



SEARCHING FOR SPACE IN TWO BUILDINGS
BY JEAN YERNAUX

OVERSIZE CHARLEROI

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OVERSIZE CHARLEROI

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JEAN YERNAUX
(architect)

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ABSTRACT

“Charleroi is an endless source of big, too big and inadequate buildings. ‘Oversize’ addresses the unique opportunities and challenges represented by the transformation and reuse of these spaces.”

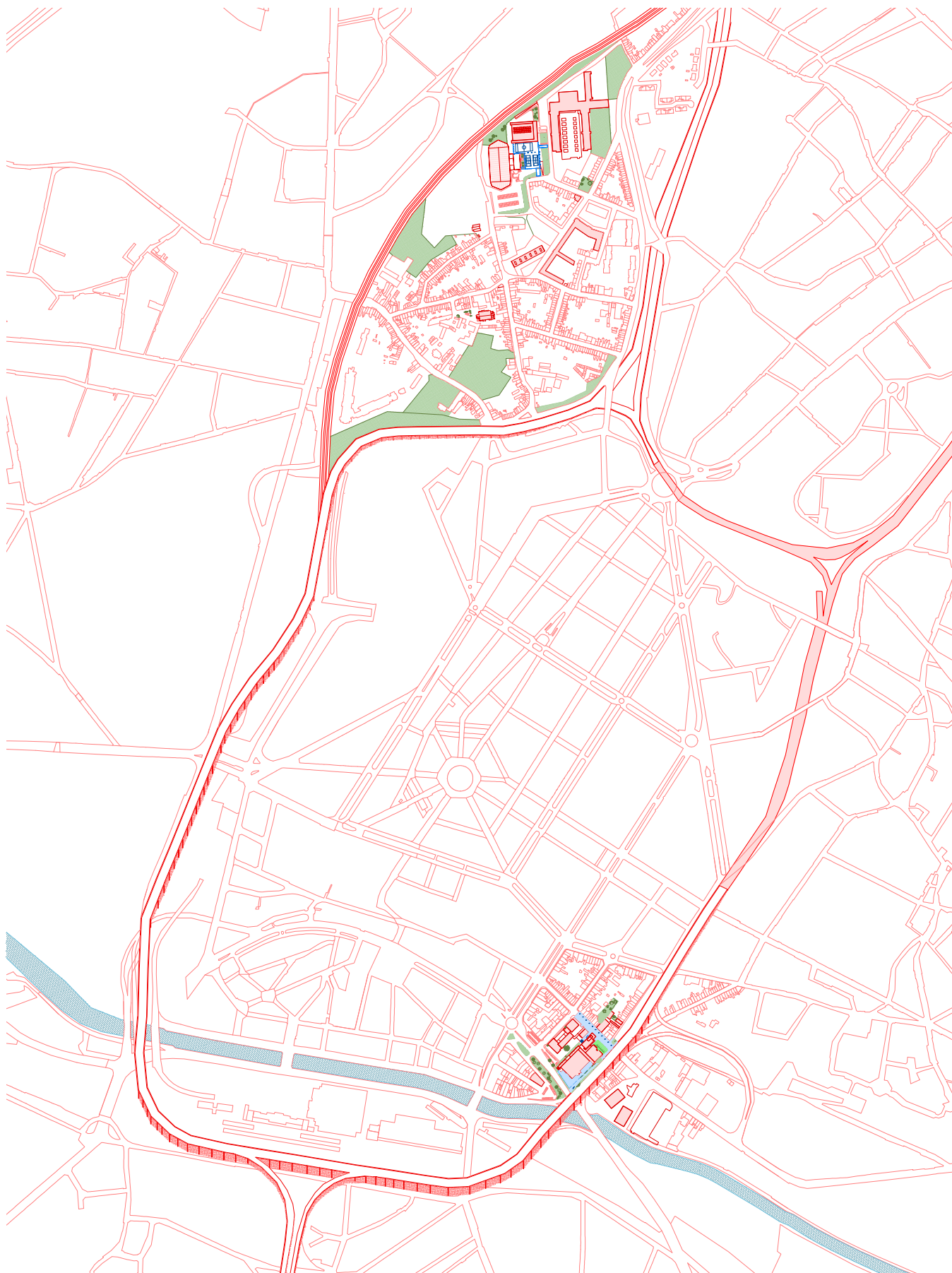
The subjects of this master dissertation are two ‘oversized’ buildings in the centre of Charleroi. Although located at the opposite edges of the city and different in size and context, the buildings have some things in common. They are important infrastructures for Charleroi both designed by architect **Jean Yernaux**, who was quite an important figure when it comes to urban planning between 1960 and 2000. Both buildings are still in use, thus they are not vacant, but inefficient for their activities.

The tower of **Piscine & crèche Helios** is an iconic brutalist piece of architecture that stands out in between the small brown worker-houses and remaining old chimneys of Charleroi and built as showcase project for Charleroi in the 1970’s. It still has an important role today. The building is still in use, at first sight it works fine, and attracts people from Charleroi as well as people from outside the city due to its function as Olympic swimming pool.

Hall Omnisports located on the site of another showcase project of Jean Yernaux that was never accomplished, is a simple and easy to understand structure that accommodates the local sports clubs: basket, martial arts, dance, badminton, etc. In the beginning the building was a welcoming and open infrastructure for the neighbourhood. Today it is introvert and used inefficiently. How can it become a social living space again for the neighbourhood and at the same time be used in an improved way?

The image of Charleroi can be reflected in these two buildings: innovating in the prime of their lives, but now worn out. The challenge of these buildings according to the subject of ‘oversize’ is to detect specific ‘oversize’ problems and find a fitting solution for them.

01 OVERSIZE CHARLEROI



02 JEAN YERNAUX

architect and urbanist for Charleroi (1960 - 2000)

°1930



Photo of Jean Yernaux during our conversation in March.

JEAN YERNAUX

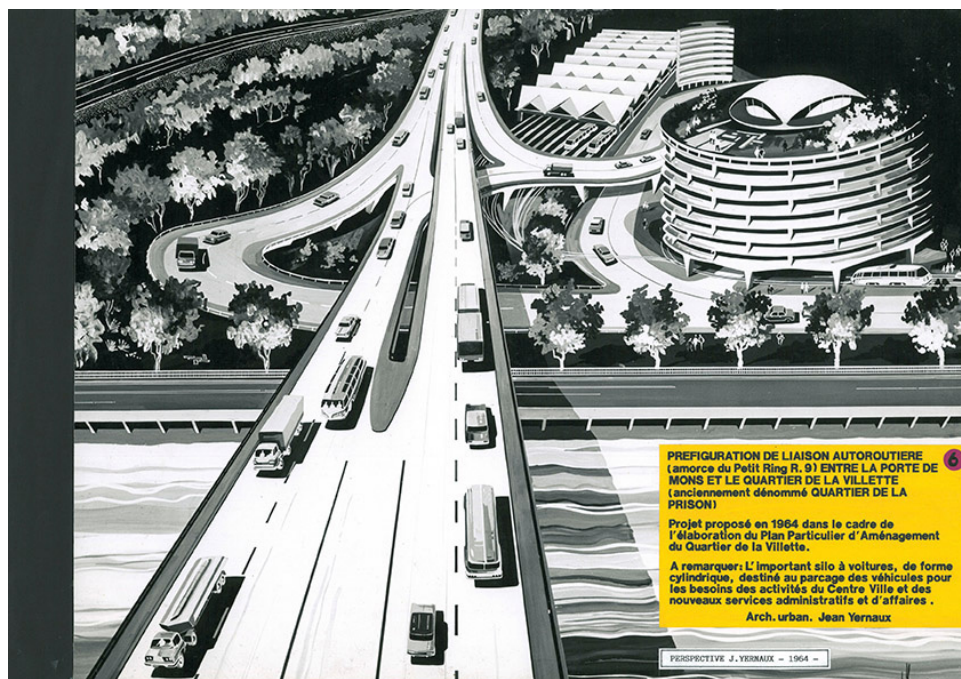
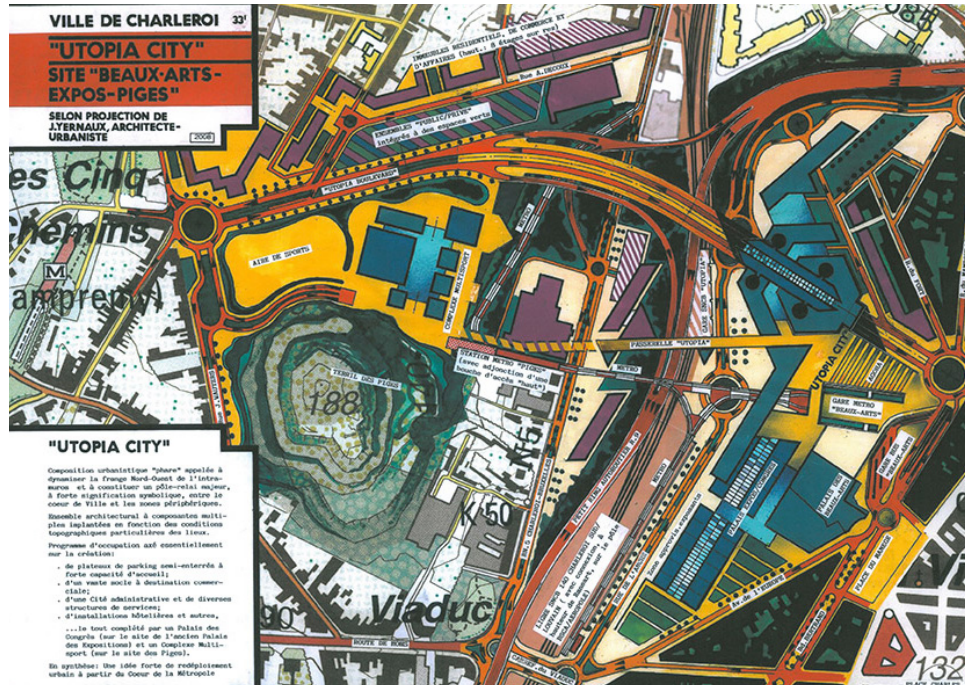
Before talking about Complex Hélios and Hall Omnisports, I want to introduce the architect of the two buildings, researched in this dissertation: Jean Yernaux.

Architect and urbanist Jean Yernaux worked in and for Charleroi between 1960 and 2000. He could be considered to be the Bouwmeester of his time as he changed the look of Charleroi drastically.

In the more than 200 collages he meticulously made during his career (shown in an additional booklet) you become aware of his love for cars and brutalist architecture. He explains all his visions, sometimes utopic, for the urban development of Charleroi. As a result, many of the projects described in the collages were never completed. But next to some buildings/infrastructures that have been built, his biggest accomplishments are the 'Metro léger de Charleroi' and the infrastructure that is without a doubt a big part of the identity of Charleroi today: the Ring (R9).

'À notre grand plaisir, il nous y a montré ce que nous avons cherché sans succès pendant plus d'un an dans les bibliothèques, puis dans les archives de la ville. Quatre décennies de projets architecturaux et urbanistiques pour Charleroi, pour la plupart non construits, archivés méticuleusement par ses soins depuis sa retraite bien méritée.'¹

¹ Hotel Charleroi, (2012), Jean Yernaux, Ville en Âbime, 7.
Geraadpleegd op 15/12/2018 via: <http://www.hotelcharleroi.com/2012-3/ville-en-abime>

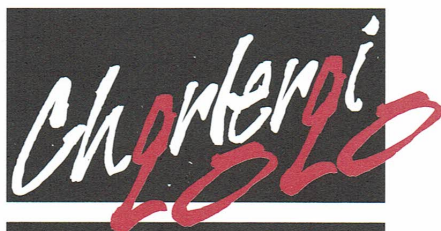




OUR CONVERSATION

Today Jean Yernaux is retired but he still has his office in one of his realised projects and is interested in all the projects that are conceived for Charleroi today.

On one of my visits to the archive of Charleroi, I received his phone number and so I decided to contact him with the goal to get to know his point of view on Complex Hélios and Hall Omnisports. I also wanted to hear from him how Charleroi was in his days as an architect/urbanist and how Charleroi has evolved in the years until now. He accepted our request and in the beginning of March Tatiana, Ine and I met him in his office in Charleroi. The conversation lasted for 3,5 hours and was more than I had expected. From the moment we entered his office, we hadn't even taken of our coats, until the moment he dropped us off at the train station, he continuously talked with passion about the different projects he realised in Charleroi. He answered the questions I had prepared about Complex Hélios and Hall Omnisports. He even scribbled a drawing during our conversation explaining the structure of Complex Helios. He also talked about the new Bouwmeester, about politics and most of all: about the Ring. The way Jean Yernaux defended this last subject, the Ring, fascinated me a lot. It took over a large part of our conversation.

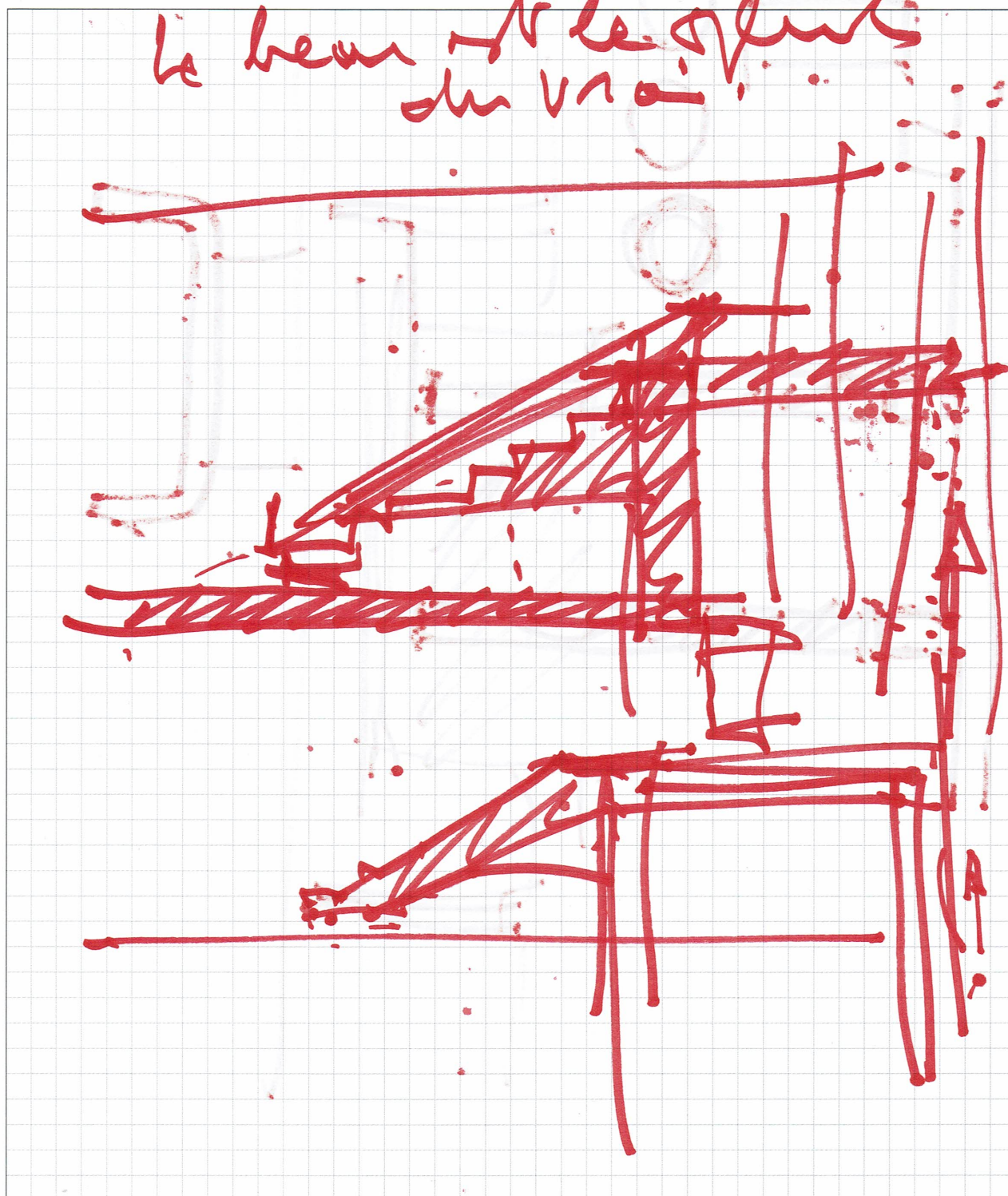


Partenaires pour le futur

Date :

CHARLEROI 2020 - Secrétariat permanent
Place Kennedy 1 - 6030 Marchienne-au-Pont
© 071 86 56 02 ou 03 ☎ 071 86 55 63

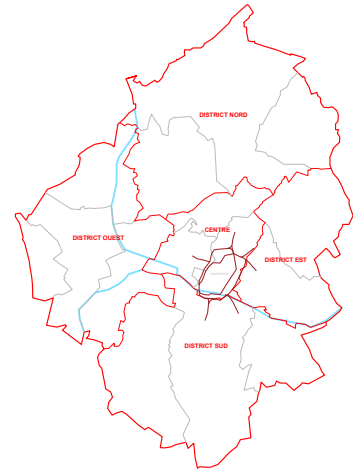
✉ contact@charleroi-2020.be
www.charleroi-2020.be



‘LA PETITE CEINTURE’

The Ring of Charleroi is an infrastructure you cannot ignore. It's part of the identity of Charleroi, but for a lot of Carolo's it is an eyesore and just an ugly thing. Every day 70.000 cars pass by on this one-way viaduct that is hovering in the air. In addition to the cars that are passing by, the Ring is also an explicit boundary for the city centre. Many households were obliged to move because of its construction. It was therefore not so surprising that Jean Yernaux defended himself in his narrative about his design. He wanted to make clear to us that the development of the Ring at that time was the correct solution for the city. "Il faut que vous voyez les éléments positifs du petit ring!"

The Ring was built in 1976. Around this year a lot of things changed in Charleroi. First you have to be aware that Charleroi isn't just inside the ring, but the city is much larger. Charleroi is one of the biggest cities in Belgium but with only 20 people/hectare it is not very dense. In the 1950's, the economic crisis stroke Charleroi inciting people to move out of the city centre. The car culture increased the spread of people across the 5 districts of Charleroi. When these people had to come back to the city for whatever reason, they came via the national roads, that crossed together in the centre of Charleroi. By making this circular movement of the Ring around the city centre, Jean Yernaux states that the historic boulevards, the national roads from before, got back their dignity. Moving from one side to the other side goes faster than before because you don't have to wait at red lights anymore. It takes only 5 minutes to complete the whole circle. This was a logic and theoretical explanation. But at the same time Jean Yernaux revealed us a more emotional interpretation and referred to the book of Kevin Lynch: 'The image of the city'. Illustrated by this book, I would describe the Ring as a 'landmark' as well as an 'edge', that is part of the environmental image of Charleroi and gives structure when perceiving the city. Jean Yernaux describes the ring as a dynamic way to read and to perceive Charleroi when you are on it.



The five districts of Charleroi.

1971**1994**

Aerial view of Charleroi before the construction of the Ring.

03 PISCINE & CRÈCHE HÉLIOS

Rue de Montigny 103, 6000 Charleroi

1970 - 1977



Crèche Hélios. Via: Iwan Strauven

PISCINE & CRÈCHE HELIOS

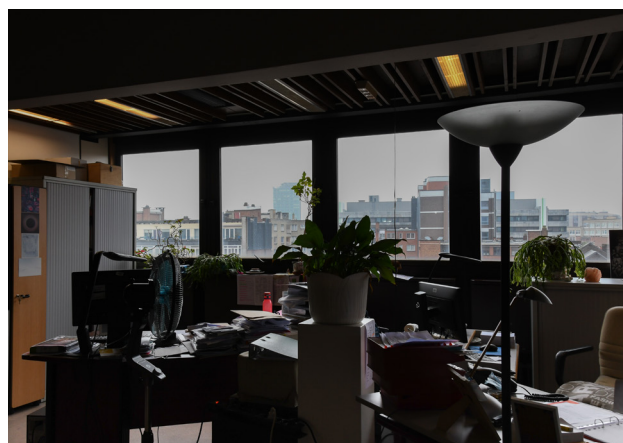
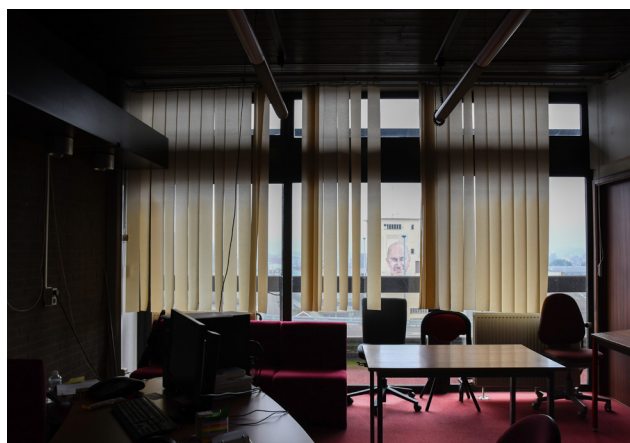
Complex Helios was built between 1970 and 1977 and is a very distinct brutalist building. It certainly stands out because it is in between the small brown worker-houses and remaining old chimneys of Charleroi. The complex lies right next to the Ring and consists two parts that were designed as a whole but built as separate entities. The tower was a former crèche with 109 beds. The orange boxes underneath the windows were the lockers of the children. Today the tower accommodates the offices of the sports magazine and the media department of Charleroi. The tower is in a bad state. Pieces of concrete crumble of the walls. As a consequence fences have to protect people from the falling pieces and the facades have become a collage of homemade interventions. The other part of the complex accommodates an Olympic sized swimming pool and a smaller pool for the little kids and is in a better state. It was renovated in 2015, but the stains on the concrete after renovation made the city decide to paint the facades grey and green. Something Jean Yernaux didn't appreciate.



Main entrance of the crèche and the swimming pool. Via: Iwan Strauven

OVERSIZE CHARLEROI

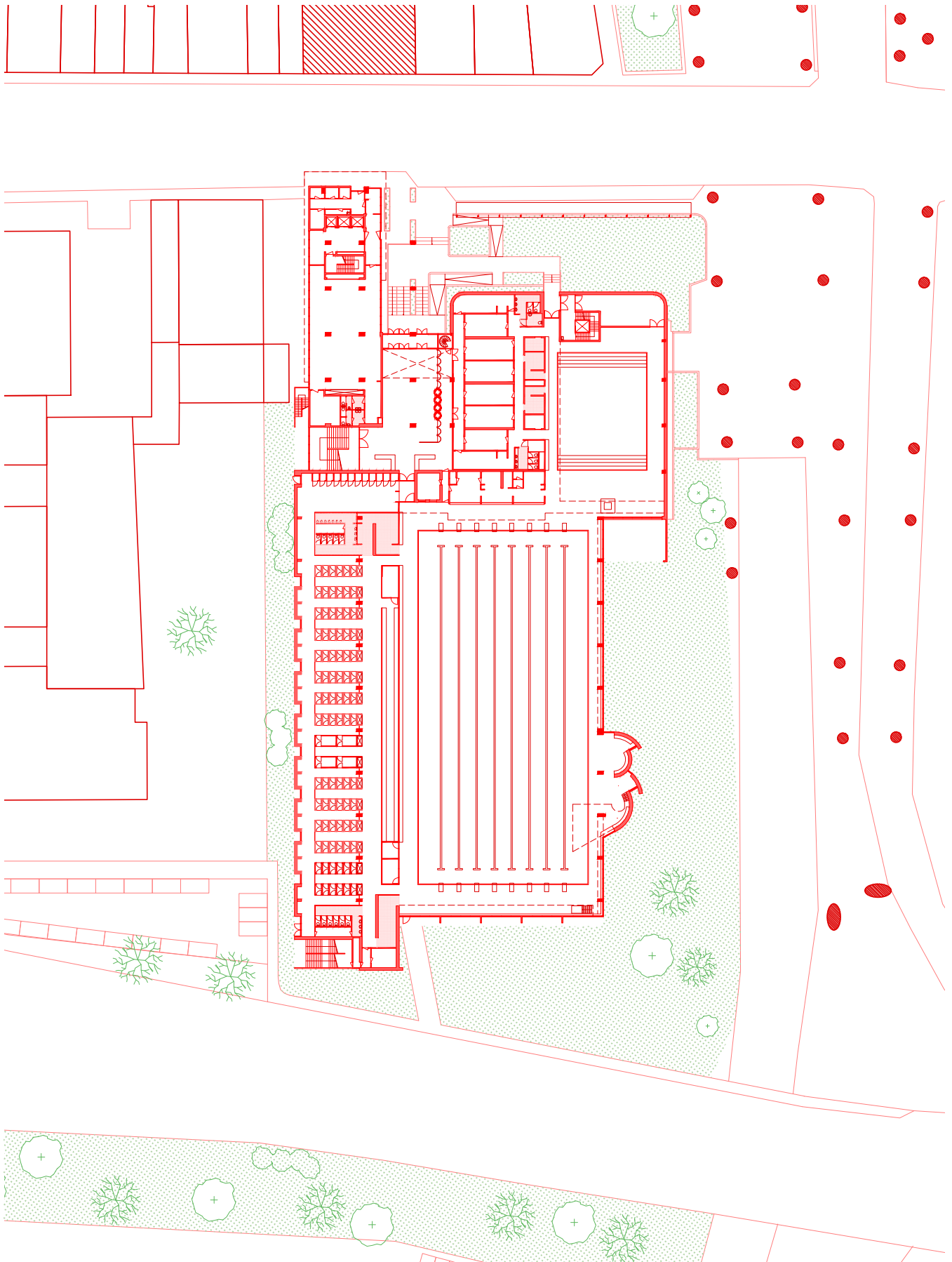


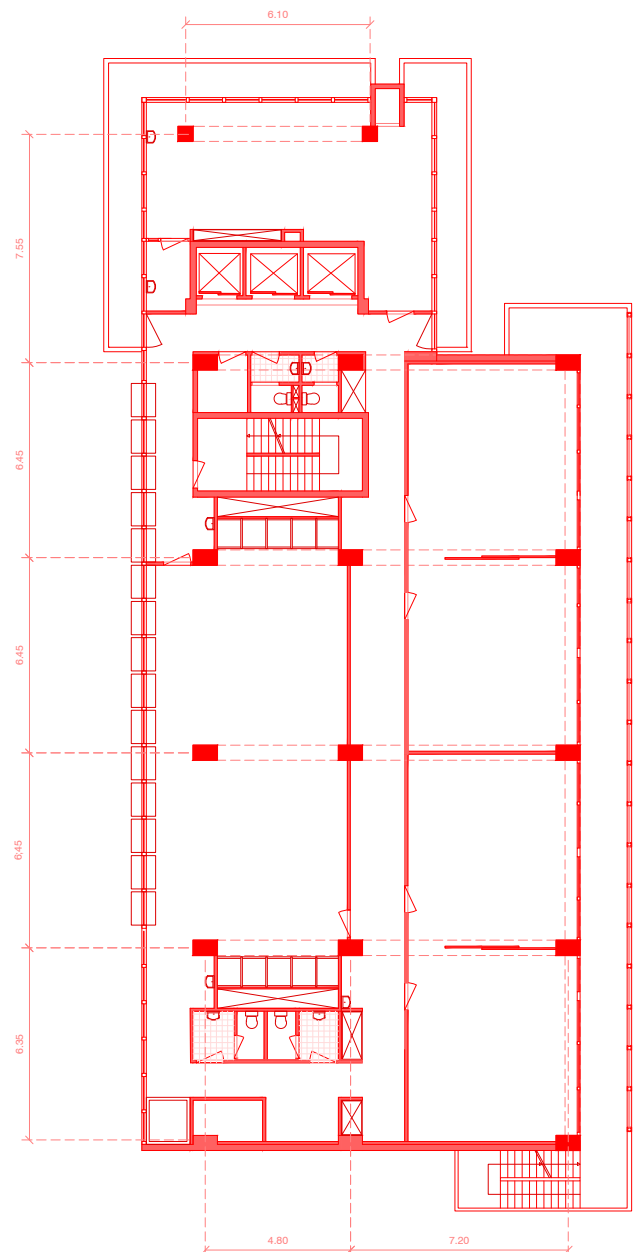




floor +0 (existing situation)
1/750

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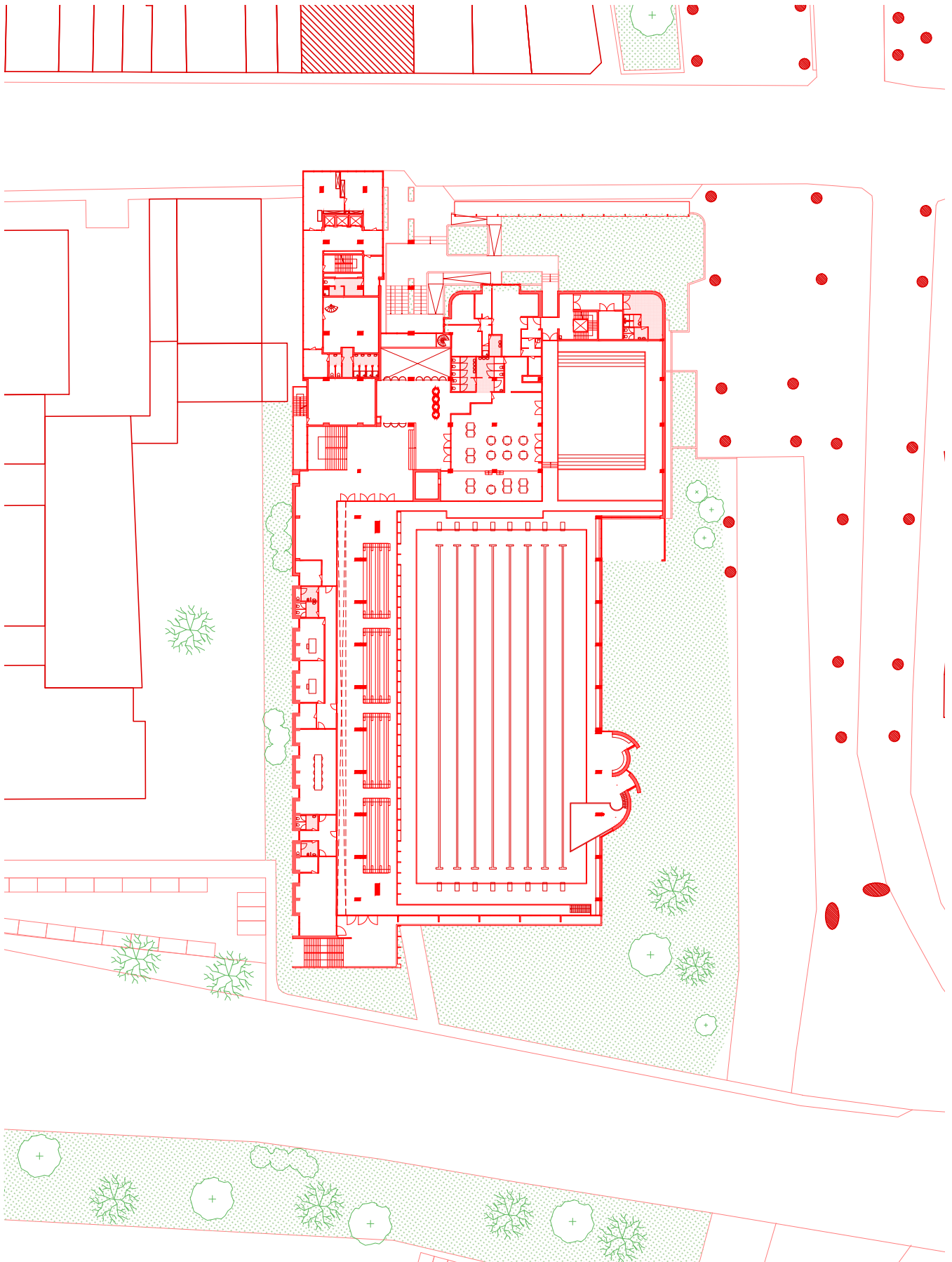


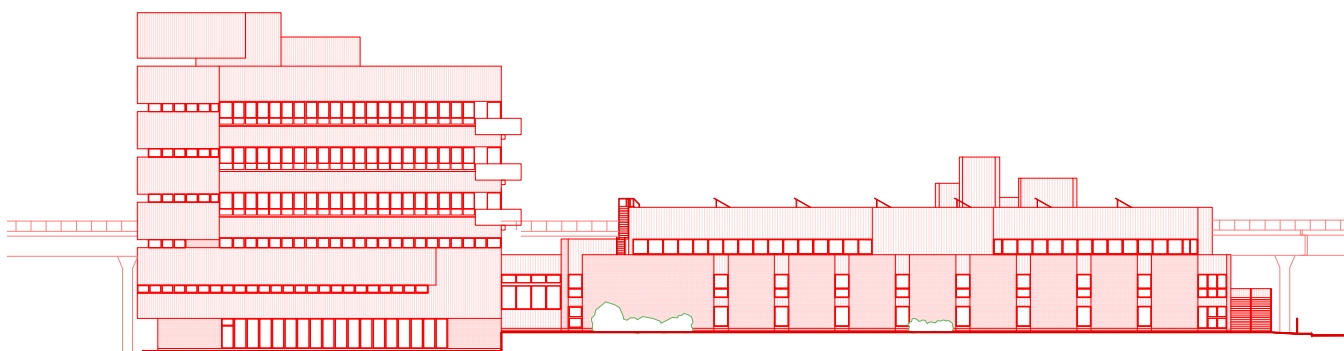




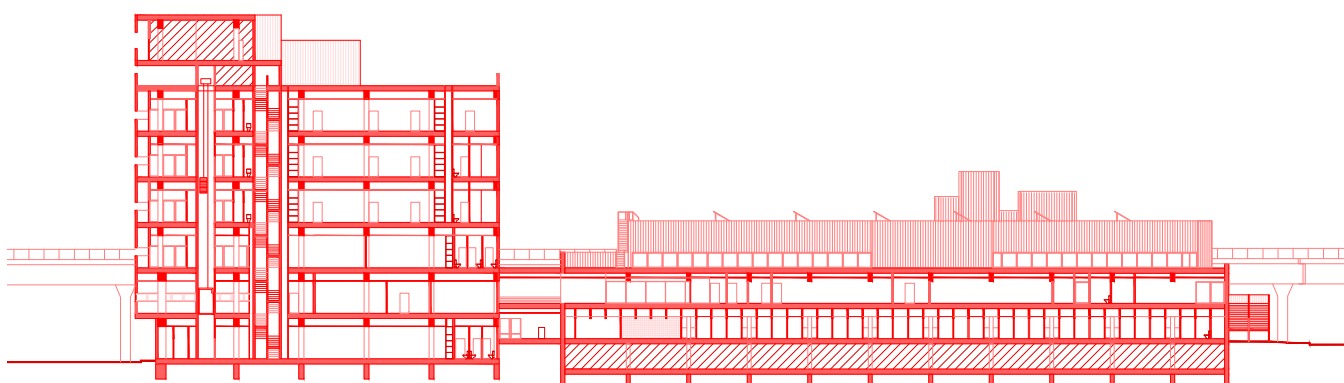
floor +1 (existing situation)
1/750

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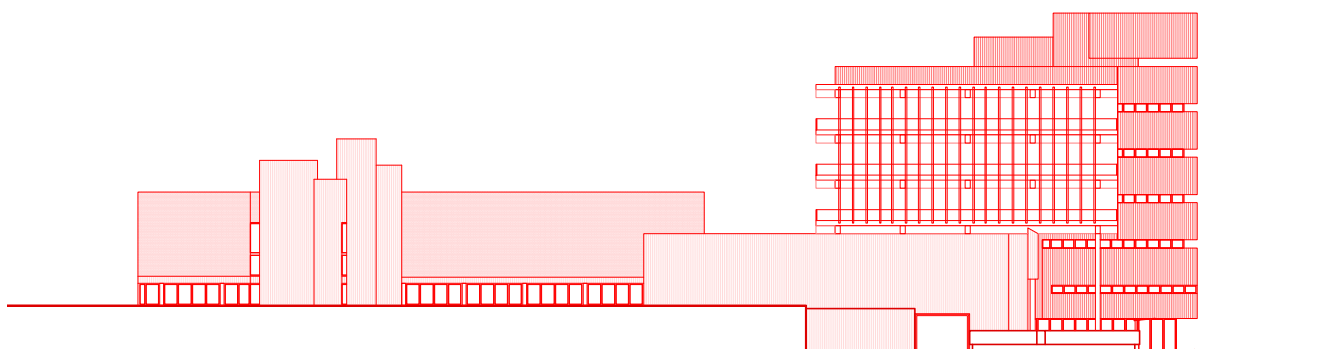




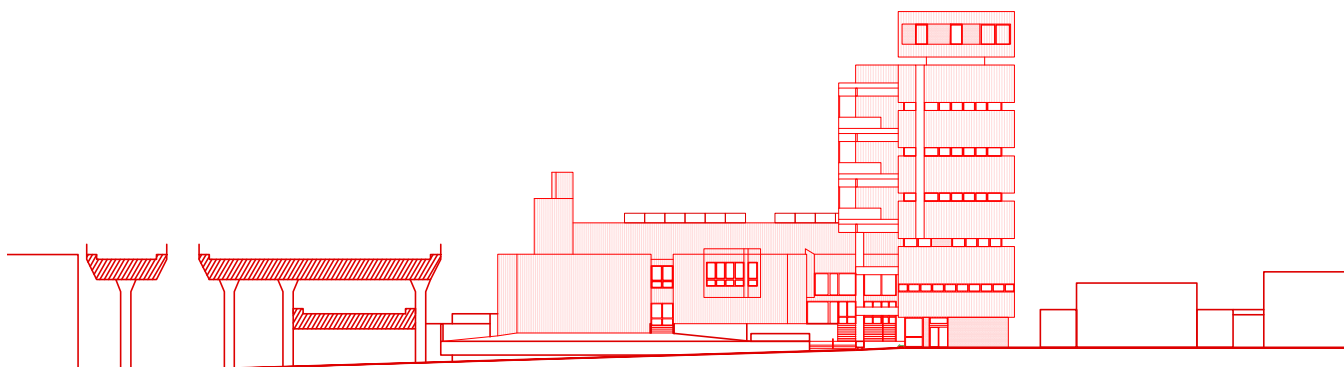
west facade (existing situation)
1/750



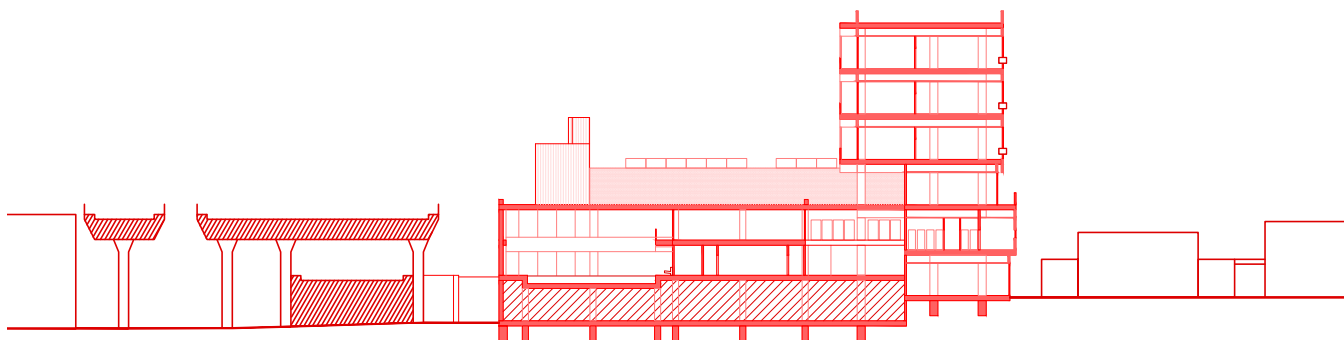
section AA' (existing situation)
1/750



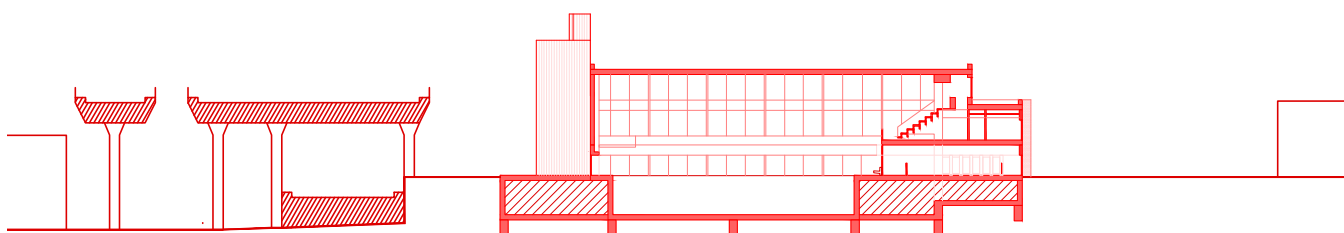
east facade (existing situation)
1/750



north facade (existing situation)
1/750



section BB' (existing situation)
1/750



section CC' (existing situation)
1/750

FINDING THE 'OVERSIZE'

In the context of 'Oversize Charleroi' this building is not, like other buildings in Charleroi, outspoken 'Oversize'. The key is to find the specific problems that lead to more specific and interesting interventions.

The first issue appears when looking at the swimming pool. One could say it is 'oversize'. On a normal Friday afternoon about 50 people are swimming in the 50 metre long pool. The tribune with 400 seats stays empty, except for one seat. The cafeteria remains closed and no one is using the (class) rooms behind the tribunes. However, this situation is in the context of 'oversize' not convincing enough. More interesting are the moments when the building isn't 'oversize' but 'undersize'. These moments happen quite frequently. About 15 times a year, during 2/3 days Hélios organises swimming competitions. On these moments 700 swimmers are present and they also attract around 3000 supporters divided over the 2/3 days. There is not enough place for the swimmers to prepare for their competition and everything happens in an area of +- two meters around the swimming pool. There is a need of extra space during those moments, however, during the normal days this extra space becomes unneeded. How can this situation be improved?



OVERSIZE?



OVERSIZE?



UNDERSIZE!



UNDERSIZE!

A second issue that appears cannot be looked at without involving Hélios' neighbour, the Théâtre de l'Ancre. The theatre was founded in Rue de Montigny in 1980. So the two have already been neighbours since the beginning of the existence of complex Helios. Last year L'Escaut Architecture announced their winning concept for a renewed theatre. After this renovation the two buildings could live a symbiotic life, but are still separated by a busy street. Also the two entrances of complex Helios are poorly designed and not welcoming. There is no comfortable public space. This second intervention could be a plus for the two buildings as well as a plus on the bigger scale for Charleroi.

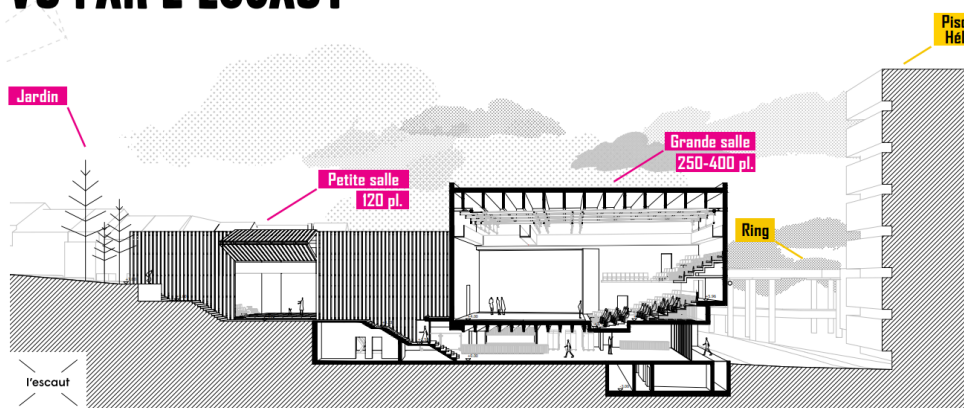
HÉLIOS

L'ANCRE



Théâtre de l'Ancre is the neighbour of complex Hélios.

LE NOUVEAU THÉÂTRE DE L'ANCRE VU PAR L'ESCAUT



The winning design for the theatre proposed by L'Escaut.

Via: <https://www.ancree.be/presse/fichiers/DOSSIER-DE-PRESSE-DEVELOP-ARCHI.pdf>

AN ANSWER TO THESE TARGETED ISSUES

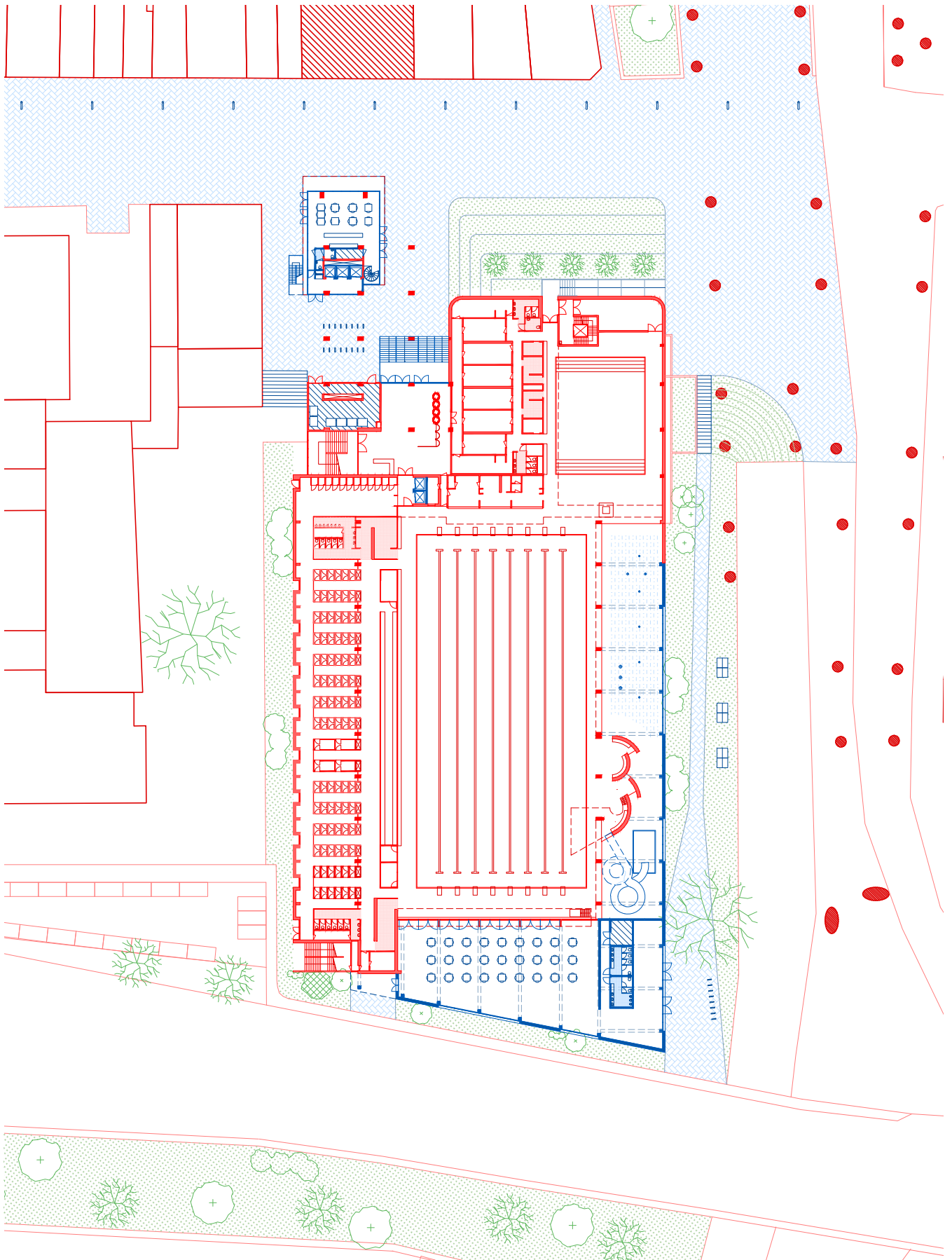
With the conditions during the competitions in mind, the first intervention is generated at the back of the building in the form of a simple extension. This extension has the purpose to intercept the swimmers and their trainers during competitions. During these competitions the doors on the south facade are opened, also the new splash pool can be emptied. This means the area of two meters around the pool becomes an area of more than 10 meters around the swimming pool. This area gives the swimmers and their trainers more space to breath and concentrate for their competition. While the extension gives more space during the 'undersize' times, it transforms to extra leisure space during 'oversize' times. The doors on the south façade are closed and the extension becomes a flexible space for Charleroi to rent. The splash pool is filled and becomes a third informal pool.

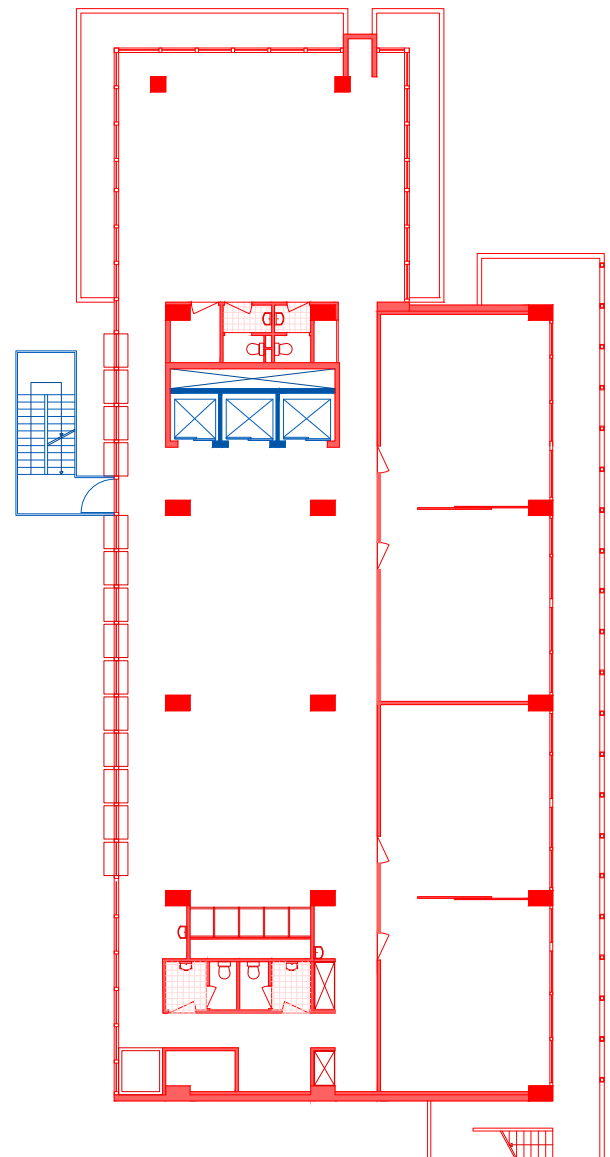
The main entrance undergoes the second and biggest transformation. The chaotic entrance with the different stairs and ramps is simplified. Both entities still have their own entrance. By removing part of the ground floor and the first floor of the tower, there is more space between the two entities to move. At the same time the remaining parts of the ground floor and first floor of the tower are transformed to a free standing pavilion that can be linked to all neighbourhood buildings. It is a café, but could also be an extended foyer during performances in the Théâtre de L'ancre, replaces the cafeteria for the swimming pool and is a meeting place for the offices from the tower.



floor +0
1/750

0

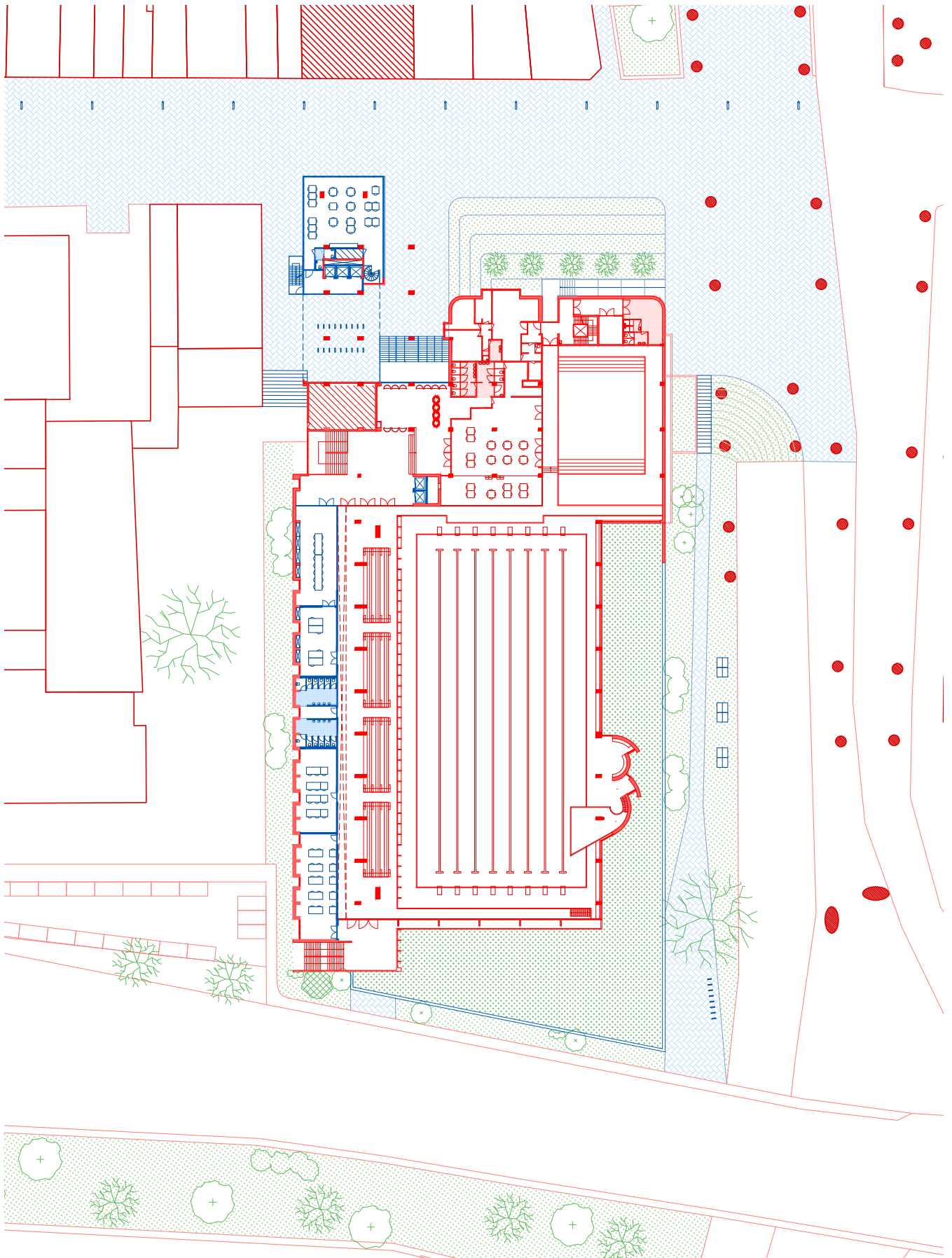


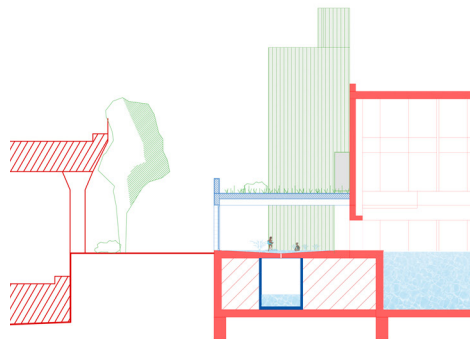




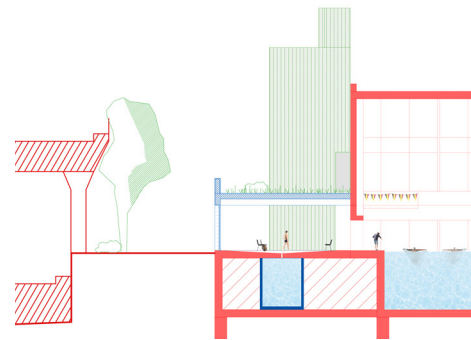
floor +1
1/750

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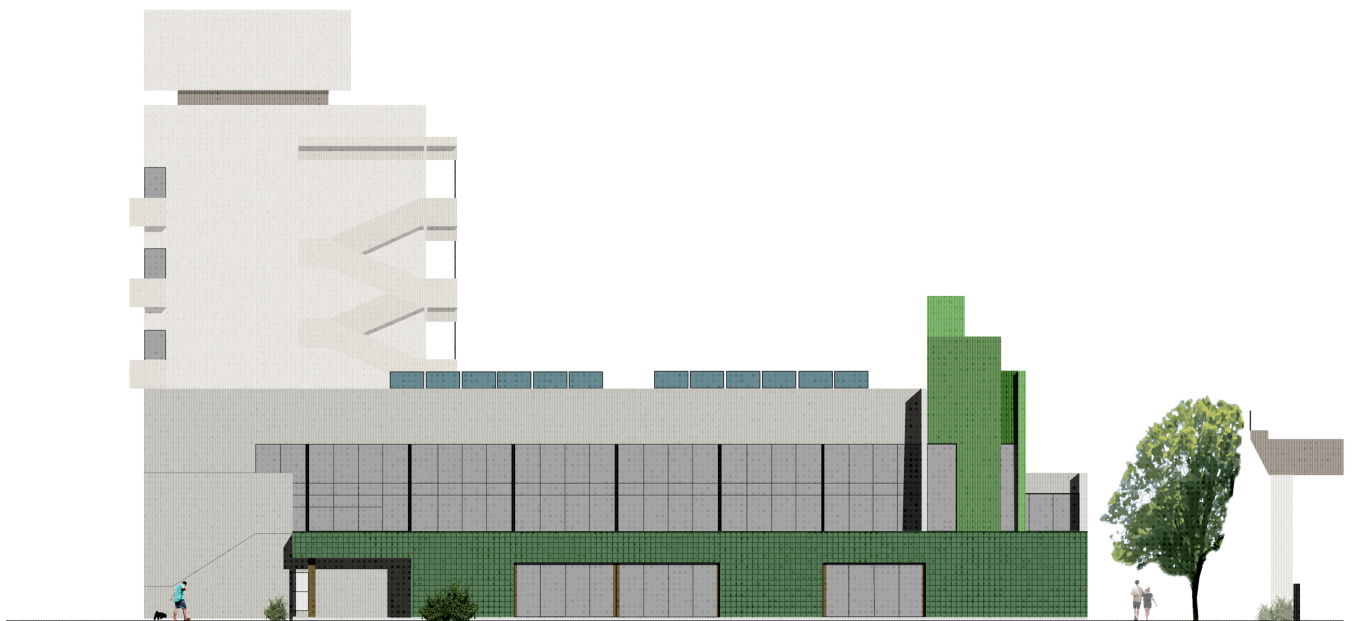




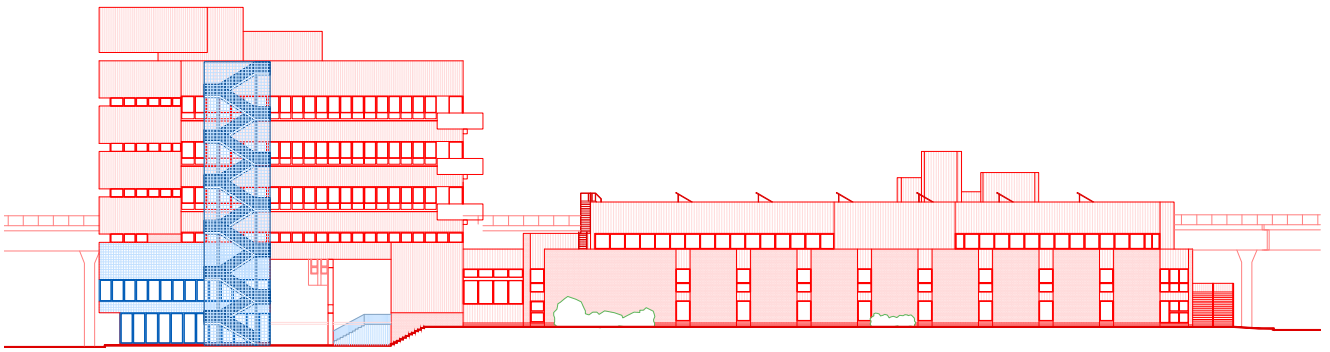
section CC' during normal day
1/500



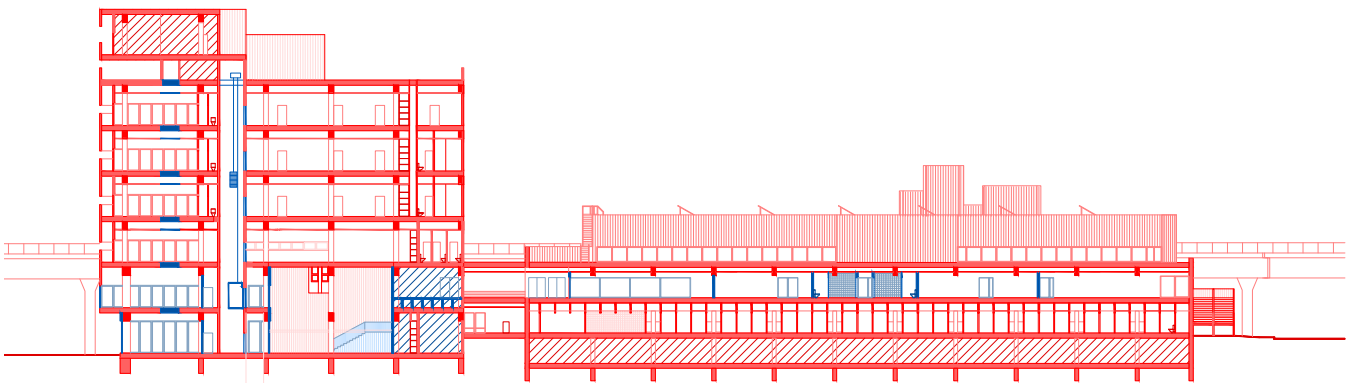
section CC' during competition
1/500



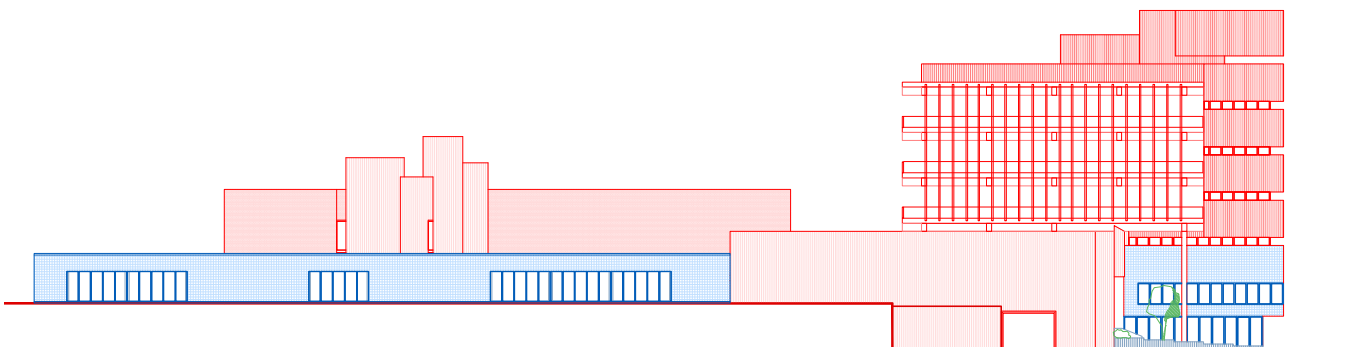
Materialized south facade with the new extension.



west facade (existing situation)
1/500



section AA' (existing situation)
1/500



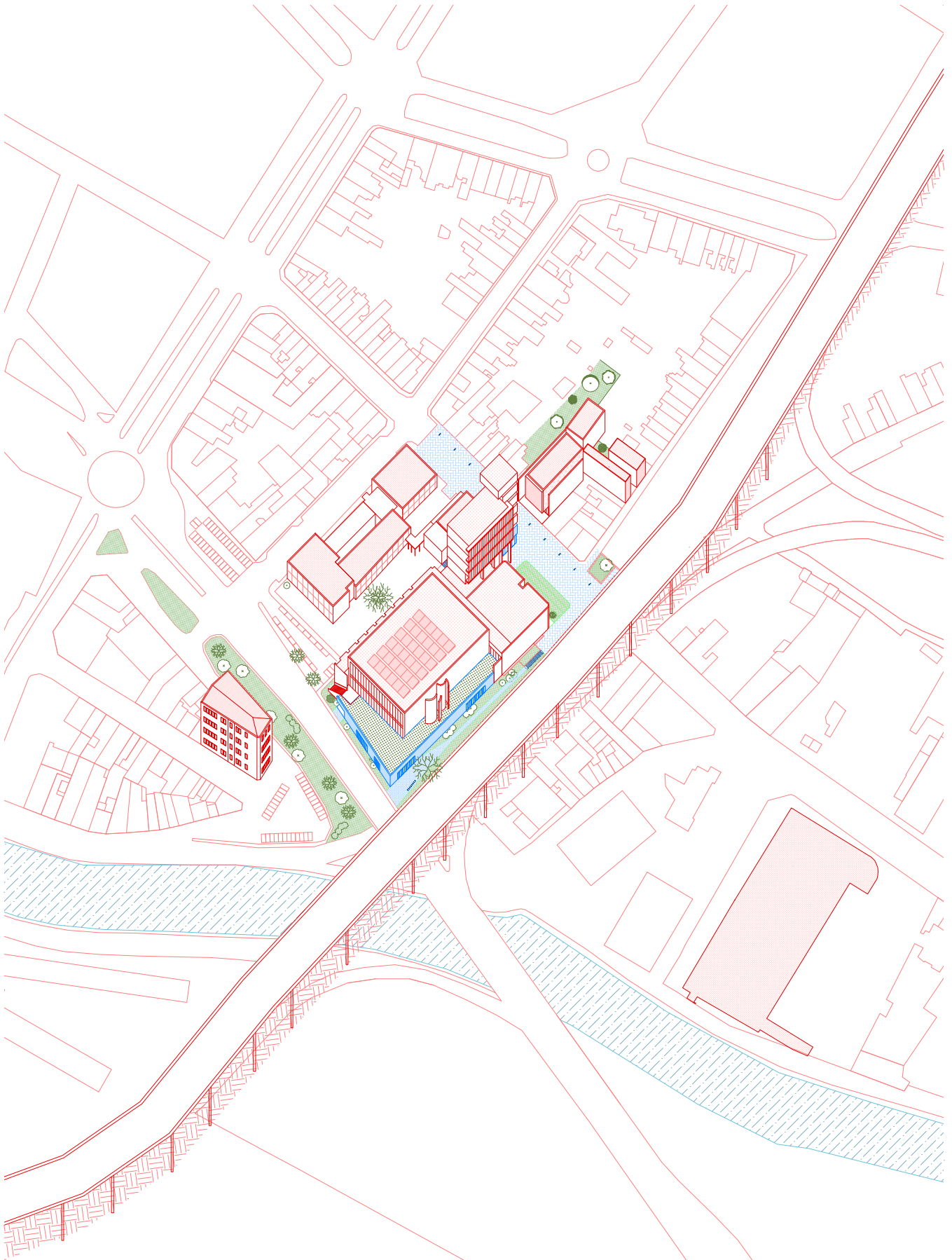
east facade (existing situation)
1/500



View on the main entrance.

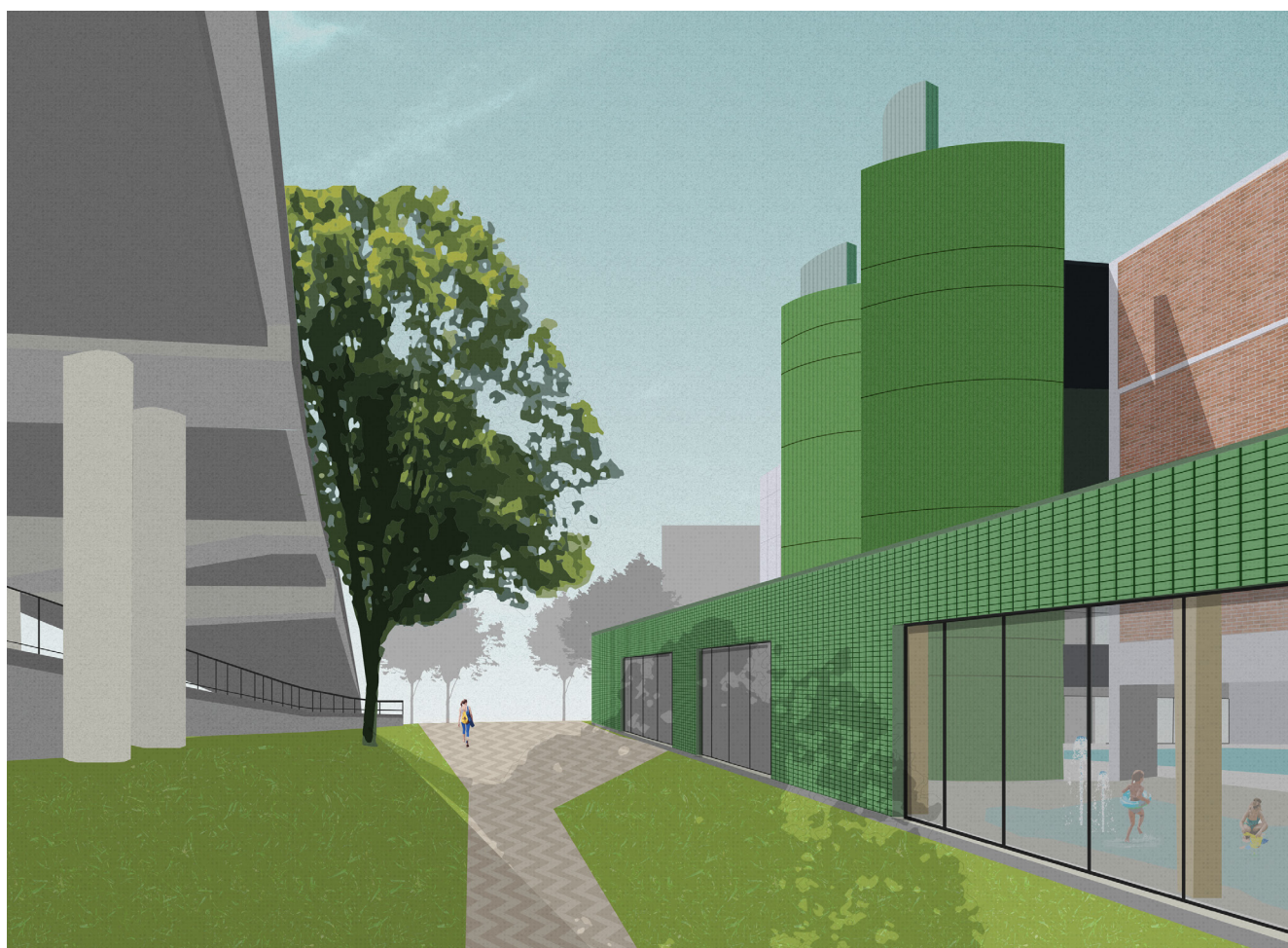
BUSY STREET BECOMES ATTRACTIVE SQUARE

On a bigger scale, the interventions to complex Hélios will have impact as well, as the closing of Rue de Montigny for cars seems a necessity. The street will transform to an attractive square. This will be a more appropriate welcome for the people that come from the east side of Charleroi to the centre. Referring to 'The image of the city' by Kevin Lynch and recommended by Jean Yernaux, the new square becomes an extra node for the city. The Ring becomes a city-gate and is given a more positive connotation. The square creates a link between the theatre, the elementary school and complex Helios.





View from rue de Montigny.



View on path inbetween the Ring and the new extension.

04 HALL OMNISPORTS

Rue des Olympiades 2, 6000 Charleroi

1974 - 1975



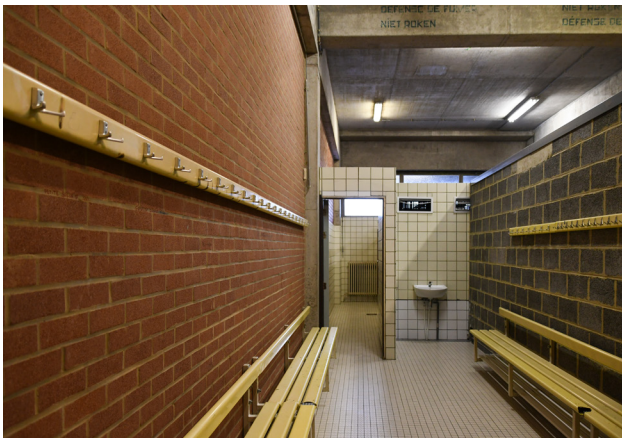
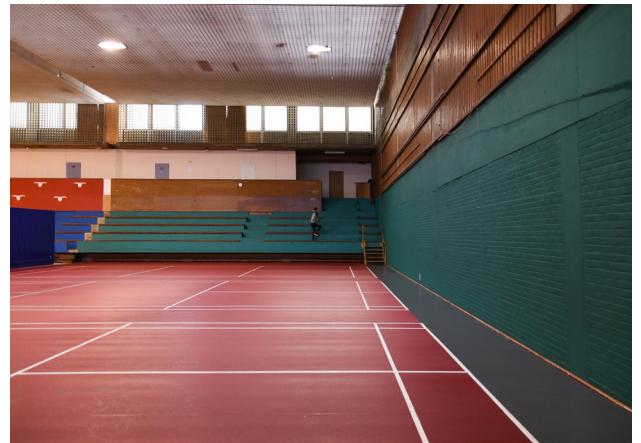
Hall Omnisports, 1990. Via: <https://www.delcampe.net>

HALL OMNISPORTS

Hall Omnisports, better known as COS1, is located just outside the ring on the north side of Charleroi. The building was built between 1974 and 1975 and lies in between another building by Jean Yernaux, école La Garenne, and the famous Spiroudôme, home of the basketball team of Charleroi. The building has a large sports hall on the first floor, where they play basket, badminton, futsal, etc. as well as some smaller sports rooms for dance, martial arts and fitness on the ground floor. It accommodates different sports clubs and schools.



Hall Omnisports, 2019.

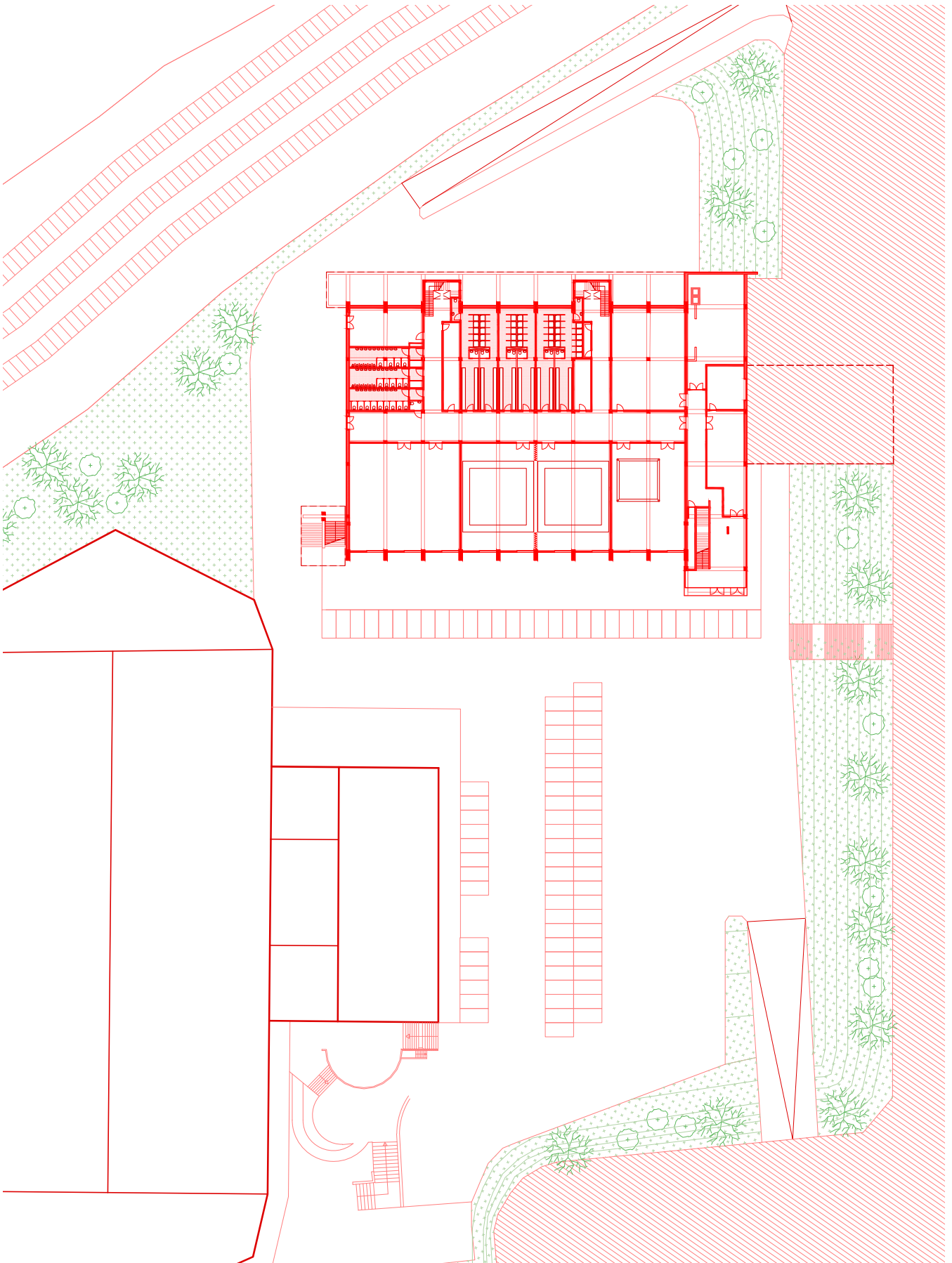






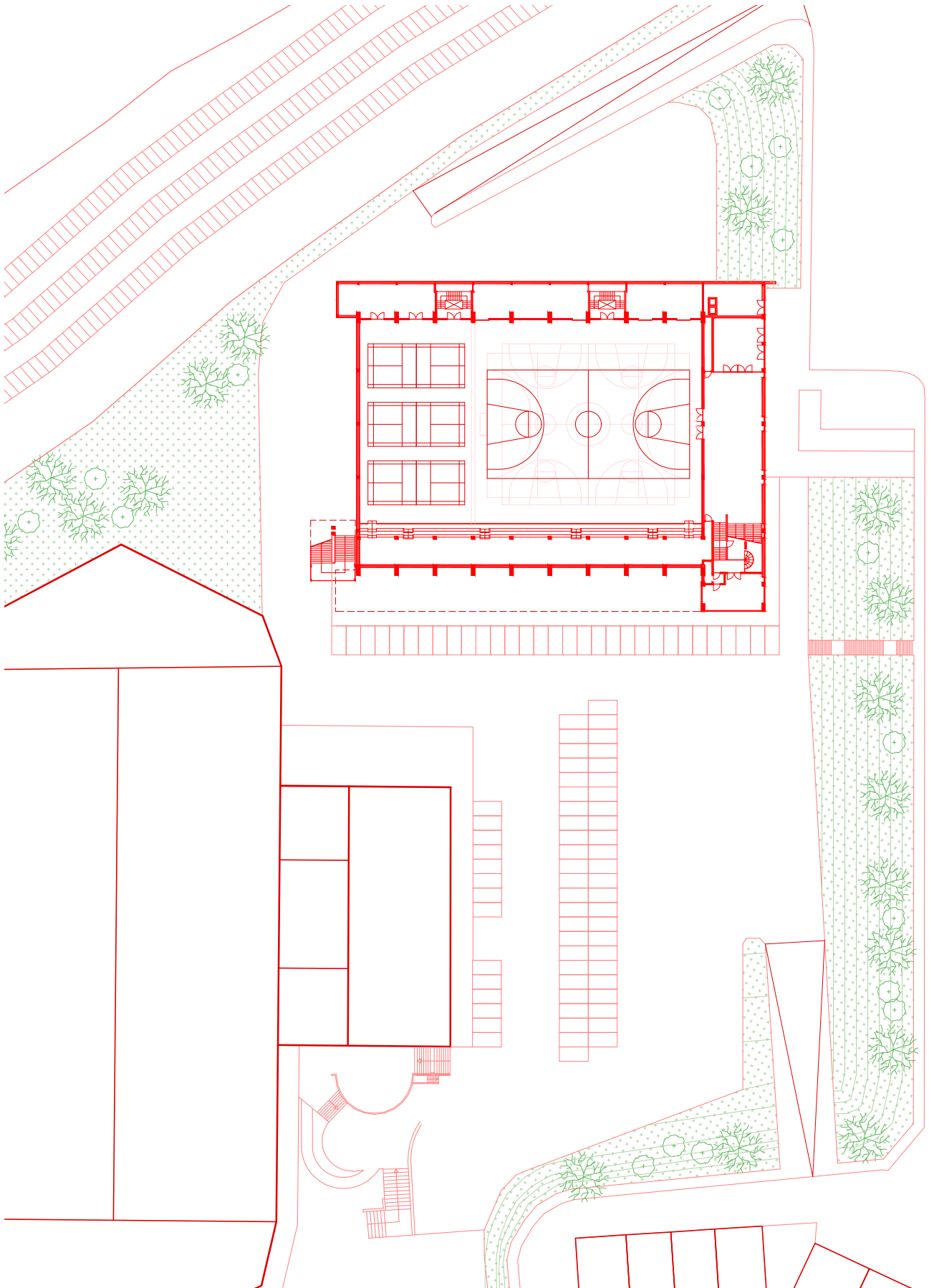
floor +0 (existing situation)
1/750

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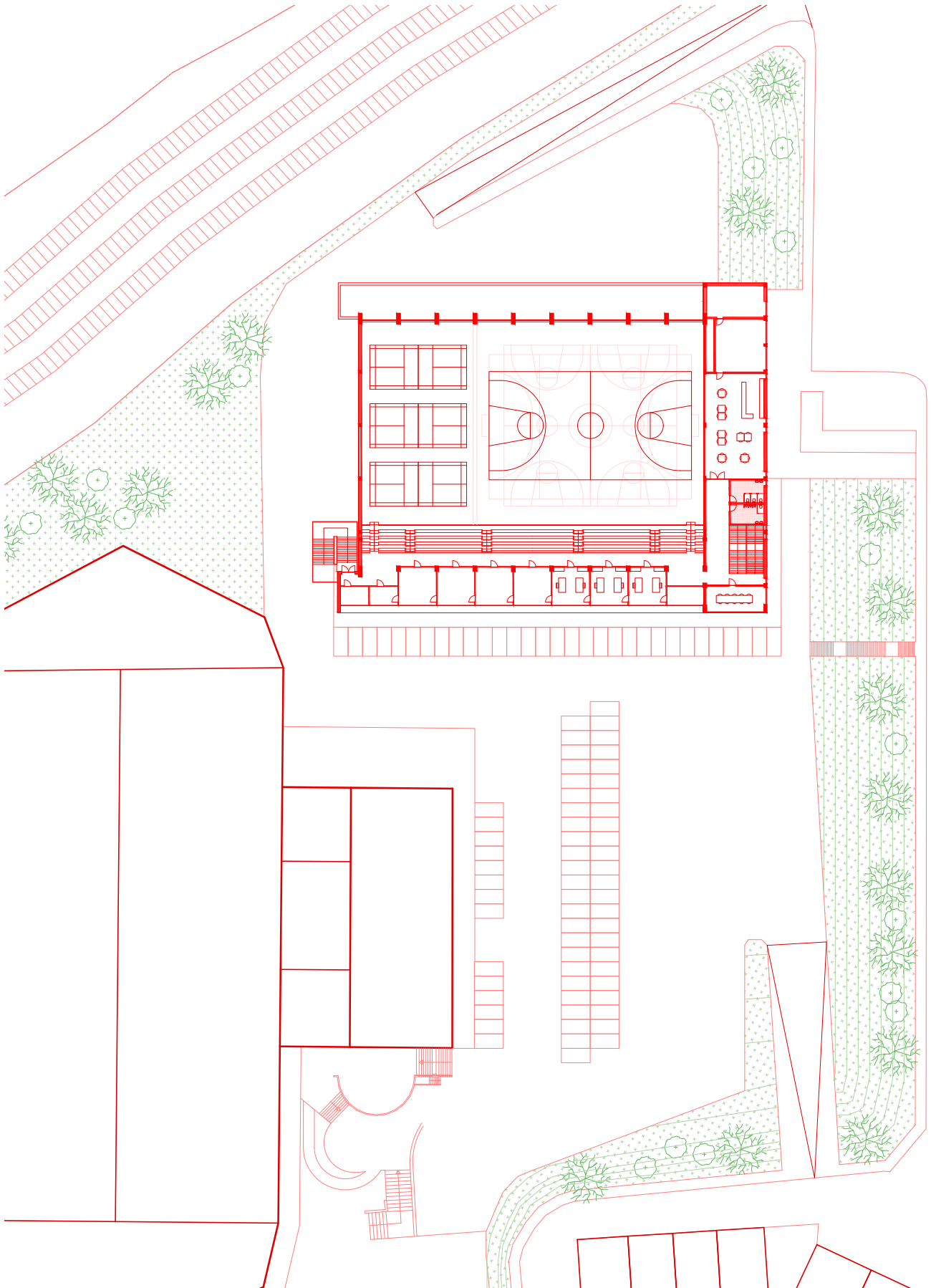
floor +1 (existing situation)
1/750

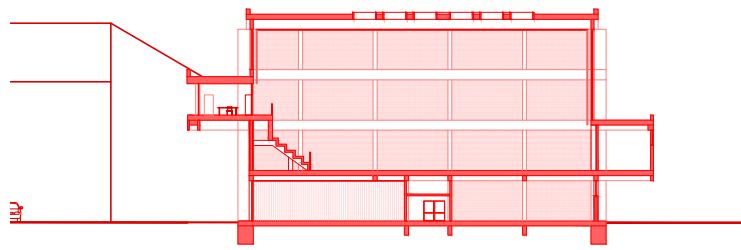




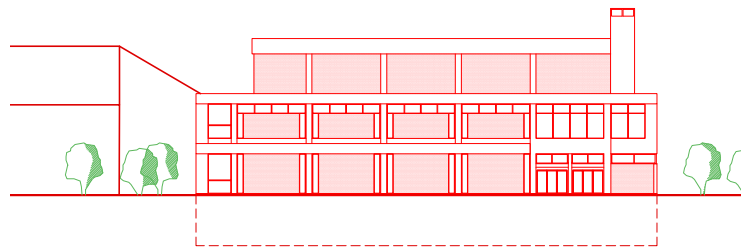
floor +2 (existing situation)
1/750

0

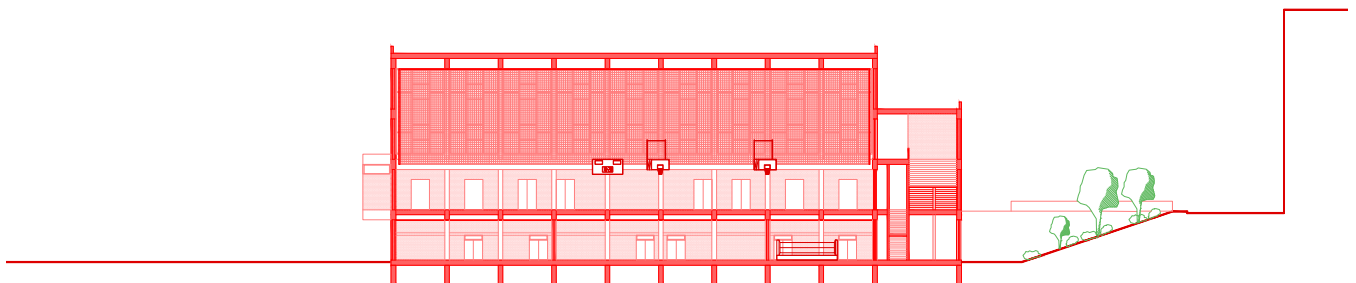




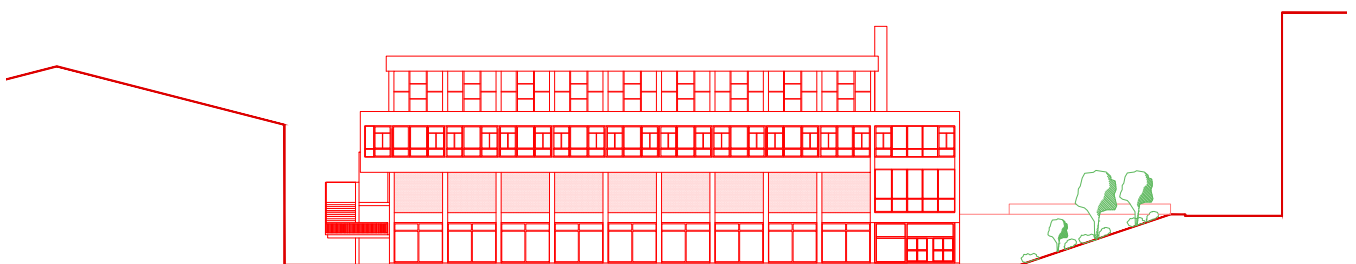
section AA' (existing situation)
1/750



east facade (existing situation)
1/750



section BB' (existing situation)
1/750



south facade (existing situation)
1/750

A SHOWCASE PROJECT

While researching this building, the emotional value of it had more impact on the interventions as with complex Hélios. Giving something back to the neighbourhood and its sports clubs and improving the context as well as the building was always a clear intention. The conversation with Jean Yernaux reinforced this intention.

As I mentioned before Jean Yernaux was an utopic thinker. Before Hall Omnisports was built, the site was already part of an utopic plan. In the collages of Jean Yernaux we can find a whole section dedicated to 'Le Palais des Sports', a showcase project for Charleroi that had to be added next to 'le Palais des Beaux Arts', 'le Palais des Expos', etc. The stadium would fit 40 000 visitors. During our conversation, Jean Yernaux told us it was never built because lack of money and sudden other politic priorities. Instead Hall Omnisports was built. It is much smaller but (as you can see on the early photo's) it was a welcoming building and directed outwards to the neighbourhood. That welcoming and open building was quickly pushed back. The tennis fields had to make place for the overwhelming Spiroudôme and his parking spots. Suddenly Hall Omnisports became an introvert building, barely noticeable and closed off from the lifeless neighbourhood.



‘OVERSIZE’ AND ‘UNDERSIZE’ AT THE SAME TIME

Next to the emotional value it has lost, the building is used above its capacity, therefore a wooden chalet was constructed against the concrete structure to allow extra space for dancers. The timetables of the sports hall show a fully occupied building at all moments. During the day, schools from the neighbourhood make use of the fields and in the afternoon, evening and during the weekends sport clubs each use their own spaces. With this point of view, Hall Omnisports can be called ‘undersize’ but at the same time the building is ‘oversized’ and could be arranged and used more efficiently. Today the whole building needs to be heated. This brings along a high cost to be paid by the sports clubs and for which they do not always have the means. Which would mean the building becomes ‘oversize’. Is it possible to halve the heated spaces and as such decrease the costs while at the same time increase the space for the clubs and open up to the neighbourhood?

MERCREDI 09 JANVIER 2019				
SALLE 1	SALLE 2	SALLE 3	LEADER	CAFETERIA
ECOLE DE LA GARINNE	ECOLE DE LA GARINNE	ECOLE DE LA GARINNE		
10:00				
11:00				
12:00				
13:00				
14:00				
15:00	DPN SPECBASKET	DPN SPECBASKET		
16:00				
17:00		SABVEDO CLUB		
18:00		KRAV MAGA		
19:00				
20:00	CHARLEROI BADMINTON CLUB	CHARLEROI BADMINTON CLUB		
21:00				
22:00				
23:00				
Commentaires :				

MERCREDI 16 JANVIER 2019				
RING	DOJO	DANSE	MUSCULATION	CHALET
8:00				
9:00				
10:00				
11:00				
12:00				
13:00				
14:00	GRAND CLUB CHARLEROI	JUST DANCE SCHOOL		
15:00				
16:00				
17:00				
18:00	SC PAYS NOIR			JUST DANCE SCHOOL
19:00		ASBL WANDA DANCE		
20:00	LE TIREUR CHARLEROI			
21:00				
22:00				
23:00				
Commentaires :				

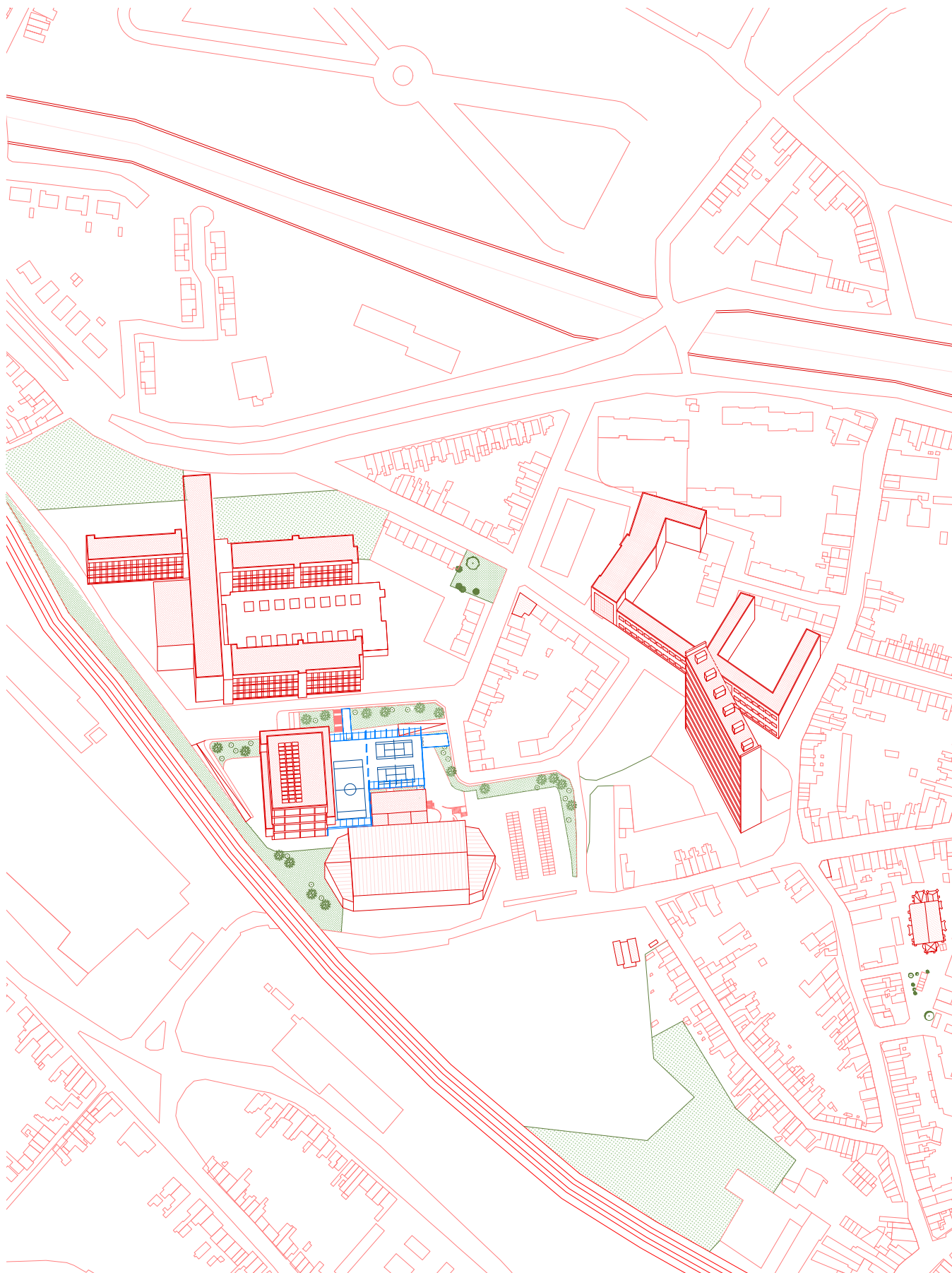
Timetables; overview of the different clubs.



The wooden chalet is currently one of the dance studios.

THE VILLAGE OF ROTON

If you zoom out on the scale of the neighbourhood you notice a lot of brown fields and parking spots. The Spiroudôme can host 6000 visitors and without a good public transport network in this area the only way to get here is by car. So removing those parking spots cannot be done, at least for now. Also because it is just outside the Ring, the neighbourhood feels more like a small village instead of being part of the city. The only thing this 'village' doesn't have is local square. Covering the parking spots in between the Spiroudôme and Hall Omnisports suddenly creates an open space for sports or even other activities. By adding multiple entry ways to the platform it connects the platform to its surroundings and the neighbourhood.



HALVE/DOUBLE

In order to answer the question: “Is it possible to halve the heated spaces and as such decrease the costs while at the same time increase the space for the clubs and open up to the neighbourhood?” Three big actions are done in and around Hall Omnisports.

A first action implies reorganising all the heated spaces on the ground floor. The parking spots are also re-arranged and bicycle parking is added. The boundaries of the original structure are ignored and the spaces are enlarged and relocated without having to remove everything. A central hall around the martial arts room allows people to move freely on the ground floor. It makes the changing rooms easily accessible from all sides. The heated area is now halved and is concentrated entirely on the ground floor.

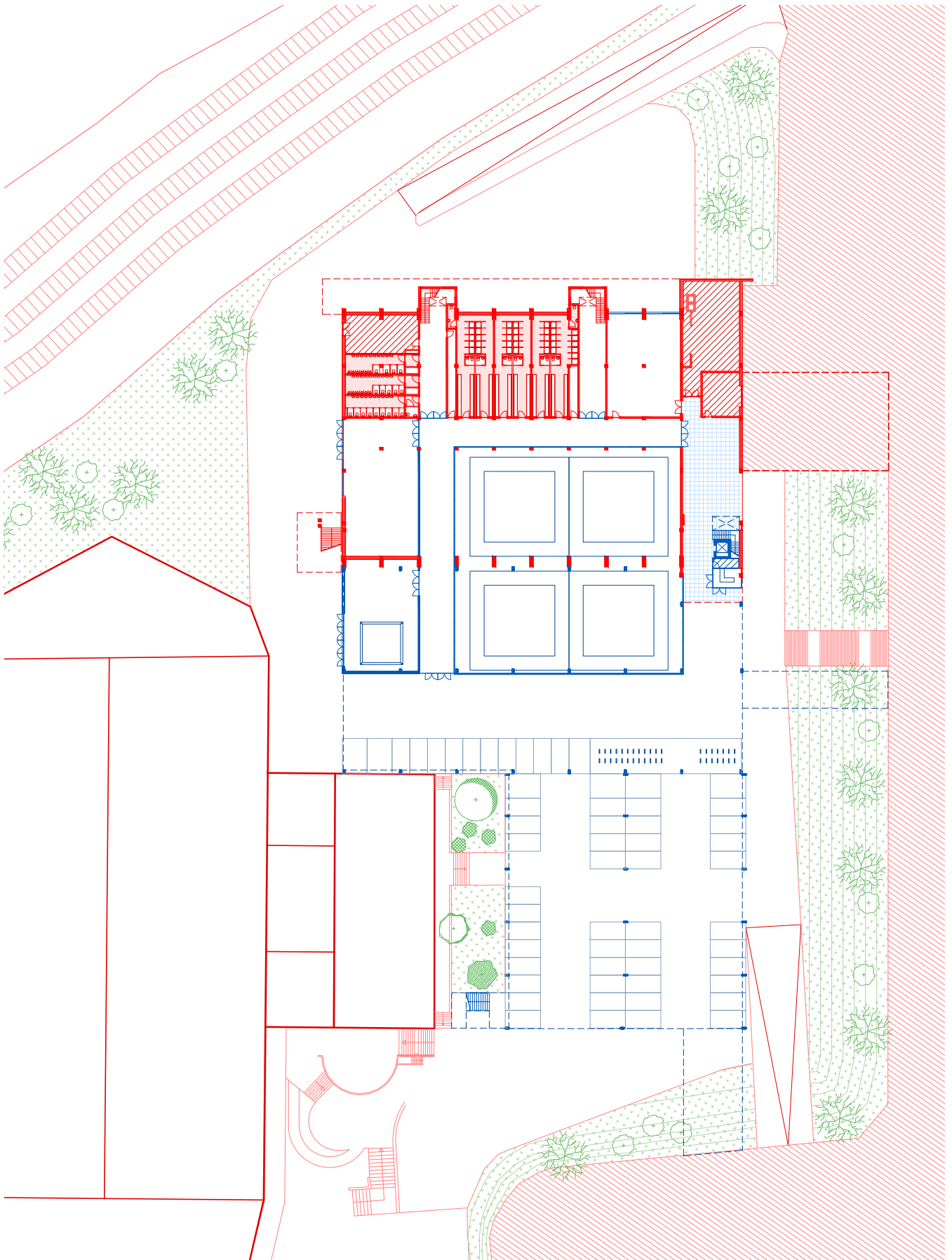


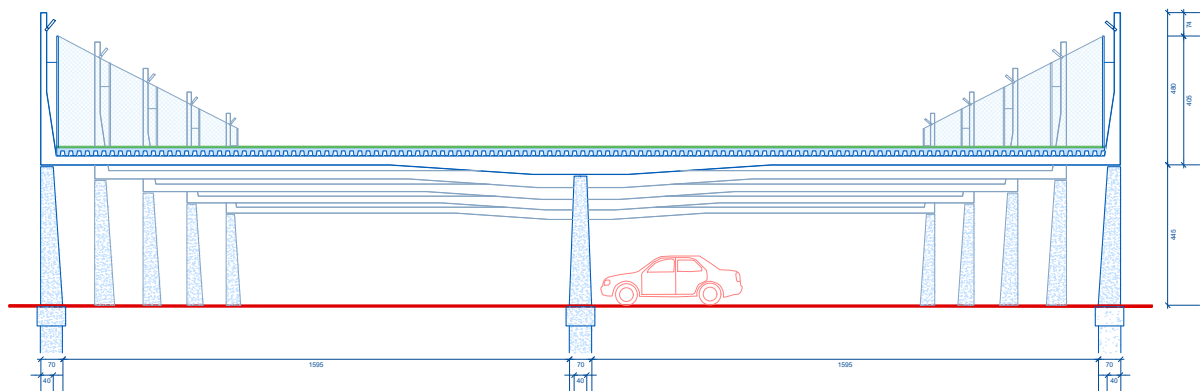
View of the room for martial arts, from the original structure into the new structure



floor +0
1/750

0

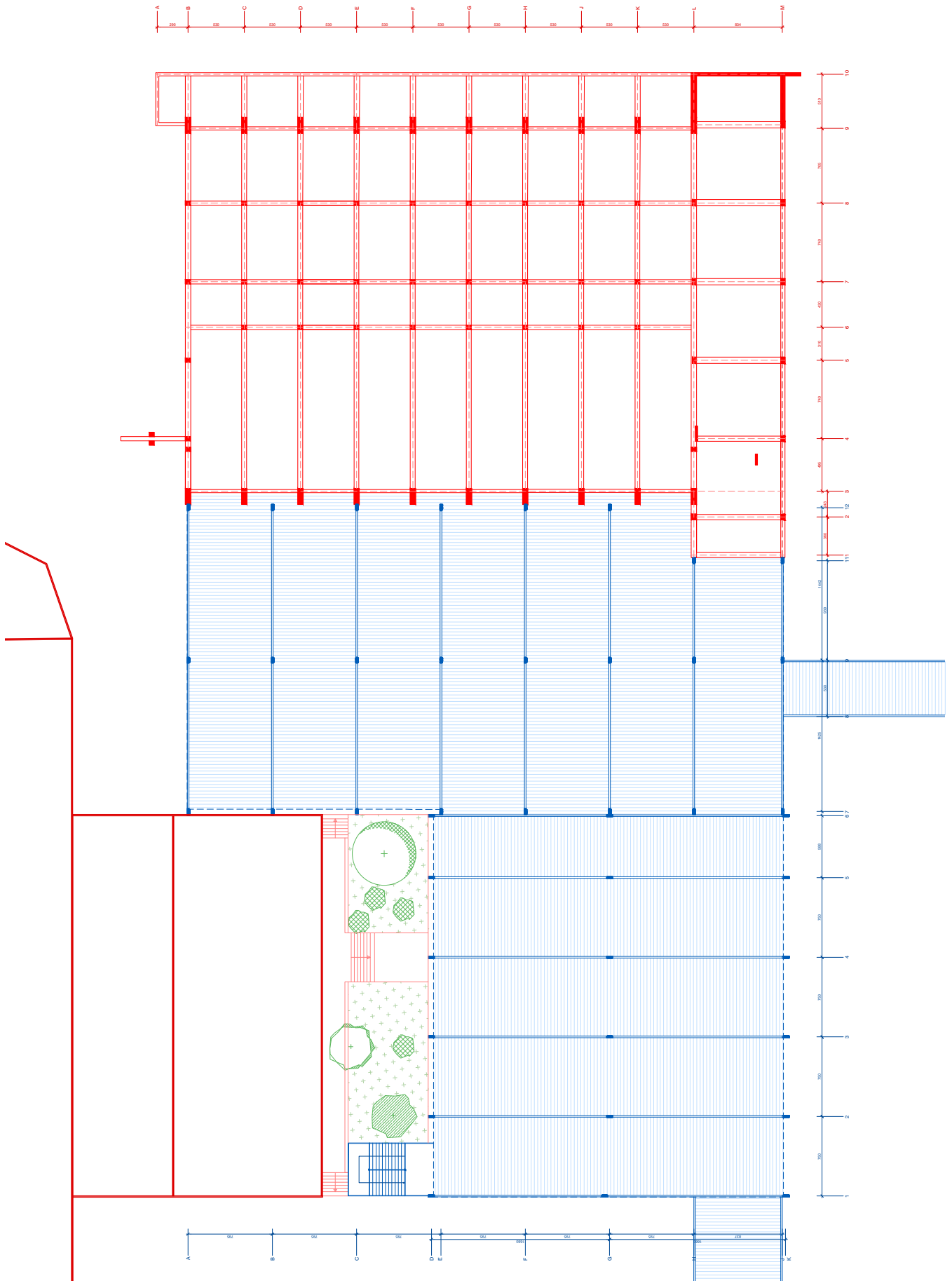




The second action is in the form of a well-considered structure that covers the parking spots. Simultaneously the structure adds new free space for sports fields on top. Concrete columns hold a steel structure, that in his place holds the dovetailed sheet and concrete floors. The structure lies next to the Spiroudôme and is connected with Hall Omnisports. Occasional bridges and stairs guarantee the accessibility from all corners of the site.



plan structure
1/500

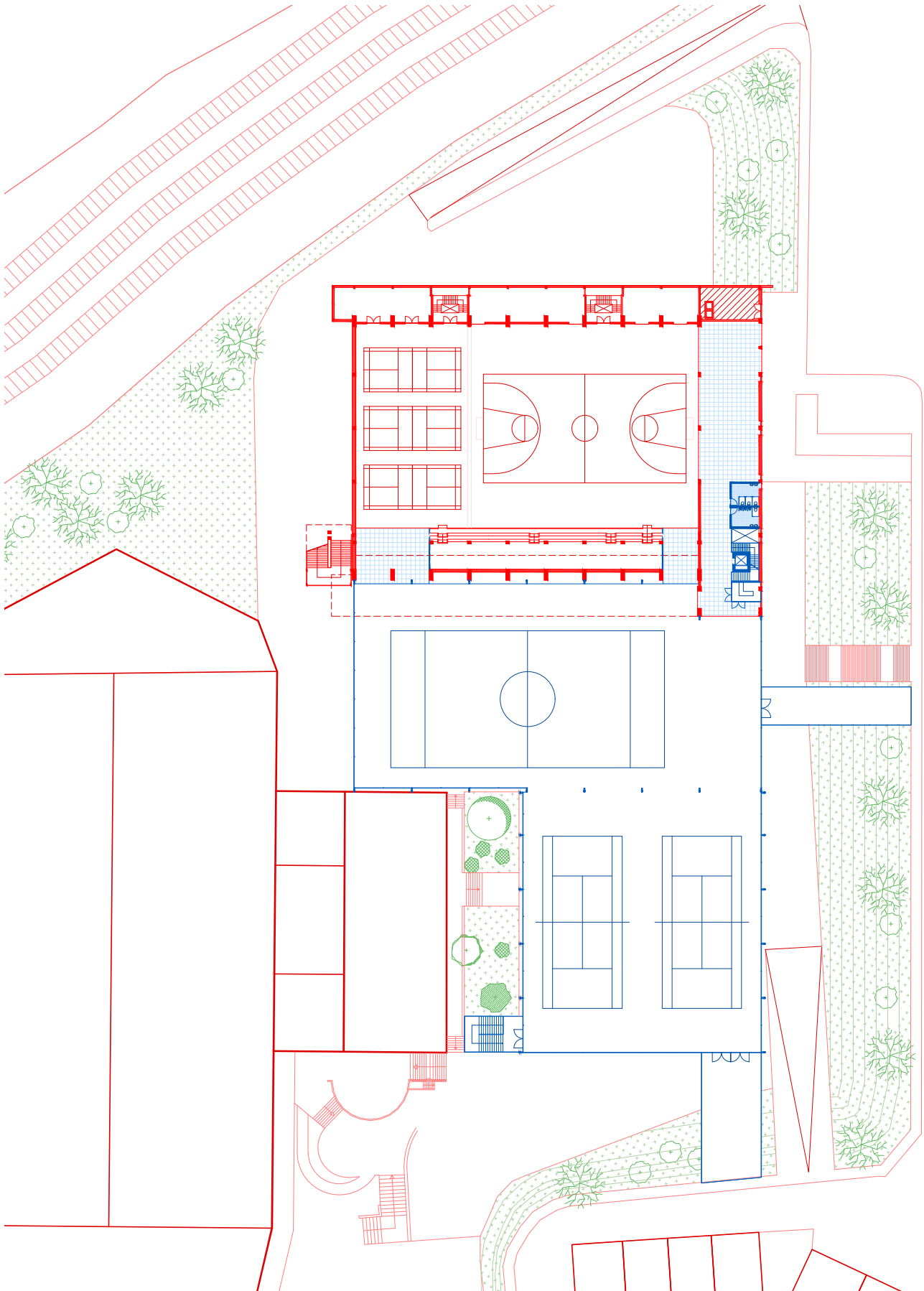


With this new created free space on the first floor, a third action is essential. To continue the open and free flow from the platform, some walls and parts of the tribune on the south facades are removed. The first floor and second floor are opened up. These spaces become outside spaces and are not heated. Elevated floors between the sport fields outside and 'inside' act as buffer areas for the rain. By executing these interventions, the first floor doubles in size without imposing explicit boundaries.



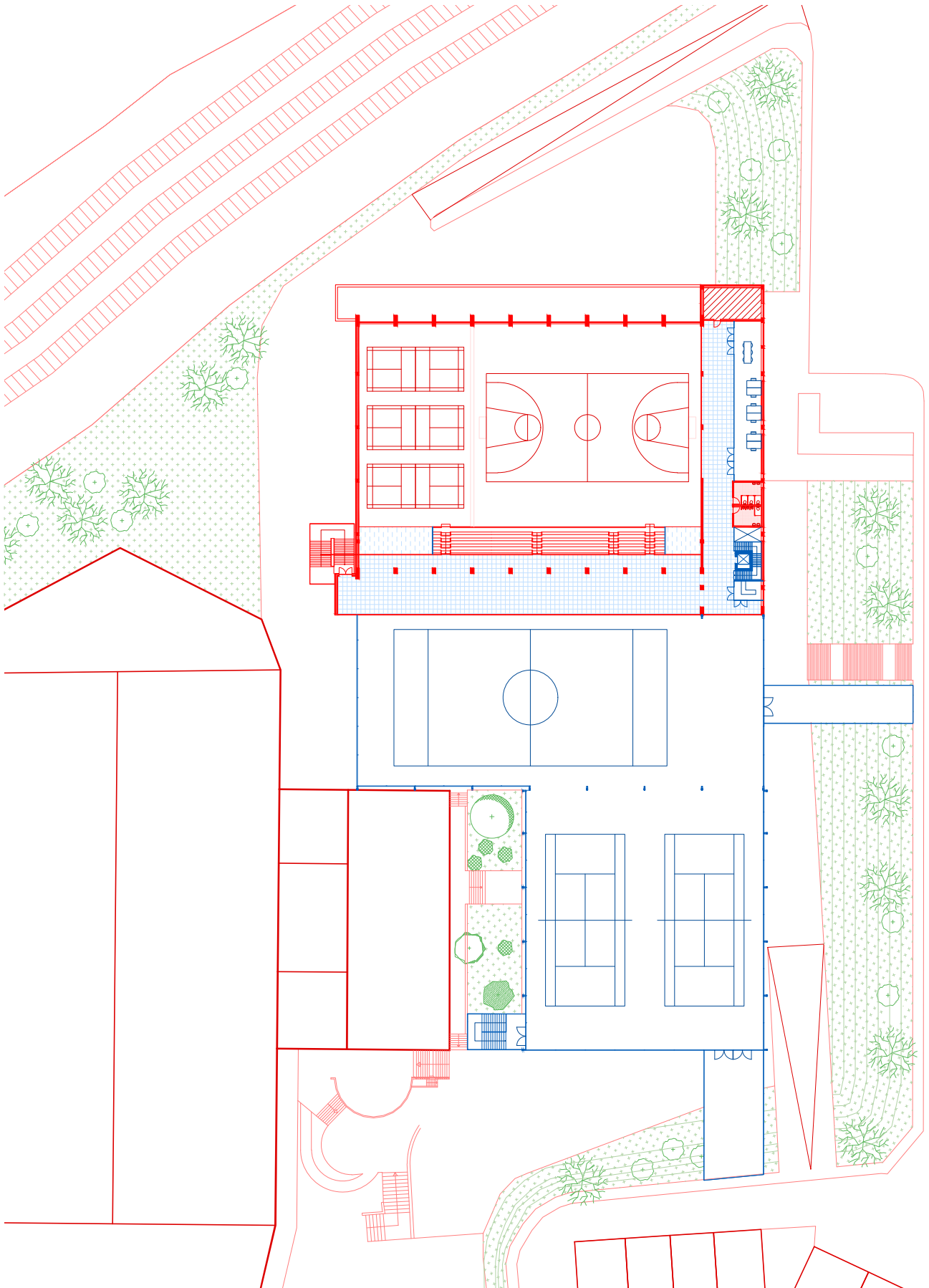
floor +1
1/750

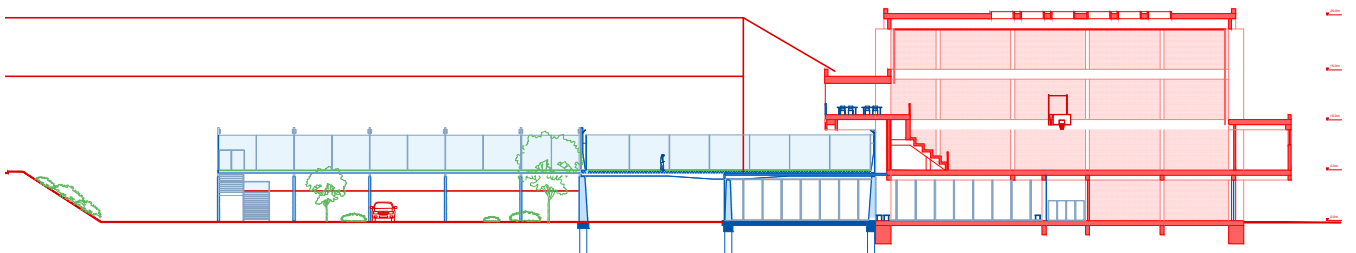
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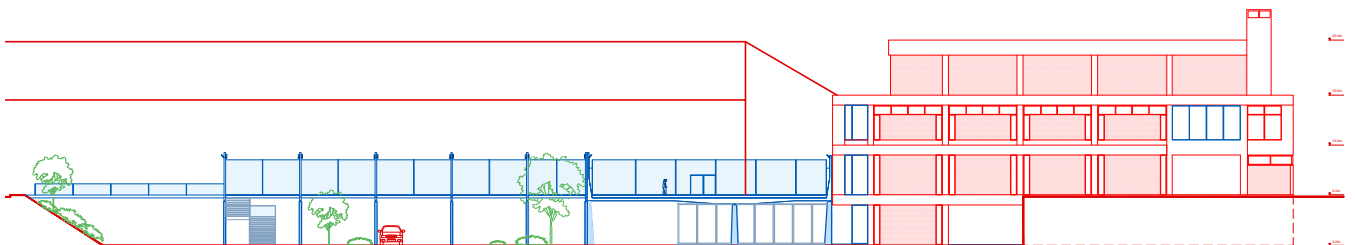


floor +2
1/750

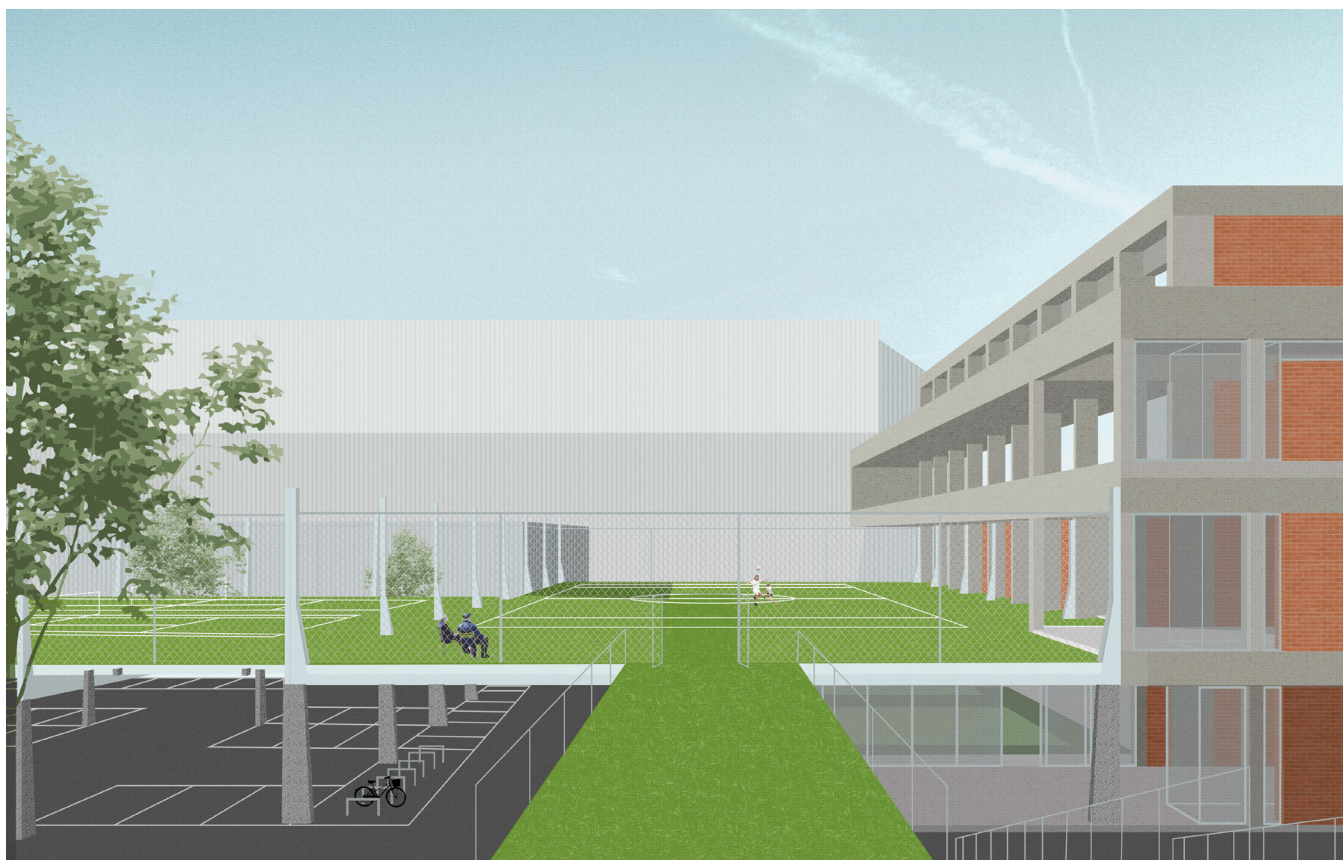




section AA'
1/750



east facade
1/750



View on the new structure.

SEARCHING FOR SPACE

Although the two projects don't have comparable outcomes, the *modus operandi* of the two is quite similar. The terms 'Oversize' and 'Undersize' are often used next to each other. The lack of space was sometimes more interesting for the projects than the overload of space.

In both cases an intense search to specific problems was necessary to develop a layered and coherent outcome. The search to these specific anecdotes was interesting and helped the projects a lot. Intensely visiting the sites, talking to people and researching the context, has resulted in two complete projects. The conversation with Jean Yernaux was a unique opportunity. If I did not have this amazing discussion with the architect who had a big impact on the development of Charleroi, this dissertation would have went on a completely different direction. Although this moment was a one time event I could consider Jean Yernaux not only the architect of these two buildings but also a mentor for the dissertation.

To conclude I would like to say: 'Thank you to all the people involved for making this possible!'

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OVERSIZE CHARLEROI

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