

Entering the Interstices

Research + Design

Cover Photo:

A conceptual representation of the manmade urban fabric, comprising of the built(black), designed voids (hatched) and leftover undesignated interstices (white space)

2022

AR3UA100 Urban Architecture Graduation Studio

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Overview:

The relationship between research and design.

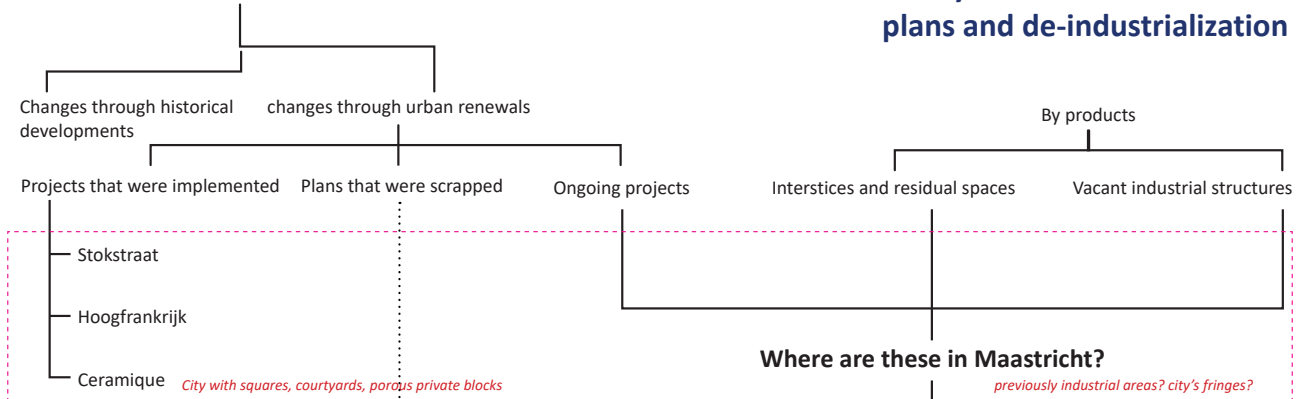
Urban Architecture studio delves into reconfiguring existing urban tissues through architectural interventions, after a thorough reading of the selected place. The graduation studio being site specific, based in Maastricht this year, my research and design project is also rooted and driven by the city itself, it's past and present constructs. The research throughout the process, has been across scales, that influenced the site selection and design decisions at later stages.

The research in the first phase, was at the wider scale of the city, concentrating on the histories of urban developments in Maastricht, especially the renewals that significantly transformed the city, post its flourishing industrial phase. From the many renewals carried out in Maastricht since 1950s, three were chosen for further research and analysis, namely the renewal of Stokstraat in the inner city, the creation of new Ceramique district on a defunct industrial site, and renewal at Hoogfrankrijk. This research gave insights into how the creators of these renewal schemes dealt with what existed on site, both the built and social fabric. It showcased the different approaches to transformations previously adopted in the city, like the preservation of medieval character through restoration of few architectural elements (facades in case of Stokstraat), demolition of derelict industrial structures and rebuilding a new state of the art district (Ceramique) as well as a contrasting approach of carefully dealing with what already existed on site and inserting a complimentary addition that enhanced the built and open spaces of the existing block (in Hoogfrankrijk). The approach adopted in the last precedent (in Hoogfrankrijk) – of careful curation of the existing and the new – was highly inspirational and used as the starting point for design interventions, at the urban and architectural scale.

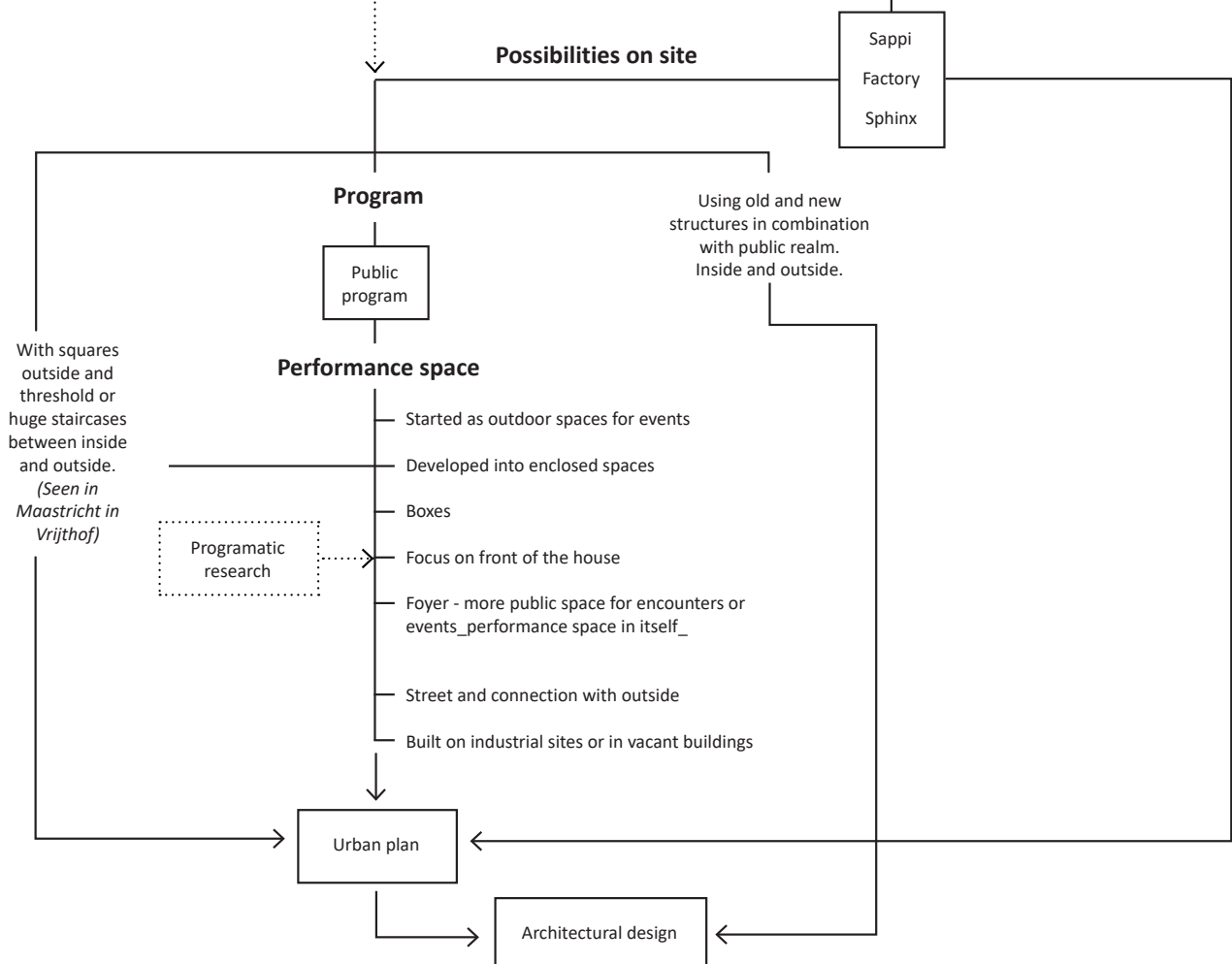
After studying the renewals that were implemented in the past, the research continued

into the renewals currently ongoing, especially the plans for the Northern fringe of the city. An area, with an urban fabric that is completely in contrast with the rest of the city. This former predominantly industrial area has been undergoing de-industrialisation and simultaneous urban transformation in the last two decades. Further research into this, helped understand the ideas behind the ongoing transformations, and the interruptions in these renewals, that have led to the current state of the area which accommodates transformed assemblies as well as unused or abandoned industrial structures, squatted buildings, pockets of undesignated, unused land and small empty spaces in between. This condition of the site led me to conduct brief theoretical research into such residual spaces in urban fabric, termed as Urban interstices, their causes, and their redesign. Following which such interstitial sites and structures were identified in the area, from which the South part of the Sappi factory which is no longer in use was selected for intervening during the urban and architectural design phase. The study of the vision documents for the area, publications about citizen surveys together with functional analysis of the area helped determine the new programs for the chosen site during the urban plan proposal. Based on the previous research, the part of the Sappi terrain that lies along the Bassin, inbetween the big industrial structures of Sappi and the other new developments in the area (Lumiere, Student Hotel and new housing projects) was chosen for architectural intervention. For this site, a public program that could help activate the site, compliment the cultural and public functions around the Bassin and act as a catalyst for future developments on Sappi seemed crucial. Further Research into public/cultural spaces in Maastricht led to finding out about the need for the additional performance venues and extra rehearsal spaces that could strengthen Maastricht's cultural infrastructure as well as give new, upcoming

Maastricht's Urban fabric over time



Theory on discontinuous urban plans and de-industrialization



artists, amateurs, and professionals more space to practice and a platform to exhibit their art. Previous plans for creation of such infrastructure remained unimplemented, but the demand for such spaces still exists. Hence for the site, a performance arts theatre, rehearsal and workshop spaces, a library, and ancillary functions seemed suitable. In the design phase, the research focussed on precedent analysis for understanding the creation

and curation of performance spaces. These included case studies of theatres complexes that carefully integrate old and new structures, theatres that have established strong connections to their urban context and the public realm and their materiality. The research also included studying the (two) theatres in Maastricht and the public realm around it. (both of which are located in the two main squares of the city)



Stokstraat (1950)



**Hoogfrankrijk by Charles Vandenhove
(1993-93)**



Ceramique by Jo Conen (1993-2000)

2. Story of Urban renewals in Maastricht through Precedent analysis

The urban fabric of cities is shaped by “spatial forms and urban compositions, built over time,” influencing the fabric of life within it. Traces of numerous historical occurrences, incidents and developments are embedded in the built and unbuilt landscape of a place. This is seen in Maastricht - a city that fans out on both sides of the river Maas in Limburg in the Netherlands.

Throughout its history, Maastricht has held a prominent place in the Euroregion. This city that began as a crossing point and meeting place on the river Maas evolved into a Roman settlement and then a medieval religious stronghold. By the advent of the 19th century, it turned into one of the first major industrial and manufacturing centres in the Netherlands. During this period, the production of ceramics, paper and glass dominated its economy. All these distinct phases sculpted the fabric of Maastricht, with old roman bathhouses (which existed below the present day Stokstraat), fortifications, a collection of churches with town squares (Vrijthof and Markt), monasteries, medieval houses, and large scale industrial infrastructure, defining the city's collective skyline.

Soon after, the post-world war era saw the decline of industries along with a housing shortage. This resulted in a shift in the economy with a growing interest in service, science, and education; expansion of the previously fortified city with new suburbs planned on its periphery; as well as reforming the old city into a place that could appeal to the Euro region and beyond. This translated into the city slating several renewal schemes and conceptualising ambitious proposals for uplifting the different districts of the city. Some of these renewals were implemented, while some remained unrealised, and a few are still on going. From them, three precedents, belonging to three different time periods, each representing a distinct approach to renewal and resulting in

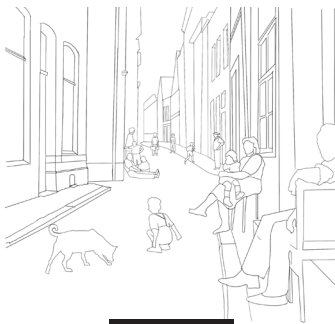
significant changes in the city's composition were chosen for the research.

Each of these renewals aimed to impart a specific identity to the place of intervention or enhance qualities of the block; to do so, the creators, planners and authorities of those times dealt differently with what existed on site – both the urban/architectural and social constructs.

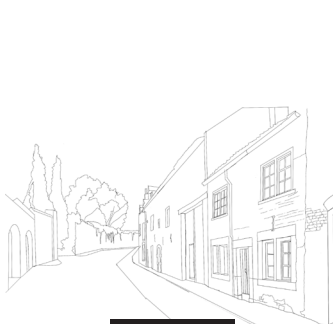
The first Urban renewal in Maastricht at Stokstraat (1950s) aimed to revive the inner city's medieval character. It did so by preserving the ornamental facades lining its street; but rest of its shabby, cluttered inner core was scooped out to make way for a quite courtyard that sits on remains of an old roman bathhouse. During this renewal, the worker's community that inhabited the block was relocated and their houses were replaced by high end stores.

Another dense block in the city's north west, at Hoogfrankrijk, was renewed in 1993 by architect Charles Vandenhoove. Here, the approach for renewing the existing was more modest, keeping the peripheral structures intact, and inserting a new social housing structure within it. The added structure replaced old garages and storage spaces in the block's centre, but respected and was responsive to the immediate context, creating a series of gardens and public courtyards between the existing and new, thus enhancing the collective and public realm in, around and within the project.

On the other side of the Maas, the former industrial site of Societe Ceramique was chosen to be renewed for the creation of a new district with high end residential and commercial spaces. For this, a highly ambitious masterplan was devised by Jo Conen, and numerous renowned architects from across Europe were invited for the architectural design of several buildings in the



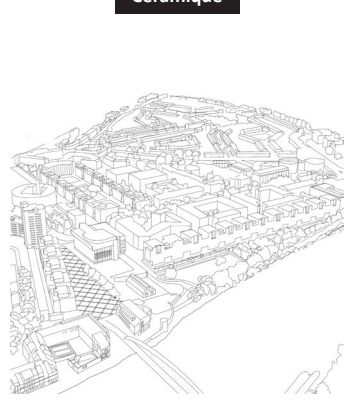
Stokstraat



Hoogfrankrijk



Ceramique



Changes in the Urban fabric and its effects on social life after renewal (Author- group research, 2021)

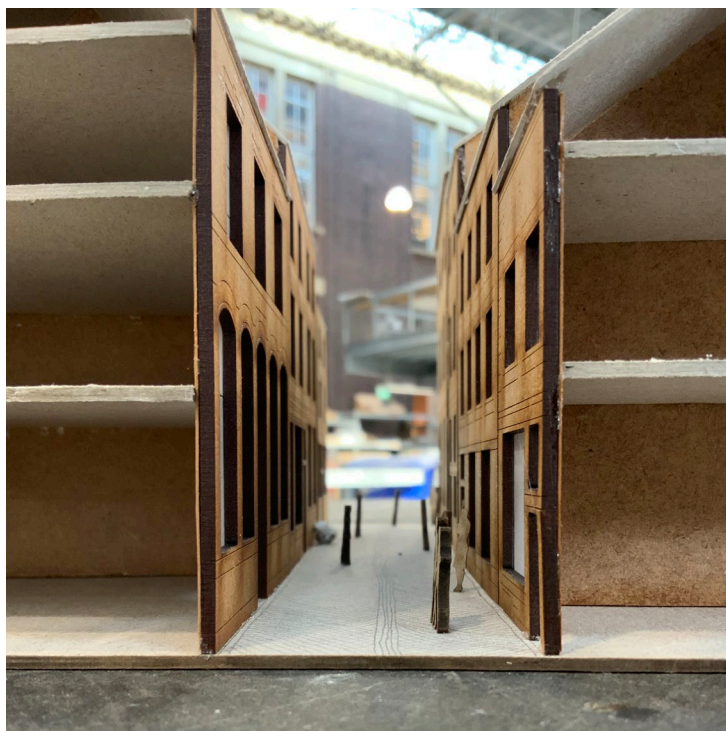
district. The aim was to strengthen the identity of the place. For the new district, most of the derelict industrial infrastructure was wiped out, and the site reconstructed with new buildings. The former industrial character of the district was taken out. But some architectural projects, within the masterplan, tried to emulate and retain the scale of the former factory structures in their design. One of these was the Stoa, a 300 m long residential building by luigi snozzi, the character of which resembles the factory and city walls.....

In each of the precedents, the urban restructuring enhanced the public realm in and around the block, establishing a relationship between the built and open environments. At Hoogfrankrijk, Charles Vandenhove, managed to add collective gardens and a publicly accessible square, while still maintaining the density of the residential block. While Snozzi, incorporated porous public passageways in the Stoa, enabling connectivity

and transition between the two sides that surround the long building – the street and park/promenade. In Stokstraat, the dense block was carved to create a hidden square, which showcased the traces of what once stood on the site as well as house secondary entrances for its current inhabitants.

While the renewals at Stokstraat and Ceramique were successful in creating architecturally impressive structures and attracting recognition, the existing social dimensions on site were sidelined in the process. Whereas at Hoogfrankrijk, the social constructs, collectivity, and the existing fabric of the area of intervention were all deemed equally important and carefully articulated in the renewal process.

Over time, through these new developments, and through other urban renewals, the previously fortified city has transformed into the city it is now.



Stokstraat (Model and Viewpoints)

"A start was made in 1957 with the restoration of 6 buildings, which was quite difficult, but many experiences were gained. But you have to understand, it certainly took a lot of courage to start clearing houses in 1957, when there was a particularly large housing shortage."

Jacques van de Venne,
director of public works

"In principle, you had to move a thousand people. If you look back on it, do you think that operation was successful? No, definitely not. The operation was not done systematically, which also resulted in relocation difficulties which caused a delay. If we had to do it again, we would do it differently."

"I look back on it with great satisfaction, with pride that this has been achieved."

Bob Sweering,
director of public works

"[...], it's such a permeable play of spaces."

Ninke Happel, architect



Hoogfrankrijk (Model and Viewpoints)

"What I think is a good project is when they combine the private interest of good housing with the collective interest of city, non-privatized space."

"You have just the small kitchen windows and the door, and together they make a repetition, they make square walls, but in projects nowadays you see huge window glass facades, simple reason that is easy to build, but the two (private and collective) are not in balance, because you either live in a square fully, or the square comes into your house fully. "

"The time is changing, so society is changing, from private ownership to sharing. Keeping collectivity also means that collective can decide for a change."

- **Ninke Happel**, architect



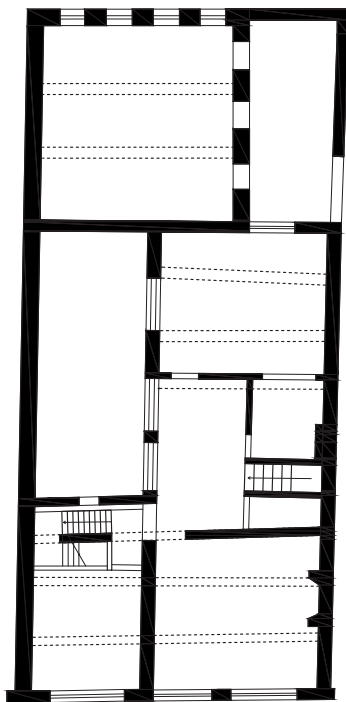
Stoa, Ceramique (Model and Viewpoints)

"I still remember that was the place to be."

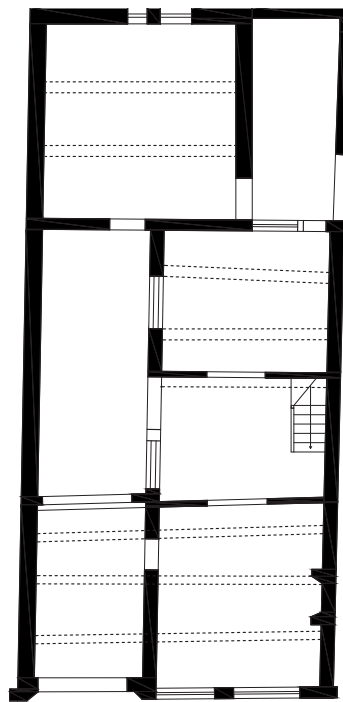
"The whole Ceramique is based on the more formal relation between the city and the human being. We make huge buildings, and by making buildings, we make the city."

"Look at this enormous scale. It's quite something that you dare to propose something like that."

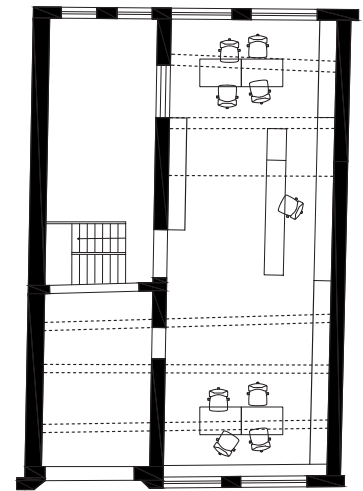
Ninke Happel, architect



Upper Floor Plan
(1950s)



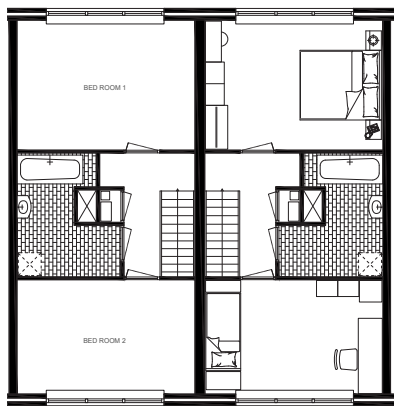
Ground Floor Plan Stokstraat 24
(1950s)



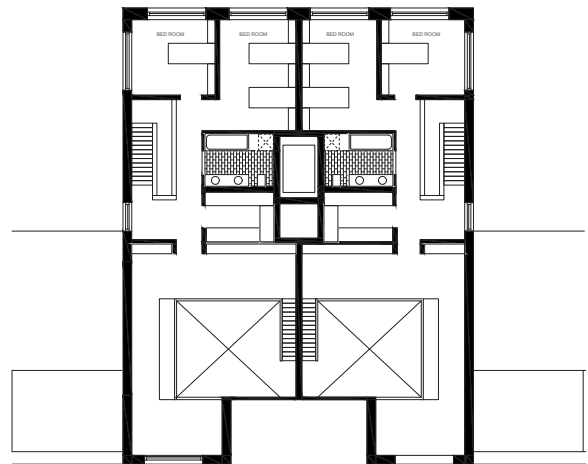
Ground Floor Plan

0 1 5 m

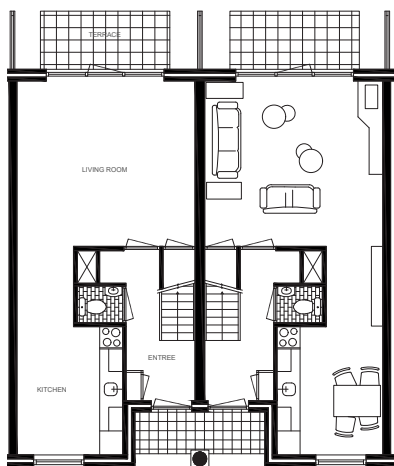
Floor plans of individual units in the chosen precedents



First Floor Plan

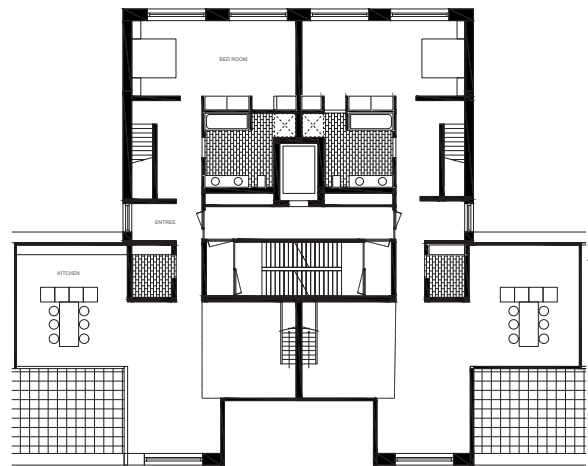


Upper Level Plan



Ground Floor Plan
(apartment no.s 1- 8)

0 1 5 m



Lower Level Plan

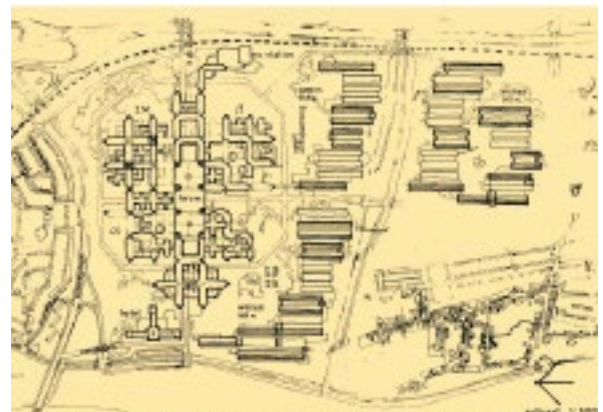
0 1 5 m

The apartments split across two levels in Hoogfrankrijk

Typical apartment module in Stoa



A car-centric plan by Jokinen (in 1967)



Campus Maastricht by Calatrava (2004)



Las Vegas on the Meuse

Urban Renewal Projects that were not implemented

Apart from these three renewals, many other renewals and development projects were envisioned for the city, some of which were never realized.

A car-centric plan by Jokinen (in 1967) proposed the construction of wide ring roads on the city's fringes, replacing the industrial infrastructure and these vehicular routes culminating in the inner city. Another grandiose plan was proposed in 2004 for creating a completely new university district in Randwyck, including an extravagant university campus and housing by Calatrava; but ultimately vacant buildings in the area were repurposed to house the university. Plans for the development of the Maas waterfront in Las Vegas style with casinos and hotels were also proposed but later scrapped.

Some of the unimplemented plans could have greatly impacted the composition of Maastricht and changed the experience of the city, as well as its identity.

expanding the city towards the north west, with new developments focusing on around “living, working, recreation, and study”.

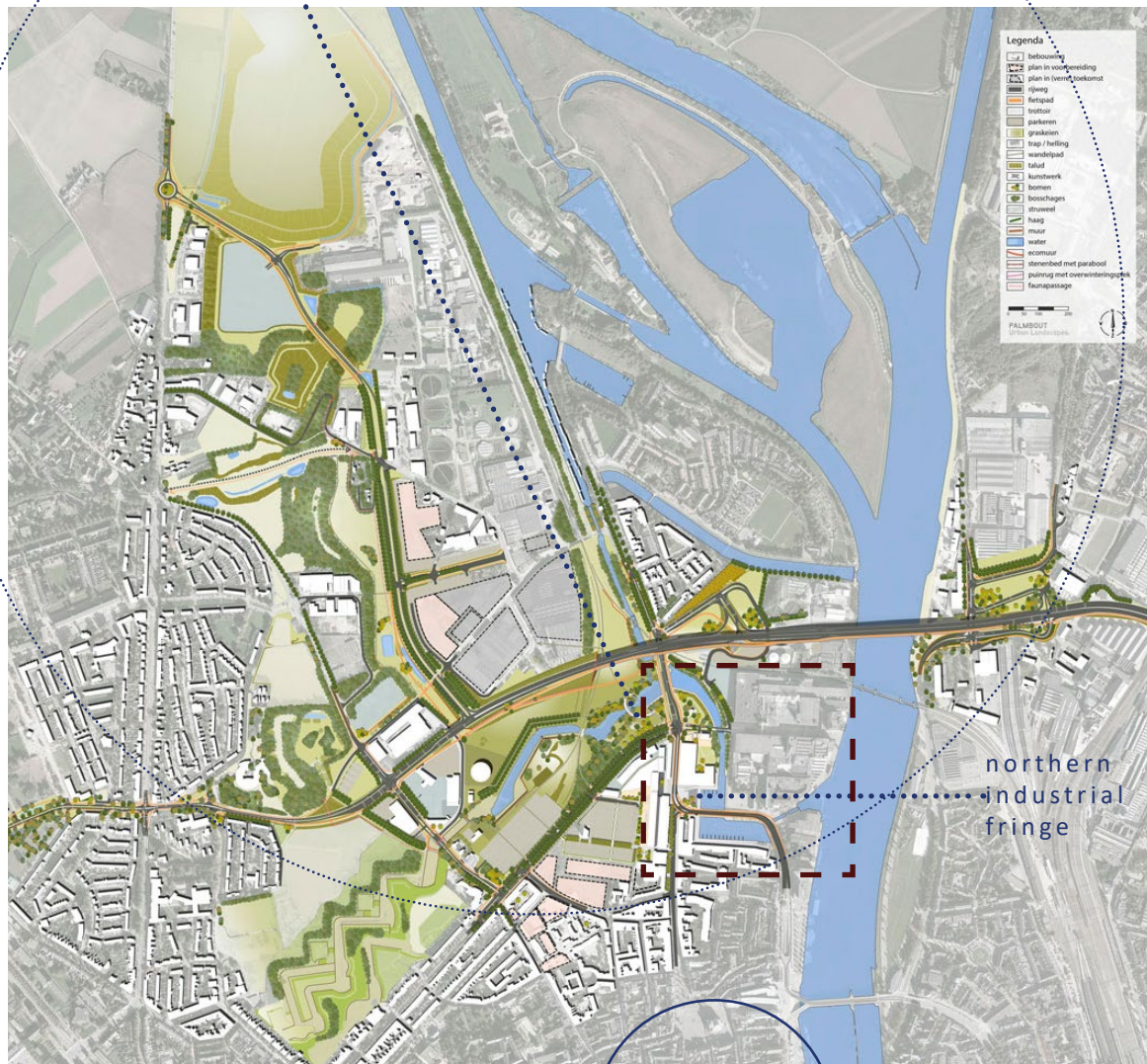


Image source, Belvedere

Inner city

On going Urban Renewal Projects

The process of renewing the city and its immediate outskirts is taking place even today.

The most recent and largest renewal plan for Maastricht - The Belvedere plan – aims at expanding the city towards the north west, with new developments focusing on “living, working, recreation, and study”. Between these upcoming mixed use developments on the outskirts and the inner city, lies the northern fringe which housed factories for Sphinx and Sappi around the Bassin, an inland water port.

But in the last few decades, this northern fringe of Maastricht has witnessed the partial or full closure of its factories, and simultaneous initiation of new development schemes. The city envisions this area around the Bassin as an expansion of its city centre, set within its industrial fabric.

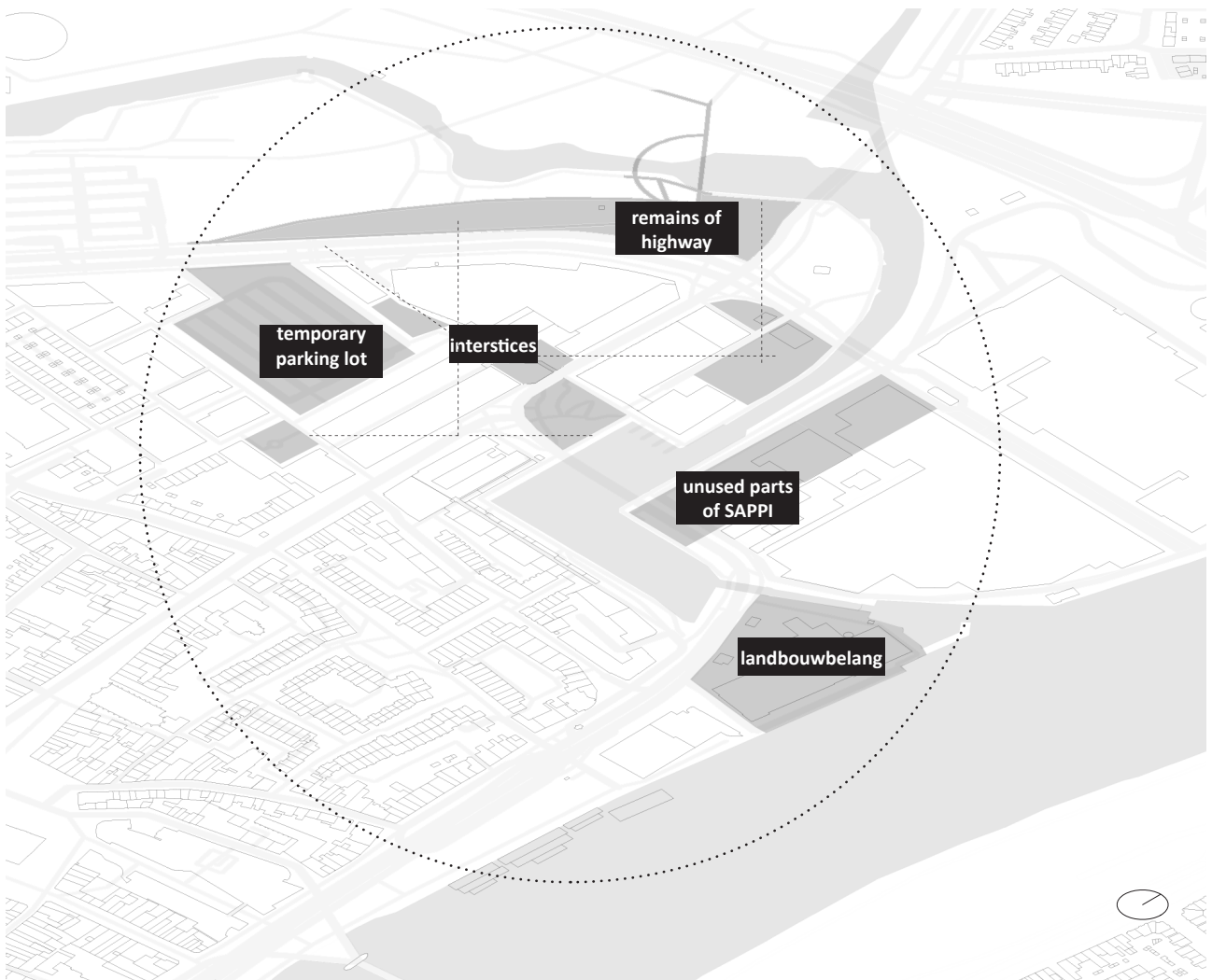
Previously the other industrial zones in Maastricht were renewed differently, with not much regard to the industrial infrastructure. Whereas, for renewing this area, the emphasis has been on identifying the value of the industrial heritage and working out transformation plans that strive to use and adapt the infrastructure that exists.

However, the plans for its renewal have been drawn and redrawn since the 2000s and its implementation has been discontinuous and interrupted by several factors like the economic crisis etc. This has resulted in some interstices, defunct infrastructure, and abandoned buildings in its urban fabric

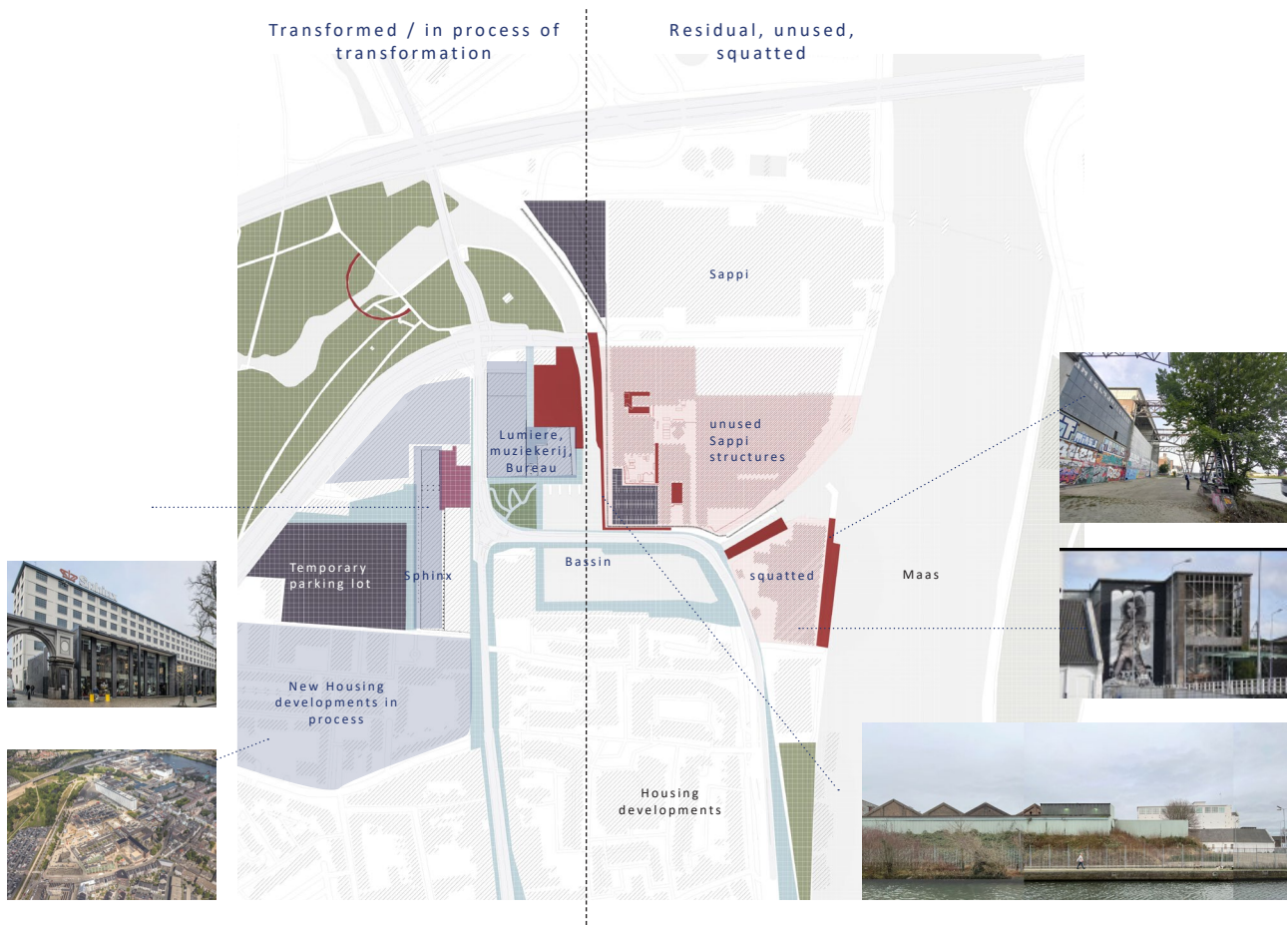
Some of these are the small interstices, undesignated land parcels, large scale defunct infrastructure like the part of the highway near Boschstraat/ Frontensingel and the space around it that remained after redirecting the A2, the temporary parking lot behind the Eiffel building, the Landbouwbelaag and area that encircles it

including the riverfront, and the parts of premises of the SAPPI factory oriented towards the Bassin that are no longer in use. Some of these spaces remain undesignated, functionless, accessible, while some have been appropriated or have temporary use.

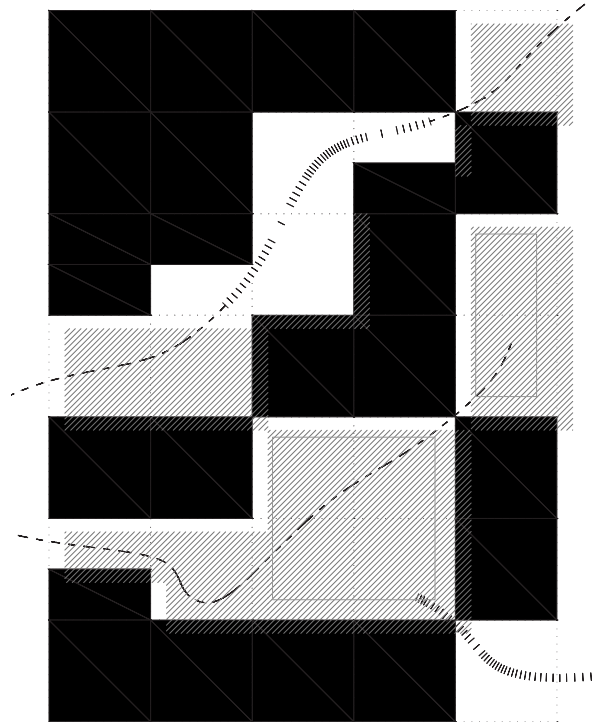
As these spaces lie interstitial between already active functional places in the city and are traces of the areas urban history and industrial past, they inherit value in them that can be enhanced and developed. They could be revitalised to support and suit the locals, their needs, and the immediate context.



Map showing interstices and derelict structures identified till now in Sphinxkwartier (Author, 2021)



Map showing simultaneous transformation, urbanisation and de-industrialisation in the area



“... an empty and mostly invisible stage, not to be entered if one does not want to risk being labeled as out of place. However, this frame must be constructed upon an actual and recognized lack of function of the interstice and [derelict]. There should therefore be a collective and observable effort to establish and maintain this frame.” (Tonnelat, 2008)



Aldo van Eyck's playground in an interstice in Dijkstraat in Amsterdam. (Stadsarchief Amsterdam, 1954)

3. Notion of Interstices

In the urban discourse interstices, are seen as “... empty functionless spaces... in the process of decay, recycling and renewal”.

The urban fabric of cities is shaped by “spatial forms and urban compositions, built over time,” influencing the fabric of life within it. This fabric or physical texture of urban areas - cities and their fringes – comprises various natural features, built and unbuilt voids, both planned and unplanned. Unbuilt voids are both the space deliberately left by carving out squares, piazzas in a city, or public passages, and courtyards in buildings as well as the leftover undesignated interstitial space, spaces in, around or enclosed by built forms, vacant land parcels, abandoned or derelict-defunct infrastructure.

Cities that flourished during industrial times, after the closure of its factories face the issue of abandoned infrastructure.

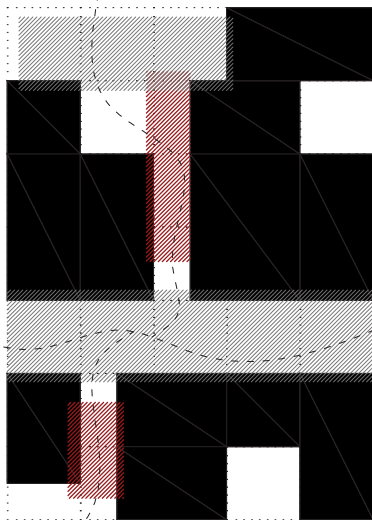
In contrast to a city’s carefully articulated fabric, urban interstices are the fragments that remain unused after loss of its former function, or are left undesignated, while awaiting implementation of an envisioned renewal. They are the leftover parcels of land that lie between other places that possess stronger identity and functionality and considered less potent compared to what lies besides it.

These spaces left out – accidentally, intentionally, and designedly – in the urban fabric, all play a crucial role in shaping its overall environment and experience. The deliberately designed spaces often serve as shared civic places, transitions between public and private, connectors and thresholds between the inside and outside, and extensions of the interior. The permeability of these spaces is knowingly and unknowingly appreciated. On the contrary, as Andrea Mubi Brighenti – the editor

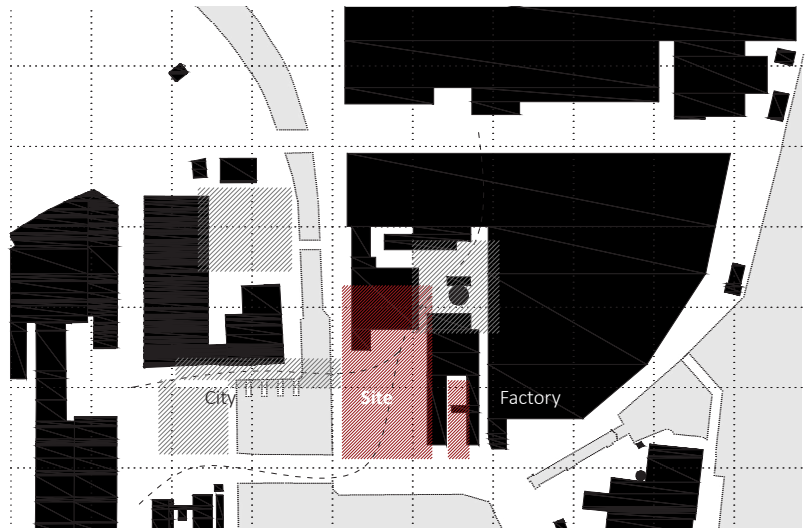
of ‘Urban Interstices: The Aesthetics and the Politics of the In-between’ emphasises, leftover interstices “imagined essentially as vacant lots, terrains vagues or decaying ruins” (Brighenti, 2013, p. xvi) have negative connotations attached to them. However, “[they] can take a more positive aspect [when seen as] rooms for manoeuvre or [spaces with] possibility for action...” (Levesque, 2013, p. 23)

These interstices are often results of discontinuous urban plans, rapid urbanisation, and have become common sights in urban areas in the process of transformation. Often, abandoned or derelict-defunct infrastructure are by-products of de-industrialisation, facing loss of intended function and value, or are under threat of demolition, or pending redevelopment. Nonetheless, as “place making always starts in the in-between” (Kärholm, 2012), such interstices can be “usefully conceptualized as a form of spatial production through transformation.” (Brighenti, 2013, p. xviii)

The network of playgrounds that Aldo van Eyck designed on derelict leftover spaces in post-war Amsterdam serves as one of the early examples of sensitive reforming of interstitial space that was appropriate for the neighbourhood while having a quality to be appropriated. This resulted in a network of shared public places (playscapes in this case), at the neighbourhood level, dispersed throughout the city. These playscapes in the interstices became “points where the seeds of community were sewn, where the city was not to be viewed or consumed but experienced.” (van den Bergen, 2002) As most of the playgrounds were temporary interventions, and are long gone, this project also entails a dimension of temporality, often associated with repurposing leftover, second hand, in-between or vacant places.



**Small empty
space that stands
between**



**undesignated space
surrounded by spaces more
institutionalised, economically
and legally powerful, have
stronger identity**

Conceptual interpretation: Site as an interstice between the city and the factory

Such leftover interstices and structures have the potential to be valuable for neighbourhoods, if articulated thoughtfully. Careful articulation of the leftovers in the urban fabric into spaces that can become meaningful for the neighbourhood/urban area also resonates with the studio's theme of Gleaning / Glaneurs, Glaneuses. The term Gleaning which was traditionally associated with gathering leftover crops or "the second harvesting of the land's produce by ... those who had no land of their own" (Gunderman, 2014) is now more loosely interpreted and associated with collecting, picking up and revaluing all kinds of objects – forgotten, unused, left out, imperfects or seconds, as seen in Agnes Varda's film 'The Gleaners and I'. Such small leftover spaces and left out structures can be gleaned from a city, in which value can be reinstated through use, reuse, revitalisation and reprogramming.

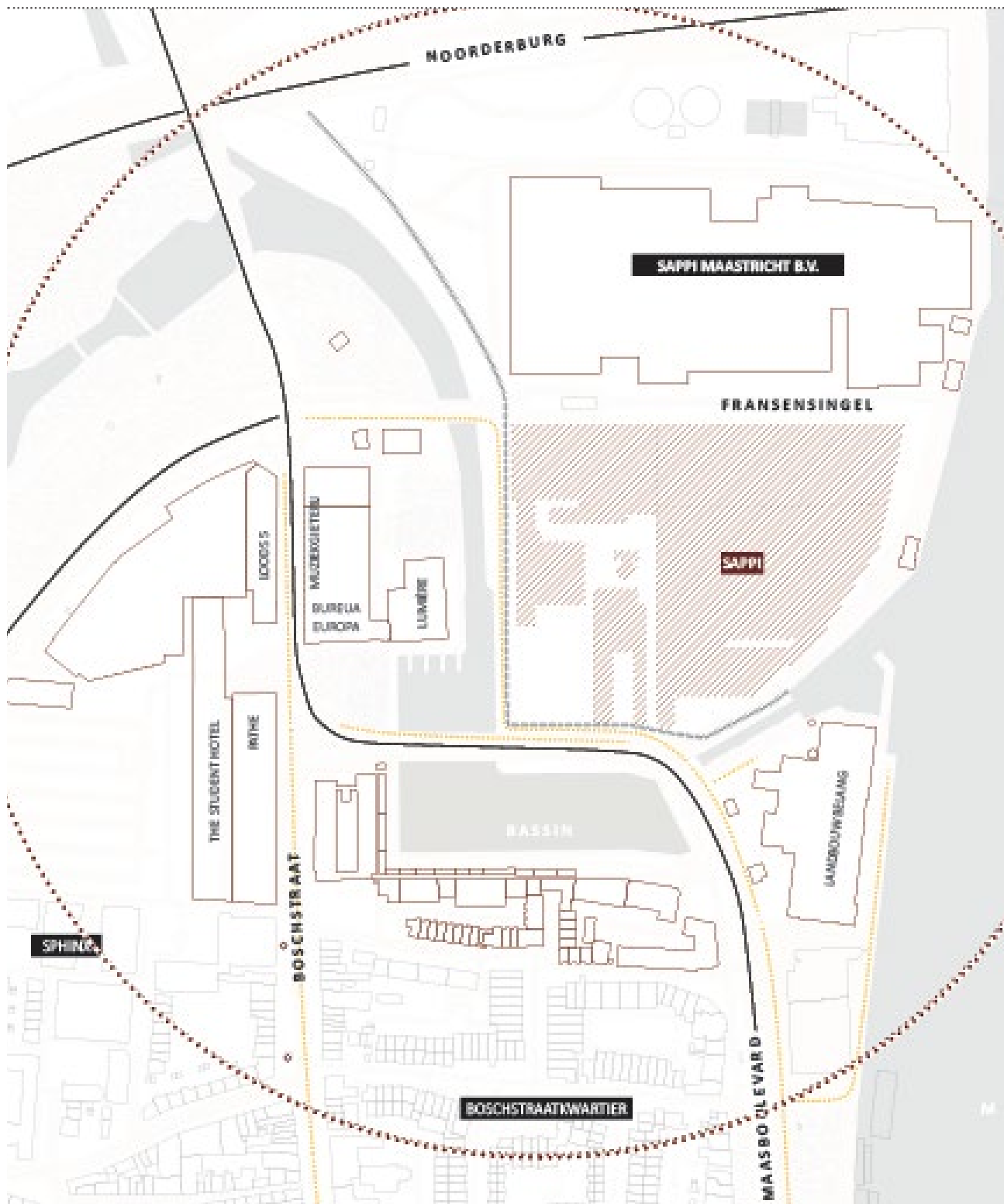


The Gleaners by Jean-François Millet,
1857

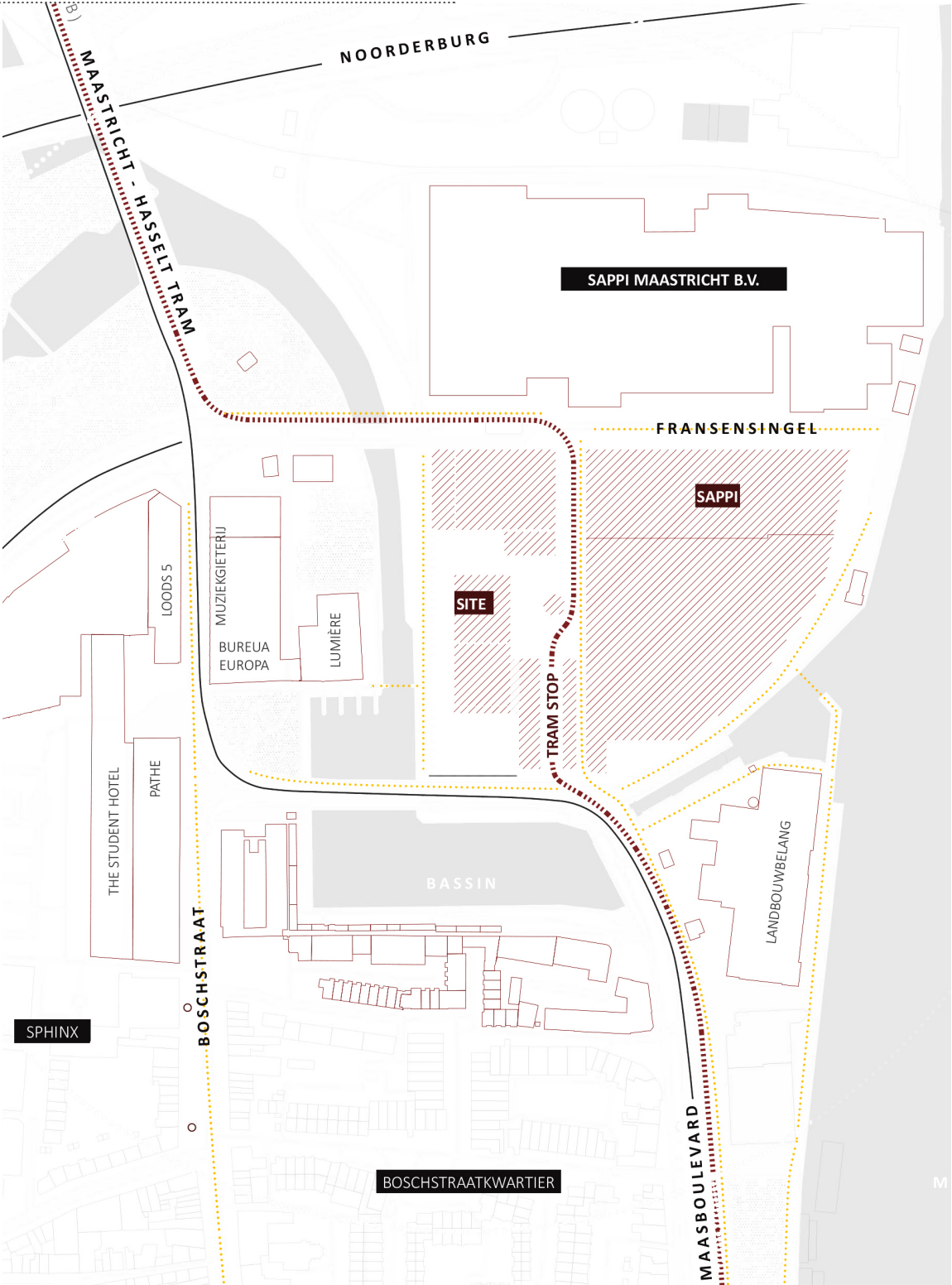


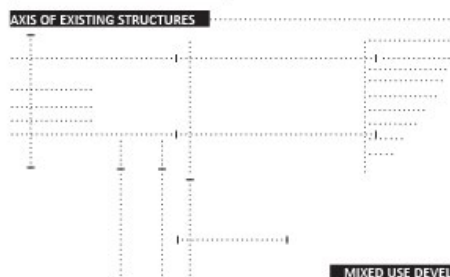
4. Site of Sappi for Urban restructuring



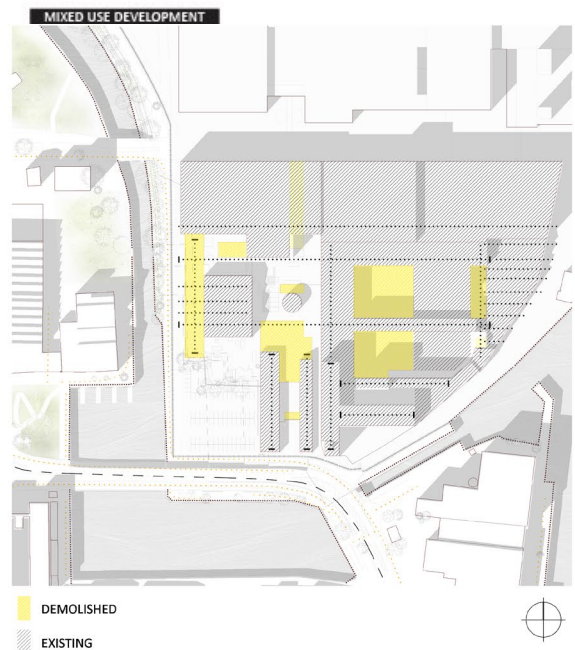
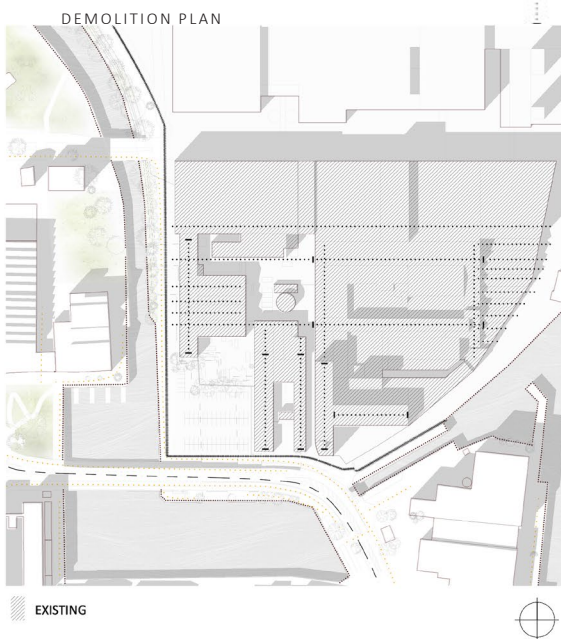


Restructuring the Flows around/through site

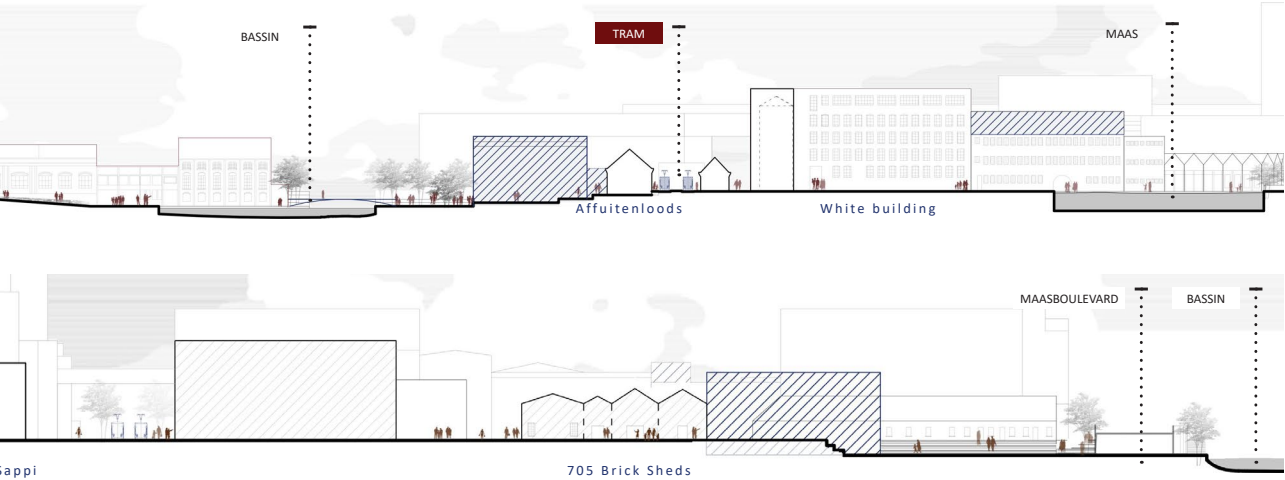




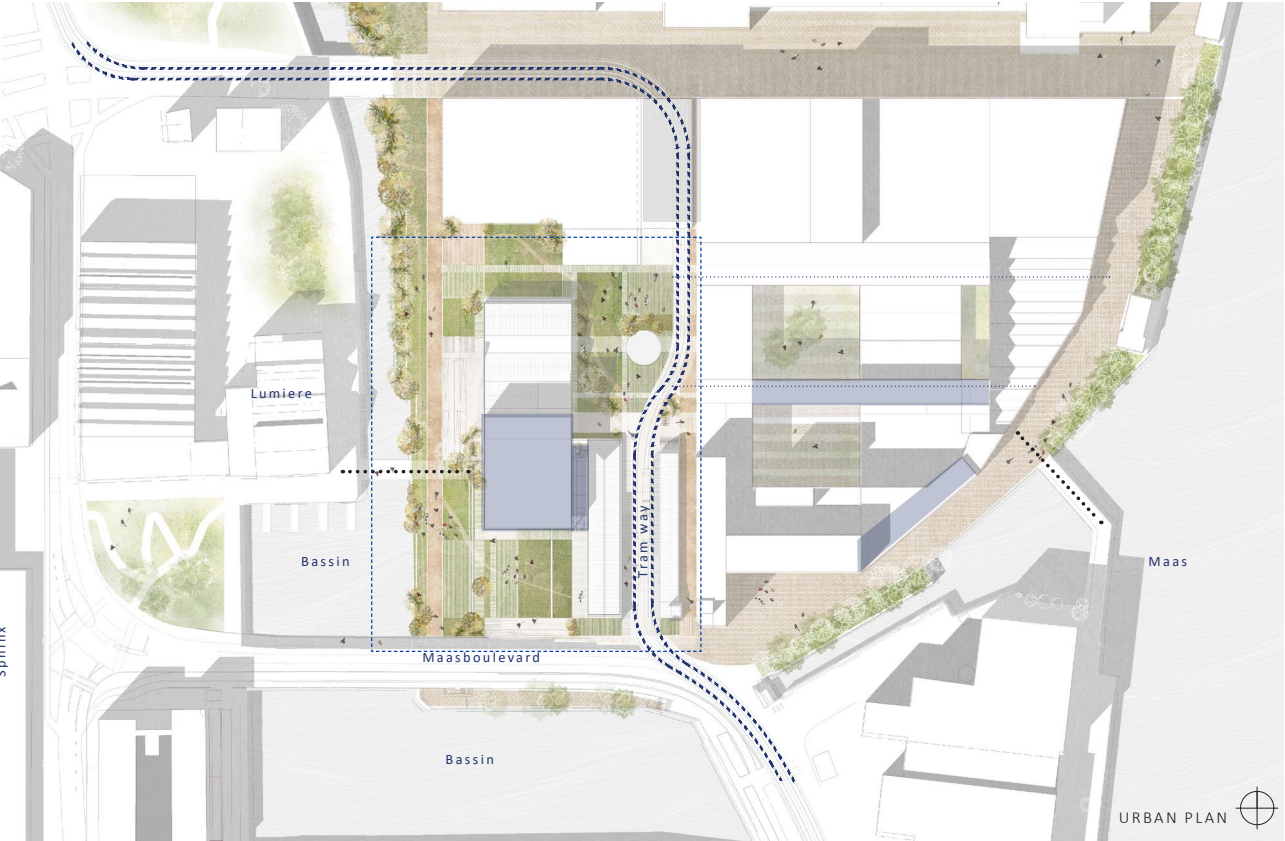
POSITION FOR URBAN RESTRUCTURING

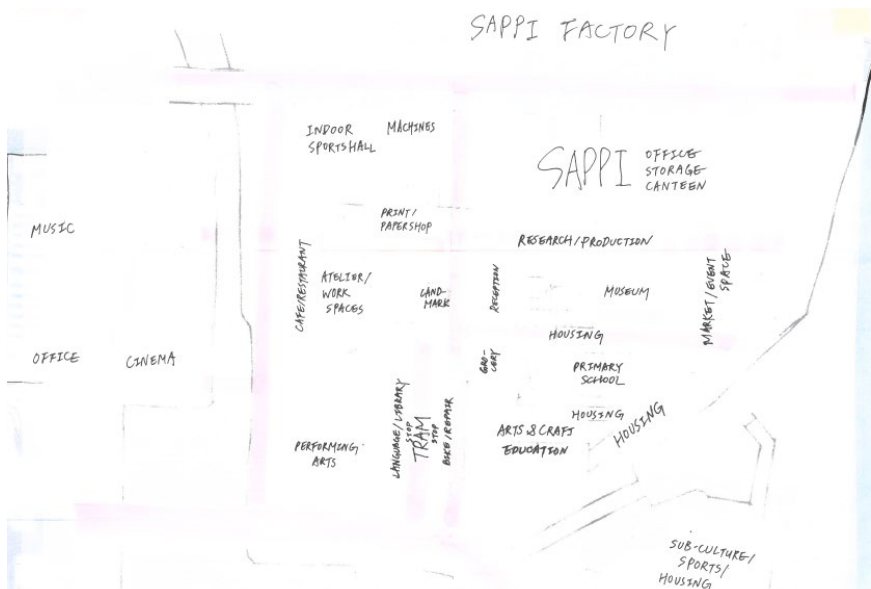


Restructuring the Sappi terrain

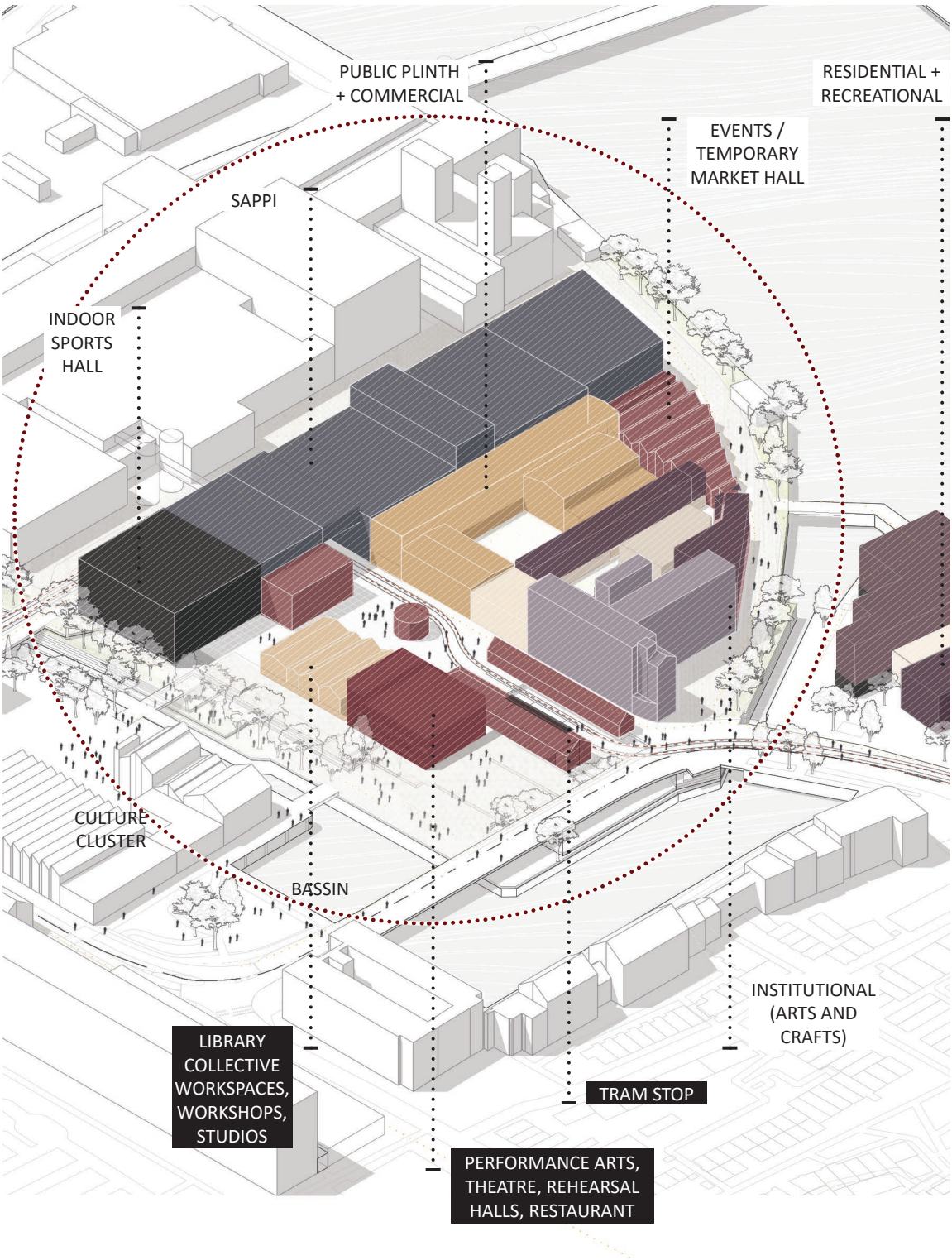


SITE SECTIONS SHOWING ADDED VOLUMES

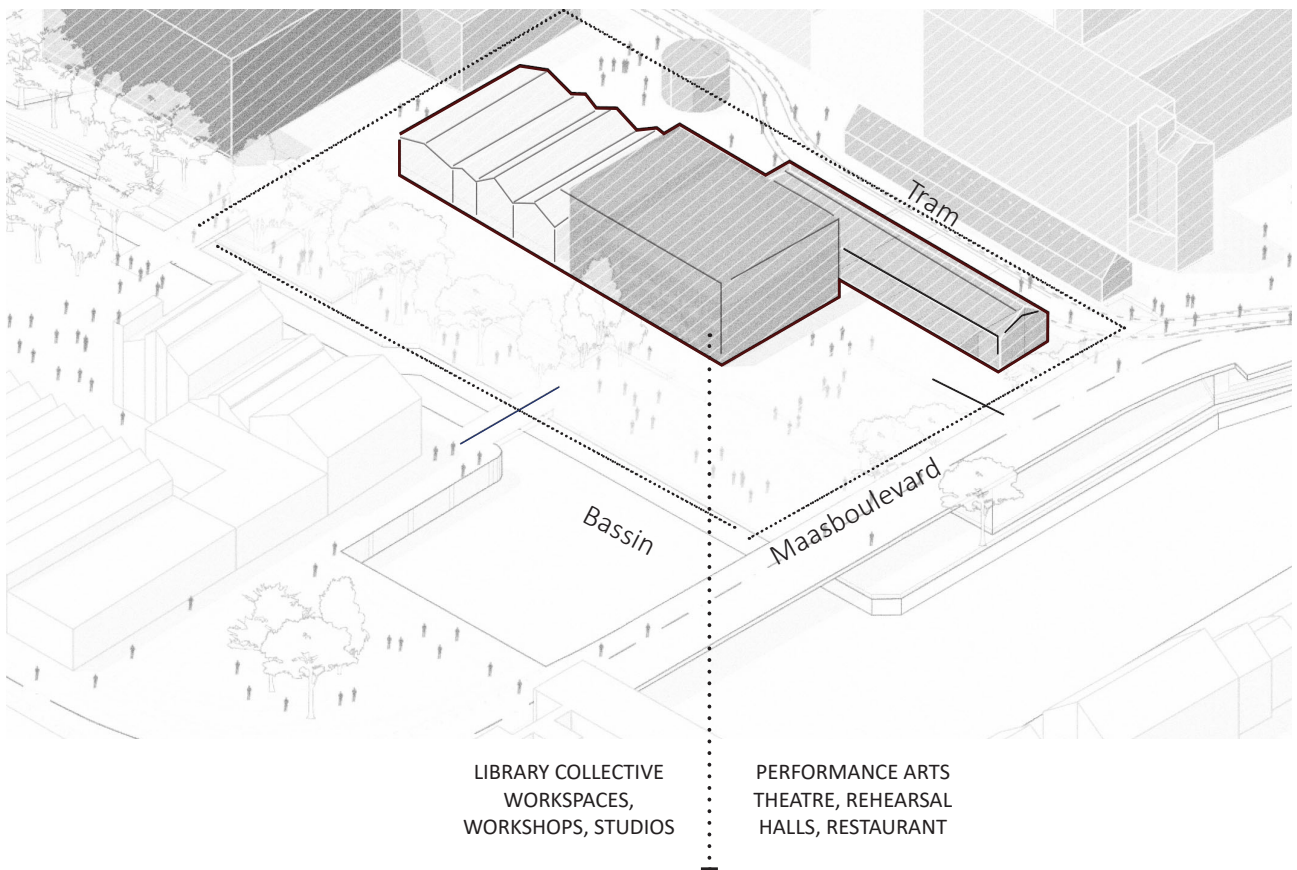




Functional Zoning

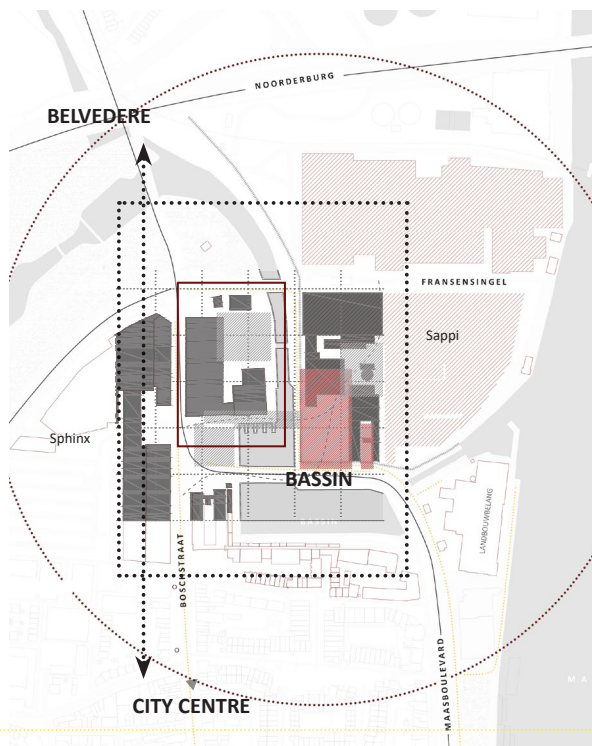


Program for Architectural intervention



5. Research related to program identification

Vision for program around the Basin



Develop the area around the Basin as a link between city centre and future developments in the north of Maastricht.

Aim to bring back liveliness, creativity and activity with addition of cultural and commercial facilities around Basin, starting with transformation of industrial structures of Timmerfabriek

CHAPTER 1

DESIGN DESTINATION PLANT TIMMER FACTORY, D. D. 21 APRIL 2010

Introduction

CAUSE

The Timmerfabriek location is part of the Belvédère urban development project; an important task in the field of **living, working, recreation and traffic**. The location occupies a **strategic position within this project and forms the link between the city center and the area to be developed**.

The inner harbor of the Basin and the existing buildings are relics of the industrial history of the city and date from the **nineteenth century**. In line with the development of the Basin as a new port for passers-by and public space with catering, terraces and retail, the **municipality of Maastricht wants to develop the Timmerfabriek location with a mix of commercial and cultural functions**. The aim is to bring back the **liveliness, creativity and activity in the area**.

The Timmerfabriek forms a 'hotspot' along the main threads between Belvédère and the historic city center of Maastricht (**Boschstraat, Maagdendries and Capucijnenstraat**). Each and every one of these routes does not really invite people to cross from the city center to the outside, but which do have the potential to be city streets that can open up the new plan area in an inviting way. **For cultural facilities, the focus is on the locations around the Basin**. These connect well with the city center, with buildings of cultural and historical interest and with the new atmosphere that is developing around the Basin. It is not so much the quantity (the surface area in m²) that is decisive here, but above all the quality of the facilities. The Timmerfabriek will house cultural facilities in combination with related functions (eg catering). This needs to be developed so that it gets a new inspiration in the interest of a clear connection from Belvédère to the city.

INTEGRAL FEASIBILITY RESEARCH CULTURAL FACTORY "CARPASS FACTORY"

Commissioned by WOM-Belvedere, various feasibility studies have been carried out into the future possibilities of the "Timmerfabriek" as a "Culture Factory". These investigations started with solving a number of housing bottlenecks and ambitions of the individual institutions and possible collaboration, such as;

House of Burgundy: too small and outdated housing. Intro/in situ: wants to grow further in more spacious accommodation.

Toneelgroep Maastricht: retains its current performance location (Deriontheater) but wants to profile itself as one of the eight nationally recognized city companies with an extra rehearsal space for playing in the middle hall.

Filmhuis Lumière: due to the growth to 90,000 visitors in 2008, the limits of the current facility

have been reached and the Timmerfabriek is an opportunity to sharpen the arthouse profile through digitization and more intense collaboration between the performing arts. **Theater at the Vrijthof: wants to free up space for LSO and wants to provide space for a growing performing arts circuit tailored to the central hall (audience capacity 400). Theater aan het Vrijthof wants new forms of offer for young people (dance, theater for young people) and of professionally framed institutions.**

In order to map out the desired spatial implementation, a program of requirements has been drawn up for the "Culture Factory", a Structural Design has been made and the planning costs have been inventoried. The program of requirements provides an outline of architectural and technical facilities. This is based on the ideas developed earlier from previous studies and the workshops held with the cultural partners. This subsequently served as the basis for the structural design of the building. The program is explained in more detail later in this section. The structure design/PVE has shown that the program is compatible.

Initially, a PVE and a design were made for the accommodation of the cultural institutions. In addition to the PoR and Structural Design for housing the cultural institutions (Culture Factory), a feasibility study was conducted into the repurposing of the (adjacent) power station and the two boiler houses behind it. The PVE and the design have been adjusted accordingly. The catering concept in the Power Plant has been tested with a few experts for viability, yields and opportunities. The outcome is positive.

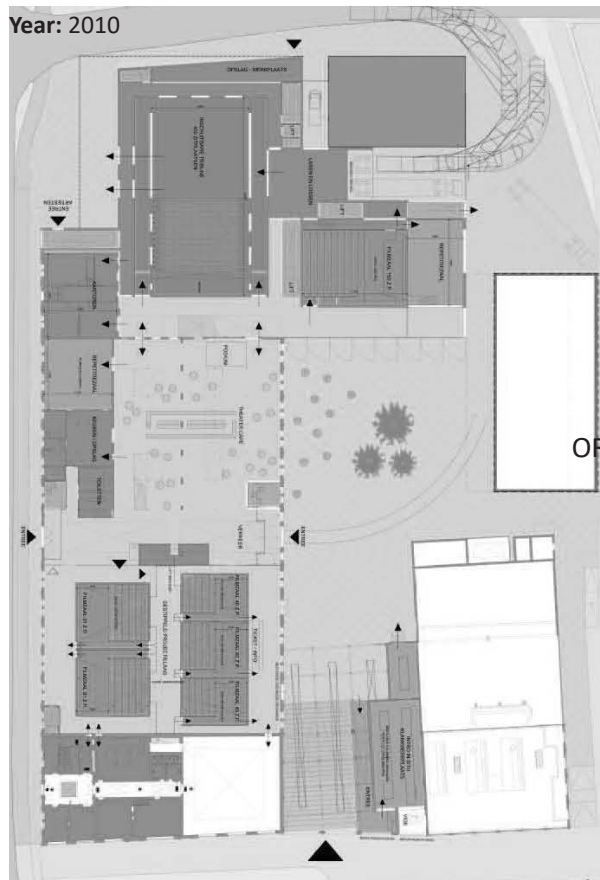
MASTERPLAN CARPENTRY FACTORY

For the purpose of a thorough design, a Master Plan 'Timmerfabriek' has been compiled on the basis of all available information, studies and research. This consists of the structure design and the urban development preconditions, which will be briefly explained below.

The total complex consists of a unique ensemble of industrial buildings. These buildings are typologically, constructively and architecturally exemplary for the different construction periods. It is therefore important to keep the spatial qualities of the buildings perceptible and to use them for reuse.

A new possible structure for the buildings has been worked out in the structure design/PVE. The assignment offers the opportunity to come up with a different solution.

Previous proposal around the Bassin for Performance arts theatre and rehearsal spaces



*Original Proposal for Timmerfabriek:
5 cinema halls, performance art theatres,
rehearsal halls*

Toneelgroep Maastricht: retains its current performance location (Derlontheater) but wants to profile itself as one of the eight nationally recognized city companies with an extra rehearsal space for playing in the middle hall.

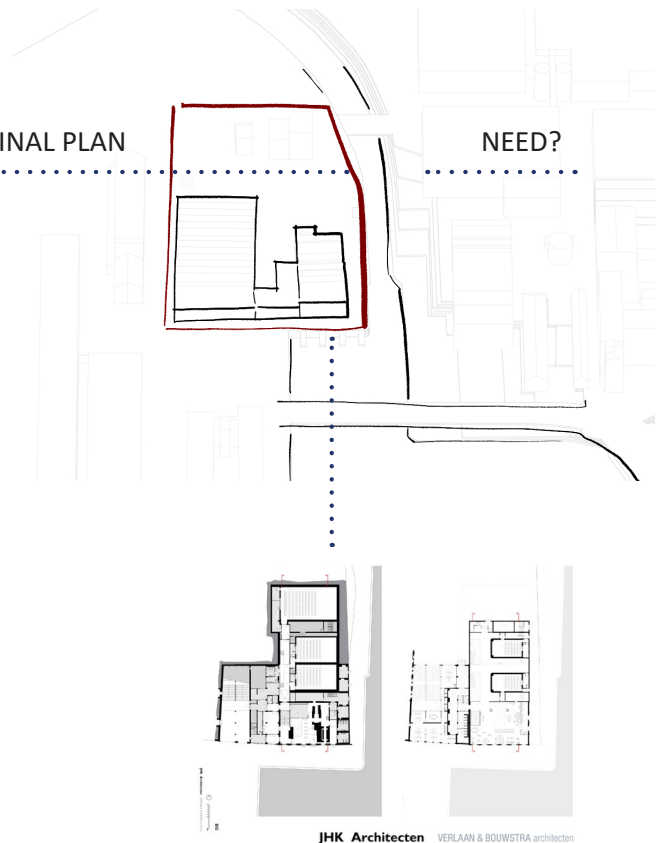
through digitization and more intense collaboration between the performing arts. Theater at the Vrijthof, wants to free up space for LSO and wants to provide space for a growing performing arts circuit tailored to the central hall (audience capacity 400). Theater aan het Vrijthof wants new forms of offer for young people (dance, theater for young people) and of professionally framed institutions.

“Toneelgroep Maastricht will retain its current performance location but wants to profile itself as one of the eight nationally recognized city companies with an extra rehearsal space

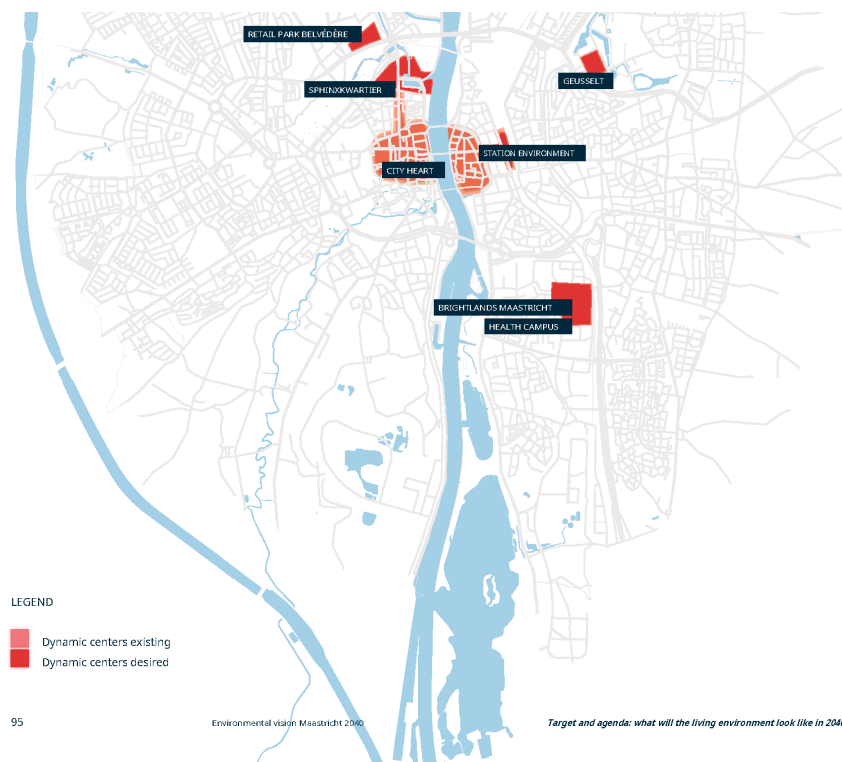
Theatre aan Vrijthof wants to provide spaces for a growing performing arts circuit”

ORIGINAL PLAN

NEED?



Present and Future Visions 2020- 2040



PERFORMING ARTS

- o large symphonic orchestra
- o music theater company
- o professional project choir classical and modern music
- o urban theater company
- o urban dance company
- o smaller theater groups (co-financing FPK)
- o talent development organization
- o city theater
- o urban music venue
- o festival pop music
- o festival jazz music
- o festival sacred music
- o competition for emerging young musical talent
- o festival dance
- o wide range of amateur associations

FINE ARTS, FILM AND MEDIA

- o presentation institution visual arts
- o institution for affordable housing for studios
- o multi-day event visual arts and design
- o movie theater
- o euregional platform for film and media
- o multi-day event fashion
- o postgraduate institution for visual arts and design
- o local radio and TV broadcaster

MULTIDISCIPLINARY

- o multi-day city festival for amateurs and professionals
- o opening cultural season for amateurs and professionals

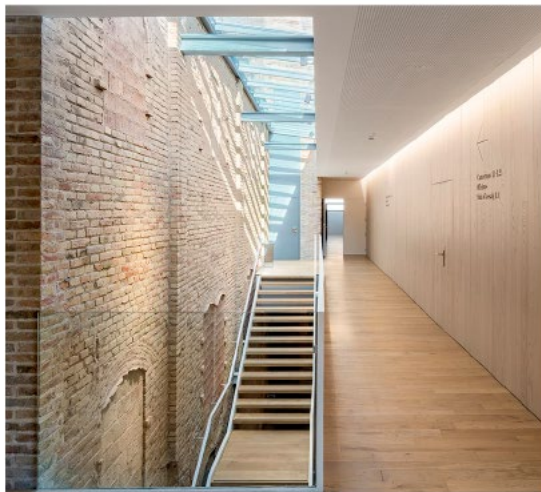
EDUCATION AND PARTICIPATION

- o institution for heritage, arts education and participation
- o organization for culture in the neighborhoods

ECONOMIC AND CULTURAL VISION MAASTRICHT

Gemeente Maastricht

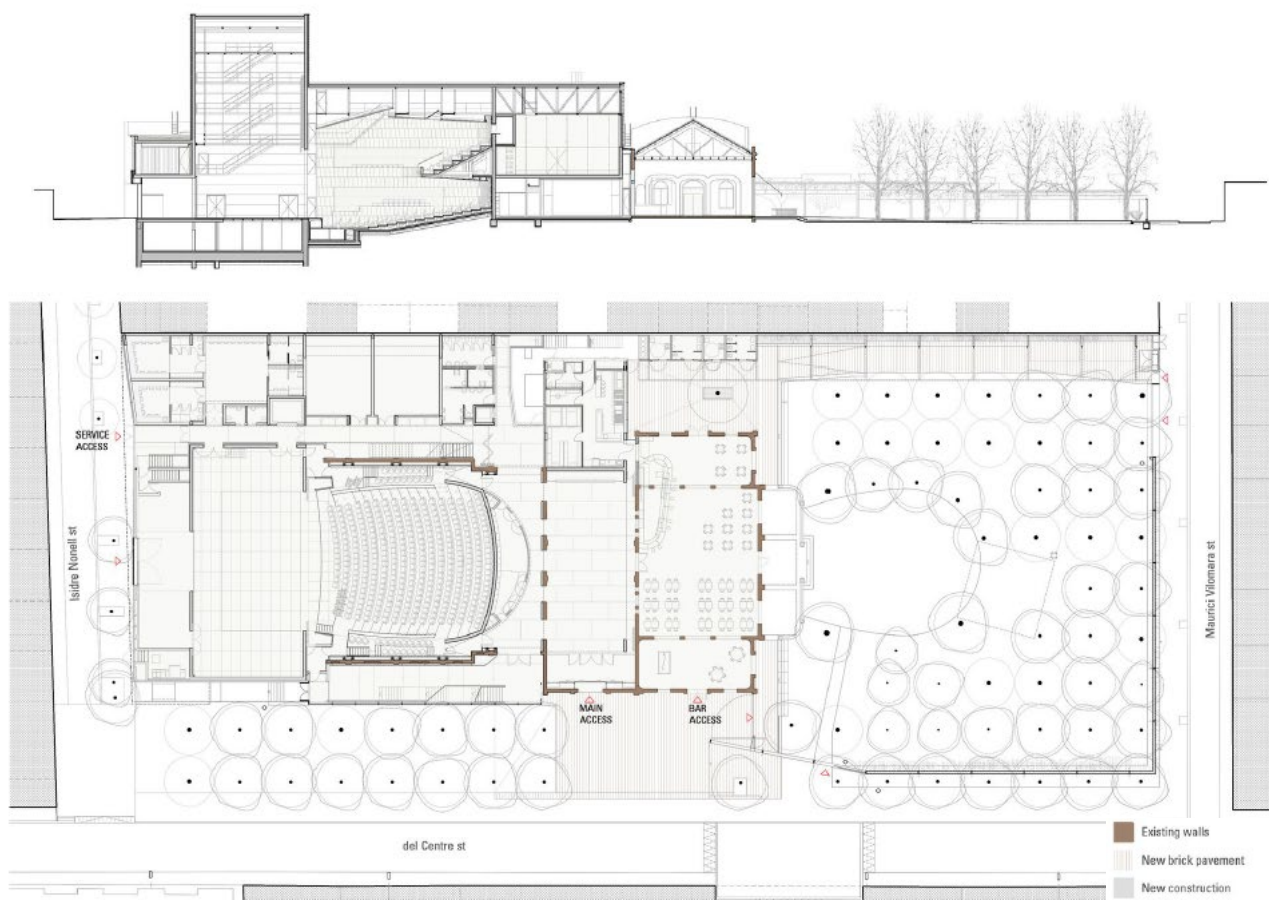
Year: 2020 - 2040

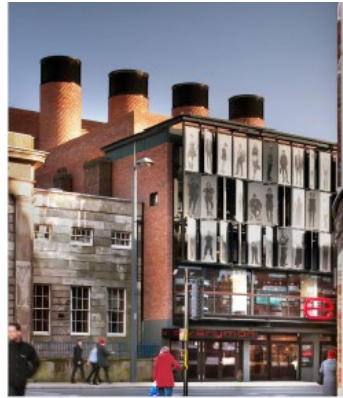


L'Artesa Theatre, Spain

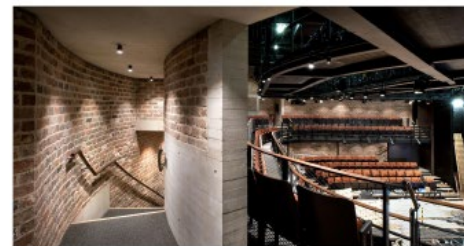
Architects: Forgas Arquitectes +
AMM Arquitectes
Area: 5300 sq.m

6. Precedents for Performance spaces





- ANNOTATION KEY
- 1 ELECTRICAL INTAKE ROOM
 - 2 SUBMITTER TANK ROOM
 - 3 STORE
 - 4 CLOAKROOM
 - 5 M.C.
 - 6 ENTRY
 - 7 KITCHEN
 - 8 CELLAR
 - 9 SUB STAGE
 - 10 STAFF CHANGING
 - 11 REHEARSAL ROOM
 - 12 F & C CHANGING
 - 13 STAGE DOOR
 - 14 ACTORS' GUEST ROOM
 - 15 STAGE MANAGEMENT
 - 16 DRESSING ROOM
 - 17 STAGE KITCHEN
 - 18 VESTIBULE
 - 19 STAGE
 - 20 YOUTH AND COMMUNITY USE STUDIO
 - 21 CAFE
 - 22 OFFICE
 - 23 BOX OFFICE
 - 24 GET-AROUND CORRIDOR
 - 25 LAUNDRY
 - 26 B.M.
 - 27 WETTING ROOM
 - 28 FUNCTION ROOM
 - 29 AUDITORIUM STALLS
 - 30 ORCHESTRON
 - 31 HALLWAY
 - 32 REHEARSAL ROOM
 - 33 SOLAR-HEATING ROOM
 - 34 SERVICE ROOM
 - 35 AUDITORIUM CIRCUS
 - 36 CONTROL ROOM
 - 37 TECHNICAL GALLERY
 - 38 MEETING ROOM
 - 39 DRESSING ROOMS
 - 40 PLANT
 - 41 LIGHTING WORKSHOP
 - 42 TECHNICAL GRID
 - 43 EXTERNAL PLAZA
 - 44 ELEVATOR
 - 45 AIR SUPPLY PLUMBING

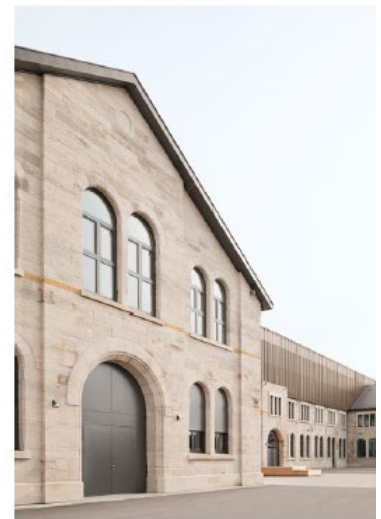


Everyman Theatre, Liverpool, England.

Architects: Haworth Tompkins

Area: 4690 m²

Year: 2013



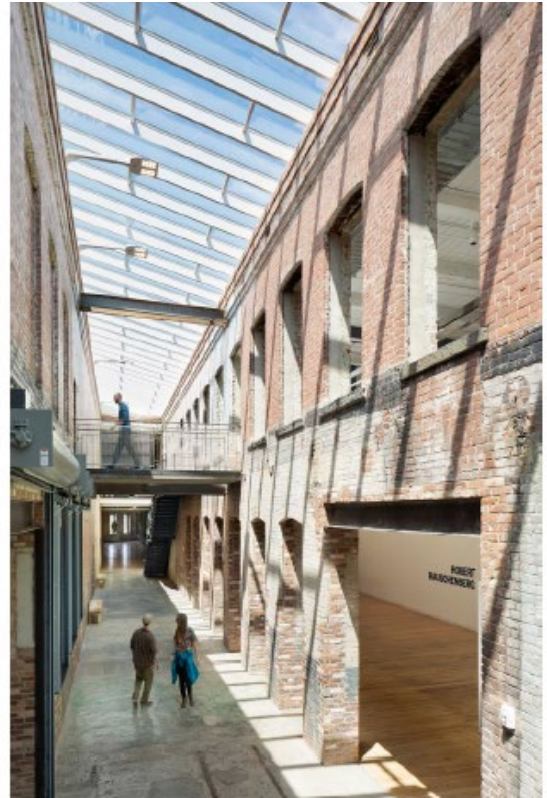
Kulturbahnhof, Aalen, Germany

Architects: a+r Architekten

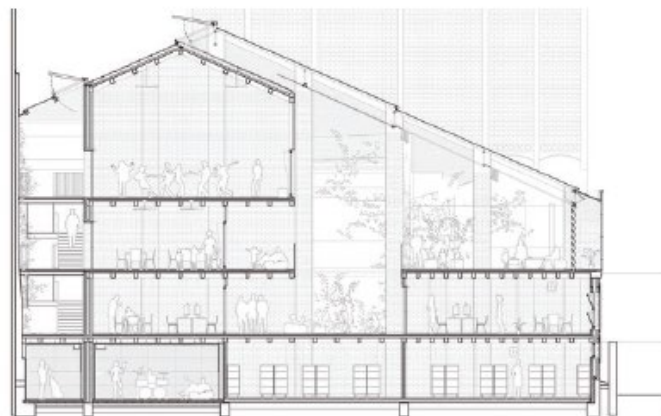
Year: 2020



Teatre L'Arsenà

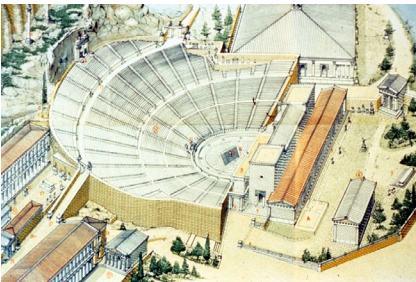
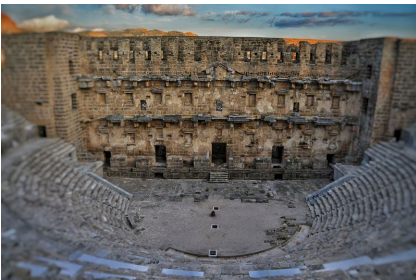


MASS MoCA Building 6 (Museum)

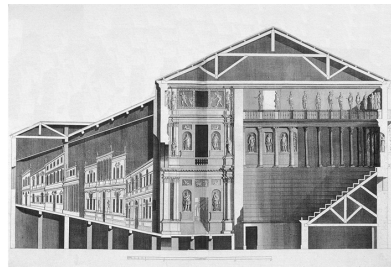


Habitat Santcugat 1914

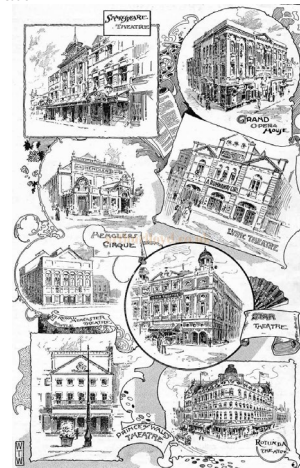
Initial outdoor greek theatres



enclosed intrinsic structures, many a times forming a facade of a city square



Ottavio Bertotti Scamozzi after
Andrea Palladio, Teatro
Olimpico, 1796



Erklärung des Planes.

A. Plätze.

- I., II., IV., Neue Plätze bei der Vatikankirche.
- III. Atrium der Vatikankirche.
- V. Universitätsplatz.
- VI. Rathausplatz.
- VII. Großer Theatersplatz.
- VIII. Kleiner Theatersplatz.
- IX. Vorplatz zum Parlamentstheater.
- X. Gastplatz.
- XI. Platz vor dem Justizpalast.
- XII. Neuer Burgplatz.

B. Gebäude.

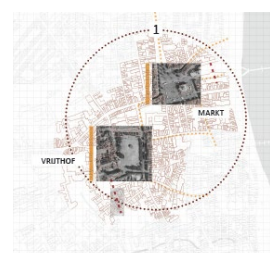
- a. Classisches Laboratorium.
- b. Vatikankirche.
- c. Platz für ein großes Monument.
- d. Universitätsgebäude.
- e. Rathaus.
- f. Burgtheater.
- g. Projektierter Trakt zum Burgtheater.
- h. Theaterspalast.
- i. Für das Große Theater in Aussicht genommener Platz.
- k. Noch unbekannter Neubau.
- l. Justizpalast.
- m. Neuer Hofburgtrakt.
- n. Projektierter Triumphbogen.

Performance spaces and relation between indoor and outdoor

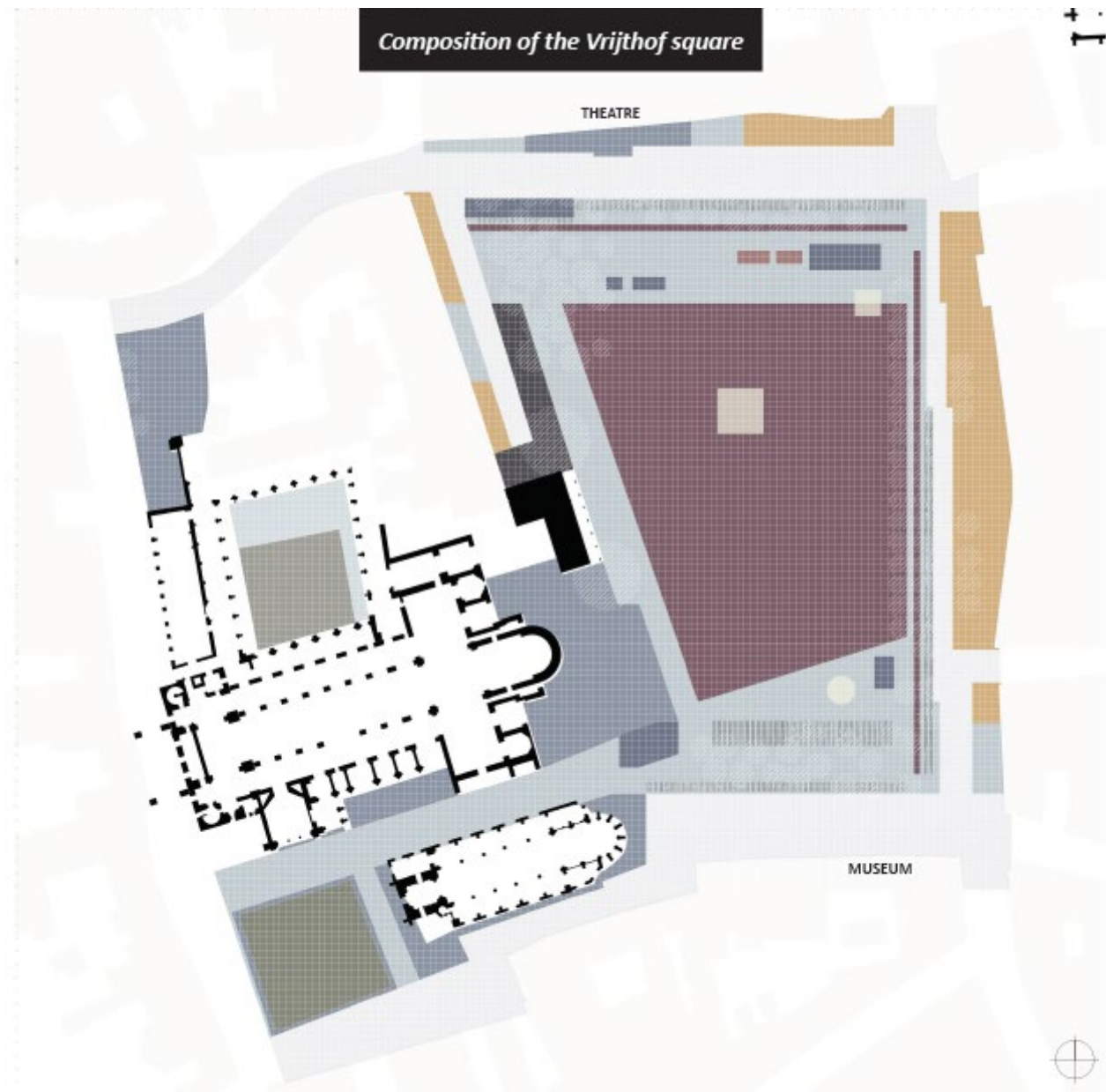
theatres with front of the house/foyers
serving as extension of performance
spaces or the street



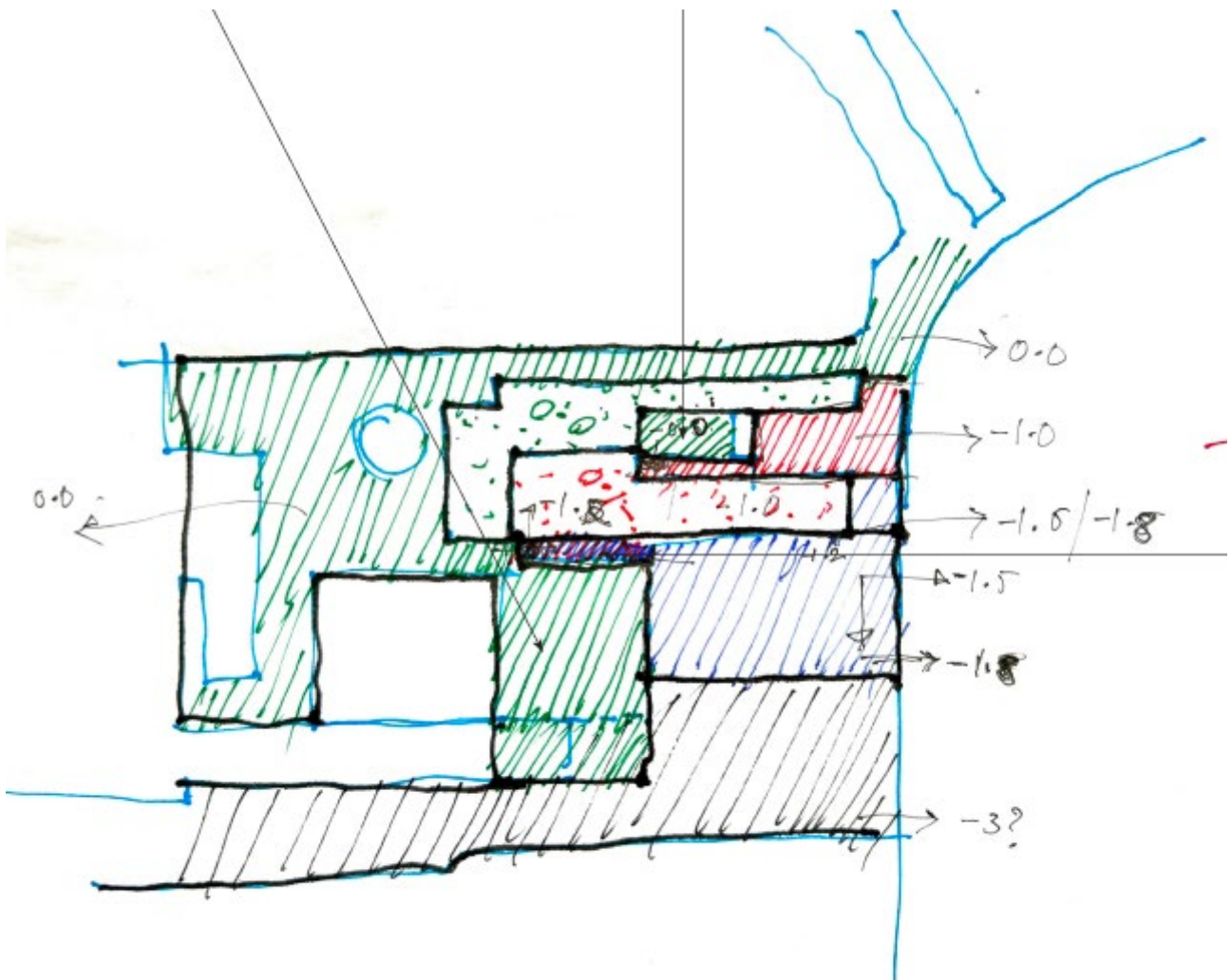
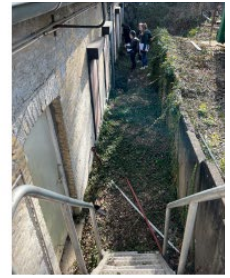
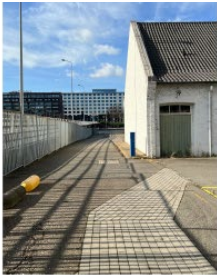
Site 1: Vrijthof - Markt square



Analysing the theatre square in Maastricht (Vrijthof)

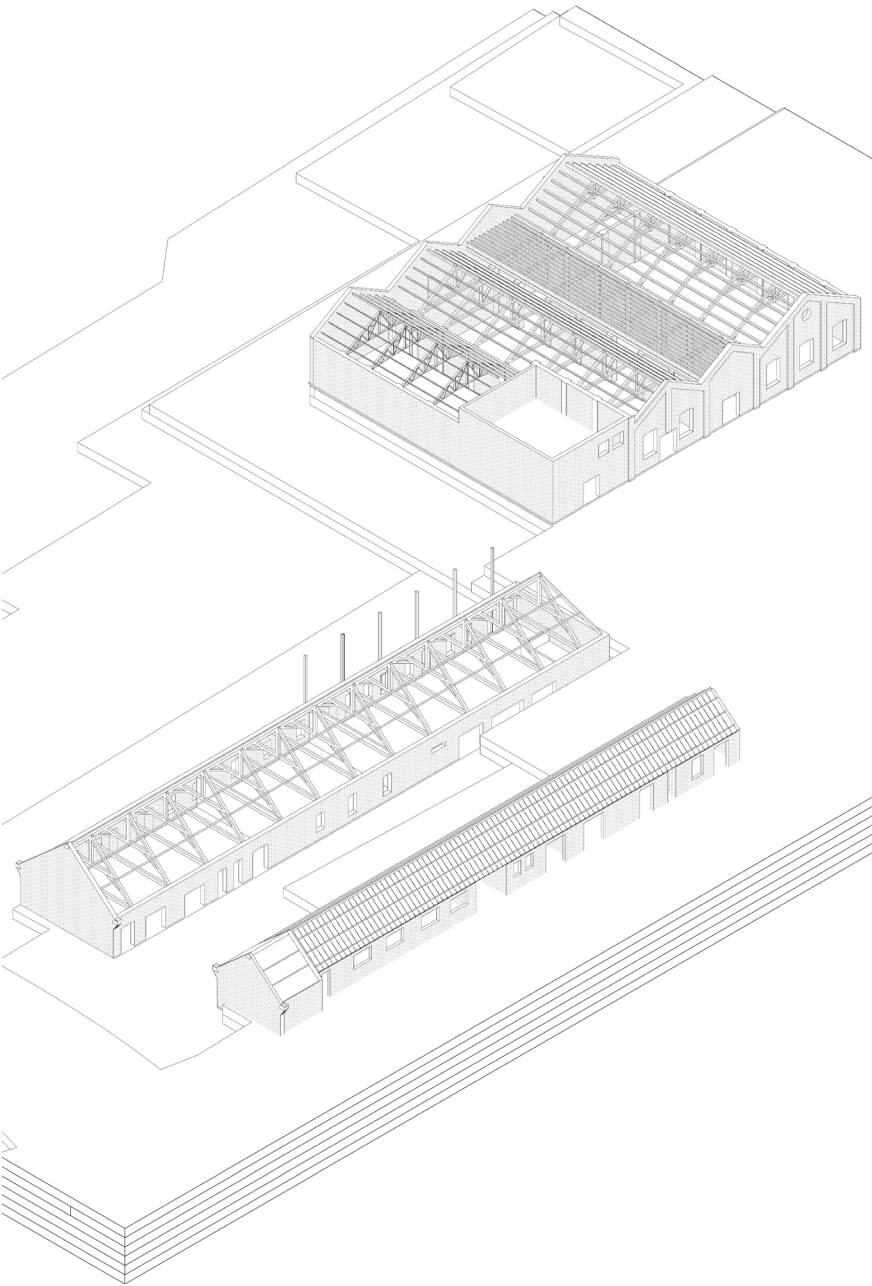


MAIN SQUARE / PEDESTRIAN	30%	CAR PARKING	2%
RESTAURANT TERRACES	10%	CONNECTIONS TO BASEMENT	2%
FOOD TRUCKS	-	BIKE PARKING	5%
PLINTHS	13%	ADDITIONAL ELEMENTS	1%
PEDESTRIAN & CYCLING	30%	GREEN SPACE / LAWN	7%
VEHICULAR	n.a.		



Site Contours

7.1 Existing Structures



Brick walls
+ tiled roofing



Load bearing Brick walls



Affuittenloods

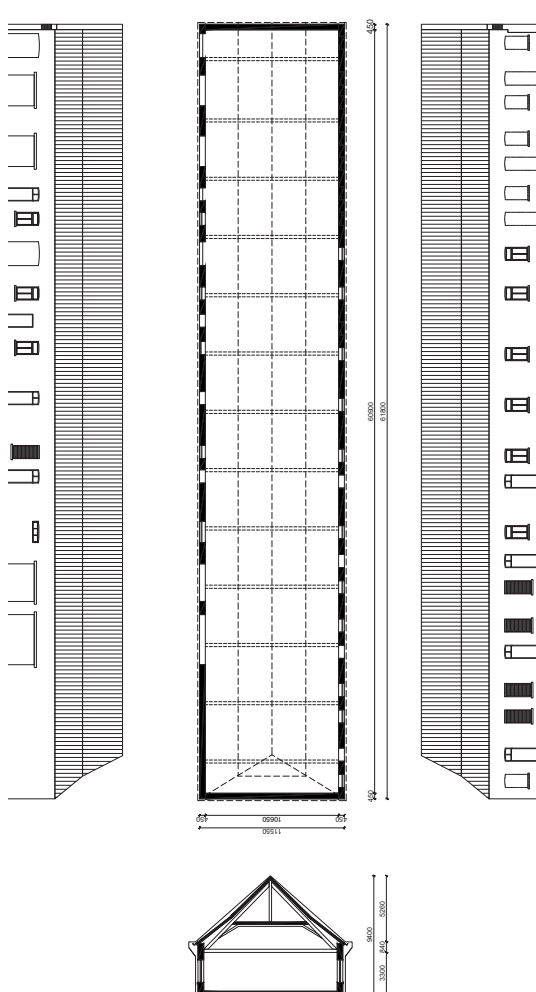
Brick wall thickness: 450mm
Height: ~ 4m
Density: 2000 kg/m³

The load / running meter to be equal to
 $0.45 \times 1 \times 4 \times 2000 = 3600 \text{ kg/meter}$,
which is equivalent to 35.30 kN/meter

Truss c/c: 4300 mm

#	Material	λ [W/mK]	R [m ² K/W]
	Thermal contact resistance		0,130 (0,256)
1	1 cm Gypsum plaster	0,350	0,029
2	45 cm Solid bricks	0,950	0,469
	Thermal contact resistance		0,040
	40 cm Whole component		0,667

<https://www.ubakus.com/en/r-value-calculator/>



7.1 Existing Structures

705 Sheds

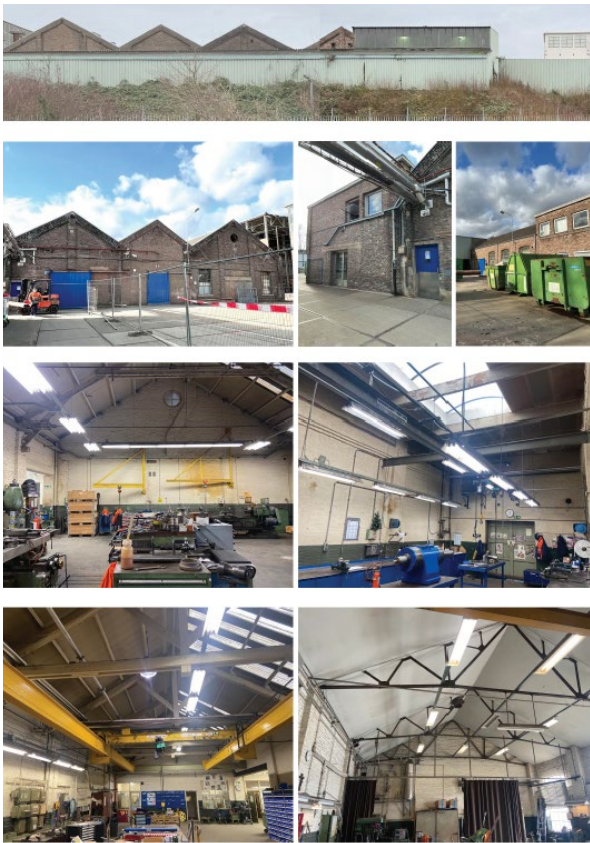
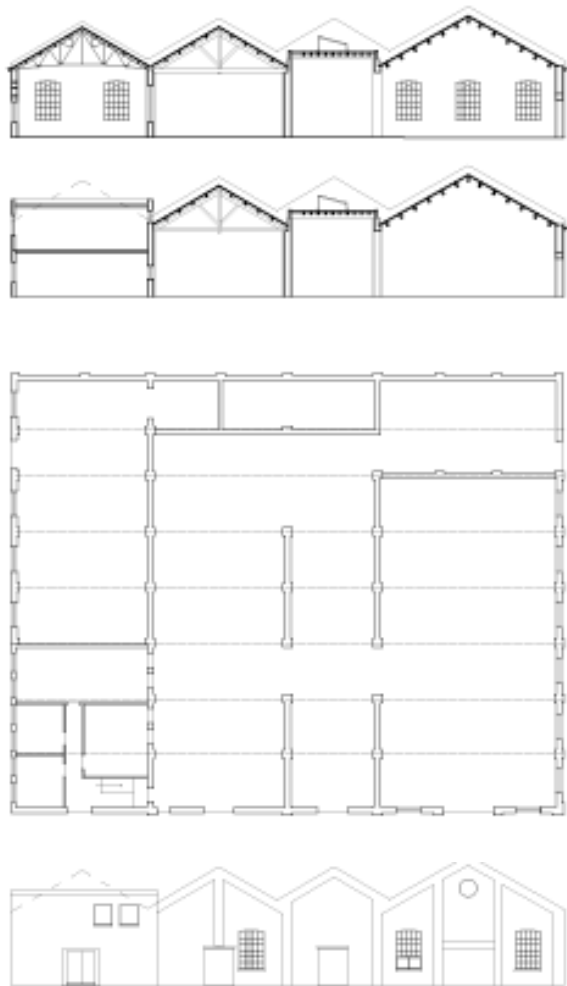
Brick wall thickness: 400mm
Height: ~ 5m
Density: 2000 kg/m3

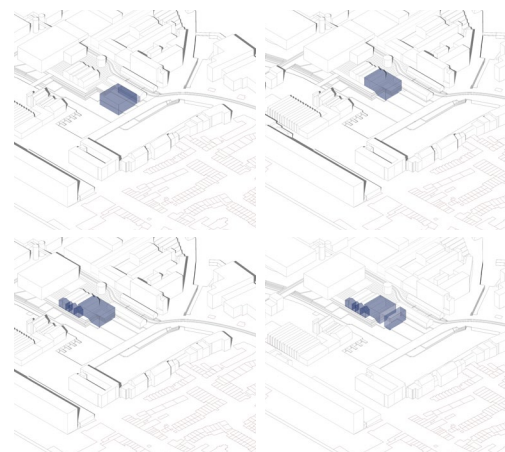
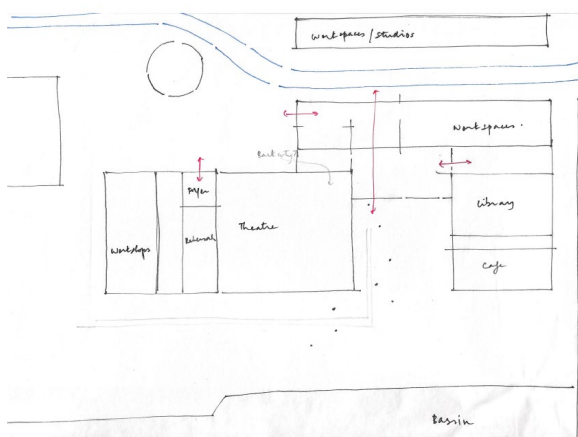
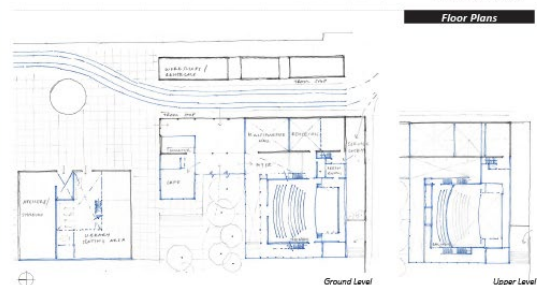
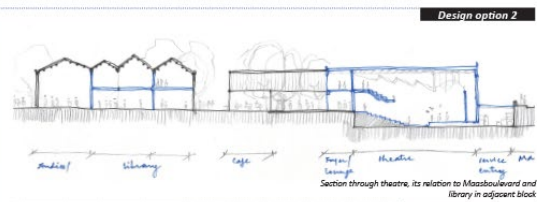
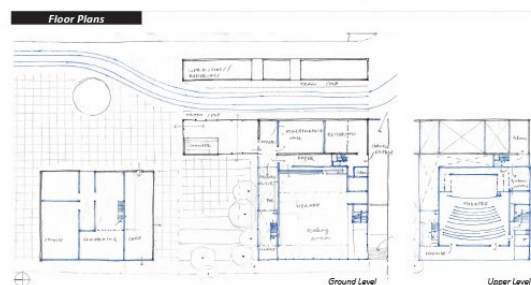
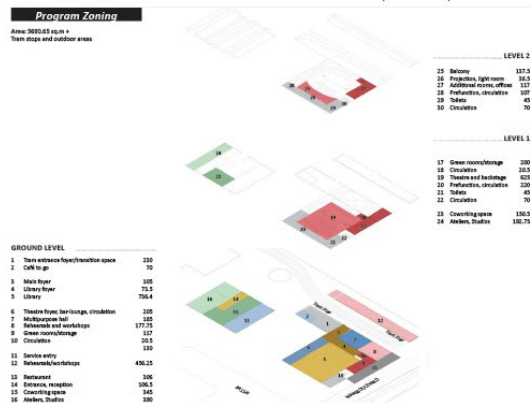
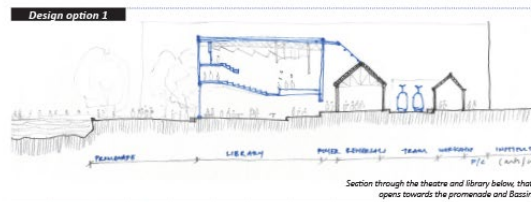
The load / running meter to be equal to
 $0.4 \times 1 \times 5 \times 2000 = 4000 \text{ kg/meter}$,
which is equivalent to 39.25 kN/meter

Brick Piers: 650 x 650mm

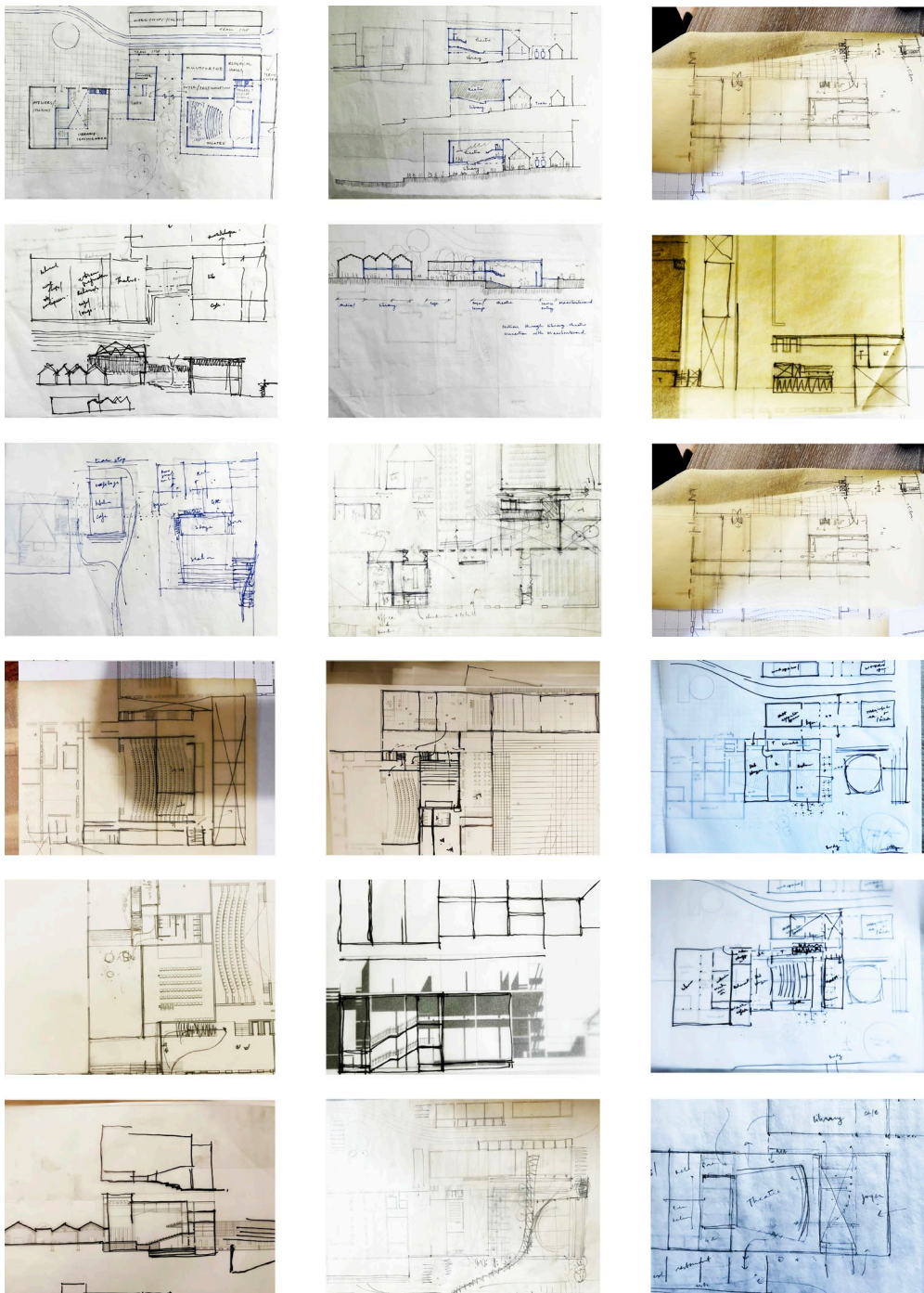
#	Material	λ [W/mK]	R [m²K/W]
	Thermal contact resistance		0.130 (0.250)
1	1 cm Gypsum plaster	0.350	0.029
2	40 cm Solid bricks	0.960	0.417
	Thermal contact resistance		0.040
	41 cm Whole component		0.615

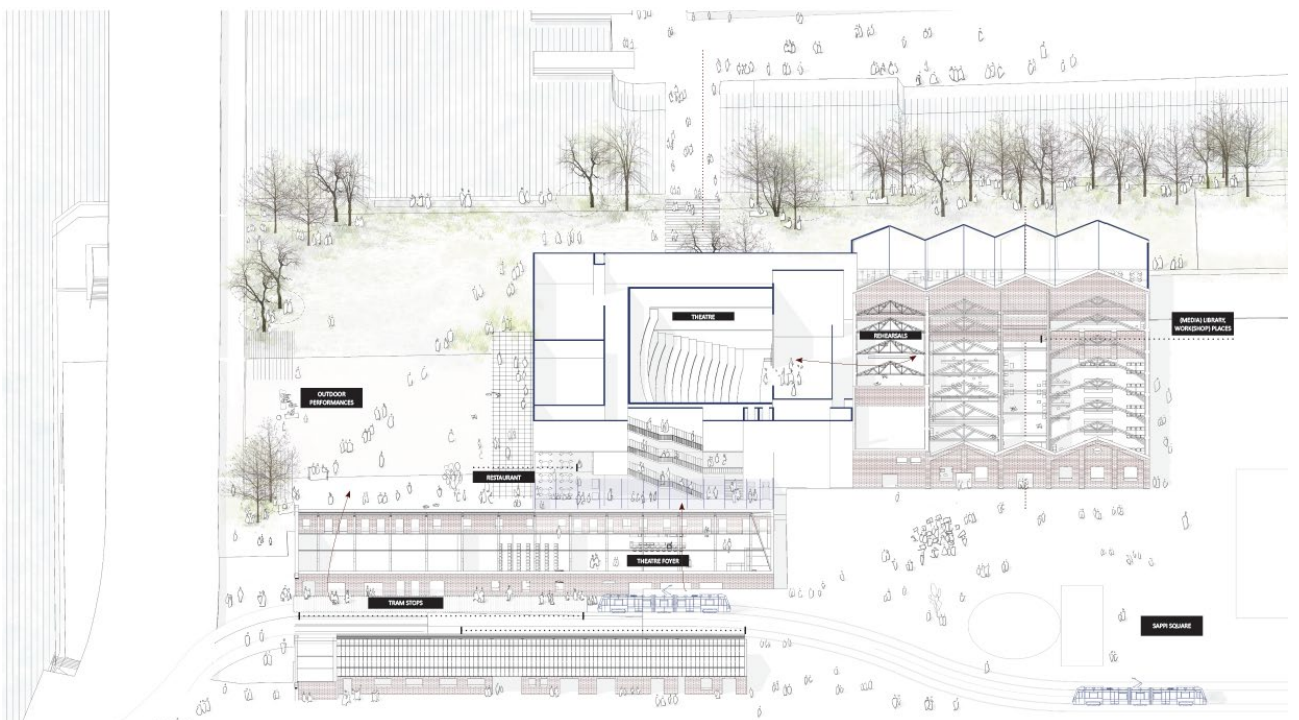
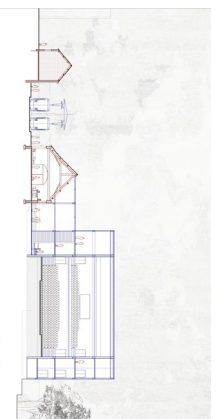
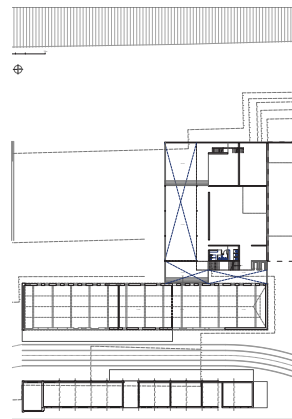
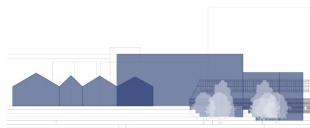
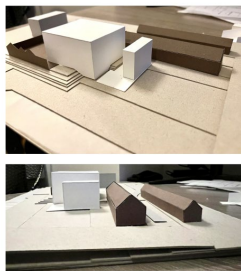
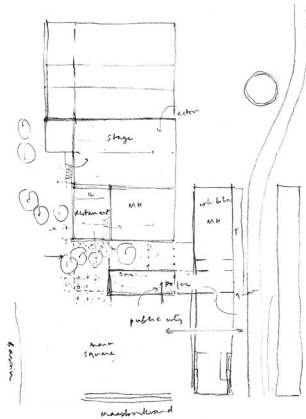
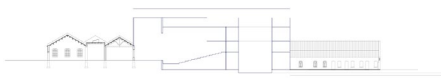
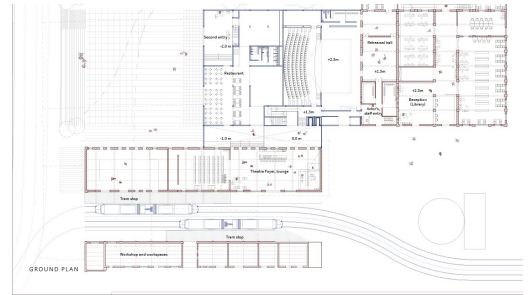
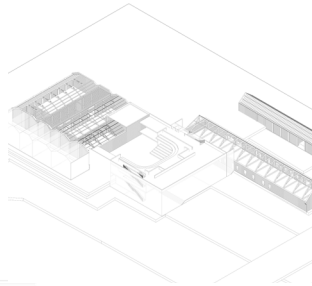
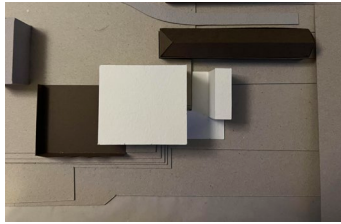
<https://www.ubakus.com/en/r-value-calculator/>

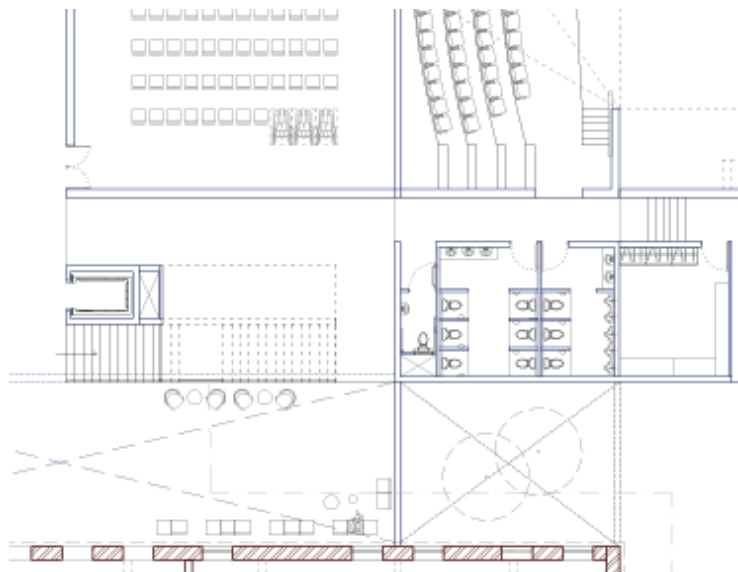
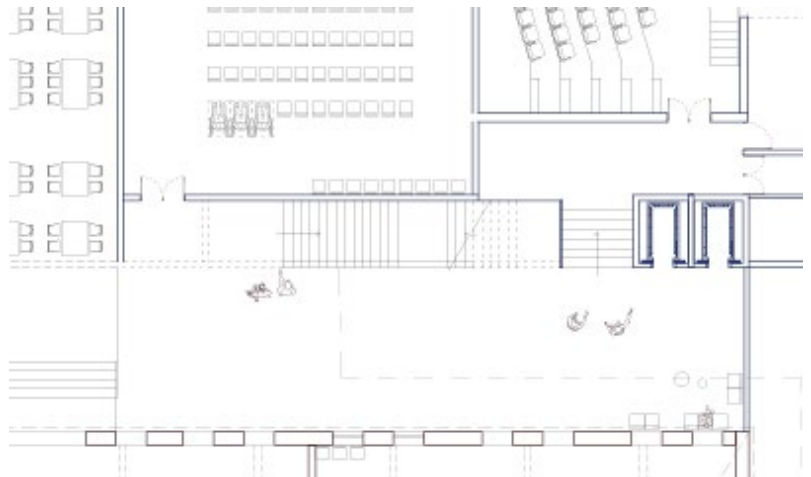
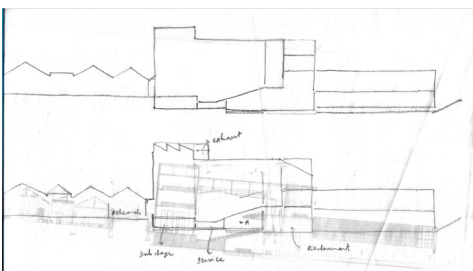
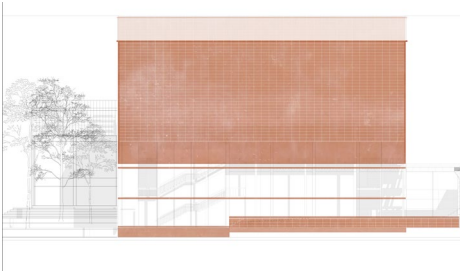
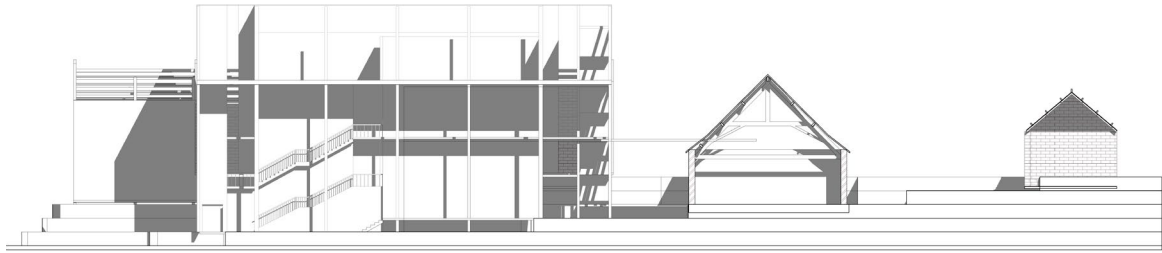


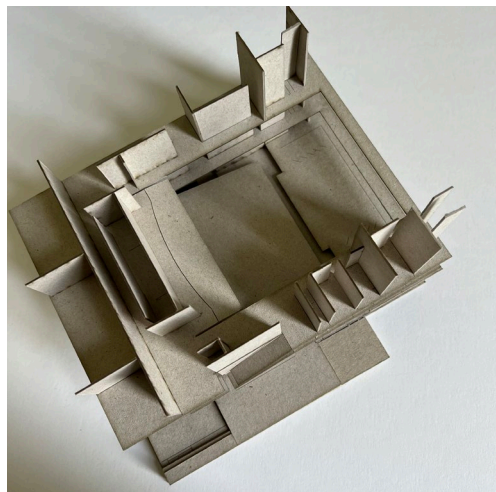
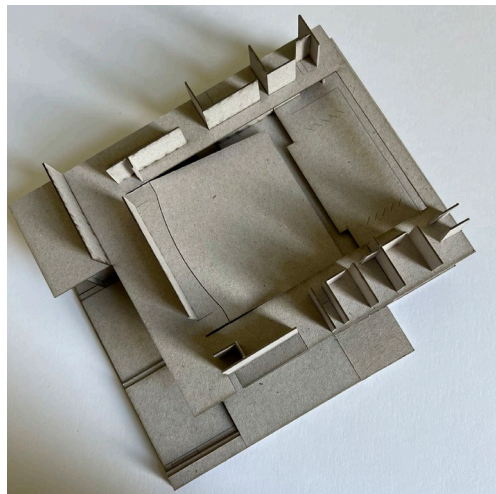
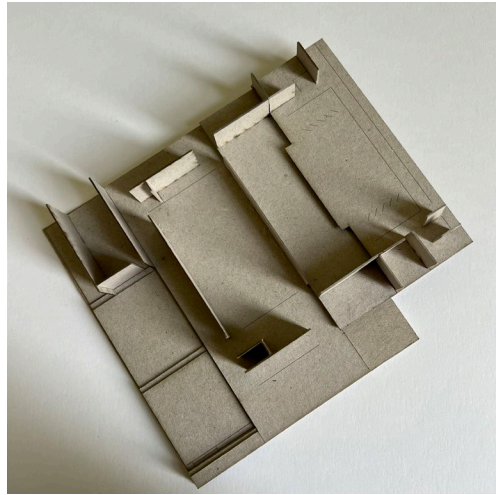


7.2 Design Development

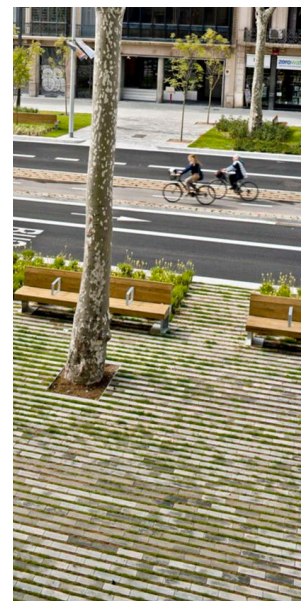
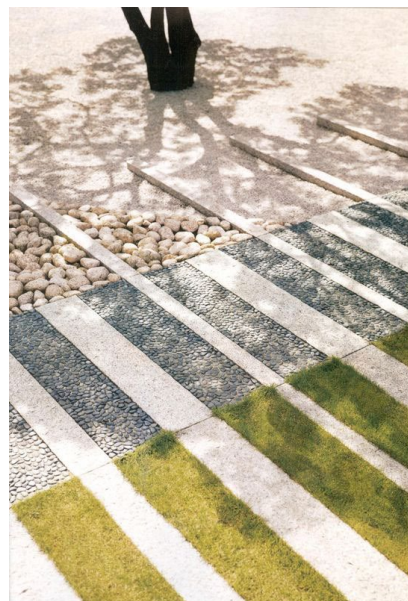
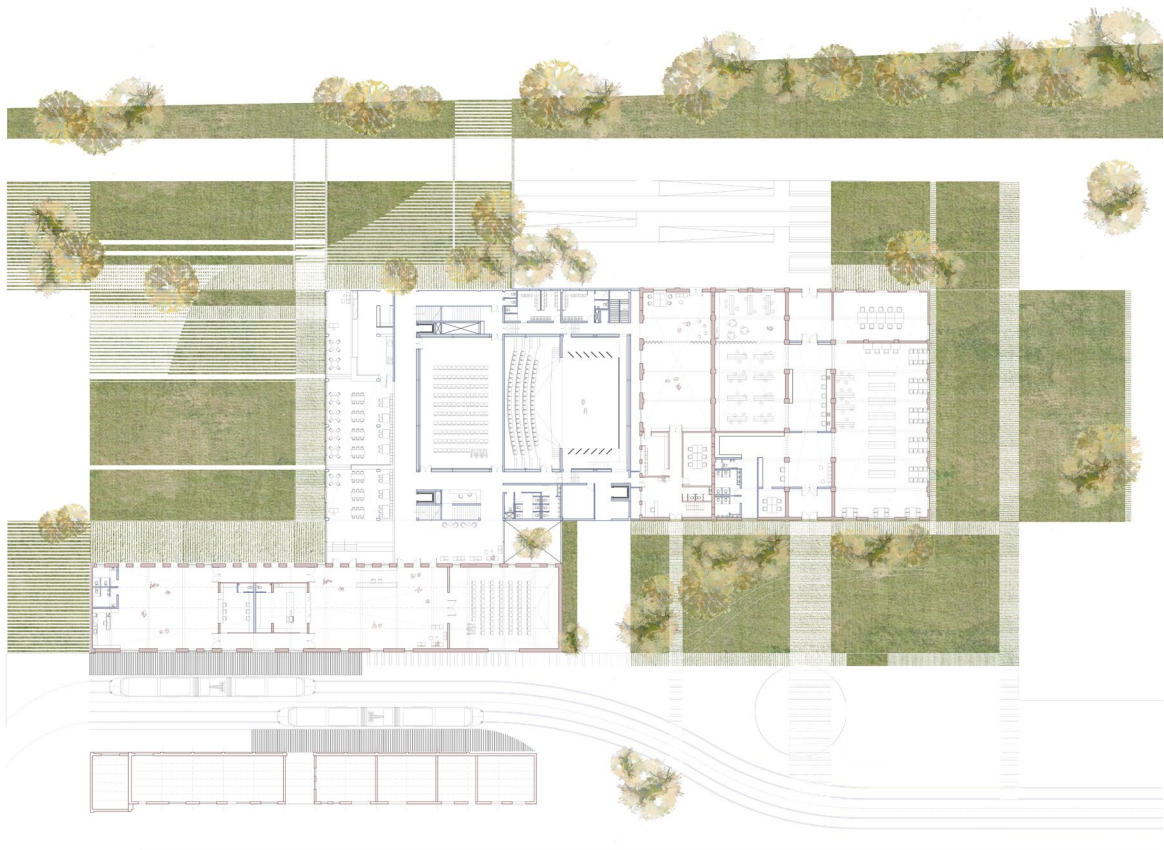






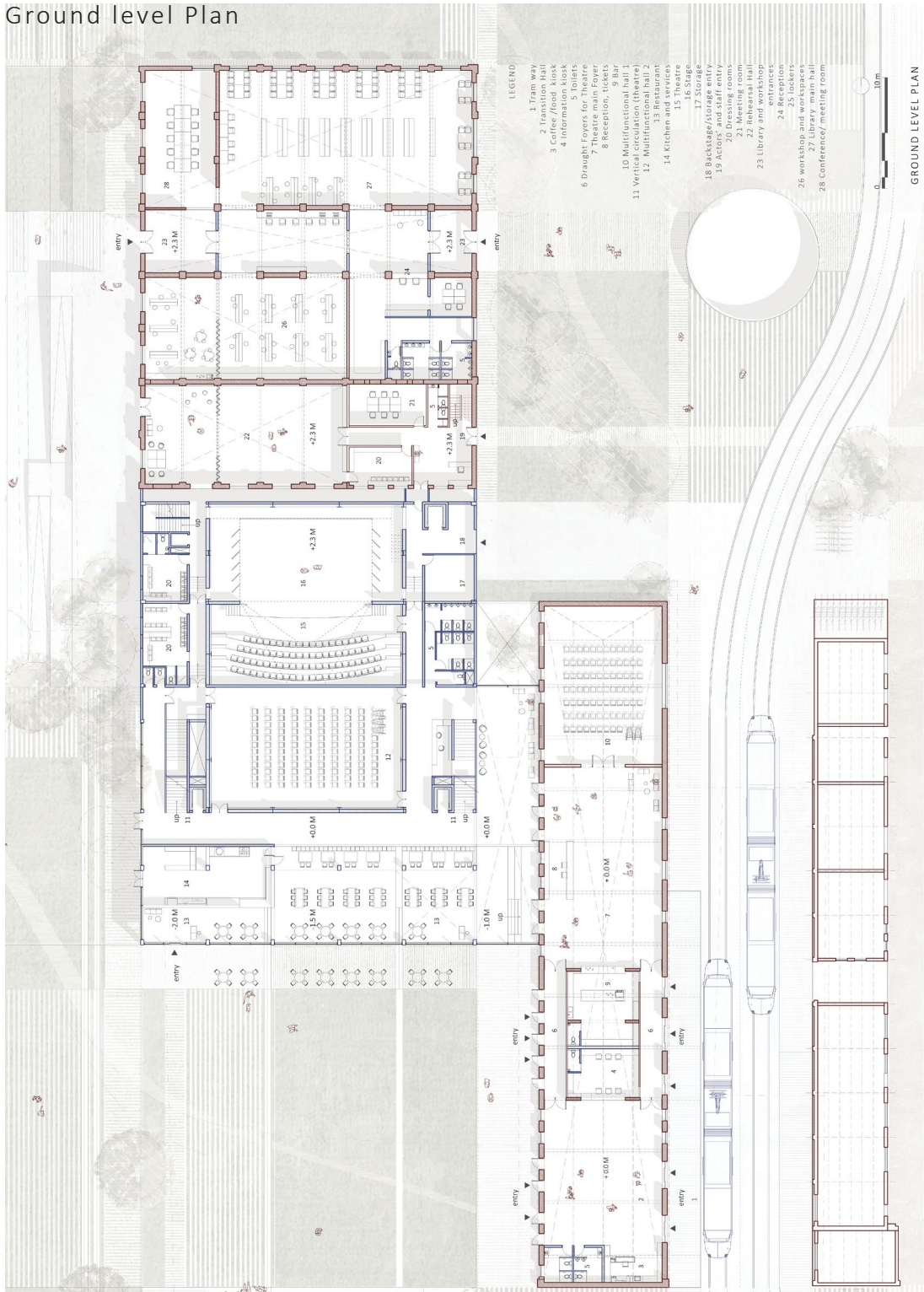


Urban landscaping

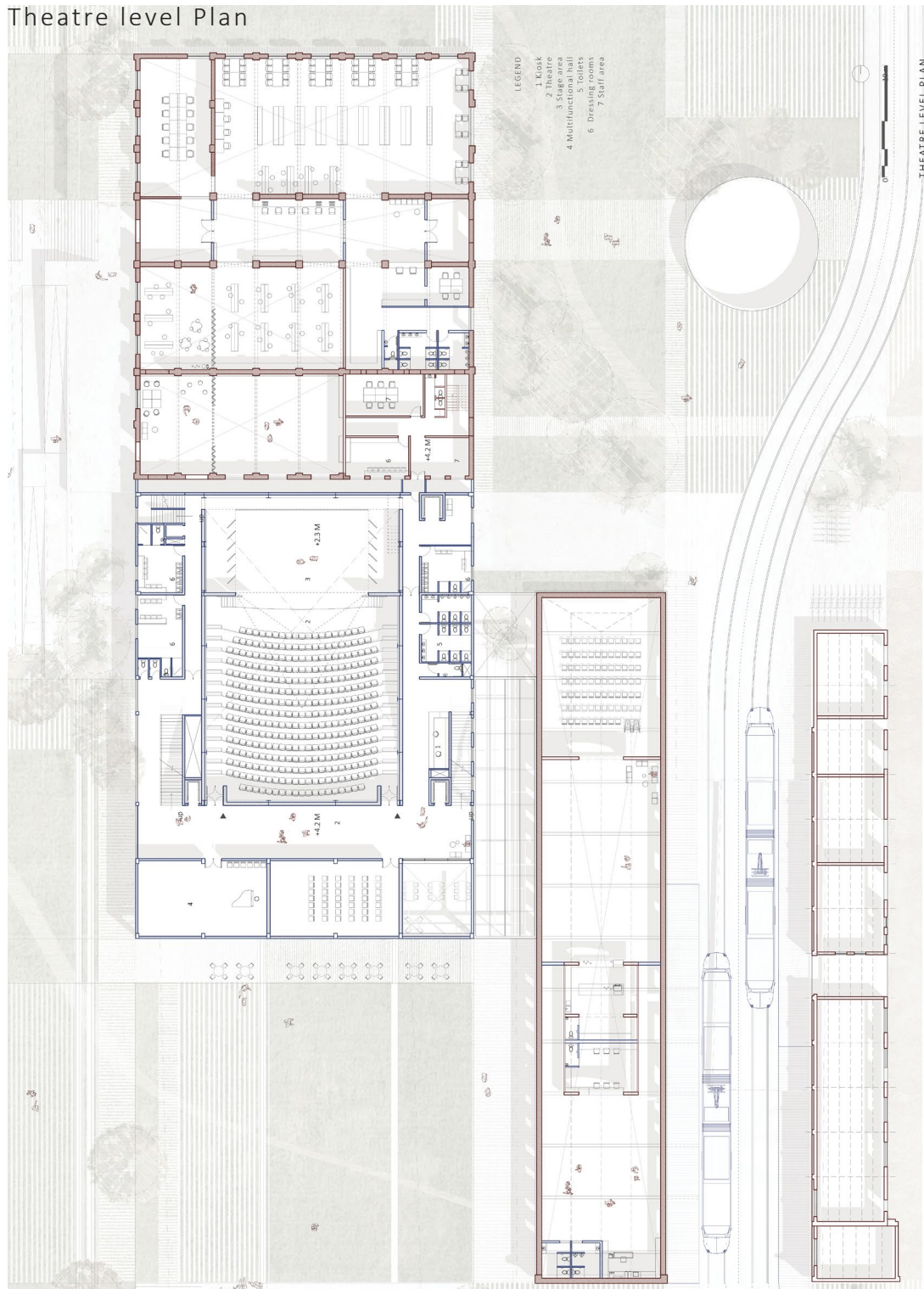


7.3 Design Drawings

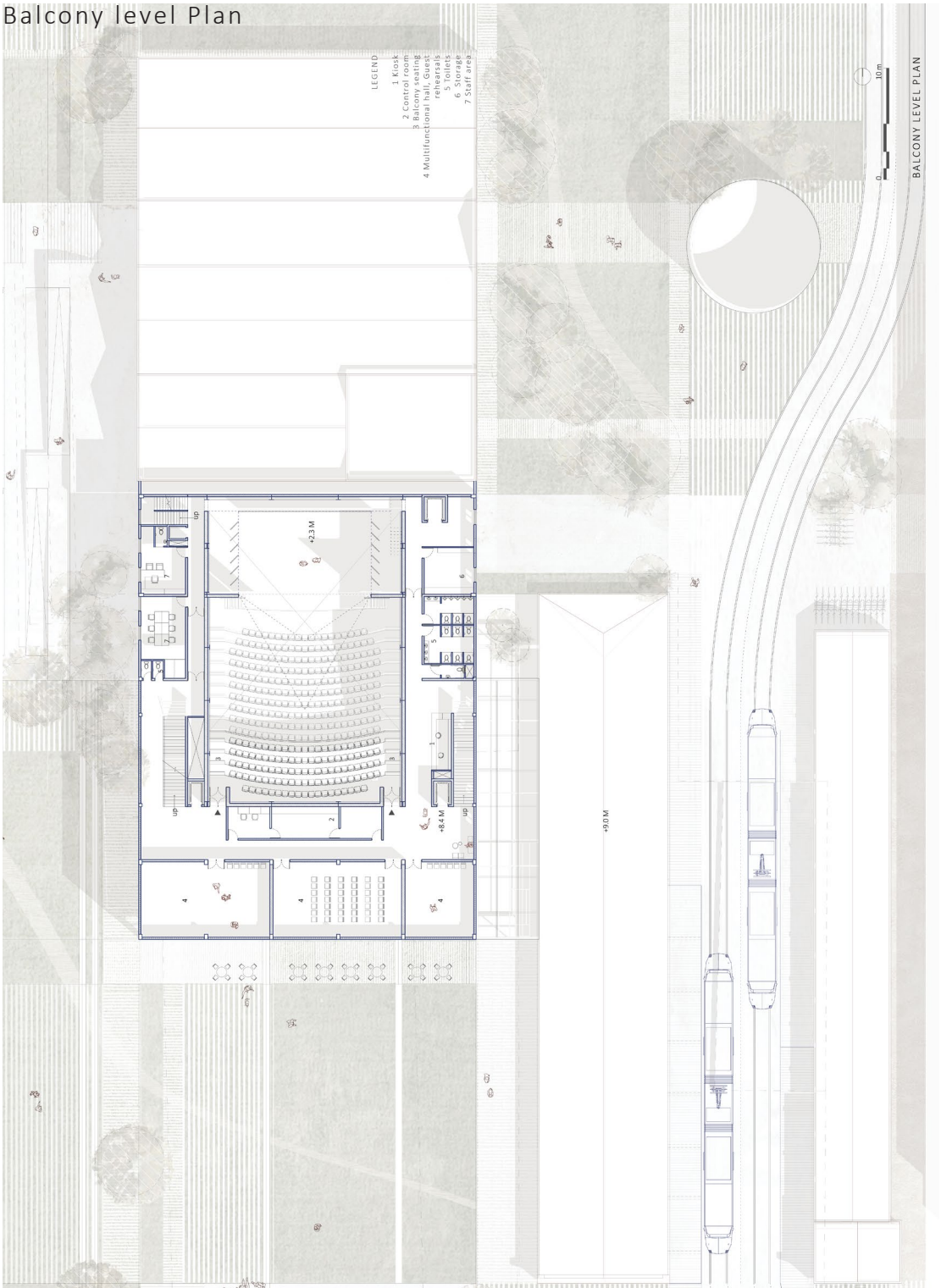
Ground level Plan

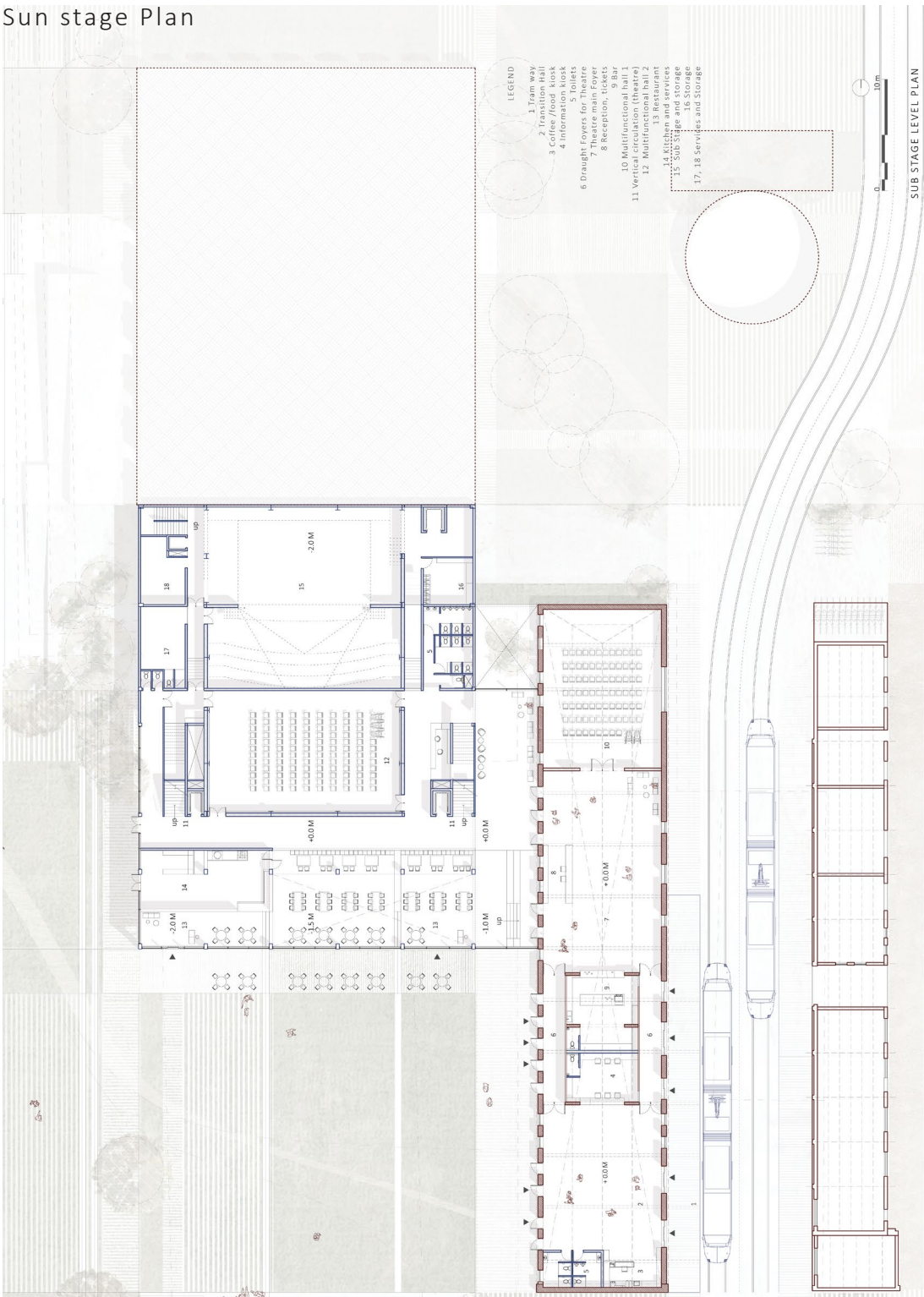


Theatre level Plan

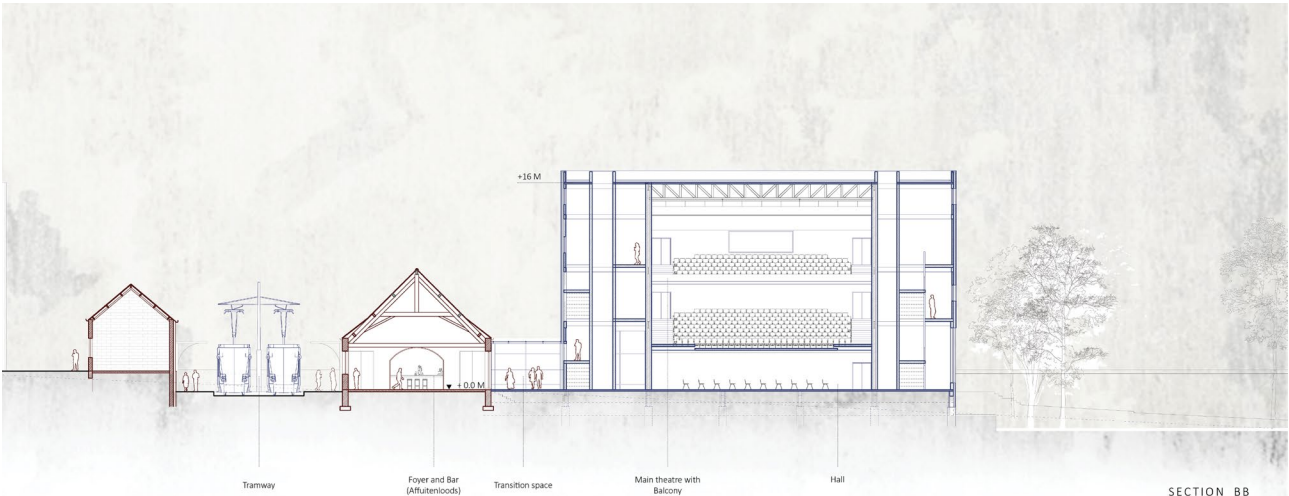
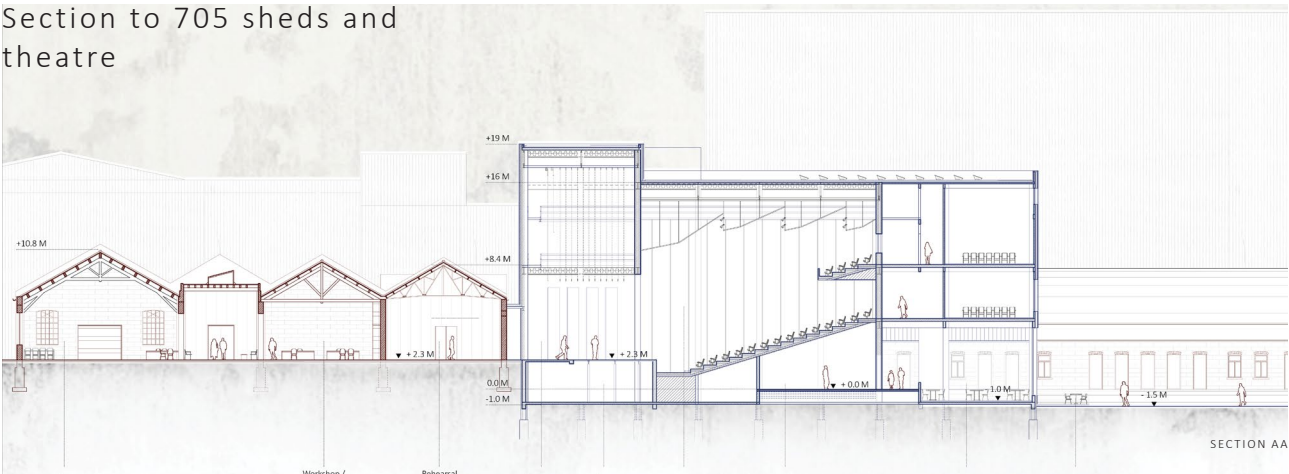


Balcony level Plan

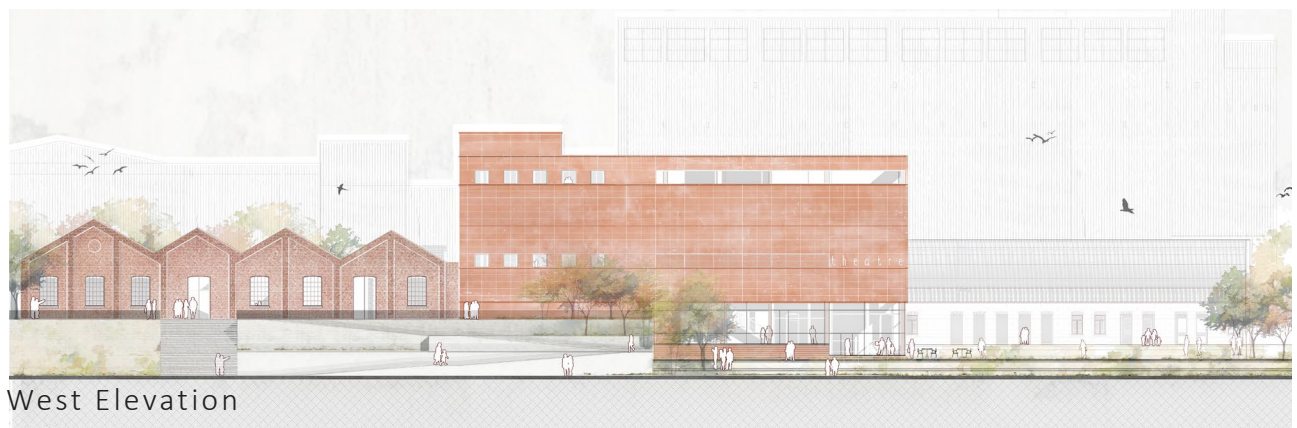
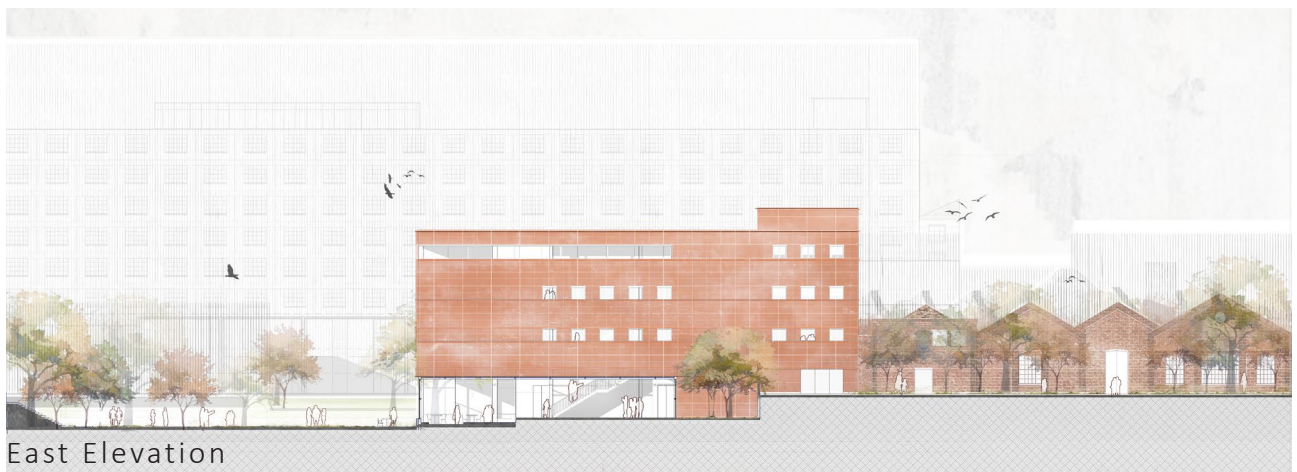


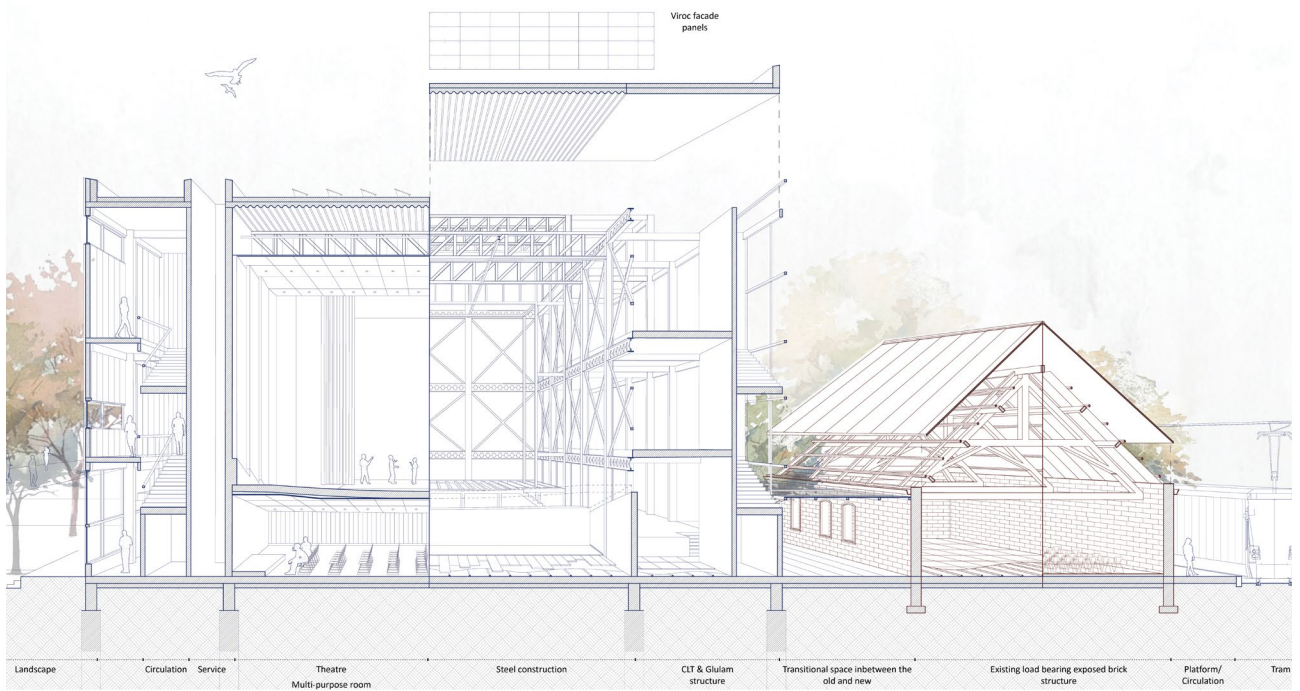


Section to 705 sheds and theatre



Section to Affuutenloods





Sectional Perspective



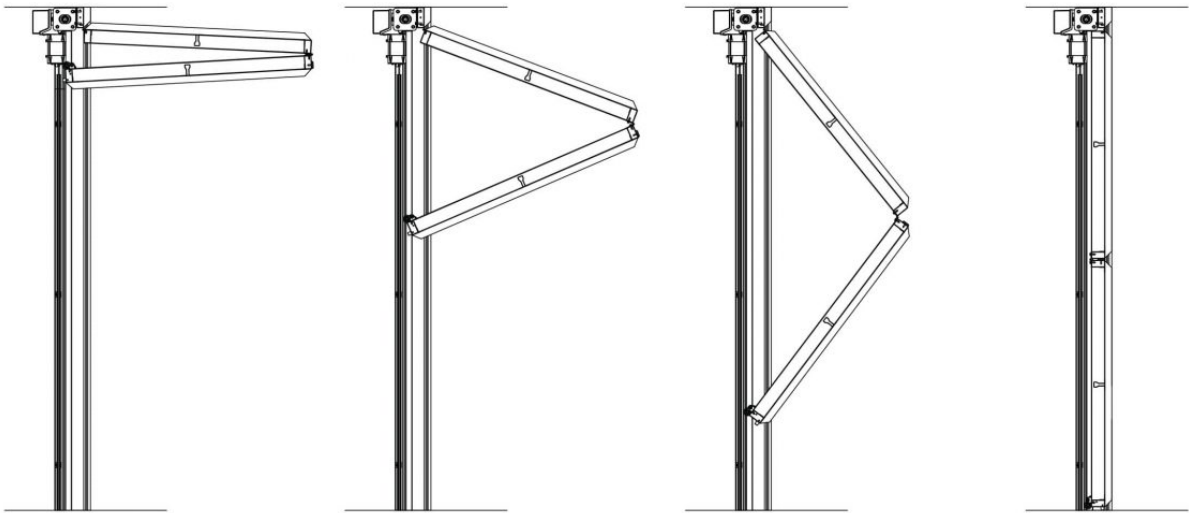
8.1 Facade Fragment



Veelzijdige reeks
texturen
ruw, gepolijst of geschuurd

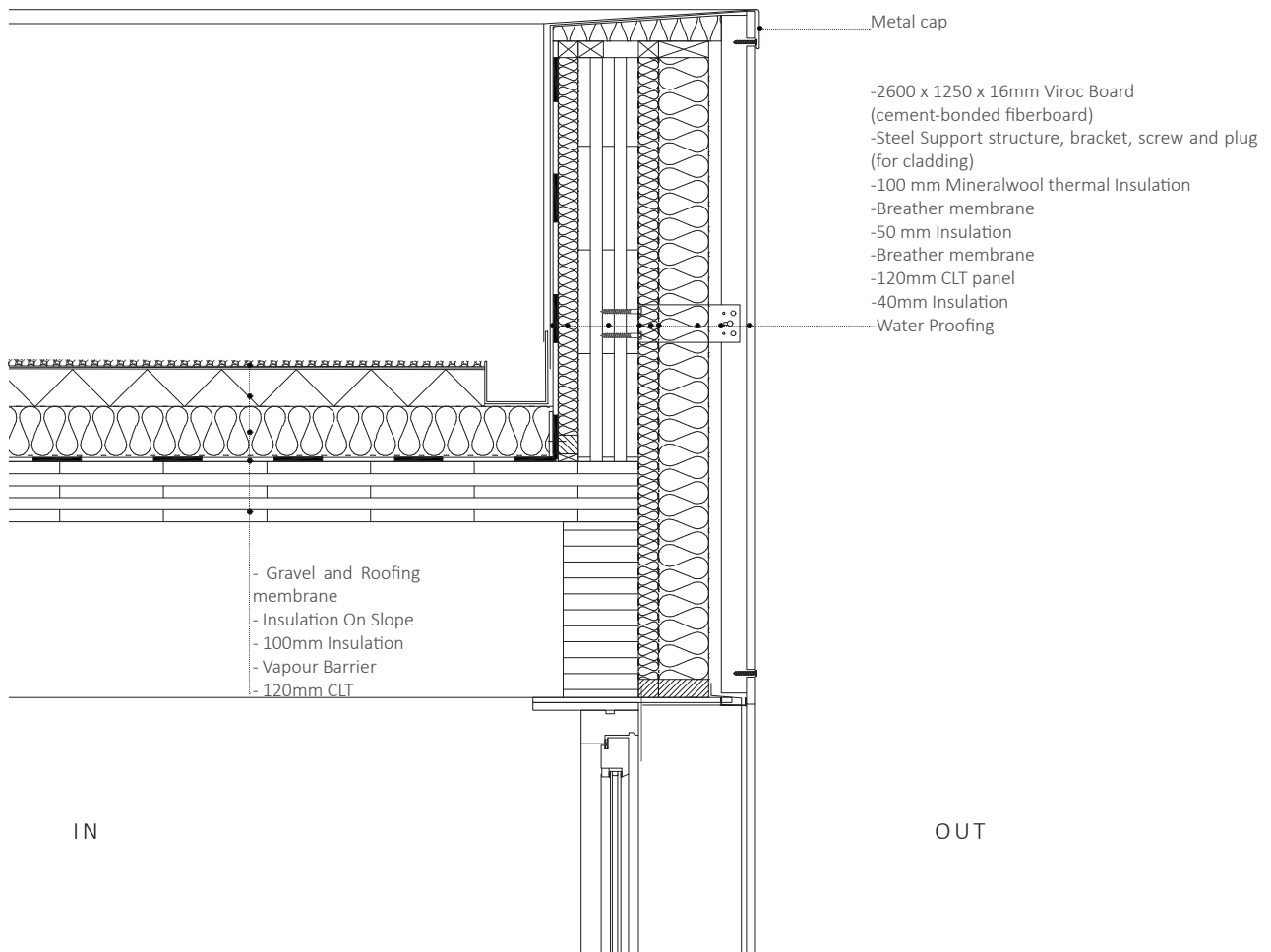
Colours / Thicknesses (mm)	8	10	12	16	19	22	25	28	32	Dim. (mm)
Black NB	*	*	*	*	*	*	*	*	*	3000 x 1250 2600 x 1250
Grey CZ	*	*	*	*	*	*	*	*	*	
White BR			*	*						2600 x 1250
Ochre AC			*	*						
Yellow AB			*	*						
Red VM			*	*						

Viroc Panels



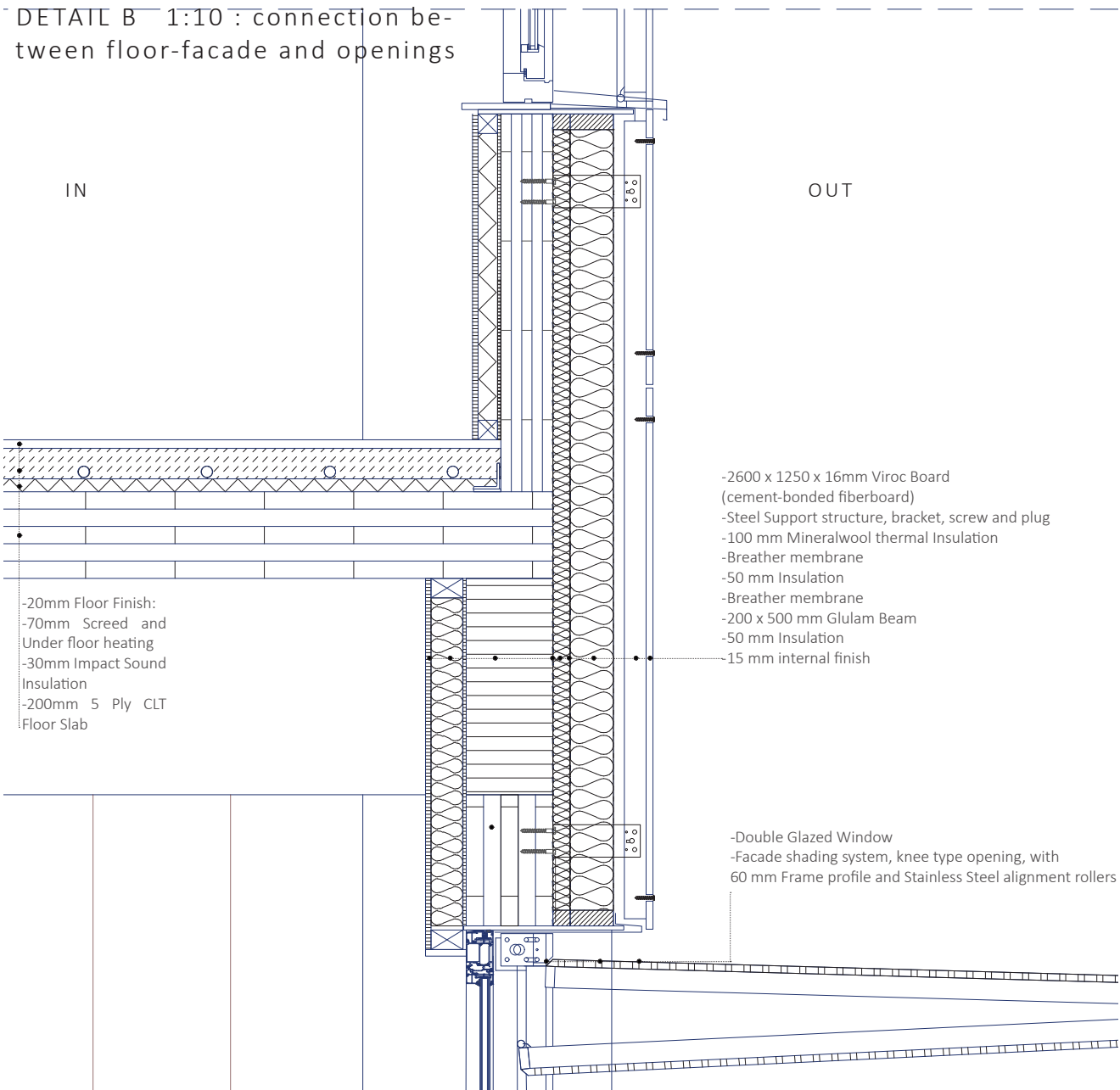
Horizontal louvers: Knee type opening

DETAIL A 1:10 : Roof level

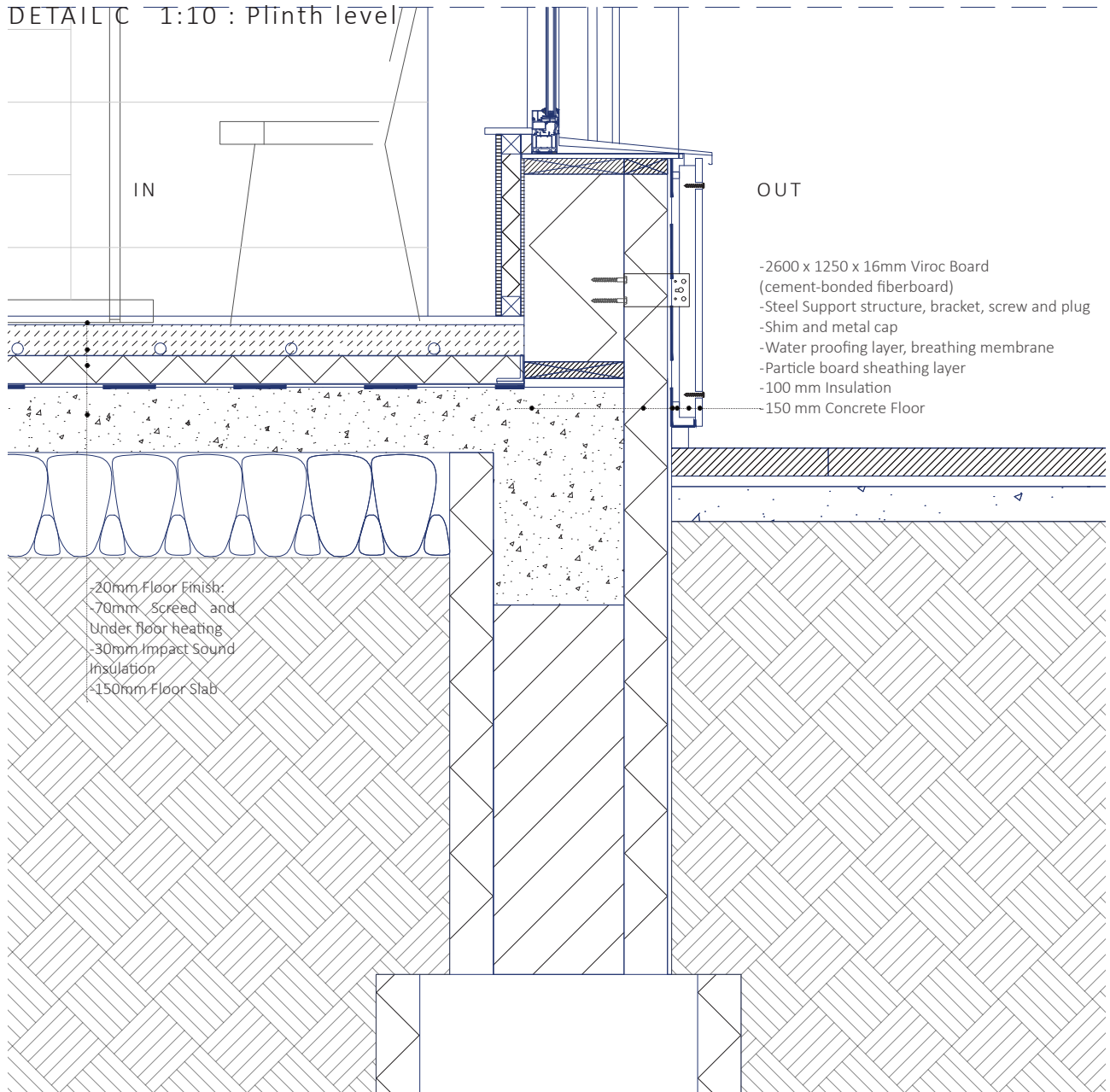


8.2 Details

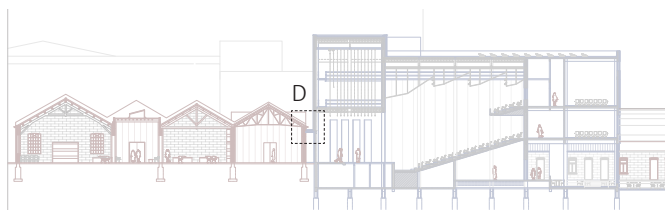
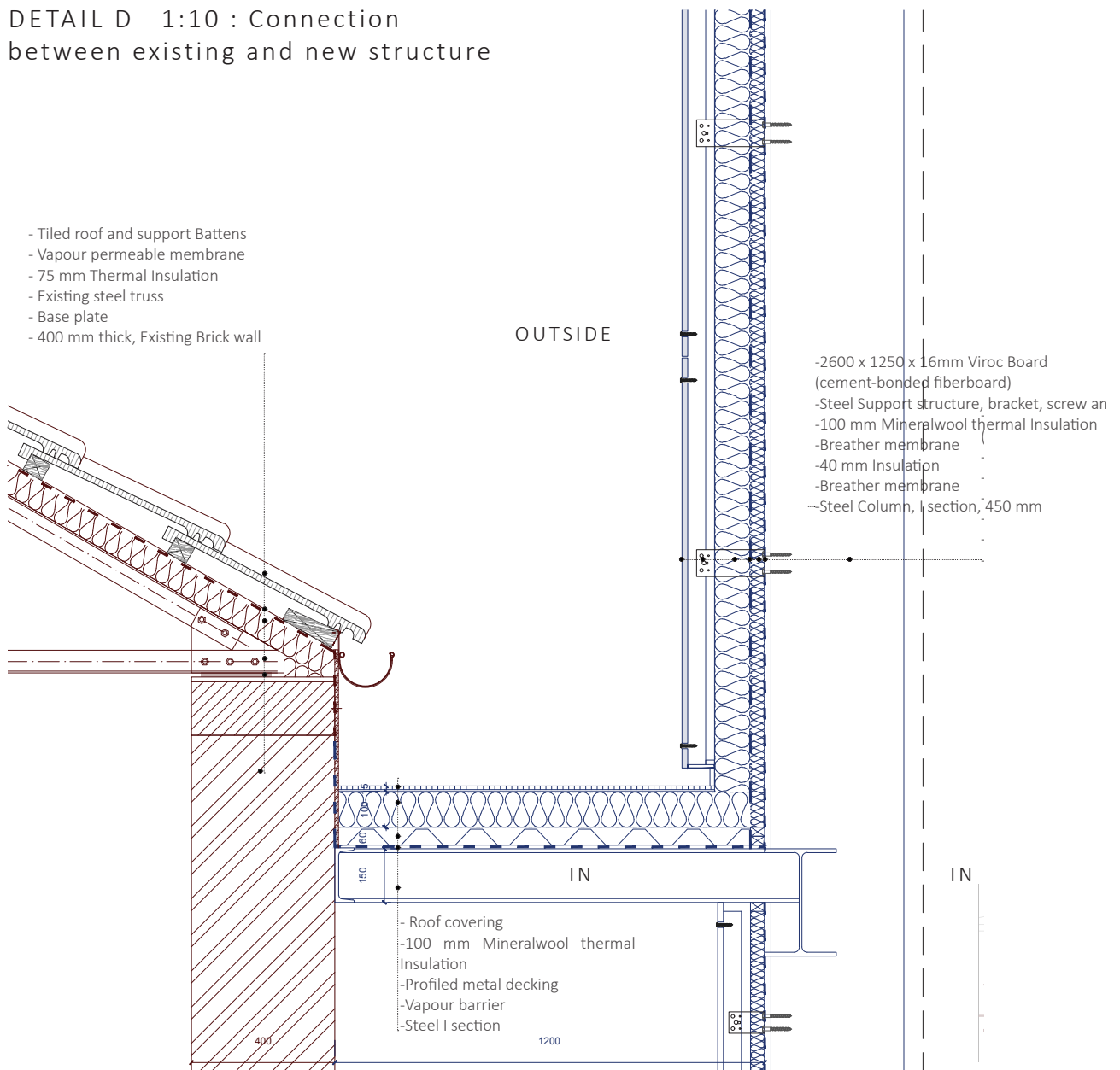
DETAIL B 1:10 : connection between floor-facade and openings



DETAIL C 1:10 : Plinth level

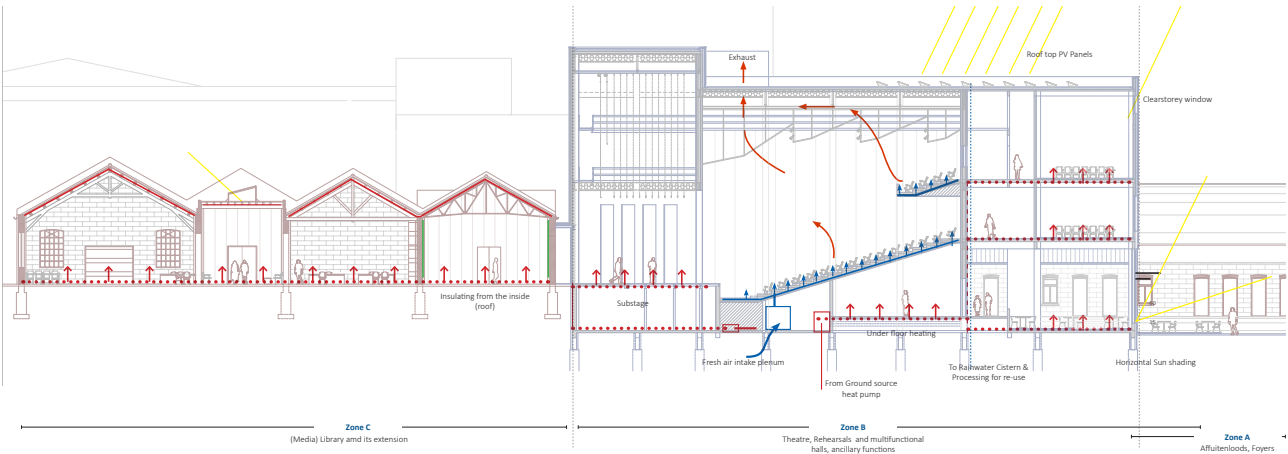


DETAIL D 1:10 : Connection
between existing and new structure





8.4 Climate Diagram



Climate diagram

Roof top PV Panels

Roof plan



Foyer in affuittenloods

9. Interior Impressions



Transitional space inbetween the old and new



Restaurant with affuitenloods as the backdrop



Rehearsal hall in shed 705



Library hall in shed 705

Aspect 1 covered in Overview (pg. 7)

Aspect 2 :
the relationship between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)

The graduation project delves into the theme of renewals and transformations of unused interstitial spaces, defunct industrial infrastructure prevalent in urban areas which are in the process of transformation and de-industrialisation and tries to identify the potentials of such spaces for intervention. Learning from the past renewals in Maastricht, and the present conditions, the project looks at how the existing structures and the spaces between them can be repurposed, reused rather than direct demolition, and how careful architectural interventions can create harmonious relations between old and new developments, and reshape urban environments while preserving traces of their past. Designing and repurposing of such leftovers of the urban fabric into spaces that can become meaningful for the neighbourhood/ urban area also resonates with the studio's theme of Gleaning (Glaneurs, Glaneuses).

Aspect 3 :

Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry.

The graduation projects, builds on the Graduation studio's approach of conducting site specific research supported by wider theoretical notions to determine interventions suitable for the place. The research had three main components, a. studying the city and its composition through the story of its renewals, b. understanding the site and its current state, as well as theoretical research into similar sites/ notion of urban interstices c. research specific to architectural intervention: design of performance spaces.

For the first phases of research, archival research was conducted to study the architectural histories of urban renewal in Maastricht. In addition, site visits were undertaken to view the current situation in Maastricht, especially in the areas that have been renewed, and to examine the consequences of the renewals on both the urban fabric and social dynamics. Interviews were also conducted to find out the creator's perspective on the city and its renewals. Findings regarding the three precedents of renewals were presented by means of a short film along with models that presented the architectural language of the structures in these renewals.

The research regarding the site continued through archival research, site visits, reviewing publications and ambition documents for the area, visit to the factory, and programmatic analysis. The theoretical research conducted regarding the Notion of interstices, in the case of the city of Maastricht was only relevant to one particular part of the city: the northern fringe.

Reflection

As most other areas of the city are inherently carefully planned or have been already completely renewed. The research during design, started with archival research and documenting the existing structures on site, followed by case study analysis of several precedents for design of theatres and its public realm.

Aspect 4 and 5 :

Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice. Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework, touching upon the transferability of the project results.

While dealing with existing fabrics, the questions about what is valuable, why and for whom are constant and there are dilemmas regarding what can be removed or replaced, as the consequences of these decisions not only change the physical fabric but also alter the social fabric and historical traces. The way the proposed alterations modify the public space in the area, and their impact on the old structures and flows through the site, relations between the existing and new structures, remained an important question and concern throughout the design process, at the architectural and urban scale interventions as well as while detailing the connections between old and new elements.

Like Maastricht, several cities are undergoing similar urban transformations with simultaneous deindustrialization, leading to the formation of interstitial spaces, unused industrial structures, undesignated plots that lie vacant in proximity of city centres and everyday life. The research and design project can contribute to understanding the value and potential of these spaces – in terms of their architectural, social, and material aspects.

