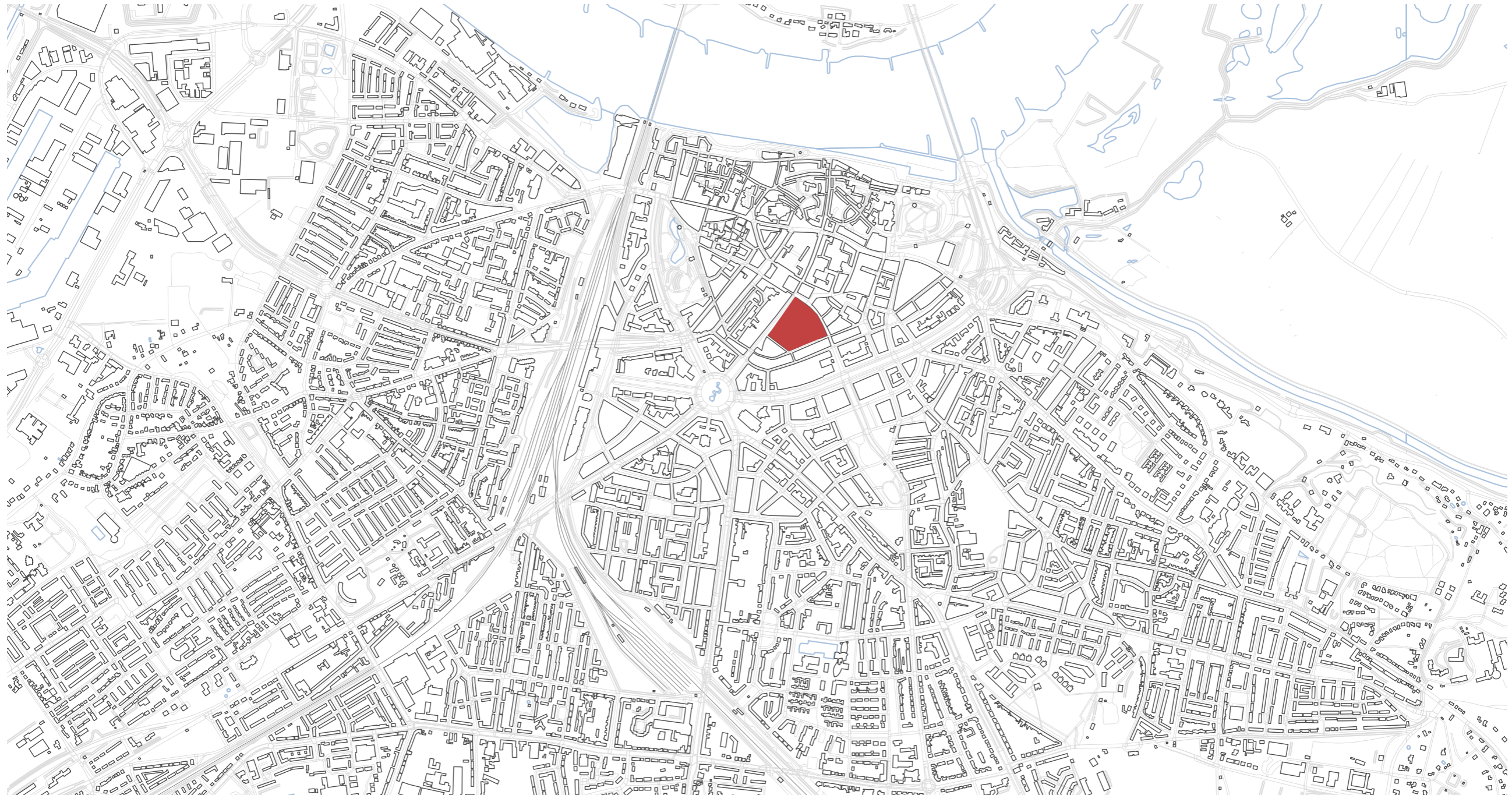
An architectural line drawing of a multi-level health and wellness center. The drawing shows a large open-plan space with a wooden floor. On the left, two people are playing soccer on a court. In the center, a man and a child are walking on a mezzanine level. On the right, there is a large open area with a grid floor, possibly a gym or studio, with a railing overlooking the lower level. The drawing is composed of simple lines and hatching for shading.

A Health and Wellness
Centre for the city of
Nijmegen.



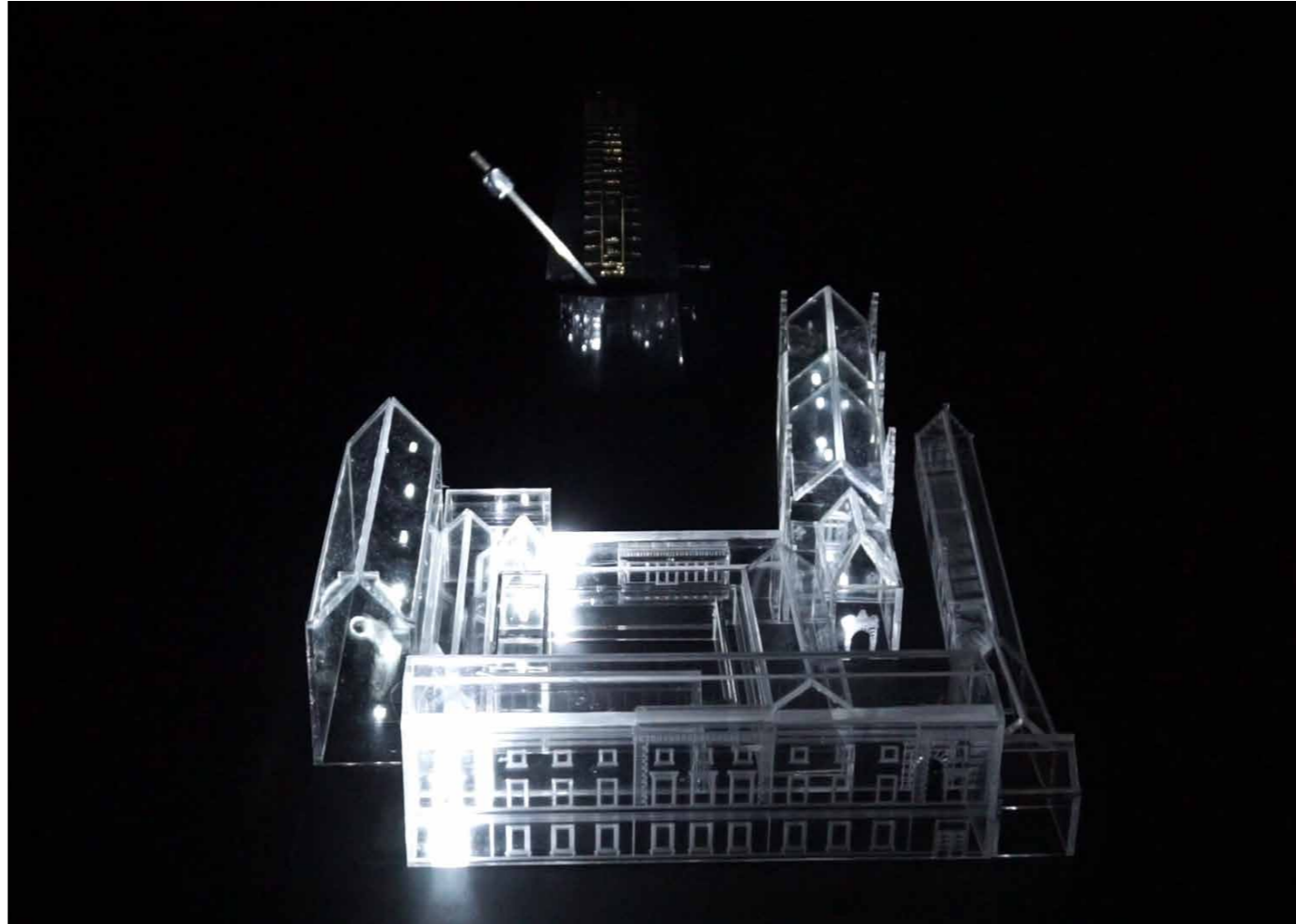
What time is this place?

Model of the churches fragments, catalogued within a closet



Model of the city governed by the rythems of nature







The theme of escape



The theme of escape

Urban proposal

The creation of an oasis in the city centre, an escape from the dominant consumerism of the area.

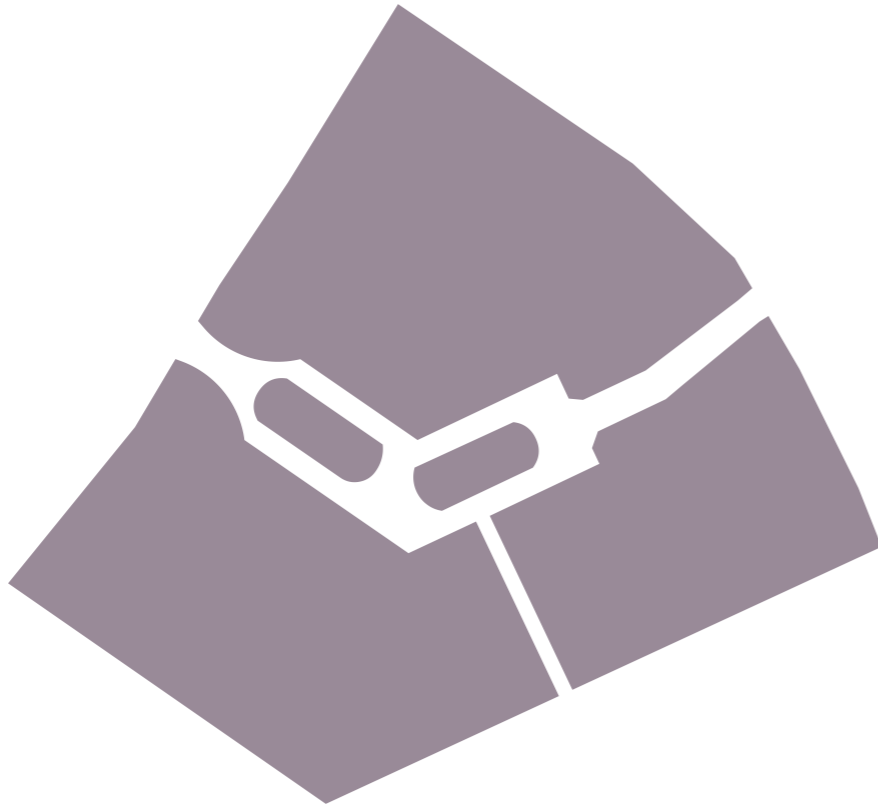
Building program

The proposal for a Health and Wellness centre that aims to escape from the consumerist values present on the site and replace them with ones of community and mental and physical wellbeing.

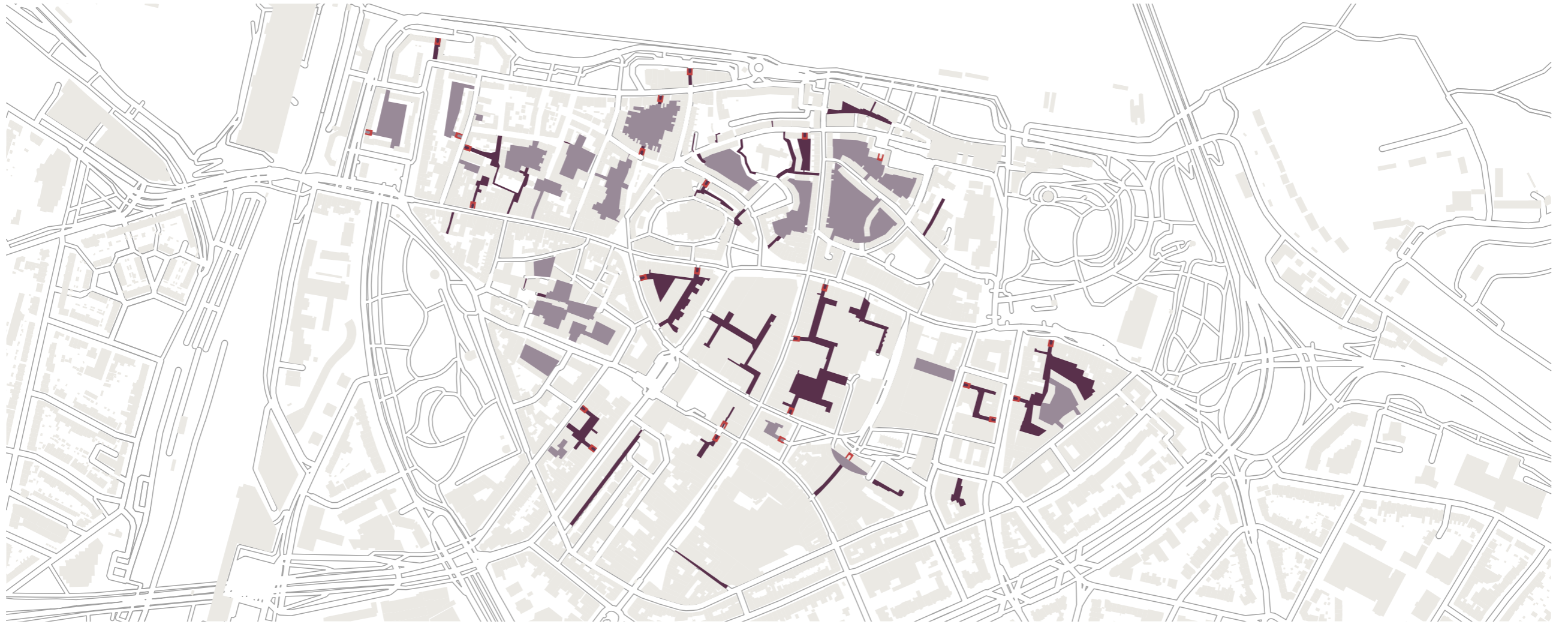
Architectural and detailed design

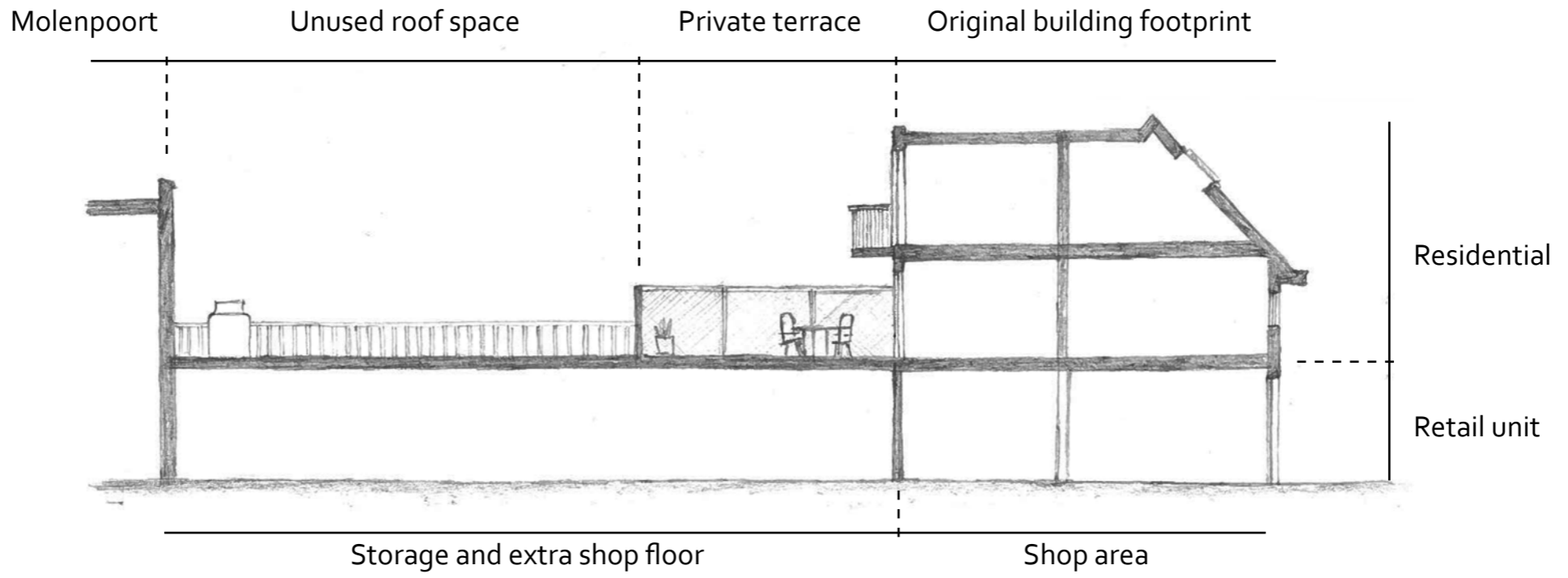
Implementing research into escape through play within the architectural and detail design of the building.

Development of Urban Scheme



The creation of an oasis in the city centre, an escape from the dominant consumerism of the area.

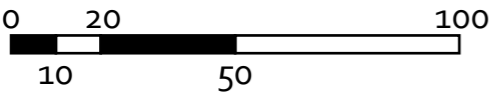






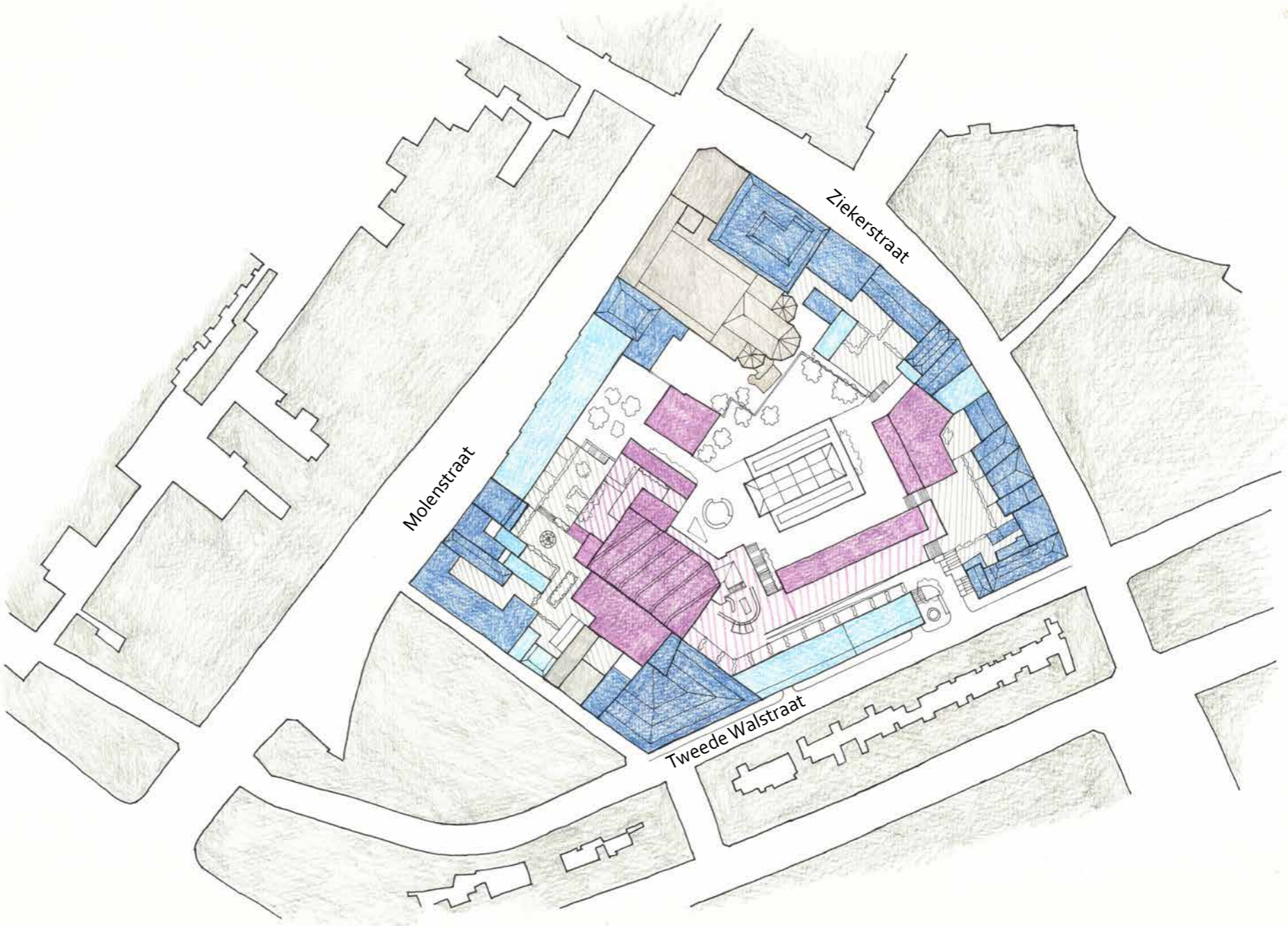
Ground level plan

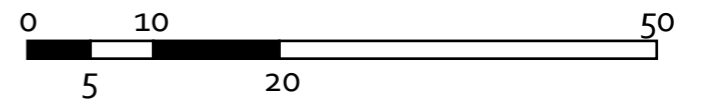
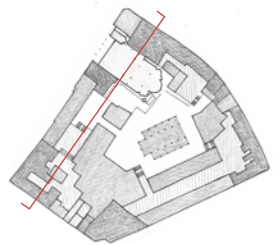
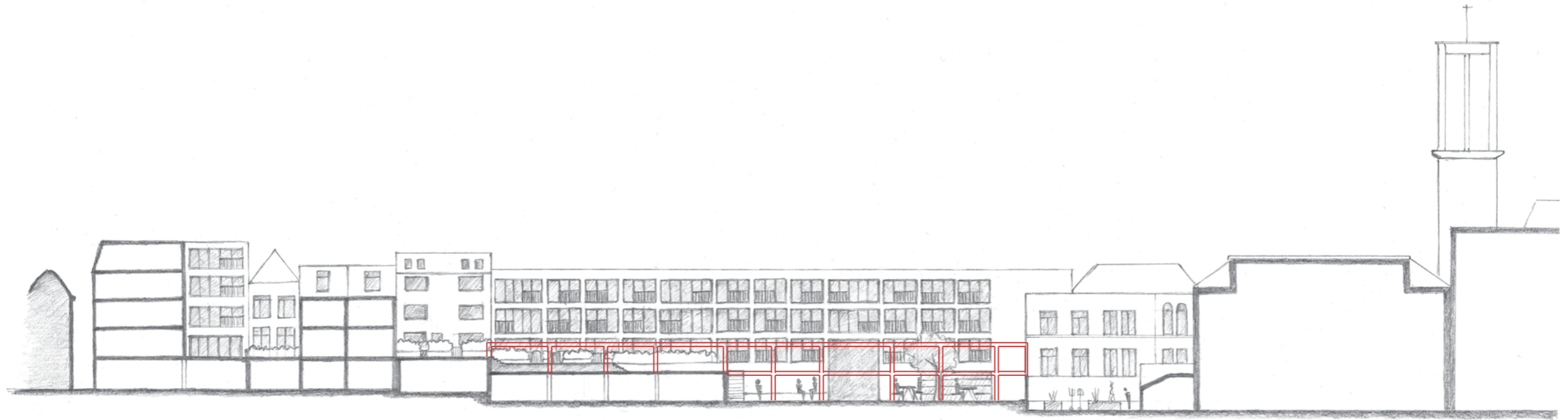
-  Parking
-  New Housing
-  Proposed facilities
-  Proposed retail units
-  Community kitchen
-  Allotments



Upper level plan

-  Existing housing
-  New Housing
-  Proposed facilities
-  Roof terrace
-  Roof terrace (above proposed facilities)







Shops with housing above

Roof terrace

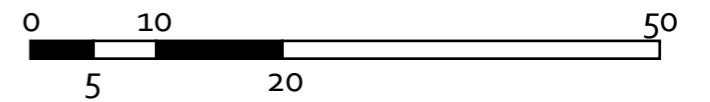
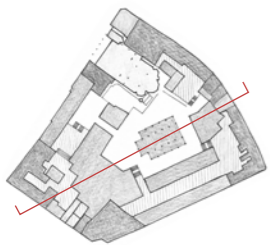
Health and Wellness Centre

Central square

Winter garden event space

Child care

Shops with housing above



Development of building program

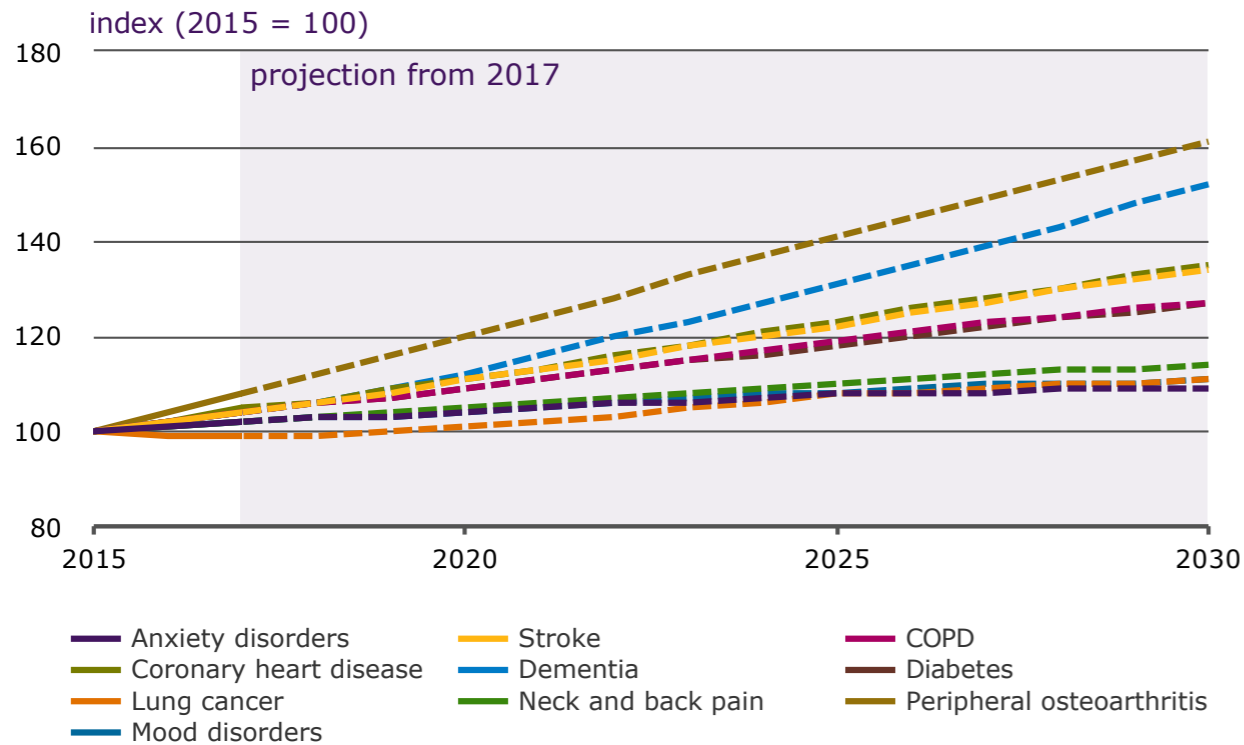


The proposal for a Health and Wellness centre that aims to escape from the consumerist values present on the site and replace them with ones of community and mental and physical wellbeing.



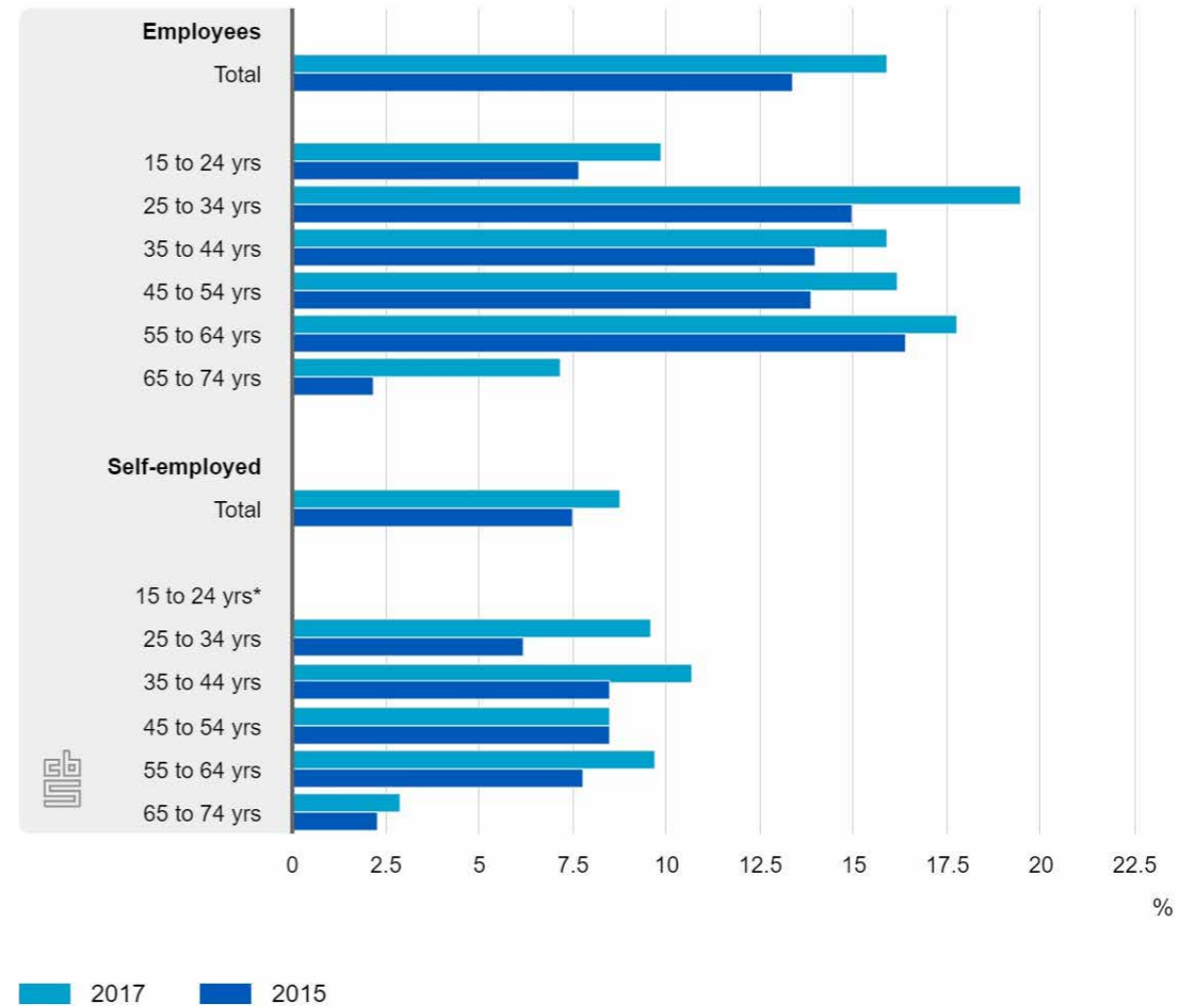


Trend in prevalence of disorders in Nijmegen



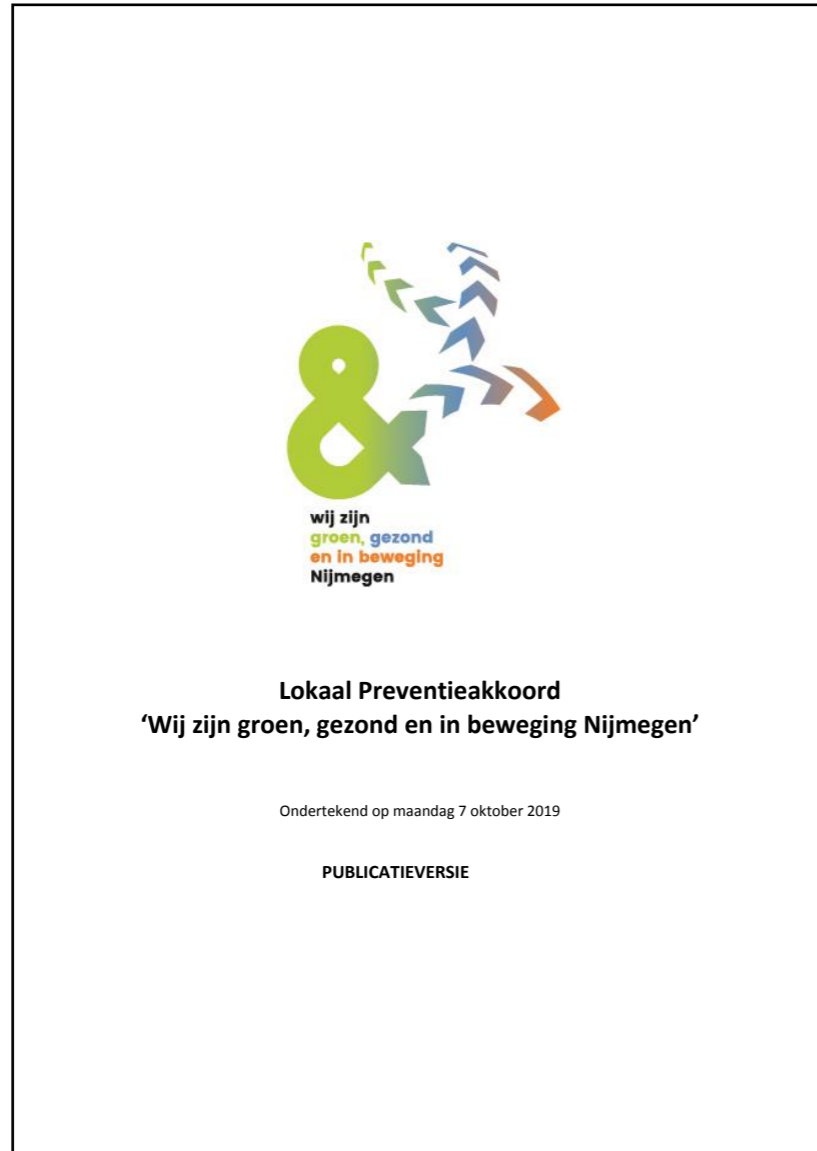
Source: Volksgezondheid Toekomst Verkenning 2018 (RIVM), <https://www.regiobeeld.nl/gezondheid-leefstijl?gemeente=Nijmegen>

Trend in prevalence of burnout in the Netherlands



Source: CBS, TNO, <https://www.cbs.nl/en-gb/news/2018/46/more-work-related-mental-fatigue>

Nijmegen Prevention Agreement



Aims:

- Improved mental health and social well-being
- Creating space for:
 - Social interaction
 - Relaxation
 - Sports
 - Play

Proposed Building Program

Consultation and therapies		
Health check rooms	2	50 m ²
Physiotherapist	2	50 m ²
Large physio room	1	60 m ²
Psychologist	6	85 m ²
Group therapy/ Seminar rooms	2	75 m ²
Acupuncture/ Massage	4	75 m ²
Lifestyle		
Swimming pool	1	620 m ²
Sauna and steam rooms	4	20 m ²
Hydrotherapy baths	1	230 m ²
Changing	4	240 m ²
Sports hall	1	720 m ²
Squash courts	1	650 m ²
Ping pong	1	130 m ²
Spectators	2	180 m ²
Flexible studios (Yoga, Pilates, Dance, Boxing, Amateur drama, exercise classes)	2	250 m ²
Active corridor (Including bouldering, climbing wall, parkour equipment and social club)	1	460 m ²
Administration		90 m ²
Services (toilets, plant, storage)		520 m ²
Circulation		370 m ²
Total		4350 m²

Architectural and detailed design

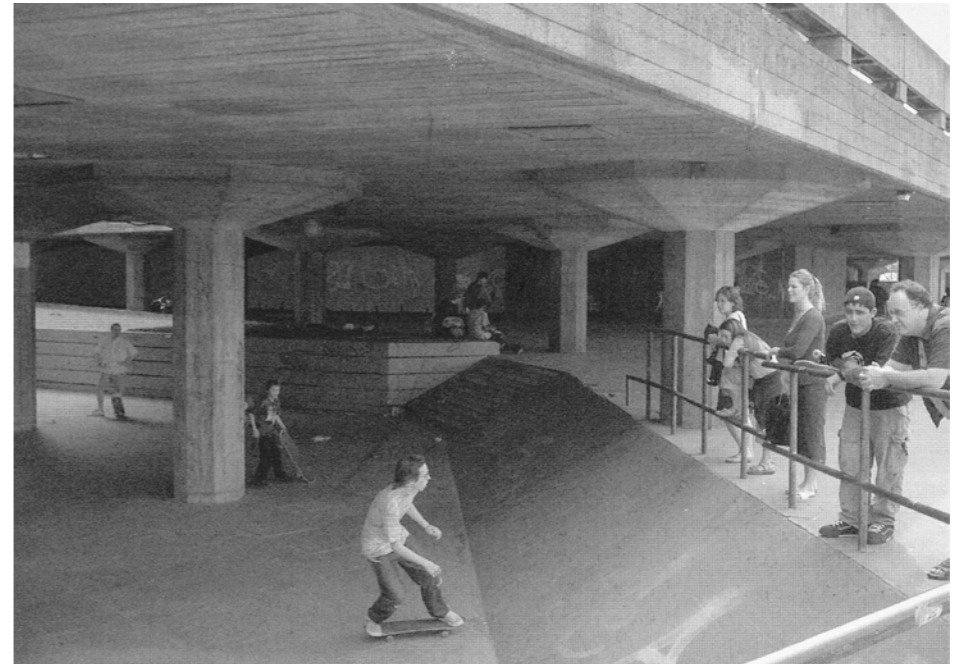


Implementing research into escape through play within the architectural and detail design of the building.



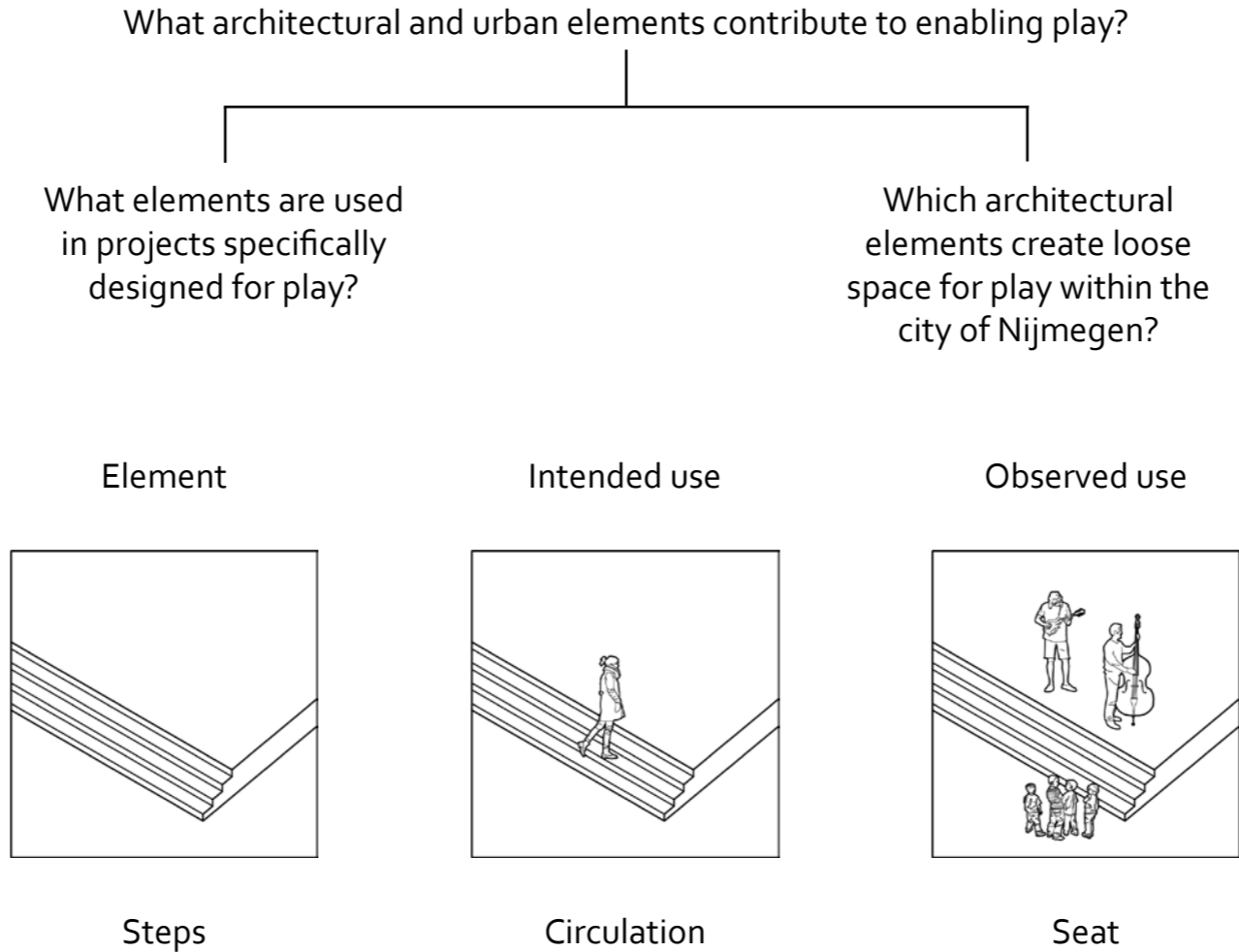








What is the role of architecture and urban design in the creation of spaces that enrich human well-being through play?



Play in Nijmegen

Boundaries

Stevens identifies that boundaries and thresholds create spaces where different sets of social rules and expectations meet and transform enabling them to function based on inviting people to behave in creative and playful ways (Stevens, 2007, pp. 73-74). These liminal conditions also exist in time and moments within life. For example, children, teenagers and the elderly can use boundaries within periods of life to behave in lesser ways. This is also true of collective moments of the day like smoke breaks, or in the year such as public holidays, celebrations and festivals (Stevens, 2007, p. 74).

Boundaries are also used as elements within games, demarcating areas where different roles and rules apply (Stevens, 2007, p. 114). For example, two sections of the pitch within field games, the stage and the audience within performances, or within free play any line or separation can be used in conjunction with any created rule to form a unique and spontaneous game.

People within boundaries can gain a sense of togetherness, for instance a football team or crowd at a concert (Stevens, 2007, p. 115).

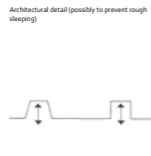
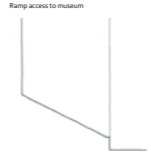


1.1 - King of the Hill, Brooklyn, 1990 (Photo by Arthur Leppig)

Performance
Stevens also identifies how boundaries can form a backdrop for performance (Stevens, 2007, p. 110) in the example observed to the right a guitarist stands in front of a facade in the lesser used space between two entrances.



Museum ramp
Ramp access to museum
Sloped edge
Street facade



Ramp access to museum
Architectural detail (possibly to prevent rough sleepers)
Blank space between entrances



A bar table to eat at
Skating ramp
Performance backdrop

Boundary and time

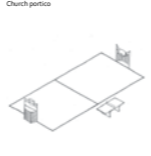
In Lesser Space, Stevens identifies how a space's boundary can also change with time. He gives the example of skaters using the stairs in front of an office once the office has closed for the day (and, p. 82). The church on Molenvoort is a good example of this. Before and after worships the portico is used as a place to gather and chat. Throughout the rest of the week it becomes a place for passers-by to sit. A food truck also occupies a space in front of the church on most afternoons and the church steps offer a place to sit and eat the food. Food delivery drivers coming and going from central restaurants also use the space as a covered area to take a break and wait for the next order.

Territory

Boundaries are then used to form territories. The book City Play identifies the importance of creating territories and controlling space as part of the New York playscape. Areas of the city can be divided into territories - some safe, some dangerous, and some designated as leisure areas (Dargatzis & Zaitlin, 1999, p. 23, 28, 34, 35). Stevens (2007, p. 114) notes that these areas designated for play within the city can create spaces that allow people to behave differently. However Rodrigo Perez de Arce (2010) describes the kind of zoning as functionality, and an example of the planner aiming to control the functional city.

Physical properties

The physical properties of boundaries can also inform how they are used for play. Solid edges can be pushed or played against and inclined edges can be climbed (Stevens, 2007, p. 114). In the case shown here the reflective quality of the glass offers a mirrored surface for play.



Church portico
A transition space for churchgoers
Sports court



A transition space for churchgoers
Ball games
Shop window



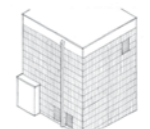
A place to sit and take a break
Events (retrieved from google street view)
Displaying clothes

Walls

Walls are an example of play against hard boundaries. Amanda Dargatzis and Steven Zaitlin give examples of bouncing balls against walls or tying skipping ropes to protrusions (Dargatzis, p. 42). Stevens also gives examples of sitting, climbing, skating and hanging banners on walls (Francis & Stevens, 2006, p. 5). He also comments on the role buildings can play in these moments of play by describing the facades of buildings on the walls of the street (Dargatzis & Zaitlin, 1999, p. 24).



Walls
Walls
Walls
Walls



Walls
Walls
Walls



Contains functional equipment
The wall serves as a flood defence
Separation (of levels)



Football against a wall
Climbing
Parkour

The edge effect

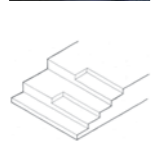
Coined by Derk de Jonge the edge effect describes the phenomenon where people prefer to stop, stand and sit at the edges of a space before then moving towards the centre (Lange, 1993). In A Pattern Language it is argued that "if the edge falls then the space never becomes lively" (Alexander, 1977, p. 600). This is because the edge condition allows people to regulate their involvement with activity of the centre by allowing them to watch over the whole space and engage if they want to (Stevens, 2007, p. 115). Both Alexander and Jan Gehl argue for the creation of building edges that engage with users inviting them to stop, helping to promote activity within public spaces next to the building. These "soft edges" also create a smooth connection between inside and outside (Alexander, 1977, p. 75; Gehl, 2004, pp. 191-197).

Sitting

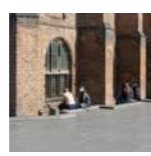
Creating spaces for sitting within cities is important. In the book to make complex forms of social interaction and play. Benches that face paths are favoured because people enjoy sitting where there is a view of other people. The shape of benches is also discussed by Jan Gehl. L shaped arrangements enable easy communication between people and tables provide opportunity for food and drink (Gehl, 2004, p. 27, 155-170). Gehl also argues that the use of secondary seating on fountains, steps, and facades means that if there are not many people at certain times it does not seem like the space is abandoned (Gehl, 2004, pp. 40-45).

Steps

Stevens identifies steps as being able to create stages or seats, balancing a connection between audience and actor (Francis & Stevens, 2006, p. 80). Within Nijmegen the use of steps as a seat, something to skate against, something to slide on and a stage for performances were all observed.



Steps



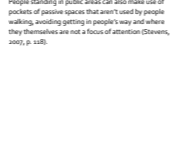
Circulation



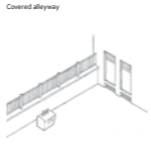
Seat and Stage

Niches

Niches can be found within cities as spaces that are particularly enclosed or sheltered. Stevens identifies them as places where people can linger and feel less watched. The spaces could be used for forbidden activities such as drinking, sexual encounters or trading stolen goods, which Stevens also identifies as creating lesser space (Francis & Stevens, 2006, pp. 9-11). Dargatzis and Zaitlin (1999, pp. 138-139) also observed this behaviour in children in New York who created clubhouses - special spaces where normal activities such as reading a comic became more sacred. It is then suggested that the urge to create clubhouse clubhouses is manifested as clubs for leisure activities in adults.



Covered alleyway
Area at rear of Molenvoort



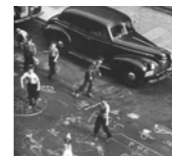
Space for deliveries to shops
Space for deliveries to Molenvoort



A space used to hang out
A place to take a smoke break

Hard surfaces

In Lesser Space, hard surfaces are identified as places for protest and skating. Skating can be seen as an activity that creates loose space, with players actively seeking out loose and latent moments in the cityscape (Francis & Stevens, 2006, pp. 2-4). Hard surfaces are used by roller skates and skateboarders throughout Nijmegen. One observation saw protesters writing "Zwaarte Piet is racism" all over the central streets of Nijmegen in chalk. As the morning progressed street cleaners and shop owners removed all traces of the message.



Paved ground
Easy movement of vehicles and people
Drawing on the road (photos by Arthur Leppig)

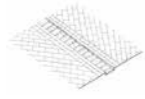


Graffiti
Graffiti removal

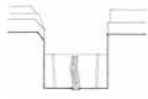
Play in Nijmegen

Water

Water is identified as an element that influences play in a number of texts. In *City Play*, water is described as "a basic element of play and recreation" giving examples of beaches, pools and rivers (Dargatzis & Zentilli, 1999, p. 93). Stevens also describes how river settings within cities create a sense of freedom because of the spatial separation created when compared with other parts of the city. He also describes how artificial elements such as fountains can become the focus of play, both as something to physically engage with or as something to watch (Stevens, 2007, p. 142-143). The book *City of Play* also gives reference to the historic annual flooding of Piazza Navona in Rome, for recreation. The fire hydrant is also recognized as an urban element which became iconic in its ability to be repositioned for play. On a smaller scale water taps and hoses can also be elements of play within private gardens (Dargatzis & Zentilli, 1999, p. 55; Pérez de Arce, 2003, p. 35-37).



Water feature



Urban prop - water feature



Interacting with water



Opposite, bottom left 2.3 - Playing in the fountain on Zusterstraat (photo Arno Bouwens)



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Level changes

In *City Play*, Dargatzis and Zentilli (1999, p. 142) identify how geological features caused New York to be formed in a particular way that then informs how people play within the city. This is also clear in Nijmegen where its natural topography creates level changes throughout the city that can be capitalised on by people as opportunities for play. Level changes appear as a recurring theme in the case studies examined in the following section as an opportunity for play.



Handrail



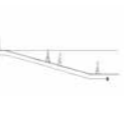
Provide assistance when climbing stairs



A slide



Ramp



Slope allowing movement of shoppers



Children scootering



Sloping stone form



Moderate level change



Sliding and climbing

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Ice and Snow

Snow's playful properties mean that it becomes the malleable surface of the city, enabling the building of creative structures or the use of slopes for sledding. It is also temporary, fleeting and disruptive of everyday routines, sharing qualities with celebrations and festivals. Ponds that bring water into cities also freeze over and offer new opportunities for recreation (Dargatzis & Zentilli, 1999, p. 95; Pérez de Arce, 2003, p. 89).



2.10 - Skating in Kronenburgpark (photo by Geert Geewies)



2.11 - Sledding at Marlenburg (photo by Tom Hessels)



2.13 - Sledding at Kronenburgpark (photo by Paul Ruyss)

Bollards and columns

Gehl identifies trees, columns and bollards as creating good places for people to stop and stand for longer periods of time within the city. These elements act as something to lean against as well as creating space that is not in the path of others. In addition, bollards can allow other forms of play such as leap frog (Gehl, 2011, p. 142-143; Stevens, 2007, p. 193).



Column



Throwing away waste



2.12 - Something to lean on or place things near. Piazza del Campi, Siena, Italy

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Carrying structural load



A place to sit

Page 35

Props

In *The Ludo City*, Stevens identifies props as elements within the urban environment that facilitate play. This category includes fixed objects within the urban environment such as public art, street furniture and play equipment. The urban environment allows people to get close to and engage physically with designed elements, some of which intentionally provoke play and others unintentionally (Stevens, 2007, p. 128, 134). Public artwork can allow people to both engage with the work physically, watch others play, or contemplate the art from a distance. The context of such elements also influences play, for instance open space allows players to gain speed or move around an object at the centre of an invented game (Stevens, 2007, pp. 148-149).



Sculpture



A piece of artwork



2.14 Climbing (see image references)



Division of space



Tennis net

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Traffic barrier



Control of cars into parking

Street furniture

Stevens recognizes that street furniture is often not designed for play and instead focuses on efficiently meeting a particular function, however, people that play in urban environments often test these elements and use them in creative and unintended ways (Stevens, 2007, p. 194).



Bench



Seating



Slating



Rear door to alleyway



Functional exit providing service access



A space to have a seat and take a break



Door step



Entrance and exit



Seat

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Doorways

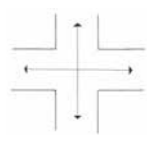
Gehl identifies the entrance as a good location for a bench, allowing for time outside with view of the city streets. "If an inviting and convenient place to sit is waiting just here [the entrance], experience shows that it will be used a great deal" (Gehl, 2011, p. 187). Observations within Nijmegen showed how steps and seat need to doors were often used as a place to take a break.

Intersections

Stevens identifies intersections as locations that help promote play. People are forced to slow down and become aware of things that are not directly in their direction of travel. This opens up the opportunities for distractions, making them good locations for performances or displays (Stevens, 2007, pp. 99-100).



Street corner



Intersection of roads



Creating of space suitable for busking

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Page 36

Play elsewhere

New Babylon, Constant Nieuwenhuys and The Fun Palace Cedric Price

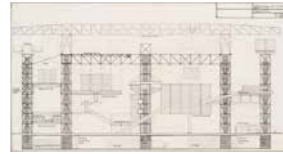
Both New Babylon by Constant Nieuwenhuys and The Fun Palace Cedric Price were both studied because of their aim to create more ludic spaces within cities, in an attempt to understand the methods used. Both projects were a response to what Price and Nieuwenhuys saw as an overly functional and controlled city.

Price saw the modern city as limited by the built environment of the past and the labels and functions associated with historic constructions. When describing urban environments he said "redundant buildings and the resultant use patterns acts as a straightjacket to total use and enjoyment" (Price, 2005, p. 21). He argued for a freer form of building that was less constrained to particular functions (Price, 2005, pp. 38-39). Nieuwenhuys shared a similar opinion, arguing that the cities of today are unsuited to the play of homo ludens and that they have become too functional to the point where human has become a victim (Nieuwenhuys & Schrofer, 1966).

Both projects take a similar approach in aiming to resolve this issue of the functional and ordered city, they aim to create spaces that are flexible and change to the needs and requirements of the users.

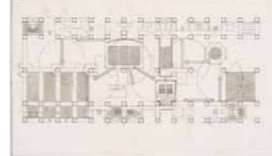
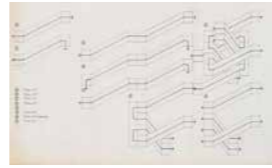
Price describes the Fun Palace as a framework capable of hosting all manners of facilities ranging from theatre and cinema to restaurants and workshops. He aims to create a space for experimental activities that are then defined and chosen by the users, the architecture itself simply providing the conditions needed and the ability to change (Price, 2005, p. 4, 8, 30, 32). These ideas are seen again in New Babylon where Nieuwenhuys describes "the environment of the homo ludens that to be flexible, changeable, allowing any movement, any change of need, any mode of behaviour" (Nieuwenhuys & Schrofer, 1966).

New Babylon took a particular focus on creating a city of play inspired by the book Homo Ludens. Nieuwenhuys also worked as part of The Letrat International and Situationist International which aimed to study the accidental playful qualities of existing urban structures and use them to create new architectural principles and ways of life. Building on the ideas discussed in these groups, Nieuwenhuys saw New Babylon as an artistic provocation of ideas for a future ludic city (Wigley & Constant, 1998, pp. 12-14, 30, 111).



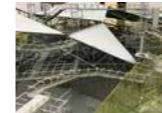
Movable building elements

New Babylon aims to create a "haphazard arrangement" of spaces which can be taken apart and rearranged through the use of standardized walls, floors, ramps, bridges and stairs. These movable elements enable the city's residents to control and construct their own desired environments (Nieuwenhuys & Schrofer, 1966, Wigley & Constant, 1998, p. 10). The Fun Palace also aims to create adaptable space with movable elements. Movable circulation is a theme with visitors to the building moving around on walkways, escalators and ramps that can move and change orientation. Furthermore, Price drew ideas of modular systems that could be used to create the walls of enclosures for functions (Price, 2005, p. 95).



Creating a labyrinth

Nieuwenhuys proposed the "haphazard arrangement" of spaces in an aim to create a labyrinthine structure as an opposition to the modern city's utilitarian organisation of space (Nieuwenhuys & Schrofer, 1966). Modern cities focus on effective orientation to allow efficient transport of goods, New Babylon proposes a maze of endless interactions, increasing social interaction. The sense of disorientation created aims to capture the spirit of those who wander cities without a purpose, welcoming the unexpected spectacles of the urban environment (Wigley & Constant, 1998, p. 14, 25, 26).



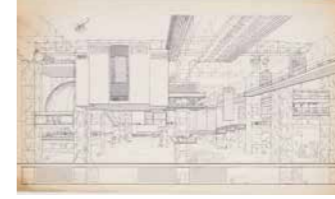
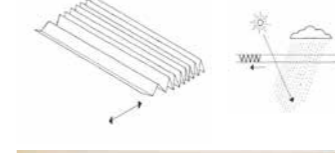
Levels

Levels play an important role in both schemes. New Babylon is constructed at a new level above the existing city while also containing meandering paths and different levels within it. The Fun Palace also creates an arrangement of different space at different levels within the supporting structure (Price, 2005, p. 95).



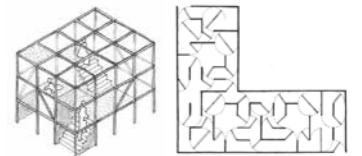
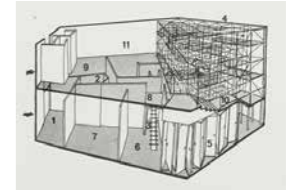
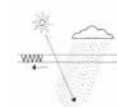
Blurring inside and outside

Price describes how the Fun Palace's absence of doors means that people are able to choose how involved they are with the different activities found within each space (Price, 2005, p. 95). Nieuwenhuys describes the construction of inner division as seamless. New Babylon is instead proposed as fields of space which the inhabitants then roam between (Nieuwenhuys & Schrofer, 1966, Wigley & Constant, 1998, p. 10). These ideas are related to the ideas of soft edges and threshold discussed previously.



Experimental Studio Rotterdam

An example of a built project by Nieuwenhuys that incorporates ideas from New Babylon is the Experimental Studio Rotterdam exhibit. The labyrinthine spaces involved smells, sounds, and crawling through small spaces (Nieuwenhuys & Schrofer, 1966, p. 45).



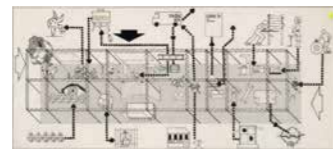
Ludic Stairs

Another project that implements some of the characteristics of New Babylon in a built scheme is Nieuwenhuys' "Ludic Stairs". Built for an exhibition in the Amsterdam Museum in 1965, the stairs continue the themes discussed by challenging how things can be used and proposing new creative and playful solutions to the everyday (Dickling Constant, 2014). In this case the form and use of stairs is questioned and a new solution is proposed promoting the building user to question accepted norms.



Inter-action

Inter-action is an example of a project built by Cedric Price that aims to incorporate the ideas of the Fun Palace. A flexible exterior structure supports interchangeable enclosures aiming to create a project that enables a flexible change of program. Within the scheme there is a layering of permeability with the external structure being open, the enclosures rearranging as needed and the contents of the enclosures altering even faster (Price, 2005, p. 37).



Sculpture and play - Isamu Noguchi

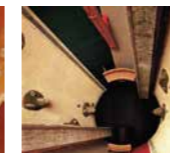
Isamu Noguchi, best known for his sculptural work, was interested in the relationship between people and the surrounding landscape (Lefauve & Doll, 2001, p. 45). One way in which he investigated this is the design of sculptural landscapes and play equipment. Play sculptures and forms had the benefit that though their use people would not only look at the object but interact with it (LARP&B). A key characteristic of his play forms is that their use is not always evident, enabling interpretation by the user and encouraging exploration (Harter, 1976, p. 88). He argued a similar point to Starbuck and Anderson (1988) in acknowledging the idea of a latent space or a gap between the "cubic feet of space and the additional space that imagination supplies" (Noguchi & Fuller, 2015, p. 160). He saw children as having an upper hand in seeing the possibilities the world had to offer because everything is a new experience, not yet confined to rules or expectations (Lefauve & Doll, 2001, p. 50).

Perhaps one of the most ambitious ideas was his design for "Play Mountain" - a communal play park proposed for a whole city block within Manhattan. The scheme proposed a large pyramid-like structure that could be climbed or containing a gymnasium, swimming pool, and skating facilities (Harter, 1976, p. 95). Essentially, water would run down the slope into a shallow pool. The slope could be used as a place to sit and watch performances at the banked during summer and a place to slodge in the winter. Similar themes were seen in subsequent work for similar landscaped playgrounds throughout his career (Noguchi & Fuller, 2015, pp. 174-175).



Architecture of Joy - Arikawa and Gins

Shohei Arikawa and Madeline Gins also investigated the relationship between the human body and architecture. Their work focuses on creating architecture of joy that promotes life or the art of near-dying. Their work seeks to challenge people instead of providing spaces that are overly comfortable (Lambert, 2014, pp. 7-10). Similar to the ideas argued by Jencks in Adhocracy - that repeated standardized forms of the modernist movement creates spaces where bodies become too comfortable and unengaged with the environment around them (Jencks & Silver, 2003, p. 95). In contrast, Arikawa and Gins create spaces where playing becomes living and the body is constantly challenged in how to occupy a space or what function spaces should be used for (Lambert, 2014, p. 42, 60).



Amsterdam orphanage and playgrounds - Aldo van Eyck

A number of themes already discussed can be seen in the work of Aldo van Eyck. Van Eyck believed part of the architectural problem was that elements were not just purely functional but also had a symbolic and social impact (Grafik et al., 2018, p. 15). This can be seen throughout his work where he carefully composes moments that allow interpretation and play. Van Eyck was interested in the informal way that life operated within the city and in urban fabric (Wigley & Constant, 1998, p. 48).



Propp
Within the Amsterdam playgrounds van Eyck created frames and stepped forms that invite interpretation from the children. In the Orphanage building, he creates fixed pieces of furniture that also invite interpretation and engagement.



Water
Carefully created forms are planned externally that collect rain water.

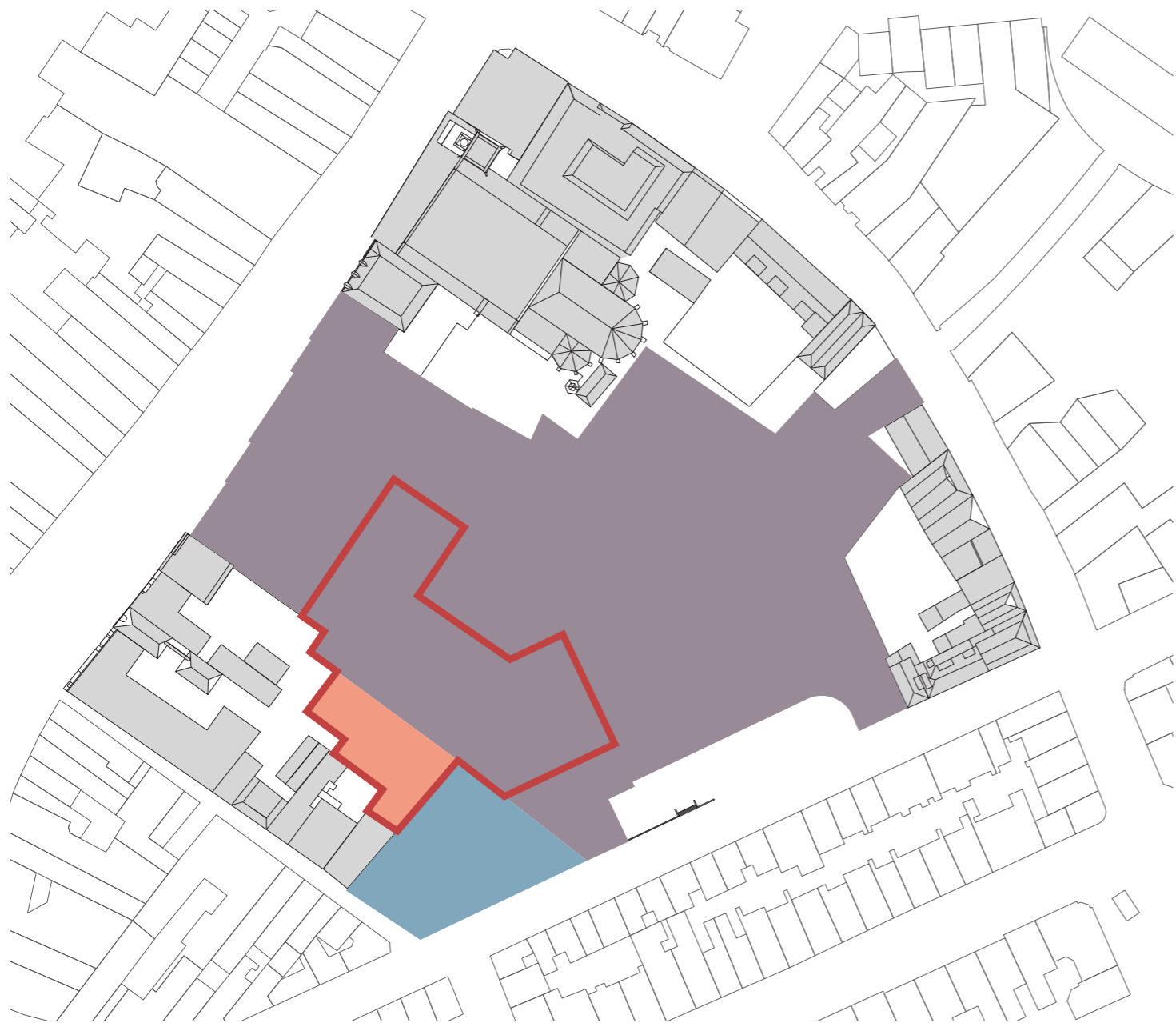
Boundaries
Boundaries, mainly formed from circles, can be seen repeated throughout different elements.



Thresholds
The threshold between indoor and outdoor space are carefully composed, emphasizing their connecting function.

Soft edges
Throughout the orphanage there is a connection between the inside and outside, external doors connect the internal spaces with the external courtyards, windows frame moments in the courtyards and large windows open spaces out to the greenery. In addition, similar elements were used externally to reinforce this link. Van Eyck believed that spaces inside buildings were never fully interior but also carried qualities of exterior spaces (Grafik et al., 2018, p. 15, 47).

Understanding the site



Proposed building envelope



Molenpoort shopping centre



Basic fit gym building



Adjacent storage building

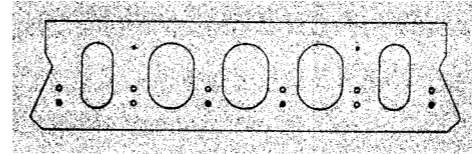


Reuse

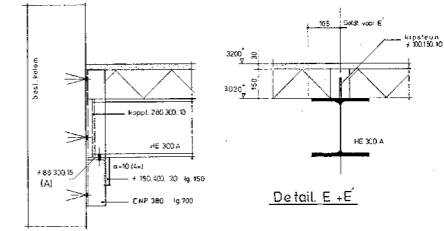
Tiles



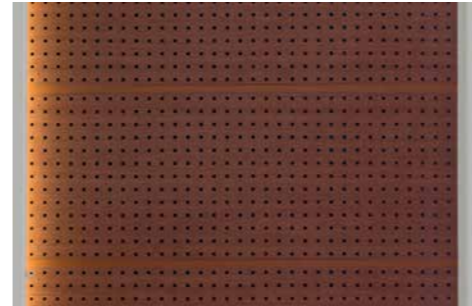
Prefabricated concrete



Steel sections



Acoustic ceiling



Internal windows



Stairs



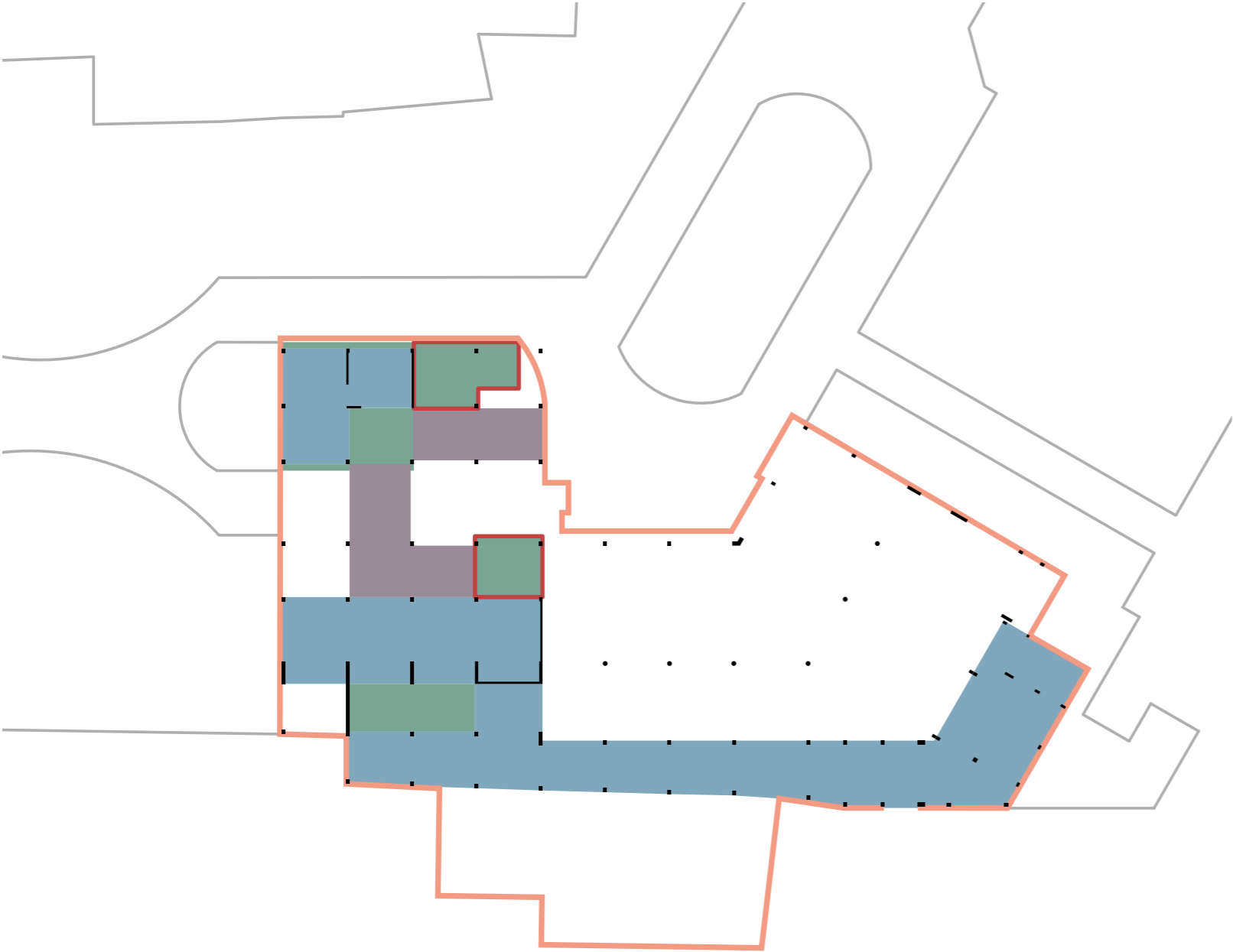
Railings



Mechanical equipment



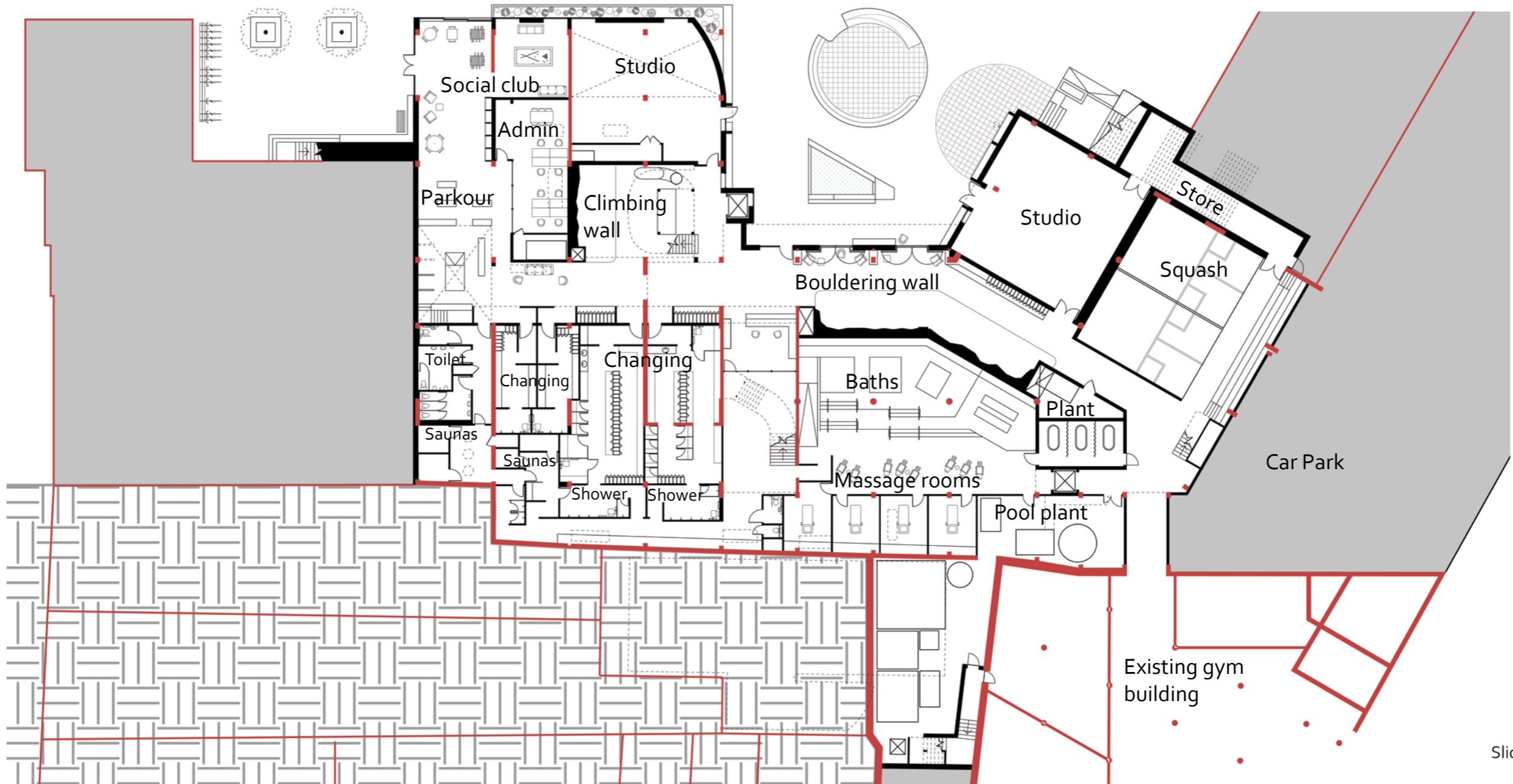
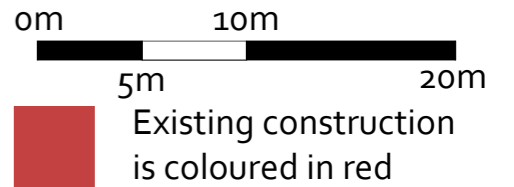
Proposed intervention

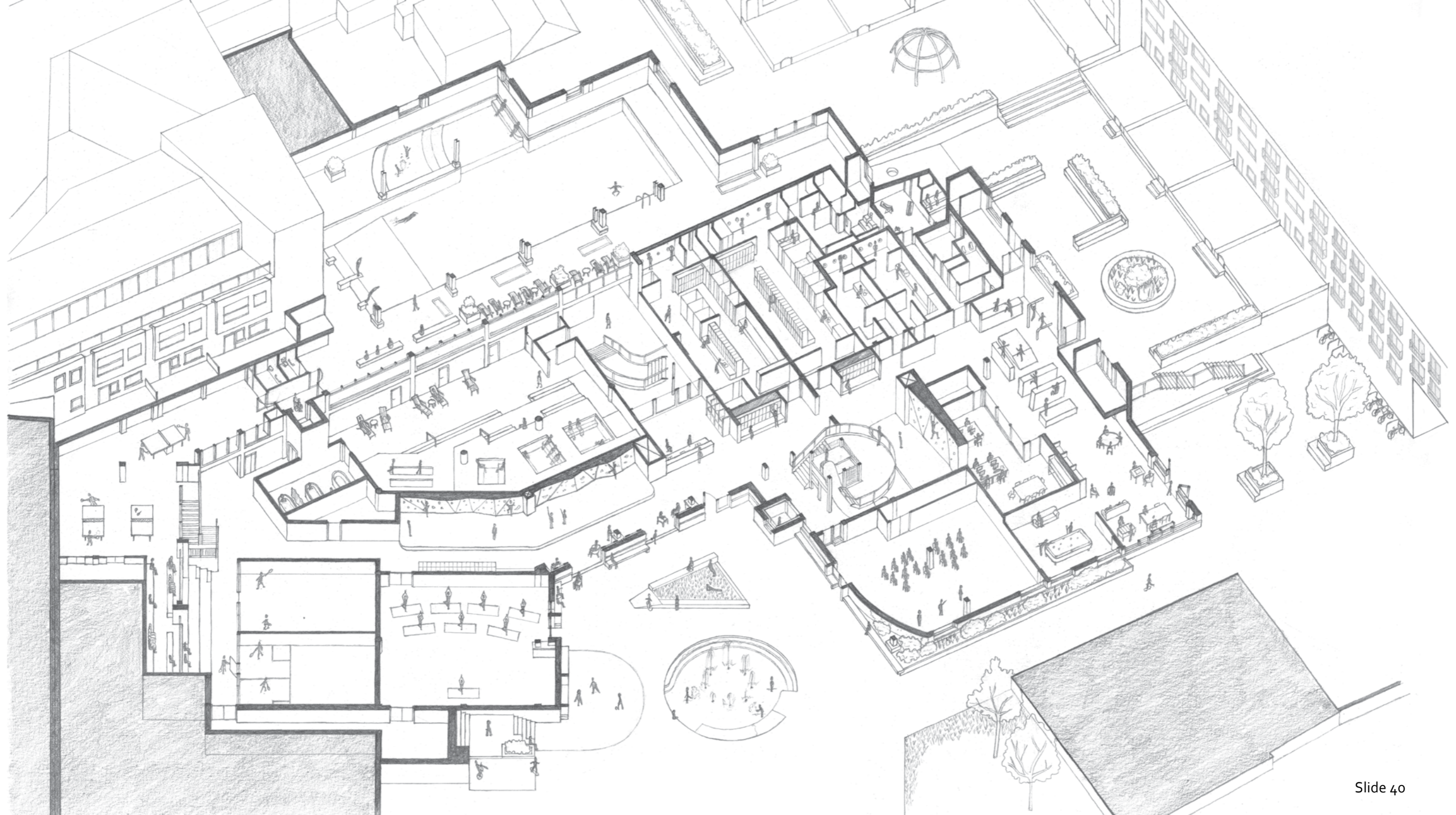


- Original 1971 first floor structure
- First floor structure added in 1998
- Proposed building envelope (non coloured areas are double height)
- Proposed first floor slabs to be removed
- Proposed new first floor level structure

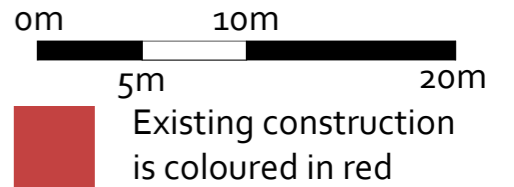
Proposed intervention

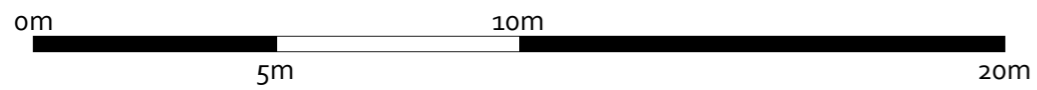
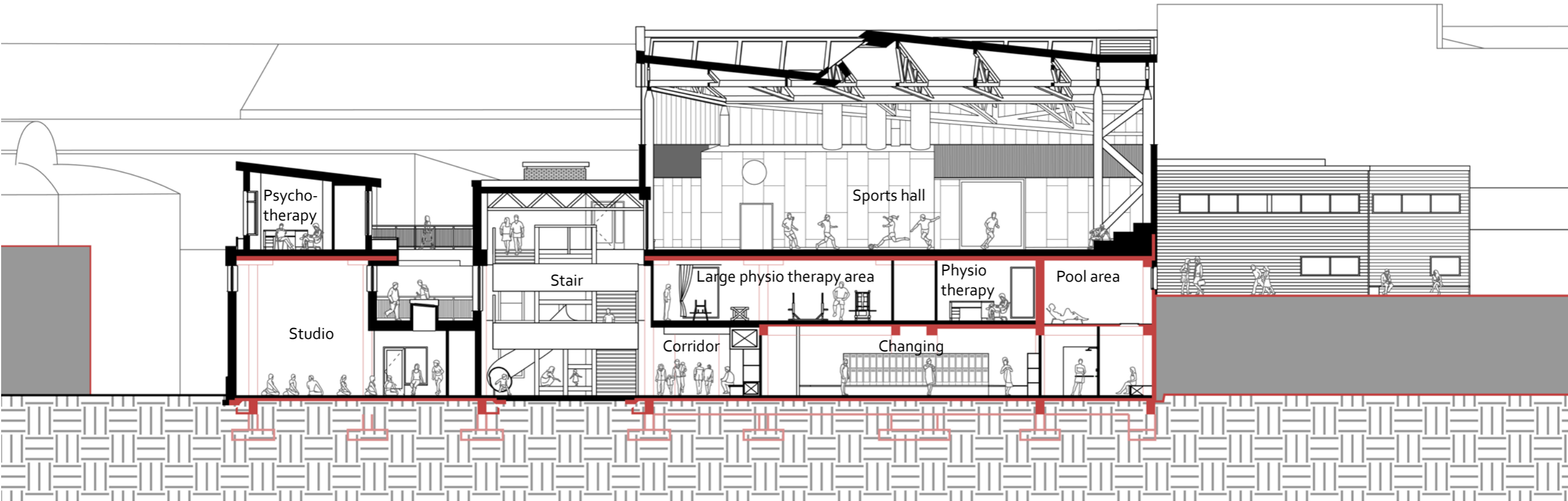
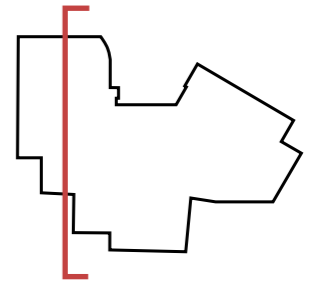








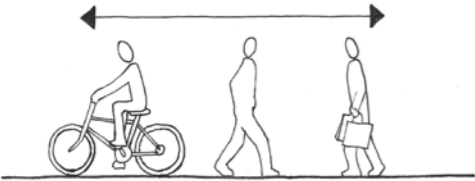


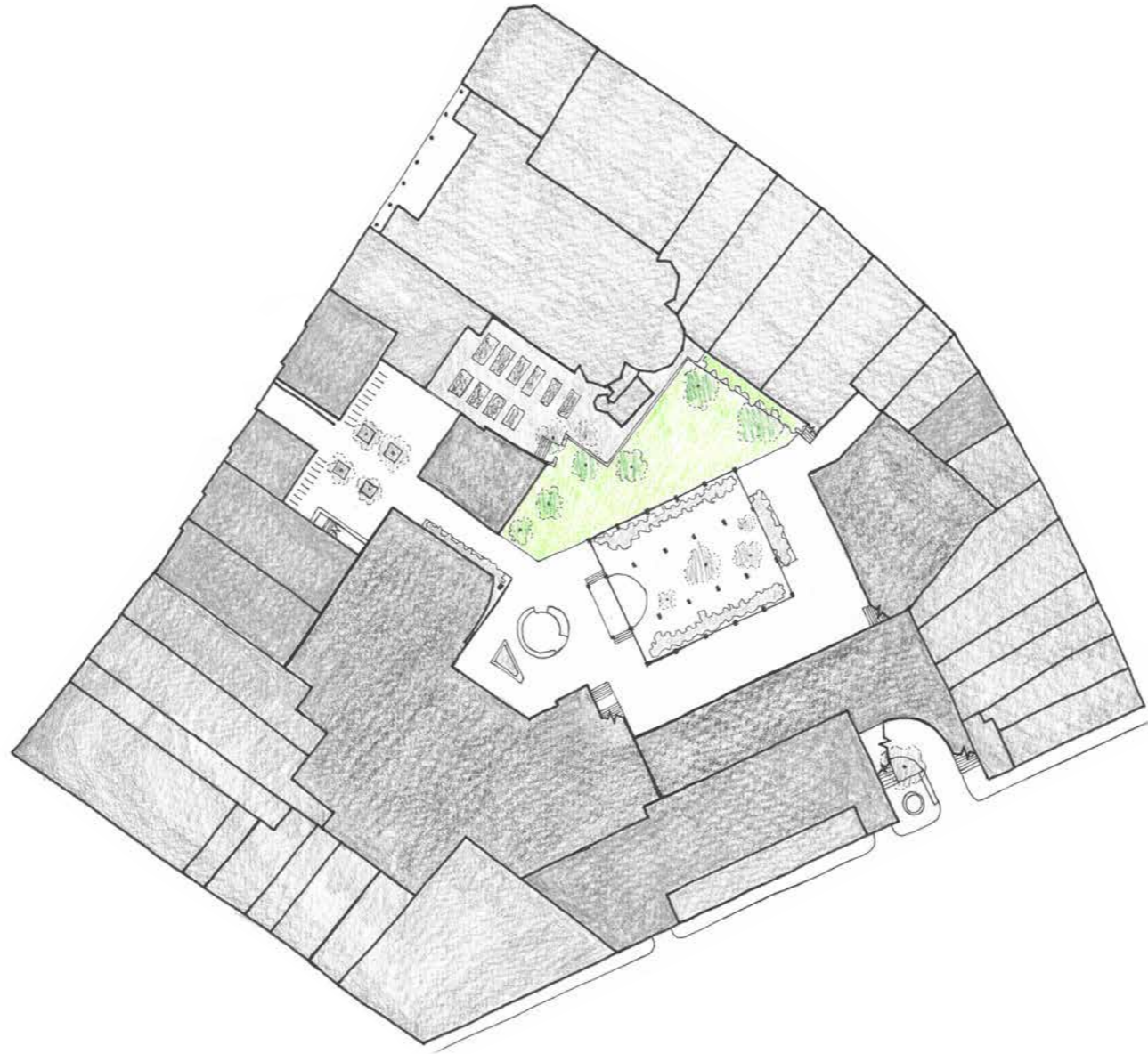


Existing construction is coloured in red

Reacting to the results of the research into play

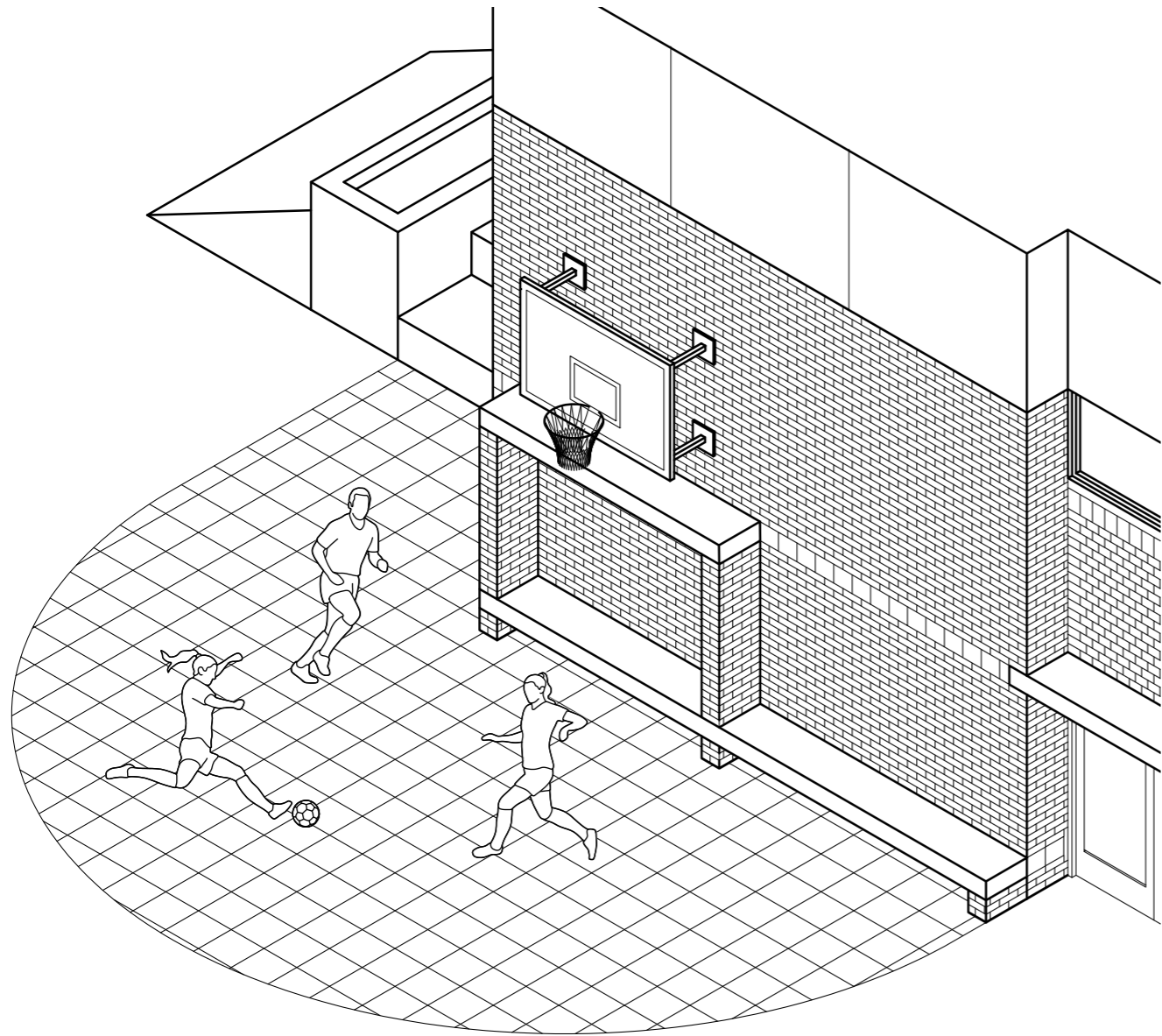
Hard and soft surfaces



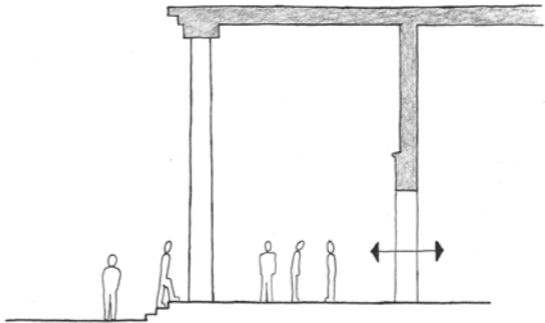
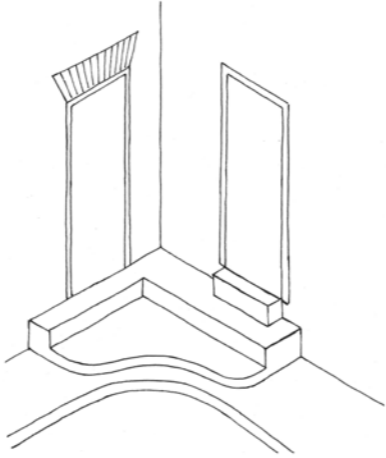
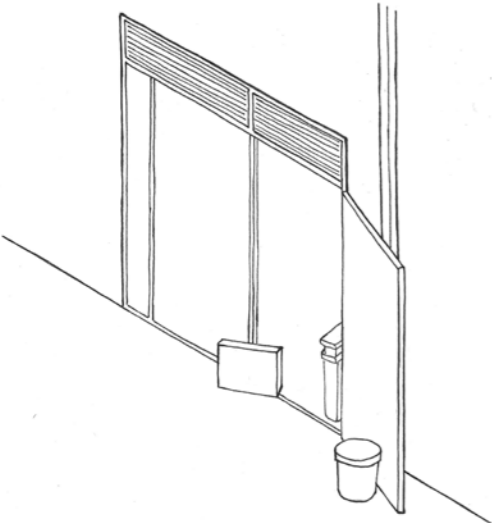


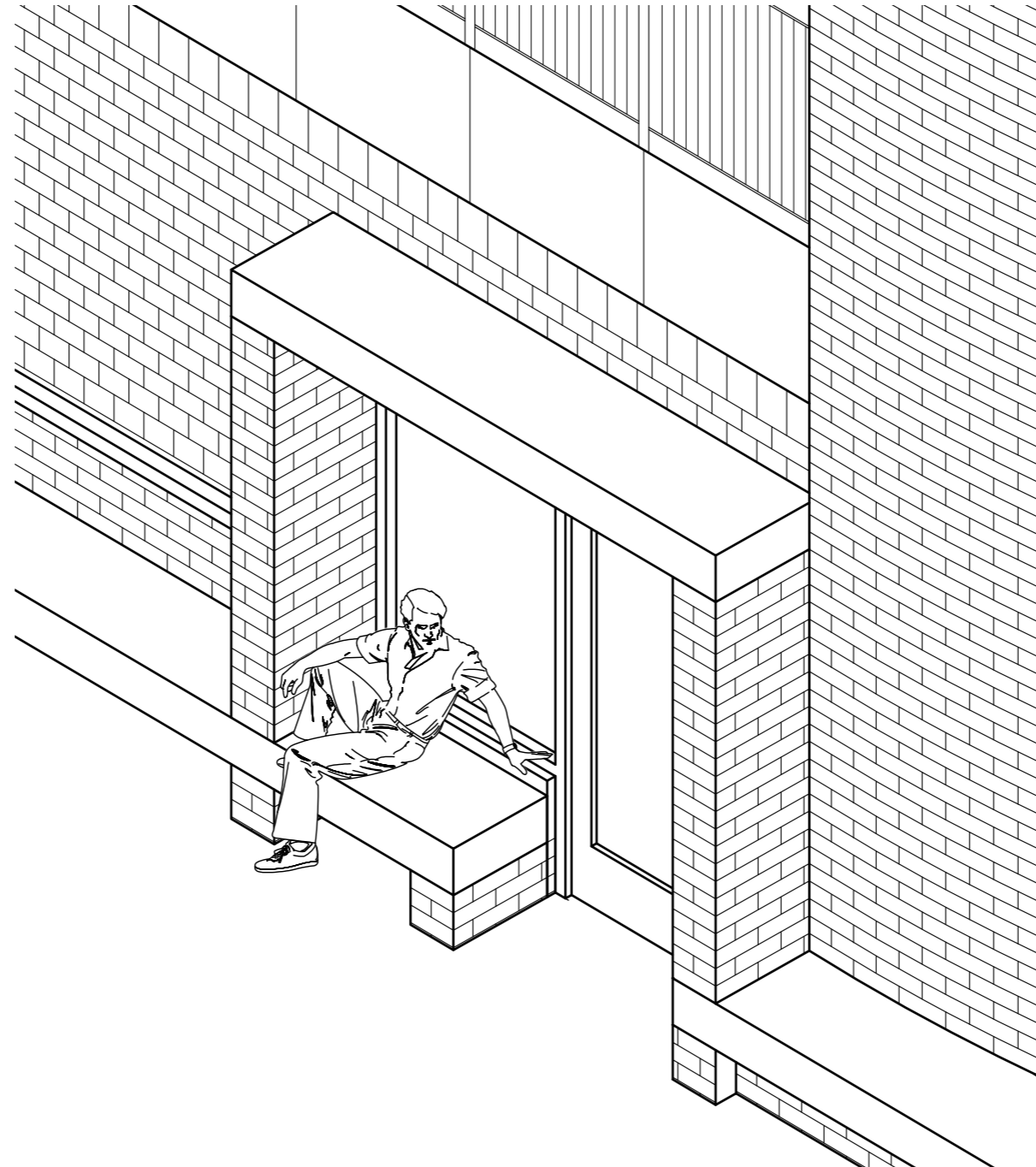
Walls and boundaries





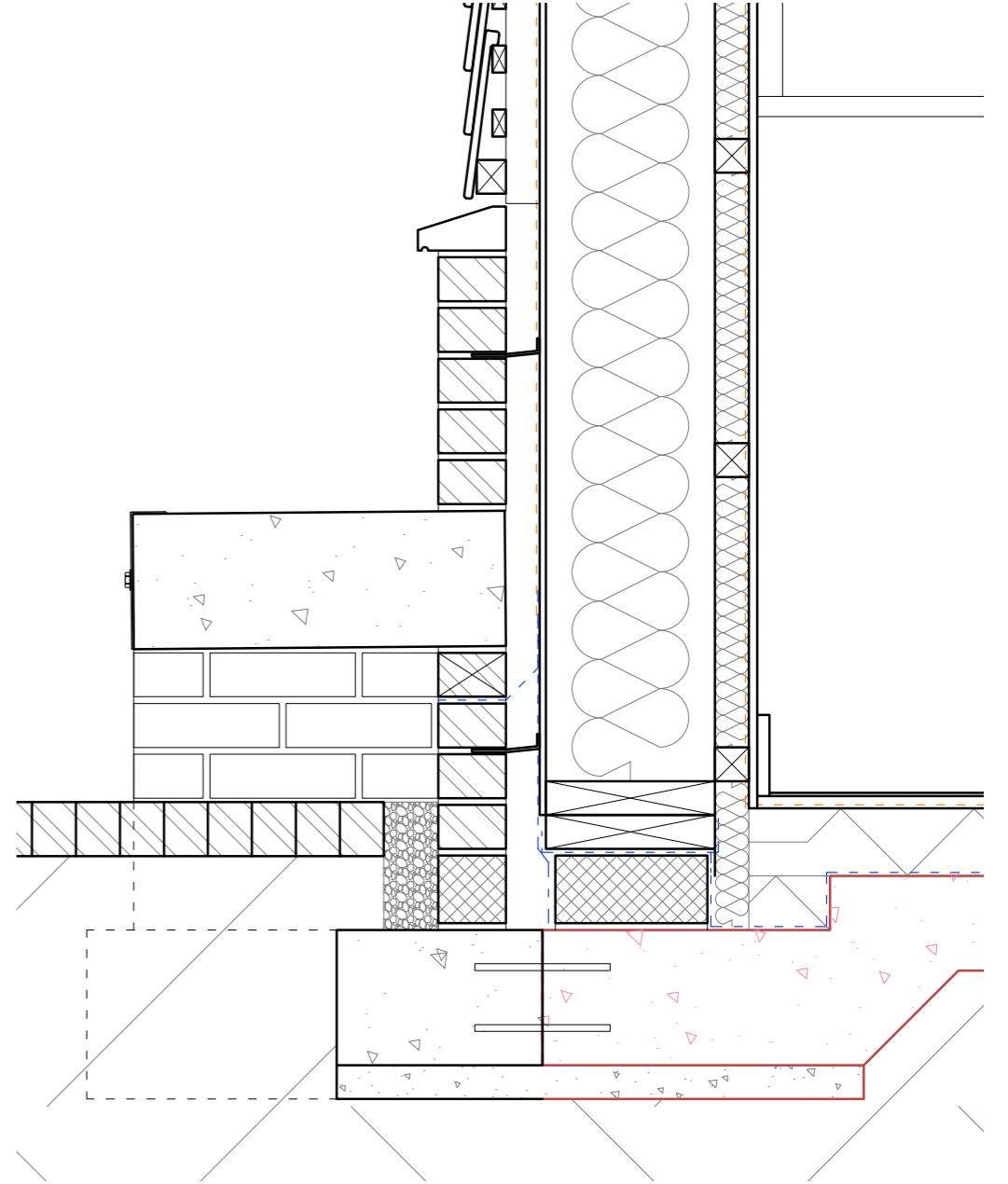
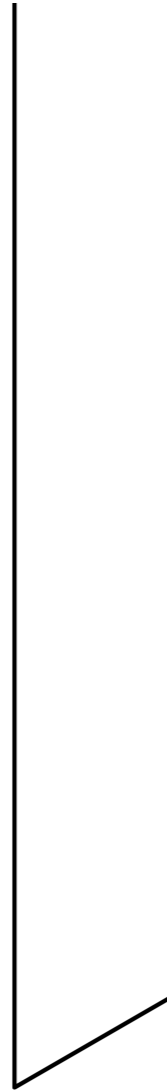
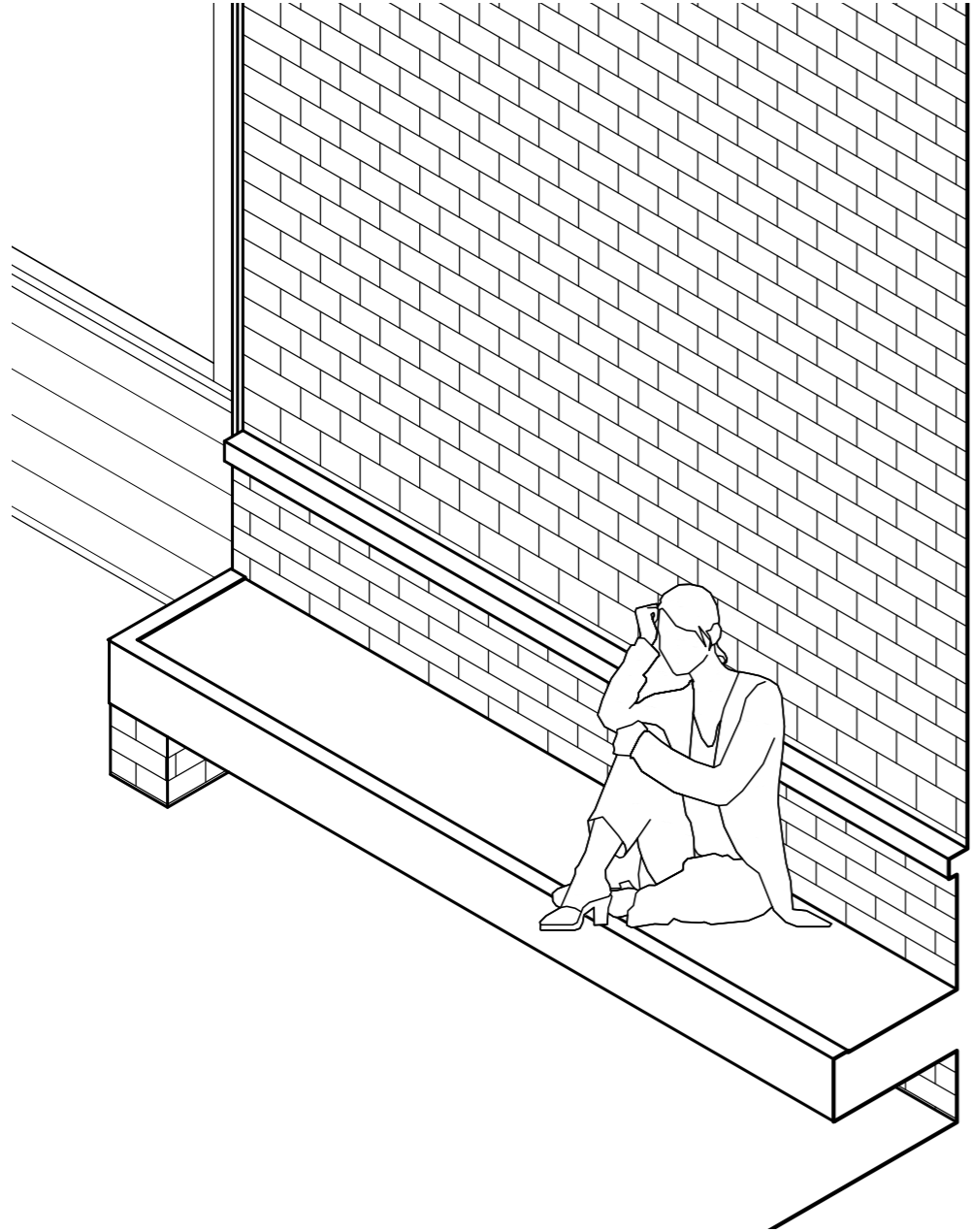
The doorways and thresholds





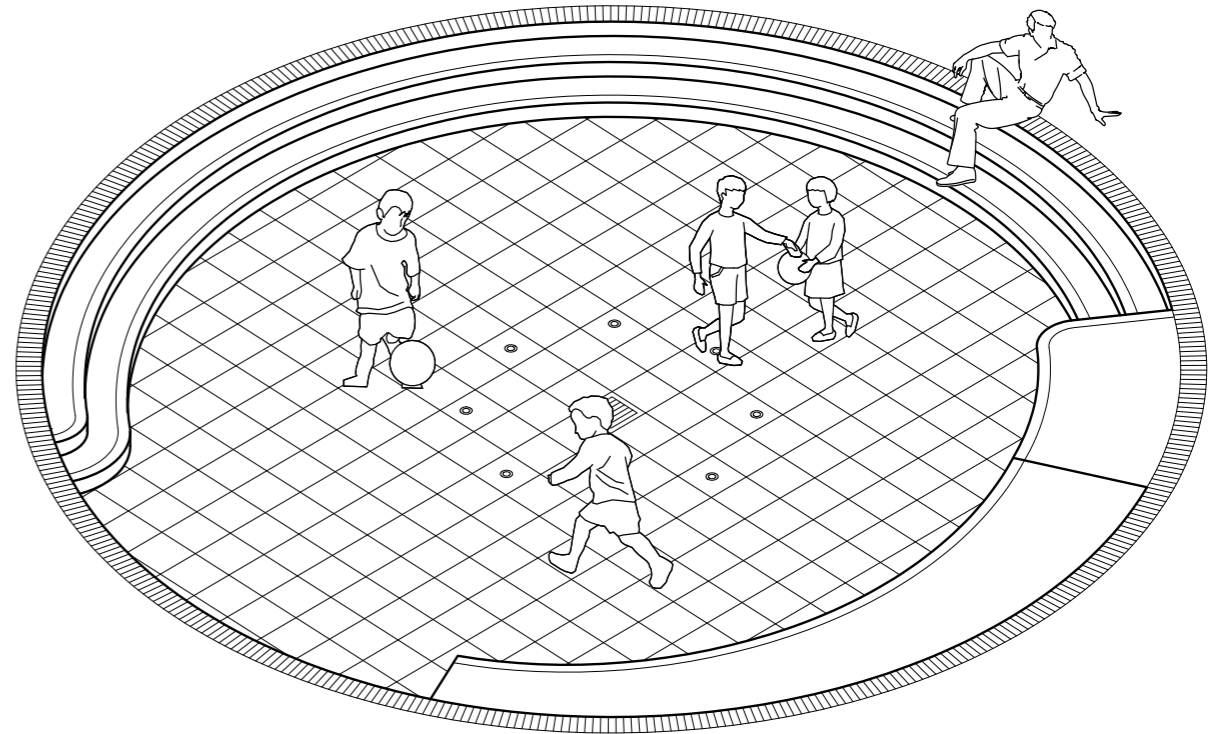
The edge effect and sitting





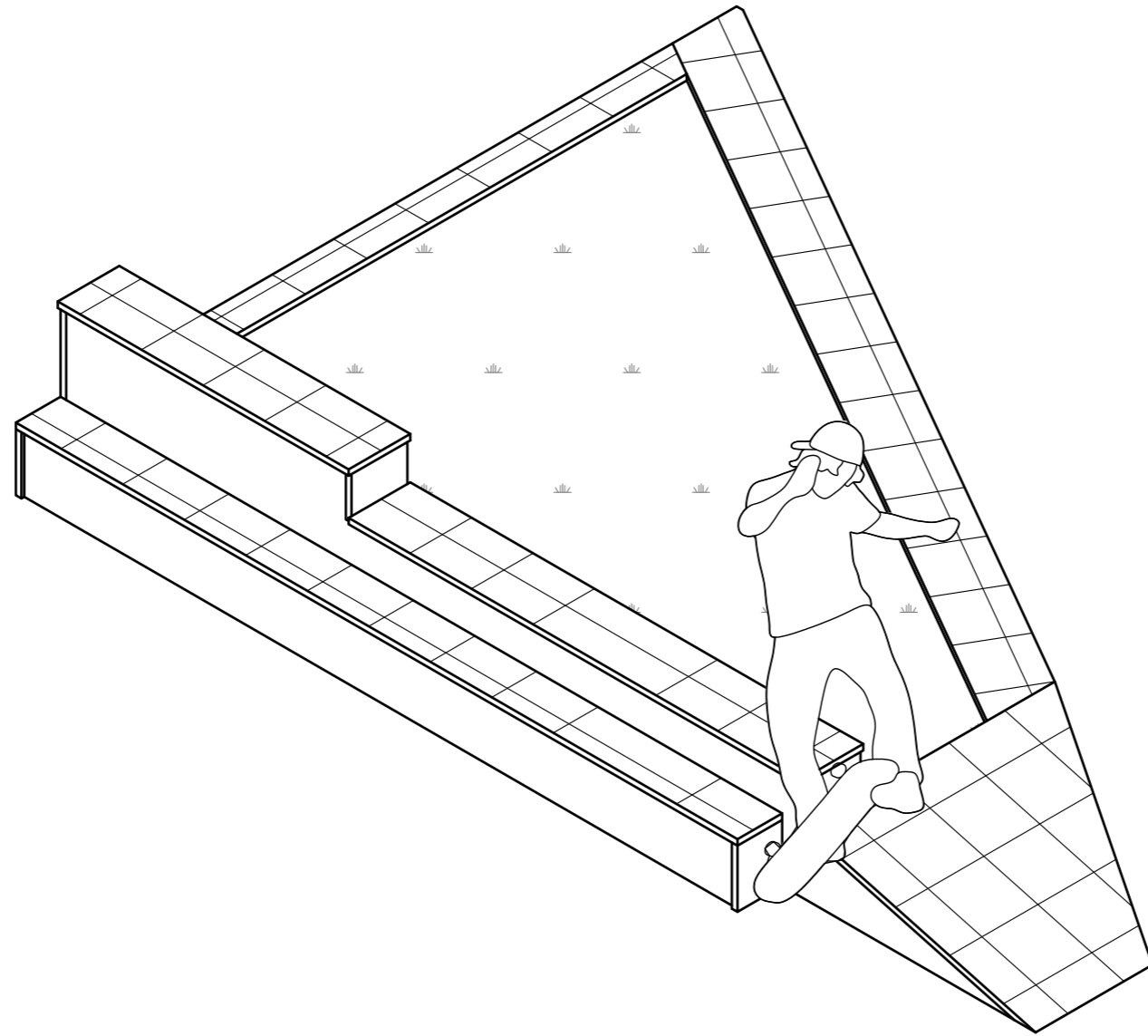
Water

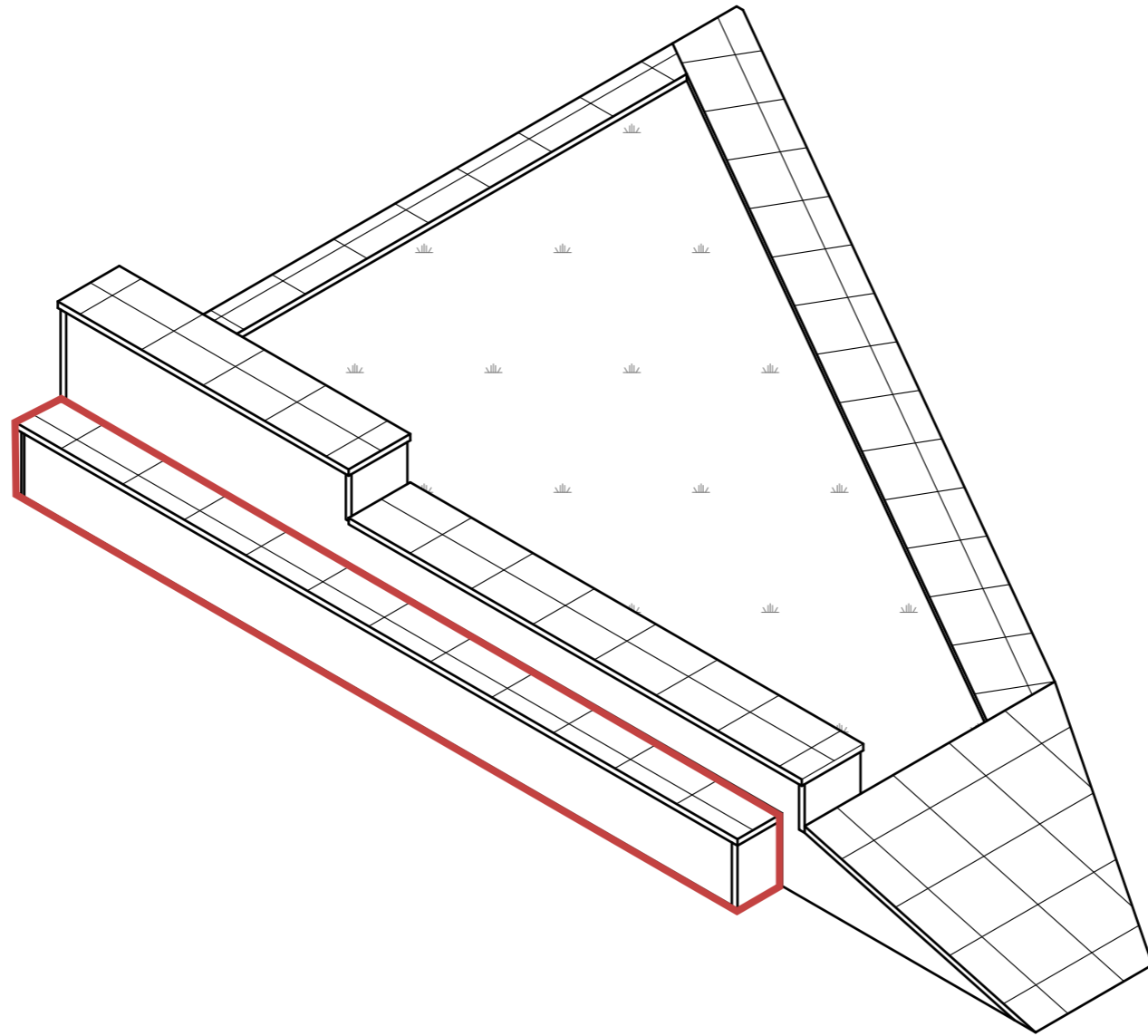


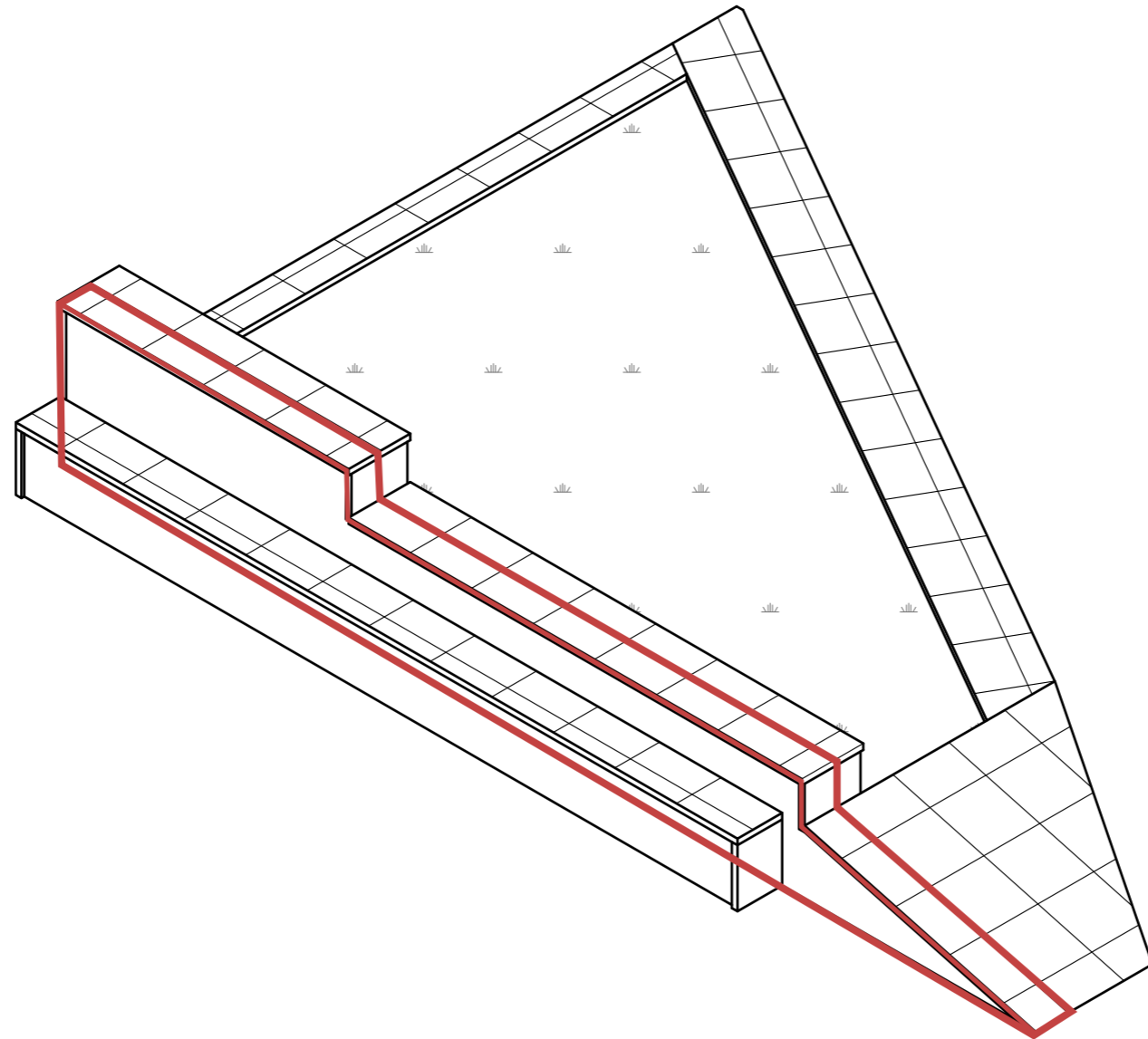


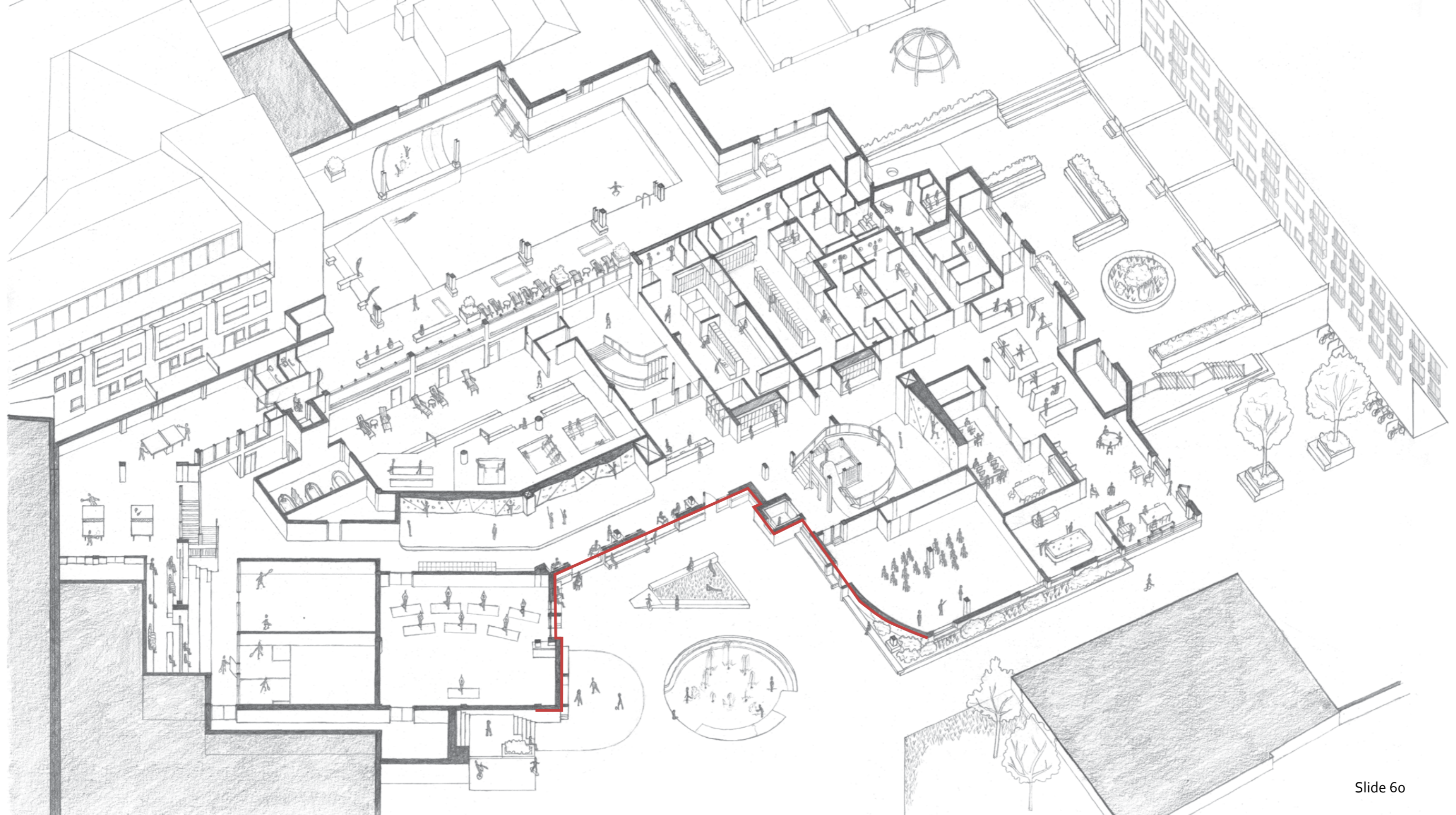
Props



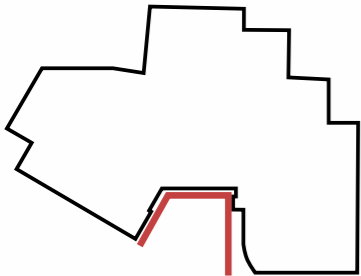




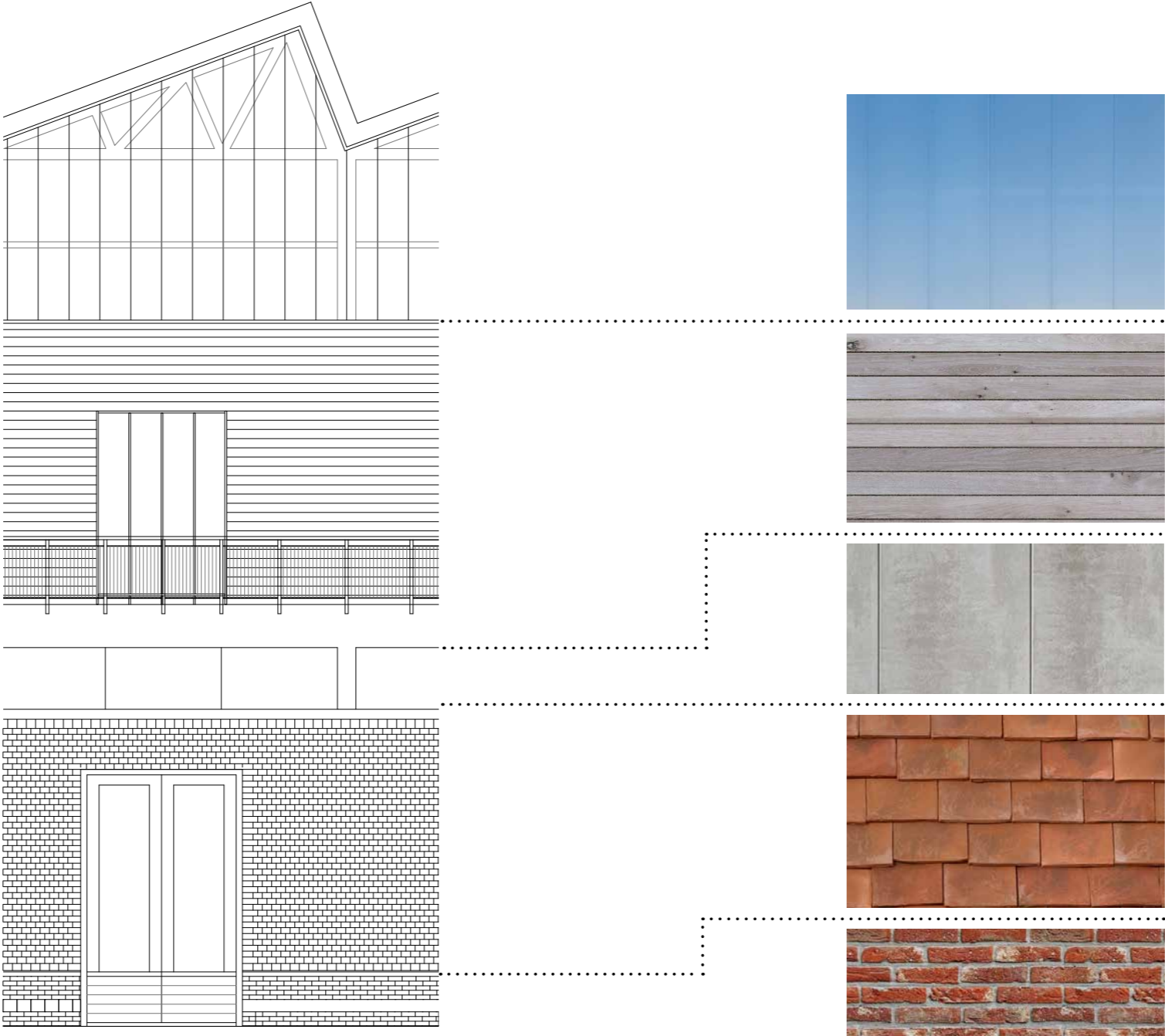




Elevation

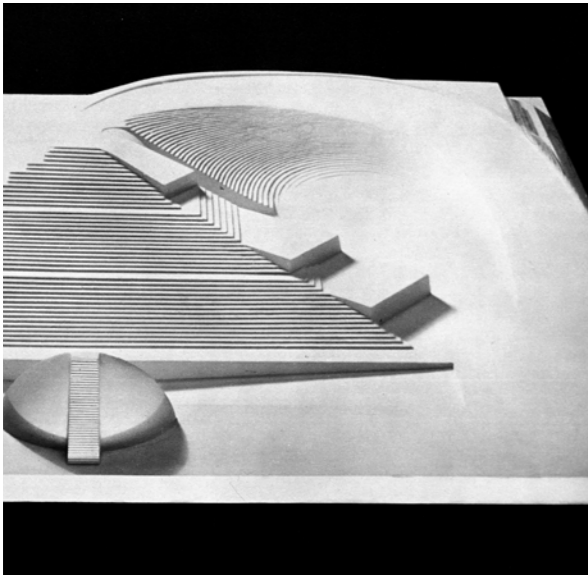


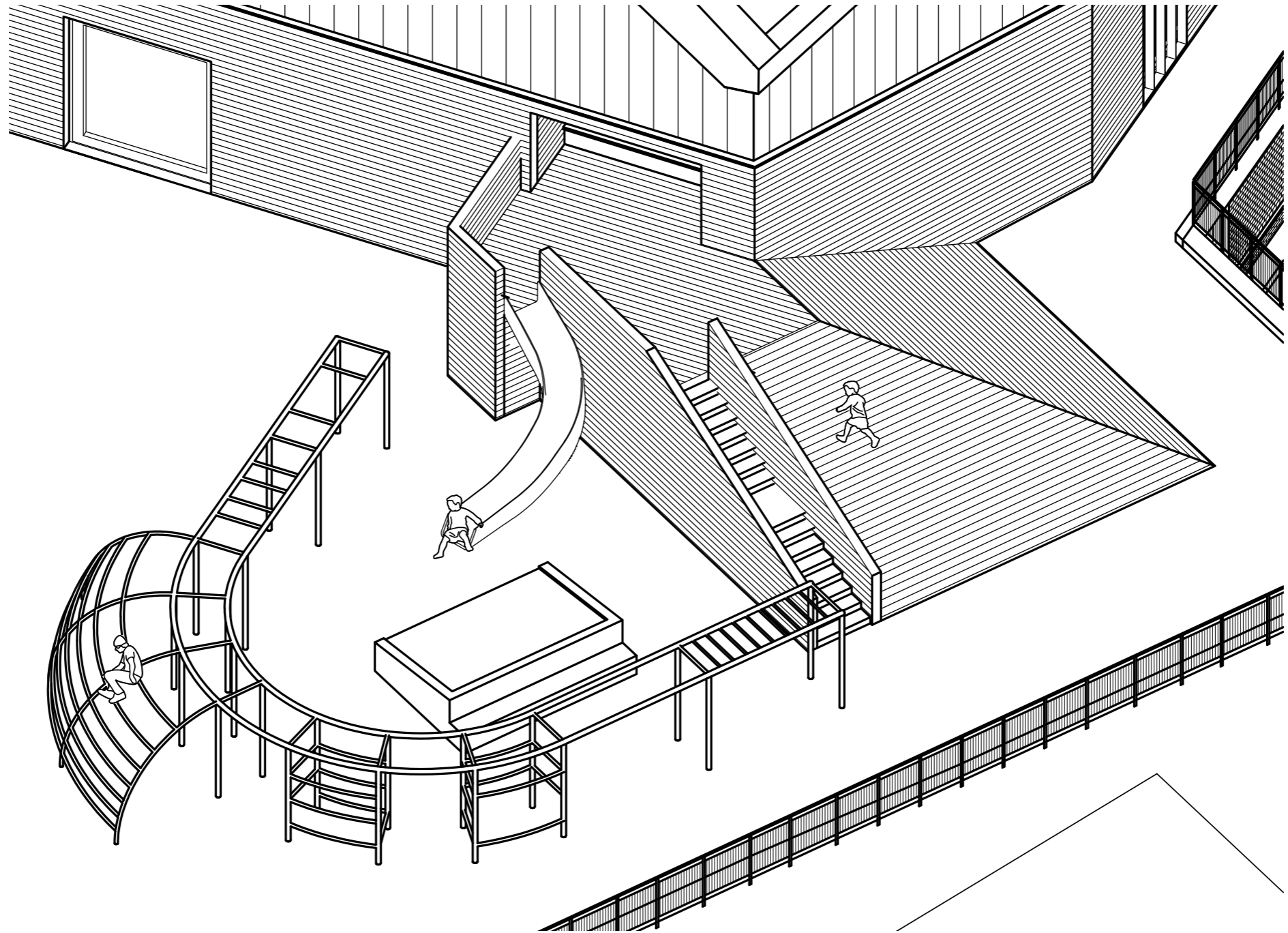
Facade materials





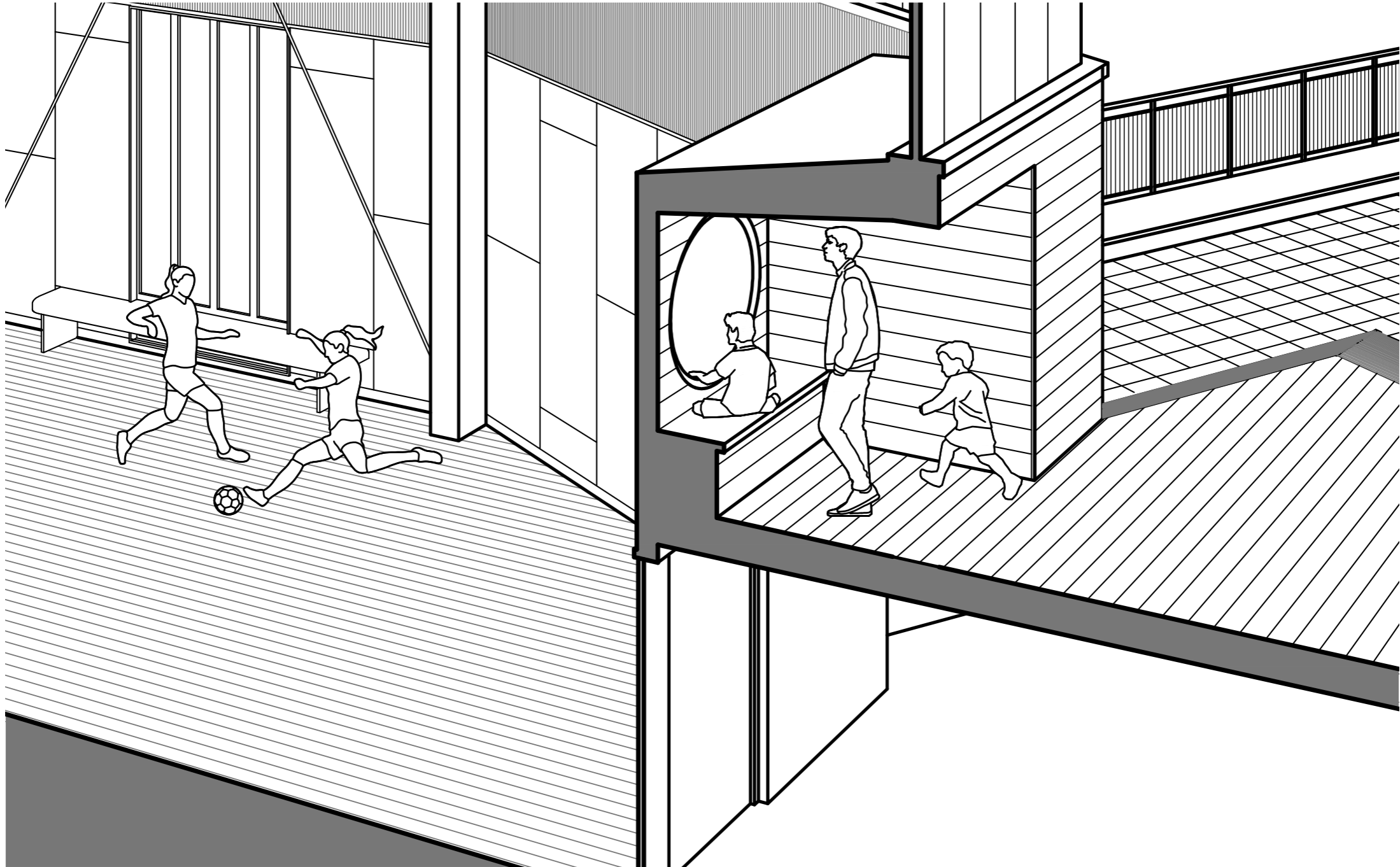
Props and playgrounds



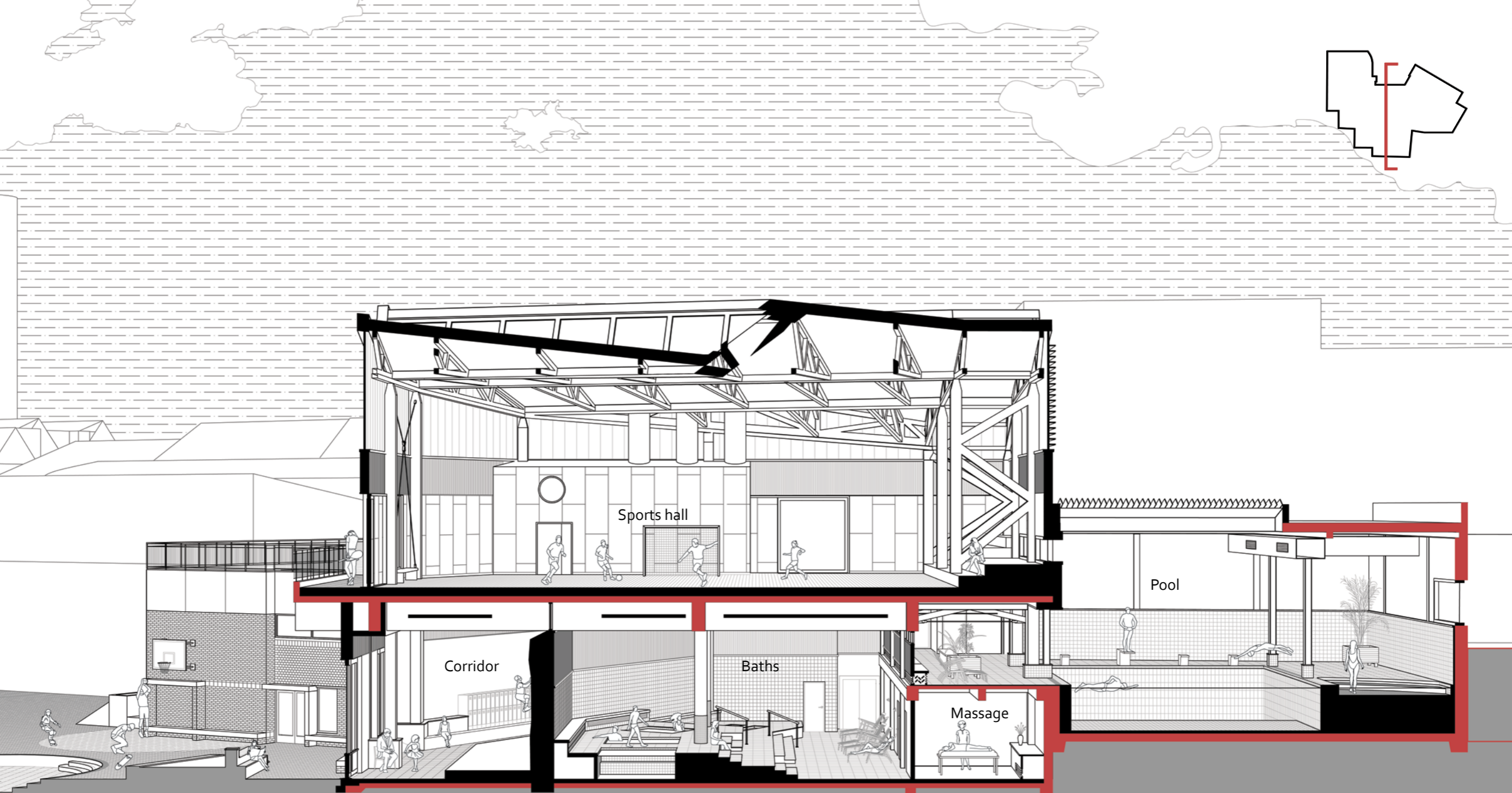


Niches

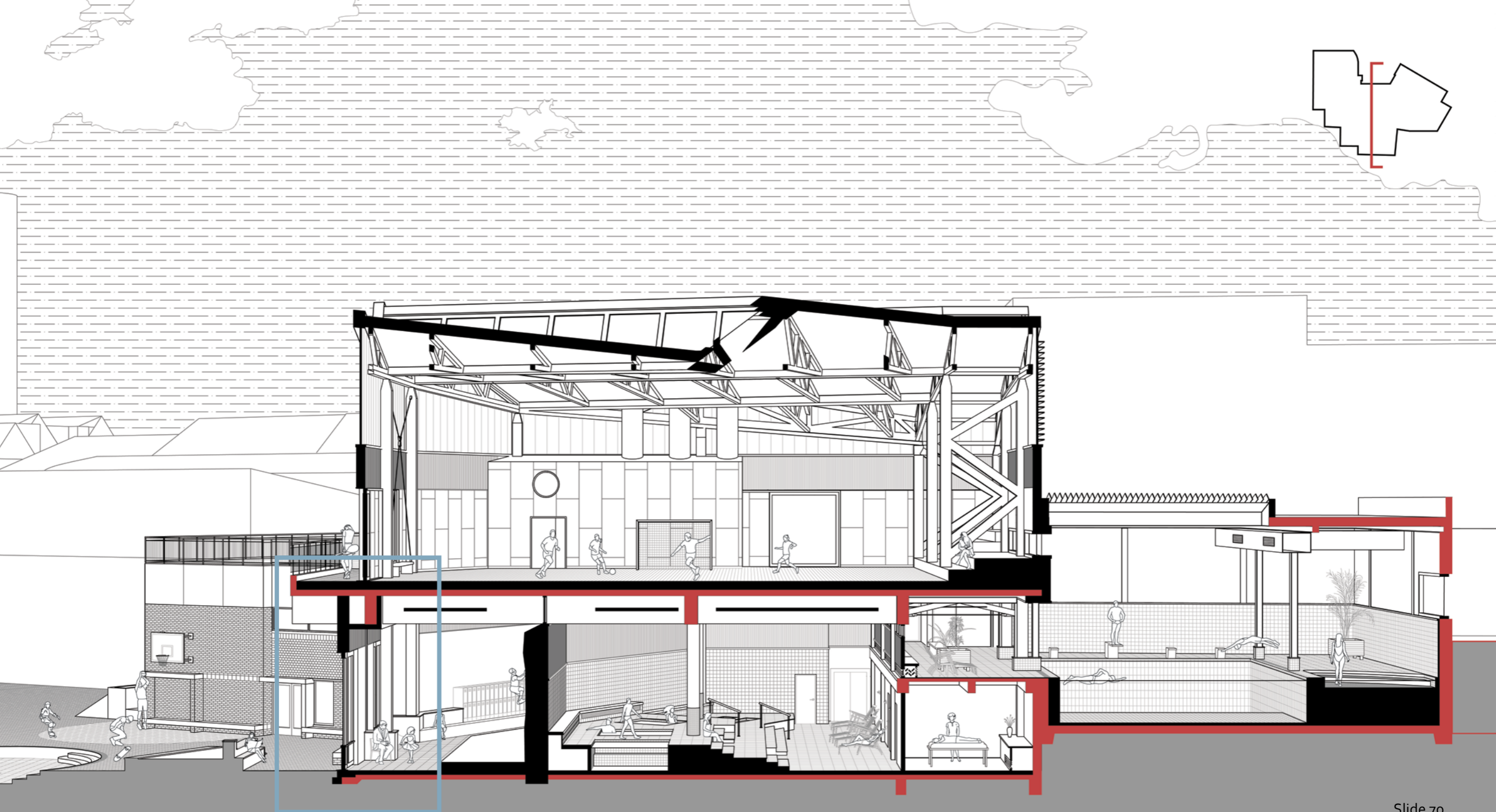




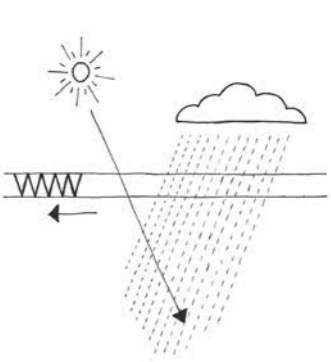
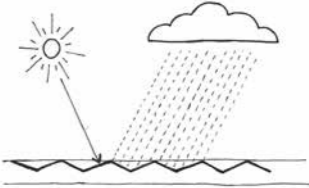
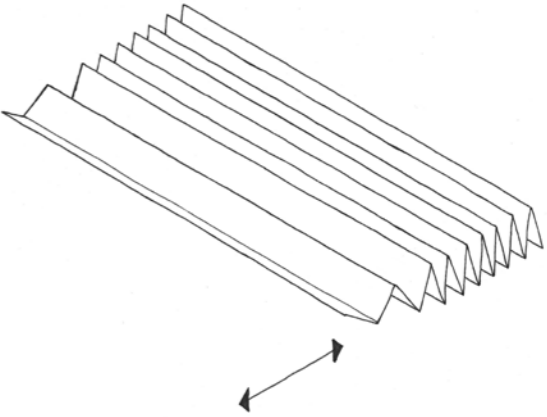
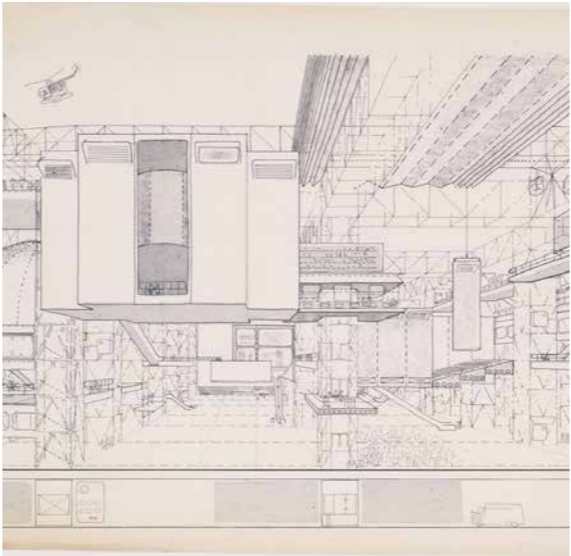


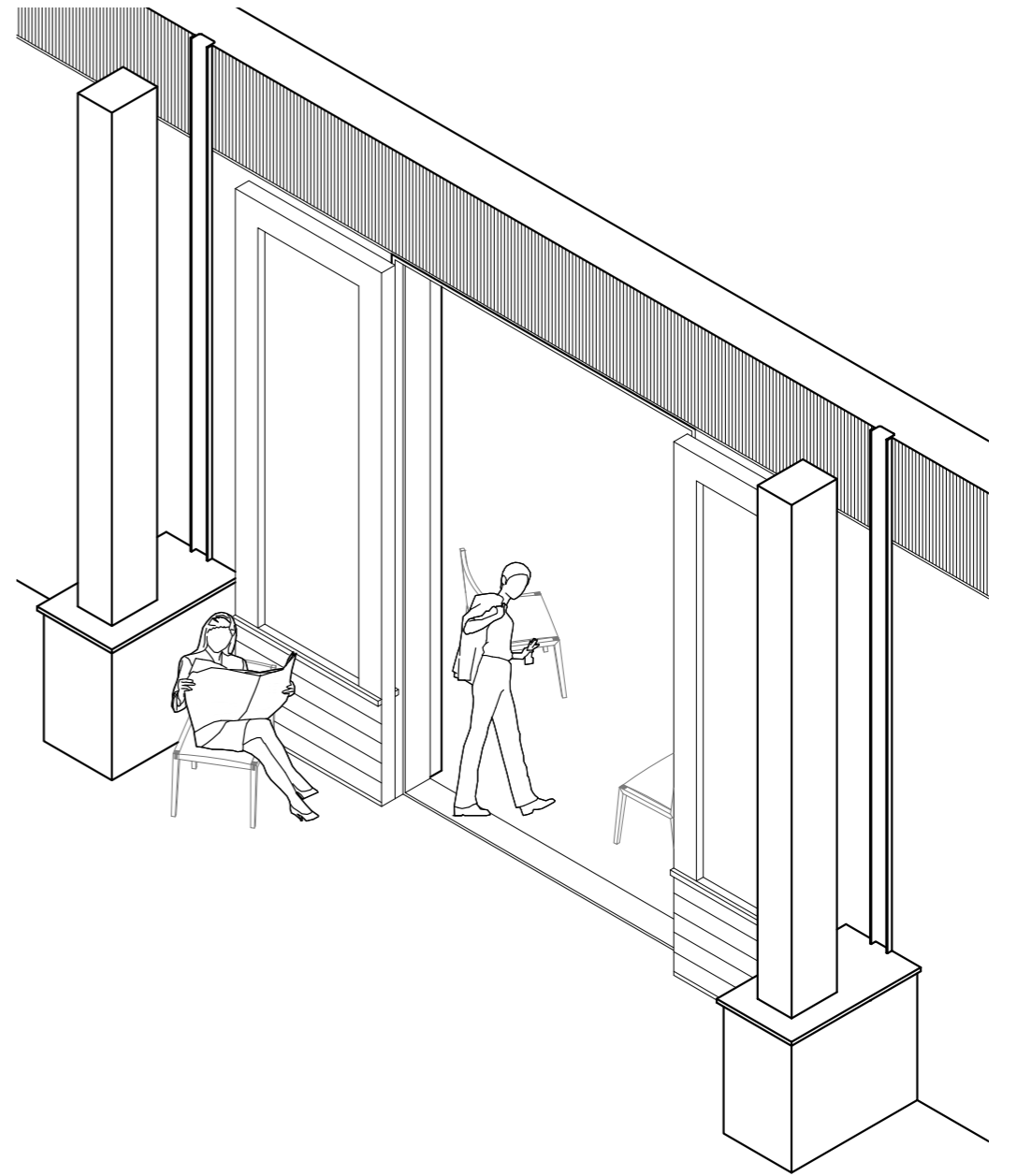
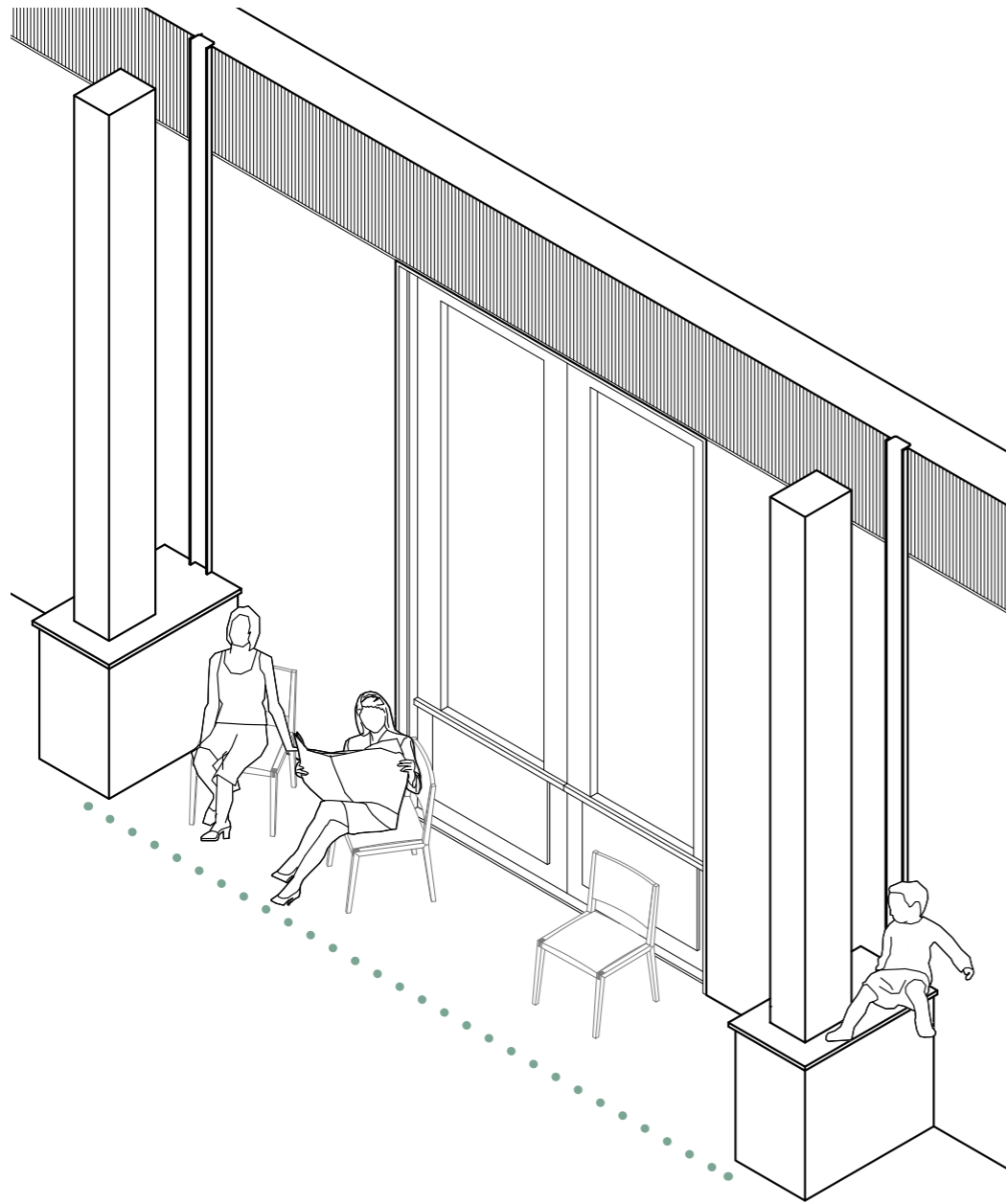


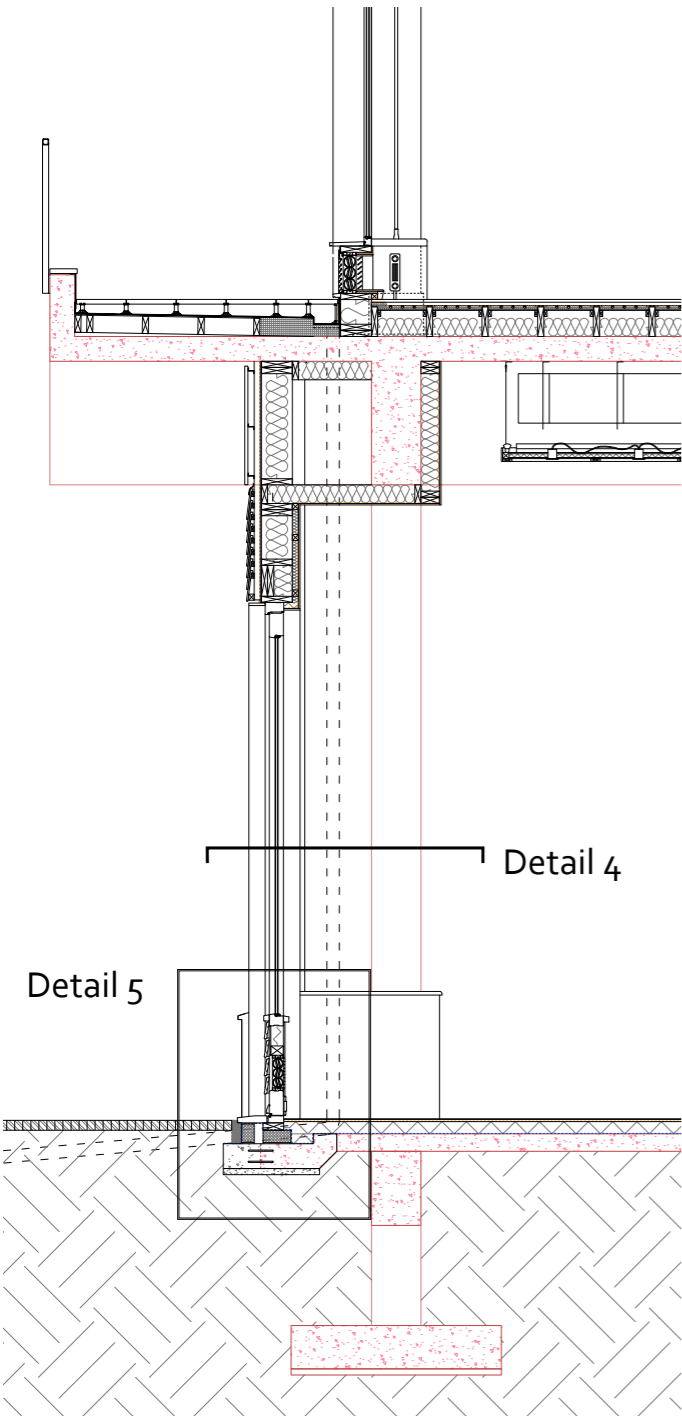
Existing construction is coloured in red



Soft edges - blurring inside and outside

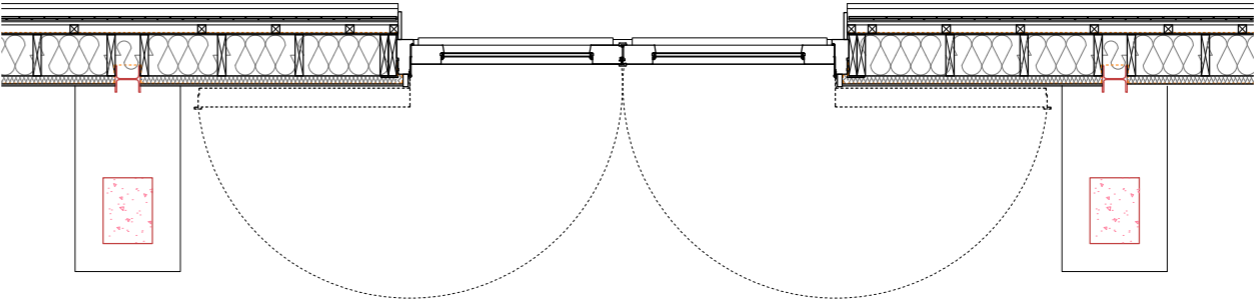






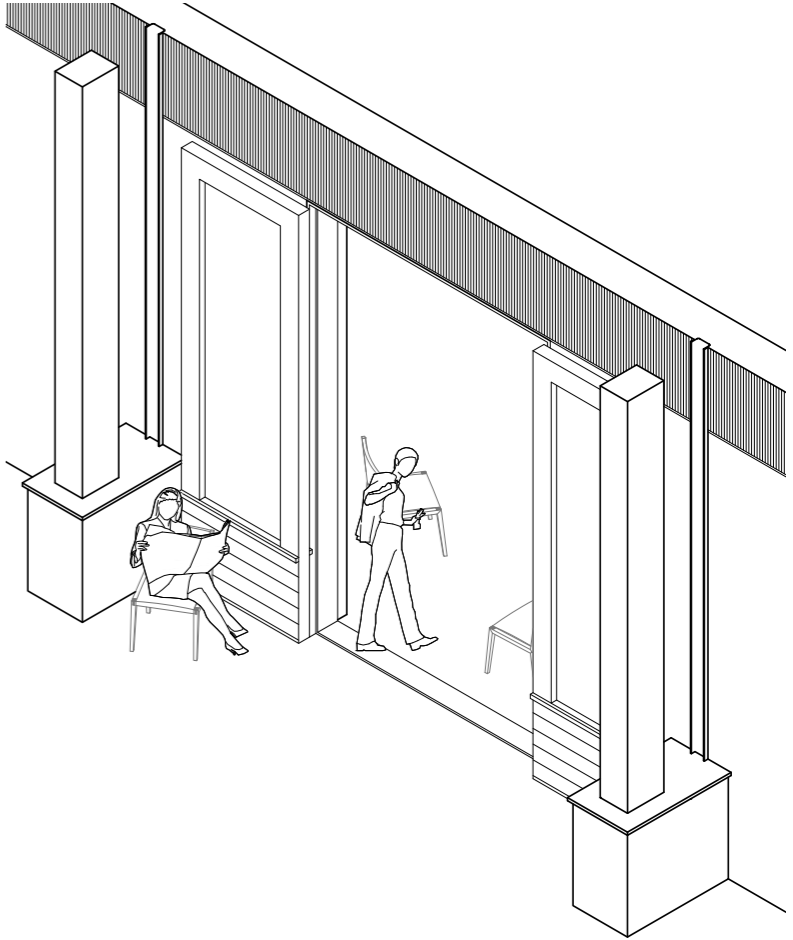
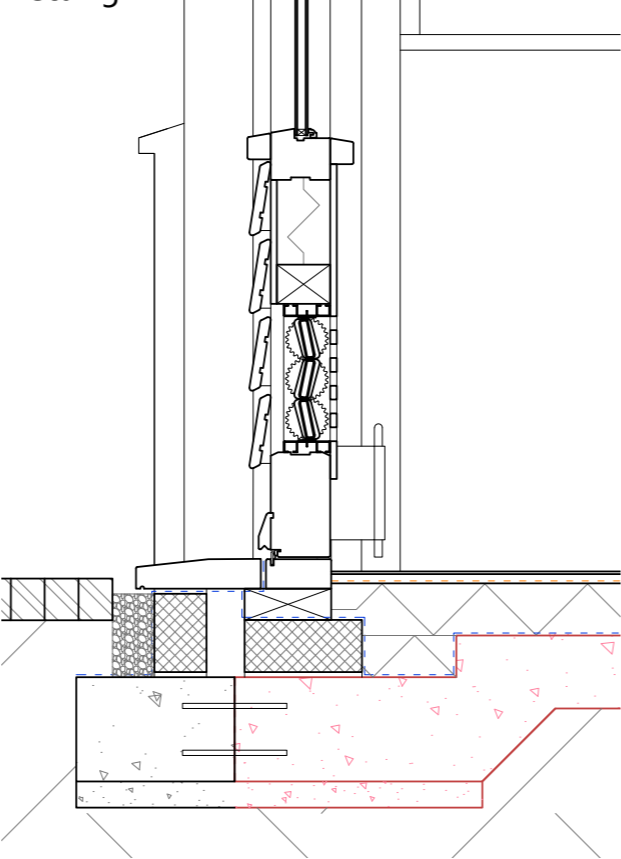
Refer to page 142 of the research and design book for labelled full scale drawings

Detail 4

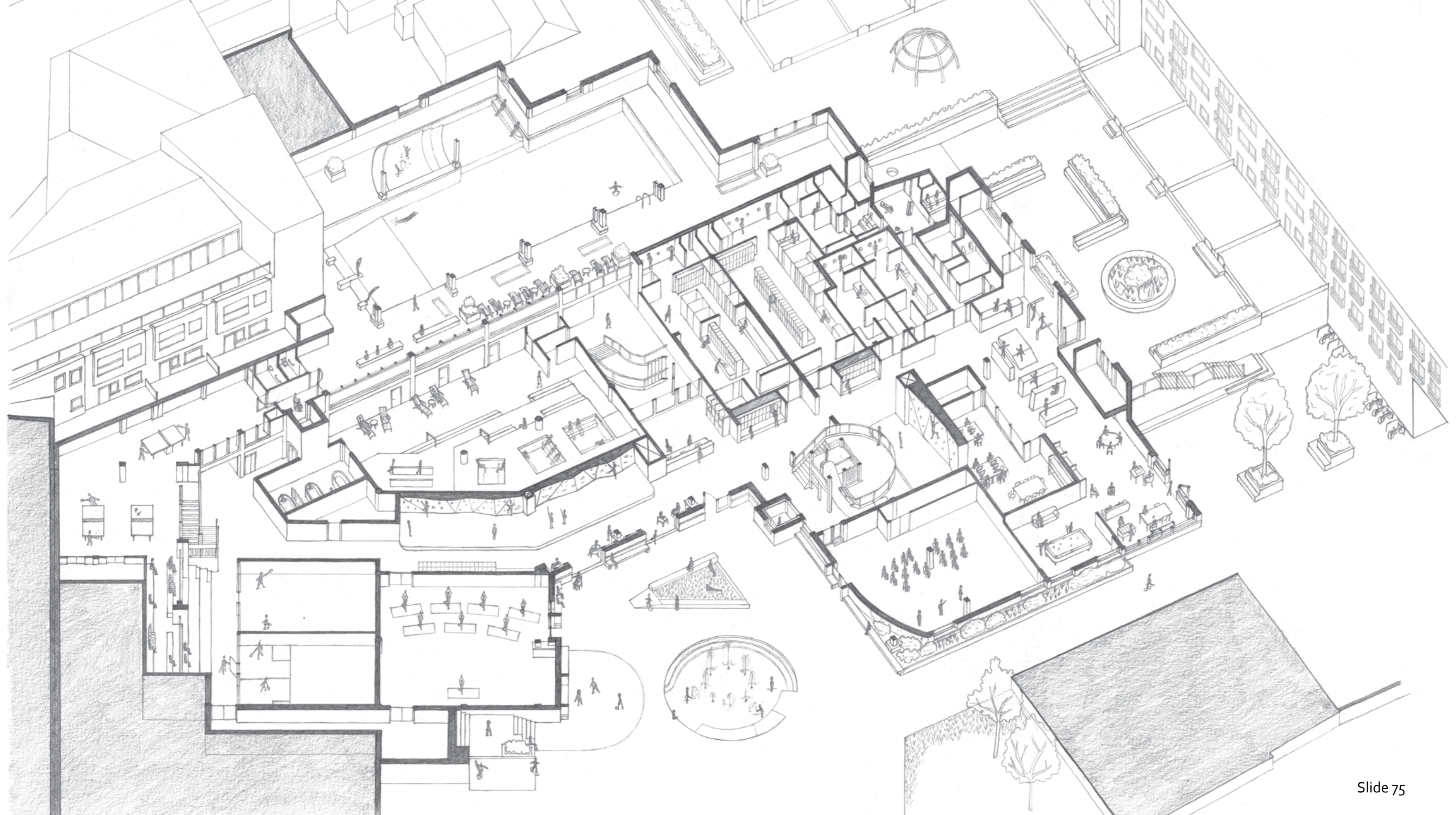


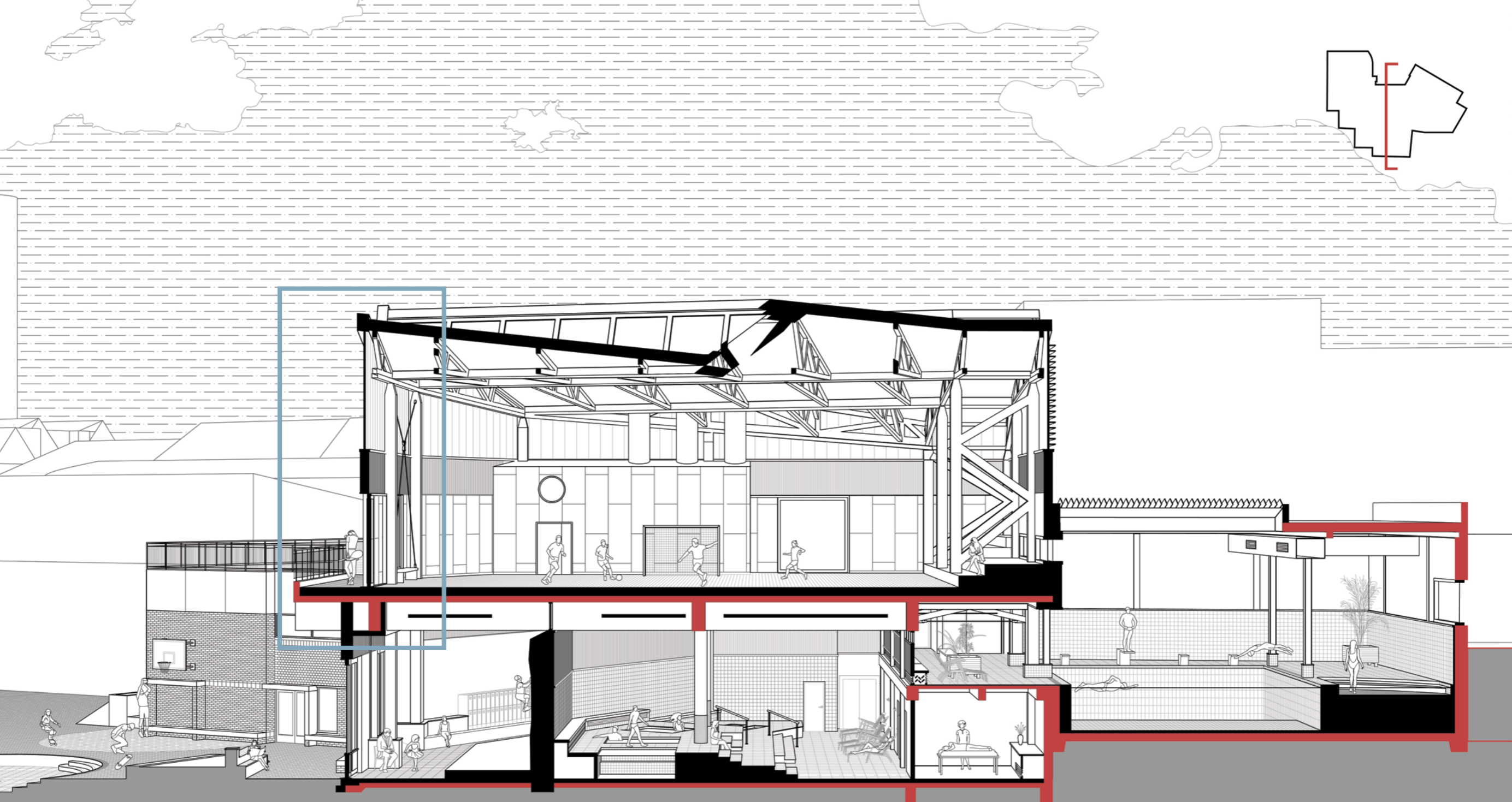
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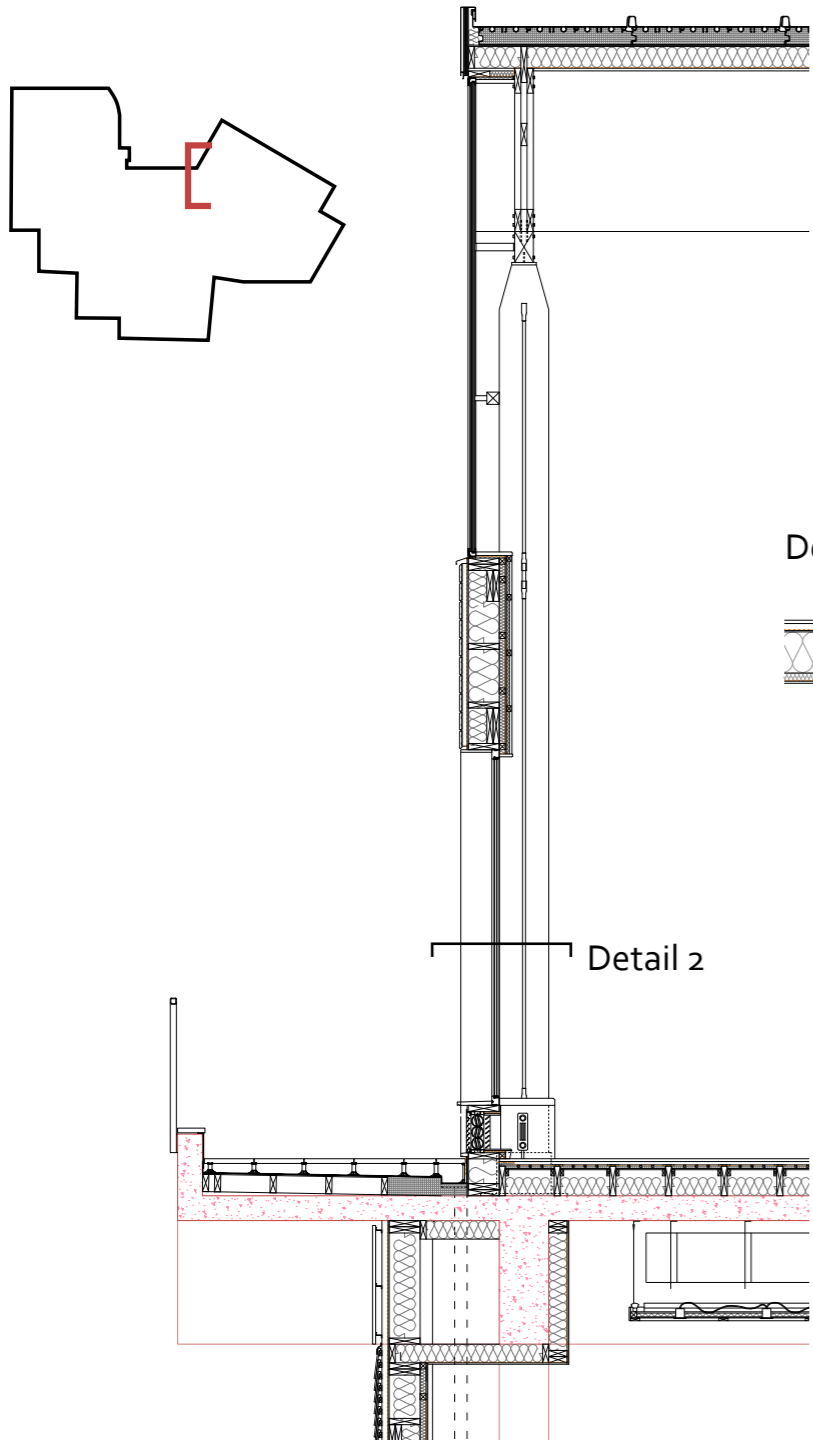
Detail 5



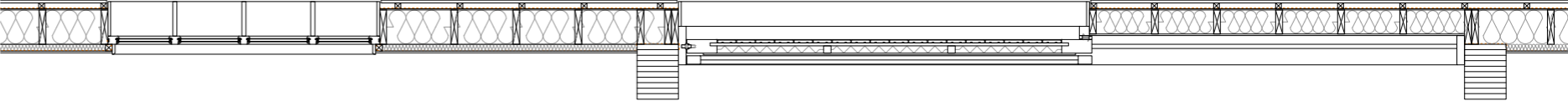




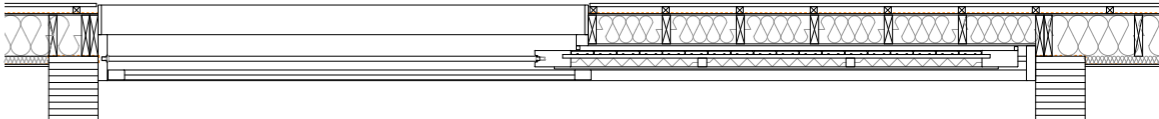




Detail 2



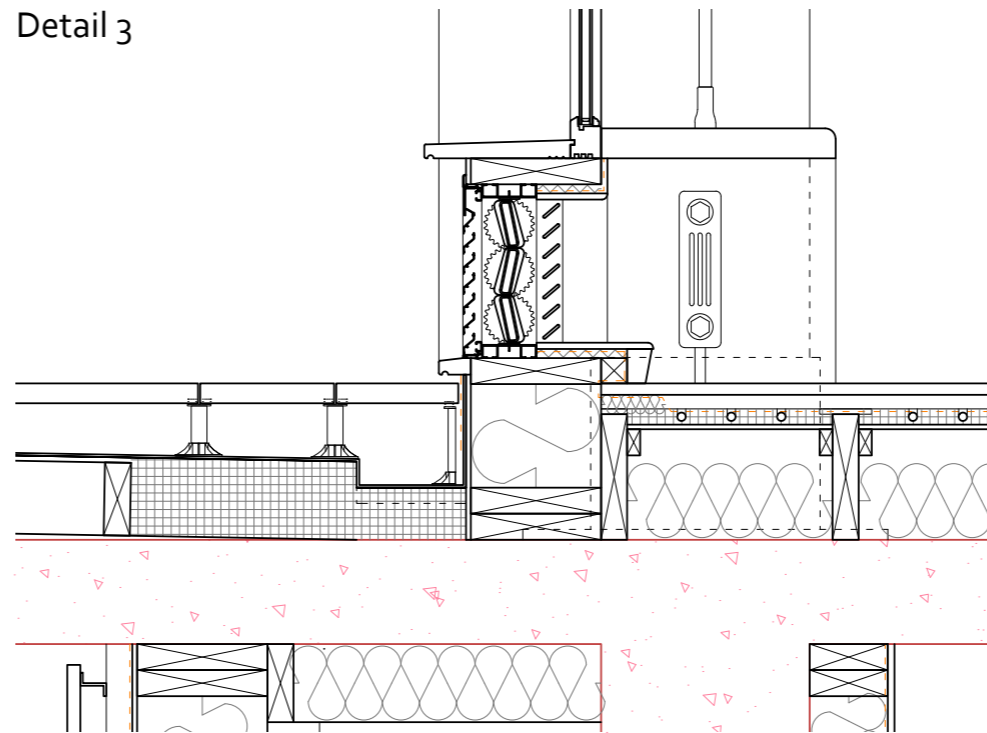
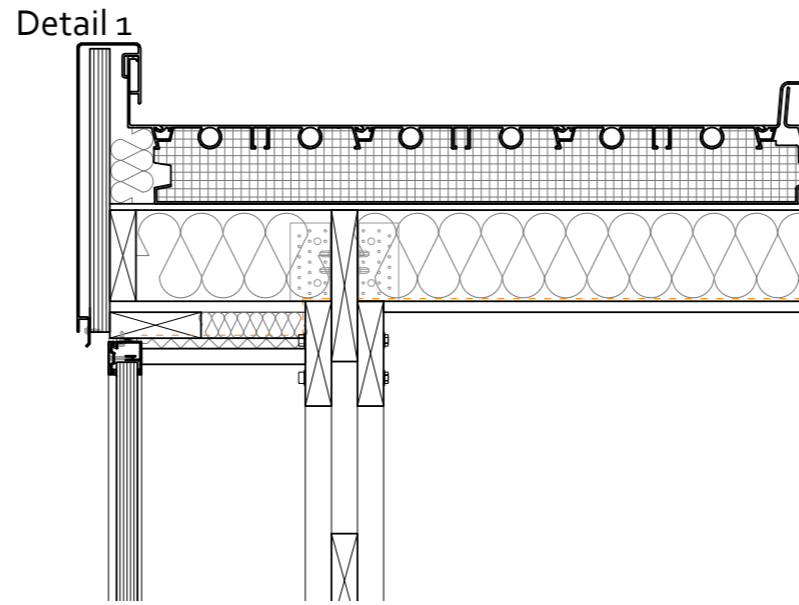
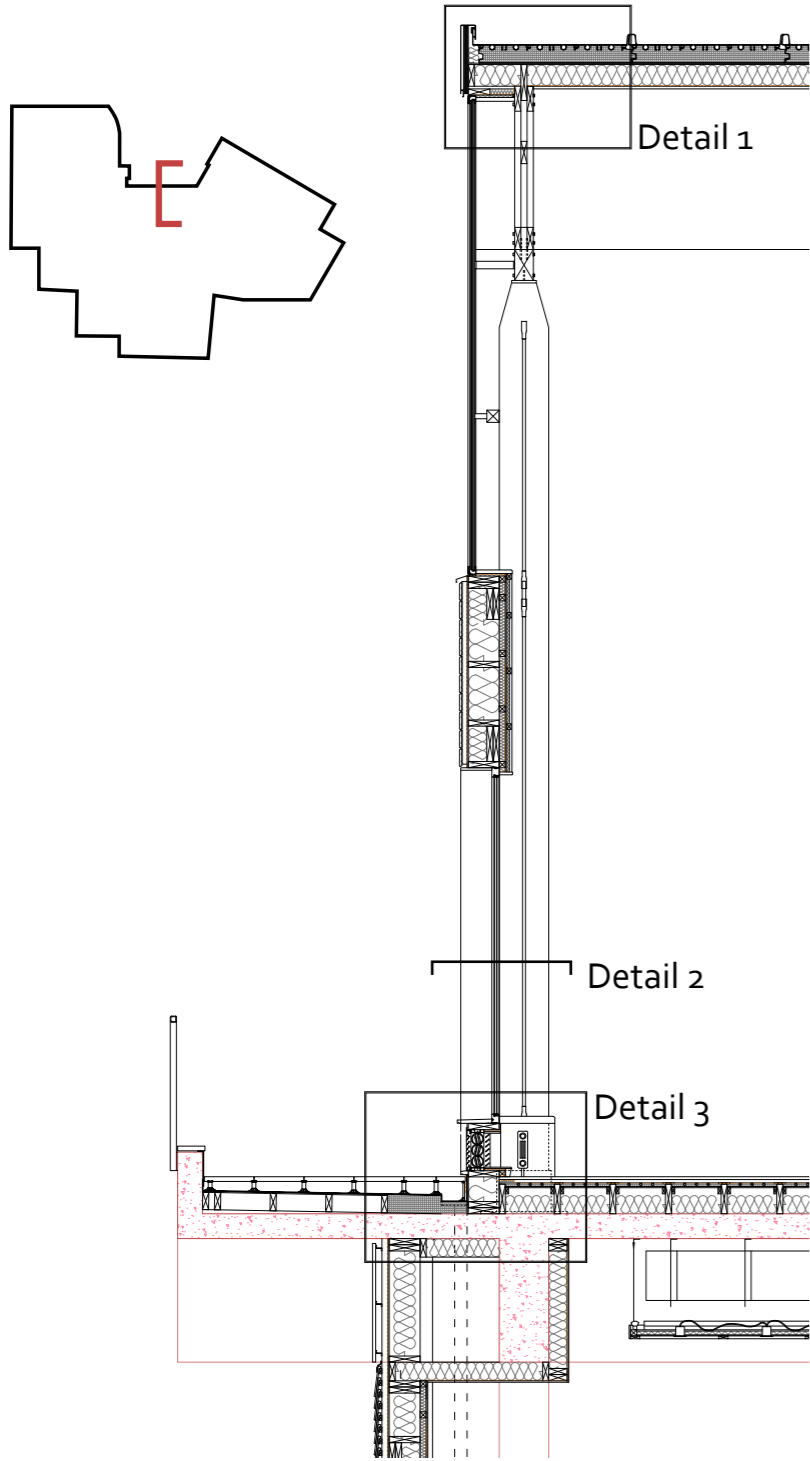
Closed




Open

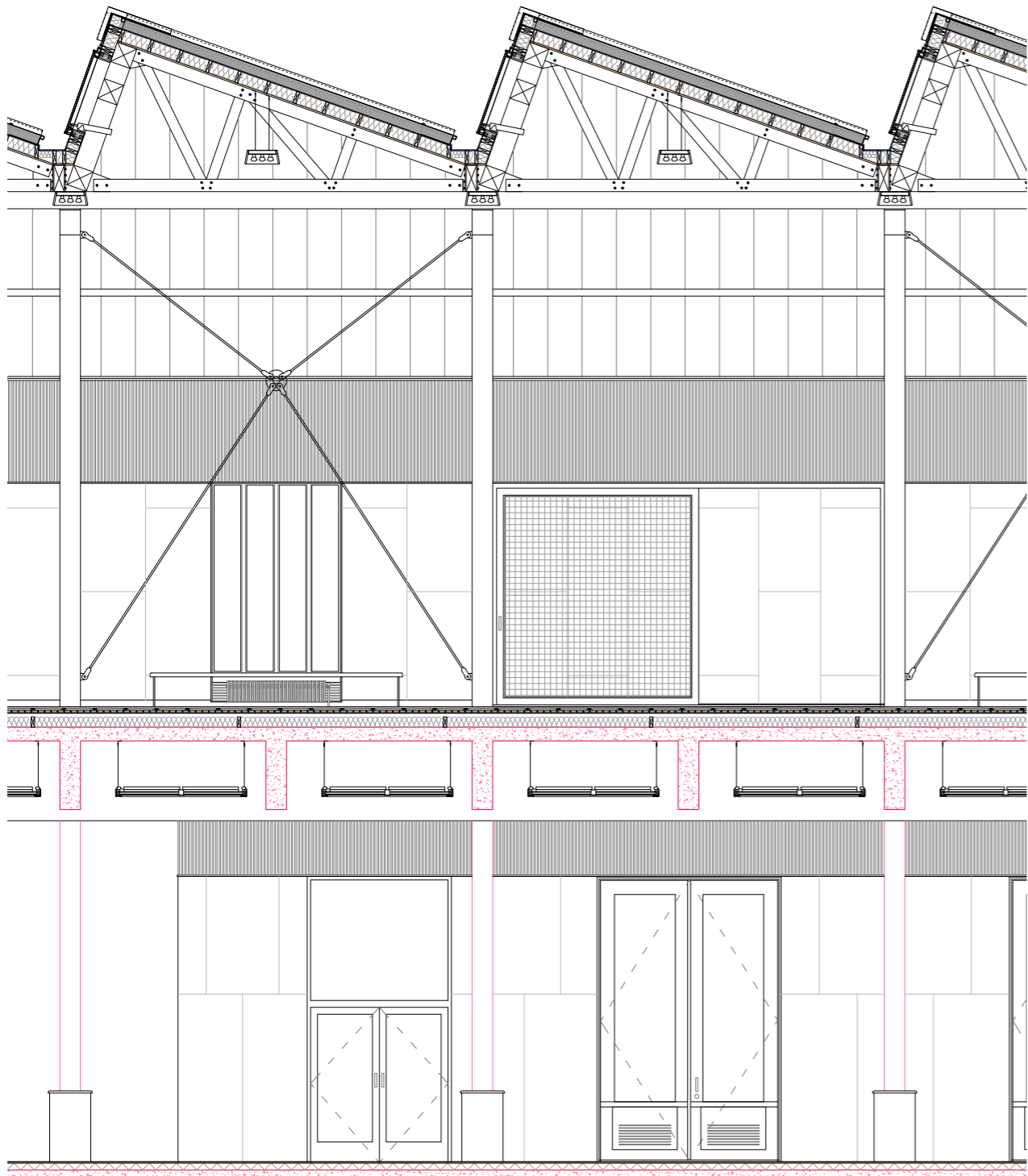
Detail 2

Refer to page 142 of the research and design book for labelled full scale drawings

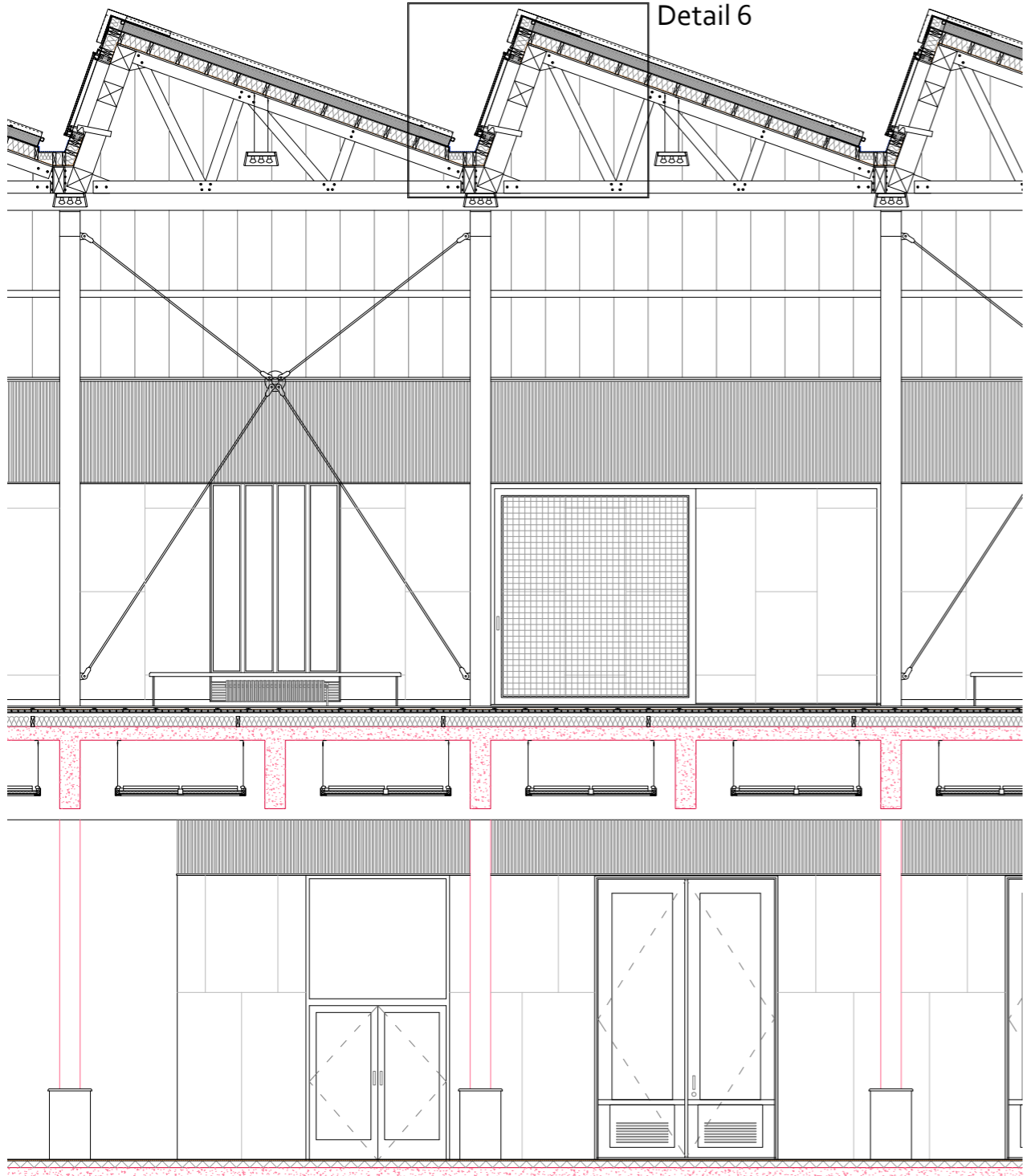


 Existing construction is coloured in red

Refer to page 142 of the research and design book for labelled full scale drawings

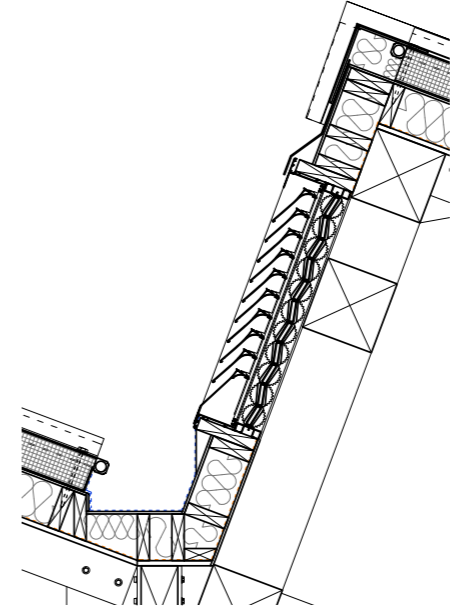
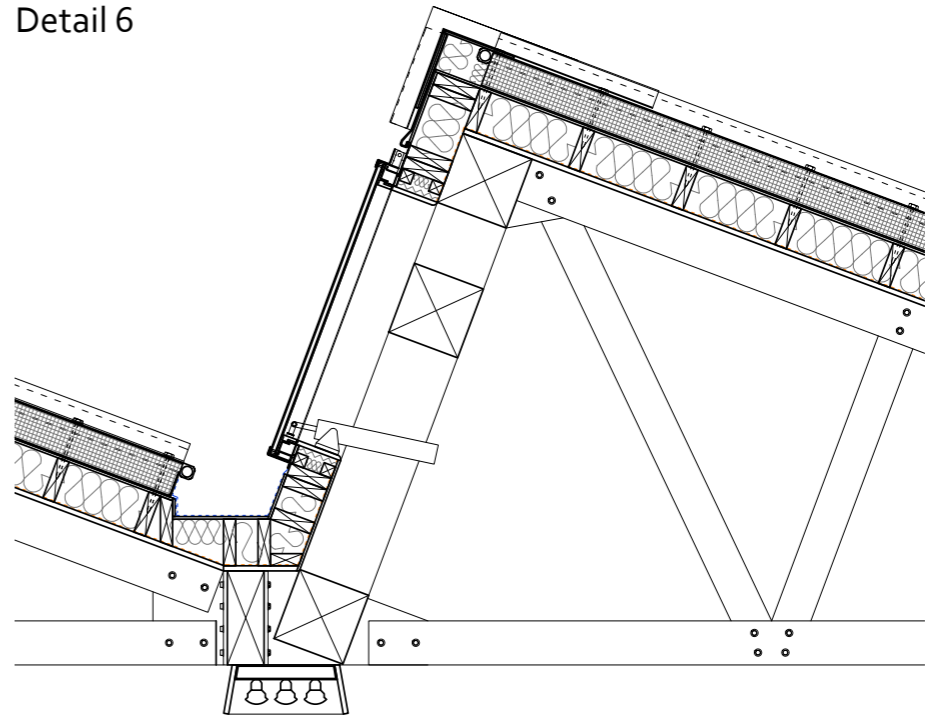


Refer to page 143 of the research and design book for full scale drawings

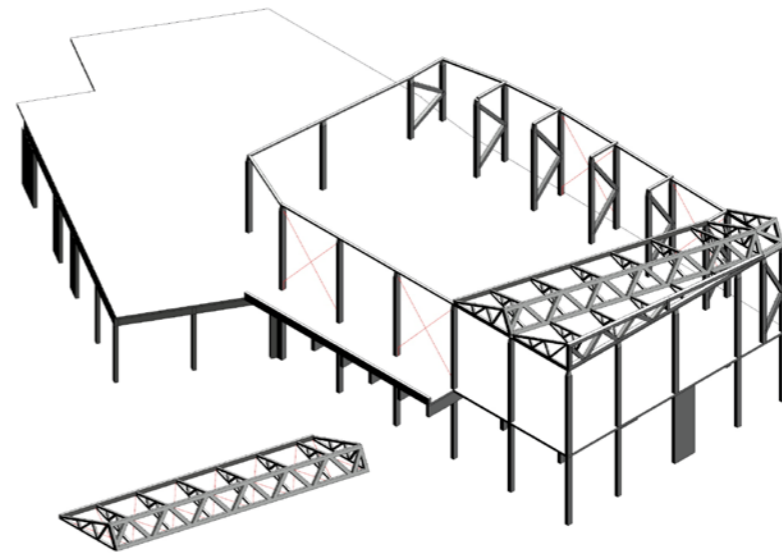
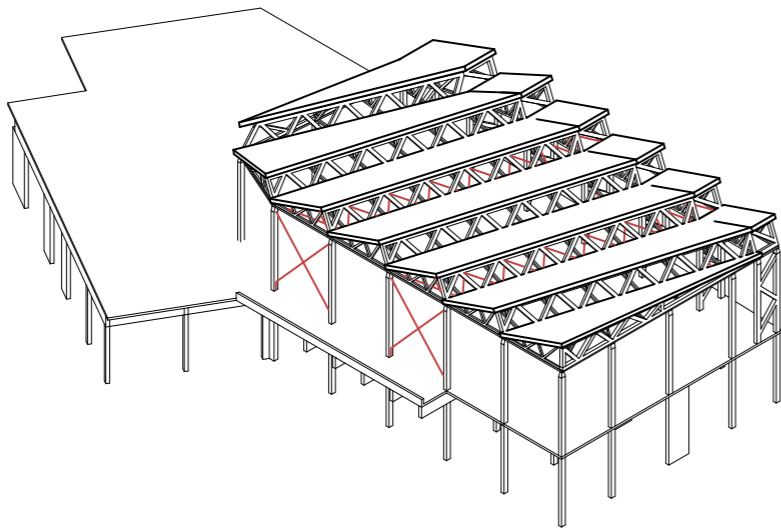
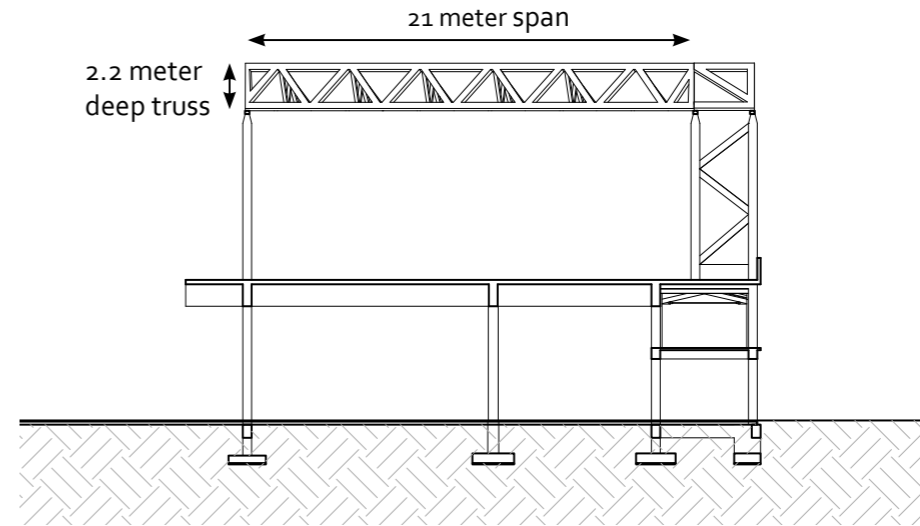
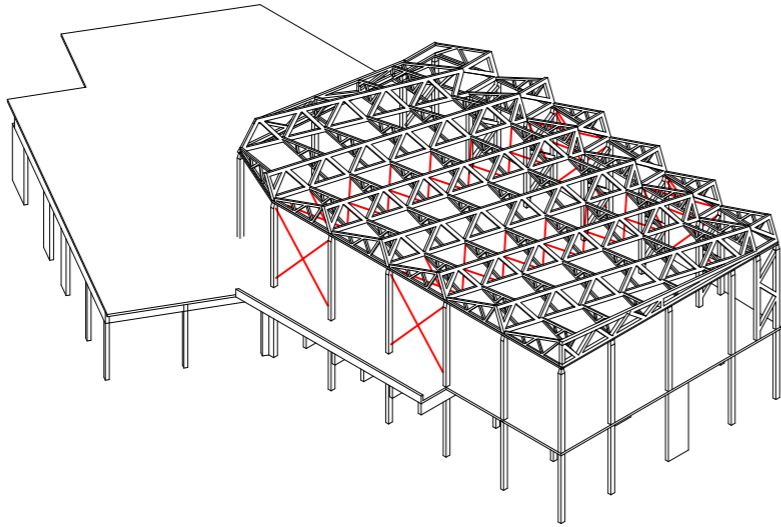


Detail 6

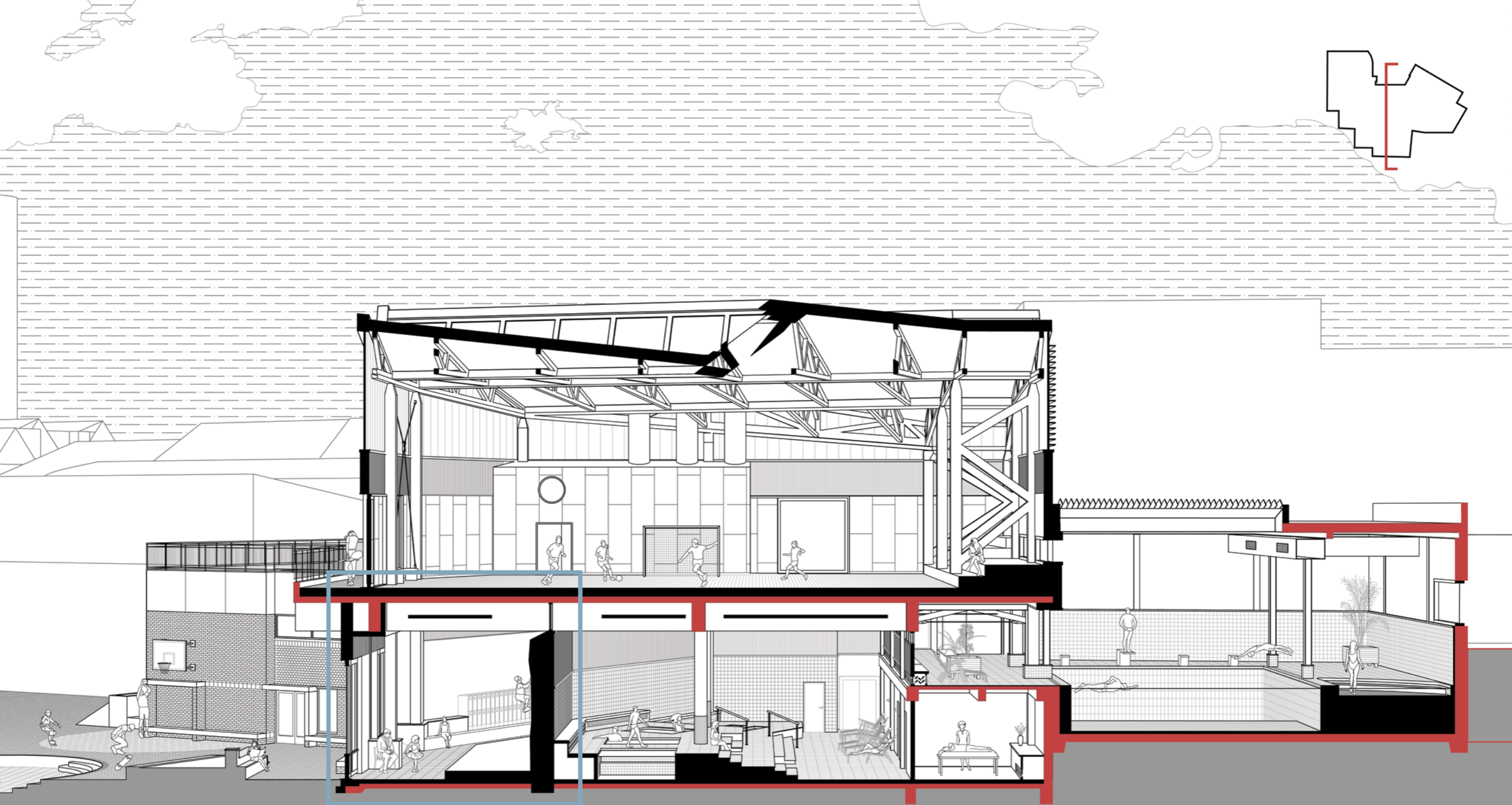
Detail 6



Refer to page 143 of the research and design book for labelled full scale drawings

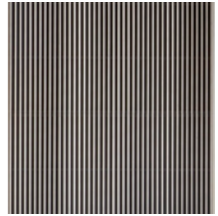








Exposed original concrete



Timber batten acoustic panels



Birch plywood wall finish

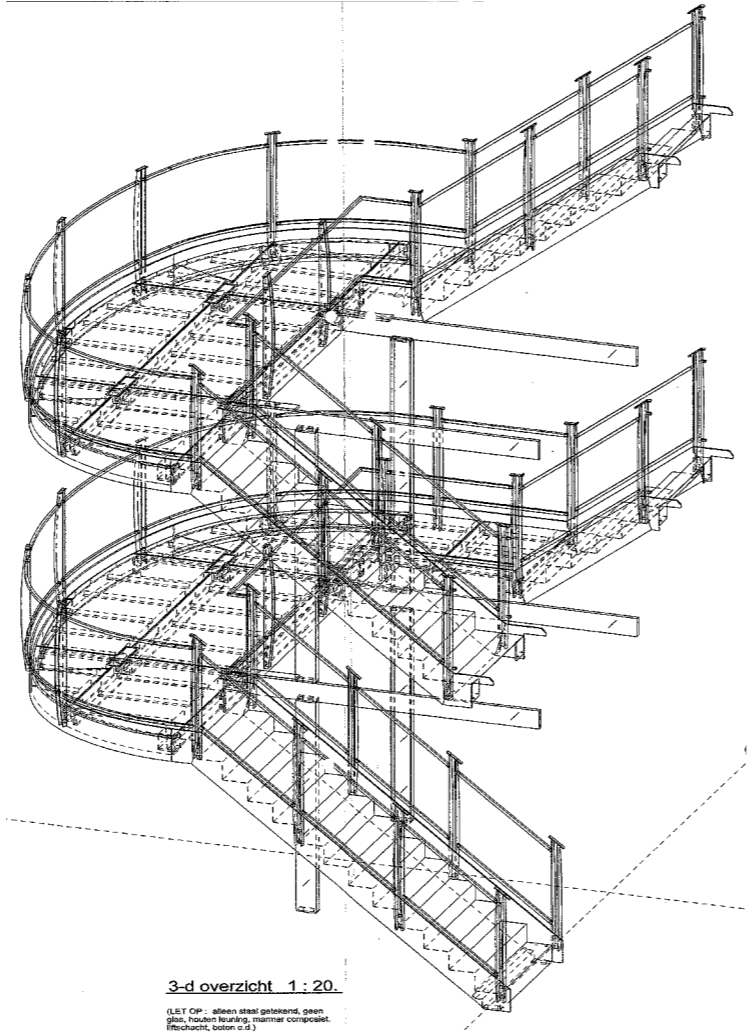
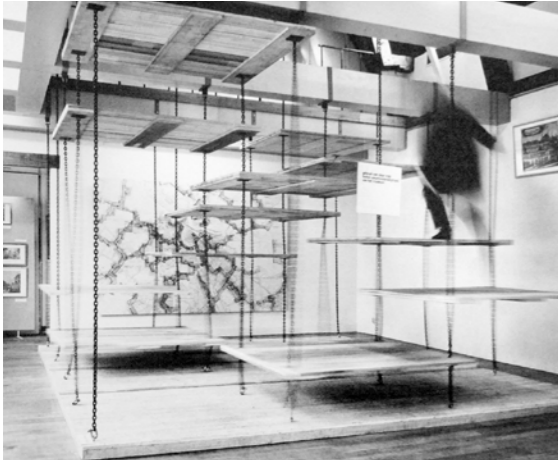


Painted original blockwork

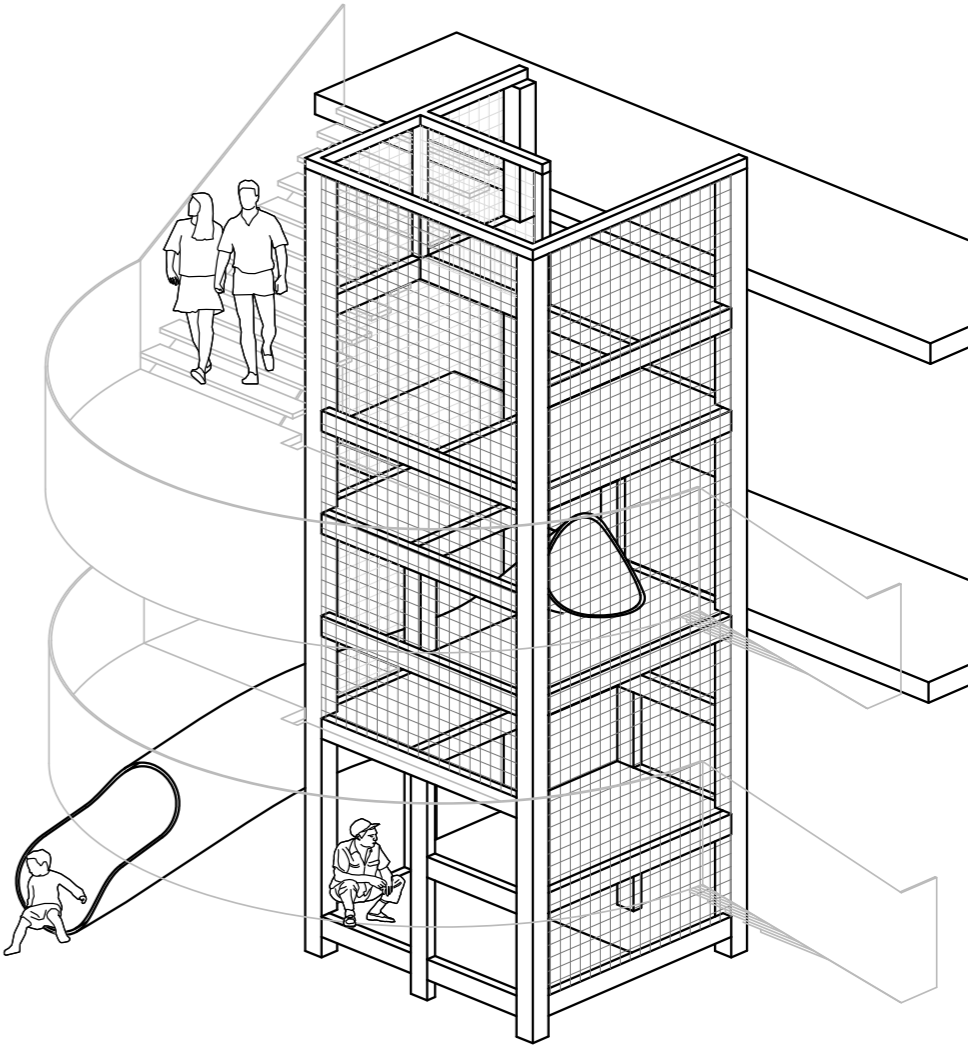


Re-used carpet tiles

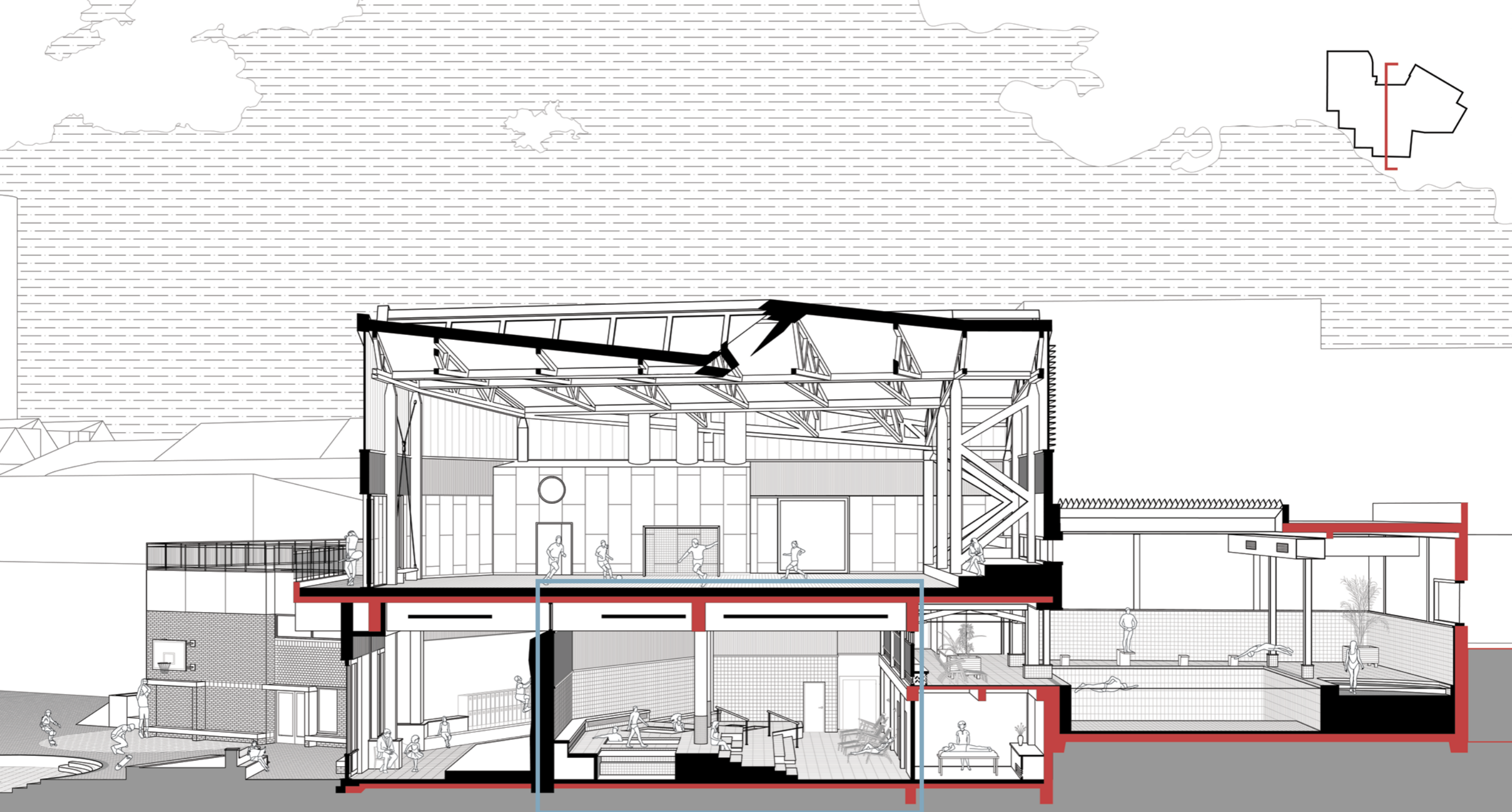
Levels and circulation



Drawing of existing stair

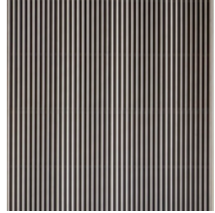


Proposed addition

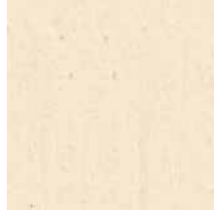




Exposed original concrete



Timber batten acoustic panels



Birch plywood wall finish

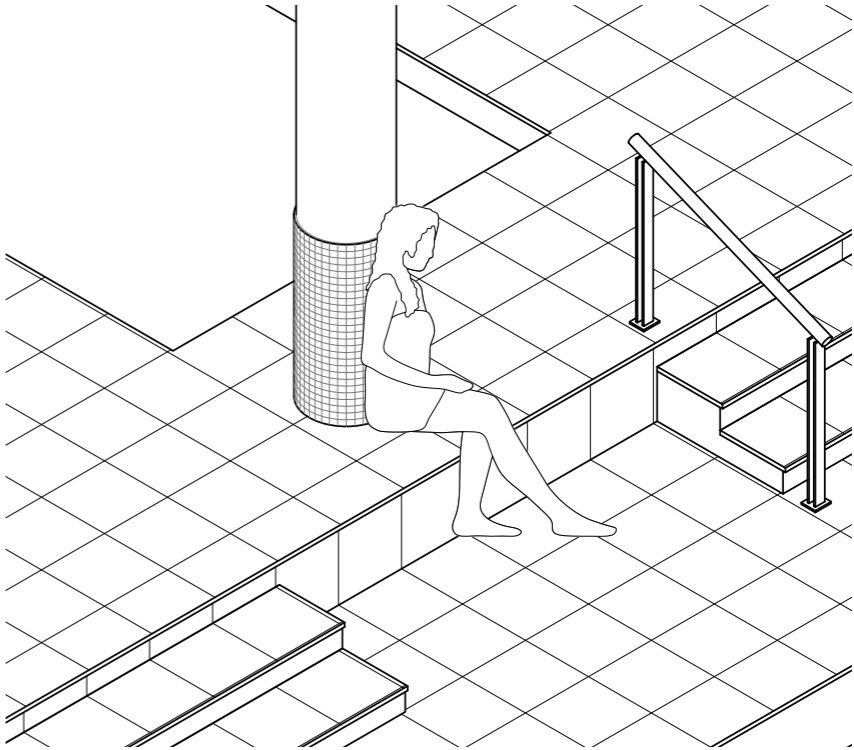


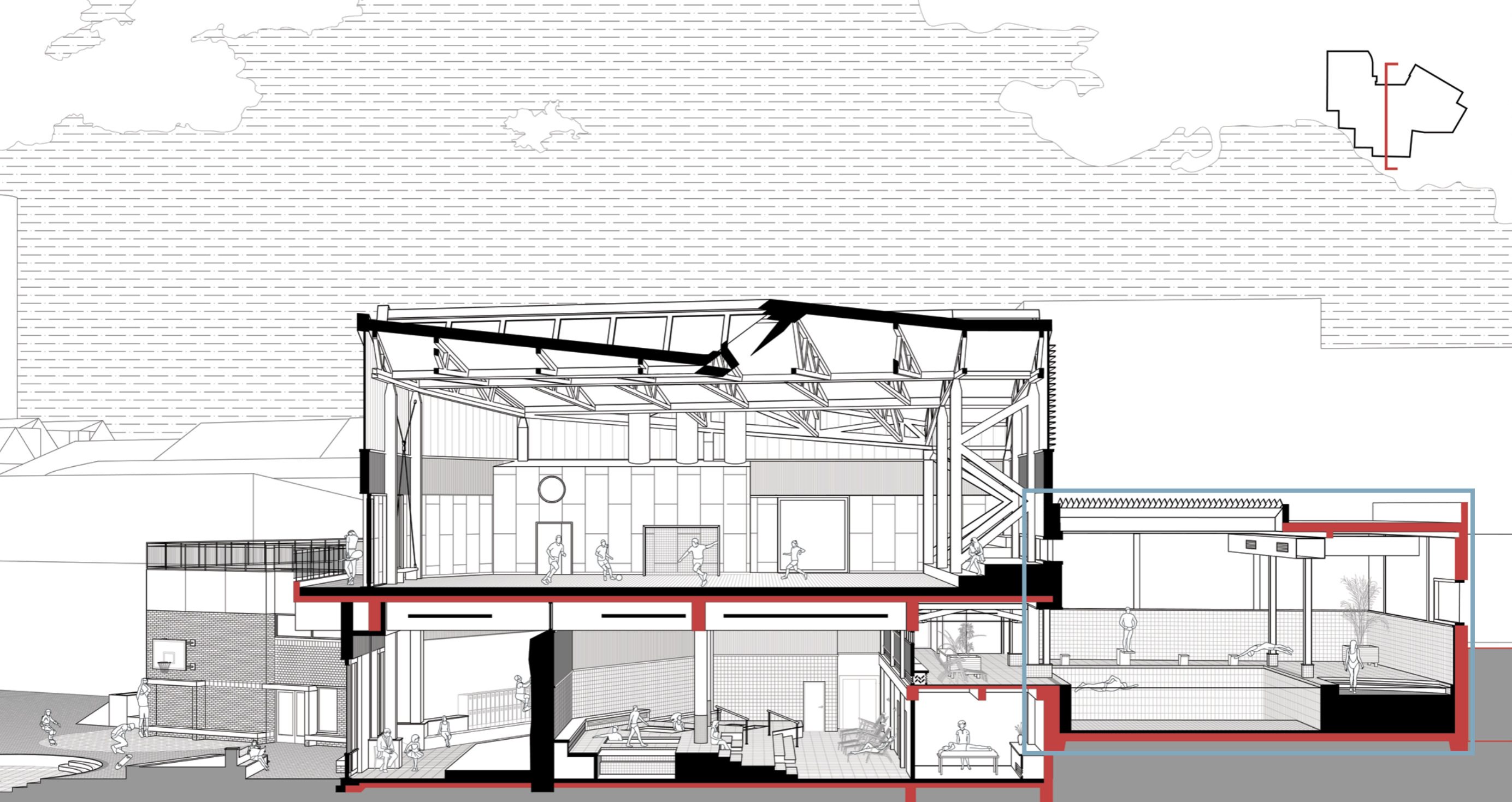
Reclaimed wall tiles



Re-used floor tiles

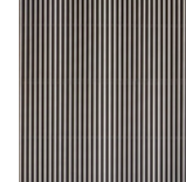
Bollards and columns







Exposed original concrete



Timber batten acoustic panels



Painted original blockwork



Reclaimed wall tiles

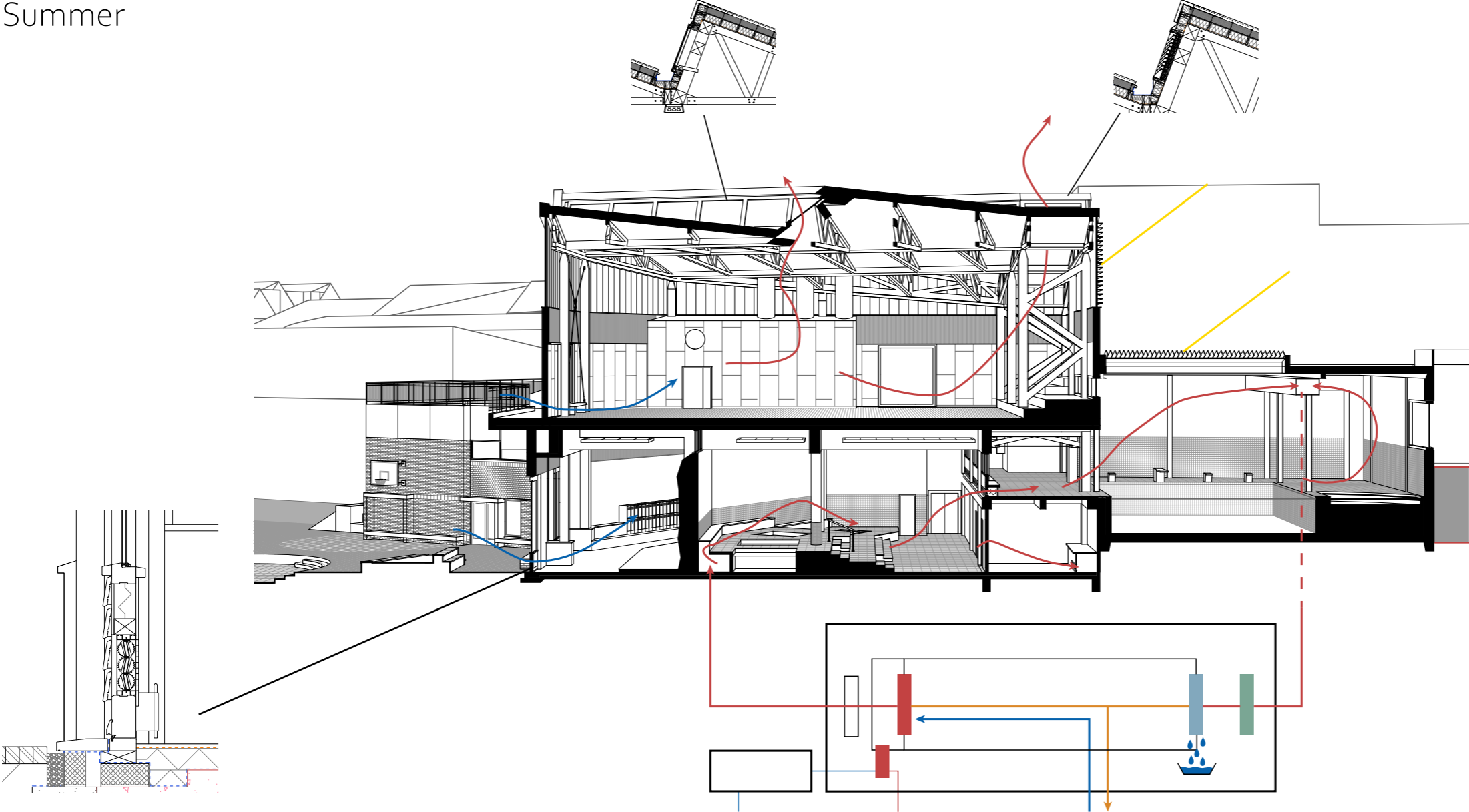


Re-used floor tiles

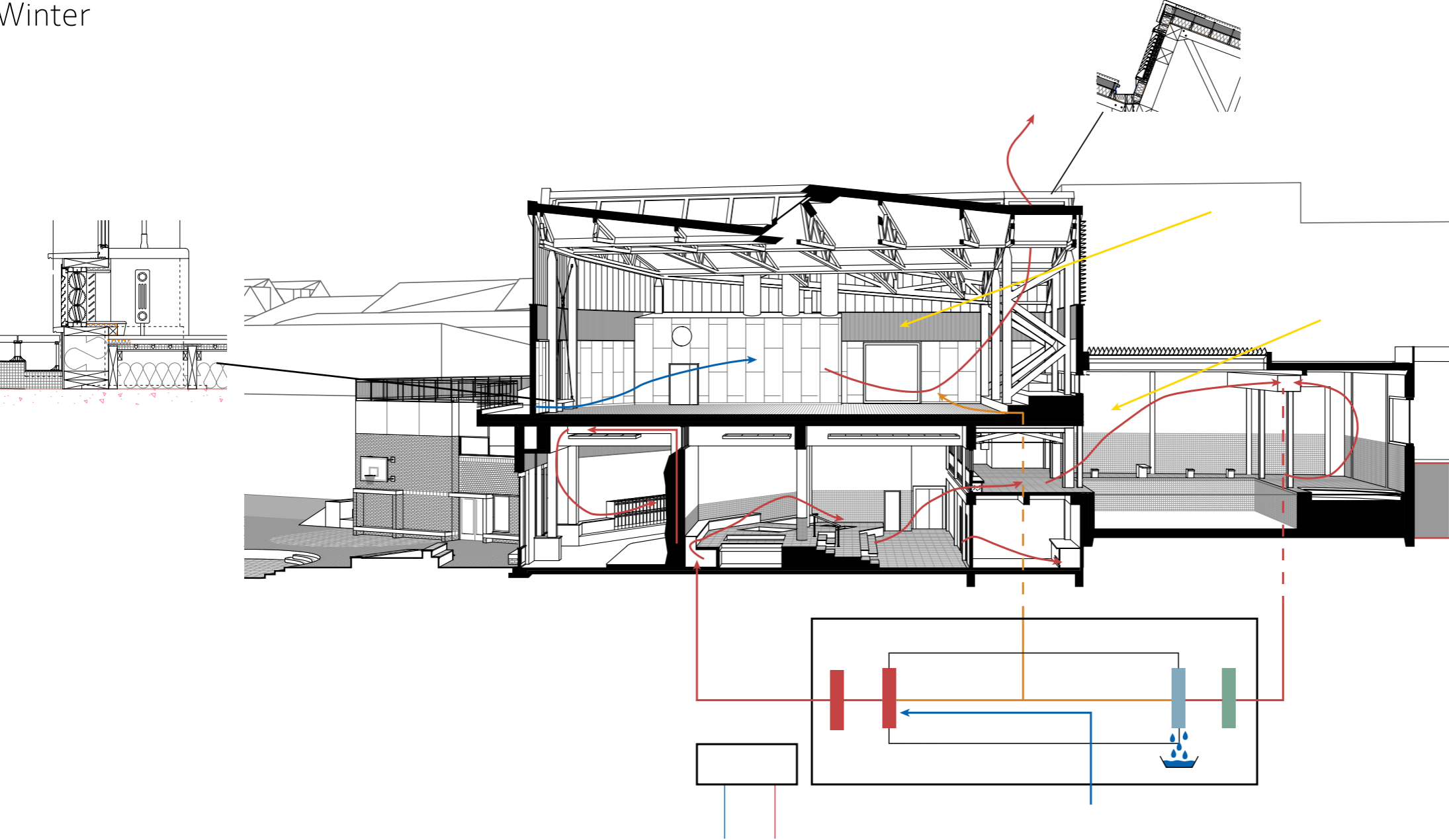


Pool tiles

Summer



Winter

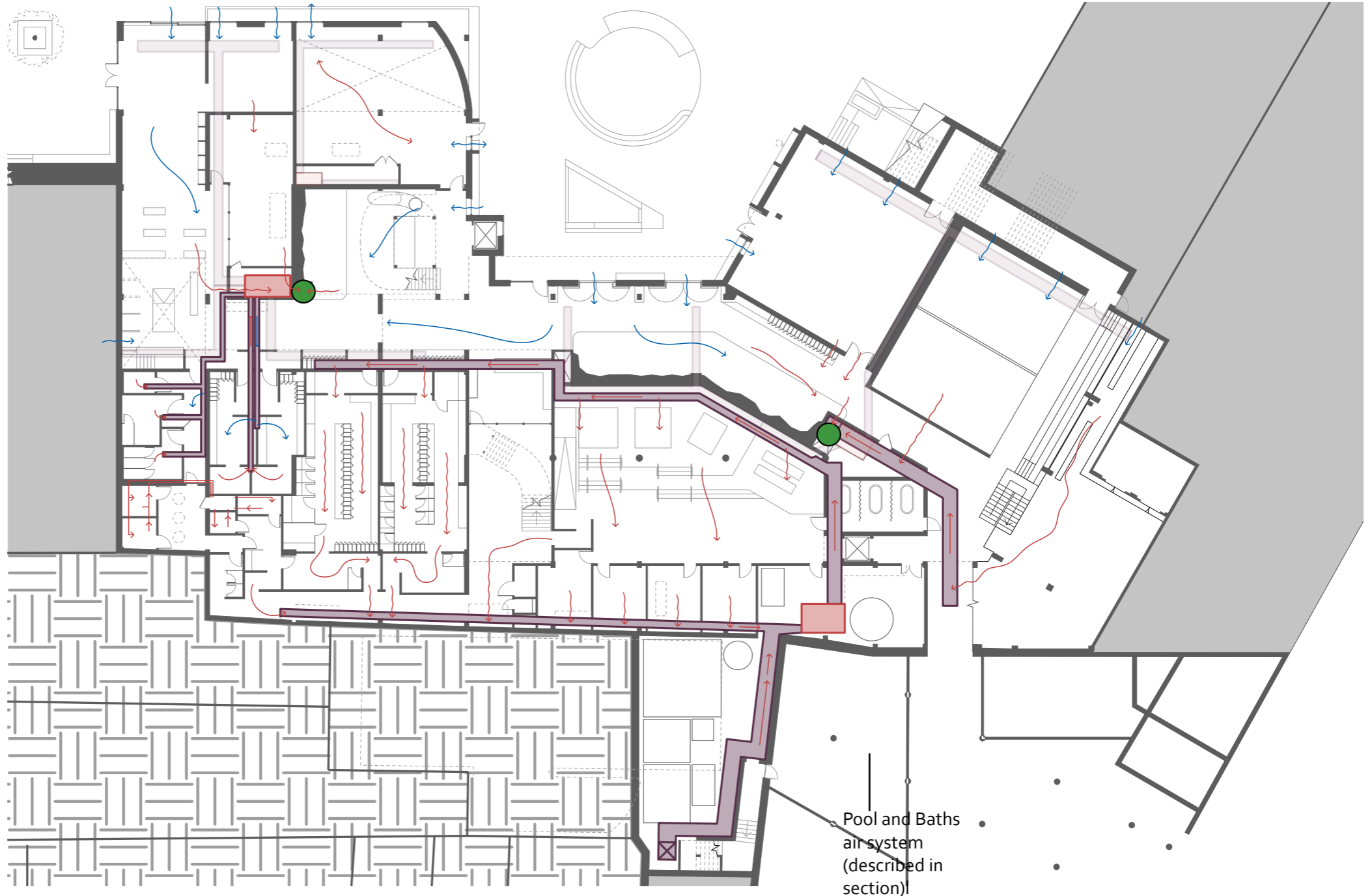
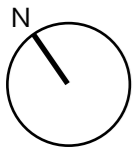
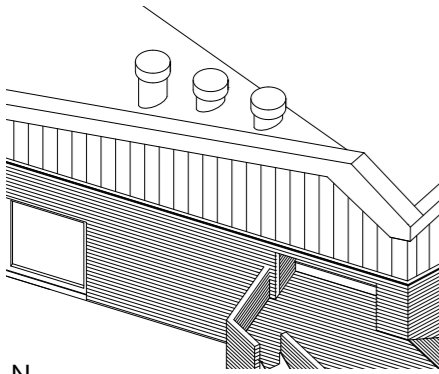


Climate plan summer

- Fresh cool air
- Stale warm air
- Mechanical equipment
- Ducting
- Turbine chimney exhausts



Example product photo



Climate plan winter

- Fresh warm air
- Stale cold air
- Mechanical equipment
- Ducting
- Turbine chimney exhausts



Example product photo

