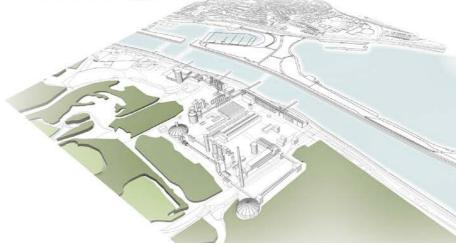
East-west connection

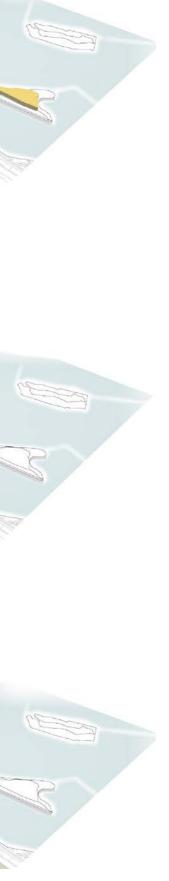


Region enabler



Rehealing the nature



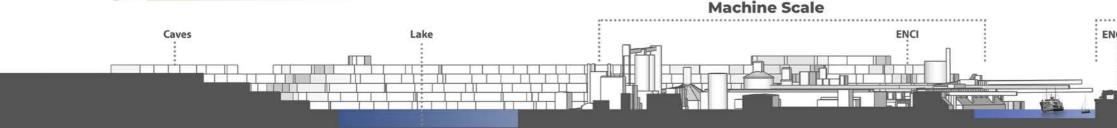


Site location as an enabler for the urban development

from machine scale to human scale:

The ENCI factory is designed based on the machine scale, where the production of the cement on a huge scale can be processed. Therefore, the grid of the n buildings are not designed for the human. the new city development is representing the iconic ENCI factory monumental buildings in a scale that is more understandable for human.





Discovery route to the Enci area

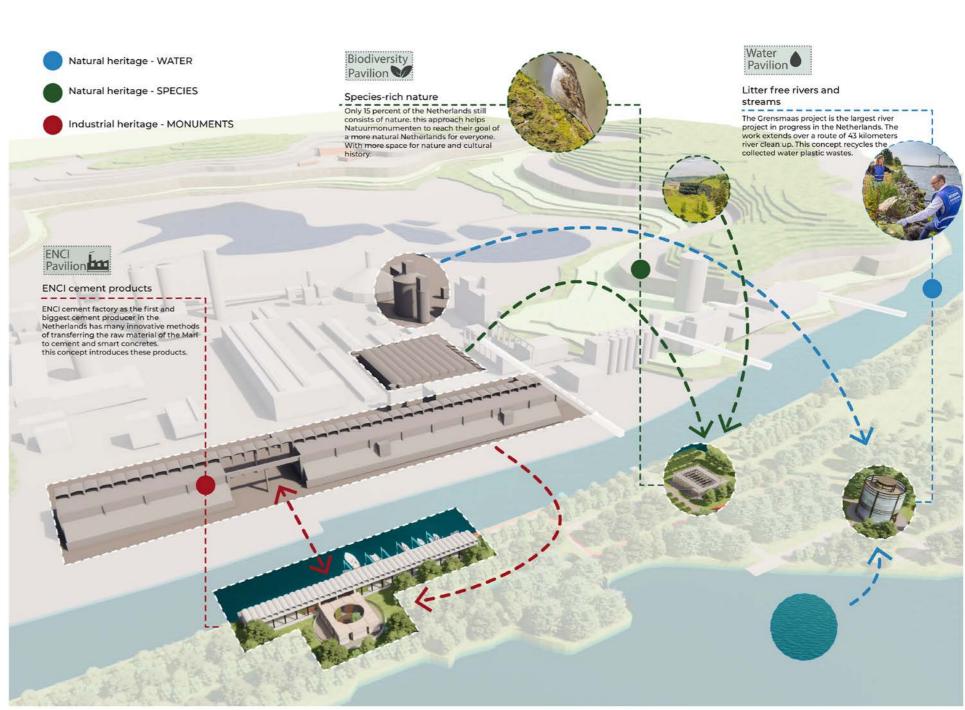
ENCI to mini ENCity:

This design proposal of a discovery parc, including pavilions and a water transportation hub in the south Maastricht region, will engage the public in the future of the ENCI legacy and the value of the site for nature and culture.

The manifesto "Crowd making for the ENCI heritage auction" gives an impulse to the post-industrial authenticity and the quality of life for the Maastricht region in an international European context.

The values of the ENCI area offer many more opportunities than are currently used for the economy and the life quality of the city for the residents and industry.

Instead, there is now the threat of complete demolition of all characteristic buildings and the associated main urban design scheme. Politicians stated that in the past, buildings would have no value for the city of Maastricht and its inhabitants and that the area should be completely returned to nature.





Discovery route to the Enci area

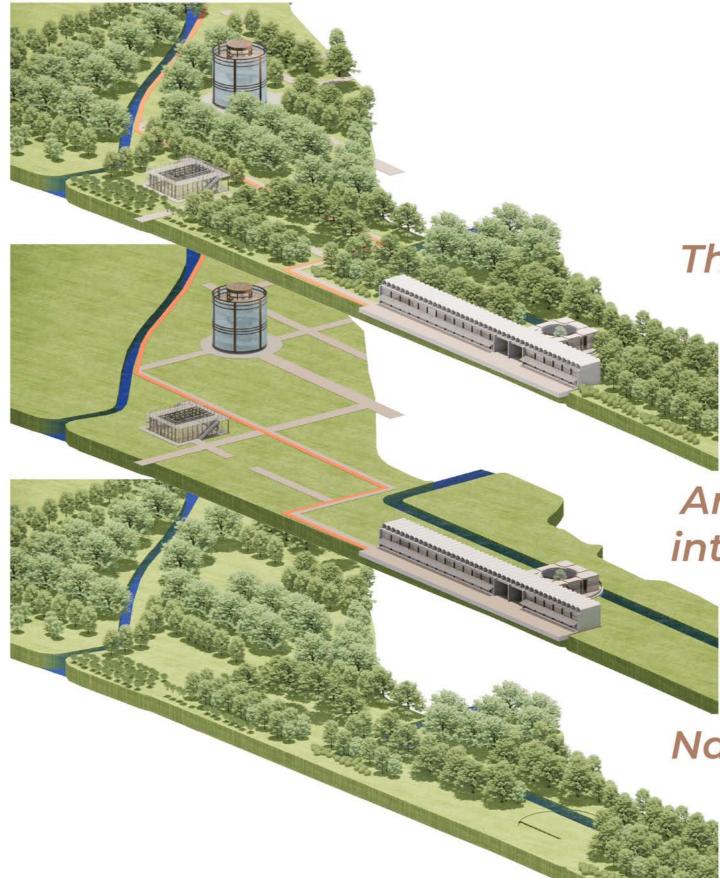
ENCI to mini ENCity:

"parc, materials and architecture pavilions and a discovery route to the Enci area" offer a hold on the identity of the genius loci.

Designed as a continuous route, the shore embraces a piece of outdoor space and creates a sense of security in the transparent environment of the orchard. Closed, protective, and yet inviting from the outside. Hospitality is given a concrete shape through a public route that connects the building with the environment like an umbilical cord. Pavilions have been created along the route with a low-threshold range of different user functions that are accessible to everyone.

From the architecture center, the visitor is guided to the 'City as a manifesto' route along the Maas river, which is the origin of Maastricht's genius loci.

The new design is an impulse and an invitation for Maastricht to think bigger. Using the shore as a connector from which new and existing routes are combined creates a different perception of the ENCI.



The "parc"

Architectural intervention

Natural layer

Pavilions

Conceptual Approach:

Water pavilion as the starting point of the discovery route attracts the visitors to climb up and experience the feeling of being in the middle of water without getting wet.

in the spiral route to the top, the visitor gets information about the active and essential role of the water and specifically the Meus river.

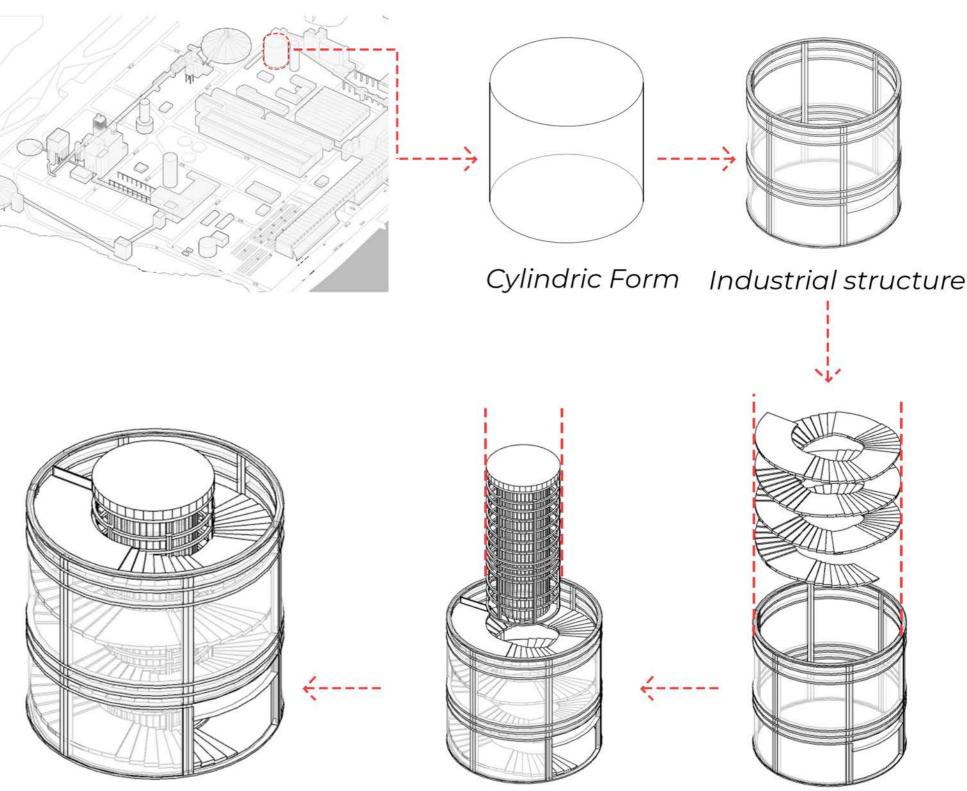
from its history how it has changed during the years and its importance for industry development.

later the informative panels educate the visitors about how polluted the Meuse has become. then it comes to the LIVES project.

The LIVES project focuses on reducing plastic waste in the Meuse. It wants to ensure that the amount of plastic has decreased by the end of the project duration. LIVES promotes environmentally friendly, cross-border cooperation by bringing together ten project partners from the entire Meuse-Rhine Euregion.

Central to the project is a comprehensive analysis of the current waste situation in the river, waste reduction measures including awareness campaigns and the installation of five different types of plastic traps, and institutional agreements to ensure the sustainability of the project. Although various initiatives already exist at the local level, LIVES wants to stimulate a more coherent cross-border approach, also looking at the broader impact that waste has on the Meuse.

looking at the broader impact that waste has on the Meuse.



Water pumping system

Vertical circulation

Conceptual Approach:

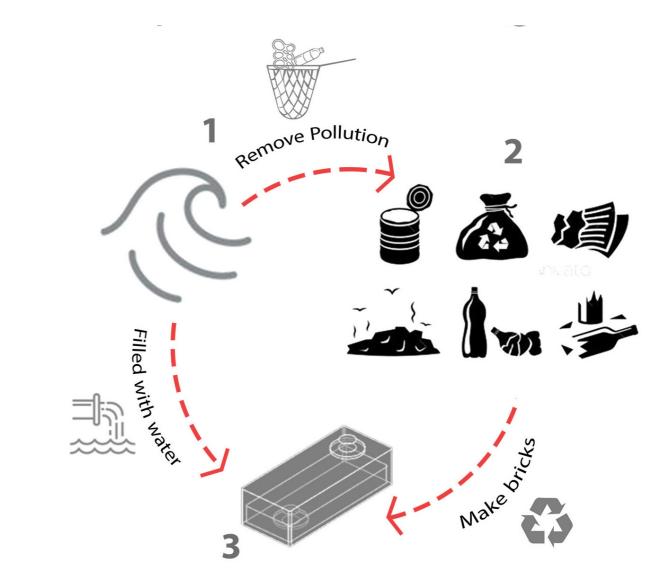
Making people co-owner of the Meuse

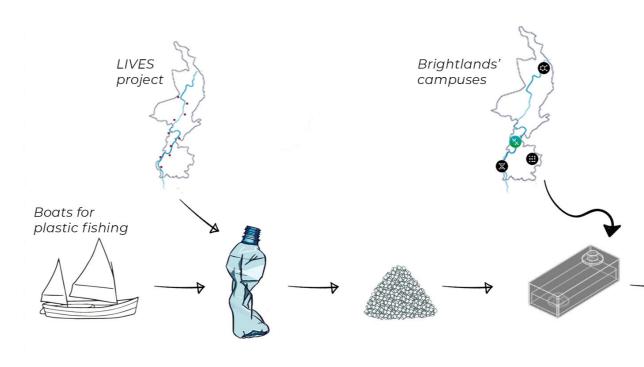
The LIVES project is sponsored by the Euroregio but what makes it strong is the participation of the locals. Volunteers with concerns about water pollution are cleaning up the Meuse. They are processing and collecting plastic waste impressive, but where those plastic wastes go remains a question.

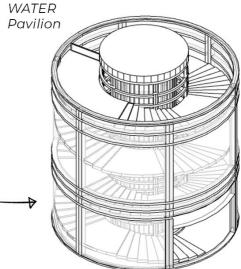
On the other hand, South Limburg is an active part of the Netherlands in the field of producing innovative future materials. the Brightland campuses are supporting ideas of future-proof material innovations. Having this chance takes the concept of this pavilion to the next level for construction.

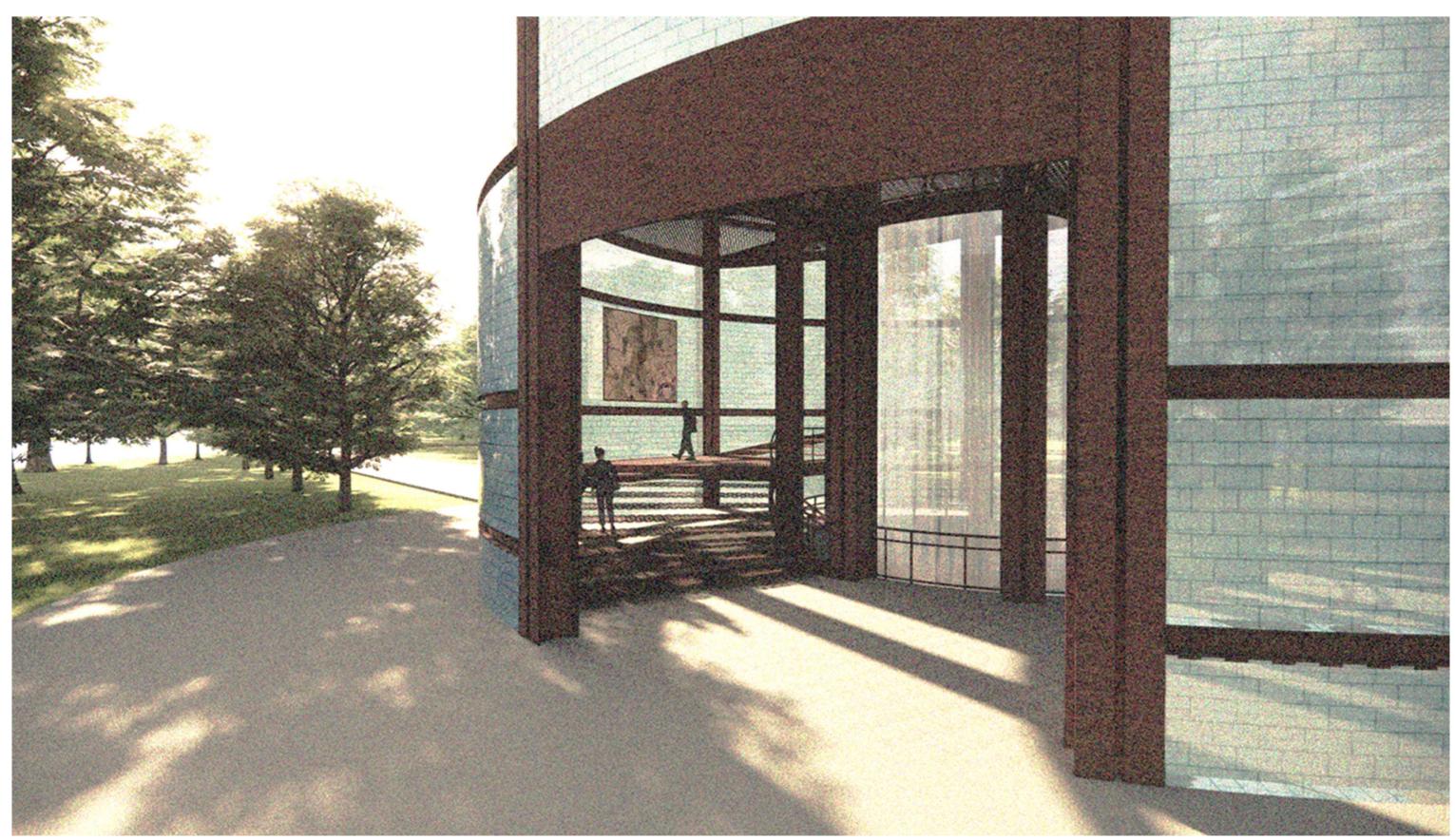
The construction is in two layers of industrial steel frame and semi-transparent cladding.

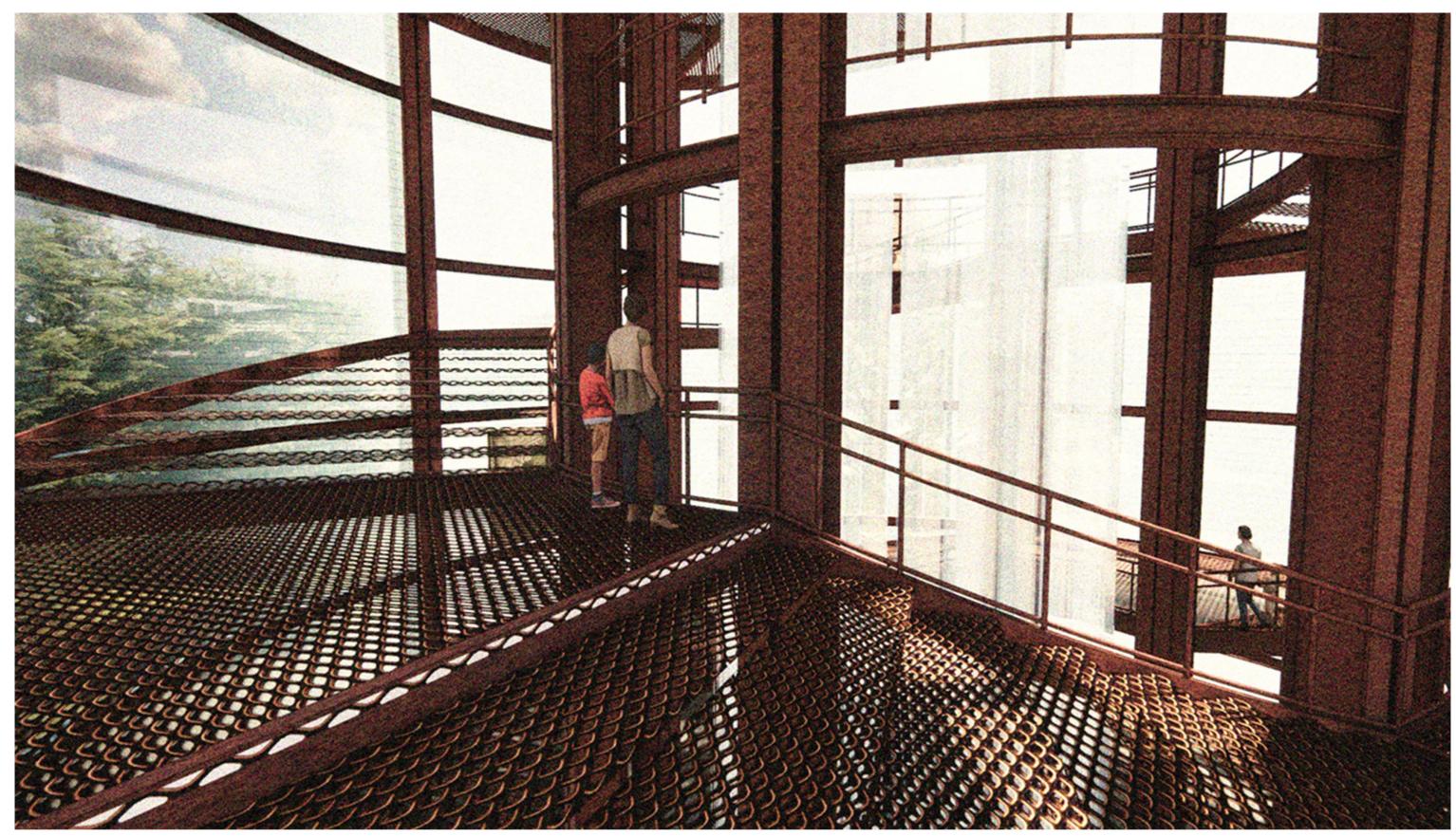
The semi-transparent cladding is made of recycled plastic bricks. As a part of the design strategy, visitors will get a chance to buy a plastic brick for a small price and get ownership of the Meuse river to be cleaned up.

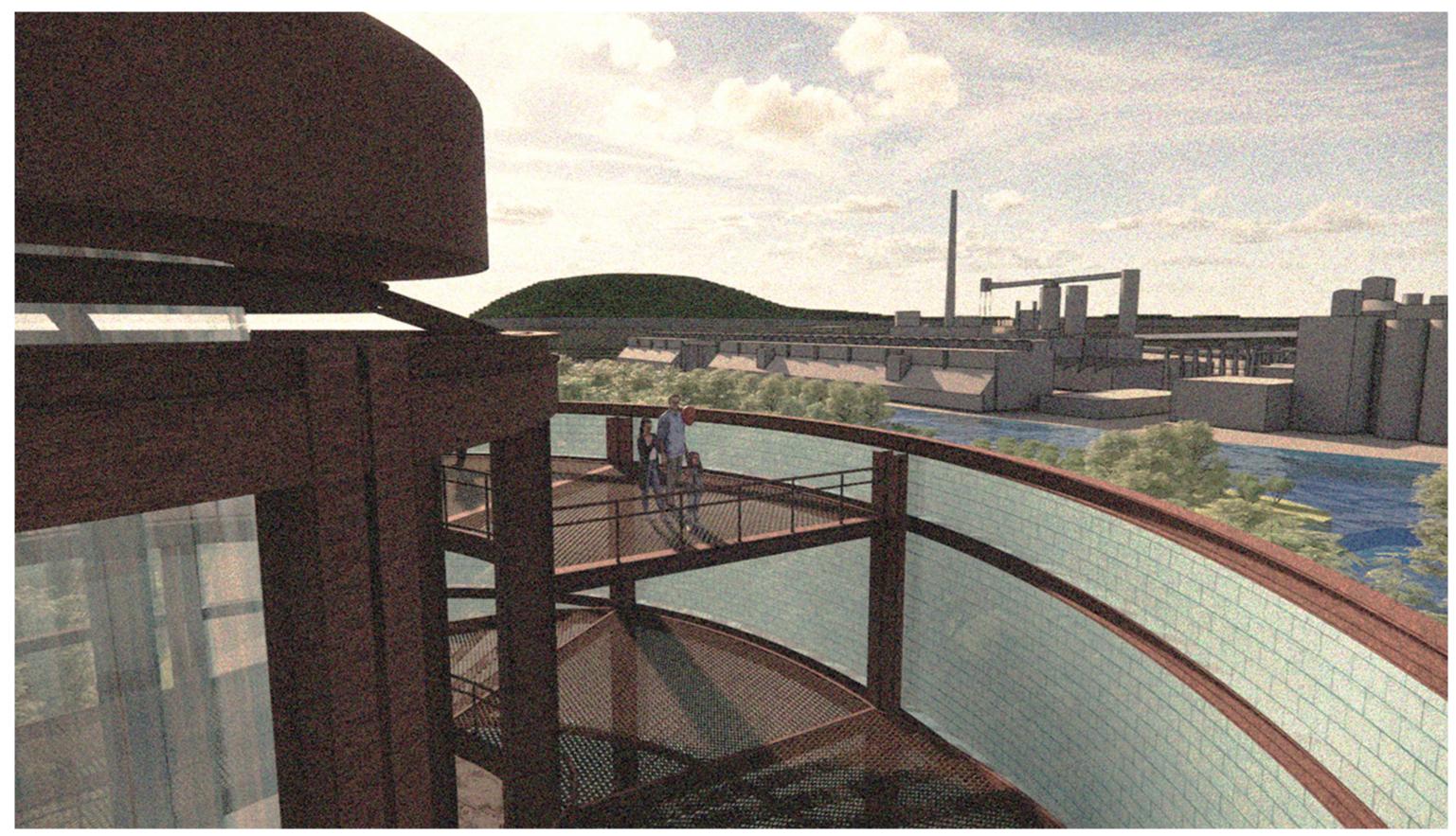










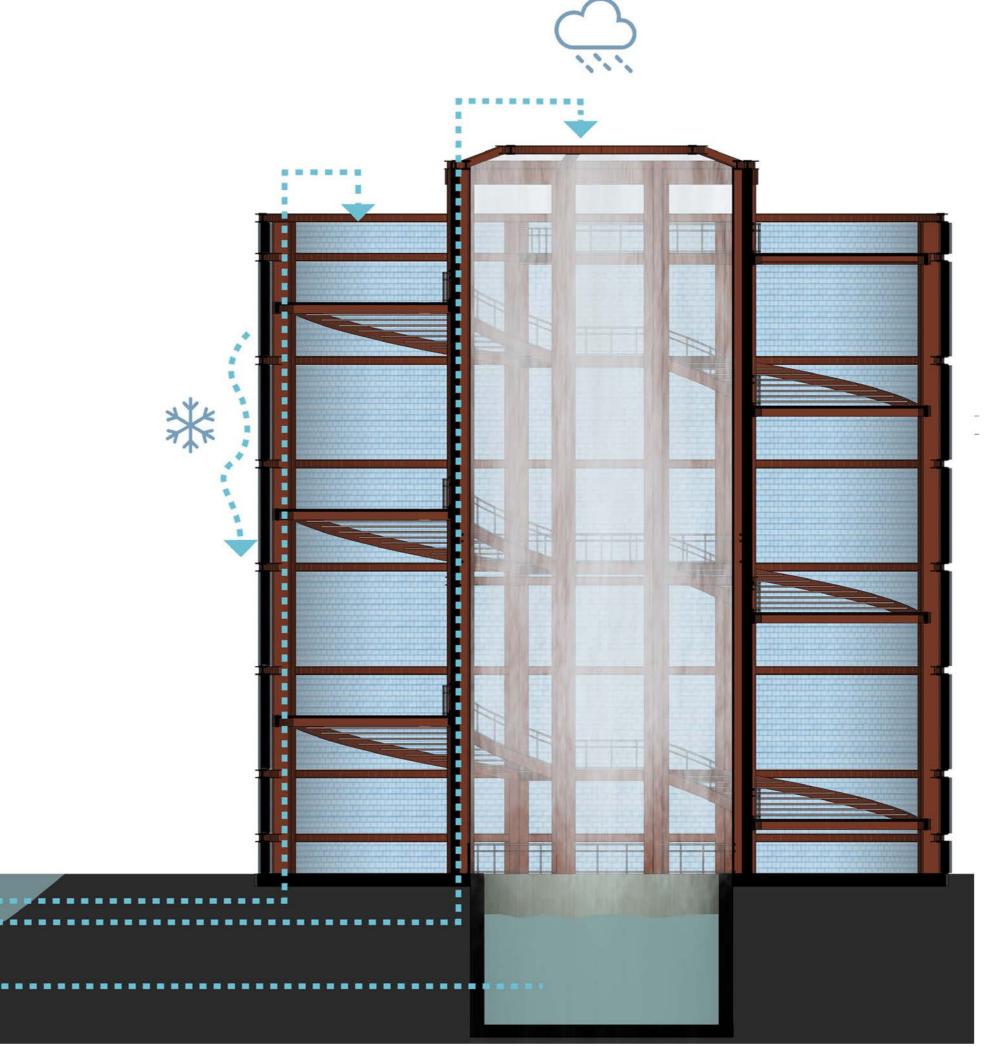


Technical Approach:

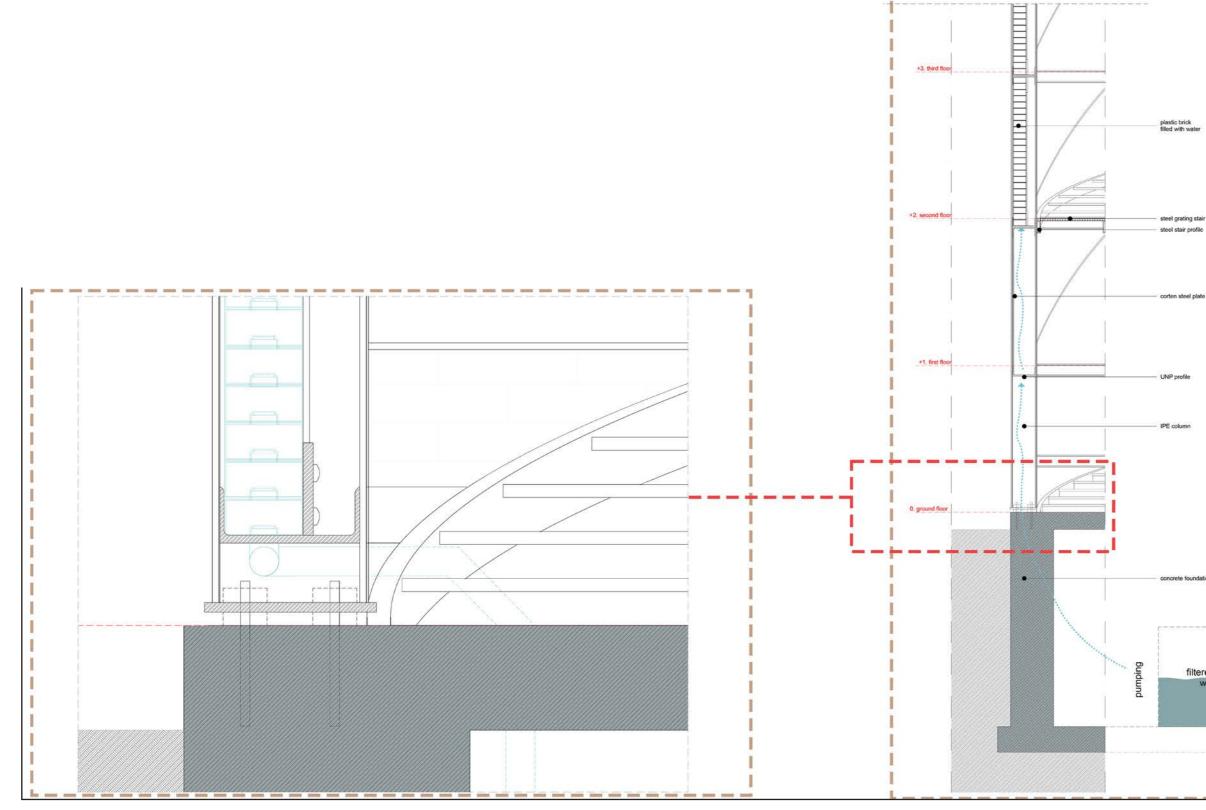
The recycled plastic bricks are filled with filtered river water through a pumping system.

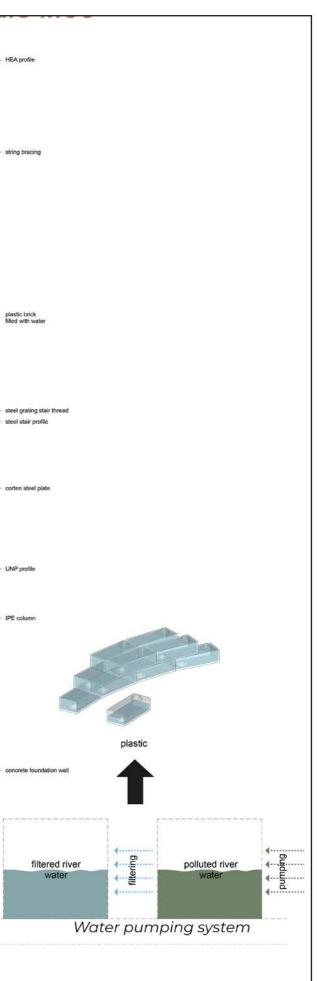
this means that the cladding transparence height is relying on the water level and it gives a better impression to the visitor.

the concept is to recycle plastic waste and make plastic bricks out of them. the bricklayer of the pavilion is working as a cladding layer and does not have a construction function. therefore it can be filled with the water coming from the Meuse river.



Facade section and detail drawing





• _____

+6, sixth floor

+3. third floor

Conceptual approach:

During the years that ENCI has been active in the St.Pietersberg site, gas and water pollution have affected the biodiversity cycle.

Birds and plants as a big part of this cycle are the focus of this concept.

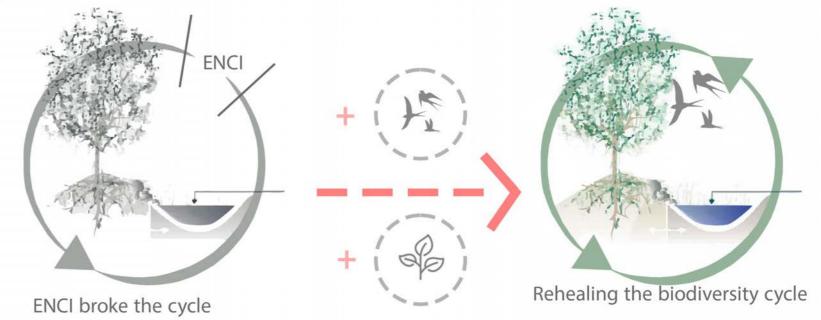
On the other hand, the eagle owl is one of the most important heritage of St. Pietersberg. The courtship is in winter, with the highlight in January when another type of bird that leaves for the south hardly notices the cold but the birds that stay in the Netherlands have to do their best to forage for their food. While they need extra energy because of the cold.

EverywinterNatuurmonumentenarrangesworkshops/ activities At Hoeve Lichtenberg on Sint-Pietersberg where families and children get information about birds.

They learn how to make the bird snacks from a pine cone into a snack bar. Afterward, they take everything home for the birds in their garden or balcony. Or you give the bird snacks as a gift!

The biodiversity pavilion goes a step further by combining these two facts. Planting species that are missing in the cycle to attract the birds who left the area because of ENCI pollution.

Natuurmonumenten has placed a new Kiekoet so people come to enjoy the view over the Eagle Owl Valley and look for the Eagle Owls. Providing nestboxes for protecting birds during winter. the specified Owl nestbox brings the chance to attract the eagle owl to the pavilion and the visitors can more easily see him.



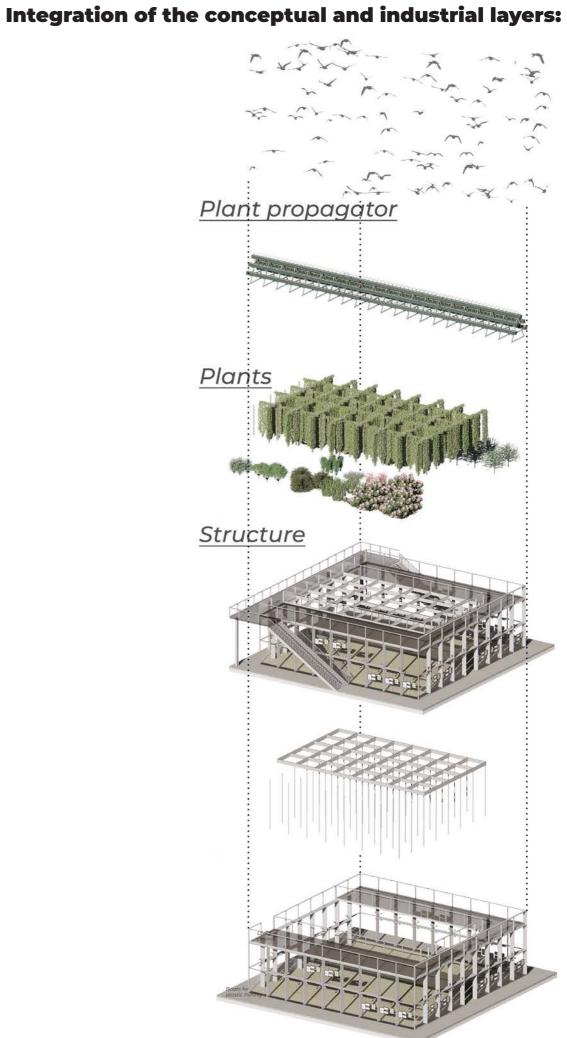


Coceptual approach:

Making people co-owner of the St. pietersberg species

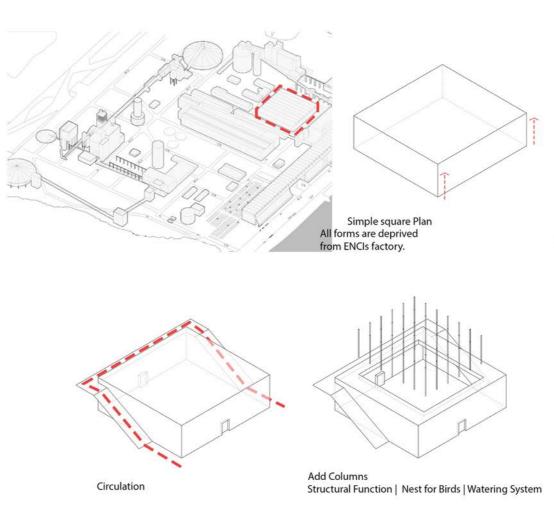
As a part of the design strategy, visitors can buy a propagate of a plant or adopt a bird and provide its food. this way the visitors will get ownership of these species.

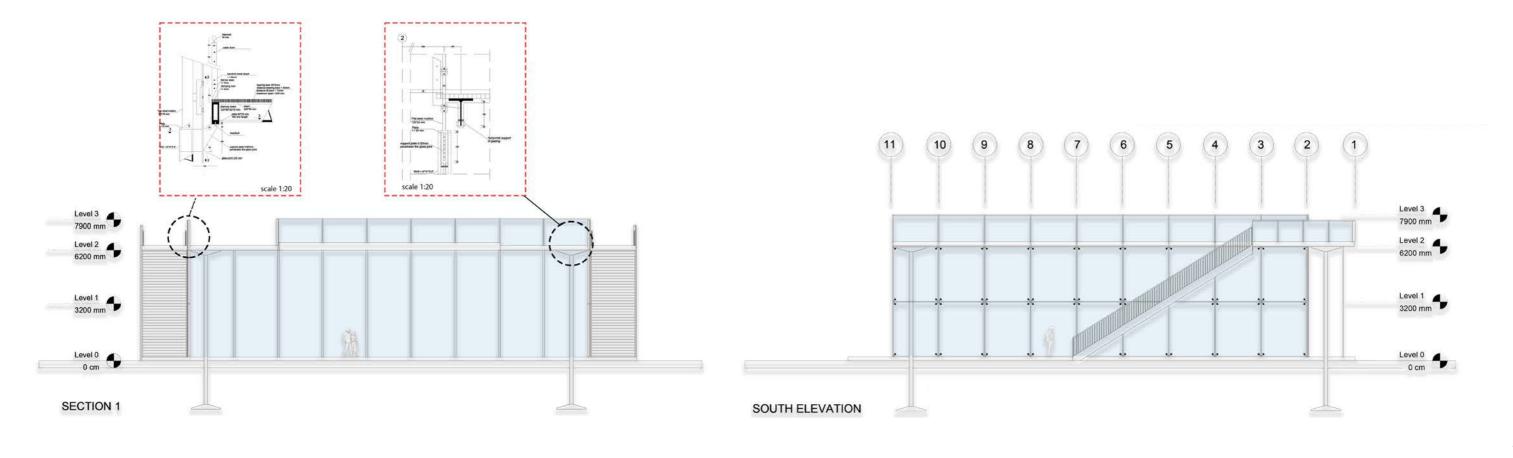


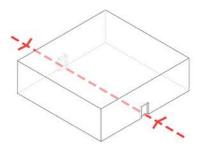


Technical Approach:

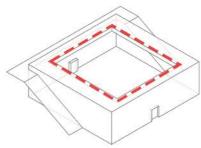
The circulation is designed in a way that if the visitor wants to go around the pavilion should take the staircase. when the users are climbing the stairs can read the informative panels on the glazing walls. the panels give information about the birds and plants. the entrance on the ground floor leads the visitors through the hall so that they can visit and buy plants.





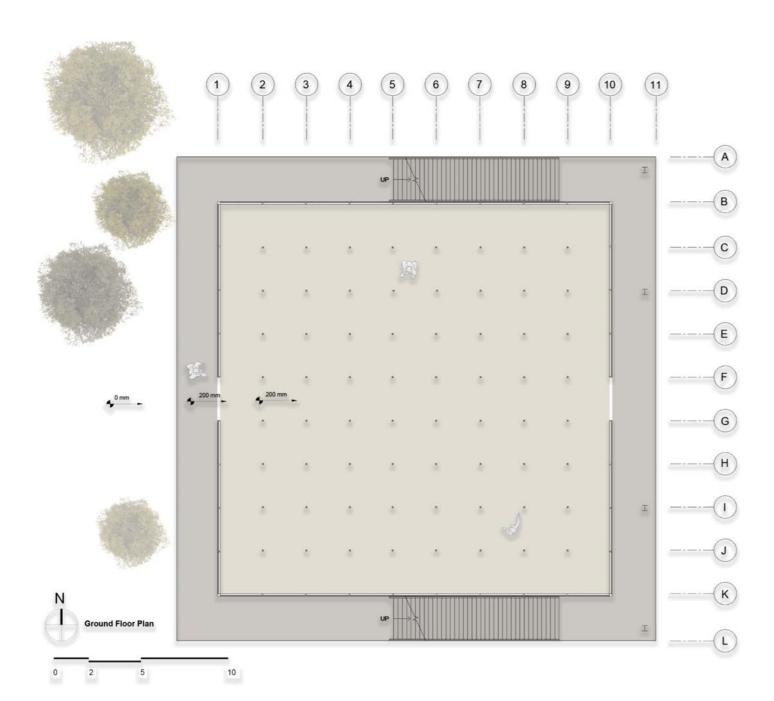


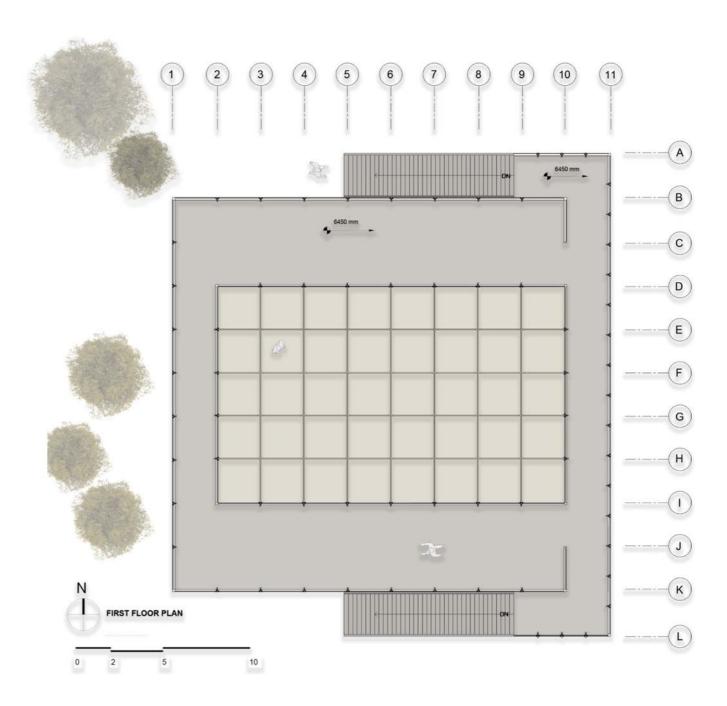
Access Entrance Opennings

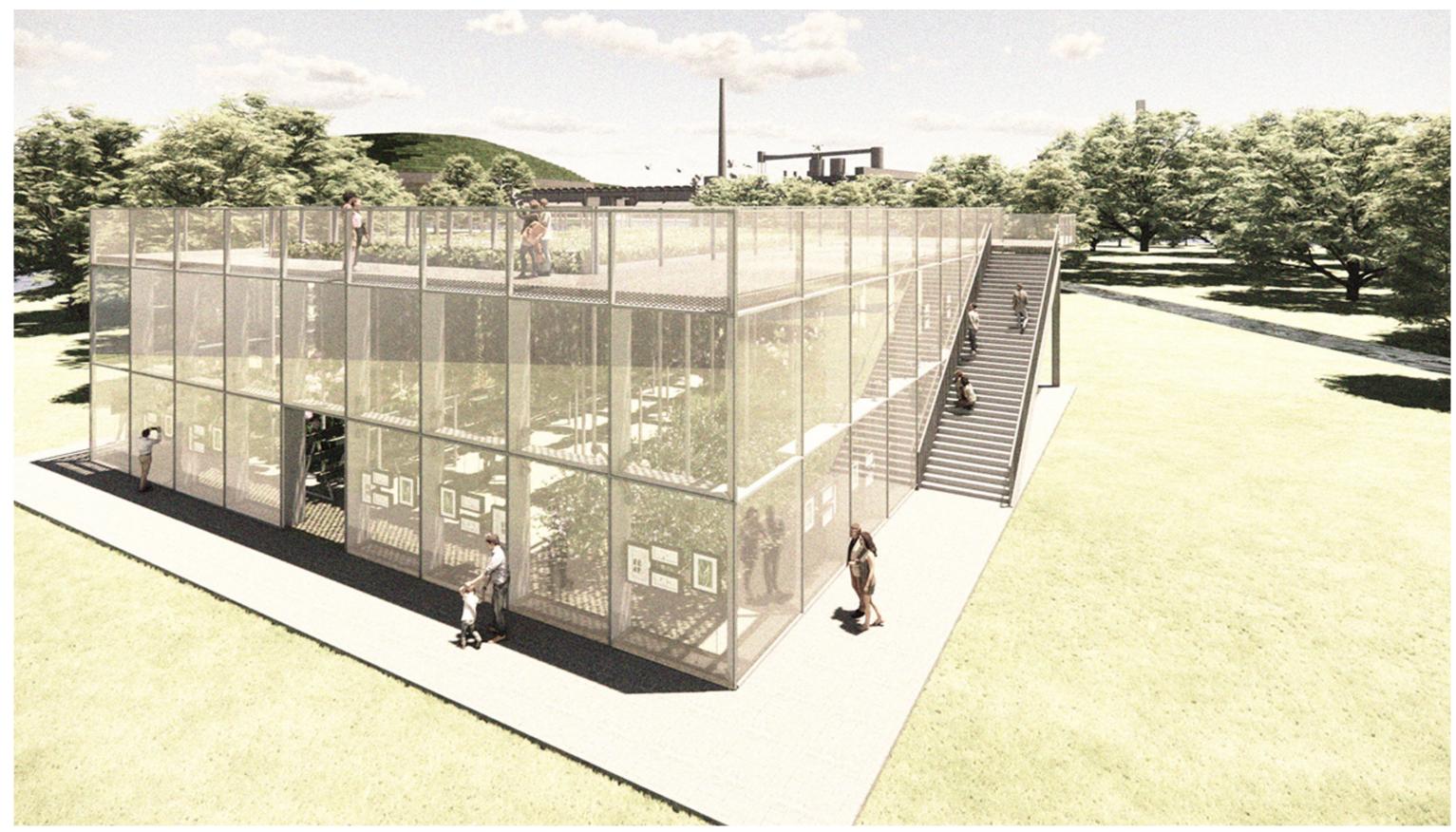


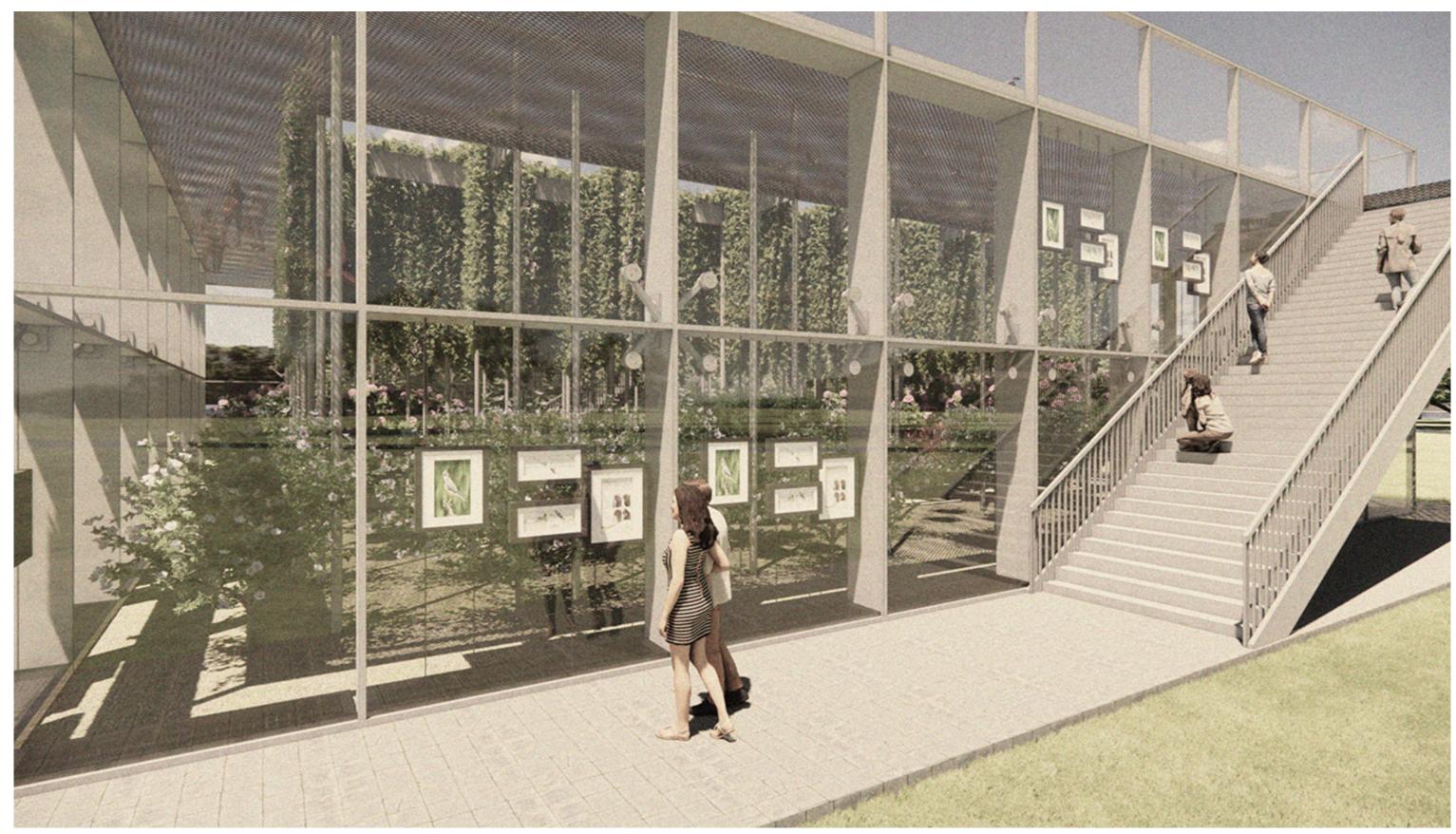
Roof Openning Access for Birds | Light

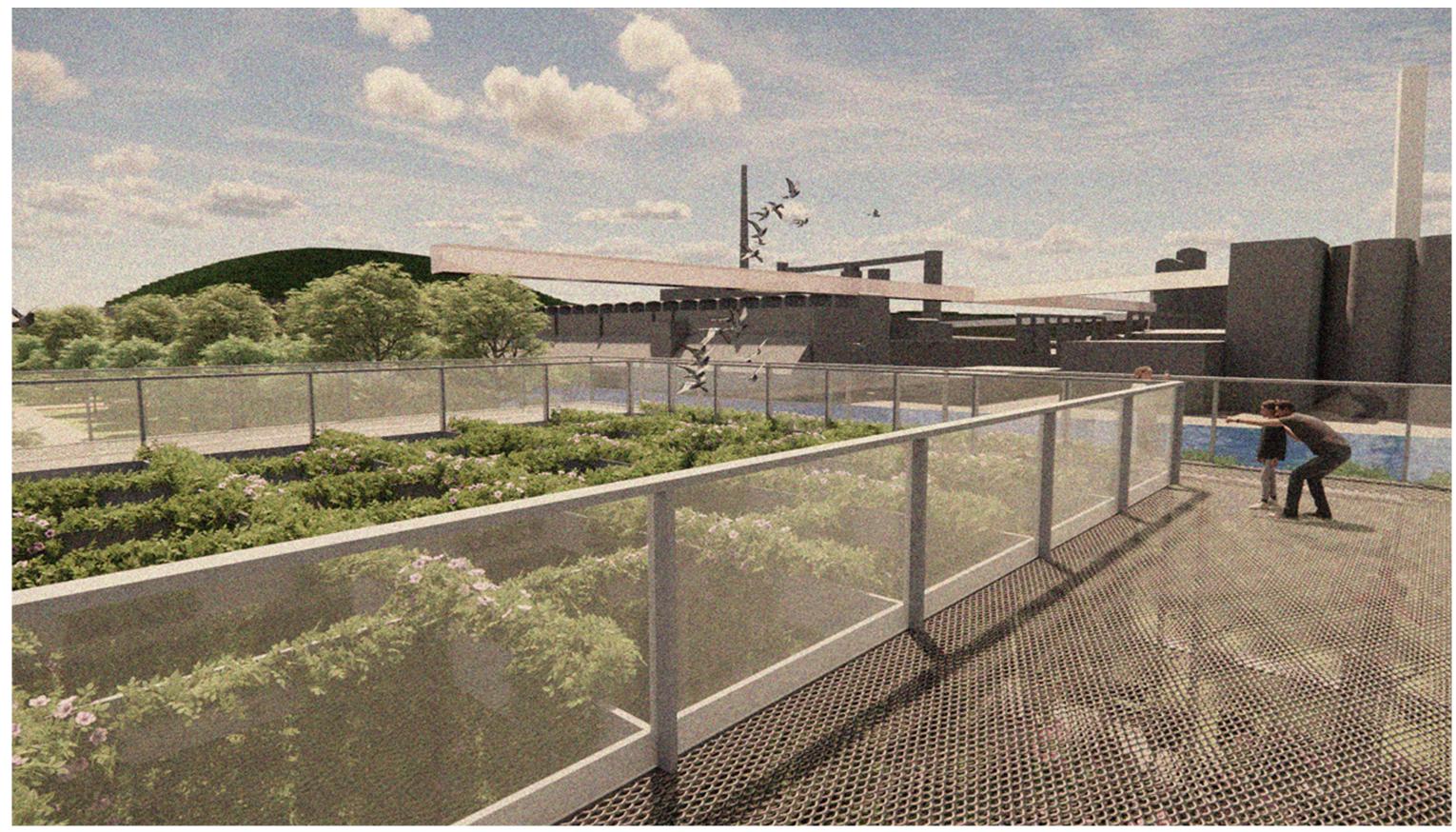
Floor plans





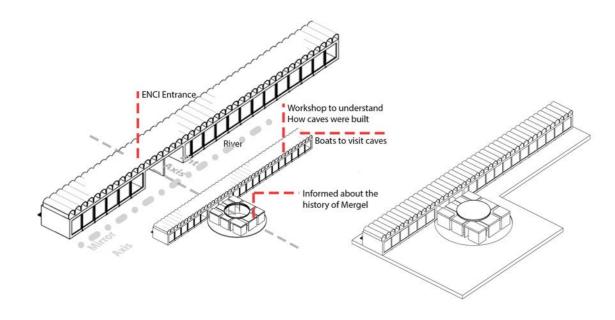


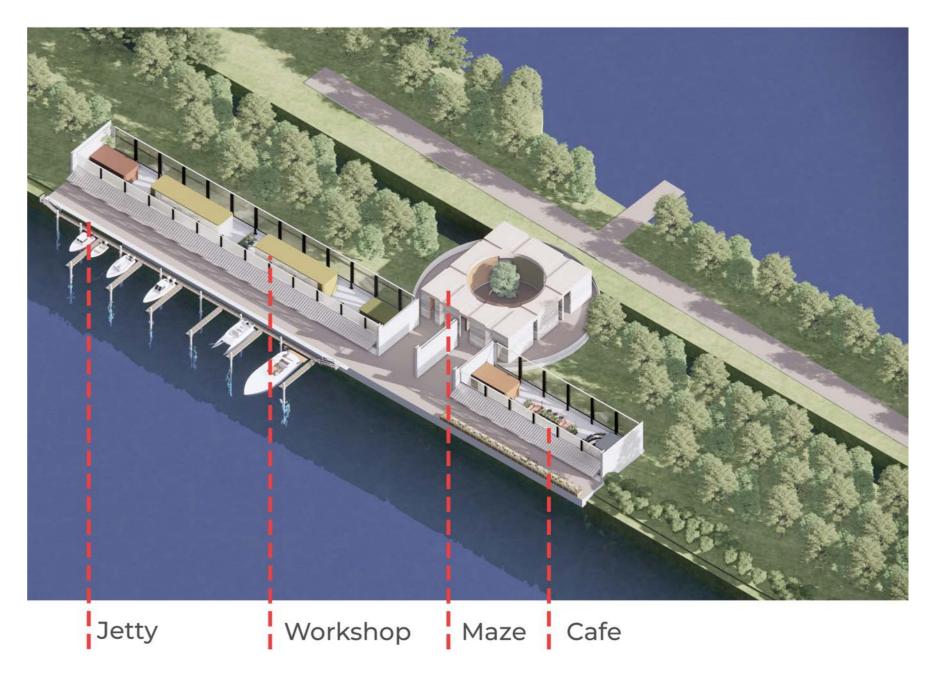




Conceptual Approach:

From a building-historical point of view, the ENCI site is important as a sample of twentieth-century concrete construction. The material that was present in abundance was used in the most diverse ways: the historical construction methods according to the Hennebique system in the packaging building, the waferthin shell roofs of the raw materials hall, the prestressed girders of the crane tracks, the B2 concrete blocks in the central control building, the works of art and the decorative application in the facade panels of the head office are just a few of a long list of concrete applications. The diversity makes the buildings on the ENCI site of high building historical value.



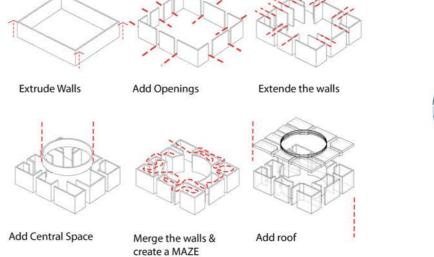


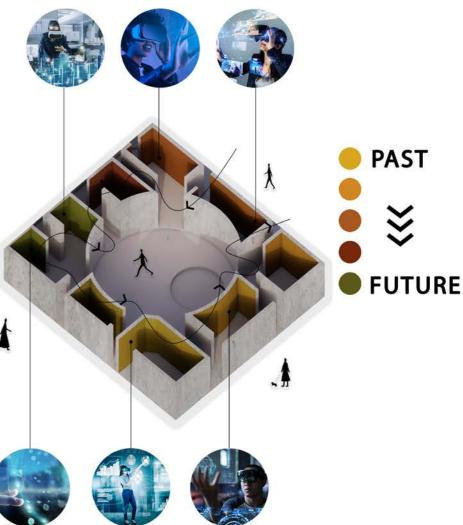
Conceptual Approach:

The ENCI pavilion represents the iconic monumental entrance of the old factory by mirroring, scaling, and being in front of the original one.

the building invites visitors to a work cafe where they can eat, drink and discuss what they have experienced through this discovery route.

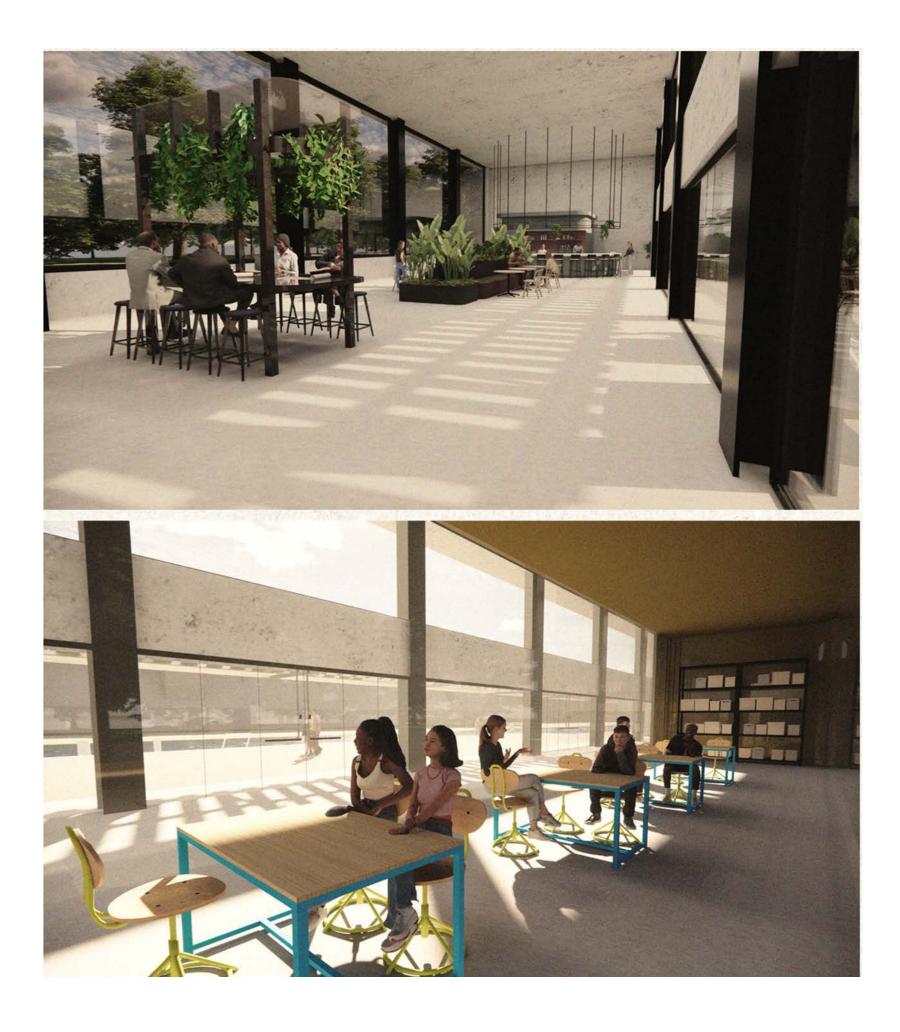
then it leads them to a maze, where the visitors go through a circular route. rooms educate visitors in an order that starts from the past and goes to the plans of the ENCI cement factory. they'll inform how the ENCI has used Marl (Mergel) as the raw material. ENCI cement factory is wishing to reheal the Destruction it caused. The use of cutting-edge technology and virtual reality helps visitors to see what the future of the area will be.







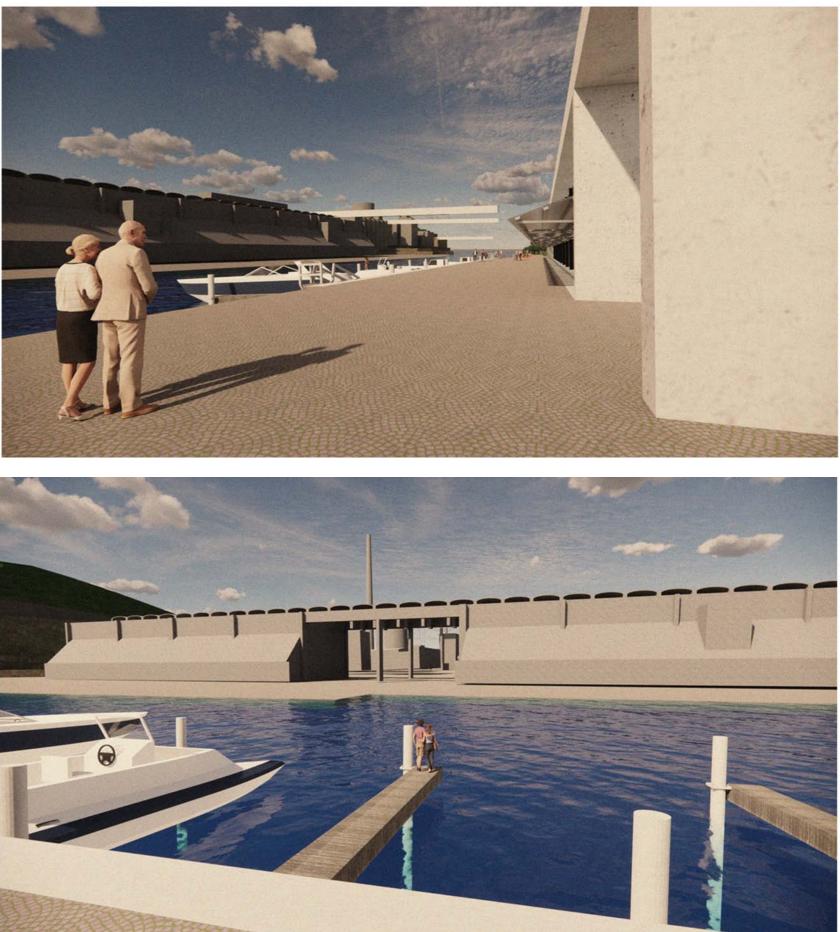
Impressions of interior:

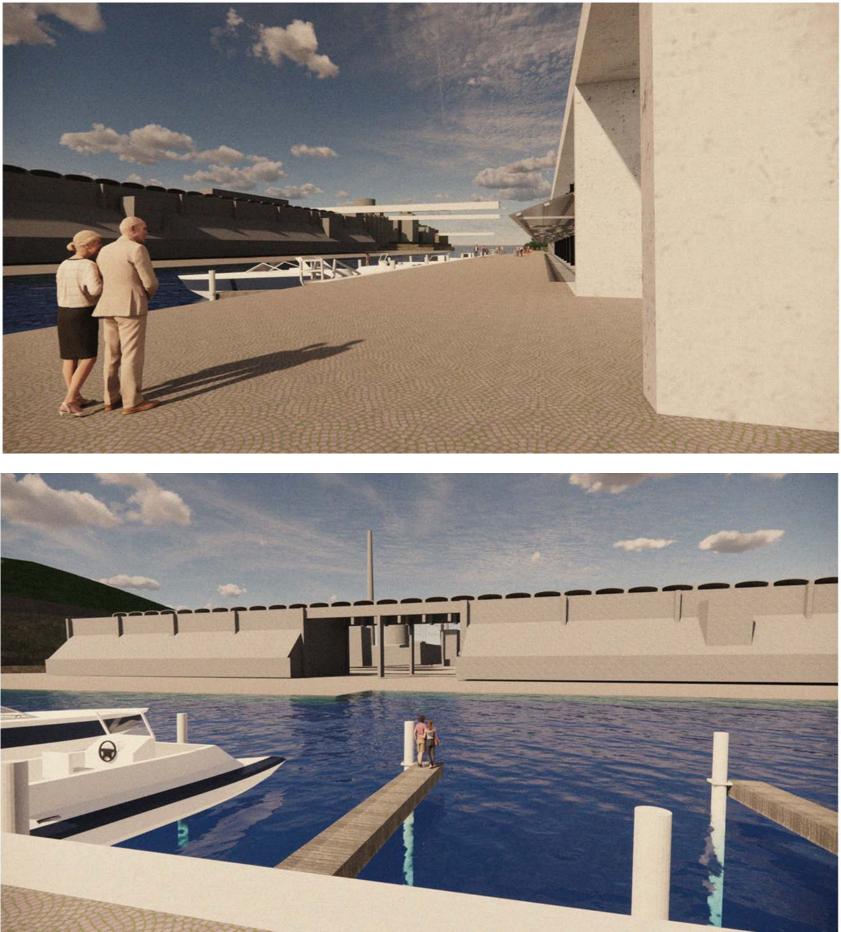


Impressions of the Jetty and ENCI entrance:

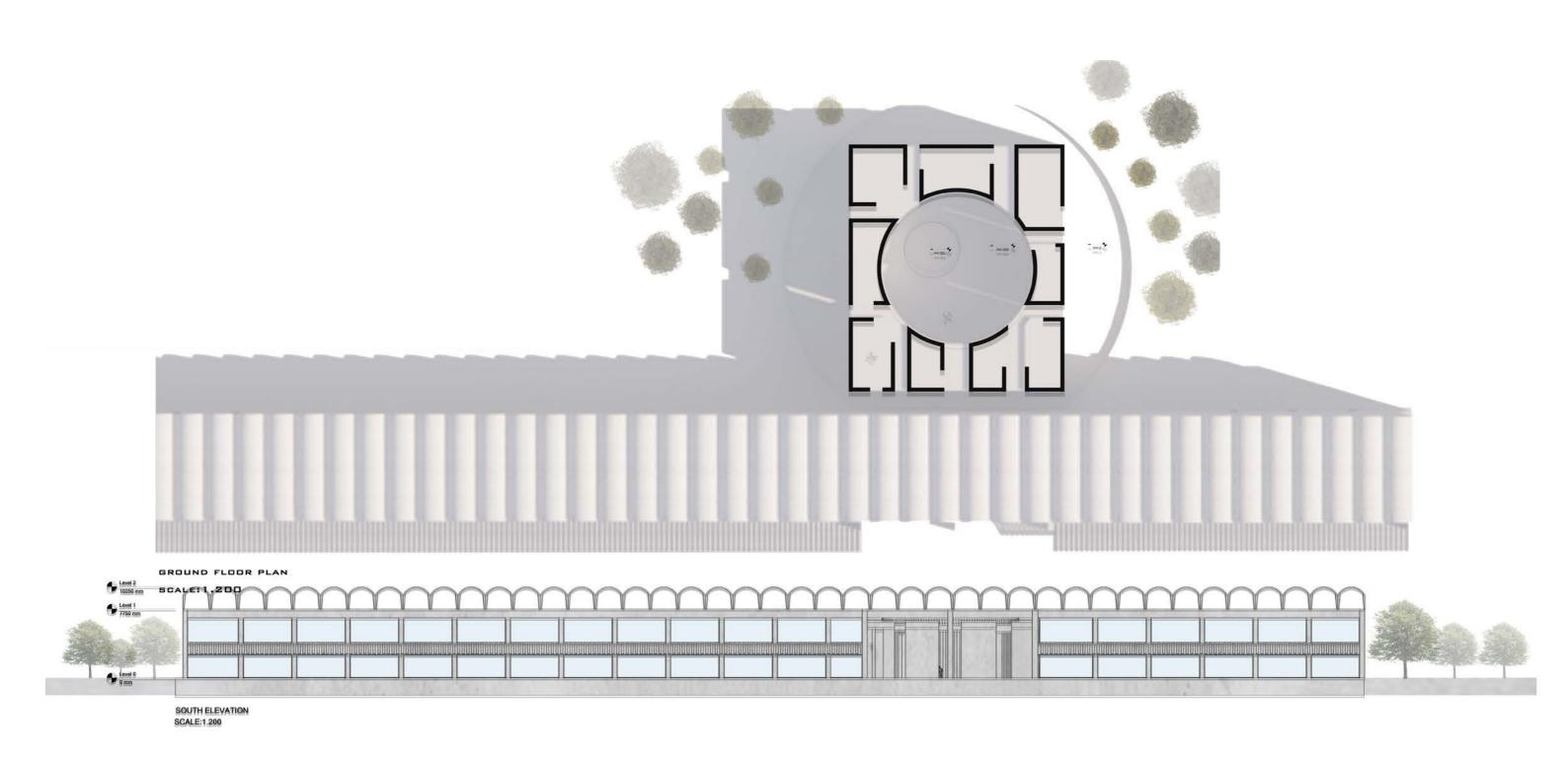
The new water transportation hub (Jetty) supports new ferries on both sides of the river, that guide people over the water to the entrance of the ENCI.

The workshop areas invite new investors and visitors to think and develop. Dialogue can be conducted in the pavilions, fed by the available information about urban developments.





Building drawings:



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