

# Togetherhness

Anya Seth

# Togetherness

Addressing experiences of social isolation and loneliness within student accommodation in New Zealand through designing for wellbeing and atmosphere.

A 120 point thesis submitted to the Victoria University of Wellington in partial fulfilment of the requirements of the degree of Master of Architecture (Professional).

Victoria University of Wellington, School of Architecture

2021

Anya Seth



*You can be lonely anywhere, but there is a particular flavour to the loneliness that comes from living in a city, surrounded by millions of people. One might think this state was antithetical to urban living, to the massed presence of other human beings, and yet mere physical proximity is not enough to dispel a sense of internal isolation. It's possible - easy, even - to feel desolate and unfrequented in oneself while living cheek by jowl with others. Cities can be lonely places, and in admitting this we can see that loneliness doesn't necessarily require physical solitude, but rather an absence or paucity of connection, closeness, kinship: an inability, for one reason or another, to find as much intimacy as is desired.*

(Laing, 2016, p.3)

**Thank You**

To my supervisor, Jan Smitheram, thank you for your unwavering support, patience and understanding. Your guidance and care throughout this journey have been indispensable. I value you greatly.

To my friends, thank you for all of the shared laugh's, grievances, and entertainment throughout the repetition of our days. You have all sparked immense joy in my life, and I will always smile thinking back to us together.

To my partner, Ari, thank you for your continual reassurance, warmth, and support in all aspects.

And to my parents, thank you for all you have raised me to be and the support you have both always given. I hope this makes you proud.



Figure 0.1  
A view while completing thesis

## Abstract

Within New Zealand there is a disheartening and growing representation of youth experiencing feelings of social isolation and loneliness - an issue commonly only recognized after the culmination of its consequences occur. Those of 18-24-year olds are the cause for greatest current and future concern, yet, are the least researched age group. Architecture has the ability to influence physiological and psychological functioning, and thus may be used to positively affect wellbeing and experiences of loneliness. This thesis questions how architecture can more appropriately address experiences of social isolation and loneliness within student halls of residence in New Zealand through designing for wellbeing and atmosphere.

To progress the research, this thesis implements both research for design and research through design. Research for design is utilized to provide a context for social isolation and loneliness in relation to wellbeing, as well as a theoretical context for atmosphere within architecture. Wellbeing and atmosphere are subsequently utilized as a framework to assess the case studies through how they support the senses, connection, surrounding objects, levels of intimacy, and material compatibility. Research through design is then utilized at two differing scales that increase in complexity, whereby each design is informed by the prior to test the practical and theoretical understanding of wellbeing and atmosphere. The first scale, a residential hall of residence, explores how wellbeing and atmosphere may be generated for a small group of people. The second scale and outcome, a public scale university hall of residence, expresses how wellbeing and atmosphere may be generated for a large group of people.

Ultimately, this thesis concludes that through appropriately addressing the senses, connection, material compatibility, levels of intimacy, and surrounding objects the experience of social isolation and loneliness in student halls of residence may be improved.



Figure 0.2  
Public Scale Design  
Study



Contents

	Acknowledgements	III			
	Abstract	V			
0 1	Introduction		0 6	Student Accommodation & Site	
	Background	03		Introduction	109
	Scope	05		Student Accommodation	111
	Methodology	07		Site	125
	Thesis Structure	09		Conclusion	135
0 2	Wellbeing		0 7	Residential Scale	
	Introduction	13		Design Intent	139
	The Need for Wellbeing	15		Design Requirements	141
	Generating Wellbeing	19		Design Process	143
	Conclusion	25		Design	175
				Design Reflection	199
0 3	Atmosphere		0 8	Public Scale	
	Introduction	29		Design Intent	203
	Atmosphere	31		Design Requirements	205
	Generating Atmosphere	35		Design Process	211
	Conclusion	43		Design	253
				Design Reflection	303
0 4	Application to Design		0 9	Conclusion	
	Introduction	47		Reflection	307
	Wellbeing	49		Conclusion	309
	Atmosphere	59			
	Conclusion	67		Works Cited	315
				List of Figures	323
0 5	Case Studies				
	Introduction	71			
	Student Village	73			
	G27	81			
	Diagonal-Besos	89			
	Mesa Nueva	97			
	Conclusion	105			



Figure 0.3  
An overview of 'Togetherness'





## Introduction

01

One

Figure 1.0  
The Wait is Over Campaign  
(Sian Moffitt Photography, 2018)



## Background

The experience of social isolation and loneliness are a cause for great current and future concern, particularly for 18-24-year olds within New Zealand. In 2014, 13.9% of the national population aged 15 and over reported feeling lonely all, most of, or some of the time, while the 15-24-year old age group depicted the highest levels of loneliness at 16.8% (Ministry of Social Development, 2016). This is a significant concern as the experience of loneliness is associated with adverse social, psychological, and physical damage (Cacioppo, 2013; Hawkey & Cacioppo, 2010; Cacioppo et al, 2002; Andersson, 1998). It has been identified that “Dementia, high blood pressure, alcoholism and accidents - all these, like depression, paranoia, anxiety and suicide, become more prevalent when connections are cut. We cannot cope alone” (Monbiot, 2014, para. 4). Issues of social isolation and loneliness can become an extreme influence on one's physical and mental health, thus needing to be addressed immediately and appropriately.

Experiences of social isolation and loneliness for the 15-24-year old age group commonly coincide with the period that undergraduates will inhabit a hall of residence. This transition for students from home to university bears an immense change in individuals social and cultural environment, whereby existing social support networks may become complicated and feelings of loneliness may be stimulated (Chow & Healey, 2008; Medora & Woodward, 1986). Within New Zealand the consequences of individuals experiencing social isolation and loneliness within halls of residence is often brought to light (Shaw, 2018; Lin, 2018; New Zealand Herald, 2019; O'Hagan Brebner, 2019). It is from the weight of these issues and outcomes surrounding wellbeing that existing hall of residence typologies are currently being challenged. A clear shift is developing on how the design of halls of residences can more appropriately support resident's wellbeing. As Julian Robinson articulates “It's clear to me that university clients, designers, developers and providers have a massive responsibility to design student accommodation in a way that maximises wellbeing” (Robinson cited in Galliford Try & Scott Brownrigg, 2019, p.25).

According to the recent nature of this shift, there is a current gap in existing literature on student orientated design in relation to wellbeing. However, similarities in patient-healthcare orientated design may be utilized, whereby studies within this area depict the ability of architecture to positively influence patients physical and psychological recovery (Seresinhe, Preis & Moat, 2015). Specifically, the human mind, body and nervous system are understood as able to be

directly influenced either positively and/or negatively by sensual elements in the surrounding physical, built and natural, environment (Gappell, 1991). In the same manner that “research supports the idea that the built healthcare environment having an impact on the health and wellbeing of patients, more attention is being paid to the psychological consequences of architectural choices”, the built hall of residence environment may do the same (Dijkstra, Pieterse & Pruyn, 2008, p.279). This supports the opportunity for architecture to develop more appropriately within halls of residence, resulting in spaces that support wellbeing through connection of individuals to themselves, to others, to the community, to place and to consider the role of the senses.

Alongside supporting connection and supporting the senses to address wellbeing, atmosphere may be used as a subsequent avenue to approach wellbeing within architecture. Many architects and theorists consider atmosphere as a way to connect an individual to a space or place through the senses (Bohme, 1993; Wigley, 1998; Pallasmaa, 2014; Zumthor, 2006). Architect Peter Zumthor closely aligns atmosphere to holding agency from both subject and object, focusing on the feelings that are generated through the interaction (Zumthor, 2006). From Zumthor's nine sensibilities towards addressing atmosphere, defined in '*Atmospheres; Architectural Environments, Surrounding Objects*', three sensibilities have been selected as a means to focus the scope of addressing atmosphere throughout this thesis. These are highlighted as material compatibility, levels of intimacy, and surrounding objects, aligning to the concerns within a hall of residence. Consequently, these three sensibilities support the opportunity for architecture within a hall of residence to develop spaces that are more appropriate to supporting wellbeing within residents.

Specifically, this thesis questions how the outlined factors of wellbeing and atmosphere can be used collectively with architecture to establish the design of a hall of residence that responds to improving the community living experience for students in Wellington, New Zealand. The process and outcome of design explored and established within this thesis contributes to expanding the body of knowledge within architecture and wellbeing that is currently lacking 'student' perspective and understanding. It is intended that the presented research for design and research through design establishes one of many potential avenues for the baseline of design for student halls of residence within New Zealand. It is hoped that this research prompts an understanding, an interest, a conversation, or a movement regarding the importance of using architecture to address wellbeing through a student orientated lens.

## Scope

This thesis focusses on understanding the relationship between wellbeing, atmosphere, and architecture in the context of designing out social isolation and loneliness within halls of residence for students in Wellington, New Zealand. Specifically, it enquires and engages with potential solutions appropriate to the physical, social, and psychological context.

This thesis was originally outlined to include three stages of design, installation, residential, and public scale. However, due to the restrictions of coronavirus lockdown, there was insubstantial access to materials or a workshop, thus a decision was made to integrate the early design explorations to the second residential scale design chapter. Additionally, the 'application to design' chapter had to be reduced to the limitations of the word count, thus becoming an overview of applications rather than a more in-depth explanation of the literature.

Due to the scale and complexity of a hall of residence, particular aspects of the design could not be addressed, whereby the design is limited to the spatial qualities of wellbeing and atmosphere.

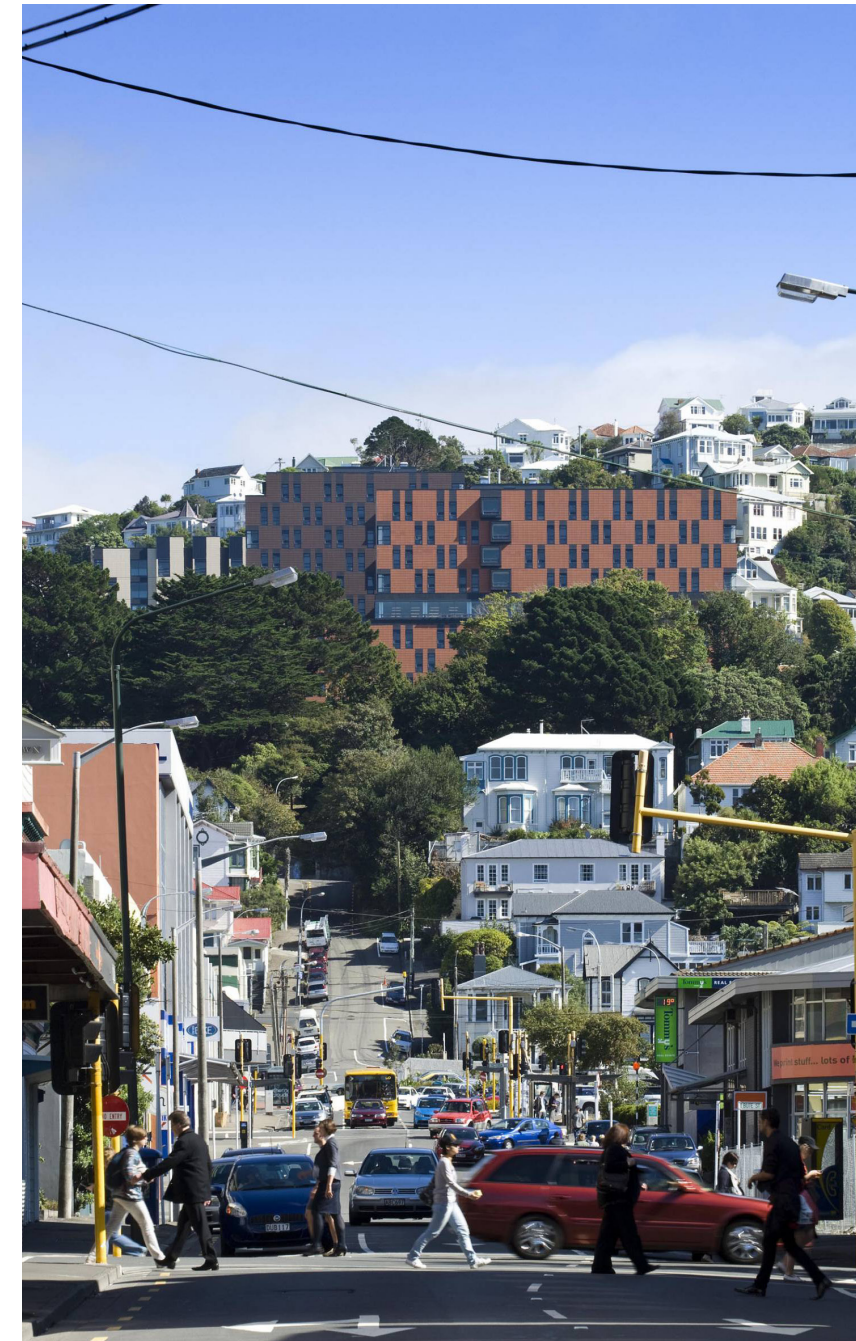


Figure 1.1  
Te Puni Village by Architectus  
(McCredie, 2009)



## Methodology

This thesis utilizes a mixed methods approach, engaging with both research for design research through design. This allows the existing knowledge regarding wellbeing, atmosphere and architecture to be integrated to an iterative and reflective design process to inform the final design.

**Research for design** follows Peter Downton's understanding of the methodology as "research intended to provide information and data that is necessary to successfully conclude the undertaking in question" (2003. p.17). Research activity of investigating theoretical inquiries in another field, are presented through literature within the wellbeing and atmosphere chapters. While research activity of examining exemplars, objects and forms of doing things, are presented through an analysis of case studies.

**Research through design** follows Jane Rendell's understanding of the methodology as a process that "operates through generative modes, producing works at the outset that may then be reflected upon later" (2013. p.117). This has been combined with design testing following Albena Yaneva's method of 'Scaling Up and Down', whereby a rhythm of scaling throughout the design process is used as "an apparatus for conducting, recording and interpreting results of manipulating selected features of models" (2005, p.868). Research through design following Rendell's and Yaneva's methodologies is utilized within this thesis through design at two scales that increase in size and complexity. This approach allows design at each scale to be continually reflected upon and able to inform the next. Within each scale analogue and digital drawing and modelling techniques are used to explore and express the relationship between wellbeing, atmosphere, and architecture.

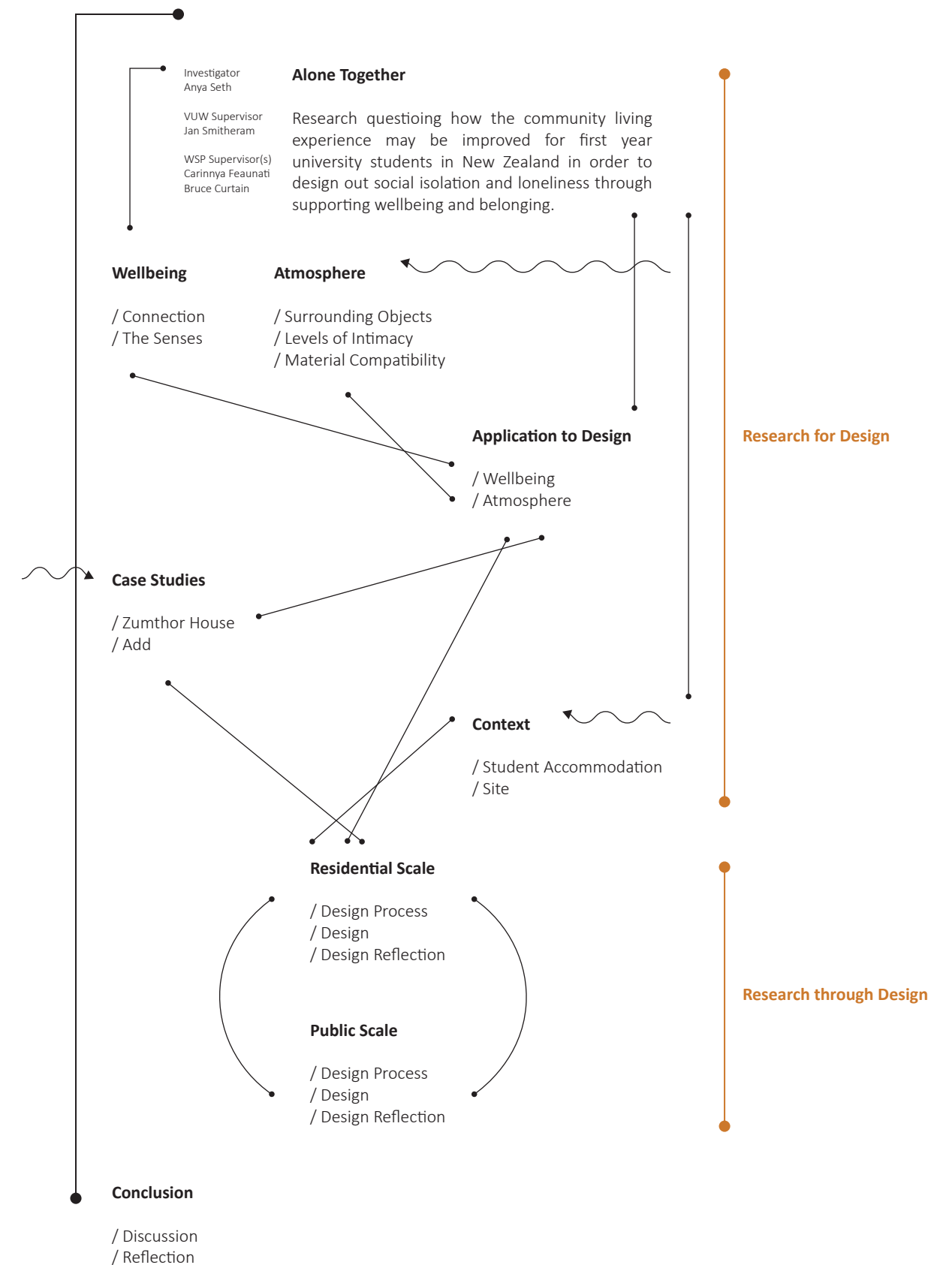


Figure 1.2  
 Overview of Methodology

Thesis Structure

This thesis is structured according to three sections that interrogate differing methods of design research; section one focusses on research for design, section two focusses on research through design and section three focusses on research by reflection of design. Within each section, differing chapters present a development of literature, design, or analysis.

**Section one** of this thesis focusses on research for design, establishing a practical and theoretical background for wellbeing and atmosphere within architecture. The section presents existing knowledge and understanding of the literature surrounding the research topic, subsequently establishing an application to design for design to develop upon. Specifically, chapter two identifies the connection between wellbeing and architecture, chapter three identifies the connection between atmosphere and architecture, while chapter four presents how these elements may be applied to design to develop desired architectural outcomes. Chapter five then identifies and critically analyses two built case studies of increasing scale, that interrogate the relationship between wellbeing, atmosphere, and architecture. Chapter six then presents the site context in relation to both student halls of residence as well as the conditions of the selected physical site.

**Section two** of this thesis focusses on research through design, establishing design at two scales of increasing size and complexity. Each scale is structured with a specific intent to explore and express wellbeing and atmosphere, where the design exploration and outcome is used to inform the next. Specifically, chapter seven presents the exploration and final outcome of design at a residential scale that investigates how wellbeing and atmosphere may be expressed as a habitable space. Chapter eight then presents the exploration and final outcome of design at a public scale that investigates how wellbeing and atmosphere may be expressed as a large student hall of residence.

**Section three** of this thesis focusses on reflection of the thesis, establishing critical analysis and reflection of the design explorations and outcomes.

	Chapter 0 1 Introduction
<hr/>	
<b>Section One</b> Research for Design	Chapter 0 2 Wellbeing
	Chapter 0 3 Atmosphere
	Chapter 0 4 Application to Design
	Chapter 0 5 Case Studies
	Chapter 0 6 Student Accommodation & Site
<hr/>	
<b>Section Two</b> Research through Design	Chapter 0 7 Residential Scale
	Chapter 0 8 Public Scale
<hr/>	
<b>Section Three</b> Research by Reflection of Design	Chapter 0 9 Conclusion

Figure 1.3  
Overview of Structure

0 2

Two

# Wellbeing

*Image redacted due to copyright*

Figure 2.0  
Great Guildford Street by Studioilse  
(Cohen, 2003)

Introduction

The intention of this chapter is to briefly present the literature surrounding the need for wellbeing to provide a wider understanding of how architecture may be used within student accommodation to relieve residents' experiences of loneliness. Specifically, the first section of the chapter presents an understanding of wellbeing in relation to loneliness and social isolation, and within the context of student accommodation. The second section of the chapter then presents how wellbeing can be generated within architecture through supporting connection and aligning to sensual elements. These elements will then be integrated and used alongside the theoretical context of atmosphere to evaluate and develop the design throughout this thesis.

	Introduction
Section One	The Need for Wellbeing
Section Two	Generating Wellbeing Supporting Connection Supporting the Senses
	Conclusion

Figure 2.1  
Overview of Chapter Structure

## The Need for Wellbeing

The experience of wellbeing is intrinsically influenced by experiences of social isolation and loneliness. The growing experience of social isolation and loneliness by many is a cause for great current and future concern, with many researchers referring to it as a 'modern epidemic' (Alberti, 2018; King, 2018; Kar-Purkayastha, 2010). Loneliness is commonly recognised as inevitable, negative, and universal, associating itself to significant psychological, physical and social damage. It is from the gravity of these consequences that one must question and understand why individuals are vulnerable to feelings of loneliness and how it can be appropriately influenced.

Loneliness is a temporary, conscious, cognitive state of estrangement or social disconnect. It has been described by Andersson as “an enduring condition of emotional distress that arises when a person feels estranged from, misunderstood, or rejected by others and/or lacks appropriate social partners for desired activities, particularly activities that provide a sense of social integration and opportunities for emotional intimacy” (1998, p.265). Ernst and Cacioppo consider loneliness as “a complex set of feelings encompassing reactions to the absence of intimate and social needs” (1999, p.1), while Perlman and Peplau consider loneliness as “the unpleasant experience that occurs when a person’s network of social relations is deficient in some important way” (1981, p.32). Similarly, these descriptions all emphasize loneliness in relation to a lack of one’s desired social engagement. However, it is also understood that “loneliness is clearly distinguishable from the objective state of solitude, social isolation, or being alone” (Heinrich & Gullone, 2006, p.699). Being physically alone, therefore, does not necessarily correlate to experiencing loneliness; it is completely subjective.

Loneliness can be classified into social and emotional loneliness. Social loneliness regards a lack of social connectedness or sense of community, while emotional loneliness regards a lack of intimate personal connectedness shared with another (Weiss, 1973). To satisfy these social and emotional needs, it is speculated that individuals must retain relationships that provide "personal attachment (as in intimate relations), social integration, the opportunity to receive nurturance, re-assurance of one's worth, and guidance" where no one relationship is apt to provide all (Weiss, 1973, p.218). Experiences of loneliness become heavily influenced by the way in which an individual belongs to the surrounding social environment. How an individual belongs to the surrounding social environment



A series of illustrations portraying the conflicting feelings of living in a city; by London artist Charlotte Ager.

Figure 2.2- 2.3  
City Life  
(Ager, n.d.)



may be influenced by the biological need for humans to be social (Cacioppo, 2013; Muthukrishna et al, 2018), an individual's identity (Perlman & Peplau, 1981) or behavioural characteristics (Perlman and Peplau, 1981; Alberti, 2018), age (Roscoe and Skomski, 1989), and technology (Hunt et al, 2018; Barford, 2013). Within this research the role of age becomes extremely relevant due to the crossover of individuals experiencing loneliness and the transition from a family residence to a collective residence.

For many, belonging within a social environment is established within, and supported through the family residence, providing an individual's first understanding of connection to oneself, to others and to place. Chow and Healey suggest that:

*Home is an important place - a critical locale for both developing and maintaining place identity - as it possesses emotional significance and provides some degree of stability within people's lives, serving as a reference for past action and experience; a locus of memories and meaning. (2008, p.37)*

Here, the family residence becomes a place where adolescents often have the capability to establish and maintain social support networks of family and friends that foster attachment to the physical experience of place (Fisher, Murray & Frazer, 1985; Altman & Low, 1992). However, when adolescents leave the family residence, the most secure and stable environments, to a hall of residence, experiences of social isolation and loneliness often emerge due to individuals feeling displaced from their initial source of safety, security, and identity (Hill, 2006; Tognoli, 2003)

For some, the pressure of these changes is mitigated by the excitement of new social, educational, and physical opportunity and are overcome in time, but for others, these changes can bring immense anxiety and pressure (Lowe & Cook, 2003). It becomes the role of the individual to establish new forms of belonging within the new environment. Chow & Healey suggest that the occurrence and extent of social relationships as well as the ability for individuals to establish control, creativity, privacy, security, and serenity may contribute to support wellbeing within the new environment of student accommodation (2008).

Aligning to the prior literature, for architecture to contribute to and support individual's wellbeing within student accommodation, it must strive to promote belonging. Specifically, how this may be addressed will be expanded upon in the next section in the form of generating wellbeing.



A series of illustrations portraying the conflicting feelings of living in a city; by London artist Charlotte Ager.

Figure 2.4- 2.5  
City Life  
(Ager, n.d.)

## Generating Wellbeing

As intrinsically social beings with a high dependency on relationships with others, factors such as belongingness and loneliness have been identified as key predictors of wellbeing (Townsend & McWhirter, 2005; Ernst & Cacioppo, 1999; Baumeister & Leary, 1995). Mellor, Stokes, Firth, Hayashi and Cacioppo suggest that "Failure to have belongingness needs met may lead to feelings of social isolation, alienation, and loneliness" (2008, p.213). To generate wellbeing, the role of how individuals experience belonging within a space or place therefore must be understood.

Belonging is a conscious state of feeling connected and accepted by something greater than an individual themselves. It has been described by Garvey, Guyotte, Latapolski, Sanders and Flint as "a fundamental need, a feeling of affection and affiliation within one's community, and as feeling valued and included within one's community" (2018, p.10). Rosenburg and McCullough consider belonging as a feeling of connectedness whereby one is important to others (1981), while Maslow considers it as a basic human motivation that all humans possess (1962). Similarly, definitions of belongingness commonly consider it as relating to a connection with oneself, with others, with a community, or with a space or place.

Academic Lisa Waxman establishes a relationship between belonging and place, providing an avenue for architecture to support wellbeing. Waxman suggests that "Places ground us to earth, to the communities in which we live, and to each other. Places provide a starting point, the opportunity to belong somewhere, and a place to return to" (2017, p.159). The role of architecture on influencing connection becomes evident. Designer and academic Isle Crawford furthers Waxman's understanding of belonging and architecture. Crawford interprets design as a tool to enhance humanity, and as able to influence an individual's connection to the world (Crawford, in Vola, 2020). She suggests that an appropriate method to approaching wellbeing in design involves considering the "individual human experience, encompassing social, sensorial and emotional perspectives" (Crawford, cited in C. Hill, 2015, p.78). Here, the influence of the senses to supporting connection becomes evident.

The conditions of supporting the senses and supporting connection become essential to addressing connection to oneself, to others, to a community, or to a space or place. These elements will be expanded upon in the next section as a method to focus the scope of wellbeing throughout this thesis.



*Image redacted due to copyright*

Figure 2.6 & 2.7  
Ett Hem Hotel by Studioilse  
(Marding, 2012)

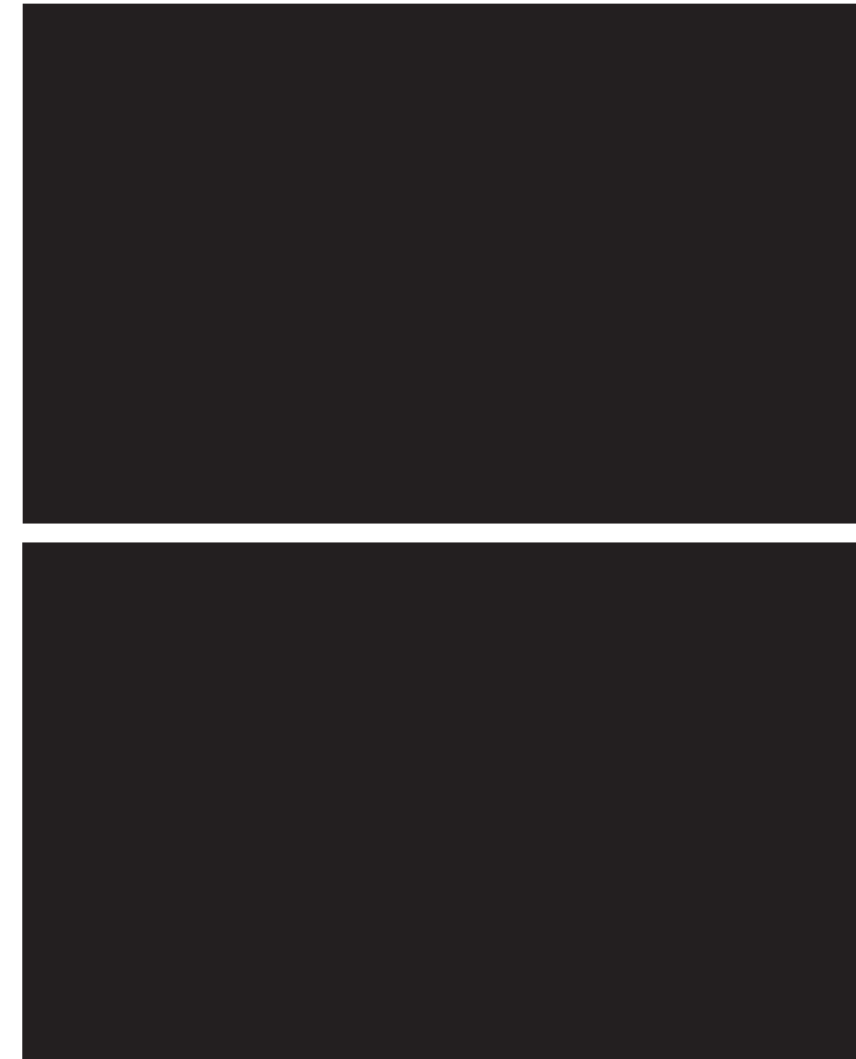
## Supporting Connection

Supporting connection regards the consideration of how architecture may enhance the connection of an individual to oneself, to others, to a community, or to a space or place. Gappell emphasises the role of architecture to support connection to oneself, suggesting that "Perhaps the most powerful relationship in the healing experience is the relationship that humans have with themselves (1991, p.128). Gappell highlights the need for connection to oneself, and thus the ability to express diversity, as vital to supporting wellbeing.

Similarly, The Commission for Architecture and the Built Environment (CABE) emphasises the role of supporting diversity and inclusion as essential to facilitating connection to oneself, others and place. CABE identifies that "Decisions about the design, planning and management of places can enhance or restrict a sense of belonging" (2008, p.3). CABE suggests that through considering the diversity of individuals backgrounds, design may become inclusive, equal, and cohesive to supporting belonging, where belonging derives from connection.

Similarly, Waxman understands architecture to have a responsibility for considering how a space or place will fulfil the human need for connection with oneself and others (2017). Waxman identifies the need for architecture to respond to human imprint through resisting 'hard architecture' (Waxman, 2017). She suggests "spaces that allow individuals to alter their surroundings allow the control so many people desire" (2017, p.164). Waxman also emphasises the role of proximity of people to one another, and paths, as key to establishing connection. Waxman identifies that " design that makes chance encounters with others in a person's 'life orbit' possible enhances the user experience (2017, p.165). Here, Waxman places an emphasis on the for architecture to create moments of informal connection to support wellbeing.

Aligning to Gappell, CABE and Waxman, wellbeing may be enhanced through consideration of how a space or place facilitates connection. Connection has been highlighted as one of the necessary elements to consider within the process and outcome of a design of a hall of residence due to the inherent need for individuals to be able to connect to oneself, others and spaces.



*Image retracted due to copyright*

Figure 2.8- 2.9  
Great Guildford Street by Studioilse  
(Cohen, 2003)



## Supporting the Senses

Supporting the senses regards the consideration of how a space or place is understood through the senses, as "Man is nothing but a bundle of sensations" (Protagoras, 450 B.C.). Artist and academic Millicent Gappell understands the role of the senses through 'psychoneuroimmunology' - "the art and science of creating environments that prevent illness, speed healing, and promote well-being" (Gappell, 1991, p.115). Psychoneuroimmunology is dictated upon evidence that the human mind, body and nervous system can be directly influenced either positively or negatively by the sensual elements in the surrounding physical environments and is most commonly addressed within the healthcare sector. Gappell identifies these elements as 1) Light, 2) Colour 3) Acoustics, 4) Aroma, 5) Tactility, and 6) Space (Gappell, 1991, p.115). Gappell suggests that when the sensual elements are considered appropriately, architecture can be considered "good medicine in itself" (Gappell, 1991, p.115). Healthcare orientated design also places an emphasis on the role of the natural environment, perceiving it as "being health promoting and/or somehow enhancing health, wellbeing, wellness, and/or quality of life" (Williams, 2009, p.209).

Similarly, to Gappell, Crawford emphasises the role of the senses within architecture to support wellbeing. Crawford suggests that design should prioritise the experiential and utilise a humanistic approach to develop connection to human value through the senses. Crawford states:

*...put those human values in there, all those unmeasurable things. Otherwise, all the things you really remember about a space, the way they feel, the way you can live in them, spaces you can love, smell, taste, spaces that make you feel grounded and good... that just kind of gets lost. (Crawford, cited in C. Hill, 2015, p.78)*

Crawford places an emphasis on how spaces and places are experienced and recalled through elements that are unmeasurable - the senses.

Aligning to both Gappell and Crawford, addressing a space through consideration of the senses may enhance wellbeing. Gappell demonstrates this within healthcare orientated design, while Crawford translates this to the everyday orientated design. The senses have been highlighted as one of the necessary aspects to consider within the process and outcome of a design of a hall of residence due to the inherent influence these elements have on an individual's experience of space and place.



Figure 2.10- 2.11  
Chalet Fontanet by Studioilse  
(Odell, 2015)

Conclusion

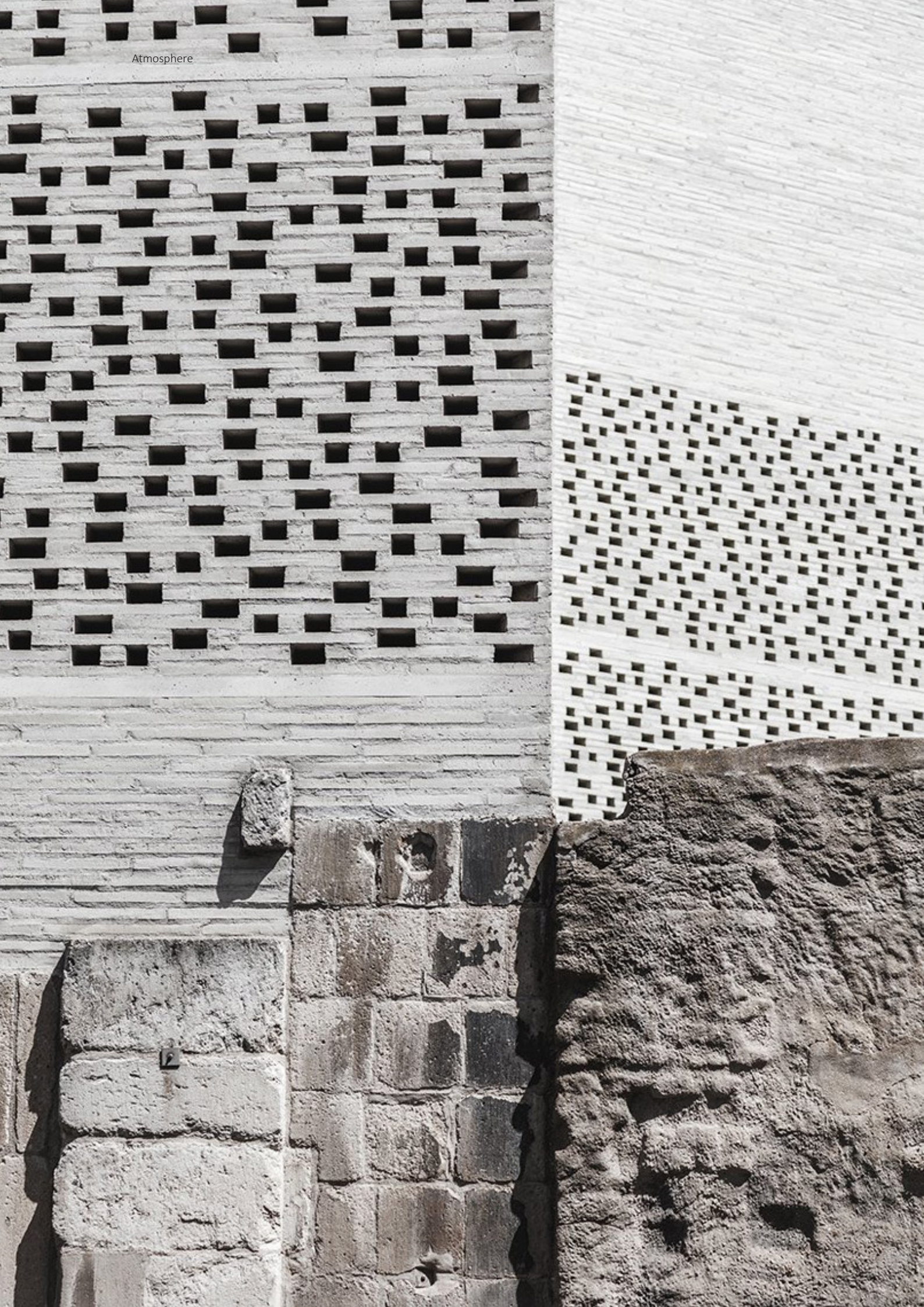
This chapter has presented a brief summary of the existing literature surrounding wellbeing within architecture and associated spatial disciplines. Interpretations and understandings of social isolation and loneliness in relation to student accommodation signal the need for architecture to support wellbeing through fostering belonging. Following the literature from patient-orientated design and everyday design, the role of sensual elements combined with elements of physical connection are made vital. Specifically, the selected conditions supporting connection and supporting the senses will be used alongside an understanding of atmosphere to evaluate and develop the design throughout this thesis.



*Image redacted due to copyright*

Figure 2.12  
Ett Hem Hotel by Studioilse  
(Marding, 2012)





## Atmosphere

Figure 3.0  
Kolumba Museum by Peter Zumthor  
(Hjortshøj, 2017)



Introduction

The intention of this chapter is to briefly present the literature surrounding atmosphere, consequently providing a wider understanding of how architecture may be used within halls of residence to alleviate experiences of loneliness. Specifically, the first section of the chapter presents an understanding of atmosphere from theorists and architects. The second section of the chapter then presents three conditions of atmosphere that will subsequently be used as a platform to both evaluate the case studies and develop the design throughout this thesis.

	Introduction
Section One	Atmosphere
Section Two	Generating Atmosphere Surrounding Objects Levels of Intimacy Material Compatibility
	Conclusion

Figure 3.1  
Overview of Chapter Structure

## Atmosphere

When we arrive at a space or place, whether we have been there before or it is completely new, whether it is public or private, or whether we experience it alone or with others, regardless of any condition, we instantly gain a sense of it. This sense develops without registering or taking notice of any specific details of the space or place, yet it determines how we feel within it and subsequently towards it. This phenomenon, this immediate sense of a space or place, is understood as atmosphere.

Atmosphere is understood as one of the many avenues to approach wellbeing within architecture. Following Bohme, atmosphere has been selected as a platform to evaluate and develop design throughout this thesis due to its role in connecting space, body and time (2017). Atmosphere emphasises the unmeasurable connection individuals have to a space or place through the senses, closely aligning to the practical context of wellbeing. Atmosphere is a term that has been explored and developed by a range of scientists, philosophers, theorists and architects. Consequently, each has their own interpretation of what atmosphere is, as well as how it is created and experienced. Although there are many approaches to understanding atmosphere, interpretations specifically from Gernot Bohme, Julieanna Preston, Mark Wigley, Juhani Pallasmaa and Peter Zumthor will be explored to gain an understanding of atmosphere within architecture.

Developing from a phenomenological perspective, philosopher Gernot Bohme regards atmosphere as applicable to humans, spaces and nature. When defining atmosphere, he speculates:

*One does not quite know whether to attribute them to the objects or environments from which they emanate, or to the subjects who experience them. One also does not quite know where they are. They seem to fill the space with a Gefühlston (feeling-tone), like a haze, as it were. (Bohme, 1993, p.14)*

Here, Bohme questions if agency is held by object or subject, concluding that atmosphere is an intermediary of the two. Approaching atmosphere from the perspective of object becomes relevant to architecture as Bohme suggests that specific aesthetics can be utilised and modified to deliberately create 'characters', or atmospheres (Bohme, in Diaconu, 2010, p.318). Although Bohme understands atmosphere as intangible and inexpressible, he proposes it as quasi-objective, differing from an architectural perspective (Bohme, 2017).

Academic Julieanna Preston regards atmosphere as elusive and pervasive. She draws from mist to understand atmosphere physically:



Figure 3.2- 3.3  
The Weather Project by Olafur Eliasson  
(Eliasson, 2003)

*The issue adopts mist... a spatial figure to both contextualise the featured contribution and conceptualise their accumulative effect. As particulate atmosphere-forming matter, mist is a physical phenomenon, a weather pattern dependant on local, intimate, and precious spatial, thermal and temporal factors. (Preston, 2008. p.7)*

Preston understands atmosphere as demarcated by subjectivity, focusing on individual experience and the influence of spatial qualities. The following example focusses on the material qualities of atmosphere.

Academic Mark Wigley similarly understands atmosphere in regard to the experience of space. He suggests that although it is central to architecture, it cannot be easily understood or controlled, and proposes it as “some kind of sensuous emission of sound, light, heat, smell - a moisture, a swirling climate of intangible effects generated by a stationary object” (Wigley, 1998, p.18). Wigley further understands architecture as a surface to produce atmosphere that in turn defines a space, highlighting the importance of atmospheric representation within architecture. Similarly to Wigley, architect Juhani Pallasmaa regards atmosphere as an exchange between the material properties of a space or place, and the immaterial properties of human perception (Pallasmaa, 2014). He suggests that “the judgement of environmental character is a complex multi-sensory fusion of countless factors which are immediately and synthetically grasped as an overall atmosphere, ambience, feeling or mood” (2014, p.230). Derived through Pallasmaa's role as an architect, emphasis is placed on the subconscious and immediate manner in which we register atmosphere as a totality of peripheral senses.

Architect Peter Zumthor's work is inevitably linked to a pursuit of generating atmosphere through the sensory. Zumthor regards atmosphere as holding agency from both the subject and object:

*So what moved me? Everything. The things themselves, the people, the air, noises, colours, material presences, textures, forms too...*

*What else moved me? My mood, my feelings, the sense of expectation that filled me while I was sitting there. (Zumthor, 2006, p.15)*

Here, Zumthor focuses on the feelings that are generated through the interaction of subject to atmosphere, where without the sole atmosphere presented, he suggests one could not experience the associated feelings.

From the outlined academics and architects there is an emphasis of atmosphere in relation to a totality of sensory experience. This becomes vital to developing atmosphere in architecture throughout this thesis, and as follows will be expressed how it may be generated.

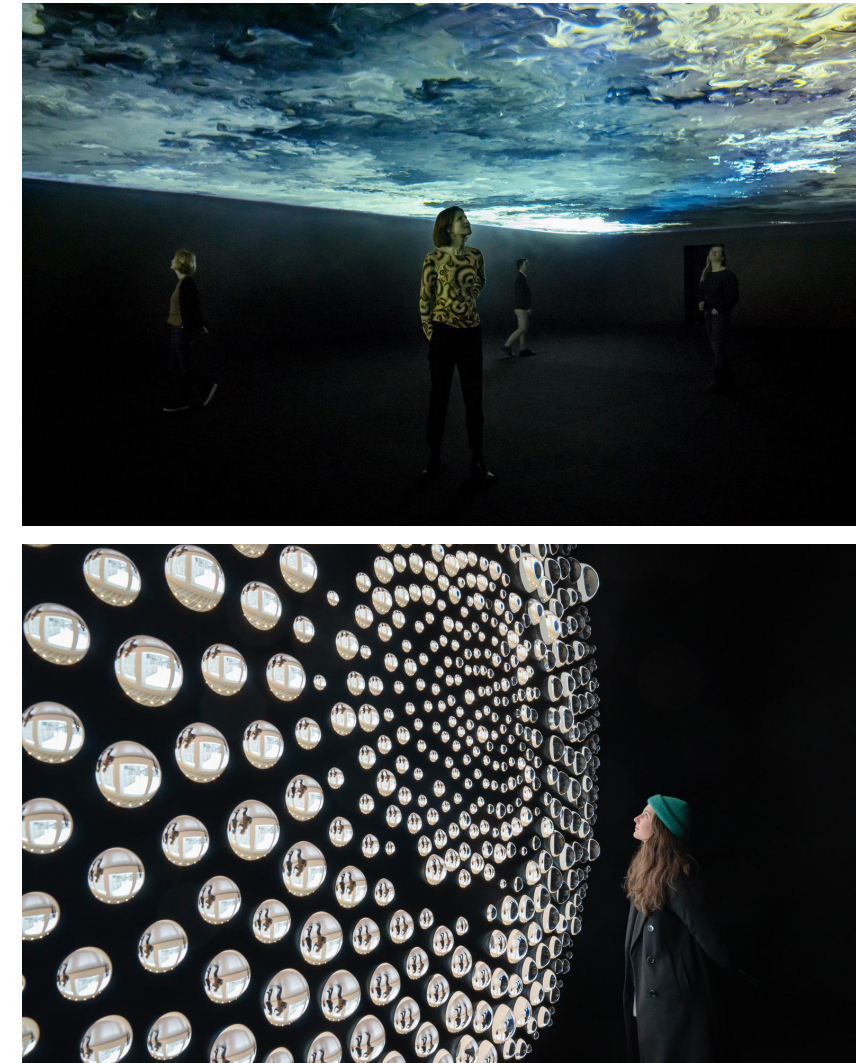


Figure 3.4- 3.5  
Symbiotic Seeing by Olafur Eliasson  
(Kunsthau Zürich, Candrian, 2020)

## Generating Atmosphere

Aligning to Wigley, Pallasmaa and Zumthor, atmosphere may be generated within architecture through graphical and physical representation. Consequently, these occur as design develops and as design is complete.

Mark Wigley suggests that an emphasis of atmosphere may be generated within architectural representation through modelling and drawing. In reference to architectural representation, Wigley proposes that “Models are mystified with a poetic turn of phrase. Drawings show the edges of buildings glowing or surrounded by a haze that blurs the edges of buildings” (Wigley, 1998, p.19). Here, representation becomes a way to distinguish or synthesize environment to atmosphere, often further supported through the representation of specific weather conditions. Similarly, when discussing atmosphere Juhani Pallasmaa regards architects such as Alvar Aalto to depict a coherent feeling or atmosphere, rather than a specific conceptual idea within graphical representation. Aalto suggests:

*Led by my instincts I draw, not architectural syntheses, but sometimes even childish compositions, and via this route I eventually arrive at an abstract basis to the main concept, a kind of universal substance with whose help the numerous quarrelling sub-problems [of the design task] can be brought into harmony. (Aalto, in Hewitt, 1989, p.164)*

The use of an abstract understanding through colour and form become essential to portraying a universal substance, or specific atmosphere, rather than the content. Consequently, Wigley and Pallasmaa convey the importance of different representation methods when expressing specific atmospheres.

Peter Zumthor suggests that an emphasis of atmosphere may be generated within architecture through nine specific processes, interests, instruments, and tools. He highlights these as:

*the body of architecture, material compatibility, the sound of space, the temperature of space, surrounding objects, between composure and seduction, tension between interior and exterior, levels of intimacy, and the light on things. (Zumthor, 2006, p.21-63)*

Each is understood through personal sensibilities and must be used in continual relation to one another. Consequently, Zumthor conveys the importance of how atmosphere may be both generated by the architect and understood by the user. While Zumthor highlights nine sensibilities, due to the limitations of the theses, three have been selected as a method to focus the scope of atmosphere throughout this thesis. These will be expanded upon in the next section, and are outlined as the conditions of surrounding objects, levels of intimacy, and material compatibility.



*Image redacted due to copyright*

Figure 3.6- 3.7  
Oil Painting by Alvar Aalto  
(Aalto, 1963)



## Surrounding Objects

The condition of surrounding objects regards the way in which subjects inhabit places or spaces with personal objects. Peter Zumthor understands these objects to express and comfort subjects within a space or place. Consequently, he questions whether it is the role of architecture to provide receptacles to house these objects (Zumthor, 2006). When considering how space for surrounding objects may be used to generate atmosphere, Zumthor states:

*The idea of things that have nothing to do with me as an architect taking their place in a building, their rightful place - it's a thought that gives me an insight into the future of my buildings: a future that happens without me. That does me a lot of good. It's a great help to me to imagine the rooms in a house I'm building, to imagine them actually in use. In English you could probably describe it as <a sense of home>. (Zumthor, 2006, p.39)*

Here, considering a subjects prospective surrounding objects provides a useful method of designing spaces of places that become receptive and expressive of the subject.

Similarly to Zumthor, Pallasmaa regards the ability of surrounding objects within a place or space to be established as essential to generating atmosphere, specifically an atmosphere of home. Pallasmaa highlights this as:

*An anonymous hotel room is immediately personalized and taken into possession by subtly marking the territory - laying out clothes, books, objects, opening the bed etc... my five year old daughter cannot go anywhere without her scratching pillow... an American architect woman friend travels with her set of kitchen knives, which are her magical instruments for recreating a sense of home. (Pallasmaa, 1992, p.7)*

Here, continual emphasis is placed on the role of objects utilised by individuals as a means of establishing oneself within foreign space.

Aligning to Zumthor and approaching surrounding objects through considering spaces and places to be receptive of such items, specific atmospheres may be generated. This has been identified as one of the necessary aspects to consider within the outcome of a design of a hall of residence due to the need for individuals to establish identity within intimate space through generating spaces that are receptive of unique atmosphere.

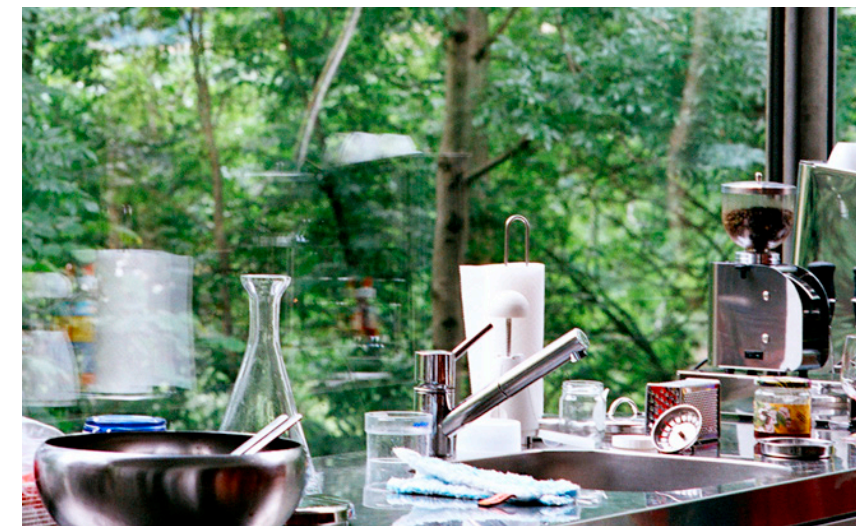


Figure 3.8- 3.9  
Zumthor House by Peter Zumthor  
(Padgett, 2005)



## Levels of Intimacy

The condition of levels of intimacy regards proximity and distance. Peter Zumthor understands it as “the various aspects - size, dimension, scale, the building’s mass by contrast with my own” (2006, p.51). When considering how levels of intimacy may be used to generate atmosphere, Zumthor states:

*I always try to create buildings where interior form, or the empty interior, is not the same as the outdoor form. In other words, where you don’t just take a ground plan and draw lines and say these are the walls, twelve centimeters thick, and that division means inside and outside, but where you have this feeling of the interior as hidden mass you don’t recognize. (Zumthor, 2006, p.51)*

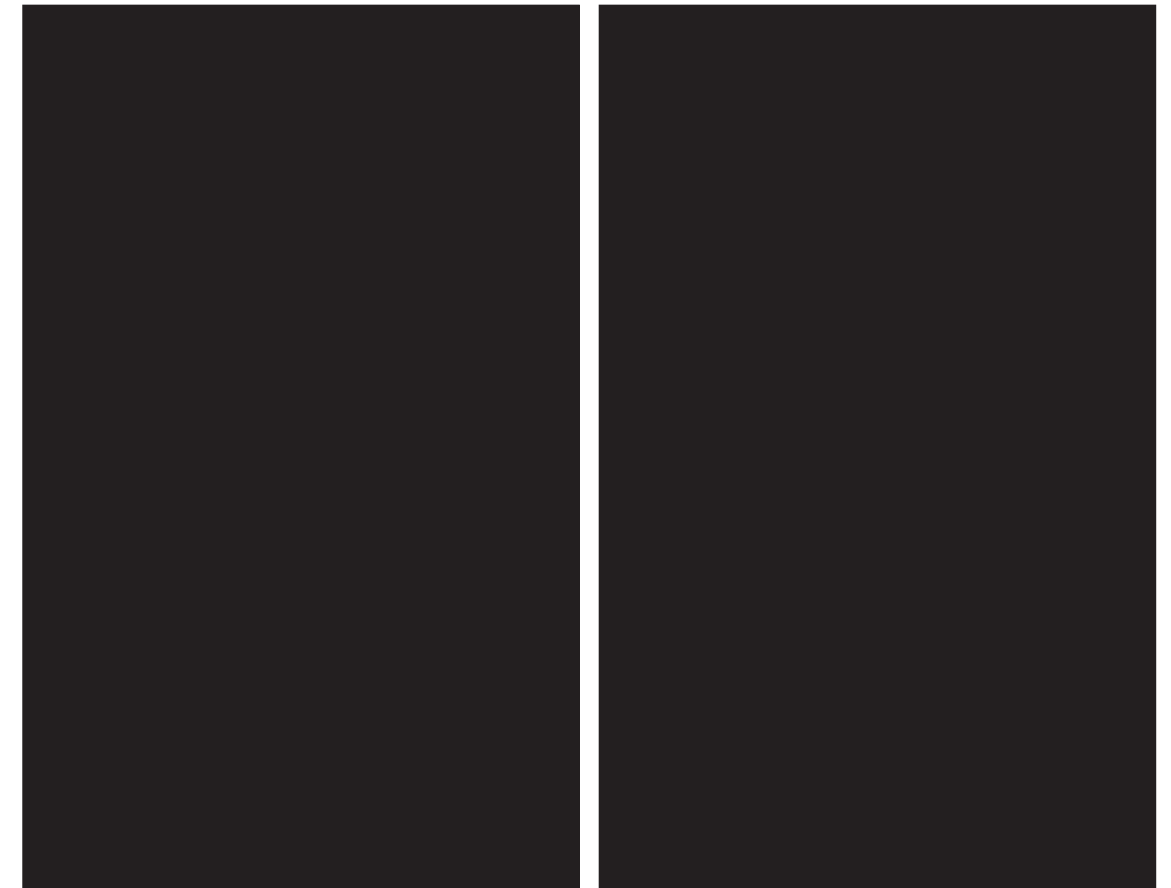
Here, intimacy is generated through how the experience of a space relates to both interior and exterior, object and subject. It involves the careful thought of the distance and proximity provided between the built, object and subject, establishing space for an individual, an individual in a group, or an individual in a crowd.

Similarly to Zumthor, Pallasmaa regards intimacy as a very personal relationship of subject to the built and object. Pallasmaa suggests that “homes delineate the realms of intimacy and public life. It is frustrating to be forced to live in a space that we cannot recognize or mark our own personal territory” (Pallasmaa, 1992, p.7). Here, the importance of the surrounding environment to be representative of an individual and the function of space becomes essential to establishing levels of intimacy to enhance atmosphere.

Karen Franck understands intimacy through proximity to architectural compositions and qualities. She suggests:

*Architecture is given life and spirit by all the qualities that touch the human sense and human soul: by light and colour, sound and texture, by expansion and compression of space, by view and prospect... Architecture outside makes vision the primary condition. Architecture inside whispers of intimacy, of one's closeness to the enclosure it always makes. (Franck, 2007, p.18)*

Aligning to Zumthor and approaching levels of intimacy through considering proximity and distance, specific atmosphere may be generated. This has been identified as one of the necessary aspects to consider within the outcome of a design of a hall of residence due to the variation of spaces with differing functions and requirements for users.



*Image redacted due to copyright*

Figure 3.10- 3.11  
Therme Vals by Peter Zumthor  
(Guerra, 2016)

## Material Compatibility

The condition of material compatibility regards the inclusion and way in which materials are used in relation to the surrounding environment. Peter Zumthor understands materials to continually react with one another, influencing the relationships within a space, and invariably creating an amalgamation of possible atmospheres (Zumthor, 2006). When considering how material compatibility may be used to generate atmosphere, Zumthor states:

*There's a critical proximity between materials, depending on the type of materials and its weight. You can combine different materials in a building, and there's a certain point where you'll find that they're too far away from each other to react, and there's a point when they're too close together, and that kills them. (2006, p.26)*

Here, Zumthor highlights the importance of a materials weight and proximity to other materials as central to generating atmosphere.

Similarly to Zumthor, Bohme regards the generation of atmosphere as dependent on the totality of material compatibility, both functionally and aesthetically, within a space. Bohme suggests that:

*the aesthetic qualities of materials cannot be linked immediately to their objective properties, nor to those established through sensuous-practical dealings. Rather, these qualities consist in their character, that is, in the specific mode in which they are atmospherically experienced or, respectively, contribute to an atmosphere. (Bohme, 2017, p.62)*

Here, the role of material compatibility as belonging to a specific atmosphere becomes evident.

Aligning to Zumthor and approaching material compatibility through considering not only the aesthetics and function of a space or place, but also the proximity and weight of materials, specific atmospheres may be generated. This has been identified as one of the necessary aspects to consider within the process and outcome of a design of a hall of residence due to the inherent visual and tactile effect of materials on experiences of wellbeing.



Figure 3.12- 3.13  
Kolumba Museum by Peter Zumthor  
(Hjortshøj, 2017)



## Conclusion

This chapter has presented a brief summary of the existing literature surrounding atmosphere within architecture. Considerations from theorists and architects such as Gernot Bohme, Julieanna Preston, Mark Wigley, Juhani Pallasmaa and Peter Zumthor signal the relation of both the subject, environment and importance of the sensory. Following Wigley, Pallasmaa and Zumthor, both graphical and physical methods to explore atmosphere have been presented. Specifically, the selected conditions of surrounding objects, levels of intimacy and material compatibility will be used alongside the understanding of wellbeing to develop and evaluate design throughout this thesis.



Figure 3.14  
Kolumba Museum by Peter Zumthor  
(Hjortshøj, 2017)



## Application to Design



Figure 4.0  
Refettorio Felix by Studioilse  
(Mannion, 2017)

Introduction

The intention of this chapter is to present a summary of the practical and theoretical literature surrounding both wellbeing and atmosphere in regard to how they may be appropriately applied to the design of a hall of residence. This chapter was originally in the form of a traditional chapter, however, it evolved to a design guide. The format in this chapter reflects how evidence was used to support design thinking and decisions. In this respect, the chapter is framed as working towards a design guide that is premised on the prior research for design. Specifically, the elements of supporting connection, the senses, surrounding objects, levels of intimacy, and material compatibility will be presented, where elements to consider have derived from key literature explored within the practical and theoretical context. The 'application to design' proposes a framework to establish a platform to develop and evaluate design within both the residential and public scale design of a hall of residence.

	Introduction
<b>Section One</b>	
Wellbeing	Supporting Connection To Oneself To Others To Community To Spaces and Places
	Supporting the Senses Light Colour Acoustics and Aroma Space Tactility Biophilia
<b>Section Two</b>	
Atmosphere	Supporting Surrounding Objects The Bodily Object The inanimate Object
	Supporting Levels of Intimacy Private Space Public Space Transitional Space
	Supporting Material Compatibility Between Materials Of Materials
	Conclusion

Figure 4.1  
Overview of Chapter Structure

Supporting  
Connection

/ To Oneself

- 01

Consider spaces that are adaptable, practical and secure.

(Hope, 2012; CABE, 2008)
- 02

Consider spaces that are able to reflect the full physical, social and psychological diversity of an individual.

(CABE, 2008; Imrie, 2003; Hill, 2006)
- 03

Consider spaces that prioritize privacy where appropriate and balance integration with common space.

(CABE, 2008; Chiusolo, 2015)

/ To Others

- 04

Consider spaces that promote small clusters of inhabitants.

(Hope, 2012)
- 05

Consider proximity, arrangement and circulation of space to promote passive contact through locating social space in relation to amenities and spaces for daily functioning.

(Nahemow & Lawton, 1975; Talen, 2008; Schweitzer, Gilpin & Frampton, 2004)
- 06

Consider space that facilitates diversity and flexibility that is reflective of the inhabitants.

(CABE, 2008; Petermans & Nuyts, 2016)

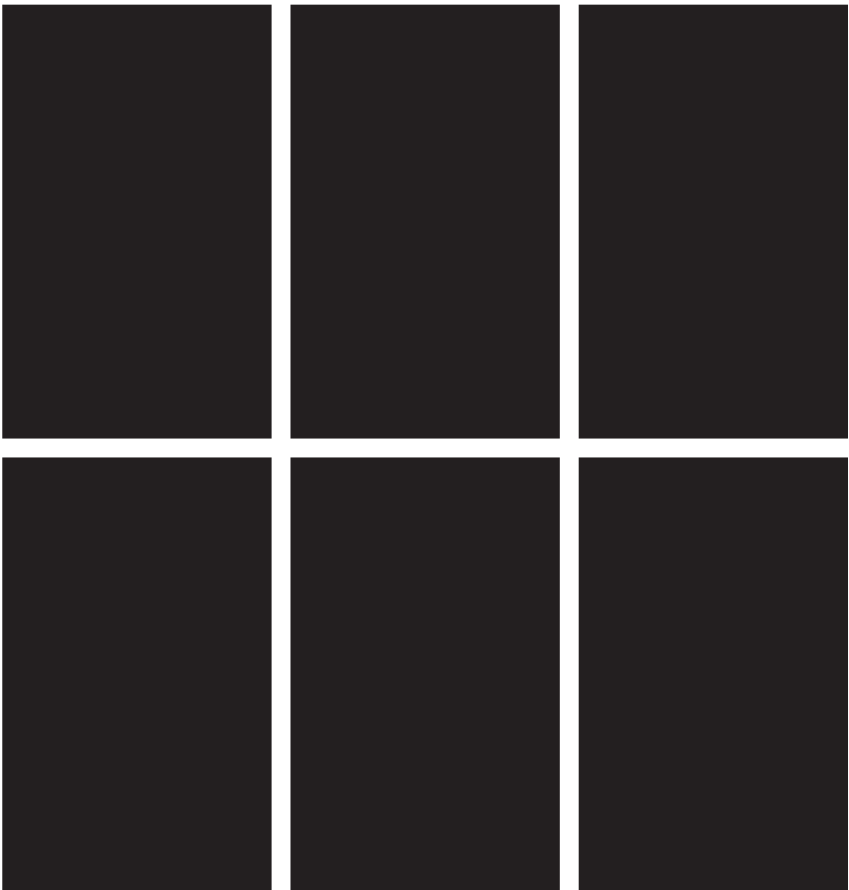


Image redacted due to copyright

Figure 4.2 - 4.7  
Ett Hem Hotel by Studioilse  
(Marding, 2012)



/ To Community

- 07

Consider programme that is reflective and related to the surrounding community.

(Morrow & Ackermann, 2012)
- 08

Consider location of spaces in relation to access and visibility of the surrounding community.

(Schweitzer, Gilphin & Frampton, 2004)
- 09

Consider spaces and circulation that allow residents, staff and others feel accepted, acknowledged and a sense of belonging.

(Garvey, Latapolski, Guyotte & Flint, 2018; Hope, 2012)

/ To Spaces and Places

- 10

Consider spaces and elements that provide and represent a secure base of the residency.

(Hope, 2012)
- 11

Consider spaces that offer unique ambience in relation to their intended function through change in form, size, materiality, and lighting.

(Schweitzer, Gilphin & Frampton, 2004)
- 12

Consider providing a variety of spaces.

(CABE. 2008; Schweitzer, Gilphin & Frampton, 2004)



Figure 4.8- 4.13  
Refettorio Felix by Studioilse  
(Mannion, 2017)

Supporting  
the Senses

/ Light

13  
Consider natural daylighting as the primary  
source of lighting. (Chuisolo, 2015; Gappell,  
1991)

14  
Consider diffuse lighting in spaces where focus  
on the room and occupant is key. (Chuisolo, 2015)

15  
Consider artificial lighting to provide visual  
information about the character and activity of  
a space. (Chuisolo, 2015)

/ Colour

16  
Consider colour choices that are relevant  
to geographical and regional location and  
preferences. (Gappell, 1991)

17  
Consider colour choices that are relevant to the  
size, purpose and users of the space. (Gappell, 1991)

18  
Consider the use of a variety of colours in a  
space to provide interest and stimulation. (Best, 2017)

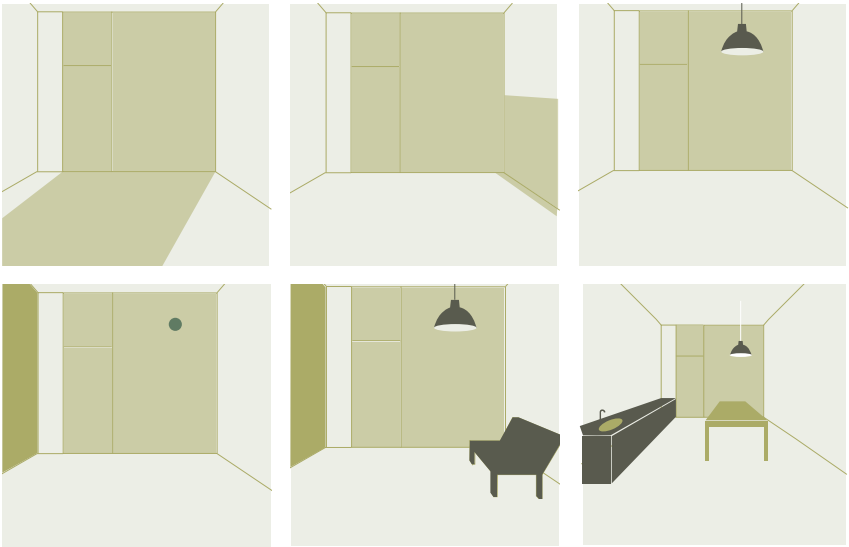


Figure 4.14- 4.19  
Application to Design  
Supporting the Senses



/ Acoustics and  
Aroma

19

Consider minimal transfer of undesirable interior, exterior and mechanical acoustics and aroma through space planning and absorptive materials.

(Davenny, 2007; Gappell, 1995)

20

Consider an infiltration of desirable background acoustics in shared spaces such as music or natural exterior acoustics.

(Fenko & Loock, 2014; Davenny, 2007)

21

Consider establishing a range of desirable aroma's in differing areas through access to fresh air, biophilia or fragrances.

(Chuisolo, 2015; Kobayashi, Kaufman, Griffiths & McConnell, 2007)

## / Space

22

Consider establishing proxemics according to the intended activity of space.

(Hall, 1996)

23

Consider space to support both sociopetal and sociofugal activity as well as providing opportunities and interest on the side of spaces to align to individuals as thigmotactic.

(Sugihito, 2016; Lang & Moleski, 2010; Appleton, 1975; Sussman & Hollander, 2015)

24

Consider an ease of wayfinding through building legibility and signage.

(Wang, 2005)

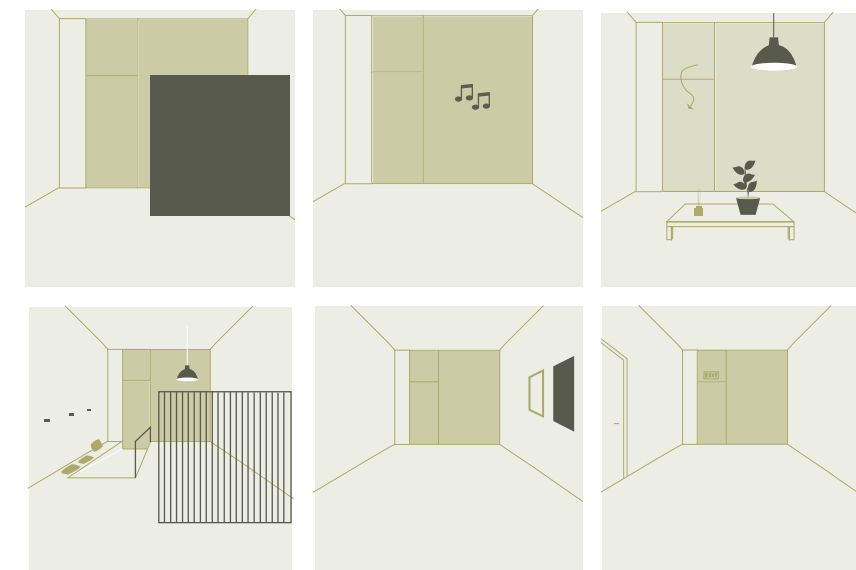


Figure 4.20- 4.25  
Application to Design  
Supporting the Senses

/ Tactility

25

Consider establishing a variety of finishing's within a space through materiality and furnishings to provide interest and comfort.

(Fenko & Loock, 2014; Gappell, 1995)

/ Biophilia

26

Consider providing internal and external connection to biophilia both visually and physically.

(Chuisolo, 2015)

27

Consider establishing connection to the natural environment through the relation of form and/or materiality.

(Joye, 2007)

28

Consider internal biophilia where visual and physical access to external biophilia is restricted.

(Dijkstra, Pieterse & Pruyn, 2008)

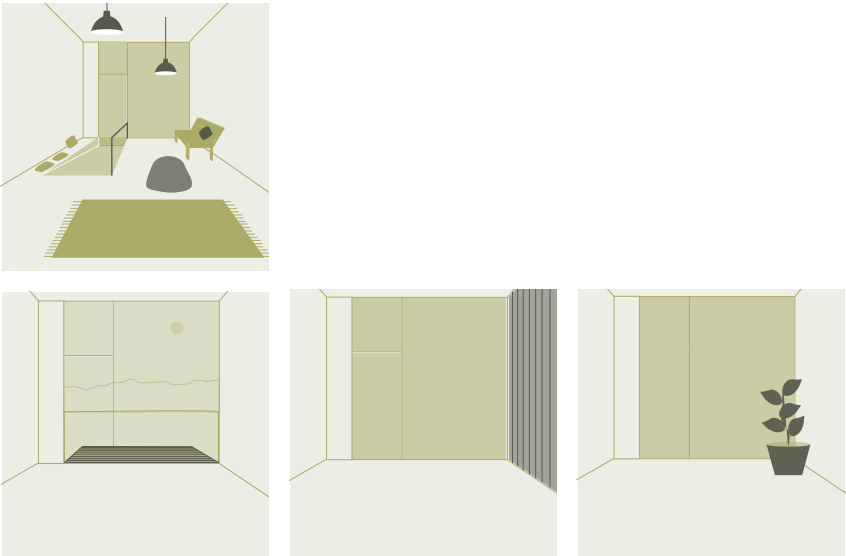


Figure 4.26- 4.29  
Application to Design  
Supporting the Senses

Supporting  
Surrounding Objects

/ The Bodily Object

29

Consider how a space may be responsive to both the physical and mental body.

(Pallasmaa, 1992;  
Chermayeff & Alexander,  
1965)

30

Consider how a space may enhance or restrict personal rhythms and routines of everyday life.

(Pallasmaa, 1992)

31

Consider the spatial hierarchy and dynamics of how bodily objects may inhabit and circulate within a space.

(Pallasmaa, 1992)

/ The Inanimate  
Object

32

Consider how an object may inhabit a space to personify human individuality and relationships.

(Baudrillard, 1996)

33

Consider how to enhance the mobility and multifunctionality of objects to provide an individual control over their relationship between object, space and user.

(CABE, 2008; Baudrillard,  
1996)

34

Consider how architecture may be used to display or hide objects in regard to their respective function, value or ownership.

(Zumthor, 2006;  
Pallasmaa, 1992)



Image redacted due to copyright

Figure 4.30  
Secular Retreat by Peter Zumthor  
(Jim Stephenson Architectural  
Photography & Films, 2019)

Figure 4.31- 4.32  
Secular Retreat by Peter Zumthor  
(Wilton, 2018)

Figure 4.33- 4.35  
Secular Retreat by Peter Zumthor  
(Hobhouse, 2018)



Supporting Levels  
of Intimacy

/ Private Space

- 35

Consider whether the integrity of differing spaces is restored through respecting differing differences in inhabitants age, gender, interests and abilities.

(Chermayeff & Alexander, 1965)
- 36

Consider the scale and proximity provided between the built, object and subject in reference to an individual, or few individuals, in a space.

(Preston, 2008; Zumthor, 2006)
- 37

Consider whether a private space supports connection and concealment.

(Pallasmaa, 1992)
- 38

Consider whether the arrangement of private space follows a sequence of the 'intimacy gradient'.

(Zumthor, 2006; Chermayeff & Alexander, 1965)



Image redacted due to copyright

Figure 4.36- 4.37  
Zumthor House by Peter Zumthor  
(Padgett, 2005)

Figure 4.38- 4.39  
Zumthor House by Peter Zumthor  
(Savorelli, 2005)

/ Transitional Space

39  
Consider whether the integrity of each spaces specific environmental characteristics are preserved by the physical elements that provide separation.

(Chermayeff & Alexander, 1965)

40  
Consider the role of physical, visual, acoustic, and aromatic elements that may regulate control between spaces.

(Baudrillard, 1996)

41  
Consider whether transitional spaces or barriers between spaces are used appropriately to provide proper separation or integration of spaces.

(Chermayeff & Alexander, 1965)

/ Public Space

42  
Consider the relationship between public and private as well as interior as exterior space.

(Scheweitzer, Gilphin & Frampton, 2004)

43  
Consider providing opportunity for voluntary communality rather than inescapable togetherness.

(Chermayeff & Alexander, 1965)

44  
Consider whether the arrangement of public space follows a sequence of the intimacy gradient.

(Zumthor, 2006; Chermayeff & Alexander, 1965)

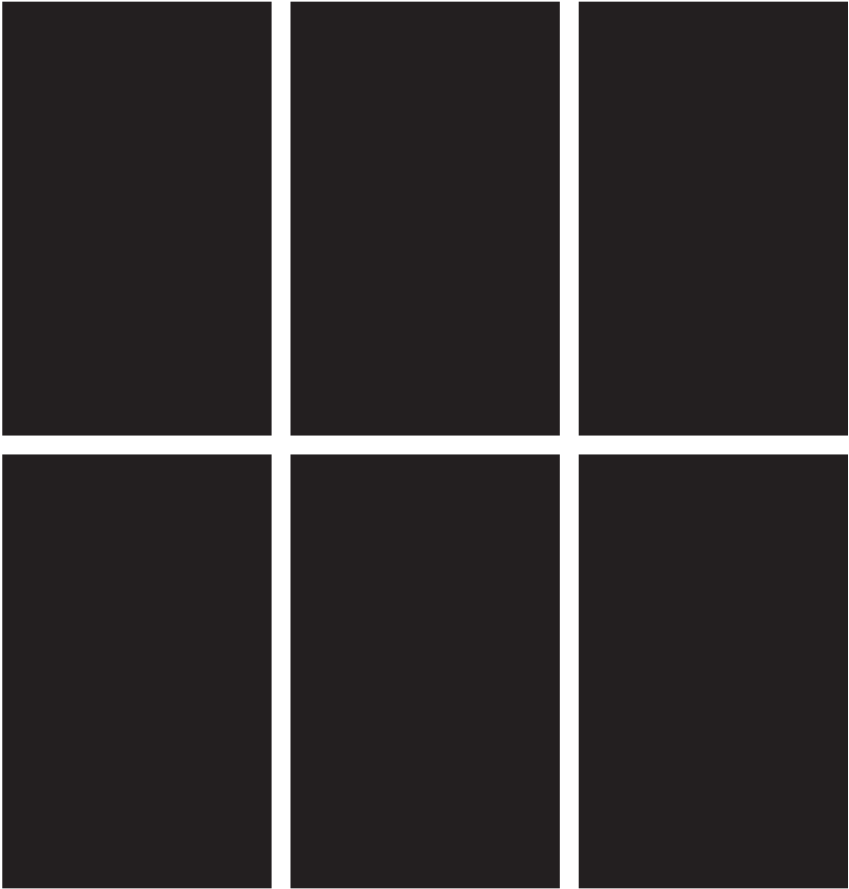


Image redacted due to copyright

Figure 4.40- 4.45  
Zumthor House by Peter Zumthor  
(Open House, 2012)

Supporting  
Material  
Compatibility

/ Between Materials

45

Consider the critical proximity between materials and what reaction it is causing within a space.

(Zumthor, 2006)

46

Consider how a single material may be used within a space with respect to differing finishes, amounts, light and surroundings.

(Preston, 2008; Zumthor, 2006)

47

Consider the scale, composition, rhythm, tone and tangibility of materials.

(Preston, 2008; Zumthor, 2006; Pallasmaa, 1992)

/ Of Materials

48

Consider rationale constructions for the points where surfaces intersect and different materials meet.

(Zumthor, 2006)

49

Consider whether the material of a thing is appropriate to its function or generates meaning.

(Pallasmaa, 1992; Bau-drillard, 1996; (Zumthor, 2006)

50

Consider the sensuous qualities of a material alongside the visual qualities.

(Bohme, 2017; Zumthor, 2006)



Figure 4.46- 4.51  
Leis House by Peter Zumthor  
(Feiner, 2013)



## Conclusion

This chapter has presented a concise summary of the practical and theoretical literature surrounding both wellbeing and atmosphere in regard to how they may be appropriately applied within an architectural context, which has been formatted as a design guide. Considerations from academics surrounding the body of knowledge within supporting connection, the senses, surrounding objects, levels of intimacy and material compatibility have been extracted and combined to develop key points that can be referenced throughout the design process to support wellbeing and atmosphere.



Figure 4.52  
Refettorio Felix by Studioilse  
(Mannion, 2017)



# Case Studies

Figure 5.0  
Student Village by Lenschow & Pihlmann  
(Berndston, 2016)

Introduction

The intention of this chapter is to present an analysis of four case studies that exemplify differing ways wellbeing and atmosphere may be addressed within student halls of residence. Specifically, the conditions of supporting connection, the senses, surrounding objects, levels of intimacy, and material compatibility will be utilised as a platform to evaluate how the design addresses wellbeing and atmosphere in order to improve the community living experience within the selected space. Aligning to the design methodology, the selected case studies increase in scale, allowing understanding to be extracted and applied to both the residential and public scale design throughout the thesis.

	Introduction
Section One	Student Village Lenschow & Pihlmann
	G27 Macro Sea, CIEE
	Student Housing Diagonal-Besos MDBA, POLO Architects
	San Diego Mesa Nueva Mithun
	Conclusion

Figure 5.1  
Overview of Chapter Structure



Student Village

Location  
/ Viby, Denmark

Architect  
/ Lenschow & Pihlmann

Date of Completion  
/ 2016

Function  
/ Student Housing

About

Lenschow and Pihlmann's Student Village establishes a student housing initiative in a rural community removed from the expense and density of large cities. Drawing inspiration from traditional Danish roadside villages to integrate context, community, and housing, Student Village stands as a refurbishment and addition to a 17th century farmhouse, accommodating over 60 residents within a range of single and double apartments, and shared facilities (Castro, 2018). Lenschow and Pihlmann's Student Village expresses, experiments, and provokes conditions of wellbeing and atmosphere through supporting connection, the senses, surrounding objects, levels of intimacy, and material compatibility.

Image redacted due to copyright

Figure 5.2- 5.3  
Student Village by Lenschow & Pihlmann  
(Lenschow & Pihlmann, 2016)

Figure 5.4  
Student Village by Lenschow & Pihlmann  
(Berndtson, 2016)



## Connection

A variation of two apartment typologies provides options for residents to select from, while internal space remains simple and open. This allows opportunity for expression of diversity and self within private space, thus contributing to supporting connection to oneself (CABE, 2008). The arrangement of apartments in small building clusters surrounding a central shared facility for daily functioning acts to promote smaller clusters of community, while enclosing flexible open spaces and pathways to enhance passive contact. Student Village relates to the surrounding space and place physically through mimicking the historical farm layout.

## The Senses

Large floor to ceiling glazing paired with a neutral colour palette provides an infiltration of natural light, supporting a consistent connection to external biophilia, and enhancing physical and psychological comfort (Chuisolo, 2015). Within apartments, social spaces are located centrally to separate differing residents' private spaces, while walling acoustically and aromatically separates differing spaces while access to fresh air provides desirable background acoustics and/or aroma's (Gappell, 1991). The presence of the old and additional buildings within Student Village provide a contrast in visual tactility while a change in interior and exterior materiality stimulates interest and comfort (Fenko & Loock, 2014).



Figure 5.5- 5.6  
Student Village by Lenschow & Pihlmann  
(Berndston, 2016)



- Surrounding Objects** Student Village establishes itself as responsive to a niche group of inhabitants seeking a more rural, intimate and self-reliant form of student housing. Within the building, apartment typologies range between single, double and twin share, becoming responsive to a diversity of differing bodies and rhythms (Imrie, 2003). Neutrality of form and materiality provide a pleasant backdrop for inhabitants to bring their own furniture and belongings to express oneself (Hope, 2012). Although this provides coherency between architecture, body, and object, there is a limited direct relationship between the design and an ability to host personal objects.
- Levels of Intimacy** The arrangement and form of differing buildings within the student community provide and encase interior and exterior pockets as well as meandering walkways for a range of intimacy. The original farmhouse buildings surround a central open landscape, suggesting a space for communality and socializing, while additional accommodation buildings encase smaller pockets of land or face towards neighbouring farms, suggesting space as more intimate and private. Internal spaces indicate a change in intimacy through elongated walling and doorways, while split levels to spaces to sleep adorned with timber signal the most intimate spaces (Chermayeff & Alexander, 1965).
- Material Compatibility** Throughout the student village, a coherency and simplicity of materials is evident. All internal spaces share a similarity in concrete flooring, white walling, and timber finishing's, while subtle changes in scale, tone, and application of timber defines the old from new. Spaces intended to be experienced alone or with few others are adorned with timber, encasing a sense of intimacy, warmth, and comfort (Bohme, 2017). Steel fittings signal vertical movement, while aligning to the original farmhouse material palette. Glimpses of brick and mortar through glazing stimulate visual and tactile interest (Fenko & Loock, 2014).



Figure 5.7- 5.12  
Student Village by Lenschow & Pihlmann  
(Berndston, 2016)



## Summary

Student Village conveys how the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility may stimulate a sense of wellbeing and atmosphere within a removed student accommodation facility. Lenschow and Pihlmann's refurbishment and addition to a 17th century farmhouse and approach towards replicating a Danish roadside village for student accommodation questions what a student accommodation facility should be both physically and socially. Student Village pushes the boundaries, creating an environment that imbues a sense of nature, both in its surroundings and materiality, physically and culturally connects inhabitants to it's past, while providing a simplicity but warmth of apartment typologies, presented as a cohesive community.



Figure 5.13  
Student Village by Lenschow & Pihlmann  
(Berndston, 2016)

G27

Location  
/ Kreuzberg, Berlin,  
Germany

Architect  
/ Macro Sea, CIEE

Date of Completion  
/ 2015

Function  
/ International Student  
Accommodation &  
Education Facility

About

Macro Sea 's G27 is an interdisciplinary space of residential and educational facilities for over 100 international students within Kreuzberg, Berlin (Ainley, 2015). Within G27, Macro Sea reject the standard procedure for student accommodation through humanizing the student housing experience and treating the "resident students as guests rather than wards of an institution... by really caring about and designing great community space" (Belt in Ainley, 2015, para.4). Macro Sea understand that students desire for housing has long developed from the repetitive configurations and mass production of furniture (Macro Sea, 2015). Evidently, G27 supports wellbeing and atmosphere through expressing and provoking conditions of connection, the senses, surrounding objects, levels of intimacy and material compatibility.

Image redacted due to copyright

Figure 5.14- 5.16  
G27 by Macro Sea  
(Macro Sea, 2015)

Figure 5.17  
G27 by Macro Sea  
(Mosier, 2015)

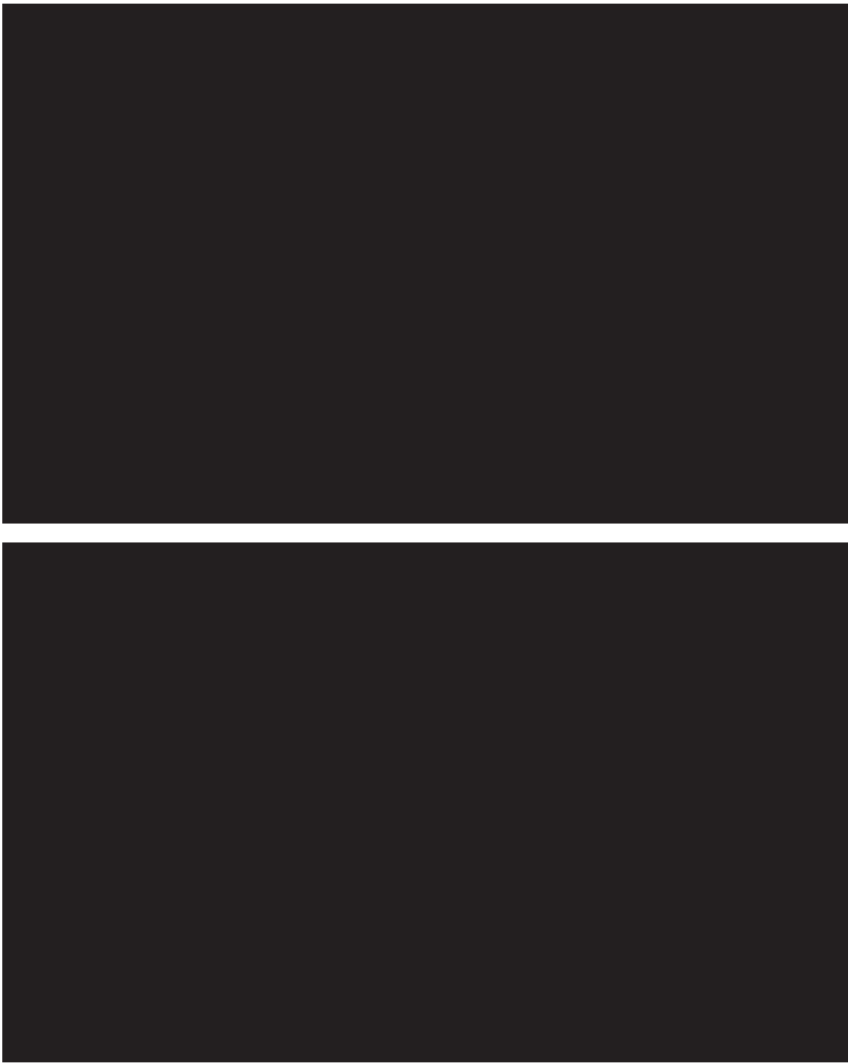


Connection

G27 sympathises with generating a sense of controlled, yet ease, of connection within each defined space. Throughout the building, a variation of large social spaces flow into one another while smaller, more intimate, spaces become happily dispersed throughout more private spaces. Connection between inhabitants in turn becomes influenced by perhaps a common and consistent passing of others within or in sight of social spaces (Waxman, 2017). Additionally, within spaces intended for many, a range of furniture, activities, spaces and atmospheres are present, encouraging comfort within a diversity of inhabitants, and connection to one another.

The Senses

As the composition of G27 supports a sense of connection, a capacity to arouse the senses is also evident. The 'h' shape of the building surrounding two courtyards in addition to almost full wall glazing dispense natural light to the shallow depth of the interior space, while enhancing visual connection to landscape and others. Inlet's of social, educational, and private spaces are subtly defined from one another through a change in wall tones, finishes and artificial lighting, allowing inhabitants to associate colour with different areas of focus or relaxation, prompting positive perception of space and mood (Gappell, 1991). The vertical arrangement of educational and social spaces in relation to private spaces enhances a gradient of acoustic and aromatic differentiation (Davenny, 2007).



*Image redacted due to copyright*

Figure 5.18- 5.19  
G27 by Macro Sea  
(Mosier, 2015)



**Surrounding Objects** G27 pronounces itself as responsive to the unique exchange of bodies and objects that inhabit the space. Within the building, spaces and levels define and delimit differing boundaries for inhabitants according to schedules, as well as staff and lecturers. Simultaneously, the central courtyards provide a visual relationship between spaces intended for differing bodies, retaining a sense of cohesion and entity throughout the building (Pallasmaa, 1992). Spaces to sleep ranging between single, twin share, and quadruple rooms become responsive to differing bodies and rhythms, while bespoke and moveable furniture provides small homes for a variety of objects to be displayed or hidden to suit each inhabitants desires (Baudrillard, 1996).

**Levels of Intimacy** The composition and arrangement of spaces within G27 provokes unique feelings of intimacy within a collection of spaces. Private spaces appear as playful assemblages of vertical and horizontal transition, using split levels, corners and separated entry points as devices to separate sleeping spaces, ingraining a sense of connected enclosure and intimacy (Preston, 2008; Zumthor, 2006). Similarly, larger social spaces utilise walling and a change in furniture to signal a change in pace in movement and tone, while retaining a sense of openness and connection to external environment, providing opportunity for integration and communality (Chermayeff & Alexander, 1965). A change in intimacy between interior and exterior is regulated through wall thickness and materiality.

**Material Compatibility** G27 utilises a variety of materials according to the intended function of a space. The exterior of the building retains its original brick facade, visually restoring a connection to the past. This then contrasts to the interior of a variation in scale, composition, tones and finishings of concrete and plaster. A consistency in concrete flooring synthesises the building, while subtle change in walling tones indicate spaces of pause and rest, or indicate a change in activity (Preston, 2008).

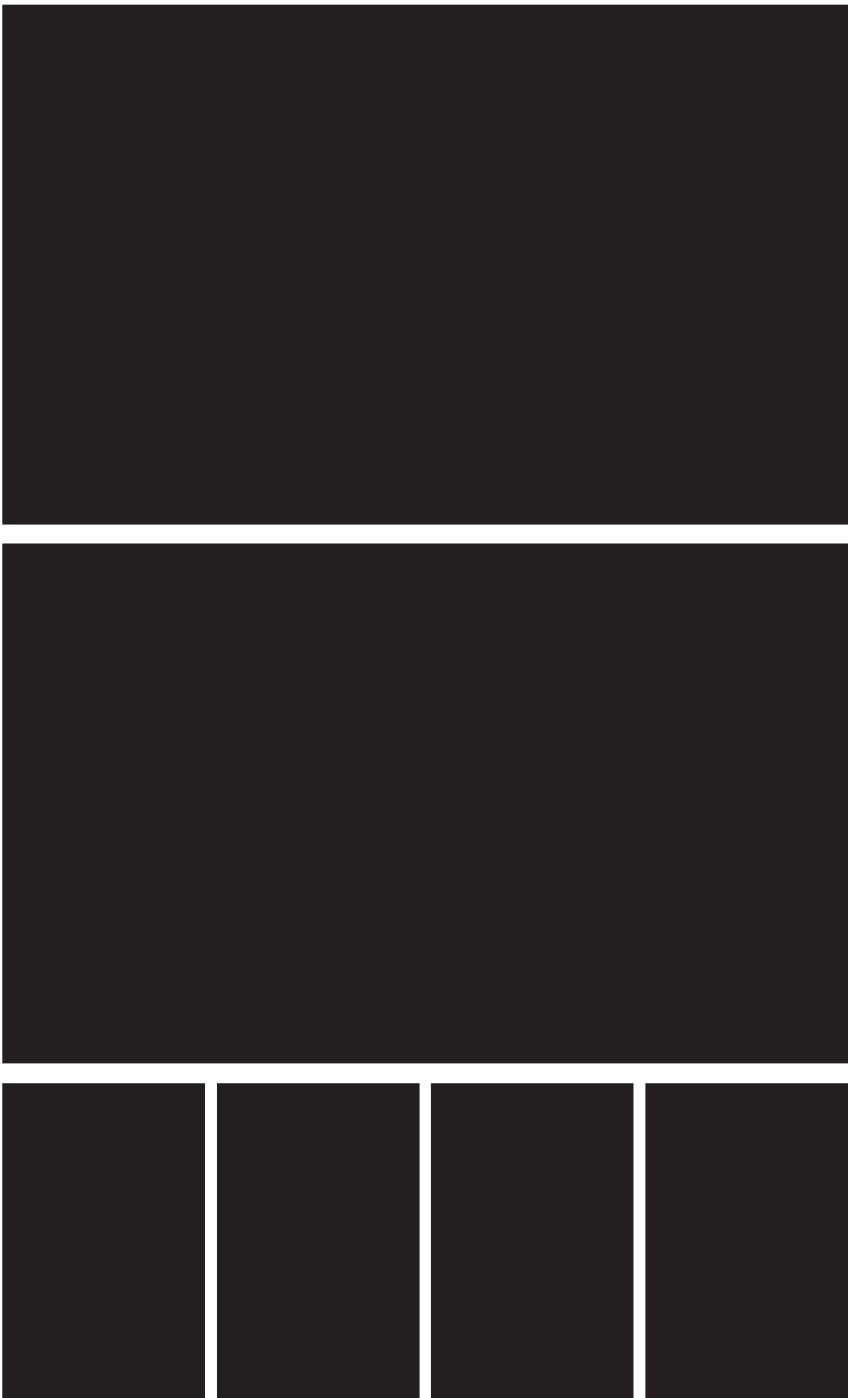


Image redacted due to copyright

Figure 5.20- 5.25  
G27 by Macro Sea  
(Mosier, 2015)

Summary

G27 conveys how the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility evoke a sense of wellbeing and atmosphere within a student accommodation facility. Macro Sea's consideration for these elements as an entwined entity to "treating the increasingly sophisticated and mobile student population as traveler's seeking authenticity" embeds the building with a sense of presence and coherency (Ainley, 2015, para.2). The role of arrangement and composition of spaces, enhanced through materiality and openings, allows spaces to become unique, diverse and personal environments for inhabitants to align with, engaging with the specific needs and desires of its inhabitants as students living abroad.



*Image redacted due to copyright*

Figure 5.26  
G27 by Macro Sea  
(Mosier, 2015)

**Student Housing**  
**Diagonal-Besos**

**Location**  
/ San Adrian Del Besos,  
Spain

**Architect**  
/ MDBA, POLO Architects

**Date of Completion**  
/ 2019

**Function**  
/ Student Housing

**About**

MDBA and POLO Architect's Student Housing Diagonal-Besos is an interdisciplinary space of residential and community facilities for over 200 inhabitants including students, guest professors and researchers within San Adrian Del Besos, Barcelona (Ott, 2019). Within Student Housing Diagonal-Besos, the architect's symbolise what the university desires to be - "a harvest of knowledge and the exchange of ideas, education and research for students, professors, and researchers, in a contemporary, open and pleasant environment, looking towards a promising and sustainable future" (Ott, 2019, para.1). Evidently, Student Housing Diagonal-Besos appears to support wellbeing and atmosphere through aligning to conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility.

*Image redacted due to copyright*

Figure 5.27 - 5.29  
Diagonal-Besos by MDBA &  
POLO Architects  
(MDBA & POLO Architects,  
2019)

Figure 5.30  
Diagonal-Besos by MDBA &  
POLO Architects  
(Amoretti, 2019)





## Connection

Student Housing Diagonal-Besos generates a boldness and consistency of connection with oneself, others and place. The form of the building surrounding a central courtyard, lined with horizontal circulation allows inhabitants to continually be visually connected to others both vertically and horizontally, while a void of space between allows inhabitants choice in approach. Within Student Housing Diagonal-Besos, social spaces are located primarily on the ground level adjacent to amenities for daily functioning, while outdoor social spaces are distributed on upper levels. This provides residents with direction to all levels and sides of the building, increasing passive connection with a variety of inhabitants (Talen, 2008; Schweitzer, Gilpin & Frampton, 2004).

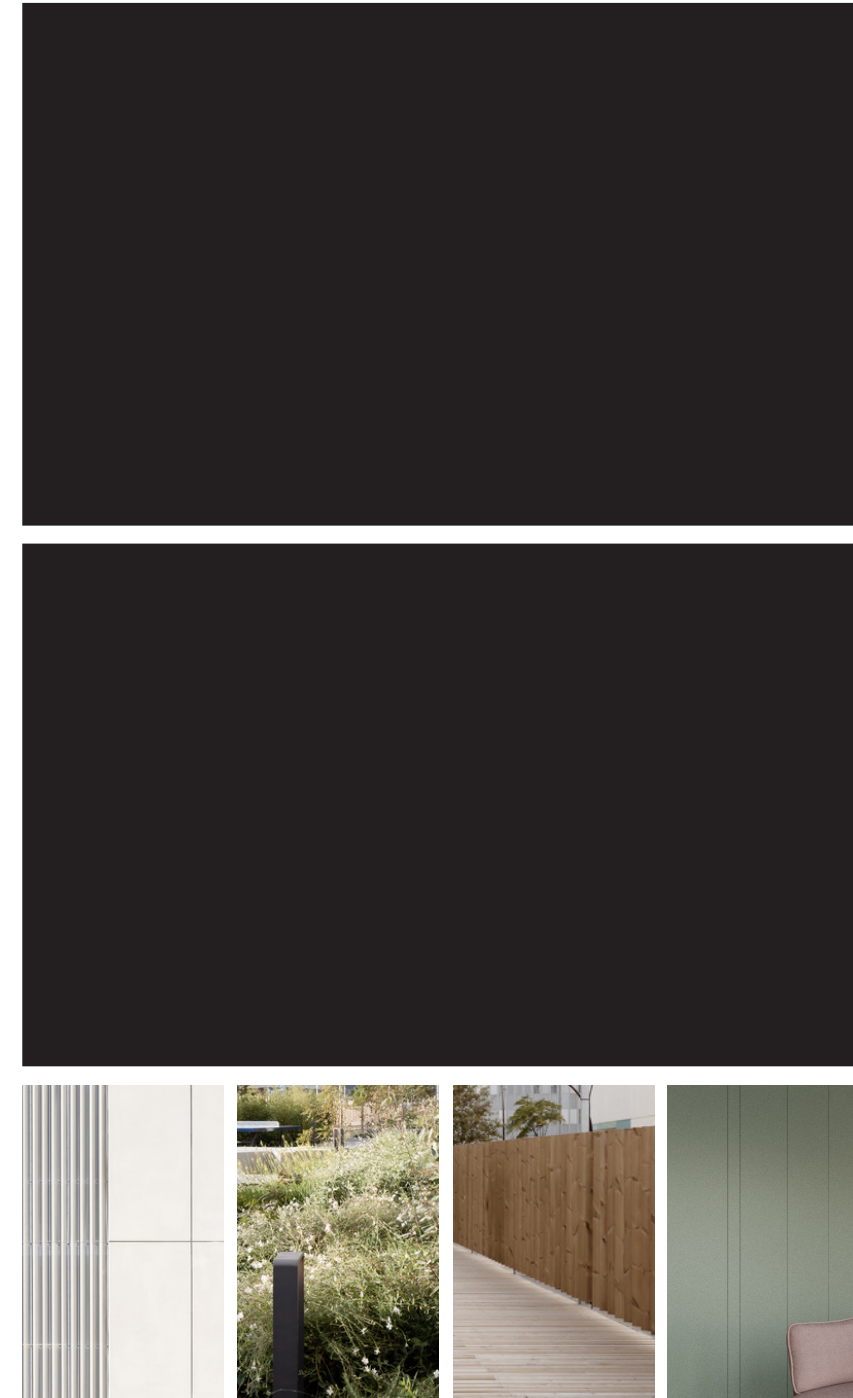
## The Senses

In addition to the form of the building supporting connection, an ability to stimulate the senses is also evident. All private and social spaces harbour visual connection to both the surrounding exterior environment and the internal courtyard, aligned with floor to ceiling glazing to allow natural light to infiltrate the depths of all spaces. Access to opening windows within these spaces stimulates and eases acoustic and aromatic sensations, while clustering of apartments typologies by inhabitant numbers mitigates and regulates acoustic comfort (Fenko & Looock, 201; Chuisolo, 2015). Diversity of internal surfaces and fittings appear minimal and neutral, creating cohesion, however, contributing to a lack of stimulation and interest if not appropriately furnished (Fenko & Looock, 2014).



Figure 5.31- 5.32  
Diagonal-Besos by MDBA & POLO Architects  
(Amoretti, 2019)

- Surrounding Objects** Student Housing Diagonal-Besos harbors a simplicity in form and open plan arrangement that supports a variety of objects and subjects to inhabit. Private space retains an open and orthogonal form throughout the single, twin share and double typologies, allowing a variety of inhabitants to both access and arrange space as desired (Pallasmaa, 1992). Fittings provide a variety of small caverns for personal objects to inhabit, while a lightness in furniture encourages ease of moveability, and vast walling suggests an ability to personalise space. However, the use of coloured fittings and furniture may act to restrict self-expression and comfort (CABE, 2008).
- Levels of Intimacy** The composition and arrangement of spaces within Student Housing Diagonal-Besos encourage differing levels of intimacy, while retaining connection to surrounding spaces. Within apartment typologies, the integration of internal bathrooms with loft space above facilitates a gradient of intimacy from the entry and kitchen/dining space as social, towards private lounge/study space, while vertical differentiation indicates a cavernous and intimate sleeping space (Chermayeff & Alexander, 1965). Social spaces throughout the building become separated and defined from private spaces through the void of the central courtyard providing a visual and spatial barrier regulating an intimacy gradient (Chermayeff & Alexander, 1965).
- Material Compatibility** Student Housing Diagonal-Besos utilizes a minimal palette of materials imbuing a coherency throughout the building. Vast amounts of concrete overwhelm the building, while variations on scale and composition of material on external facades provide variation and rhythm (Preston, 2008; Zumthor, 2006). A contrast between concrete and timber flooring indicates the use of space for pause and rest (Zumthor, 2006).



*Image redacted due to copyright*

Figure 5.33- 3.34  
Diagonal-Besos by  
MDBA & POLO Architects  
(De Schepper, n.d.)

Figure 5.35- 3.38  
Diagonal-Besos by  
MDBA & POLO Architects  
(Amoretti, 2019)

## Summary

Student Housing Diagonal-Besos depicts how the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility may engulf a sense of wellbeing and atmosphere within a student, professor and researcher's accommodation facility. Following the initial drive of the building to serve as a 'social centre' of the university's campus, MDBA and POLO Architects focus attention to the communal facilities supporting a diversity of inhabitants, consequently, supporting connection to oneself, others and the surrounding environment. Additionally, the focal open courtyard proves central to supporting wellbeing and atmosphere through regulating connection and intimacy, providing thresholds between differing spaces and breaking up a large building to differing forms.



Figure 5.39  
Diagonal-Besos by MDBA & POLO Architects  
(Amoretti, 2019)



**UC San Diego**  
**Mesa Nueva**

**Location**  
/ San Diego, California,  
United States of America

**Architect**  
/ Mithun

**Date of Completion**  
/ 2016

**Function**  
/ Student Housing

**About**

Mithun's UC San Diego Mesa Nueva is an urban community of residential accommodation for graduate and doctorate students in San Diego, California (Clark, 2017). Within UC San Diego Mesa Nueva, Mithun address the demand for an increase of affordable, diverse, innovative and sustainable student accommodation. Specifically seeking to foster community while promoting longevity and performance through passive design, renewable energy, integration of the natural environment and master planning (Mithun, 2016). Successively, UC San Diego Mesa Nueva supports wellbeing and atmosphere through addressing the conditions of connection, the senses, surrounding objects, levels of intimacy and material compatibility.

*Image redacted due to copyright*

Figure 5.40  
Mesa Nueva by Mithun  
(Damonte, 2016)

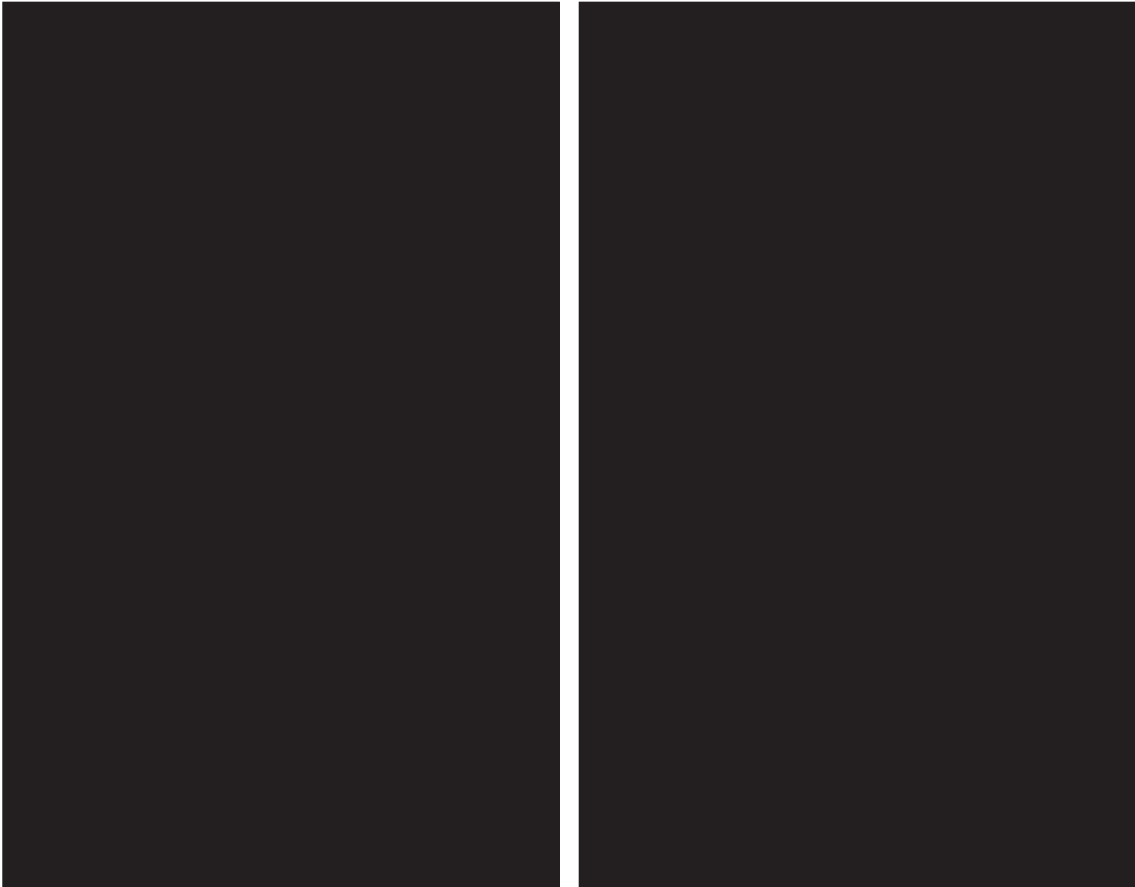


Connection

UC San Diego Mesa Nueva enhances a sense of connection of inhabitants to the surrounding environment and consequently inhabitants. Through focusing on "increasing housing density in a respectful way that connects to the larger landscape and community", Mithun provide a vast amount and variety of integrated landscape for inhabitants to dwell according to their desires (Mithun, 2016). Throughout the six main buildings, social spaces are arranged in proximity to views of the surrounding natural environment as well as amenities to promote social connection aligned to daily functioning, while fittings and furniture of slight variation encourage comfort for a larger diversity of inhabitants (Talen, 2008; Schweitzer, Gilpin & Frampton, 2004).

The Senses

In addition to focussing on housing density with respect to the landscape to stimulate connection, an ability to arouse the sense is also evident. Apartment typologies within the buildings gain visual connection to the surrounding foliage and natural environment. Light becomes infiltrated into social spaces through large floor to ceiling glazing, promoting social spaces as desirable, while artificial lighting is used to highlight the function or intimacy of a space (Chuisolo, 2015). The open play layout of apartment typologies lacks an appropriate differentiation of social and private zones, creating an infiltration of potentially undesirable acoustics and aromas throughout (Davenny, 2007). Subsequently, fittings and furniture within apartment typologies greatly range in tone and materiality, perhaps overwhelming the visual and tactile senses of inhabitants (CABE, 2008).



*Image redacted due to copyright*

Figure 5.41- 5.42  
Mesa Nueva by Mithun  
(Damonte, 2016)

Surrounding Objects	UC San Diego Mesa Nueva evidently pronounces itself responsive to the exchange of differing bodies that inhabit the space. Through Mithun providing an accommodation facility specifically for graduate and doctorate students at the university, apartment typologies become self-contained spaces with kitchen, dining, living, sleeping and bathing spaces to suit the inhabitants as self-sufficient (Mithun, 2016). Social spaces within apartment typologies retains a simple, orthogonal form, and while fittings provide apt spaces for objects to dwell and hide, both the fittings and furniture provided appear rigid, restricting unique rhythms and responses to space (CABE, 2008).
Levels of Intimacy	The composition and arrangement of spaces with UC San Diego Mesa Nueva shelter and encase a variety of interior and exterior pockets of land, while lining prominent walkways. Large open walkways between buildings and the exterior of the site signal spaces of transition from exterior to interior, while open pockets of land distanced from the buildings suggest an intimacy with the surrounding environment of others in company (Chermayeff & Alexander, 1965). Internal social spaces appear open and light, utilising fittings and furniture to navigate differing levels of intimacy. The colour red on surfaces also appears to signal social spaces, providing inhabitants with a visual representation of the intimacy of a space (Schweitzer, Gilpin & Frampton, 2004).
Material Compatibility	Throughout UC San Diego Mesa Nueva, a wide variety of materials is evident. Exterior facades are covered predominantly white, with segments of red to highlight spaces of movement or entry. Interior spaces share a similarity in concrete flooring, while private spaces are adorned with carpet to indicate a change in pace. Perforated steel panels, timber, concrete, and colour are used throughout the buildings stimulating visual and tactile interest, perhaps overwhelmingly though (Zumthor, 2006).

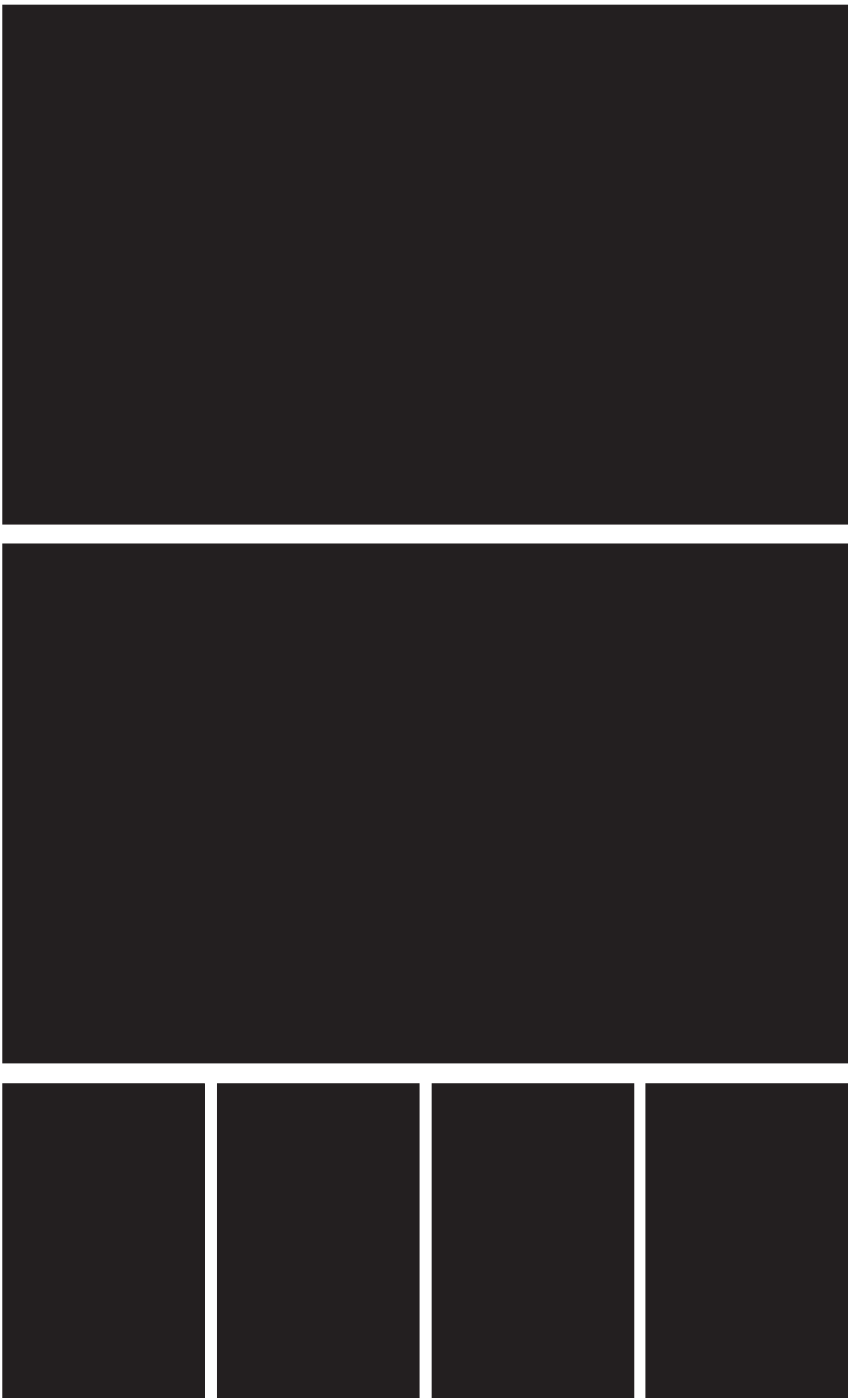


Image redacted due to copyright

Figure 5.43- 5.48  
Mesa Nueva by Mithun  
(Damonte, 2016)



Summary

UC San Diego Mesa Nueva conveys how the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility may support a sense of wellbeing and atmosphere within a graduate and doctorate accommodation facility. Mithun's approach to respond to an connect the larger landscape and community questions the role of sustainable campus development and sets a benchmark for integrating and considering site. UC San Diego Mesa Nueva creates an environment greatly considers future sustainability and development through its master planning and landscape, connects inhabitants to the natural environment and community, while providing a repetition of apartment typologies.



*Image redacted due to copyright*

Figure 5.49  
Mesa Nueva by Mithun  
(Damonte, 2016)

Conclusion

This chapter has presented a summary of the analysis of four case studies of student accommodation facilities that vary in location, scale, and approach to supporting how a sense of wellbeing and atmosphere may be provoked. Using the guides from the 'application to design' as a tool to assess each case study, new understandings and methods to supporting connection, the senses, surrounding objects, levels of intimacy, and material compatibility become apparent. Effective elements may be drawn and developed upon, while less effective elements may be learnt from.

Understandings from these case studies, alongside the prior practical and theoretical literature, inform design methods, decisions, and outcomes within the residential and public scale.



*Image redacted due to copyright*

Figure 5.50  
G27 by Macro Sea  
(Mosier, 2015)





06

Six

## Student Accommodation & Site

Figure 6.0  
Wellington  
View from Site



Introduction

The intention of this chapter is to present the context surrounding student accommodation within Wellington, New Zealand, as well as the selected site to develop design upon within the residential and public scale. The first section of the chapter presents the role of student accommodation both overall and specific to Wellington. The second section of the chapter presents the site that the residential and public scale will be developed upon, specifically presenting the ecological registers of the environment and social relations. This follows Felix Guatarri's understanding of the registers as "interrelated process-assemblies, their production mechanisms characterized by fluctuations accelerating or deferring development" to later inform how architecture may be situated and defined (Guatarri, cited in Angelil, 2003, p.365).

	Introduction
Section One	Student Accommodation
	Student Accommodation Overview
	Student Accomodation in New Zealand
	Student Accommodation Typologies
Section Two	Site
	Site Ecologies
	Site Conditions
	Conclusion

Figure 6.1  
Overview of Chapter Structure

## Student Accommodation Overview

Student accommodation, or a hall of residence, is an accommodation facility most commonly established on or near the campus for students entering their first year of a university (Wallace, 2015). A hall of residence will customarily provide sleeping, eating and social facilities necessary to support students, however, specific settings, characteristics and cultures vary from hall to hall.

For many universities, staying at a hall of residence is optional, but often provides the most desirable accommodation due to the opportunity for social connection it offers (Frascaroli, Blanco & Gozzoli, 2014). Many universities encourage first-year students to stay within a hall of residence, highlighting it as a safe, supportive and social student experience (Victoria University of Wellington, 2020).

Research identifies both practical and social purposes as a reason for how and why student accommodation exists and continue to function. Frascaroli, Blanco and Gozzoli suggest:

*Students experience the life in college, dormitories and halls of residence during a significant evolutionary phase, that also corresponds to the period in which they either get trained in order to enter the working environment or are near to deal with this important transition. (2014, p.1197)*

Highlighting the transition from family to self, Frascaroli, Blanco and Gozzoli suggest that students entering their first year of university choose to stay within a hall of residence to support this transition. AnFocal (2018) suggests that providing catering and cleaning, physical security as well as educational and social support contribute to an ease of transition. Additional to practical purposes, Arboleda, Wang, Shelley and Whalen suggest that "Those who live on campus have a natural advantage over commuter students in developing an attachment to and involvement in undergraduate life" (2003, p.517). AnFocal (2018) suggest that these include the immense opportunity for social connection through being in consistent close proximity to up to hundreds of other first-year students. Amongst these residents, individuals all share the common intention of adapting to university and residency, therefore are more likely to connect. Halls of residence will place residents in proximity to the university and city or town centre, supporting connection with place and amenities.

Through understanding the role of a hall of residence as student accommodation offering both practical and social benefits for first-year university students, the motives and expectations for users becomes apparent, as well as the role of architecture to become receptive of these.



Figure 6.2 - 6.3  
Te Puni Village by Architectus  
(McCredie, 2009)



**Student  
Accommodation  
in New Zealand**

For many generations attending a hall of residence in an individual's first year of university is common within New Zealand. The majority of universities and tertiary institutions within New Zealand provide halls of residence either on, or close to, the university. The range of halls of residence provide either catered or un-catered service, private or shared sleeping facilities, as well as communal lounges, dining, and laundry.

However, the reputation of halls of residence within New Zealand tends to be negatively focused. The media within New Zealand is commonly filled with the cost to stay at a hall of residence or lack of pay for residential advisors (Hosking, 2019; Moratti, 2018), the culture of alcohol consumption and damage within and to halls of residence (Neilson, 2019; Kang, 2015), the lack of psychological support (Shaw, 2018; Lin 2018), sexual assault (Otago Daily Times, 2019; 2017), and regrettably suicide attempts and deaths (Neilson, 2019; O'Hagan Brebner, 2019; New Zealand Herald, 2016). The culmination of these factors contributes to current and expected major shifts within halls of residence within New Zealand.

These are identified as both an upcoming shift in demographics of residents, as well as the need for halls of residence to better support resident wellbeing. There has been a recent increase in halls of residence fee's, whereby within one year fees have been set to increase by 50-80% while student allowance is falling short on living costs (Powell, 2019). Residents must either be fortunate enough to be reliant on family wealth or must increase their hours of employment immensely while continuing with educational priorities (Hunt, 2019). Thus, halls of residence are likely to experience a shift in both demographics and culture, becoming accommodation "introducing a class system" (Hunt, 2019). There is also a magnitude of issues related to mental health occurring in halls of residence, whereby the need for the university to support wellbeing more appropriately has become a major focus, exposed following student campaigns. Initiatives towards improved pastoral care and facilities both within halls of residences and universities are high (Potter, 2018; Smith, 2018). Halls of residence are experiencing a shift in opportunity for change in the way in they are designed, facilitated and governed.

The existing issues within halls of residences and way in which they may influence upcoming shifts have been highlighted to understand the potential change in both demographics and functioning of residents, as well as the unarguable need for change. This becomes relevant to influencing design to accommodate change.



Figure 6.4- 6.5  
The Wait is Over Campaign  
(Sian Moffitt Photography, 2018)



Student  
Accommodation  
Typologies

Throughout New Zealand student accommodation for first year university students are typically defined as either 'corridor style' or 'flat style' accommodation. There is no evidence that one is that one is more desirable than the other, however, each harbours unique advantages and disadvantages in response to scale.

Corridor Style Accommodation

Corridor style accommodation typically occurs in large, high rise buildings intended to accommodate hundreds of students; these are often hosted in repurposed office buildings. Due to the immense quantity of residents, corridor style accommodation is commonly catered, and hosts a diversity of social spaces. Most often identical bedrooms are arranged along a corridor, with communal bathrooms often in clusters on each floor or area (Victoria University of Wellington, 2021).

Flat Style Accommodation

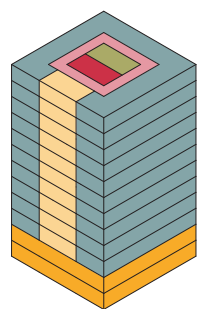
Flat style accommodation typically occurs in small, multi-level buildings intended to accommodate tens of students; these are often hosted in repurposed residential stand-alone houses. Due to the minimal quantity of residents, flat style accommodation is commonly self-catered, and hosts only the variety of social spaces one would expect in a typical family household. A variation of bedrooms and amount are customarily arranged in clusters alongside other household spaces (Victoria University of Wellington, 2021).

The following page depicts diagrams of these typologies,exemplifying through massing how spaces may be composed and relate.

Corridor Style (Catered)		Flat Style (Self-catered)	
Residents (All Shared)	Main Entrance	Residents (All Shared)	Main Entrance
	Reception		Lounge
	Lounge		Dining
	Dining & Servery Space		Kitchen
	Study Spaces		Outdoor Spaces
	Exercise Spaces		Bathrooms (toilet, sink, shower & laundry)
	Outdoor Spaces		Vehicle Access
	Laundry		
	Bathrooms (toilets & sinks)		
Residents (Floor Shared)	Resident Private Bedrooms	Residents (Private)	Resident Private Bedrooms
	RA Private Bedroom		
	Bathrooms (toilet, sink & shower)		
	Common Room (Lounge, kitchen, dining, study)		
Staff	Reception & Offices	Staff	Offsite Reception & Offices
	Kitchen		
	Bathrooms (toilets & sinks)		
	Cleaning/Security storage facilities		
	Vehicle Access		

Figure 6.6  
Corridor and Flat Style Halls of  
Residence in Wellington Typical  
Programme

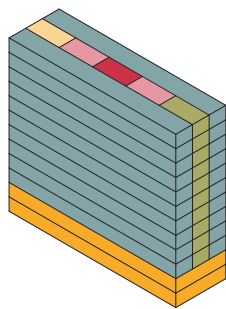
Circulate (vertical) - ■  
Circulate (horizontal) - ■  
Socialise (all shared) - ■  
Socialise (area shared) - ■  
Bathe - ■  
Sleep - ■



Central Core with surrounding Facilities

Vertical circulation, services and bathrooms arranged within a central core surrounded by horizontal circulation to corridor bedrooms. Social spaces associated to lower floor/s.

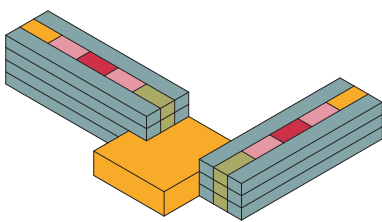
- + Effective in refurbished office buildings
- + Focus on external views and daylighting
- / Social clusters according to floor
- Repitition of space
- Minimal exterior space



Central Core with adjacent Facilities

Vertical circulation surrounded by parallel horizontal circulation to corridor bedrooms and disperesd services and bathrooms. Social spaces associated to lower floor/s.

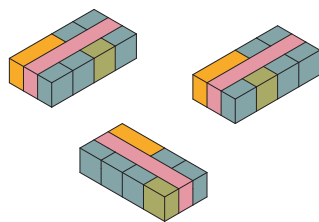
- + Effective in refurbished office buildings
- + Focus on external views and daylighting
- / Social clusters according to floor
- Repitition of space
- Minimal exterior space



Dispersed Core and Facilities

Vertical circulation cores surrounded by circulation to corridor bedrooms, services and bathrooms are dispersed throughout singular/multiple buildings. Social spaces dispersed.

- + Often more diversity of space & bedrooms
- + Focus on daylighting
- / Social clusters according to floor/space
- Minimal overlap of residents in different spaces



Dispersed Typologies

Horizontal and/or vertical circulation arranged around dispersed services, bathrooms and bedrooms. Often sepearate but close to other dispersed typologies.

- + Effective in refurbished residential housing
- + Focus on exterior space and daylighting
- / Social clusters according to 'house'
- / Diversity of spaces, sizes & finishings
- Heavily reduced number of residents

From left to right

Figure 6.7- 6.9  
Corridor Style Accommodation  
Examples

Figure 6.10  
Flat Style Accommodation  
Example

01 Uni Lodge- Stafford 301 residents Self catered 2-3 bedroom apartments 13 storey refurbished office building Central Core with surrounding facilites	08 Capital Hall 320 residents Catered Single bedrooms 12 storey refurbished office building Central Core with surrounding facilities
02 Joan Stevens 242 residents Catered Single bedrooms 11 storey refurbished office building Central Core with surrounding facilities	09 Victoria House 184 residents Catered Single and twin-share bedrooms 3 storey purpose built hall of residence Dispersed core and facilities
03 Weir House 309 residents Catered Single, twin-share and set bedrooms 4 storey purpose built hall of residence Dispersed core and facilities	10 Willis St- Education 108 residents Self catered Single apartments 7 storey refurbished office building Central Core with surrounding facilities
04 Everton Hall 199 residents Self catered 5 person apartments 3 storey purpose built hall of residence Dispersed core and facilities	11 Te Puni Village 398 residents Catered Single bedrooms & 1-3 person apartments 4-11 storey purpose built hall of residence Dispersed core and facilities
05 Katharine Jermyn Hall 390 residents Catered Single bedrooms 14 storey refurbished office building Central Core with surrounding facilities	12 Willis St- Cumberland 227 residents Catered Single bedrooms & 1-2 person apartments 11 storey refurbished office building Central Core with adjacent facilities
06 Helen Lowry Hall 130 residents Catered Single & twin-share bedrooms 1 storey purpose built & refurbished houses Dispersed typologies	13 Uni Hall- Te Kotahinga 246 residents Self catered 3-10 person house 1-2 storey refurbished houses Dispersed typologies
07 Boulcott Hall 180 residents Catered Single bedrooms 14 level refurbished office building Central Core with surrounding facilities	14 Uni Hall- Whanau 14 residents Self catered 4-5 person house 1-2 storey refurbished houses Dispersed typologies



Figure 6.11  
Location of Halls of  
Residence in Wellington  
1 : 20,000





Figure 6.12-6.25  
Halls of Residence Facades in Wellington

SITE



Ghuznee Street

Cuba Street

N

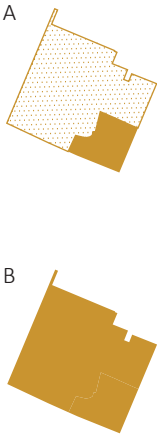


Site

The selected site to develop both residential and public scale design upon is located at 302-320 The Terrace, Te Aro. The site comprises of two adjacent sections, where the smaller section (A) of approximately 1400m<sup>2</sup> will set the boundaries for the residential scale design, while both the sites (B), totaling approximately 8000m<sup>2</sup>, will be used to develop public scale design upon. This site has been selected due to its appropriate physical and social connection to Victoria University of Wellington.

The site is approximately 9000m<sup>2</sup> and is located within an inner residential area between Wellington's Central Area and an Institutional Precinct. It is located closely to State Highway 1, and is connected to the wider city through surrounding pedestrian, cyclist, and bus routes. The site is located upon steep terrain and is surrounded by a range of urban green space due to its close proximity to the original town belt. It is also closely located to many social and cultural spaces of interest to first-year students.

The site has recently been purchased by Victoria University of Wellington with the intention of it becoming the "University's front door to the city and provide a safe and attractive public pedestrian link between Kelburn Campus and Ghuznee Street" (Victoria University of Wellington, n.d, para.1).However, given the current housing shortage in Wellington there is pressure for the university to provide more affordable accommodation for its students (Fitzsimons in George, 2020).



Boundary of Site - ■

Previous Page  
Figure 6.26  
Site Location  
(Google Earth Pro, 2021)

Figure 6.27  
Site Location  
1 : 40,000

Figure 6.28  
Site Location  
1 : 6000





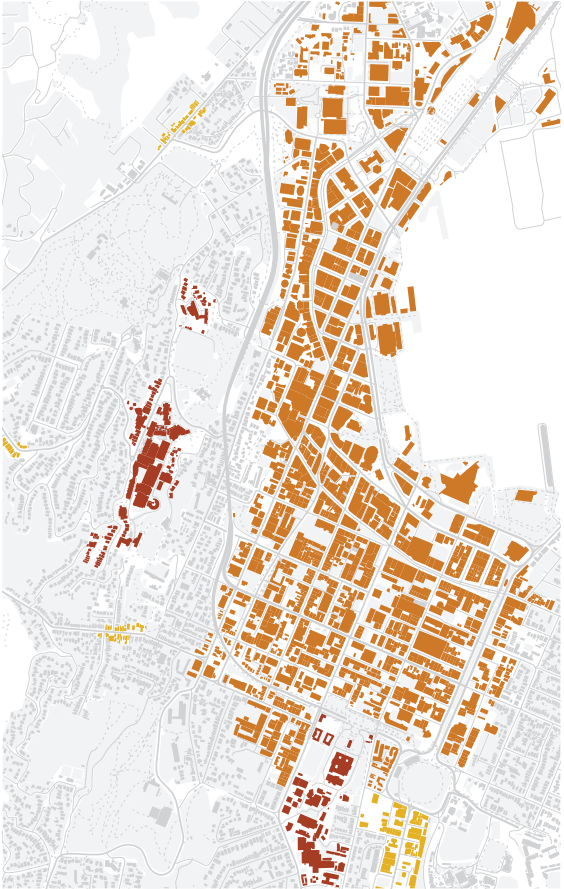
Site Ecologies

/ Built

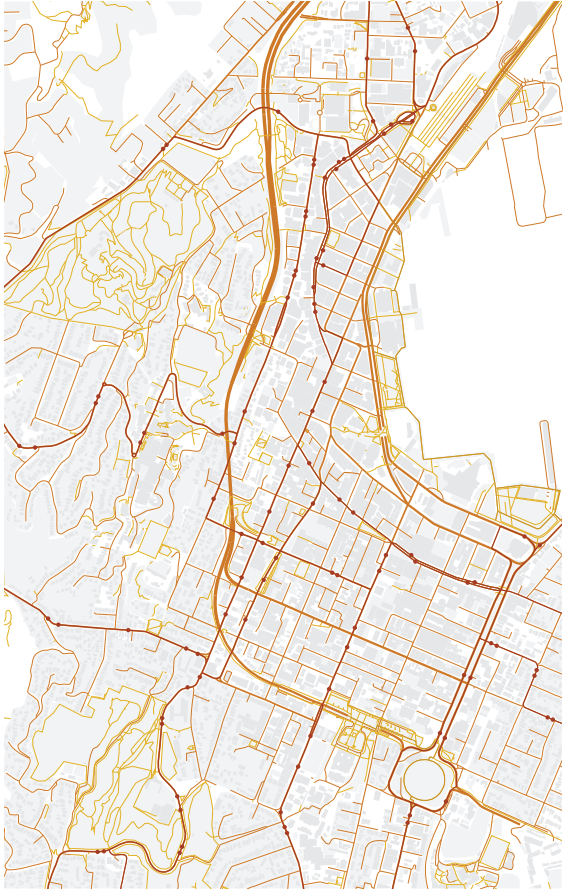
/ Infrastructure

/ Natural

/ Social



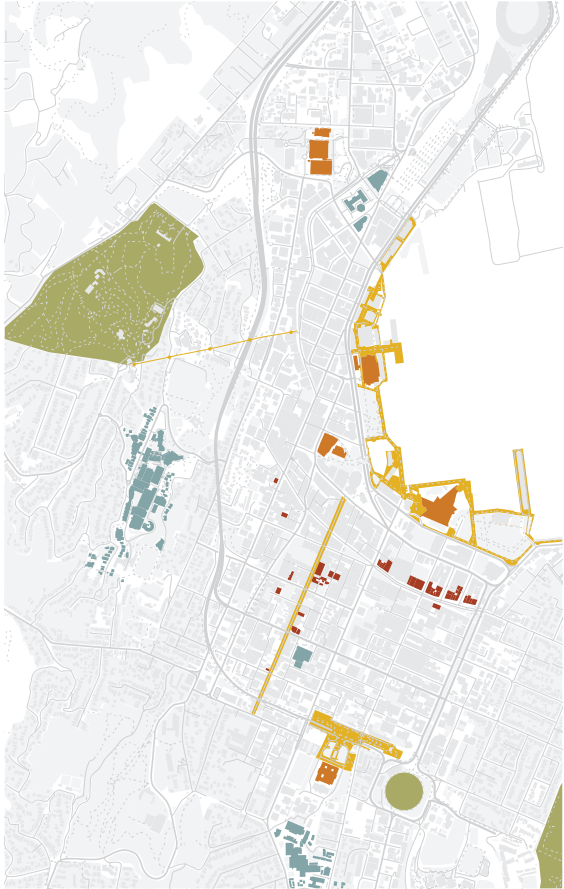
- Institutional Precinct
- Cental Area
- Centre
- Inner/Outer Residential



- Bus Route & Stops
- Vehicle Routes
- Cycle Routes
- Pedestrian Routes



- Public Green Space (Forest)
- Public Green Space (Open)
- Public Green Space (Sports Fields)



- Bars & Clubs
- Cultural Centres
- Promenade
- Educational Facilities
- Green Spaces



Figure 6.29-6.32  
Site Ecologies  
1:40,000

/ Built

/ Infrastructure

/ Natural

/ Social



- - Institutional Precinct
- - Central Area
- - Centre
- - Inner/Outer Residential



- - Bus Route & Stops
- - Vehicle Routes
- - Cycle Routes
- - Pedestrian Routes



- - Public Green Space (Forest)
- - Public Green Space (Open)
- - Public Green Space (Sports Fields)



- - Bars & Clubs
- - Cultural Centres
- - Promenade
- - Educational Facilities
- - Green Spaces



Figure 6.33-6.36  
Site Ecologies  
1 : 6000





Figure 6.37 - 6.41  
Existing Site Conditions







Figure 6.42- 6.46  
Existing Site Access Methods  
and Paths



## Conclusion

This chapter has presented an encapsulation of the context surrounding student accommodation in Wellington, as well as the selected site to develop both residential and public scale design upon. Current attractions and challenges within student accommodation have been identified to highlight space for opportunity through design, while the context of the selected site has been analysed to allow design to both align to, and progress, the area. Information and analysis understood within this chapter will be utilised to inform both the residential and public scale design throughout this thesis.



Figure 6.47  
View from Above Site



Residential Scale

Figure 7.0  
Residential Scale Design



Design Intent

The intention of this chapter is to present an exploration of design resulting in the design of a residential scale student hall of residence within Wellington that exemplifies how both wellbeing and atmosphere may be addressed within architecture. Specifically, the development of design and resulting design interrogates how elements of the selected site may be integrated with the previously outlined conditions of wellbeing and atmosphere to appropriately address the context.

The first section of the chapter presents the intended programme of a flat style hall of residence. The second section of the chapter presents the development of design through both hand drawing and physical modelling. The third section of the chapter then presents the final design of a small-scale student hall of residence upon a specific site within Wellington. The design expresses how site, wellbeing and atmosphere may be integrated to form design within the residential scale, providing a development of understanding from the model scale, and further platform for design to develop throughout this thesis.

	Design Intent
Section One	Student Accommodation / Programme
Section Two	Design Process / Wellbeing & Atmosphere Explorations / Extracting Information from Site / Application of Wellbeing and Atmosphere
Section Three	Design / Architectural Drawings / Architectural Renders
	Design Reflection

Figure 7.1  
Overview of Chapter Structure

Programme

The program for the residential scale design aligns to existing self-catered halls of residence within Wellington due to a similarity in scale, resident amount and opportunity of site. Focal to the programme is creating a close community of residents within one cohesive building, imitating a traditional household structure that residents may be accustomed to. This approach to programme seeks to provide a familiarity of space, while offering new and unique social and spatial dynamics. The following information will provide an overview of what each programmatic area of space will envision.

Resident Accommodation

Resident accommodation will be arranged in two clusters of space due to being located upon differing levels, whereby bedrooms will range in single, double and twin-share spaces to offer a variety of space and affordability while encouraging a diversity of residents. It is intended for each cluster of space to both integrate with one another as one, while retaining moments of opportunity for separation. This will increase the chances of each individual being accountable, connected, and comfortable due to a smaller community engaging with one another, while a residential advisor would oversee both clusters.

Resident Facilities

Resident facilities will be arranged throughout the building in a manner that is accessible to all. These facilities will include spaces that become essential and desirable to everyday life within a household, encouraging residents of differing spaces within the household to continuously and informally bump into one another and interact.

Residents (Private)	Resident Bedroom (12)	/ 9 sqm	
	Residential Advisor Bedroom (1)	/ 9 sqm	
Residents (Communal)	Kitchen	/ 46.2 sqm	] <i>shared</i>
	Dining	/ 46.2 sqm	
	Lounge	/ 68 sqm	] <i>shared</i>
	Study	/ 68 sqm	
	Bathroom (4)	/ 3 sqm	
	Outdoor	/ NA	
	Laundry	/ 5.46 sqm	
Residents and Staff (Shared)	Cleaning Storage	/ NA	
	Vehicle Access	/ NA	

Minimum sqm of spaces  
(Auckland Council, 2019)

Figure 7.2  
Overview of Programme

**Wellbeing and  
Atmosphere  
Explorations**

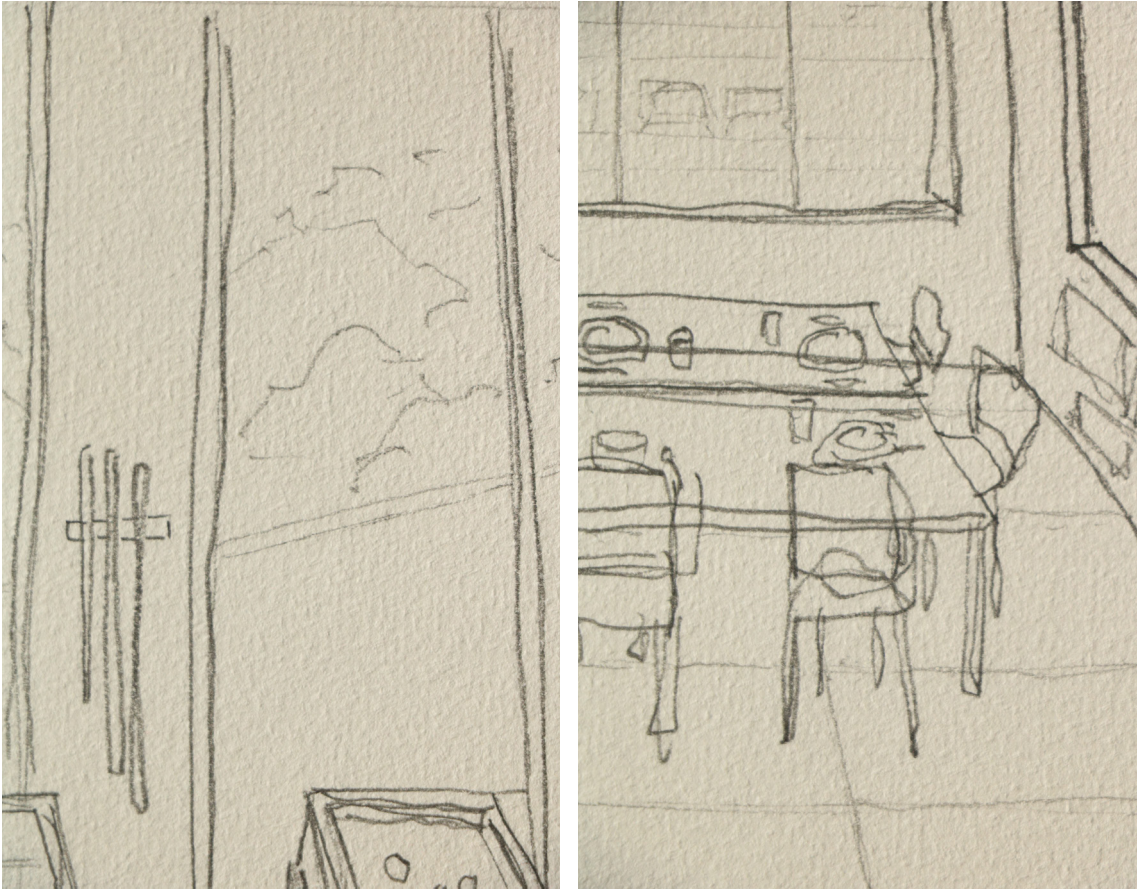
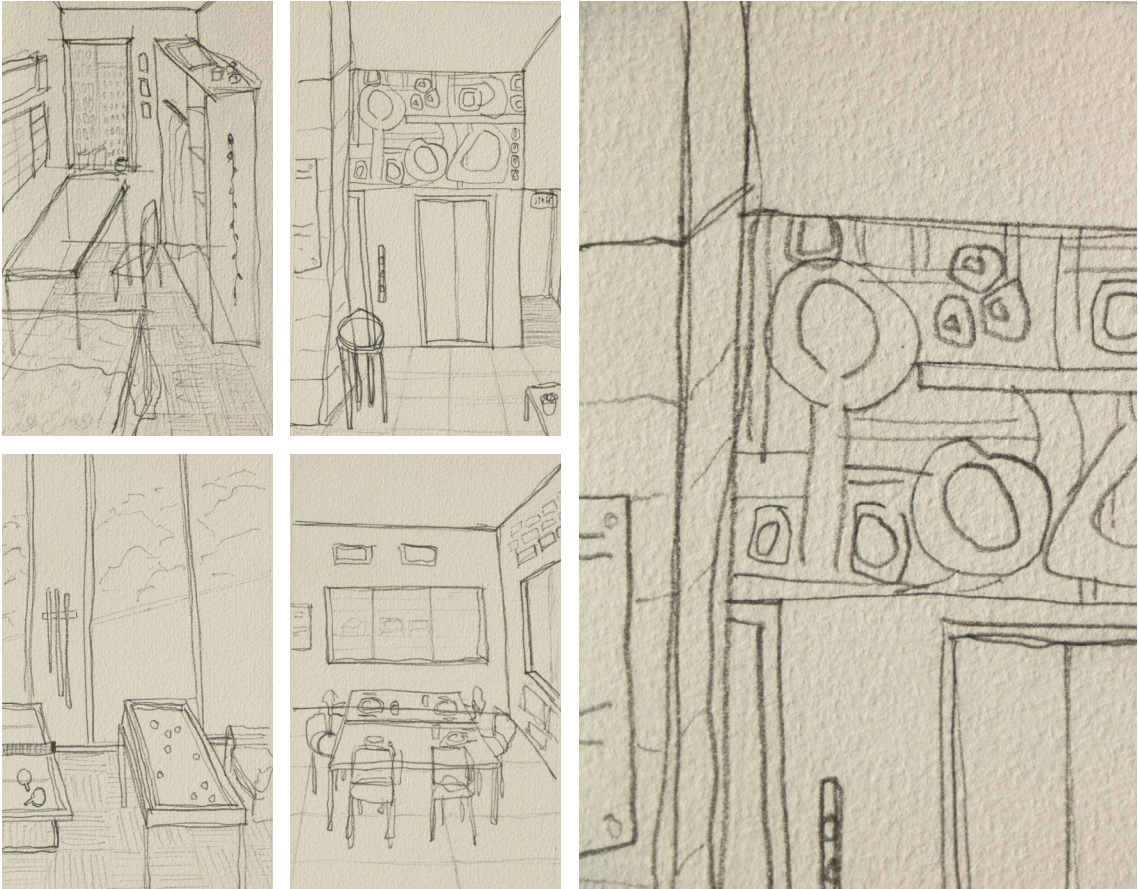
This section presents an exploration of design resulting in a series of models exemplifying how wellbeing and atmosphere may be addressed within architecture conceptually. At this stage of the thesis, the speculation of how wellbeing and atmosphere could be integrated within architecture was to first be explored at an installation scale, however, due to coronavirus this did not occur, thus experimentation of design at a model scale was to be further developed to align to residential scale design. Specifically, the development of design and resulting models interrogate the key elements of supporting connection, the senses material compatibility, levels of intimacy, and surrounding objects, and physical context to begin to speculate how the spatial conditions of wellbeing and atmosphere may be created and represented physically.

The first section of the chapter presents an exploration of each previously defined element contributing to generating wellbeing and atmosphere individually through both drawing and modelling. The second section of the chapter presents an exploration of how architecture may respond to landscape, while the third section presents an exploration of the combined elements through modelling. Expressing both wellbeing and atmosphere through initial exploration within the model scale provides a platform for design to then develop from throughout this thesis.



Figure 7.3- 7.9  
Overview of Wellbeing and  
Atmosphere Explorations





Connection

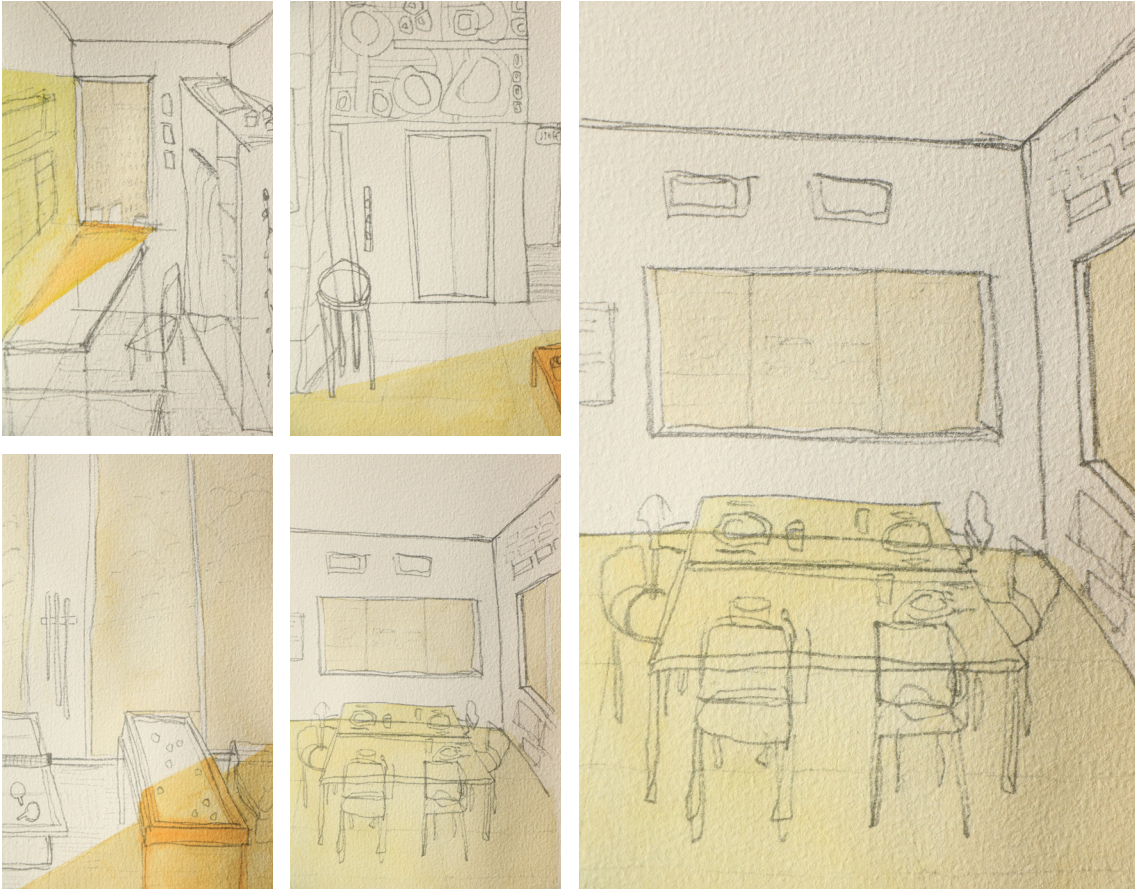
Hand drawings of recalled spaces within a prior hall of residence that supported connection were documented to exemplify the role of architectural elements that reflect diversity, stimulation, and opportunity for control in contributing to addressing connection within a range of differing and unique spaces.

Left to Right

Figure 7.10- 7.13  
Connection  
Spaces Overall

Figure 7.14- 7.16  
Connection  
Spaces in Detail





The Senses

Light, colour and tactility of the space have been recalled to exemplify the role of architectural and non-architectural elements that reflect how a space may be understood differently through the senses to bring delight, interest and stimulation to a space.



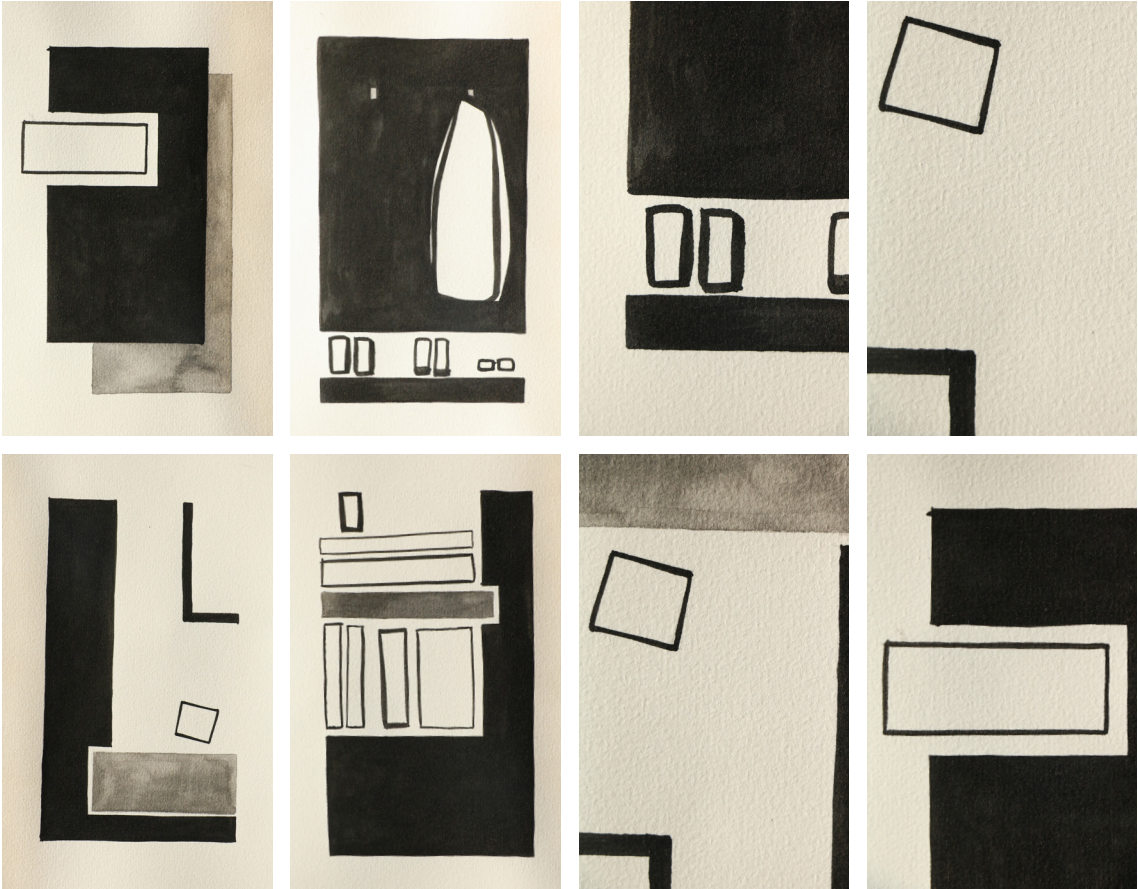
Left to Right

Figure 7.17- 7.21  
The Senses  
Light

Figure 7.22- 7.25  
The Senses  
Colour

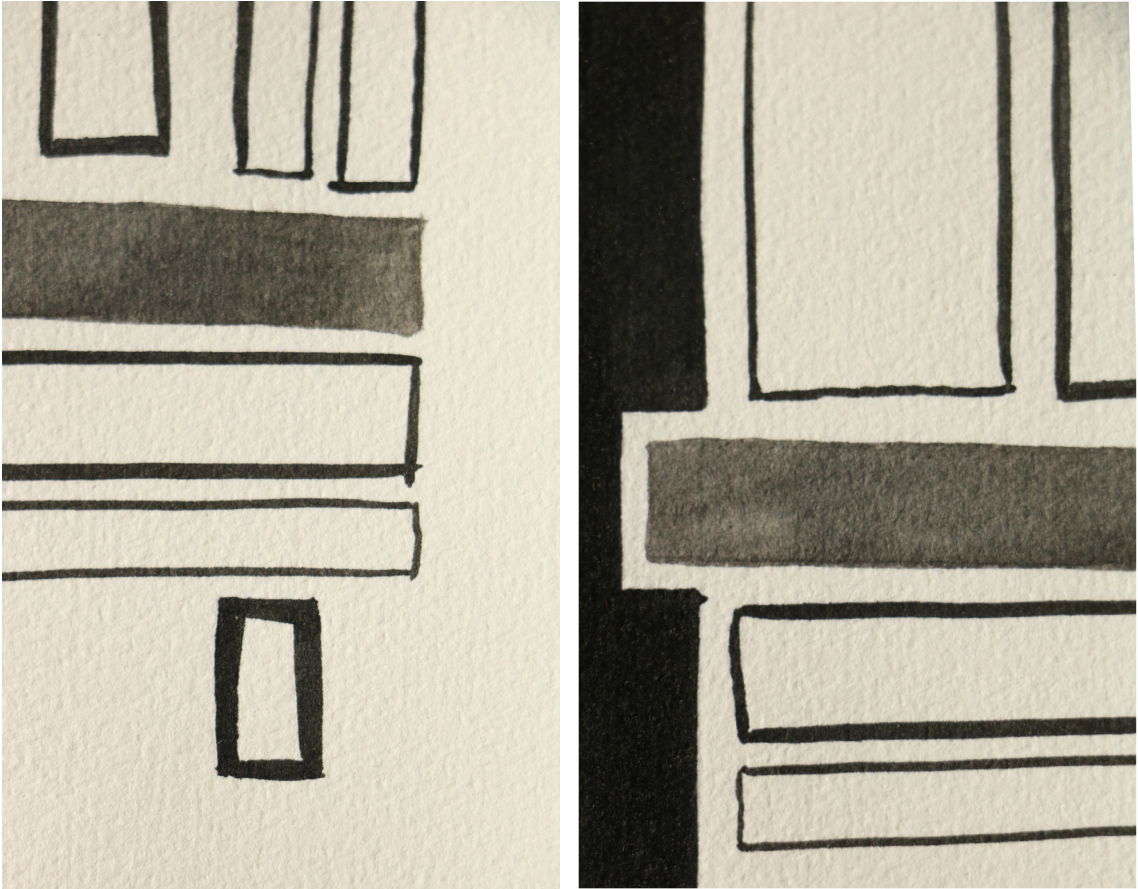
Figure 7.26- 7.29  
The Senses  
Tactility





Surrounding Objects

Space envisioned in plan and elevation for bodies and objects to be received depict strengths and strokes of ink to explore the thresholds between subject and object to envisioned architectural space.



Left to Right  
Figure 7.30- 7.33  
Surrounding Objects  
Compositions Overall

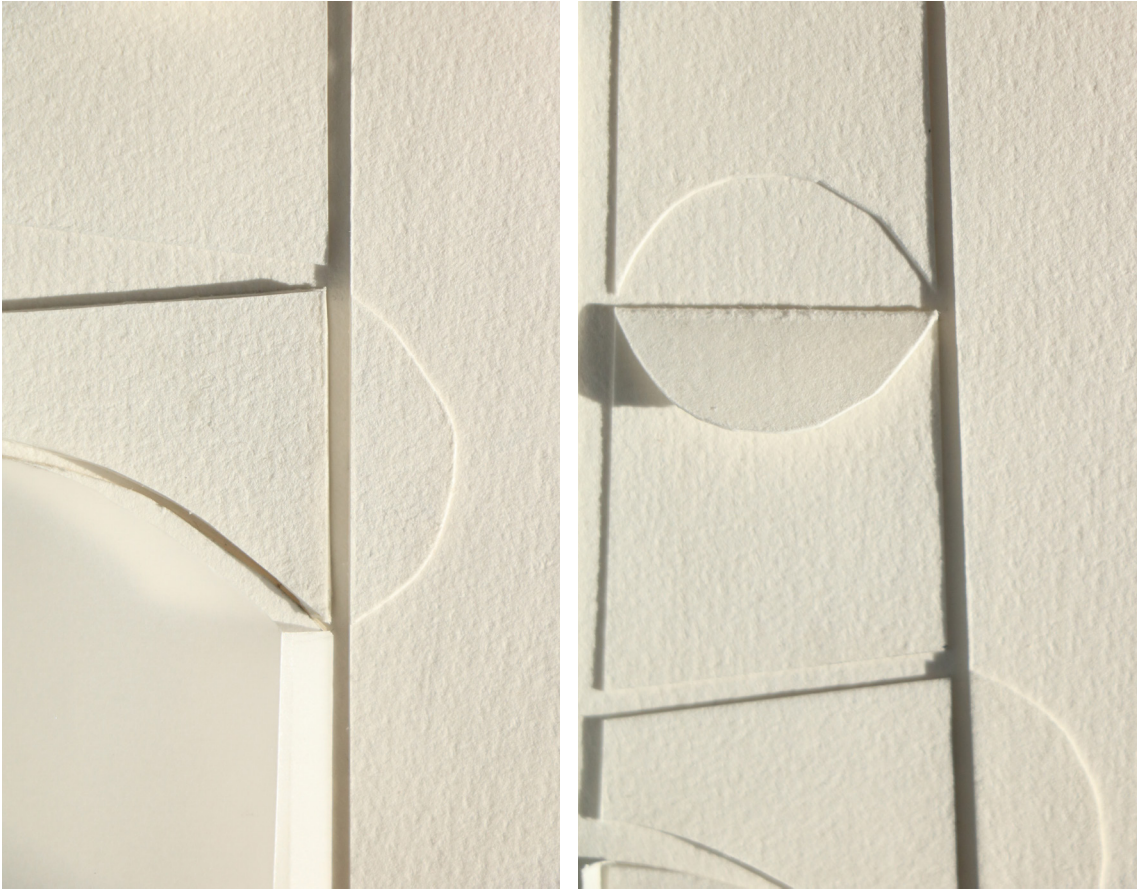
Figure 7.34- 7.39  
Surrounding Objects  
Compositions in Detail





Levels of Intimacy

Compositions of paper explore proximity, distance, size, dimension and scale upon a surface to enhance intimacy. Slices and folds of shape and compositions exemplify the role of differentiating space to influence both subject and object to generate atmosphere.

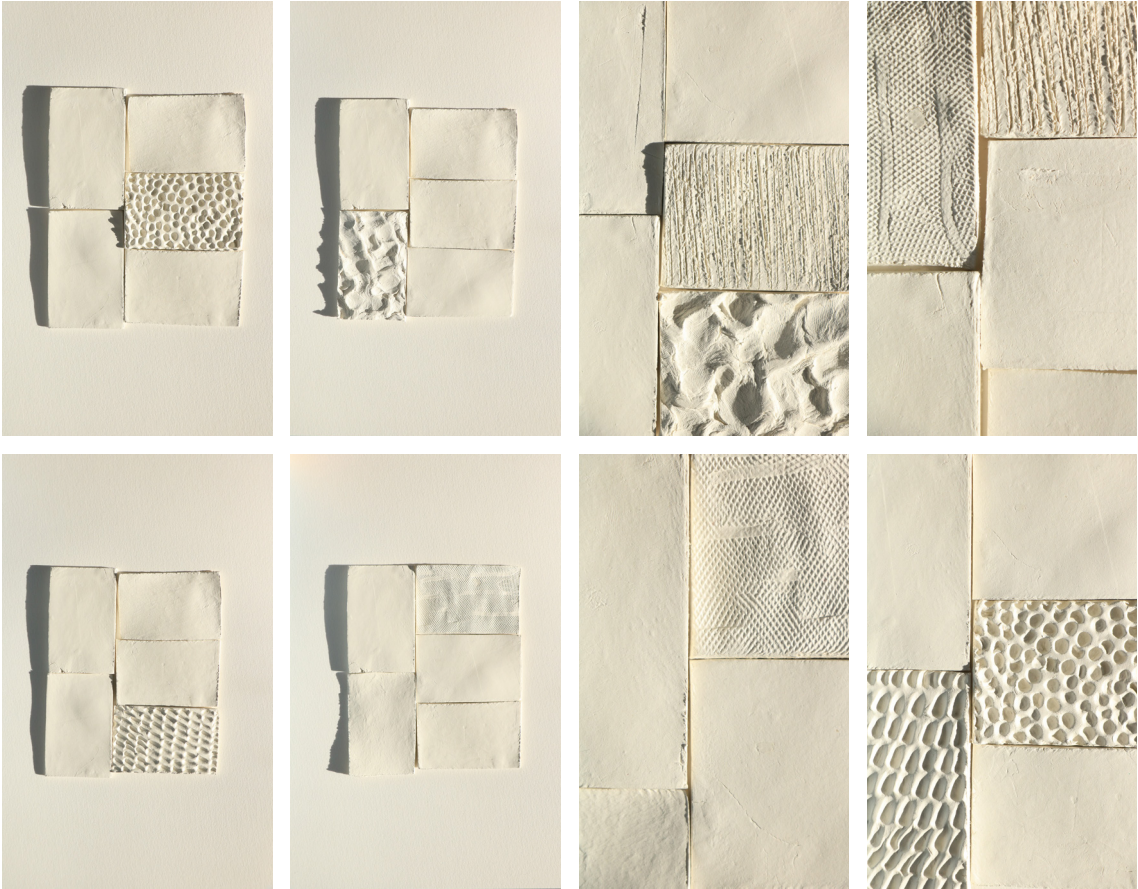


Left to Right

Figure 7.40- 7.43  
Levels of Intimacy  
/Compositions Overall

Figure 7.44- 7.49  
Levels of Intimacy  
Compositions in Detail





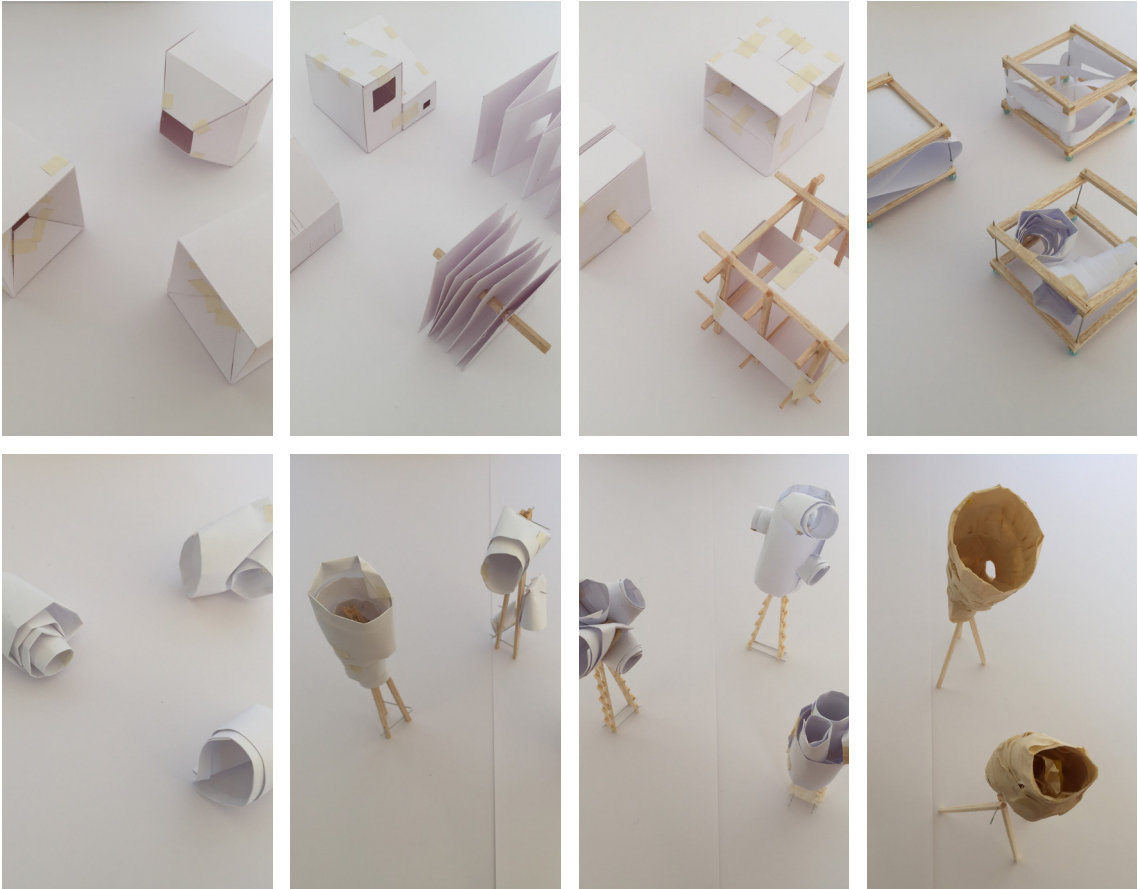
**Material Compatibility** Compositions of clay tiles explore proximity, type and weight of material upon a surface to generate atmosphere, exemplifying the role of a singular materiality in relation to influencing a subject or object within an architectural space.

Left to Right

Figure 7.50- 7.53  
Material Compatibility  
Compositions Overall

Figure 7.54- 7.59  
Material Compatibility  
Compositions in Detail





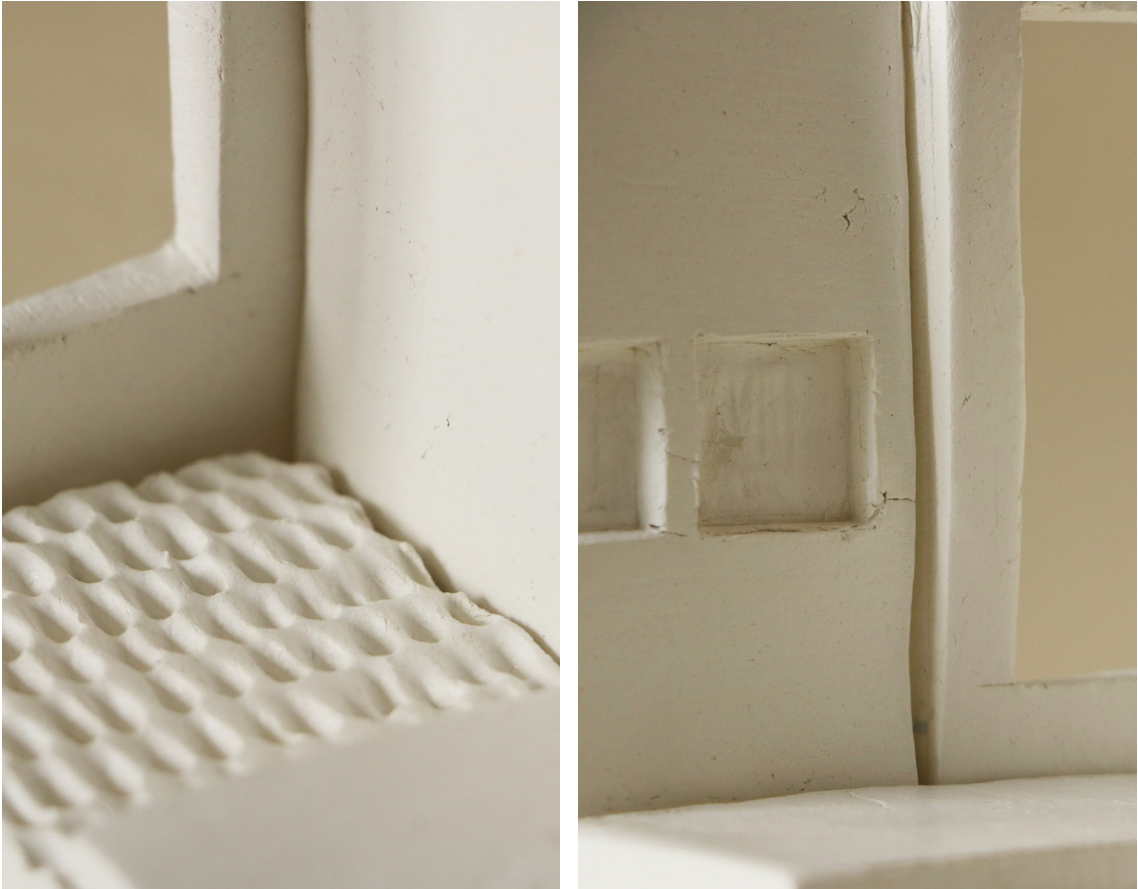
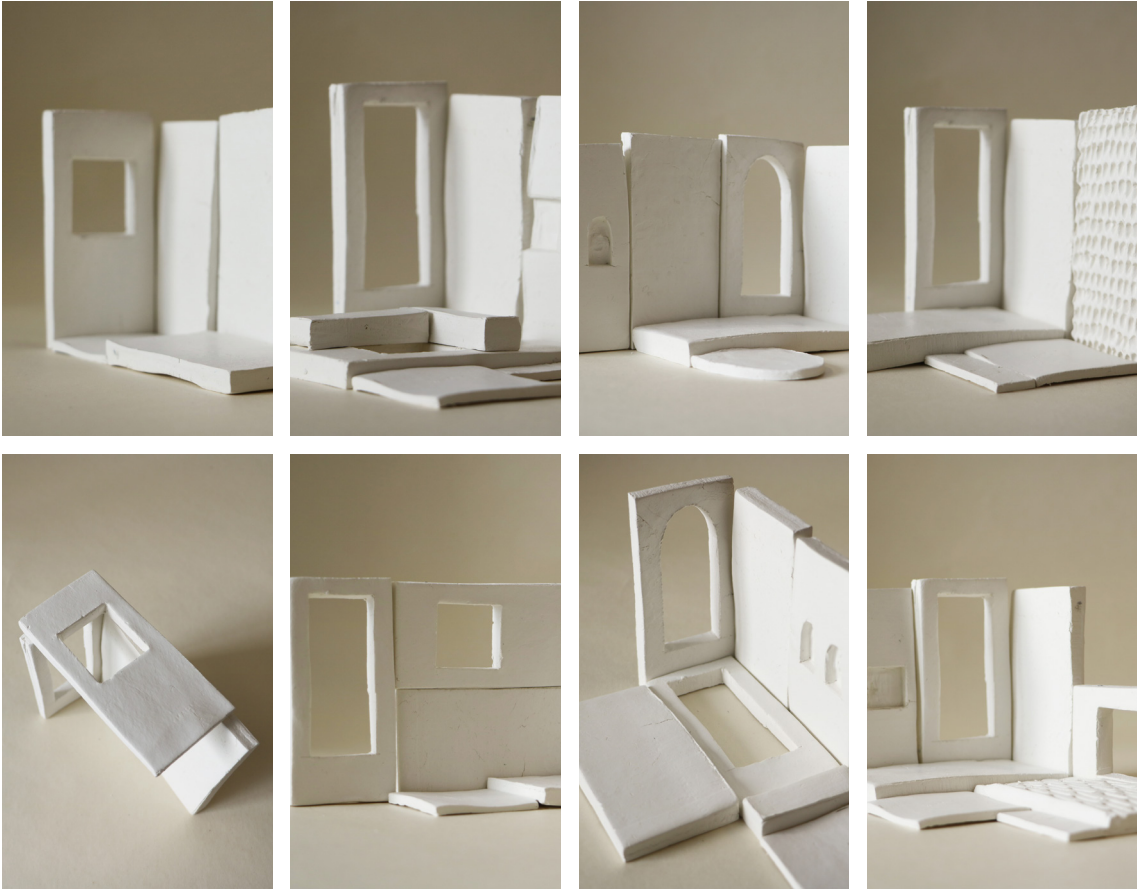
Landscape

Compositions of models explore how conditions of wellbeing and atmosphere may be represented three dimensionally while responding to an imagined landscape. Extrusions, folds, levels, and orientation of form become useful to integrating architecture with landscape.

Left to Right  
Figure 7.60- 7.67  
Landscape  
Compositions Overall

Figure 7.68- 7.69  
Landscape  
Resulting Model





Wellbeing and Atmosphere

Exploration occurs through playful assemblage's of clay tiles representing architectural facades, openings, inlets and steps combining to create segments of an imagined architectural facade, corridor or corner, speculating how architectural space may appropriately respond to supporting wellbeing and connection.

Figure 7.70- 7.77  
Wellbeing and Atmosphere  
Compositions Overall

Figure 7.78- 7.79  
Wellbeing and Atmosphere  
Compositions in Detail

**Extracting  
Information  
from Site**

The following section of this chapter present's the development of design arising from the integration of wellbeing and atmosphere to the site context. Following Angelil's understanding of cartography as "the notational and operative device by which to frame architecture's contexts", the previously explored site ecologies become a foundation for a succession of physical drawings and models to unfold as an overlapping series of explorations (2003, p.365). These unfold and become interpreted towards the design of a residential scale student accommodation facility that aligns to the surrounding practical, theoretical and physical context.

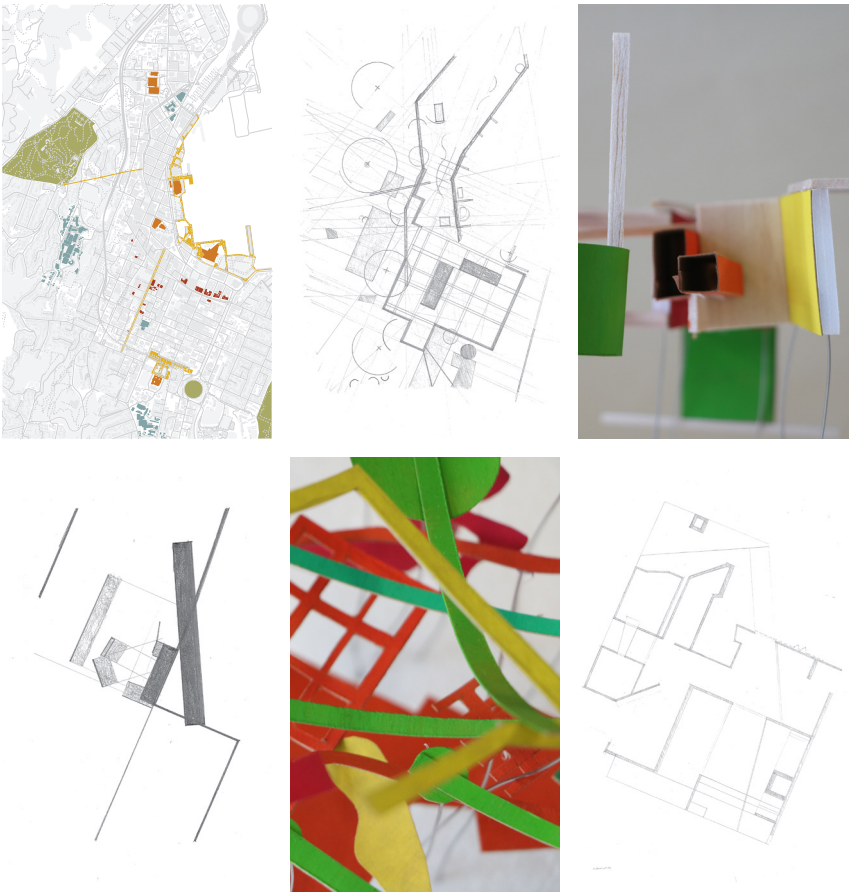
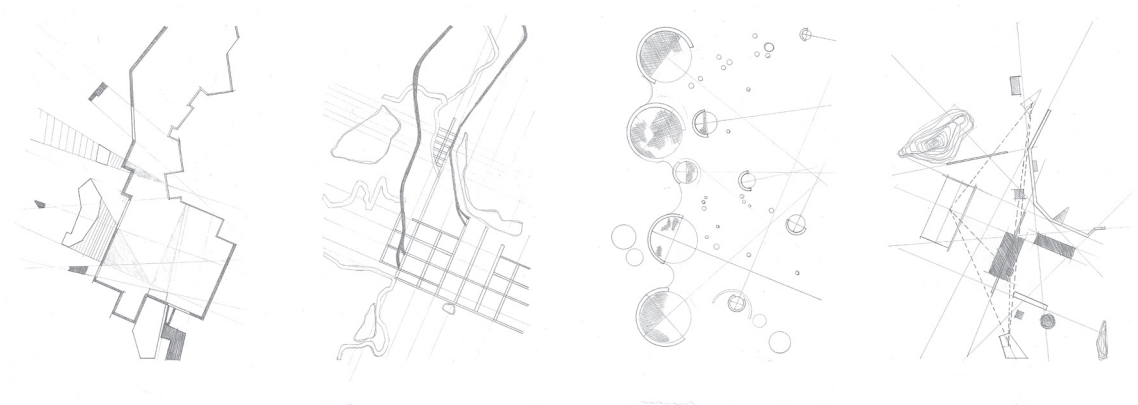
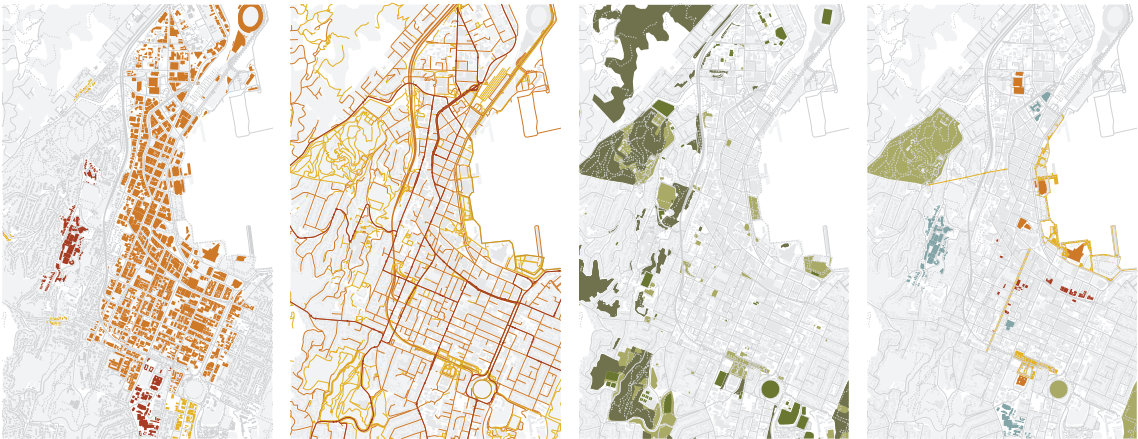


Figure 7.80- 7.85  
Overview of Extracting  
Information from Site

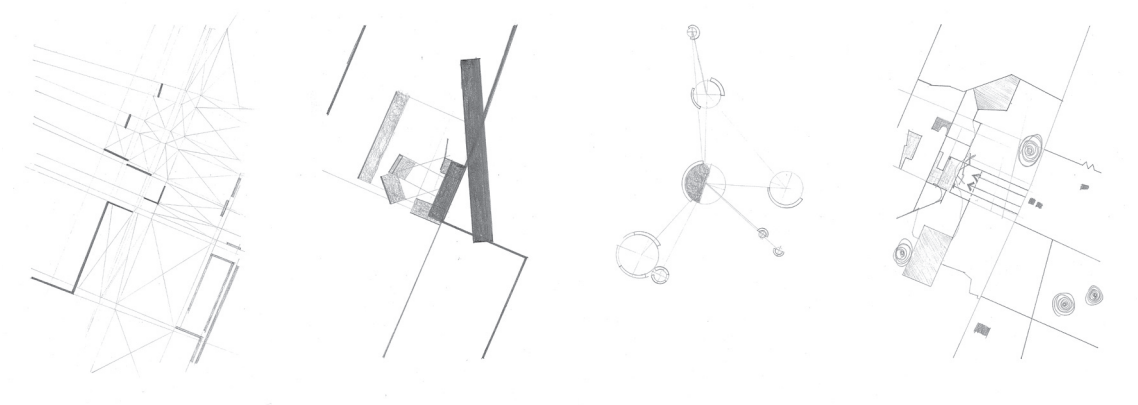




Scale 01  
1 : 40,000

Spatial Extractions

Individual explored site ecologies are traced over, for the differing scales, whereby pronounced patterns and points are extracted as potential spatial opportunities. These are evident as tonal lines and masses.

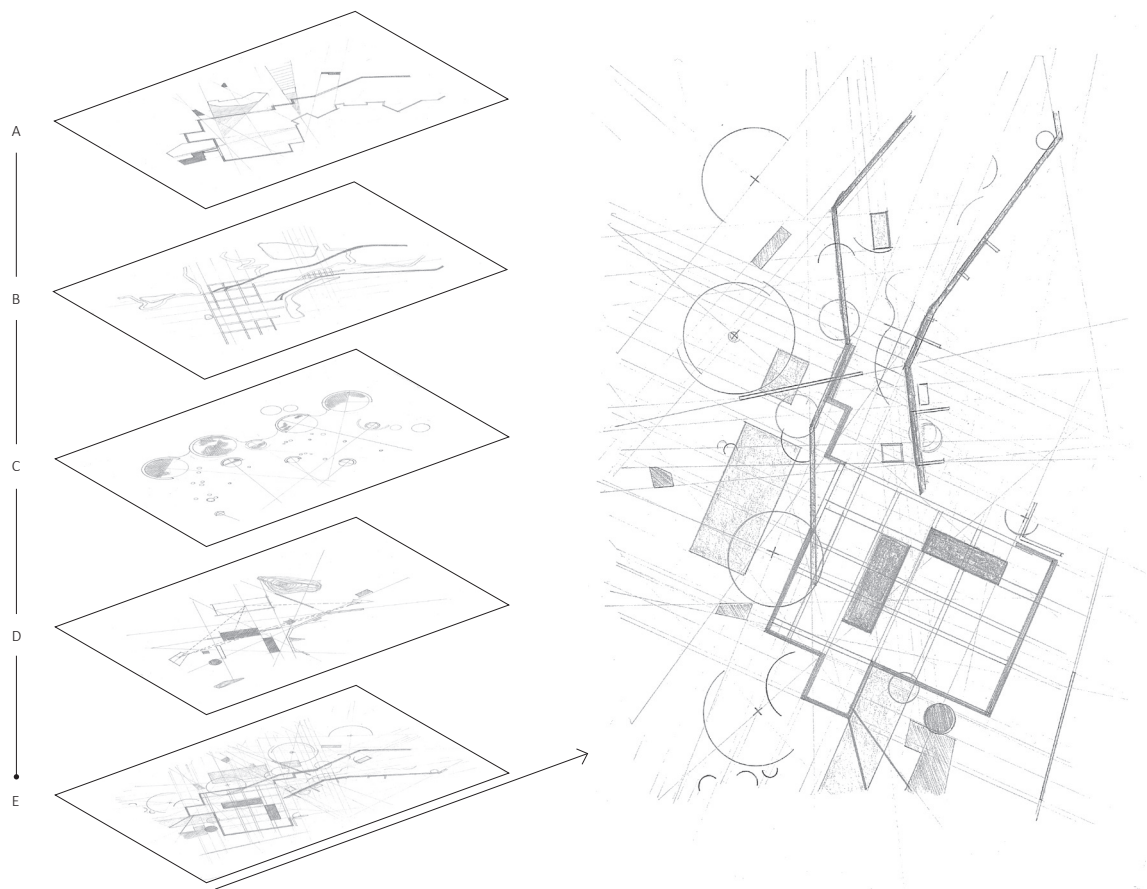


Scale 02  
1 : 6,000

Top to Bottom

Figure 7.86- 7.93  
Site Ecologies Mapping

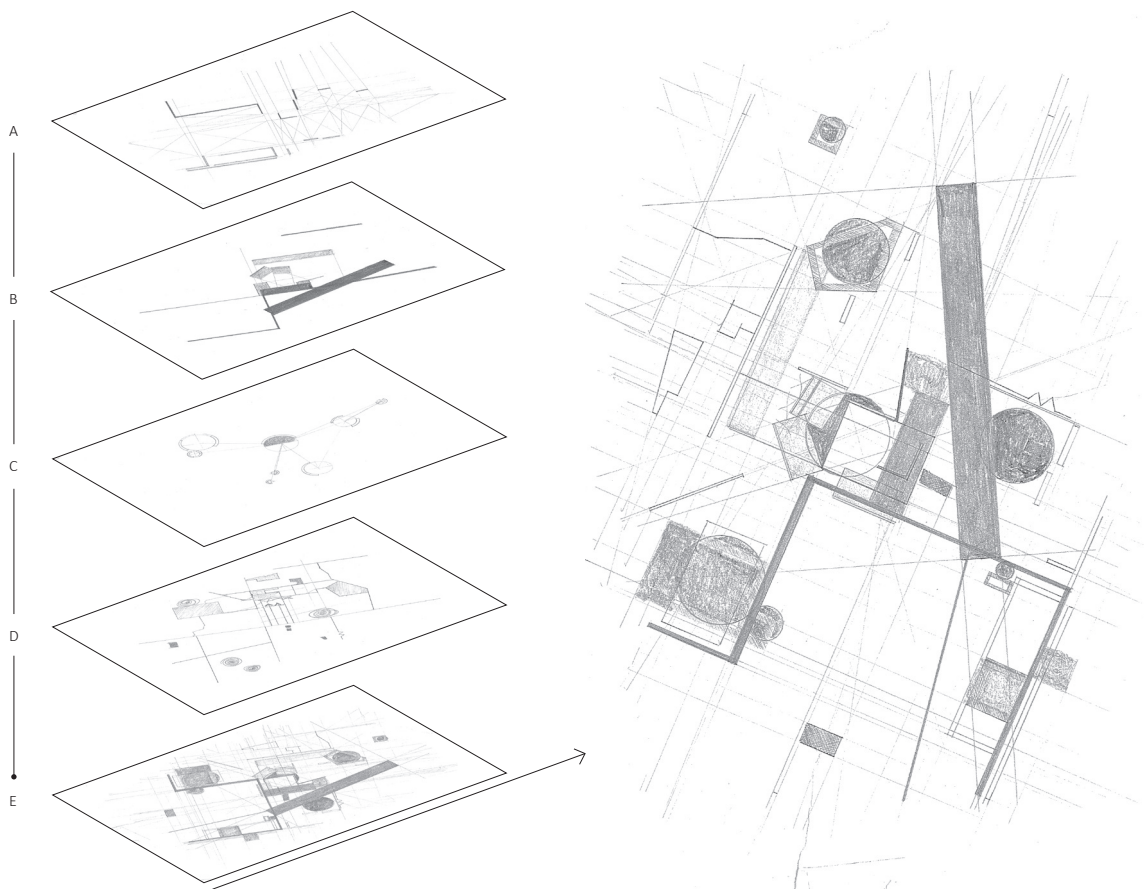
Figure 7.94- 6.101  
Hand Traced Spatial Extractions



Scale 01  
1 : 40,000

Layering Extractions

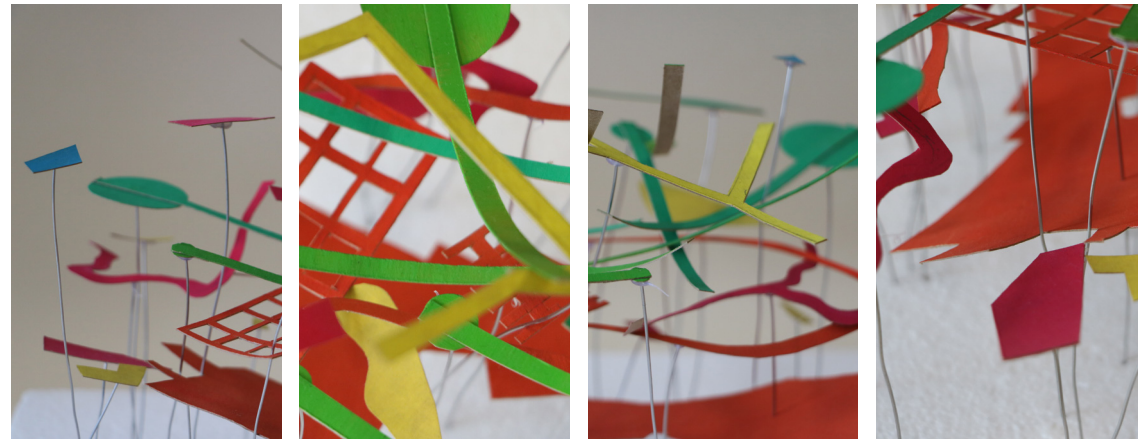
Spatial extractions of each scale are overlaid to create "transversal trajectories crisscrossing the different ecological territories" (Angelil, 2003) to represent the imbued ecology of each scale.



Scale 02  
1 : 6,000

Left to right  
Figure 7.102  
Spatial Extractions 01  
Figure 7.103  
Combined Spatial Extraction 01  
Figure 7.104  
Spatial Extractions 02  
Figure 7.105  
Combined Spatial Extraction 02





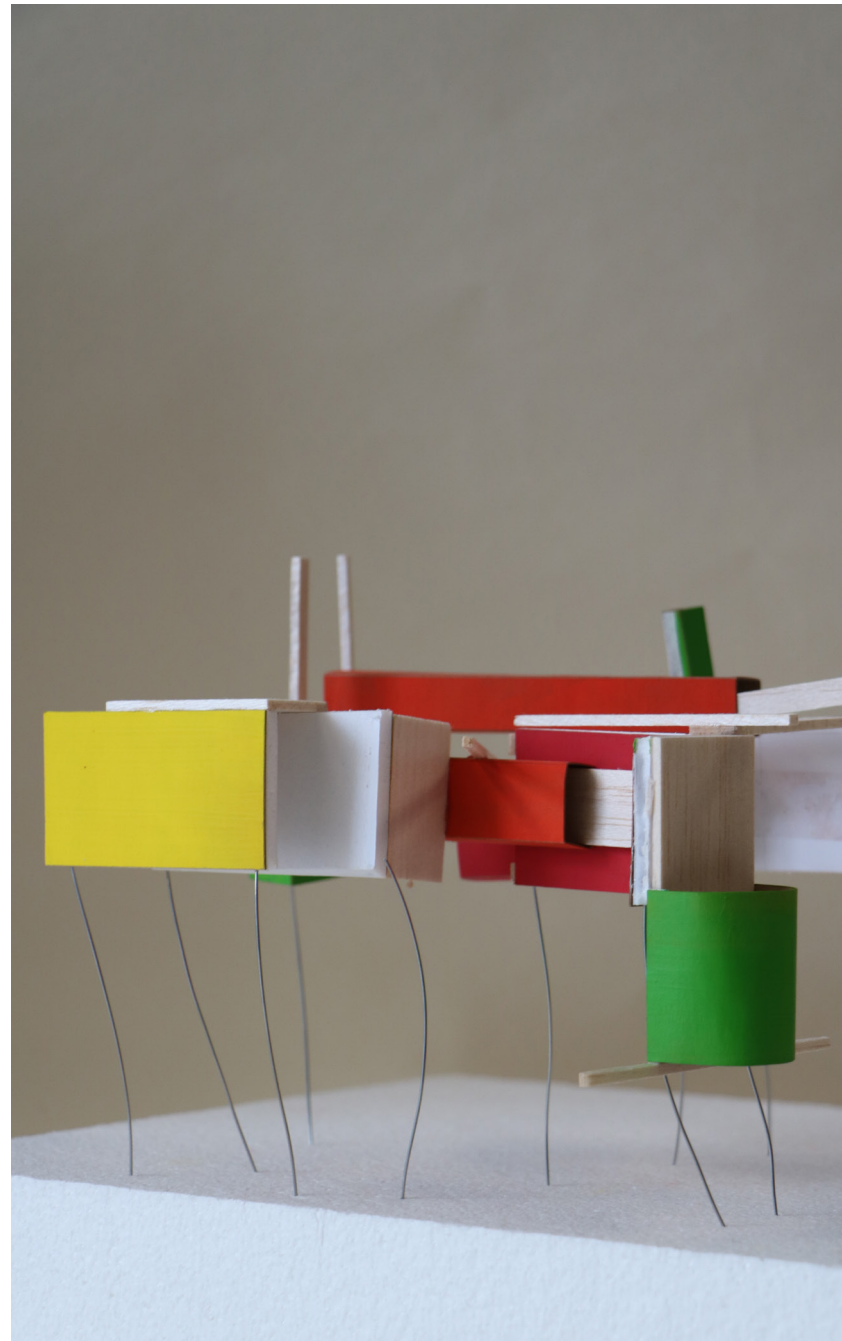
Scale 01  
1 : 40,000

### Configuring the Extraction

The concluding drawing of scale 01 is transformed to three-dimensional form, allowing hierarchy, pattern, and dominance to influence colour, height and thus the developed form.

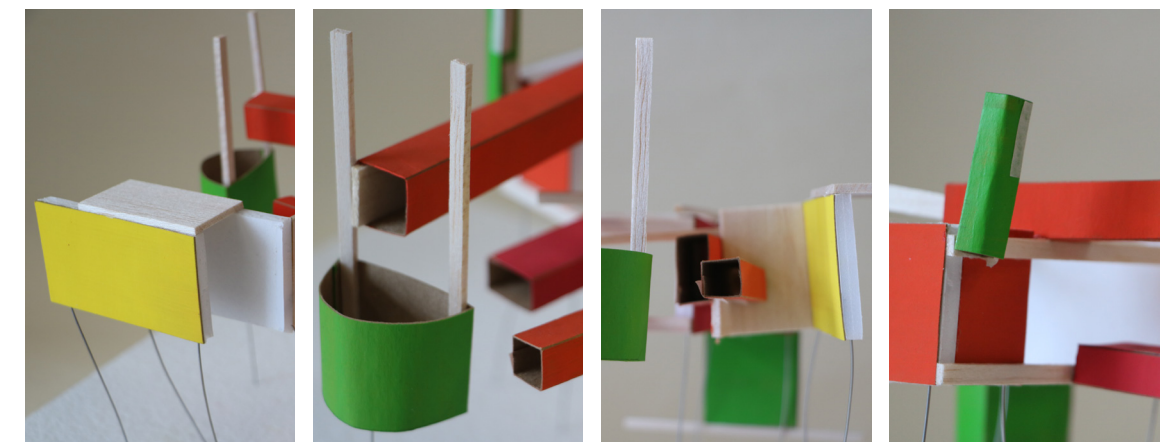


Figure 7.106- 7.110  
Configuring the extraction 01



Scale 02  
1 : 6,000

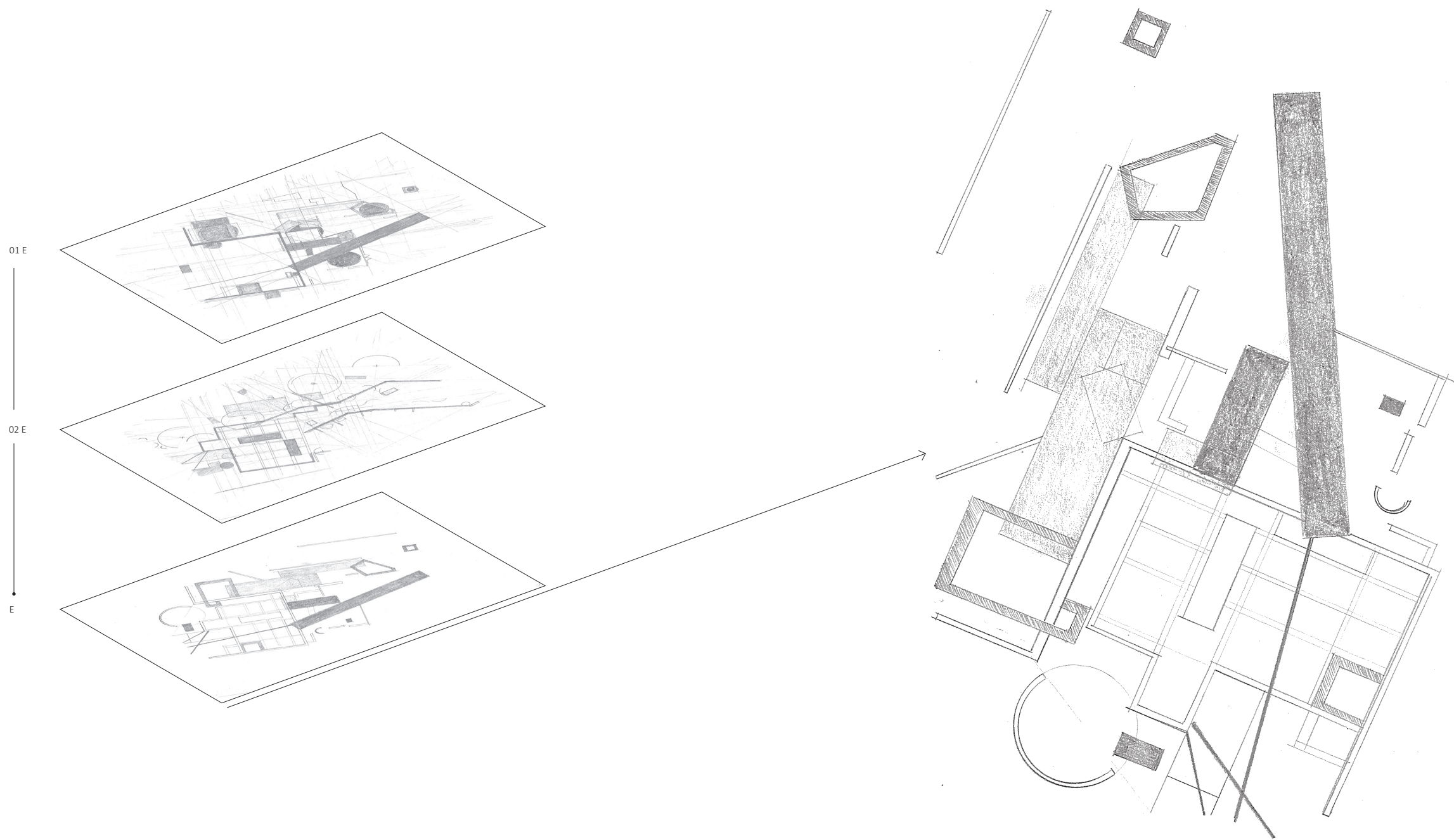
Figure 7.111- 7.115  
Configuring the extraction 02



### Configuring the Extraction

The concluding drawing of scale 02 is transfigured to three-dimensional form, allowing hierarchy, pattern, and understanding from the prior scale model to influence the developed form.





Configuring the  
Extraction

The concluding drawings of scale 01 and 02 are overlaid to further  
convene the diversity of ecologies and scales surrounding the physical  
site.

Figure 7.116  
Spatial Extractions

Figure 7.117  
Combined Extraction

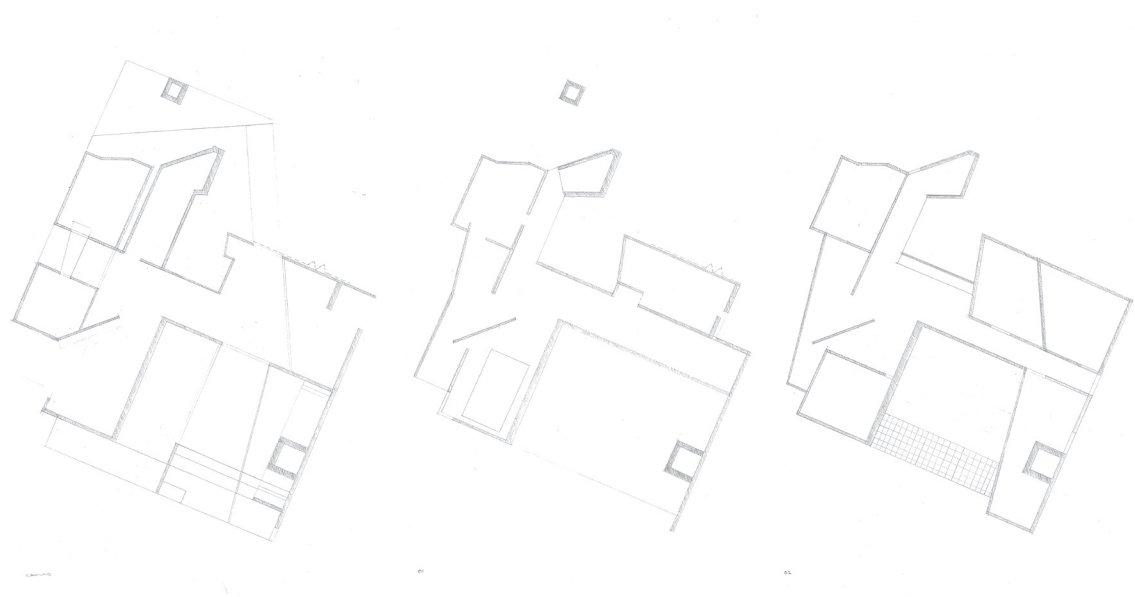
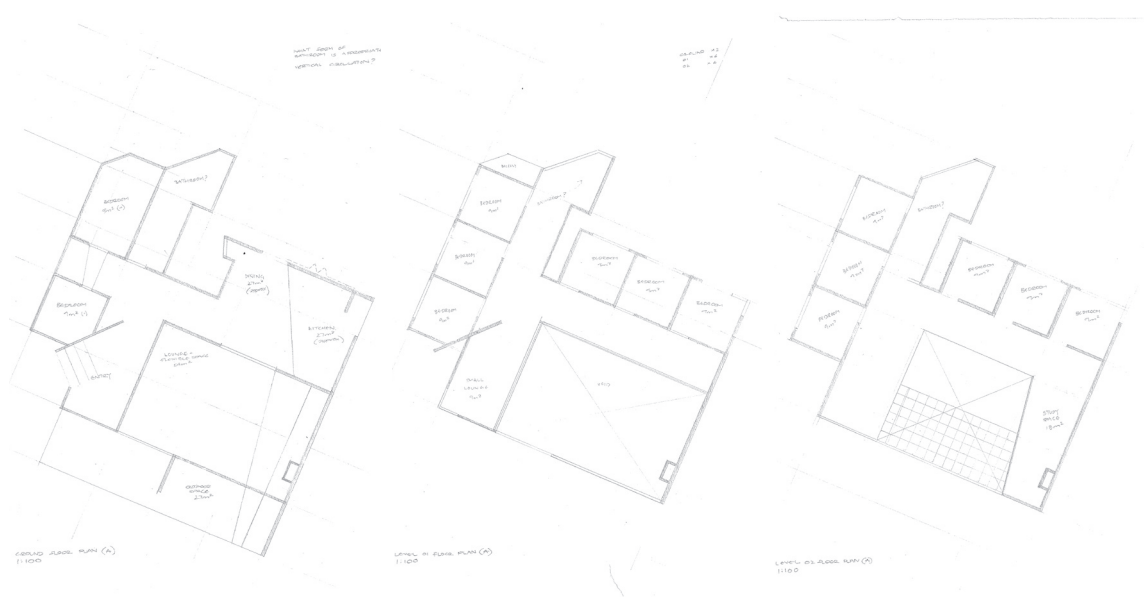


Figure 7.118- 7.120  
Architectural Plan Drawings

Figure 7.121- 7.123  
Developing Plans



Withdrawing Planar  
Form

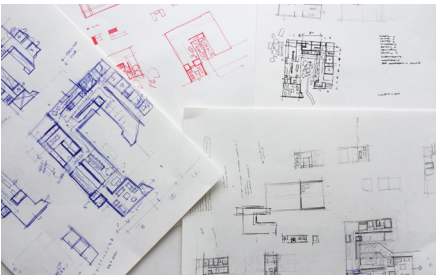
Architectural drawings in plan view are extracted from the final drawing to explore floor plan design over three level, while the following images depict envision specific spaces.



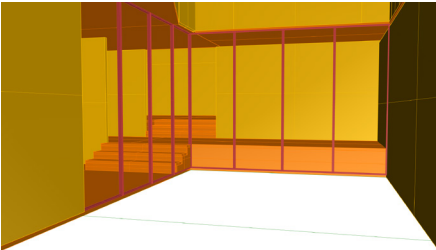
**Translating Process  
to Design**

The translation from process to design was achieved through three primary tools. Following the extraction of floor plans, two-dimensional hand drawing was used to further integrate program and form (01). Three-dimensional development of these spaces was then extruded up and carried out in Rhino (02), where the final model could then be developed in greater detail within ArchiCAD (03).

01



02



03



Figure 7.124  
Overview of Translation Process

## Design

As one inclusive building, the residential scale design houses thirteen residents, including one residential advisor, and provides social amenities within a self-catered household. Through designing for connection, the senses, surrounding objects, levels of intimacy and material compatibility, the design seeks to exemplify how architecture may more appropriately address experiences of social isolation and loneliness within student halls of residence through designing for wellbeing and atmosphere.

The following pages depict the design of the flat style hall of residence. The first part of this section presents a series of architectural plans, sections, and elevations with supporting text to depict programme, arrangement and the relationship of spaces. The second part of this section presents a series of visual drawings and supporting text aligning to the key spaces that resonate to the components of connection, the senses, surrounding objects, levels of intimacy and material compatibility. These were developed according to the accumulation of the practical and theoretical literature, the derived design guidelines, and the case studies to address the heart of what this thesis questions.

Figure 7.125  
Exterior Courtyard







Figure 7.126  
Street Facade



Site



Figure 7.127  
Site Plan  
1 : 500



**Ground**

- 01 / entry
- 02 / kitchen
- 03 / dining
- 04 / living
- 05 / outdoor courtyard
- 06 / laundry
- 07 / bathroom
- 08 / WC
- 09 / storage (cleaners)
- 10 / bedroom
- 11 / Sun Room

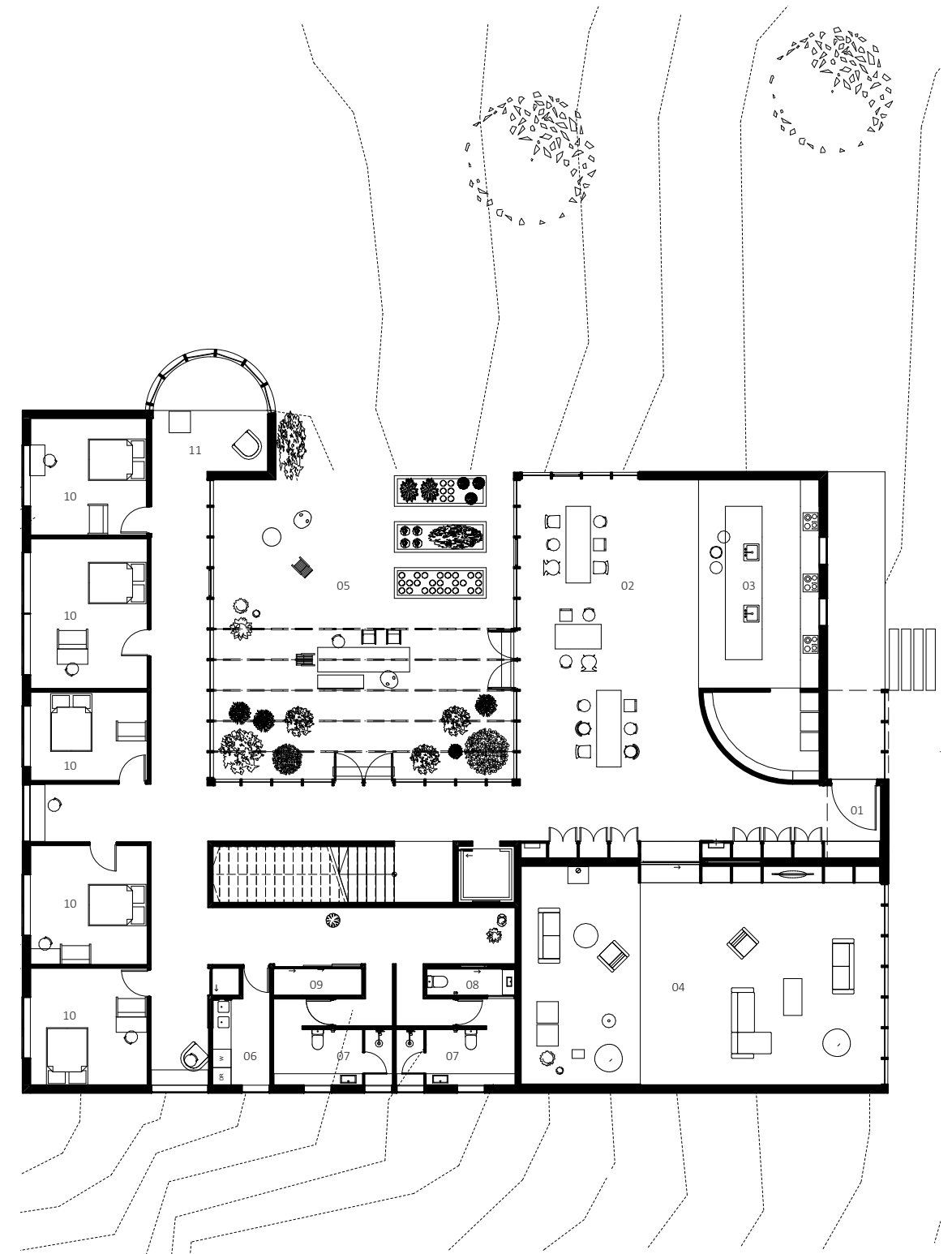


Figure 7.128  
Ground Floor Plan  
1 : 200



One

- 07 / bathroom
- 08 / WC
- 09 / storage
- 10 / bedroom
- 12 / gym
- 13 / private lounge (RA)
- 14 / study

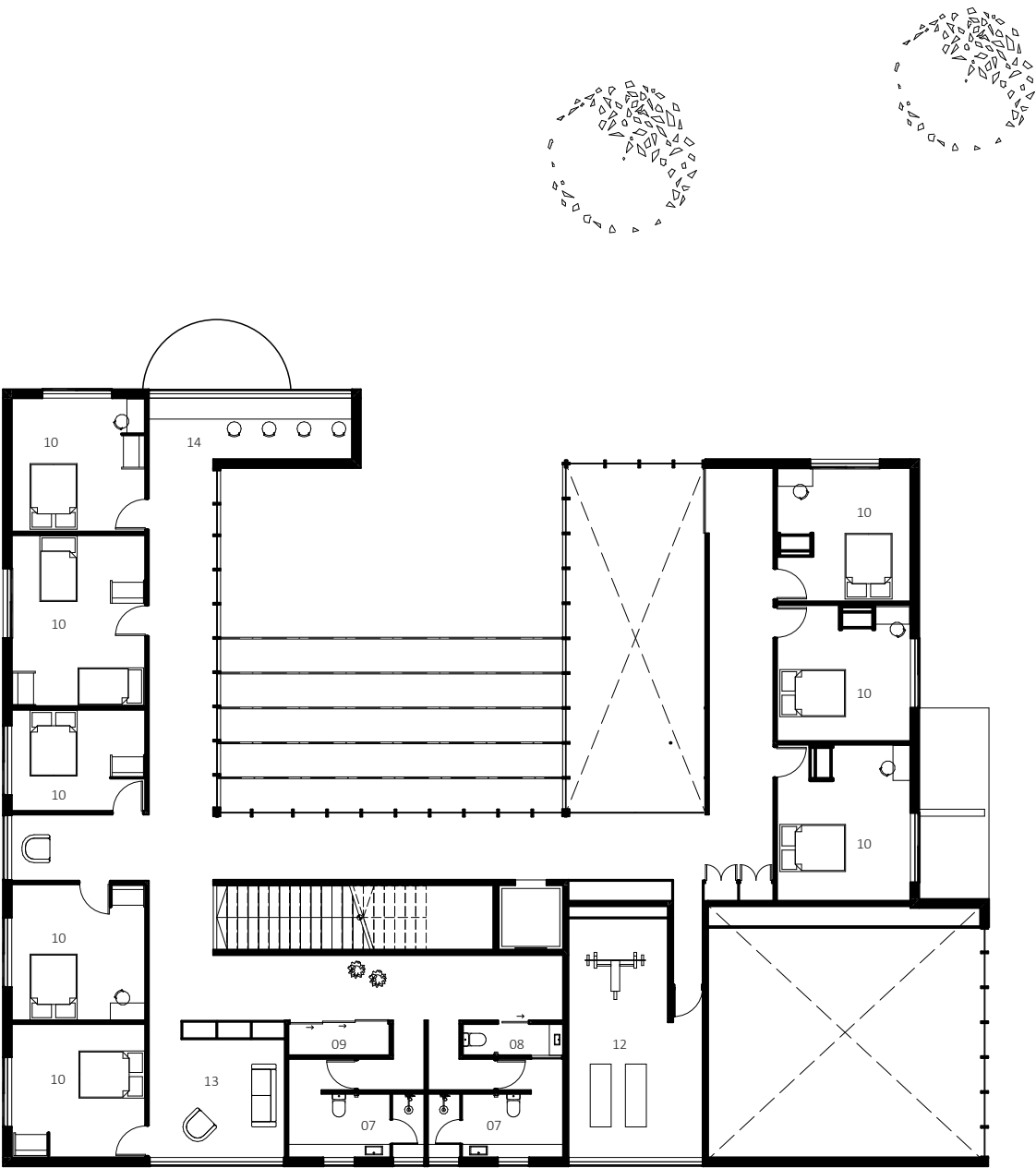
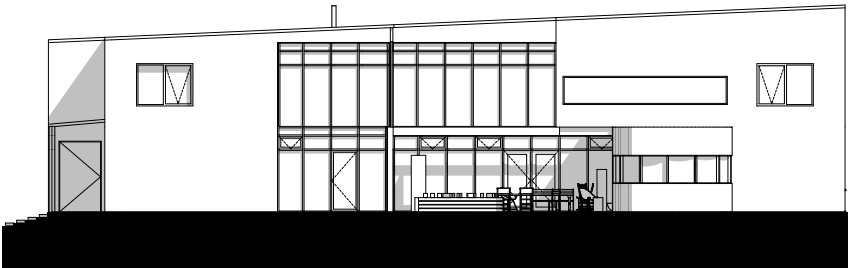


Figure 7.129  
Level One Floor Plan  
1 : 200



Elevational

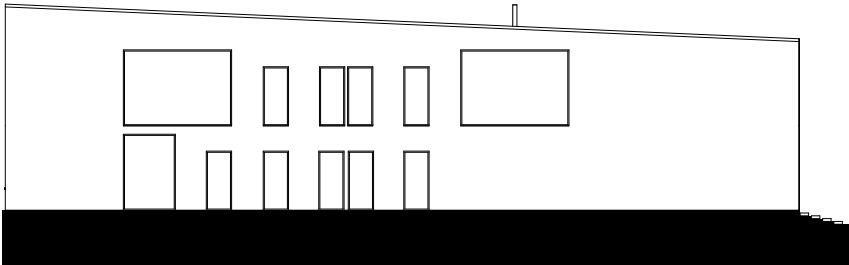
North



East



South



West

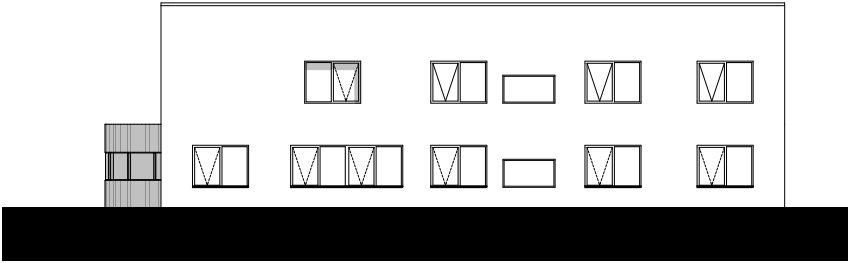
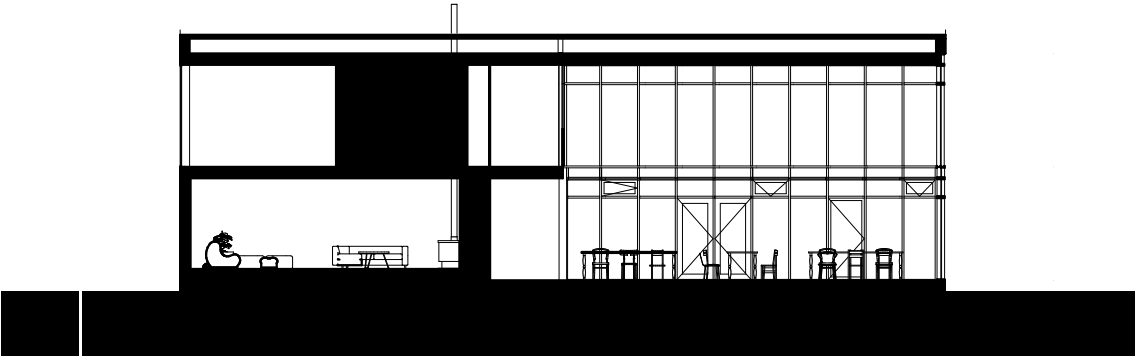


Figure 7. 130- 7.133  
Elevations  
1 : 200

Sectional

Section A



Section B

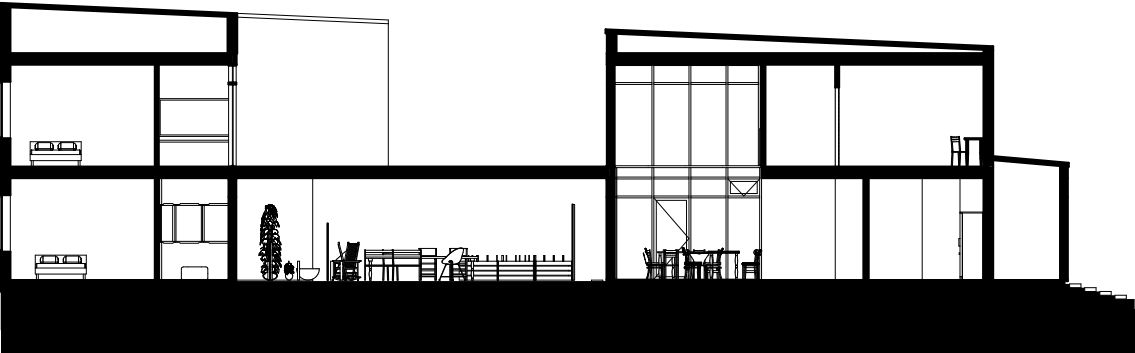


Figure 7. 134  
Section A  
1 : 200

Figure 7.135  
Section B  
1 : 200



**Connection**

Following Gappell, CABE and Waxman, the residential scale design seeks to nourish and enhance a sense of connection within each defined space. Within the house, spaces intended for oneself to dwell remain soft and minimal, suggesting to inhabitants an ability to control and express personal identity. The form of the house encompassing a garden courtyard, touched through floor to ceiling glazing, shifts connection in spaces of movement to the surrounding environment, and common and consistent glimpses of other residents. Spaces intended for all to dwell imbue a diversity of space, materiality, lighting and enclosure to balance a sense of diversity with coherency.

Figure 7.136  
Upon Entry  
Ground Floor





### The Senses

Aligning to Gappell and Crawford, the residential scale design pursues attention to arousing the senses. The form of the house encapsulating a garden courtyard, floor to ceiling glazing kissing the two, enrich interior space with a depth of natural light and instill a visual and tactile connection to the surrounding landscape and climate. Spaces for all are become adorned with a whisper of colour on fittings and a diversity of touch and appearance of furniture, balancing stimulation, and interest. The arrangement of differing spaces seeks to separate a change in acoustic and aromatic tone, ensuing circulation paths and openings as a means of subdue.

Figure 7.137  
Kitchen and Dining  
Ground Floor

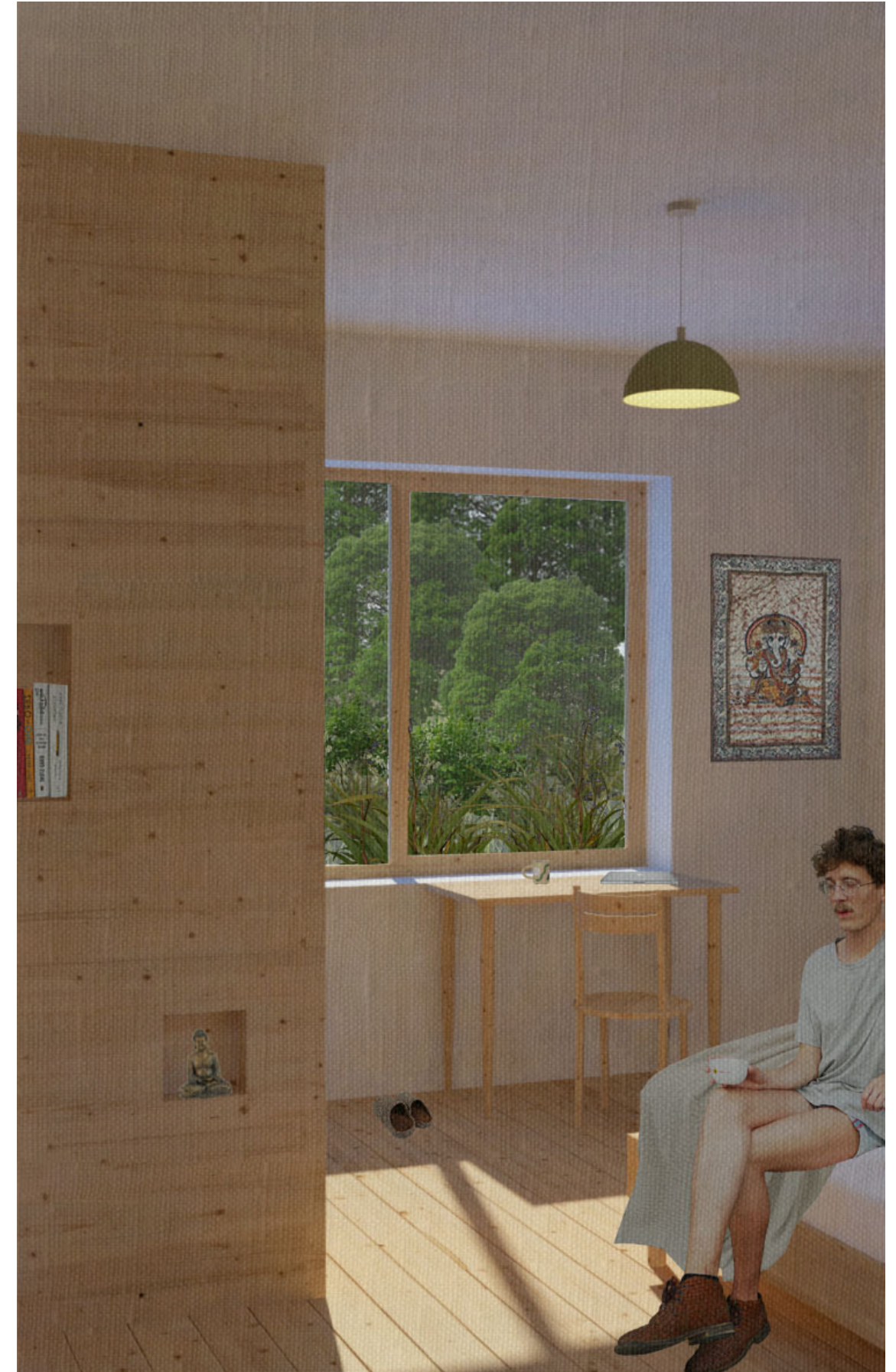




### Surrounding Objects

Following Zumthor and Pallasmaa, the residential scale design seeks to respond to the distinctive exchange of bodies and objects that reside within the space. Within the house, space defines the boundaries of differing bodies to traverse, contraction and expansion signalling how to dwell, conclusions of corridors offering a site of rest. Inlets within unique timber fittings and protruding pegs offer small homes for objects of value and expression to sit or hang, while closed shelves and draws embedded into these structures offers a hiding place for the mundane or secret.

Figure 7.138  
Bedroom  
Ground Floor





### Levels of Intimacy

Aligning again to Zumthor and Pallasmaa's principles, the residential scale design seeks to provoke a range of unique experiences of intimacy throughout differing spaces. Within the house, spaces intended to be experienced alone appear more closed through lengthened access and lowered ceilings, while surfaces are enriched with soft linings of timber flooring or textured tiles, imbuing a sense of safety and warmth. Spaces of movement regulate opposing levels of intimacy through defined corridors, while floor to ceiling glazing provides a muted infiltration of sheltered and familiar external environments. Spaces intended to be experienced with a variety of others retain a sense of openness through double height spaces and glazing connecting to the external environment and other shared spaces, while elongated doorways embedded within wall fittings define shared spaces from one another.

Figure 7.139  
Lounge  
Ground Floor





### Material Compatibility

Following Zumthor and Bohme, the residential scale design aligns materials to the intended function or feel of a space. The entirety of the house encompasses a sweeping amount of timber, paying homage to the surrounding environment and location of the town's green belt that once was, while supporting a human tendency towards this material. Interior to the house, variations in scale, composition and tone of timber are expressed to adhere to a consistency of place, while subtly suggesting a change in spaces intended for differing functions. Colouration and texture of both timber, tiles and glazing become a signal of differing moments within the house, defining one bathroom from another, or one walkway to its pair. Similarly, concrete is applied to spaces of movement and communality, signalling a change in pace.

Figure 7.140  
Bathroom  
Ground Floor





## Design Reflection

The residential scale design of a hall of residence focussed on developing a building that responded and resonated to the physical site as a method to convey experiences of wellbeing and atmosphere. Following Angelil's understanding of cartography as an "operative device by which to frame architecture's context" as a primary means to stimulate creative form, it was expected that this would provide the foundations for wellbeing and atmosphere to naturally emerge from (2003, p.365). However, due to such a strong initial focus on form finding, paired with a lack of consistent translation between the resulting two-dimensional drawings and three-dimensional explorations, the resulting design, evidently, is rigid and precedes the importance of integrating wellbeing and atmosphere from the outset and part of the design process. Subsequently, design elements to support the conditions of wellbeing and atmosphere were attempted to be integrated within the design following the establishment of form and following a completion of the design stage. Expressing conditions of atmosphere through this process inevitably suffered, while an inconsistent relationship to the 'application to design' guidelines provoked a lack of atmosphere throughout the design. These design guidelines were not used at the beginning of the design process because of pragmatic constraints due to coronavirus, which put more pressure on completing the design rather than developing design in a reflective way. It was clear at the end of the design process what areas of the 'research for design' had been neglected, in particular through a focus on form and not shifting this. Zumthor emphasises the implications of designing through a form orientated lens, stating:

*Architecture is not about form, it is about many other things... The light and the use, and the structure, and the shadow; the smell and so on. I think form is the easiest to control, it can be done at the end. (Zumthor in Frearson, 2013, para.2)*

Developing design according to two-dimensional exploration, with minimal integration to the contours of site throughout the process also proved perilous to the relationship of the design to the steep topography and bush on part of the site. It seems more pertinent to align the topography with architectural opportunities it may offer such as light and views, on reflection these are more relevant and applicable to progress within the final scale of design.

An emphasis on integrating the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility with one another prior to expressing them within the resulting design would have been more beneficial to create a cohesive and connected building.



Drawing from these evaluations to the final design, the design process, and integration of wellbeing and atmosphere will be realigned and explored.

Additionally, the design outcome of the residential scale hall of residence does not align to the initial scale that was intended. Rather than a self-catered dispersed housing typology (existing throughout VUW's accommodation facilities), the design proposes a large singular housing typology. Without the aligning literature and case studies, the enlarged design outcome was not evidence based. In reflection, the scale would have benefitted from responding to research in the area, such as understandings from Van Der Ryn's & Silverstein's dorm project (1967).

Figure 7.141  
Bedroom Corridor  
Level One





Public Scale

Anya Seth

08

Eight

## Public Scale

Figure 8.0  
Public Scale Design



Design Intent

The intention of this chapter is to present an exploration of design resulting in a public scale student hall of residence within Wellington that both addresses and progresses the evaluation and understandings gained from the prior design scale. While a shift in scale of design occurs, the public scale design becomes focused on retaining a greater sense of spatial diversity and more intimate connection to the landscape to align more closely to supporting wellbeing and atmosphere.

To re-engage and progress supporting wellbeing and atmosphere throughout the public scale hall of residence, the design process shifts from an exterior to interior led approach, as explored within the prior scale of design, to that of an integrated interior to exterior led approach. Spatial explorations of specific rooms allow the conditions of wellbeing and atmosphere to be more greatly considered and refined, before needing to be arranged within a specific form, as Peter Zumthor suggests may be controlled easily at the end (Zumthor in Frearson, 2013). The intention of this approach was to place a greater emphasis on the unique space's residences would experience and engage with. To further shift the design process and resulting design, the conditions explored within wellbeing and atmosphere, connection, the senses, levels of intimacy, surrounding objects, and material compatibility, become integrated with one another early in the interior led design approach. This is to prompt users to engage with spaces that conjure a greater cohesion of atmosphere, rather than disjointed experiences throughout a building.

The first section of the chapter presents the revised design requirements, highlighting specific drivers derived from the practical, theoretical and physical to focus the scope of the project as well as a shift in program. The second section of the chapter presents the interior to exterior led design process, depicting the development of spatial, facade, massing and form explorations involving both physical and digital modelling and drawing. The third section of the chapter presents the design of the public scale hall of residence, providing an overview of design followed by a series of architectural drawings, then renders to depict the qualities of design. The chapter then ends with a reflection of the design.

	Design Intent
Section One	Design Requirements / Key Drivers / Program
Section Two	Design Process / Spatial Exploration / Facade Exploration / Massing Exploration / Form Exploration / Translating Process to Design
Section Three	Design / Overview / Architectural Drawings / Architectural Images
	Design Reflection

Figure 8.1  
Overview of Chapter Structure

Key Drivers

Information arising from the practical and theoretical literature surrounding wellbeing and atmosphere have been condensed to guides for each as a method to focus the scope of the design. While all information is considered throughout the design process, these guides serve not as a restriction but rather a simple prompt encompassing the primary goals.

Connect

0 1  
Create spaces that are accessible, adaptable and desirable for residents, staff and community to use as individuals, groups and communities.

Stimulate

0 2  
Create spaces that appropriately stimulate the visual, tactile, acoustic, and aromatic senses and enhance a relationship to natural light and biophilia.

Receive

0 3  
Create spaces that appropriately respond to inhabitation of subjects and objects to enhance integration and rhythm.

Define

0 4  
Create spaces that rejoice and restore the unique integrity of the associated intimacy of a space.

Coordinate

0 5  
Create objects and surfaces with materiality that responds meaningfully and sensuously to its surroundings.



Figure 8.2- 8.6  
Overview of Design Key Drivers  
Practical & Theoretical  
Response



Key Drivers

Information arising from the physical context has been paired with the relevant practical and theoretical literature surrounding wellbeing and atmosphere and translated to guides as a method to focus the scope of the design.

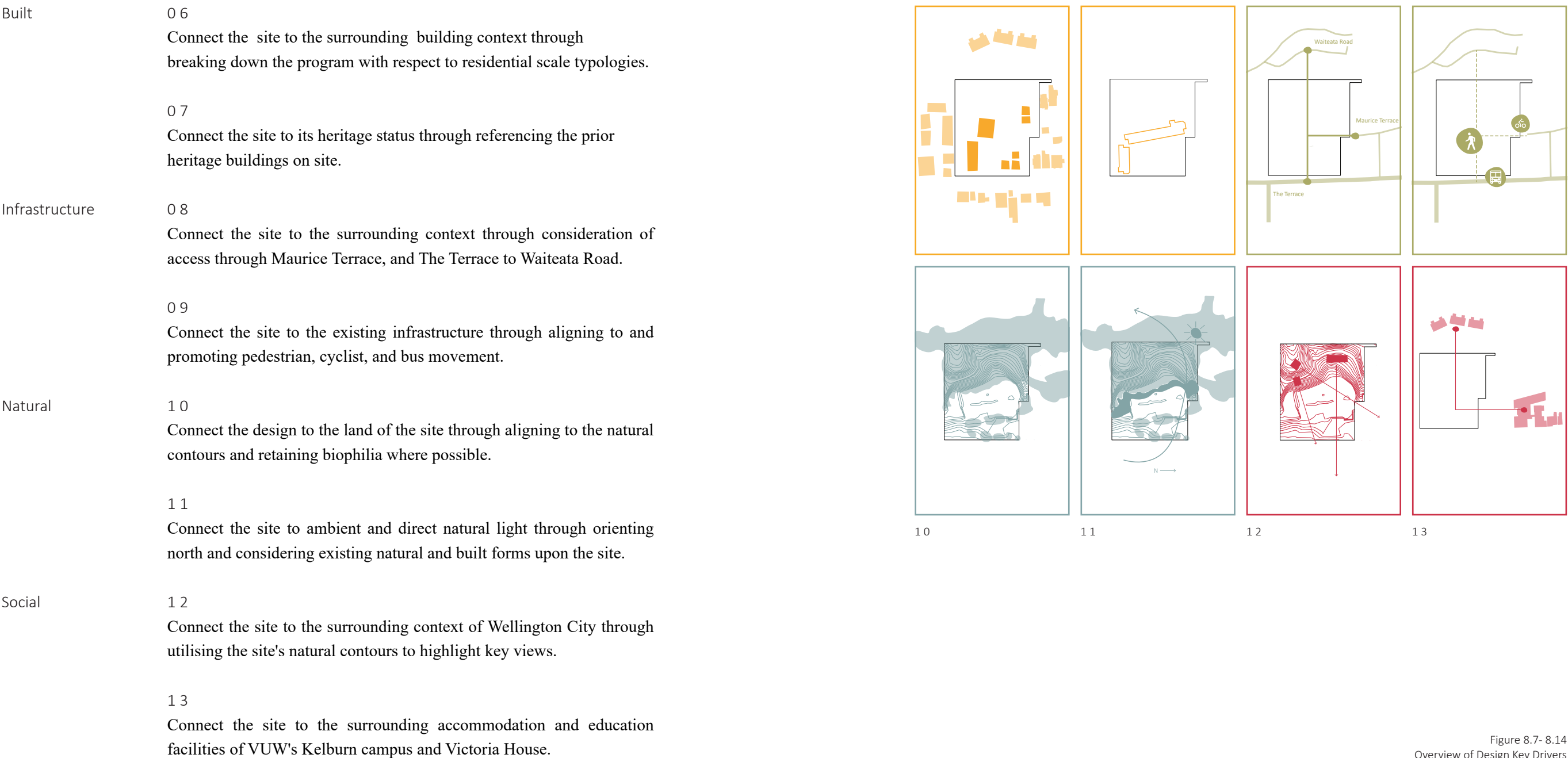


Figure 8.7- 8.14  
Overview of Design Key Drivers  
Physical Response

Program

The program for the public scale design has shifted from that of the large scale residential design due to a change in requirements and opportunities that align to a larger site and scale. Amendments to the program consist of creating clusters of related private, communal, and public space to be used and integrated as one. This approach to program offer's flexibility in future potential to expand accommodation needs, as well as relates to the design as a village of typologies. The following information will provide an overview of what each programmatic area of space will envision.

Resident Accommodation

Resident accommodation will be arranged in three building clusters of housing, each including a range of single/double/twinshare, three, five and seven bedroom typologies. It is intended for each cluster to be function as a larger household, thus spaces will be intertwined and overlapping. This will increase the chances of each individual being accountable due to a smaller community engaging with one another, as well as a residential advisor overseeing and being accommodated within each cluster.

Resident Facilities

Resident facilities will be arranged throughout the clusters of resident accommodation in a manner that is accessible to all. These facilities will include spaces that are necessary and desired to the daily rituals of life but are not required within the private realm - such as kitchen, dining, lounge, study, laundry and guest rooms. Though establishing these as communal to all residents, the privatisation and infrequent use of these facilities within a smaller household is removed and sustainable practice is restored as well as enhanced social interaction between all residents.

Public Facilities

Public facilities have been integrated into the program to engage residents and staff with the wider community. The site is located in a key area of Wellington Central, with many opportunities for integration with a wide range of the public to benefit both residents, staff and the community. Spaces that are desirable to the immediate community may be available for both consistent and booked use and placed within a manner that attracts the public into and through the site.

Residents (Private)	One Bedroom Typology (8)	36 sqm
	/ Bedroom (1)	/ 12 sqm
	/ Bathroom	/ 4 sqm
	/ Kitchen	/ 9 sqm
	/ Dining	/ 9 sqm
	/ Lounge	/ 11 sqm
	Three Bedroom Typology (4)	64 sqm
	/ Bedroom (3)	/ 12 sqm
	/ Bathroom	/ 4 sqm
	/ Kitchen	/ 11 sqm
	/ Dining	/ 11 sqm
	/ Lounge	/ 13 sqm
	Five Bedroom Typology (2)	96.5 sqm
	/ Bedroom (5)	/ 12 sqm
	/ Bathroom (2)	/ 4 sqm
Residents (Communal)	/ Kitchen	/ 13.5 sqm
	/ Dining	/ 13.5 sqm
	/ Lounge	/ 15 sqm
	Five Bedroom Typology (4)	120.5 sqm
	/ Bedroom (7)	/ 12 sqm
	/ Bathroom (2)	/ 4 sqm
	/ Kitchen	/ 13.5 sqm
	/ Dining	/ 13.5 sqm
	/ Lounge	/ 15 sqm
	Kitchen	40 sqm
	Dining	150 sqm
	Lounge	40 sqm
	Study	20 sqm
	Guest Bedroom (3)	12 sqm
	Bathroom (4)	4 sqm
Public (All)	Laundry	40 sqm
	/ Interior	/ 20 sqm
	/ Exterior	/ 20 sqm
	Exercise Space	40 sqm
	Gallery (Flexible)	40 sqm
	Cafe (Flexible)	100 sqm
	Outdoor Space (Flexible)	850 sqm
	/ Social Space	/ 200 sqm
	/ Horticulatural Space	/ 50 sqm
	/ Flexible Market Space	/ 600 sqm

Minimum sqm derived from  
(Littlefield, 2008)

Figure 8.15  
Overview of Programme



## Design Process

The design process giving rise to the public scale hall of residence follows an integrated interior to exterior led approach. Following the 'application to design' where applicable, the first part of the design process consists of a series of spatial explorations, followed by a series of facade explorations. Both of these explorations consider the close relationship between environment, architecture and user at an intimate level. The second part of the design process then looks to connect these spatialities to form and site. A massing exploration consisting of a series of annotated diagrams provide insight to suitable volumes upon site, followed by a series of more detailed form explorations focussing on integrating architecture to environment.

Throughout the design process, design has developed according to an accumulation of the knowledge gained throughout the thesis, encompassing a variety of digital and physical modelling and drawing techniques to convey this. How the design process is translated to design is conveyed.

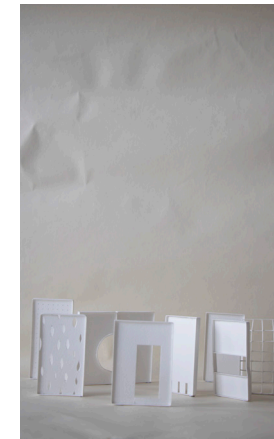
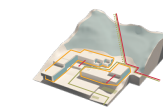
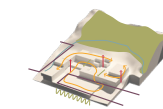
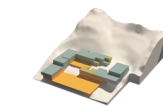


Figure 8.16- 8.19  
Overview of Design Process

**Spatial Exploration**

Spatial explorations individually consider spaces of differing purpose and users through plan and sectional digital drawings. Defined spaces include spaces to sleep, bathe, lounge, study, be outside, enter, and to circulate. To provide a guideline of space, explorations occur within a 4x4m area (based on the minimum area of a room established through the program guides, and reflective of the parameters within New Zealand for Student Housing). Within this guide, spatiality's are initially explored individually, then integrated with one another to prompt how larger spaces may work in coherency to support wellbeing and atmosphere. Plan and sectional drawings of spaces are designed following the 'application to design' to combine how each may work together within one space.

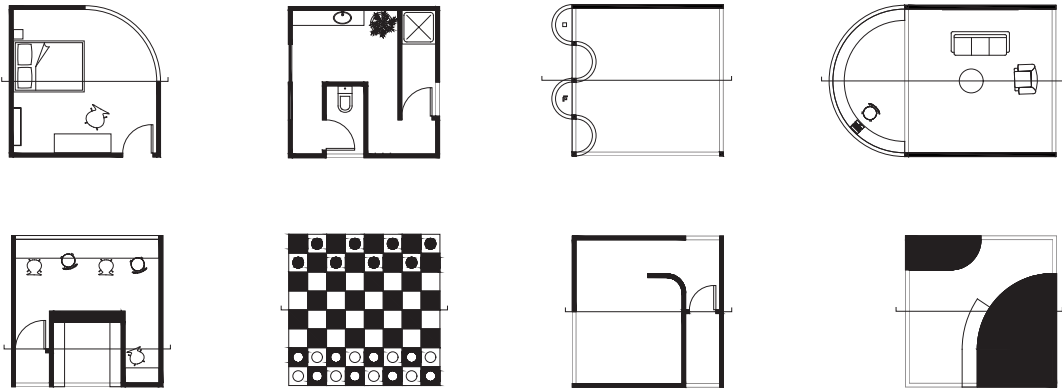


Figure 8.20  
Overview of Scale Two  
Part A





Spaces to Sleep

Explorations consider the role of natural light and views in relation to privacy and exposure to both other users and the environment. Curved walling, external balconies, elongated corridors, and shifts in facades become useful to connect and distinguish spaces intended for oneself.

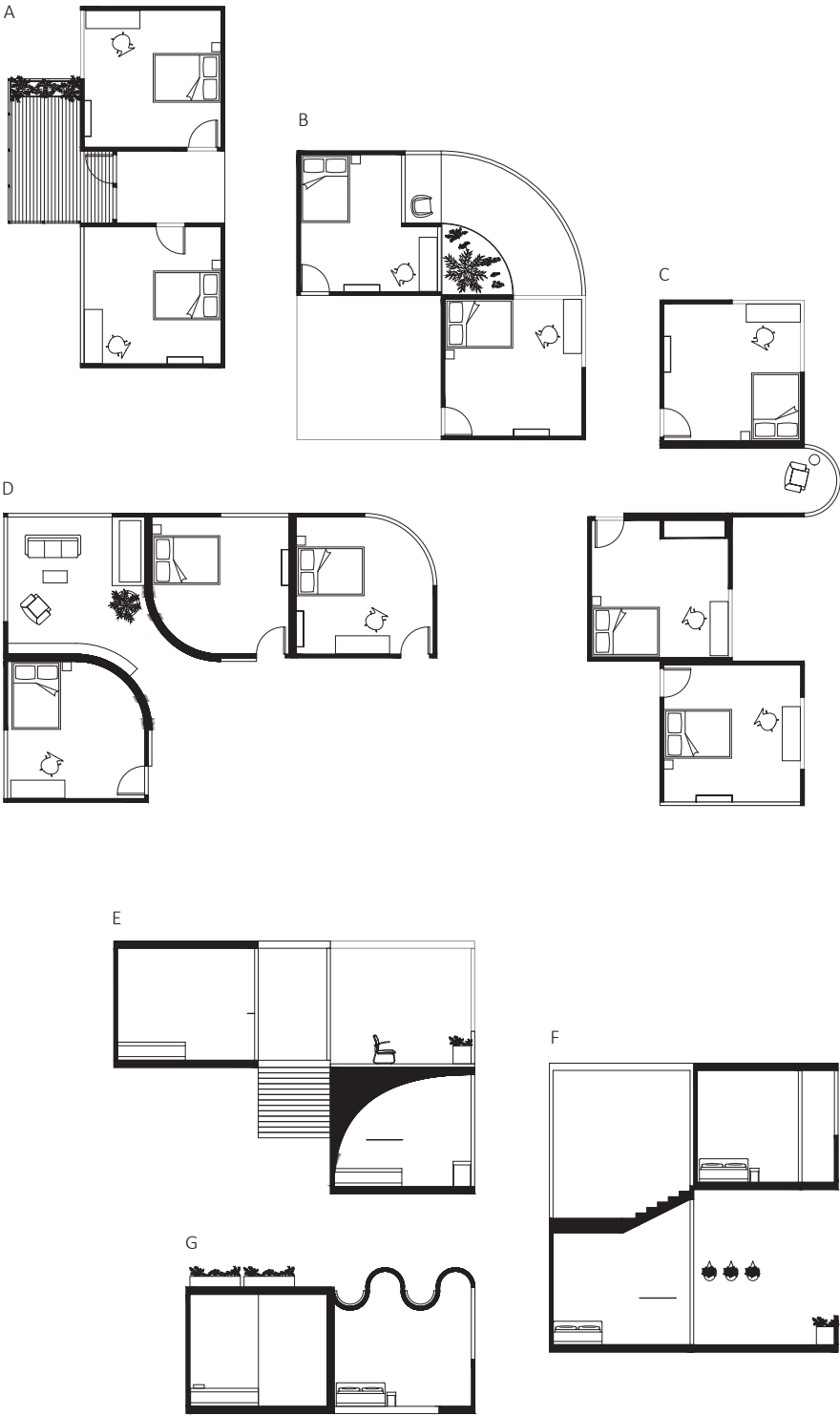


Figure 8.21  
Spaces to Sleep (Isolated)  
1 : 200

Figure 8.22  
Spaces to Sleep (Combined)  
1 : 200

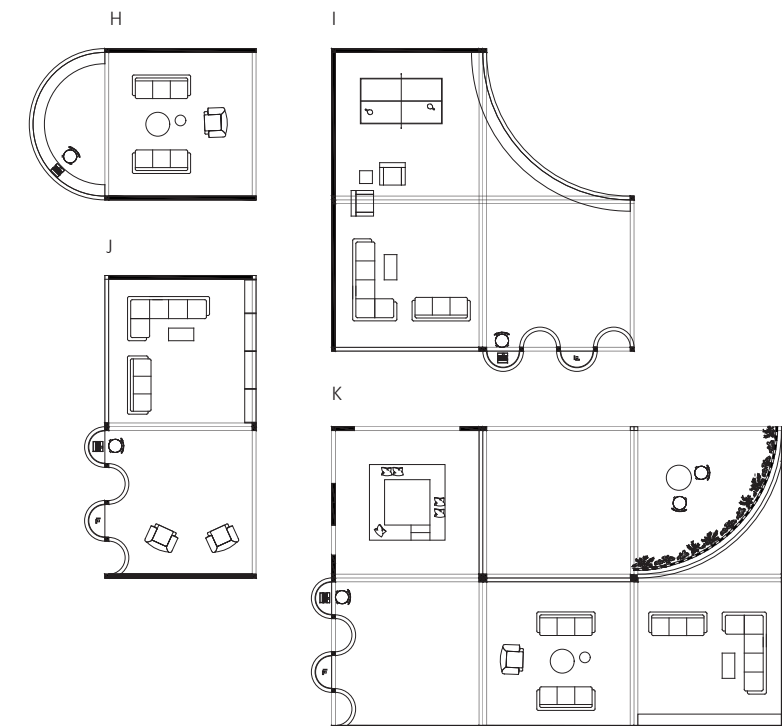
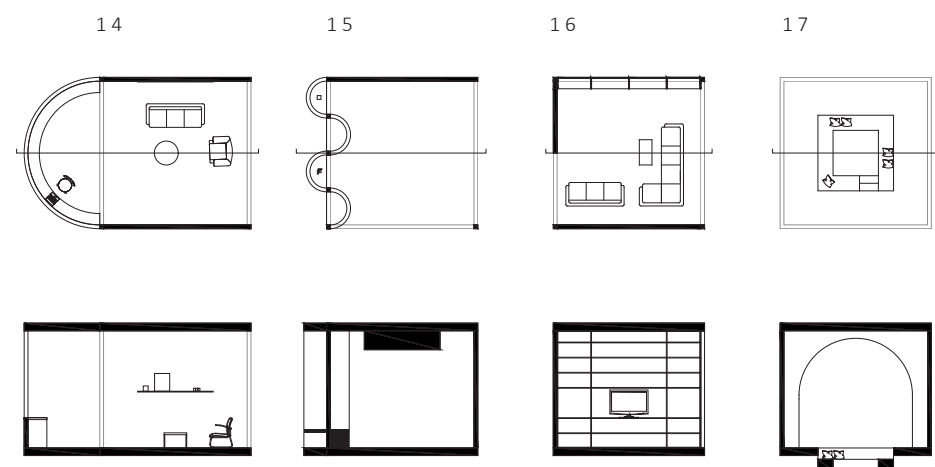


Spaces to Bathe

Explorations consider the role of light, sight, acoustics and aroma in relations to levels of intimacy between users. Floor to ceiling walling and physical division becomes useful to seperate spaces to bathe and spaces to use a latrine, creating more private and hygienic spaces.

Figure 8.23  
Spaces to Bathe (Isolated)  
1 : 200



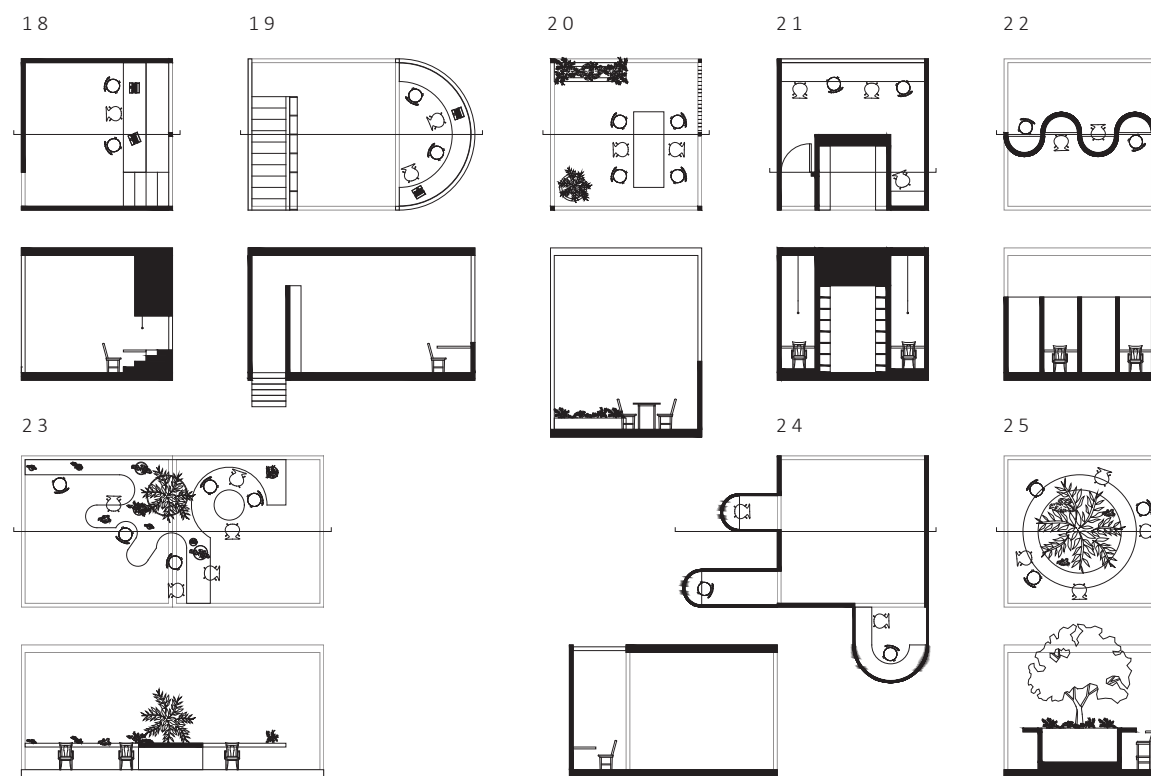


## Spaces to Lounge

Explorations consider the role of the diversity and flexibility of how a space may be used differently. Curved walling, excavated flooring and in-built shelving solutions become useful to create small pockets and boundaries for activity within a larger cohesive whole.

Figure 8.24  
Spaces to Lounge (Isolated)  
1 : 200

Figure 8.25  
Spaces to Lounge (Combined)  
1 : 200



## Spaces to Study

Explorations consider the role of diversity and flexibility of space, specifically differing levels of intimacy in reference to sight and acoustics. Thickened walling, partitions, variation of floor height, glazing, extrusions, and plantings become useful to defining differing gradients of intimacy and connection to the senses and users.

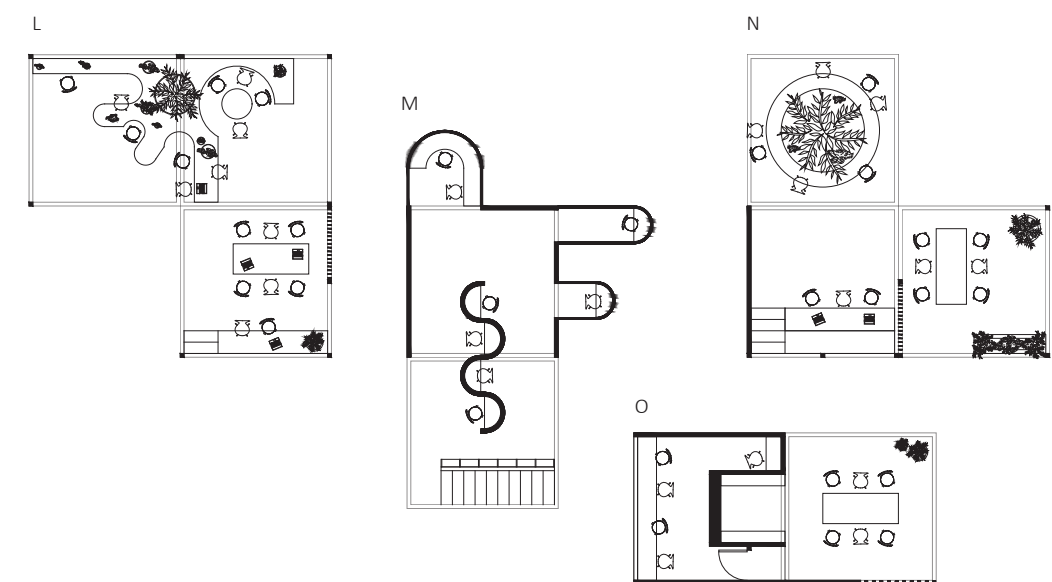
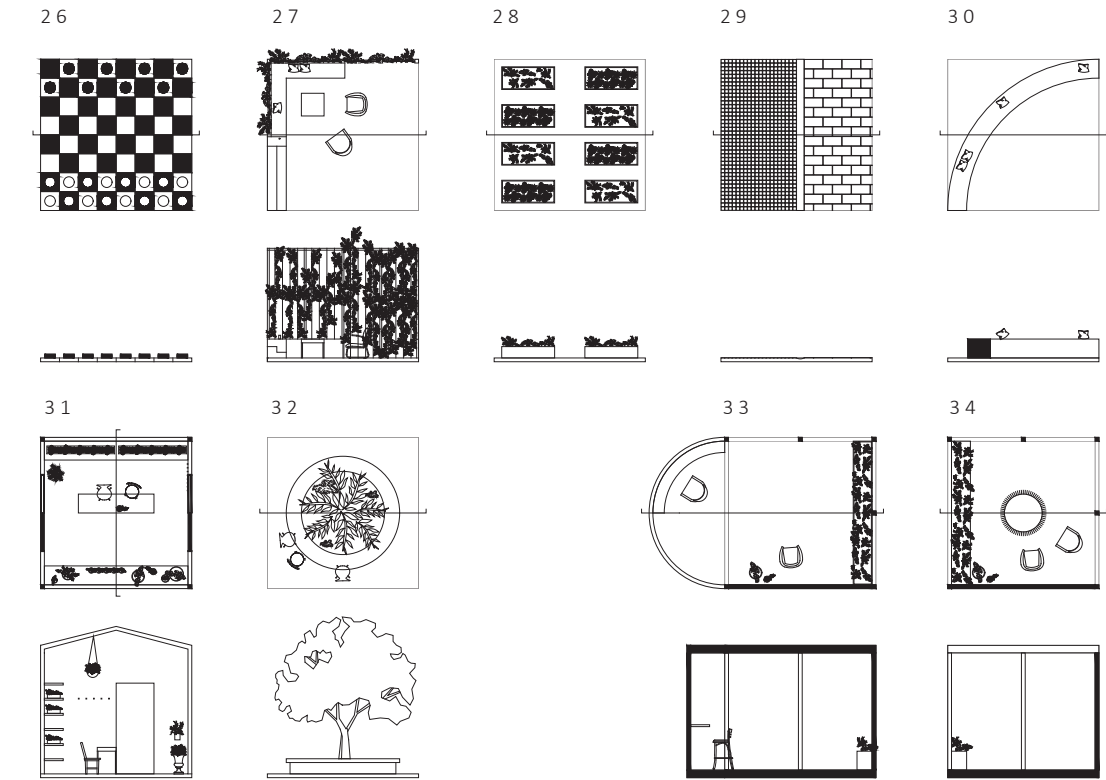


Figure 8.26  
Spaces to Study (Isolated)  
1 : 200

Figure 8.27  
Spaces to Study (Combined)  
1 : 200



Spaces to be Outside

Explorations consider the role of biophilia and play to wellbeing and atmosphere. Spaces embedded within nature become useful to connection users have to oneself and environment through the senses, while spaces focused around play and socialising become useful to stimulating connection with others through intimacy.

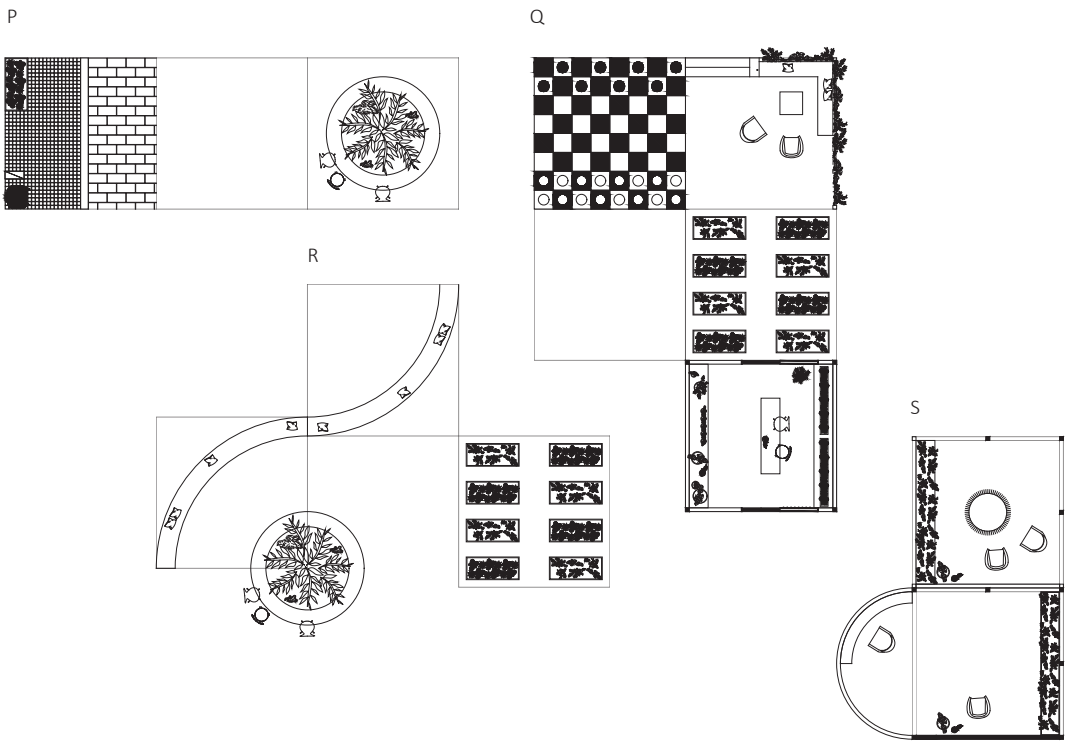
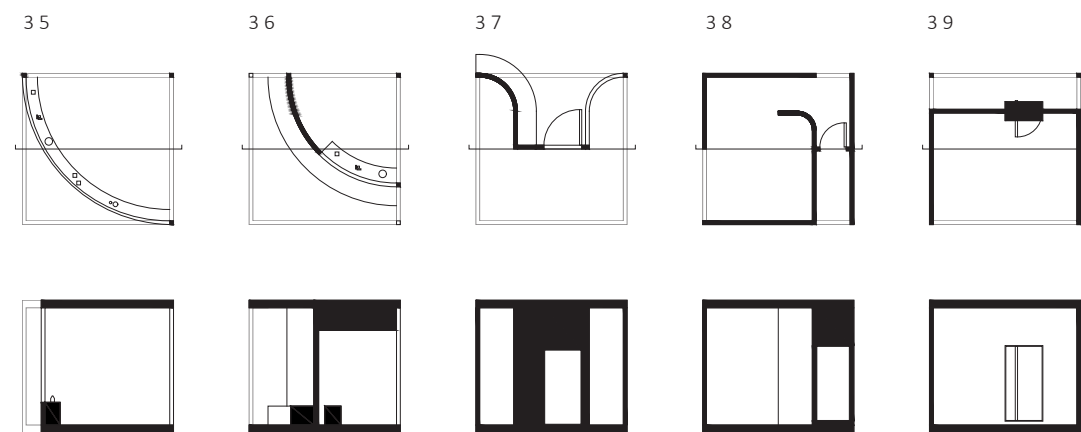


Figure 8.28  
Spaces to be Outside (Isolated)  
1 : 200

Figure 8.29  
Spaces to be Outside (Combined)  
1 : 200





## Spaces to Enter

Explorations consider the threshold between differing levels of intimacy of spaces to create a sense of wellbeing and atmosphere. Elongated and curved walling considered with thickness, glazing, and seating for subjects and objects becomes useful to defining differing spaces and sense of both journey and arrival within a space.

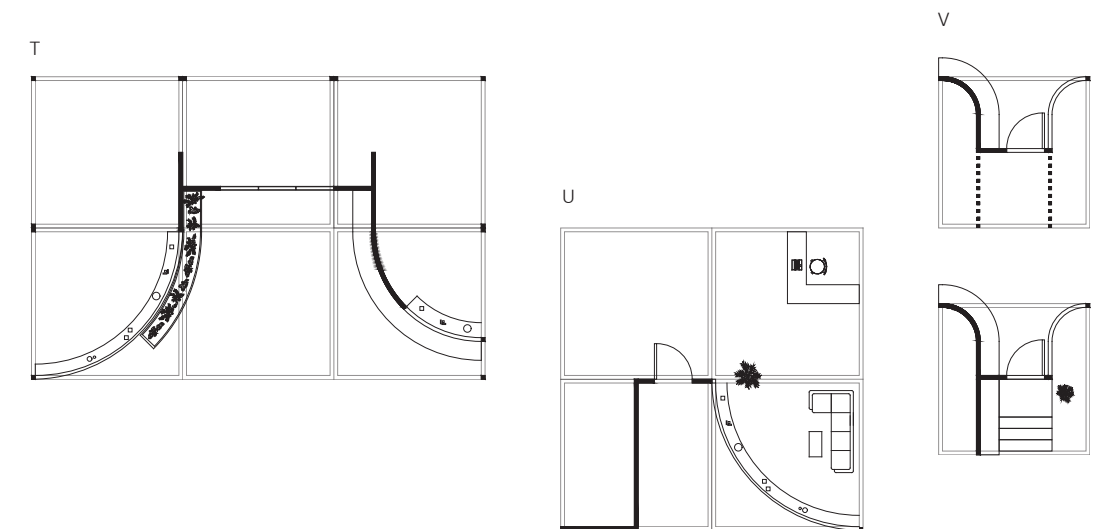
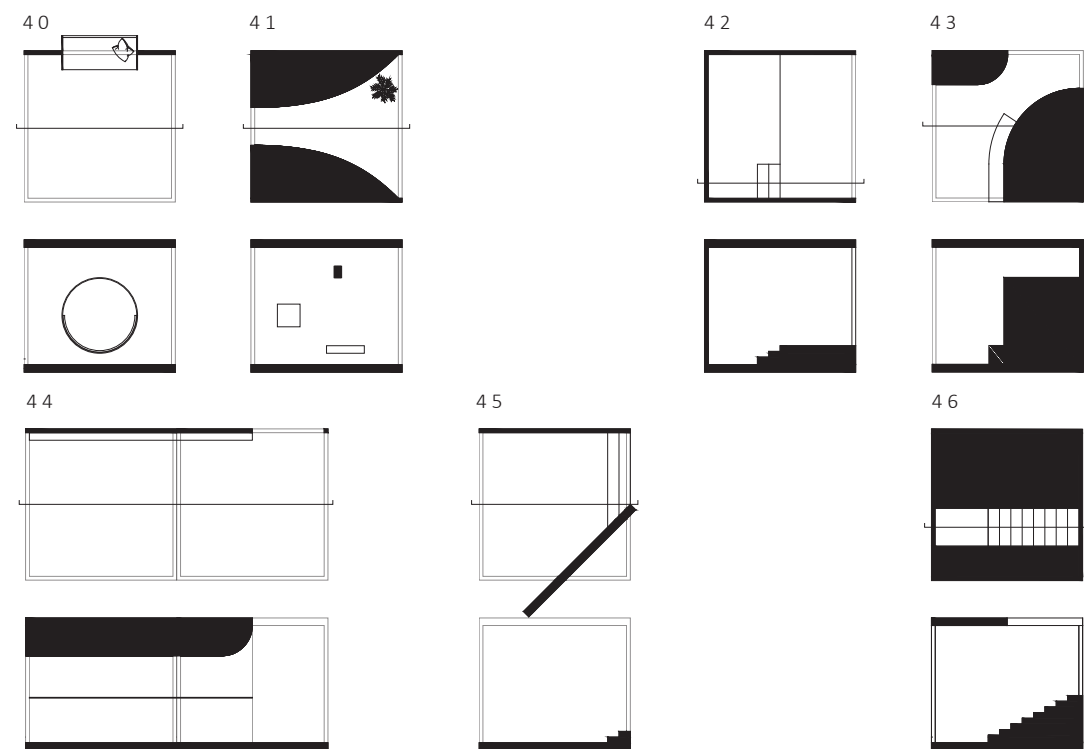


Figure 8.30  
Spaces to Enter (Isolated)  
1 : 200

Figure 8.31  
Spaces to Enter (Combined)  
1 : 200



## Spaces to Circulate

Explorations consider again the threshold between differing levels of intimacy. Curvature and thickness in walling, alongside extrusions, floor height, and compression and tension of space become useful to signal moments of pause and movement to generate wellbeing and atmosphere.

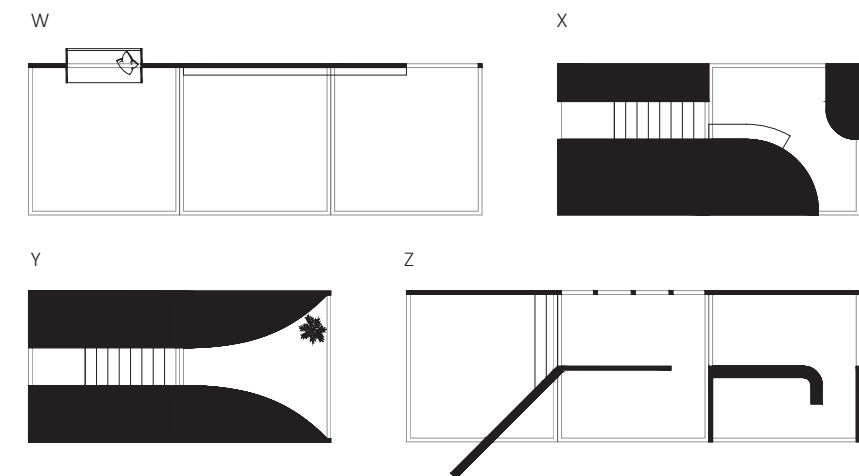


Figure 8.32  
Spaces to Circulate (Isolated)  
1 : 200

Figure 8.33  
Spaces to Circulate (Combined)  
1 : 200

**Facade Exploration**

Facade explorations extend from the spatial explorations to consider how users may engage with others and the environment through the internal and external facades facilitating light, sight, texture, and form. From the prior spatial explorations, it was evident that how these factors were controlled was key to how a space may be interpreted by the inhabitant and feel. Following physical modelling of a series of facades, digital drawing is used as a method to further explore how these may be utilised within differing spaces to support wellbeing and atmosphere. Aligning to the spatial explorations, facade exploration occurs to fit within the previously defined 4x4m area through limiting facades to a 2x3m area as a guide.

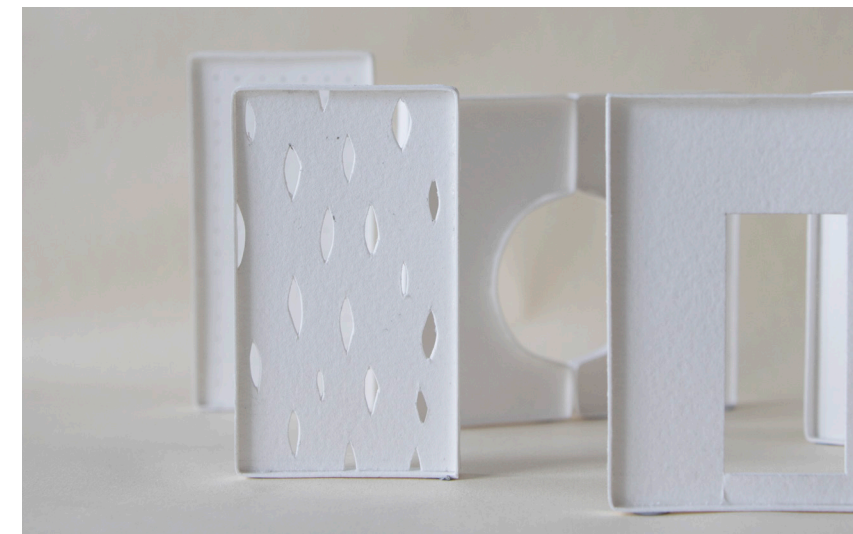
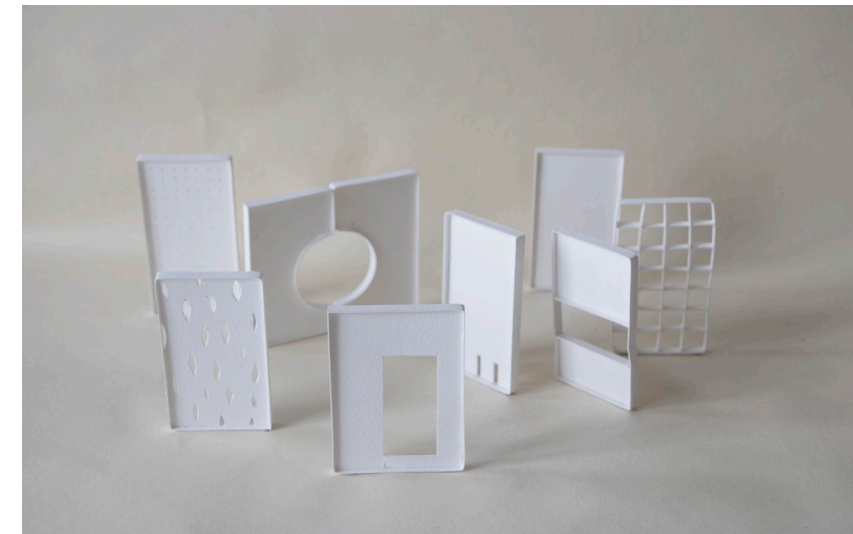
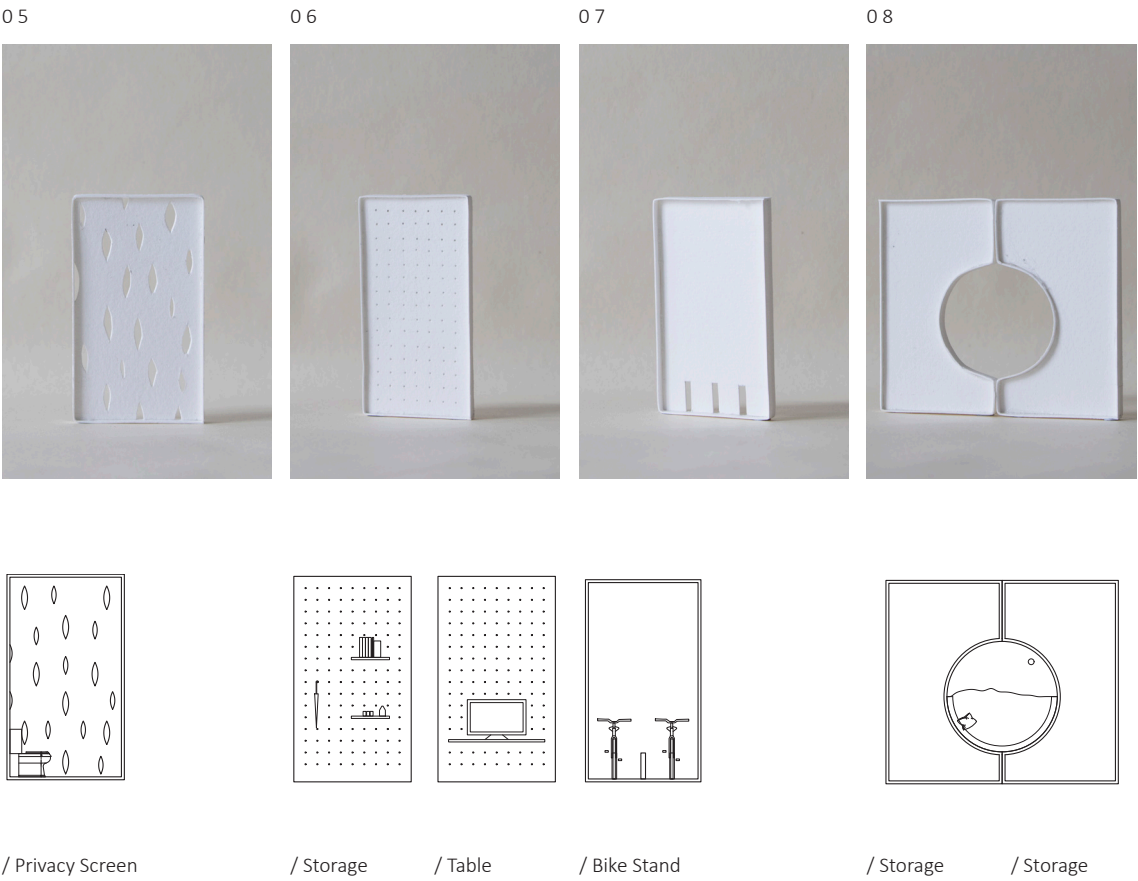
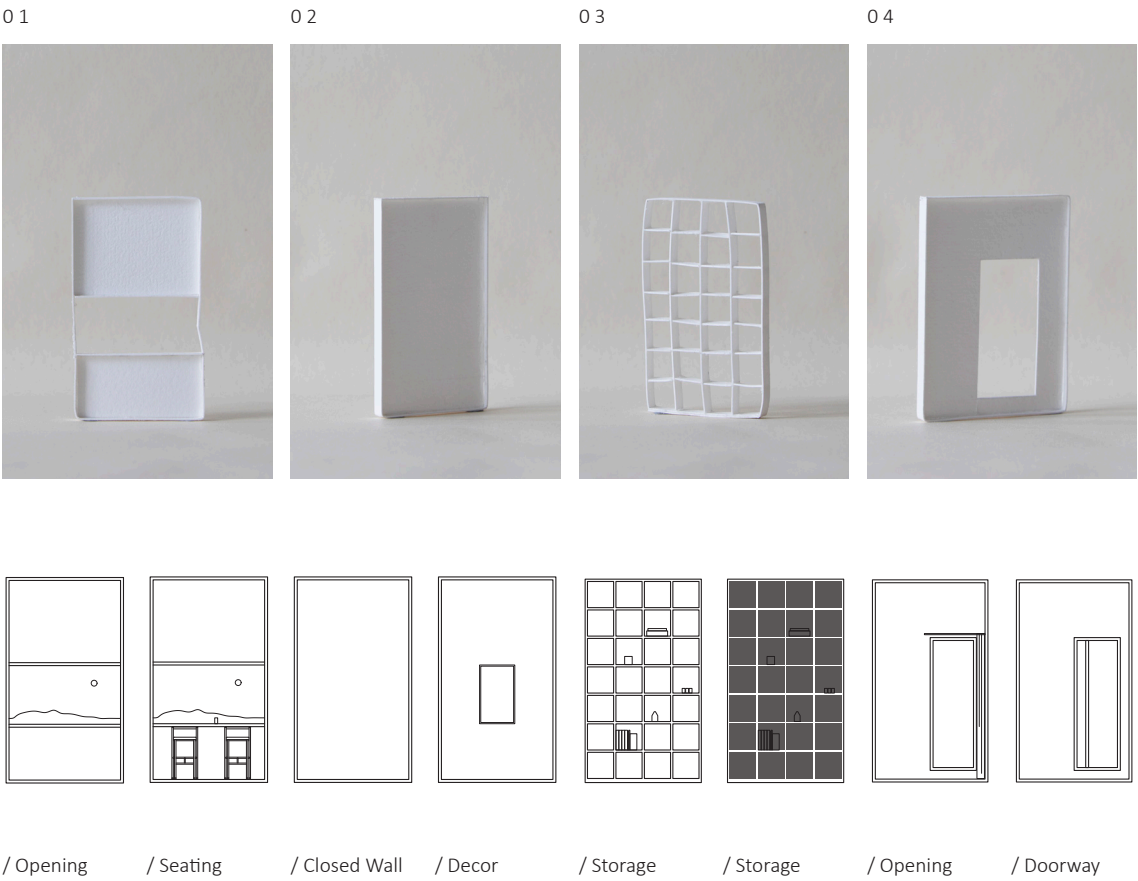


Figure 8.34- 8.35  
Facade Exploration (All)





Facade Exploration

Explorations of facades consider the role of glazing, openings, storage and screens to provide both connection and separation between users and environments.

Figure 8.36- 8.43  
Facade Exploration Series  
Models

Figure 8.44- 8.56  
Facade Exploration Series  
Drawings

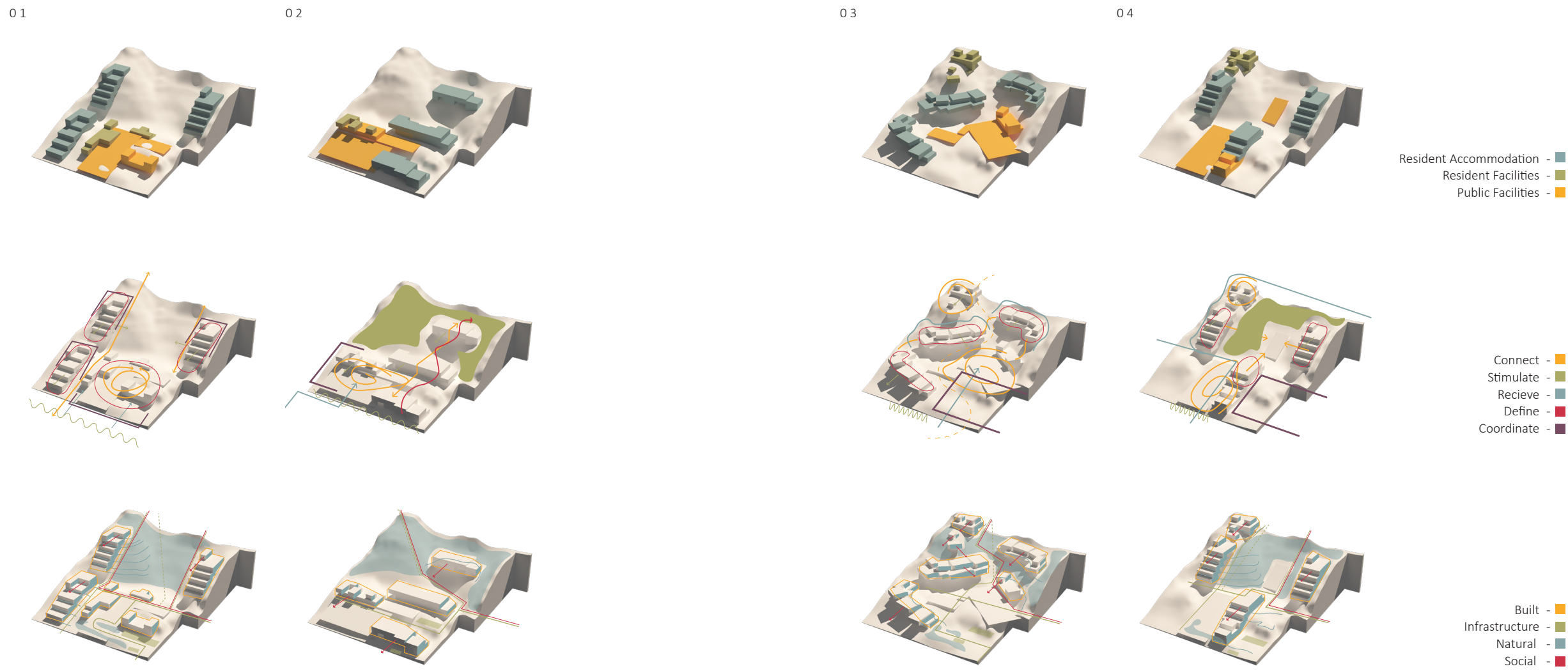
**Massing Exploration**

Massing explorations consider differing arrangements of volumes and program upon the site to assess how the design may best interact with the surrounding programmatic, practical and theoretical, and physical context. Following explorations of how interior space may be approached and arranged with respect to wellbeing and atmosphere, exploration shifts to how these may be massed together, developing to the exterior led approach of the method. Explored methods to address this included considering program upon site through separation, grouping, dispersing, and condensing.

Within each series of explorations a different context is analysed. The first iteration of each series explores program, the second explores wellbeing and atmosphere, and the third physical site. Each iteration within each series can then be individually analysed prior to considering each series massing as an entirety.



Figure 8.57  
Massing Exploration (All)

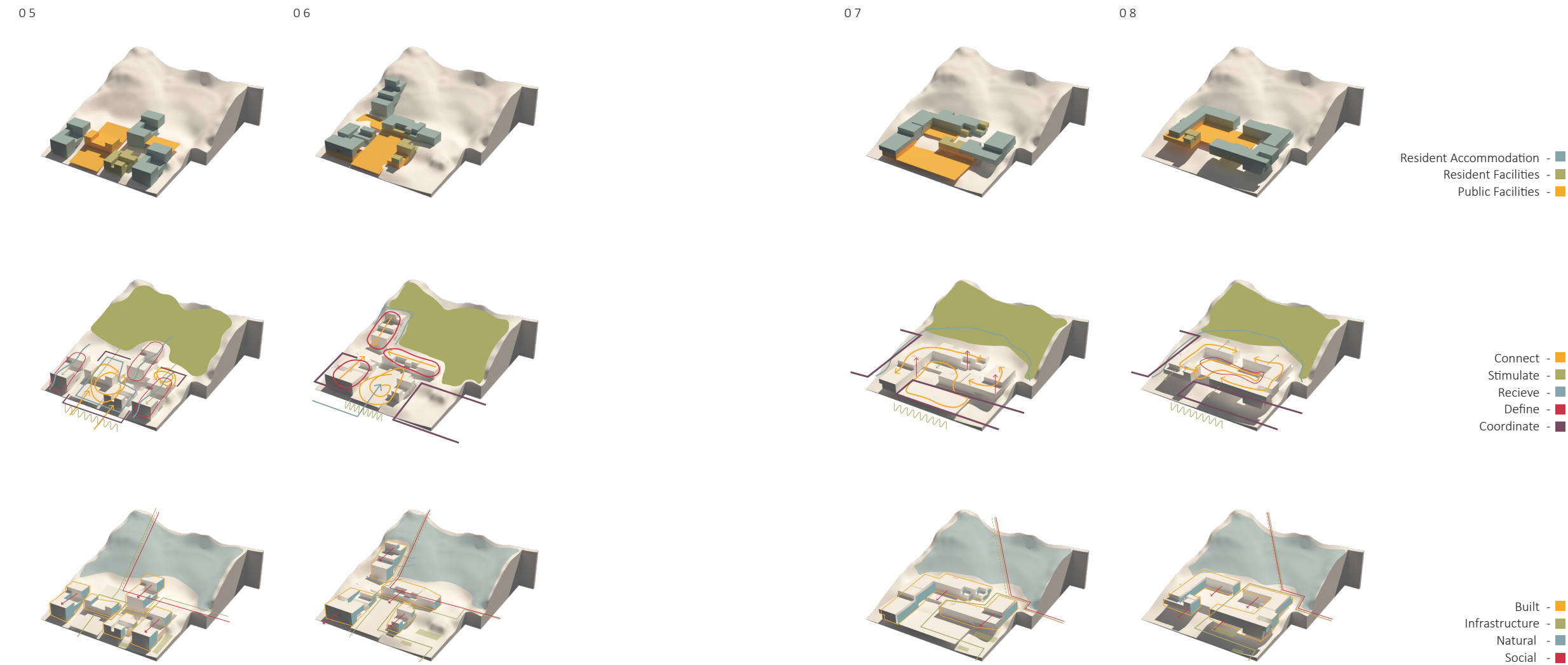


Dispersed Grouping

Iterations express a difficulty in promoting passive contact, a requirement to remove existing biophilia, but a strength in natural light and views results.

Figure 8.58- 8.61  
Massing Explorations  
Dispersed Grouping

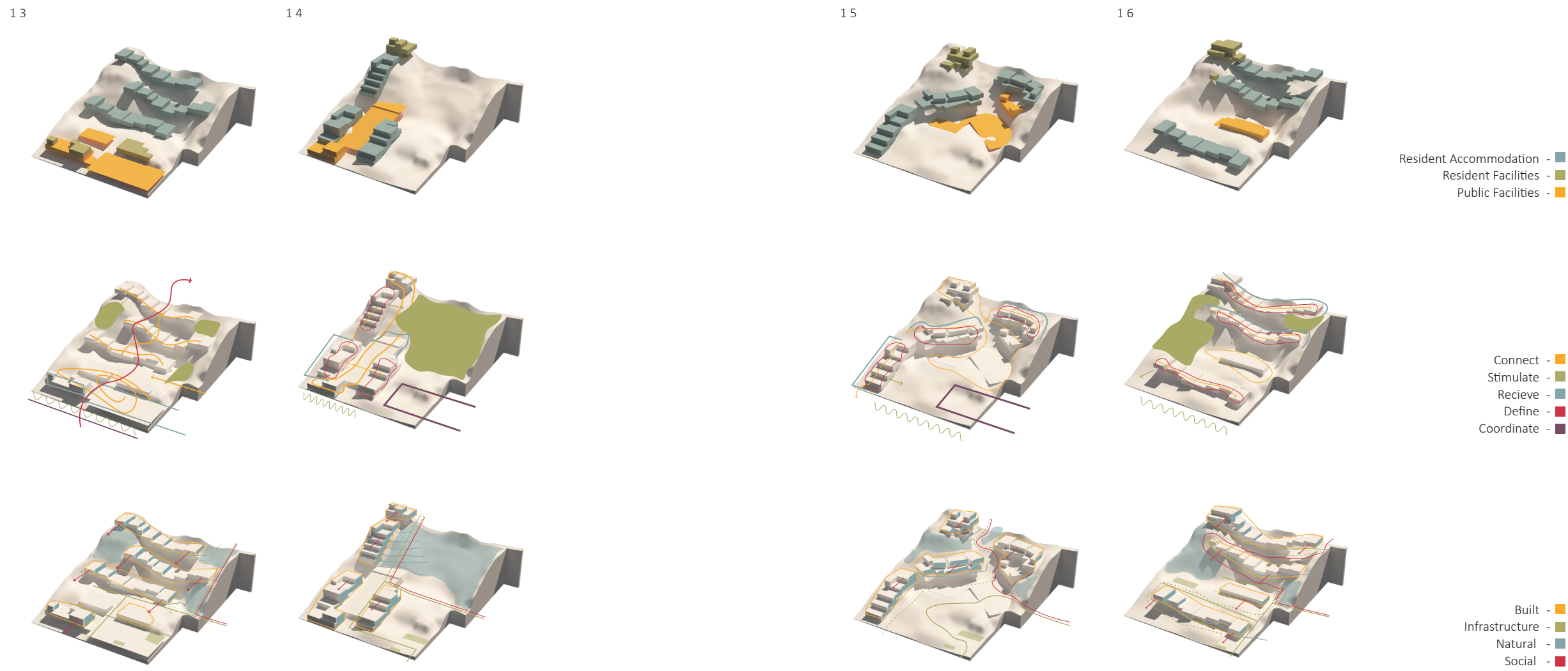




Condensed Grouping

Iterations express a sense of enclosure, ability to retain the natural site results, however, a need to address light and privacy in sight would need to be revised.

Figure8.62- 8.65  
Massing Explorations  
Condensed Grouping

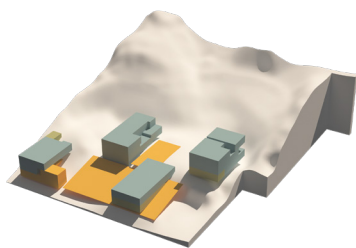


Dispersed Separation

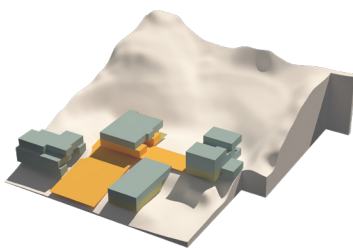
Iterations express strengths in gradients of intimacy and ability to engage the senses, however, spaces do not promote a sense of building unity or togetherness.

Figure 8.66- 8.69  
Massing Explorations  
Dispersed Separation

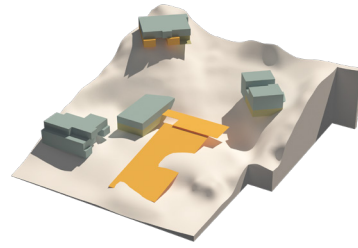
09



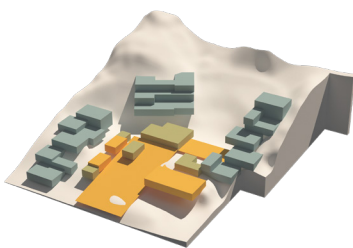
10



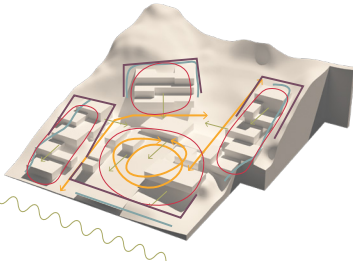
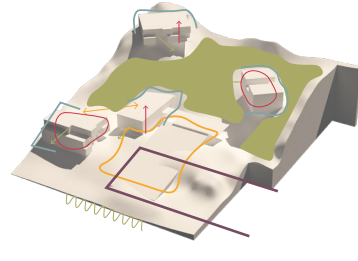
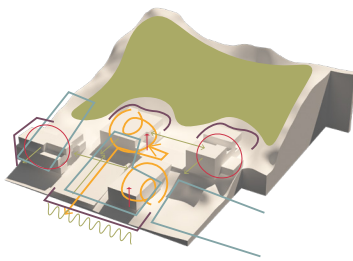
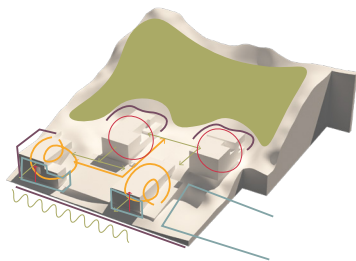
11



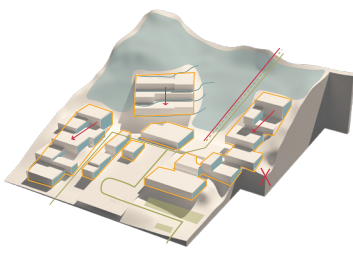
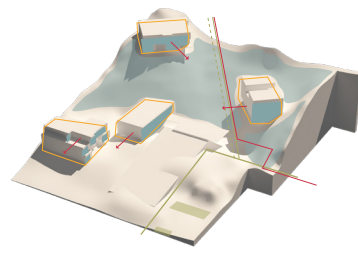
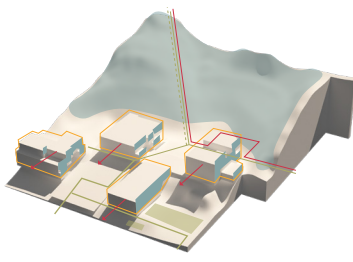
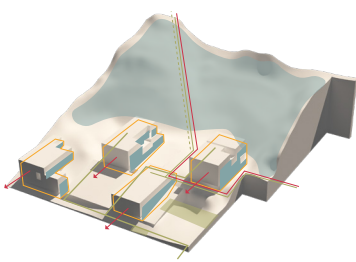
12



Resident Accommodation - ■  
Resident Facilities - ■  
Public Facilities - ■



Connect - ■  
Stimulate - ■  
Recieve - ■  
Define - ■  
Coordinate - ■



Built - ■  
Infrastructure - ■  
Natural - ■  
Social - ■

Condensed Separation

Iterations express a strength in promoting passive contact arises alongside the role of unified shared spaces.

Figure 8.70- 8.73  
Massing Explorations  
Condensed Separation



### Form Exploration

Form explorations extend from the massing explorations to consider how more specific arrangements and variation of form may be used to visually break down and integrate the design to the surrounding physical context. Through prior understandings within this thesis, it was evident that there was a need to reduce the visual impact of large scale typologies, while considering the natural impact on the land.

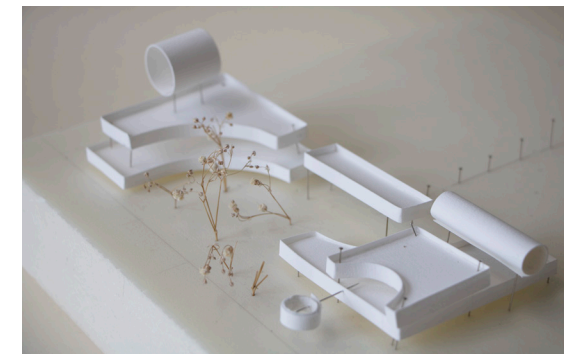
Three explorations of form aligning to the prominent prior methods of massing exploration are presented. These were explored through physical modelling upon 'site' to enhance a closer relationship to how form may respond physically and visually to scale, context and one another.



0 1

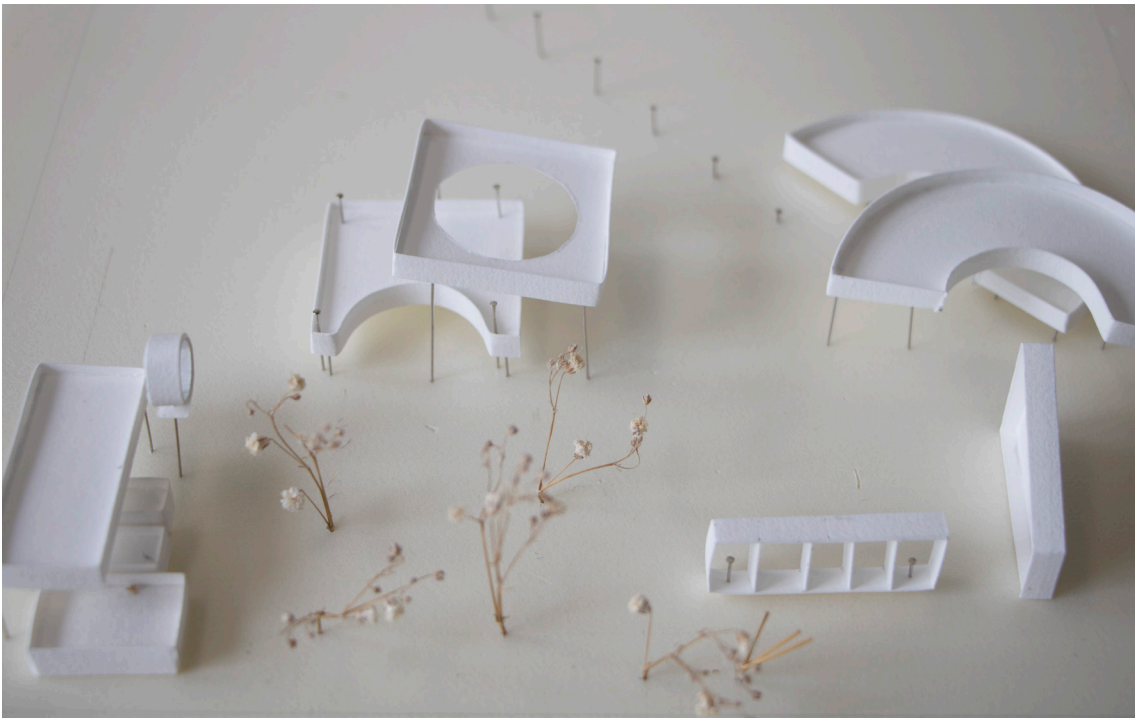


0 2



0 3

Figure 8.74- 8.76  
Overview of Scale One Part B  
All Iterations



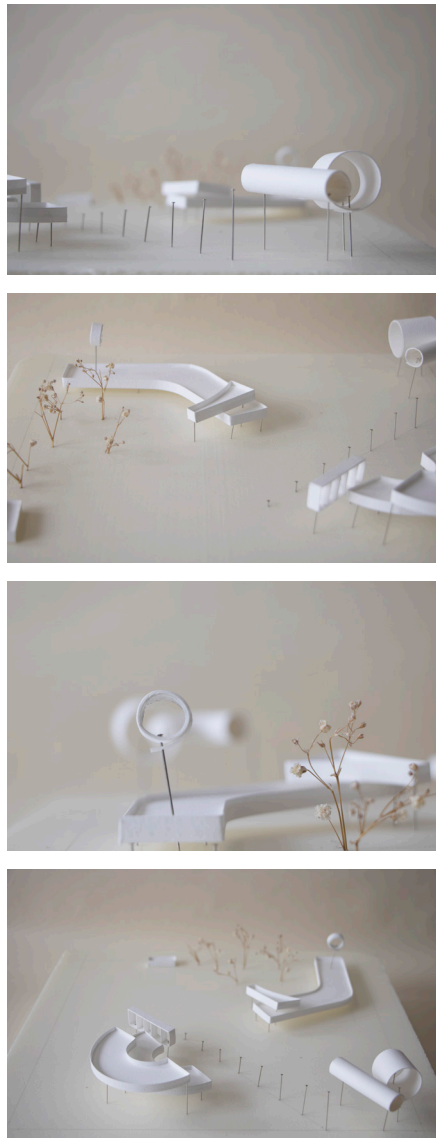
Iteration 01

Misalignment of facades, pockets of open/ exterior space, and atriums become useful to reducing visual impact, while enhancing an infiltration of natural light and surrounding views.

From left to right

Figure 8.77  
Iteration 01 Overall

Figure 8.78- 8.81  
Iteration 01 in Detail



From left to right

Figure 8.82 - 8.85  
Iteration 02 in Detail

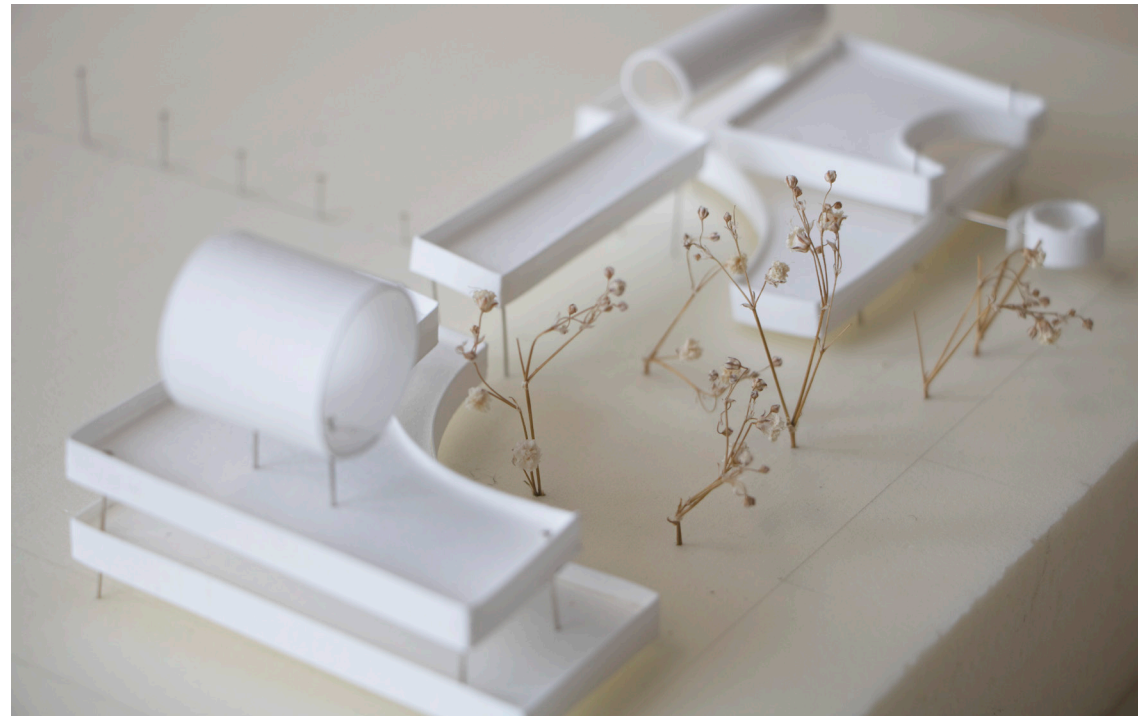
Figure 8.86  
Iteration 01 Overall



Iteration 02

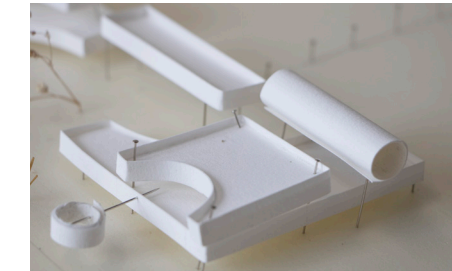
Stacking, elongation and heightening of form arising from minimal base points becomes useful to integrating design within the natural contoured and planted landscape, while nurturing views and visual impact of the design.





## Iteration 03

Utilising terracing, setbacks, pockets of open/exterior space, and heightening open ground space become useful to minimising the visual and physical impact on the street front, while retaining a connected and cohesive massing.



From left to right

Figure 8.87  
Iteration 03 Overall

Figure 8.88-8.91  
Iteration 03 in Detail

Translating Process  
to Design

Following the interior to exterior led design approach, understandings, and developments in applying wellbeing and atmosphere throughout design are accumulated towards the final design. This translation from process to design was achieved through four primary and integrated tools.

Two-dimensional hand drawing was used to align spatial explorations within massing and formal explorations, where AutoCAD was then used to refine this. Three-dimensional development of these spaces and was then carried out through modelling in Rhino, where the final model could then be developed within ArchiCAD to a detailed level.

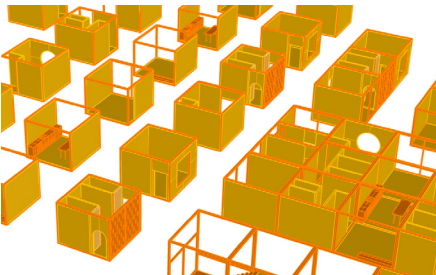
0 1



0 2



0 3



0 4



Figure 8.92  
Overview of Translating Process  
to Design

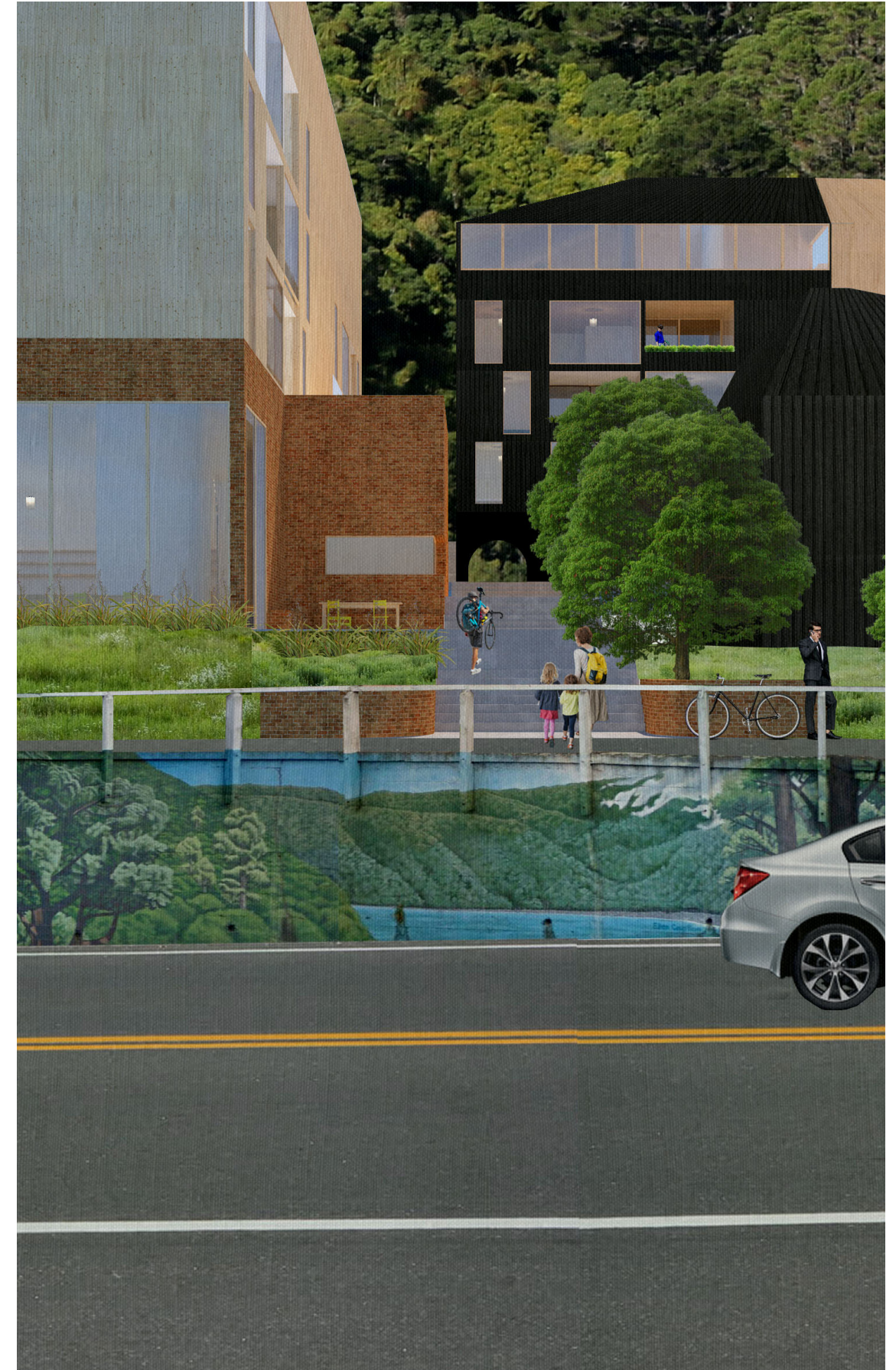


## Design

As a series of interconnected buildings, the public scale design accommodates up to 110 inhabitants, while providing shared residential and community facilities. Through progressing understandings of designing for connection, the senses, surrounding objects, levels of intimacy, and material compatibility, the design proposes how wellbeing and atmosphere may be addressed within the design of student accommodation. Ultimately, it is through this that the public scale design may improve the experience of social isolation and loneliness among residents.

The following pages present the public scale design of a catered hall of residence. The first part of the section presents a series of architectural plans and sections depicting programme, arrangement, and relationship of spaces. The second part of the section then presents a series of visual drawings, grouped and ordered by function of space, to depict moments of time that may be captured throughout an individual's experience within the spaces.

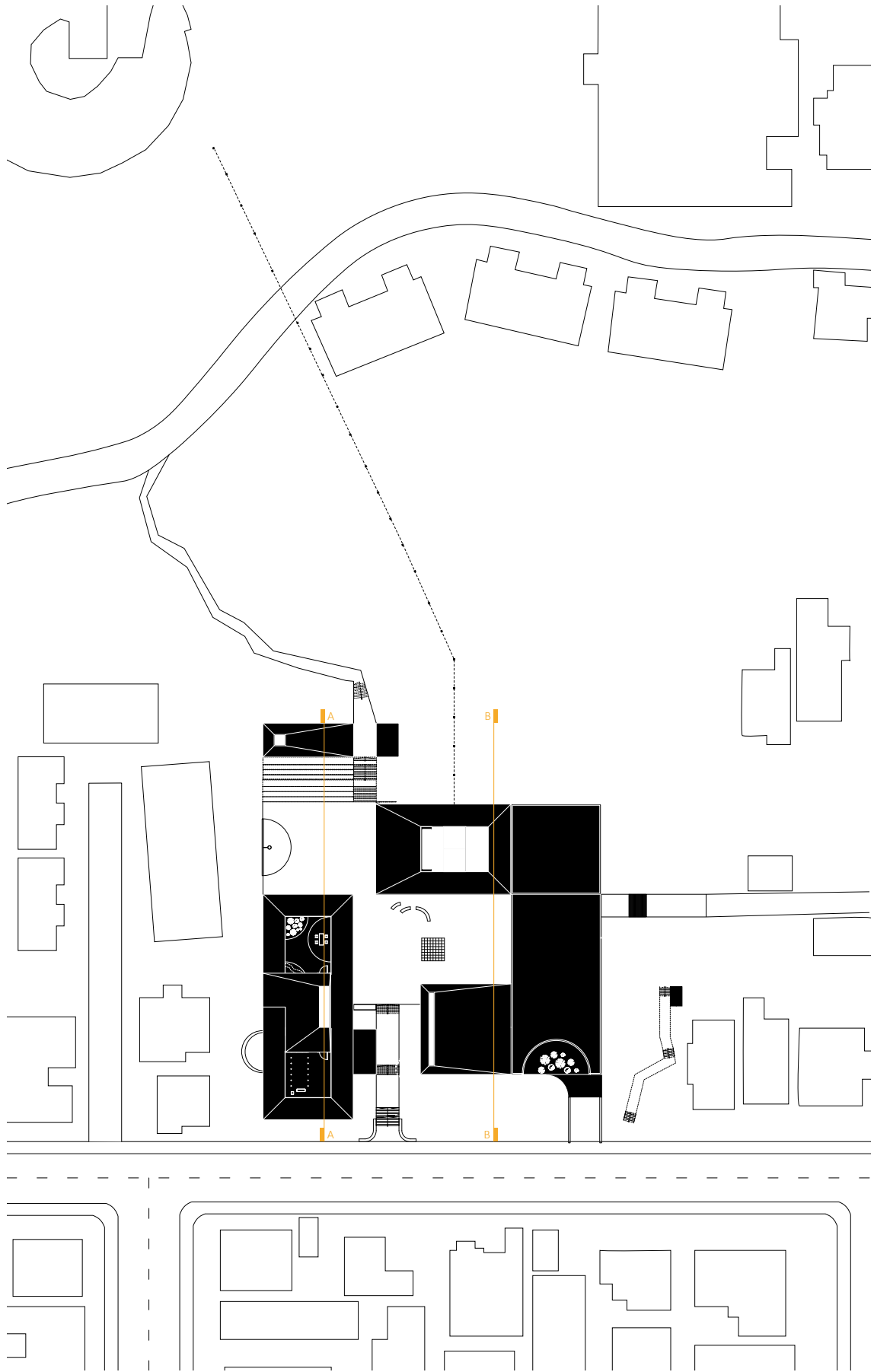
Figure 8.93  
Street Appearance & Entry





Site

Figure 8.94  
Site Plan  
1 : 1000



Basement

- 01 / Pedestrian Entry (The Terrace)
- 02 / Vehicle Entry (The Terrace)
- 03 / Carpark
- 04 / Rubbish

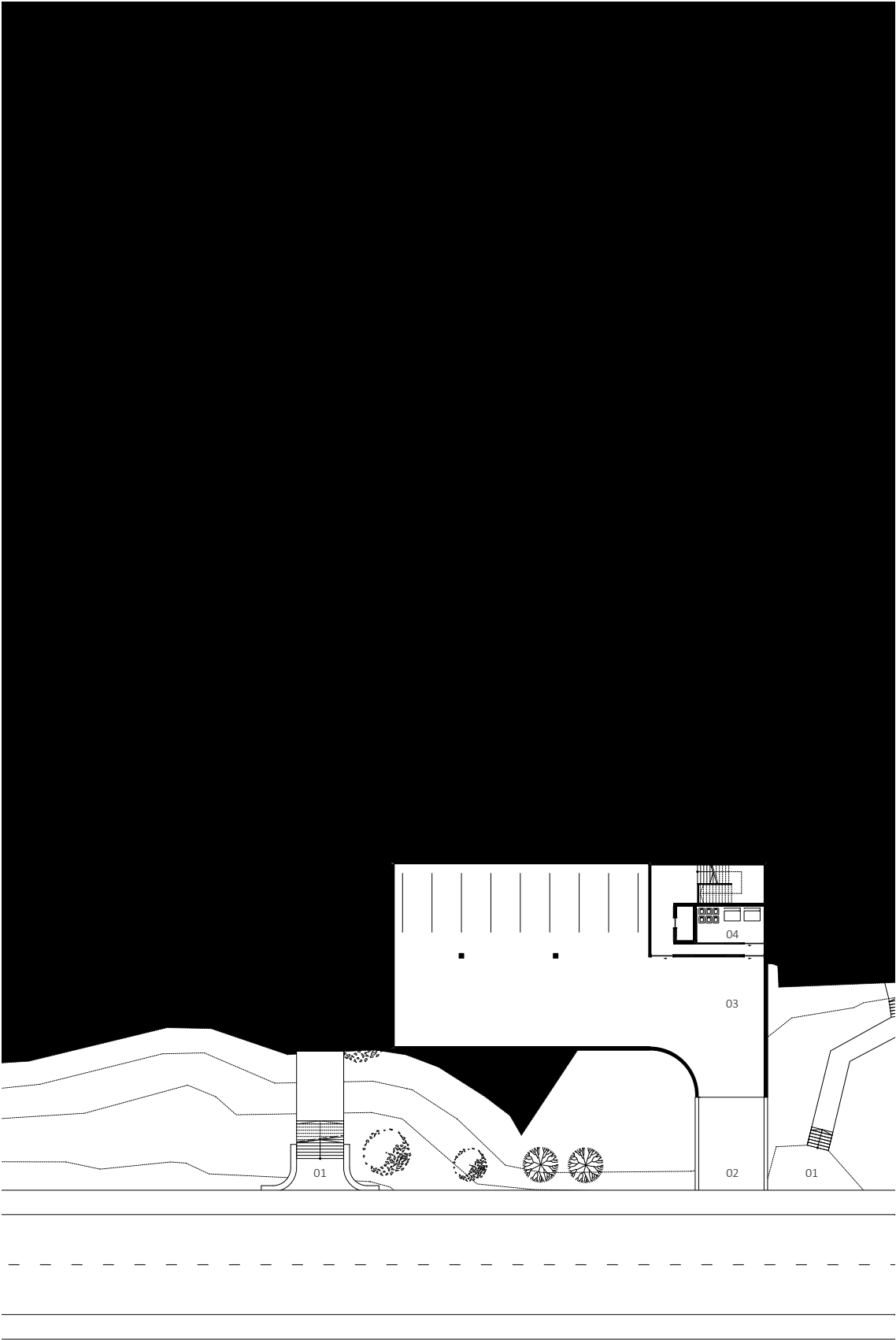


Figure 8.95  
Basement Floor Plan  
1 : 500

Ground

- 01 / Pedestrian Entry
- 02 / Vehicle Entry
- 05 / Cafe
- 06 / Studio
- 07 / Gallery
- 08 / Lounge
- 09 / Outdoor Sports Court
- 10 / Sheltered Courtyard
- 11 / Open Courtyard
- 12 / Reception & Waiting Area
- 13 / Offices
- 14 / Dining Room
- 15 / Kitchen
- 16 / Horticultural Garden
- 17 / Pedestrian Access to Waiteata Road
- 18 / Cable Cart Access to Waiteata Road



Figure 8.96  
Ground Floor Plan  
1 : 500





One

- 17 / Pedestrian Access to Waiteata Road
- 19 / Single/Double/Twinshare/RA Accommodation
- 20 / Three Bedroom Accommodation
- 21 / Five Bedroom Accommodation
- 22 / Seven Bedroom Accommodation
- 23 / Resident Kitchen
- 24 / Resident Deck
- 25 / Viewing Space
- 26 / Gym
- 27 / Spa



Figure 8.97  
Level One Floor Plan  
1 : 500



Two

- 19 / Single/Double/Twinshare/RA Accommodation
- 20 / Three Bedroom Accommodation
- 21 / Five Bedroom Accommodation
- 22 / Six Bedroom Accommodation
- 23 / Resident Kitchen
- 24 / Resident Deck
- 25 / Viewing Space

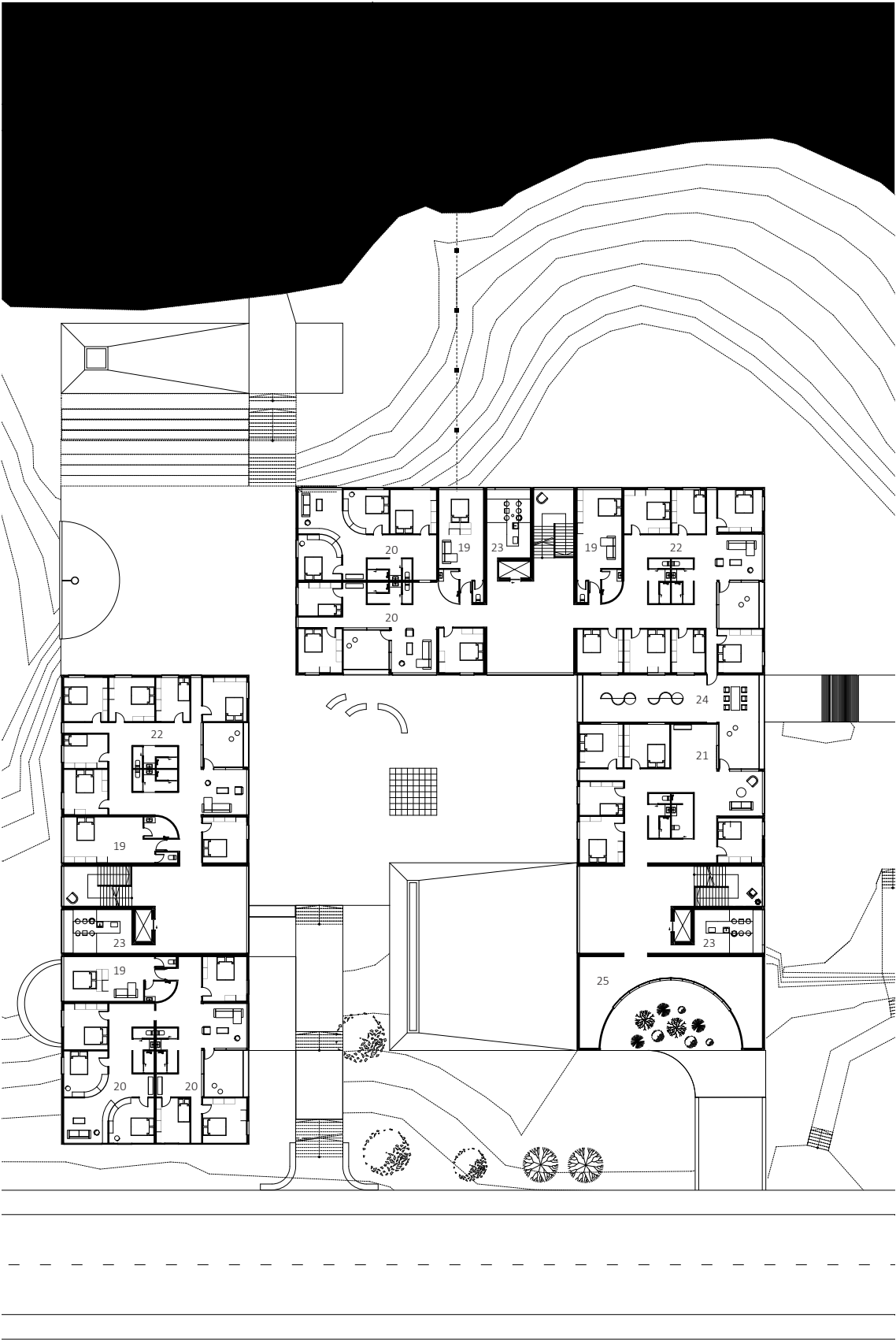


Figure 8.98  
Level Two Floor Plan  
1 : 500

Three

- 19 / Single/Double/Twinshare/RA Accommodation
- 20 / Three Bedroom Accommodation
- 22 / Six Bedroom Accommodation
- 23 / Resident Kitchen



Figure 8.99  
Level Three Floor Plan  
1 : 500



Four

- 28 / Laundry
- 29 / Laundry (Drying Space)
- 30 / Rooftop Deck
- 31 / Study

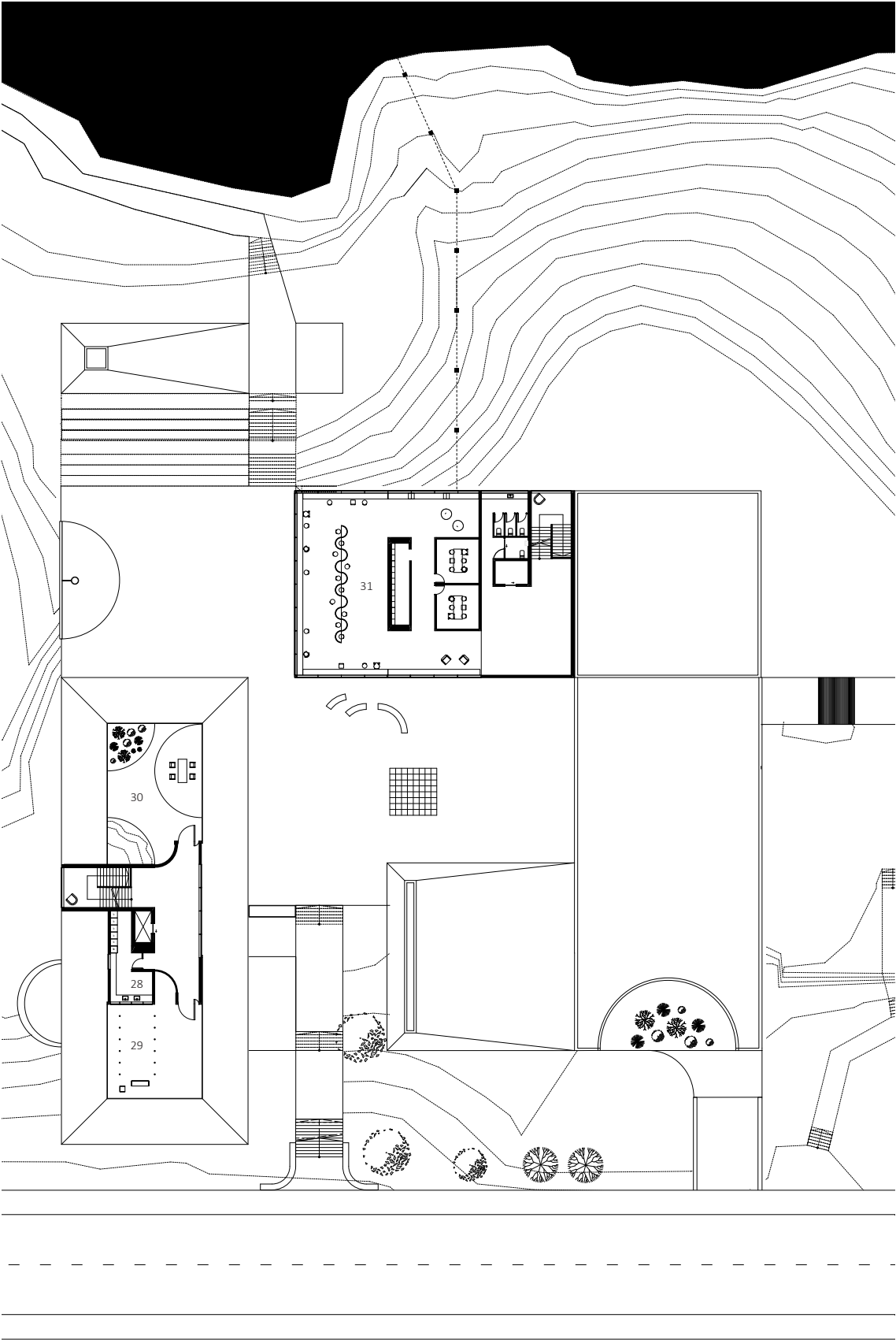
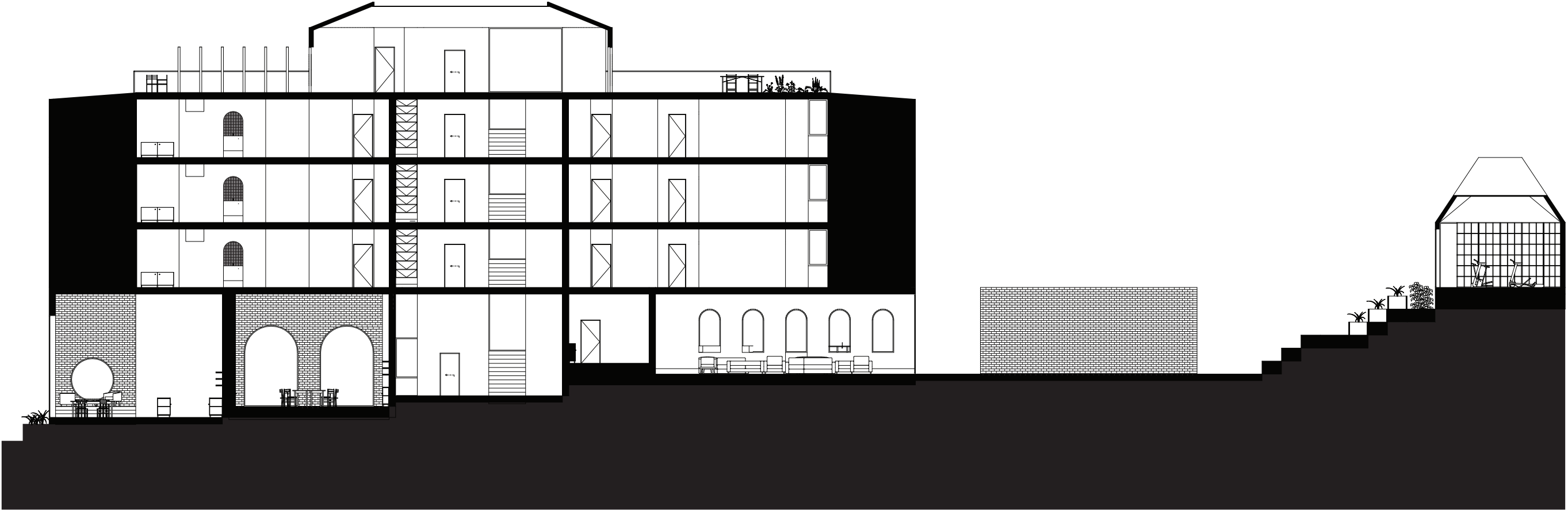
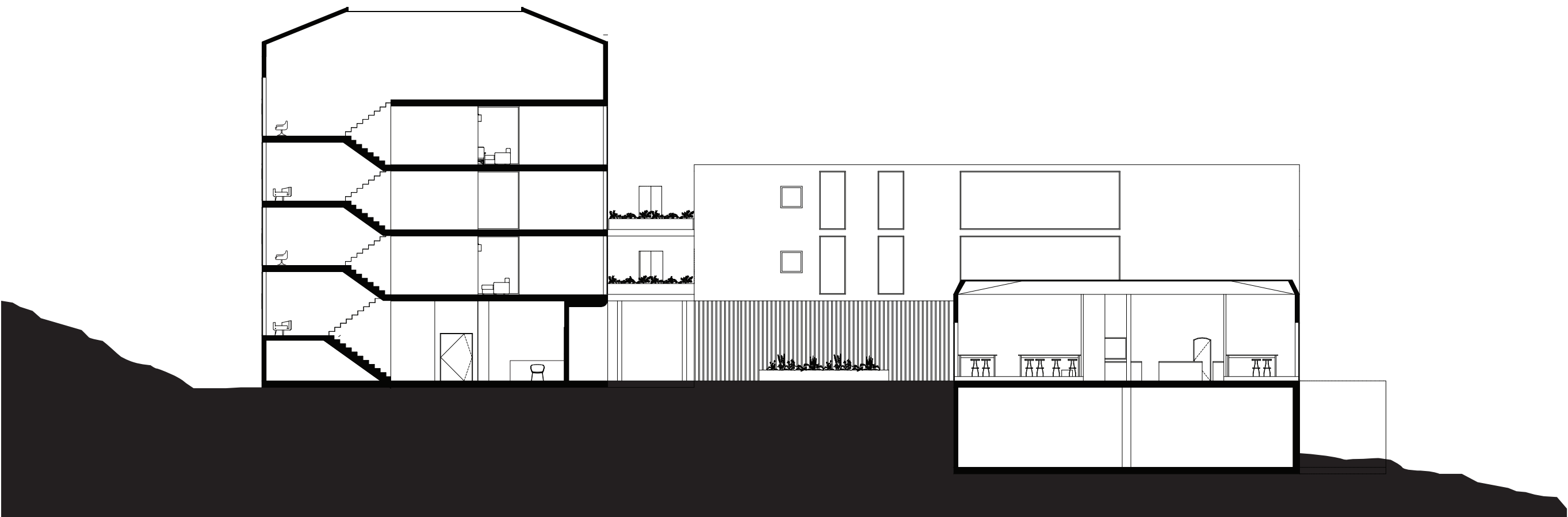


Figure 8.100  
Level Four Floor Plan  
1 : 500



Section A

Figure 8.101  
Section A  
1 : 200



Section B

Figure 8.102  
Section B  
1 : 200





Figure 8.103  
Exterior Entry  
The Terrace





Figure 8.104

Exterior Entry

Maurice Terrace



## Resident Accommodation

The resident accommodation facilities are located on levels one, two, and three of the public scale design, housing up to 110 residents, including seven residential advisors. Following understandings from the case studies, the resident accommodation provides a variety of single/double/twin share, three, five, and seven bedroom typologies, each of the latter providing both regular and small bedrooms to support a diversity of inhabitants. To encourage cohesion, and a subtle change in levels of intimacy, throughout the differing typologies within each floor, all initial entry points are shared, while an open approach to the different typologies and division through walling and walkways is facilitated.

Alongside private bedrooms, each accommodation typology provides shared bathroom facilities, loft guest sleeping areas, and open space for a lounge, while the larger typologies also provide an outdoor deck. Responding to how both bodies and objects may inhabit a space to express oneself, bespoke moveable floor to ceiling storage provides small homes for inhabitant's belongings to sit or hang, be displayed or hidden. The primarily orthogonal bedrooms allow inhabitants to rearrange storage and furniture to their desires, allowing a further acoustic and visual separation to surrounding spaces to enhance a gradient of intimacy.

Drawing from the need for inhabitants to connect with oneself and others, express them self, and experience sensual delight, the resident accommodation provides a simple, open and light base. An abundance of floor to ceiling glazing provides an infiltration of natural light and views, while the amount of timber used for flooring and fittings relates provides a sense of natural warmth. A change in ceiling heights within bathrooms spaces as more intimate, while perforated walling panels in social spaces encourage activity.

Figure 8.105  
Resident Accommodation  
Bedroom







Top to Bottom

Figure 8.106  
Resident Accommodation  
Lounge

Figure 8.107  
Resident Accommodation  
Bathroom Entry



**Resident Facilities**

The resident facilities are located throughout the levels and buildings of the public scale design. Spaces that become essential to daily functioning such as dining, lounge and reception are located on ground floor, while resident kitchens are located upon every floor of each building to promote accessibility of use. Spaces that may be used less frequently such as study, laundry and rooftop deck are distributed to level 4 to not only establish a gradient of intimacy, but also provide inhabitants with reason to move throughout all spaces and levels of the design. Subsequently, spaces that differ in intimacy, purpose, and acoustics, such as the gym and spa, are located as separate buildings.

These facilities are provided within the design to support residents physical and mental health throughout their first year of university, while providing an array of opportunities to informally connect with others. Within each facility, materiality, location, and form is used to control how sensual conditions may be received by the inhabitants, creating spaces that vary in atmosphere and purpose. This provides a diversity of inhabitants to dwell within similar or adjacent spaces, promoting small clusters of inhabitants within a greater whole.

Drawing from the need to social spaces to retain adaptability and practicality, large spaces remain open, while using small interventions such as materiality, glazing, fittings, and floor height to divide space as desired. This aligns to student accommodation being able to facilitate a range of activities and events for the inhabitants within spaces of differing purpose.

Figure 8.108  
Resident Facilities  
Kitchen







Figure 8.109  
Resident Facilities  
Lounge





Figure 8.110  
Resident Facilities  
Dining

Figure  
Gym





Top to Bottom

Figure 8.111  
Resident Facilities  
Reception

Figure 8.112  
Resident Facilities  
Gym





Figure 8.113  
Resident Facilities  
Study

Figure  
Shared Deck



**Community Facilities** The community facilities are located on ground floor throughout the buildings. Spaces that may attract the community, such as a cafe and gallery, align to the street front, while spaces that are used by the community in a private manner such as rentable office spaces are located within the privacy of the Maurice Terrace entrance. Access to the Waiteata Road, towards the universities Kelburn Campus, is provided through cable car and a walking track on ground floor up from the cafe and main exterior entry.

These facilities are provided within the design to not only support smaller businesses and groups within the community, but also assist in informally integrating the inhabitants with the wider community. This aspect of the design follows understanding from developing housing models throughout the globe to unite communities and support social sustainability through integrating residential facilities with commercial tenancies (Nightingale, 2020; Effekt, 2018). Variations in visual accessibility, materiality, and facade, subtly assist in defining community facilities from residential facilities, providing legibility of place. The location of community facilities at differing entry points of the design in relation to the cable car and walking track encourage community members to both progress through and dwell within the main exterior spaces of the design.

Figure 8.114  
Community Facilities  
Cafe

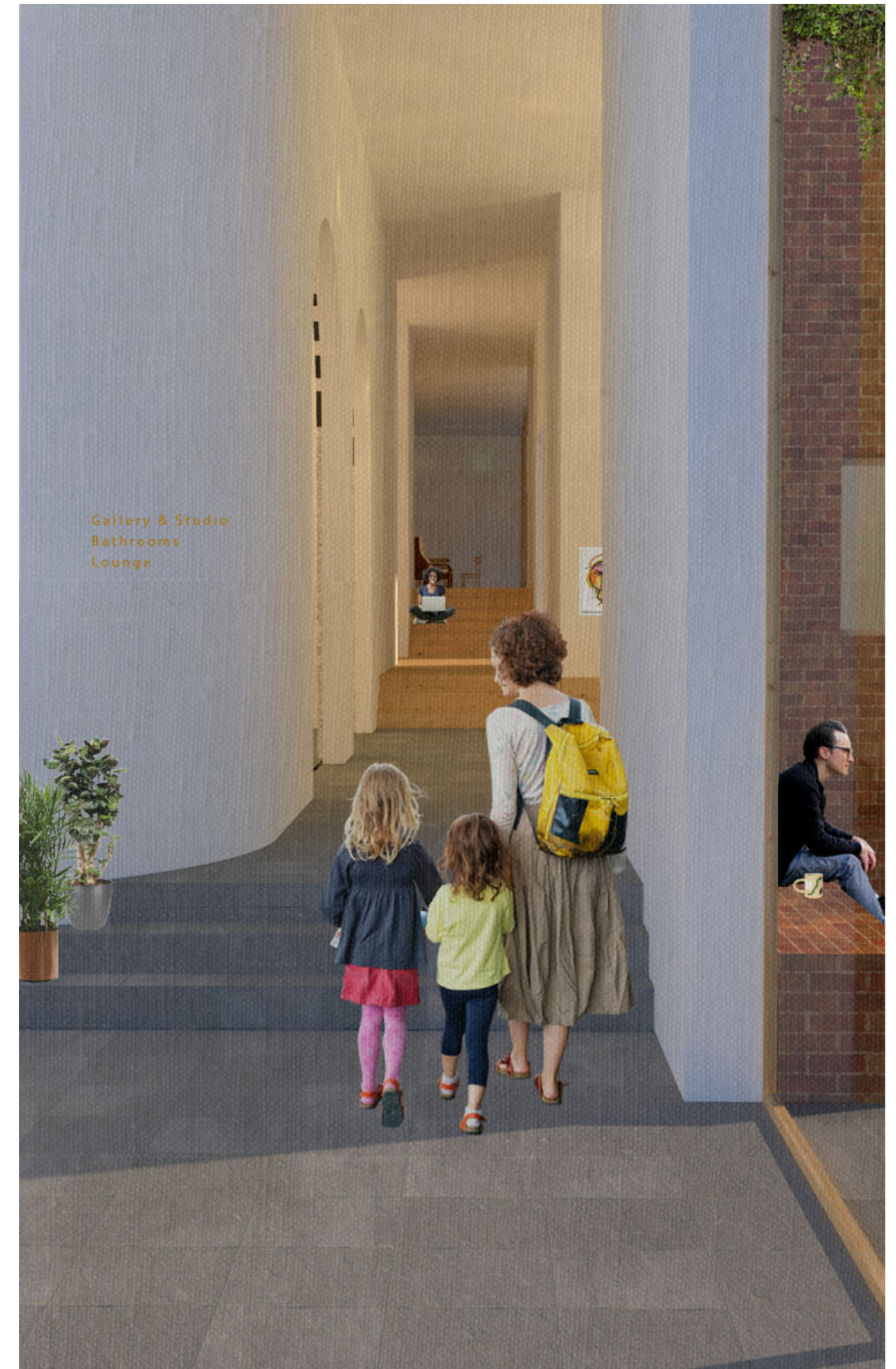






Figure 8.115  
Community Facilities  
Cafe





Top to Bottom

Figure 8.116  
Community Facilities  
Gallery & StudioFigure 8.117  
Community Facilities  
Offices



### Exterior Facilities

The exterior facilities are located within pockets and central spaces throughout the public scale design. Spaces that encourage open social connection, such as courtyards, are located centrally and are surrounded by external walking routes and lined with glazing of internal social spaces, while spaces that encourage more intimate connection with oneself or others, such as working gardens and sports courts, are located within pockets between the design and the site boundaries.

These components of the design were established to both engage the inhabitants with the surrounding natural landscape, as well as connect the architecture to site. Through variations in enclosure, integration with the landscape and application of materials, each exterior space harbors a unique purpose and feel, whether it be for markets, socialising, exercising, sitting, watching or gardening.

Drawing from the prior understandings and cases studies, the provision of outdoor spaces proved to stimulate the senses and connection thus became vital to integrate throughout the design. Due to the site, an ability to engage inhabitants with the natural landscape was supported, a great opportunity within a dense urban environment.

Figure 8.118

Exterior Entry

Maurice Terrace







Top to Bottom

Figure 8.119  
Community Facilities  
Court & Seating

Figure 8.120  
Community Facilities  
Outdoor Sports Court





Top to Bottom

Figure 8.121  
Community Facilities  
Sheltered Area (regular)

Figure 8.122  
Community Facilities  
Sheltered Area (market)

Figure  
Cable Cart Access (top)

**Design Reflection**

The public scale design of a hall of residence explored the development of wellbeing and atmosphere within architectural spaces to improve the experiences of social isolation and loneliness among inhabitants. Drawing from an accumulation of understanding and learnings from the prior literature, case studies, and design, the hall of residence was able to be realised with greater clarity and control when addressing integration between inhabitants, architecture, and landscape, evidently aligning more appropriately to the conditions of wellbeing and atmosphere.

Throughout the hall of residence there were many reoccurring and prominent design methods specific to wellbeing and atmosphere used to create and control the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility. These proved to be vital to not only supporting wellbeing and atmosphere within the architectural environments, but also stimulating coherency. These are as follows:

- / Connection: Developing a variety of unique spaces within open areas.
- / The Senses: Utilising glazing to generate an infiltration of light and connection to the surrounding environment.
- / Surrounding Objects: The application of bespoke fittings aligning to walling arrangements
- / Levels of Intimacy: Creating elongations and enclosures of space between differing areas of privacy, function, and shelter.
- / Material Compatibility: Consideration of the type of material according to the function of a space.

A major shift in design coherency was stimulated through developing the design method from the prior scale. Starting with the design guides more explicitly meant that design decisions were connected more directly with the research at the outset. Having a clear guide supported my design, because of this I also reformatted chapter four 'application to design', in response. This allowed explored spaces, facades, massing and form to simultaneously consider the conditions of connection, the senses, surrounding objects, levels of intimacy, and material compatibility as

integrated and reacting with one another. Additionally, continual exploration of spaces three dimensionally following a development of spaces and arrangements two dimensionally removed a rigidity of resulting form and allowed spaces to naturally extrude, condense, and arrange themselves according to the function and feel. Finally, the development from an exterior led approach to that of interior to exterior led process placed a greater emphasis on the refinement of unique spaces and experiences; how these connected and related to one another could also be regarded in detail.

While the design appropriately responded and developed upon prior understandings from the residential scale, new issues and design challenges arose. Following a shift in scale, one of these challenges included the arrangement of spaces within resident accommodation areas. A focus was placed on providing an infiltration of natural light and views for private and social spaces such as bedrooms, lounges and circulation, as a result placing bathrooms as internal spaces. In reflection, providing a central atrium or differentiation in form would have alleviated the need for internal spaces - a design decision that should have been explored during translation between two and three dimensional design as well as human and form scaled design.

Additionally, a shift in scale resulted in a greater amount of buildings and thus potential material compatibilities. While the application of a range of materials is thought to be cohesive and align to the function of a space, minimal variations of scale, composition, and rational construction are exhibited. In reflection, this needed to be addressed from the beginning of the design process. As a result it meant that materiality was looked at as something that was applied at the end rather than integral to the design process. Explorations of materiality would have been beneficial throughout the differing scales of the design process. Following both these understandings, it is clear that placing a greater amount of time during design exploration is important to develop a responsive design. But, also to reflect on the design process when key ideas are not being incorporated, and how to address this, earlier.





09  
Nine

## Conclusion

Figure 9.0  
Public Scale Design  
Entry (Maurice Terrace)



Conclusion

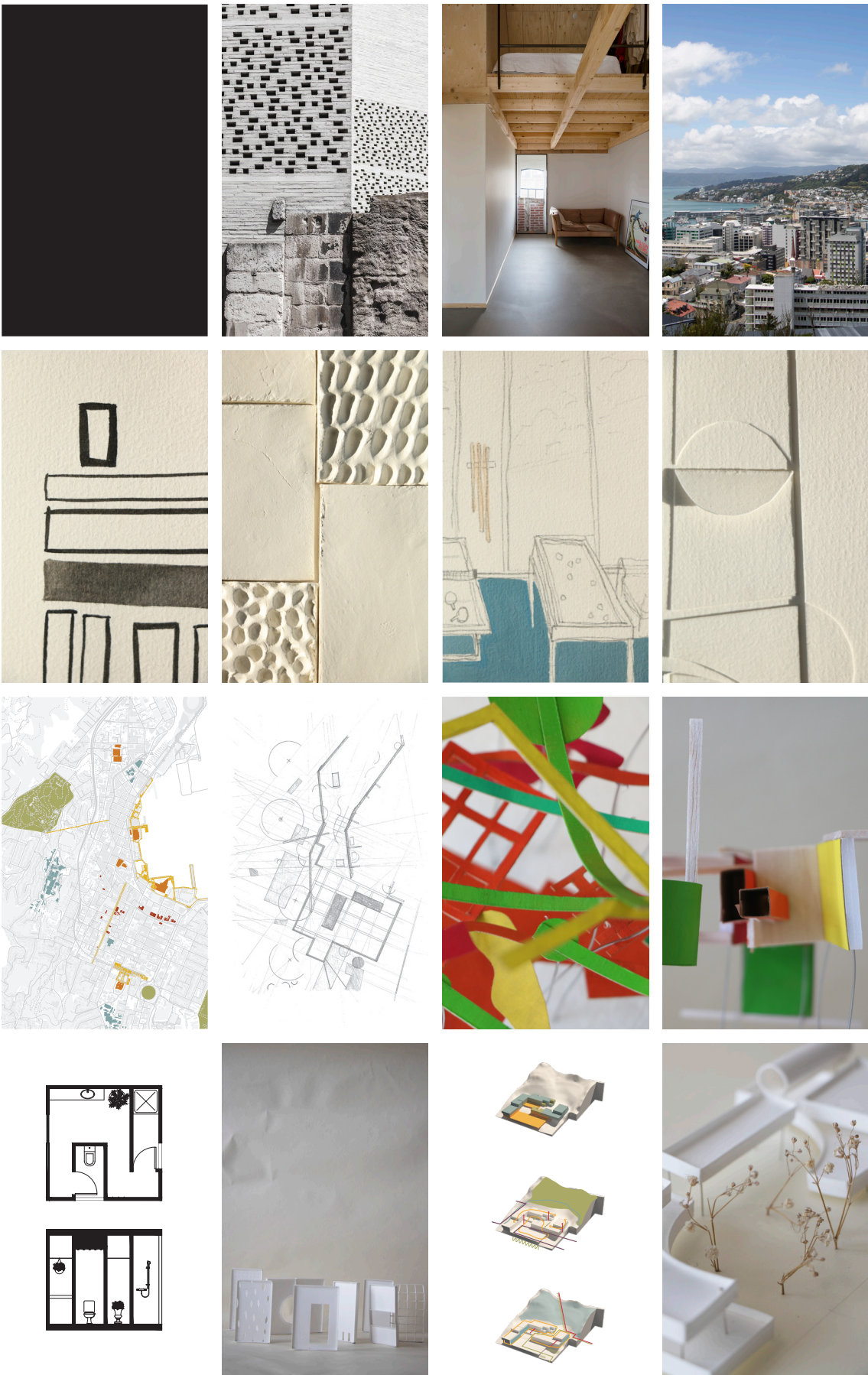
Stimulating and developing from prior research within the area, this thesis questioned how architecture may more appropriately address experiences of social isolation and loneliness within student halls of residence in New Zealand through designing for wellbeing and atmosphere.

The first two chapters established a practical and theoretical background surrounding wellbeing and atmosphere, exploring how they may be experienced and generated within architecture. The third chapter then developed upon the practical and theoretical literature to provide a condensed series of guidelines that could be readily applied throughout the analysis and design of student accommodation. Within chapter four, these guidelines provided an organised method and standard to analyse the four selected case studies against. This generated a coherency of understanding how differing elements within existing student accommodation aligned to both wellbeing and atmosphere. Chapter six then introduced an overview to the role and requirements of student accommodation, while touching on the context of it specific to New Zealand, as well as analysing the physical context of site for design to be developed upon. Following Peter Downton's methodology, the accumulation of these chapters provided a strong research for design (2003).

Developing to Jane Rendell's methodology of research through design, chapters seven and eight generate the design of student accommodation within Wellington at increasing scales (2013). Chapter seven initially explores design through small scale drawings and models to spatially engage with each condition explored within wellbeing and atmosphere, before exploring how form may be extracted from site through a series of drawings and models. These were then developed to create a residential scale student accommodation facility, however, on reflection, a disjointed application of wellbeing and atmosphere as well as an exterior led approach, creating a rigid design that preceded the importance of integrating wellbeing and atmosphere. Chapter eight then presented the public scale design, developing from an accumulation of the prior literature and evaluation of the prior design, to create a student accommodation facility that integrated inhabitants within architecture and landscape through the conditions of wellbeing and atmosphere. Through the continuation and assemblage of these processes, this thesis provides insight into how architecture may more appropriately address experiences of social isolation and loneliness within student accommodation through designing for wellbeing and atmosphere.

Image redacted due to copyright

Figure 9.1  
A Reflectional Overview  
of 'Togetherness'





Reflection

Throughout this research journey, many invaluable lessons have been learnt relating to how design occurs, the design itself, and the reflection of design. It is clear that each of these elements become integrally pertinent to one another and to how subsequent design may advance.

Understood through the reflection of design, one of the primary findings from this research was the role and influence of the design process to design. This became evident when a shift in design process from the residential scale to the public scale fostered design that was no longer rigid and preceding the importance of wellbeing and atmosphere, but appropriately addressed and integrated interior and exterior spaces to the conditions of wellbeing and atmosphere. The design process was realigned and explored in three key areas that restricted an appropriate design outcome within the residential scale; these included the integration of - the 'application to design' guidelines, three dimensional exploration prior to design, and an interior to exterior led design approach.

At the outset of the public scale design, the 'application to design' guidelines were consistently referred to and considered as connected applications and applied throughout the development and refinement design. In reflection, this allowed spaces of differing function to harbor unique qualities, while retaining coherency throughout. Following an initial two dimensional exploration of applying the 'application to design' guidelines to specific spaces, three dimensional exploration both through physical and digital modelling for facade and form scales was explored. While a similar approach to design was carried out in the residential scale, the public scale design method continued a three dimensional exploration of design following a clarification of two dimensional design. In reflection, this allowed a greater development of inlets, openings, passages, ceilings, and facades to be established. At the outset of the public scale design, an interior to exterior led approach was utilized. This placed a greater emphasis on the refinement of unique spaces and experiences, where considering how these may relate and connect to one another could be supported through specific circulation and entry/exit points explorations. In reflection, this allowed not only a greater variation of diverse space but removed the pressure of an overall form needing to provide the base for wellbeing and atmosphere to stimulate from, as seen to occur withinin the residential scale. This shift from form-centered design to human-centered design proved beneficial in creating spaces that supported and responded to the needs and desires of inhabitants.

Figure 9.2  
A Reflectional Overview of the  
Public Scale Design





Without the design methodology of exploring and reflecting upon design at differing scales, these changes in design process would not have been clear to make. However, while the design methodology allowed further design to appropriately respond and develop upon understandings from the prior scale, new issues and design challenges were inevitable. Due to the new shift in scale, these included both the arrangement of space to support both wellbeing and atmosphere, as well as the defining of multiple entry/exit points.

Following a strong shift to an 'interior to exterior led' design approach, the arrangement and design of individual spaces was not cohesive and in consistent dialogue with exterior led form exploration. In reflection, this created spaces, specifically resident bathrooms, to suffer from an appropriate integration to exterior spaces. Additionally, a shift in scale generated a greater amount of potential material applications, whereby the design exploration failed to explore these. In reflection, this resulted in minimal applications in material of varying scale, composition, and rational construction. While there is no further design scale to realign these understandings to, they have highlighted the importance of consistent integration of the design process at differing stages, scales, and techniques to develop coherent design.

This research journey, subsequently, has exemplified that through focusing on designing for wellbeing and atmosphere, architecture has the ability to influence inhabitants experience of space. Specifically, the role of supporting connection, the senses, surrounding objects, levels of intimacy, and material compatibility all play a vital role in creating an environment that may improve the experience of social isolation and loneliness within student accommodation for inhabitants. This thesis seeks to provide a tangible vision for how the current hardships young individuals are facing within student accommodation may be addressed and supported architecturally. It is hoped that this thesis educates, advocates, and stimulates conversation regarding the need for architecture to begin to more avidly consider and design for spaces that support wellbeing.



Figure 9.3- 9.4  
Public Scale Design  
Entry Points



W o r k s   C i t e d

**Words Cited**

Ainley, N. (2015). An Old Factory Becomes Germany's College Housing of the Future. *Vice*. Retrieved from [https://www.vice.com/en\\_uk/article/pgqqk8/an-old-factory-becomes-germanys-college-housing-of-the-future](https://www.vice.com/en_uk/article/pgqqk8/an-old-factory-becomes-germanys-college-housing-of-the-future)

Angelil, Marc. (2003). *Inchoate: an experiment in architectural education*. Zürich : Swiss Federal Institute of Technology (ETHZ).

Alberti, F. B. (2018). This “Modern Epidemic”: Loneliness as an Emotion Cluster and a Neglected Subject in the History of Emotions. *Emotion Review* 10(3), 242 – 254.

Altman, I., & Low, M. (1992). *Place attachment: A conceptual enquiry*. New York: Plenum.

Andersson, L. (1998). Loneliness research and interventions: A review of the literature. *Aging and Mental Health*, 2, 264-274.

AnFocal (2018). The Advantages and Disadvantages of Living on Campus. Retrieved from <https://www.anfocal.ie/index.php/the-advantages-and-disadvantages-of-on-campus/>

Appleton, J. (1996). *The Experience of Landscape*. Chichester, United Kingdom: John Wiley & Sons Ltd.

Arboleda, A., Wang, Y., Shelley, M., & Whalen, D. (2003). Predictors of Residence Hall Involvement.

Auckland Council (2019). *Residential Design Element: Unit Layouts and Room Sizes*. Retrieved from [http://content.aucklanddesignmanual.co.nz/regulations/design-for-the-rules/Documents/Design\\_Element\\_R6-Unit\\_Layouts\\_Room\\_Sizes.pdf](http://content.aucklanddesignmanual.co.nz/regulations/design-for-the-rules/Documents/Design_Element_R6-Unit_Layouts_Room_Sizes.pdf)

Barford, V. (2013). Is modern life making us lonely? *BBC News Magazine*. Accessed from <https://www.bbc.com/news/magazine-22012957>

Baudrillard, J. (1996). *The system of objects*. Verso.

Baumeister, R., & Leary, M. (1995). The Need to Belong : Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3), 497-529.

Best, J. (2017). *Colour Design: Theories and Applications*. Duxford, United Kingdom: Woodhead Publishing.

Bohme, G. (2017). *Atmospheric architectures: the aesthetic of felt spaces*. Bloomsbury Academic.

Bohme, G. (1993). Atmosphere as the Fundamental Concept of New Aesthetics. *Thesis Eleven*, 36(1), 113-126.

CABE. (2008). *Inclusion by design: Equality, diversity and the built environment*, 1-28.

Cacioppo, J. (2013, September 9). The lethality of loneliness: John Cacioppo at TEDxDesMoines. Retrieved from [https://www.youtube.com/watch?v=\\_0hx103JoA0](https://www.youtube.com/watch?v=_0hx103JoA0)

Cacioppo, J., Hawkley, L., Crawford, E., Ernst, J., Burleson, M., Kowalewski, R., Malarkey, W., Van Cauter, E., & Bernston, G. (2002). Loneliness and Health: Potential Mechanisms. *Psychosomatic Medicine*, 64(3), 407-417.

Chermayeff, S., & Alexander, C. (1965). *Community and privacy: toward a new architecture of humanism*. Doubleday Anchor book.

Chow, K., & Healey, M. (2008). Place attachment and place identity: First-year undergraduates making the transition from home to university. *Journal of Environmental Psychology*, 28(2008), 362-372.

Chiusolo, K. (2015). *Design Guidelines through the morphology of transient space and design in healthcare facilities* (Doctoral Dissertation, University of Hawaii at Manoa, Honolulu, Hawaii).

Clark, C. (2017). UC San Diego Unveils Mesa Nueva: One of the Nation's Largest Graduate Housing Communities. UC SanDiego. Retrieved from [https://ucsdnews.ucsd.edu/pressrelease/uc\\_san\\_diego\\_unveils\\_mesa\\_nueva\\_one\\_of\\_the\\_nations\\_largest\\_graduate\\_housing](https://ucsdnews.ucsd.edu/pressrelease/uc_san_diego_unveils_mesa_nueva_one_of_the_nations_largest_graduate_housing)

Crawford, I. (2015). In C. Hill, *Being Human*. Design Curial. <http://www.designcurial.com/news/being-human-ilse-crawford-4541095>

Crawford, I. (2020). Ilse Crawford discusses design and wellbeing in short film by Vola. Dezeen. Retrieved from [https://www.youtube.com/watch?v=n\\_0D9n\\_GeuU](https://www.youtube.com/watch?v=n_0D9n_GeuU)

Davenny, B. (2007). *Acoustic Environment Technical Brief*. Green Guide for Health Care, 2.2, 1 – 8.

Diaconu, M. (2014). The Sky around our Bodies: Climate and atmospheric perception. In A. Michaels, & C. Wulf (Eds.), *Exploring the Senses : South Asian and European perspectives on rituals and performativity* (pp. 317-337). New Delhi: Routledge.

Dijkstra, K., Pieterse, M., & Pruyn, A. (2008). Stress-reducing effects of indoor plants in the built healthcare environment: The mediating role of perceived attractiveness. *Preventive Medicine*, 47(3), 297-283.



Downton, P. (2003). *Design research*. Melbourne: RMIT Publishing.

EFFEKT (2018). Urban Village Project. Retrieved from <https://www.effekt.dk/urbanvillage>

Ernst, J. M., & Cacioppo, J. T. (1999). Lonely Hearts: Psychological perspectives on loneliness. *Journal of Applied Psychology*, 8, 1-22.

Fisher, S., Murray, K., & Frazer, A. (1985). Homesickness, health and efficiency in first year students. *Journal of Environmental Psychology*, 5(2), 181-195. Fenko, A. & Loock, C. (2014). The influence of ambient scent and music on patient's anxiety in a waiting room of plastic surgeon. *Herd Journal*, 7(3), 38 – 59.

Franck, K. (2007). *Architecture from the Inside Out: From the Body, the Senses, the Site, and the Community*. Chichester: Wiley.

Frascaroli, D., Blanco, S., & Gozzoli, C. (2014). How Can Living In a Hall of Residence Support The Students' Personal And Professional Development? The Case of The College Di Milano, *Procedia – Social and Behavioural Sciences*, 191 (2015), 1196 – 1200.

Frearson, A. (2013). "Architecture is not about form" - Peter Zumthor. *Dezeen*. Retrieved from <https://www.dezeen.com/2013/02/06/peter-zumthor-at-the-royal-gold-medal-lecture-2013/>

Galliford Try & Scott Brownrigg (2019). Impact of Accommodation Environments on Student Mental Health and Wellbeing. 25. <https://www.gallifordtry.co.uk/media/1154/accommodation-and-student-wellbeing-report-digital.pdf>

Gappell, M. (1991). Psychoneuro-immunology: Fourth Symposium on Healthcare Design. In *Innovations in Healthcare Design: Selected Presentations from the First Five Symposia on Healthcare Design* by S. Marberry. John Wiley & Sons, Inc.

Garvey, J., Guyotte, K., Latapolski, K., Sanders, L., & Flint, M. (2018). Belongingness in residence halls: Examining spaces and contexts for first-year students across race and gender. *Journal of The First-Year Experience in Transition*, 30(2), 9-25.

George, D. (2020). Lack of affordable housing forcing Wellington tertiary students to drop studies or leave capital. Retrieved from <https://www.stuff.co.nz/national/122397801/lack-of-affordable-housing-forcing-wellington-tertiary-students-to-drop-studies-or-leave-capital>

Hall, E. (1990). *The Hidden Dimension*. United States of America: Anchor Books Editions.

Hawkley, L., & Cacioppo, J. (2010). Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms. *Annals of Behavioural Medicine*, 40(2), 218-227.

Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical psychology Review*, 26, 695-718.

Hewitt, M. (1989). The Imaginary Mountain: The Significance of Contour in Alvar Aalto's Sketches. *Perspecta*, 25(1989), 162-177.

Hill, J. (2006). House and Home. In J.Hill (Eds.), *Immaterial architecture* (pp.6-30). London, United Kingdom: Routledge. Hope, M. (2012). The Importance of Belonging: Learning From the Student Experience of Democratic Education. *Journal of School Leadership*, 22(7), 733 – 750.

Hosking, M. (2019). Rising cost of university accommodation hurting students. *Newstalk ZB*. Retrieved from [newstalkzb.co.nz/on-air/mike-hosking-breakfast/audio/chris-whelan-rising-cost-of-university-accommodation-hurting-students/](http://newstalkzb.co.nz/on-air/mike-hosking-breakfast/audio/chris-whelan-rising-cost-of-university-accommodation-hurting-students/)

Hunt, M., Marx, R., Lipson, C., & Young, J. (2018). No More Fomo: Limiting Social Media Decreases Loneliness and Depression. *Journal of Social and Clinical Psychology*, 37(10), 75-768.

Hunt, T. (2019). \$19,000 a year to live at Victoria University hall as fees soar. *Stuff*. Accessed on January 23rd, 2020, from <https://www.stuff.co.nz/dominion-post/news/116971403/19000-a-year-to-live-at-victoria-university-hall-as-fees-soar>

Imrie, R. (2001). Architects' conception of the human body. *Environment and Planning D: Society and Space*, 21, 47 – 65.

Joye, Y. (2007). Architectural Lessons from Environmental Psychology: The Case of Biophilic Architecture. *Review of General Psychology*, 11(4), 305-328.

Kang, S. (2015). Student arrested after Victoria University rampage. *The New Zealand Herald*. Retrieved from [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=11532243](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11532243)

Kar-Purkayastha, I. (2010). An epidemic of loneliness. *The Lancet*, 376, 2114-2115.

King, M. (2018). Working to Address the Loneliness Epidemic: Perspective-Taking, Presence, and Self-Disclosure. *American Journal of Health Promotion*, 32(5), 1315-1317.

Kobayashi, K., Kaufman, A., Griffis, J., & McConnell, J. (2007). Using Houseplants To Clean Indoor Air. *Ornamentals and Flowers*, 39, 1 – 7.

Laing, O. (2016). *The Lonely City: Adventures in the Art of Being Alone*. First U.S. Edition. New York: Picador, 3-4.

Lang, J., & Moleski, W. (2010). *Functionalism Revisted: Architectural Theory and Practice and the Behavioural Sciences*. London, United Kingdom Routledge.

Lin, L. (2018). Student Evicted for State of Mind. Salient. Accessed on January 23rd, 2020, from <https://salient.org.nz/2018/09/student-evicted-for-state-of-mind/>

Littlefield, D. (2008). *Metric Handbook: planning and design data*. Architectural Press.

Lowe, H., & Cook, A. (2003). Mind the gap: Are students prepared for higher education? *Journal of Further and Higher Education*, 27(1), 53-76.

Macro Sea (2015). G.27 Global Institute Berlin. Macro Sea. Accessed from <http://macro-sea.com/projects/g-27-global-institute/#1>

Maslow, A. (1962). *Towards a psychology of being*. New York, NY : Harper & Row.

Medora, N., & Woodward, J. (1986). Loneliness Among Adolescent College Students at a Midwestern University. *Adolescence*, 21(82), 391.

Mellor, D., Stokes, M., Firth, L., Hayashi., & Cummins, R. (2008). Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences*, 45(2008), 213-218.

Ministry of Social Development (2016). *The Social Report 2016: Te purongo oranga tangata* (Report No. June 2016). Ministry of Social Development.

Communities: UC San Diego Mesa Nueva Graduate and Professional Student Housing. Accessed from <http://mithun.com/project/university-of-california-san-diego-mesa-nueva-graduate-and-professional-student-housing/>

Monbiot, G. (2014). The age of loneliness is killing us. Retrieved November 21st, 2019, from <https://www.theguardian.com/commentisfree/2014/oct/14/age-of-loneliness-killing-us>

Moratti, C. (2018). Overworked and underpaid: the nightmare of lives of university hostel assistants. *The Spinoff*. Retrieved from <https://thespinoff.co.nz/society/22-07-2018/overworked-and-underpaid-the-nightmare-lives-of-university-hostel-assistants/>

Morrow, A., & Ackermann, M. (2012) Intention to Persisit and Retention of First-Year Students: The Importance of Motivation and Sense of Belonging. *College Student Journal*, 46, 483 – 491.

Muthukrishna, M., Doebeli, M., Chudek., & Henrich, J. (2018). The Cultural Brain Hypothesis: How culture drives brain expansion, sociality, and life history. *PLoS Computational Biology*, 14(11), 1-37.

Nahemow, L., & Lawton, M. (1975). Similarity and propinquity of friendship formation. *Journal of Personality and Social Psychology*, 32(2), 205 – 213.

Neilson, M. (2019). Victoria University students outraged over hall withholding bond money for communal damage. *The New Zealand Herald*. Retrieved from [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12278495](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12278495)  
O'Hagan Brebner, J. (2019). VUW Hall Death: What We Know So Far. Salient. Retrieved from <https://salient.org.nz/2019/10/vuw-hall-death-what-we-know-so-far/>

New Zealand Herald (2019). Student Mason Pendrous lay dead in hostel for weeks: Stepfather emailed uni with concerns. . *The New Zealand Herald*. Retrieved from [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12275075](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12275075)

Nightingale (2020). *Nightingale Principles*. Retrieved from <https://nightingalehousing.org/nightingale-principles>

Orson, M. (1998), In Preston, J. (2008). *Interior Atmospheres*. Architectural Design, Wiley.

Otago Daily Times (2019). Sexual assault 'normalised' at Dunedin's Knox college, former students allege. . *The New Zealand Herald*. Retrieved from [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12220043](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12220043)

Ott, C. (2019). Student Housing Diagonal Besos / MDBA. *ArchDaily*. Accessed from <https://www.archdaily.com/926589/student-housing-diagonal-besos-mdba>

Pallasmaa, J. (2014). *Space, Place and Atmosphere*. Emotion and Peripheral Perception in Architectural Experience. *Lebenswelt* (Milano), 4.

Pallasmaa, J. (1992). Identity, Intimacy and Domicile: Notes on the phenomenology of home. In N. D. Benjamin (Ed.), *The Home; Words, Interpretations, Meanings and Environments* (pp.131-147). Avebury.

Perlman, D., & Peplau, L. A. (1981). Towards a Social Psychology of Loneliness. In S. Duck & R. Gilmour (Eds.), *Personal Relationships in Disorder* (pp.31-56).



Petermans, A., & Nuyts, E. (2016). Happiness in place and space: Exploring the contribution of architecture and interior architecture to happiness. *Celebrations and Contemplation*, 10th International Conference on Design & Emotion, 114-122.

Potter, J. (2018). Residential Advisors to Receive More Training and Support in 2019. *Salient*. Accessed on January 23rd, 2020, from <https://salient.org.nz/2018/10/residential-advisors-to-receive-more-training-and-support-in-2019/>

Powell, H. (2019). VUW Halls Hiking Fees By 50-80% Next Year. *Salient*. Accessed on January 23rd, 2020, from <https://salient.org.nz/2019/10/vuw-halls-hiking-fees-by-50-80-next-year/>

Preston, J. (2008). *Interior Atmospheres*. Wiley

Protagoras (45 B.C.). In M. Myslobodsky (Eds.), *The Mythomanias: The Nature of Deception and Self-deception* (1997). Lawrence Erlbaum Associates, Inc.

Rendell, J. (2013). A Way with Words: Feminists Writing Architectural Design Research. In M. Fraser (Eds.), *Design Research in Architecture: An Overview* (pp.117-136). Ashgate Publishing Limited.

Roscoe, B., & Skomski, G. G. (1989). Loneliness among late adolescents. *Adolescence*, 24(96), 947-955.

Rosenberg, M., & McCullough, C. (1981). Mattering: Inferred significance and mental health among adolescents. *Research in Community Mental Health*, 2, 163-182.

Schweitzer, M., Gilpin, L., & Frampton, S. (2004). Healing spaces: elements of environmental design that make an impact on health. *Journal of alternative and complementary medicine*, 10(1), 71-83.

Seresinhe, C., Preis, T., & Moat, H. (2015). Quantifying the Impact of Scenic Environments on Health. *Scientific Reports*, 5(16899), 1-9.

Shaw, A. (2018). Residential Advisors Feel Ill-Prepared as VUW Reduces Training. *Salient*. Accessed on January 23rd, 2020, from <https://salient.org.nz/2018/04/residential-advisors-feel-ill-prepared-as-vuw-reduces-training/>

Smith, A. (2018). Students around NZ echo mental health care concerns. *RNZ*. Accessed on January 23rd, 2020, from <https://www.rnz.co.nz/news/national/367462/students-around-nz-echo-mental-health-care-concerns>

Sugihto, E. (2016). Sociopetal and Sociofugal Spaces. [https://medium.com/@social\\_archi/sociopetal-and-sociofugal-spaces-f8e3f18880e8](https://medium.com/@social_archi/sociopetal-and-sociofugal-spaces-f8e3f18880e8)

Sussman, A., & Hollander, B. (2015). *Cognitive Architecture: Designing for how we Respond to the Built Environment*. New York: Routledge.

Talen, E. (2008). *Design for Diversity: Exploring Socioally Mixed Neighborhoods*. In *Design for Diversity*. Routledge.

Tognoli, J. (2003). Leaving home: Homesickness, place attachment, and transition among residential college students. *Journal of College Student Psychotherapy*, 18(1), 35-48.

Townsend, C., & McWhirter, T. (2005). Connectedness: A review of the literature with implications for counselling, assessment, and research. *Journal of Counselling and Development*, 83, 191-201.

Van Der Ryn, S. (1967). *Dorms at Berkely: An environmental Analysis*. University of California, Centre for Planning and Development Reseach.

Victoria University of Wellington (2021). Hall Profiles. <https://www.wgtn.ac.nz/accommodation/halls/profiles>

Victoria University of Wellington (2020). Accommodation Guide. Victoria University of Wellington. [https://www.victoria.ac.nz/\\_\\_data/assets/pdf\\_file/0007/1723876/accommodation-guide.pdf](https://www.victoria.ac.nz/__data/assets/pdf_file/0007/1723876/accommodation-guide.pdf)

Wallace, S. (2015). Hall of Residence. In *A Dictionary of Education*. <https://www.oxfordreference.com/view/10.1093/acref/9780199679393.001.0001/acref-9780199679393-e-436>

Wang, Y. (2005). *Creating positive wayfinding experience (Retrospective Theses and Dissertation)*. Iowa State University, Iowa, United States of America.

Waxman, L. (2017). The Role of Place in Well-being. In D. Kopec (Eds.), *Health and Well-being for Interior Architecture* (pp.159-168). Routledge.

Weiss, R. (1973). *Loneliness: The Experience of Emotional and Social Isolation*. Cambridge: The MIT Press.

Wigley, M. (1998). *The Architecture of Atmosphere*. Atmosphere, Daidalos

Williams, A. (2009). Therapeutic Landscapes as Health Promoting Places. In *A Companion to Health and Medical Geography* (eds T. Brown, S. McLafferty & G. Moon).

Yaneva, A. (2005). Scaling Up and Down: Extraction Trials in Architectural Design. *Social Studies of Science*, 35(6), 867-894.

Zumthor, P. (2006). *Atmospheres: Architectural Environments, Surrounding Objects*. Birkhauser.

Works Cited

All unattributed figures are author's own

01 Introduction

Figure 1.0: Sian Moffitt Photography. (2018). The Wait is Over Campaign. Retrieved from [https://www.facebook.com/vuwsa/photos/?tab=album&album\\_id=10156585751281081](https://www.facebook.com/vuwsa/photos/?tab=album&album_id=10156585751281081)

Figure 1.1: McCredie, P. (2009). Te Puni Village by Architectus. Retrieved from <https://architectus.co.nz/work/victoria-university-of-wellington-te-puni-village/>

02 Wellbeing

Figure 2.0, 2.8-2.9: Cohen, L. (2003). Great Guildford Street by Studioilse. Retrieved from <https://www.studioilse.com/great-guildford-street>

Figure 2.2-2.5: Ager, C. (n.d). City Life. Retrieved from <https://charlotteager.co.uk/city-life>

Figure 2.6 - 2.7, 2.12: Marding, M. (2012). Ett Hem Hotel by Studioilse. Retrieved from <https://www.studioilse.com/ett-hem-hotel>

Figure 2.10-2.11: Odell, F. (2015). Chalet Fontanet by Studioilse. Retrieved from <https://www.studioilse.com/chalet>

03 Atmosphere

Figure 3.0, 3.12-3.14: Hjortshoj, R. (2017). Kolumba Museum by Peter Zumthor. Retrieved from <https://www.archdaily.com/877432/peter-zumthors-kolumba-museum-through-the-lens-of-rasmus-hjortshoj>

Figure 3.2 - 3.3: Eliasson, O. (2003). The Weather Project by Olafur Eliasson. Retrieved from <https://olafureliasson.net/archive/artwork/WEK101003/the-weather-project>

Figure 3.4-3.5: Kunsthau Zürich, Candrian, F. (2020). Symbiotic Seeing by Olafur Eliasson. Retrieved from <https://olafureliasson.net/archive/exhibition/EXH102541/symbiotic-seeing>

Figure 3.6 – 3.7: Aalto, A. (1963 – 1949). Untitled, Oil. Retrieved from <http://theridoureport.blogspot.com/2011/12/post-number-900-alvar-aalto-as-painter.html>

Figure 3.8-3.9: Padgett, L. (2009). Zumthor House by Peter Zumthor. Retrieved from <http://lpadgett.net/for-thinking-architecture/>

Figure 3.10 – 3.11: Guerra, F. (2016). Therme Vals by Peter Zumthor. Retrieved from <https://www.archdaily.com/798360/peter-zumthors-therme-vals-through-the-lens-of-fernando-guerra>

04 Application to Design

Figure 4.0, 4.8 - 4.13, 4.52: Mannion, T. (2017). Refettorio Felix by Studioilse. Retrieved from <https://www.studioilse.com/refettorio-felix>

Figure 4.2 - 4.7: Marding, M. (2012). Ett Hem Hotel by Studioilse. Retrieved from <https://www.studioilse.com/ett-hem-hotel>

Figure 4.30: Jim Stephenson Architectural Photography & Films (2019). Secular Retreat by Peter Zumthor. Retrieved from <https://www.living-architecture.co.uk/press/theseclarretreat/overview/>

Figure 4.31 - 4.32: Wilton, D. (2018). Secular Retrtreat by Peter Zumthor. Retrieved from <https://www.living-architecture.co.uk/press/theseclarretreat/overview/>

Figure 4.33 - 4.35: Hobhouse, J. (2018). Secular Retreat by Peter Zumthor. Retrieved from [https://www.jackhobhouse.com/?page\\_id=25&gallery=103](https://www.jackhobhouse.com/?page_id=25&gallery=103)

Figure 4.36 - 4.37: Padgett, L. (2005). Zumthor House by Peter Zumthor. Retrieved from <http://lpadgett.net/for-thinking-architecture/>

Figure 4.38 - 4.39: Savorelli, P. (2005). Zumthor House by Peter Zumthor. Retrieved from <https://www.pinterest.nz/pin/539728336567502361/>

Figure 4.40 - 4.45: Open House (2012). Zumthor House by Peter Zumthor. Retrieved from <https://openhousebcn.wordpress.com/2012/05/18/openhouse-barcelona-mountain-air-architecture-peter-zumthors-own-home-haldenstein-switzerland/>

Figure 4.46 - 4.51: Feiner, R. (2013). Leis House by Peter Zumthor. Retrieved from <https://www.archdaily.com/315135/zumthor-vacation-homes-for-let#:~:text=Three%20years%20ago%2C%20Peter%20Zumthor,welcome%20its%20very%20first%20guests.>

05 Case Studies

Figure 5.0, 5.4 - 5.13: Berndston, H. (2016). Student Village by Lenschow & Pihlmann. Retrieved from <https://www.archdaily.com/900206/student-village-lenschow-and-pihlmann/5b72eefef197cc6ff000262-student-village-lenschow-and-pihlmann-photo>



Figure 5.2 - 5.3: Lenschow & Pihlmann (2016). Student Village by Lenschow & Pihlmann. Retrieved from <https://www.archdaily.com/900206/student-village-lenschow-and-pihlmann/5b72eefef197cc6fff000262-student-village-lenschow-and-pihlmann-photo>

Figure 5.14 - 5.15: Macro Sea (2015). G27 CIEE Global Institute by Macro Sea. Retrieved from <https://www.archdaily.com/772841/g27-ciee-global-institute-macro-sea>

Figure 5.16 - 5.26, 5.50: Mosier, C (2015). G27 CIEE Global Institute by Macro Sea. Retrieved from <https://www.archdaily.com/772841/g27-ciee-global-institute-macro-sea>

Figure 5.27 - 5.29: MDBA (2019). Student Housing Diagonal Besos by MDBA. Retrieved from <https://www.archdaily.com/926589/student-housing-diagonal-besos-mdba/5d9e5033284dd17241000149-student-housing-diagonal-besos-mdba-photo>

Figure 5.30 - 5.32, 5.35 - 5.39: Amoretti, A. (2019). Student Housing Diagonal Besos by MDBA. Retrieved from <https://www.archdaily.com/926589/student-housing-diagonal-besos-mdba/5d9e5033284dd17241000149-student-housing-diagonal-besos-mdba-photo>

Figure 5.33 - 5.34: De Schepper, T. (n.d.). Student Housing Diagonal Besos by MDBA. Retrieved from <https://tibods.com/>

Figure 5. 40 - 5.49: Damonte, B. (2016). UC San Diego Mesa Nueva Graduate and Professional Student Housing by Mithun. Retrieved from <https://mithun.com/project/university-of-california-san-diego-mesa-nueva-graduate-and-professional-student-housing/>

## 06 Student Accommodation & Site

Figure 6.2-6.2: McCredie, P. (2009). Te Puni Village by Architectus. Retrieved from <https://architectus.co.nz/work/victoria-university-of-wellington-te-puni-village/>

Figure 6.4-6.5: Sian Moffitt Photography (2018). The Wait is Over Campaign. Retrieved from [https://www.facebook.com/vuwsa/photos/?tab=album&album\\_id=10156585751281081](https://www.facebook.com/vuwsa/photos/?tab=album&album_id=10156585751281081)

Figure 6.24: Google Earth Pro (2021). Wellington. Retrieved from <https://earth.google.com/web>

**Togetherness**

Victoria University of Wellington, School of Architecture  
Anya Seth 2021