

Selwyn Steyn
Heart of Culture
Supervisor: Michael Louw
2022



Heart

of

culture.

DISSERTATION TITLE: **Heart of culture.**

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This dissertation is presented as part fulfilment of the degree of Master of Architecture (Professional) in the

School of Architecture, Planning and Geomatics, University of Cape Town

Date: **09 September 2022**

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Acknowledgments.

I would like to thank my supervisor Michael Louw for his continuous support and valuable insight over the past year.

To my parents, Maxi and Tertius. You were right all along about architecture being the right choice for me. I am filled with joy and gratitude upon reflecting on the privilege of having spent six years learning about this beautiful discipline. Thank you for your eternal care, support and love. I owe everything to you.

Abstract.

If the urban landscape is the body politic made inertly manifest, then cultural and civil space acts as the heart. Cultural space allows for the societal corpus to gaze into itself. Cultural space however is commonly made to act as gilded cages -held aloft within ivory towers- with a negation of its civic value. A cultural heart, an institutional anchor, tying the past and future is most prescient within the context of Cape Town's Foreshore, simultaneously addressing the complex urban needs of an unstitched Modernist landscape and anticipating rapid developmental flux that will see the city change explosively. This dissertation scheme aims to rein-terpret the art museum typology which typically generates an insular and monastic aesthetic experience in which one is removed fully from the world. Here rather, the pro-gram questions how public functions and museum functions can be interspersed and dynamically overlaid so that maximal conversation and cross pollination may occur with public life influencing the experience of art.



Figure 2: Photo of the site (author.)

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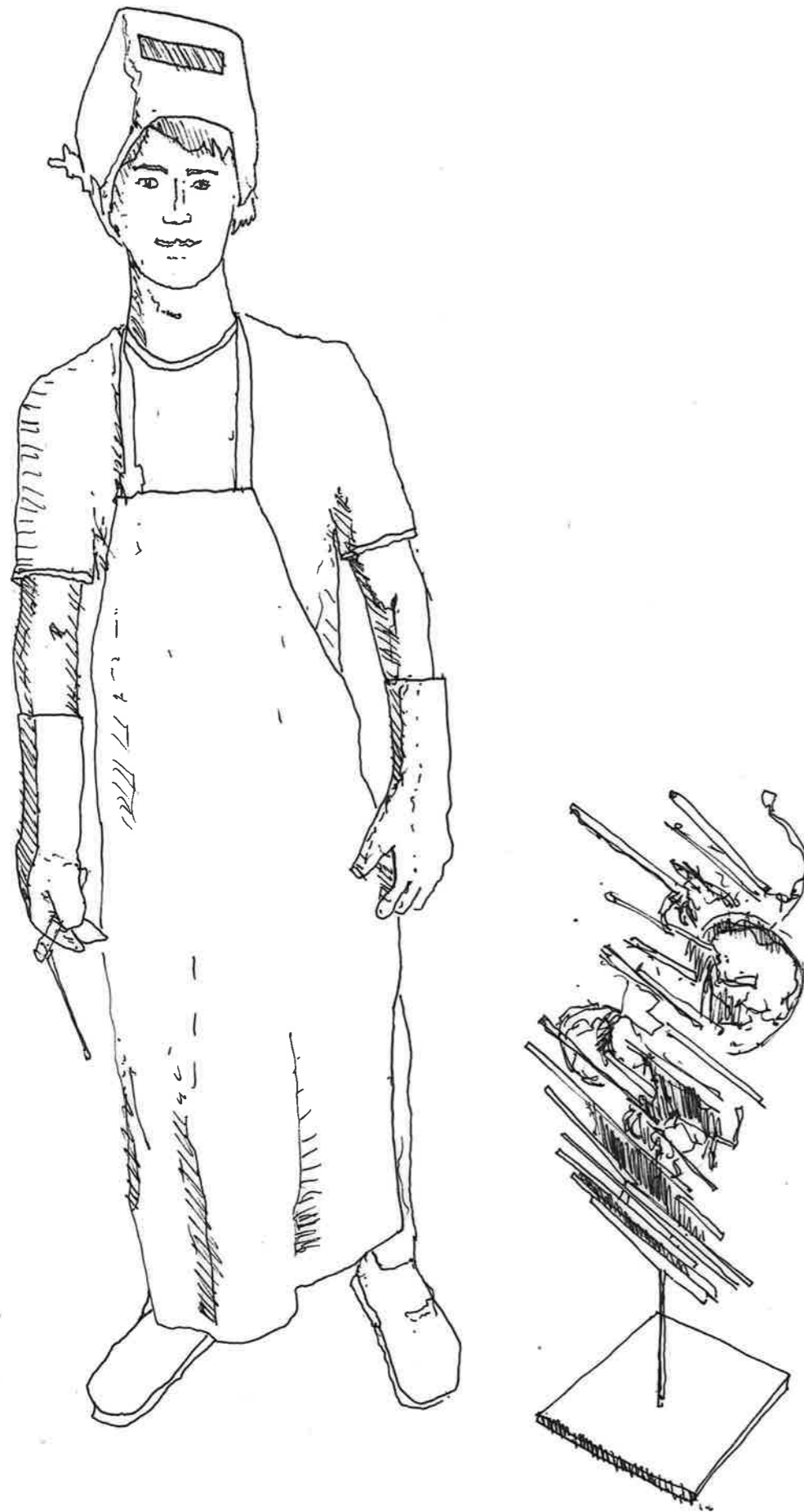


Figure 3: Me next to a sculpture I was busy making (author.)

Preface.

From a very young age I have been enamored with art. I have always spent much of my time creating art, even when it seemingly made much of the rest of my life more difficult. In congruence with my love of art, many of my most significant and touching experiences have been visits to places in which art is housed. These experiences have often had a near religious quality for me. I remember as a young child, encountering great works of art and being overcome by awe. Art was the conduit for my aesthetic awakening. Soon my eyes wandered out of the frame of the artwork, and I started to notice the spaces in which art was housed. I had discovered that much of that which I had found such a deep passion for, was also found in the built environment. The most meaningful architectural experiences for me have always been at cultural spaces. Witnessing people engage with culture -having their perceptions altered radically and their inner landscapes of salience adjusted by meeting art and architecture- has always given me strong belief in the power of artistic creation. The value of culture is unquantifiable. In cultural spaces we hold our ideals up to the light. Where my interest was initially formal, it had soon evolved to be relational. I have become interested in that which is awakened at cultural spaces. How these spaces become places of event where we encounter the *mythos* that serves as the operating systems on which our societies run. The importance of culture (in my estimation) cannot be assessed using reductionist-materialist or utilitarian means. One of culture's most important functions is the awakening generated in its immediate proximity. Cultural space facilitates

a parent covering the eyes of their child in anticipation of revealing a true great work of art to the child for the first time. Cultural space houses the heated exchanges on matters such as representation, identity and morality. Cultural space invites the appropriation of the space by our irreverent youths, skateboards in hand. Cultural space is the scene where we collate and examine who we are, what we produce and what the driving impetus is behind our production. Cultural space is the turning of the soil, the airing of dated ideas and the place where ideas that have not reached maturity are left to lie fallow. Where I was first interested in the works on the walls, I soon became interested in the people engaging with these and then how these people engage with each other and how this can be facilitated and celebrated using four walls and a roof.

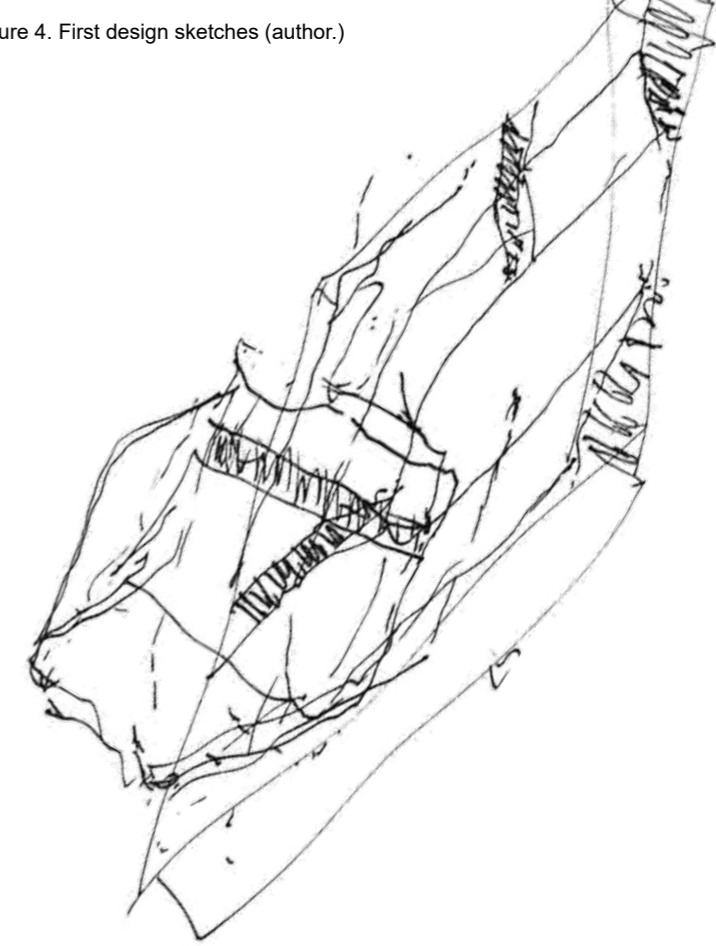
Although my intention was to focus solely on this, I soon realized however that these spaces do not exist in isolation. Every cultural space is situated, along a variety of axes, within spatial contexts, conceptual contexts and social contexts. Through this investigation, the platonic and rigid idea of what cultural space is, and how it manifests has started to dissolve.

This dissertation was a labyrinthine and non-sequituous stumbling forth in which I have tried to make sense of the type of space that I have been so enamored by. Creative inquiry is *Sisyphean* in nature, and the search never ceases. This dissertation is but a cross-section into a loose tangent of many of the things which I have been thinking about for my entire life. I cannot guarantee the emergence of any novel knowledge, but I can guarantee the sincerity of the pursuit.

Introduction.

This design thesis document is divided into 6 parts. First, the history and nature of the site ,as well as current policy discourse regarding development within Cape Town's Foreshore, is discussed and engaged with. Thereafter the nature of cultural and public space is investigated through a theoretical investigation as well as precedent studies. In part three a site analysis is discussed. In part four the development of the design is explored and expanded on. Interspersed within the document, one will find loose tangents and thoughts. There is difficulty in generating a linear document for a non-linear process and in some places the linearity gives way. Through different phases of analysis and investigation, different guiding principles will emerge. These principles are discussed as the document proceeds.

Figure 4. First design sketches (author.)





Part 1: Understanding the context.

About the Foreshore.

Cape Town's Foreshore is located on land reclaimed from the ocean following the rapid economic growth of post-war South Africa. A level, man-made surface provided the ultimate *Tabula Rasa* for the imposition of a formal layout that organized and arranged in rigid fashion. Spaces serving different uses were held separate yet "connected" using vast infrastructural schemes. Grand open spaces were punctuated with boulevards and the landscape became dominated by monoliths of hope (and dominion.) The first plan for the Foreshore was created by Professor W Thornton-White and was typical of the ethos of Modernism. Thornton proposed the concept of the monumental approach and the Foreshore as the gateway to Africa (Postlethwayt, 2020.) In 1968 a double, elevated freeway was constructed, severing the city from the ocean. Today, the Foreshore reflects its functional bias, instead of providing human-centric spatial experiences, kept alive by it's economic output rather than its spatial merits. Wide windswept boulevards feel bare and sterile. The Foreshore is on the precipice of flux. For several years, the city has been breathing in, ready to transform once again and to provide new iteration. How the Foreshore 2.0 will come to be can only be speculated, yet with some insight a vision for a future Foreshore might start to gain clarity.



The current policy framework around the site.

Understanding the intentions of the City of Cape town regarding the development of the greater Foreshore precinct.

It is of essential importance to understand the positioning of the Foreshore precinct within current policy discourse by the City of Cape Town. In this regard it is worth noting that this part of the city has seen plentiful planning iterations in recent years with varying stages of planning and development being initiated and then also abandoned. Currently a relatively new administration is in the process of reformulating policy on the development of the Foreshore. This policy however is situated within a framework that the city has remained aligned on for some years. It is also worth investigating previous plans for the foreshore that were abandoned as a means of understanding the potential future of the precinct.

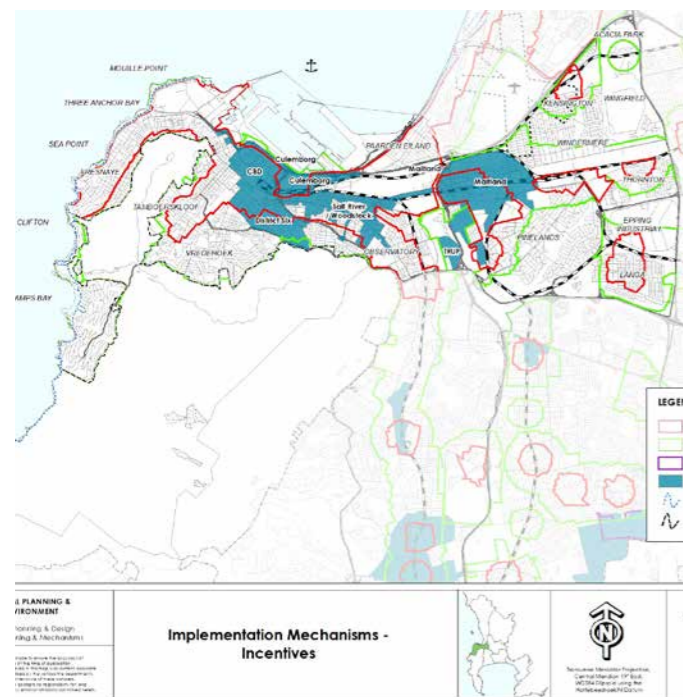


Figure 7: Implementation mechanisms and incentives (City of Cape Town, 2022) Image retrieved from: <https://www.capetown.gov.za/>

Part 1: Understanding the context.

The image shown above from the District Spatial Development Framework of 2022 indicates that the Foreshore is located within a developmental focus area.

The most current plan is known as the **Integrated Table Bay District Spatial Development and Environmental Management Framework of 2022** and is still in the process of finalization and approval and will most likely only be released in December of 2022. This plan envisions the Table Bay District as “an inclusive destination, providing homes to more people and opportunities to more people. An innovative district that becomes more accessible and continues to offer a variety of economic opportunities, the benefits of which spread across the city. A resilient district where character areas, green spaces and cultural practices are celebrated.” (Department of Human Settlements, 2022.)

In May of 2021 a Foreshore Gateway Master-plan was discussed at a sub-council meeting which resolved that the area around the Foreshore freeway be used to “unlock economic potential, alleviate congestion and provide affordable housing.” The master-plan goes on to state that “it is the intention of the city to release vacant and underutilized land for development.” (City of Cape Town, 2021.)



Figure 8: New proposed MyCity bus route (City of Cape Town, 2022) Image retrieved from: <https://www.capetown.gov.za/>

Furthermore, it was resolved that a new park and ride facility be created near the freeway with the creation of a new MyCity bus station.

In 2015 the City of Cape Town welcomed a series of proposals for the development of the precinct between the freeways in Cape Town’s Foreshore. The brief stated that proposals had to suggest solutions for uses for the unfinished freeway, provide means of addressing congestion and housing shortages as well as reconnecting the city to the sea. This process was then scrapped as a result of legal non-compliance yet remains

an asset in terms of anticipating the nature of inevitable development within the freeway. The table below compares the similarities and differences between proposals and makes it obvious that the Foreshore precinct will most likely be a highly densified, mixed-use precinct with a strong emphasis on housing, pedestrianization and the creation of a day and night city, in line with the intentions of the City of Cape Town’s various planning schemes.

Different remedies were generated for the freeway, which suggests that future schemes need to remain adaptable to an uncertain condition in relation to the freeway.

	PROPOSAL A.	PROPOSAL B.	PROPOSAL C.	PROPOSAL D.	PROPOSAL E.	PROPOSAL F.
SYNOPSIS.	REMOVAL OF THE FORESHORE FREEWAY. ENHANCEMENT OF MYCITI ROUTE WITH ROUTE WHERE FREEWAY USED TO BE. CYCLING STATIONS ADDED. ATTRACTIVE GREEN WALKING ROUTES. PARKING GARAGES ADDED NEAR CIVIC CENTRE. 4000 AFFORDABLE HOUSING UNITS ADDED. FREEWAY ALTERED INTO NEW URBAN PARK.	CREATION OF A LARGE RING SHAPED SKY-SCRAPER WITH A NEW CABLE CART COMMUTER LINE. TUNNELING OF THE FREEWAYS.	FREEWAY IS COMPLETED. NEW OUTBOUND VIADUCTS ARE CREATED. OLD HIGHWAY LINE IS TRANSFORMED INTO A PUBLIC PROMENADE. HIGH RISE STRUCTURES ARE PLACED BETWEEN OLD AND NEW FREEWAYS WITH OCCASIONAL PLAZA OPENING. INCLUSIVE HOUSING IS ADDED.	LIFTED PLATFORM IS CREATED. FREEWAY IS COMPLETED. GREEN SPACES CREATED IN BETWEEN. HIGH DENSITY DEVELOPMENT IS CREATED BETWEEN THE FREEWAYS. AFFORDABLE HOUSING IS PROVIDED. PRECINCT IS MADE TO BE ENERGY AND WATER INDEPENDENT.	ADDITION OF A MYCITI BUS ROUTE UNDER EXISTING FREEWAY. MAJOR NEW PUBLIC PARK SYSTEM. CIVIC HEART AT ARTSCAPE. NEW PEDESTRIAN PROMENADE CREATED. PEDESTRIAN TRANSIT ROUTE THROUGH SITE. FREEWAY DEMOLISHED AND LOWERED. PARK PLACED OVER FREEWAY AFFORDABLE HOUSING ADDED	HIGH DENSITY DEVELOPMENT BETWEEN FREEWAYS. ADDITION OF PEDESTRIAN WALKWAY. ADDITION OF AFFORDABLE HOUSING.
HIGH DENSITY SCHEME.	X	X	X	X	X	X
CREATION OF A PEDESTRIAN PROMENADE.	X		X	X	X	X
ADDITION OF AFFORDABLE HOUSING.	X	X	X	X	X	X
TOTAL REMOVAL OF FREEWAY.	X					
PARTIAL REMOVAL OF FREEWAY.		X		X	X	X

Figure 9: Comparison between all schemes proposed for the City of Cape Town (author.)

CITY OF CAPE TOWN, 2017.

Emergent principle 1.

Anchor the old and the new by generating cultural and civic space serving both the new Foreshore precinct and the old Modernist context.



Figure 10: Parti diagram 1 (author.)

Understanding the intentions of the City of Cape town regarding the site.

Erven 187 (where the Zip Zap Circus is currently located) has been identified by the city of Cape Town as underutilized, city owned land for several years. Various iterations of proposals have been generated for this land in conjunction with upgrades to the Artscape theatre. In 2015, major extensions to the Artscape were proposed which necessitated the process of a heritage impact assessment. Although the major extensions to the Artscape were subsequently abandoned, it again provides for valuable insight as to the future of the greater site. The city is currently investigating the potential of Erven 187 and the plans for this site should be finalized by December 2022.

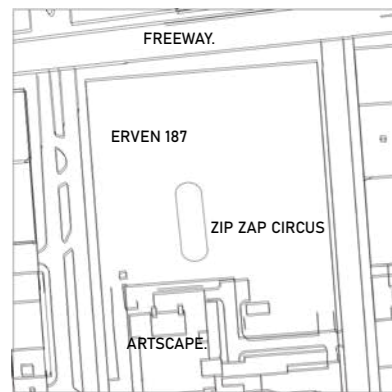


Figure 12: Erven 187 (author.)

The current plan being investigated is known as the **Founders Garden Artscape Precinct (FGA) Plan** and has been in process since 2011. This plan envisions the

creation of two cross-subsidized housing blocks with a total of 2000 units with a further smaller block created where the Artscape parking is currently situated. It proposes that 1000 units be used for social housing whilst the remainder be used for market priced units. A double basement parking garage is proposed under the building footprint. The proposed East tower will be 23 storeys with 951 units for an average of 40 units per floor whilst the proposed North tower will be 19 storeys with 854 units. In order to free up this land, the plan proposes moving the Zip Zap circus to the entrance plaza of the Artscape theatre.

Here it is important to note that the future of the site is uncertain. Hence there is scope for a novel proposal for this site using the varying preexisting and abandoned proposals as

Part 1: Understanding the context.

informants.

Findings from the Heritage Impact Assessment completed in terms of section 38(4) of the National Heritage Resources Act.

The Heritage Impact Assessment completed by Cindy Postlethway discusses the Western Cape Government's strategy to address Apartheid legacy challenges, in particular the need to provide affordable housing on well located sites. In 2011, the Cabinet of the Western Cape Government approved a development proposal for the FGA precinct and the inclusion thereof in the **central regeneration program**. This program aims at expanding the cultural footprint in the precinct by accommodating the expansion of the Artscape, the creation of a new museum and an overall improvement of the quality of the urban space. (Postlethway, 2020.)

Postlethway characterizes the Foreshore as an area planned at a time when planning, design and architecture were heavily influenced by new ideas. These formal planning conceptions were Corbusierian in nature and replaced historic or organic layouts with formal layouts where design could exert greater control. (Postlethway, 2020.)

Postlethway continues by stating that the area is mostly made up of large modern multi-storey office blocks locked within a semi-grid street block pattern that includes plentiful open spaces and expansive parking lots. The character of the area is largely defined as being Modern late 20th Century.

Postlethway found that Hannes van der Merwe's Artscape Theatre Complex (formerly Nico Malan Theatre Complex) can be considered a hard, windswept environment. There is little or no activity on the edges and the environmental quality and sense of security is of low standard. It has some landmark status, but this is not due to its inherent place-making qualities. Artscape has never been recognized as a particularly notable building. Postlethway states that it is not a good example of Brutalism with low truth to material whereas raw concrete in

Tabulation of the significance of the Artscape complex as modernist architecture in terms of DOCOMOMO criteria			
LEVEL OF SIGNIFICANCE	LOW	MEDIUM	HIGH
1. Technological merit		✓	
2. Social merit	✓		
3. Aesthetic and Artistic merit		✓	
4. Canonic merit	✓		
5. Referential value	✓		
6. Integrity		✓	
RECOMMENDED GRADING: III B (Medium to low significance)			

Figure 11: Tabulation of the significance of the Artscape complex as Modernist architecture in terms of DOCOMOMO (Postlethway, 2020.) Retrieved at: <https://sahris.sahra.org.za/>

the hands of Le Corbusier became something beautiful and almost spiritual (Postlethway, 2020.) There are very few activated street edges around the Artscape, and the elevated freeways also have a blighting effect. Postlethway concludes by stating that the complex as a whole is not conservation worthy.

A few notable recommendations are made that will act as key design informants moving forward.



Figure 13: Boulevard of Ficus trees (author.)

The HIA identifies the Northernmost part of the Artscape site along the North-Western Street boundary of the DF Malan street edge as important. Here an established row of Ficus trees with a tall tree canopy are conservation worthy. This is an important avenue to retain.

Towards the east of these trees, new generators have been placed and a freestanding,

Emergent principle 2.

The Artscape is sliced to continue the existing urban walkway and a new entrance is created, ultimately expanding the orientation of the existing structure.

dilapidated, prefabricated annex is located. The HIA states that both can be moved to accommodate future expansion. The HIA also reveals that most ground floor space on the Northern edge of the Artscape theatre is used



Figure 14: Acceptable areas of intervention on Artscape (Postlethway, 2020.) Retrieved at: <https://sahris.sahra.org.za/>

for storage. The HIA suggests a setback of all new buildings of 8m from site boundary or 15m from the kerb to accommodate the Ficus trees. The HIA suggest the creation of new canopied pedestrian routes to provide pedestrian comfort. The HIA identifies significant pedestrian routes along DF Malan street and Herzog Boulevard. The HIA suggests that buildings around the Artscape respond with a similar scale, with the exception of the cross subsidized housing which warrants greater bulk. Finally, the HIA proposes the creation of a precinct of unique character that focuses on recreation, creativity, cultural development and play (Postlethway, 2020.)

The clearance for additions on the Northern edge provides sufficient justification for the proposal of additions to the Artscape within this dissertation project.

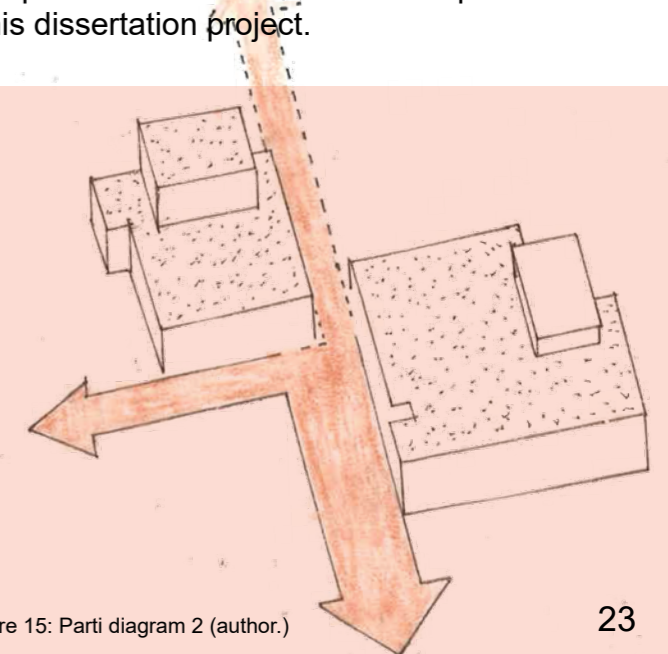


Figure 15: Parti diagram 2 (author.)



Part 2: Understanding public space and the importance of cultural space within greater urbanity.

Figure 16: Ficus tree boulevard (author.)

The importance of public space for the health of a society.

Antonio Balmon, president of the Barcelona Metropolitan area states that “public space is the quintessential place of social meeting and citizen participation, it is also the showcase of social conflicts” (Balmon, 2018.) From this we can gather that the spaces between buildings and specifically the spaces generated with the public predominantly in mind serves the role of allowing a society to generate an understanding of itself. Not only is the connection between the individual and his or her urban surround integral to the health of the individual, (Gehl, 2010) but the conglomeration of individuals living in symbiotic harmony with the city becomes the central building block of a working society. Zaha Hadid states seminally that what characterizes contemporary life is a new level of social complexity. Hadid continues by stating that cities are no longer occupied by one single type of inhabitant. Cities now contain a range of ethnic experiences and influences and thus require a different agenda for living. Hadid then argues for the importance of complex and considered public space by explaining that people want to be in an “event space,” buildings not just made up of mono-programs, but made of a field of different spaces. Hadid is appealing towards a drive to programmatic complexity and a pivot away from the top-down imposition of unitary programs upon the urban landscape (Obrist, 2015.)

Embracing a greater complexity, moving away from top down design.

This point is then reaffirmed by Thomas Mayne as he similarly criticizes top-down design. He states that opting for speed and efficiency over all else, reductive, top-down and two-dimensional methods of planning, passively serve the status quo and engender generic, atomized and static spaces. Mayne explains that these spaces risk standardizing their citizens, an outcome that should be resisted. When spaces and citizens are divided according to predetermined classification,

they become atomized particles that respond to themselves and are left to negotiate a world without the connective tissue that weaves individual buildings into a collective. If a woven collective is not sufficiently achieved, then it becomes impossible to foster social cooperation or generate an engaged public sphere. This is then when the individual withdraws inward, into the privatized place of self (Mayne, 2011.) The statements by Hadid and Mayne serve as an accurate diagnosis for some of Cape Town’s, Foreshore’s maladies. Mayne then states that the designer should not seek to generate design based on the traditional ideas of an urban fabric defined in terms of solid figures placed in a field or ground that simply emphasizes formal relationships. The conventional approach ignores the importance of contingent spaces that appear in the city as a result of design which are crucial to the cities public vitality, mystery and beauty (Mayne, 2011.)

Museum and cultural space.

Cultural space has long occupied an important role in public life. The spatial challenge lies in the fact that cultural spaces and particularly museum spaces face the dual demands of having strict programmatic and pragmatic constraints in combination with the importance of unlocking the civic and cultural potential housed in and around these spaces. Here for instance, artist Antony Gormley states an affection for museum spaces for the way in which these spaces become the site of confluence of thought and object. He then continues by stating the concomitant problem of that is that museums can often become catalogs of objects that are examples of a culture rather than acting on it in a direct way. This then clarifies a distinct problem with cultural public space, the fact that cultural public space often reserves its public offering to its ancillary spaces rather than successfully synthesizing its cultural programming with the realm of the public (Gormley, 2015.)

Another issue associated with cultural space is its traditional concomitant occurrence with

monumentality. Paul Rudolph however defends the role of monumentality in public space by suggesting that monumental, cultural spaces are necessary for civilization as symbols of public life. Here Rudolph suggests that monumentality can be redeemed only if the human being can recognize him or herself, their experience, and what they feel in the structures around them. Here then, Paul Rudolph, perhaps in acknowledging the *harmatia* of some of his own schemes calls for a humanist architecture (Rohan, 2014.)

Ways of remedying the existing spatial tropes.

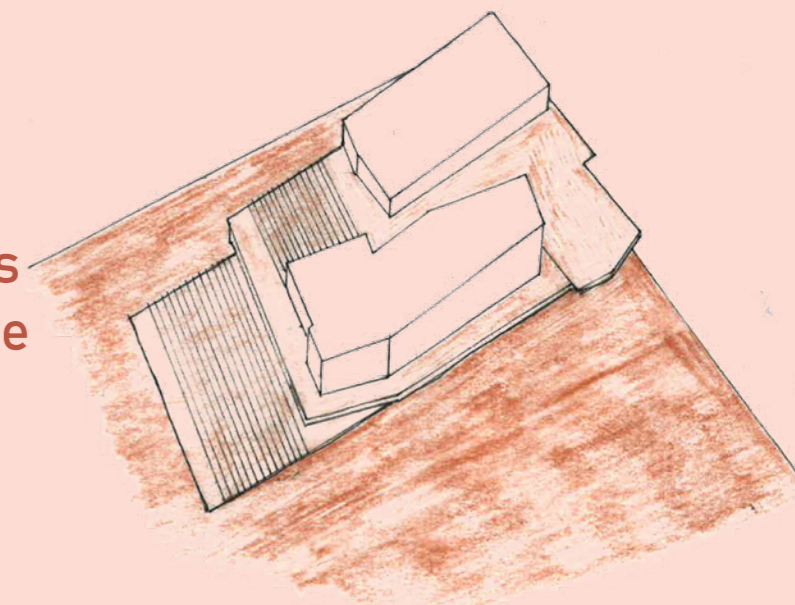
In generating humane and dynamic public space and in moving away from what Jane Jacobs describes as the products of a planning ideology which separated the uses of the city and emphasized free standing individual buildings which put an end to urban space and city life and resulted in lifeless cities devoid of people (Jacobs, 1993), it is useful to look towards the work of Jan Gehl. Gehl’s means of addressing deeply rooted issues are simple and pragmatic but effective in nature.

Gehl calls for the importance of reintroducing the human dimension back into our public agenda. Gehl also suggests a strong emphasis on privileging life on foot and accordingly improving the conditions for life on foot to generate cities that are truly walkable. Gehl

also distinguishes between optional and necessary activities. Optional activities in his estimation include meandering down a promenade, standing to get a good look at a city and sitting down to enjoy the weather. Gehl states that if conditions within a city are sufficiently tolerable, and if allowance is sufficiently made for optional activity, then the degree to which citizens will opt to engage in necessary activity within a specific area will increase and the condition will be improved. Gehl continues by suggesting that design should invite users to engage in outdoor activity rather than just walking. In order for this invitation to be extended a scheme should sufficiently provide protection, security, reasonable space, furniture and visual quality (Gehl, 2010.) Gehl and Svarre proposes building on a human scale, rather than on a vehicular scale. By this they suggest spaces with sufficient complexity and a negation of barrenness which can effectively be perceived at walking pace. A soft, lively edge (they suggest) should enclose and envelope the pedestrian and vertical facades, provide interest and rhythm to those traversing the edge of a building. Most importantly, they suggest a focus on life, then space and then building, an inversion of the top-down design trope. For this the micro, the small moments of public life become the pinnacle of importance in any scheme (Gehl and Svarre, 2013.)

Emergent principle 3.

Maximal access is generated with all possible parts of the site given back to the public.



Precedent study 1: Theatre des Varietes by Flores and Prats.

Background.

Catalonian firm Flores and Prats completed the rehabilitation of the former Theatre des Varietes in the center of Brussels. The original theatre was designed by Modernist architect Victor Bourgeois in 1937. A private institution dedicated to the promotion of civil activity commissioned the rehabilitation as part of a vision of a transformation that opens a new civic chapter for this previously abandoned cultural space.

The brief of the building envisioned the creation of a “forum” acting as a place of meeting and gathering with a public condition and purpose aimed at serving the public through inviting the passerby to enter and enjoy the building without necessarily taking part in the activities at the performing halls.

Design response.

Visitors are directed through the building using two giant light-wells which also brings natural light into the forum. The use of an interior street and the use of a forum transforms the space into a public one. Flores and Prats describes this new space as a covered street and piazza, an extension of the surrounding street into the building (Flores and Prats, 2020). All programs that necessitate access control are essentially moved from the ground plane and placed above and below the public plaza. Through doing this, free through-fare through the scheme is generated. “The public character of the common spaces makes the building once again become part of the activities of the city” (Flores and Prats, 2020.)

This precedent provides a stellar example of the synthesis of cultural programming with public space and in so doing provides a sound example of the democratization of program.

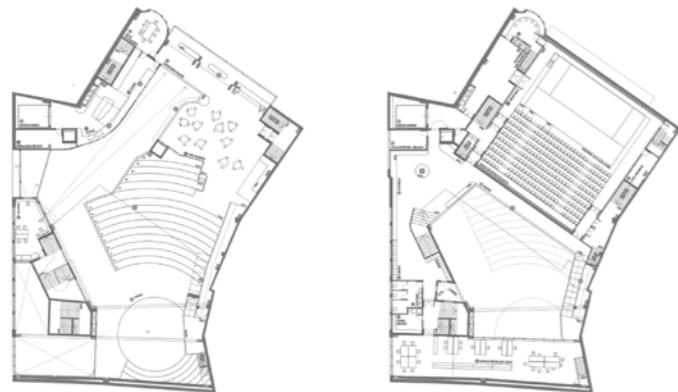


Figure 18: Ground floor and first floor plans of Theatre Des Varietes (Flores and Prats, 2020.) Retrieved at: <https://floresprats.com/>

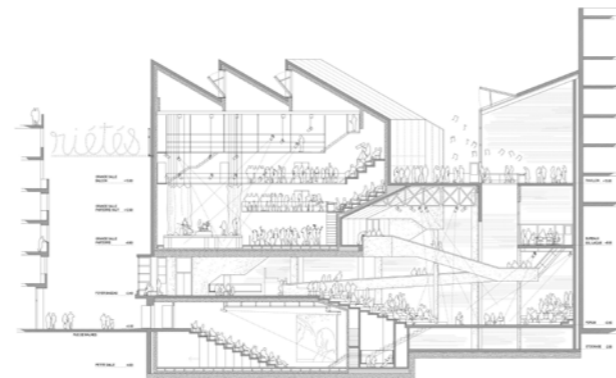


Figure 19: Section through Theatre Des Varietes (Flores and Prats, 2020.) Retrieved at: <https://floresprats.com/>



Figure 20: Sectional model of Theatre Des Varietes (Flores and Prats, 2020.) Retrieved at: <https://floresprats.com/>



Figure 21: Render of Theatre Des Varietes ground floor condition (Flores and Prats, 2020.) Retrieved at: <https://floresprats.com/>

Emergent principle 4.

Programs are integrated and allowed to overlap for dynamic interplay and communication between users of different programs.

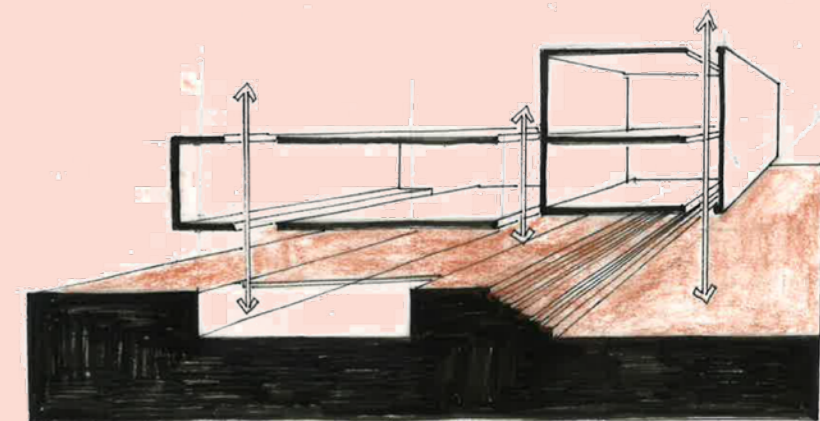


Figure 22: Parti diagram 4 (author.)

Part 2: Understanding public space and the importance of cultural space within urbanity.

Precedent study 2: The Stavros Niarchos Foundation Cultural Centre by Renzo Piano Building Workshop.

The SNFCC consists of new facilities for the National Library of Greece as well as providing a new home to the Greek National Opera. In addition to this a 210,000m² park was created.

The park which covers most of the site (including large portions of the roof) knits the surrounding neighbourhoods. This is done by continuing on existing street patterns and creating a myriad of green footpaths between different neighbourhoods.

The park elevates to provide visual connec-



Figure 23: Image showing how most of the site is used as park space, including roof planes (Renzo Piano Building Workshop, 2016.) Retrieved at: <http://www.rpbw.com/all-projects>

tion to the sea as visitors slowly meander through the park (Piano, 2016.)

The intention behind placing the building on the highest point is to create a strong connection between the city and the sea with the structure acting as the point of confluence between the two.

The SNFCC has been designed to draw visitors. All side streets are lined with boulevards of trees that generate a friendly and hospitable public space. Once inside visitors have the op-

Part 2: Understanding public space and the importance of cultural space within urbanity.

Figure 24: Image showing how users are lifted so as to connect to the ocean (Renzo Piano Building Workshop, 2016.) Retrieved at: <http://www.rpbw.com/all-projects>



portunity to engage with a variety of programs provided by the SNFCC.

Athens is commonly considered to be the birthplace of Democracy, and the *Agora* (or public plaza) embodies many of the democratic ideals. The SNFCC generates an urban *Agora* by creating an indent or niche in the central building housing the opera house and library (Piano, 2016.)

This scheme provides valuable insight into means of using a scheme to stitch the current

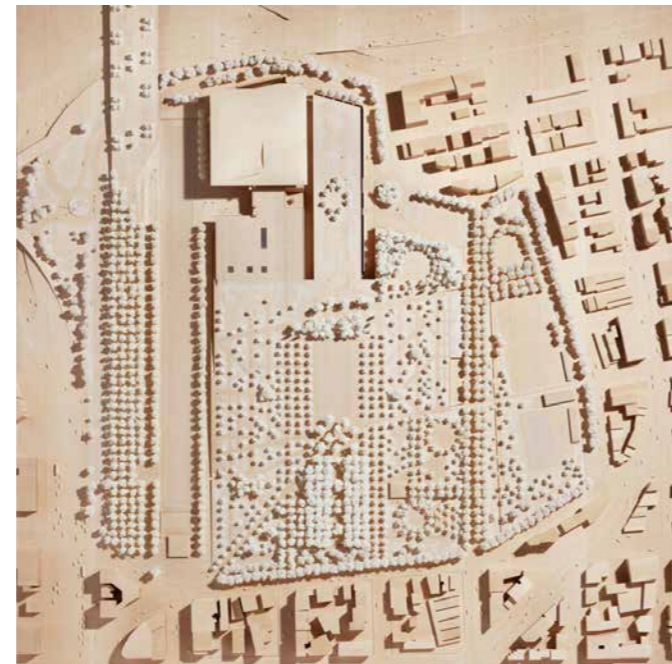


Figure 25: Model showing continuation of street patterns through the scheme (Renzo Piano Building Workshop, 2016.) Retrieved at: <http://www.rpbw.com/all-projects>

fabric and in so doing embed the scheme successfully within a city. Similarly to the project by Flores and Prats, affordance and access was of paramount importance. The SNFCC has similarities to the Foreshore site in the need to create a connection to the ocean and a need to improve the urban fabric.

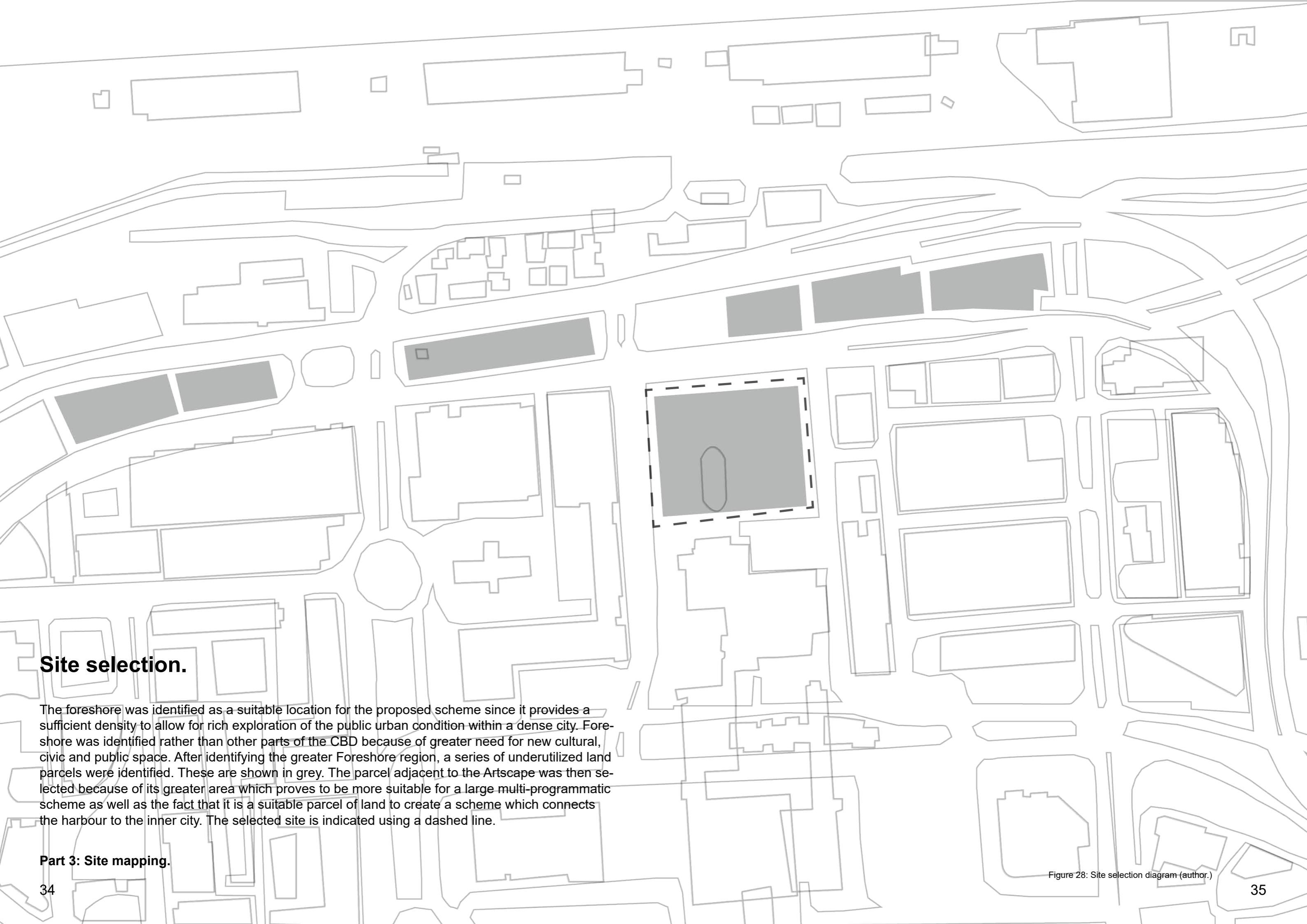


Figure 26: The SNFCC in its entirety (Renzo Piano Building Workshop, 2016.) Retrieved at: <http://www.rpbw.com/all-projects>



Part 3: Site mapping.

Figure 27: Northern facade of Artscape (author.)

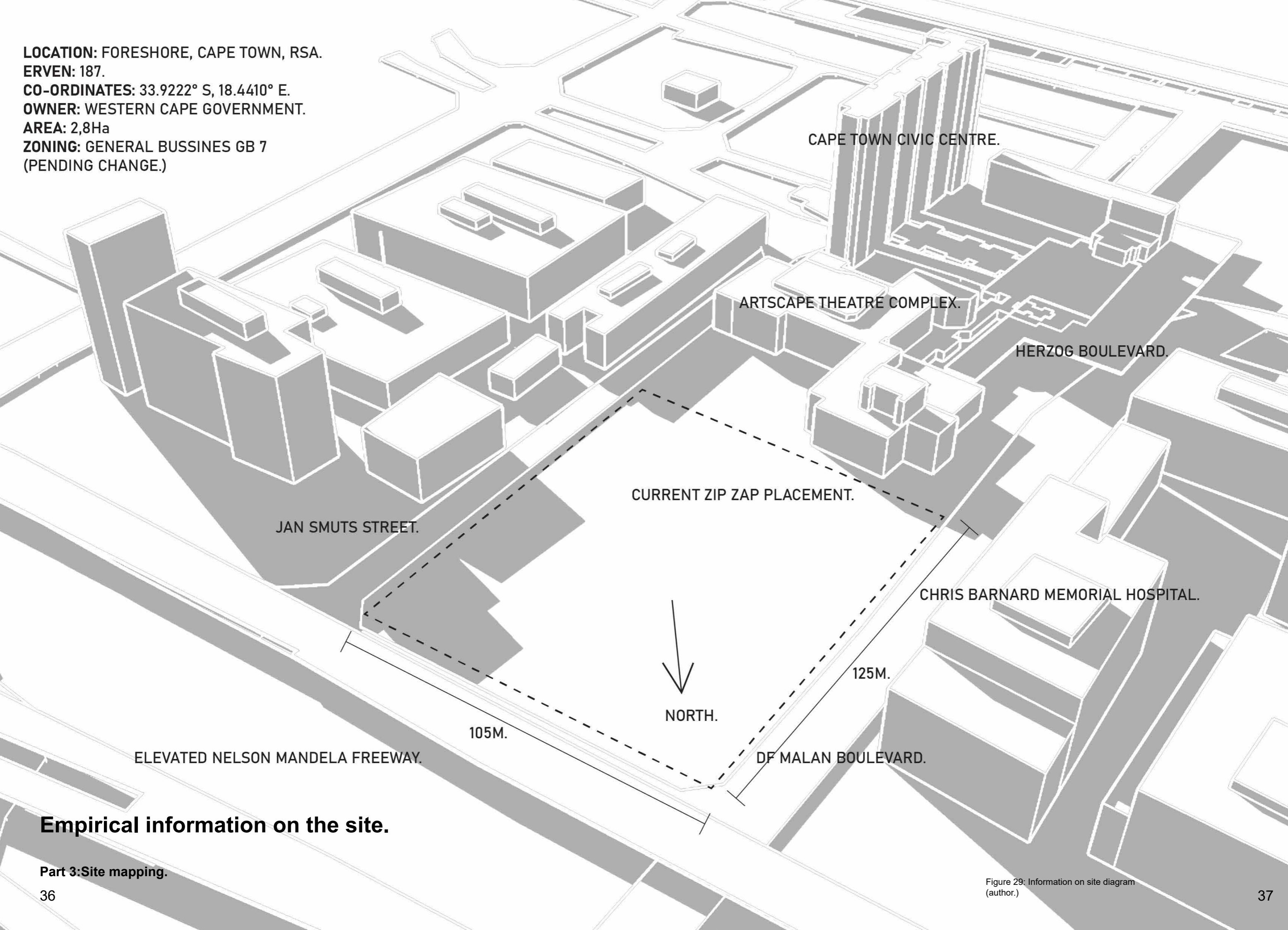


Site selection.

The foreshore was identified as a suitable location for the proposed scheme since it provides a sufficient density to allow for rich exploration of the public urban condition within a dense city. Foreshore was identified rather than other parts of the CBD because of greater need for new cultural, civic and public space. After identifying the greater Foreshore region, a series of underutilized land parcels were identified. These are shown in grey. The parcel adjacent to the Artscape was then selected because of its greater area which proves to be more suitable for a large multi-programmatic scheme as well as the fact that it is a suitable parcel of land to create a scheme which connects the harbour to the inner city. The selected site is indicated using a dashed line.

Part 3: Site mapping.

LOCATION: FORESHORE, CAPE TOWN, RSA.
ERVEN: 187.
CO-ORDINATES: 33.9222° S, 18.4410° E.
OWNER: WESTERN CAPE GOVERNMENT.
AREA: 2,8Ha
ZONING: GENERAL BUSSINES GB 7
(PENDING CHANGE.)



JAN SMUTS STREET.

CAPE TOWN CIVIC CENTRE.

ARTSCAPE THEATRE COMPLEX.

HERZOG BOULEVARD.

CURRENT ZIP ZAP PLACEMENT.

CHRIS BARNARD MEMORIAL HOSPITAL.

NORTH.

105M.

125M.

ELEVATED NELSON MANDELA FREEWAY.

DF MALAN BOULEVARD.

Empirical information on the site.

Figure 29: Information on site diagram (author.)

Understanding density and fabric, present and future.

Understanding the current urban scale proves to be challenging. The Artscape theatre stands at 8 storeys high with an extruding volume housing stage lifts. The Chris Barnard Memorial Hospital extends past this scale at around 12 storeys. In the Heritage Impact Assessment, Postlethway posits that further developments around the Artscape should align with the current scale of the Artscape. This is however fervently negated in the City of Cape Town's FGA proposal which envisions two 10+ storey cross-subsidized housing blocks on the adjacent site. When considering proposals for the site one needs to be wholly cognizant of future developments. The Harbour Arch developments which are currently under construction and can be located one block East of the site will consist of a series of high density buildings that tower up to 20 storeys. Furthermore, in anticipating growth between the freeways one can again assume a high degree of density since all proposals generated for the City of Cape Town, proposed high density schemes of 15+ storeys between the existing freeways.

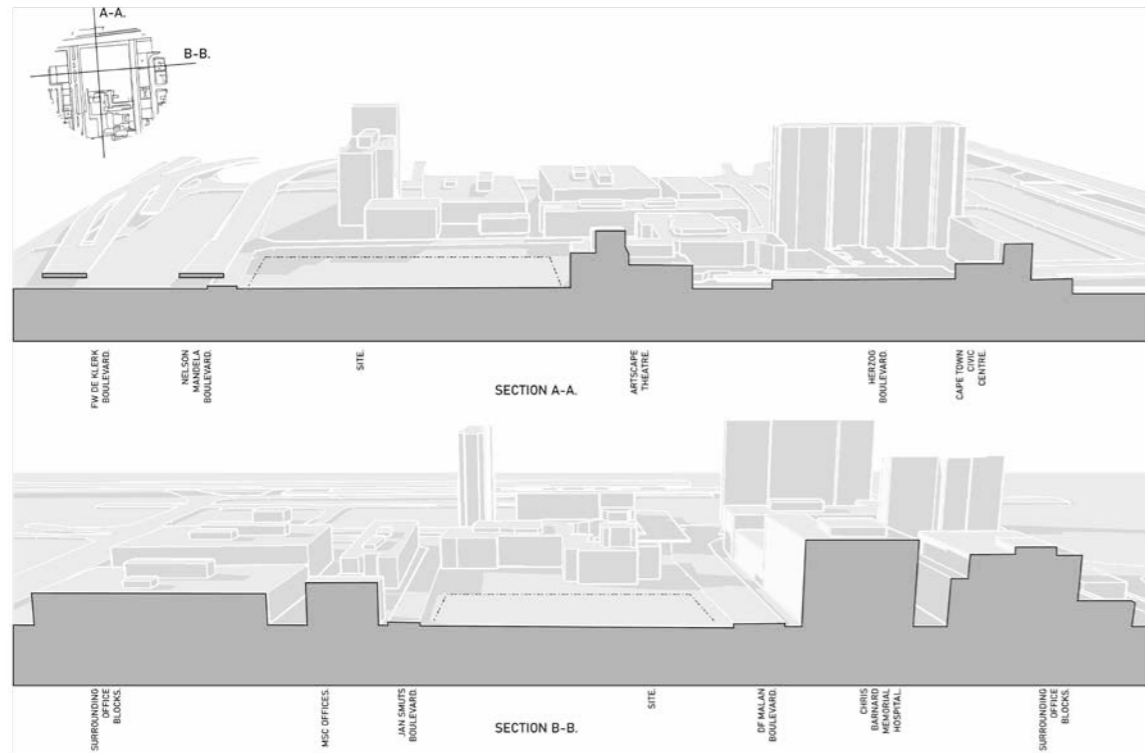


Figure 30: Section through site in two directions (author.)



Figure 32: Future Harbour Arch development (Harbourarch.co.za) Retrieved at Harbourarch.co.za)

The image on the left shows a render of the future Harbour Arch development. The scale of this development completely exceeds the scale of the surrounds.



Figure 33: Future Harbour Arch development 2 (Harbourarch.co.za) Retrieved at Harbourarch.co.za)

On the left; the scale of the Harbour Arch development in relation to the site can be seen. Here already an accidental stepping down to the site is visible.



Figure 34: Proposed developments between the freeways (News24.com) Retrieved at: News24.com)

Here the scale of potential future developments between the freeways can be assessed in relation to the site. In this speculated proposal for the City of Cape Town, towers of 15+ storeys were proposed.

Emergent principle 5.

Stepping down the urban scale to a human scale.

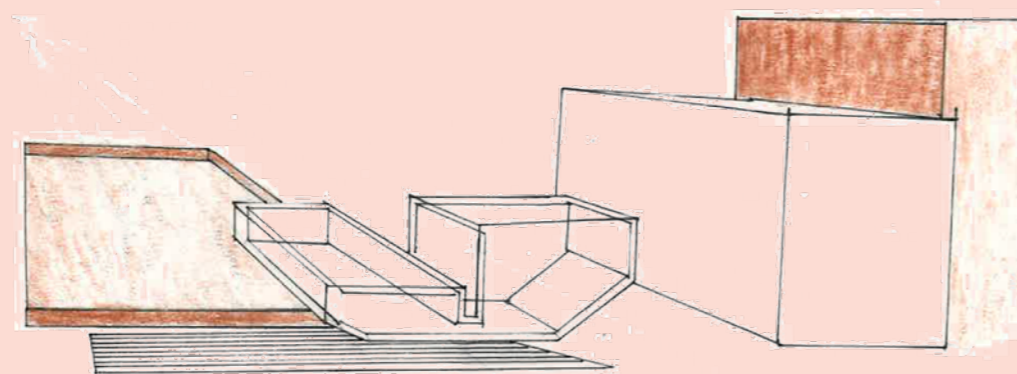


Figure 31: Parti diagram 5 (author.)

Part 3: Site mapping.

Figure ground studies of the site and surrounds.

In analysing the current fabric one can see a high degree of density inland with a rapid decrease in density towards the harbour. The first figure ground diagram also gives an idea of the nature of the windswept, hard and barren qualities of the Foreshore. The grid-iron planning scheme is also made evident along with the fact that buildings in the Foreshore are often placed in the center of sites, generating underutilised and awkward interstitial spaces.

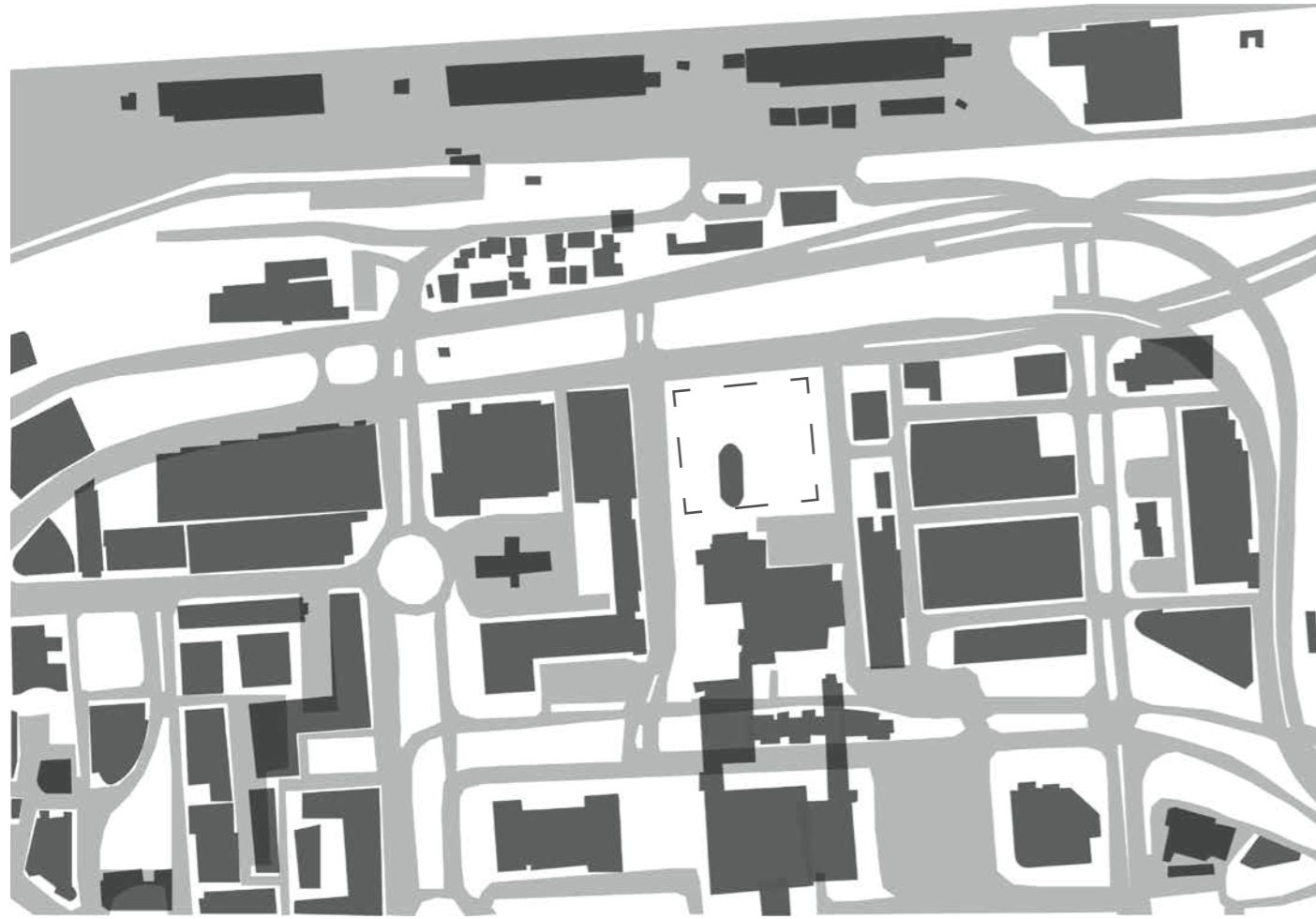


Figure 35: Figure ground diagram of Foreshore (author.)

The second figure ground diagram illustrates the new urban density generated if future development is taken into account. This further diminishes the amount of open space surrounding the site and creates a strong argument for developing a lower density on site as a means of generating breathing space within the city.

The third and final figure ground diagram highlights the elevated freeway neighbouring the site. Any designs on the site need to maintain a degree of adaptability towards the freeway. All proposals made for the City of Cape Town provided different means of addressing the freeway, from removing it completely, to transforming it into a walking promenade to submerging it underground. Hence it is important to remain flexible in relation to multiple variations of the freeway condition on the North-Eastern edge.

Part 3: Site mapping.



Figure 36: Figure ground diagram of Foreshore with additions (author.)

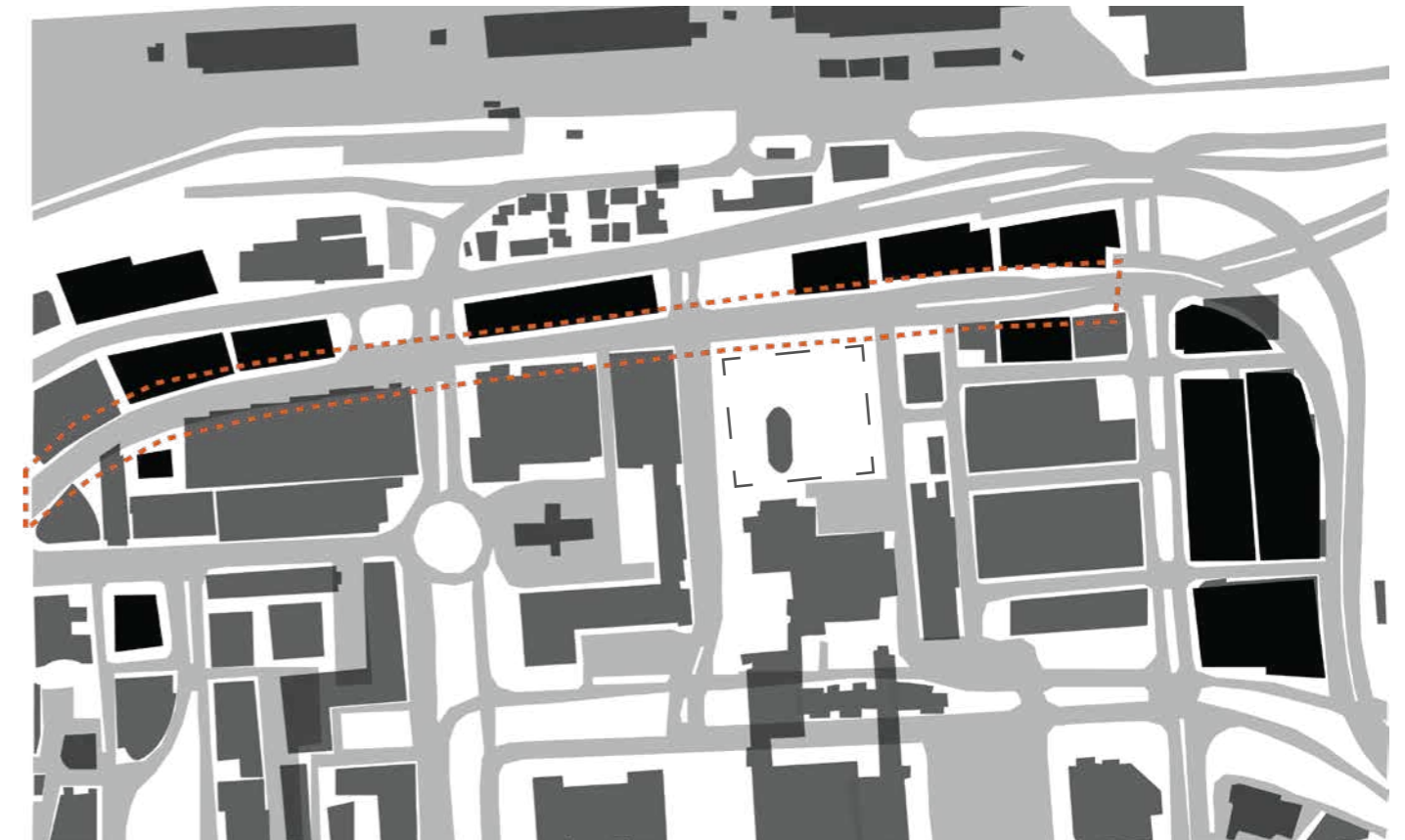


Figure 37: Figure ground diagram of Foreshore with additions and removal of the freeway (author.)

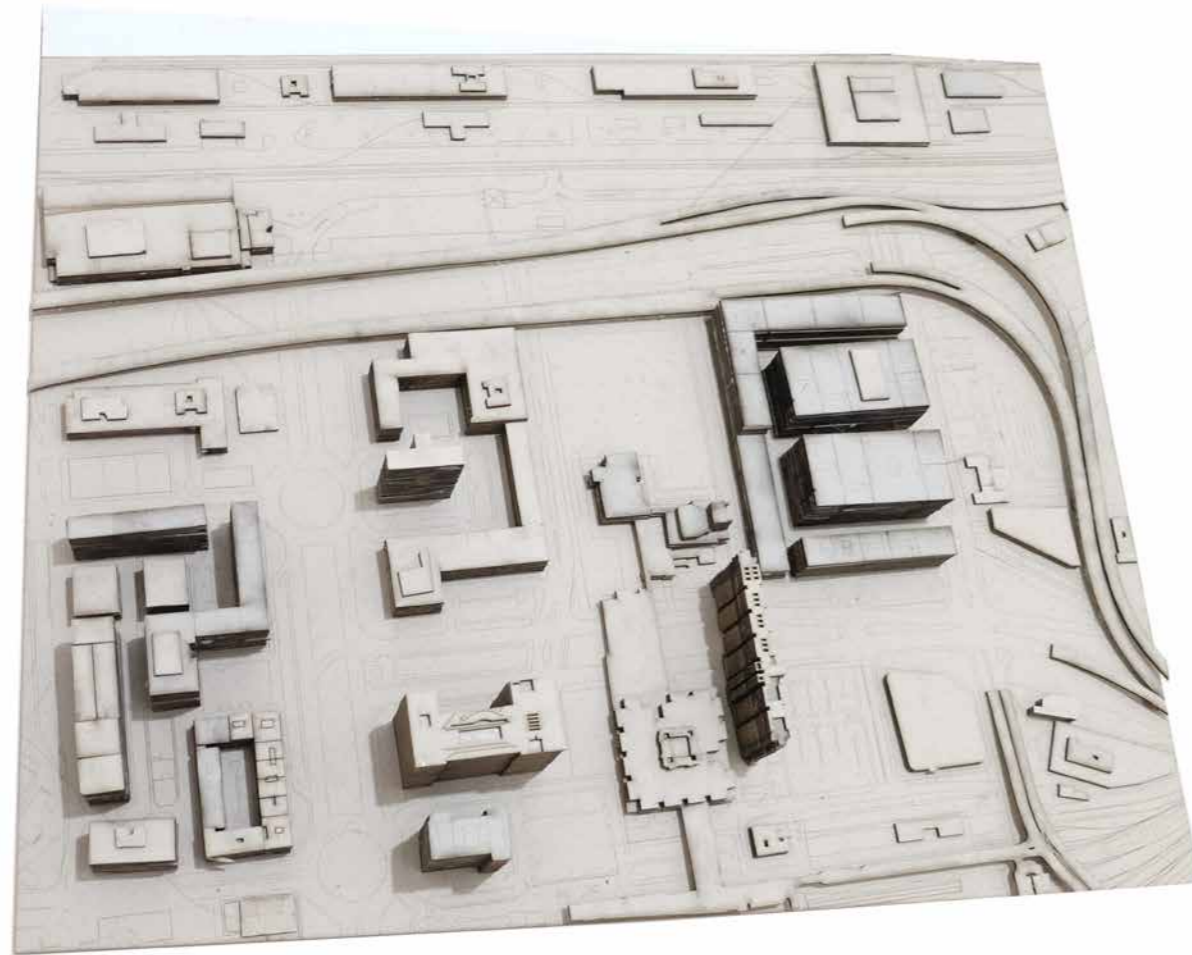


Figure 38: Site model (author.)

Anticipation and adaptability.

Through the use of a variable site model, varying degrees of density can be effectively tested against the proposed scheme. Following studies on density and fabric it becomes clear that any proposals need to be able to anticipate contextual flux as well as remaining highly adaptable. Here again the functional bias of the Foreshore is made discernable with limited emphasis on human centeredness. The windswept and barren nature of the Foreshow is also made evident.

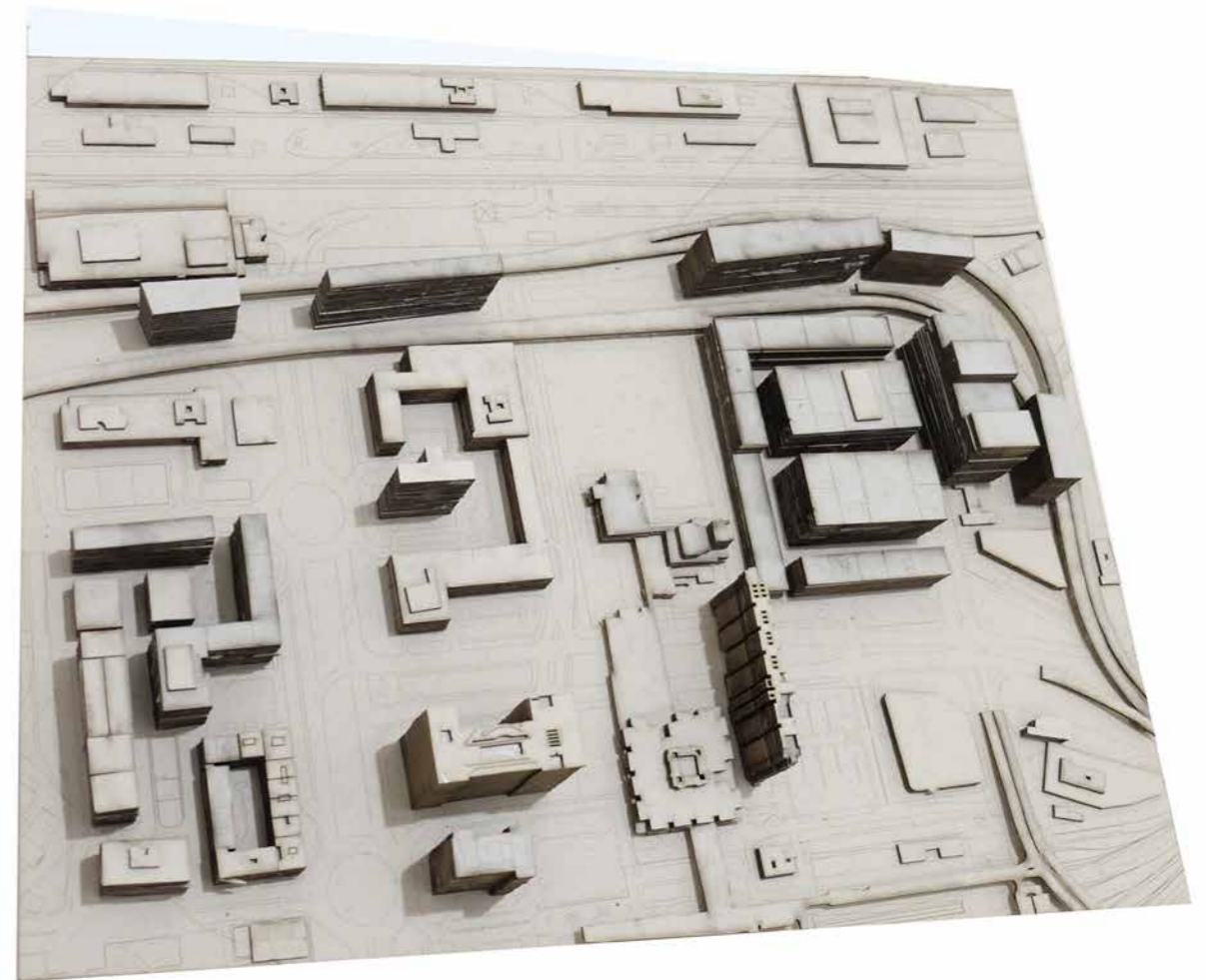


Figure 39: Site model with likely future additions by others (author.)

Emergent principle 6.

Inversion of the existing Modernist footprint in which space traditionally occupied by buildings is now opened to the public, hence pushing buildings to the edges.

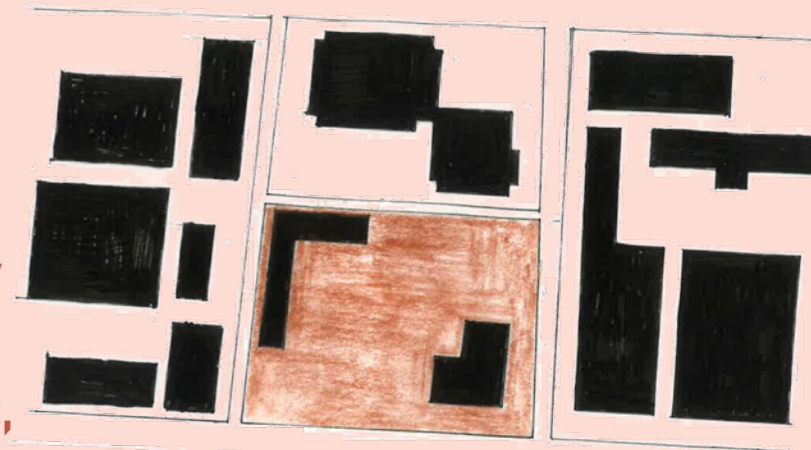


Figure 40: Parti diagram 6 (author.)

Places of respite within the City Bowl.

This diagram investigates the placement of green public spaces within the city bowl and analyses the quality of these spaces. From this it becomes apparent that a very low concentration of places of respite is found in the greater Foreshore area which provides opportunity for the creation of a space which not only services existing users but also those to come.

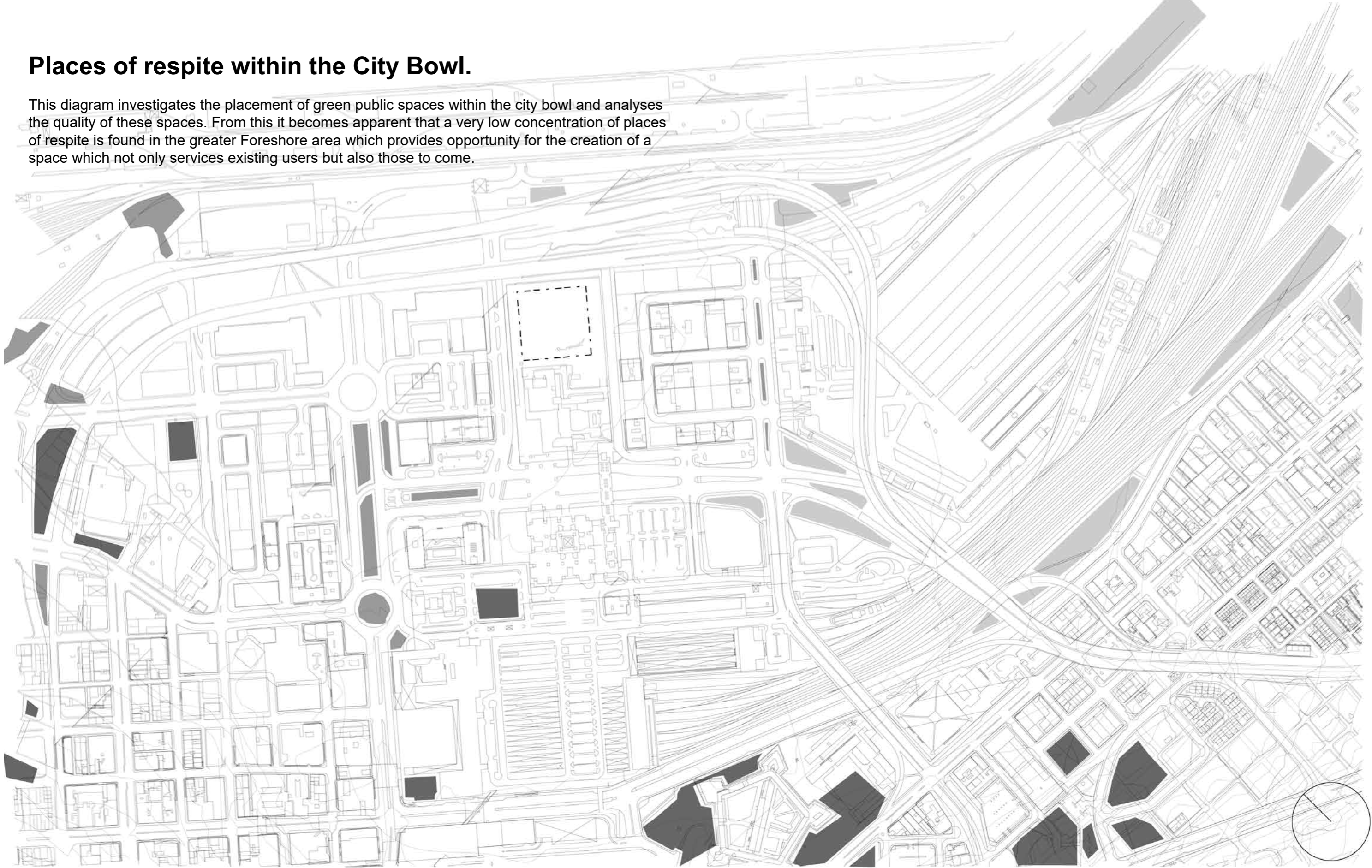


Figure 41: Surrounding greenery diagram (author.)

THE QUALITY OF GREENERY IS ASSESSED BASED ON THE QUALITY OF GREEN SPACE, DEGREE OF ACCESS AND INTENDED PUBLIC USE.



Civic and cultural spaces in the surrounds.

Similarly, a greater concentration of cultural space is located towards the West, although many governmental buildings are located around the site, very few of these are “civic” in their service of the public.

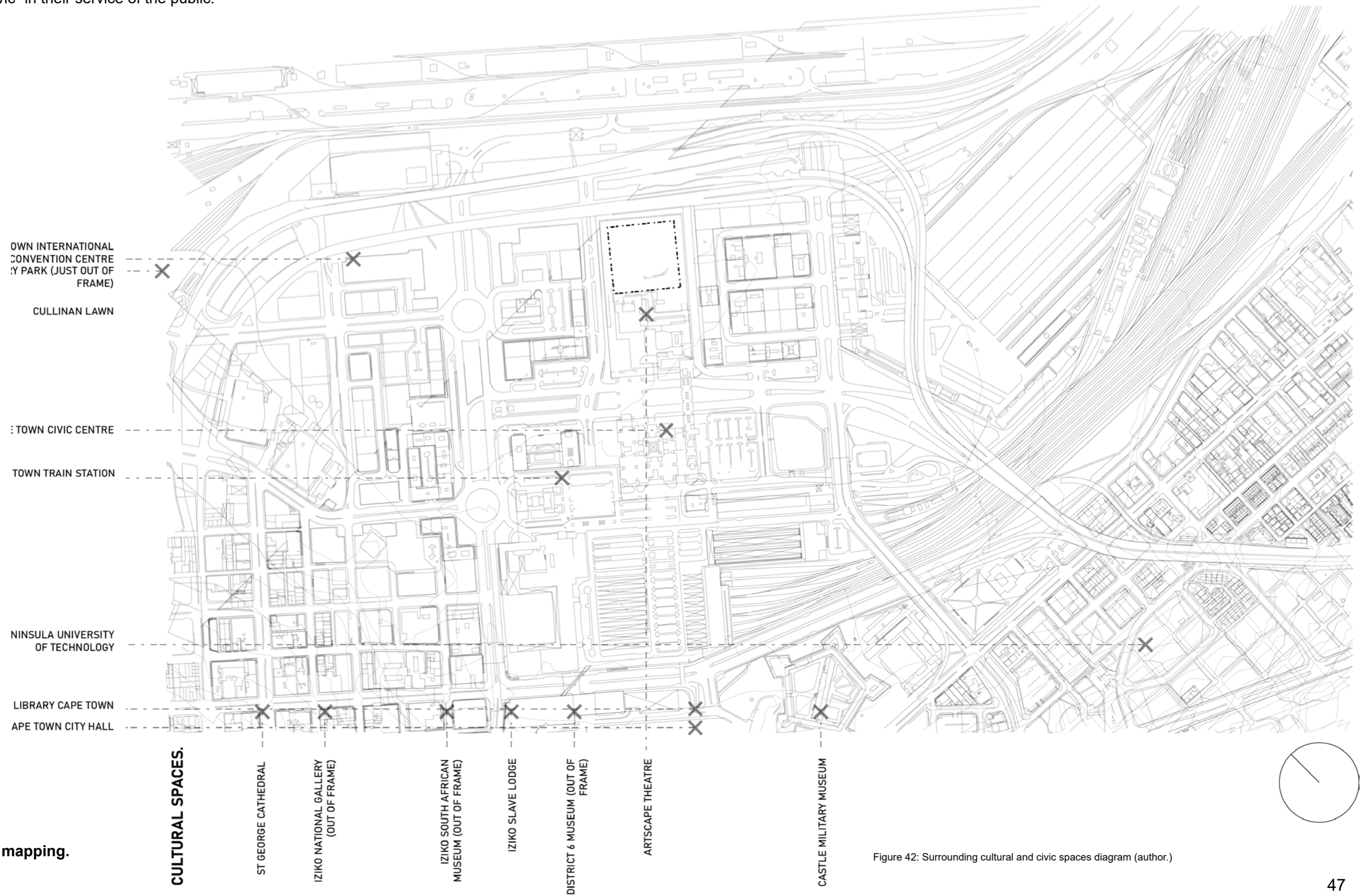


Figure 42: Surrounding cultural and civic spaces diagram (author.)

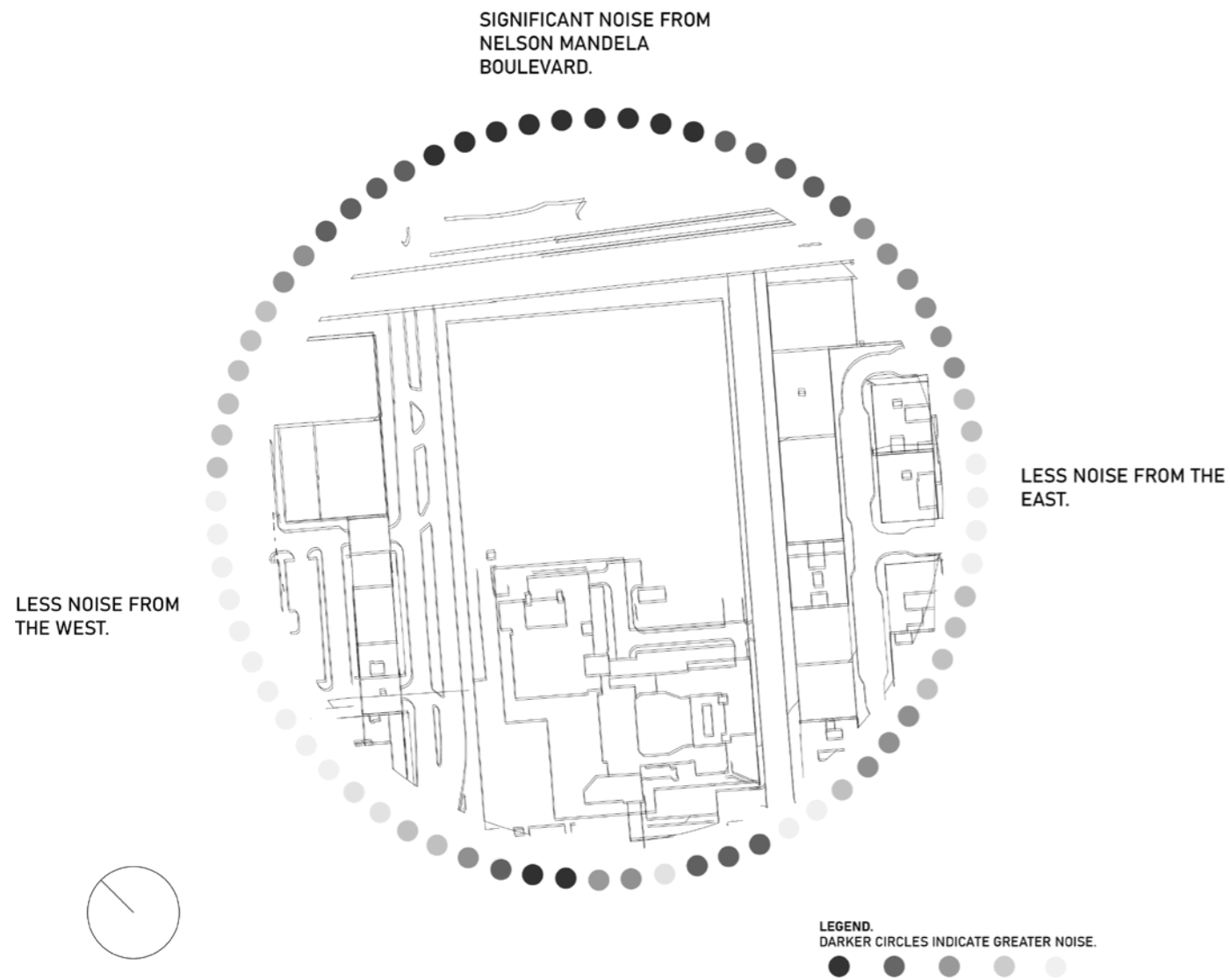


Figure 43: Surrounding noise on site diagram (author.)

Noise on site.

The fact that the site sits at the confluence of numerous infrastructural systems, in combination with a largely bare concrete landscape produces a hostile and noisy site. The diagram above explores the prevailing points of origin of noise. The freeway towards the North-East as well as the Artscape from the South-West are the greatest generators of noise. This information was generated through observation on site.

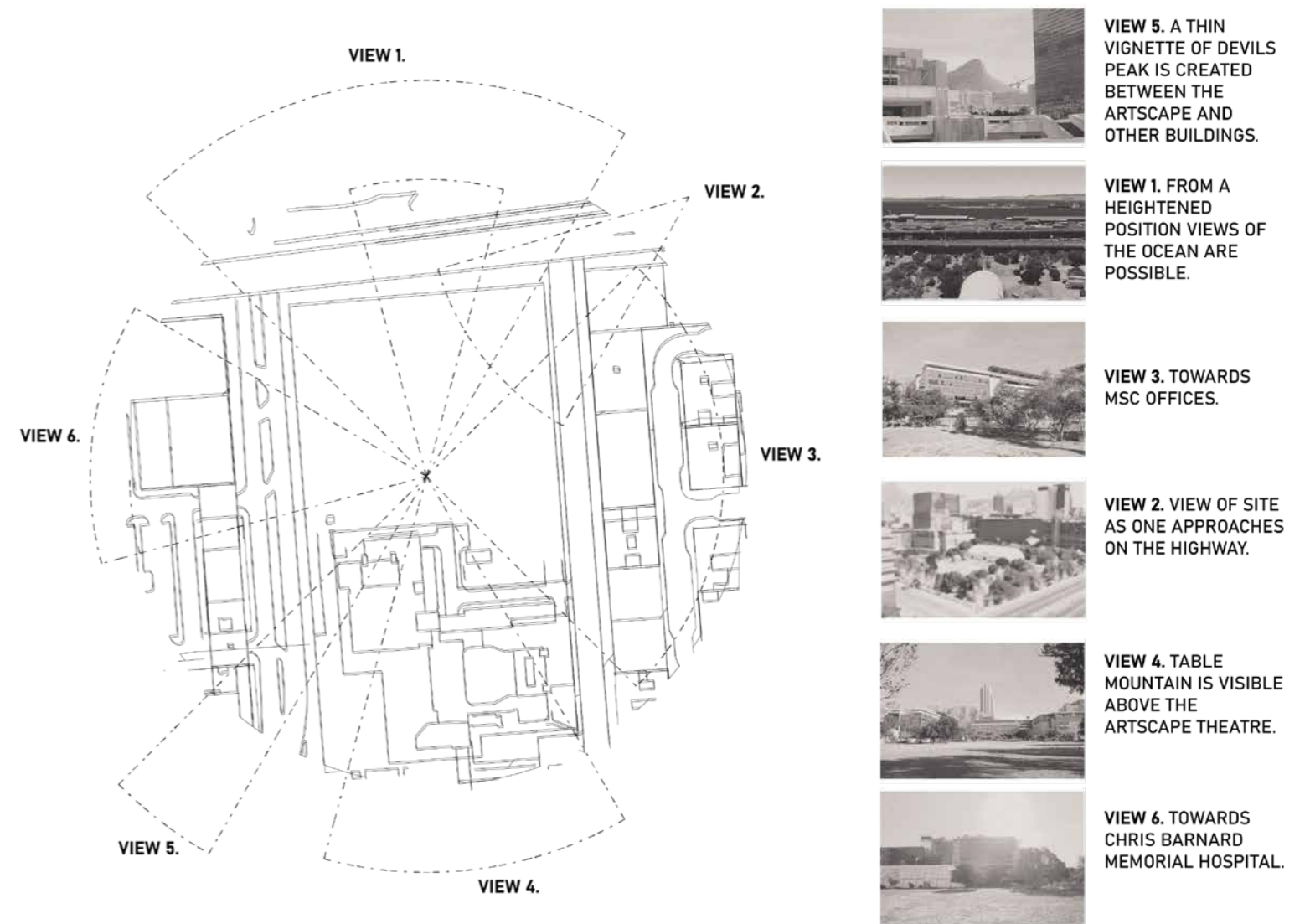


Figure 44: Surrounding views on site diagram (all images by author.)

Views on site.

Notable views on site are present towards Signal hill and Table mountain. Large, towering structures around the site effectively frame significant views of the mountain. The freeways and the harbour completely block off the site from the ocean. Quite significantly, vehicular views onto the site are found from the freeway as one enters Cape Town CBD.

Wind analysis.

Wind has become a central part of the Foreshore condition. The infamous “Cape Doctor” or prevailing South-Easter is of even greater significance within the Foreshore compared to the rest of Cape Town. The barren, hard nature of the Foreshore provides very little buffer and protection against the wind and the presence of large structures further intensifies wind within the Foreshore. Infamously, the large, flat, rectangular form of the Cape Town Civic Centre channels wind aggressively onto the site. The South-Easter is most prevalent in Summer months. A much less significant North-Western wind is also often present but is much less significant in the creation of on-site discomfort. The South-Easter has become stuff of legend, as is displayed in the excerpt from a news article below.



It's the one thing about Cape Town that locals and visitors alike love to complain about – the wind.

Like clockwork, the first southeasterly spell arrives to the Mother City in early November every year, generally bringing several days of gale-force gusts. Dubbed the Cape Doctor, it arrives to blow the city clean, and this year is no different.

Scenes of pedestrians battling the notorious Foreshore winds have begun to circulate on social media. The waters off Table Bay Harbour have been churned into a sloppy mess and that iconic “table cloth” is back over the summit of Table Mountain. Summer in Cape Town is here.

Good news on the radar is that the wind should subside by Sunday. But, this is Cape Town so anything is possible.

Figure 45: Excerpt from news article on wind in the Foreshore (IOL.co.za) Retrieved at: IOL.co.za

As a means of quantifying the extent of the wind, a journal article on wind patterns within the City of Cape Town was consulted. Out of six weather stations in the City of Cape Town, the Royal Cape Yacht Club station which is found approximately 500 meters from site recorded the second greatest wind energy potential for all of Cape Town.

Part 3: Site mapping.

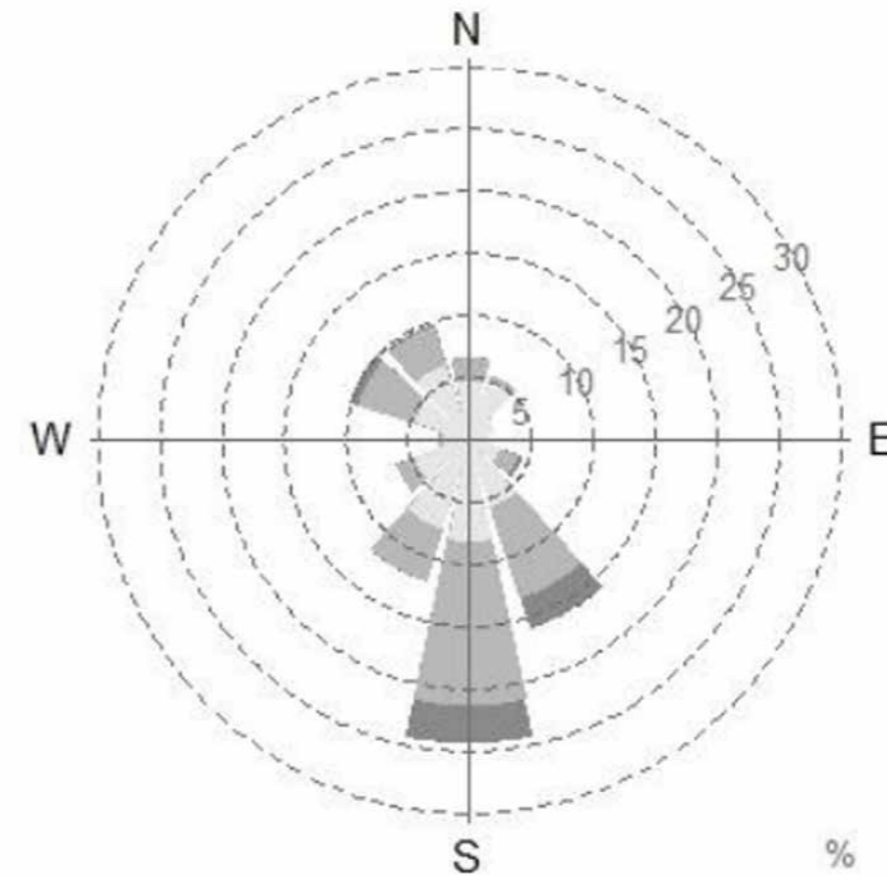


Figure 46: Prevailing wind directions for Cape Town (Gough et al.) Retrieved at: <https://www.mdpi.com/1996-1073/12/8/1479>

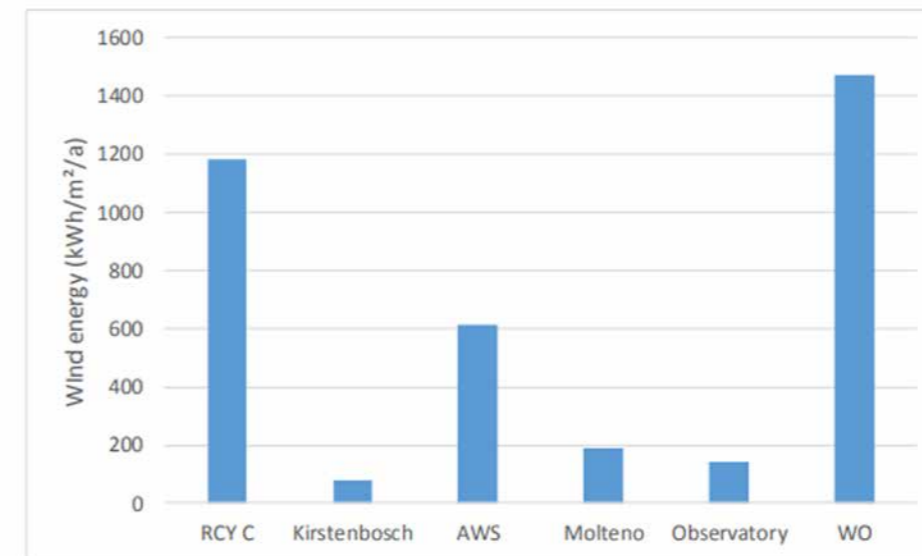


Figure 47: Wind energy resource potential from 6 different weather stations in Cape Town (Gough et al.) Retrieved at: <https://www.mdpi.com/1996-1073/12/8/1479>

User density.

Although the density of the built fabric has been sufficiently explored, exploring the density of actual users is also crucial. Through time spent traversing the streets around the site, one becomes aware of the degree of activation of different locales in and around the Foreshore. A very rapid drop-off in activity is present as one moves from the central CBD in the East towards Woodstock in the West. Here, Jan Gehl's ideas of creating user density through the creation of both place for necessary and optional activity becomes important.

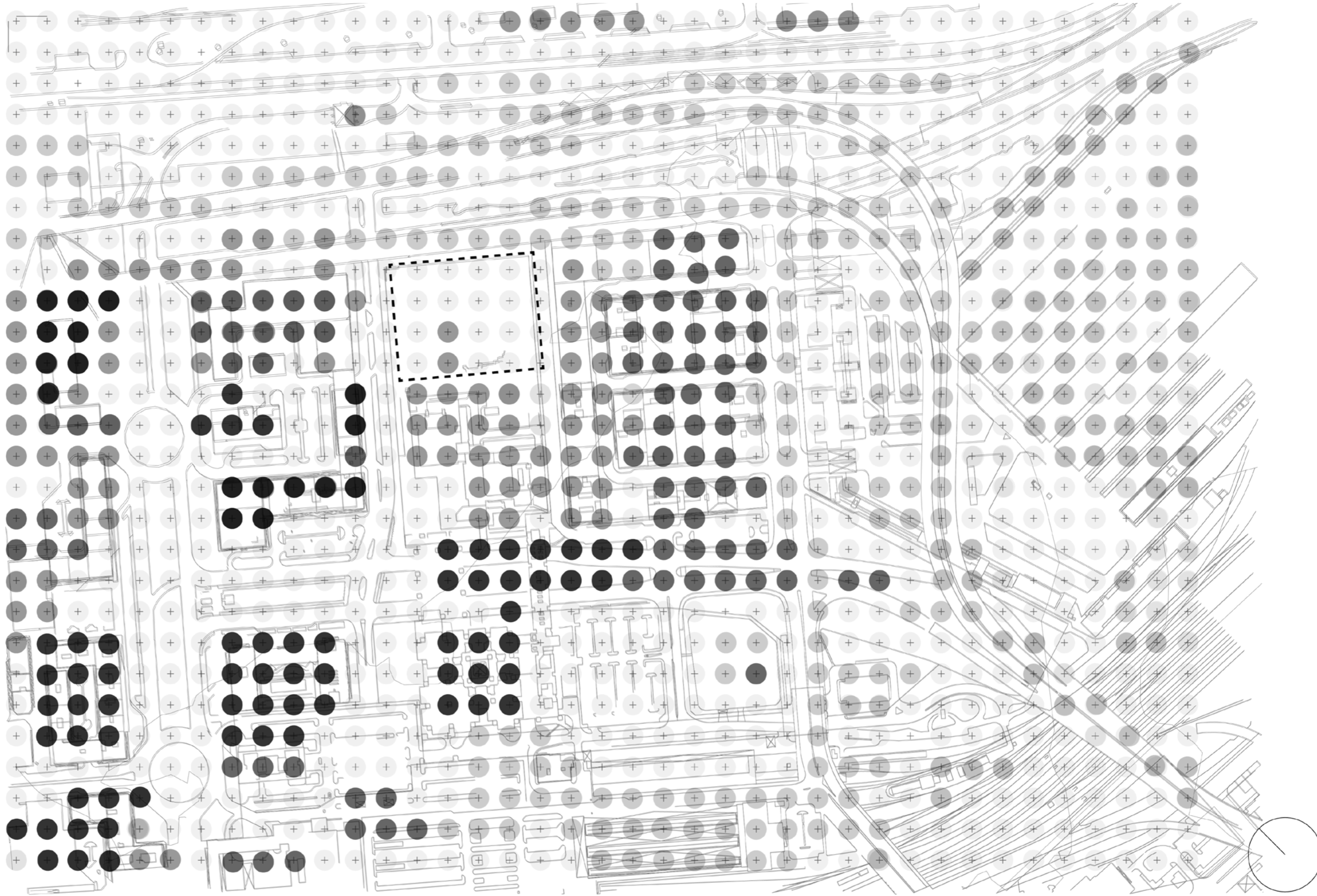


Figure 48: Human density in areas around the site, determined through observation at different times of the day and week (author.)



Day vs night occupation.

In a similar vein, one can compare user density during the day versus at night to gauge the type of activity that is present in and around the site. Observations on the site during the evening reveals that the Foreshore becomes highly vacated once the working day ends. The only activity around the site after 8pm can be found at the hospital with some other activity at the hotel on the South-Eastern edge. The lack of activity relates to the lack of residential schemes within the Foreshore. The lack of activity during the night is one of the key issues which the City of Cape Town is wishing to address. Current policy framework envisions the creation of a safe night-time city with bustling activity extending past sunset.

Pedestrian flows.

Site observation confirmed the statements made in the Heritage Impact Assessment that the most pedestrian active regions are on Herzog Boulevard and DF Malan Boulevard. The overall level of pedestrian movement on the site towards the harbour is low.

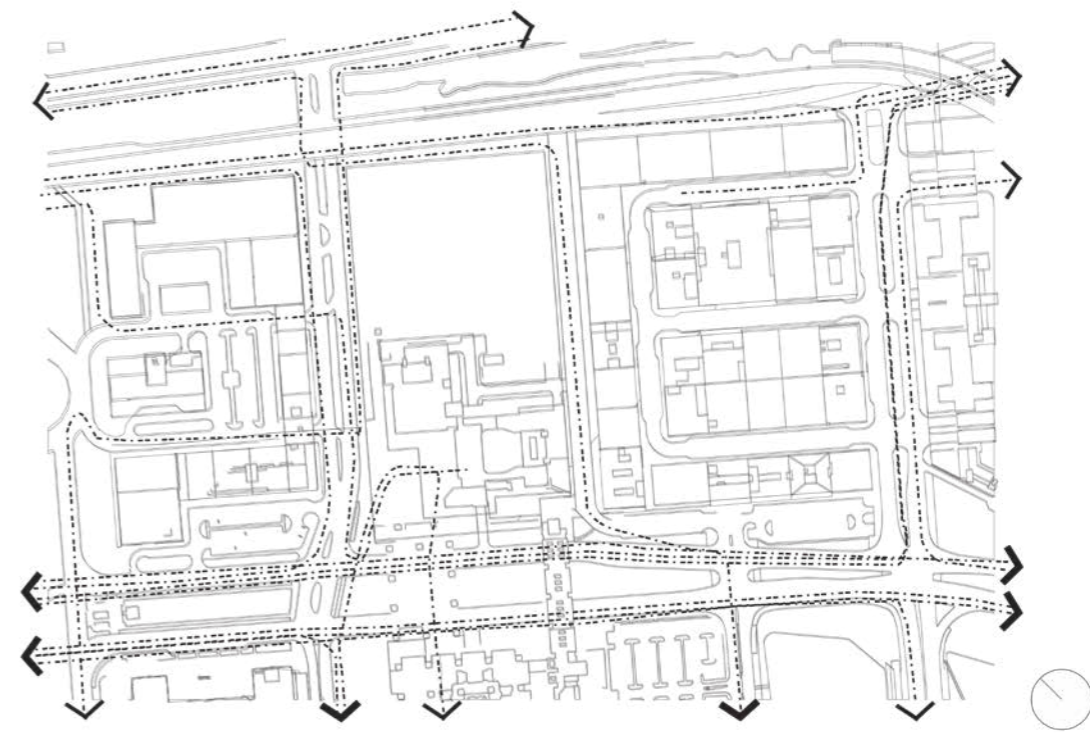
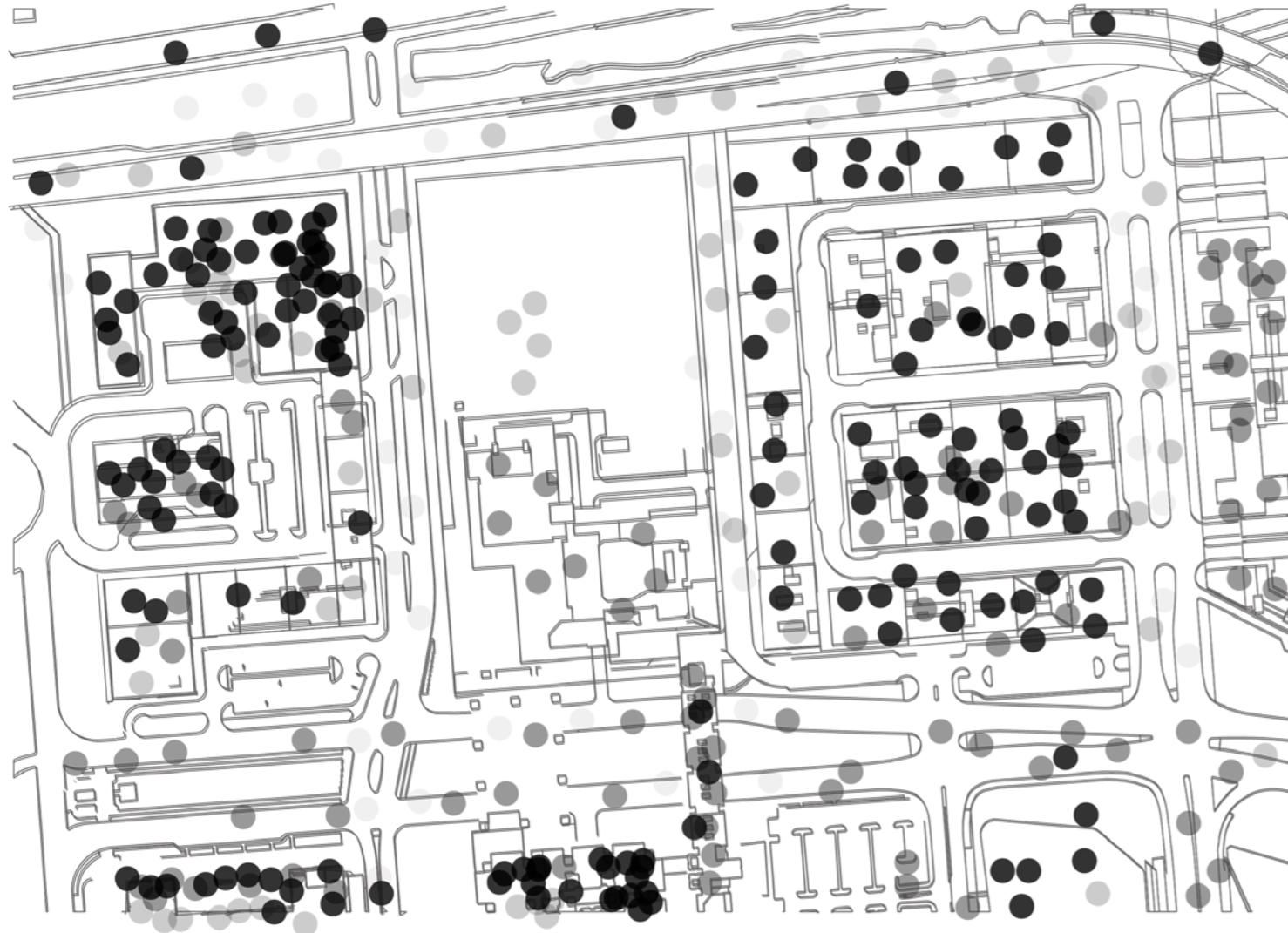


Figure 49: Major pedestrian routes around the site (author.)



DAY TIME ACTIVITY DENSITY.



NIGHTTIME ACTIVITY DENSITY.

Figure 50: Human density in areas around the site in the day versus the night based on

Part 3: Site mapping.

LEGEND.
DARKER SPOTS INDICATE A GREATER INCIDENCE OF ACTIVITY



WALKWAY. AN ELEVATED WALKWAY CONNECTS TRAIN TERMINAL, ARTSCAPE AND CIVIC CENTRE.

METRORAIL. CAPE TOWN TRAIN STATION CONNECTS THE CBD TO OUTER REGIONS BY RAIL.

HIGHWAY. NELSON MANDELA BOULEVARD PASSES THROUGH SITE.

MAIN ROADS. MAIN ROADS INCLUDING MYCITI BUS ROUTES BETWEEN BUILDINGS.

SIDEWALKS. PEDESTRIANS MOVE BETWEEN BUILDINGS ON SIDEALKS.

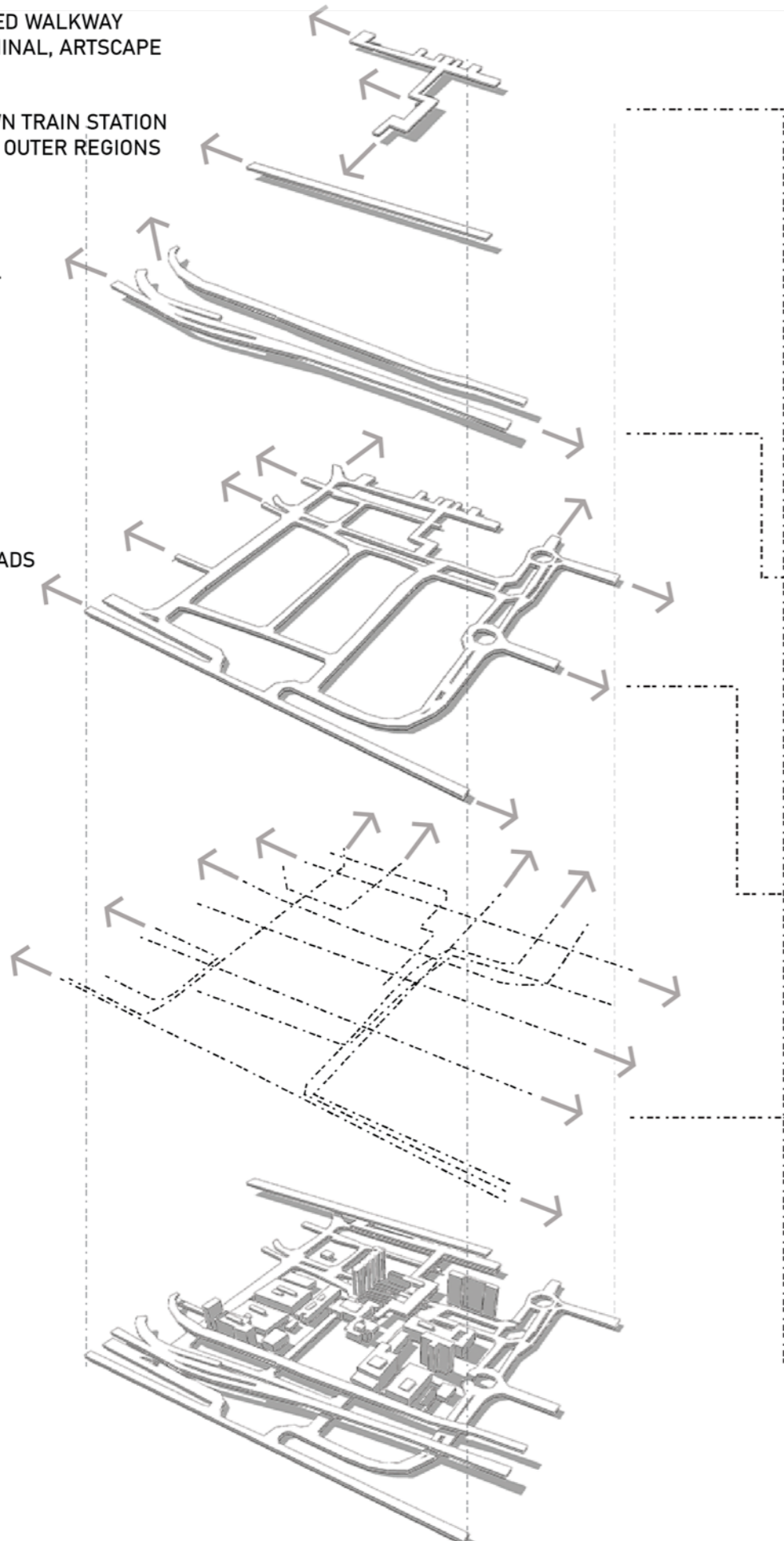


Figure 51: Surrounding infrastructure diagram exploded (author.)

Surrounding infrastructure study.

A study for infrastructure in the surrounds reveals that the site is located within a series of transport networks. This is ideal for the creation of a dense civic node but also generates the challenge of creating a hostile, noisy environment. Notably, scope is created for continuity of the elevated pedestrian walkway from the Cape Town Station, through the Cape Town Civic Centre, to the Artscape and beyond. Here it is again worth mentioning the City of Cape Town's intention to create a new MyCiti bus stop somewhere under the existing freeway. This will open the potential for the site to form a connection between the MyCiti stop under the freeway and the existing one on Herzog boulevard.

Figure 8: New proposed MyCiti bus route (City of Cape Town, 2022) Retrieved at: <https://www.capetown.gov.za/>



CITY OF CAPE TOWN
IKHEKO SASENAPA
STAD KAAPSTAD

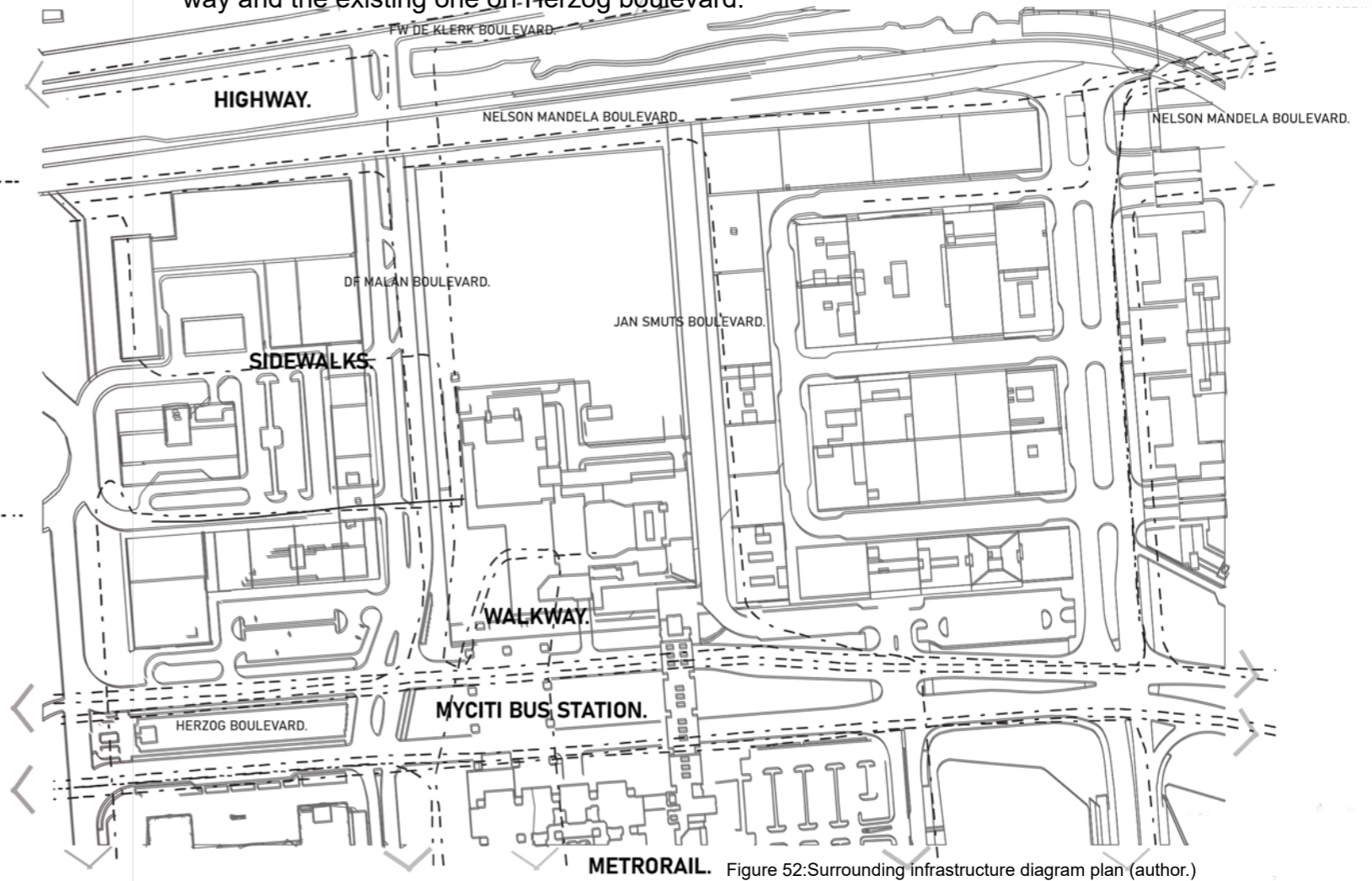


Figure 52: Surrounding infrastructure diagram plan (author.)

Emergent principle 7.

The user is provided refuge through elevation away from the vehicular plane and enclosure by a programmatically activated edge.

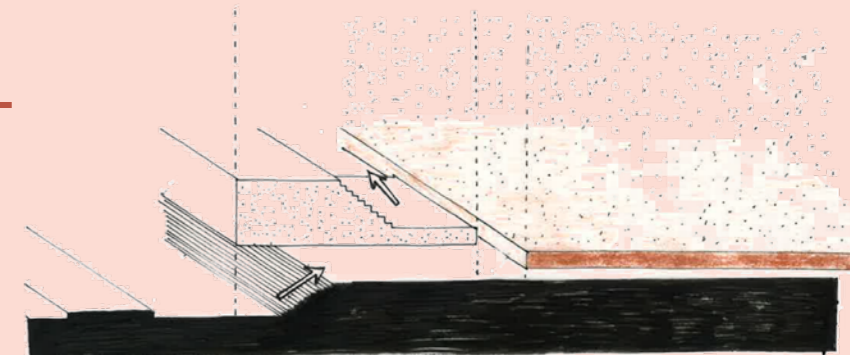


Figure 53: Part1 diagram 7 (author.)

Shadows on site.

The following study was conducted of significant shadows onto the site. The site receives a generous amount of sun for most of the day, for most of the year with the exception being some afternoon sun on the North-Western half of the site around the winter solstice as a result of the Chris Barnard Memorial Hospital. This however can be mitigated with increase in height of schemes on that portion of the site out of the shaded zone. New developments built between the freeways could impose shadows onto the site because of the relative distance of such schemes from the site. Again this could be mitigated through elevation as well as situating activity towards the center of the site. There are also few sensitive schemes in the surrounds in terms of shadows produced by interventions on site. Any shadows cast should fall on Artscape service area or onto office park space just off of Jan Smuts.

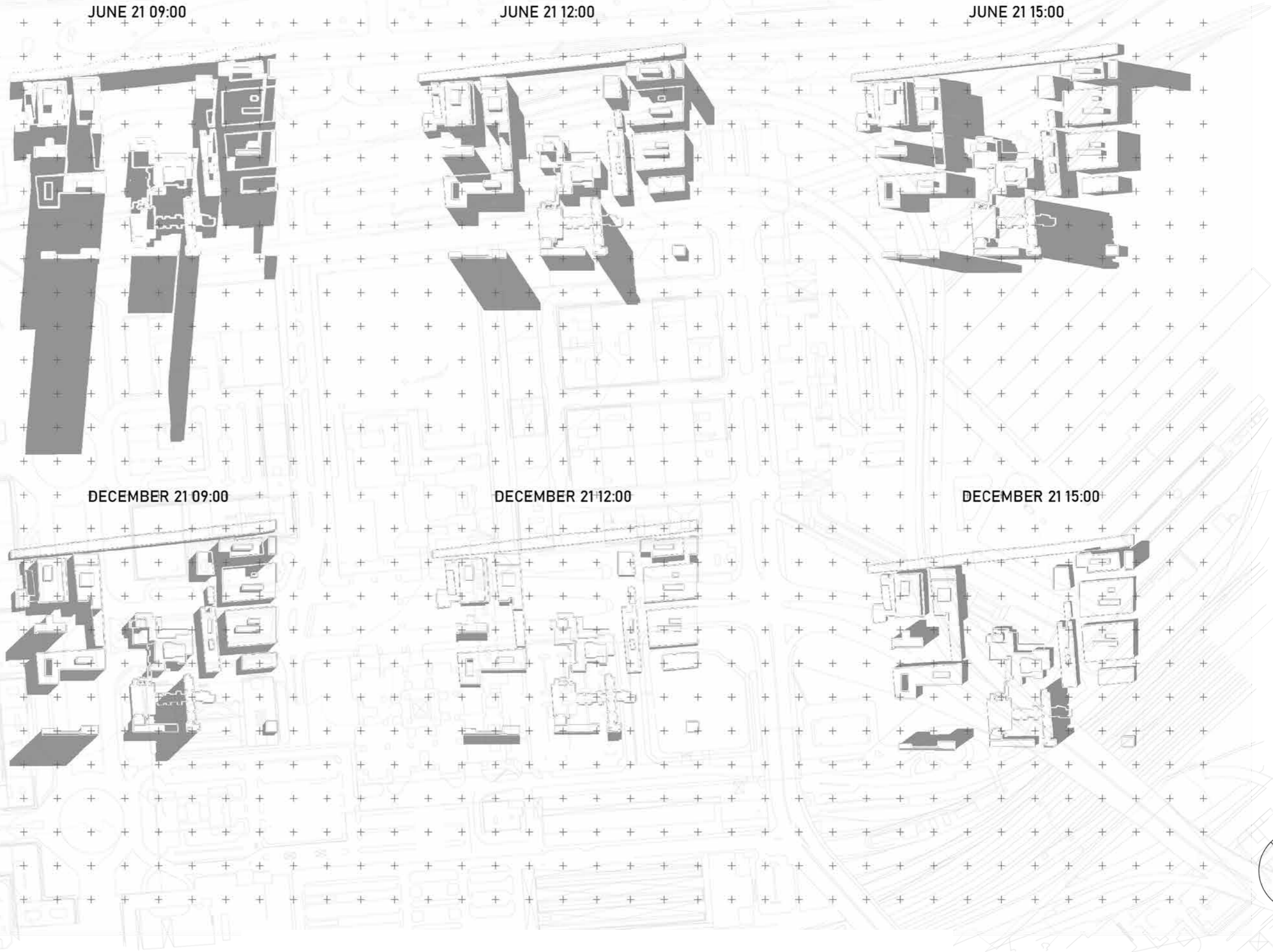
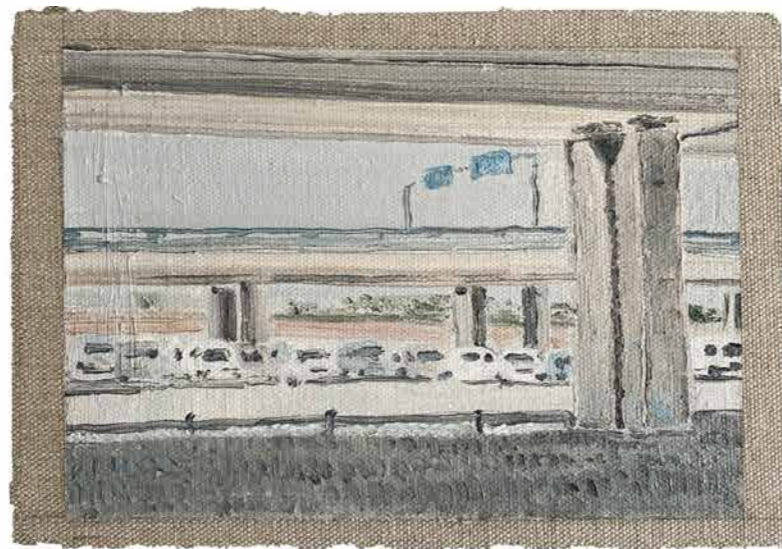


Figure 54: Mapping of shadows during the Summer and Winter Solstices (author.)



URBAN FABRIC PAINTINGS



VIEWS ON SITE PAINTINGS

Understanding the site subjectively.

Through the use of oil painting as an investigative medium, the gestalt of the context is captured. This approach embraces subjectivity and creates broad impressions of the site condition. This approach clarified the quality of light on site, the treatment of light and shadow by facades of buildings in the surrounds as well as revealing a barrenness of use.



LIGHT ON SITE PAINTINGS

WIND. A SIGNIFICANT PREVAILING SOUTH-EASTERLY WIND ON SITE GENERATES AN INHOSPITABLE AND WINDSWEPT URBAN CONDITION.

DENSITY. THE DENSITY STUDY HAS REVEALED THAT THE SITE'S DENSITY IS INSUFFICIENT. THERE IS POTENTIAL FOR DEVELOPMENT OF GREATER SCALE THAN THE ARTSCAPE THEATRE. THIS LEADS TO THE CONCLUSION THAT PARTS OF THE SITE COULD BE DEVELOPED UP TO 10 STORIES WHILST A PEDESTRIAN FRIENDLY PODIUM SETTING IS MAINTAINED.

NIGHT OCCUPATION. THE SITE BECOMES QUIET AT NIGHT. MOST SURROUNDING BUILDINGS HAVE DAY VISITORS, THE CITY OF CAPE TOWN HAS INDICATED THE DESIRE TO CREATE A NIGHT CITY. THIS POTENTIALLY CALLS FOR RESIDENTIAL PROGRAMMING ON SITE.

VIEW STUDY. A STUDY OF THE VISUAL VALUE OF THE SURROUNDS SUGGESTS POTENTIAL TO FRAME TABLE MOUNTAIN TOWARDS THE SOUTH. A NARROW VIGNETTE OF DEVILS PEAK IS ALSO CREATED TOWARDS THE SOUTH EAST. FROM THE CENTRE OF THE SITE, IF ONE IS ELEVATED HUGE POTENTIAL IS CREATED FOR HARNESSING VIEWS OF THE HARBOUR AND OCEAN. PERHAPS MOST IMPORTANTLY, USERS ENTERING CAPE TOWN FROM NELSON MANDELA BOULEVARD WILL RAPIDLY LOOK INTO THE SITE FROM THE HIGHWAY. THIS CREATES POTENTIAL FOR A SCHEME WHICH CAN BE READ QUICKLY FROM AN ELEVATED POSITION FROM RIGHT TO LEFT.

PEDESTRIAN FLOW STUDY. LOGICAL PEDESTRIAN CONNECTIONS CAN BE GENERATED TOWARDS THE MYCITI BUS STATION AS WELL AS THE CORRIDORS ALONG JAN SMUTS AND DF MALAN BOULEVARDS. AN ADDITIONAL OPPORTUNITY EXISTS FOR RAISED CONNECTIONS CONNECTING WITH THE WALKWAY TOWARDS THE ARTSCAPE AND CIVIC CENTRE.

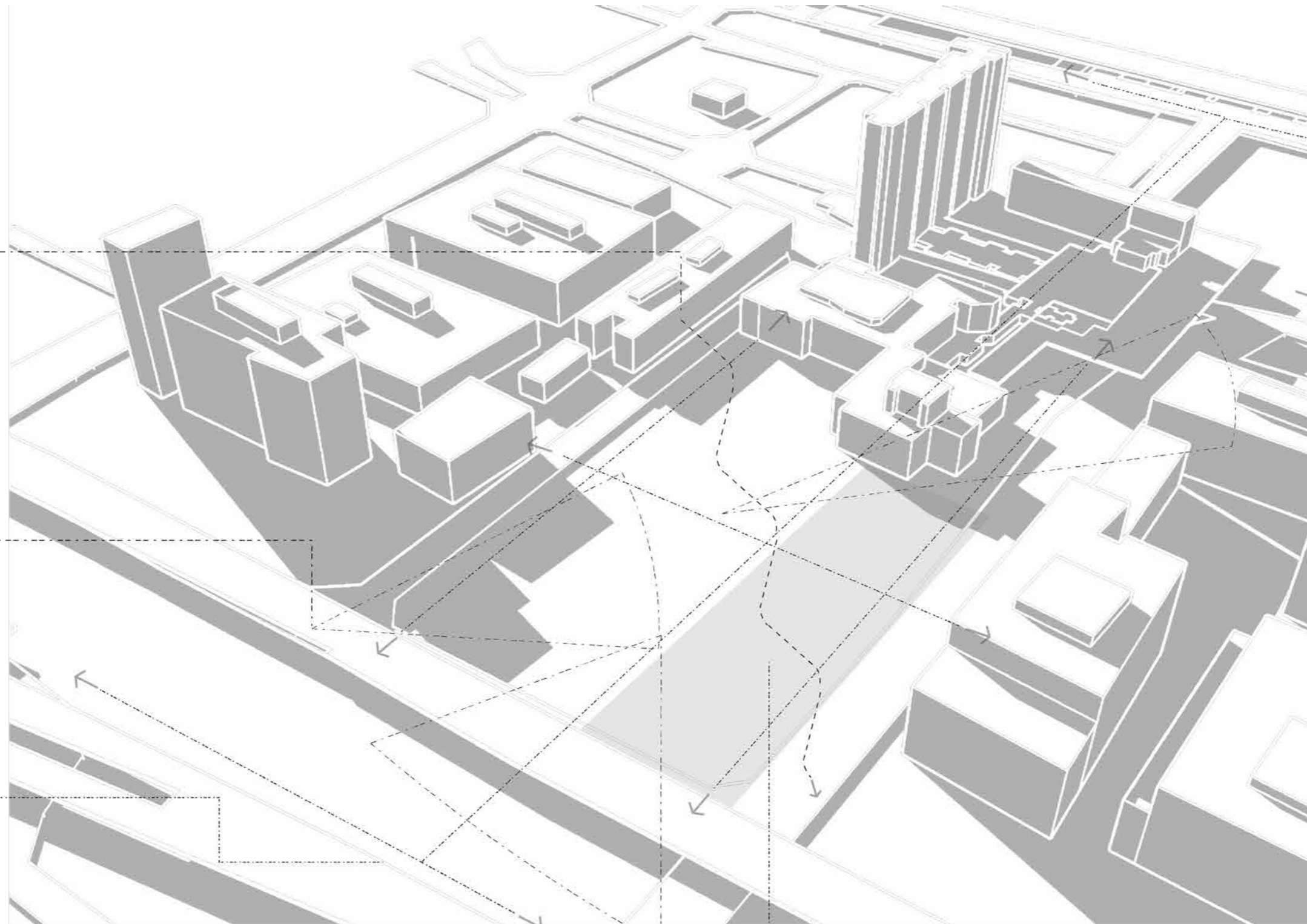


Figure 56: Conclusions diagram (author.)

NOISE STUDY. A STUDY OF NOISE ON SITE REVEALS SIGNIFICANT NOISE POLLUTION FROM NELSON MANDELA BOULEVARD WHICH MIGHT SUGGEST THE NEED FOR A NOISE BUFFER. SOME NOISE IS ALSO GENERATED BY THE ARTSCAPE THEATRE. RELATIVE SILENCE IS FOUND ALONG JAN SMUTS AND DF MALAN BOULEVARDS.

DAY OCCUPATION. CURRENTLY THE GREATEST ACTIVATION IS TOWARDS HERZOG BOULEVARD WITH ACTIVITY DENSITY INCREASING TOWARDS FW DE KLERK BOULEVARD. FUTURE ADJUSTMENTS TO FORESHORE PRECINCT COULD ALTER THE FABRIC WITH GREATER USER DENSITY TOWARDS THE PORT.

CIVIC AND CULTURAL SPACES. A STUDY OF CIVIC AND CULTURAL SPACES INDICATES THAT THERE IS POTENTIAL FOR THE CREATION OF A SIGNIFICANT CIVIC/CULTURAL NODE.

SHADOW STUDY. THE SHADOW STUDY HAS REVEALED THAT WINTER TIME AFTERNOON SHADING IS GENERATED BY THE CHRIS BARNARD MEMORIAL HOSPITAL ONTO APPROXIMATELY HALF OF THE SITE CREATING AN UNPLEASANT AFTERNOON CONDITION. THE NATURE OF SURROUNDING BUILDINGS ALSO DON'T CREATE SIGNIFICANT VULNERABILITY TOWARDS BEING SHADED BY PROPOSED STRUCTURES ON SITE.

SECTIONAL STUDY. THE SECTIONAL STUDY HAS REVEALED A DECREASE IN DENSITY FROM NORTH WEST TO NORTH EAST, THIS IS POTENTIALLY SUBJECT TO CHANGE FOLLOWING THE COMPLETION OF CONSTRUCTION ON THE NORTH EASTERN CITY BLOCK. THE SECTION TAKEN THROUGH THE ARTSCAPE AND HIGHWAY INDICATE THAT THE SCALE OF THE HIGHWAY AND ITS EFFECT ON THE SITE SHOULD BE A LEADING INFORMANT.

GREENERY. A STUDY OF GREENERY IN THE CITY BOWL HAS REVEALED A NEED FOR GREEN SPACE IN THE NORTH EASTERN EDGE OF THE FORESHORE PRECINCT SINCE MOST HIGH QUALITY GREEN SPACES ARE FOUND IN THE WEST AND SOUTH.

Conclusions on the site.

part 3: Site mapping.

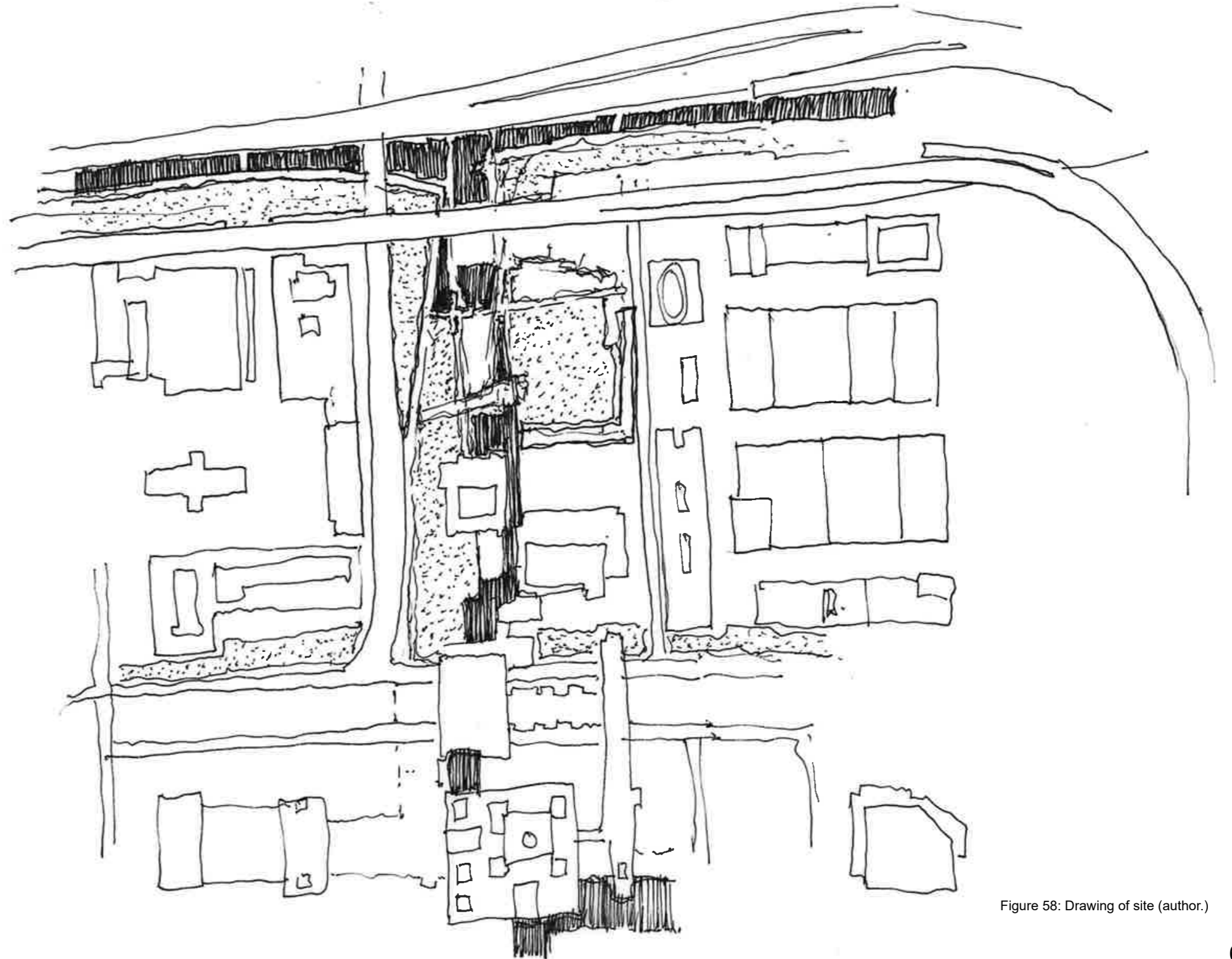


**Part 4: Design development
and response.**

Figure 57: Existing trees on site (author.)

Envisioning embeddedness.

The drawing below envisions how the site can be connected into the broader context through continuing on existing elements in the fabric. This could include the placement of a stop for the proposed new MyCity bus route on the site, the possible creation of a pedestrian bridge to either connect to a new converted elevated Foreshore promenade or a pedestrian bridge crossing a newly dropped free-way. It envisions the adoption of existing pedestrian routes into the scheme as well as creating a pedestrian route through the Artscape as a continuation of the existing elevated walkway running from the Cape Town Station. The vision also speculates how the design language of public spaces around new developments could culminate and continue into the cultural heart, creating an unity in the spatial experience of the entirety of the new Foreshore precinct.



Understanding the inter-relationship between density and program.

Through examining a myriad of different cultural programs, and an embrace of pluralistic spatial programming, an analysis is done of which programs could be generated for the scheme. Considering the size of the site, a great number of primary and secondary programs could potentially be included. Here then a hierarchy of programs is created from most to least essential. A decision then needs to be made on bulk which will then determine which of these programs will be included and which programs will be excluded. Bulk under consideration ranges from 0% floor area ratio to the maximum which current zoning allows (this would be a solid block covering the entire site in excess of 15 storeys.) The difficulty then lies in selecting the appropriate bulk since arguments can be made for a variety of densities. Greater densities are scaled more appropriately to the surrounds whereas lesser densities allow for respite. In order to select a density (and concomitantly delineate the program) an exercise was conducted in which four density scenarios were considered for the site.

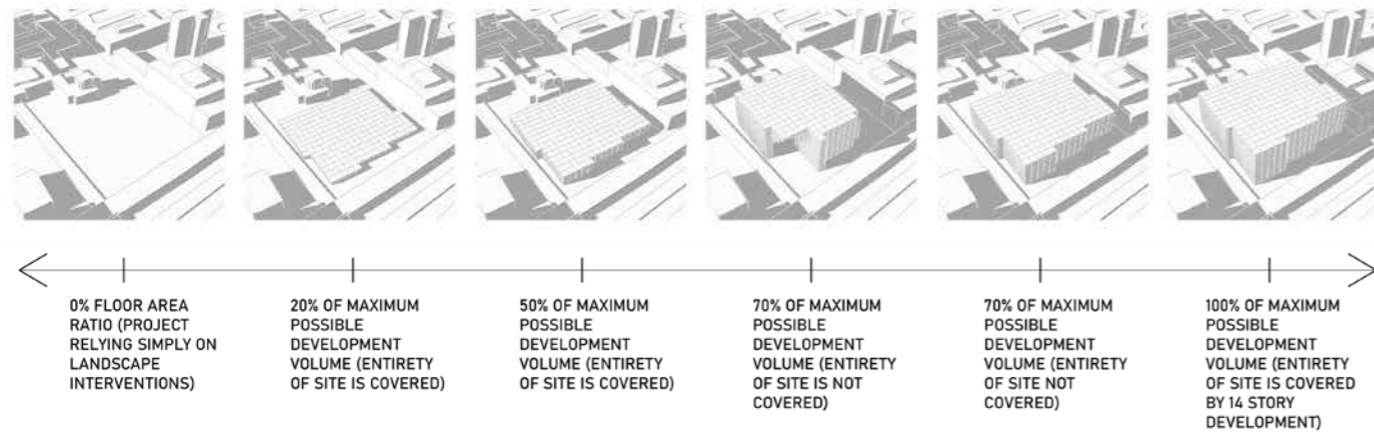


Figure 59: Floor area ratios possibilities (author.)

CIVIC: FOCUS ON URBANISM AND EMBODIMENT OF CIVIC IDEALS.

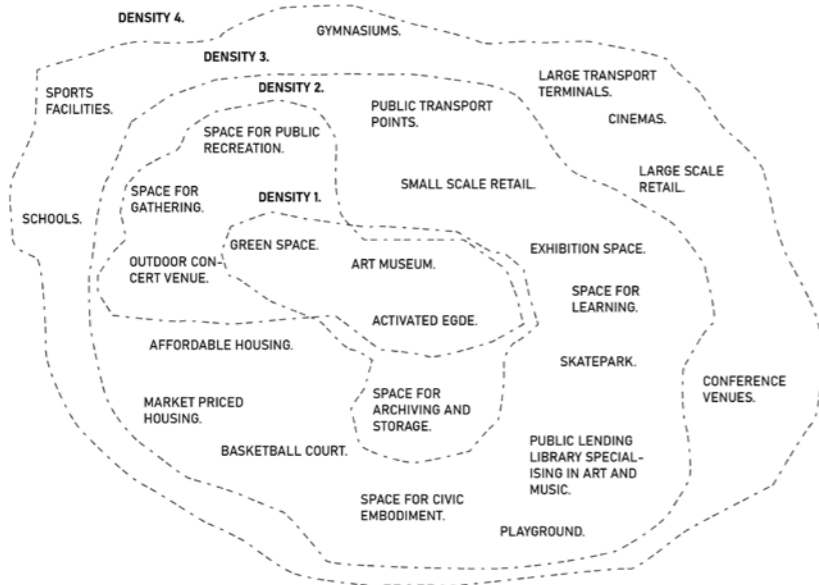


Figure 60: Program possibilities in relation to different density scenarios (author.)

CULTURAL: FOCUS ON CULTURAL DEVELOPMENT AND CULTURAL EXPERIENCE.

Part 4: Design development and response.

DENSITY SCENARIO 1

PRINCIPLE: PUBLIC USAGE MAXIMISATION.

SYNOPSIS: LAND WITHIN THE CBD LARGELY FORCES THE PUBLIC DOMAIN ONTO THE STREET EDGE. HERE A SCHEME IS PROPOSED IN WHICH THE FUNCTIONAL PROGRAM ACTS IN TOTAL SUBSERVIENCE TO PUBLIC USABILITY AND THE CREATION OF USABLE PUBLIC SPACE WITHIN THE FORESHORE PRECINCT.

KEY INFORMANTS: PEDESTRIAN ACCESS, SHADOW LINES, NOISE, GREENERY.

PROGRAMMING: PUBLIC PLAZA AND USABLE OUTDOOR SPACE.

DENSITY: 15%.

Figure 61: Density scenario 1 (author.)

DENSITY SCENARIO 2

PRINCIPLE: INTEGRATION AND SEPERATION OF CIVIC (PUBLIC) AND CULTURAL (PRIVATE)

SYNOPSIS: HERE A DUAL GOAL OF USABLE PUBLIC SPACE WITH ITS CONVERSATIONAL QUALITY AND THE MORE MONASTIC QUALITY OF CULTURAL SPACE IS SUPERIMPOSED BUT THINLY SEPERATED.

KEY INFORMANT: SIGHT LINES, PEDESTRIAN PATHS, CIVIC AND CULTURAL SPACES.

PROGRAMMING: ART MUSEUM (PRIMARY), PUBLIC PLAZA (SECONDARY).

DENSITY: 25%.

Figure 62: Density scenario 2 (author.)

SCENARIO 3

PRINCIPLE: COMBINING DIFFERENT DENSITIES.

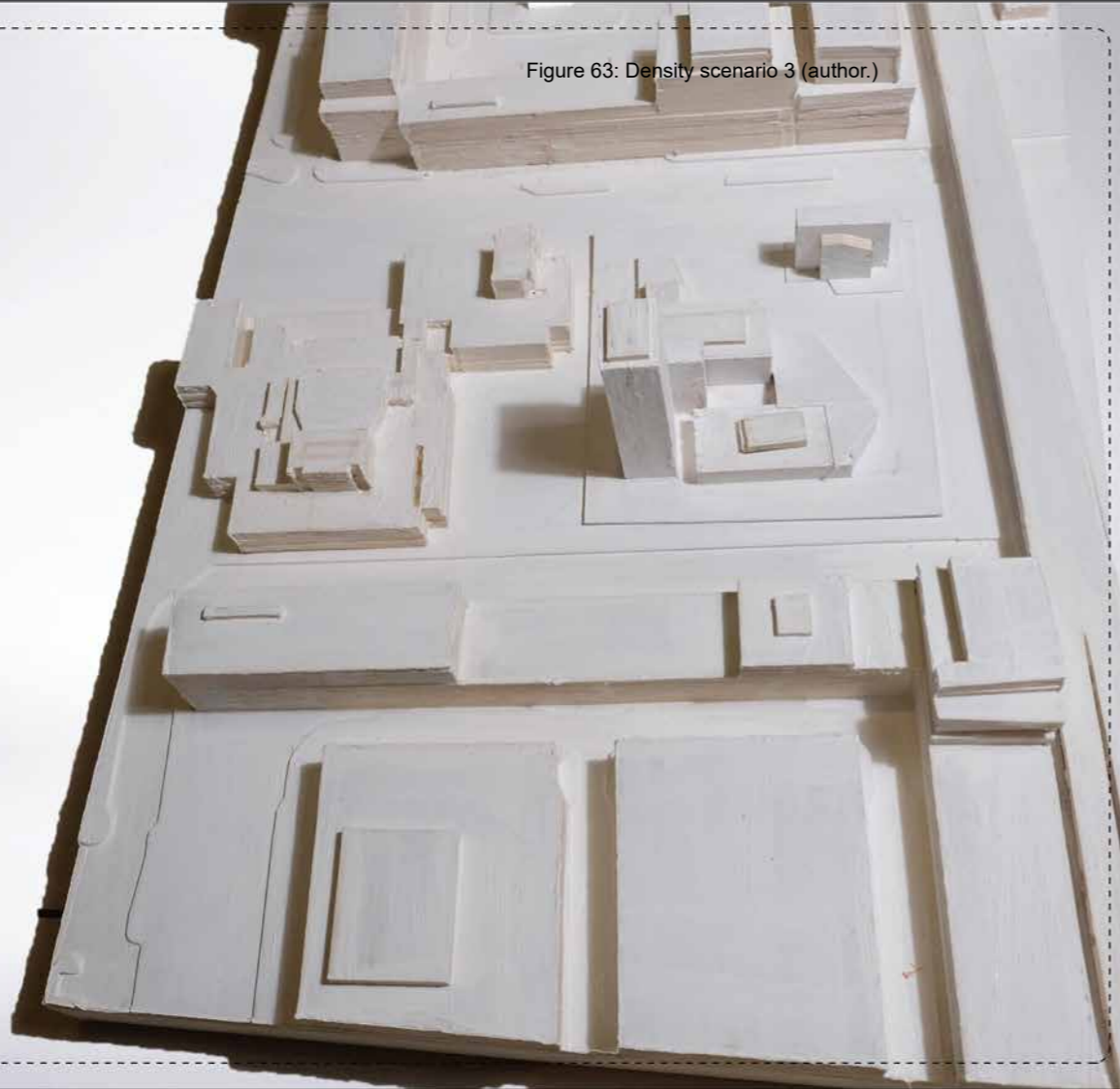
SYNOPSIS: THIS SCHEME REACTS BOTH TO A MUCH NEEDED HIGH DENSITY IN SOME PARTS AS WELL AS THE IMPORTANCE OF LOWER DENSITY IN OTHER PARTS.

KEY INFORMANT: CITY OF CAPE TOWN POLICY, NOISE STUDY.

PROGRAMMING: ART MUSEUM (PRIMARY), CROSS-SUBSIDISED HOUSING (SECONDARY), PUBLIC PLAZA (TERTIARY).

DENSITY: 45%.

Figure 63: Density scenario 3 (author.)



SCENARIO 4

PRINCIPLE: CONNECTING GROUND-FLOOR WITH HIGH VOLUME SCHEME (PRIVATE)

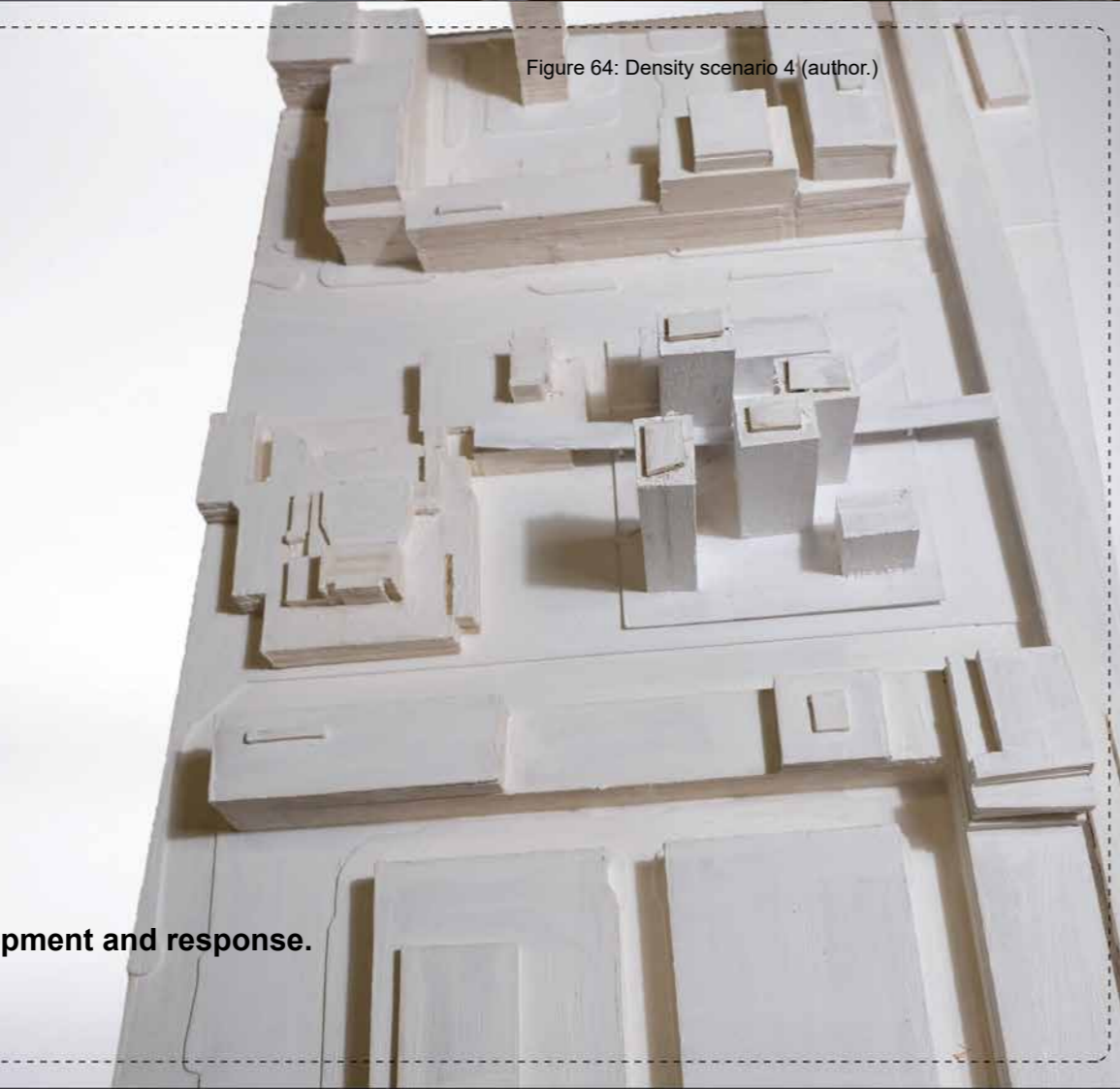
SYNOPSIS: HERE A SCHEME IS PROPOSED THAT EMBRACES HIGH DENSITY AND COVERS A SIGNIFICANT PORTION OF THE SITE. HERE OPEN SPACE IS ABANDONED IN FAVOUR OF MAXIMAL UTILISATION.

KEY INFORMANT: DENSITY.

PROGRAMMING: ART MUSEUM (PRIMARY), HOUSING (SECONDARY), RETAIL (TERTIARY) AND SCHOOLS AND OTHER AMENITIES (QUATERNARY).

DENSITY: 70%.

Figure 64: Density scenario 4 (author.)



Part 4: Design development and response.

Programming.

Once all scenarios were considered it was concluded that scenario 3 was most appropriate. This then lead to the conclusion that the program for the site should consist of the following.

Programs to be included.

An **art museum** serving the purpose of being a cultural attraction. **Cross-subsidised housing** in order to address the need for affordable housing in the CBD as well as activating the site both during the day and the night. An **outdoor concert venue** for the Artscape theatre of greater capacity than any of the interior concert venues. This venue should be able to accommodate the Cape Town Jazz Festival which currently occurs between the freeways. A **public park** at the center of the scheme which is "semi-enclosed" but completely publicly accessible. A dedicated **arts library**. Which is to work in conjunction with the museum. A **well designed playground, basketball court** and **skate-park** to generate more possibility for optional activity. A **retail edge** to further activate the site. **Public restrooms** and generous seating and gardening is also essential to the scheme. The inclusion of an **agora-like forum** space will also add to the schemes civic value. Currently the City of Cape Town hosts consultations on the first

Thursday of every month in which members of the public can meet with the city executive. This currently occurs in the foyer of the civic center. An **agora-like forum** could start serving such functions. It is of essential importance that the public offering does not act in subservience to cultural programming but rather that public programming such as park space is given equal credence and emphasis whilst integrating all programs with each other in a synthesised manner.

Another art museum in Cape Town?

Cape Town already has plentiful art museums and foundations. These include the Norval Foundation in Tokai, the Zeits MOCAA in the waterfront and the Iziko National Gallery in the Company Gardens. The argument for the inclusion of an art museum revolves around two points.

1. This art museum aims to reinterpret the art museum typology which typically generates an insular and monastic aesthetic experience in which one is removed fully from the world. Here rather, the program questions how public functions and museum functions can be interspersed and dynamically overlaid so that maximal conversation and cross pollination may occur with public life influencing the experience of art.

2. It is not unusual for cities of Cape Town's size, GDP and tourist appeal to have multiple cultural venues. The table below compared various cities from emerging economies in terms of population in relation to number of significant art spaces. This reveals that Cape Town is not saturated in terms of cultural programming.

CITY.	ECONOMIC CLASSIFICATION.	POPULATION IN MILLIONS (UN DATA, 2021)	NOTABLE ART SPACES.	NUMBER OF NOTABLE ART SPACES.
MEXICO CITY (MEXICO)	EMERGING MARKET.	8,8	UNIVERSITY MUSEUM OF CONTEMPORARY ART, PALACIO DE BELLAS ARTES, MUSEO DE ARTE POPULAR, MUSEO JUMEX, FRIDA KAHLO MUSEUM, SOUMAYA MUSEUM, MUSEO TAMAYO CONTEMPORARY, MUSEO NACIONAL DE ARTE, MUSEO DE ARTE MODERNO.	9
BRAZILIA (BRAZIL)	EMERGING MARKET (BRICS.)	5,7	CAIXA CULTURAL, MUSEU NACIONAL DA REPUBLICA, MUSEU DE VALORES DO BANCO CENTRAL, MUSEU DE ARTE DE BRASILIA.	5
BUENOS AIRES (ARGENTINA)	EMERGING MARKET.	3,0	MUSEUM OF LATIN AMERICAN ART, MUSEO NACIONAL DE BELLAS ARTES, MACBA, MUSEO MODERNO, MUSEO NACIONAL DE ARTE DECO.	5
HA NOI (VIETNAM)	EMERGING MARKET.	5,0	VIETNAM NATIONAL FINE ART MUSEUM, HANOI MUSEUM, HO CHI MINH MUSEUM.	3
NAIROBI (KENYA)	EMERGING MARKET.	5,1	NAIROBI NATIONAL GALLERY, NATIONAL MUSEUM OF KENYA, KAREN BLIXEN MUSEUM, UHURU GARDENS NATIONAL MUSEUM.	4
CAPE TOWN (SOUTH AFRICA)	EMERGING MARKET (BRICS.)	4,8	ZEITS MOCAA, NOIRVAL FOUNDATION, IZIKO NATIONAL GALLERY.	3

Figure 65: Comparing number of art spaces in cities with similar social and economic contexts to City of Cape Town (author.)



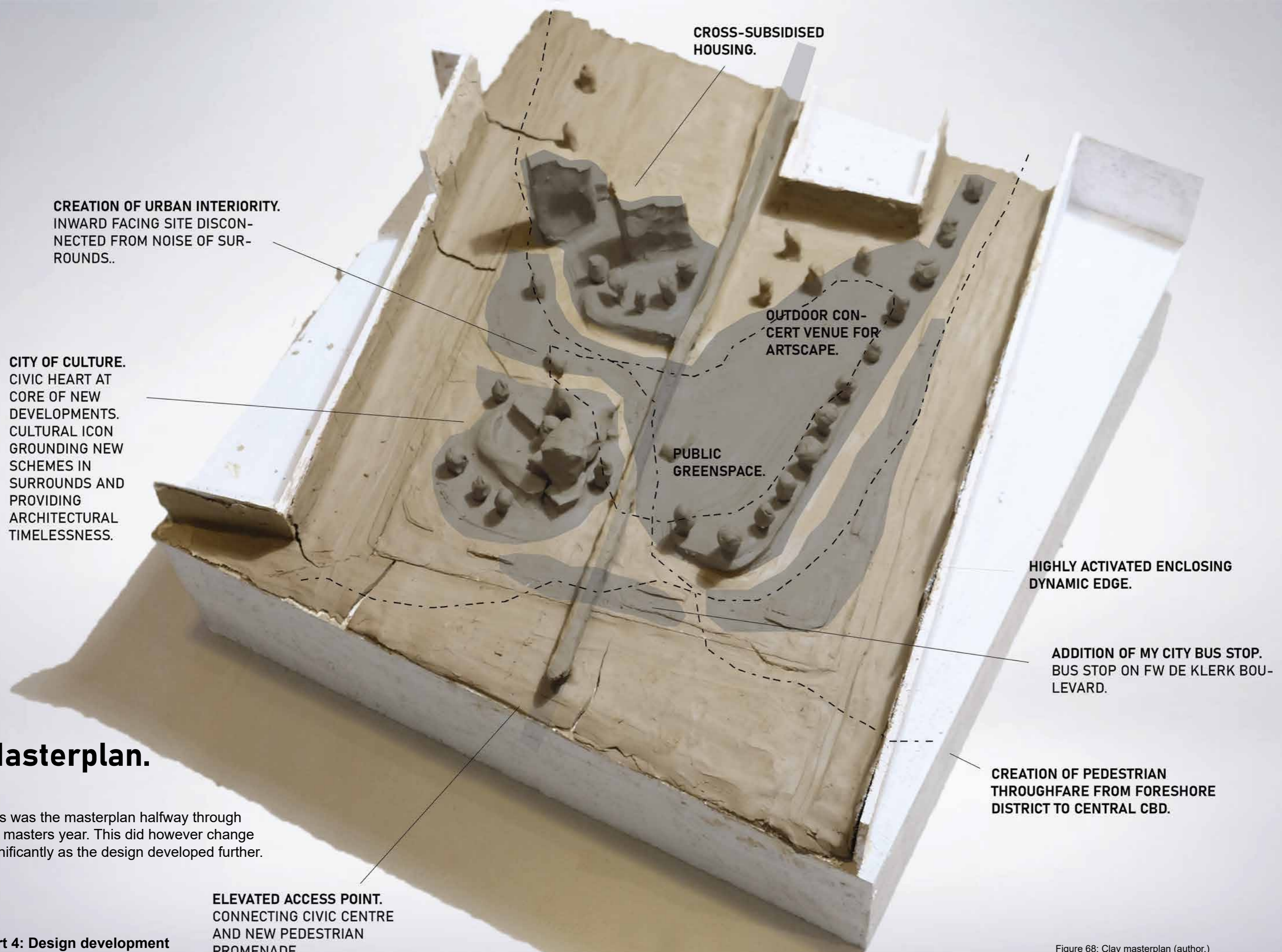
Initial masterplan using the intuitive immediacy of clay.

Clay was used immediately after site mapping and program selection was completed to reactively generate a quick, intuitive idea of how forms and masses should be placed on site. This served the purpose of placing programs in relation to mapping findings.

Part 4: Design development and response.



Figure 67: Hands forming clay (author.)



CROSS-SUBSIDISED HOUSING.

CREATION OF URBAN INTERIORITY. INWARD FACING SITE DISCONNECTED FROM NOISE OF SURROUNDS..

OUTDOOR CONCERT VENUE FOR ARTSCAPE.

CITY OF CULTURE. CIVIC HEART AT CORE OF NEW DEVELOPMENTS. CULTURAL ICON GROUNDING NEW SCHEMES IN SURROUNDS AND PROVIDING ARCHITECTURAL TIMELESSNESS.

PUBLIC GREENSPACE.

HIGHLY ACTIVATED ENCLOSING DYNAMIC EDGE.

ADDITION OF MY CITY BUS STOP. BUS STOP ON FW DE KLERK BOULEVARD.

Masterplan.

This was the masterplan halfway through the masters year. This did however change significantly as the design developed further.

CREATION OF PEDESTRIAN THROUGHFARE FROM FORESHORE DISTRICT TO CENTRAL CBD.

ELEVATED ACCESS POINT. CONNECTING CIVIC CENTRE AND NEW PEDESTRIAN PROMENADE.

Part 4: Design development and response.

Figure 68: Clay masterplan (author.)

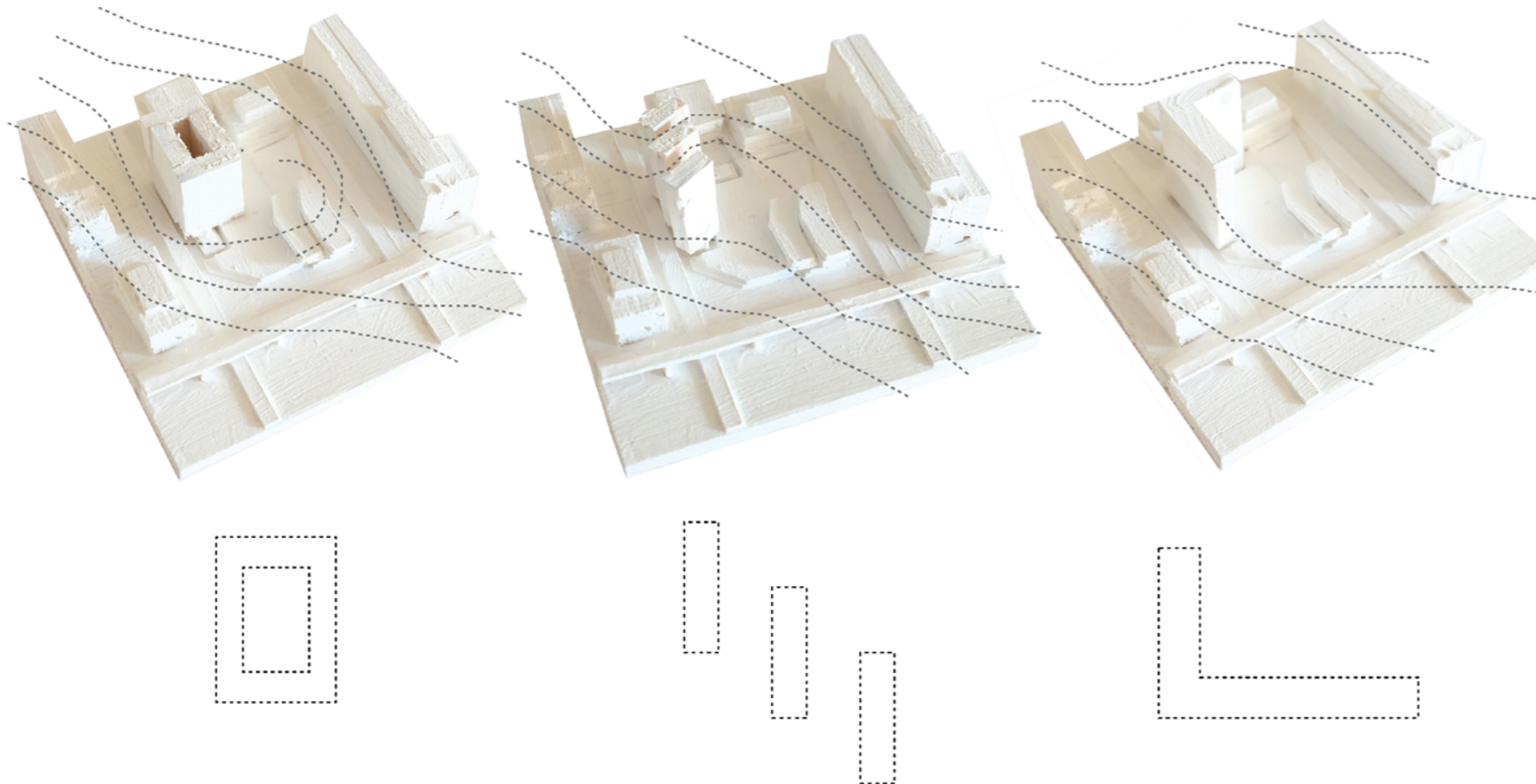
Developing mass and form for the cross-subsidised housing.

It must be made clear that this scheme will not develop the cross-subsidised housing portion in full resolution. The housing will only be looked at in terms of site placement, bulk, form, and orientation as well as the interface with the rest of the scheme.

Major considerations for the housing included maximisation of sunlight, the protection against prevailing winds and appropriate bulk.

The cross-subsidised housing is placed on the South-Eastern edge of the site. This is in accordance with the need to create an open public cavity in the center of the site. This is done in order to move the housing as far away from the currently existing freeway as well as minimising shadows from any future developments and from the Chris Barnard Memorial Hospital. The bulk of the housing remains in line with the bulk proposed in the FGA proposal for the City of Cape Town. Thus the scheme proposes a single tower of around 10-14 storeys. In order to best mitigate the significant South-Eastern wind, the decision was made to use the housing block as a wind buffer. This will benefit all residents who will live in residences facing North-West (away from the most significant, prevailing wind) as well as benefiting visitors to the site since this could create a wind-still locale within an otherwise very windy part of the city. In order to test different forms for their ability to block wind, an experiment was done in which candle smoke was passed over a model with housing blocks of different shapes. Under consideration were three freestanding blocks oriented to the North, a long, L-shaped block and a courtyard block. The experiment revealed that the long L-shaped block was the most successful at generating wind protection.

Figure 69: Models exploring wind cover (author.)



Part 4: Design development and response.

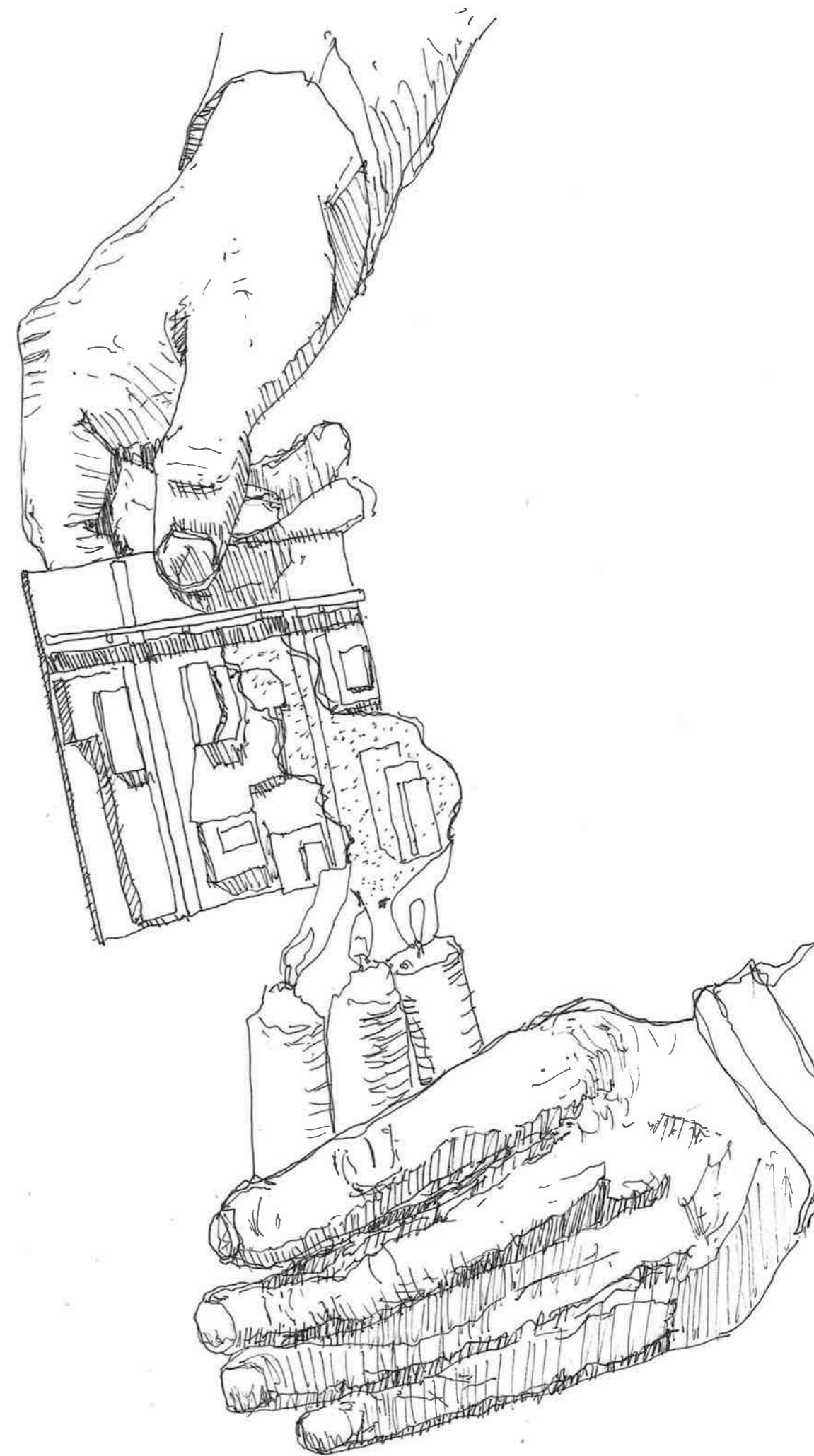
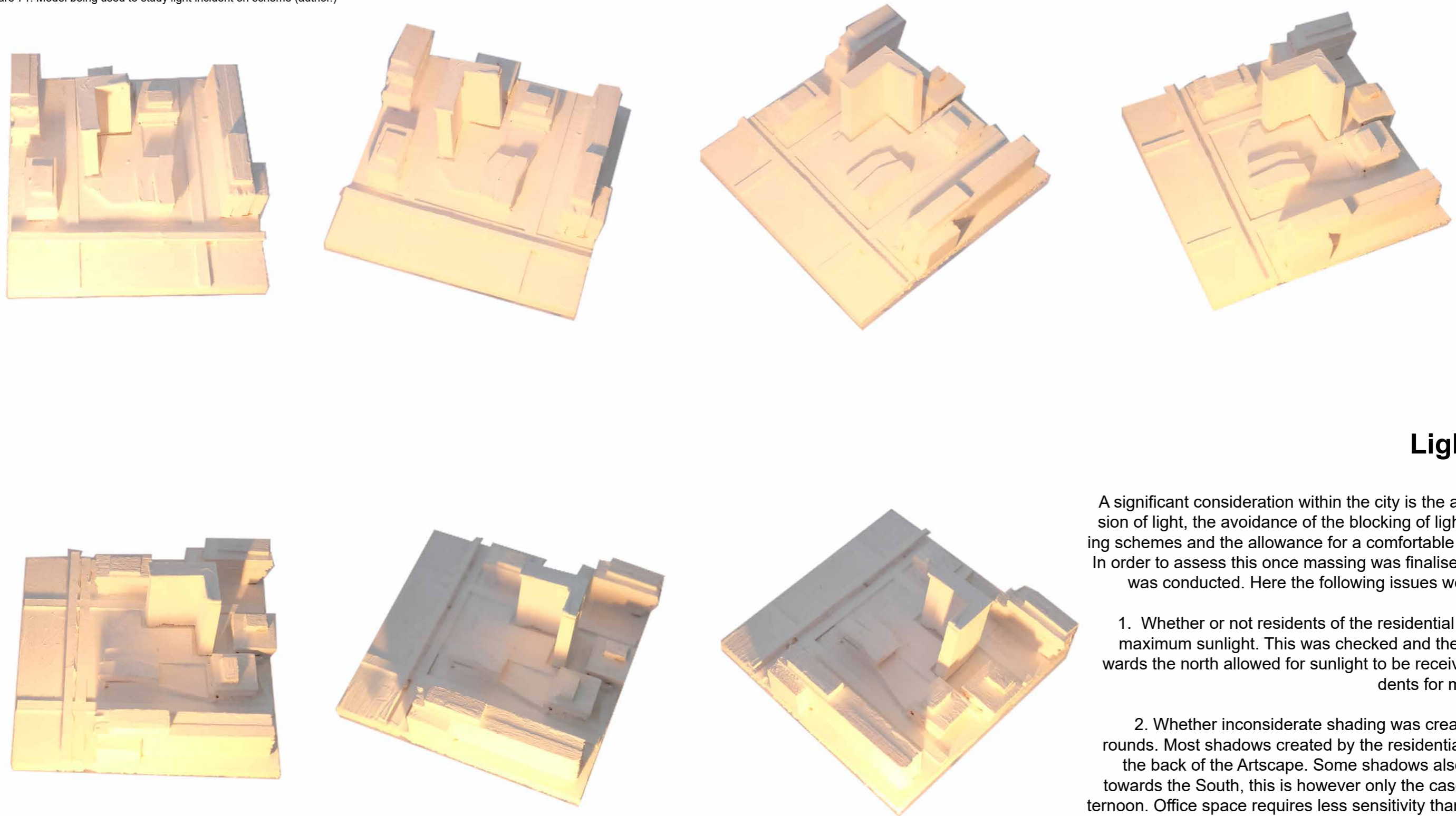


Figure 70: Drawing showing how the study was conducted (author.)

Figure 71: Model being used to study light incident on scheme (author.)



Light study.

A significant consideration within the city is the adequate provision of light, the avoidance of the blocking of light for surrounding schemes and the allowance for a comfortable light condition. In order to assess this once massing was finalised, a light study was conducted. Here the following issues were addressed.

1. Whether or not residents of the residential block received maximum sunlight. This was checked and the orientation towards the north allowed for sunlight to be received by the residents for most of the day.
2. Whether inconsiderate shading was created on the surrounds. Most shadows created by the residential block falls on the back of the Artscape. Some shadows also fall on offices towards the South, this is however only the case in the late afternoon. Office space requires less sensitivity than the treatment of residential space.
3. Whether uncomfortable low angle sunlight is incident upon either the performers or visitors to the concert venue in the late afternoon. Although the outdoor concert venue is orientated towards the Artscape, late afternoon sun is mitigated by surrounding buildings as well as Signal hill and Lions head. Because of Signal hill and Lions head, the sun sets an hour or two earlier on the site. This was confirmed during site visits.

Materiality and tectonics.

Material explorations.

The use of concrete in the scheme allows for some material continuity between old and new. The use of concrete references many of the Modernist schemes in the surrounds including the Artscape. Concrete also allows for the free-forms necessary to generate a highly bespoke structure which gives the necessary sense of security and enclosure as well as cultural resilience, durability and permanence necessary for a cultural venue. In order to address the sometimes austere feel of concrete, some material iterations explore the use of red oxide dye to create a set of tones that exude warmth and act as diametric opposite to the feel of the context. Explorations of a variety of surface finishes delve into the use of the surface of the concrete as a design tool. Bush-hammering allows for emphasis on horizontality/verticality whilst finishes like salted slabs allows for a greater appreciation of light that falls incident on the scheme.



Figure 72: Bush-hammered/corrugated concrete (author.)

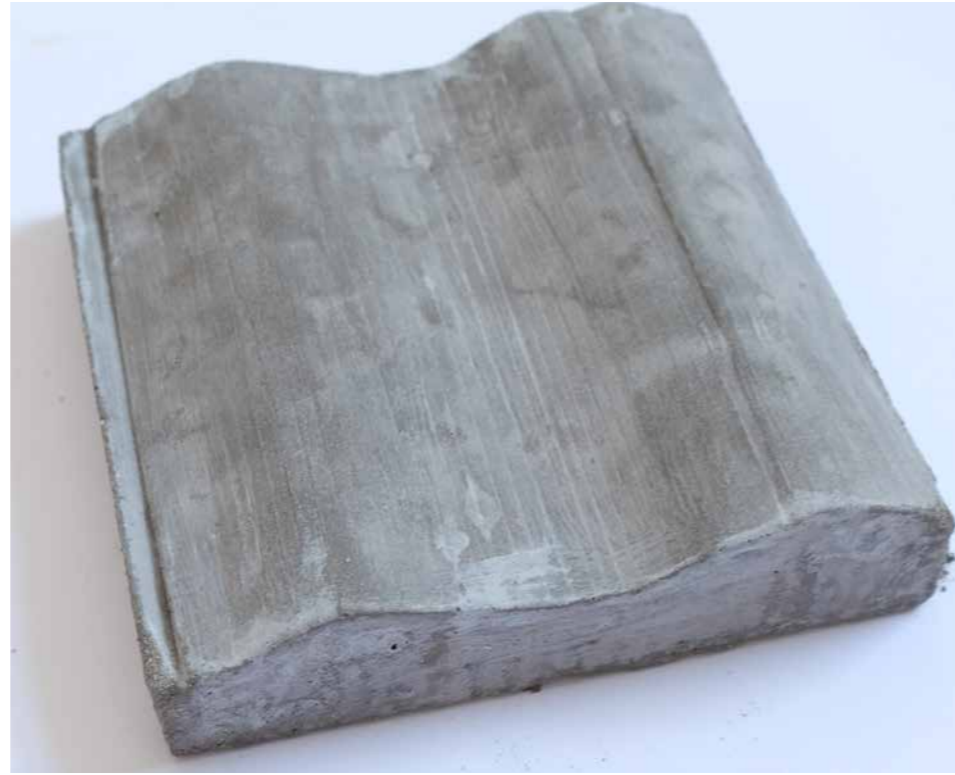


Figure 73: S-profile corrugated iron as formwork (author.)



Figure 74: Grooved and dyed using red oxide dye (author.)



Figure 75: Red oxide dyed with off-shutter finish (author.)



Figure 76: Off-shutter finish (author.)



Figure 78: Course salt thrown on slab and then dissolved (author.)

Part 4: Design response.

Colour strategy.

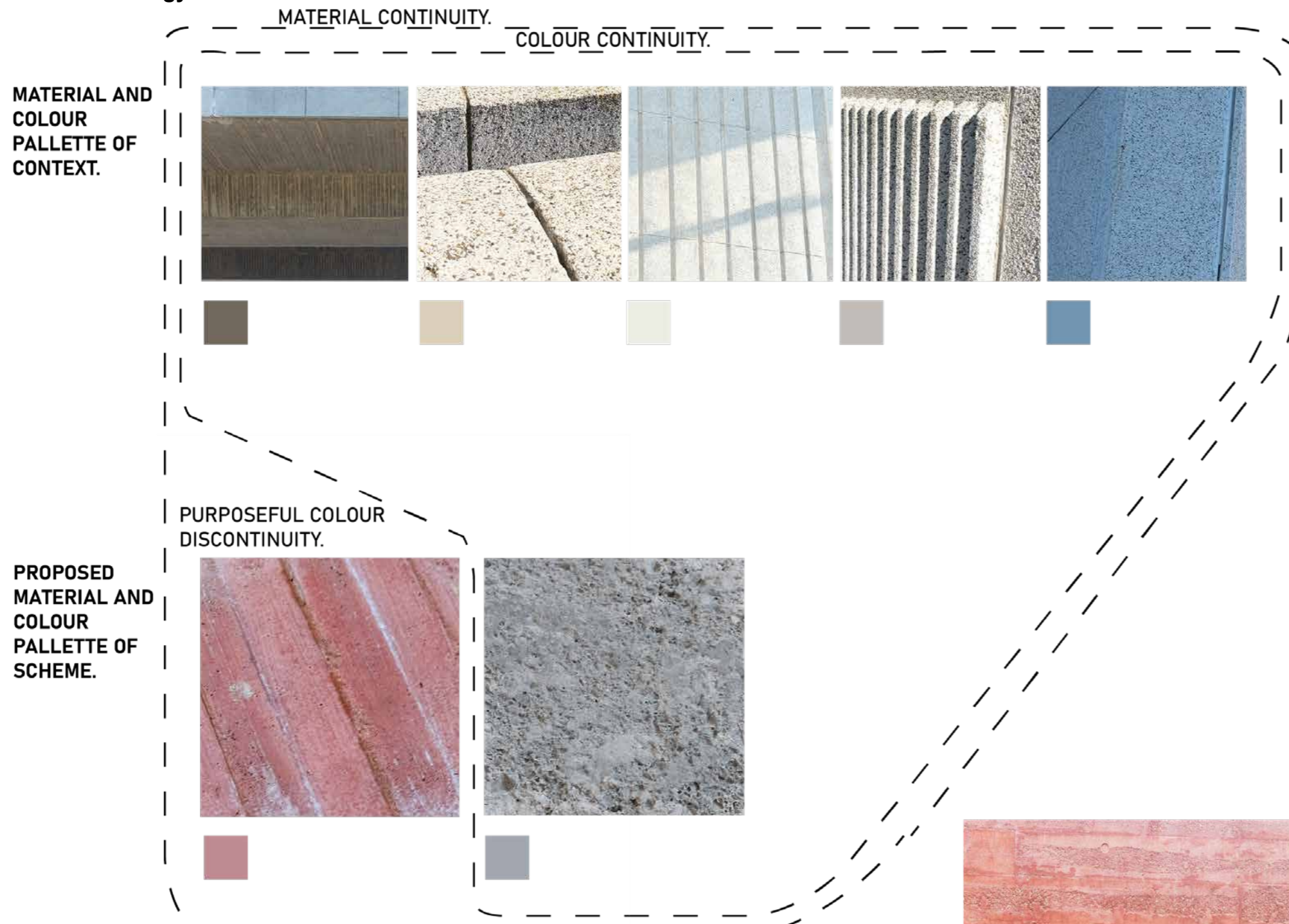
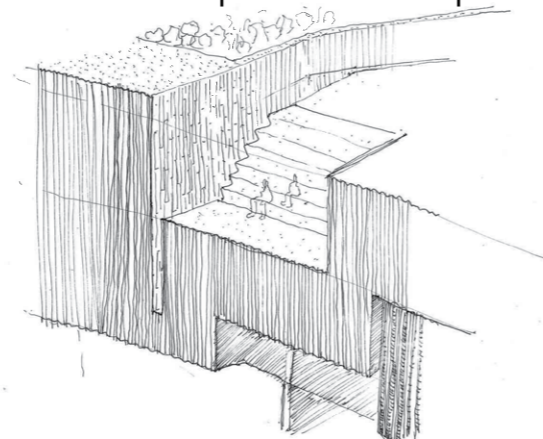


Figure 79: Diagram showing colour and material strategy using images from site and images from material exploration (all images by author.)

The diagram above illustrates the strategy of responding to the context through maintaining material continuity by proposing a concrete scheme. In some parts of the scheme, the colour of the concrete is in keeping with surrounds whilst some parts will purposefully directly contrast and oppose the colour of much of the context. The adjacent drawing explores how different material finishes could

be applied to different parts of the scheme to generate various spatio-material experiences.



Part 4: Design development and response. Figure 80: Diagram showing different surface finish utilisations (author.)

Casa Das Historias Paula Rego as precedent of dyed concrete use.

The versatility of concrete as a material is made evident at the Casa Das Historias Paula Rego in Cascais, Portugal. The scheme was designed by Eduardo Souto de Moura. The use of dyed, off-shutter concrete significantly elevates the material and pronounces the legibility of the textures and materiality of the concrete. The wooden form-work was placed so as to generate directionality on the facade of the scheme, on the surface of the light-well tower structures, the form-work was placed at diagonals to best emphasise the *Axis Mundi* function of this part of the scheme. On lower levels, the form-work is placed in a horizontal fashion for a friendlier experience when the user comes in direct contact with the building. The vibrant exterior contrasts drastically with the white and cool interior (Mead, 2009.)

The use of dyed concrete certainly is not a method of creating a scheme that nonchalantly blends into the context. The use of such a high degree of colour contrast, designates, emphasises and draws attention to the scheme.



Figure 81: Casa Das Historias Paula Rego wall close-up (author.)

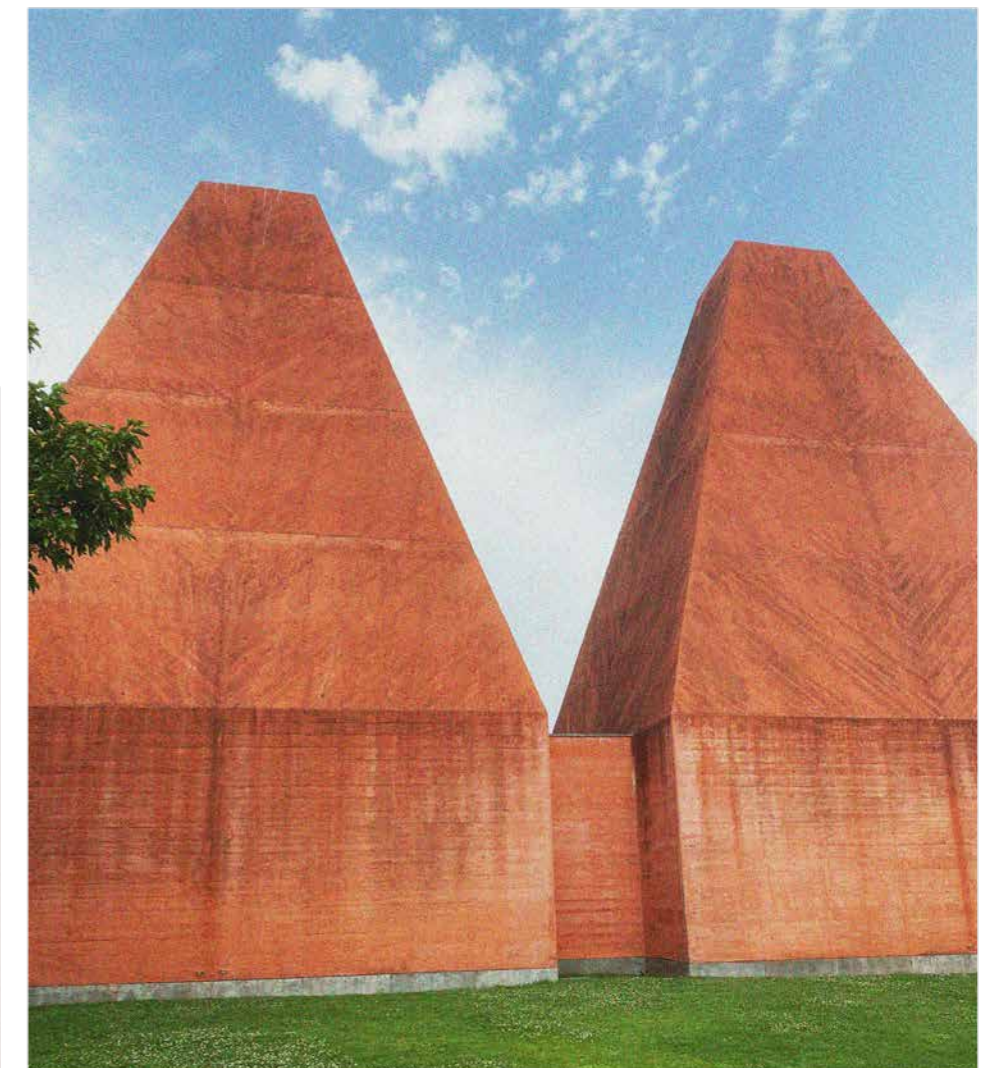


Figure 82: Casa Das Historias Paula Rego (author.)

Ecological and climatic response.

In the 21st Century, the designer needs to carefully consider each building in relation to the current climatic status quo. It has become nearly indefensible for design choices to ignore the urgent need for carbon mitigation strategies especially in light of the fact that the construction industry is responsible for nearly a third of global greenhouse gas emissions (Gan, Cheng and Lo, 2019.)

Concrete as an environmentally problematic material.

Concrete in particular poses significant problems in relation to greenhouse emissions. Concrete construction is highly energy intensive and leads to high rates of carbon emission. Concrete is however still a highly durable, flexible and ubiquitous material with significant structural and poetic benefits which make it ideal for the scheme in question. It allows for spans needed to create large civic spaces, it has sufficient strength to remain rigid in the face of strong winds. It has the thermal properties that could allow for sufficient thermal comfort without the use of excessive HVAC and insulation and it creates continuity with much of the materiality of the context.

Carbon emissions are generated both through the production and replacement phases of buildings. The replacement phase emissions can represent up to half of total embodied emissions. If one then selects materials with a long reference service life and high durability then some of the replacement emissions can be mitigated (Gan, Cheng and Lo, 2019.)

From this then, the key question becomes how the net carbon emissions generated through the use of concrete in the production phase in this scheme can also be sufficiently mitigated.

Concrete emissions mitigation strategies.

Part 4: Design development and response.

1. Determination of minimum concrete characteristic strength for each portion of concrete use in conjunction with maximal strength concrete. The greater the strength of the binding agent, the less cement is needed in relation to aggregate. Through the use of high strength cement as well as using the lowest volume of cement permissible per building component whilst adhering to all necessary standards, emissions can be lessened (Gan, Cheng and Lo, 2019.)

2. Using supplementary cementitious materials along with Portland cement that have lower embodied energy. The use of Low Calcium Fly Ash for example in conjunction with cement can lower emissions (Gan, Cheng and Lo, 2019.)

3. The use of Eco-cement. Eco-cement provides similar mechanical properties to conventional concrete but requires significantly lower energy to produce through the burning of municipal waste during the production process significantly lowers the carbon footprint (Gan, Cheng and Lo, 2019.)

4. Use of maximum aggregate size. maximum aggregate size (up to 40mm) leads to a reduction in the volume of cementitious substance needed since a greater binding surface area is present for a smaller volume of concrete to have to bind to (Gan, Cheng and Lo, 2019.)

5. Use of recycled scrap steel for reinforcement. This also significantly lowers embodied energy in reinforced concrete work (Gan, Cheng and Lo, 2019.)

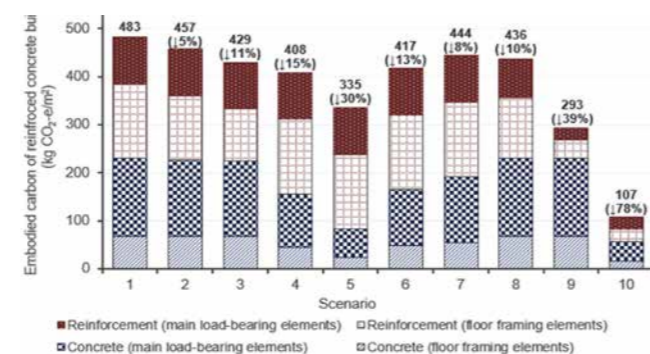


Figure 83: Indication of the degree of carbon mitigation that can be achieved using mitigation methods in concrete. (Gan, Cheng and Lo, 2019.)

Through the deployment of these five strategies the net carbon emissions can be significantly lessened. This is made visible in the figure 83 which compares multiple mitigation strategies in terms of efficacy.

In conclusion, with significant attempts at mitigation and the potential benefits in terms of high durability, concrete can be considered a suitable and acceptable primary material in the scheme.

Rain water collection.

The proximity of the site to the ocean and the high prevalence of non-permeable surfaces has led to the majority of rainwater simply running into the ocean. This scheme proposes the collection of all rainwater on site through downward gradients to collection points which allows water to be stored in water tanks. This will allow water to then be stored for irrigation of greenery on site as well as other non-potable uses.

The method for calculating the amount of water that can be harvested is as follows:

Water Potential = Rainfall x Area x Runoff Coefficient. (Mariana and Suryawinata, 2018.)

For the proposed site (approximately 100x100m) then with Cape Town's average annual rainfall of around 515mm (Harris et al, 2010) and a runoff coefficient of 0,8 (low permeability of surface) the following amount of water will be harvested annually:

$$5,15dm \times 1\ 000\ 000dm^2 \times 0,8 = 4\ 120\ 000l$$

This will go a long way in lowering reliance on the City of Cape Town water supply for non-potable purposes.

Passive ventilation.

Passive flow of air is created through the scheme through the placement of openings at high thermal mass high points above the main hall with a open first floor through which cooler

air generated by shaded first floor regions is then sucked into higher volumes.

Planting of indigenous planting.

In keeping with the creation of a place of respite, a large portion of the site will be covered by greenery and foliage. In order to keep maintenance and water requirements low, all planting will be indigenous and from the Cape biosphere. A high degree of planting will also lower surface glare, and solar radiation which will lower contribution to the urban heat island effect (Enteria, Santamouris and Eicker, 2021.)

Maximizing daylighting and energy efficiency.

Daylighting is maximised through the use of skylights that allow light to penetrate all the way into the basement level. This in conjunction with passive ventilation, allows for lower energy output.

Touching the Artscape lightly.

The Artscape consists of two main halls (one for opera and one for theatre) that meet at their corners. Around these are service spaces and offices. The service spaces to the South-East of the theatre can be shifted to the North-Western facade of the Artscape. Through doing this, room is created for an opening which allows for through-fare through the Artscape to the new outdoor concert venue.

The creation of an outdoor venue will expand the range of possible offerings for the Artscape theatre particularly since the Cape Town climate is well suited for late afternoon or

evening outdoor summer concerts. Modernist buildings such as the Artscape typically have a distinctive “front” and “back.” Through the creation of the opening which leads to the new cultural centre, the “back” of the Artscape is activated more effectively which will open the Artscape effectively to visitors approaching from the new harbour precinct. The new stage will be placed on the North-Eastern edge which is currently used for storage. By having two stages, back-to-back, some stage services can be shared.

The areas of proposed intervention are predominantly on the “back” of the Artscape which is of lesser visual value. The size, scope and rough placement of the interventions are also

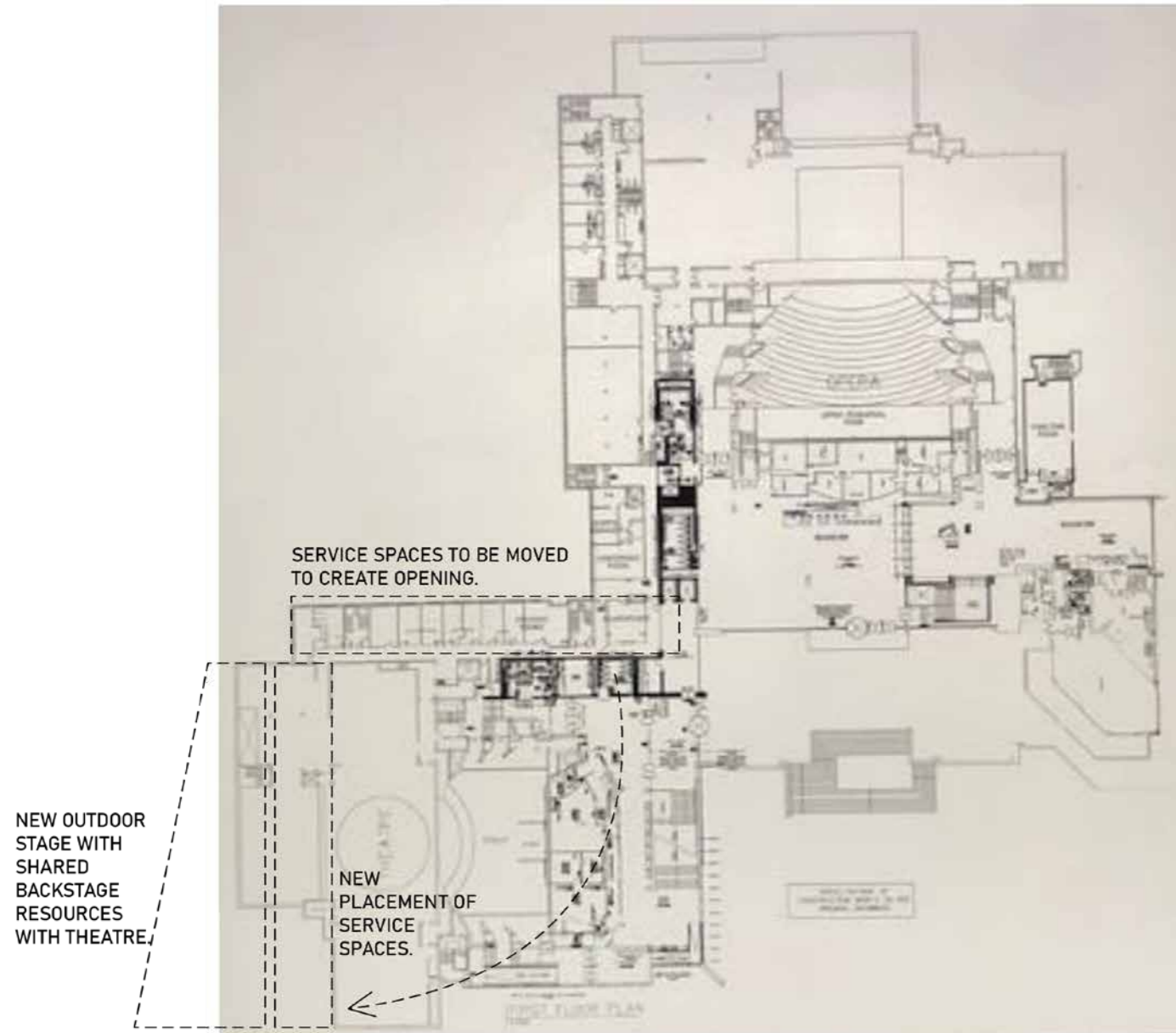


Figure 84: Proposed alterations to the Artscape over existing plan (author and KMH Architects, 2020.) Retrieved at: <https://sahris.sahra.org.za/>

in line with what was deemed as acceptable in the Heritage Impact Assessment discussed earlier. The creation of through-fare allows for continuation of the existing walkway from the Cape Town train station, through the Cape Town Civic Centre, into the Artscape, and then into the new proposed scheme and finally culminating at the harbour.

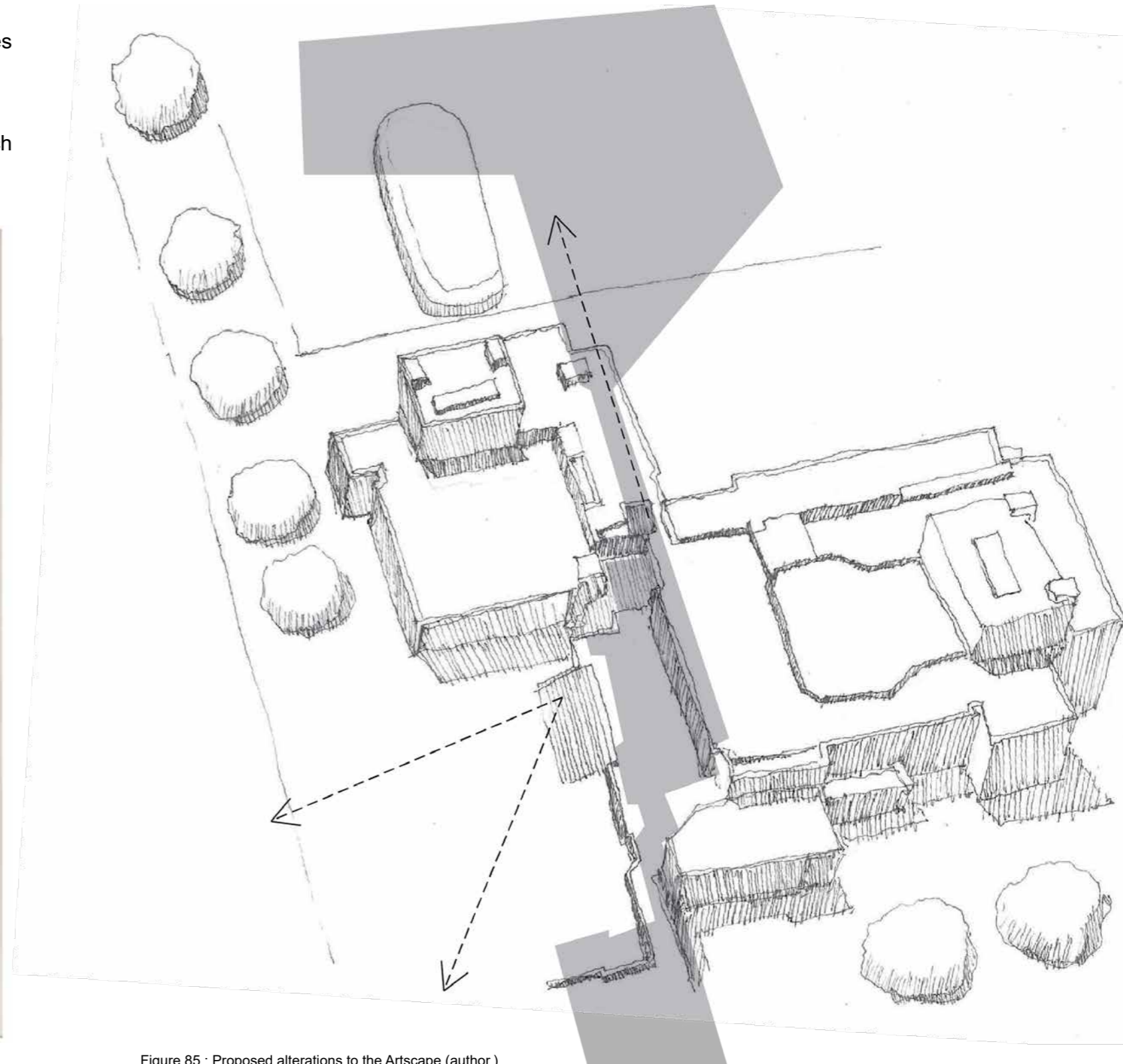


Figure 85 : Proposed alterations to the Artscape (author.)

Gestalt of the scheme embedded in the context.

Here a sense is generated of how the scheme will fit into the landscape.

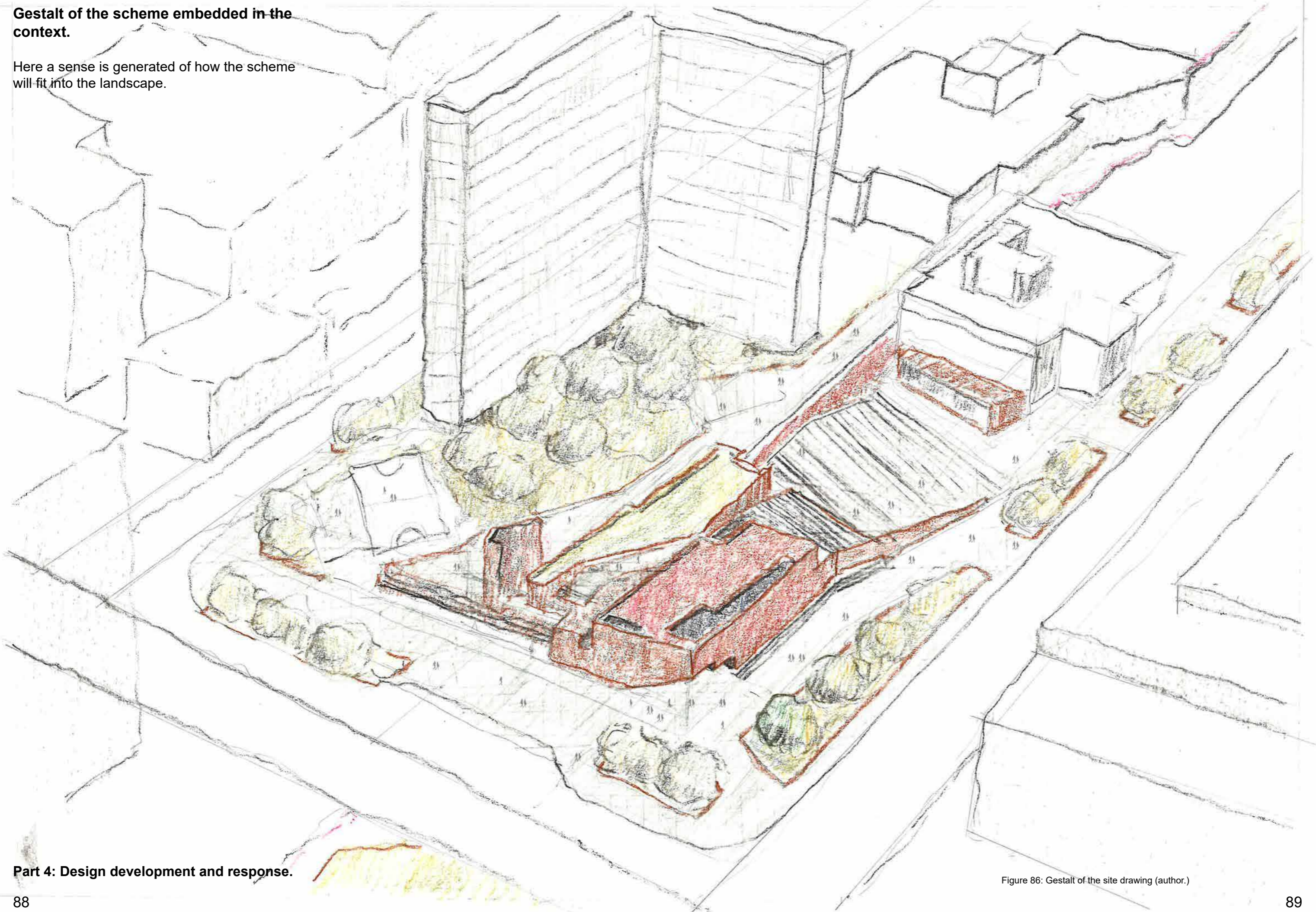


Figure 86: Gestalt of the site drawing (author.)

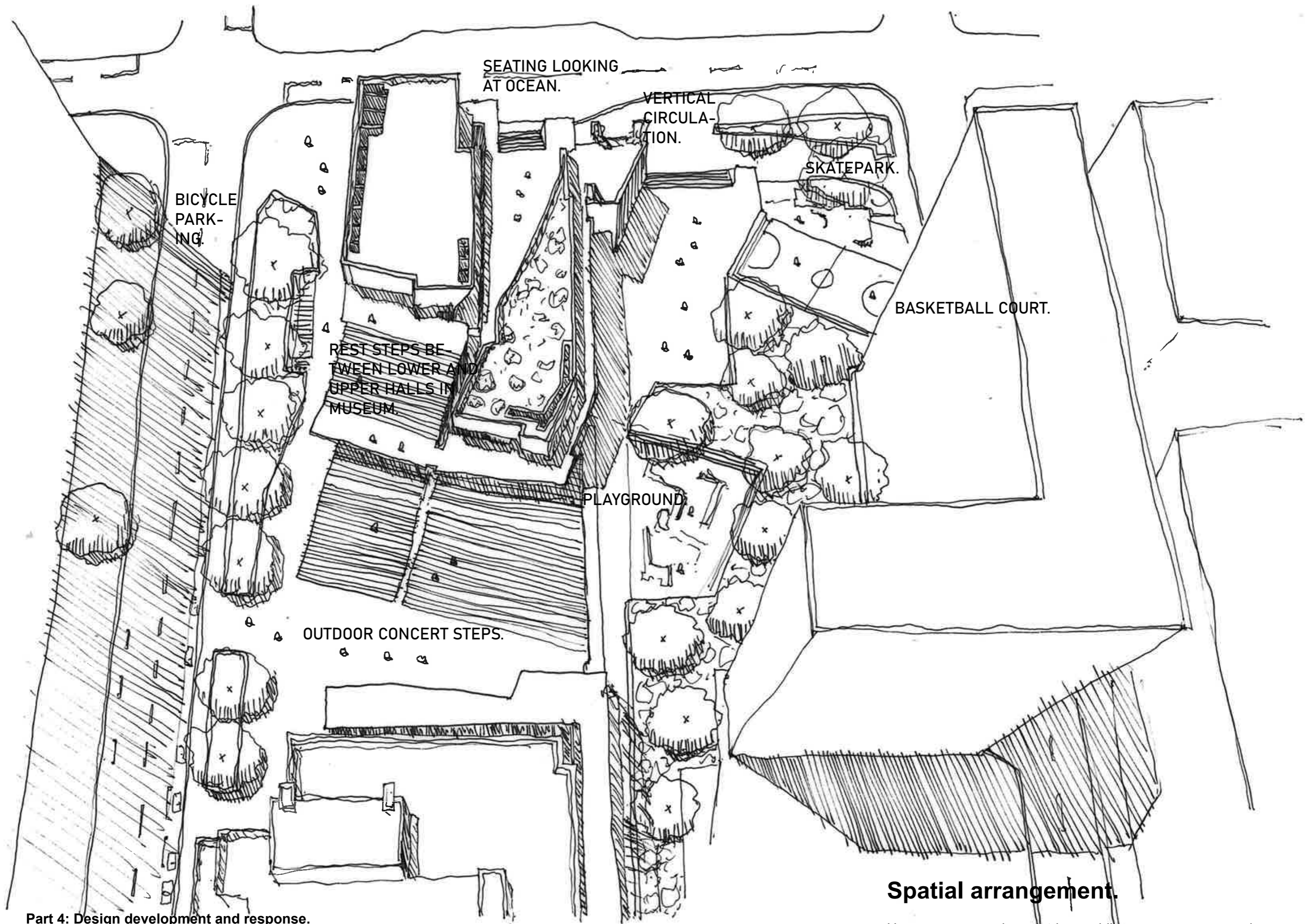
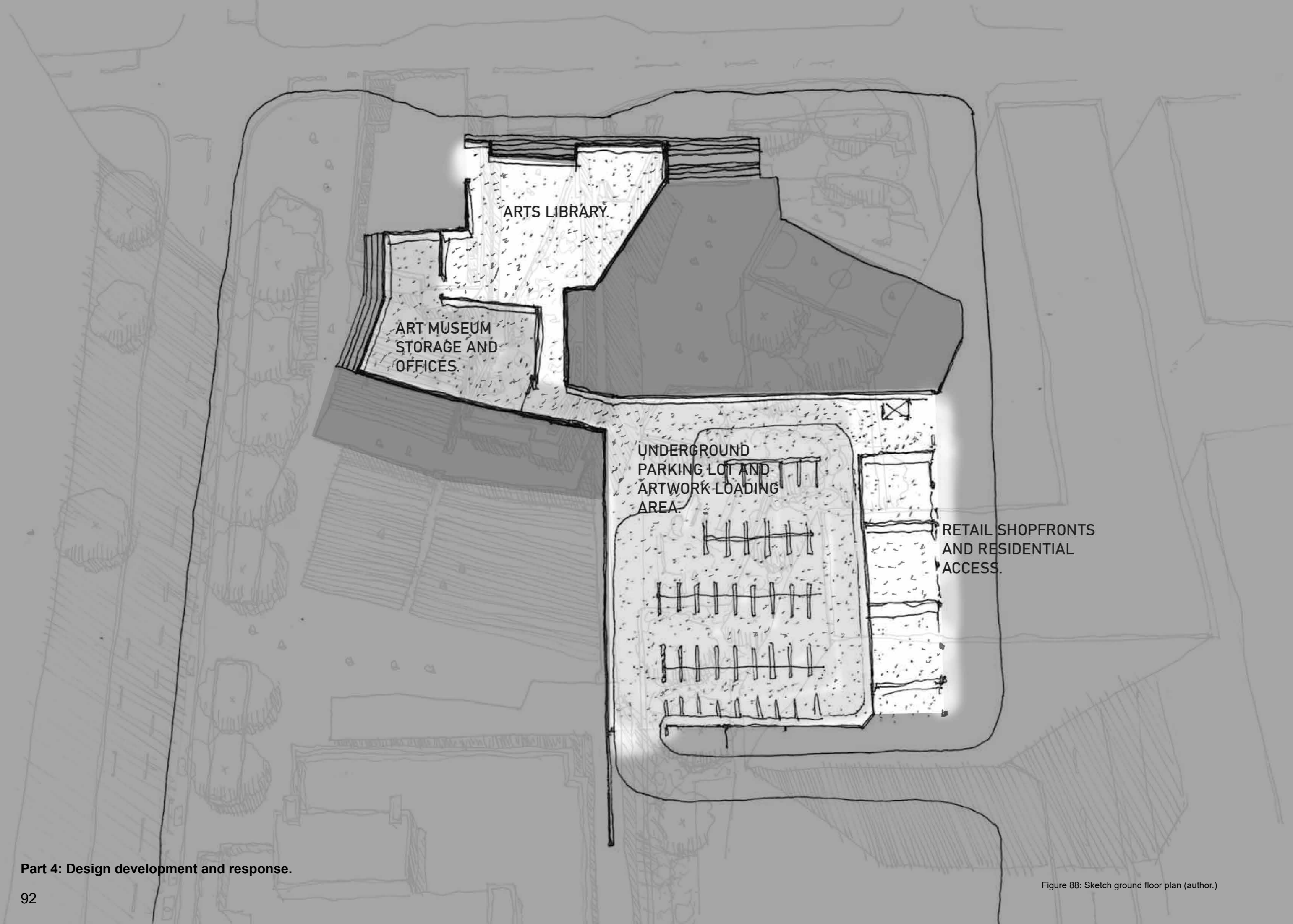


Figure 87: Sketch site plan (author.)

Spatial arrangement.

Here one can see how outdoor public spaces are arranged on the site.



ARTS LIBRARY.

ART MUSEUM
STORAGE AND
OFFICES.

UNDERGROUND
PARKING LOT AND
ARTWORK LOADING
AREA.

RETAIL SHOPFRONTS
AND RESIDENTIAL
ACCESS.

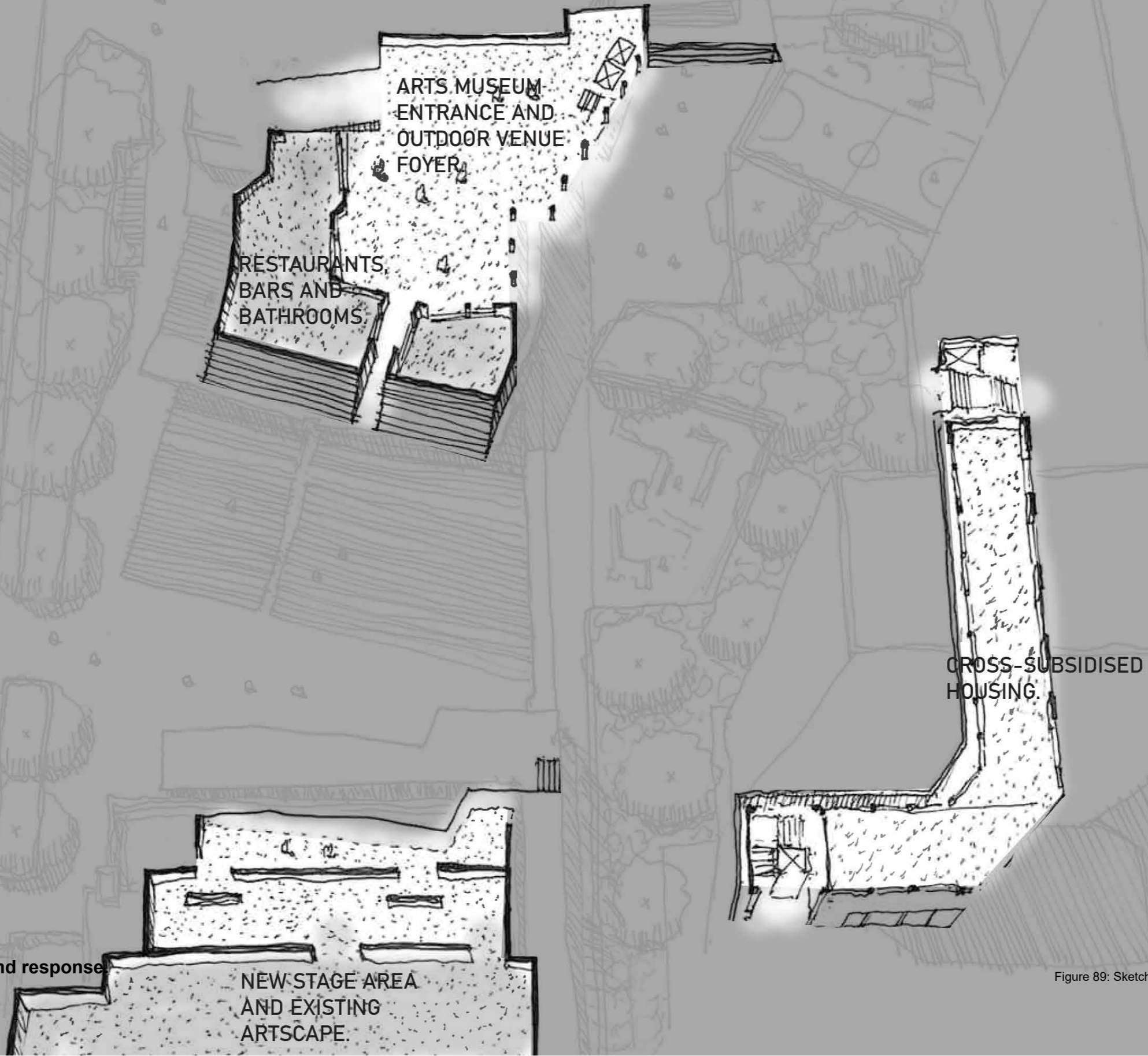
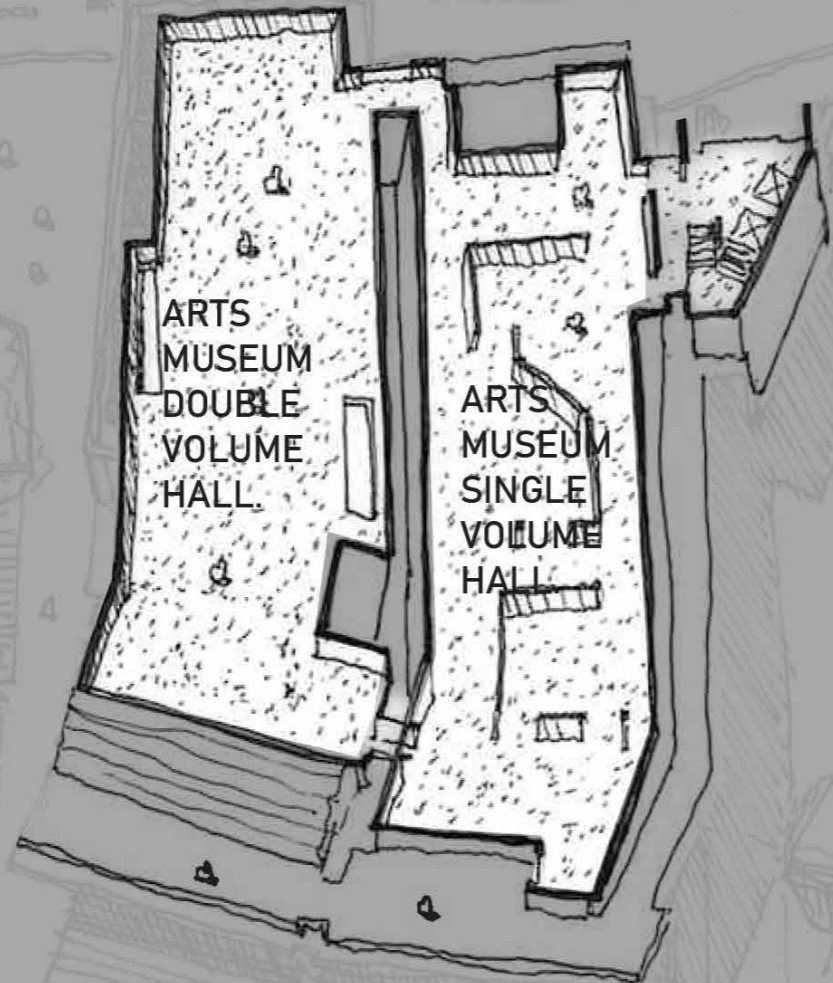
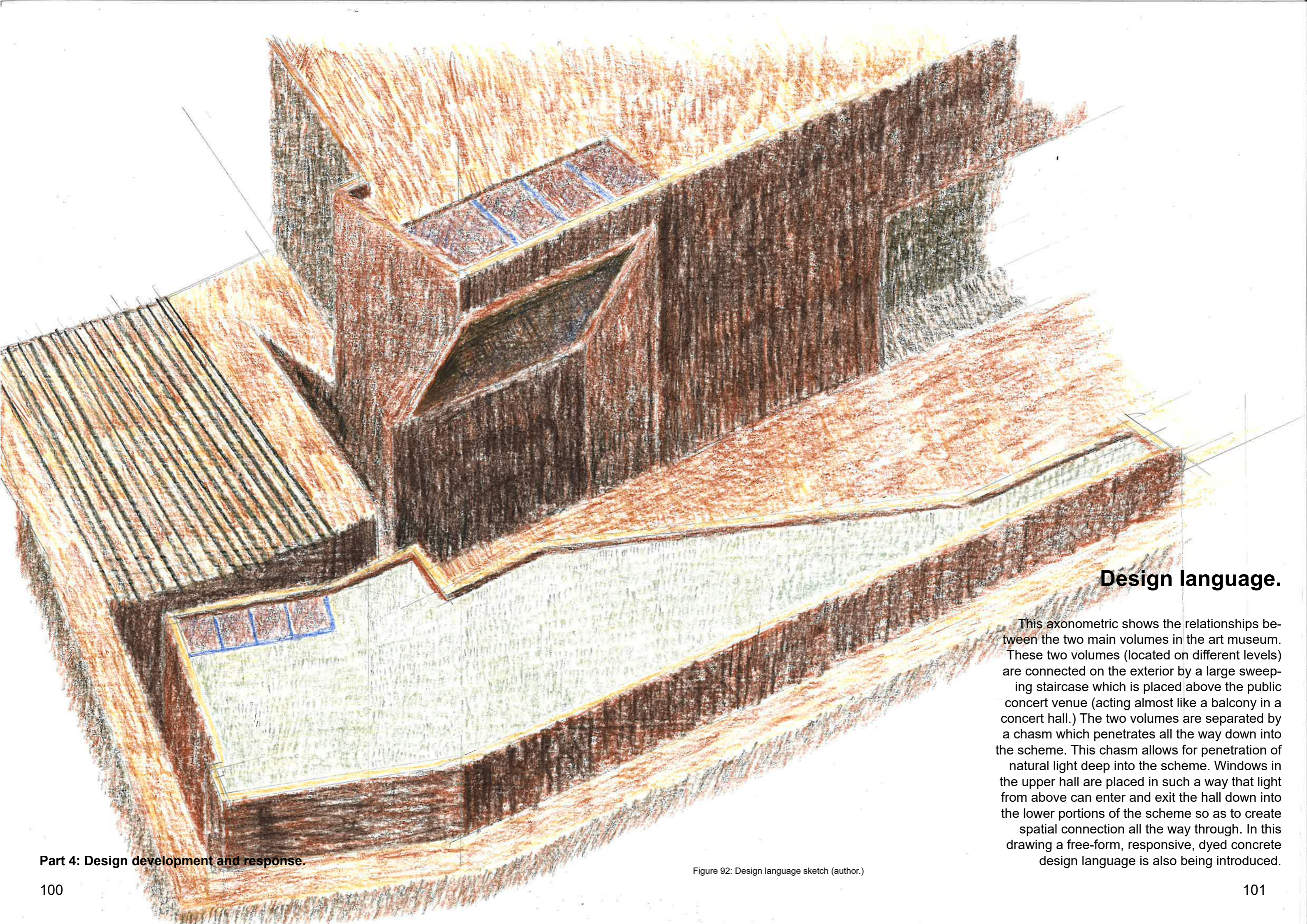


Figure 89: Sketch first floor plan (author.)







Design language.

This axonometric shows the relationships between the two main volumes in the art museum. These two volumes (located on different levels) are connected on the exterior by a large sweeping staircase which is placed above the public concert venue (acting almost like a balcony in a concert hall.) The two volumes are separated by a chasm which penetrates all the way down into the scheme. This chasm allows for penetration of natural light deep into the scheme. Windows in the upper hall are placed in such a way that light from above can enter and exit the hall down into the lower portions of the scheme so as to create spatial connection all the way through. In this drawing a free-form, responsive, dyed concrete design language is also being introduced.

Interior spatial qualities.

In these two drawings some of the central spatial ideas are tested. Through separating roof planes and wall planes from enclosing wall planes, openings are created to create a spatial and visual permeability between different programs.

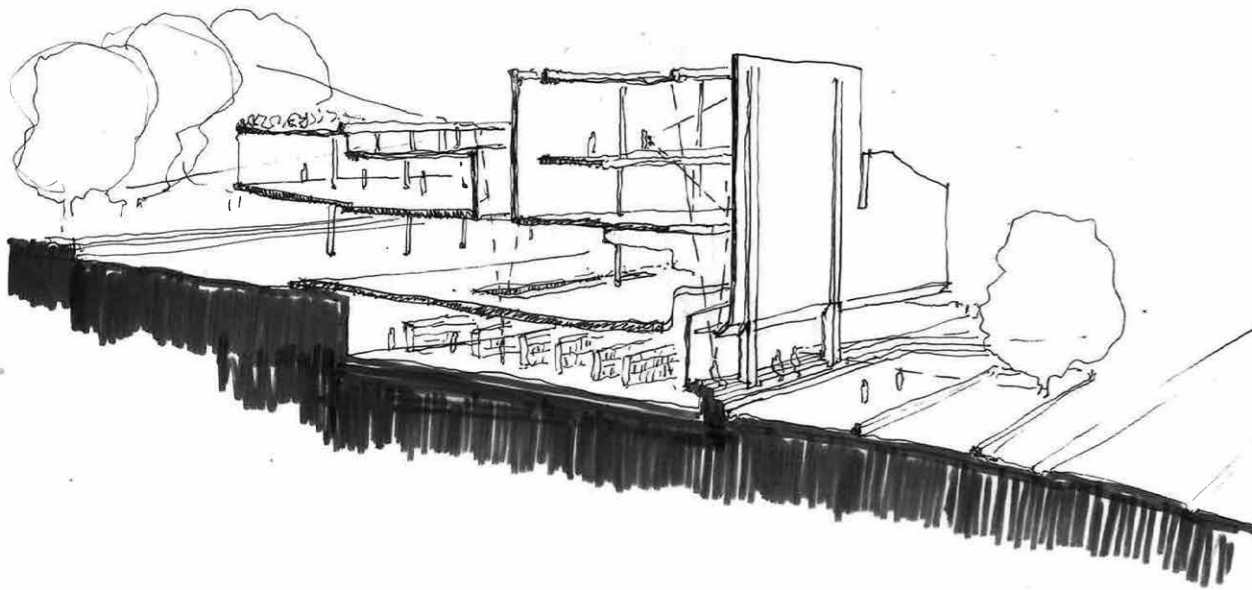


Figure 93: Sectional sketch (author.)

Part 4: Design development and response.

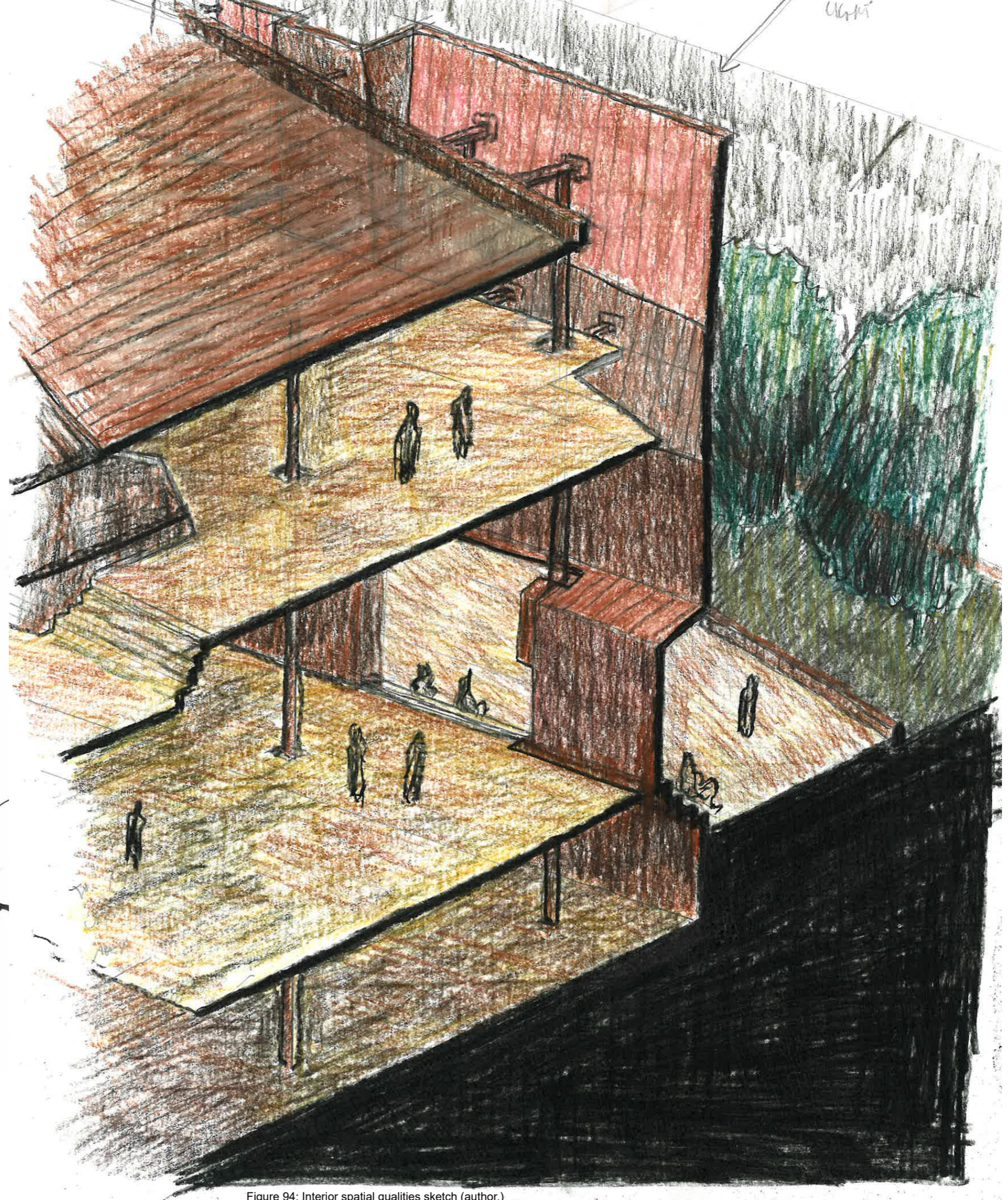


Figure 94: Interior spatial qualities sketch (author.)

Edge conditions.

The creation of a humane space is of utmost importance, thus a significant focus area in the design is edge conditioning. This includes both how users first engage with the design but also the thresholds and interstitial spaces between different programs are dealt with.

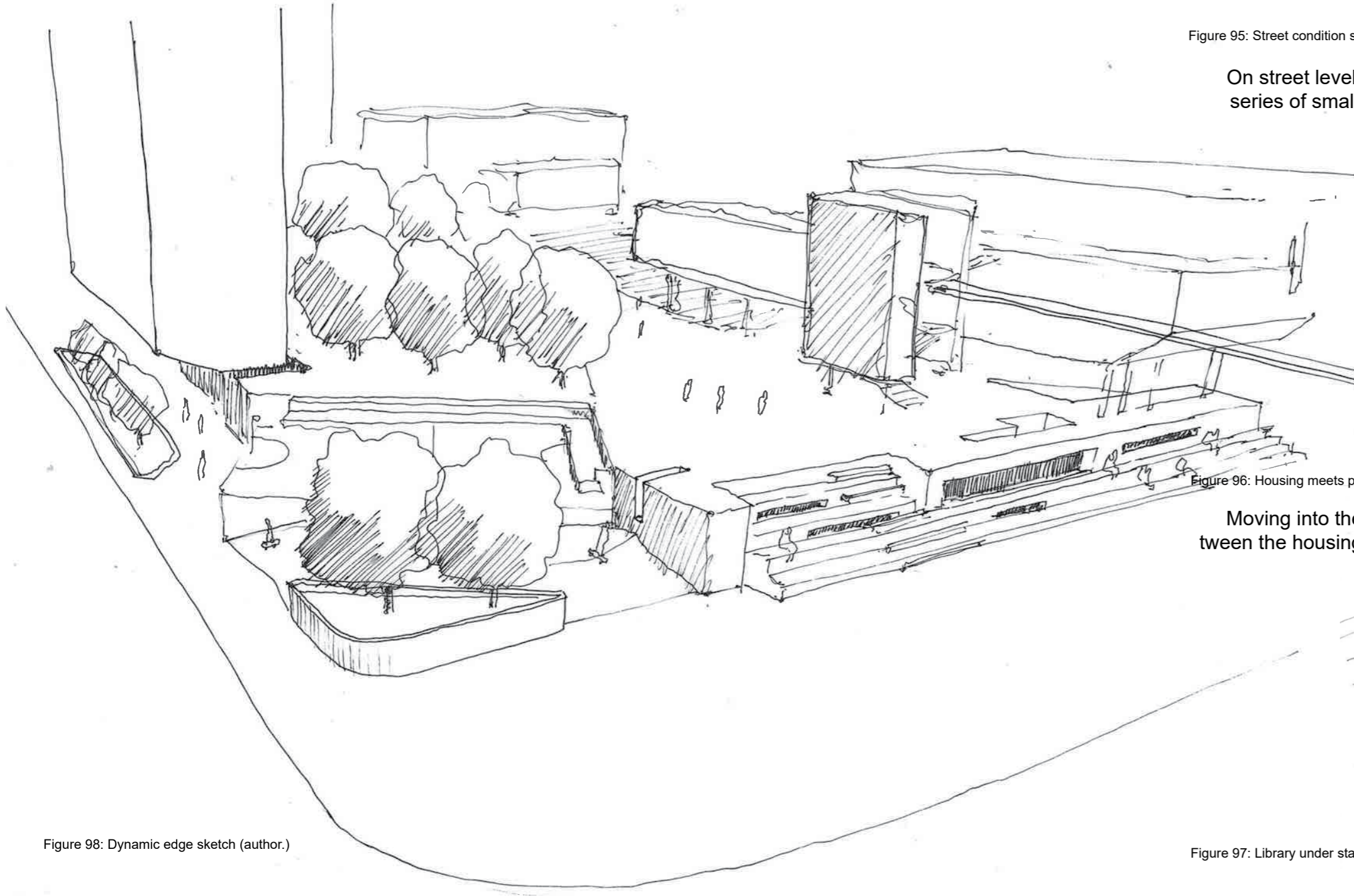
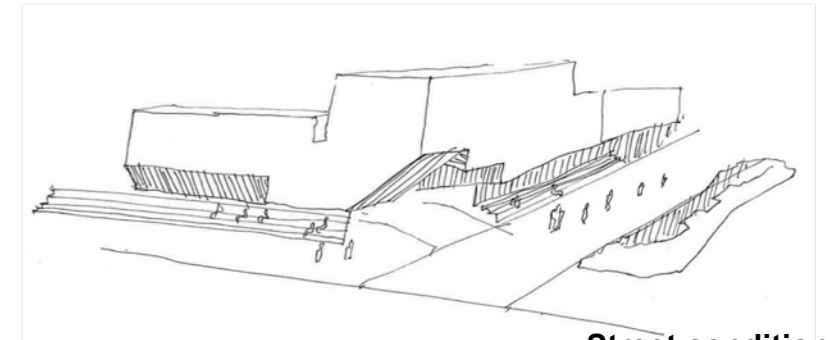


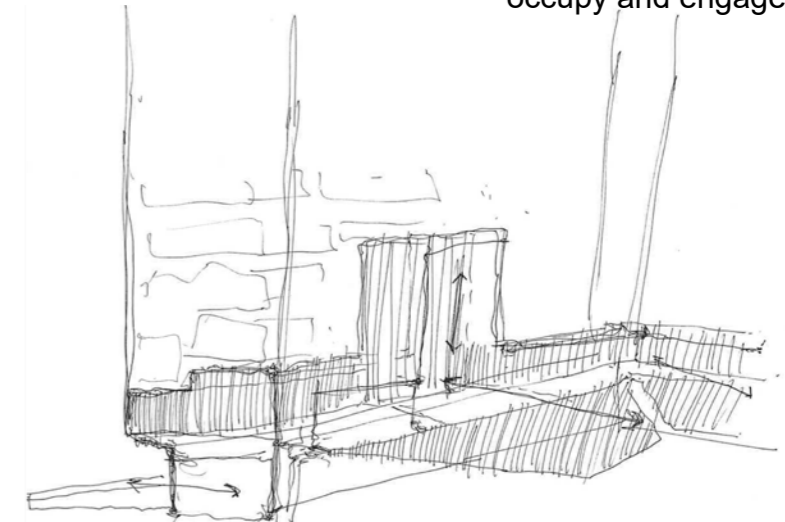
Figure 98: Dynamic edge sketch (author.)



Street condition.

Figure 95: Street condition scaling sketch (author.)

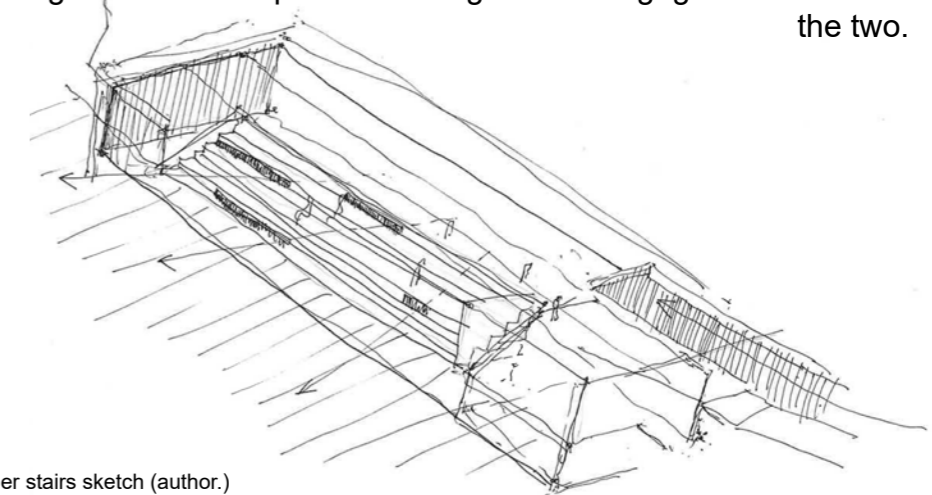
On street level, volumes have been “carved” out of the larger form to create a series of smaller, comfortable spaces for users and the everyday passerby to occupy and engage with.



Threshold between housing and park.

Figure 96: Housing meets park sketch (author.)

Moving into the final design, emphasis will be placed on the articulation between the housing block and the park so as to generate engagement between the two.



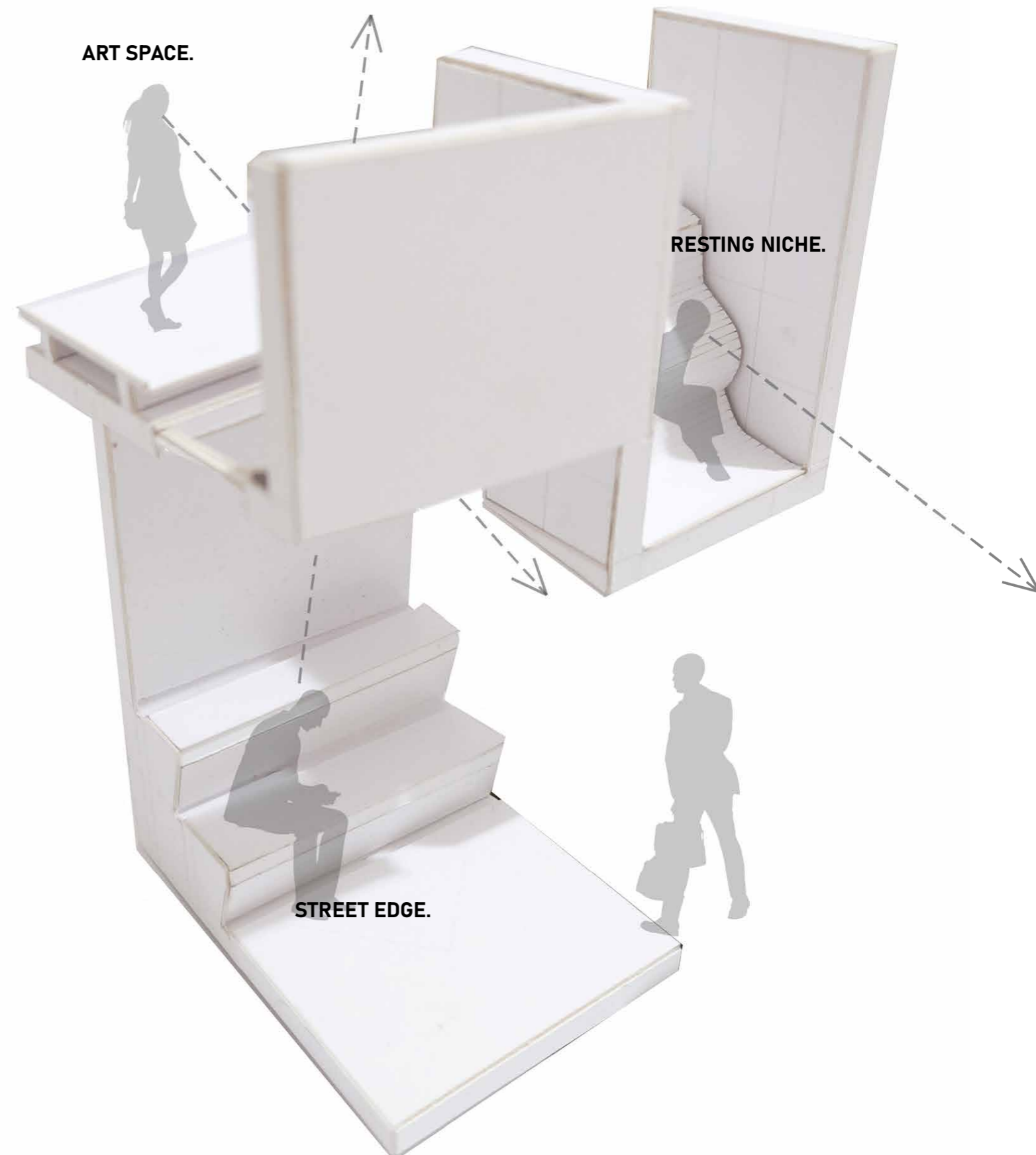
Arts library under stairs.

Figure 97: Library under stairs sketch (author.)

The arts library will be placed underneath access stairs on the Northern edge with openings in the risers of the treads allowing for penetration of light as well as sightlines into the library.

Theoretical technical detail.

This model explores the possibilities of generating programmatic integration whilst maintaining the technical spatial requirements needed for museum space. Walls in the exhibition space is offset from the floor and a skylight opening is made. Through doing this an overhang is created under which seating is placed on street level. This allows for a comfortable, scaled down urban edge with sight-lines directly into the cultural parts of the building. Seated niches punctuate the museum space allowing for breaks whilst navigating the museum. These niches are placed on a slightly lower level so as to gesture towards the street edge. The interior seating as well as the exterior edge seating aims to be simulacrum of each other so as to create visual continuity between indoor and outdoor activity.





Part 5: Final design.



Figure 100: Aerial perspective of proposed urban framework (author.)

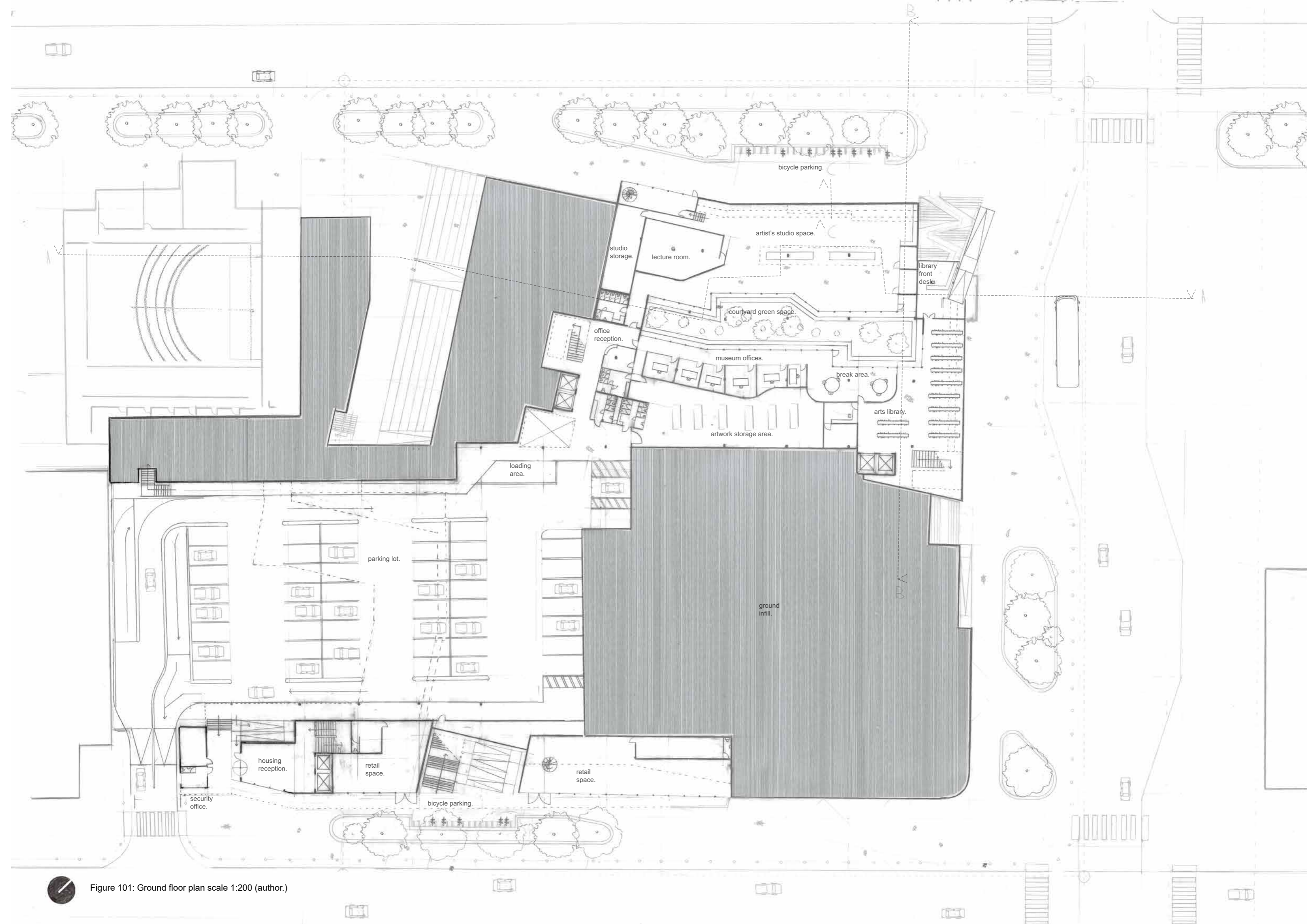


Figure 101: Ground floor plan scale 1:200 (author.)

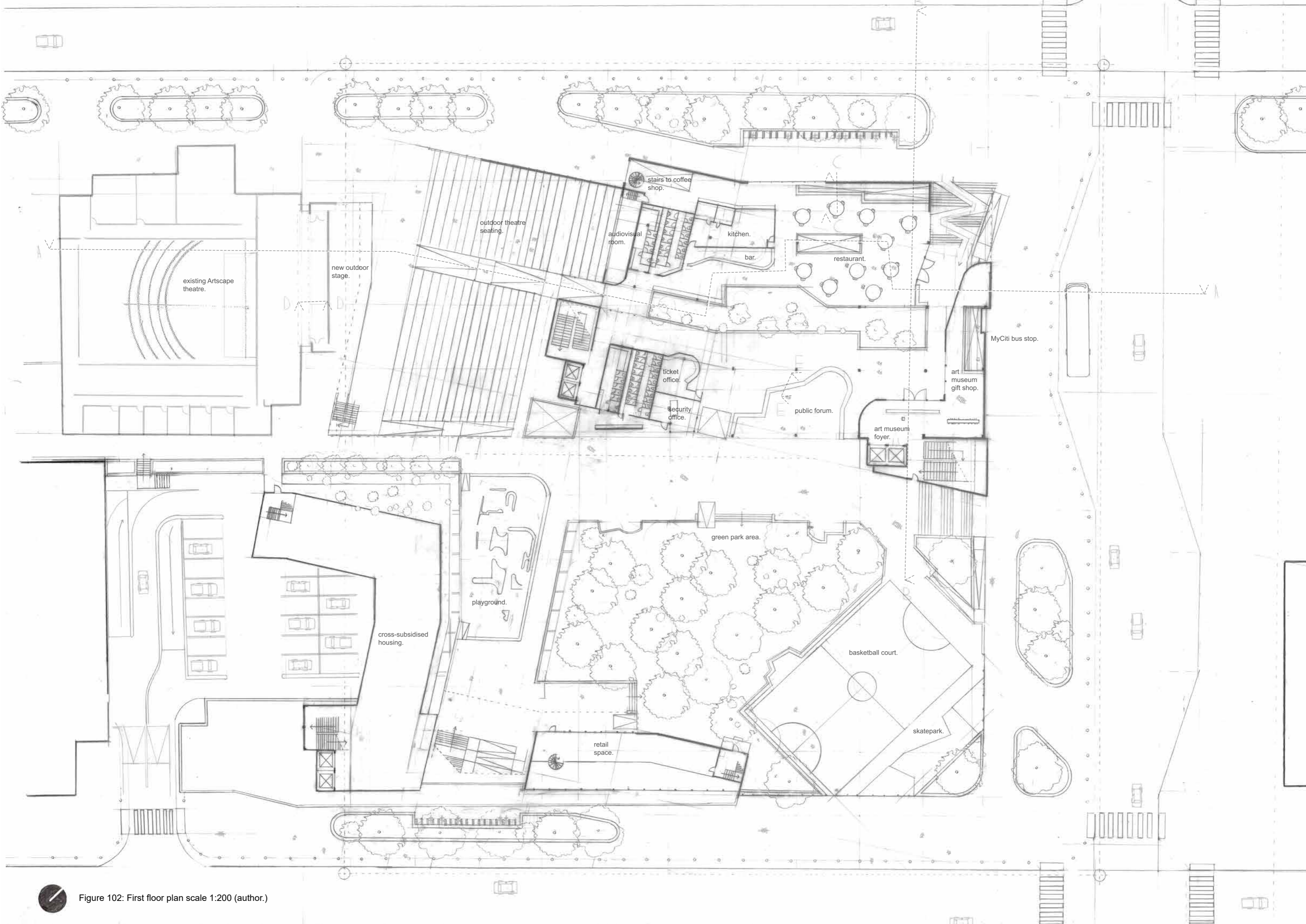
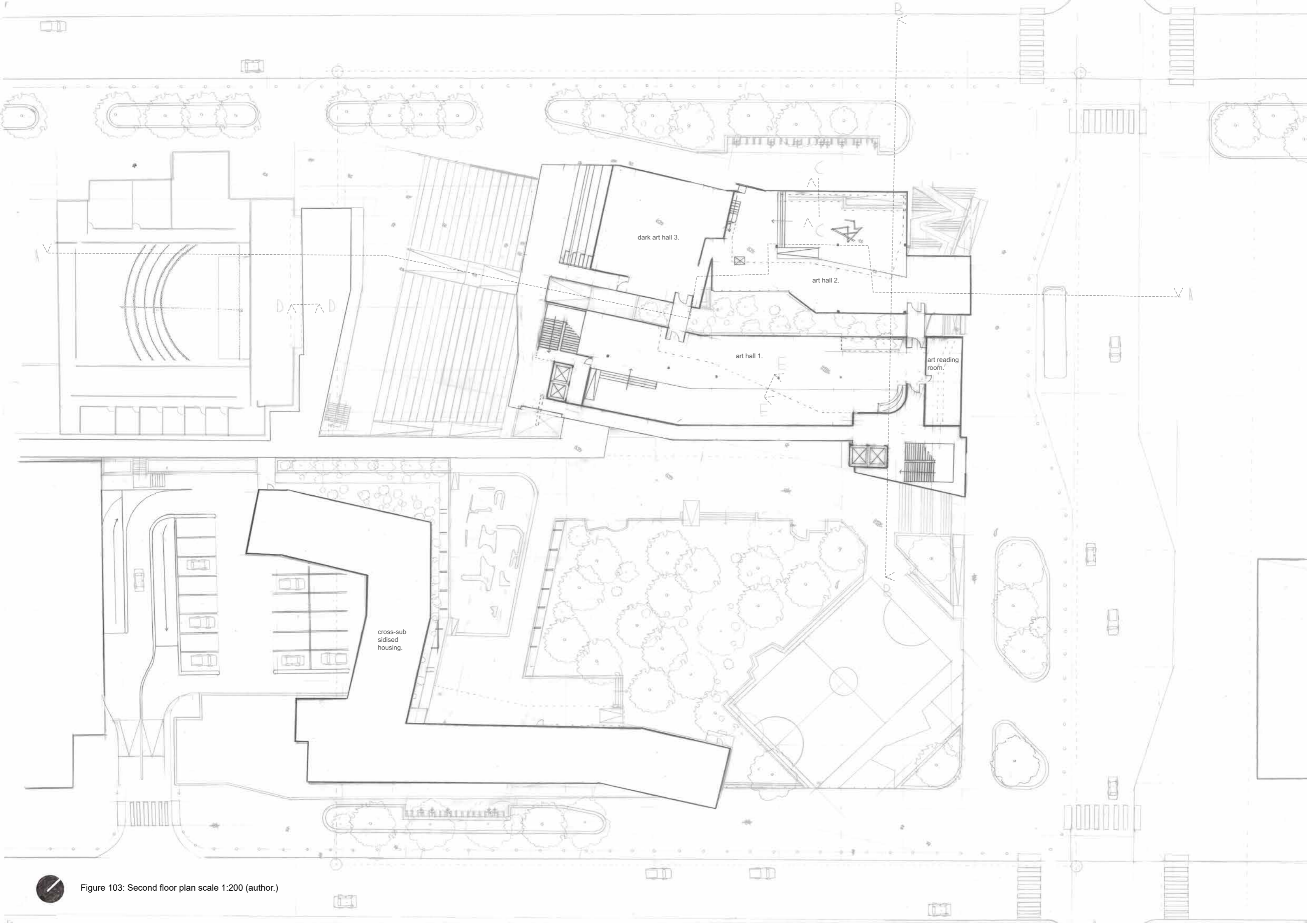


Figure 102: First floor plan scale 1:200 (author.)



dark art hall 3.

art hall 2.

art hall 1.

art reading room.

cross-sub sidised housing.



Figure 103: Second floor plan scale 1:200 (author.)



Figure 104: Third floor plan scale 1:200 (author.)

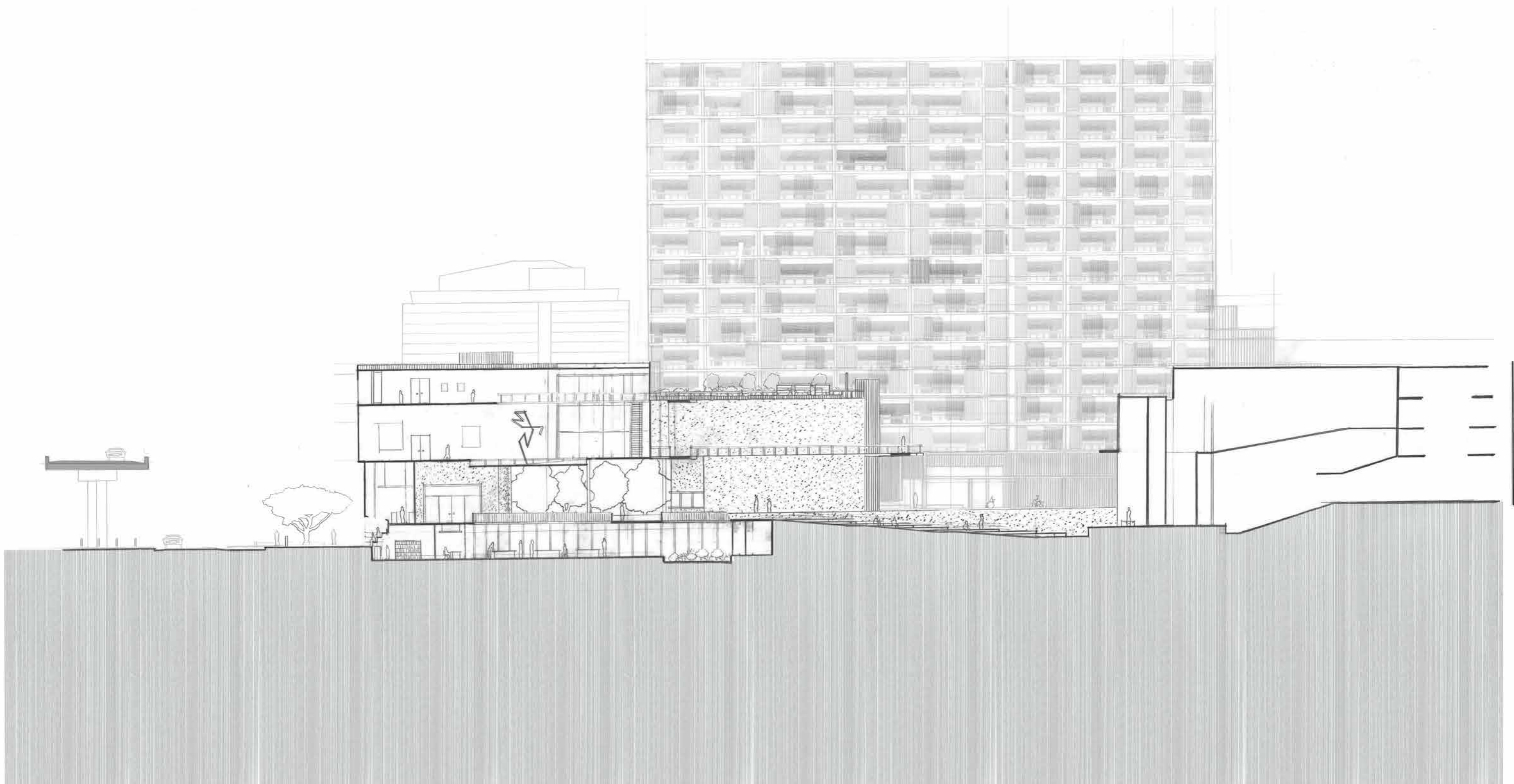


Figure 105: Section A-A scale 1:200 (author.)

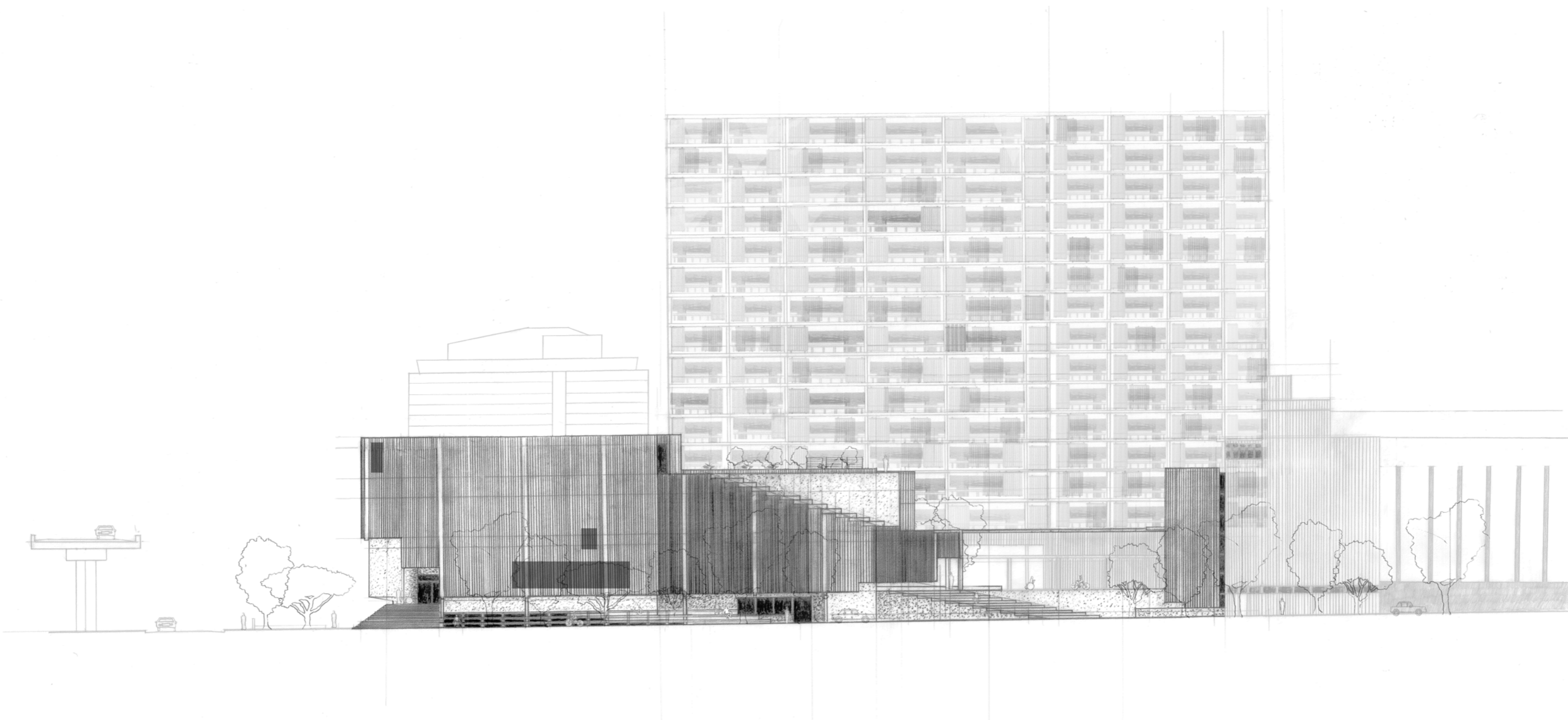


Figure 106: Elevation North-West scale 1:200 (author.)

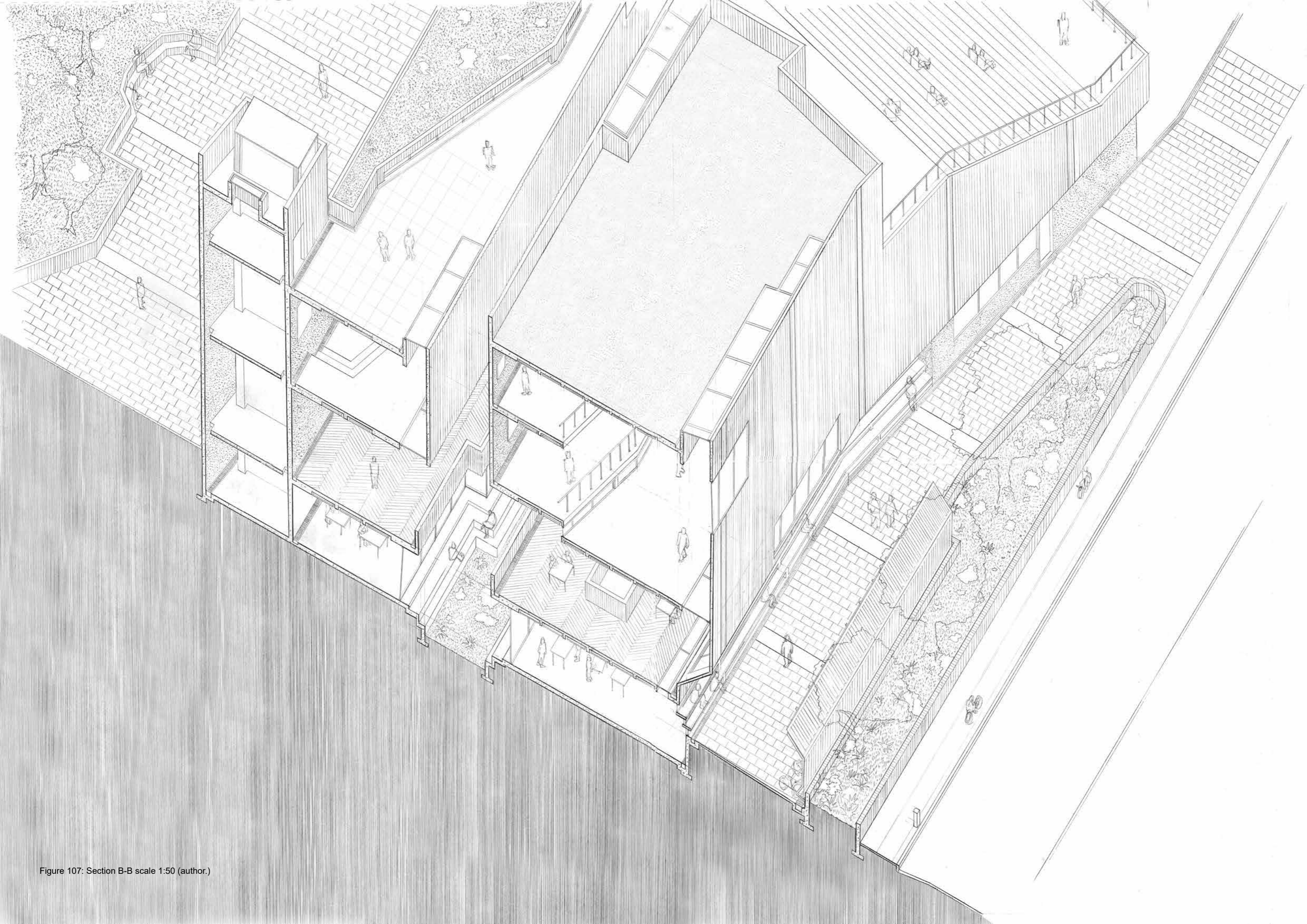
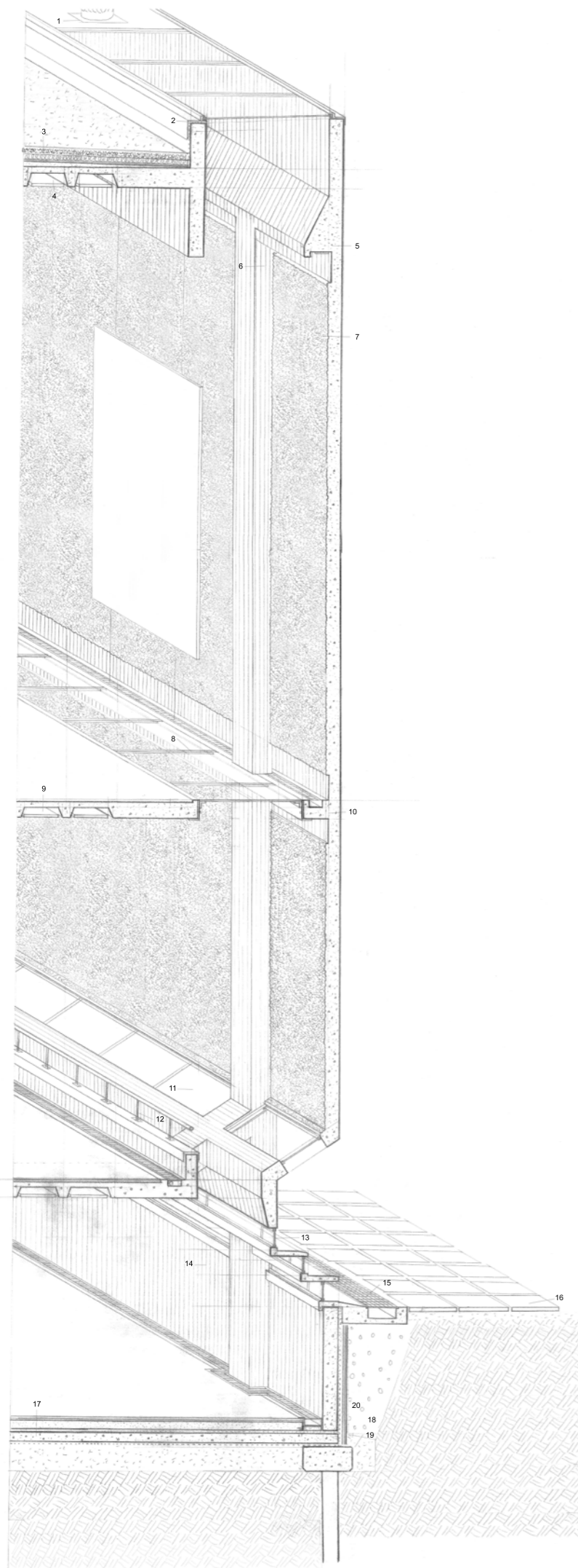


Figure 107: Section B-B scale 1:50 (author.)



1. 610mm galvanised steel ventilator extraction unit mounted on structural insulated aluminium roof panel.
2. Double glazed, laminated, low-E, safety glass in Aluminium frame. Aluminium sheeting, anodised 2.5mm. Torch on Bitumen sealing.
3. Gravel. Insulation 150mm. Self-adhesive waterproofing. Screed to fall. Red oxide dyed reinforced concrete 320mm slab with two way waffling @1500mm.
4. Suspended hardwood ceiling board conceals services found in waffle cavities.
5. Concrete extrusion concealing steel hanging rails for artworks.
6. Reinforced concrete structural column 500x500mm @ 8000mm grid interval with off-shutter finish.
7. Reinforced, red oxide dyed, concrete structural shear wall 200mm with mechanically tooled bush hammered interior finish and off shutter exterior finish

8. Laminated trafficable safety glass 25mm with non-slip surface finish on neoprene spacer in steel frame. Steel frame is welded and expansion bolted to steel angle iron bolt fixed to concrete slab.
9. Polished concrete floor finish on screed layer on waffled concrete floor slab 300mm.
10. Service channel cast in-situ covered by black powder coated grating.

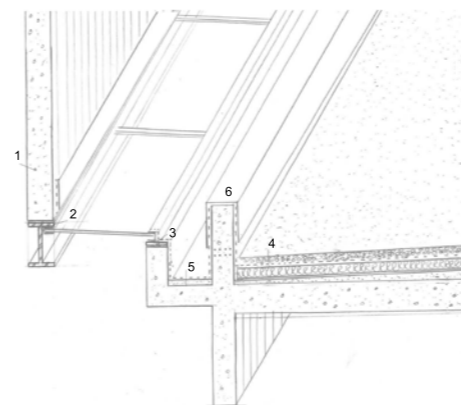
11. Double glazed, laminated glazing in steel frame.
12. Parapet with steel profile posts, black grey enamelled, 60/ 15mm, handrail, steel profile 60/ 10mm, steel bar diameter 16mm. Black enamelled steel base expansion bolt fixed on concrete upstand.

13. Laminated, low-e, double glazing in steel frame. Pre-cast concrete steps supported by in-situ concrete buttressing.
14. In-situ, off-shutter red dyed, reinforced concrete retaining wall 300mm.

15. Galvanised steel mentis grating. Pre-cast concrete stormwater channel with slope to fall.

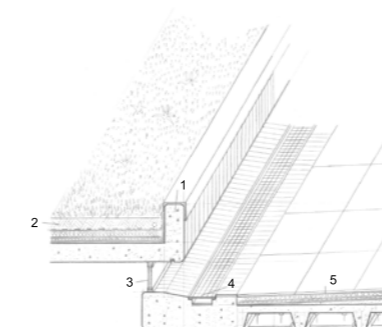
16. Large format, pre-cast concrete pavers on 50mm sand blinding made to emulate existing pavers outside Artscape Theatre.
17. Internal floor finish on concrete screed. Reinforced concrete floor slab 300mm.
18. Tanking. Concrete blinding.
19. Shingle to allow suitable drainage. Geopipe placed above foundation and again under floor slab.
20. Concrete foundation system.
21. Dorking sheet protective layer covering torch on waterproofing.

Figure 108: Section C-C scale 1:20 (author.)



1. Existing concrete wall system of Artscape Theatre.
2. 356 X 171 X 51mm I-beam lintel. Double glazed, low-E, laminated float glass in Aluminium frame system fixed to I-beam and separated with Neoprene strips. Flashing covering bottom of concrete and window frame system.
3. Counter flashing. Glazing Aluminium frame system. Screed level to fall. Concrete upstand.
4. Gravel. Self-adhesive waterproofing. Insulation XPS 100mm. Screed to fall. Reinforced, red oxide dyed, concrete roof slab
5. Screed to fall. Torch on bitumen. Counter flashing.
6. Aluminium capping 3mm. Concrete parapet with drainage holes.

Figure 109: Section D-D scale 1:20 (author.)



1. Aluminium parapet covering 3mm. Torch on Bitumen sealing on concrete upstand.
2. Green area on soil substrate on roof barrier. Self-adhesive waterproofing on insulation 150mm. Screed to fall. Reinforced, red oxide dyed, concrete roof slab 200mm.
3. Double glazed, low-E, laminated safety glass in Aluminium frame.
4. Mentis grating on water channel with bitumen sealing. cementitious waterproofing on exposed parts of slab lapped into the drainage channel bituminous waterproofing.
5. Large format, non-slip floor tiles. Insulation 150mm. Self-adhesive waterproofing. Screed to fall. Reinforced, red oxide dyed, concrete roof slab with two way waffling 350mm.

Figure 110: Section E-E scale 1:20 (author.)

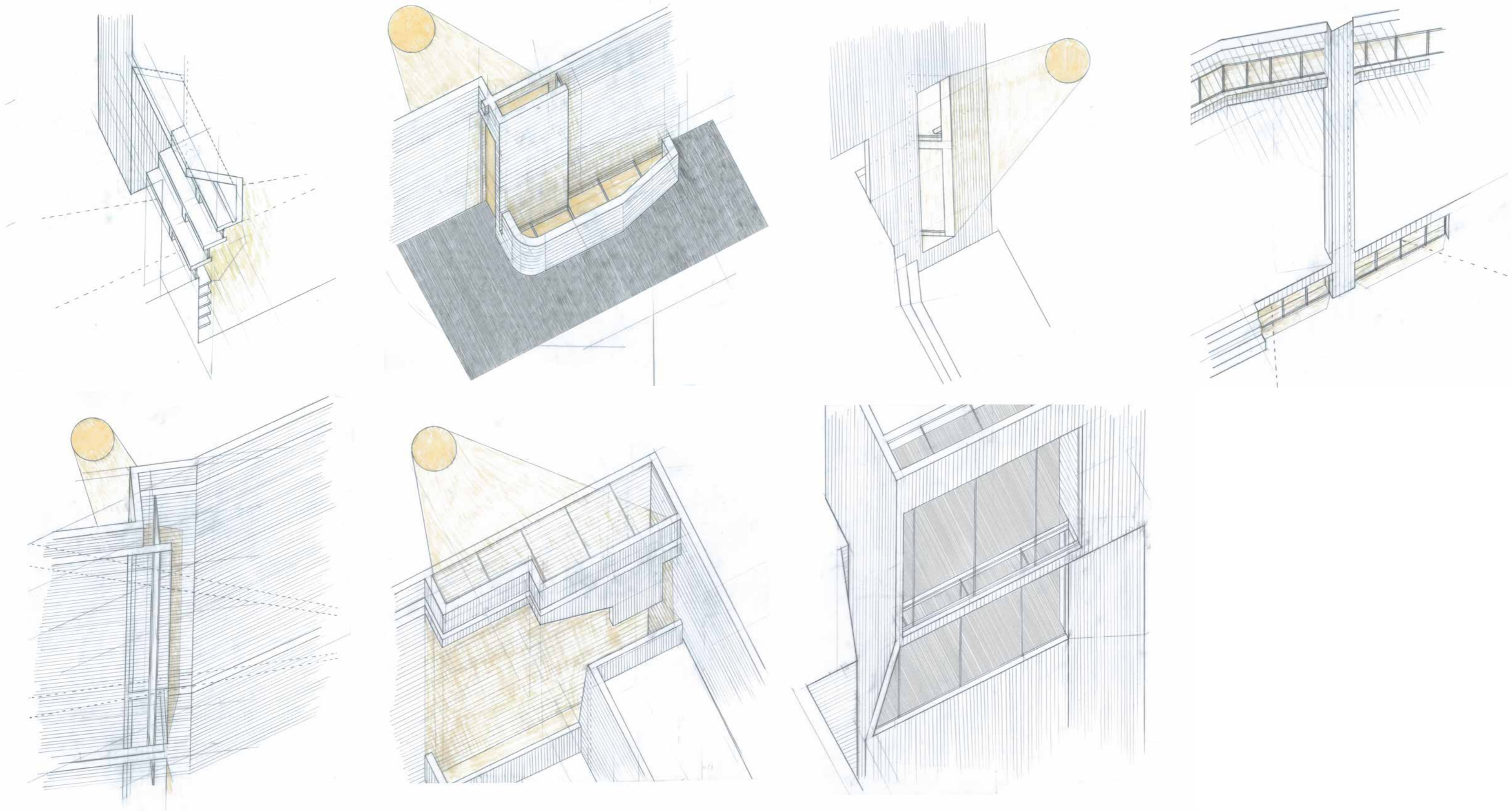


Figure 111: Apertures 1:20 (author.)



Figure 112: Aerial perspective towards the ocean (author.)

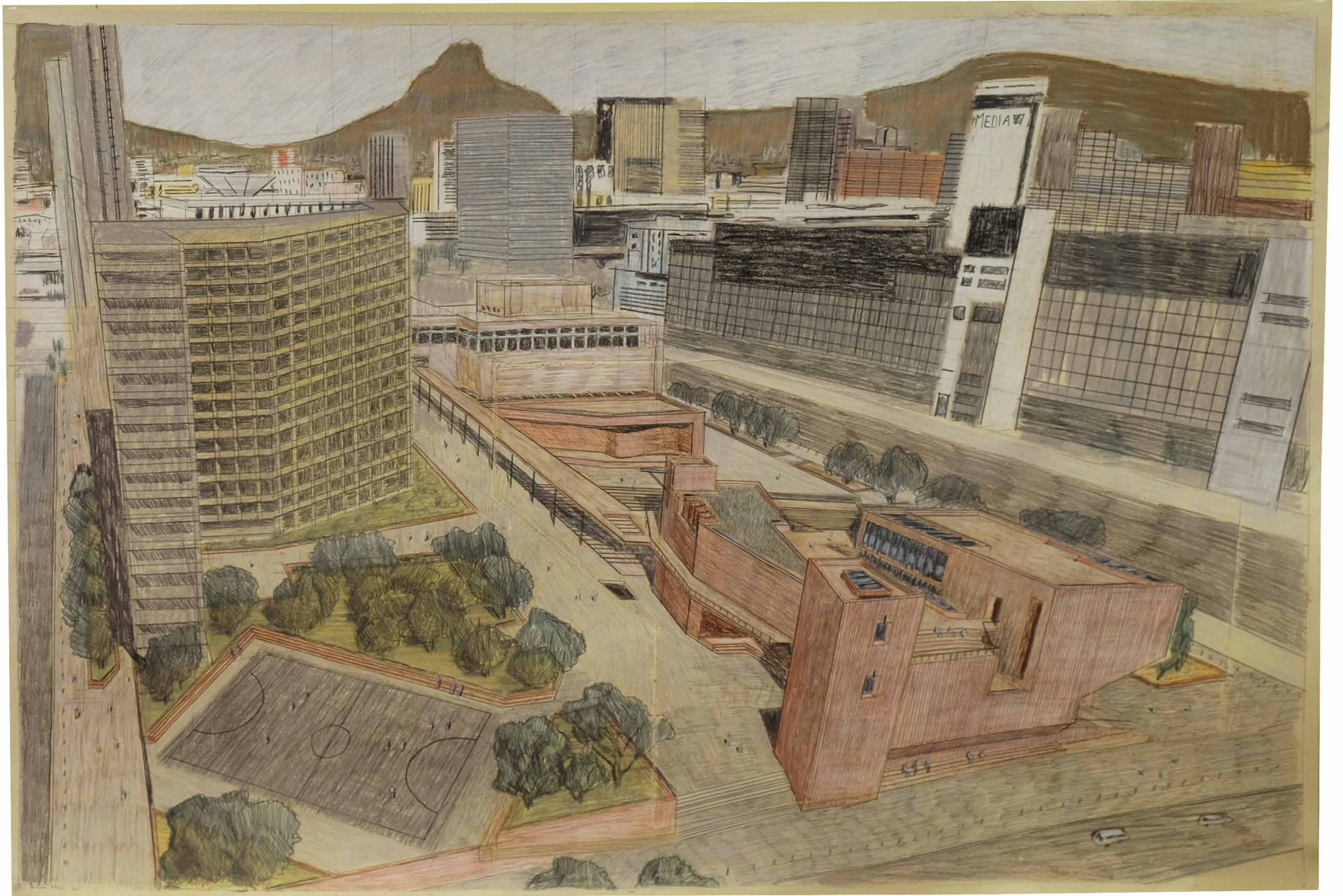


Figure 113: Aerial perspective towards the city and mountain (author.)

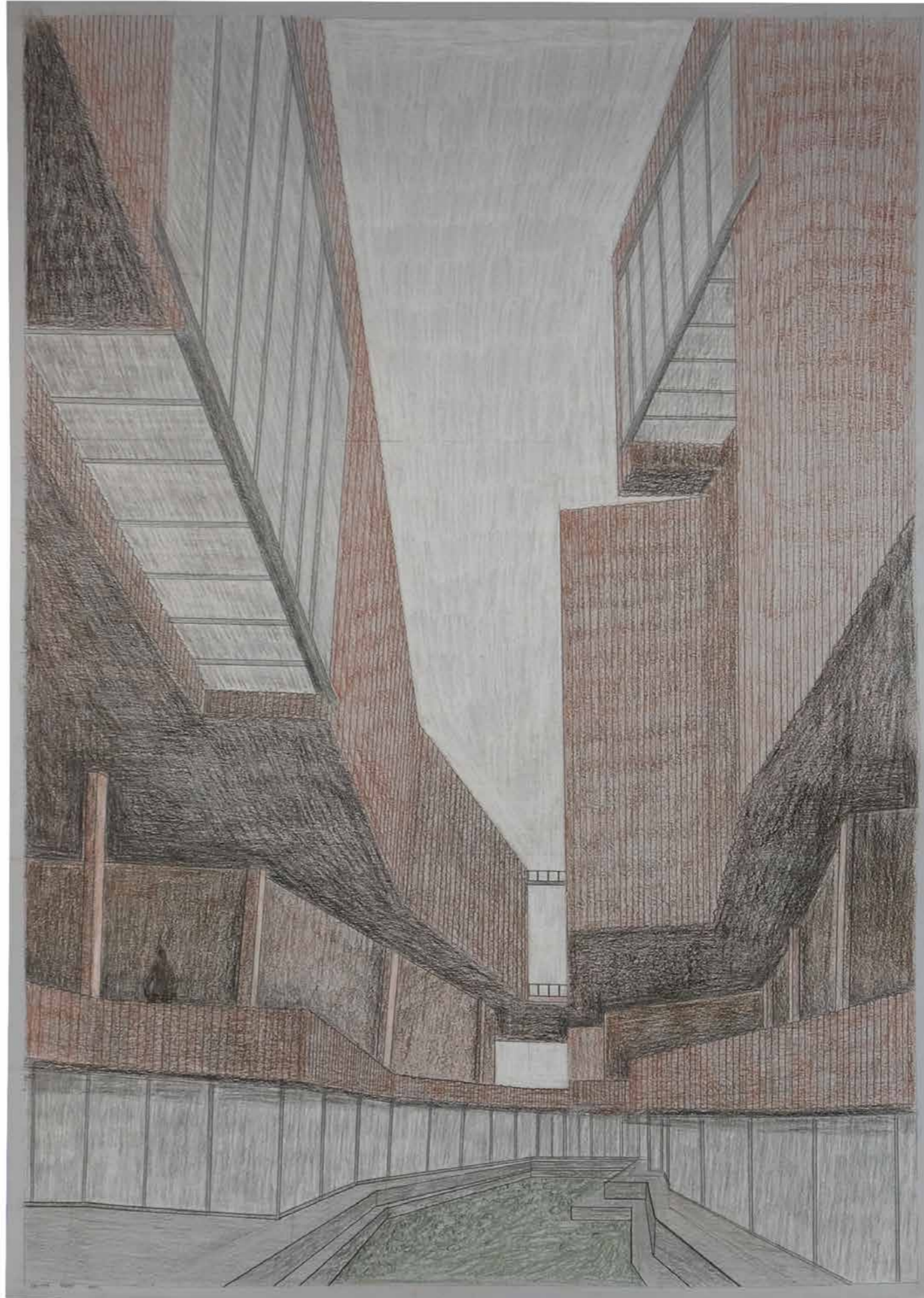


Figure 114: Interior perspective from inside courtyard (author.)

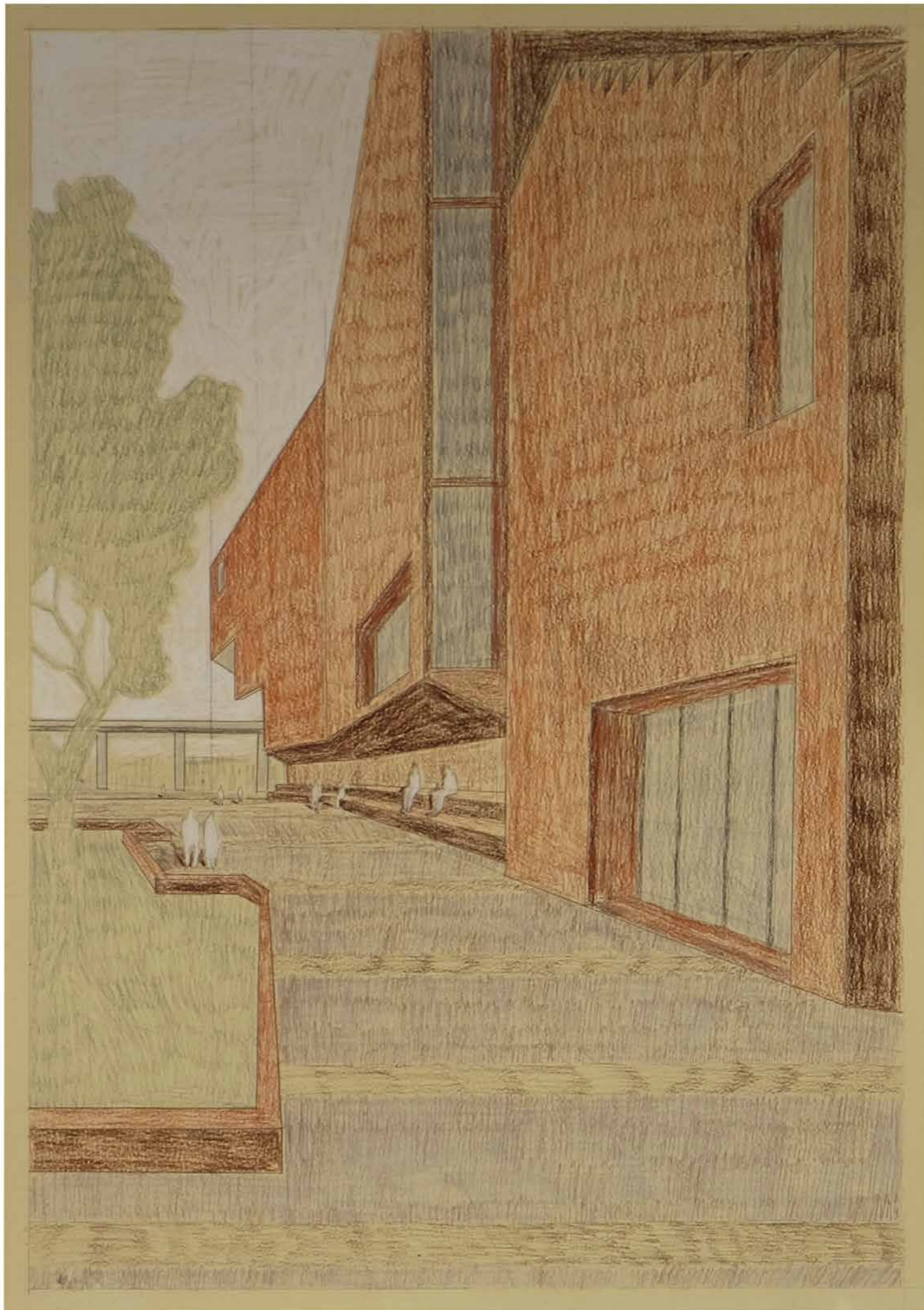


Figure 115: Outdoor perspective from street edge (author.)

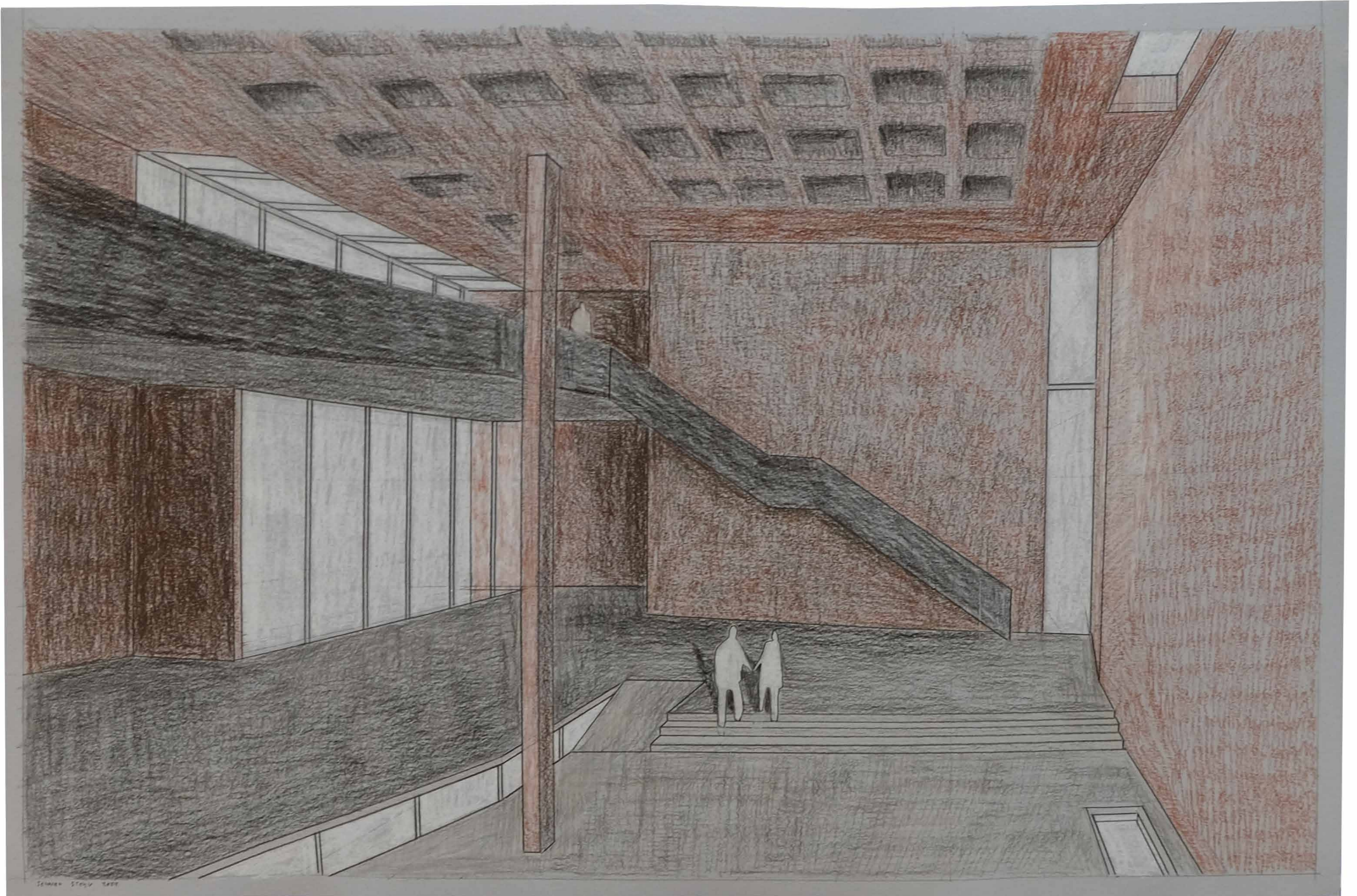


Figure 116: Indoor perspective from inside larger art hall (author.)



Figure 117: Final model (author.)

ART OF CULTURE
RESHORE, CAPE TOWN
RESHORE, CAPE TOWN
RESHORE, CAPE TOWN





Part 6: Reflections.

Reflections.

This then concludes the sketch design phase of the design. From here on the many threads that have been followed will be taken to their conclusion in the creation of a final, fully resolved design. The process of mapping the site, investigating the discourse around the site, researching the nature of cultural and civic space as well as the process of the slow, iterative generation of a design has revealed the degree of complexity involved in the creation of a fully functional scheme. An architectural scheme of sufficient complexity mediates between a myriad of competing demands whilst constantly weighing out the relative valences of a plethora of informants and spatial ideals. This positions the architect as the interlocutor, the agent listening to the babble of competing voices, past, present and future so as to create a mediated and measured response that channels the needs of the collective. The architect then, is the seismograph, marking the vibrations of his surrounds, reacting on them and creating their impression. Of course, the architect will never be a perfectly calibrated machine, nor should the architect ever be. The architect brings his or her own biases with to the table, but perhaps with sufficient humility and self-reflection the architect can ensure that when his or her own voice forms part of the response, the voice is spoken from a clear-eyed and well intended position.

The design of a heart of culture, a civic complex in the Foreshore has reaffirmed my belief in the value of architecture as a social agent which can alter the manner in which citizens engage with their urban surrounds. If meaning is found in existing in harmony with oneself, and if one supposes that the individuals psyche is duly influenced by external stimulus from his or her surrounds then a humane and functional built environment becomes an important component to meaning in life. This investigation has shown me the ability architecture has in providing vitality. Architecture does not exist in isolation, and in many ways architecture is reactive on economic, political

and social factors. A scheme can only be built if there is social and political will in accompaniment with sufficient economic resources. This limits the scope of the architect. The architects hand can only be revealed at the point when a plethora of other variables have fallen into place. But perhaps here then is the fulcrum:

The architect has a small slither of opportunity that is made possible when a great number of external factors fall into place. This means that when these opportunities arise, the architect needs to be cognizant of the importance of directing the degree of focus and attention that the problem deserves.

The architect is faced with the challenge of making sense of a huge degree of complexity and sorting through an inexhaustible list of competing informants. Fortunately, our profession is built on the shoulders of giants. Great architectural voices accompany us all the way.

The architect is faced with the challenge of being human and managing his or her own internal voice with its own egoistic demands. We are human, all too human, and of course this has its challenges, but this should also remind us of the fact that our profession is after all a human focused one. This cannot be negated.

With sufficient resolve, humility and vigor the architect is granted the privilege of creating spaces that may truly benefit a large number of people.

And that is a responsibility that cannot be taken lightly.

PRE-SCREENING QUESTIONNAIRE OUTCOME LETTER

STU-EBE-2022-PSQ000083

2022/09/15

Dear Selwyn Steyn,

Your Ethics pre-screening questionnaire (PSQ) has been evaluated by your departmental ethics representative. Based on the information supplied in your PSQ, it has been determined that you do not need to make a full ethics application for the research project in question.

You may proceed with your research project titled:

Heart of culture.

Please note that should aspect(s) of your current project change, you should submit a new PSQ in order to determine whether the changed aspects increase the ethical risks of your project. It may be the case that project changes could require a full ethics application and review process.

Regards,

Faculty Research Ethics Committee

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