

BETWEEN SKIN AND VINE

A viticulture college at the Old Tannery on the outskirts of Wellington

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Figure 1: Abandonment (Author, 2021)

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A VITICULTURE COLLEGE AT THE OLD TANNERY ON THE OUTSKIRTS OF WELLINGTON

This dissertation is submitted in partial fulfillment of the requirements for the Masters Degree in Architecture. All work contained in this document is my own except where otherwise acknowledged.

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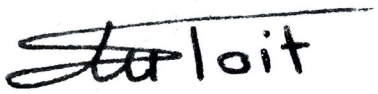
The work contained in this dissertation has not been previously submitted to meet the requirements for an award at this or any other institution of higher education. To the best of my knowledge, this dissertation contains no material previously published or written by another person except where due reference is made.

Signed Francois Stefan du Toit: 

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ABSTRACT

The aesthetic of disorder and sensuality of the wilderness has been lost to society for a long time; just one of the underlying effects caused by urbanisation and suburbia. Contemporary dwellers often feel the need to escape their artificial environment to recharge through a direct connection with their inner self and the divine that is only perceivable in nature.

The region of the Val du Charon is known not only for its rich viticulture heritage but also for its picturesque landscapes. Instead of continuing to practice viticulture as another way in which nature has been dominated, recent trends in winemaking aim to recast agricultural cultivation as a mediator between people and nature, thereby opening the way for new (and more nuanced) relationships between dwellers and nature.

Traditionally, viticulture depends on the domestication of nature, but the move toward 'ethical wine' and 'biodynamic viticulture' envisions a more reciprocal future. The proposed viticulture school aims to teach this new sensibility to the South African winemakers of the future; an 'academic reconnection' between cultivators and nature, serving as a catalyst for new kinds of caring relationships between the wine-drinking public, vineyards, and the natural landscape.

The Old Tannery, abandoned since November 1999 has started to show the potential to illustrate architecturally these new kinds of relationships. Firstly, the decaying structure has created opportunities for nature to regain its foothold in unexpected ways, consequently contributing to a new type of beauty. Through adaptive reuse and by focusing on scripting the relationships between the different buildings in the ensemble the goal is to, sustainably and appropriately, find new relational assemblages.

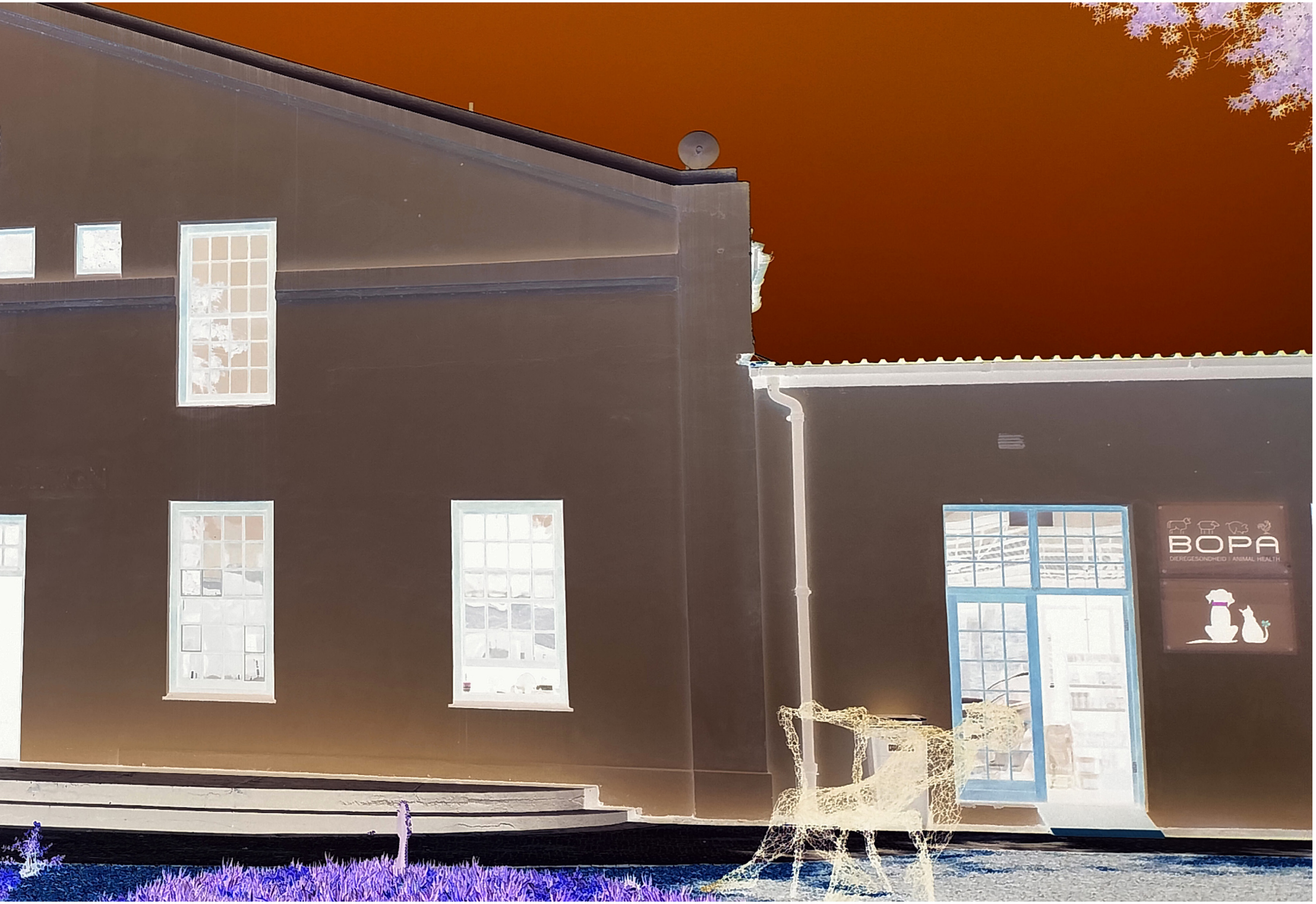
This thesis proposed the adaptive reuse of the existing framework of the Old Tannery as a viticulture college. The architectural approach will be influenced by three main considerations: first, the spatial organisation of the ensemble through the use of a promenade; second, the adaptation of the existing built 'skin' in line with the heritage prescriptions of the Burra Charter; third, the 'rewilding' of the site and the wine-making process. Ultimately, the goal is to architecturally interpret the principles ensconced in 'ethical wine' and 'biodynamic viticulture' in order to recast the old industrial complex, to question the way human cultivation used to imply the domestication of nature and to open the way for establishing new existential thresholds between dwellers and the vine.

Keywords: viticulture, sensitive, biodynamic, tableau, palimpsest, rewilding

PROLOGUE



Figure 2: The Main Building (Author, 2021)


BOPA
DIEREGESONDHEID | ANIMAL HEALTH

INTRODUCTION

Abandoned by society, the Old Tannery has become Wellington's example of a place where industrial architecture meets nature. Unfortunately, the effects of the Old Tannery's operations during the 1900s have left most of the nearby landscape infertile.

The crumbling industrial complex testifies to the futility of destructive and one-sided human-nature relationships. It is a metaphor for an old way of thinking; a way of thinking that is also being questioned in viticulture through the introduction of 'ethical wines' and 'biodynamic' approaches. In regenerating the site as a viticulture college, the project aims to draw on the new sensibilities of winemaking and align with broader calls for the rewilding of our relationship with nature. Architectural rewilding does not call for ruination, nor does it seek to undermine the functionality of buildings, but rather a sense of placemaking that abstracts the line between dwellers and nature. This critical making of place will be explored through a speculative and tectonic interpretation of dweller movement and a sensitive recasting of the carapaces of the old industrial heritage.

The goal is the architectural synchronisation of rhythms of past and present to create moments of appropriation within the existing framework of the Old Tannery; moments that could serve as a catalyst for new forms of mortal cultivation, and a new kind of 'wild' relationship between people and their natural surroundings. The new viticulture college needs to be a place that recasts agricultural cultivation as a mediator for more a codependent relationship between people and nature.



Figure 3: Industrial interiors (Author, 2022)



CLIENT AND BRIEF

Cape Peninsula University of Technology (CPUT)

The Cape Peninsula University of Technology(CPUT) was established in 2005 when the Cape Technikon and Peninsula Technikon merged to accommodate the rapid transformation of South African higher education. CPUT is currently the largest university in the Western Cape with approximately 30000 students over several campuses. One of these campuses is the Boland Education College which has its roots in the Cape Technical College that was established in 1920 (Mazwi-Tanga, 2019: online). This campus however does not only accommodate courses in education, as it has many technical courses with the most prominent one being viticultural studies. Though this course has been praised for delivering prominent winemakers, it lacks sufficient facilities for practical applications of viticulture. Consequently, this means that the CPUT campus in Wellington will be the ideal client for the adaptive reuse of the Old Tannery, also due to its close proximity to the site. The design of this establishment does however not start after choosing a client with research having to be done into theoretical discourse in order to correctly reconfigure the site of the Old Tannery.

Cape Peninsula University of Technology

Figure 4: CPUT logo (CPUT 2022: online)



Figure 5: The original Huguenot College building (Seabutla, 2015: online)


HUGENOTE
KOLLEGE
A D
1907

PROBLEM STATEMENT

The adaptive reuse of historical buildings during recent years has proven through its sophistication that it lacks an appropriate, sensitive, and ethical touch to the original activities of the building. These 'reconfigurations' of existing frameworks merely lack a holistic approach to working with what the building has to offer. Consequently, this should be the priority of all architects in order to preserve the significance of any historical ensemble.

Traditional winemaking has a similar issue that has risen during the past few decades. Through its mechanisation, during the twentieth century, a degradation of the sensitive relationship between farmers and grapevine started to appear. The solution to this lack of an ecological harmony has been proposed by biodynamic viticulture. Bio-dynamic viticulture is a response to the ecological degradation caused by global warming. It is a sustainable alternative to traditional winemaking based on the approach initially developed by the Austrian architect and occultist Rudolf Steiner (1861-1925). Steiner proposed that a farm should be understood as a single organism(Denig, 2017: online). Each component, from the vine to the vineyard, should function as a dynamic part of the whole. Thereby each portion will contribute to the next, with the whole essentially becoming self-sustaining.

The following chapter will investigate the principles provided by this new form of viticulture and how it can inspire a new way of adaptively and sensitively reusing historical buildings.



Figure 6: Photograph taken at a recent wedding function held at the Old Tannery (Author: 2022)



THEORETICAL STANCE

How can the principles of bio-dynamic viticulture inspire a sensitive architectural approach towards the adaptive reuse of the Old Tannery in Wellington into a fertile assemblage for contemporary winemaking that can foster new existential thresholds between dweller and vine?

This became a question to ponder while adaptively reusing the site for this thesis through inspiration from biodynamic viticulture. How will this reinterpretation of biodynamic viticulture influence architecture? In all honesty, viticulture and architecture are two completely different areas of study, but it is possible to identify principles of biodynamic viticulture that can be applied to develop a new approach to adaptive reuse projects. The most important principle is the fact that biodynamic viticulture interprets a single grapevine as being part of a greater whole; a holistic approach that should be implemented when adaptively reusing a historical ensemble. Furthermore, biodynamic viticulture aims to preserve natural resources by reducing all external inputs and replacing them with natural alternatives. This should be true for all adaptive reuse projects where an architect should work with what the site has to offer through a contextualistic approach to architecture

It is also important to look at this reinterpretation of biodynamic viticulture into architecture in a metaphorical sense. Firstly, the architect is the farmer who aims to restore ecological harmony not only between themself and the soil(the historical ensemble) but also to fertilise it through incremental improvements(a detail-orientated design). This however might seem like a vague deduction of how biodynamic viticulture could foster a new approach to adaptive reuse projects, but this notion will be elaborated on in later chapters within this thesis through the help of other theoretical tools.



Figure 7: Multifunctional Space (Booysen, 2021: online)



2

SITE ANALYSIS



Figure 8: A mountainous context (du Plessis, 2020: adapted by author)

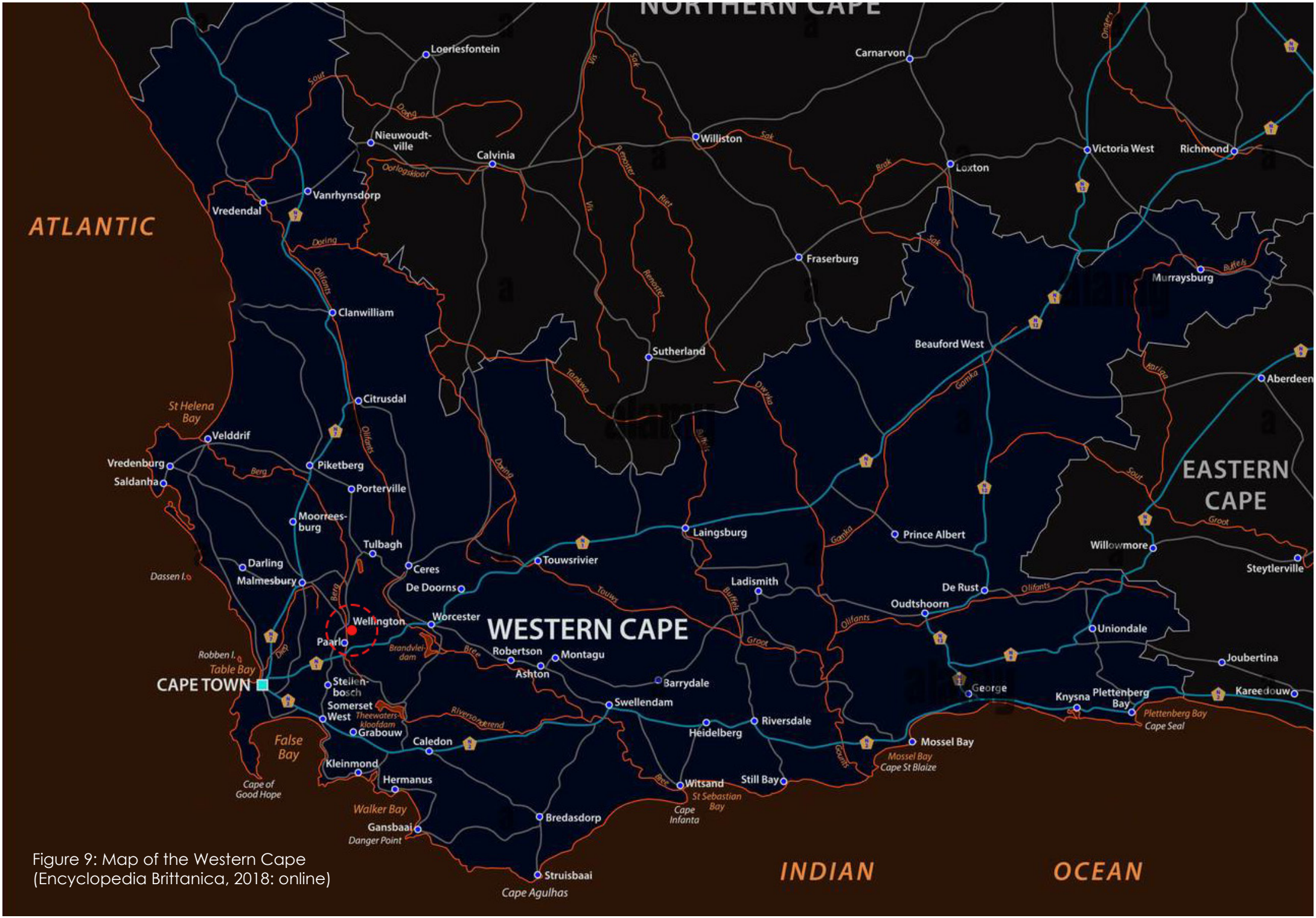


Figure 9: Map of the Western Cape
(Encyclopedia Brittanica, 2018: online)

VAL DU CHARRON

In 1657, Dutch Explorer Abraham Gabbema (1587-1671), on an official expedition from the fledgling Cape's faraway fort, first dubbed the distant wilderness between the expanse of the Berg River and the Hawequa Mountains as the "limietvallei" (Boundary Valley). This picturesque enclave soon showed that its limits lied in the ambition of its dwellers when the first settlement started with the granting of farms to Dutch "Free Burghers" in 1687 by Cape Governor Simon van der Stel (1639-1712). The area was soon named Val du Charron (Valley of the Wagonmakers) with the arrival of French Huguenots in 1699 – a group of pious Protestant refugees significantly contributed to the heritage of the area. (Kreitzer, Kreitzer and Bosman, 2008: 30). Soon the majority of the farms belonged to the French refugees and the area became the epicentre of Huguenot industry through its rich viticulture and winemaking traditions. Furthermore, the pious following of the Protestant faith by the French Huguenots led to the church becoming the hub for growth, with the first place of worship being erected on the farm Babylonstoren in 1691. Both French and Dutch services were held, but the integration of French into the Dutch language started in 1720 when the Paarl government erected the 'Strooidakkerk' (Kreitzer, Kreitzer and Bosman, 2008: 34). But this church did not convey the integration sufficiently and upon request by the people the first fully integrated church was erected in 1843.



Figure 10: The valley of wine (Lategan, 2021: online)

Opposite Page:
Figure 11: The Val du Charron (Google Earth, 2022: online; adapted by author)


WELLINGTON
MBKWENI
NEWTON
PAARL

WELLINGTON

With the consecration of the dutch reformed church in 1843 on the farm Champagne, the town of Wellington was formally proclaimed. Reverend AF du Toit (1785-1849), an ancestor of the author, was the church's first minister which soon became the nucleus of the town. One of the main contributions of the town is its substantial education system which has its foundations in the Huguenot Seminary and Huguenot University College which was later amalgamated with CPUT and the many schools in the region. This holistic and radical approach to education for the time is primarily thanks to South African writer Andrew Murray (1828-1917), whose vision founded many schools in the Boland and the Eastern Cape. He further contributed to the spreading of the Christian faith in Africa from the Dutch Reformed Church in Wellington (Kreitzer, Kreitzer and Bosman, 2008: 38). Another memorable feat in the history of Wellington is the Bain's Kloof Pass through the Limiet Mountains which was constructed by South African Geologist Andrew Geddes Bain (1797-1864) without any formal engineering training. Finally, Wellington is famous for its viticulture having its roots in the country of France, and its leather industry at the Old Tannery on the town's outskirts.

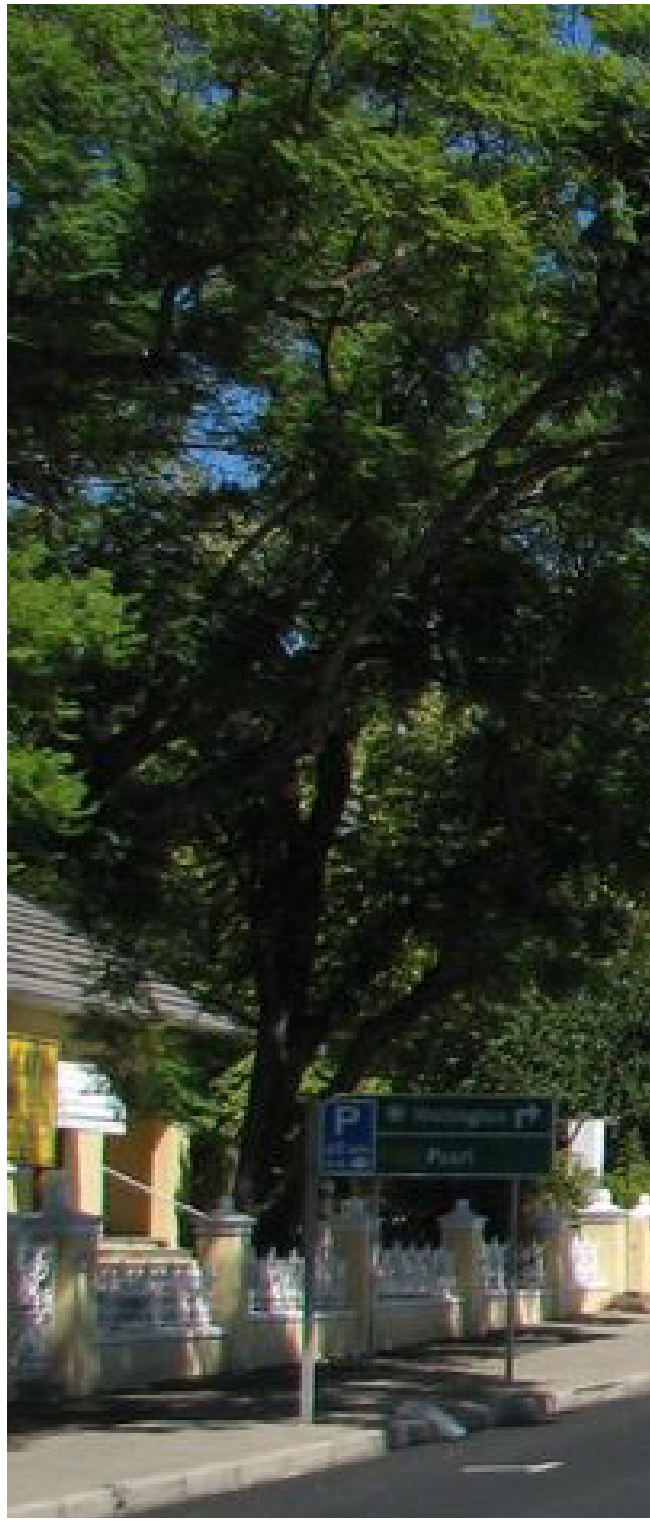


Figure 12: Moedergemeente Wellington (Titus, 2020: online)



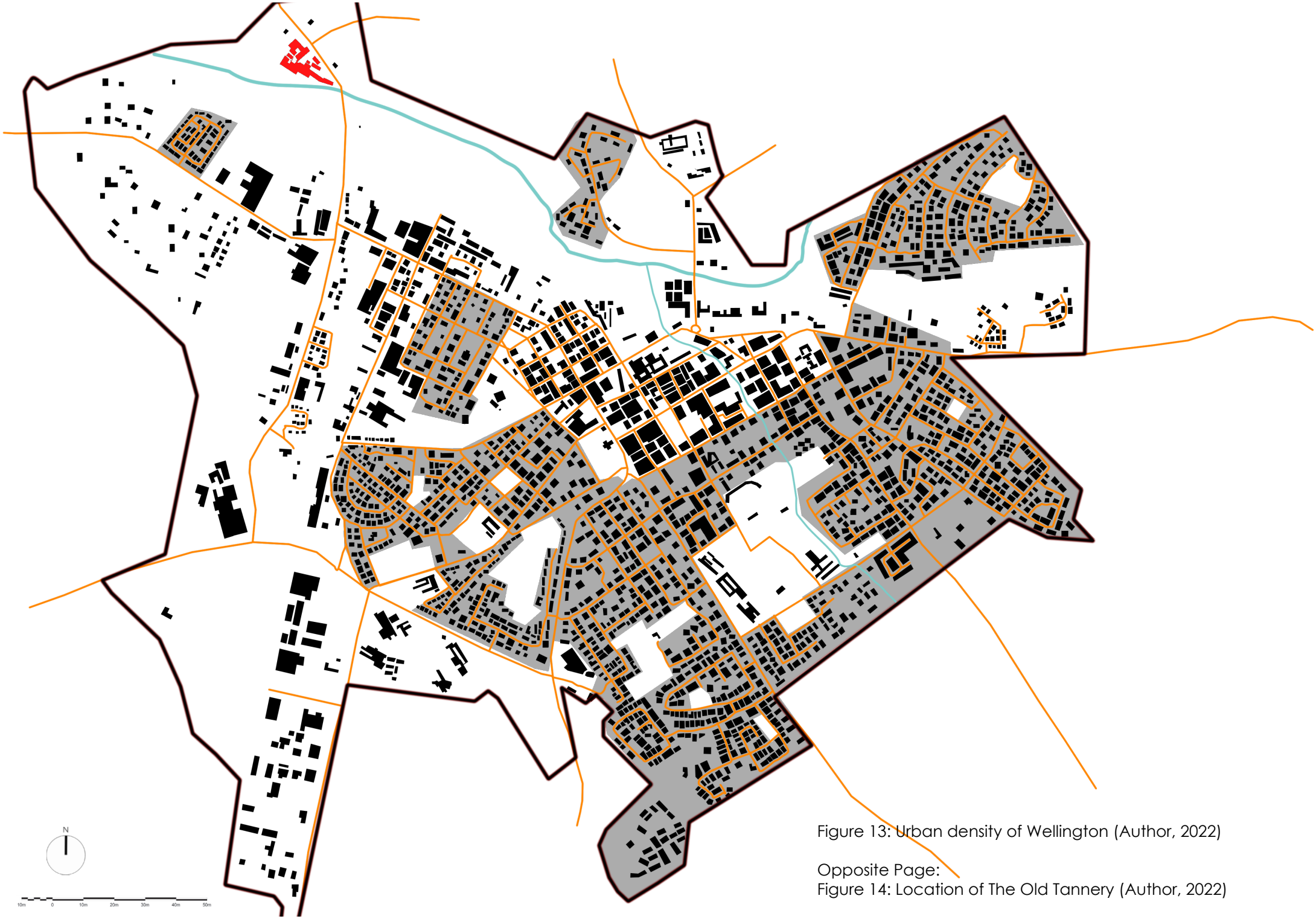
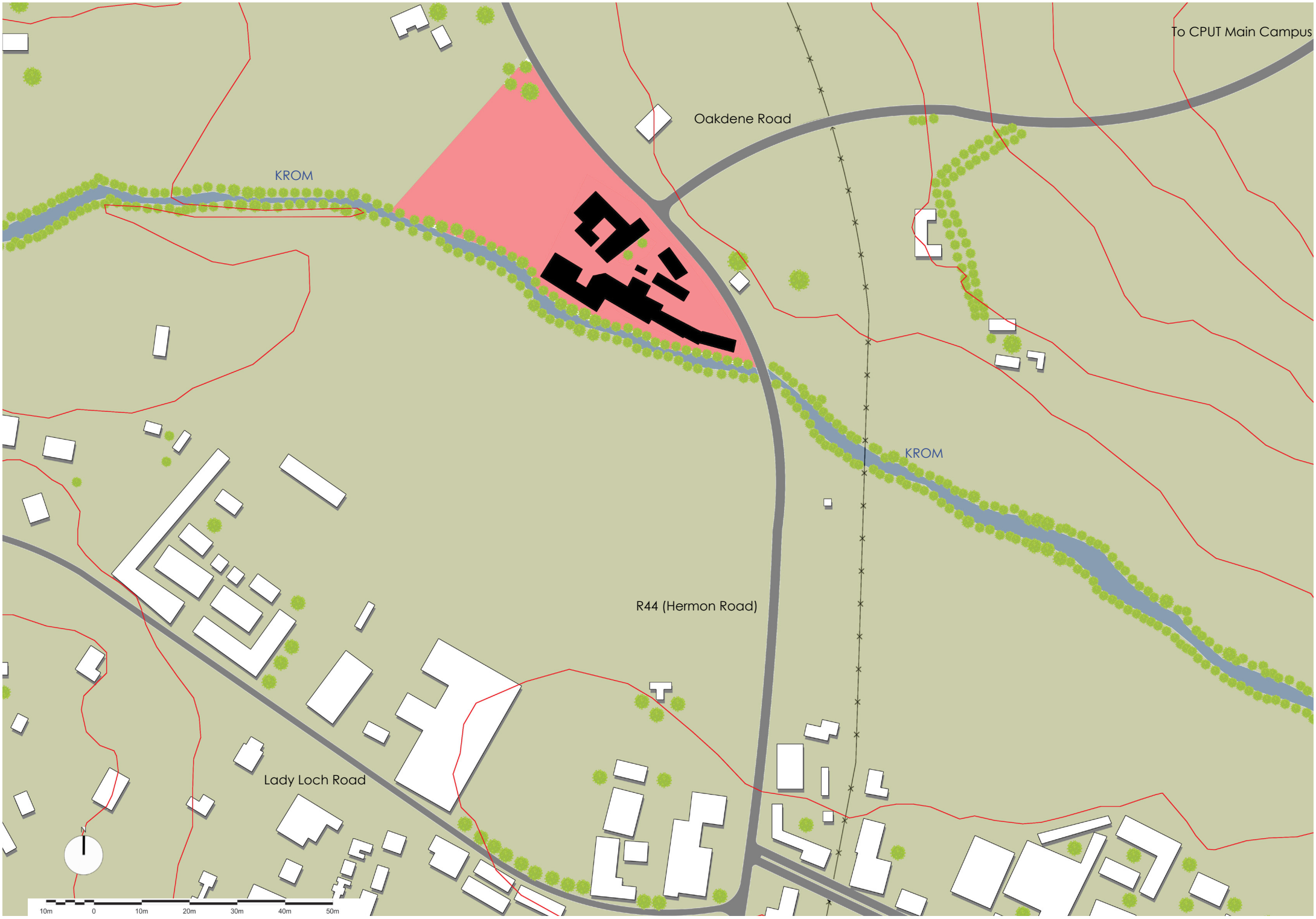


Figure 13: Urban density of Wellington (Author, 2022)

Opposite Page:
Figure 14: Location of The Old Tannery (Author, 2022)


To CPUT Main Campus
Oakdene Road
KROM
KROM
R44 (Hermon Road)
Lady Loch Road
10m
0
10m
20m
30m
40m
50m

THE OLD TANNERY

The Old Tannery or Western Tanning & Boot Corporate, as it was originally known, was established in 1871 by English railway worker John Henry Coaton (1841-1903) and was the oldest of its type in South Africa. It came to prominence during the Great Depression (1929-1939) when it produced an estimate of 100 000 leather shoes annually (Naidoo and van Wyk, 2001: 180). During this period, it maintained its South African roots by sourcing hides from the Cape Colony, Orange River Colony, Transvaal, and Rhodesia (modern-day Zimbabwe), while sourcing coal, salt, and tree bark from Natal (Naidoo and van Wyk, 2001: 180). Fires in 1930 and 1939 diminished the production potential of the factory and it was rebuilt to its current state.

At the end of the 21st century, it was known as the largest of its kind in the Southern Hemisphere producing 50% of South Africa's leather products. At its peak in 1998, it produced 750 000 leather shoes monthly, of which 15% were exported to Europe and the East (Naidoo and van Wyk, 200). However, later that year constant unrest started in the town of Wellington regarding the smell produced by the factory while already being located on the town's outskirts. After long consideration, the factory seized production of leather and was abandoned at the end of 1999. It was only until fairly recently that the Drakenstein Municipality started seeing the commercial value of the Old Tannery, leading to the possibility of reconfiguring the site.



Figure 15: Large uncovered exterior (Author, 2022)



HERITAGE ASSESSEMENT

The following subsection is a heritage assessment of the site based on the Heritage Impact Assessment(HIA)Phase 1 done by the Heritage Western Cape(HWC) in 2009(HWC Case 19062106). Personal observations were conducted during multiple site visits in 2021 and 2022 of the changes done by the many site owners, some of which appear to be illegal in terms of the *National Heritage Resource Act 25 of 1999*(NHRA).

2.4.1. ASSUMPTIONS AND LIMITATIONS OF THE HIA

The report does not address the heritage impact of pipelines, electrical connections, and other similar infrastructure on site.

2.4.2. THE SITE ITSELF

A large portion of the site is regarded as Grade 111A(High Importance) by the Drakenstein Municipality. This portion includes all industrial buildings, excluding the pump station, settlement tanks, and collection dams[Figure 15]. The oldest structures on the site date back to the early 1900s and are located next to the Kromriver (Buildings H-N). These buildings also include the brick kiln which was constructed in 1910. In combination with these structures, the Administration Block(Buildings A-C), constructed in 1945, fall under Grade 111A of the HIA Phase 1 of 2009, due to their historic and associated values to the industrial landscape. The following pages pertain an analysis of the structures on site that are deemed to be important to the heritage significance of the Old Tannery.



Figure 16: Existing Buildings on Site (Google Earth, 2022: online; adapted by author)


A
B
C
D
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F
G
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I
J
K
L
M
N

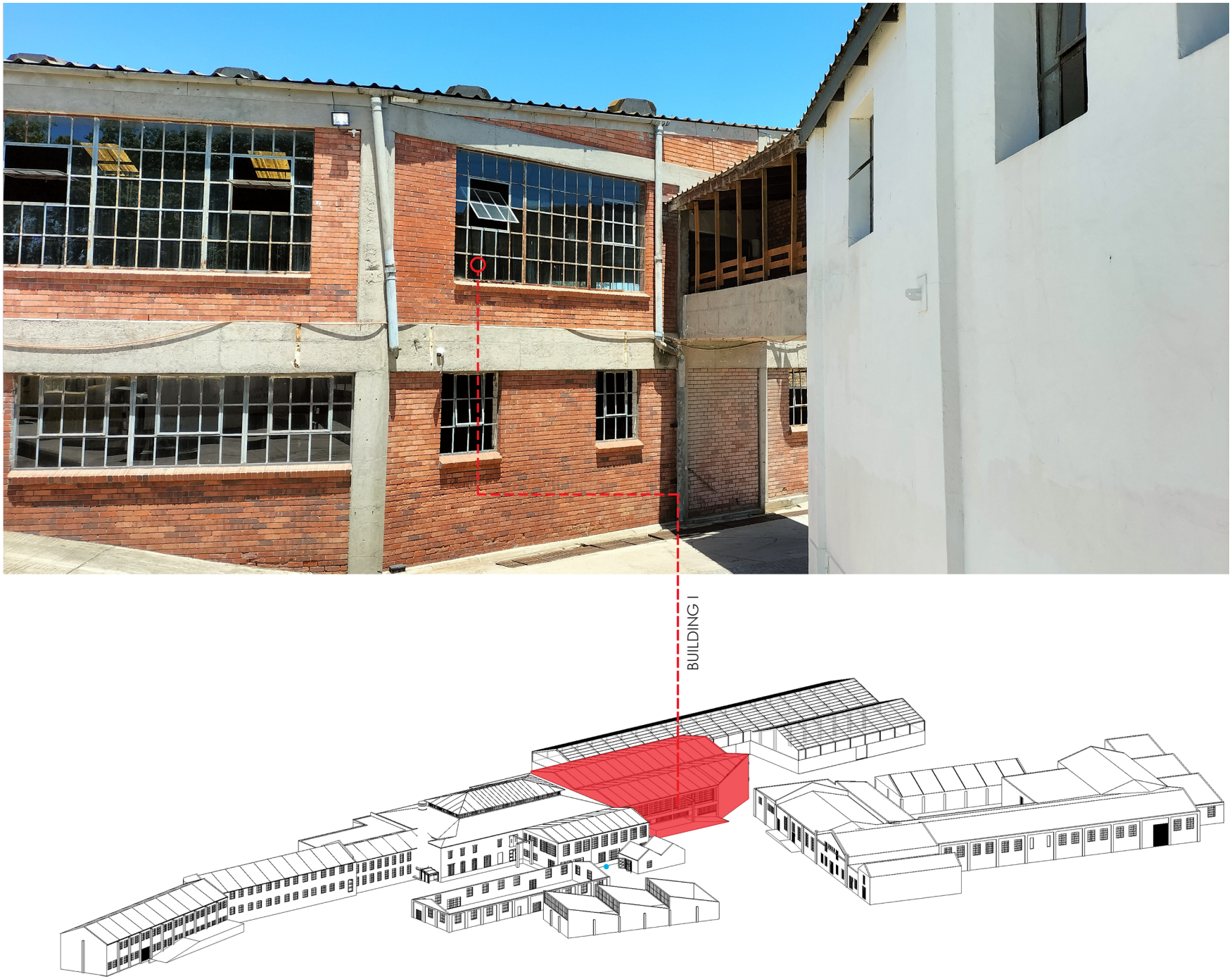


Figure 17: Material use giving the building its industrial appearance (Author, 2022)

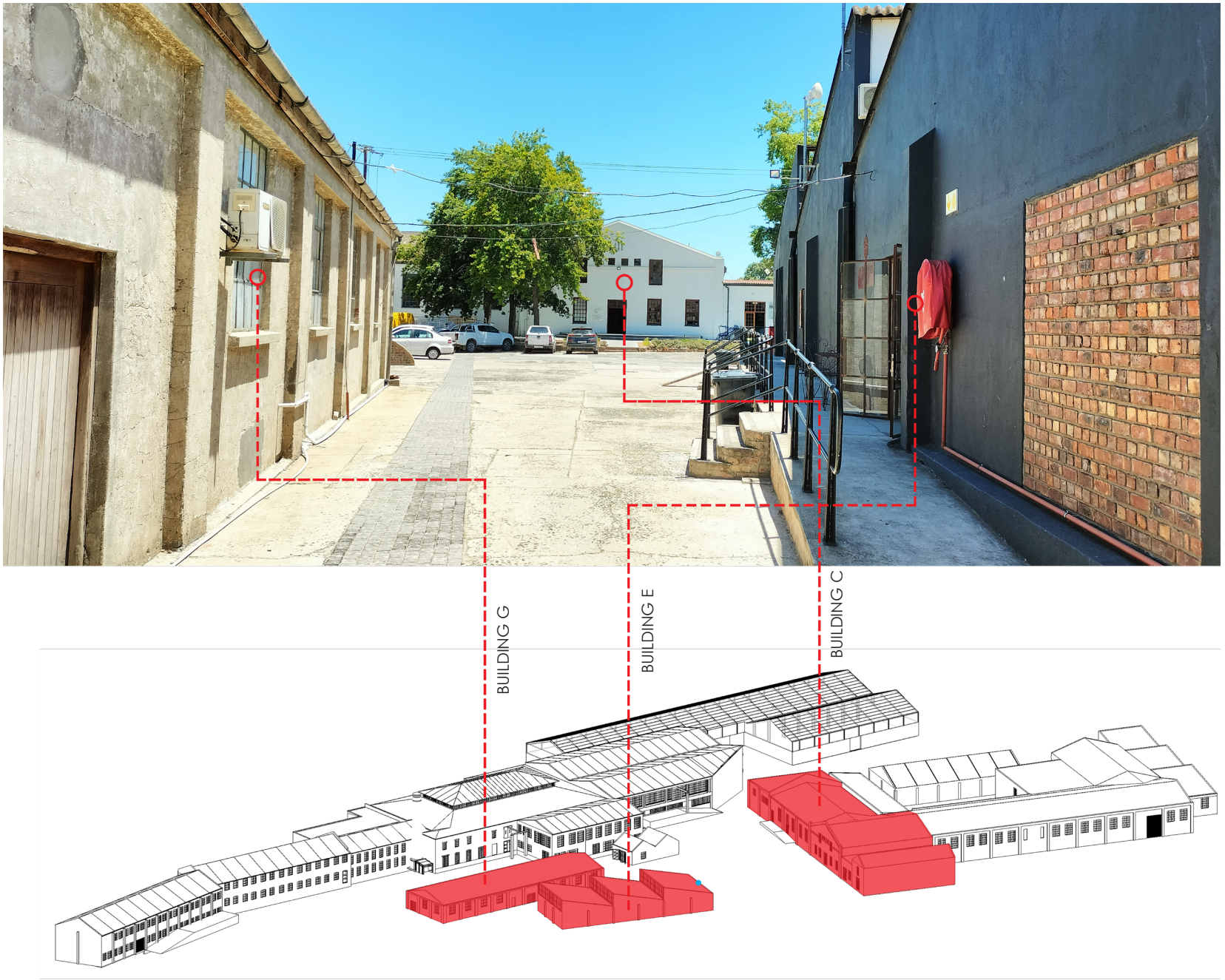


Figure 18: Large difference in building tectonics contributing to the site's discordant state (Author, 2022)

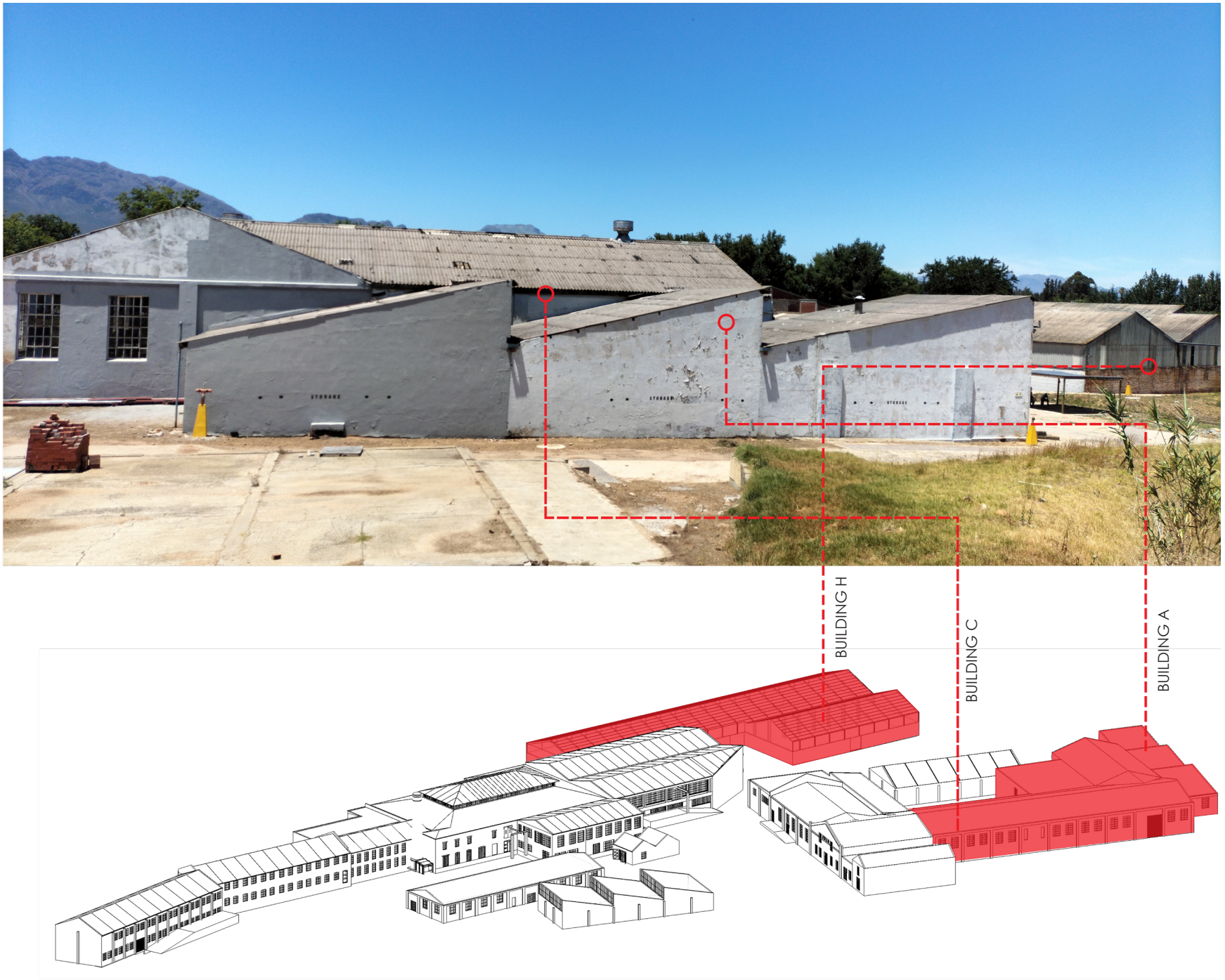


Figure 19: Clear decay calling for reinvigoration (Author, 2022)

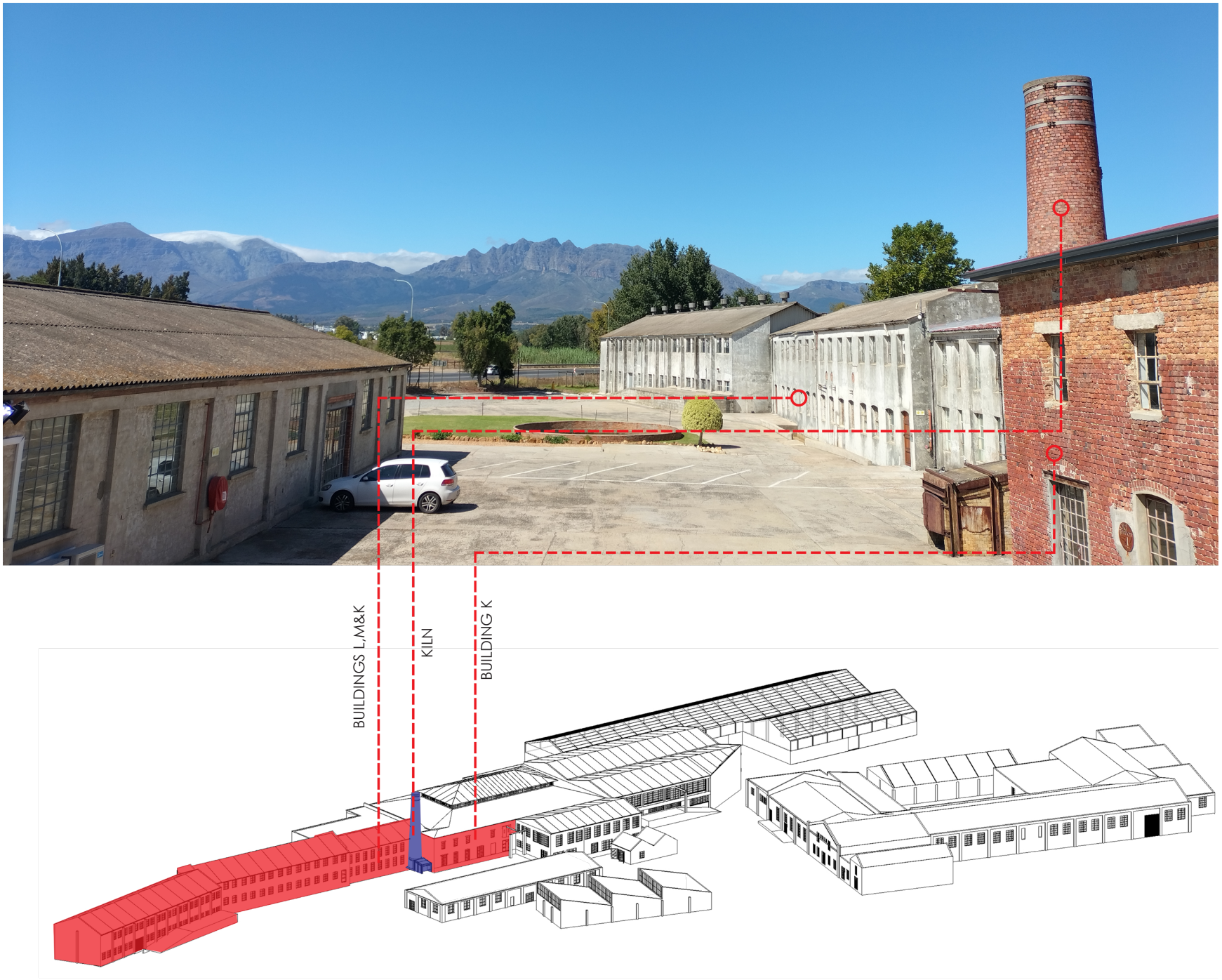


Figure 20: Picturesque natural landscape contributing to the site's signifcance (Author, 2022)

2.4.3. THE BROADER CULTURAL LANDSCAPE

The HIA Phase 1 of 2009 further refers to the Old Tannery as an important landmark that owes its visual contrast to its broader surroundings. It can be agreed that this contrast has imparted a special sense of place to the area since the early 1900s through a mutual reinforcement of both its industrial and rural components. Furthermore, the site falls in a transition node between rural and urban as areas to the south and southwest of the site have been marked for urban development. The toxic effects of the Old Tannery's operations during the 1900s have rendered lands to the north and northeast impractical for future agricultural developments.

2.4.4. STRUCTURES TO BE CONSERVED

Referring to Figure 21, structures on site have been identified as key elements to be conserved after further study of the HIA Phase 1 of 2009. Industrial elements including the brick kiln and industrial crane next to buildings L and I respectively should be conserved to full extent[Figure 21.1]. Exterior fire stairs added to the building in 2015 should be removed due to it being done without the HWC's approval[Figure 21.2]. The bridge connecting buildings C and I is to be demolished and replaced with a more sensible connection constructed of more robust materials[Figure 21.3]. The lantern roof added in 2019, with approval of the HWC, must be retained as it has become part of the Old Tannery's heritage aesthetic.

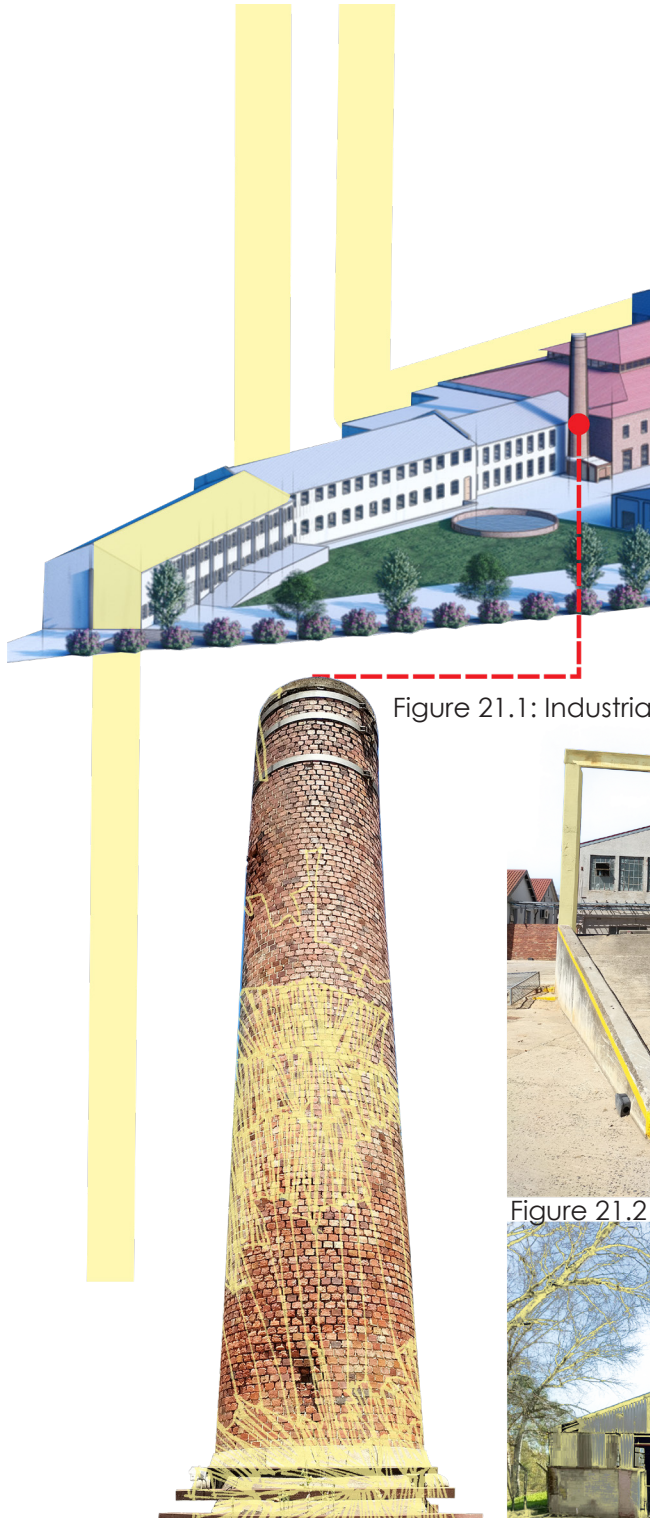
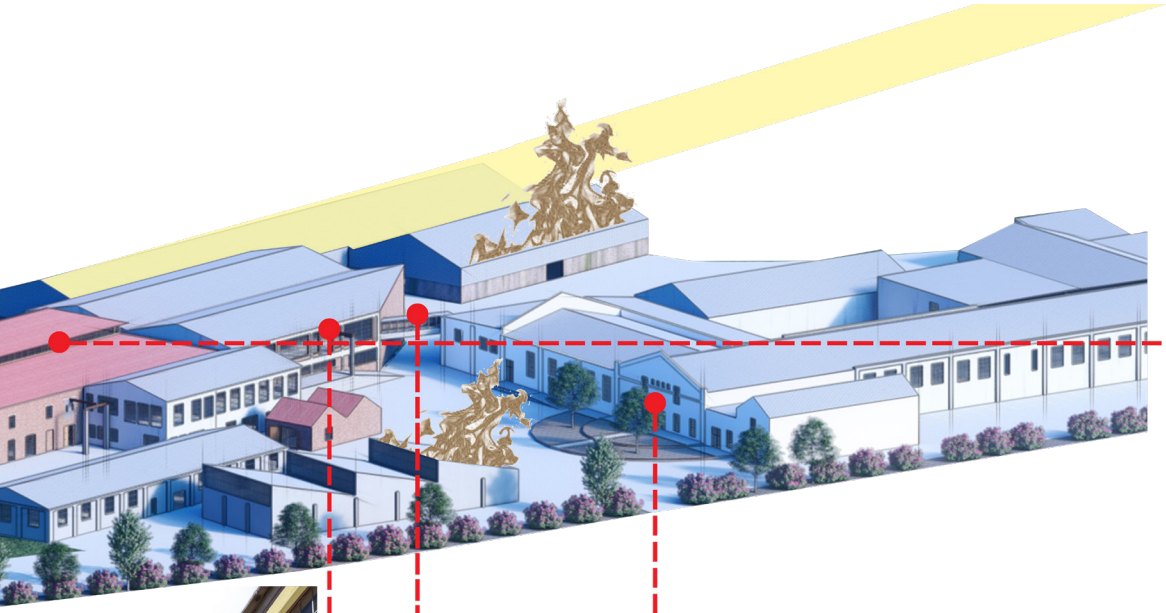
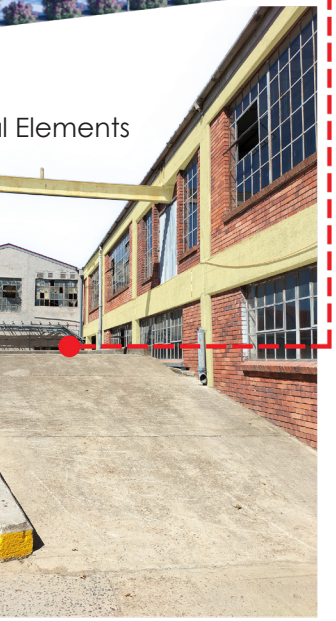


Figure 21.1: Industria

Figure 21.2

Figure 21: The Hidden potential of the site (Author, 2022)





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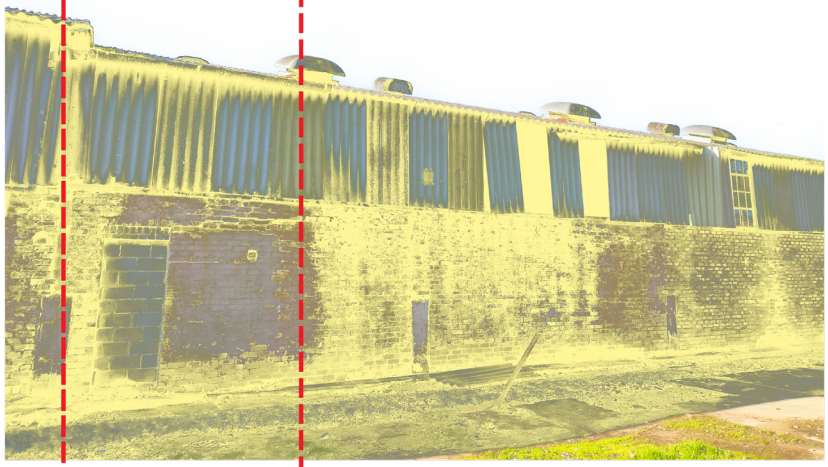


Figure 21.3: Odd Connections





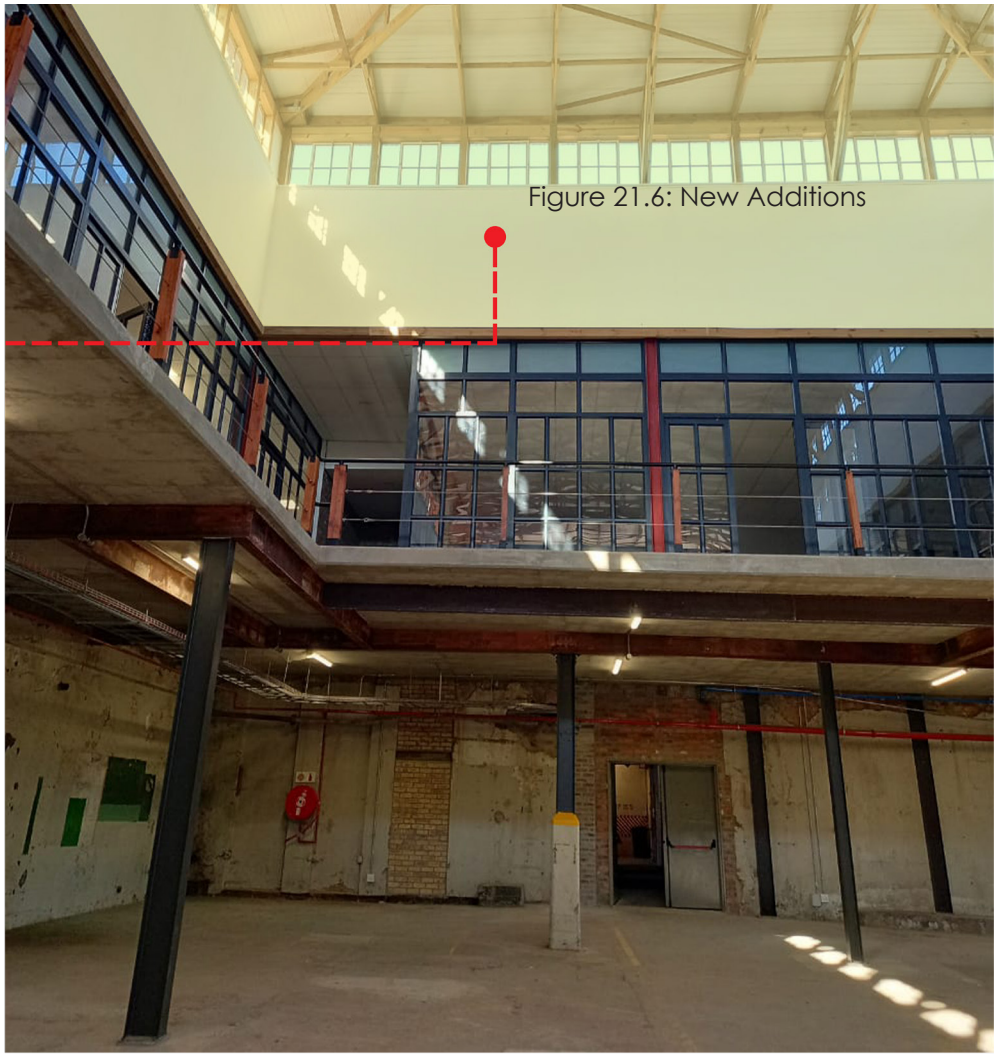


Figure 21.6: New Additions

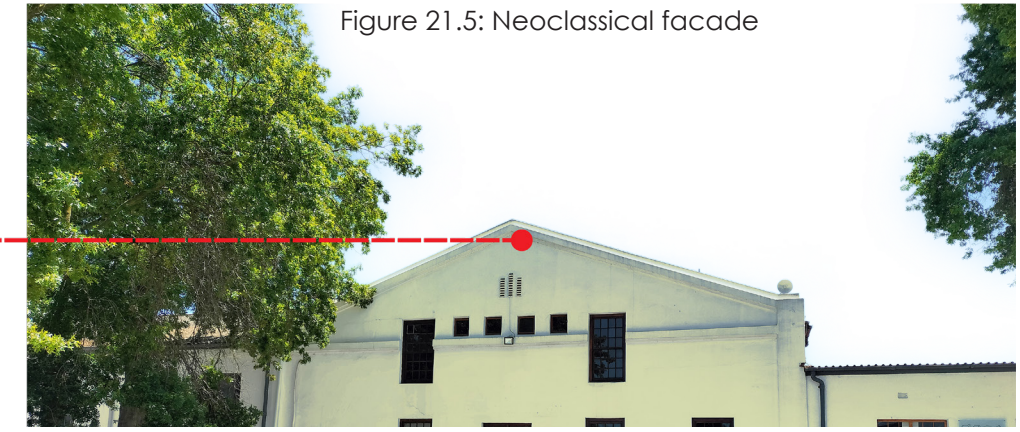


Figure 21.5: Neoclassical facade

2.4.5. EVENTS AFTER 2009

Through personal observations, some changes on site were noticed that happened after the HIA Phase 1 of 2009 was compiled. The northern roof of building E has been damaged by a fire in 2018 and replaced without the approval of the HWC or adhering to the existing aesthetics on site. A further fire damaged the interior of building H and left it unsafe for human occupation. The previously-mentioned lantern roof[Figure 22] has become an important addition to the site and if one is unfamiliar with its origins, it could be deemed as part of the original.

2.4.6. REFLECTION

In terms of heritage, the site itself and the exterior of the original buildings are seen as high priorities for conservation, since it has a large contribution to the existing cultural associations with the place. The interior is seen as less significant, which means that internal interventions are highly advised. However, conservative, high-impact opportunities for external interventions will be strategically identified.

Currently, the spaces in between the industrial buildings are poorly defined, due to the industrial heritage of the site. The new use demands a different urban approach. The proposal will aim to create more defined and human-scaled interstitial spaces. Finally, the marshland to the South of the collection dam has been deemed fertile, consequently being suitable for agricultural development. The heritage assessment has proposed certain important limitations that need to be respected in the new design. The added layers of complexity will contribute to the refinement of the final design and will be incorporated going forward. The next chapter will formulate the theoretical stance as means to further develop the heritage response and clarify the design strategy that will be followed when adding to existing buildings and planning the in-between space.



Figure 22: The Lantern Roof (Author, 2022)



3

THEORETICAL DISCOURSE



Figure 23: Open for adaptive reuse (Author, 2022)


Old Tannery

INTRODUCTION

Can the contemporary dweller and nature be reconciled to create a transposing experience for viticulturists? The old Tannery is in dire need of a site-specific intervention that will unearth its hidden potential. A potential that will be supported by the reinvigoration of spaces through the beauty left by its abandonment. While giving architecture back to the wilderness, ghostly glimpses of the past will be revealed to the dweller. This palimpsistic dance between its rewilded future and industrial past will stimulate a provocative interaction between the buildings' existing shells and the rhythms at which dwellers circulate through the built and in-between spaces. Furthermore, the dweller's perception of the built spaces will be in constant flux due to new kinds of interactions with natural elements participating in the rewilding of the historical ensemble.

Moments of critical noticing will be enabled through the creation of spaces where the rhythms of the present resonate with the rhythms of the past. Finally, the existing open voids will be used to bind all structures on site into an assemblage that will improve the overall experience of the Old Tannery. While the Old Tannery has been long abandoned by society, new reconfigurations of existing elements on site will enable it to become a node of viticultural greatness.

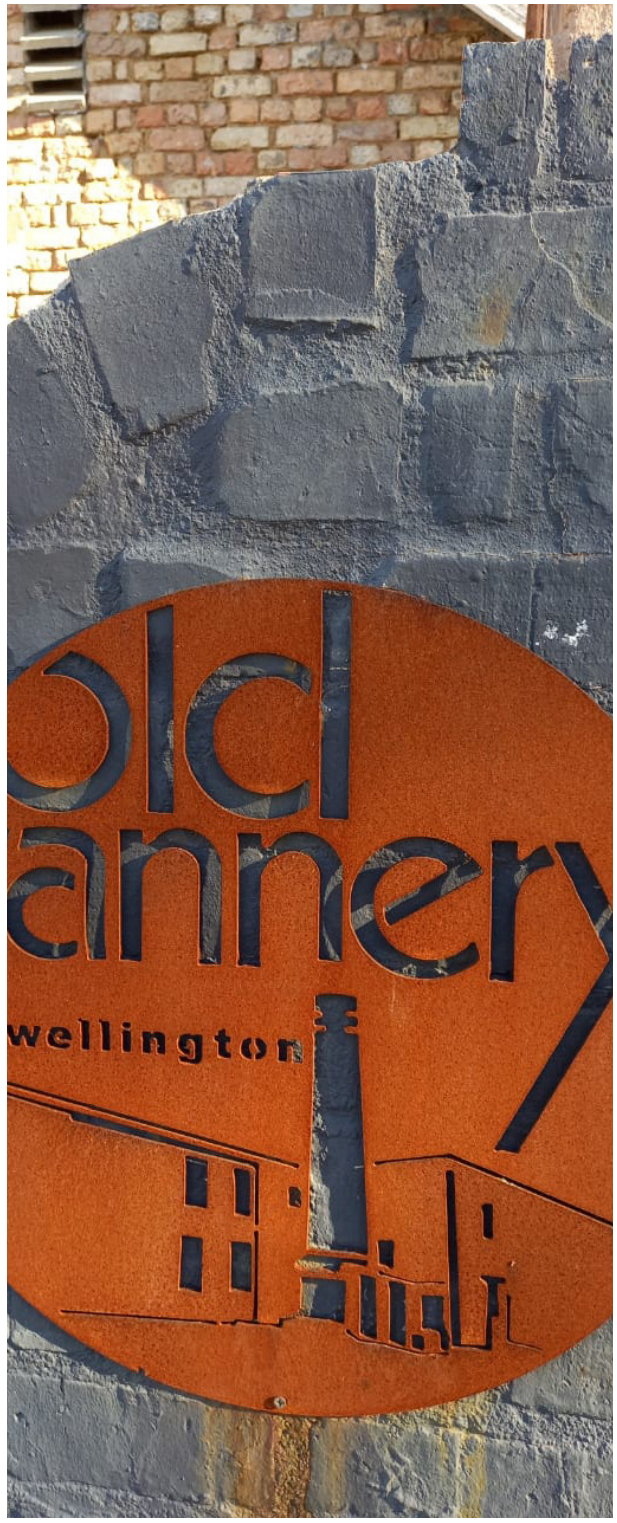


Figure 24: Old Tannery Logo (Author, 2022)

BETWEEN SKIN AND VINE

A viticulture college at the Old Tannery on the outskirts of Wellington

How can the principles of bio-dynamic viticulture inspire a sensitive architectural approach towards the adaptive reuse of the Old Tannery in Wellington into a fertile assemblage for contemporary winemaking that is able to foster new existential thresholds between dweller and vine?

THE FOUNDLING

Abandoned buildings are structures with a severed connection to society and its context. These buildings are deemed as 'non-places' not necessarily because they lack existence in the eyes of the dwellers but rather as places that lack any connotation with their immediate environment, as described by French anthropologist Marc Augé (1995: 152). In contrast to what one would expect, these places sometimes manage to gain value despite their isolation, and because humans are beings of care, they may even accrue a wealth of associations due to the effects of time. These 'effects of time' include a building's newfound relationship with nature through its dominance in the form of decay or natural growth in places where it was initially prevented by human intervention. The Old Tannery is an example of this; though its abandonment might have been due to unfortunate circumstances, it did not mean the end of its usefulness but rather an opportunity for reconfiguration with the ensemble's new skins being 'beautified' by the effects of time. There might be the impediments of dangers to human health or high maintenance costs, but urban social interventions, such as with the College of Viticulture, can mean that a building becomes a metaphorical foundling within a society that once abandoned it.

As for the responsibilities of architecture regarding these 'foundlings', the design proposal suggests that such socially 'unregulated ruins' need to be conserved amid a strange entangling of appropriate uses for the community while allowing the place to be 'rewilded' by natural processes, consequently giving it back to the wilderness in a very human way, a habitable place, yet free of the everyday tensions of contemporary urbanity, while offering a new kind of college experience. Too often architecture has been the source of its own destruction through its constant disregard for structures and landscapes that existed before the newly built space. Architects urgently need a new mindset that allows the aesthetics of disorder and sensuality, the delights of nature to enrich our manmade world; a biophilic approach able to both recall ghostly glimpses of the past and accommodate the necessity of the building's shell or carapace, while opening the way for more intimate relationships to form between dwellers and their natural surroundings.





Figure 25: Left to decay (Author, 2022)

CARAPACES

The proposed scheme will rely on the notion of architectural palimpsest to serve as a catalyst to inspire human curiosity toward further examination of the physical process embodied by the adaptive reuse of a structure. This theory was evocatively explained by 19th-century English writer Thomas de Quincey (1785-1859) In his book *Suspiria de Profundis* as follows: "What else than a natural and mighty palimpsest is the human brain? Such a palimpsest is my brain; such a palimpsest, O reader! is yours. Everlasting layers of ideas, images, and feelings, have fallen upon your brain softly as light. Each succession has seemed to bury all that went before. And yet, in reality, not one has been extinguished" (De Quincey cited in Van Ooijen, 2019: online). In this sense, buildings have the same palimpsistic capacities as the human brain by not being static but rather ever-evolving sedimentations of the effects of time contributing to its own resilience.

The inclusion of time as an essential variable shows that the theory of palimpsest explores the 'historicity' (as defined by the German philosopher Martin Heidegger (1927:375)) of a structure rather than the history thereof, consequently meaning that it looks at the appropriative, care-infused way people make sense of a structure, instead of the mere collection of 'facts' usually regurgitated as the 'historical truth' of the place. It follows that to appreciate a building as a palimpsest, one should discern not only the value of each layer but the appropriated associations that layers accrue; while older layers are usually seen to add to the integral meaning of the building, and newer layers are seen as fodder for reinterpretation, the inverse may be equally true if we understand the situation in terms of the lived historicity of the structure.



Figure 26: Charcoal interpretation of a carapace (Author, 2022)



While the interior and the exterior were built simultaneously, the exterior - a hard industrial carapace - communicates more of the associations that the public has of the building and can thus be seen as more significant in terms of heritage conservation. The 'carapace' in biology is the dorsal part of the exoskeleton of various animals that restricts access to the protected inner layers (Merriam-Webster.com Dictionary, 2022). To place this biological phenomenon into architectural terms implies that one appreciates this outermost layer as the part of the building most exposed to the effects of natural processes; it protects the interior against the elements but also shows the beauty of the structure in dialogue with nature, thereby encouraging the dweller to venture beyond the carapace and explore the interior. In the adaptive reuse of the Old Tannery, the 'design question' remains whether the observational promenade or the existing building is the carapace due to them both sheltering each other while accumulating the beauty left by the effects of time.

The question can be sidestepped by seeing both as equal but different skins in conversation with each other. In the spaces created between these two carapaces, the dweller may find the most nuanced and evocative spaces, calling for new kinds of relationships between dwellers and nature. The next section will discuss the potential for rewilding these kinds of in-between spaces.

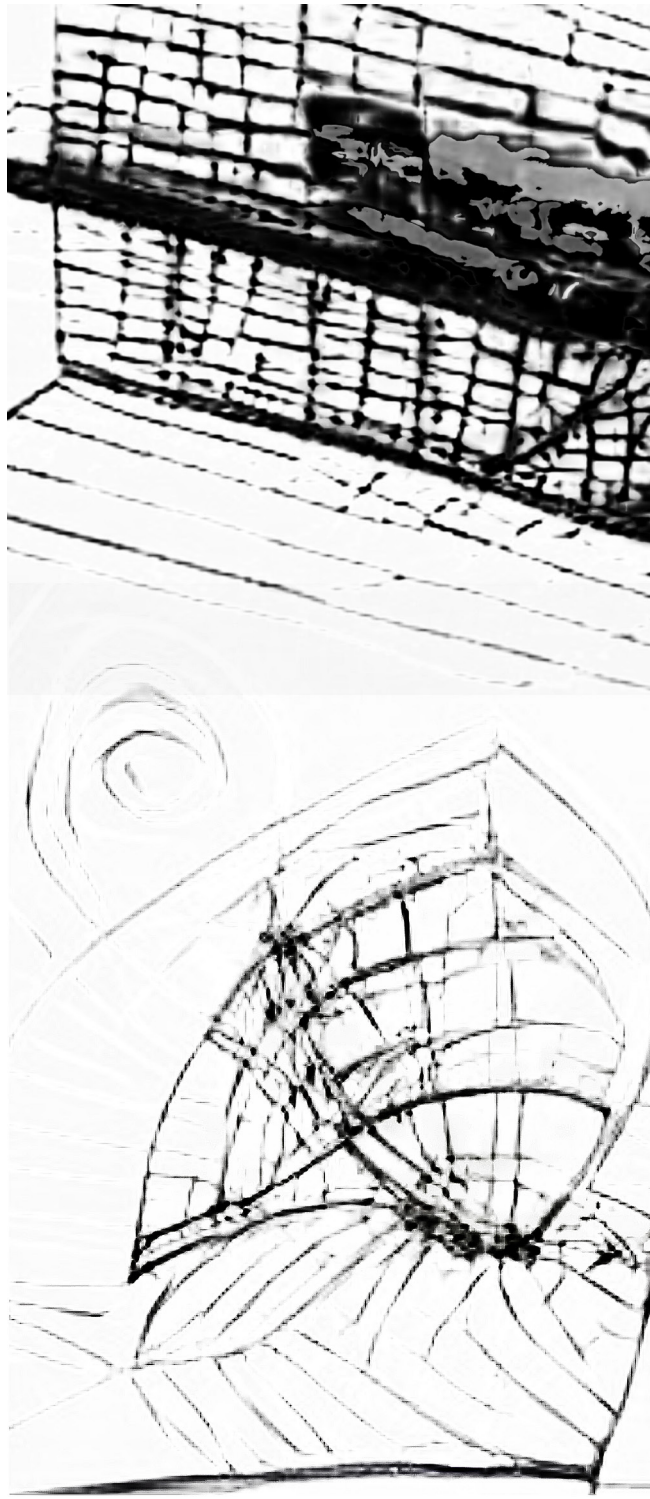
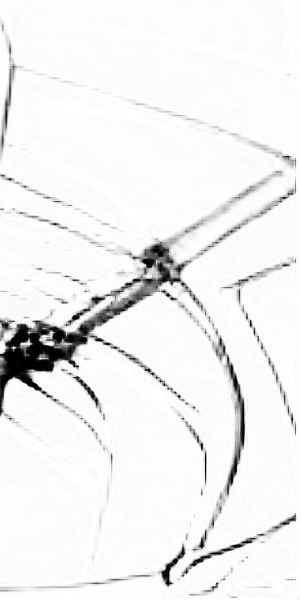
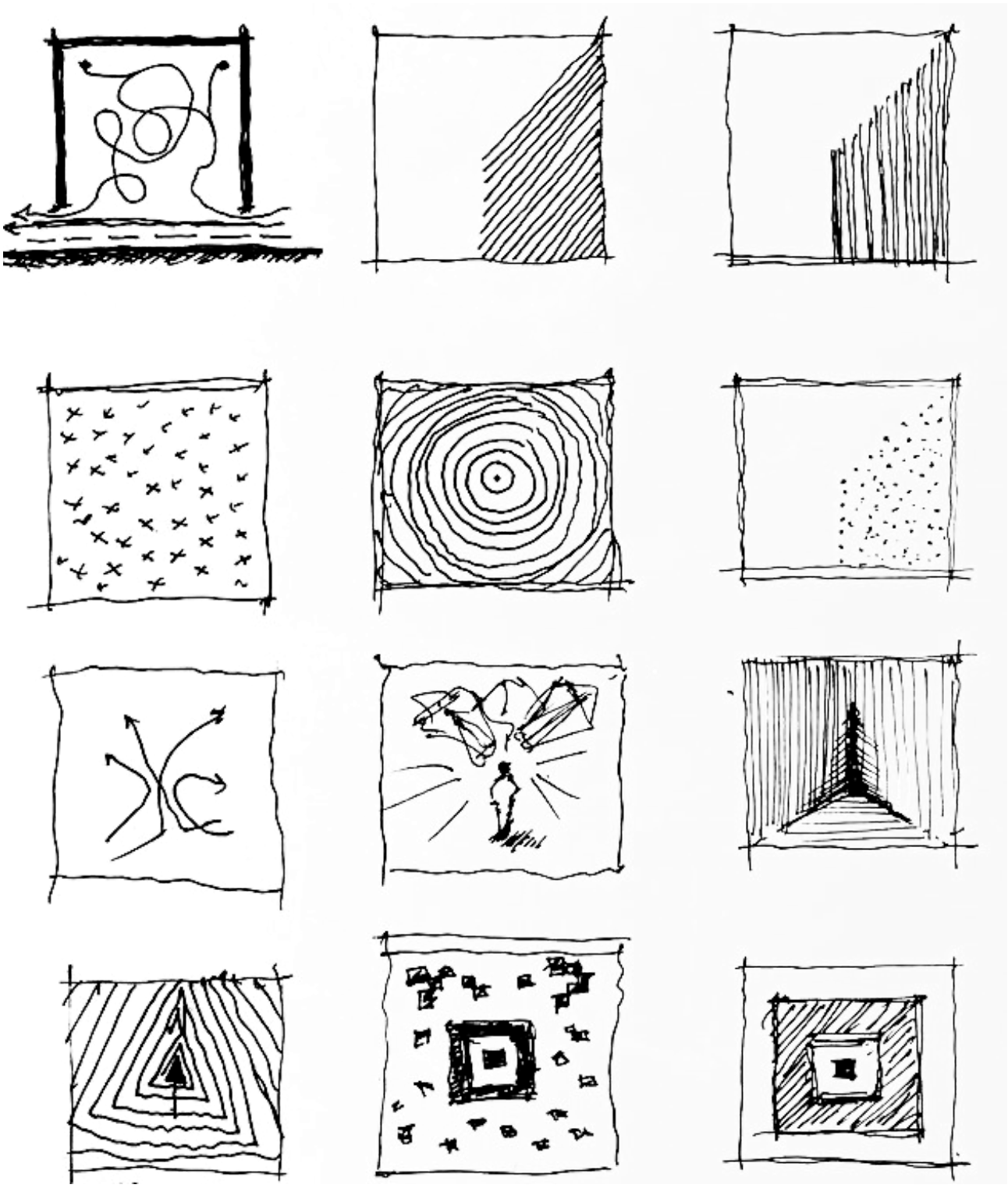


Figure 27: Shell Building Site (Author, 2022)

Opposite Page:
Figure 28: Analysing the essence of the carapace in architecture (Author, 2022)







REWILDING ARCHITECTURE

Rediscovering the aesthetics of disorder and sensuality of the wilderness can allow architects to connect dwellers more closely with not only nature but also abandoned spaces. This type of architecture can be defined as biophilic in nature which is grounded in the hypothesis that humans have an innate affinity toward nature. The process of rewilding integrates greenery, light, and water into architecture which are elements that will positively affect the dweller's perception of a space. The picturesque landscape of the Val du Charon is something that should be drawn into a building when designing or, in this case, redesigning buildings in the area. In contrast to a traditional notion of wilderness, the process of architectural rewilding implies simply the reintroducing of natural forces, processes, and elements into the built fabric of the design. This process of rewilding calls for the kind of spaces where dwellers can be reminded of their own mortality and strive to catch a glimpse of the face of the divine (Merriam-Webster.com Dictionary, 2022).

American environmental historian William Cronon (1954) further supports this statement by describing the wilderness as the "natural, unfallen antithesis of an unnatural civilization that has lost its soul. It is a place of freedom in which we can recover the true selves we have lost to the corrupting influences of our artificial lives" (1995: 11). This elevates the importance of a dweller's constant consciousness of her part in the natural world even while navigating the 'artificial' built spaces of the urban environment. This constant awareness can be made possible by designing the time spent in different spaces throughout the Old Tannery to urge the dweller to notice her natural environment more critically.



Figure 29: The Dominance of Nature (Author, 2022)


STORAGE

3.5

CADENCE

Time gives measurable and finite qualities to architecture through the creation of a relationship with a space. This relationship allows the dweller to experience time as being physical and experientially stable. In *The Eyes of the Skin* Finnish Architect Juhani Pallasmaa (1936) proposes the following:

> "The incredible acceleration of speed during the last century has collapsed time into the flat screen of the present, upon which the simultaneity of the world is projected. As time loses its duration, and its echo in the primordial past, man loses his sense of self as a historical being, and is threatened by the 'terror of time'. Architecture emancipates us from the embrace of the present and allows us to experience the slow, healing flow of time. [...] Time and space are eternally locked into each other in the silent spaces [...]; matter, space and time fuse into one singular elemental experience, the sense of being."(1996)

The cadence is brought to the forefront. When considering its etymology, it can lead to ambiguity. However, in the English language, it means 'the beat, time, or measure of a rhythmic activity', in essence, the act of dwelling (Merriam-Webster.com Dictionary, 2022). How can places resonate with the contemporary rhythms of the foundling to bring about an awareness of the deep meanings of the past lives that already echo in a stable manner within its thresholds? The clock should literally beat slower when experiencing this type of place. Urbanity does not aid in accomplishing this through the fast-paced existence of the 21st century that surrounds the dweller forcing her to join the status quo. However, through the reinvigoration of the discordant spaces within the Old Tannery, even the most contemporary dweller can experience a slowing down of time between cadence and carapace.

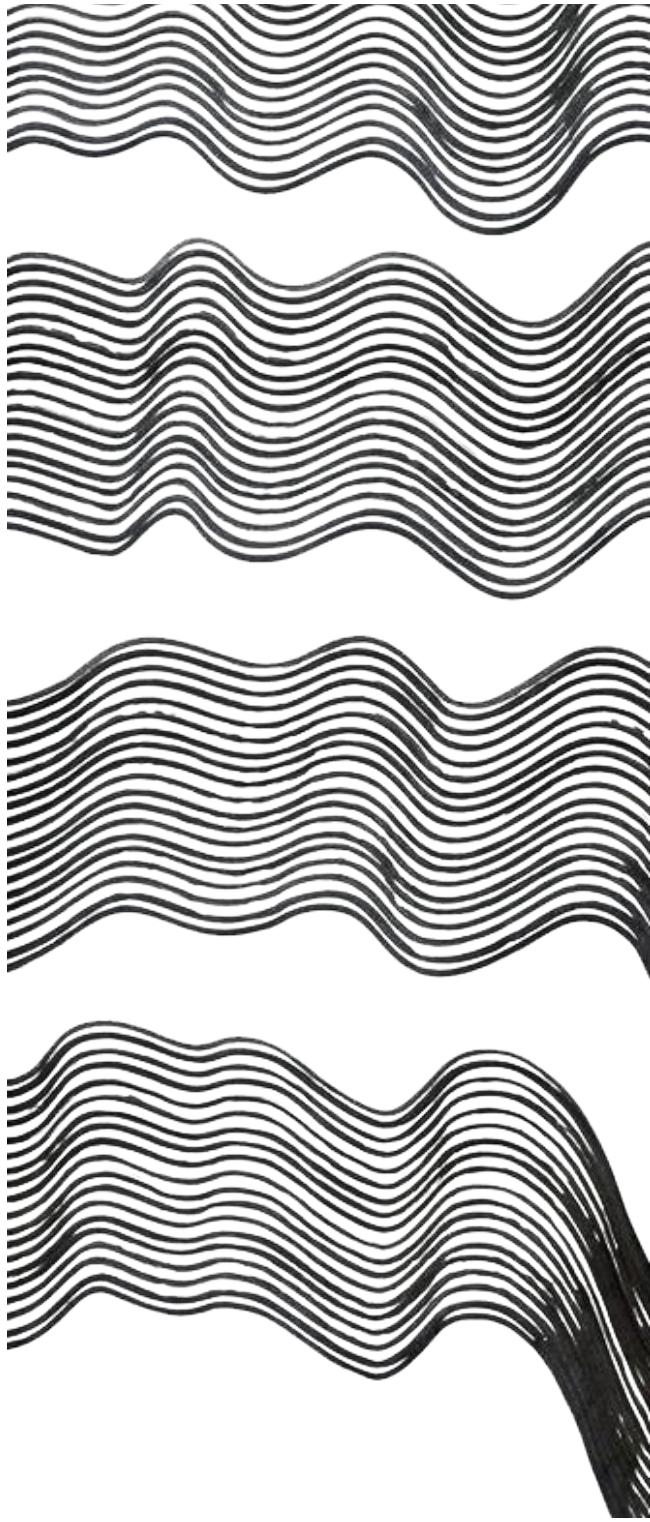


Figure 30: The Moment of Synchronition (Author, 2022)

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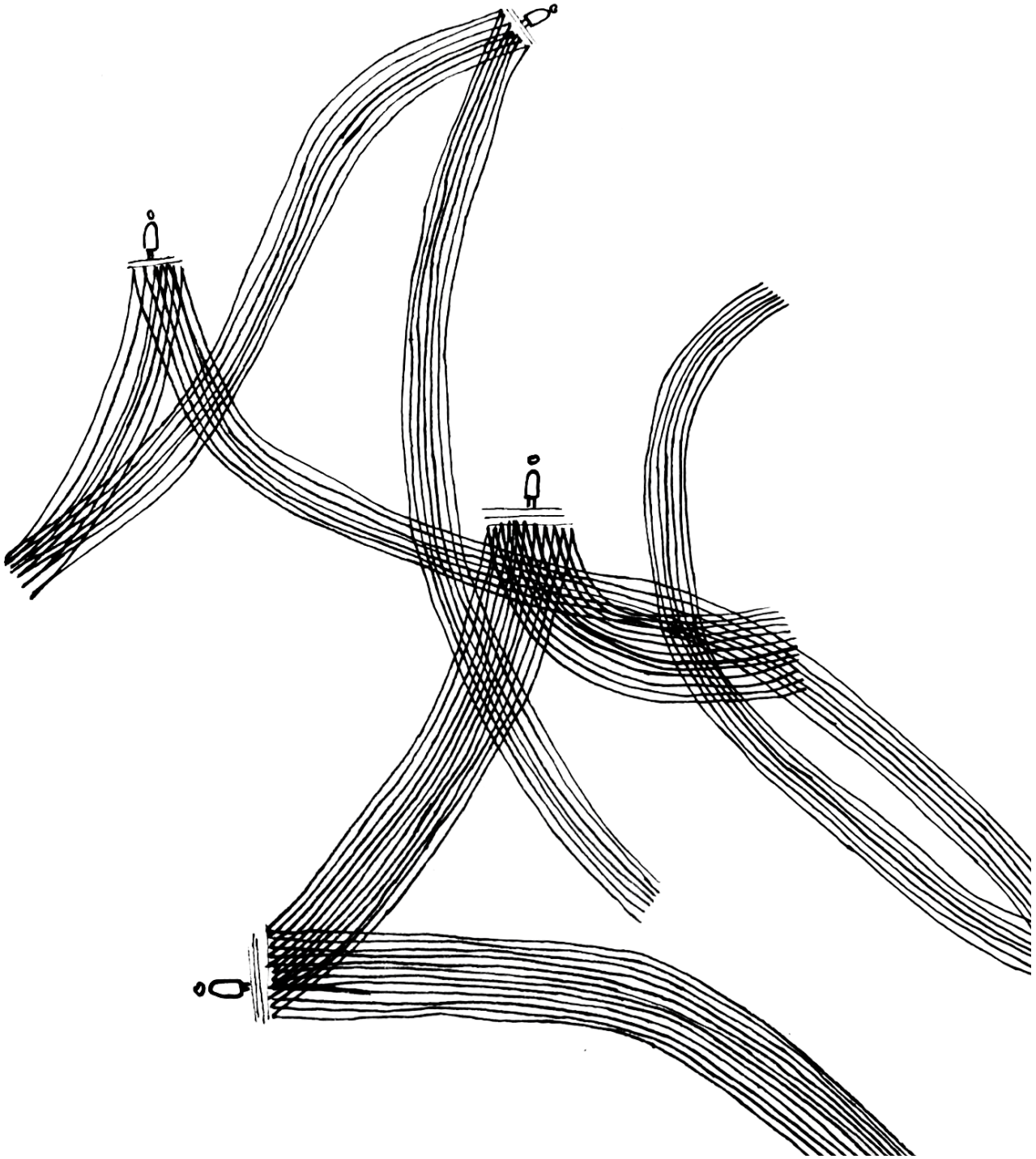
Figure 31: Overlapping Realities (Author, 2022)





TIME, SKIN AND PLACE

Though the exterior experience of the building's permanent shells is more deeply embedded in the public consciousness, it could be argued that the most bodily-intense experience only starts when the dweller starts her journey through the spaces between skin and promenade. The architectural notion of the promenade was developed by the Swiss-French architect Le Corbusier (1887-1965). Le Corbusier's promenade focused on the pathways through the built space along which a sequence of images will unfold to the dweller (Samuel, 2010: online). This resulting sequence of images is known as a *tableau* short for *tableau vivant,* which is French for a living image. This might seem to be a limited concept when perceiving it within an architectural context, but it is dependent on how the dweller creates an outer-worldly embodiment within her imagination from the accumulation of her experience while navigating along the observational promenade. The observational promenade takes this notion further by following an ocular-centric architectural approach that evokes a sense of both active and passive engagements between the rhythms of both past and present.

This palimpsestic dance between past and present influences how the dweller grounds herself in a given setting by connecting with the flesh of the world. "To think is thus to test out, to operate, to transform", a quote from *Eye and Mind* (1956) by French philosopher Maurice Merleau-Ponty (1908-1961) (1958: 121). Seeing this from a more contemporary perspective: humans critically use their minds to create embodiments of their imagination, even if its existence can sometimes be doubtful (Merleau-Ponty, 1958: 123). This theory can be interpreted as the culmination of the experience of the building's outer shell and the rhythm of movement along the promenade to experience a moment of appropriation that, as previously mentioned, could only be experienced in a natural environment. However, large open spaces remain between the buildings on site, pondering the question of how to translate these rhythmic shells into the form of plazas.

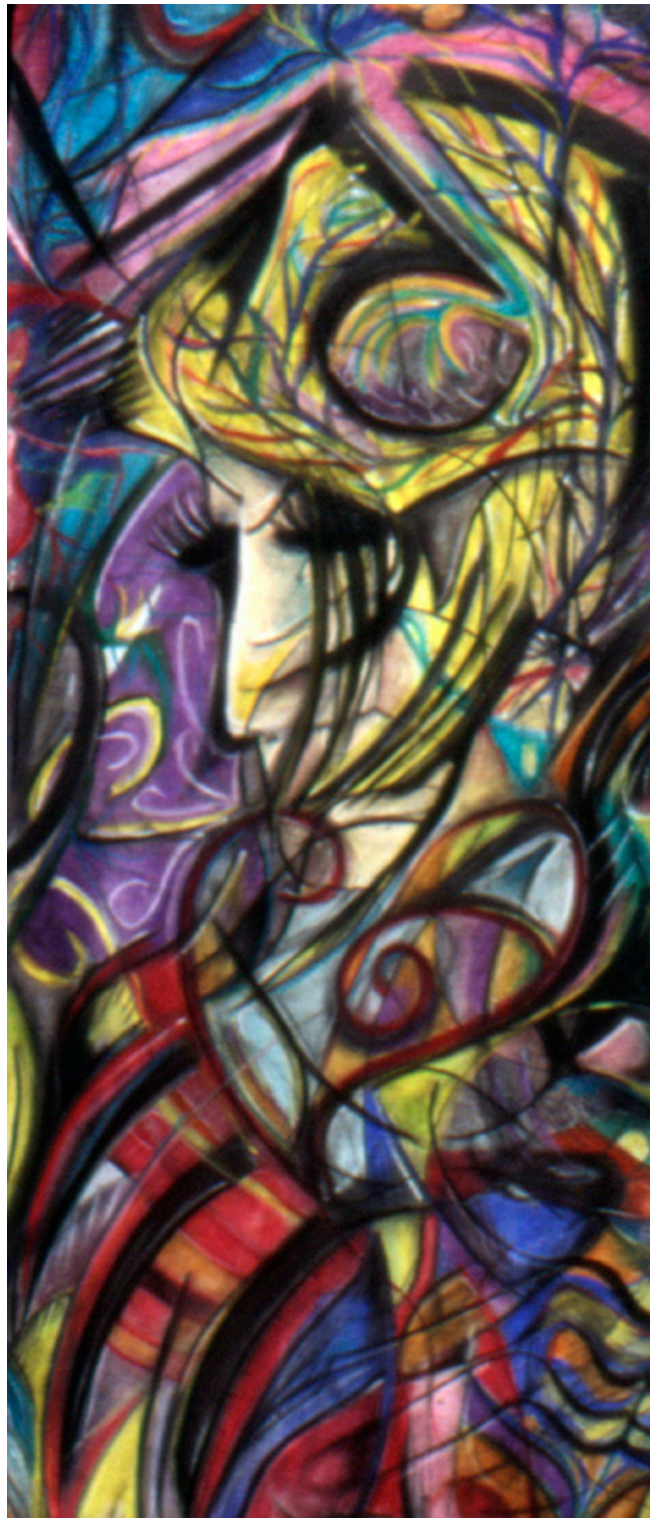
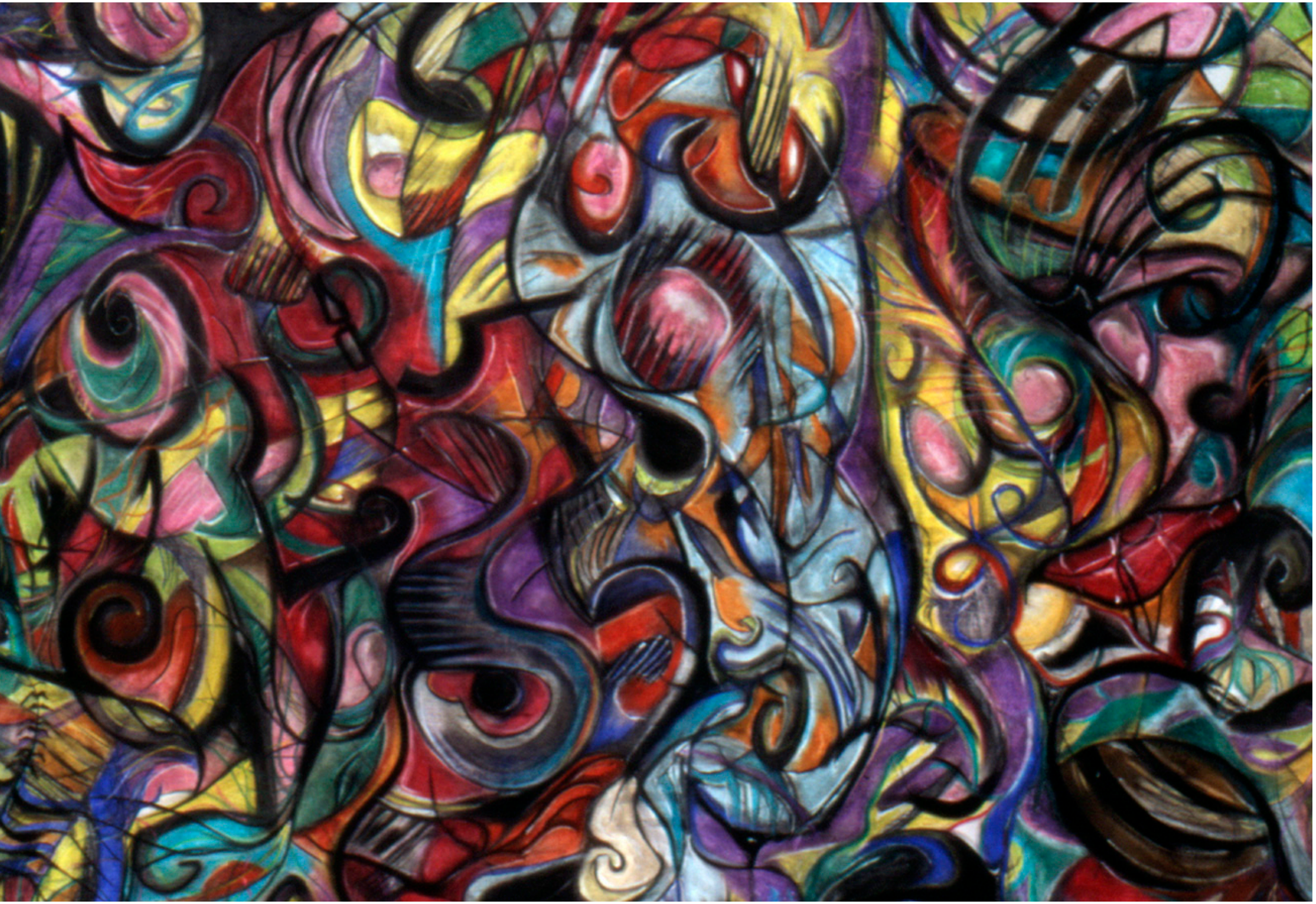


Figure 32: Rendered realities (Nessbit, 2004: online)

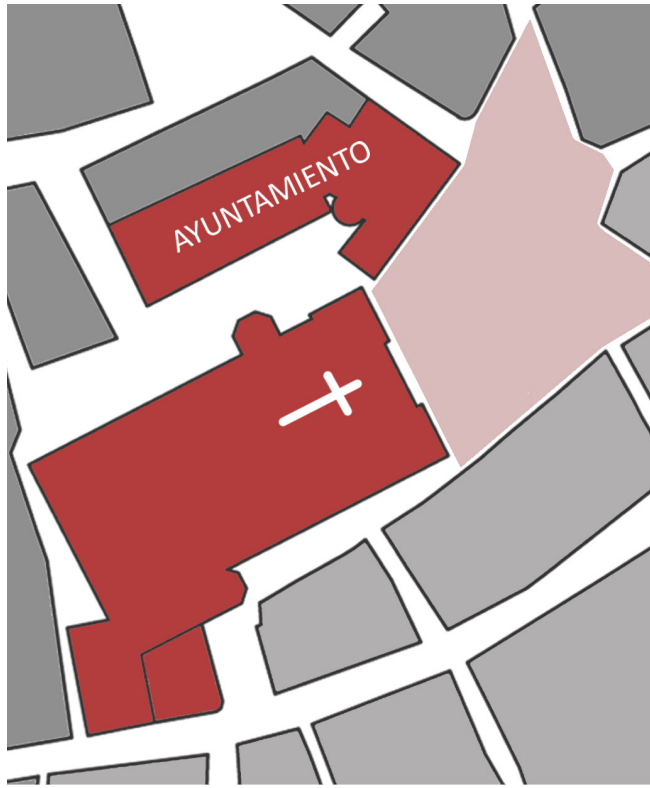


THE ASSEMBLAGE

What kind of urban design approach is geared towards creating a more coherent relationship between the different buildings on the site of the Old Tannery? In the Austrian architect Camillo Sitte's (1843-1903) book *The Art of Building Cities* in which, he argued that architects should rethink their approaches; for a city 'should be built to give its inhabitants security and happiness' (1945: 1). This, however, does not necessitate the idea that the Old Tannery would become a city, but rather an urban intervention outside the borders of urbanity where nature becomes the main driving force. The proposed urban intervention will focus on designing various plazas between the edges of the buildings on site, thereby creating an assemblage.

> Old buildings ought to be preserved, but we must, so to speak, peel them and preserve them.
> Camillo Sitte (1945:19)

'To peel and preserve them', there is no better way to describe the adaptive reuse of architecture that should be left to peacefully subside: imposing a harmonious existence for dwellers not only within the buildings but also in the in-between. Plazas should break free from the grid of contemporary cities leaving the sensitive observer "seeking an explanation for its wonderous effect" (Sitte, 1945: 26). An unsightly disruption of symmetry on plan and elevation and the incorporation of nature will help add to the picturesque qualities of the plaza to compliment the context. With the context including its rich viticulture heritage through its extensive vineyards, the question remains in how the notion of an assemblage can be integrated into the practice of viticulture.



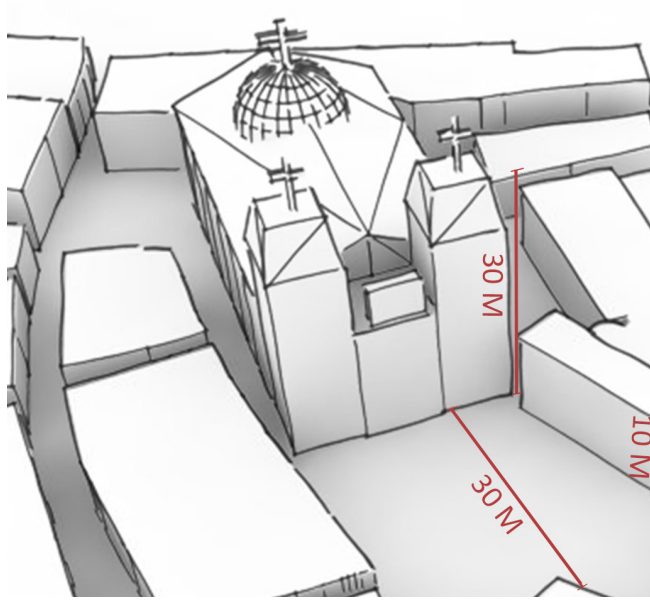
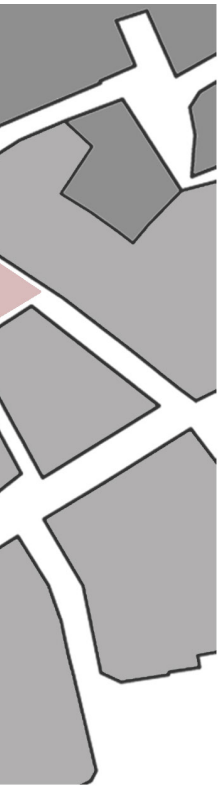
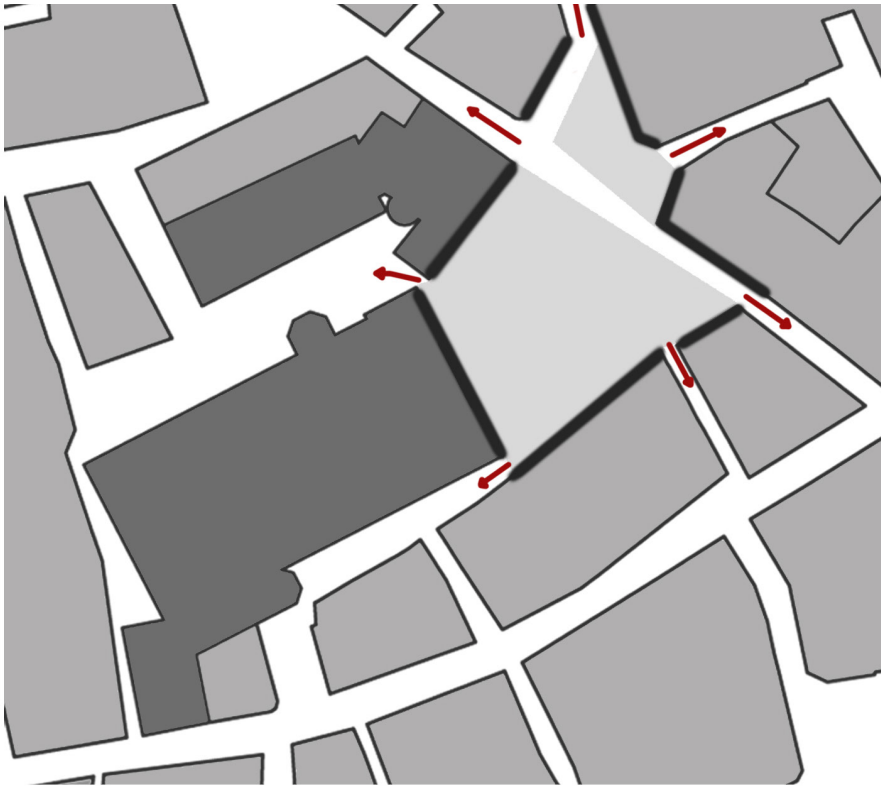
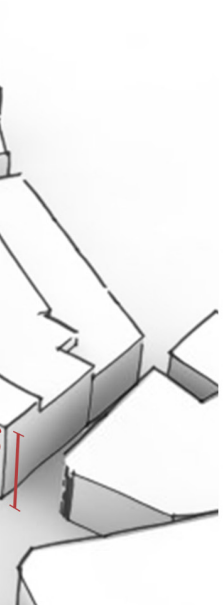


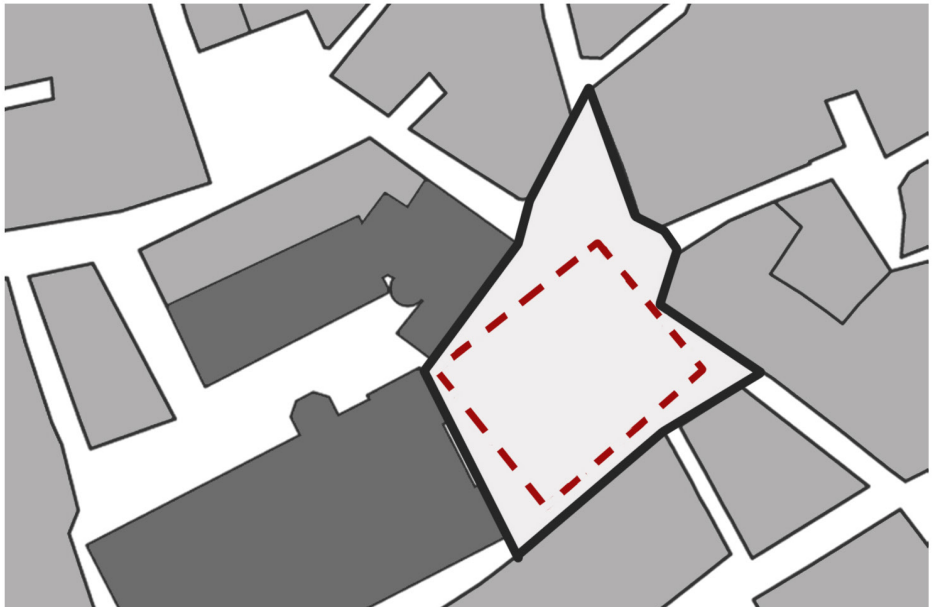
Figure 33: The art of plazamaking (Jones, 2010: online)

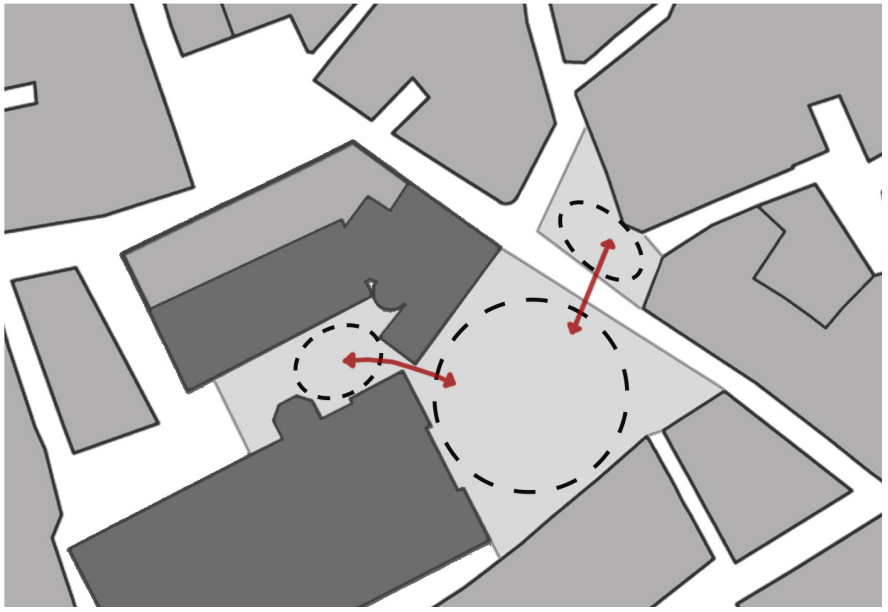












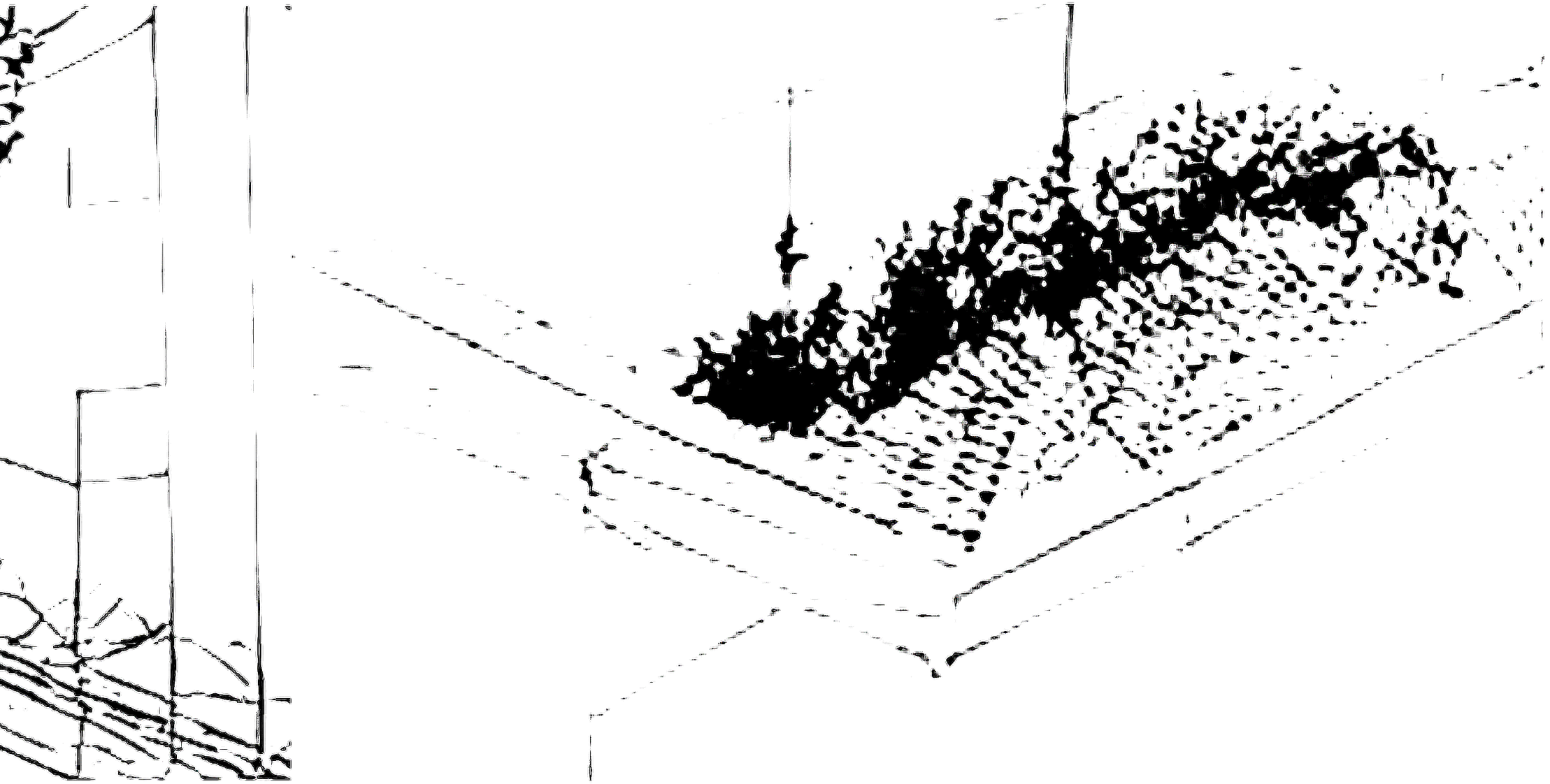
BIO-DYNAMIC VITICULTURE

In recent times, biodynamic viticulture has developed into a "spiritual-ethical-ecological" interpretation of agriculture, holding out the elusive promise of mutual flourishing for humans and nature. Bio-dynamic viticulture attempts this kind of flourishing in unconventional ways. For instance, while traditional farming focused on monocultural cultivation, the bio-dynamic approach allows animals (ranging from ducks to horses) to graze the spaces between grapevines as an ecological way to fertilize, prune and cultivate the vineyards (Denig, 2017: online).

In an architectural sense, bio-dynamic viticulture is both an inspiration and culmination of the theoretical discourse discussed in previous chapters. It motivates the prominent role that the dialogue between assemblage and rewilding plays in the proposal. It challenges the existing orders on site in the same way it challenges traditional beliefs in viticulture. Metaphorically its recognition of the importance of the spaces between grapevines alludes to the palimpsistic dance between cadence and carapace; the current vintage and those that precede it. Bio-dynamic viticulture allows for the temporal cadences of cultivation to come into their own without solely relying on the presence of manmade carapaces. It fosters a new appreciation for the viticultural heritage of the Val du Charon while proposing alternative methods for future viticulturists. Ultimately, this interpretation of biodynamic viticulture becomes a reinvigoration of both time and shell within buildings and for the dwelling spaces between grape vines.



Figure 34: A grapevine as the carapace (Author, 2022)



CONCLUSION

The Old Tannery has long been abandoned by society, but reconfiguring the various industrial relics on site, a design process inspired by new directions in viticulture may breathe new life into the ensemble. A site-specific intervention aimed at both historic preservation and the urge toward new kinds of codependent relationships between dwellers and their natural surroundings. The beauty of abandonment may find a new voice amid intentional efforts at architectural rewilding. This palimpsistic dance has enabled a provocative interaction between the historicity of the buildings' existing shells and the rhythms at which dwellers circulate through the built space along orientating promenades. The dweller's perception of the built spaces is called forth in various moments of biophilic encounter amid the general rewilding impetus.

Moments of critical noticing are enabled through the creation of spaces where the rhythms of the present resonate with the rhythms of the past. The existing open voids on site are used to bind all structures on site into an assemblage that improves the overall experience of the Old Tannery. An intervention in the spaces between carapace and cadence enables a palimpsistic dance on the site of the Old Tannery that will lead to many moments of appropriation for those dwelling on the site and its immediate environment. The theoretical stance discussed in this chapter is only the beginning of a suitable intervention on the site, meaning that local and foreign precedents need to be examined in the following chapter.



Figure 35: Extractable beauty (Author, 2022)



4

PRECEDENT STUDIES



Figure 36: New vs Old (Smith, 2012: online; adapted by author)



PRECEDENTS OF TYPE

Elgin Railway Market
Elgin, South Africa
Corban Warrington, 2019

Intent

The Elgin Railway Market is located within an old apple warehouse converted into a bustling Steampunk, Art Deco market boasting local food and craft vendors, and live music. It is the gateway to the beautiful Elgin Valley. The original building was built in the 1940's by Italian prisoners of war. The concrete tapered columns and curved box gutters bear testimony to the skill of those bygone craftsmen(Stehr, 2020: online). The Ceres Rail company with their collection of 80 year old steam trains operate a Cape Town to Elgin weekend return trip.

Concept

The architect Corban Warrington aims to create spaces that encourage interaction and give meaning. In this case, the communal seating acts as a catalyst for interaction between market visitors and their surroundings.

> 'With the help of local in-house manufacturers, lead by engineer Mike Sutton, we had full freedom [when it came to the] design and were able to push the boundaries of manufacturing practices', Corban Warrington (Stehr, 2020: online).



Figure 37: Central heating (Author, 2022)

Opposite Page:
Figure 38: An old apple store (Author, 2022)


ELGIN

Application to Design

- The means at which the Elgin Apple Store was adaptively reused into a market is quite similar to the extent of adaptive reuse that should be achieved in the Old Tannery:
    - Using what the site has to present and improving it
    - Sensitve, yet sophisticated, intervention on detail-level

- The use of a promenade that follows the exterior silhouette of the building, allowing dwellers to circulate on the building edges while giving constant awareness of the important functions within the centre.

- The use of materials that compliment the existing industrial techtonics of the building.

- Incorporating local artisans to design and build aesthetical elements that contribute to the magnificence of the building's interior.



Figure 39: Central heating (Author, 2022)

Opposite Page:
Figure 40: New place for public gathering (Author, 2022)



The Documentation Center Nazi Party Rally Ground
Nuremburg, Germany
Günther Domenig, 1998

Concept

Austrian architect Günther Domenig(1934-2012) uses diagonal lines to disrupt the building's "axiality," which otherwise imposes itself from every angle. His formal vocabulary evokes lightness, and his use of other materials (glass, aluminum, concrete), opposes the building's granite façade and brick torso. He creates an architectural landmark of the present, visible from afar, as a reply to the National Socialist past (Hansen, 2010: online).

Design Explanation

The interior structures of the Documentation Center are a clear intrusion into the gloomy, rectangular building. All the new structures provide views into the original architecture from the National Socialist era, actually putting it on display(Hansen, 2010: online). The original structure remains continuously on exhibit, offered up for study. Domenig's deconstructionist intervention, clearly readable as a counter-position to the National Socialists' claim to domination, is a statement in opposition to the Congress Hall's monumentality, and enables viewers to arrive at their own opinions about the past era's aesthetics. Günther Domenig won numerous awards for his design. It reaches beyond Nuremberg's boundaries to express a new way of dealing with the architectural legacy of the National Socialist regime (Hansen, 2010: online).

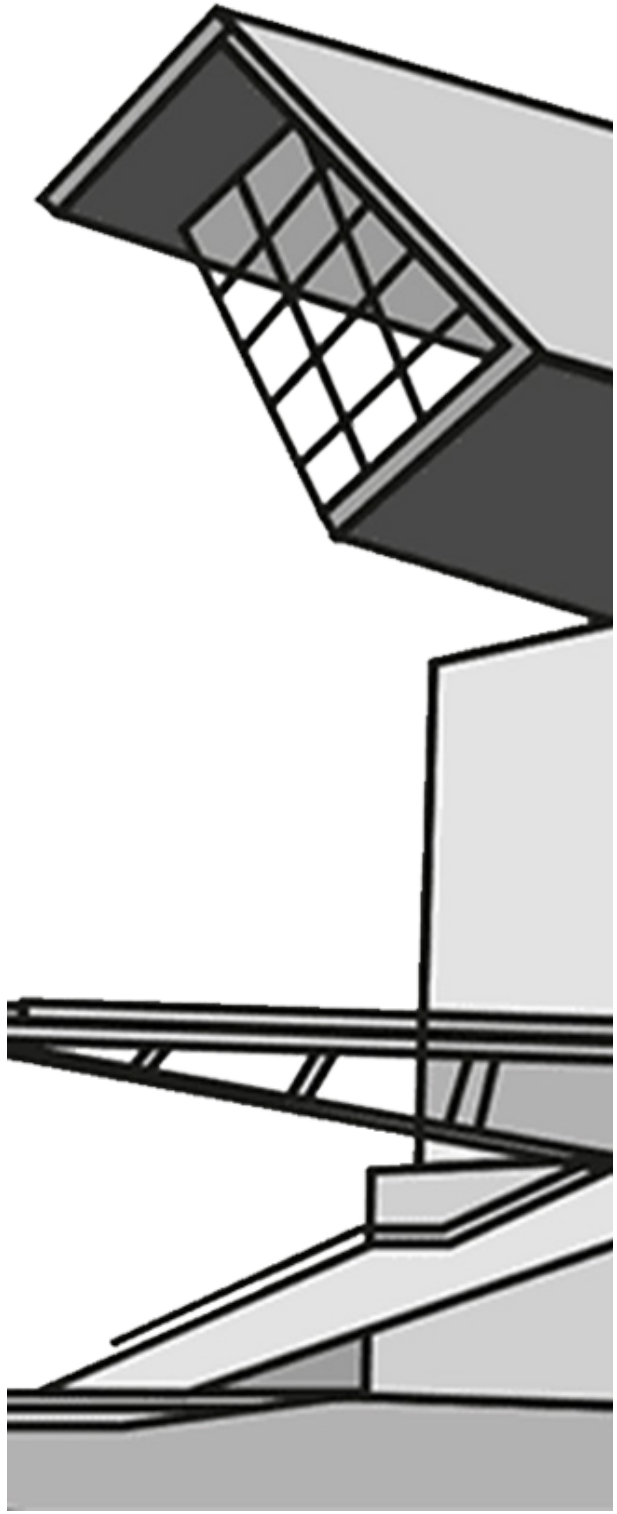


Figure 41: Complimenting the old (Smith, 2012: online)

Opposite Page:
Figure 42: Imposed upon the old (Smith, 2012: online; adapted by author)



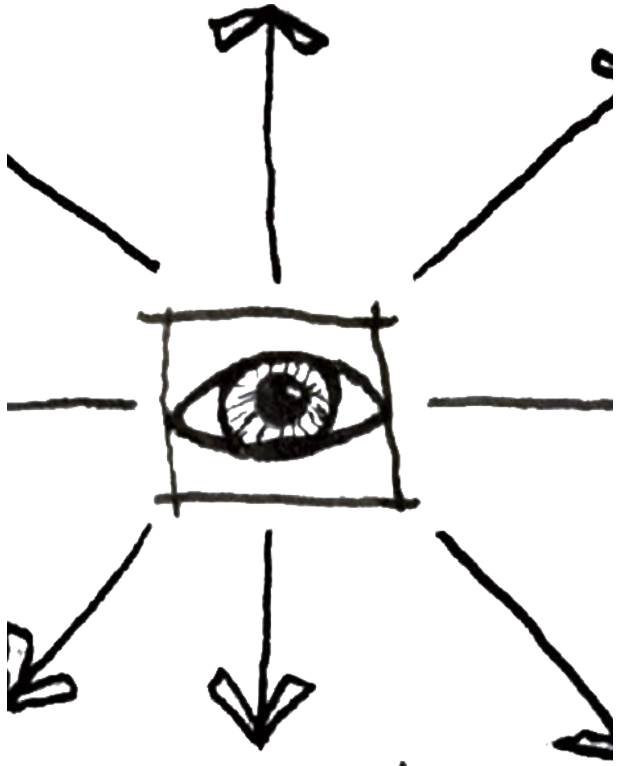
Application to Design

- The use of an 'invisible' yet 'readable' promenade through the building to aid dwellers to navigate through the built space.

- A promenade should not be a labyrinth but rather a pathway through the built space with moments of appropriation happening along its extent.

- Moments of appropriation along the promenade forcing the dwellers to critical notice their surroundings.

- Though this is a more aggressive way of working with heritage that might not be applicable on the Old Tannery, the extent of intervention on the building's interior is both sensitive and sophisticated.



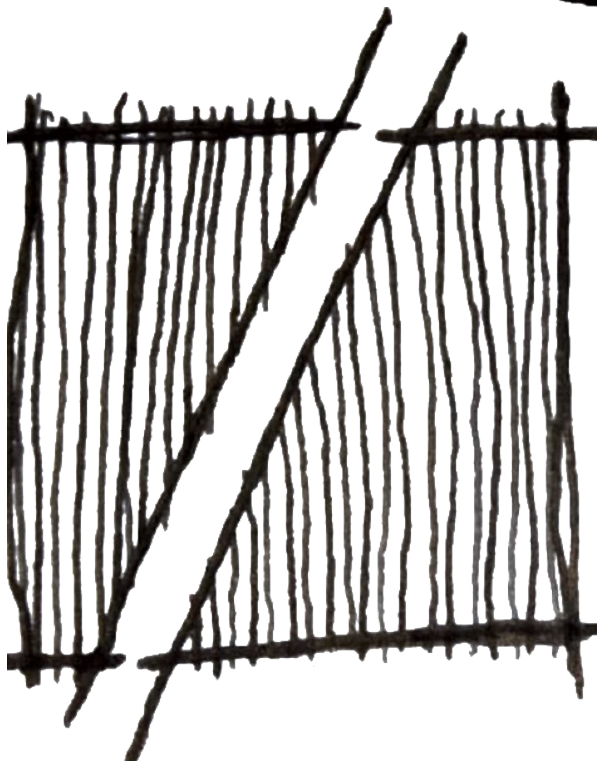


Figure 43: Observing (Author, 2022)

Opposite Page:
Figure 44: Contrasting the axis (Author, 2022)



Figure 44: Corridor through history (Smith, 2012: online)

ASSEMBLAGE PRECEDENT

Wedgehood Holly Campus
Culver City, United States of America
Eric Owen Moss Architects, 1999

Introduction

The Wedgehood Holly Campus was designed by Eric Owen Moss Architects as part of their New City Project in 1999. The asssemblage of buildings was built in Culver City in the United States of America after being gifted by a long-time benefactor. He intended it to be a place where the next generation of the theatre world would be educated in the performing arts (Lawson, 2010: online). This building was chosen as a case study for the adaptive reuse of the Old Tannery in Wellington due to its use of an assemblage to connect structures and function on site.

Application to Design

- Though the site might not be a historical assemblage, this precedent shows how to connect buildings of different morphologies and function together into an assemblage.

- It is also evident that this precedent lacks a sufficient means of circulating between buildings on the exterior. A lacking that will be answered by the reconfiguration of the Old Tannery.



Figure 45: Structural experiment (Lawson, 2010: online)

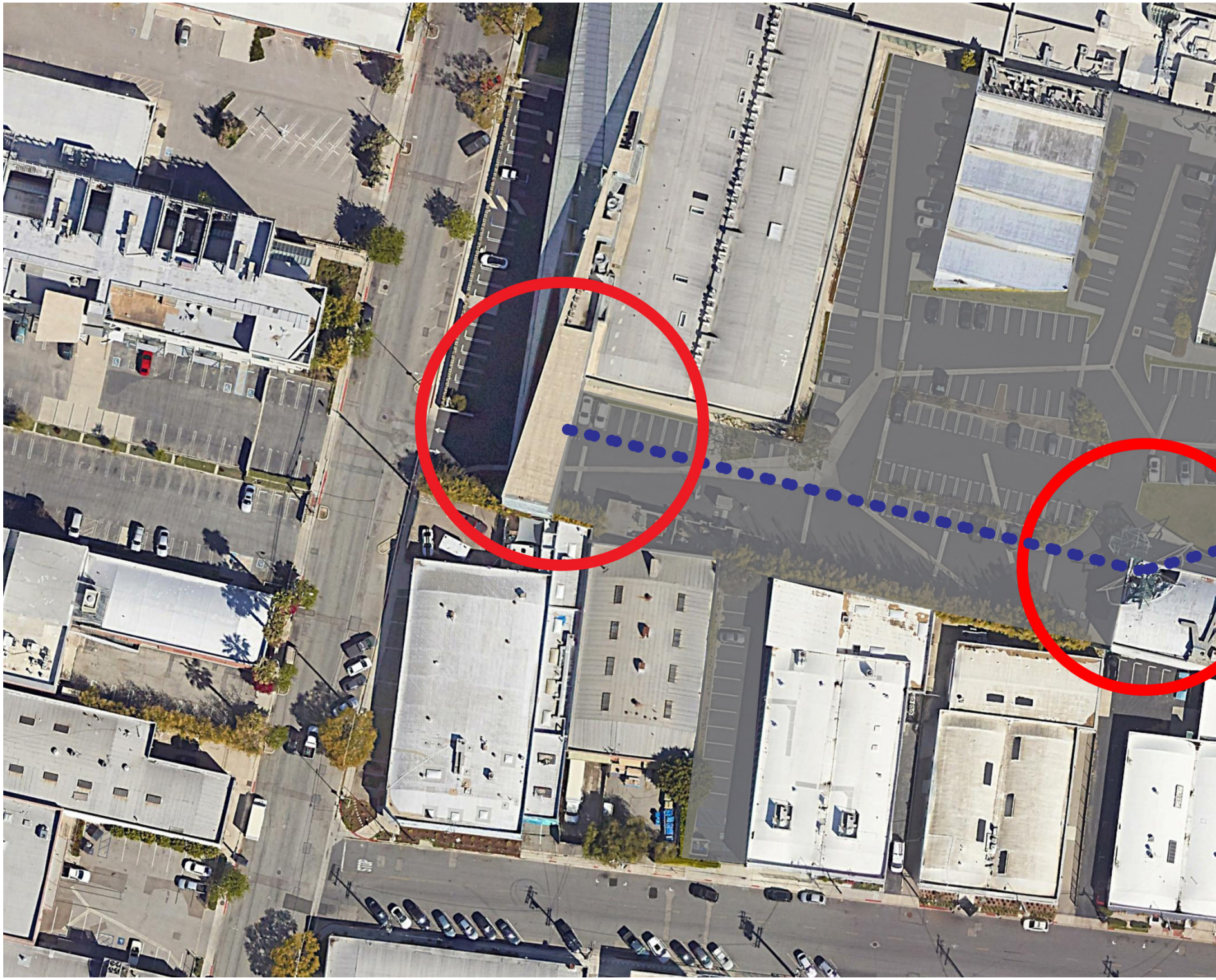
Opposite Page:
Figure 46: The Pterodactyl (Lawson, 2010: online)



4.2

STRUCTURAL PRECEDENT

PRECEDENT STUDIES



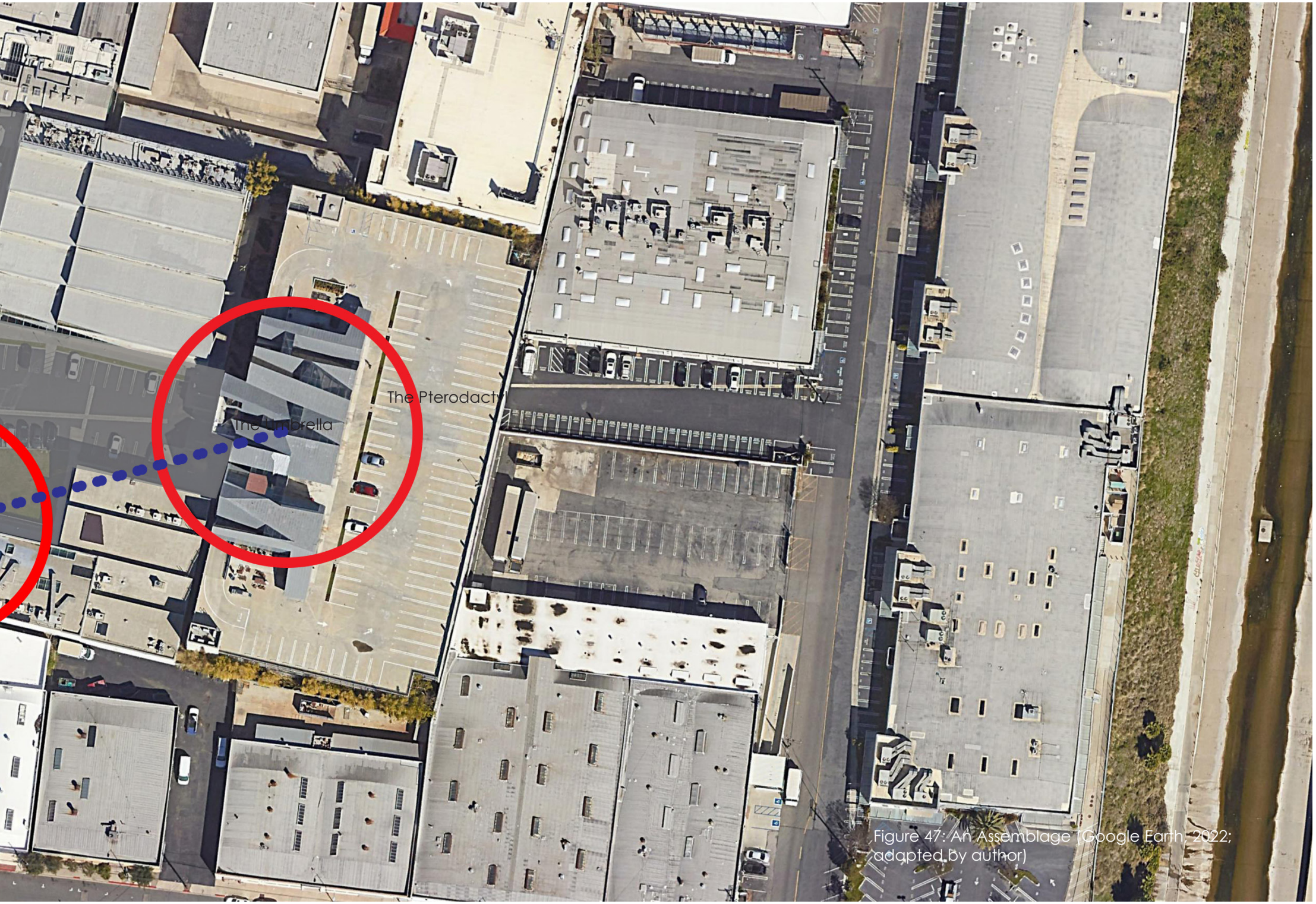


Figure 47: An Assemblage (Google Earth, 2022; adapted by author)

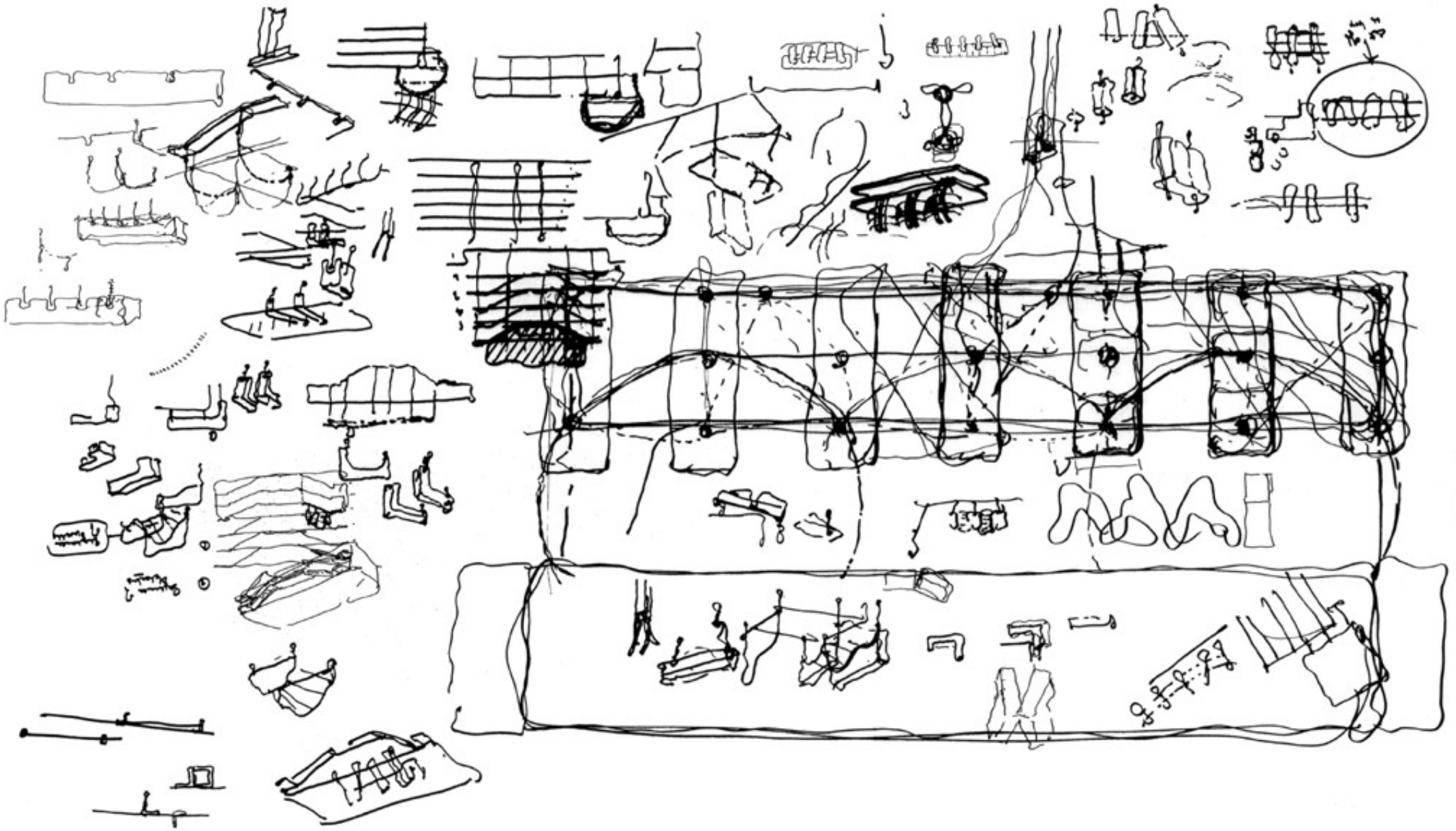


Figure 48: Analysis of the Wedgehood Holly Campus (Author, 2022)

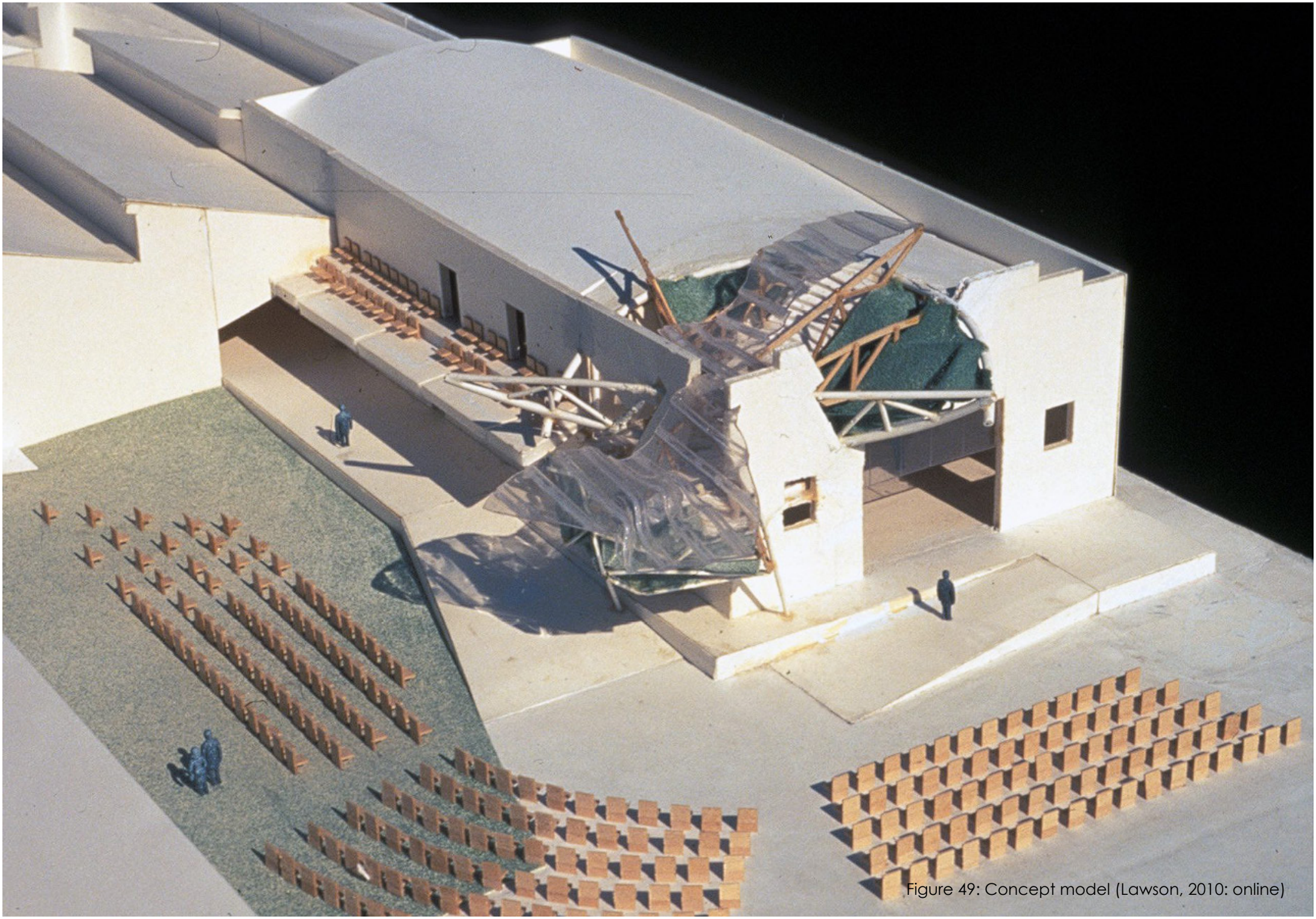


Figure 49: Concept model (Lawson, 2010: online)

5

BRAIN WORK



Figure 50: Overlapping Realities embodied (Author, 2022)



5.1

TOUCHSTONE

TOUCHSTONES

Two touchstones were developed through the process of the design with one being a reaction to the other failing to develop as a compelling companion to the design process. The first touchstone aimed to create the idea of a reconciliation between industrial architecture and the Arts and Crafts [Figure 52.1]. This approach, however, changed to a reconciliation between architecture and nature in the second touchstone. A grapevine was combined with leather to create an assemblage [Figure 52.2] of both the old and new realities of the site, embodying the palimpsistic dance that the design aims to achieve. This palimpsistic dance shows that architecture and nature can be drawn together by a synthesis of the rhythms of old and new.

The original touchstone led to a questioning of the direction in which the design was going, consequently meaning that three concepts had to be developed to react to this assemblage.

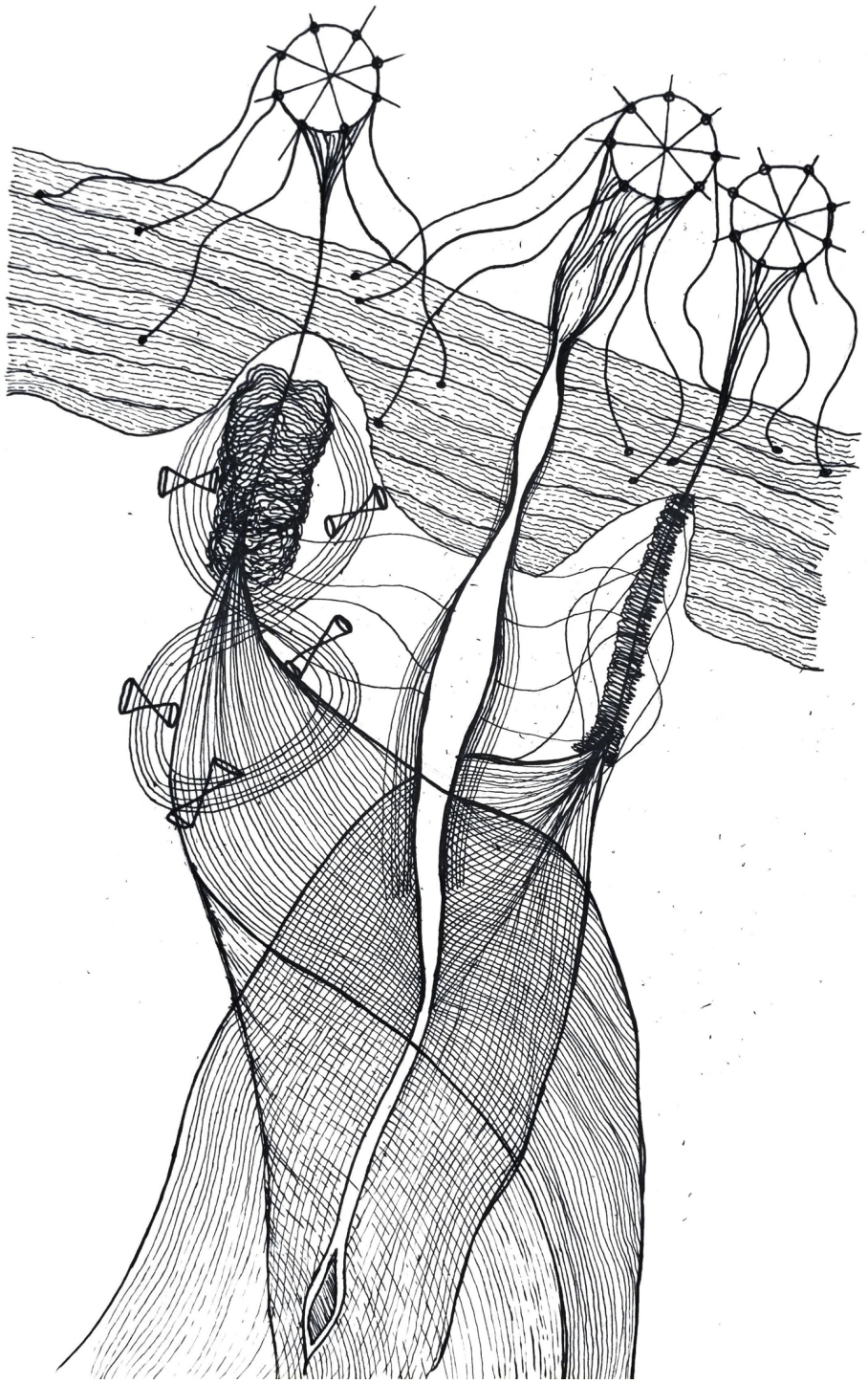


Figure 51: Overlapping Realities (Author, 2022)

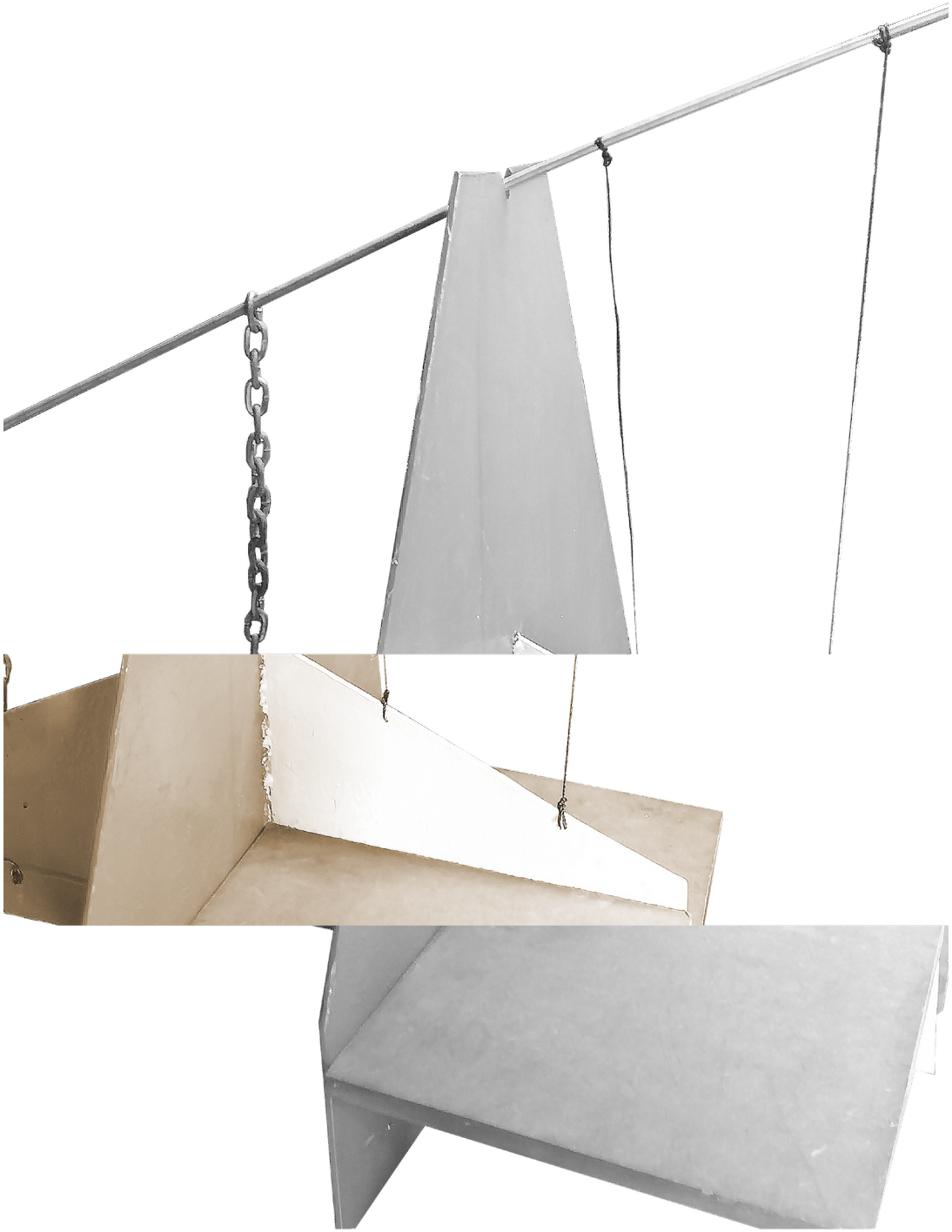


Figure 52.1: Industrial vs Arts and Crafts (Author, 2022)



Figure 52.2: Architecture vs Nature (Author, 2022)

SOJOURNED ASSEMBLAGE

On the site of the Old Tannery there exists a lack of connection between the different buildings and functions on site. This discordant nature of the site makes it difficult to navigate along the site's many thresholds. To get from point A to B would take the average dweller through a route that navigates various thresholds and endless open spaces lacking any functions or forms of articulation. The site as it is is a "difficult whole" to comprehend, as constituted by American architect Robert Venturi(1925-2018) in his book *Complexity and Contradiction in Architecture*(1966).

The assemblage of this difficult whole will be designed in such a way that the buildings would inadvertently communicate their functions to the dwellers through a temporal or 'sojourned' interaction between dwellers, the existing framework, and its environment. Pathways throughout the built space will be the first step to this assemblage.

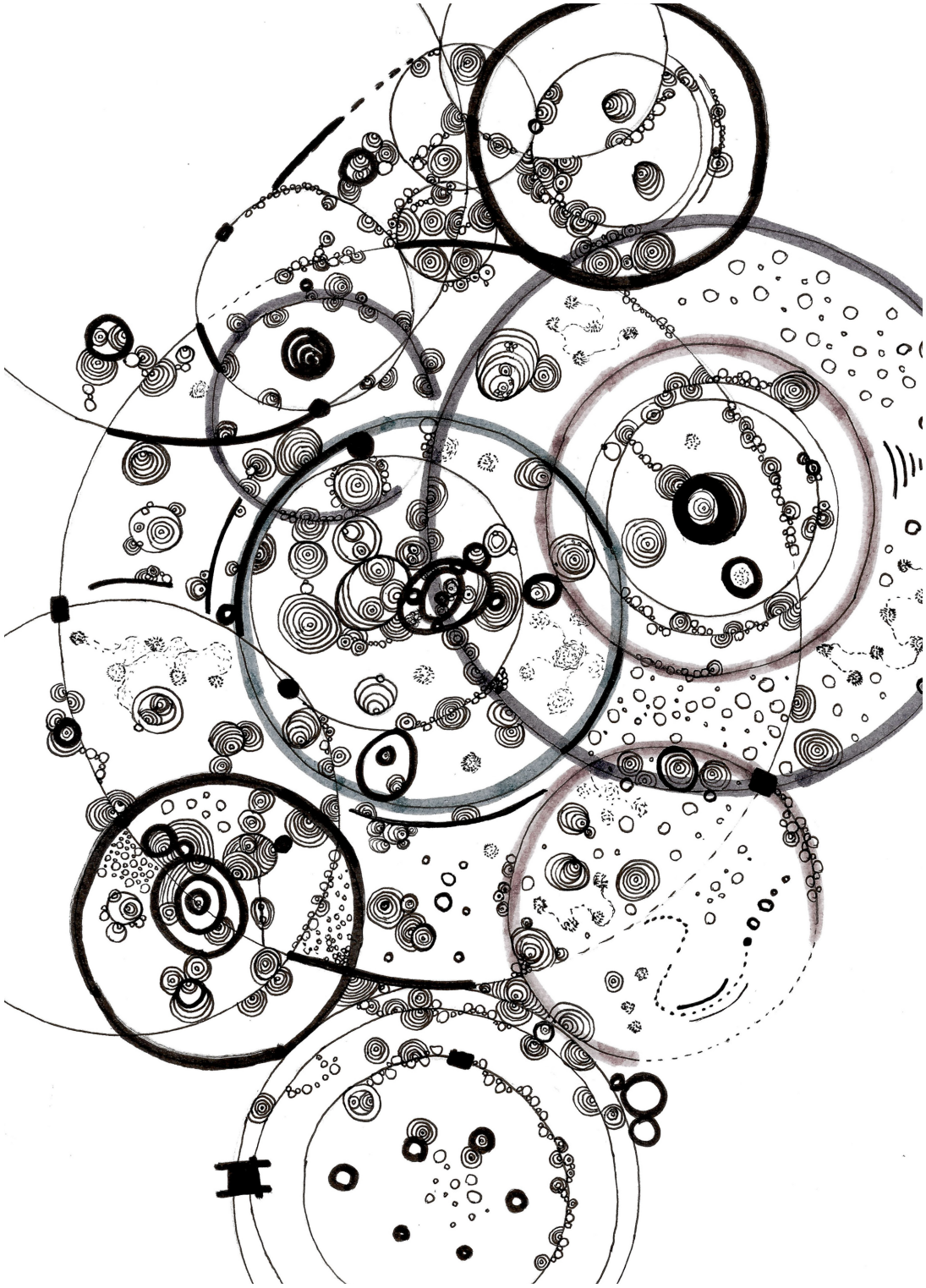
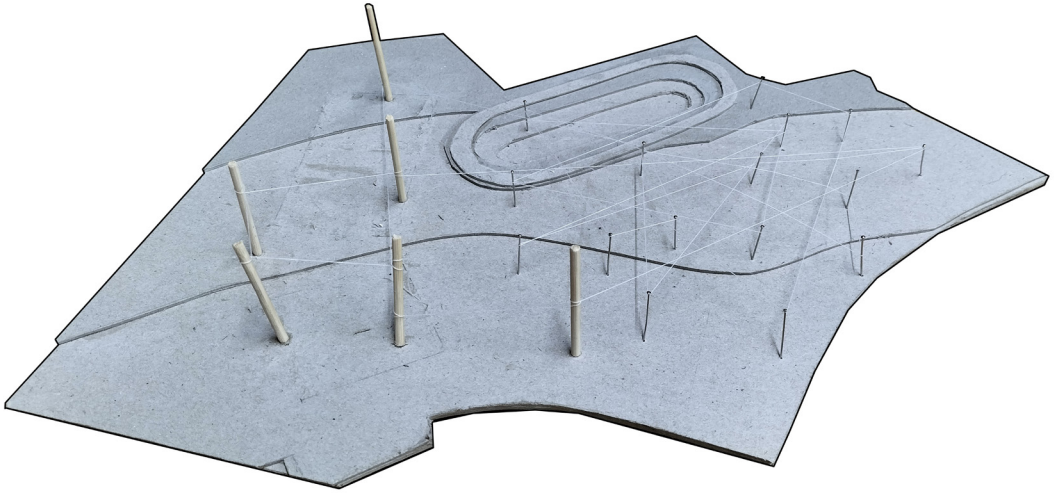
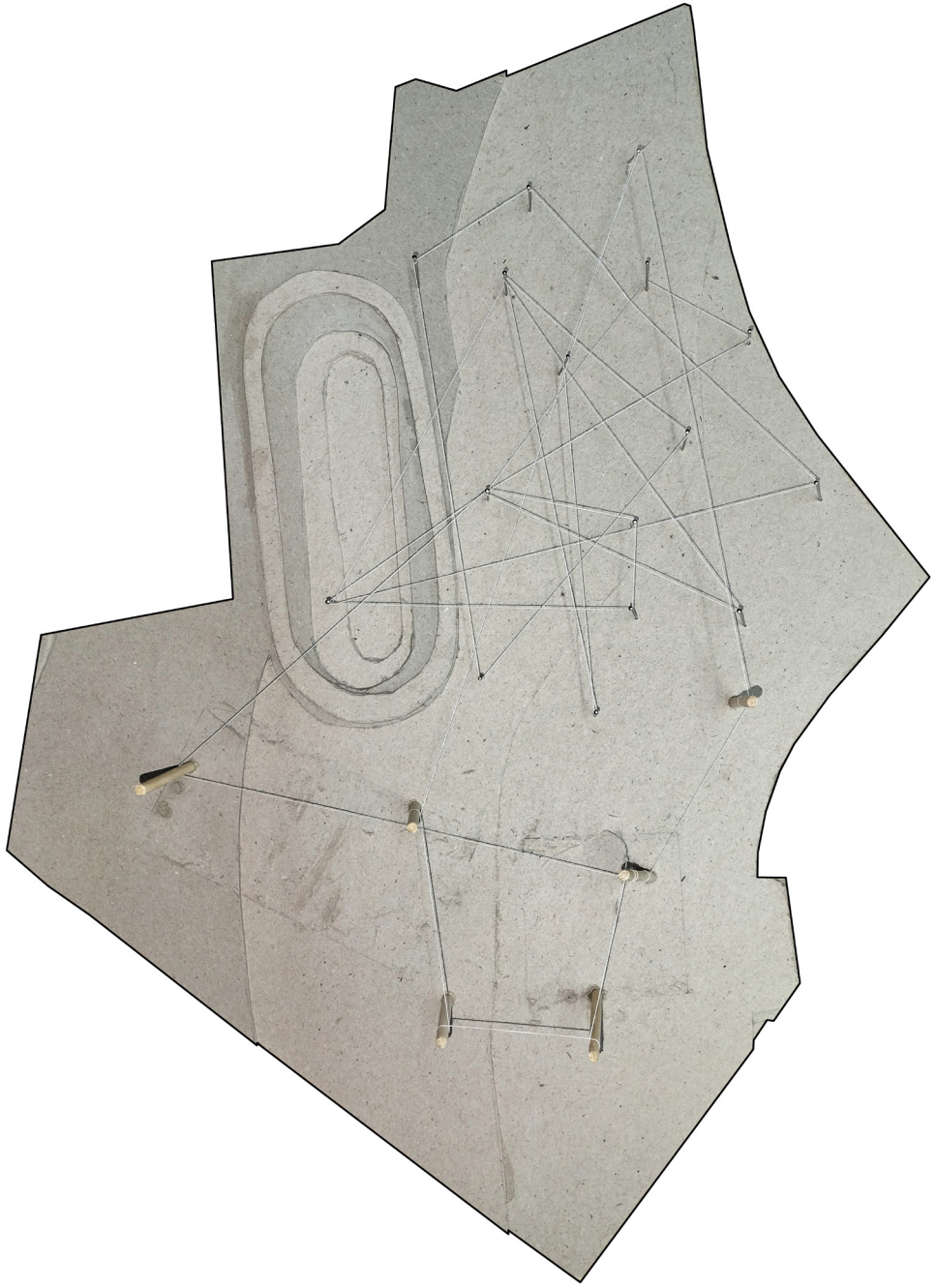
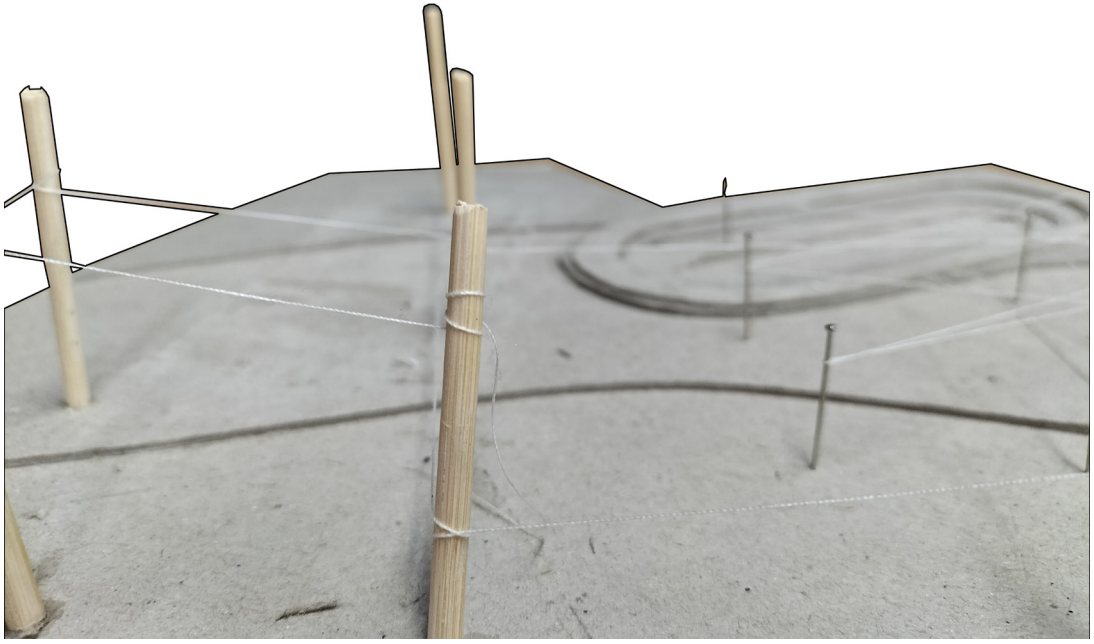


Figure 53: A distributed assemblage (Author, 2022)

Opposite Page:
Figure 54: Interconnectedness (Author, 2022)







OBSERVATIONAL PROMENADE

As an interpretation of Le Corbusier's promenade, the Observational Promenade allows for research into the spatial dynamic qualities of a pathway through the built space. How will the dweller navigate along this pathway, ensuring that it does not become a labyrinth? Where will moments of intensity happen along this pathway? Will this promenade have a visual or subtle presence in the design?

The moments of intensity along this pathway that connect with the essence of the cadence will allow dwellers to critically look at their direct environment. Furthermore, there will have to be a connection between the rhythmic movements of the dweller and the shell of the building.

As for the model of this concept [Figure 56], a connection between carapace and cadence is shown through moments of appropriation that push through the existing footprint of the building. The intensity of these interactions will however be decided by the extent of changes to the existing facades allowed by the Burra Charter.

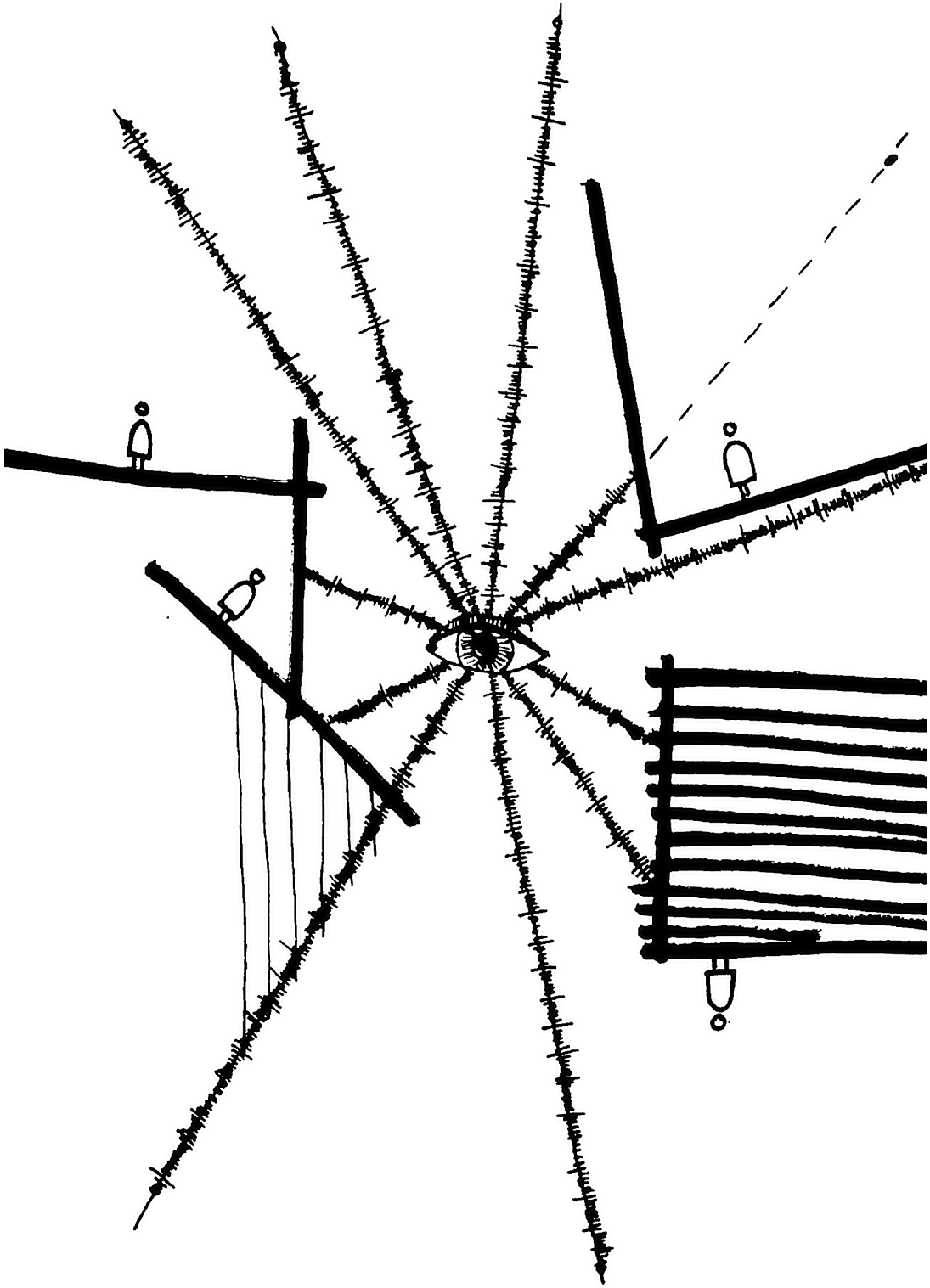
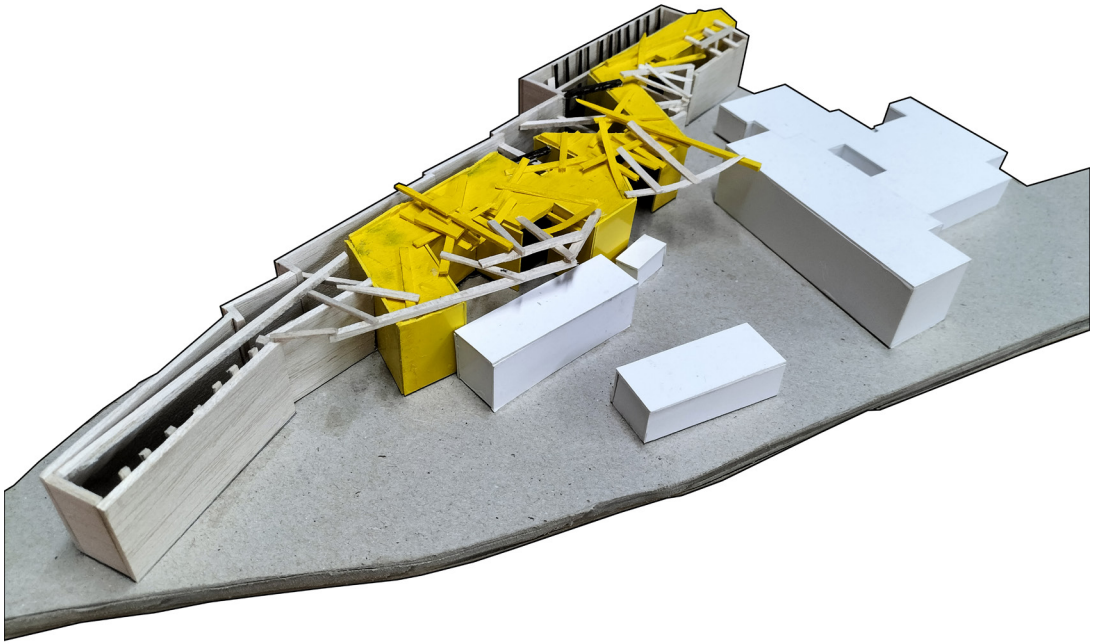
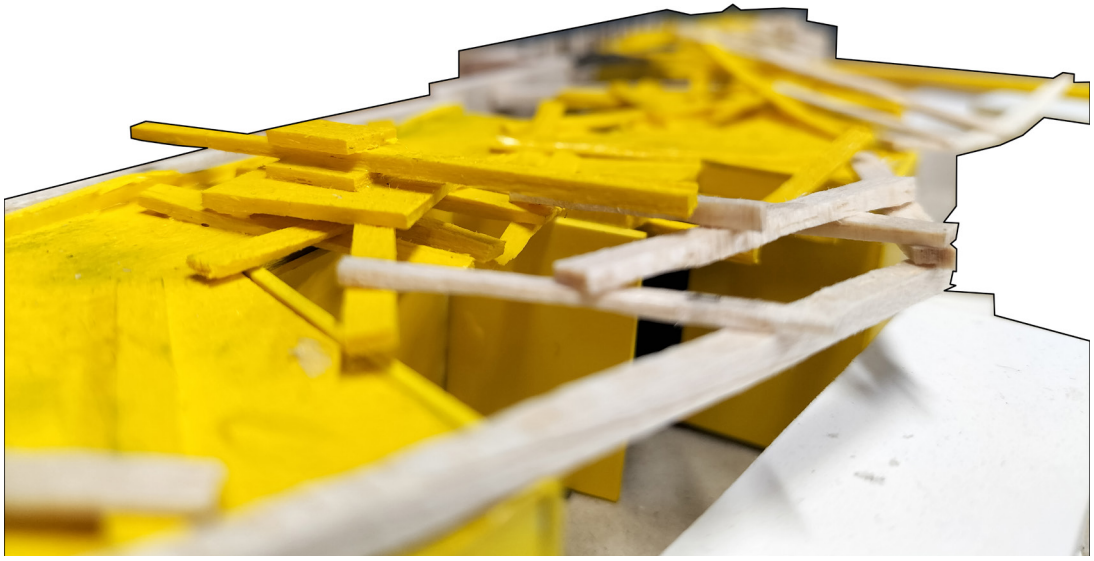
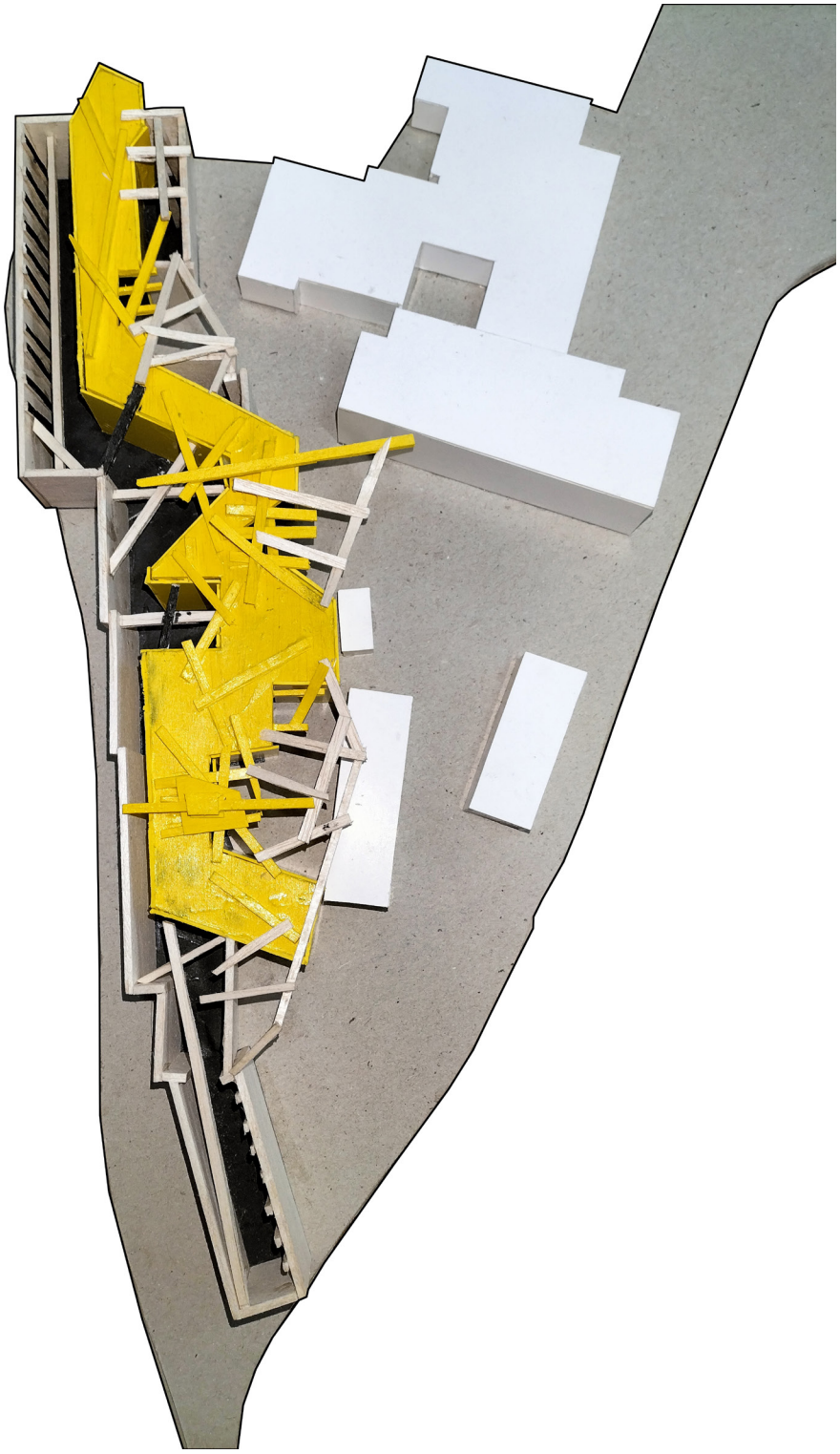


Figure 55: Observed experience (Author, 2022)

Opposite Page:
Figure 56: Nodes of observation (Author, 2022)







ADVENTITIOUS APPARITION

Continuing on the essence of the promenade and its importance to the proposed assemblage, the Adventitious Apparition aims to connect further importance to the moments of appropriation along the observational promenade. Where these 'moments of appropriation' happen there should be an interior space designed to culminate the time spent in said space(cadence) and the extent of changes to the building's shell(carapace) into a palimpsistic dance between functions of old and new.

The concept model[Figure 58] conveys these moments of intensity as a parasite that infiltrates the building's existing framework, but rather than degrading the historical structure, it fertilises its overall performance. The lessons learnt from the three concepts led to a design starting to develop that took a considerable amount of turns in terms of proposed programmes and interpretations.

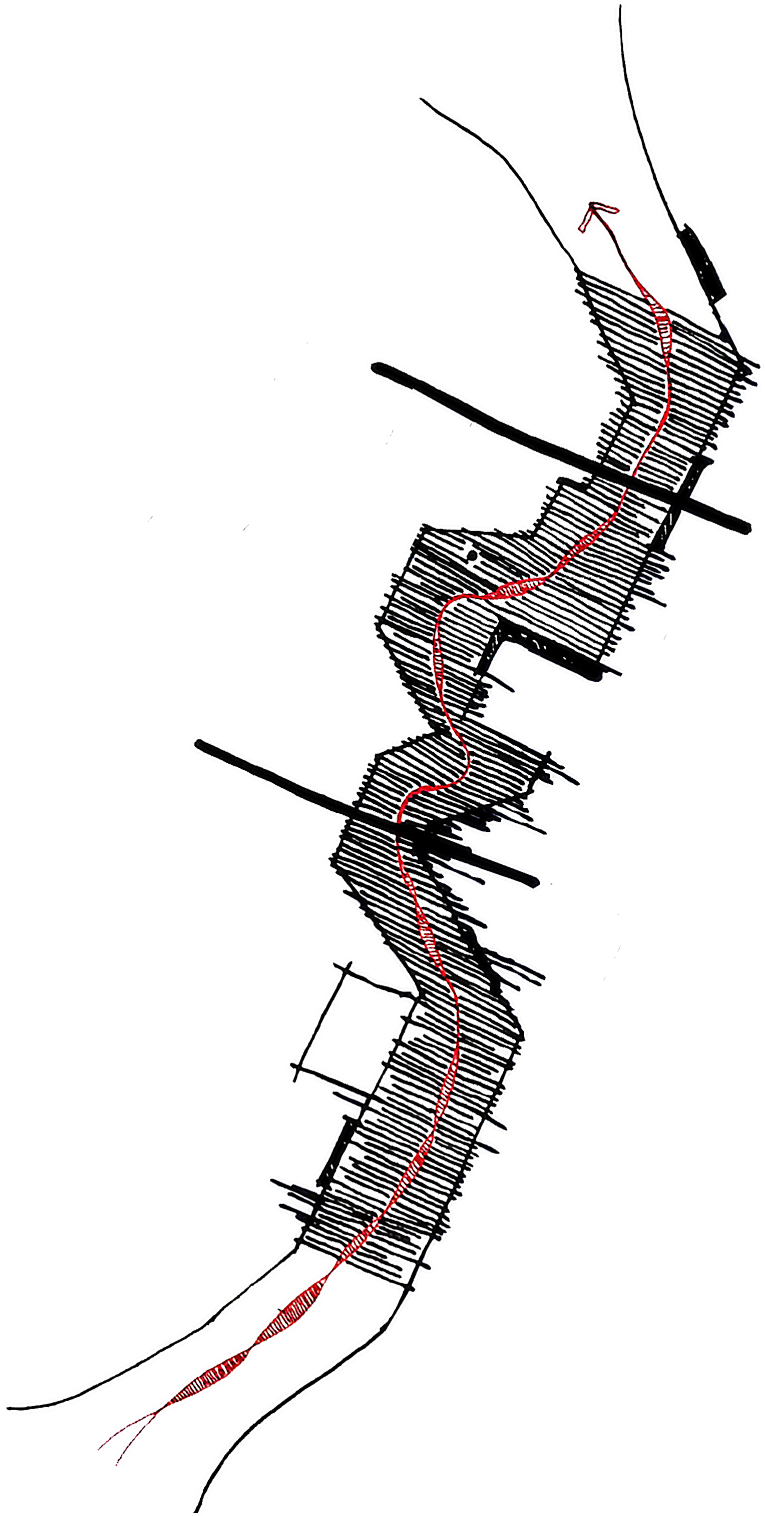
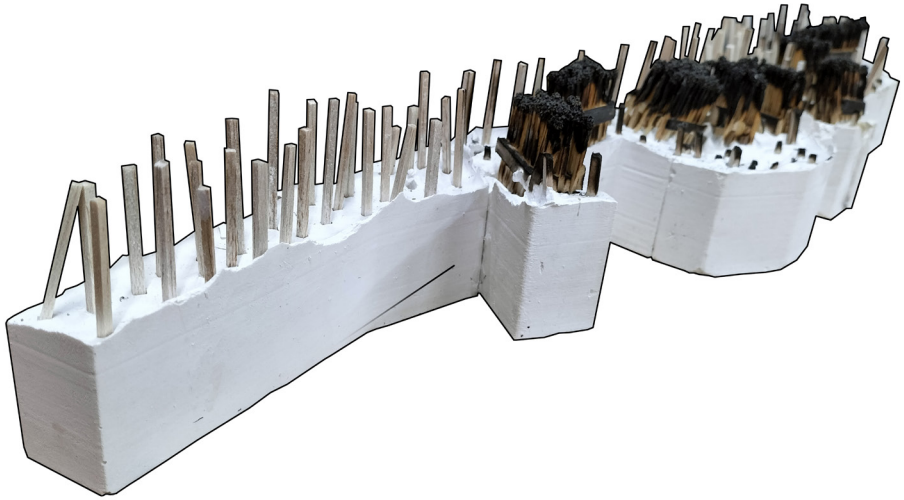
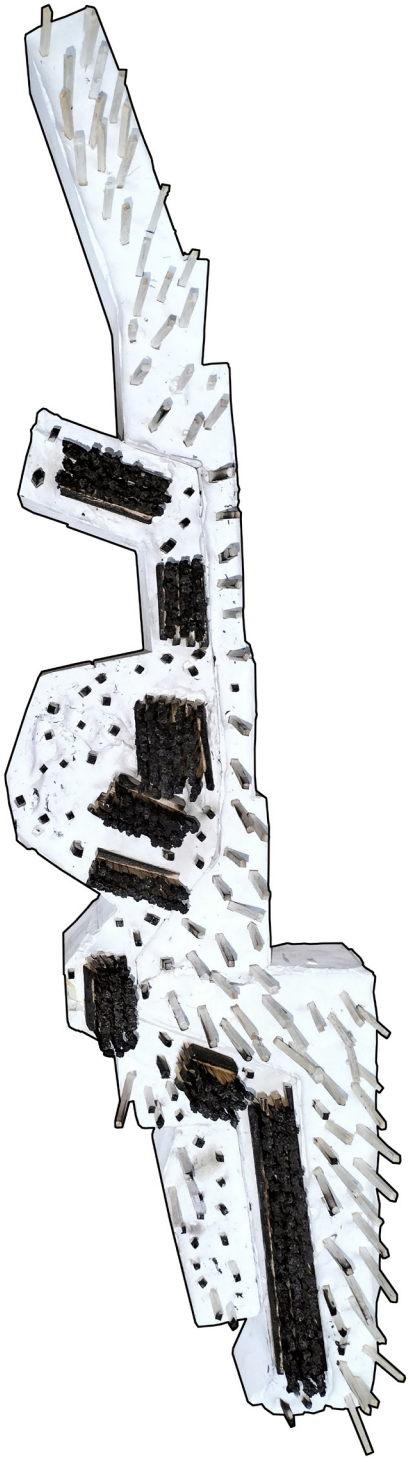


Figure 57: Parasitic intrusion (Author, 2022)

Opposite Page:
Figure 58: An intrusive effect (Author, 2022)









DESIGN DEVELOPMENT

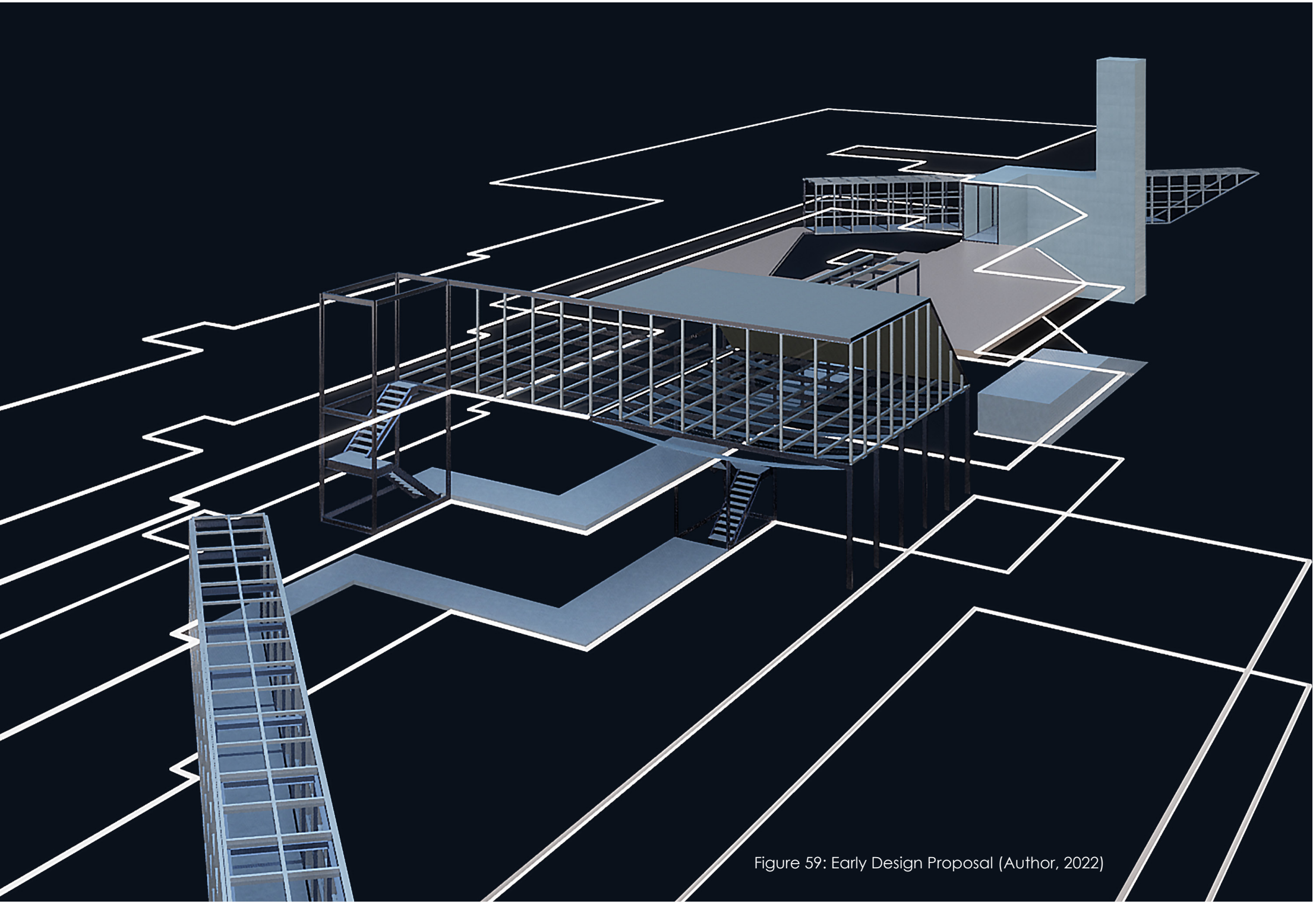


Figure 59: Early Design Proposal (Author, 2022)

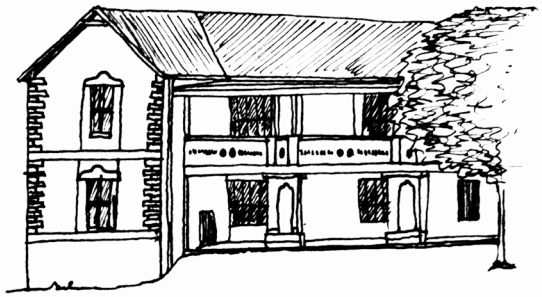
DESIGN DEVELOPMENT

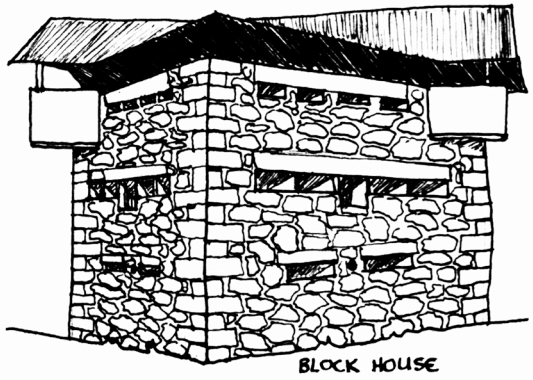
The reconfiguration of the Old Tannery into a College of Viticulture has been preceded by an eclectic assemblage of design methods and programme proposals. The initial design started as an Artisan's Aedificium (Structure of assemblage) that draws inspiration from a contemporary interpretation of the architecture of the Val du Charon[Figures 60 & 61]. This design was only focused on the reconfiguration of the southernmost building on site with the addition of temporary residencies for the artisans on the edge of the dam. The promenade became the tool to bind this proposal together but essentially proved to be a labyrinth that contributed to the various flaws of this design proposal.

The second design proposal came as a response to the various flaws of the first design proposal by using the promenade as an experiential tool between the tanner and the observer in a Tannist Tableau. Moments of interaction between these two parties allowed for an experience of both the tanning process and leather craft, while acknowledging the rhythms of the past. On a 3-dimensional level, the design followed the addition of shells, mimicking the leather tanning process, over the exterior of the building to enable an extension of the promenade on the outside of the structure. This design, however, proved to conflict with the principles stipulated within the Burra Charter through its complete disregard for the historical essence of the structures of the Old Tannery. Finally, the design reached its end with the proposal of a College of Viticulture for CPUT.



Figure 60: Various architectural principles identified in Wellington (Author, 2022)





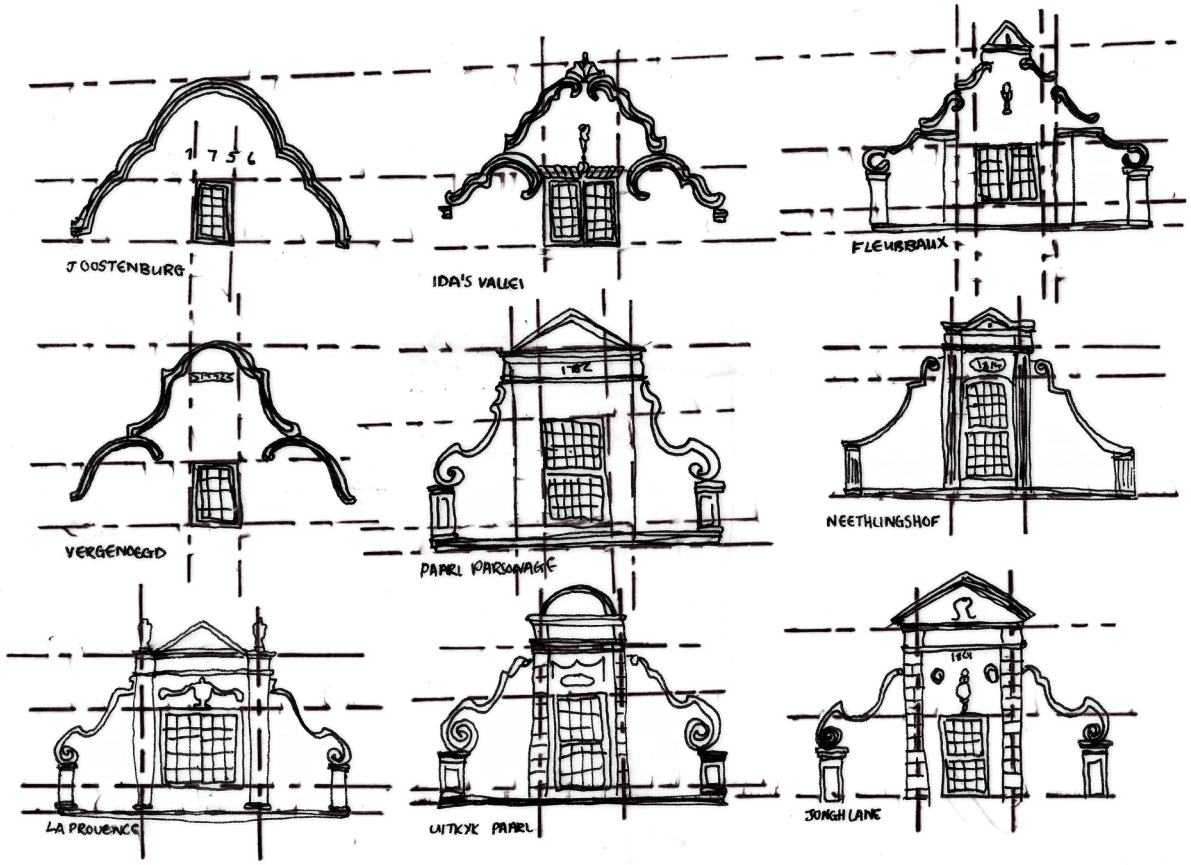
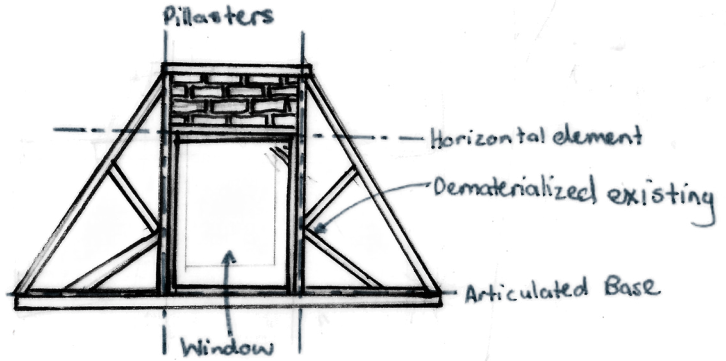


Figure 61: Reinterpreting the Cape Dutch Gable (Author, 2022)



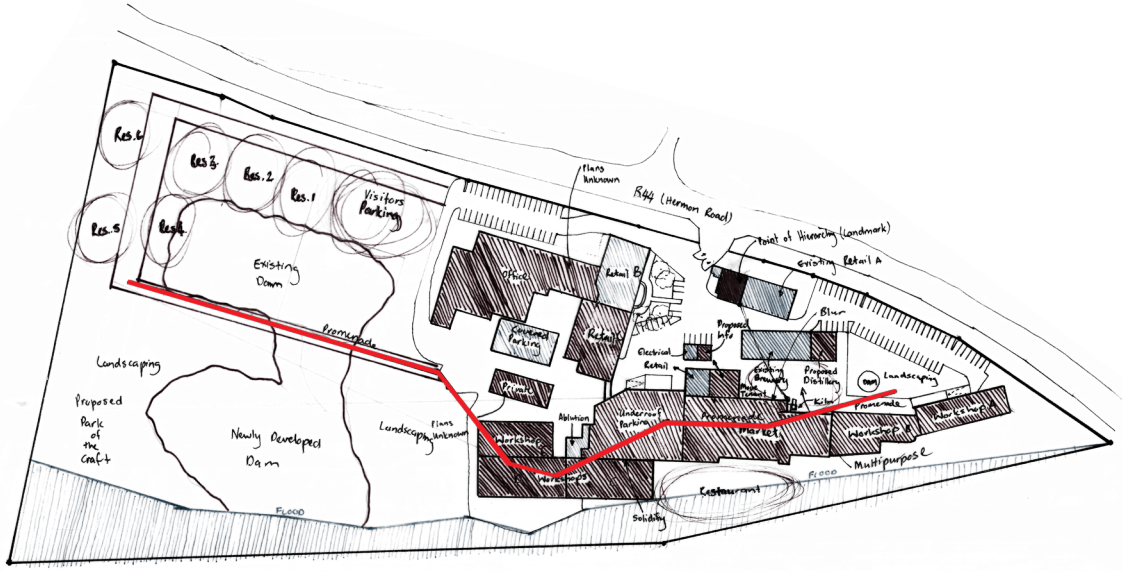


Figure 62.1: The proposal to extend the dam to the edge of the Krom river and adding residencies along its edges(Author, 2022)

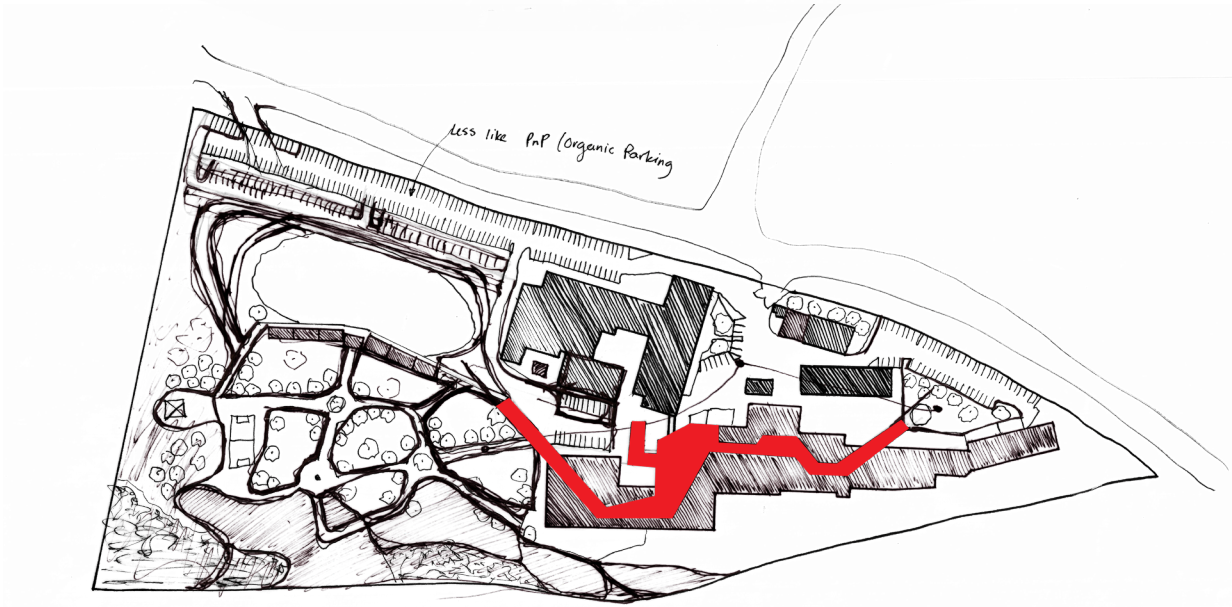
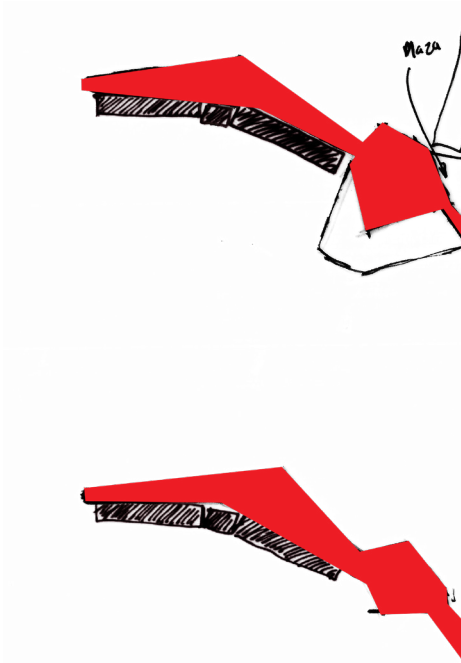
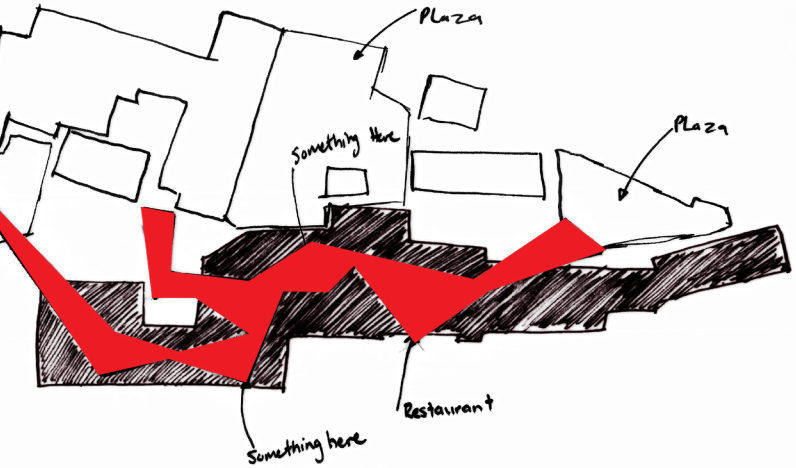


Figure 62.2: Landscaping proposed for an urban intervention on the outside of urbanity(Author, 2022)





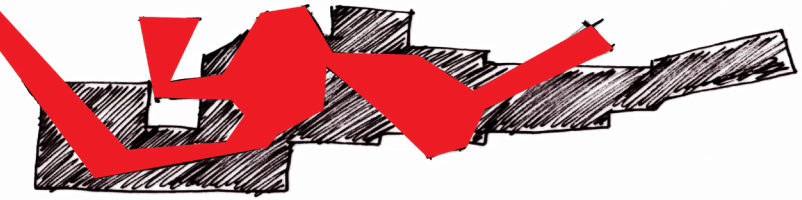


Figure 62.3: Using the promenade as an experiential tool on site(Author, 2022)

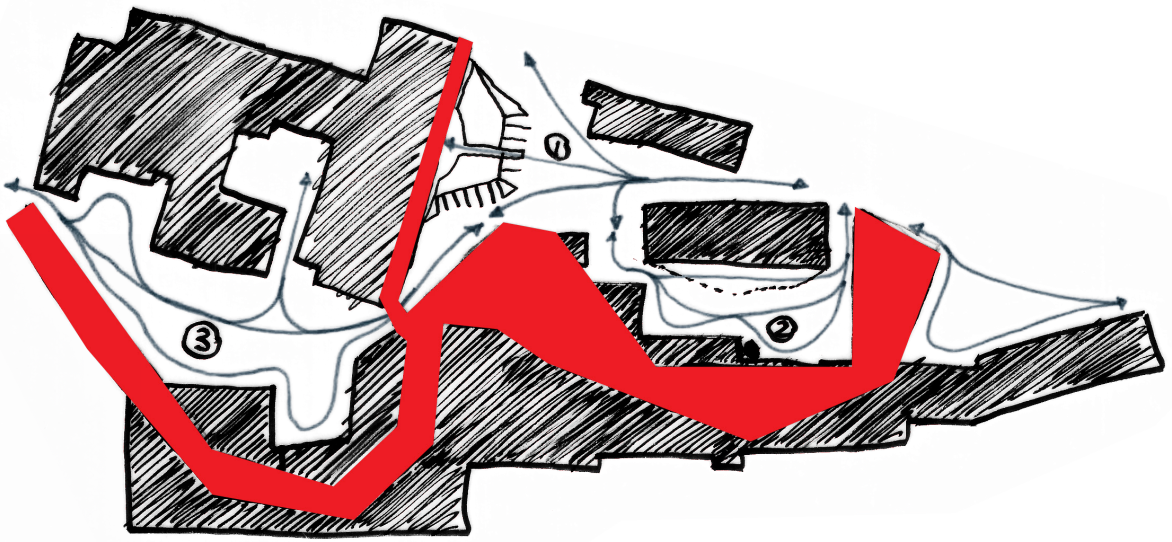


Figure 62.4: Using the promenade to create various plazas on site(Author, 2022)

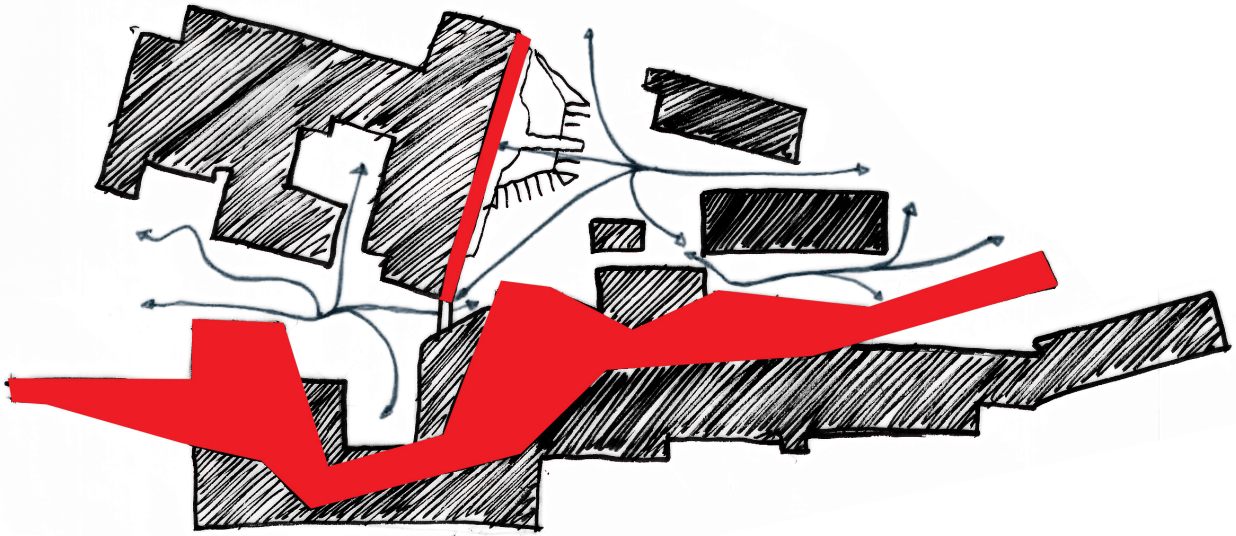
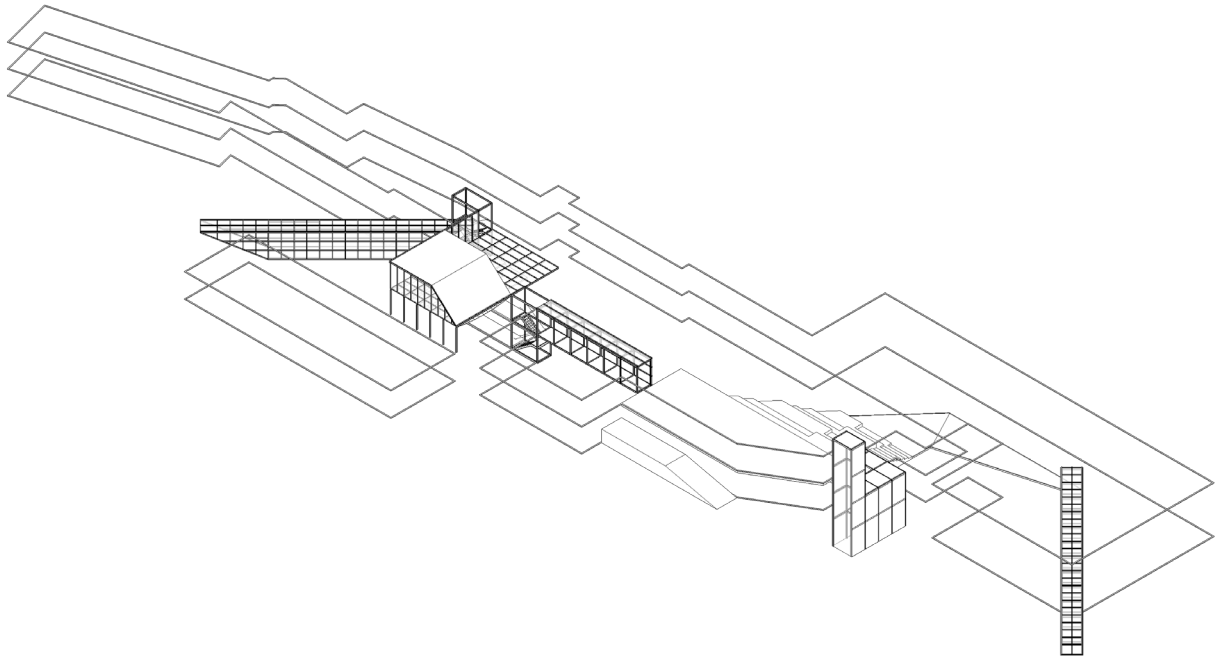


Figure 62: The development of the site plan with the promenade depicted in red(Author, 2022)



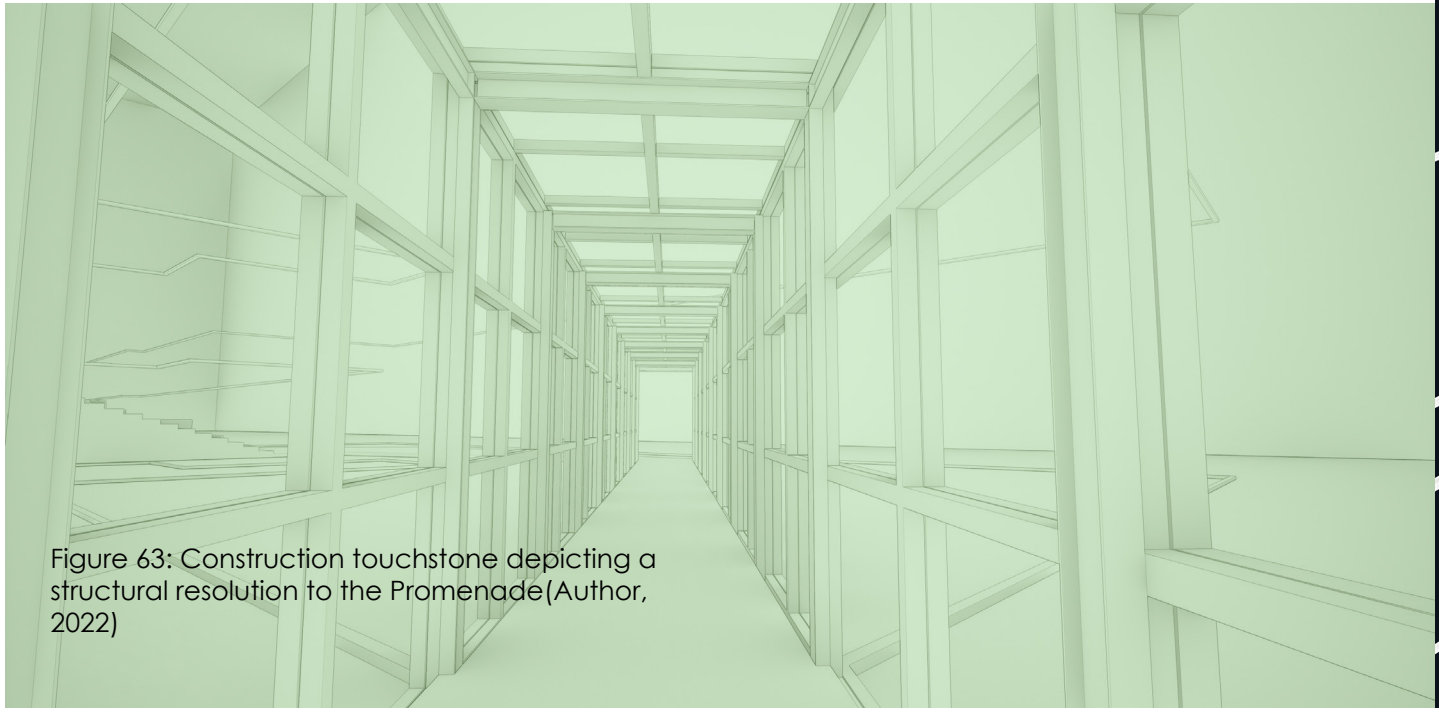
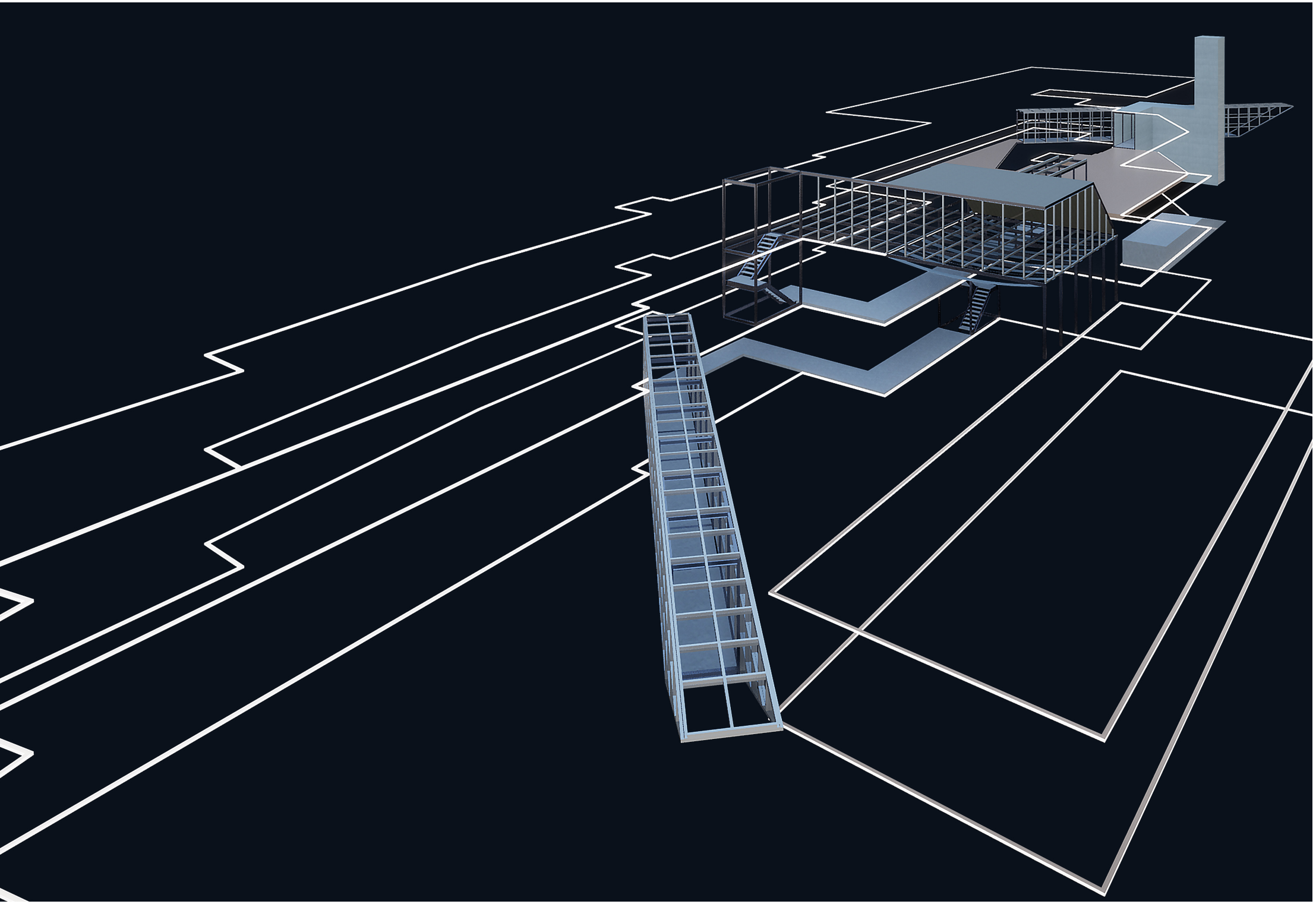
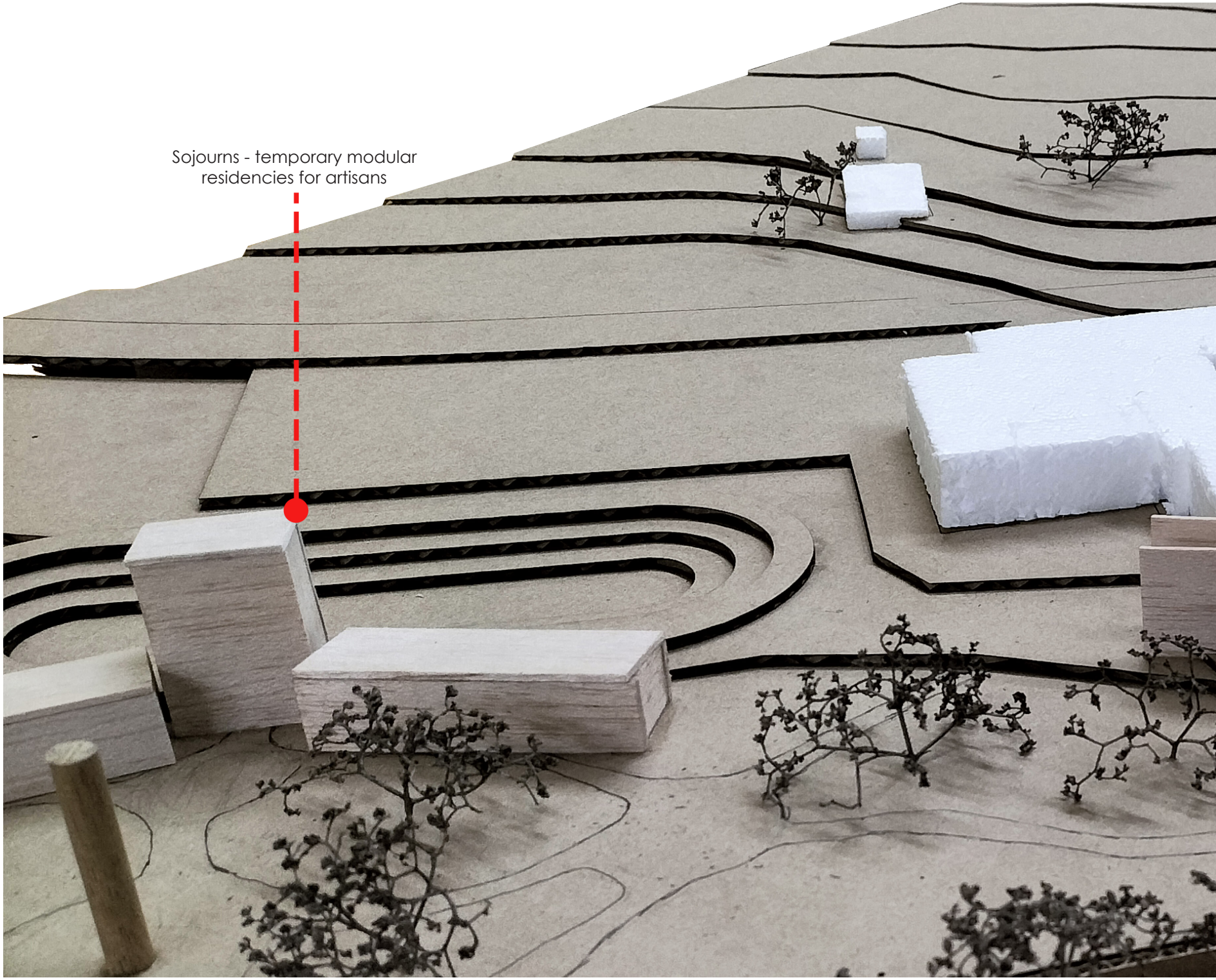


Figure 63: Construction touchstone depicting a structural resolution to the Promenade(Author, 2022)



7.3

DESIGN DEVELOPMENT | MODELS



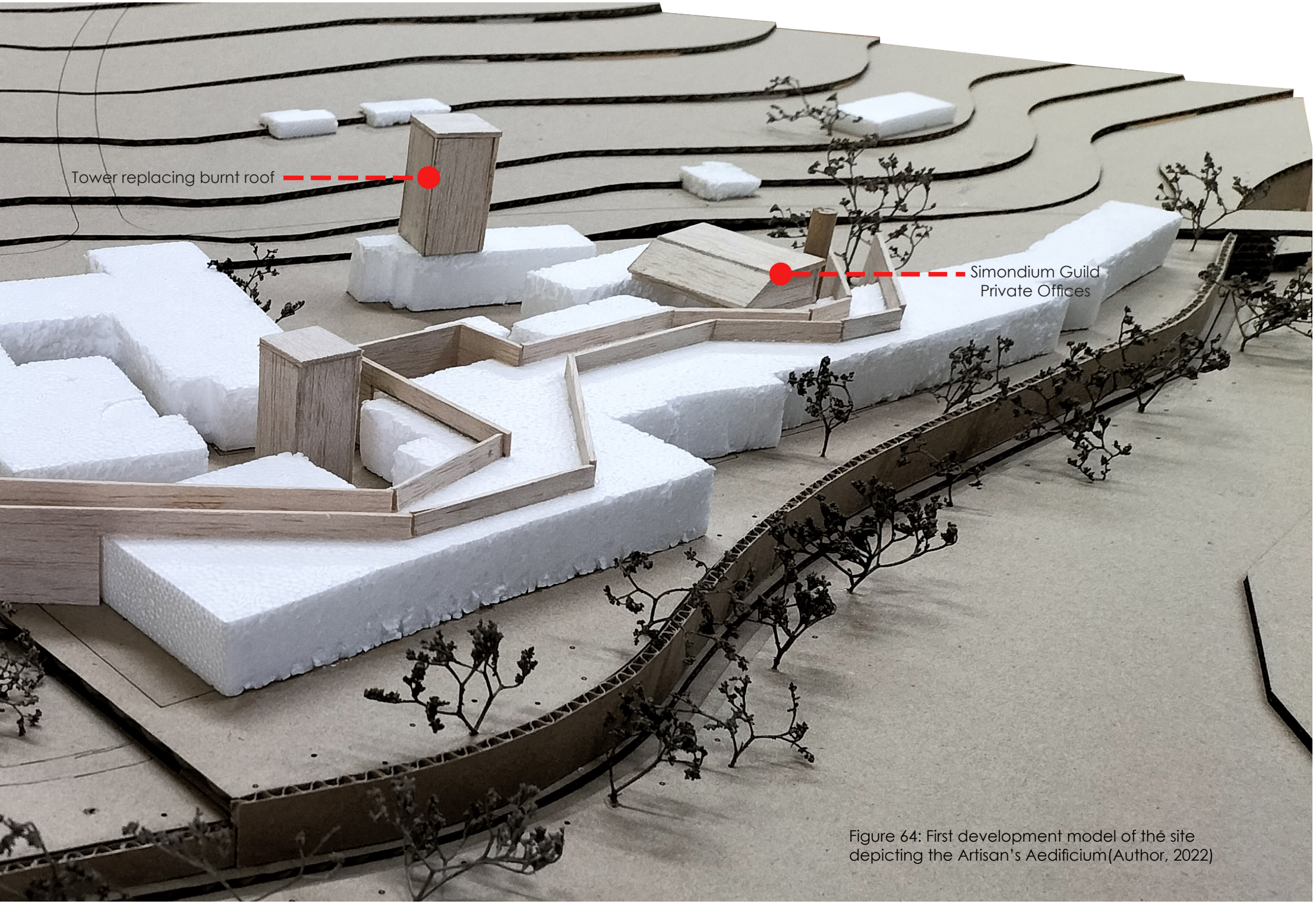


Figure 64: First development model of the site depicting the Artisan's Aedificium(Author, 2022)



Figure 65.1: Creating new structures supported by the existing to enclose the plaza (Author, 2022)

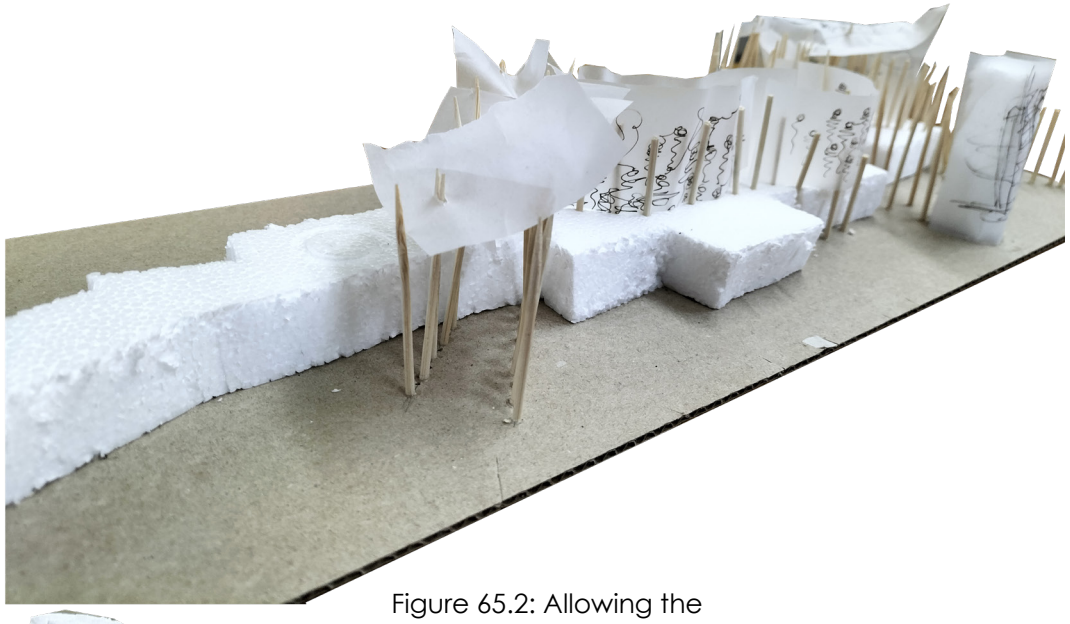


Figure 65.2: Allowing the promenade to regulate the shape of new additions(Author, 2022)

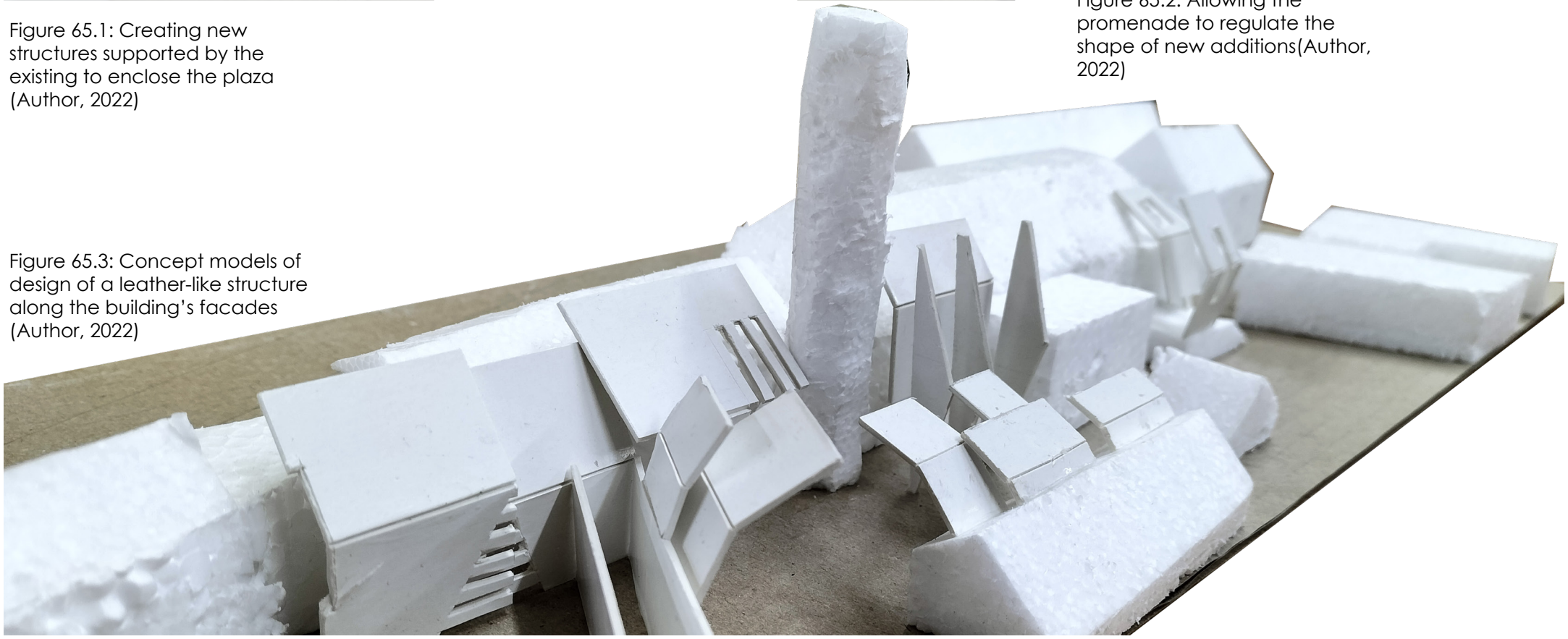


Figure 65.3: Concept models of design of a leather-like structure along the building's facades (Author, 2022)

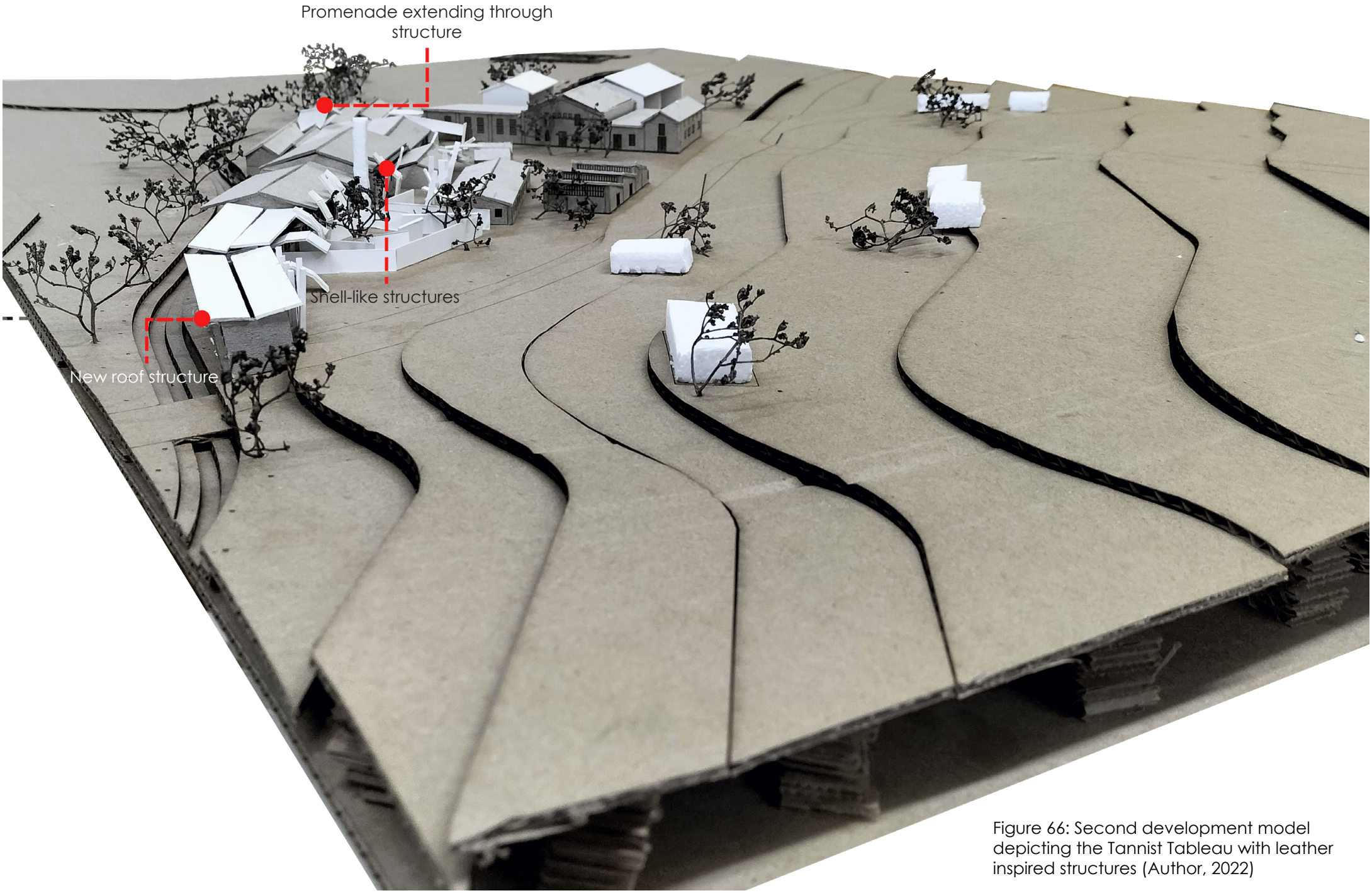


Figure 66: Second development model depicting the Tannist Tableau with leather inspired structures (Author, 2022)

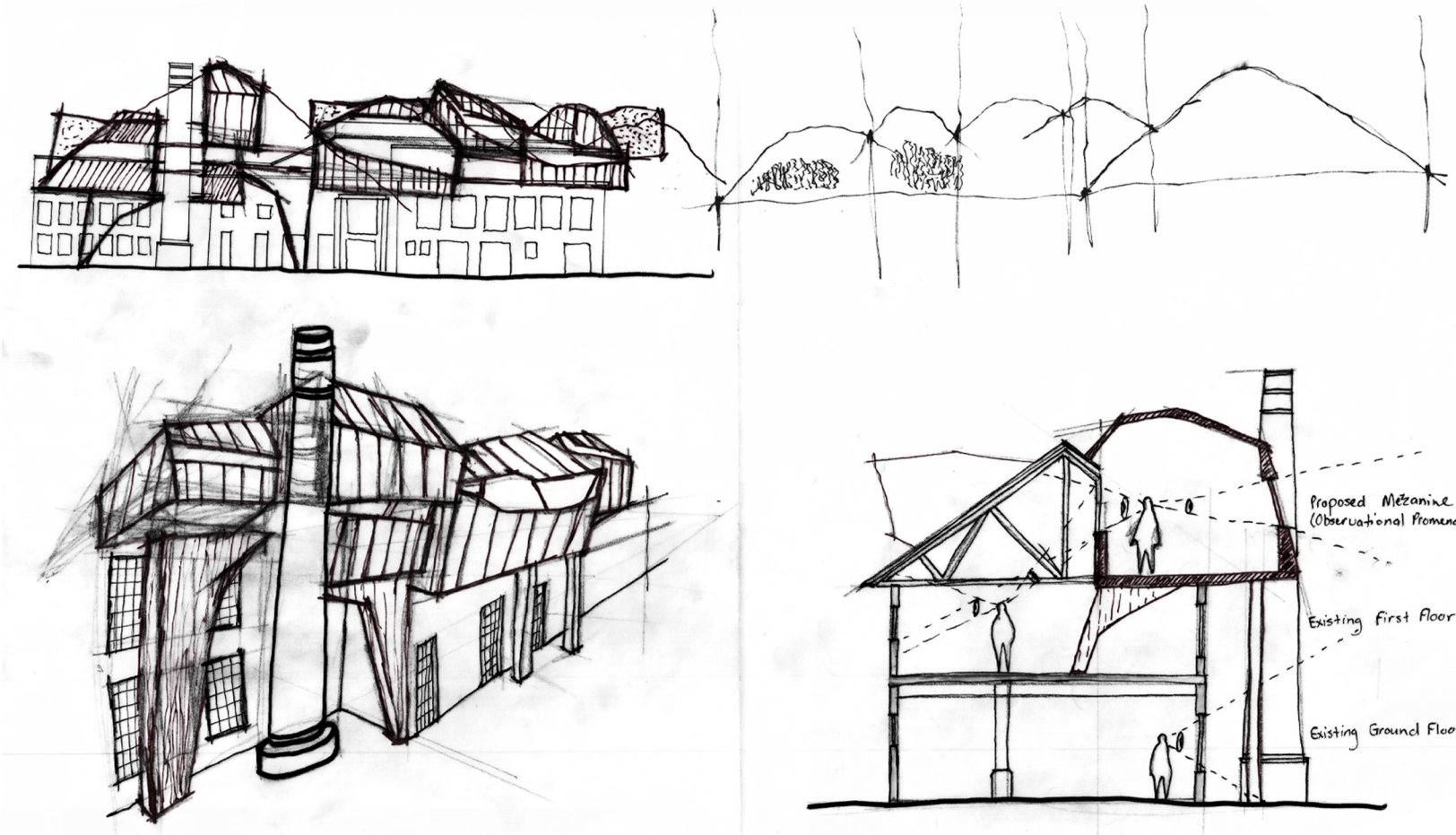


Figure 67.1: Shell-like structures influenced by the mountainous context of the Val du Charon (Author, 2022)

Figure 67.2: New levels and nodes of interaction being designed (Author, 2022)

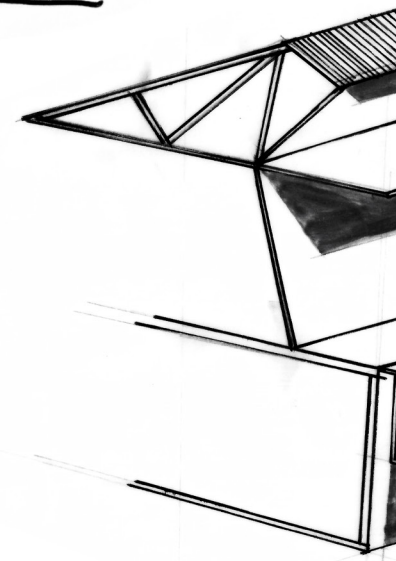


Figure 67: 3D development of structures articulating the building's facades proposed before External Review 2 (Author, 2022)

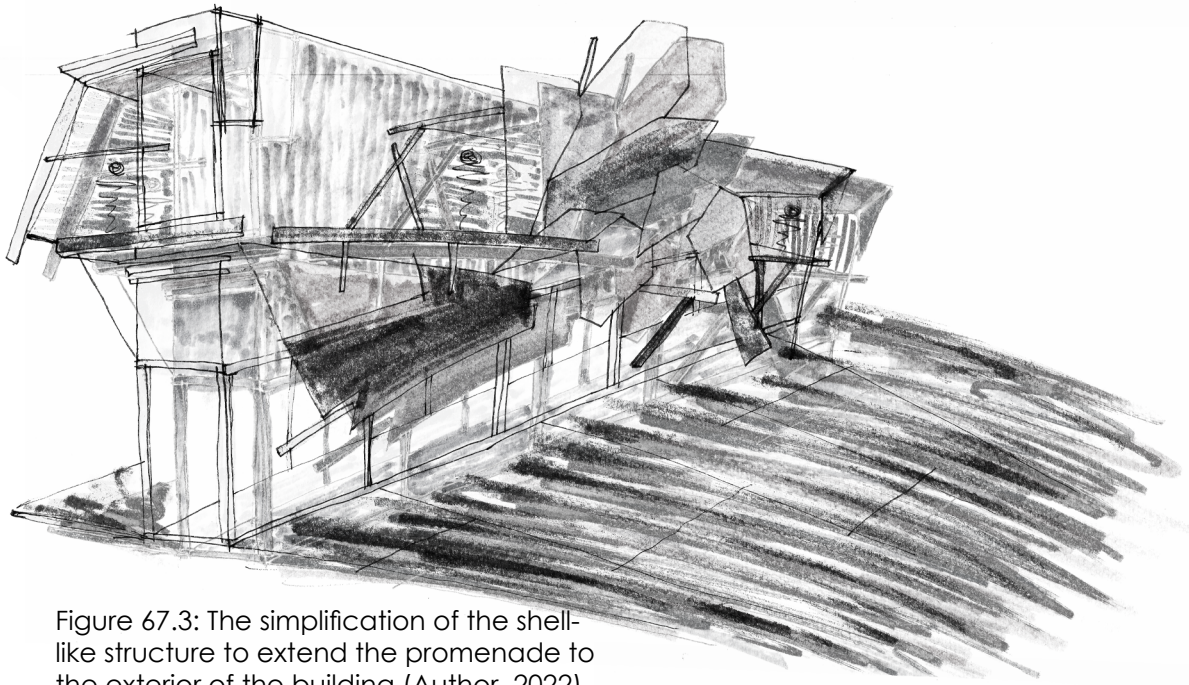
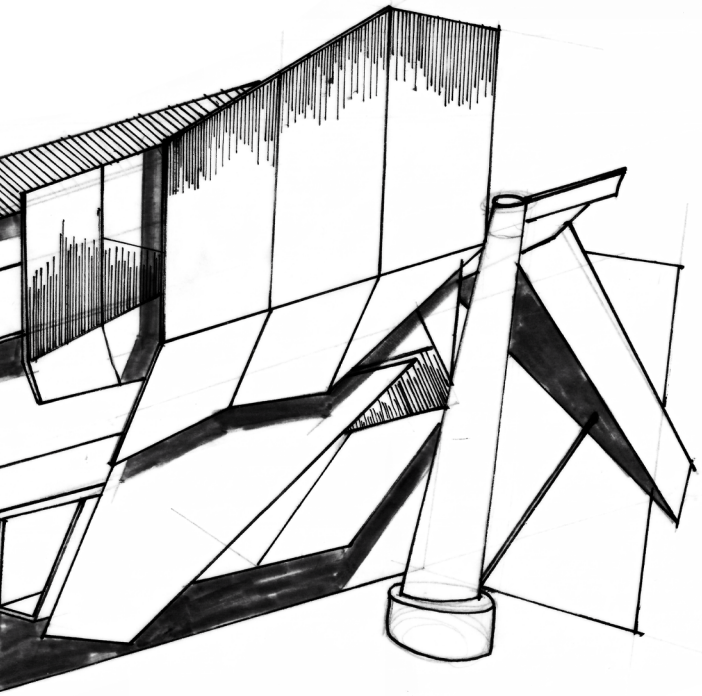


Figure 67.3: The simplification of the shell-like structure to extend the promenade to the exterior of the building (Author, 2022)



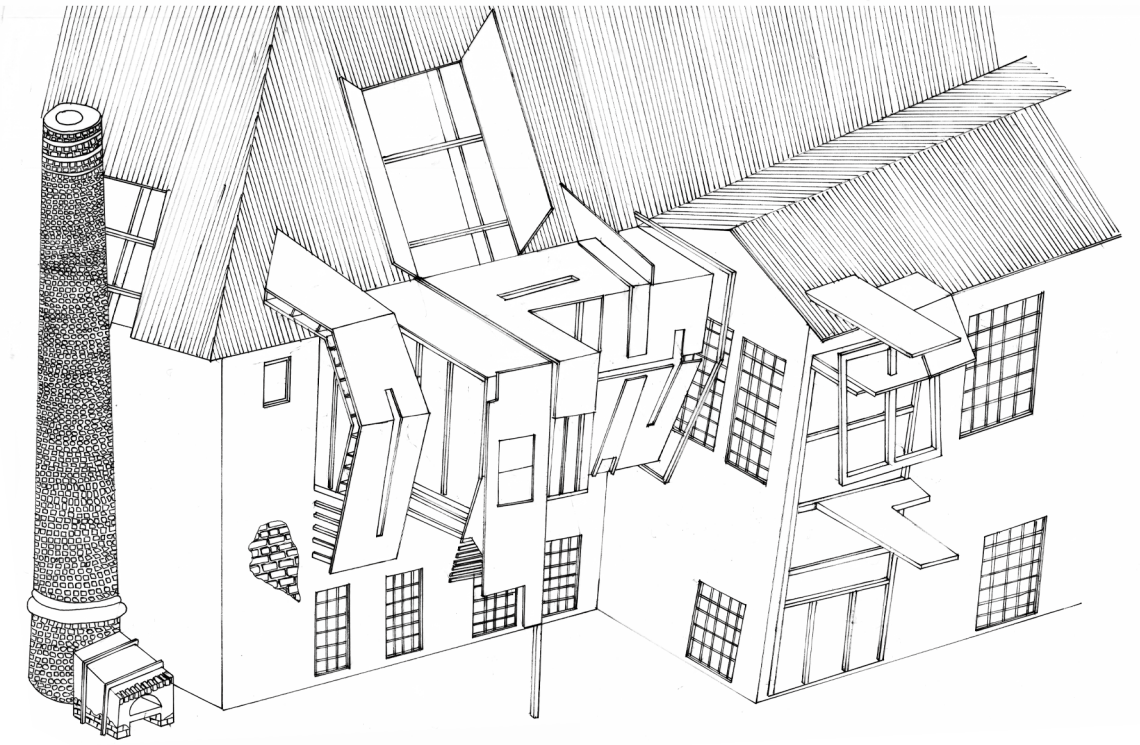


Figure 67.4: An axonometric of the new additions with the kiln for scale (Author, 2022)

ACCOMMODATION LIST

Building A:
- Toxic Storage - 54m^2
- Farm Machinery Workshop - 330m^2

Building B:
- Showers - 70m^2
- Lockers Rooms - 84m^2
- Toilets - 96m^2

Building C:
- Receptions - 92m^2
- Toilets - 60m^2
- Open Plan Offices - 318m^2
- Boardrooms - 78m^2
- Staff Lounge - 60m^2
- Private Offices - 78m^2
- Conference Hall - 368m^2
- Viticulture Museum - 390m^2
- Multifunctional Area - 112m^2
- Kitchen - 30m^2
- Consultant Offices - 350m^2

Building D - 435m^2

Building E:
- Indoor Market - 450m^2

Building F:
- Coffee Shop - 39m^2
- Kitchen - 39m^2

Building G:
- Tasting Rooms - 117m^2
- Grappa Distillery - 165m^2
- Multifunctional Hall - 200m^2
- Kitchen - 15m^2
- Toilets - 60m^2

Building H:
- Greenhouses - 250m^2
- Storage - 275m^2
- Reception - 70m^2
- Toilets - 43m^2
- Laboratories - 400m^2
- Distribution - 90m^2

Building I:
- Student Lounges - 590m^2

Building J:
- Reception - 240m^2

Building K:
- Cafeteria - 950m^2
- Kitchen - 75m^2
- Toilets - 144m^2
- Study Area - 100m^2
- Computer Labs - 150m^2
- Workshops - 400m^2

Building L:
- Lecture Halls - 340m^2

Building M:
- Lectorium - 300m^2
- Reception - 70m^2
- Toilets - 100m^2

Building N:
- Library - 480m^2

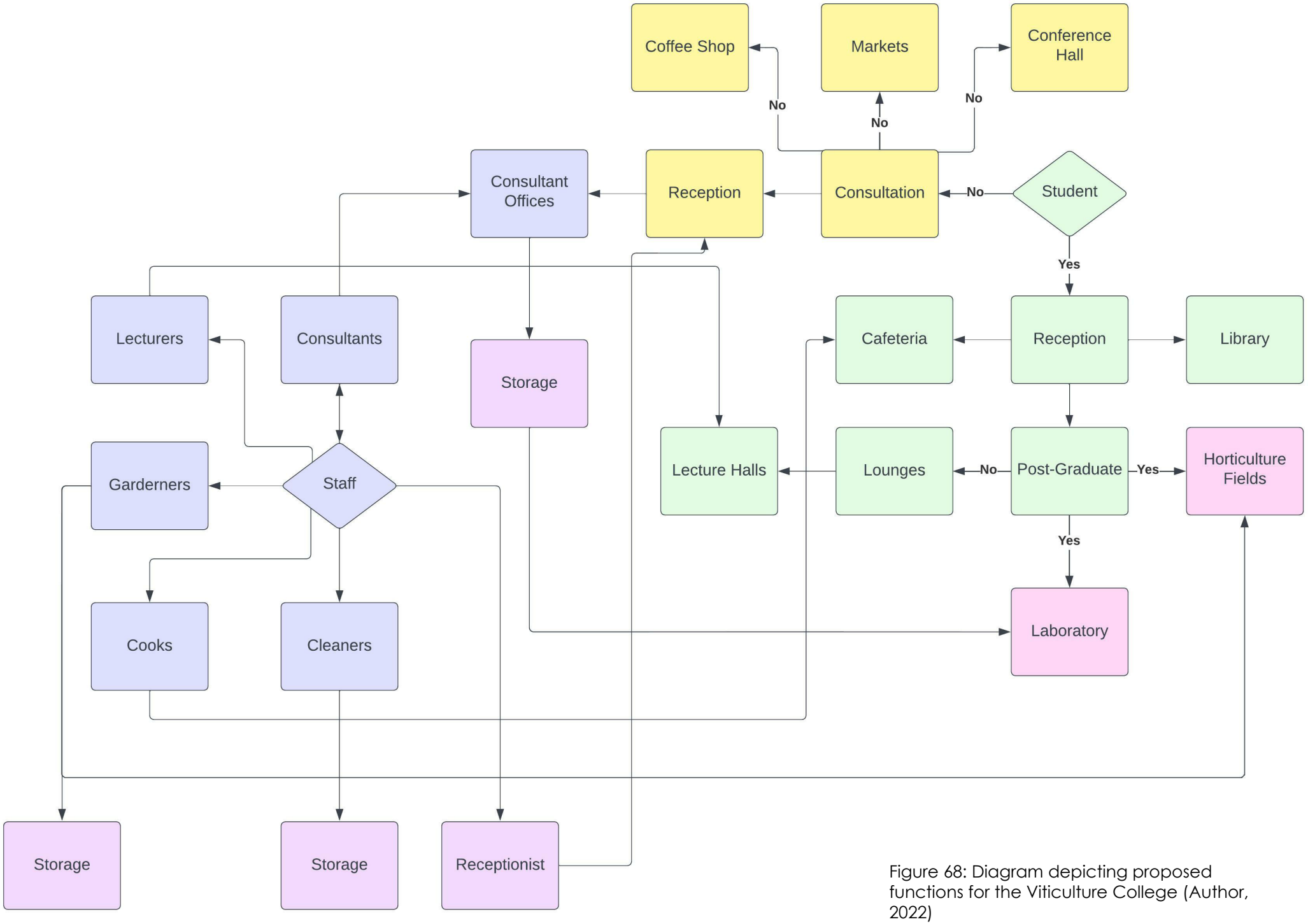


Figure 68: Diagram depicting proposed functions for the Viticulture College (Author, 2022)

7

DESIGN DISCOURSE

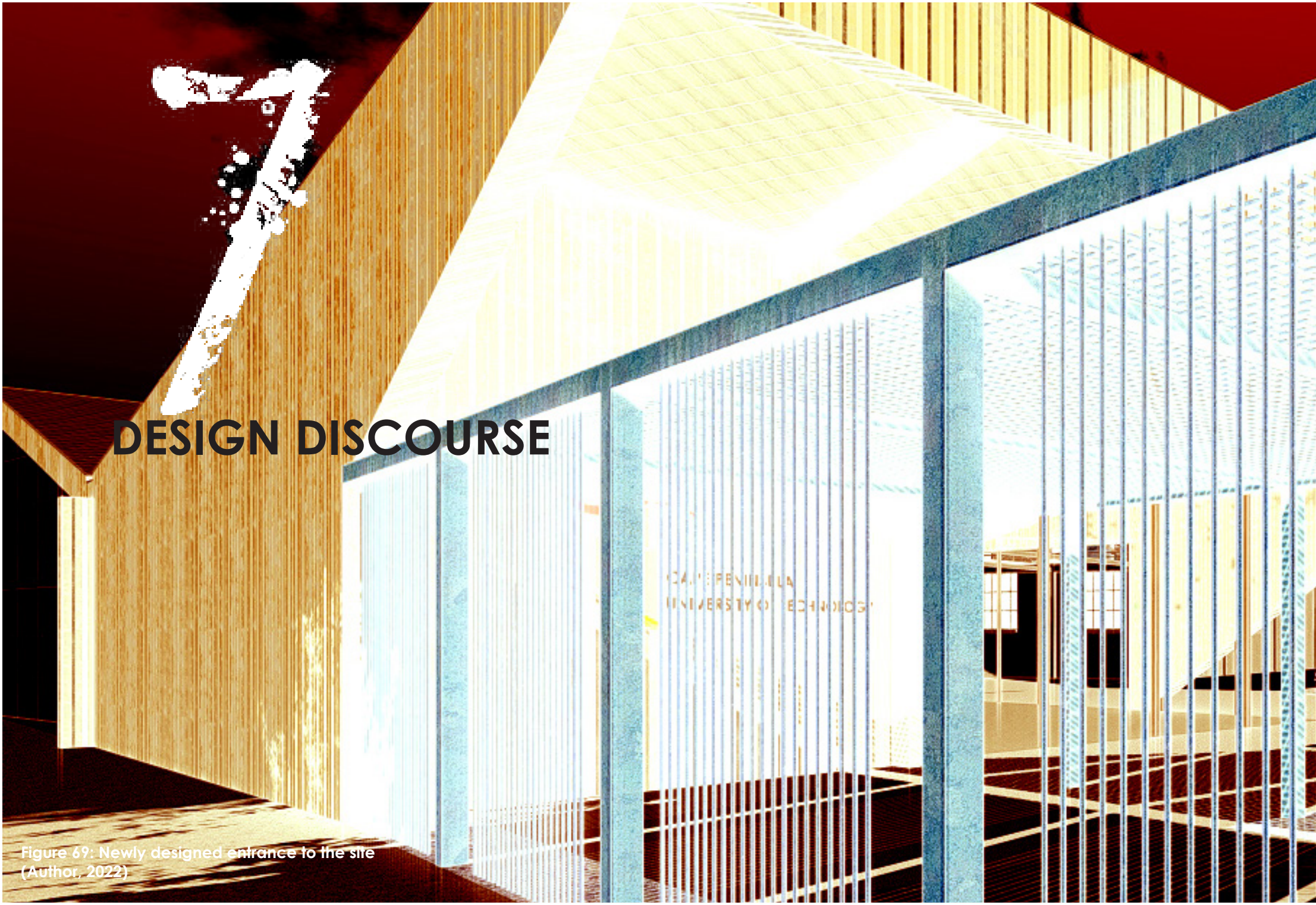
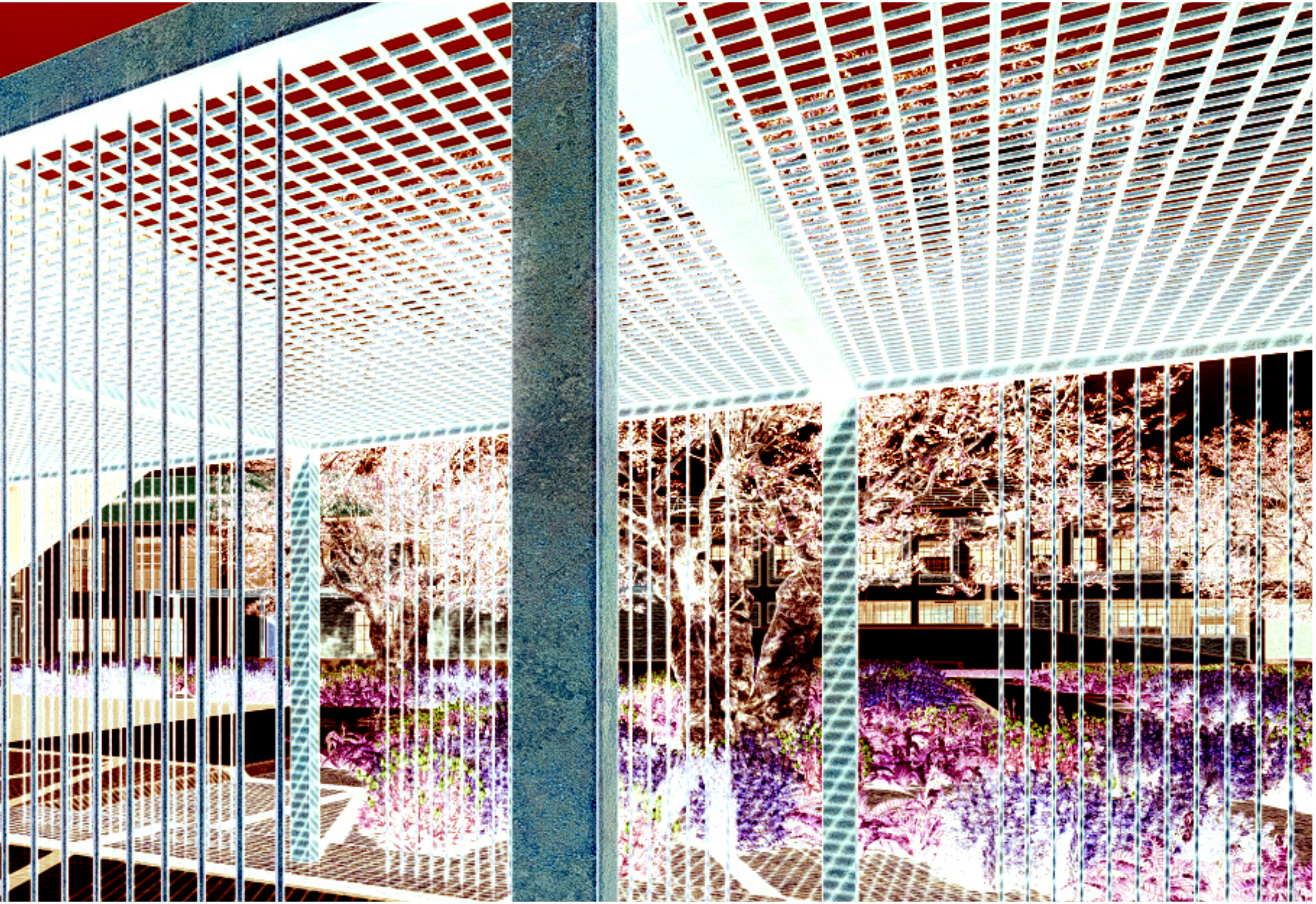


Figure 69: Newly designed entrance to the site (Author, 2022)



THEORY THROUGH DESIGN

As stated, the means of intervention on the site of the Old Tannery will be done through a reconfiguration of the industrial relics present on site. By reconfiguring the site through a new direction in winemaking and placing emphasis on its historical preservation, new life will be breathed into the ensemble of existing structures. Not only will this design envision an adaptive reuse of the site, but also a rewilding of architecture. Through an appropriate placement of a promenade within the southernmost building and in the form of grape arbours within the exterior plazas, the dwellers will be introduced to the site in an unprecedented way.

Not only will this design focus on the dwellers' relationship with the existing, but also the dwellers' awareness of their codependency with nature. Though the programme proposed is that of a college of viticulture, the site will not be only accessible by students and staff of CPUT, but also for the general public with the restrictions placed on the academic building. Through the rewilding of architecture and the emphasis placed on the various plazas on site a dichotomous way of wandering will occur in the spaces between buildings. Traveling from one building to the next must essentially feel like a transversal through nature with the grapevines, gardens, and trees covering these areas.

Throughout this chapter cross references related to design will be indicated between theory, precedents and brain work as discussed in earlier chapters.

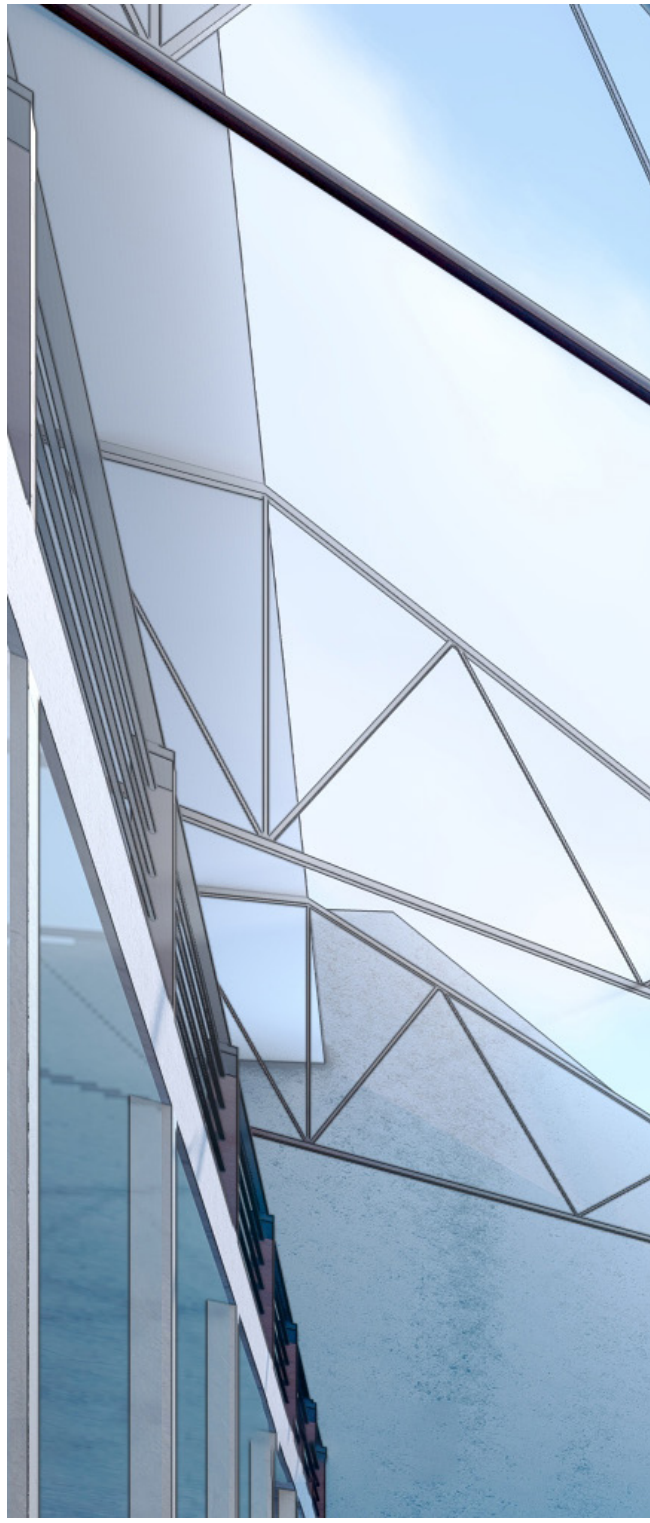


Figure 70: Opening the building's carapace to nature and new experiences (Author, 2022)



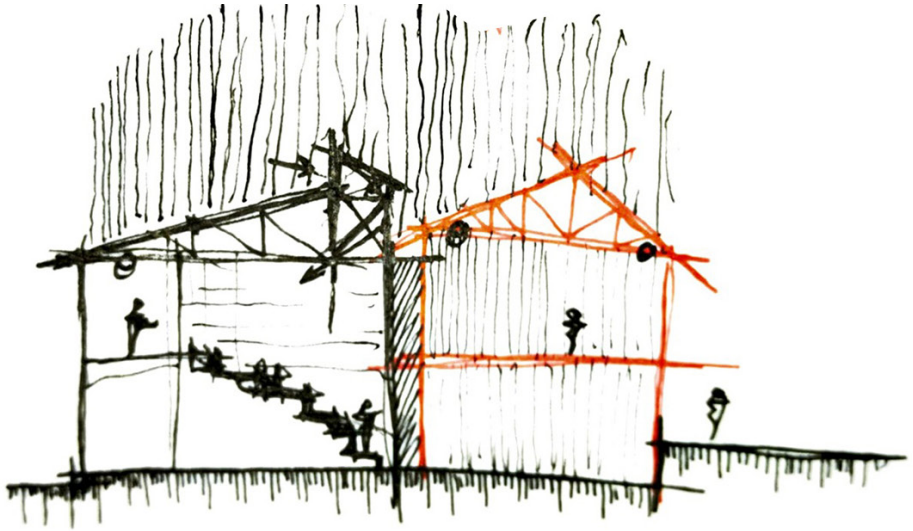


Figure 71.1: Adding new carapaces to the existing (Author, 2022)

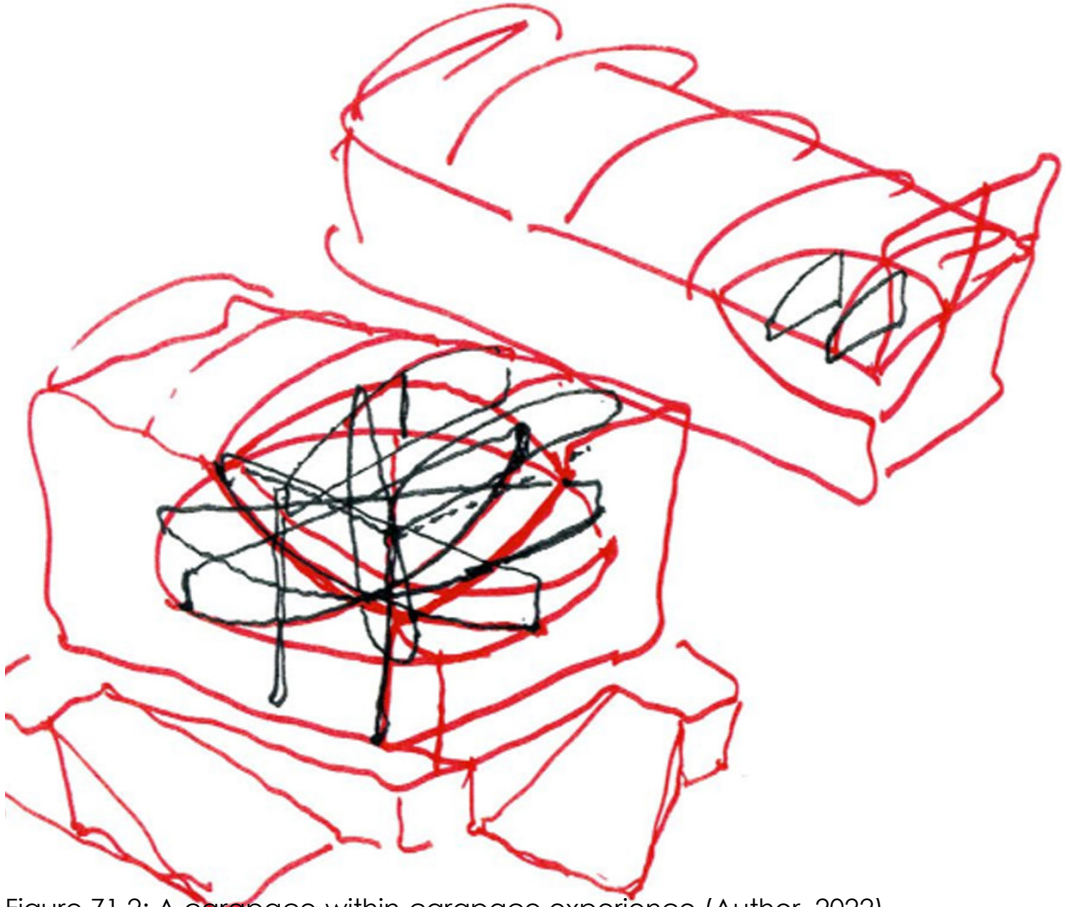


Figure 71.2: A carapace-within-carapace experience (Author, 2022)

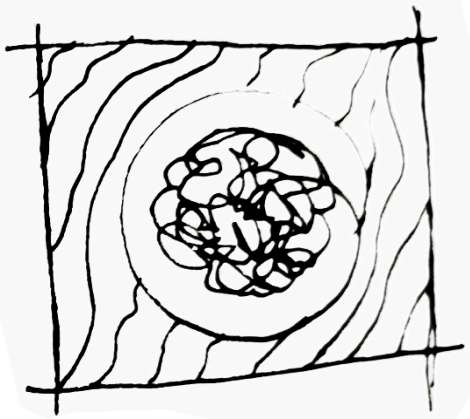


Figure 71.3: Nature as the centre of the design(Author, 2022)

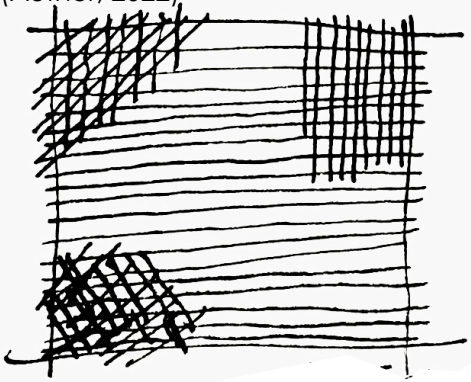


Figure 71.4: Adapting the existing existential thresholds(Author, 2022)

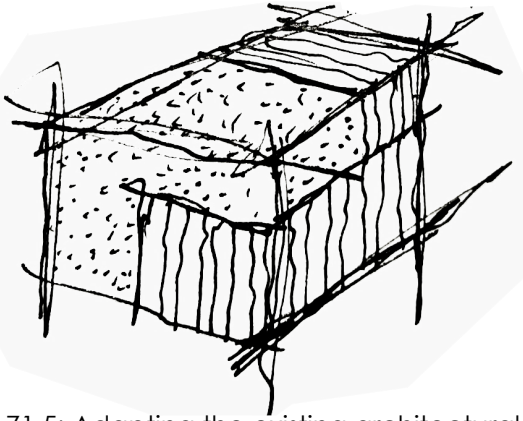


Figure 71.5: Adapting the existing architectural framework(Author, 2022)



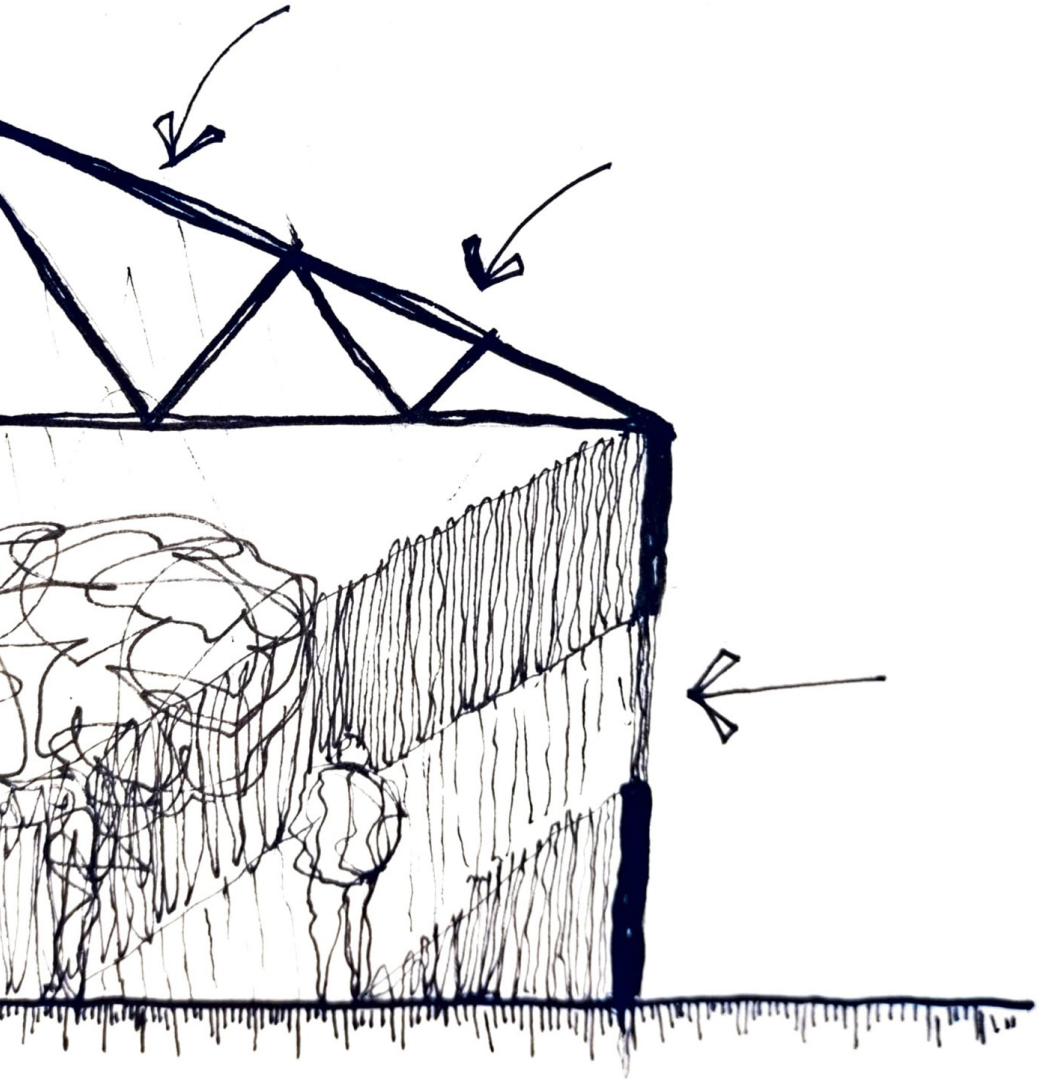


Figure 71.6: Allowing nature to enter the industrial thresholds(Author, 2022)

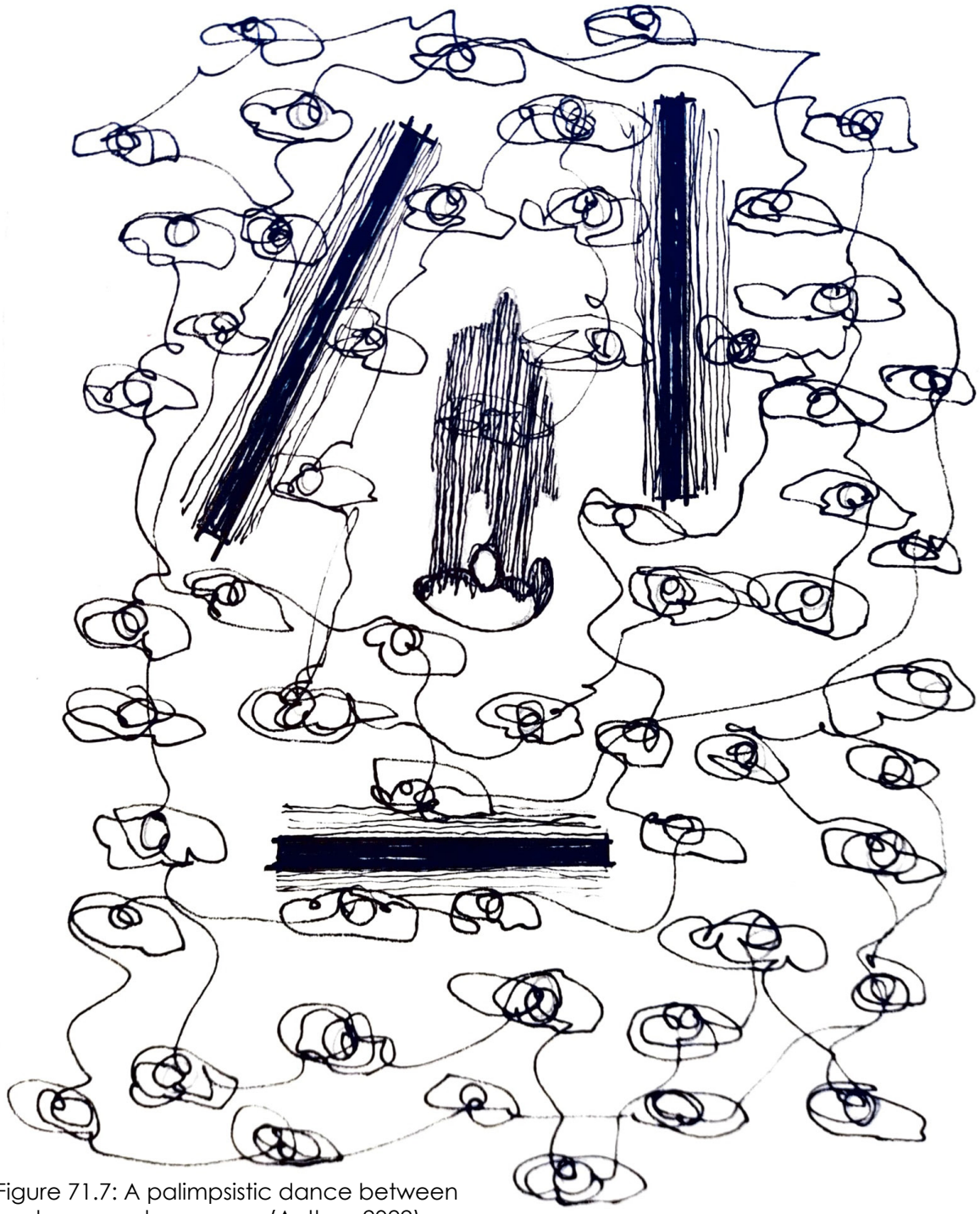


Figure 71.7: A palimpsistic dance between cadence and carapace(Author, 2022)

7.2

DESIGN DISCOURSE | SITE PLAN



Figure 72: The site and its direct context(Author, 2022)



SITE PLAN

The design aims to connect the historical ensemble on site by using the rewilded spaces and an exterior promenade in the form of a grape arbour. In essence, an assemblage connected through nature.

The main building, though only being used for staff and back-of-house functions, still dominates the site by not only being the focal point of the main plaza but also of the majority of the site through its visibility from all the eastern parts of the site.

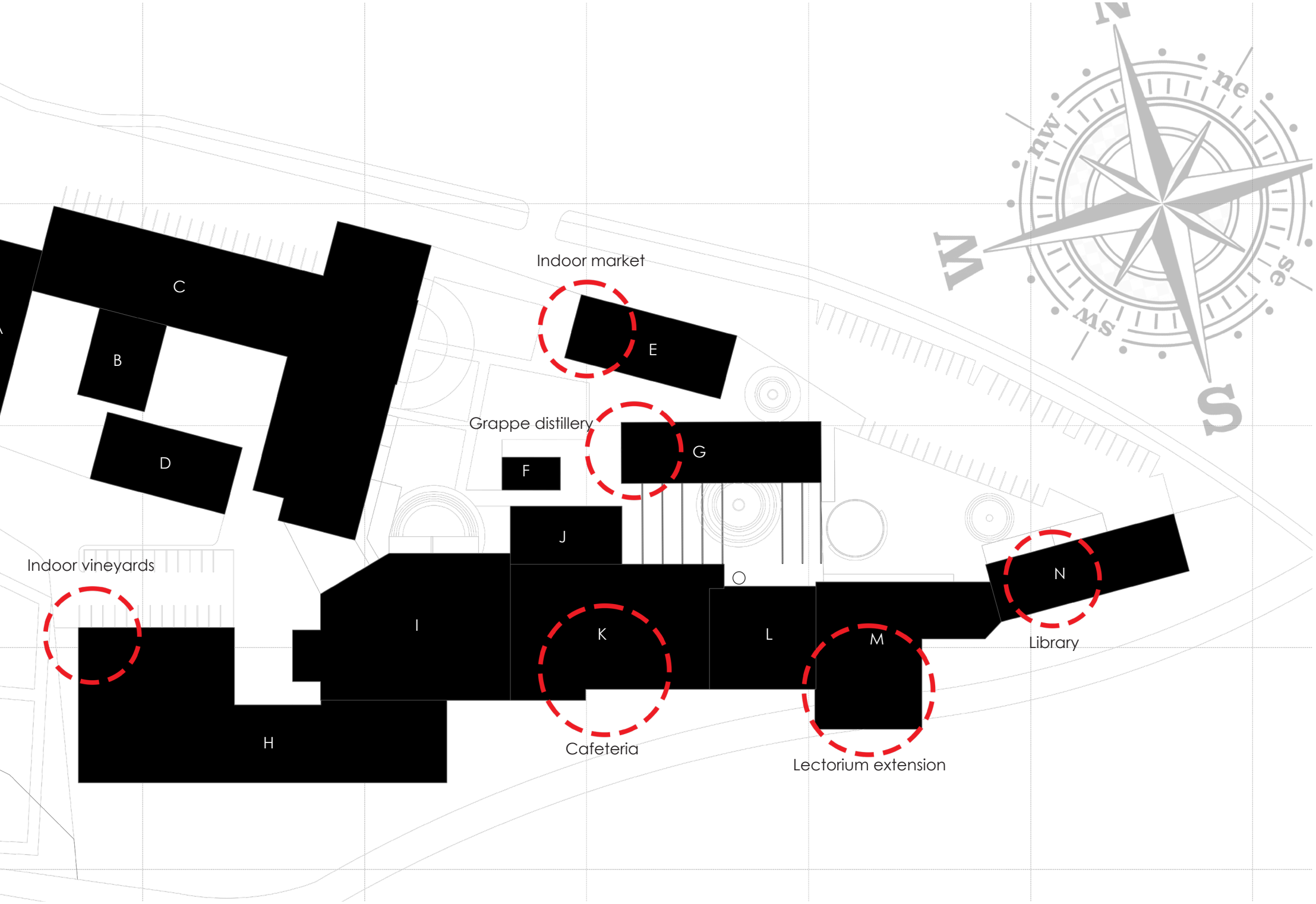
The southernmost building, through its large extent and longitudinal axis, has been redesigned at a detail level to house all academic functions - from the indoor vineyards in its western parts to the library in its eastern parts.

New importance has been given to building E by redesigning its damaged roof structure to further articulate the site's main entrance. The linear shape of building G and its placement in the centre of the site has made it an important node to divert public movement between the various plazas.

The following chapters will give a more detailed look at all these buildings and how they were adaptively reused in this thesis.



Figure 73: Locations of important spaces on site(Author, 2022)


C
B
D
A
Indoor market
E
Grappe distillery
G
F
J
Indoor vineyards
I
K
L
M
N
H
Cafeteria
Lectorium extension
Library

7.3

DESIGN DISCOURSE | ADJUSTED FORM

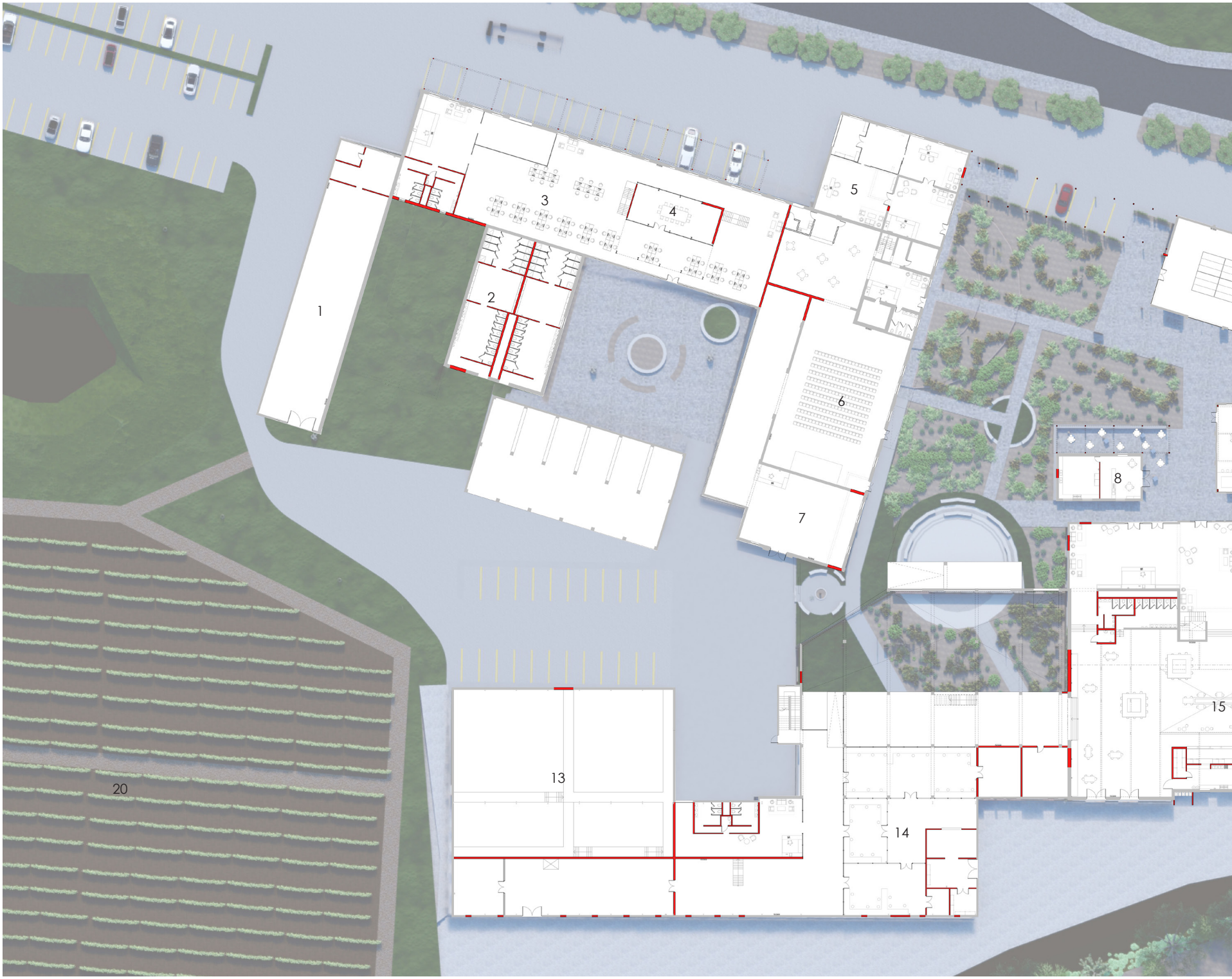




Figure 74: Axonometric view of the site with proposed changes(Author, 2022)

7.4

DESIGN DISCOURSE | PLANS





Legends:

1 - Farm Equipment Storage
2 - Locker Rooms
3 - Open Plan Offices
4 - Boardroom
5 - Consultant Offices
6 - Conference Hall
7 - Viticulture Museum
8 - Coffee Shop
9 - Indoor Market
10 - Tasting Room
11 - Grappa Distillery
12 - Multifunctional Hall
13 - Covered Agricultural Fields
14 - Laboratories
15 - Cafeteria
16 - Lecture Hall
17 - Lectorium
18 - Library
19 - Outdoor Market
20 - Agricultural Fields

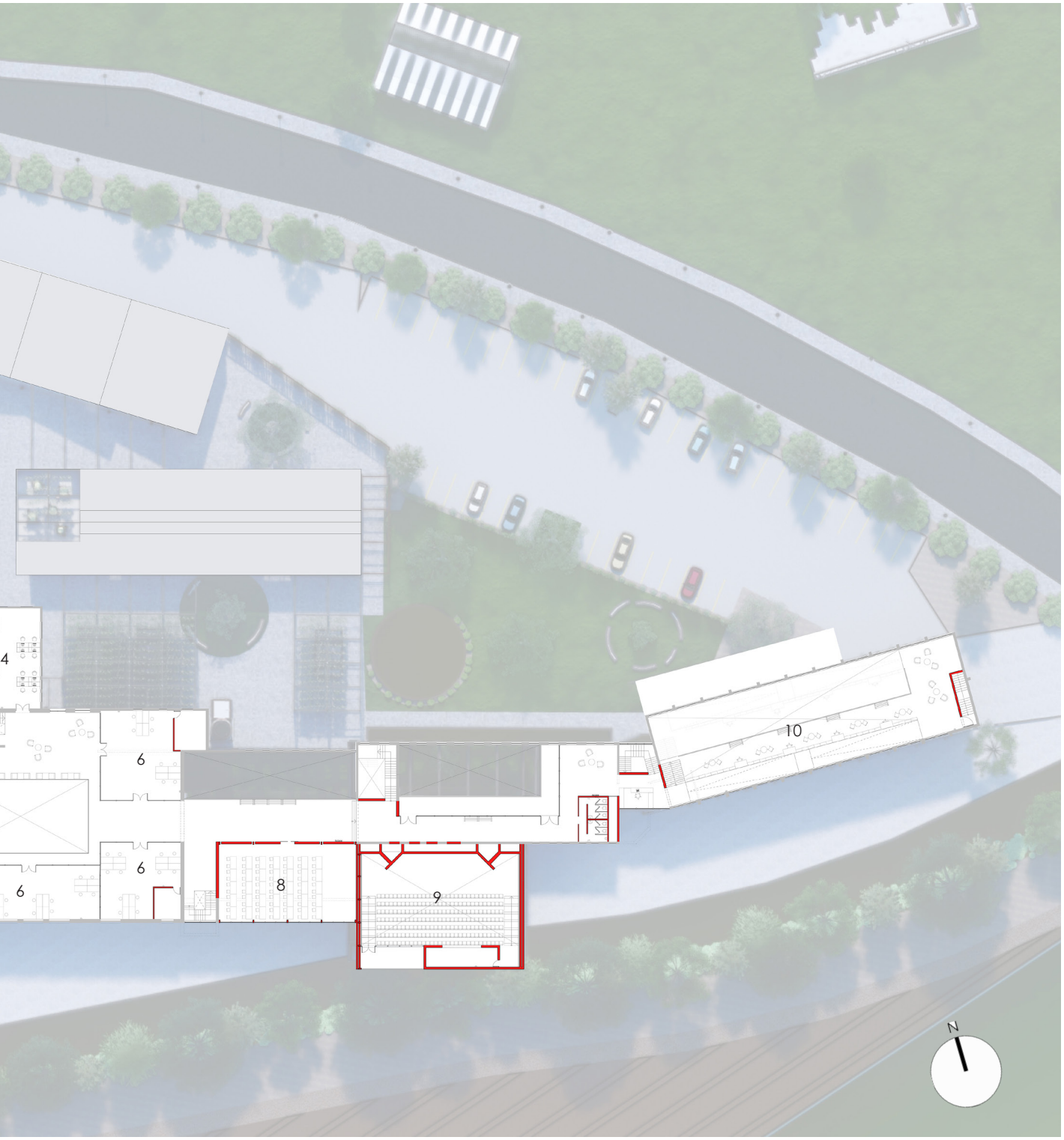
GROUND FLOOR PLAN

10m 0 10m 20m 30m 40m 50m

7.4

DESIGN DISCOURSE | PLANS





Legends:

1 - Private Offices
2 - Consultant Offices
3 - Computer Room
4 - Study Hall
5 - Student Cubicles
6 - Workshops
7 - Student Lounge
8 - Lecture Hall
9 - Lectorium
10 - Library
11 - Covered Agricultural Fields
12 - Greenhouses

FIRST FLOOR PLAN

10m 0 10m 20m 30m 40m 50m

REWILDED PLAZAS

Rewilded plazas are spaces that provide the dwellers with a constant awareness of their part in nature, this type of plaza integrates the use of greenery to create a pleasant transition between the various buildings on site. By organising these spaces between buildings, the site has been redesigned into an assemblage with nature as the dominating force. Vast openness to the sky that welcomes the overwhelming summer heat of the Val du Charon has now been enclosed by trees and grape arbours, essentially motivating dwellers to embrace the outdoors and spend as much time embracing nature.

In Figure 77, emphasis is placed on the placement of these plazas on site[Figure 77.2] and the connection between adjacent plazas[Figure 77.3]. Furthermore, importance is also placed on the various viewpoints, of the magnificent elements on site, which is enforced by the placement of seating within these plazas [Figure 77.4]. The following chapter will investigate the workings of the most important plaza on site.

Figure 77: Plaza used as spaces to reconcile the dwellers with nature(Author, 2022)

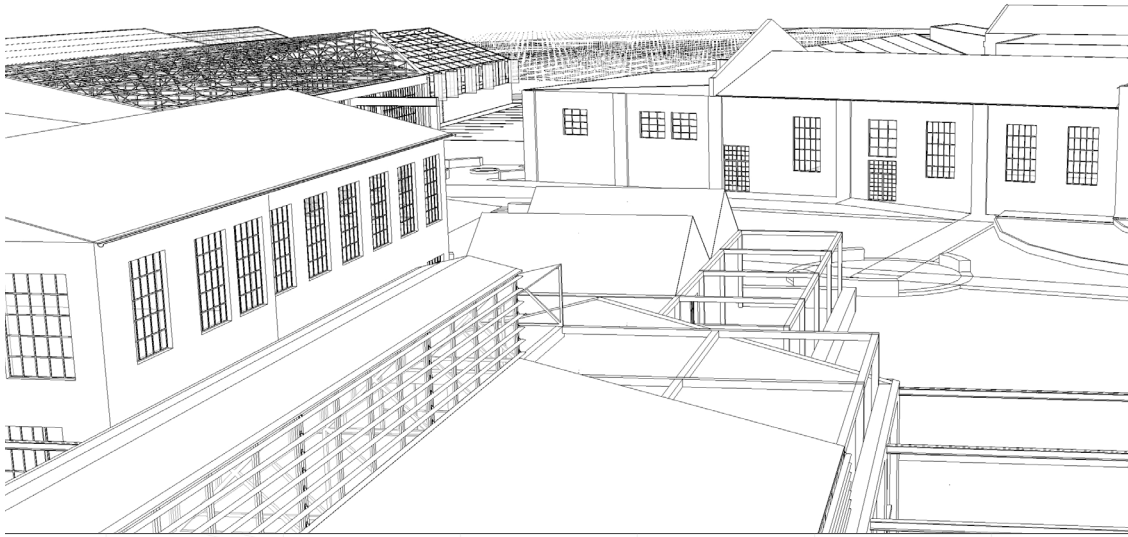


Figure 77.1: Diagramatic View of the Main Plaza

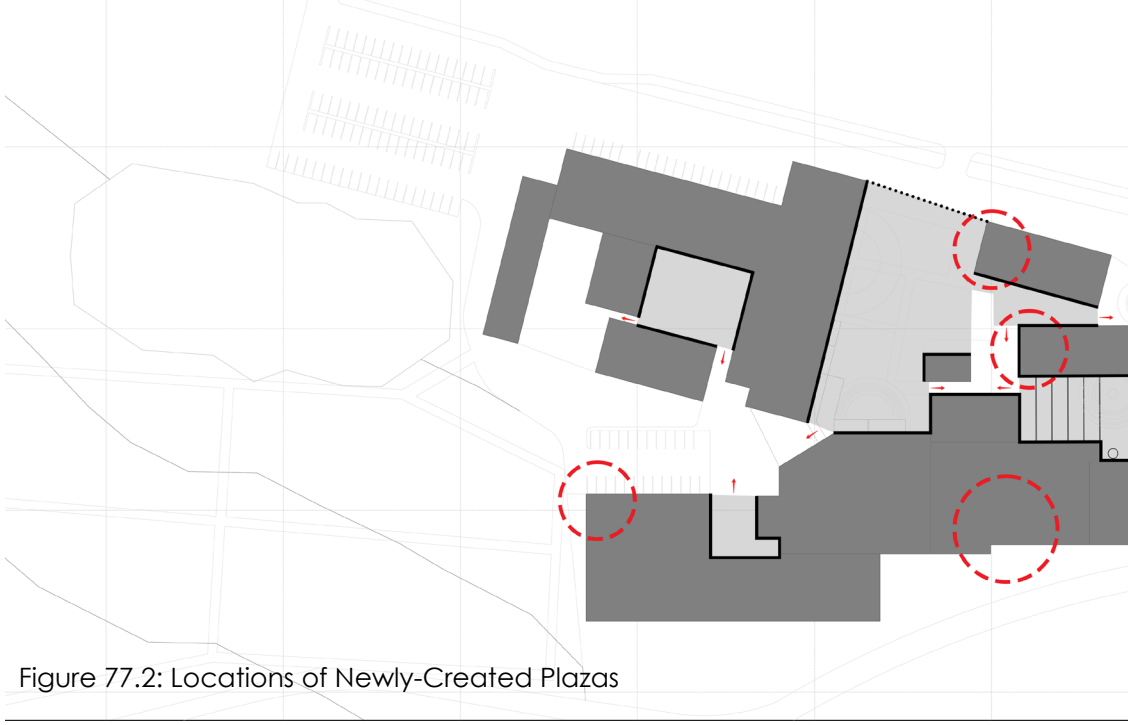
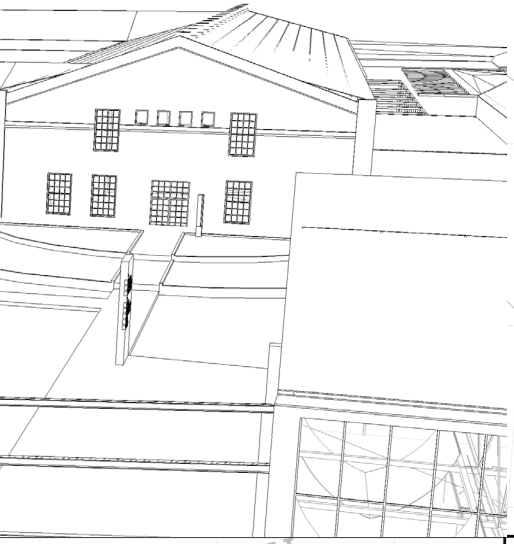


Figure 77.2: Locations of Newly-Created Plazas



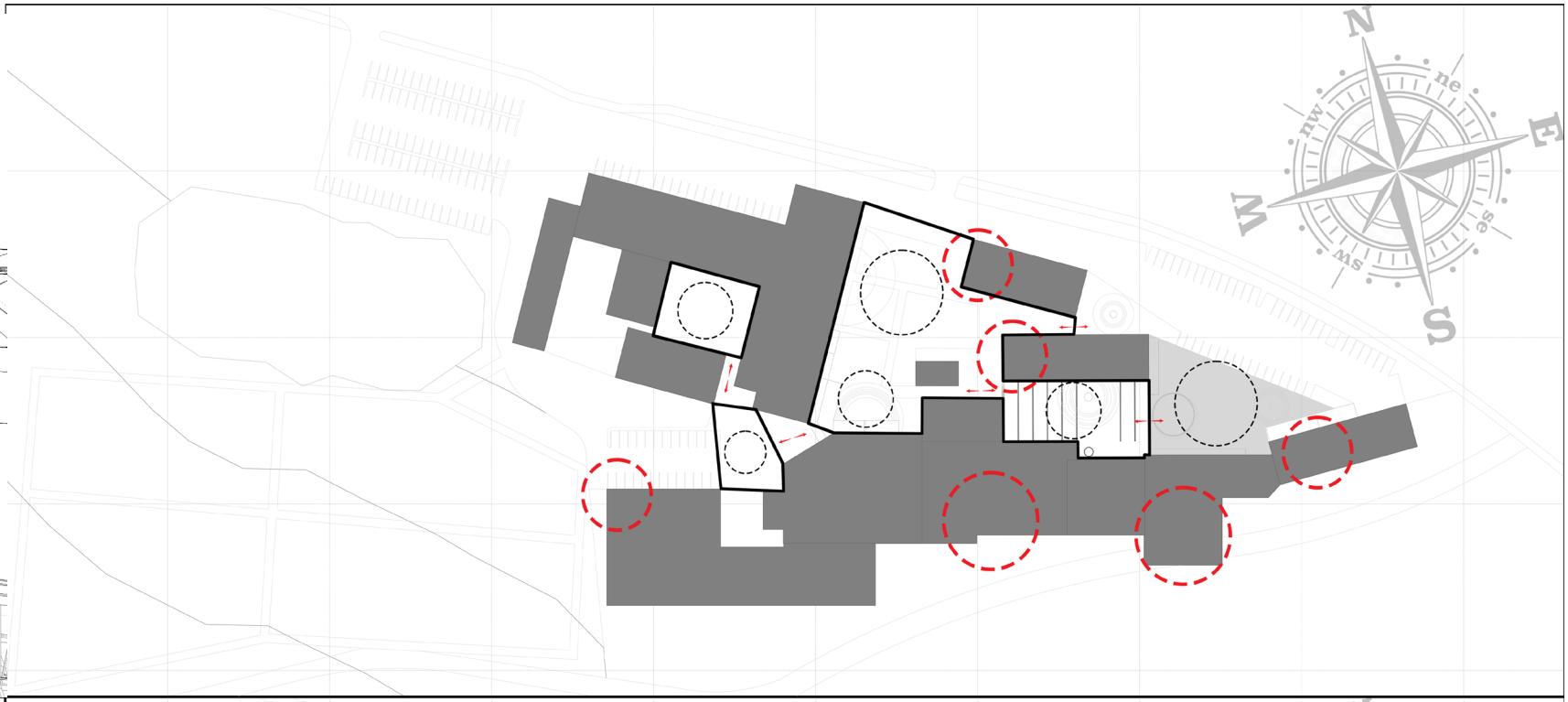
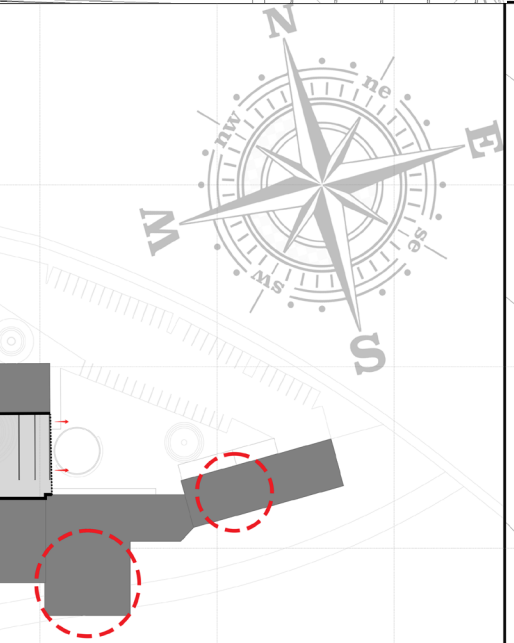


Figure 77.3: Interconnecting the various plazas



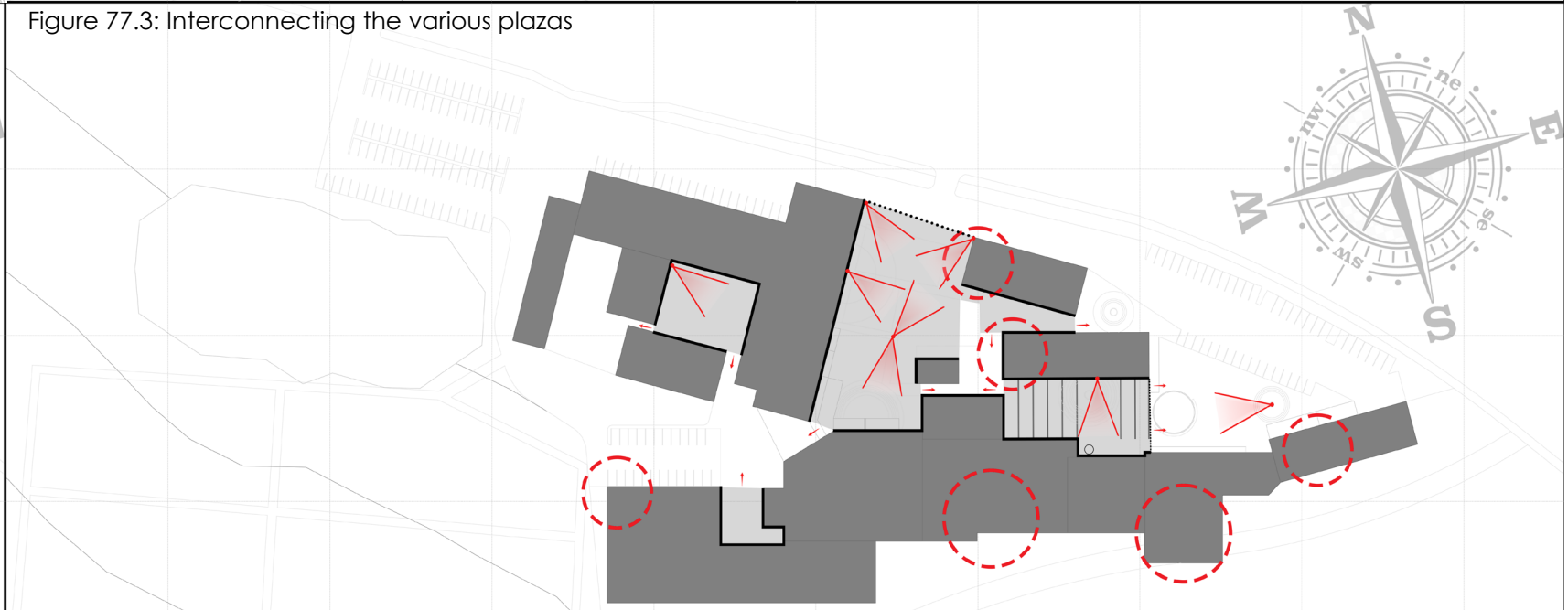


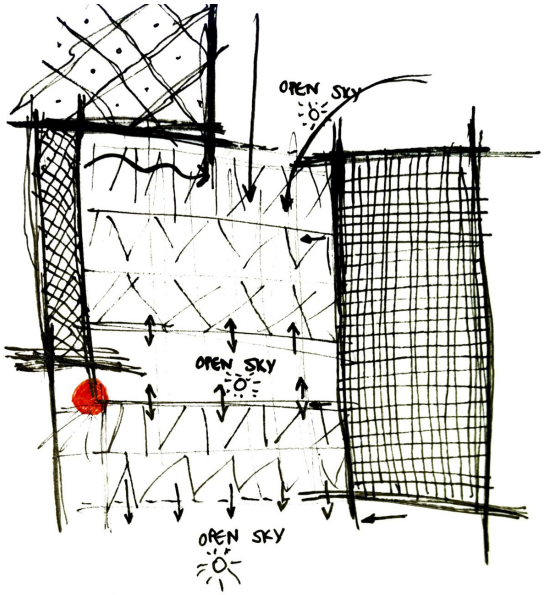
Figure 77.4: Various views created of the magnificence of the old

OUTDOOR MARKET

The most essential plaza on site, this open space between buildings G and K has been a prominent outside space for dweller interaction even before the adaptive reuse of the Old Tannery. Wedding functions were held here during the winter season with temporary grape arbours being erected as shading devices. This has even been used for various photography sessions, consequently immortalising the brick kiln as the face of the Old Tannery.

The adaptive reuse of this space, however, focuses on creating a permanent means of shading over this plaza, creating a seamless transition between buildings G and K. This permanent shading device has been designed in the form of a grape arbour that mimics the silhouette of building J, essentially creating a steel skeleton of the existing.

The steel skeleton does however not cover the complete extent of the plaza, with a courtyard breaking its rhythm at the plaza's centre. This courtyard allows the dwellers to pause in a space, between the inside-outsideness presented by the grape arbours, where their admiration for the magnificence of the brick kiln and nature can be elevated. After the adaptive reuse of the Old Tannery, the brick kiln did not remain the only force of adoration on the edges of this plaza.



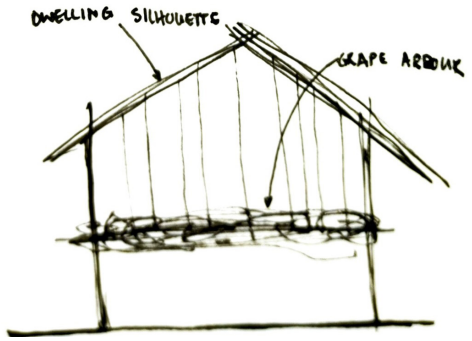
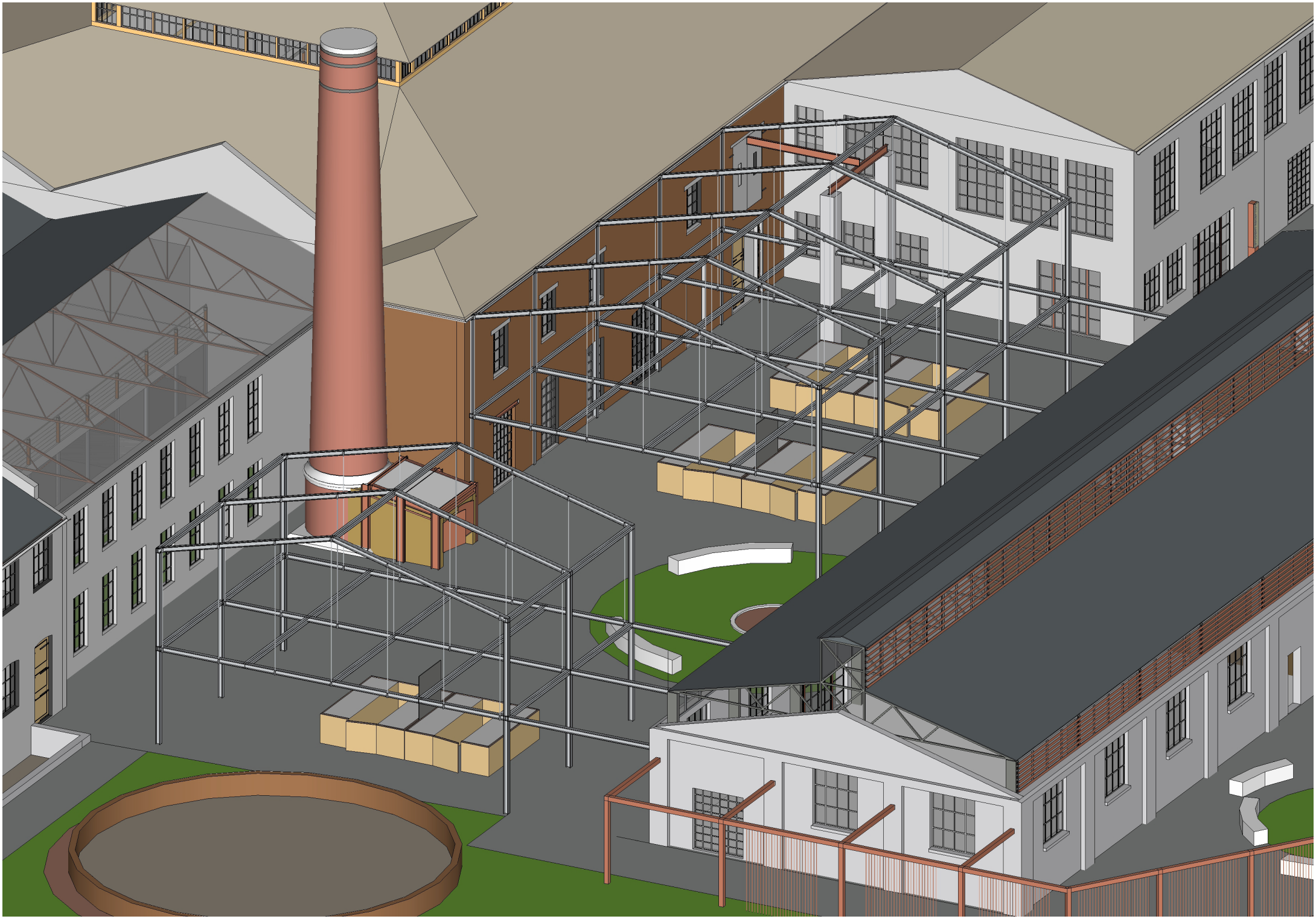


Figure 78: Sketches showing the development of the plaza design(Author, 2022)

Opposite Page:
Figure 79: 3 Dimensional depiction of the outdoor market (Author, 2022)



7.6

DESIGN DISCOURSE | OUTDOOR MARKET





Figure 80: A place for new lived experiences between structures (Author, 2022)

GRAPPA DISTILLERY

The creation of a new carapace for building G has elevated the importance its not only as the centre of the site but also as an important edge for the plaza that was investigated in the previous chapter. The newly designed building carapace mimics the roof pitch of the original roof structure with the addition of being elevated on steel columns, consequently allowing natural light to filter into the building. The further addition of a lantern roof, inspired by the existing roof structure of building K, allows for additional light to filter into the building.

As for the functions of the building, a grappa distillery with a tasting room was placed in its western half, while a multifunctional hall for public gatherings is accommodated in the eastern half of the building. The introduction of a grappa distillery was done in consideration of the biodynamic viticulture principles that influence the adaptive reuse of the Old Tannery. The alcoholic drink known as grappa is an Italian method of distilling the leftovers of the winemaking process, ranging from pulp to seed, in an attempt to use all natural resources provided by the grapevine (da Porto, 2012, 299). The following structure that will be investigated looks at how sustainability can be integrated into a space in which the roof structure has been damaged.

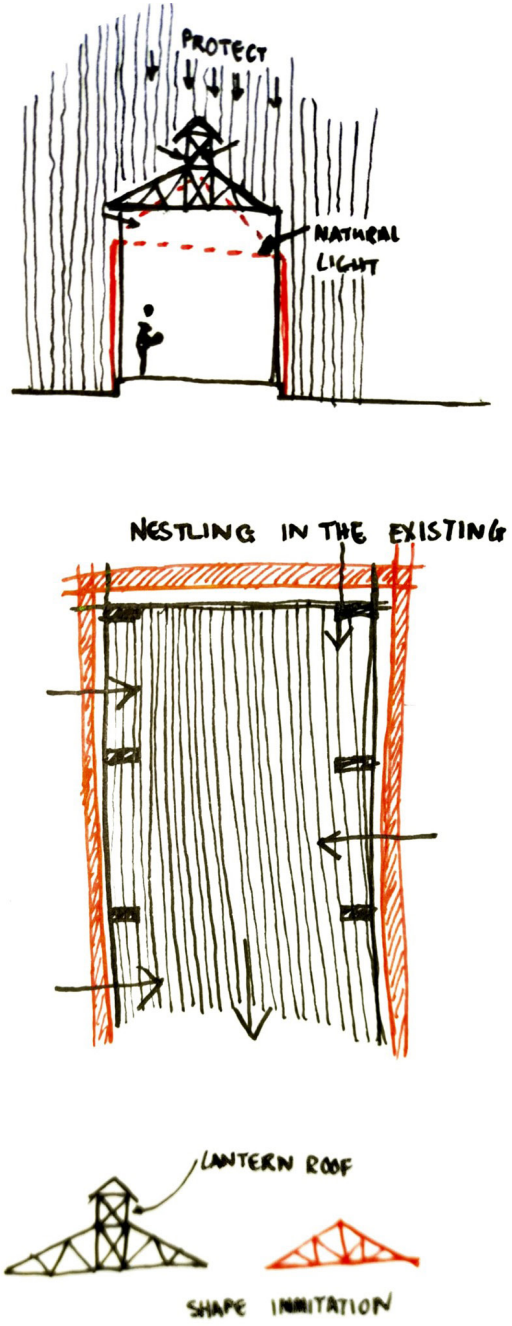


Figure 81: Sketches showing the design discourse behind the redesign of the building's shell(Author, 2022)

Opposite Page:
Figure 82: Exploded axonometric depiction of changes to building G (Author, 2022)

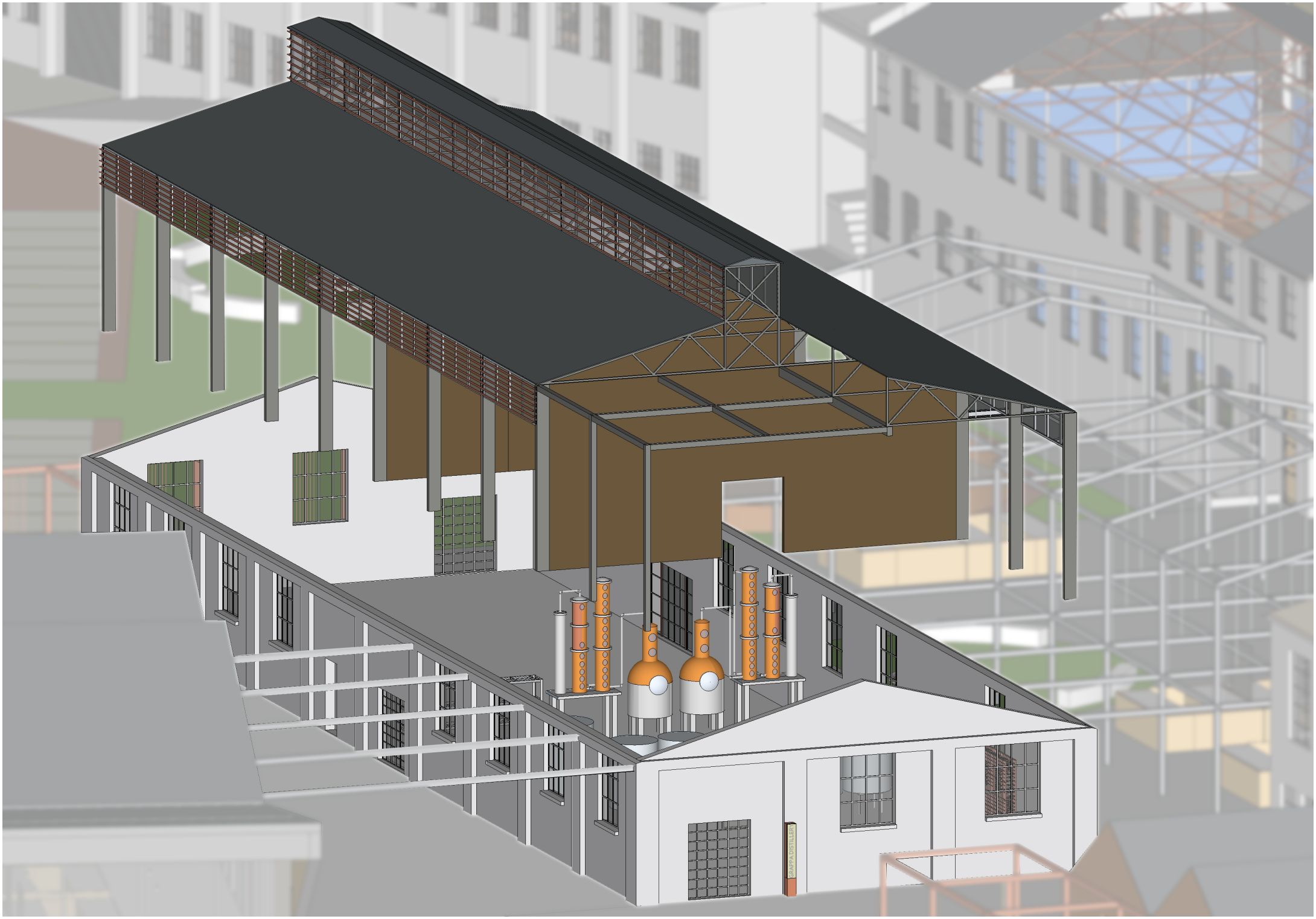




Figure 83: Grappa tasting room covered by a grape arbour (Author, 2022)



Figure 84: Grappa Distillery with interior view of new building shell (Author, 2022)

INDOOR MARKET

As mentioned in the HIA, the western third of building E's roof structure was damaged by a fire in 2018 and replaced by a previous owner with a roof structure contrasting the original. This action by the owner has been deemed as a heritage risk, consequently meaning that an architectural intervention should be sought to replace this roof structure.

This architectural intervention aimed to work with the existing framework of the building. Furthermore, the lack of natural light filtering into the building was taken into account with the addition of openings on its southern facade. Contrary to the principles of biodynamic viticulture to minimalise any external inputs, the damaged third of the building was redesigned into a beacon that emphasises the site's main entrance. This new roof structure was designed in such a way that the roof pitch contrasted that of the other two roofs in the process turning to challenge the hierarchy of the main building. To emphasis nature as the mediating force on site a tree was placed in the plaza between these two structures; essentially becoming part of the strive for vertical dominance.

The following chapter will investigate the workings of the academic building.

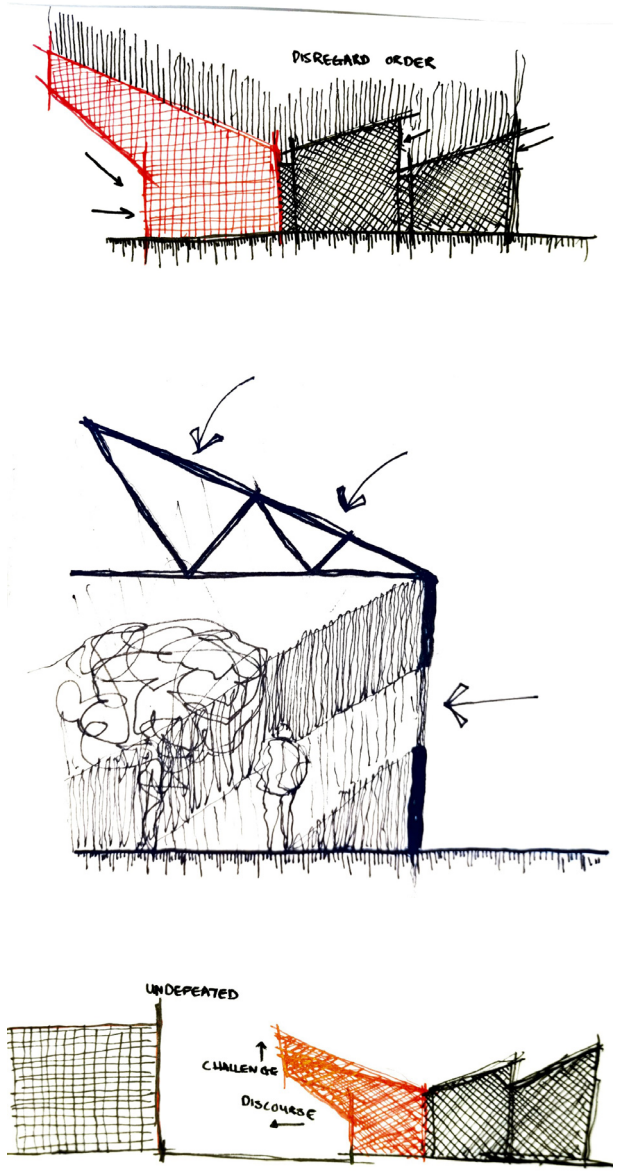
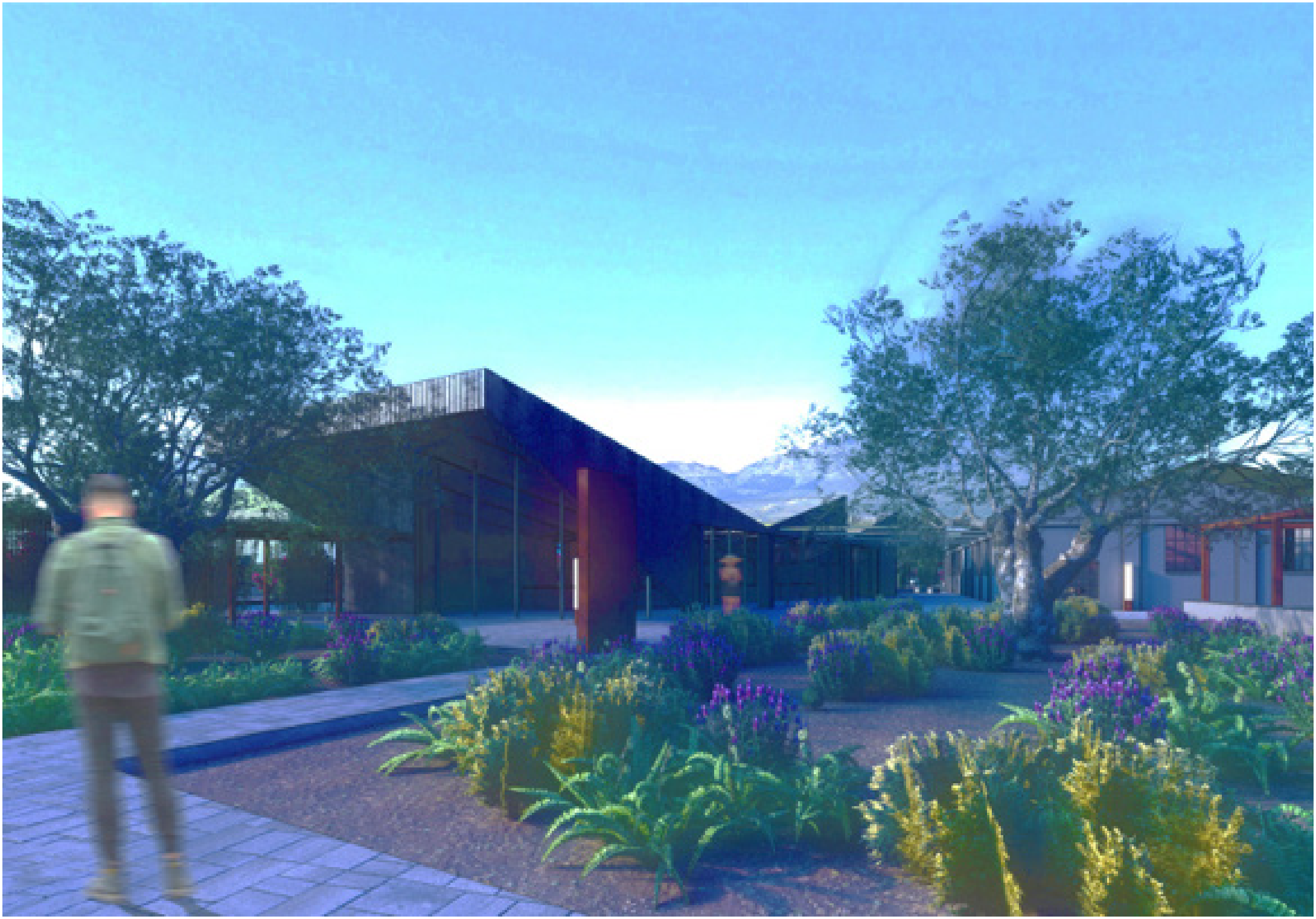


Figure 85: Sketches showing the design discourse behind the changes done to building E damaged roof structure (Author, 2022)

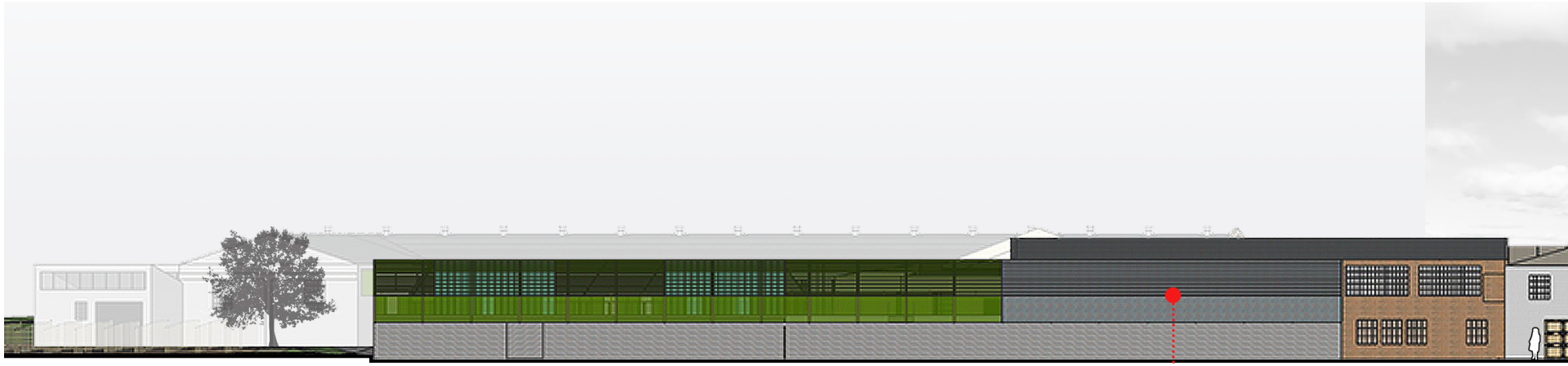
Opposite Page:
Figure 86: The Indoor market in the context (Author, 2022)





ACADEMIC BUILDING NORTHEAST ELEVATION
Scale 1:500

Roof Covering Removed for creation of new courtyards



ACADEMIC BUILDING SOUTHWEST ELEVATION
Scale 1:500

Original Roof Covering Restored





Figure 87: Elevations showing the extent of the academic building (Author, 2022)



SECTION A-A
Scale 1:500





LIBRARY



CAFETERIA

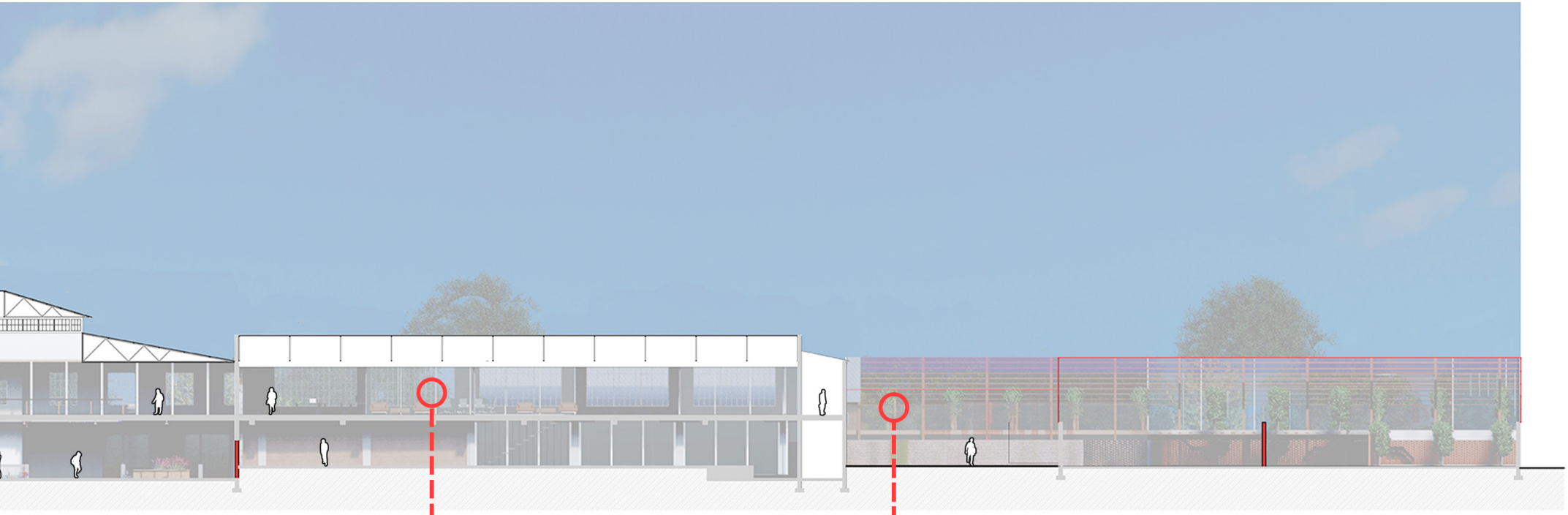


Figure 88: Longitudinal section through the academic building placing emphasis on important spaces (Author, 2022)



STUDENT CUBICLES



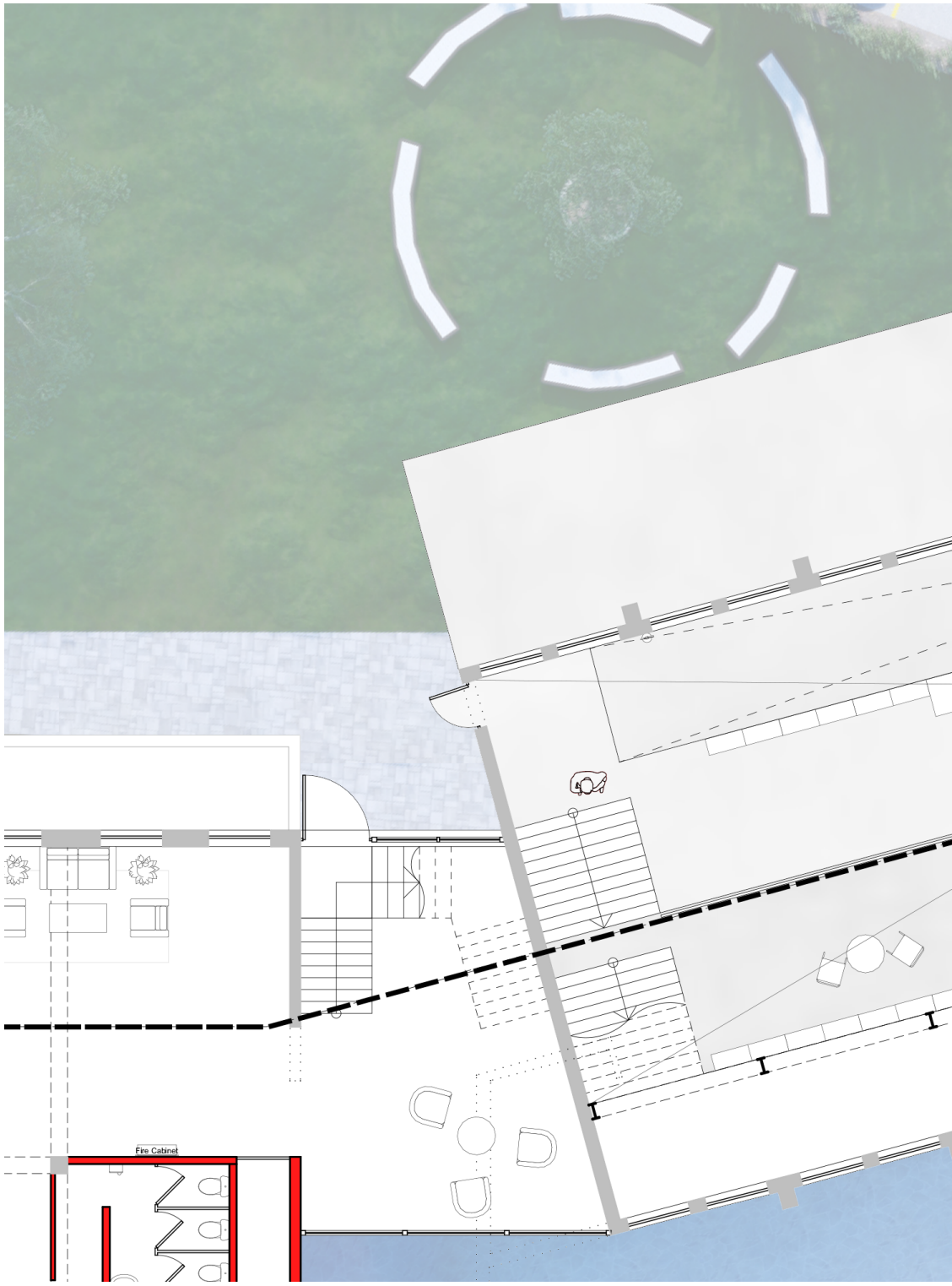
COVERED VINEYARDS

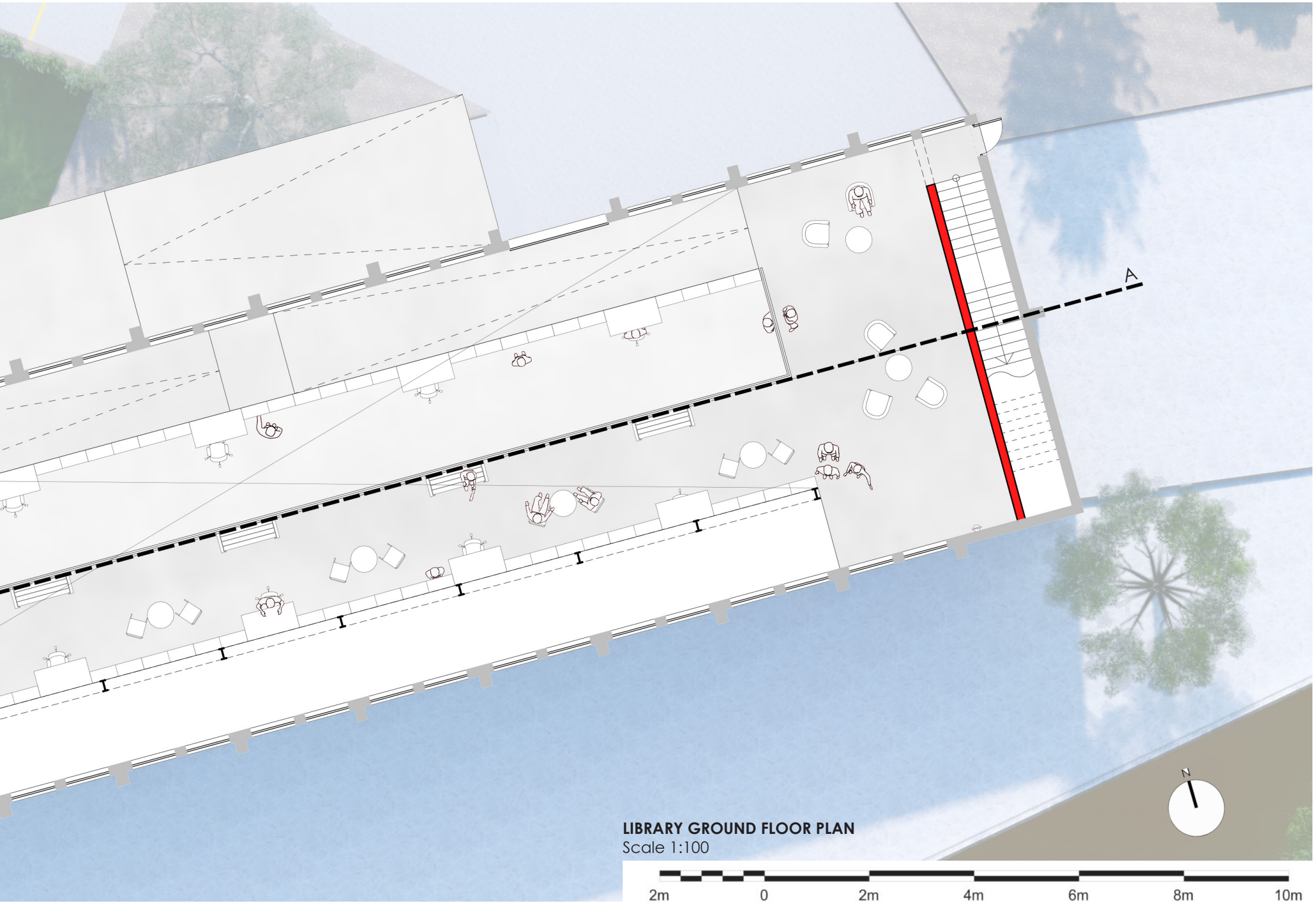
LIBRARY

The library is located at the eastern part of the academic building, consequently making it the endpoint of the promenade. The original structure of building N was a double-story space with the first floor's concrete slab being cracked due to exposure to rainwater. Furthermore, a concrete ramp is situated along the northern facade of the building, with the function being for deliveries to the first floor.

The redesign of this space, however, focuses on a multi-level experience where the first-floor slab is removed to create a double-volume space. A concrete ramp along the edges of this space allows for an ease of circulation for the dwellers. An aluminium shuttering system was placed on the inside of the building's northern facade to limit the excessive filtering of natural light into the space.

A new addition was also done to the academic building in the form of a lectorium.





LIBRARY GROUND FLOOR PLAN
Scale 1:100



Figure 90: Interior of the Library showing its multi-level experience (Author, 2022)



LECTORIUM

With the large open space available behind building M, an opportunity was made available for a new structural addition to the academic building. It is however important that this addition be done in a sensitive way that limits the new structure's impact on the heritage of the site.

This sensitive intervention was done by complimenting the material usage of the rest of the site and mimicking the roof structures of adjacent buildings. In addition to this, a lantern roof was added to compliment the roof structure of building K and allow natural light to filter into the space. Furthermore, a void was created as a transition node between old and new to elevate the dweller's familiarity with the new addition.

The following chapter formulates the principles of biodynamic viticulture into new forms of vineyards and roof covering for building H.

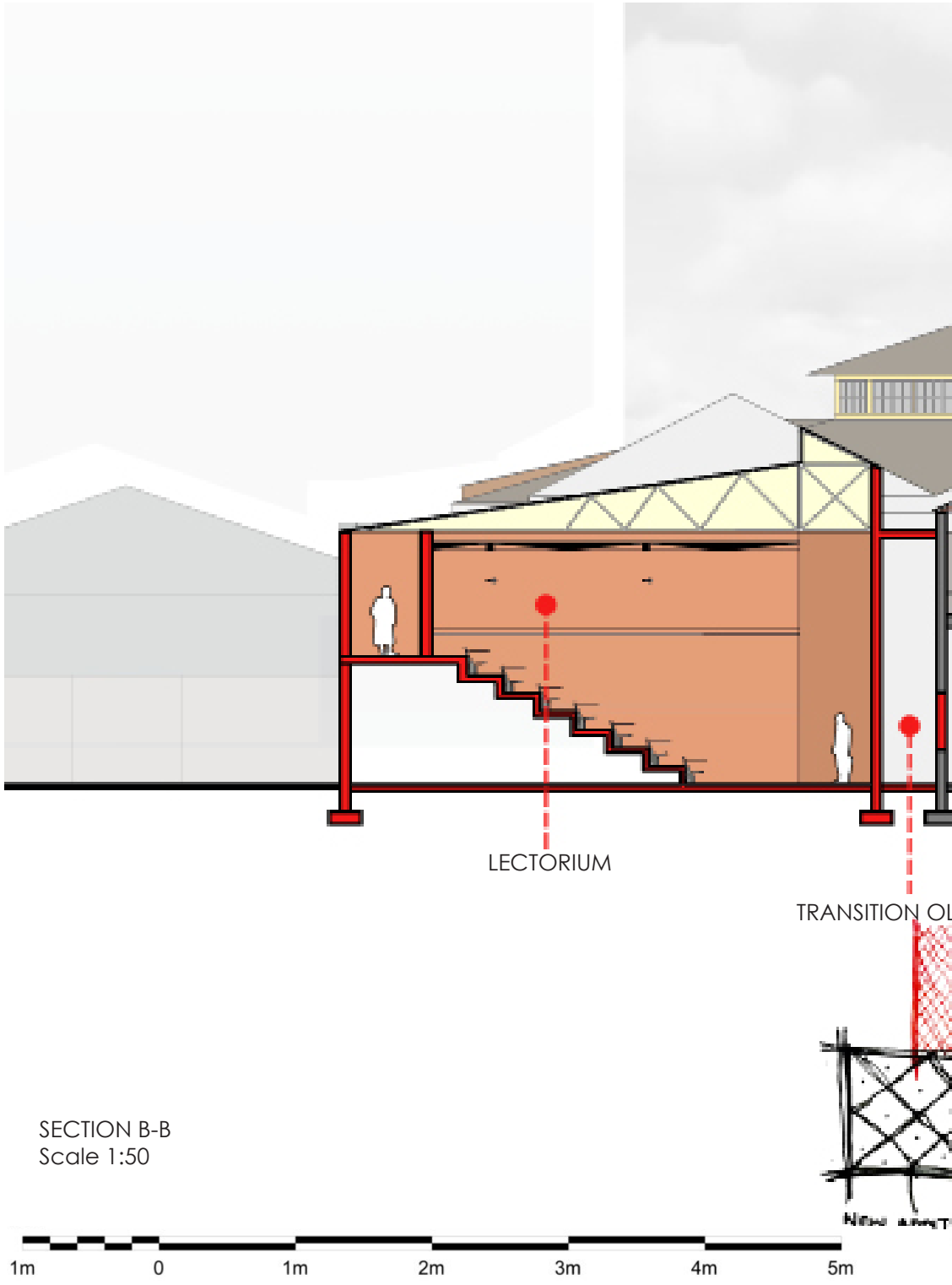


Figure 91: Section through the lectorium showing its connection to the existing structures (Author, 2022)



LD-NEW

SECTION B-B
Scale 1:50

1m 0 1m 2m 3m 4m 5m

7.11

DESIGN DISCOURSE | LECTORIUM





Figure 92: Interior of the lectorium (Author, 2022)

INDOOR VINEYARDS

Another building with a roof structure that was damaged by fire, the design intervention of building H aims at an approach of removing and replacing its roof covering. This approach was done to accommodate the building's new function of covered vineyards. The northern roof covering was completely removed to expose these vineyards to the elements with the only shade being provided by the steel skeleton of the building. To the eastern part of the building, the roof structure was preserved to cover the horticulture laboratories.

New roof covering, indicated in green [Figure 93] was done with horticultural float glass, giving the illusion of being exposed to the elements, with the addition of protection against the UV radiation of the sun. The changes done to building H are the most prominent example of adaptive reuse on site that was done within the principles set out by biodynamic viticulture. This is true for all forms of changes on site with the end product aiming to create new existential thresholds between dwellers and nature.

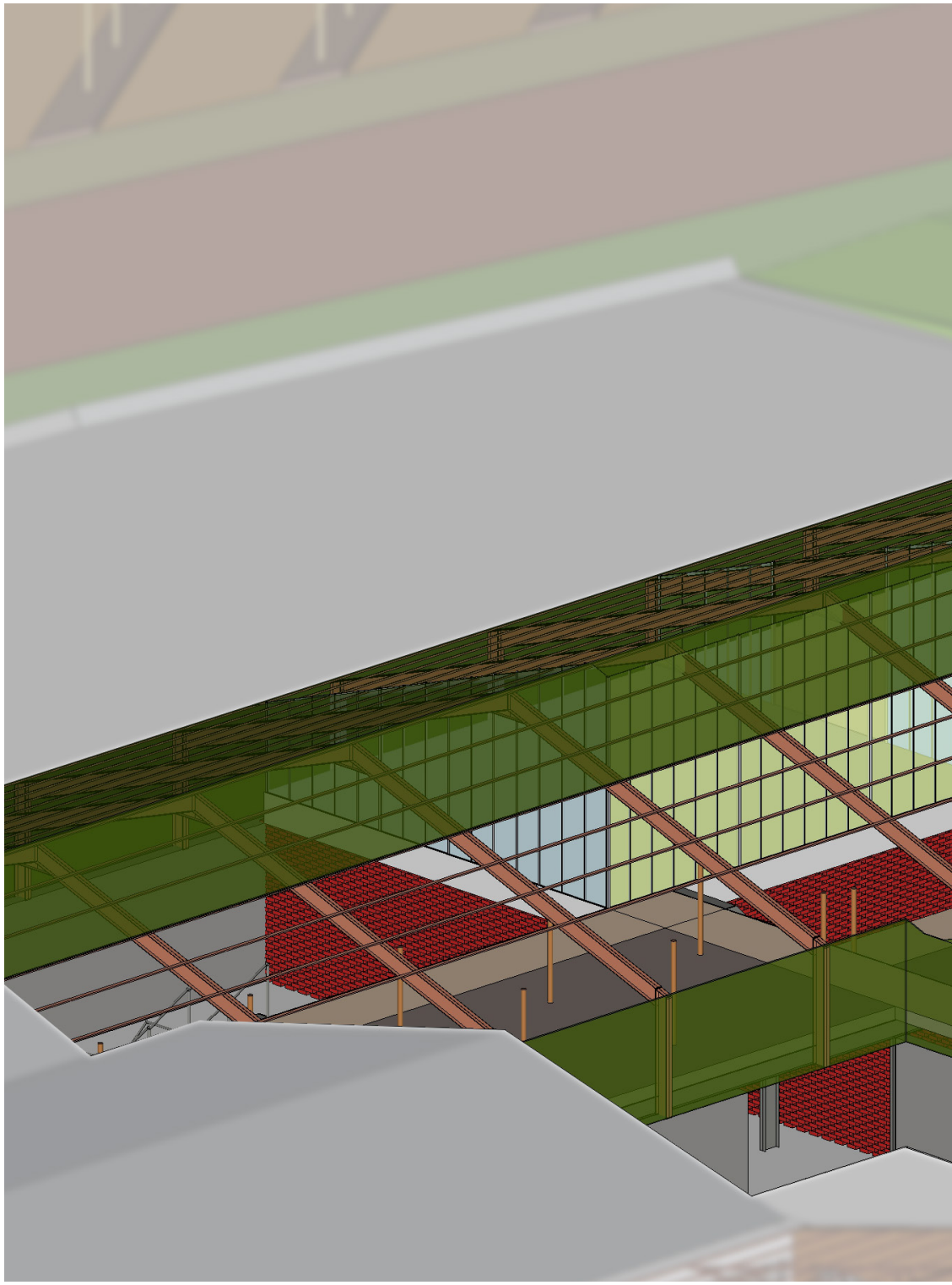
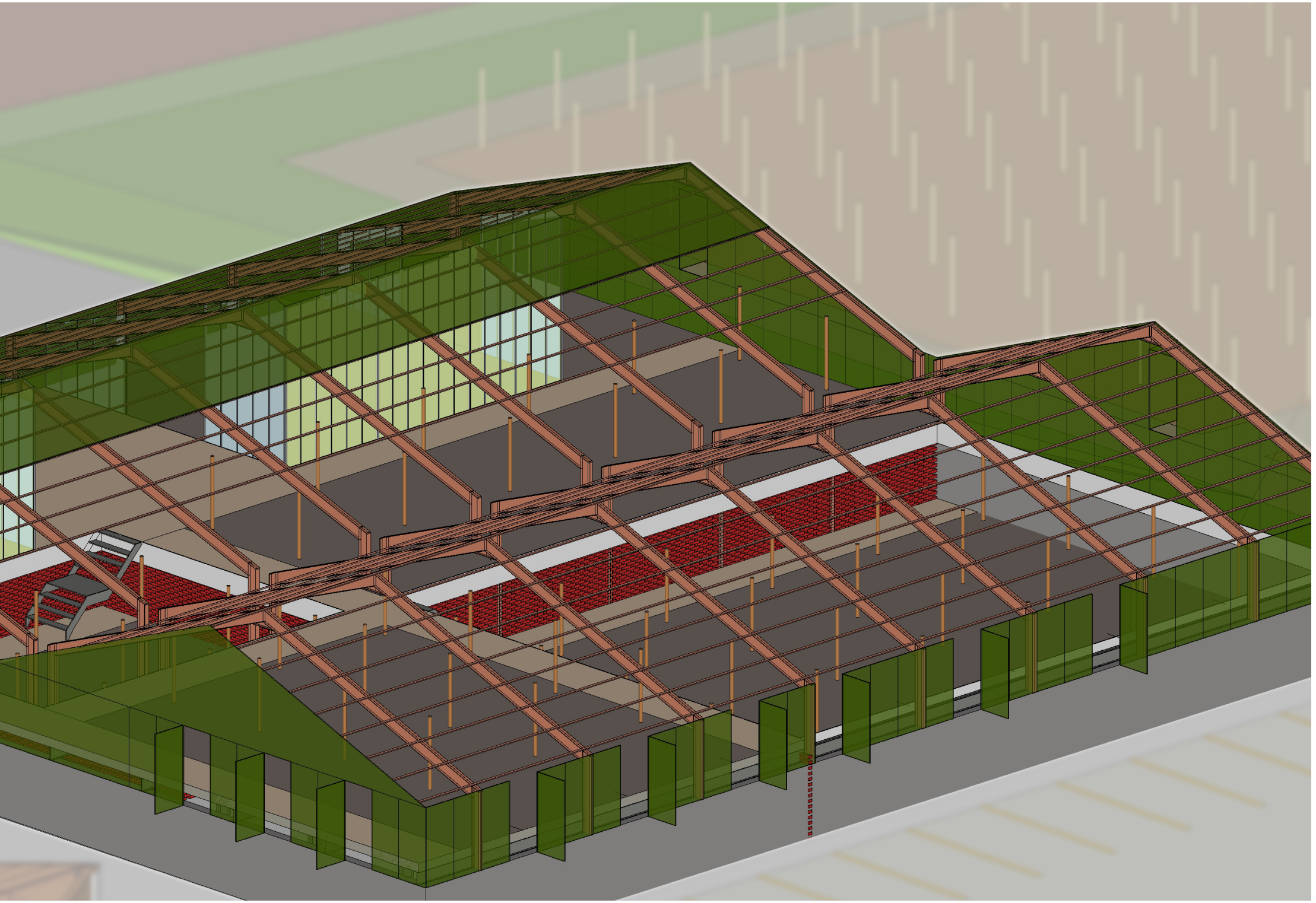


Figure 93: Axonometric depicting the horticultural float glass replacing the damaged roof covering (Author, 2022)



7.12

DESIGN DISCOURSE | INDOOR VINEYARDS

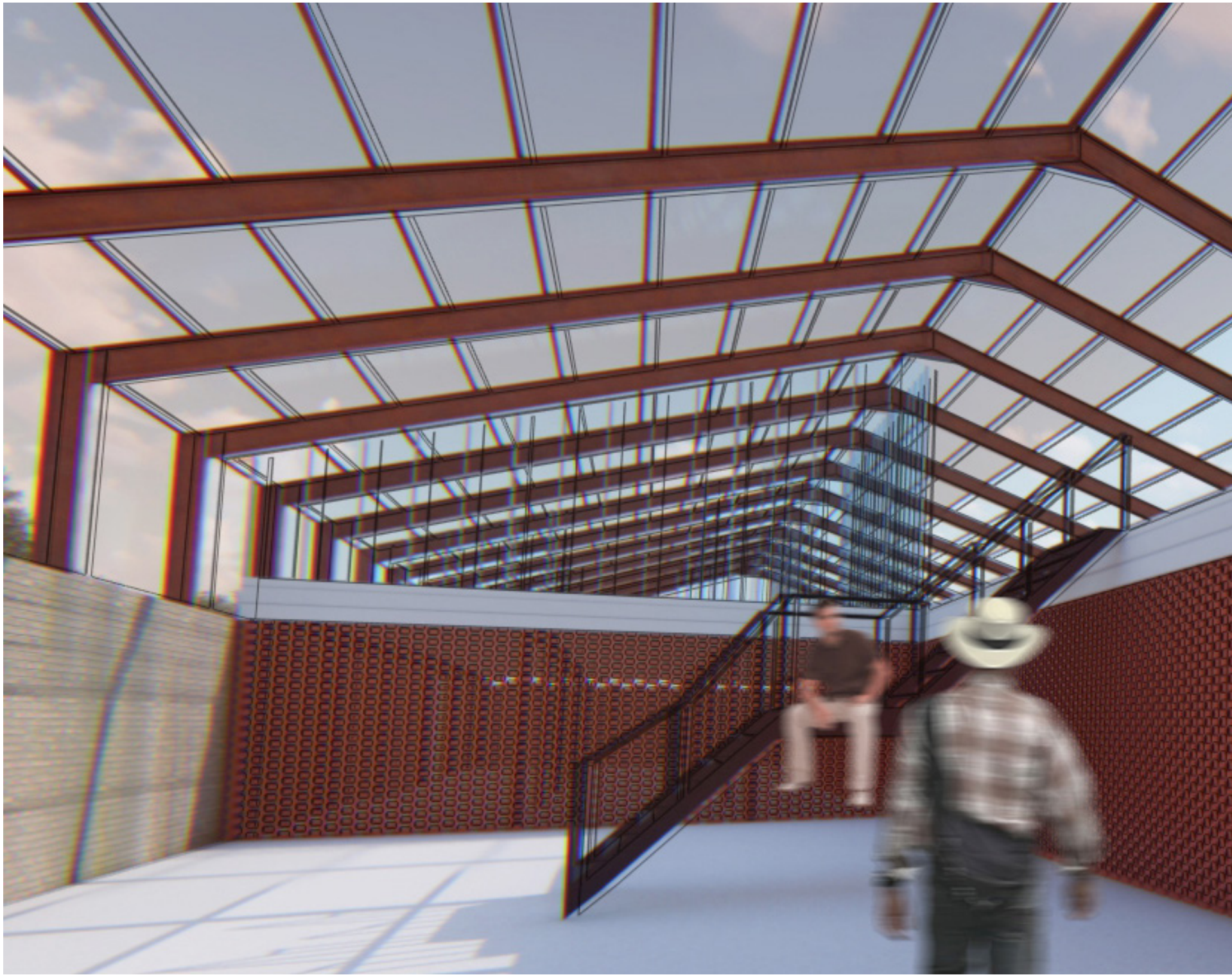




Figure 94: The biodynamic way of farming ‘indoors’ (Author, 2022)

7.13

DESIGN DISCOURSE | GREEN SPACES





Figure 95: Navigating the site (Author, 2022)

7.14

DESIGN DISCOURSE | OLD VS NEW





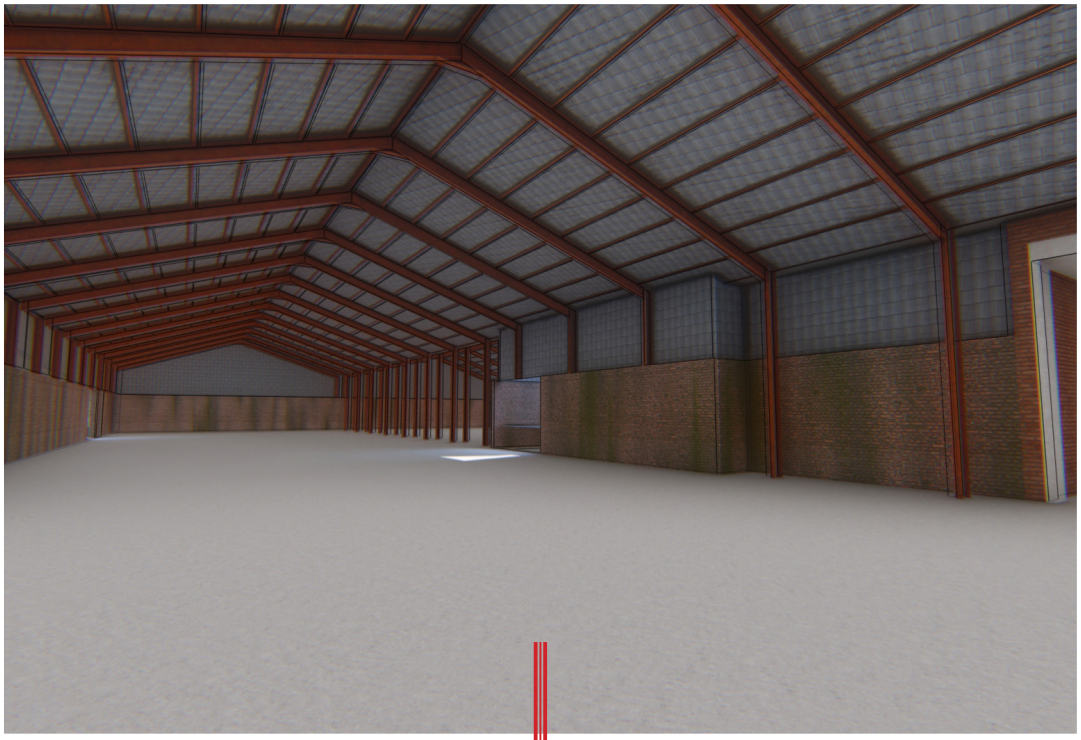


INDUSTRIAL VS NATURAL



THE CAFETERIA







SITE ENTRANCE



COVERED FARMING

Figure 96: Side-by-side comparison of old and new (Author, 2022)

7.15

OTHER IMPORTANT AREAS

DESIGN DISCOURSE



THE INDOOR MARKET



STUDENT CUBICLES



REWILDED SPACES



BEAUTIFUL VIEW AT DUSK



CHALLENGING HIERARCHY



TRANSITIONING BETWEEN BUILDINGS



Figure 97: Final Model(Author, 2022)



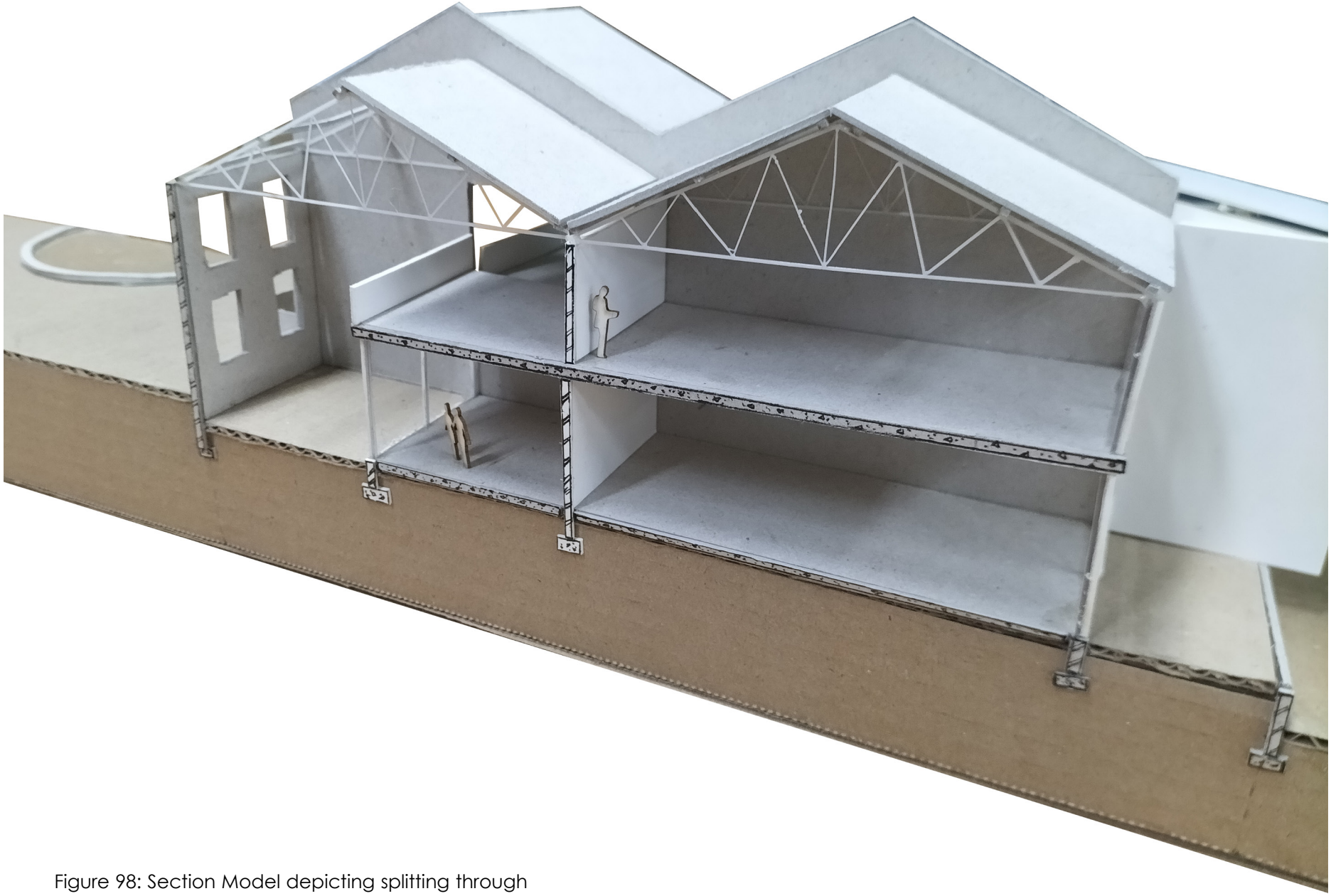


Figure 98: Section Model depicting splitting through interior structures(Author, 2022)

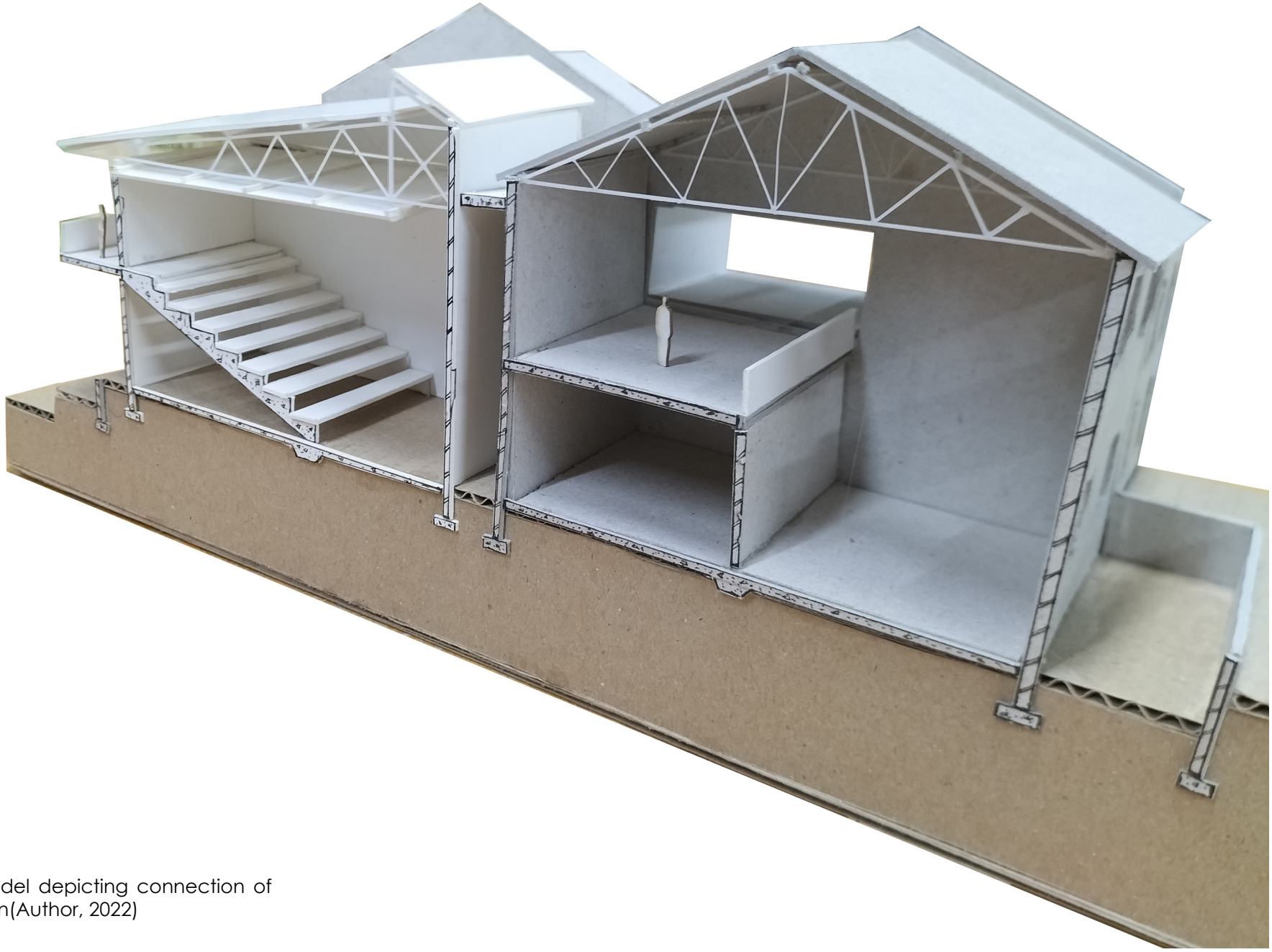


Figure 99: Section Model depicting connection of new lectorium addition(Author, 2022)

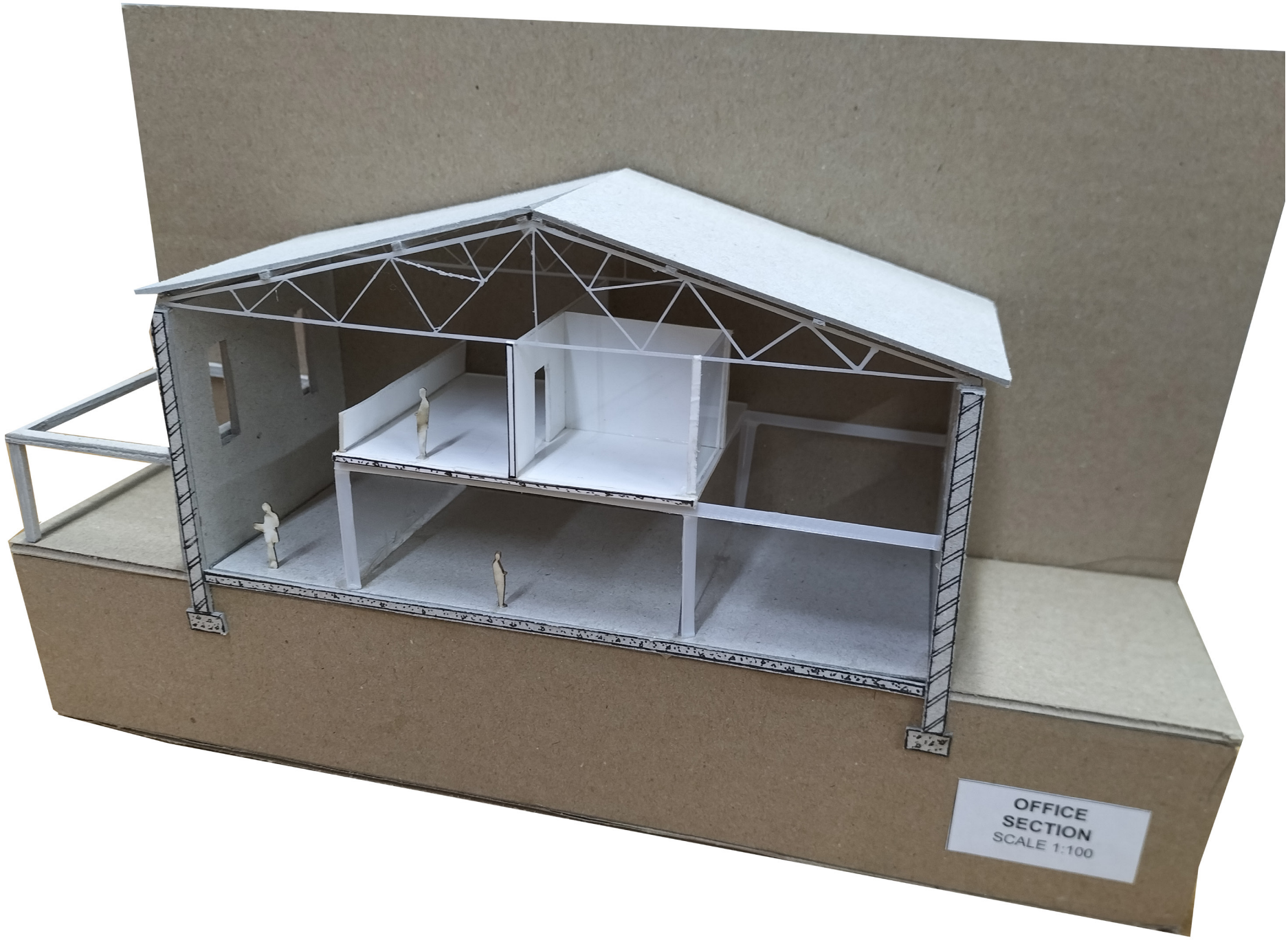


Figure 100: Section Model depicting insertion of new structure into existing(Author, 2022)

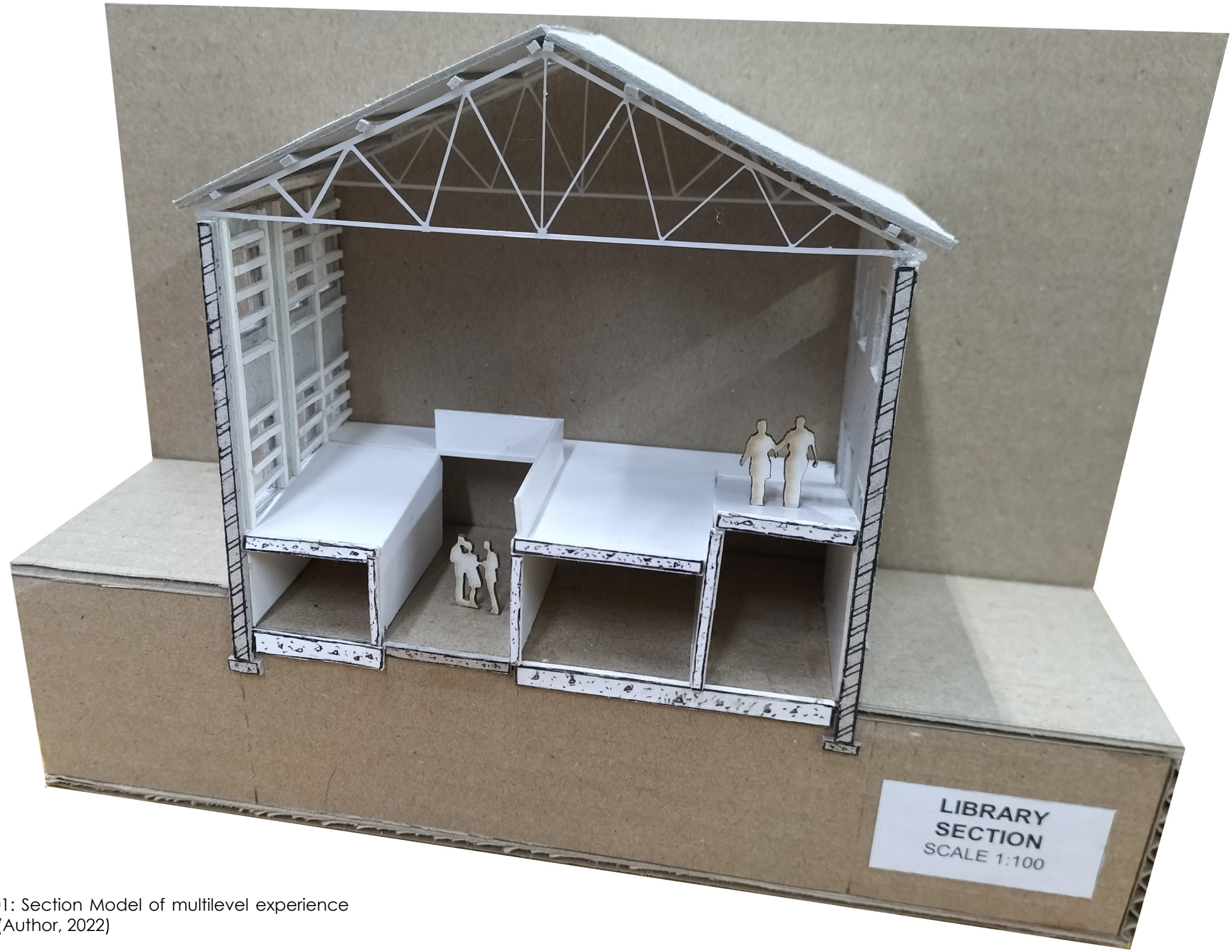


Figure 101: Section Model of multilevel experience of library(Author, 2022)

8

TECHNICAL INVESTIGATION



Figure 102: New possibilties for the Old Tannery
(Author, 2022)



8.1

TECHNICAL INVESTIGATION

SITE AND ENVIRONMENT

This investigation compiles all the explorations done in previous chapters in order to look at design resolutions in terms of function and structure for the College of Viticulture. The technical investigation explores the influences of the site's context, circulation, building services, and structural approaches that allow for the creation of newfound relationships between dwellers and nature.

TOPOGRAPHY

The site, located in the Val du Charon valley, is at its highest point approximately 127m above sea level. The site is situated along the banks of the Krom river, leading to an abundance of fertile soil. The fall of the site is only a mere 2 meters from its eastern border to its western border. This fall allows rainwater to flow from the site into the Krom river with ease. The fall also influences the southernmost building on site, with a meter fall between interior floor slabs on the ground floor.

VEGETATION

Contrary to the rich fynbos vegetation of its context, the vegetation on site mostly comprises of *Sorghastrum nutans* (tall grass) that can grow up to 1.5m at its highest. Other vegetation on-site includes *Populus alba* (white poplar) and *Salix mucronata* (willow tree), which are alien trees growing on the banks of the Krom river. Instances of *Rhoicissus tomentosa* (wild grapevines) have also been identified on-site, indicating past agricultural efforts.



Figure 103: Tall grass growing on site with growth along the Krom river at the back (Author, 2022)



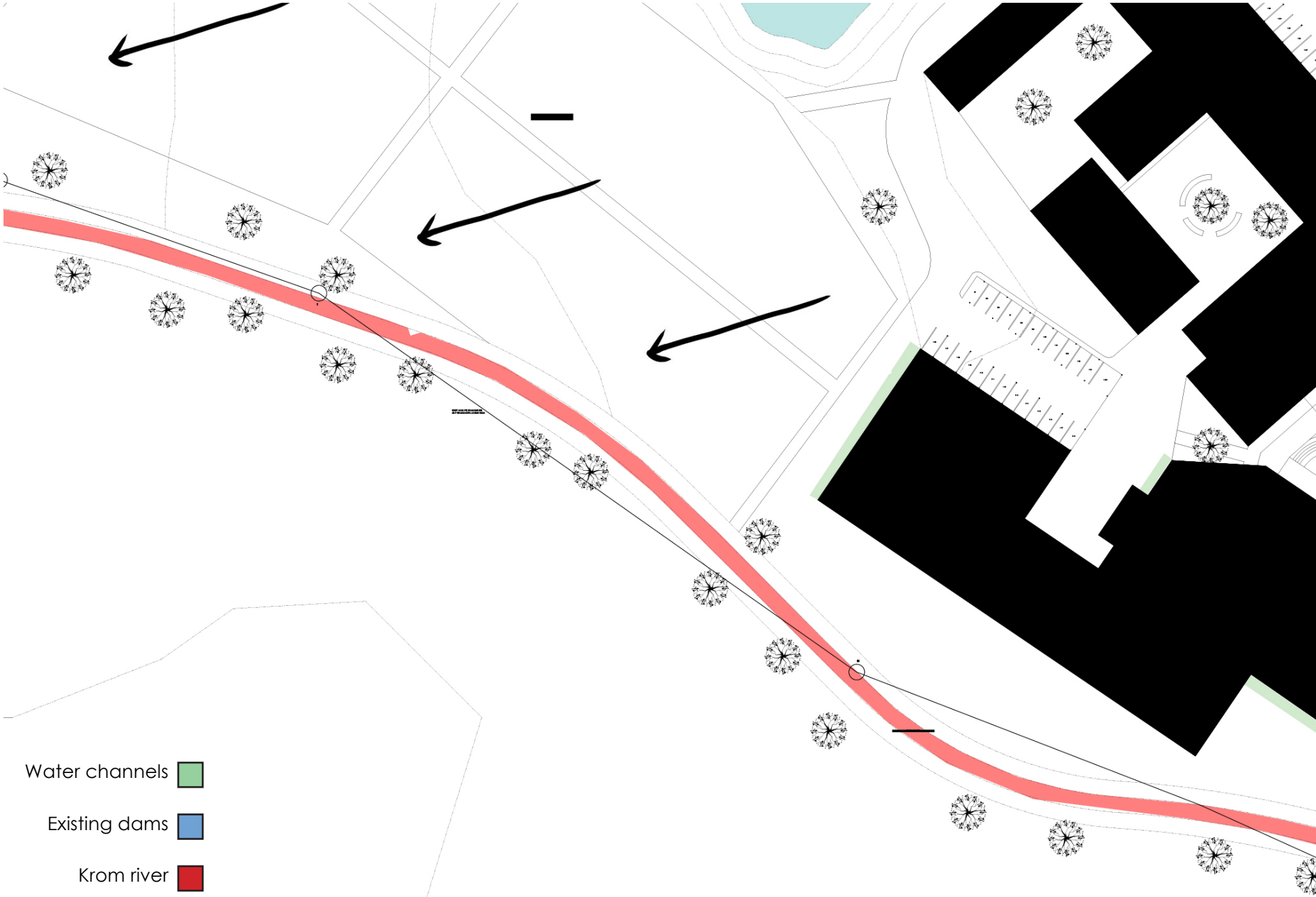


Figure 104: Diagram indicating the drainage of water towards the Krom river (Author, 2022)



PARKING AND LANDSCAPING

PARKING

Due to the site's large extent, various parking areas have been distributed on-site. The largest parking area(95 parkings) is to the north of the dam and is mostly for public use allowing visitors to firstly explore the natural aspects of the site before visiting the historical ensemble. Further visitor parkings are located between buildings C and E (10 parkings) and between buildings D and H (25 parkings) for those seeking consultation from staff. 20 parkings for staff are also accommodated for along the northern facade of building C. Furthermore, 50 parkings are accommodated for students on the eastern part of the site leading to a total of 195 parking spots on site. Disabled parking spots are located closest to the entrances with a 1.5m clearance being given for wheelchair access.

LANDSCAPING

Landscaping forms an important part of the rewilding of architecture on the site of the Old Tannery. The removal of pavement to create gardens within the main plaza in front of building C enables dwellers to have a newfound relationship with nature. Paved pathways between these gardens allow dwellers to circulate between buildings on site while constantly being aware of nature. This constant awareness of nature is further emphasised by including corten steel grape arbours as 'natural' shading devices. Finally, concrete seats are placed along the previously-mentioned pathways in circular shapes as a response to the existing circular landscaping in front of building C.

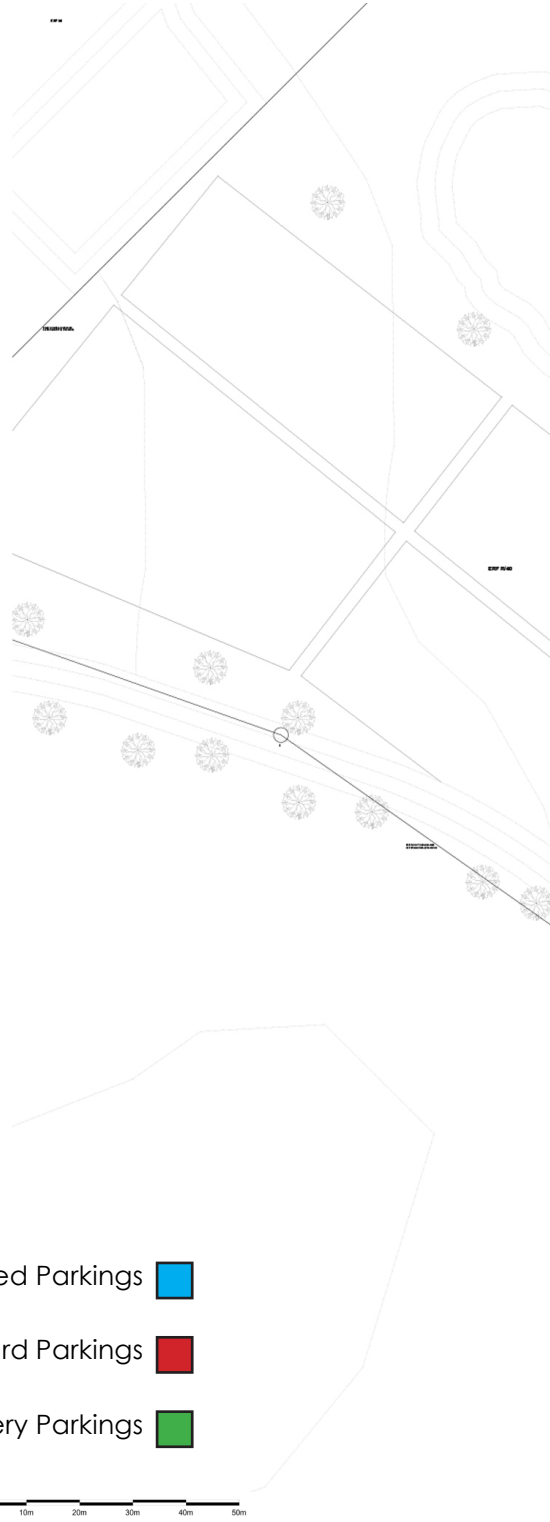


Figure 105: Location of parkings on site (Author, 2022)


95
20
10
25
50
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HORIZONTAL AND VERTICAL CIRCULATION

Circulation along the interior and exterior spaces on-site plays an important role in binding the historical ensemble together. The essence of the architectural promenade is used to create a pathway through the built space while exposing dwellers to the *tableau* in the form of sudden changes to their immediate environment.

Navigating the external promenade:

1. The dweller arrives at the site's main entrance and has to cross the natural threshold provided by a corten steel grape arbour.
2. After navigating through the natural threshold, the dweller is presented with an option: to visit the indoor market to their left or to further navigate the site.
3. The dweller reaches an impasse with various functions being laid out in front of them, each drawing curiosity for further exploration.
4. Seating is provided framing important views on-site and allowing for moments of critical noticing of both the historical ensemble and the dwellers' direct natural context.

Navigating the internal promenade:

5. The dweller navigates through the historical threshold into the reception of the academic building.
6. An impasse is reached at the cafeteria, giving the dweller the decision to either follow the promenade east or west. This contradicts the essence of the promenade as a pathway from one point to another, by rather branching into multiple promenades.
7. By following the promenade to the west, the dweller can access the large undercover garden in building I or further navigate along the promenade to reach the covered vineyards and laboratories.
8. By following the promenade to the east the dweller will navigate towards the site's academic functions including the lectorium and lecture halls with the library being the end point of this branch.

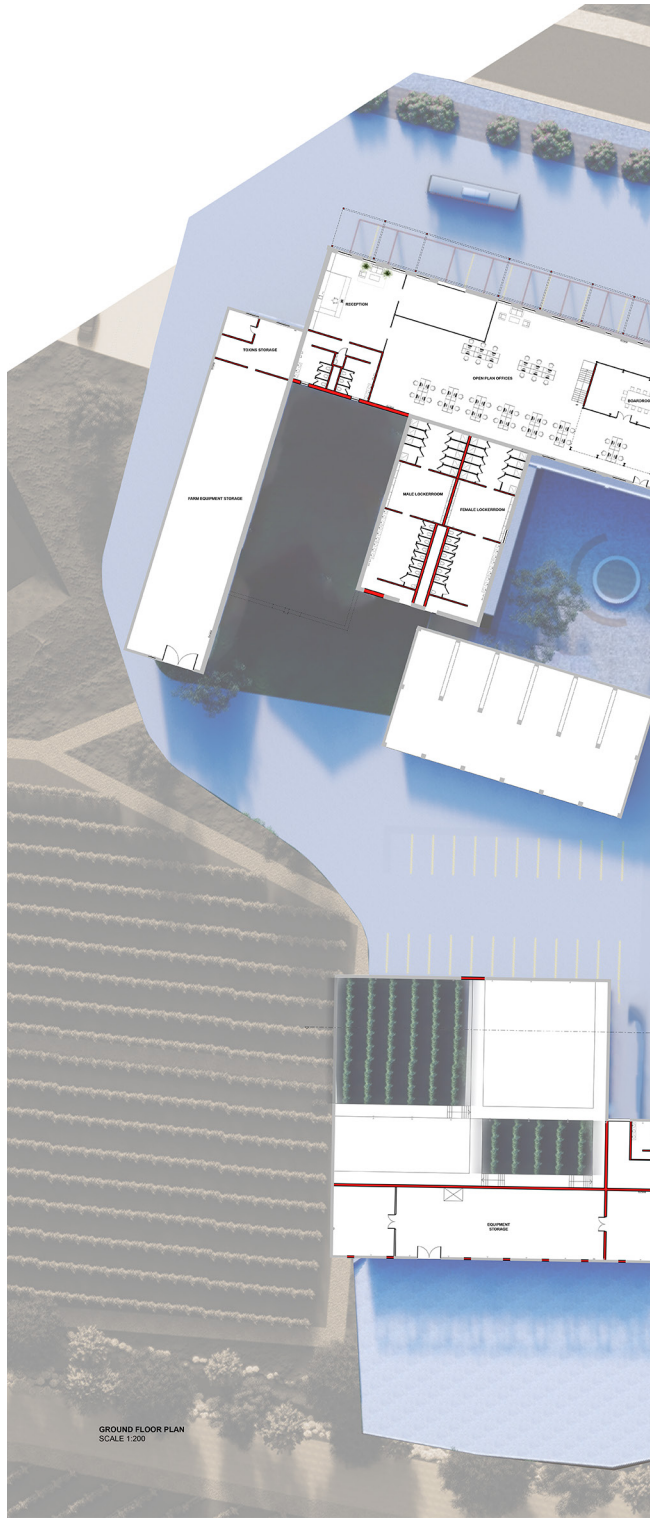
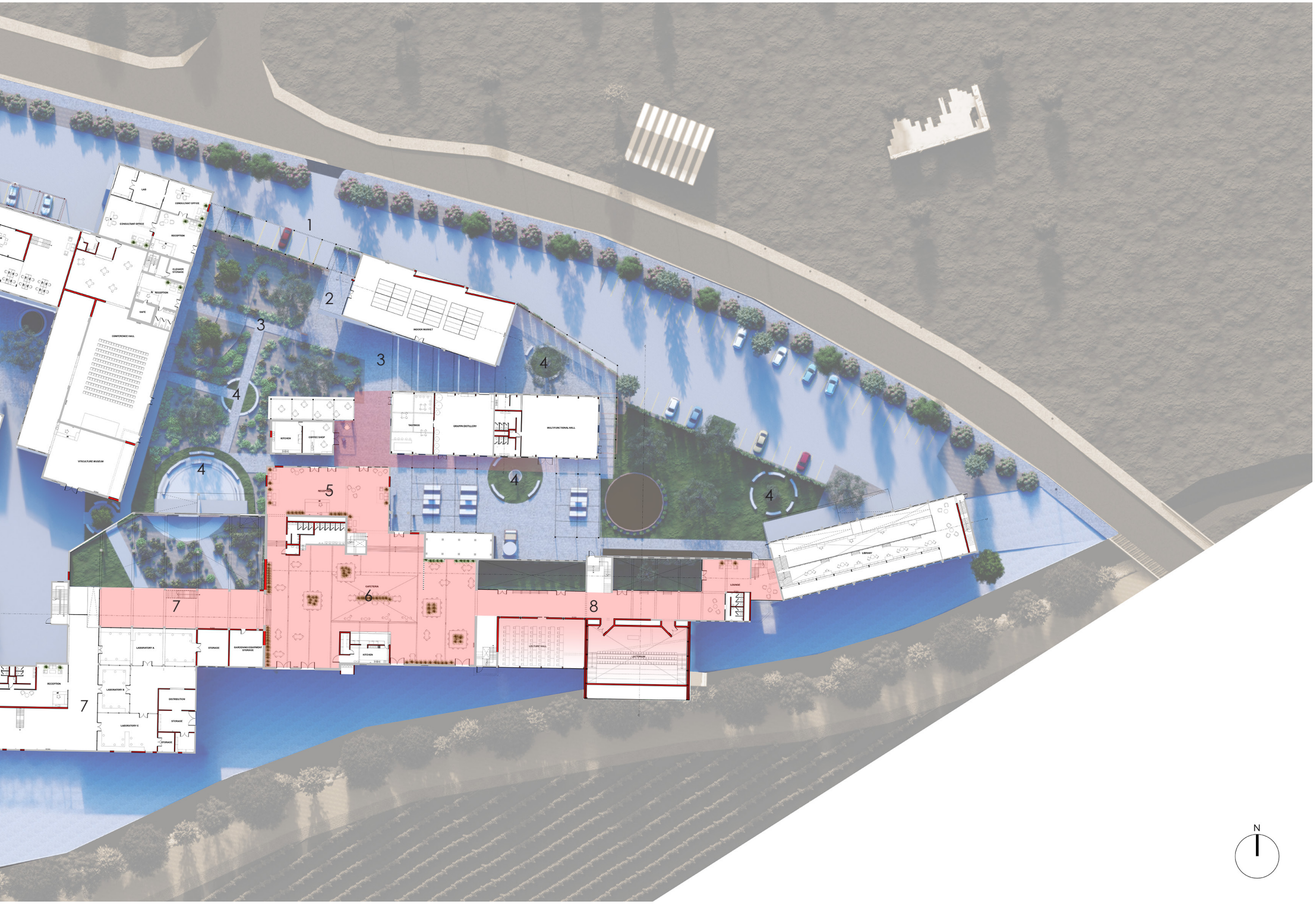


Figure 106: The extent of the promenade on ground floor (Author, 2022)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STRUCTURAL SYSTEMS

Foundations

The existing foundations on site are 650mm deep 250x650mm concrete strip footings that are used to support 280mm thick load-bearing walls. 300x300mm reinforced concrete foundations on a compacted gravel layer are used for all seatings and walkways.

Floor

The existing interior floor slabs are 85mm reinforced concrete with different finishes as indicated on construction drawings. The existing first-floor slab is 350mm reinforced concrete supported by 350x250mm concrete beams.

Walls and structural columns

280mm thick existing brick walls are adapted with new additions using walls varying from 110mm thick to 220mm thick. Furthermore, cavity walls used in the lectorium addition to building M have an air pocket of 100mm. Existing concrete columns are 500x500mm due to their function being to support the heavy weight of machinery resting on the first-floor slab. New steel columns used in steel assemblies have a measurement of 150x300mm.

Roofs

Existing roof trusses made out of steel angles have started showing signs of weathering but still maintain structural integrity. Roof coverings range from corrugated steel to standard roof tiles with 50x50mm steel purlins distributing the weight over the roof trusses. New roof trusses aim to mimic the existing ones by using 100mm hollow steel section trusses. The roof covering over the greenhouses in building H is made out of horticultural float glass to allow sunlight to reach the gardens within.

Figure 107: Important structural detailings (Author, 2022)

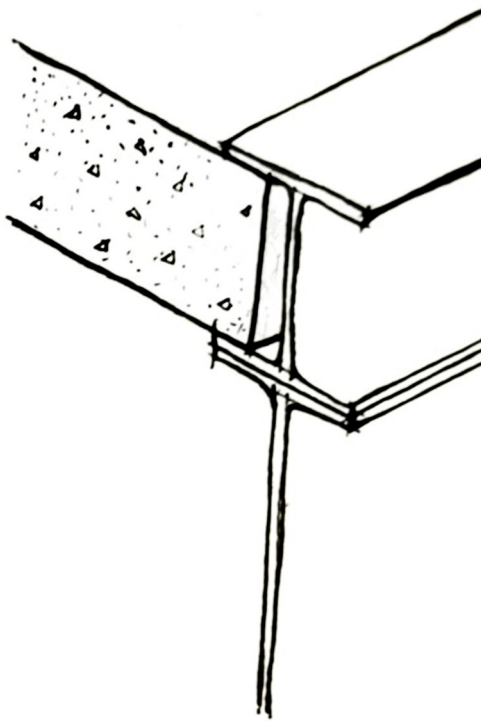


Figure 103.1: Steel Assembly used in the mezzanine level in building C (Author, 2022)

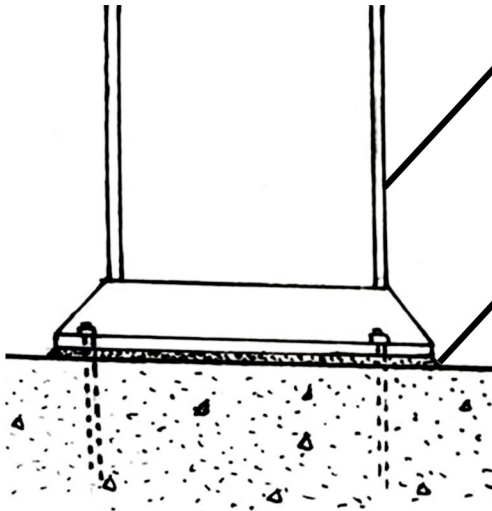


Figure 103.2: Steel column-to-floor connection (Author, 2022)



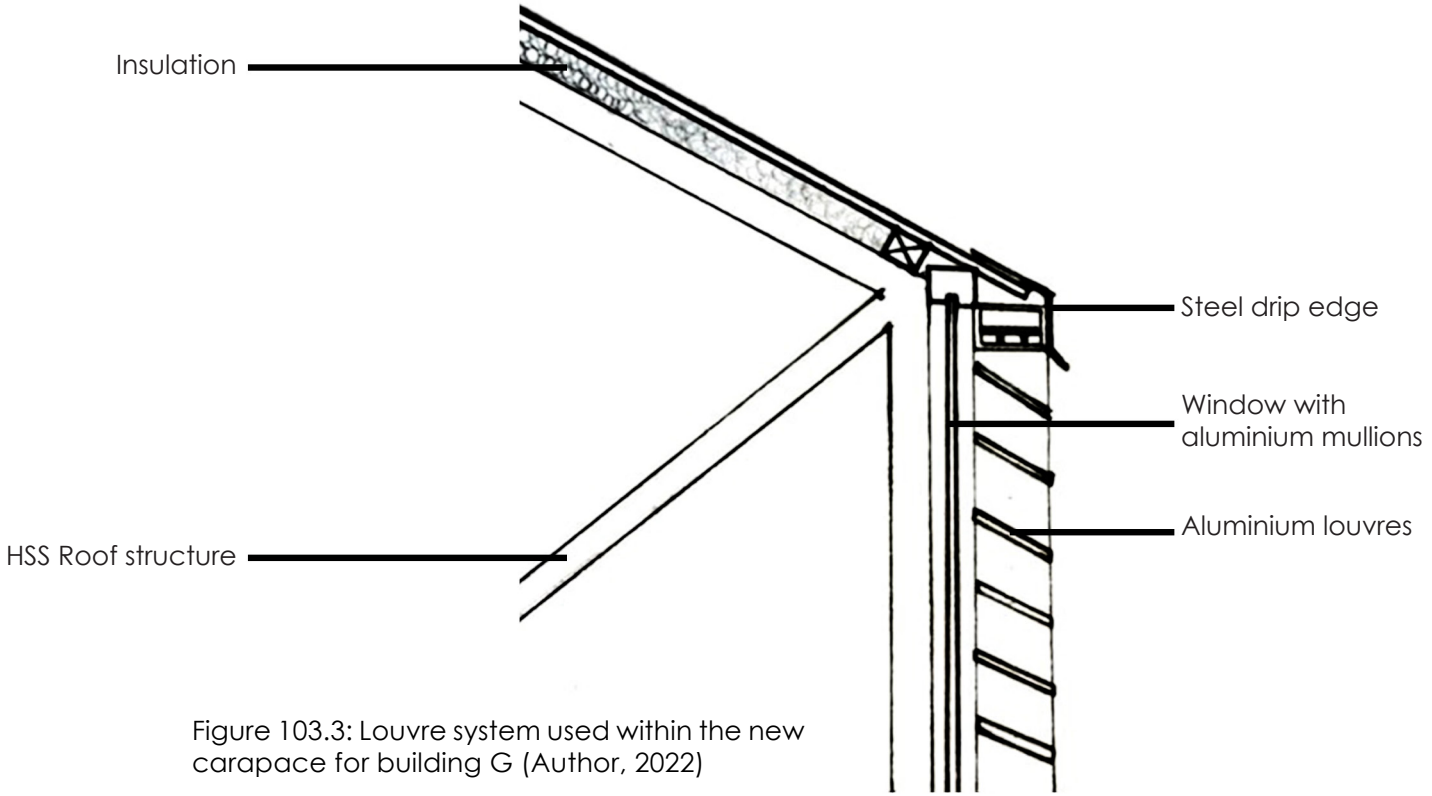
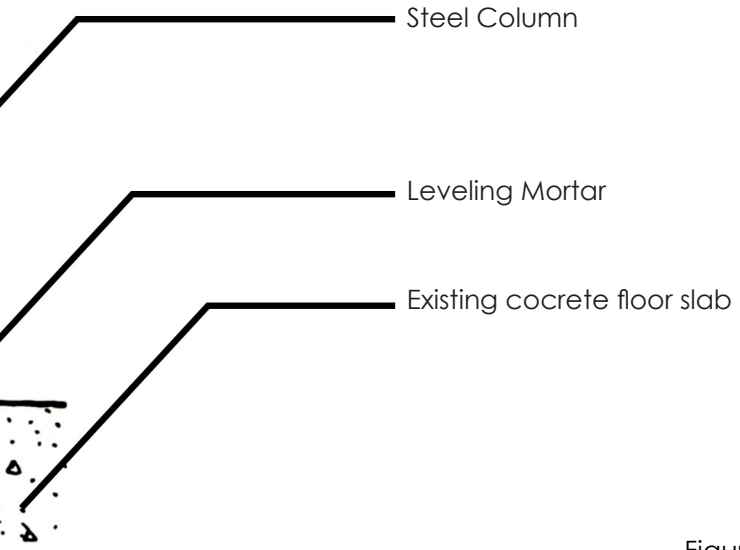


Figure 103.3: Louvre system used within the new carapace for building G (Author, 2022)



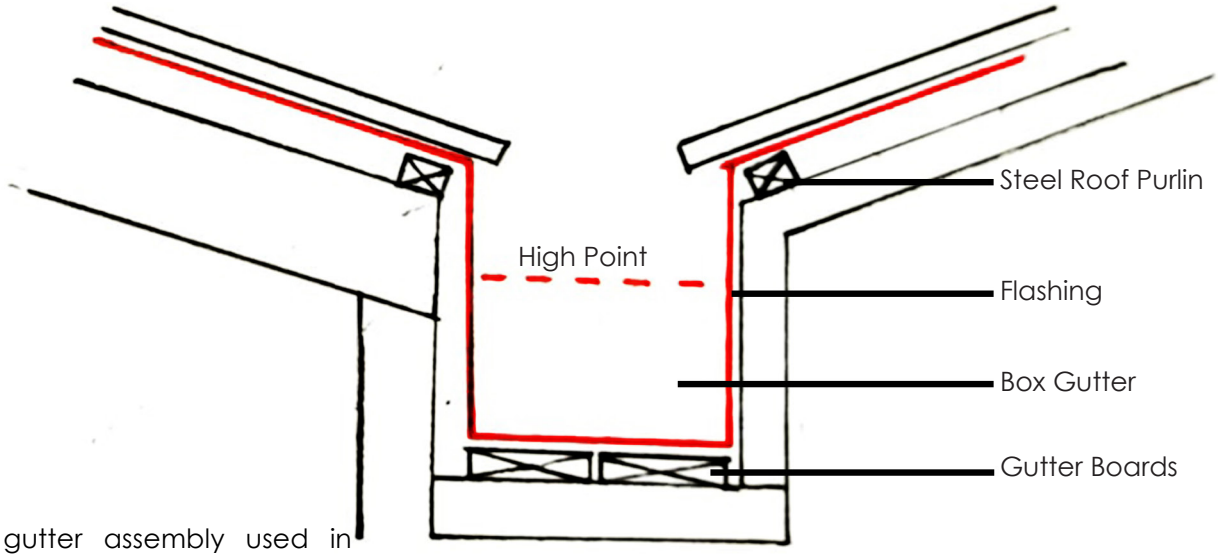


Figure 103.4: Box gutter assembly used in building E (Author, 2022)

PASSIVE DESIGN STRATEGY

The energy efficiency of the site is improved by using passive design solutions within the design. This minimises the amount of electricity that the site uses by rather seeking natural solutions.

Most buildings on site are orientated north and east allowing for opportunities to use natural light within spaces. By using lantern roofs in buildings G, K, and the lectorium addition to building M allows for natural light to enhance the spaces within and minimises the use of artificial lighting. This use of lantern roofs allows for efficient cross-ventilation of the spaces allowing it to be constantly cool even in the summer heatwave.

Furthermore, the removal of the buildings' roof covering in some parts, allows for further cross-ventilation. This also allows rainwater to reach these spaces, consequently minimalising the use of sprinkler systems

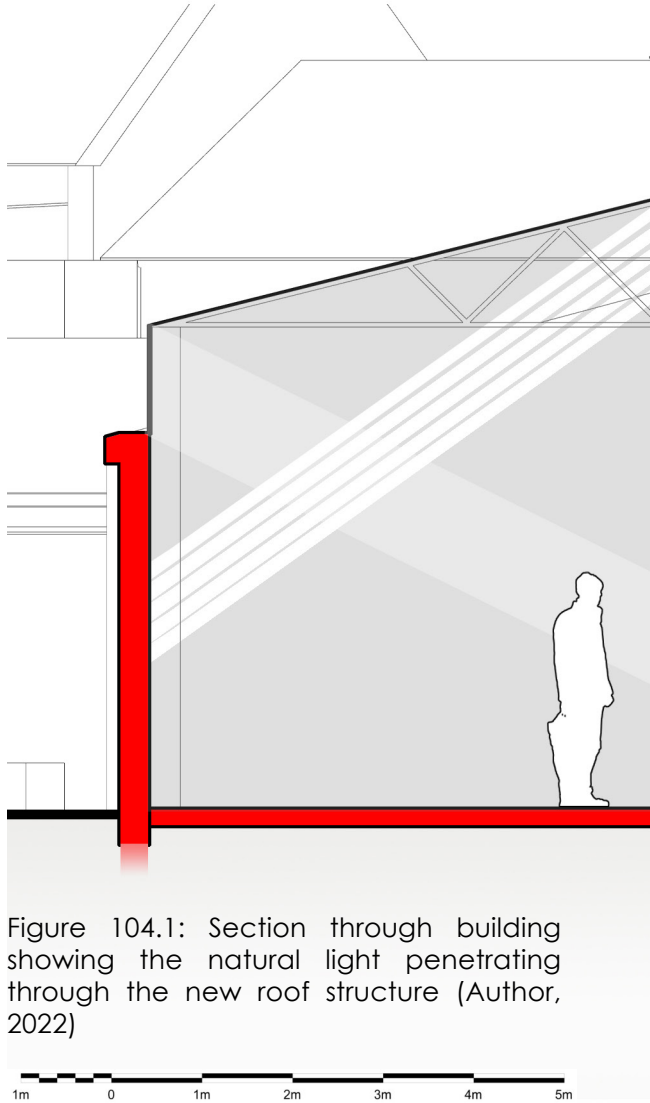


Figure 104.1: Section through building showing the natural light penetrating through the new roof structure (Author, 2022)

Figure 108: Sections through spaces using lantern roof structures (Author, 2022)

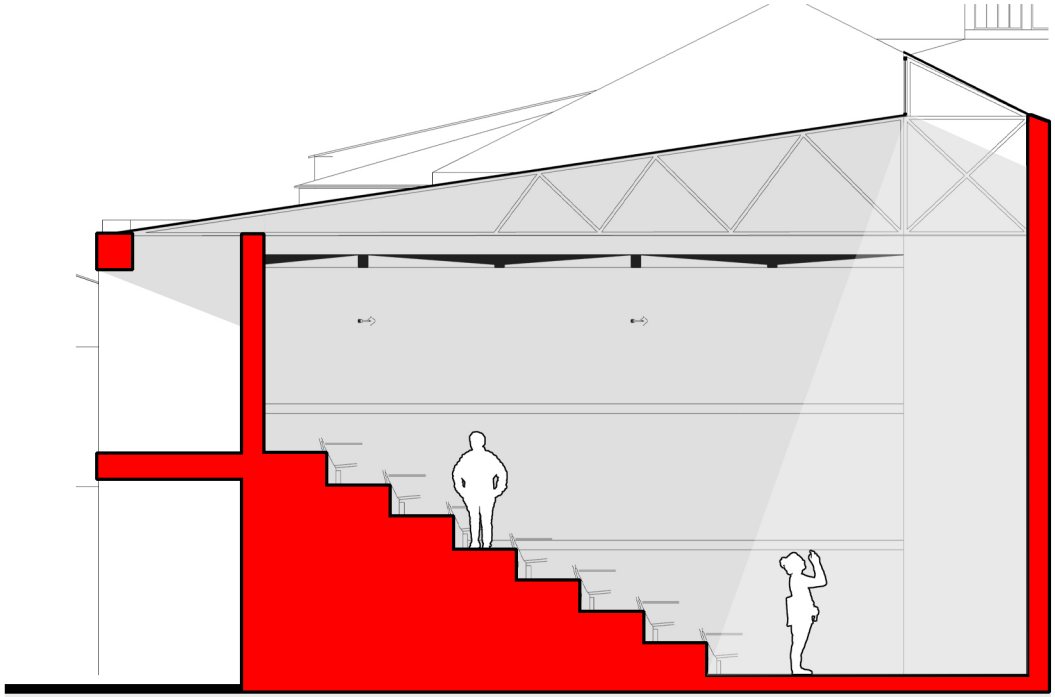
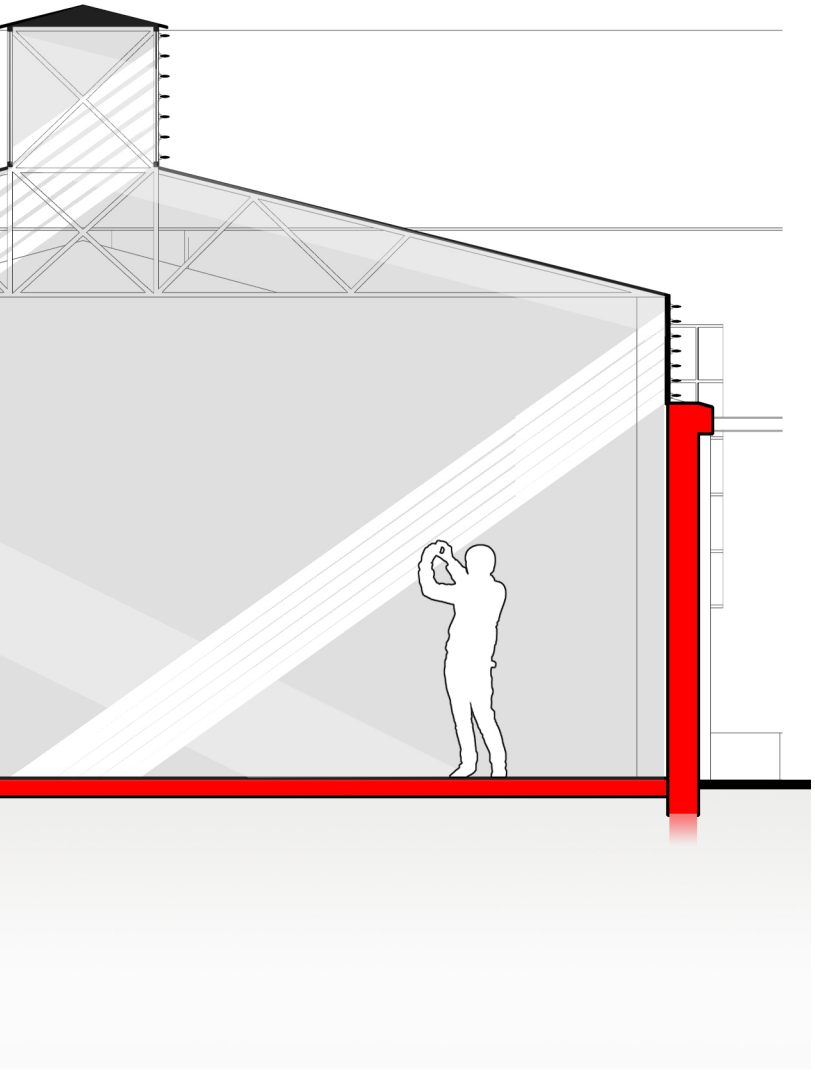


Figure 104.2: Section through the new extension of building M (Author, 2022)



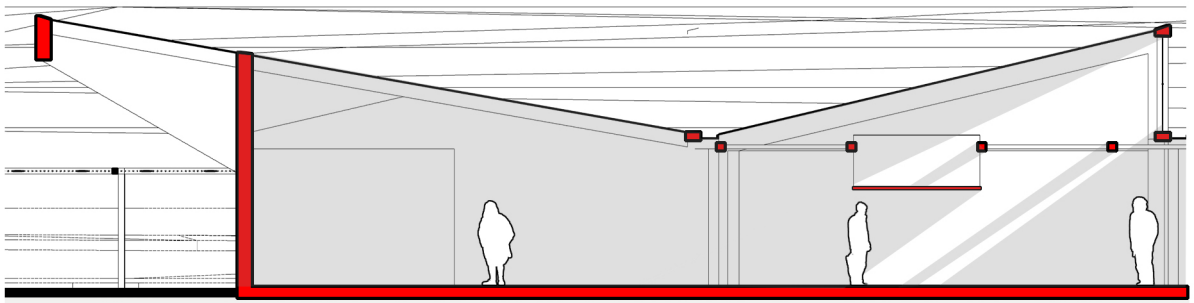


Figure 104.3: Section through building E showing natural light penetrating through existing windows (Author, 2022)

BUILDING SERVICES

SEWAGE DISPOSAL

Even though the Old Tannery is located on the outskirts of Wellington, there is a municipal sewage connection on site. 100mm diameter sewage pipes with a fall of 1:40 divert black water from toilets to this municipal sewage connection. Inspection Eyes(IE) are also provided at bent parts of these pipes.

WATER SUPPLY

Water is supplied by the Drakenstein municipality from the Voelvry Dam running from Riebeeck Kasteel to Wellington. Water is heated using solar geysers for use in kitchens and showers.

ACCESSIBILITY

Universal access toilets are provided in all public toilets allowing accessibility to everyone. Due to the fall of the site within the academic building, 1:12 ramps are included to allow wheelchair users to access spaces like the library and cafeteria.

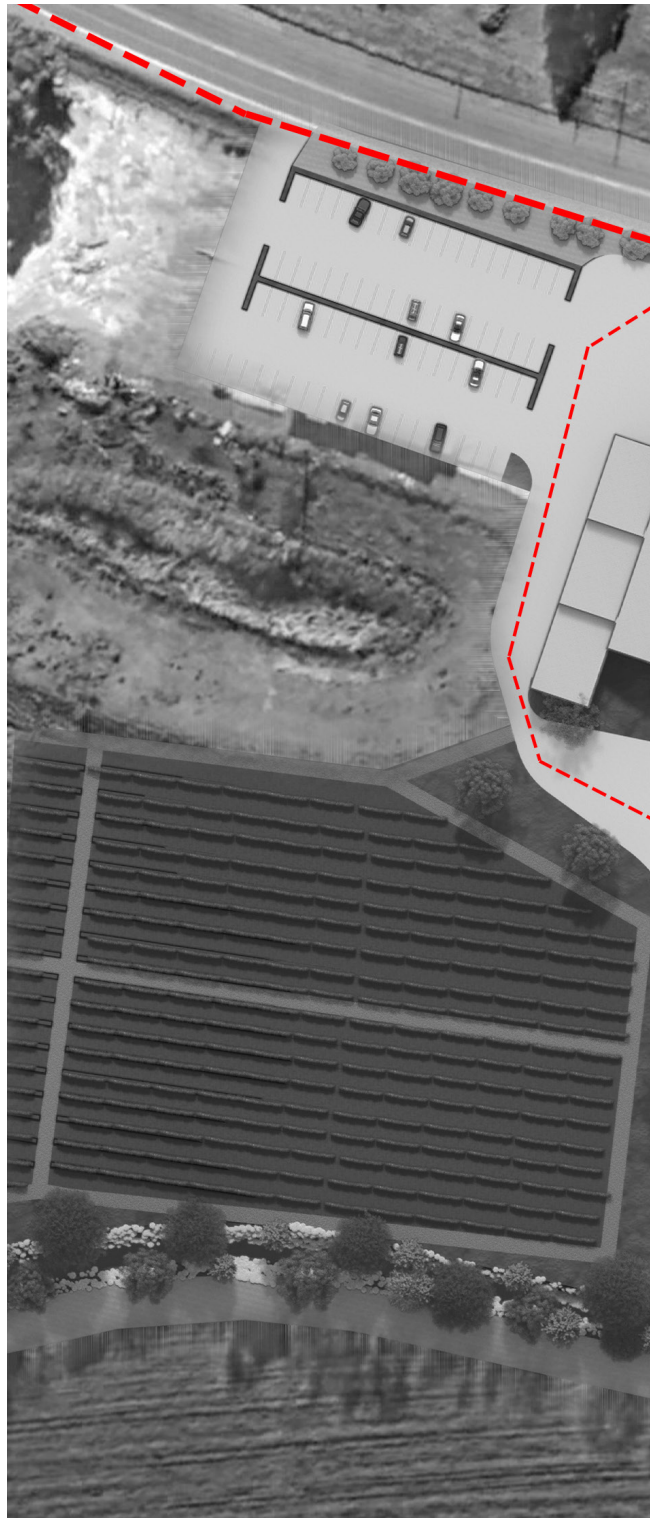
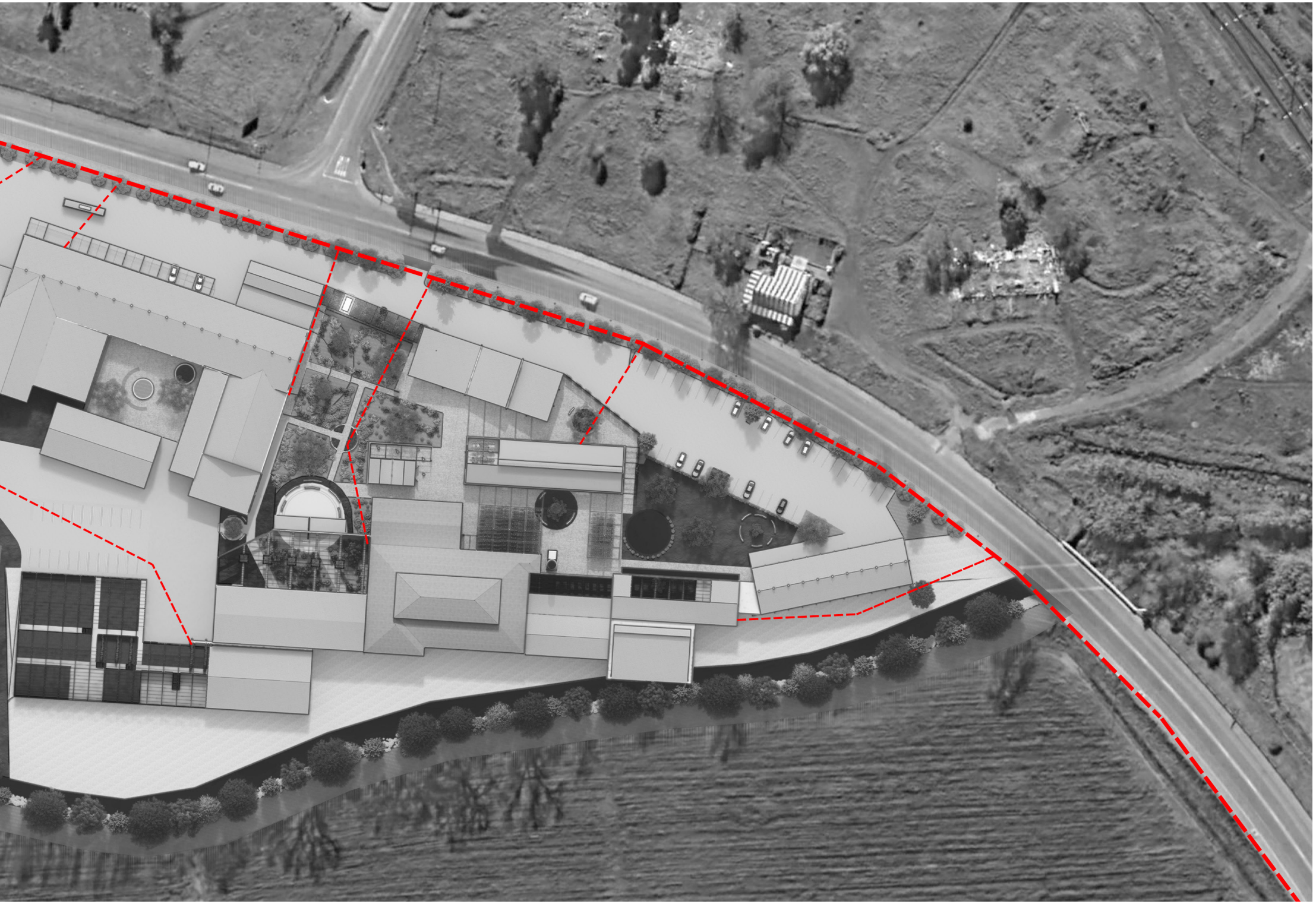


Figure 109: Roof plan depicting the connection of black water pipes to the existing municipal sewage line(Author, 2022)



CONCLUSION

This thesis has argued that the principles of biodynamic viticulture can be used to influence a new adaptive reuse approach for the Old Tannery that will create newfound relationships between the dwellers and their natural surroundings.

The aforementioned biodynamic viticulture was used not only to draw new sensibilities out of winemaking but also to align the broader calling of this thesis by rewilding architecture's relationship with nature. This notion, however, did not call for the ruination of the historical ensemble of the Old Tannery, but rather to expose its potential through a critical making of space within its existing framework. Furthermore, new forms of mortal cultivation were achieved through a tectonic reinterpretation of dweller movement and a sensitive yet sophisticated, recasting of the carapaces of the industrial complex.

By reconfiguring the Old Tannery into a new college of viticulture for CPUT in Wellington, an existing framework was recast to become a mediator which cultivates a codependent relationship between dwellers and nature.



Figure 110: A View of the Viticulture College in the picturesque landscape of the Val du Charon (Author, 2022)



REFLECTION

The reflection on the design of the College of Viticulture is an integral part of the conclusion of this thesis. Wellington has been my hometown for the past sixteen years, meaning that I occasionally traveled past the Old Tannery when using the Hermon Road. It was however in 2020 that I first came into contact with the site's potential. I immediately started pondering the question: Why is this historical ensemble left to abandonment? Without hesitation the decision of site for my Masters in Architecture was made, not knowing the difficulties that a design resolution might present.

It was evident that the problems presented by the Old Tannery had to be solved at an urban level, with the addition of a detail-level design at later stages. Constant reluctance to change site and by disregarding the heritage of the site through earlier proposals led to the final design not completely being to my satisfaction. Even though the design served its purpose by achieving the objective of this thesis, it still lacked the essence of what my design capabilities could achieve in the past.

Throughout this thesis, I grew as an architect in terms of mental resilience to adapt to an undesirable situation and by pushing myself to the limits by never giving up. However, there is always room for improvement, for this was the thesis that I wanted, but not the end product that I was capable of.



Figure 111: New Existential Thresholds for the Old Tannery (Author, 2022)



APPENDIX A
CONSTRUCTION DOCUMENTATION



Figure 112: New possibilties for the Old Tannery (Author, 2022)



SITE PLAN


ERF 36
ERF 42
ERF 43
ERF 46
ERF 5783
ORIGINAL FARMERS FOREMAN HOUSE
RUIN
FARM STALL
HERMAN ROAD
KNOX ROAD
KNOX RIVER
BUILDING A
BUILDING B
BUILDING C
BUILDING D
BUILDING E
BUILDING F
BUILDING G
BUILDING H
BUILDING I
BUILDING J
BUILDING K
BUILDING L
BUILDING M
BUILDING N
SITE PLAN
SCALE 1:500
EXISTING STRUCTURES
NEW ADDITIONS

ARCHICAD EDUCATION VERSION



AERIAL PHOTOGRAPH OF EXISTING SITE



RENDER OF DEVELOPMENT

N

GENERAL NOTES:
ALL WORK TO COMPLY WITH NBR (SABS0400). THE APPLICABLE SABS CODES AND BUILDING SOCIETY REGULATIONS. THIS DRAWING IS NOT TO BE SCALED. USE FIGURED DIMENTIONS ONLY. ALL DIMENSIONS AND HEIGHTS TO BE CHECKED ON SITE BEFORE LAYING OF ANY SLABS. ANY DISCREPENCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS. LEVELS, DEPTHS OR EXCAVATIONS AND NUMBER OF STEPS TO BE FINALLY CHECKED BY THE CONTRACTOR ON SITE. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR THE ACCURATE SETTING OUT AND LEVELLING OF THE WORKS AND FLOORS AND THE SITE IS TO BE TREATED IN ACCORDANCE WITH SABS 0126 OR 0307 AGAINST SUBTERRANEAN TERMITE ATTACK. SOLID FLOORS TO HAVE TOP OF FOUNDATIONS TO BE A MIN. OF 300mm BELOW NATURAL GROUND LEVEL. BACKFILLING TO FOUNDATIONS. TOP OF CONCRETE SURFACE BED TO BE MIN. OF 150mm ABOVE FINISHED FLOOR LEVEL. 100mm THICK CONCRETE SURFACE BED TO BE ON *DAMPLAC* 1200 GRADE MEMBRANE ON 250MM MIN. COMPACTED HARDCORE ON SAND BLINDING. ON COMPACTED FILL *DAMPLAC* 1200 GRADE MEMBRANE ON EMBOSSED DPC 375 BIC. UNDER ALL WALLS, WINDOW CILLS AND AT CHANGES IN FLOOR LEVEL. THESE ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS AND CONSULTANTS DRAWINGS WHERE APPLICABLE. ELECTRICAL INSTALLATION TO BE CARRIED OUT BY A REGISTERED ELECTRICAL SYSTEM IN THE DISTRIBUTION BOARD. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND ALL LOCAL COUNCIL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS BY LOCAL AUTHORITIES. ALL BRICKWORK TO BE IN STRETCHER BOND. BRICKFORCE TO BE LAID AT EVERY THIRD COURSE. SLIP JOINT TO BE PROVIDED AT JUCTIONS TO BRICKWORK AND UPPER FLOOR SLAB.

DRAINAGE NOTES:
100Ø SEWER PIPE DRAIN WITH A MIN. FALL OF 1:60 MAX 1:20Ø STUB STACK PIPE WITH A MIN. WATER SEAL OF 65Ø0 MAX. 315Ø STEEL AT THE HEAD OF DRAIN, AT ALL CHANGES OF DIRECTION AND AT A MAX. OF 25m INTERVALS. INSPECTION EYES (IE's) AT ALL JUNCTIONS OF DRAIN, AND TO HAVE MARKED COVERS. AT GROUND LEVEL. DRAIN PIPES UNDER BUILDINGS TO BE ENCASED AND SUPPORTED. ALL WASTE FITTINGS TO HAVE 40mm PD SEAL TRAPS.
ALL WASTE PIPES TO BE ACCESSIBLE OVER ENTIRE LENGTH FOR CLEANING AND REPAIRS. ALL WASTEPIPES UNDER FLOOR SLABS TO BE SLEEVED TO SABS 0400. PP3H. ALL WASTE FITTINGS TO HAVE 40mm PD SEAL TRAPS. ALL WASTE PIPES TO BE ACCESSIBLE UNDER FLOORS. WITH 12.5 EITHER END OR CLAMPED TO WALL. THE RADIUS AT THE CENTERLINE OF BEND AT THE FOOT OF DISCHARGE STACK, SHALL BE NO LESS THAN 300mm AND OTHER BENDS 600mm. THE VERTICAL DISTANCE BETWEEN THE INVERT OF THE LOWEST BRANCH
DISCHARGE PIPE CONNECTED TO AND THE INVERT OF THE DRAIN AT THE POINT OF CONNECTION OF THE STACK AND THIS DRAIN TO BE MIN. 500mm ALL SOIL FITTINGS WITH A VERTICAL DISCHARGE GREATER THAN1200mm TO HAVE ANTISYPHON VENT PIPES (ASVP'S). PIPE SIZES: WC 100Ø, SINK 40Ø, SHOWER, BATHS, BIDETS 50Ø AND WHB 32Ø

ROOF SHEETING:
TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS. STAIRS AND BALUSTRADES: GLAZING TO COMPLY WITH PART N OF THE NBR AND GLAZING EXPOSED TO WIND TO COMPLY WITH CLAUSE 4.3 OF SABS 0137. ROOF SHEETING ON TRUSSES TO COMPLY WITH NBR SANS10400J:2011, PART M AND ALL ROOF TRUSSES TO BE DESIGNED BY A REGISTERED ENGINEER. CONSTRUCTION: TO COMPLY WITH SABS 0400. ROOF TRUSS SPANS, SIZES ACCORDING TO PART L OF SABS 0400. ALL MEMBERS TO BE 1.5m APPROVED BRACING MUST PREVENT BUCKLING AND KEEP TRUSSES UPRIGHT. FLASHING TO ALL CHANGES IN ROOF LEVELS, ROOF PENETRATIONS, ROOF JUNCTIONS VALLEY AND HIP RAFTERS TO BE GR. 6, 50 x 228mm SAP.

FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 20MPA CONCRETE, PERFECTLY LEVELED. MIN. 150mm ABOVE NGL ON PROPERTY. COMPACTED HARDCORE. 25mm THK SCREED AND FINISHES AS SPECIFIED. WATERPROOFING: TO BE AS SPECIFIED ON THE SITE PLAN. THE AFFECTED FLOORS MUST BE LAID ON MIN 50mm THK POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS DPC UNDER ALL WALLS. DAMPLAC 1200 GRADE MEMBRANE ON SAND BLINDING. ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS, ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

FOUNDATIONS, BRICKWORK & PARTITIONS:
ALL FOUNDATIONS TO BE 20MPA CONCRETE @ 5NO/3 CEMENT 4 WHEELBARROWS RIVER SAND 5 WHEELBARROWS 22mm STONES. MIN FOUNDATION SIZE TO BE 2Ø0 x 600mm. MIN 200mm UNDER GROUND LEVEL OR TO ENG. SPEC. REF PLANS. BOUNDARY WALLS TO BE 230mm THICK, 2.1m HIGH ABOVE NGL. ALL FACES OF THE BOUNDARY AND WALLS ARE TO BE PLASTERED AND PAINTED TO CLIENTS SPEC. PARAPET WALLS TO BE AT LEAST 300mm HIGH AND MAX 500mm. WITH BRICKFORCE IN EVERY COURSE. ALL SCREEN WALLS TO BE AT LEAST 1.8m HIGH ABOVE NGL. LINTELS TO BE REINFORCED CONCRETE OR PRECAST TO SPAN OPENINGS OF 200mm FOR OPENINGS UP TO 2.4m. 1 COURSES BRICKFORCE TO BUILT IN BELOW FLOOR LEVEL AND ABOVE WINDOW LEVEL AND EVERY THIRD COURSE BETWEEN. IN CONTUNUOUS BANDS. NO TEETHING OR BLOCK BONDING WILL BE ALLOWED UNDER ANY CIRCUMSTANCES AND ANY PARTITIONS TO BE RUDENT AND WATERPROOFED.

FLOOR AREA:

BUILDING A:	430m²
BUILDING B:	350m²
BUILDING C:	3200m²
BUILDING D:	450m²
BUILDING E:	480m²
BUILDING F:	90m²
BUILDING G:	800m²
BUILDING H:	2000m²
BUILDING I:	2000m²
BUILDING J:	550m²
BUILDING K:	2240m²
BUILDING L:	900m²
BUILDING M:	1076m²
BUILDING N:	500m²
TOTAL FLOOR AREA	**15100m²**

ADDITIONS:
NEW ADDITIONS 2230m²

PARKINGS:
Parkings required: 4 per 250m² building area
New parking to accommodate: 242 Parkings
Parkings Accommodated: 208 Parkings

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UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

Department of Architecture
Architecture Building
Dean Street
205 Nelson Mandela Avenue
Park West
BLOEMFONTEIN
9301

CLIENTS:
Cape Peninsula University of Technology

ARCHITECTS:
Archi (Fax) Design Studio

TITLE:
Proposed Viticulture College

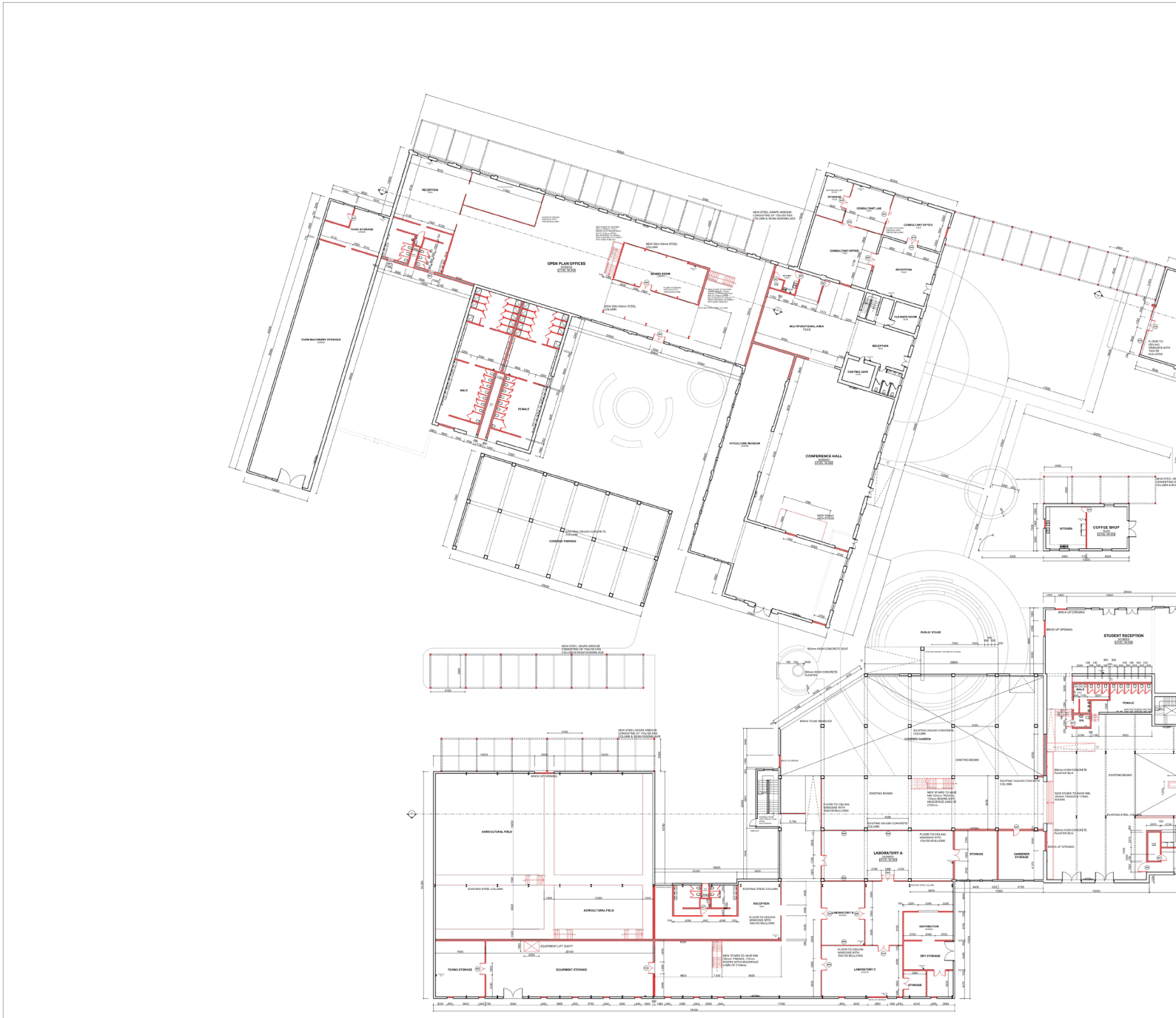
SCALE: 1:500
DATE: 22/11/2022

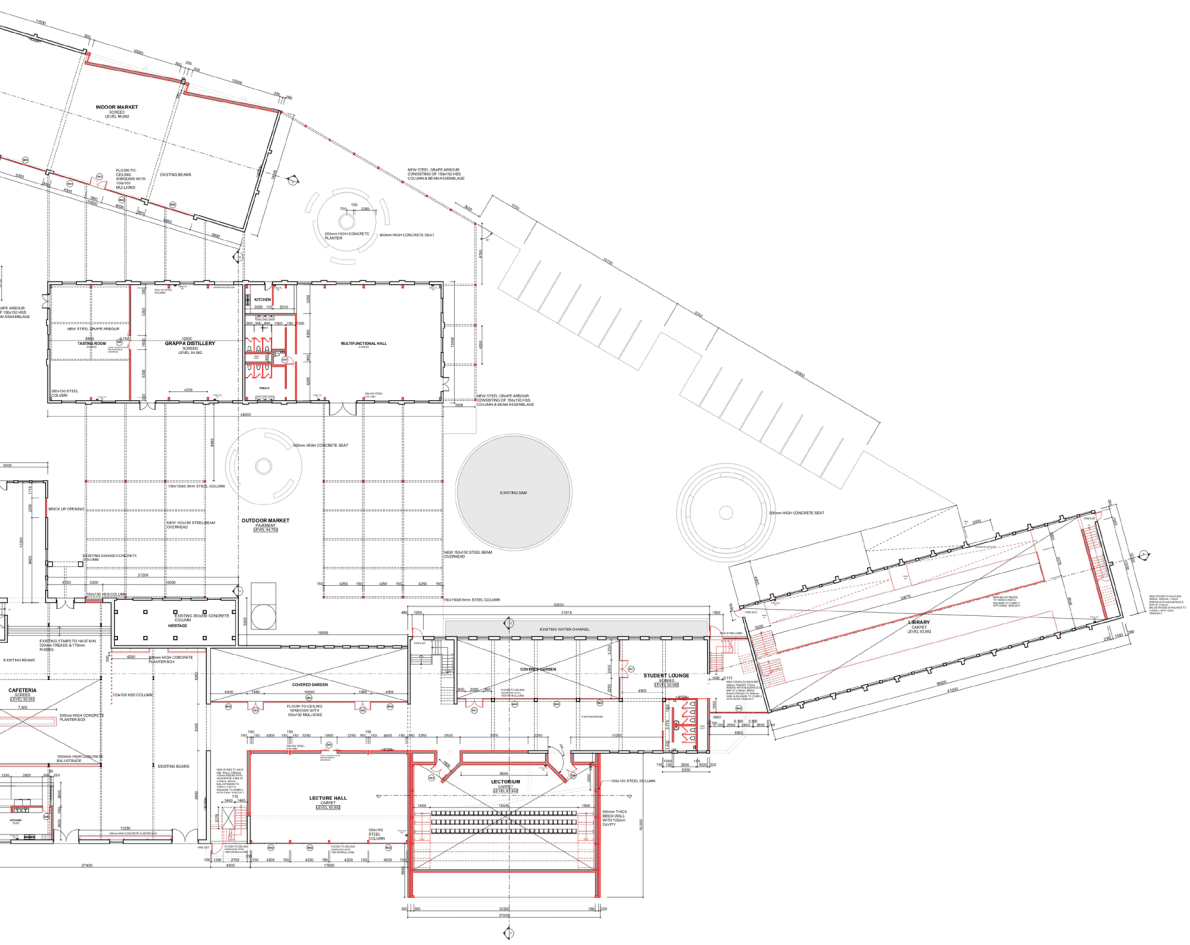
DRAWN BY: Mr Francois Stefan du Toit
STUDENT NUMBER: 2019029862

DRAWING TYPE: SITE PLAN
DRAWING NO: A - 101

SCAN ME

GROUND FLOOR PLAN





GENERAL NOTES:
ALL WORK SHALL COMPLY WITH NBR (SABS0400). THE APPLICABLE SABS CODES AND BUILDING SOCIETY REGULATIONS. THIS DRAWING IS NOT TO BE SCALED. USE FIGURED DIMENTIONS ONLY. ALL DIMENSIONS AND HEIGHTS TO BE CHECKED ON SITE BEFORE LAYING OF ANY SLABS. ANY DISCREPENCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE WORK IS PROCEEDED WITH. ALL LEVELS, DEPTHS OR EXCAVATIONS AND NUMBER OF STEPS TO BE FINALLY CHECKED BY THE CONTRACTOR ON SITE. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR THE ACCURATE SETTING OUT AND LEVELLING OF THE WORKS AND FLOORS AND THE SITE IS TO BE TREATED IN ACCORDANCE WITH SABS CODE OF PRACTICE 0248 AND 0249. FOUNDATIONS TO BE TAKEN DOWN TO TOP OF FOOTINGS TO BE A MIN. OF 900mm BELOW NATURAL GROUND LEVEL. BACKFILLING TO FOUNDATIONS. TOP OF CONCRETE SURFACE BED TO BE MIN. OF 150mm ABOVE FINISHED FLOOR LEVEL. 100mm THICK CONCRETE SURFACE BED TO BE ON 'KAPHOLD' 0.5MM GREEN GRADE ROOF MEMBRANE ON SAND BLINDING ON 'KAPHOLD' 0.5MM GREEN GRADE DAMP PROOF MEMBRANE EMBOSSED DPC 375 MIC. UNDER ALL WALLS, WINDOW CILLS AND AT CHANGES IN FLOOR LEVEL THESE ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS AND CONSULTANTS DRAWINGS WHERE APPLICABLE. ELECTRICAL WORKS TO BE CARRIED OUT BY REGISTERED ELECTRICIAN. ELECTRICAL SYSTEM IN THE DISTRIBUTION BOARD. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND ALL LOCAL COUNCIL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS BY LOCAL AUTHORITY OFFICIALS. ALL BRICKWORK TO BE LAID IN STRETCHER BOND. REINFORCE TO BE LAID AT EVERY THIRD COURSE. SLIP JOINT TO BE PROVIDED AT JUCTIONS TO BRICKWORK AND UPPER FLOOR SLAB.

DRAINAGE NOTES:
100Ø SEWER PIPE DRAIN WITH A MIN. FALL OF 1:60 MAX 1:90Ø (ES)Ø PVC SOIL PIPE WITH 100Ø DRAIN PIPE FOR SOIL & STEEL PIPE AT THE HEAD OF DRAIN, AT ALL CHANGES OF DIRECTION AND AT A MAX. OF 25m INTERVALS. INSPECTION EYES (IEs) AT ALL JUNCTIONS OF DRAIN, AND TO HAVE MARKED COVERS AT GROUND LEVEL. DRAIN PIPES UNDER BUILDINGS TO BE ADEQUATELY SUPPORTED. ALL WASTE FITTINGS TO HAVE 40mm RE-SEAL TRAPS. ALL WASTE PIPES TO BE ACCESSIBLE OVER ENTIRE LENGTH FOR CLEANING AND REPAIRS. ALL WASTEPIPES UNDER FLOOR SLABS TO BE SLEEVED TO (SABS 0400, PP24). ALL WASTE FITTINGS TO BE FIXED TO WALLS WITH BRASS SCREWS. ALL WASTE PIPES NOT UNDER FLOORS, WITH UP'S EITHER END OR CLAMPED TO WALL. THE RADIUS AT THE CENTERLINE OF BEND AT THE FOOT OF DISCHARGE STACK, SHALL BE NO LESS THAN 300mm AND OTHER BENDS 600mm. THE VERTICAL DISTANCE BETWEEN THE INVERT OF THE DRAIN AND THE FOOT OF DISCHARGE PIPE CONNECTED TO AND THE INVERT OF THE DRAIN AT THE POINT OF CONNECTION OF THE STACK AND THE DRAIN TO BE MIN. 600mm ALL SOIL FITTINGS WITH A VERTICAL DISCHARGE GREATER THAN1200mm TO HAVE ANTISYPHON VENT PIPES (ASVP'S) PIPE SIZES INC 100Ø, SINK 40Ø, SHOWER, BATHS, BIDETS 50Ø AND WHB 32Ø

ROOF SHEETING
TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS. STAIRS AND BALUSTRADES: GLAZING TO COMPLY WITH PART N OF THE NBR AND GLAZING EXPOSED TO WIND TO COMPLY WITH CLAUSE 4.3 OF SABS 0137. ROOF SHEETING ON TRUSSES TO COMPLY WITH NBR SANS10400-D11, PART M AND ALL ROOF TRUSSES TO BE DESIGNED BY ENGINEER. ROOF CONSTRUCTION TO COMPLY WITH SABS 0400. ROOF TRUSS SPANS, SIZES ACCORDING TO PART L OF SABS 0400. ALL MEMBERS TO BE 1.5m APPROVED BRACING MUST PREVENT BUCKLING AND KEEP TRUSSES UPRIGHT. FLASHING TO ALL CHANGES IN ROOF LEVELS. ROOF COVERING TO BE 0.5mm THICK IN LONG SECTIONS VALLEY AND HIP RAFTERS TO BE GR. 5, 50 x 228mm SAP.

FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 25MPA CONCRETE, PERFECTLY LEVELLED, RIN. 150mm ABOVE NGL, ON PROPERTY COMPACTED HARDCORE 25mm THK SCREED AND FINISHES AS PER FINISHES SCHEDULE. 1 LAYER OF 0.5MM DPM ON 50mm THK. BLUE PLANK. THE AFFECTED FLOORS MUST BE CAST ON MIN.50mm THK. POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS EPC UNDER SLAB. ALL WATERPROOFING TO BE CARRIED OUT IN ACCORDANCE WITH ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS. ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP. PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

FOUNDATIONS, BRICKWORK & PARTITIONS:
ALL FOUNDATIONS TO BE 25MPA CONCRETE (2 SACKS CEMENT: 4 WHEELBARROWS RIVER SAND: 5 WHEELBARROWS 22mm STONE). MIN FOUNDATION SIZE TO BE 203 x 600mm, MIN 200mm UNDER GROUND LEVEL OR TO ENG. SPEC. REF PLANS. BOUNDARY WALLS TO BE 230mm THICK AND MAX 2.1m HIGH. ALL WALLS ON THE BOUNDARY AND WALLS ARE TO BE PLASTERED AND PAINTED TO CLIENTS SPEC. PARAPET WALLS TO BE AT LEAST 300mm HIGH AND MAX 530mm. WITH BRICKFORCE IN EVERY COURSE. ALL SCREEN WALL'S TO BE AT LEAST 1.8m HIGH ABOVE NGL. LINTELS TO BE 230mm WIDE AND 150mm DEEP WITH 2Y12 & 4 6m. S STIRRUPS AT 150 CTS 225mm FOR OPENINGS UP TO 1.4 6m. S STIRRUPS BRICKFORCE TO BE BUILT IN BELOW FLOOR LEVEL AND ABOVE WINDOW LEVEL AND EVERY THIRD COURSE BETWEEN. IN CONTINUOUS BANDS. NO TEETHING OR BLOCK BONDING WILL BE ALLOWED UNDER ANY CIRCUMSTANCES AND ANY PARTITIONS TO BE ROUGHT AND WATERPROOFED.

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YUNIVESITHI YA FREISTATA
UFS UV

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Park West
BLOEMFONTEIN
9301

CLIENTS:
Cape Peninsula University of Technology

ARCHITECTS:
Archi [Flex] Design Studio

TITLE:
Proposed Viticulture College

SCALE: 1:200

DATE: 06/11/2022

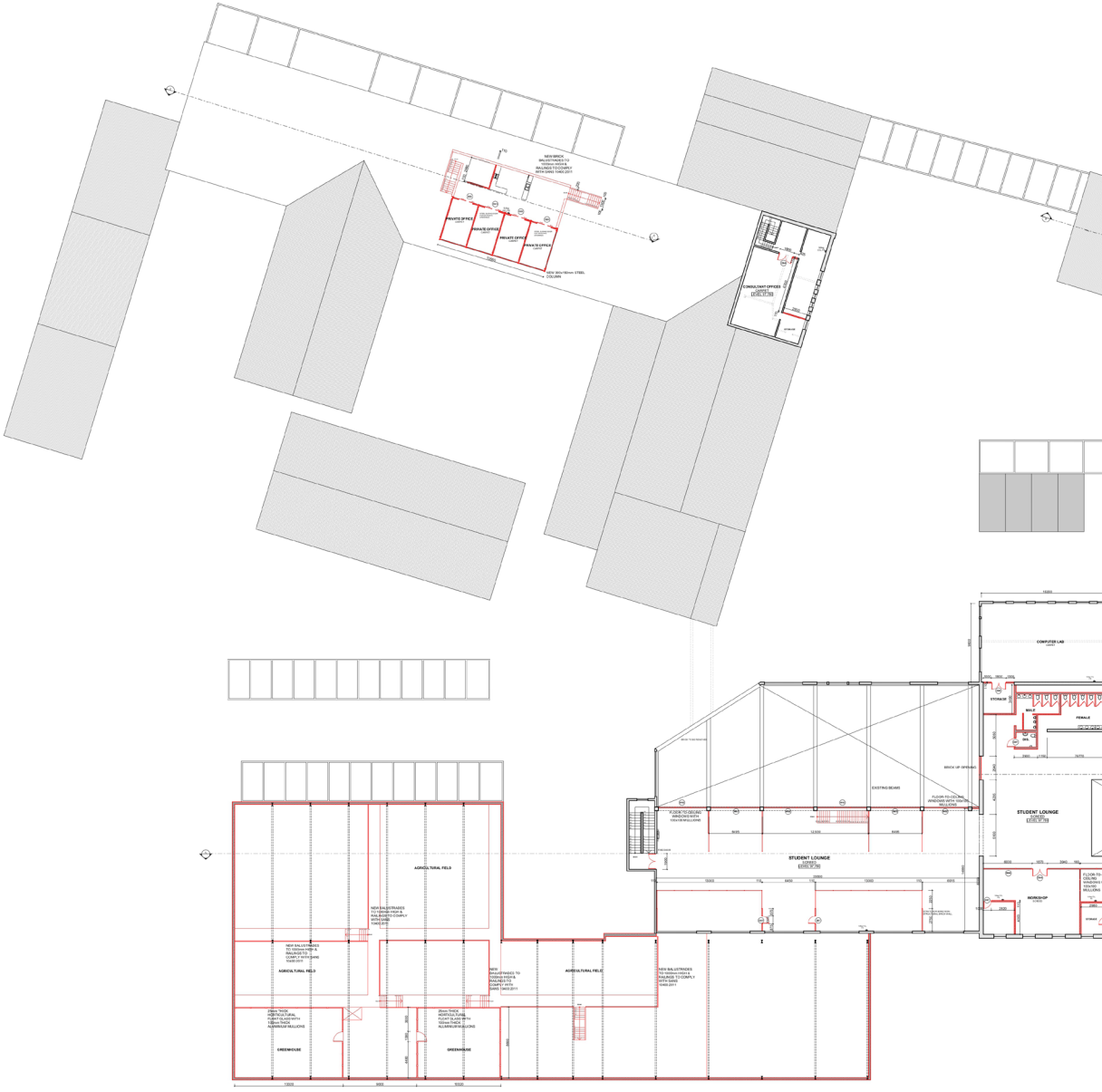
DRAWN BY: Mr Francois Stefan du Toit

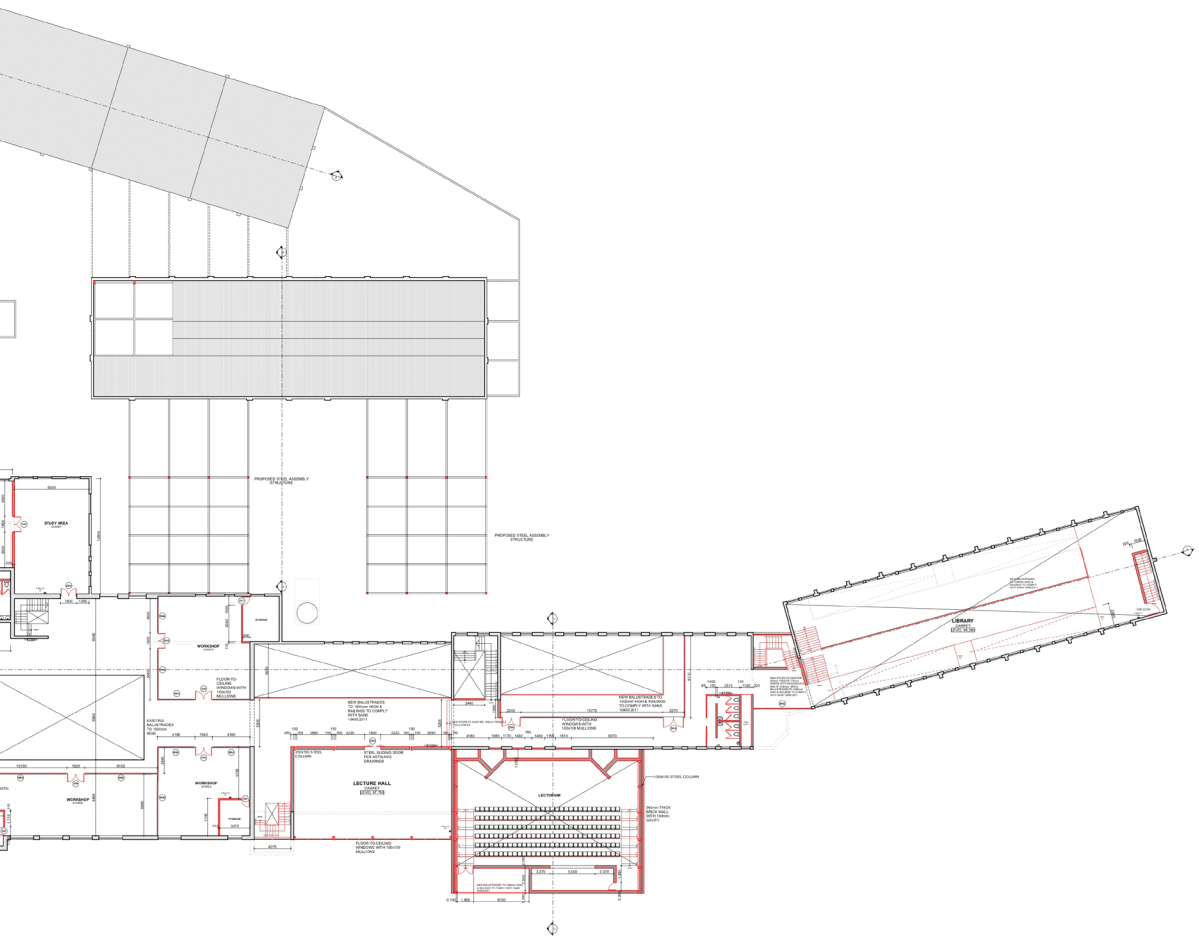
STUDENT NUMBER: 2019029882

DRAWING TYPE: GROUND FLOOR PLAN

DRAWING NO: A - 102

FIRST FLOOR PLAN





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FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 25MPA CONCRETE, PERFECTLY LEVELED. MIN. 150mm ABOVE NGL ON PROPERTY. COMPACTED HARDCORE. 25mm THK SCREED AND FINISHES AS PER FINISHES SCHEDULE. SLOPE TO BE MIN 1:80 AS PER SITE PLAN. THE AFFECTED FLOORS MUST BE LAID ON MIN 50mm THK POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS DPC UNDER SCREED. ALL WATERPROOFING TO BE CARRIED UP WALLS 150mm. ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS. ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP. PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

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UFS UV

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BLOEMFONTEIN
9301

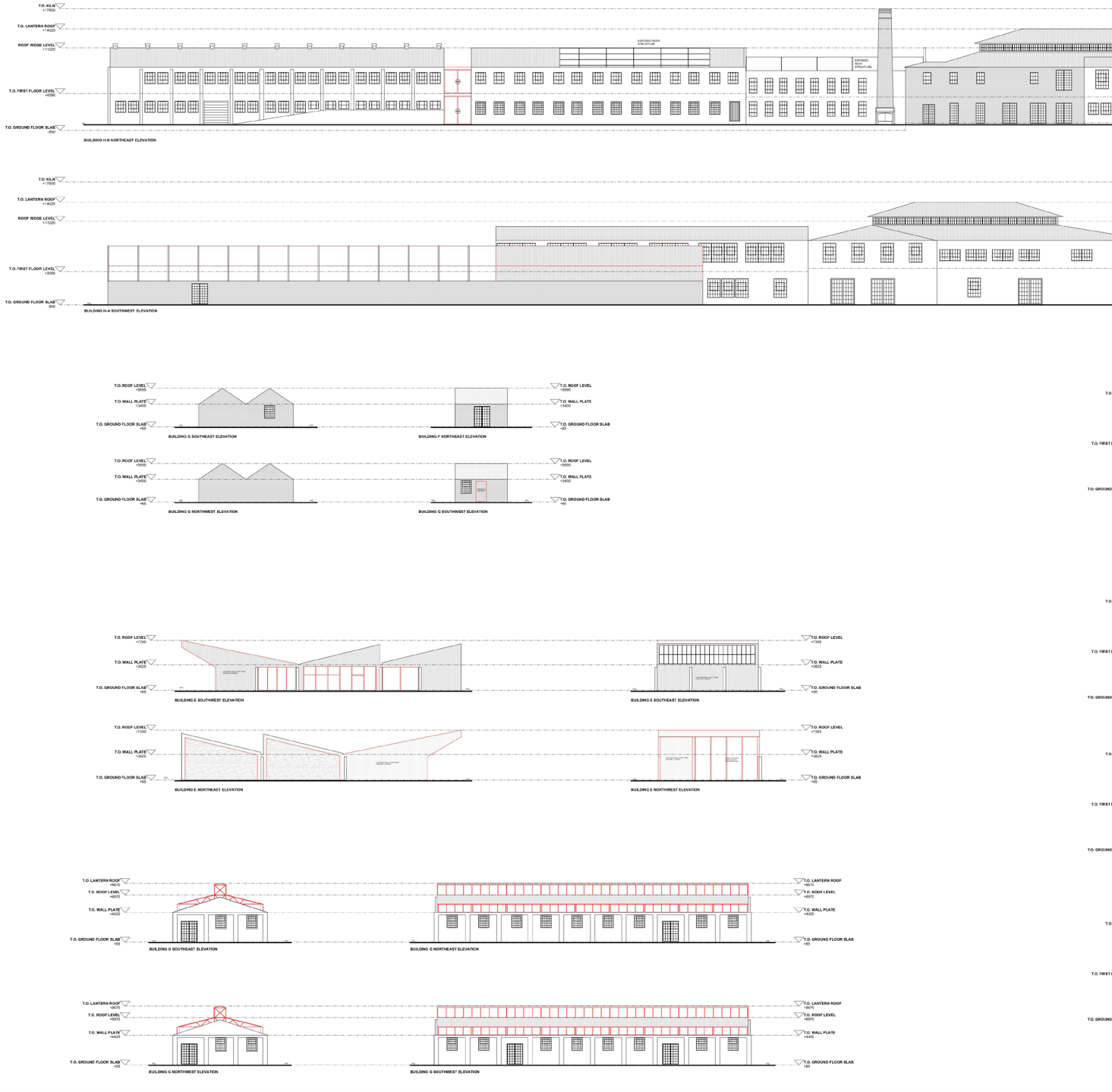
CLIENTS:
Cape Peninsula University of Technology

ARCHITECTS:
Arch (Flux) Design Studio

TITLE:
Proposed Viticulture College

SCALE:	DATE:
1:200	06/11/2022
DRAWN BY:	STUDENT NUMBER:
Mr Francois Stefan du Toit	2076029982
DRAWING TYPE:	DRAWING NO:
FIRST FLOOR PLAN	A - 103

ELEVATIONS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ROOF RIDGE LEVEL +11220
T.O. FIRST FLOOR LEVEL +4390
T.O. GROUND FLOOR SLAB -850
BUILDING H-H NORTHEAST ELEVATION
T.O. KILN +17850
T.O. LANTERN ROOF +14025
ROOF RIDGE LEVEL +11220
T.O. FIRST FLOOR LEVEL +3006
T.O. GROUND FLOOR SLAB -850
BUILDING H-H SOUTHWEST ELEVATION
T.O. ROOF LEVEL +6695
T.O. WALL PLATE +3400
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BUILDING G SOUTHEAST ELEVATION
T.O. ROOF LEVEL +6695
T.O. WALL PLATE +3400
T.O. GROUND FLOOR SLAB +85
BUILDING F NORTHEAST ELEVATION
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T.O. WALL PLATE +3400
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BUILDING G SOUTHWEST ELEVATION
T.O. ROOF LEVEL +7295
T.O. WALL PLATE +3825
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BUILDING E SOUTHWEST ELEVATION
T.O. ROOF LEVEL +7295
T.O. WALL PLATE +3825
T.O. GROUND FLOOR SLAB +85
BUILDING E SOUTHEAST ELEVATION
T.O. ROOF LEVEL +7295
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BUILDING E NORTHEAST ELEVATION
T.O. ROOF LEVEL +7295
T.O. WALL PLATE +3825
T.O. GROUND FLOOR SLAB +85
BUILDING E NORTHWEST ELEVATION
T.O. LANTERN ROOF +8670
T.O. ROOF LEVEL +6970
T.O. WALL PLATE +4420
T.O. GROUND FLOOR SLAB +85
BUILDING G SOUTHEAST ELEVATION
T.O. LANTERN ROOF +8670
T.O. ROOF LEVEL +6970
T.O. WALL PLATE +4420
T.O. GROUND FLOOR SLAB +85
BUILDING G NORTHEAST ELEVATION
T.O. LANTERN ROOF +8670
T.O. ROOF LEVEL +6970
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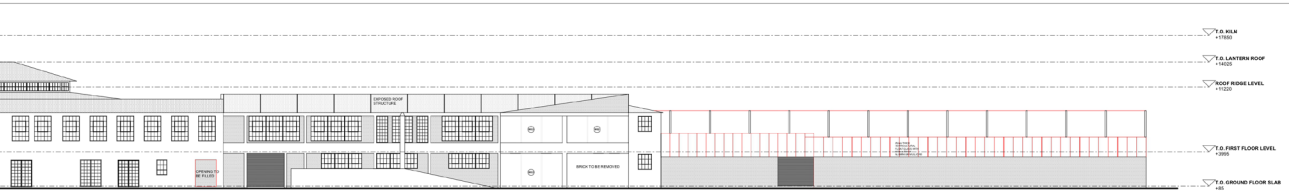
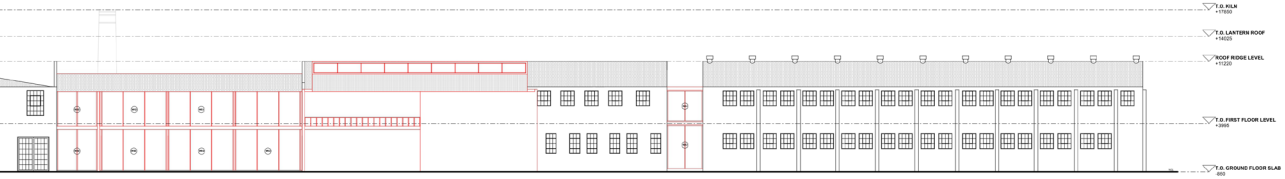
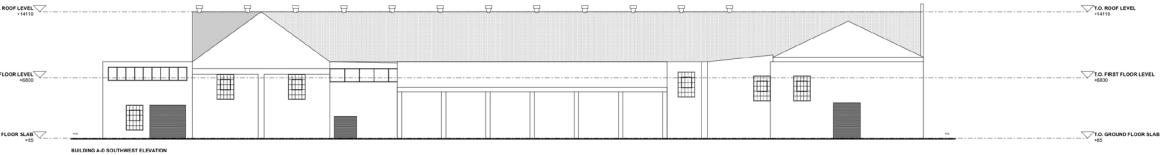
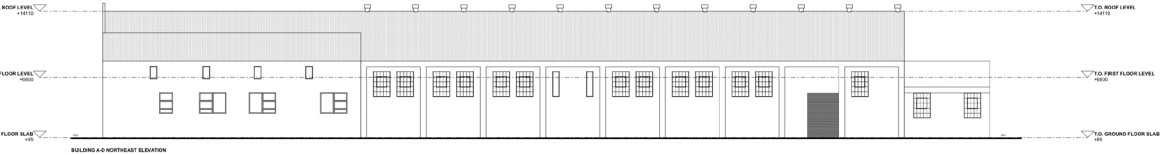
BUILDING G NORTHWEST ELEVATION
T.O. LANTERN ROOF +8670
T.O. ROOF LEVEL +6970
T.O. WALL PLATE +4420
T.O. GROUND FLOOR SLAB +85
BUILDING G SOUTHWEST ELEVATION



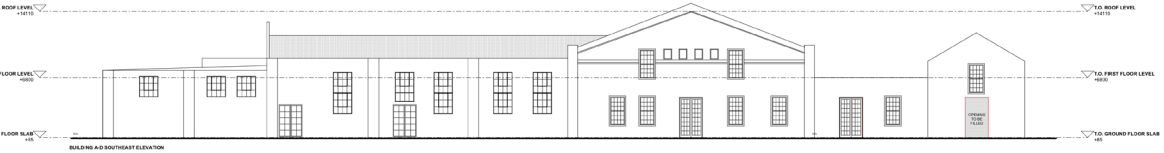




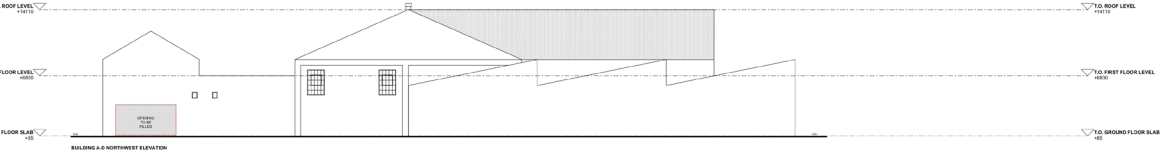
BUILDING A-D SOUTHWEST ELEVATION



BUILDING A-D NORTHEAST ELEVATION



BUILDING A-D SOUTHEAST ELEVATION



BUILDING A-D NORTHWEST ELEVATION

GENERAL NOTES:
ALL WORK TO COMPLY WITH NBR (SABS0400). THE APPLICABLE SABS CODES AND BUILDING SOCIETY REGULATIONS. THIS DRAWING IS NOT TO BE SCALED. USE FIGURED DIMENTIONS ONLY. ALL DIMENSIONS AND HEIGHTS TO BE CHECKED ON SITE BEFORE LAYING OF ANY SLABS. ANY DISCREPENCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. LEVELS, DEPTHS OR EXCAVATIONS AND NUMBER OF STEPS TO BE FINALLY CHECKED BY THE CONTRACTOR ON SITE. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR THE ACCURATE SETTING OUT AND LEVELLING OF THE WORKS AND FLOORS AND THE SITE IS TO BE TREATED IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TERMITE CONTROL. FOUNDATIONS TO BE A MIN. OF 600mm BELOW NATURAL GROUND LEVEL. BACKFILLING TO FOUNDATIONS. TOP OF CONCRETE SURFACE BED TO BE MIN. OF 150mm ABOVE FINISHED FLOOR LEVEL. 160mm THICK CONCRETE SURFACE BED TO BE ON *DUNPLAC 1200 GREEN MEMBRANE ON SAND BLINDING. ALL EXTERNAL CONCRETE PAVING TO BE REINFORCED EMBOSSED DPC 375 BIC UNDER ALL WALLS, WINDOW CILLS AND AT CHANGES IN FLOOR LEVEL. THESE ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS AND CONSULTANTS DRAWINGS WHERE APPLICABLE. ELECTRICAL CONTRACTOR TO ENSURE THAT HE INSTALLS AN EARTH LEAKAGE SYSTEM IN THE DISTRIBUTION BOARD. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND ALL LOCAL COUNCIL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS BY LOCAL AUTHORITIES. ALL WORK TO BE PLUMB, LEVEL AND TRUE. DAMP PROOF COURSE TO BE LAID AT EVERY THIRD COURSE. SLIP JOINT TO BE PROVIDED AT JUCTIONS TO BRICKWORK AND UPPER FLOOR SLAB.

DRAINAGE NOTES:
100Ø SEWER PIPE DRAIN WITH A MIN. FALL OF 1:60 MAX 1:6Ø Ø STUB STACK TO BE MIN. 1.2m ABOVE WATER DRAWING AND 900mm STUB AT THE HEAD OF DRAIN, AT ALL CHANGES OF DIRECTION AND AT A MAX. OF 25m INTERVALS. INSPECTION EYES (IE's) AT ALL JUNCTIONS OF DRAIN, AND TO HAVE MARKED COVERS. AT GROUND LEVEL. DRAIN PIPES UNDER BUILDINGS TO BE ENCASED AND SUPPORTED. ALL WASTE FITTINGS TO HAVE 40mm RE-SEAL TRAPS.
ALL WASTE PIPES TO BE ACCESSIBLE OVER ENTIRE LENGTH FOR CLEANING AND REPAIRS. ALL WASTEPIPES UNDER FLOOR SLABS TO BE SLEEVED TO SABS 0400. PP3/4 ALL WASTE FITTINGS TO HAVE 40mm RE-SEAL TRAPS. ALL WASTE PIPES TO BE LAID IN TRENCH UNDER FLOORS, WITH 1/2 'S' EITHER END OR CLAMPED TO WALL. THE RADIUS AT THE CENTERLINE OF BEND AT THE FOOT OF DISSCHARGE STACK SHALL BE NO LESS THAN 300mm AND OTHER BENDS 600mm. THE VERTICAL DISTANCE BETWEEN THE INVERT OF THE DISCHARGE PIPE CONNECTED TO AND THE INVERT OF THE DRAIN AT THE POINT OF CONNECTION OF THE STACK AND THE DRAIN TO BE MIN. 500mm ALL SOIL FITTINGS WITH A VERTICAL DISCHARGE GREATER THAN1200mm TO HAVE ANTISYPHON VENT PIPES (ASVP'S). PIPE SIZES: WC 100Ø, SINK 40Ø, SHOWER, BATHS, BIDETS 50Ø AND WHB 32Ø

ROOF SHEETING:
TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS. STAIRS AND BALUSTRADES: GLAZING TO COMPLY WITH PART N OF THE NBR AND GLAZING EXPOSED TO WIND TO COMPLY WITH CLAUSE 8.3 OF SABS 0137. ROOF SHEETING ON TRUSSES TO COMPLY WITH NBR SANS10400-B(2011,PART M AND ALL ROOF TRUSSES TO BE DESIGNED BY A REGISTERED ENGINEER. CONSTRUCTION: TO COMPLY WITH SABS 0400. ROOF TRUSS SPANS, SIZES ACCORDING TO PART L OF SABS 0400. ALL MEMBERS TO BE 1.6m. APPROVED BRACING MUST PREVENT BUCKLING AND KEEP TRUSSES UPRIGHT. FLASHING TO ALL CHANGES IN ROOF LEVELS. ROOF PITCH: 30 DEGREES FOR MAIN ROOF SECTIONS VALLEY AND HIP RAFTERS TO BE GR. 5, 50 x 228mm SAP.

FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 25MPA CONCRETE, PERFECTLY LEVELED. MIN. 150mm ABOVE NGL ON PROPERTY. COMPACTED HARDCORE. 25mm THK SCREED AND FINISHES AS SPECIFIED. DAMP PROOFING: 375 MICRON DPC UNDER ALL SLABS ON PLAN. THE AFFECTED FLOORS MUST BE LAID ON MIN 50mm THK POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS DPC UNDER SCREED. ALL WATERPROOFING TO BE CARRIED UP WALLS AT LEAST 150mm ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS. ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP. PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

FOUNDATIONS, BRICKWORK & PARTITIONS:
ALL FOUNDATIONS TO BE 20MPA CONCRETE @ 3/4CKS CEMENT 4 WHEELBARROWS RIVER SAND. 5 WHEELBARROWS 22mm STONES. MIN FOUNDATION SIZE TO BE 2Ø0 x 600mm. MIN 200mm UNDER GROUND LEVEL OR TO ENG. SPEC. REF PLANS. BOUNDARY WALLS TO BE MIN. 1.8m HIGH. ALL EXTERNAL WALLS TO BE 230mm. ALL BOUNDARY AND WALLS ARE TO BE PLASTERED AND PAINTED TO CLIENTS SPEC. PARAPET WALLS TO BE AT LEAST 300mm HIGH AND MAX 920mm. WITH BRICKFORCE IN EVERY COURSE. ALL SCREEN WALLS TO BE AT LEAST 1.8m HIGH ABOVE NGL. LINTELS TO BE SUPPLIED AND BUILT IN OVER ALL OPENINGS. MIN BEARING OF 150mm FOR OPENINGS UP TO 2.4m. 3 COURSES BRICKFORCE TO BUILT IN BELOW FLOOR LEVEL AND ABOVE WINDOW LEVEL AND EVERY THIRD COURSE BETWEEN. N CONTUNUOUS BANDS. NO TEETHING OR BLOCK BONDING WILL BE ALLOWED UNDER ANY CIRCUMSTANCES AND ANY PARTITIONS TO BE RUDENT AND WATERPROOFED.

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9301

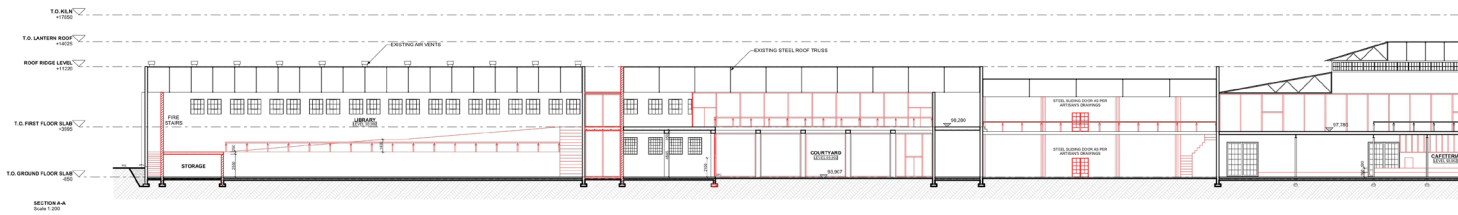
CLIENTS:
Cape Peninsula University of Technology

ARCHITECTS:
Archi (Fax) Design Studio

TITLE:
Proposed Viticulture College

SCALE:	DATE:
1:200	06/11/2022
DRAWN BY:	STUDENT NUMBER:
Mr Francois Stefan du Toit	2019029982
DRAWING TYPE:	DRAWING NO:
ELEVATIONS	A - 201

SECTIONS 1



SECTION A-A
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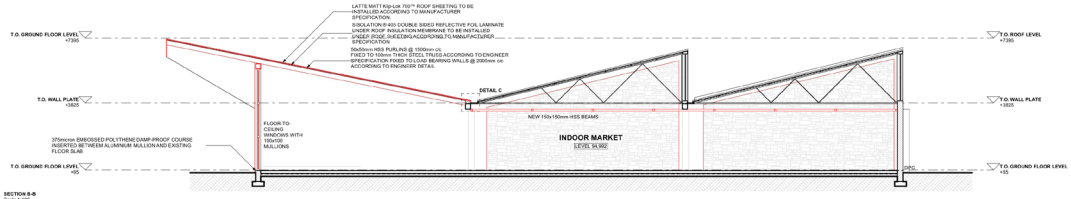

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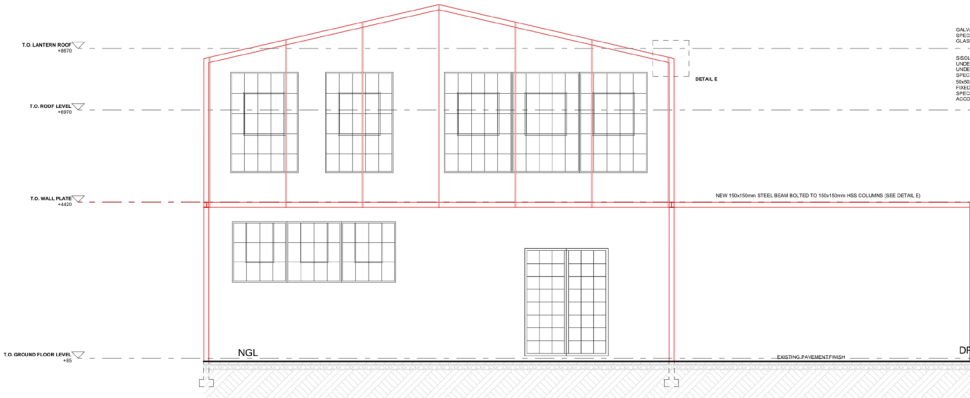

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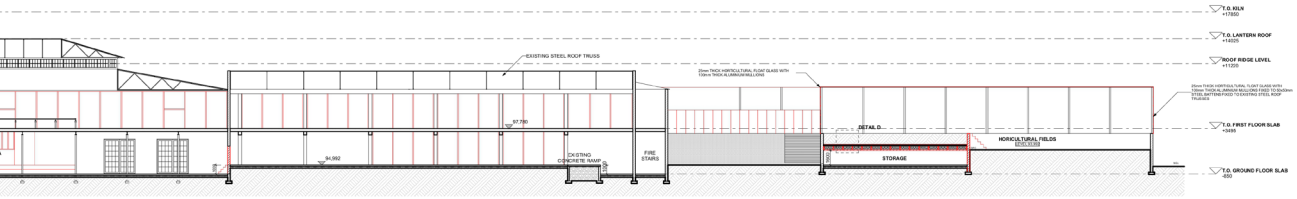

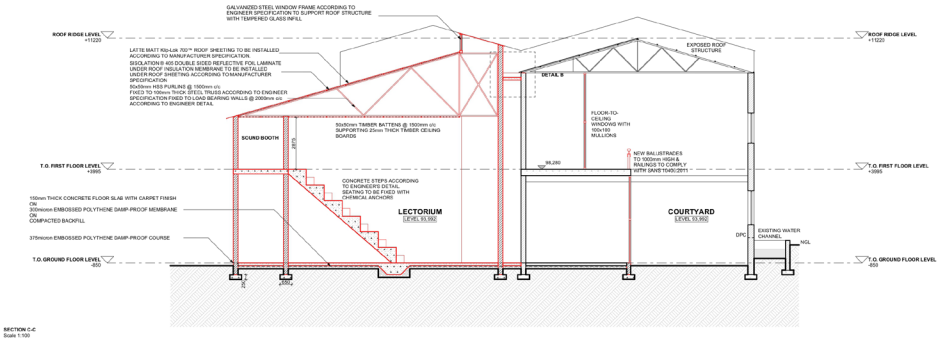

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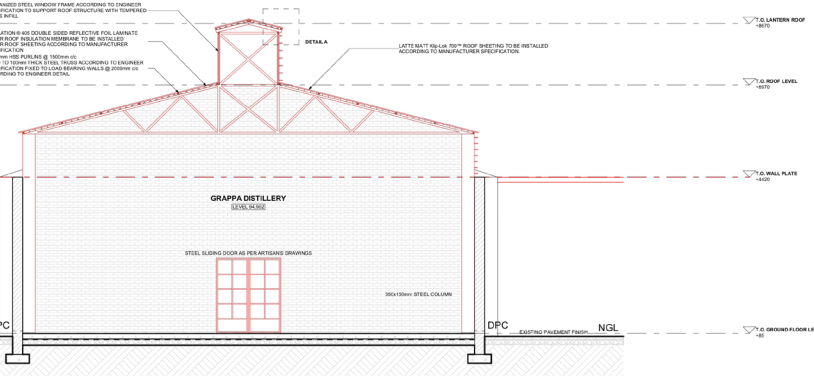

GENERAL NOTES:
ALL WORK TO COMPLY WITH NBR (SABS0400). THE APPLICABLE SABS CODES AND BUILDING SOCIETY REGULATIONS. THIS DRAWING IS NOT TO BE SCALED. USE FIGURED DIMENTIONS ONLY. ALL DIMENSIONS AND HEIGHTS TO BE CHECKED ON SITE BEFORE LAYING OF ANY SLABS. ANY DISCREPENCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. LEVELS DEPTHS OR EXCAVATIONS AND HUMBER OF STEPS TO BE FINALLY CHECKED BY THE CONTRACTOR ON SITE. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR THE ACCURATE SETTING OUT AND LEVELLING OF THE WORKS AND FLOORS AND THE SITE IS TO BE TREATED IN ACCORDANCE WITH THE CODE OF PRACTICE SANS 0124-1994. FOUNDATIONS TO BE A MIN. OF 300mm BELOW NATURAL GROUND LEVEL. BACKFILLING TO FOUNDATIONS TOP OF CONCRETE SURFACE BED TO BE MIN. OF 150mm ABOVE FINISHED FLOOR LEVEL. 150mm THICK CONCRETE SURFACE BED TO BE ON *DUNLAP/ UBS DR6EH DPC/ DAMP PROOF MEMBRANE ON SAND BLINDING LAYER. 150mm THICK CONCRETE FLOOR SLAB WITH EMBOSSED DPC 375 SMC UNDER ALL WALLS. WINDOW CILLS AND AT CHANGES IN FLOOR LEVEL. THESE ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS AND CONSULTANTS DRAWINGS WHERE APPLICABLE. ELECTRICAL INSTALLATION TO BE IN ACCORDANCE WITH SANS 10142-1 WIRING SYSTEM IN THE DISTRIBUTION BOARD. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND ALL LOCAL COUNCIL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS BY LOCAL AUTHORITIES. ALL WORK TO BE INSPECTED BEFORE ANY BRICKFORCE TO BE LAID AT EVERY THIRD COURSE. SLIP JOINT TO BE PROVIDED AT JUCTIONS TO BRICKWORK AND UPPER FLOOR SLAB.

DRAINAGE NOTES:
100Ø SEWER PIPE DRAIN WITH A MIN. FALL OF 1:60 MAX 1:6Ø Ø STUB STACK. 110Ø SOIL AND WASTER DRAIN RESPONDING 3 STD BENDS AT THE HEAD OF DRAIN, AT ALL CHANGES OF DIRECTION AND AT A MAX. OF 25m INTERVALS. INSPECTION EYES (IE)s AT ALL JUNCTIONS OF DRAIN, AND TO HAVE MARKED COVERS AT GROUND LEVEL. DRAIN PIPES UNDER BUILDINGS TO BE ADEQUATELY SUPPORTED. ALL WASTE FITTINGS TO HAVE 40mm RE-SEAL TRAPS.
ALL WASTE PIPES TO BE ACCESSIBLE OVER ENTIRE LENGTH FOR CLEANING AND REPAIRS. ALL WASTEPIPES UNDER FLOOR SLABS TO BE SLEEVED TO ISABS 0400. PP3/1 ALL WASTE FITTINGS TO HAVE 40mm RE-SEAL TRAPS. ALL WASTE PIPES TO BE SUPPORTED UNDER FLOORS WITH 1/2 S EITHER END OR CLAMPED TO WALL. THE RADIUS AT THE CENTERLINE OF BEND AT THE FOOT OF DISCHARGE STACK SHALL BE NO LESS THAN 50mm AND OTHER BENDS 600mm. THE VERTICAL DISTANCE BETWEEN THE INVERT OF THE DISCHARGE PIPE CONNECTED TO AND THE INVERT OF THE DRAIN AT THE POINT OF CONNECTION OF THE STACK AND THE DRAIN TO BE MIN. 500mm ALL SOIL FITTINGS WITH A VERTICAL DISCHARGE GREATER THAN1200mm TO HAVE ANTISYPHON VENT PIPES (ASVP'S). PIPE SIZES: WC- 100Ø, SINK 40Ø, SHOWER, BATHS, BIDETS 50Ø AND WHB 32Ø

ROOF SHEETING:
TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS. STAIRS AND BALUSTRADES: GLAZING TO COMPLY WITH PART N OF THE NBR AND GLAZING EXPOSED TO WIND TO COMPLY WITH CLAUSE 8.3 OF SABS 0137. ROOF SHEETING ON TRUSSES TO COMPLY WITH NBR SANS10400-2011, PART M AND ALL ROOF TRUSSES TO COMPLY WITH SANS 10400-2011, PART H CONSTRUCTION: TO COMPLY WITH SABS 0400. ROOF TRUSS SPANS, SIZES ACCORDING TO PART L OF SABS 0400. ALL MEMBERS TO BE 1.6m. APPROVED BRACING MUST PREVENT BUCKLING AND KEEP TRUSSES UPRIGHT. FLASHING TO ALL CHANGES IN ROOF LEVELS, ATRIUMS & COURTYARDS. ROOF SHEETING DIRECTIONS VALLEY AND HIP RAFTERS TO BE GR. 5, 50 x 228mm SAP.

FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 25MPA CONCRETE, PERFECTLY LEVELED, MIN. 150mm ABOVE NGL ON PROPERLY COMPACTED HARDCORE. 25mm THK SCREED AND FINISHES AS SPECIFIED. WATERPROOFING: DPC UNDER ALL WALLS AND DPM IN SLAB. THE AFFECTED FLOORS MUST BE LAID ON MIN 50mm THK POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS DPC UNDER WALLS AND DPM IN SLAB. ALL WATERPROOFING TO COMPLY WITH SABS. ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS, ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP. PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

FOUNDATIONS, BRICKWORK & PARTITIONS:
ALL FOUNDATIONS TO BE 20MPA CONCRETE @ 3 BAGS CEMENT 4 WHEELBARROWS RIVER SAND. 5 WHEELBARROWS 22mm STONES. MIN FOUNDATION SIZE TO BE 2Ø0 x 600mm, MIN 200mm UNDER GROUND LEVEL OR TO ENG. SPEC. REF PLANS. BOUNDARY WALLS TO BE 230mm THICK, 2.1m HIGH WITH PIERS @ 3m CENTRES. ALL BOUNDARY AND WALLS ARE TO BE PLASTERED AND PAINTED TO CLIENTS SPEC. PARAPET WALLS TO BE AT LEAST 300mm HIGH AND MAX 920mm. WITH BRICKFORCE IN EVERY COURSE. ALL SCREEN WALLS TO BE AT LEAST 1.8m HIGH ABOVE NGL. LINTELS TO BE SUPPORTED ON 150mm MIN BEARING. ALL LINTELS TO BE 150mm FOR OPENINGS UP TO 2.4m. 3 COURSES BRICKFORCE TO BUILT IN BELOW FLOOR LEVEL AND ABOVE WINDOW LEVEL AND EVERY THIRD COURSE BETWEEN. N CONTUNUOUS BANDS. NO TEETHING OR BLOCK BONDING WILL BE ALLOWED UNDER ANY CIRCUMSTANCES AND ANY PARTITIONS TO BE RODENT AND WATERPROOFED.

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CLIENTS:
Cape Peninsula University of Technology

ARCHITECTS:
Arch (Fax) Design Studio

TITLE:
Proposed Viticulture College

SCALE:
SEE DRAWING DESCRIPTION

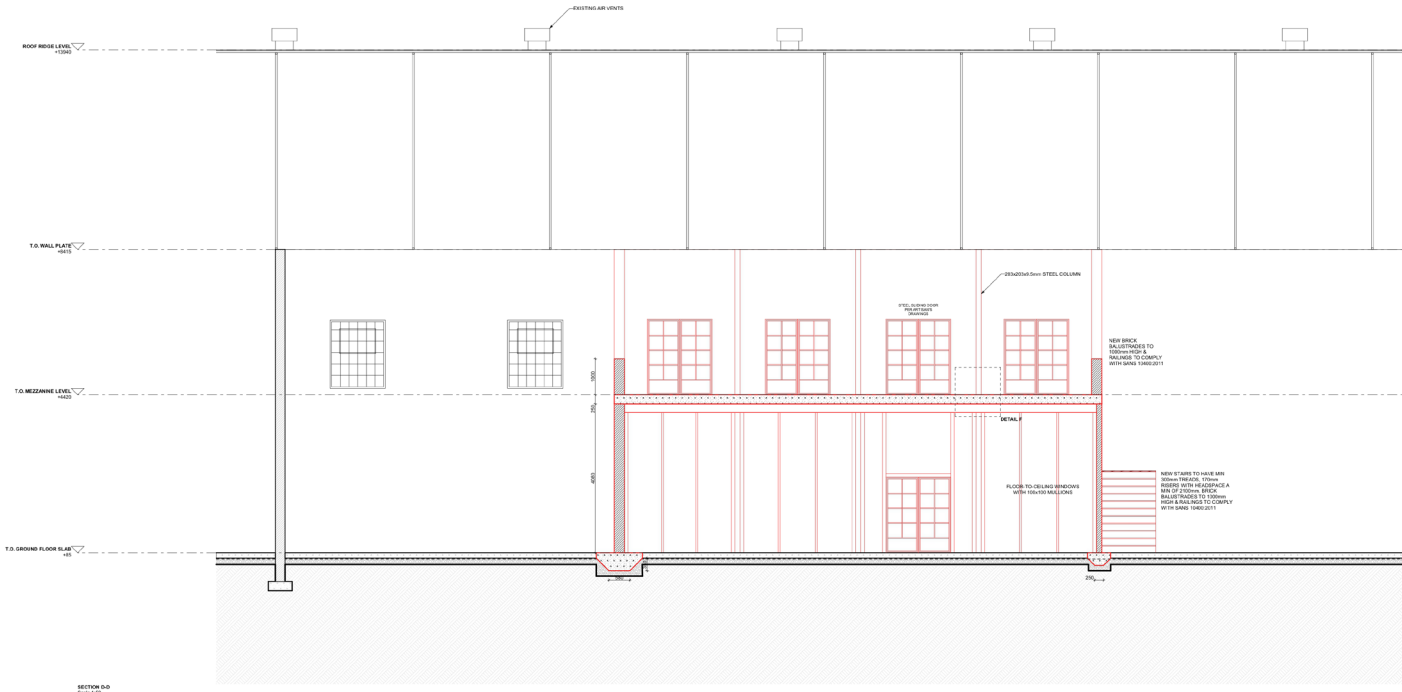
DATE:
06/11/2022

DRAWN BY:
Mr Francois Stefan du Toit

STUDENT NUMBER:
2076029982

DRAWING TYPE:
SECTIONS

DRAWING NO:
A - 301



SECTION D-D
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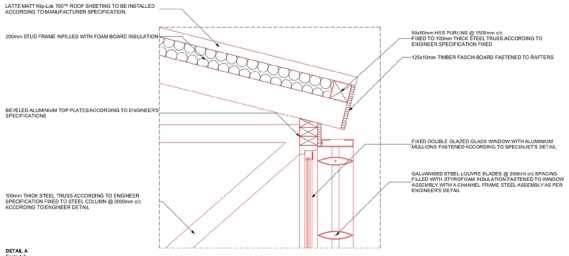

DETAIL A
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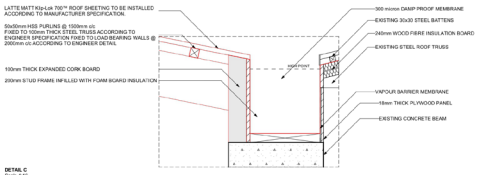
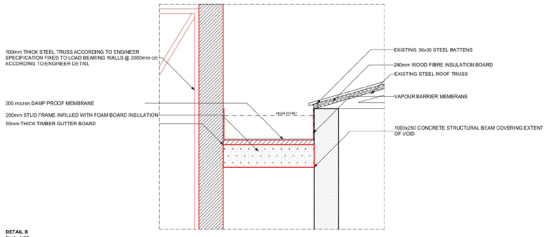


DETAIL C
Scale 1:10



DETAIL E
Scale 1:10



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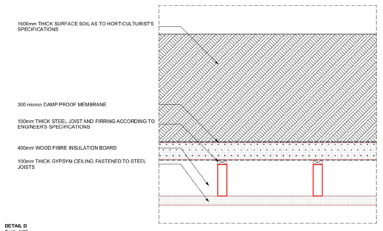
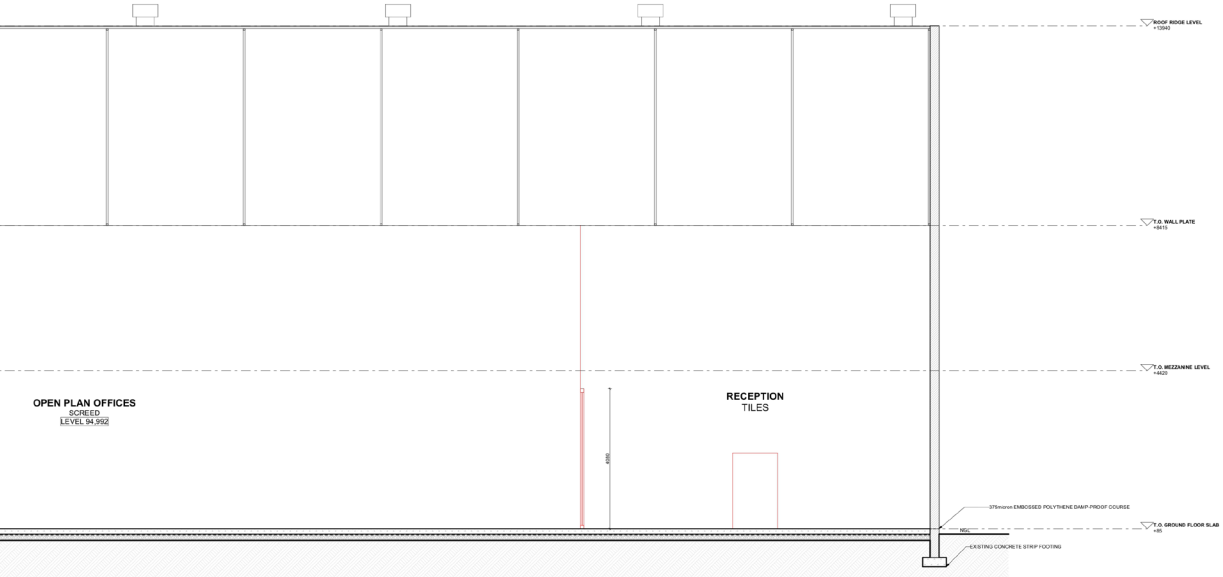
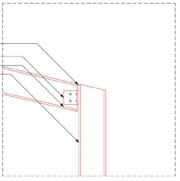


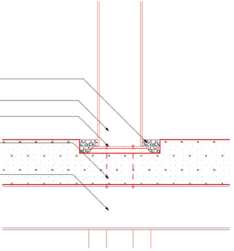
DETAIL D
Scale 1:20

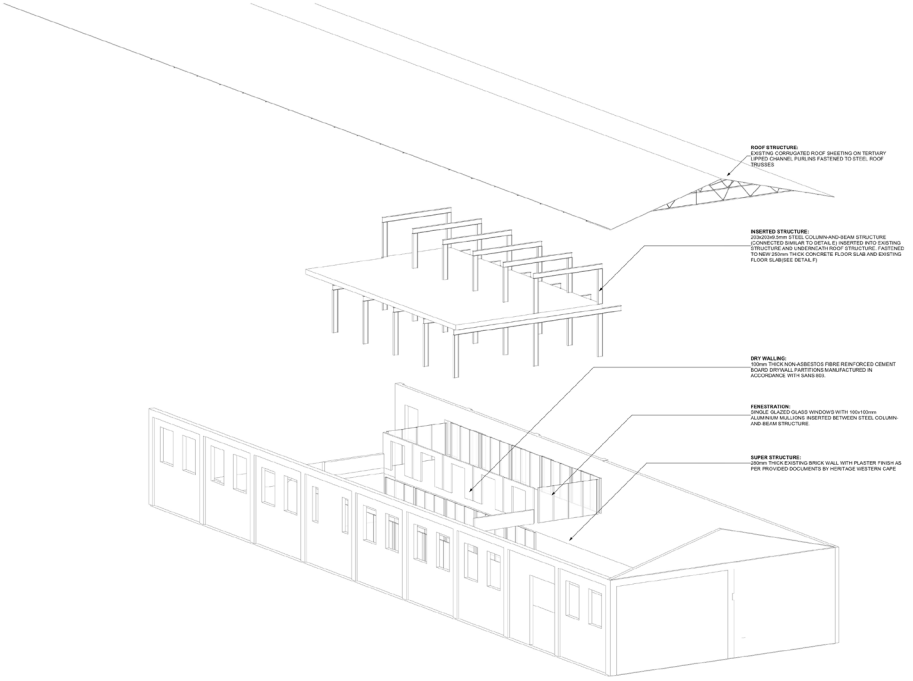


DETAIL F
Scale 1:10









EXPLODED AXONOMETRIC OF OFFICE BUILDING
Not to Scale

GENERAL NOTES:
ALL WORK TO COMPLY WITH NBR (SABS0400). THE APPLICABLE SABS CODES AND BUILDING SOCIETY REGULATIONS. THIS DRAWING IS NOT TO BE SCALED. USE FIGURED DIMENTIONS ONLY. ALL DIMENSIONS AND HEIGHTS TO BE CHECKED ON SITE BEFORE LAYING OF ANY SLABS. ANY DISCREPENCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. LEVELS DEPTHS OR EXCAVATIONS AND NUMBER OF STEPS TO BE FINALLY CHECKED BY THE CONTRACTOR ON SITE. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR THE ACCURATE SETTING OUT AND LEVELLING OF THE WORKS AND FLOORS AND THE SITE IS TO BE TREATED IN ACCORDANCE WITH SABS CODE OF PRACTICE 0124-1974. MINIMUM HEIGHT OF DAMP COURSES TO BE 150mm. FOUNDATIONS TO BE A MIN OF 300mm BELOW NATURAL GROUND LEVEL. BACKFILLING TO FOUNDATIONS. TOP OF CONCRETE SURFACE BED TO BE MIN. OF 150mm ABOVE FINISHED FLOOR LEVEL. 160mm THICK CONCRETE SURFACE BED TO BE ON "DUNPLAS" UBS GREEN DPM PROOF MEMBRANE ON SAND BLINDING. 50mm THICK EXTRUDED POLYSTYRENE INSULATION EMBOSSED DPC 375 MIC. UNDER ALL WALLS. WINDOW CILLS AND AT CHANGES IN FLOOR LEVEL. THESE ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS AND CONSULTANTS DRAWINGS WHERE APPLICABLE. ELECTRICAL CONTRACTOR TO ENSURE EARTH LEAKAGE PROTECTION SYSTEM IN THE DISTRIBUTION BOARD. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND ALL LOCAL COUNCIL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE VISITS BY LOCAL AUTHORITIES. ALL BRICK WALLS TO BE BUILT IN STRETCHER BRICKFORCE TO BE LAID AT EVERY THIRD COURSE. SLIP JOINT TO BE PROVIDED AT JUCTIONS TO BRICKWORK AND UPPER FLOOR SLAB.

DRAINAGE NOTES:
100Ø SEWER PIPE DRAIN WITH A MIN. FALL OF 1:60 MAX 1200 STUB STACK. 100Ø SOIL & WASTE STACK RAISED 450Ø MIN. 2100 ABOVE AT THE HEAD OF DRAIN, AT ALL CHANGES OF DIRECTION AND AT A MAX. OF 25m INTERVALS. INSPECTION EYES (IEs) AT ALL JUNCTIONS OF DRAIN, AND TO HAVE MARKED COVERS. AT GROUND LEVEL. DRAIN PIPES UNDER BUILDINGS TO BE ENCASED AND SUPPORTED. ALL WASTE FITTINGS TO HAVE 40mm RD SEAL TRAPS.
ALL WASTE PIPES TO BE ACCESSIBLE OVER ENTIRE LENGTH FOR CLEANING AND REPAIRS. ALL WASTEPIPES UNDER FLOOR SLABS TO BE SLEEVED TO SABS 0400. PP3/ ALL WASTE FITTINGS TO HAVE 40mm RD SEAL TRAPS. ALL WASTE PIPES TO BE SUPPORTED UNDER FLOORS WITH 12 'S EITHER END OR CLAMPED TO WALL. THE RADIUS AT THE CENTERLINE OF BEND AT THE FOOT OF DISSCHARGE STACK SHALL BE NO LESS THAN 300mm AND OTHER BENDS 600mm. THE VERTICAL DISTANCE BETWEEN THE INVERT OF THE DISCHARGE PIPE CONNECTED TO AND THE INVERT OF THE DRAIN AT THE POINT OF CONNECTION OF THE STACK AND THE DRAIN TO BE MIN. 500mm ALL SOIL FITTINGS WITH A VERTICAL DISCHARGE GREATER THAN1200mm TO HAVE ANTISYPHON VENT PIPES (ASVP'S). PIPE SIZES: WC- 100Ø, SINK 40Ø, SHOWER, BATHS, BIDETS 50Ø AND WHB 32Ø

ROOF SHEETING:
TO BE CARRIED OUT IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS. STAIRS AND BALUSTRADES: GLAZING TO COMPLY WITH PART N OF THE NBR AND GLAZING EXPOSED TO WIND TO COMPLY WITH CLAUSE 8.3 OF SABS 0137. ROOF SHEETING ON TRUSSES TO COMPLY WITH NBR SANS10400-2011, PART M AND ALL ROOF SHEETING TO BE FIXED IN ACCORDANCE WITH MANUFACTURERS CONSTRUCTION TO COMPLY WITH SABS 0400. ROOF TRUSS SPANS, SIZES ACCORDING TO PART L OF SABS 0400. ALL MEMBERS TO BE 1.6m. APPROVED BRACING MUST PREVENT BUCKLING AND KEEP TRUSSES UPRIGHT. FLASHING TO ALL CHANGES IN ROOF LEVELS, ATRIUMS & COURTYARDS. ROOF TRUSS DIRECTIONS VALLEY AND HIP RAFTERS TO BE GR. 5, 50 x 228mm SAP.

FLOORING & WATERPROOFING
GROUND FLOOR SLAB: 500mm THICK, 25MPA CONCRETE, PERFECTLY LEVELED. MIN. 150mm ABOVE NGL ON PROPERTY. COMPACTED HARDCORE. 25mm THK SCREED AND FINISHES AS PER ARCHITECTS SPECIFICATION. WHERE SHOWN ON THE FLOOR PLAN, THE AFFECTED FLOORS MUST BE LAID ON MIN 50mm THK POLYSTYRENE FOAM AND FOAM IS TO BE INSTALLED AROUND PERIMETER OF ROOM TO INSULATE FLOOR FROM WALL. SUSPENDED CONCRETE FLOORS TO ENG. DETAILS DPC UNDER SCREED. ALL WATERPROOFING TO BE CARRIED UP WALLS 150mm. ALL VERTICAL CHANGES IN FLOOR LEVELS AND FLASHING TO ALL PARAPETS & CHANGES IN ROOF LEVELS, ATRIUMS & COURTYARDS TO BE FITTED WITH GRATING AND SILT TRAP. PLANTERS TO BE WATERPROOFED AND DRAINAGE INSTALLED, WITH WEEP HOLES.

FOUNDATIONS, BRICKWORK & PARTITIONS:
ALL FOUNDATIONS TO BE 20MPA CONCRETE @ 5NO/5 CEMENT 4 WHEELBARROWS RIVER SAND: 5 WHEELBARROWS 22mm STONE). MIN FOUNDATION SIZE TO BE 2Ø0 x 600mm. MIN 200mm UNDER GROUND LEVEL OR TO ENG. SPEC. REF PLANS. BOUNDARY WALLS TO BE 230mm THICK, 2.1m HIGH ABOVE NGL. ALL FACES OF THE BOUNDARY AND WALLS ARE TO BE PLASTERED AND PAINTED TO CLIENTS SPEC. PARAPET WALLS TO BE AT LEAST 300mm HIGH AND MAX 920mm. WITH BRICKFORCE IN EVERY COURSE. ALL SCREEN WALLS TO BE AT LEAST 1.8m HIGH ABOVE NGL. LINTELS TO BE SUPPLIED AND BUILT IN OVER ALL OPENINGS IN BRICK WALLS 150mm FOR OPENINGS UP TO 1.8m. 1 COURSES BRICKFORCE TO BUILT IN BELOW FLOOR LEVEL AND ABOVE WINDOW LEVEL AND EVERY THIRD COURSE BETWEEN. IN CONTUNUOUS BANDS. NO TEETHING OR BLOCK BONDING WILL BE ALLOWED UNDER ANY CIRCUMSTANCES AND ANY PARTITIONS TO BE RUDENT AND WATERPROOFED.

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Cape Peninsula University of Technology

ARCHITECTS:
Arch (Fax) Design Studio

TITLE:
Proposed Viticulture College

SCALE:
SEE DRAWING DESCRIPTION

DATE:
22/11/2022

DRAWN BY:
Mr Francois Stefan du Toit

STUDENT NUMBER:
2176029982

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