OUR PLACE

public + private balance in a state housing community

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Abstract

Government owned housing in New Zealand is moving towards a model of privatisation. This can limit the opportunities found in the semi-public space for neighbours to meet and interact. Without these human interactions, a housing complex loses that which makes it a community. By restructuring the site to facilitate social interaction, this thesis aims to focus the space between buildings towards communal living, through an exploration of the public private interface in council housing complex, Arlington Apartments, in Wellington, New Zealand. This project will develop the balance in which residents can share space with their neighbours, by re-zoning current ambiguous space to be communal to a smaller group, in order to give tenants an opportunity to appropriate their living environment.

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A number of overlapping terms are used throughout this thesis to describe the housing situation in which suitable applicants are placed; low income housing, government housing, council housing, state housing and social housing. Council housing is used most often when talking about the site in question, Arlington Apartments, because it is a Wellington City Council owned complex, the other terms are used for this site and other case studies throughout the research, but they are not used to purposefully be distinctive to a particular typology.

1

INTRODUCTION

Introducing the disciplinary problem, the scope of the project, the motivation behind the research, and a brief introduction to the site.

Research Question

“How can social interaction in a council housing community be enhanced through urban restructuring?”

1.1 The Problem

Over sixty thousand New Zealanders live in government owned accommodation (Statistics New Zealand, 2013). Whether it be Housing New Zealand, Community Housing Aotearoa, or local council owned complexes. Many New Zealanders regard these sites as unappealing, eye-sores, intimidating or even scary. A discussion with Wellington City Council Community Action and Engagement Manager Rosie Gallen bought to light the issue that many members of the public tend not to want to live in the same neighbourhood as government housing estates, and that the tenants themselves file complaints about their standard of living (R, Gallen, personal communication, April 1st, 2016). It is hard to maintain standards, in a system that caters to so many, let alone prioritise quality of lifestyle.

Most New Zealand government owned housing offer little in the way of socially useful outdoor space. Many complexes follow a basic structure used all over the world; of multiple mid to high rise apartment buildings arranged on a city or suburban block. The space in between the buildings is officially considered communal or semi-public space, often taken up by carparks or ‘greenspace’.

By treating these spaces as publicly available to all, and shared by all, they tend to, as Herman Hertzberger says, become no one’s. Occupation can be suggested; bench seats placed, paved paths to follow, playgrounds assigned, or signs hung up, “residents only’. Over the last thirty years we can see a shift in the way government complexes have been built. Shared space is less popular, and there is a trend towards privatisation. A more practical, but less optimistic model. The ‘ideal home’ in New Zealand is still seen as the suburban quarter acre dream, with fences separating us and them. We can see this translated in the trajectory of social housing projects throughout the last thirty years. The positioning chapter of the thesis will discuss the current disciplinary tendencies that have led to the changes we’ve seen built in New Zealand.

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Figure 1: Park Hill Social Housing in Sheffield, England (webbaviation, 2010)

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Figure 2: Social housing in Fitzroy, Melbourne (Google Earth, 2016)

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Figure 3: Wellington City Council owned Newtown Park Apartments, Wellington, New Zealand. Author’s own

“Architecture has a social responsibility beyond the building, client and architect.” Ian Athfield

1.2 Motivation

It's important that our government looks out for the less fortunate in our communities- to help provide someone somewhere to live when they need it.

An important reason for the privatisation trend, is that it is understood to be safer. By having fences around individual yards instead of sharing a courtyard, each person is responsible for their own space, and can regulate it as they please. Also it's believed to be fairer, that everyone is allocated an equal amount of space, especially in a state housing system such as New Zealand's, where individuals and families are placed in a unit. These are both important considerations. However, I worry that with the nature of state housing, how they are grouped in large blocks that fit into a city grid (fig. 5), that only relying on increased privatisation to deal with those issues will result in physically segregating the city based on socio-economic class. Low income neighbourhoods are already treated with a biased caution, and if we continue to separate our communities physically, through zoning or barriers, we run the risk of that attitude affecting the way people think about each other, and the way we treat one another. So this thesis aims to explore alternative options for state housing structure, so that communities feel safe and have privacy, are given access to the space and facilities they need, without dividing our neighbourhoods. Segregation and class systems are present and relevant in our current society, and if that's something that can be addressed through urban design, then that is important to New Zealand's future.

This thesis idea originally came from previous projects on urban appropriation, which explored how people living in dense urban areas, in small apartments without much living space, with private outdoor space, might allow their private lives to spill into the public realm (fig. 4). Designing through this lens was really interesting because it fostered analysis on what separates the public and private world, and what, spatially, would make people-appropriate public areas. What was lacking in that research though, was a specific client, or community, with which to ground the project in particular values. 'Urban public space' felt too general, too vague and impersonal. The research needed a community to work with, a group which might depend on their public space more specifically than in the common city block

Figure 4: A makeshift breakroom, outside the back entrance of a restaurant in an alley way in Wellington City. Author's own

Figure 5: Map of Arlington and surrounding neighbourhood. Author's own

1.3 Introduction to the Site

Context Maps:

Figure 6, 7, 8 and 9: Context maps. Author's own

Plan Key:

Arlington Apartments

Figure 10: Plan of Arlington Apartments as they are now. Author's own

1.3 Introduction to the Site

Figure 11: Context within Te Aro. Authors own

Arlington Apartments is a Wellington City Council owned housing complex in Mount Cook, Wellington, located just on the outskirts of the city centre (fig. 11).

Built in the 1970's and 80's, Arlington has a unique structure made up of three clusters of low-rise, medium density units and the George Porter Tower, a ten story high-rise apartment block in the north-eastern corner of the site. The complex has a population on 480 people, across 212 units, on a 3.17 acre block (Statistics New Zealand, 2013).

The site feels like a maze, it's made up of staircases and twisting alley ways that lead between carparks and courtyards and front door. Even though the site climbs a hill, the difference from the bottom, Arlington Street, to Hanky Street at the top, is twenty-seven metres, the spaces don't slope, instead the structure is made up of courtyards, and buildings stacked on top of each other, with staircases in between to move through.

Figure 12: Arlington Apartments. Author's own

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Figure 13: Arlington Apartments (Bing Maps, 2016)

Who lives there?

Arlington Apartments are home to a diverse group of people. Because the units range from one to three bedrooms, the complex welcomes a variety of tenants, from single occupants, to couples both young and elderly, and families. Even though statistics will never allow us to really get to know a community, they do paint a picture of the diversity in Arlington. As shown in the graphs below, there are a wide variety of ethnicities, religious identities and ages all living within this community.

Figure 14: Ethnic Diversity: Arlington

Figure 15: Religious Identity: Arlington

Figure 16: Age Range: Arlington

Figure 17: Annual Income: Arlington, Medium between \$12,800 and \$15,400

Through the comparison study with Te Aro and the Wellington Region, we can see that Arlington expresses a diversity unique to the area. New Zealand is fast becoming an increasingly multicultural nation, and Arlington is an example of what most of New Zealand will look like in the coming years.

Te Aro

Figure 18: Age Range: Te Aro

Figure 19: Annual Income: Te Aro

Median Weekly Rent per Household: \$450

Figure 20: Homeownership: Te Aro

Figure 21: Ethnic Diversity: Te Aro

Figure 22: Religious Identity: Te Aro

The Wellington Region

Median Weekly Rent per Household: \$370

Home Ownership by Household -Wellington

Figure 23: Homeownership: Wellington

Ethnic Diversity: Wellington

Figure 24: Ethnic Diversity: Wellington

Figure 25: Age Range: Wellington

Figure 26: Annual Income: Wellington

1.4 Approach to the Project

The project will begin by assuming that the existing complex will not be demolished. The advantage of using the current site as a starting point, is the opportunity to learn from existing complexities. The site already operates under a set of tendencies, both positive and negative. Learning from these gives the chance to explore ways to manipulate the existing structure, rather than develop an entirely new one.

This research is about retrofitting the existing public realm, through working with the transitions between the private and the public, achieved by restructuring the whole site and the local area, as well as restructuring the site's internal spaces.

Through urban restructuring, this thesis aims to explore alternative options for state housing, so that communities are given access to the space and facilities they need, through sharing courtyards with their neighbours, while retaining safety and privacy, by defining space as public, private or communal. Park space will be added in order to give the community a place to hold social events (the Wellington City Council try host events to enhance to social life of their housing projects, but generally these have to be held in the carparks at Arlington). This will also give tenants more options in terms of how to occupy Arlington, as a part of this design research is involved in how tenants can feel comfortable occupying a communal space is a domestic way

2

POSITIONING

Relevant disciplinary tendencies, literature review and case studies which helped position the research.

2.1 Relevant Disciplinary Tendencies

This chapter will discuss how landscape architecture and urban design deal with the issues surrounding government owned housing communities, how they affect the thesis site, and council housing's societal implications.

“In a society becoming steadily more privatised with private homes, cars, computers, offices and shopping centers, the public component of our lives is disappearing. Public life in good quality public spaces is an important part of democratic life and a full life.”

Jan Gehl

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Site History

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Figure 29: Plan of Arlington made from the archived plans, originally three documents. Author's own (see Appendix for full versions of original images)

Site History

The body of Arlington Apartments was built in three stages, which can be read clearly in the structure of the site, especially seen in the plan view (fig. 29 and 30). The first stage here in the north, with the George Porter tower (fig. 31) built in 1972; the second stage a few years later in 1975. These blocks both have the same language, with the stacked beige concrete block units and mess of twisting alleyways and zigzagged stairwells (fig. 27), both designed by Athfield architects in collaboration with engineering firm King & Dawson.

Then the third stage in 1981, which has a different structure altogether. It's made up of single dwelling townhouses with individual backyards (fig. 28), designed in response to the way the first two stages were received, and to the trend of privatisation which was becoming popular at the time. Also they were aimed towards families, as they're bigger, three bedroom homes, with close access to the playground located in the carpark.

These stages of design act as a built reference for the path in which state housing has been following.

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Figure 31: View of Arlington Apartments, from Thompson Street. (Gatley, 2012)

Plan Key:

Carparking Spaces		Front Doors
Towards the top of the stairs		Back/Secondary Doors
Building Footprints		Mail Boxes
Grass		Rubbish Bins
Tree		Courtyard Walls
		Wire Fences
		Kerbs
		1m Contours

Figure 30: Plan of Arlington as it is today. Author's own

The Uncertain Future of Arlington

Arlington is part of a wider \$400 million program funded by the Wellington City Council and the New Zealand government to upgrade all of Wellington's council housing from the 1960's and 70's (Harris, 2015). It is well recognised, by tenants and council members, that the state of Wellington's low income housing isn't good enough (Easton, 2014)

The south-eastern block of Arlington, 'Arlington Two', between Taranaki Street and Hankey Street, was demolished in for redesign in early 2015. Construction for the upgrade began in the middle of that same year, with the aim to finish the project in 2018 (Wellington City Council, n.d, a).

The new design is by Novak Middleton architects, and Boffa Miskell, a landscape architecture firm, in collaboration with Hawkins Construction and many other consultants, and is estimated to cost \$33 million (Wellington City Council, 2015). The upgrade takes the complex from 57 units housing 166 residents, to 105 new apartments with space for 324 residents (The Dominion Post, 2016, June).

Built in the 1970's, the concrete apartments, have issues regarding weather-tightness and earthquake resilience (Harris, 2015), and would be difficult to rewire, and the site has some drainage issues (Easton, 2014).

So rather than remodelling the existing site, Wellington City Councillor Paul Easton, who chairs the committee responsible for state housing, believes it would be more affective to demolish it all and start again (Easton, 2014).

In June 2016, the Council announced they were engaging with the market and exploring options for 'Arlington Site One' (the main body of the site, which this thesis deals with, fig. 32) including the George Porter Tower (Wellington City Council, 2015).

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Figure 32: Arlington Apartments, as they are now, showing the site of Arlington 2, set to be demolished. Author's own

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Figure 33: Arlington Apartments, as they are now. (Harris, 2015)

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Figure 34: Demolition under way at Arlington Two. (Wellington City Council, 2016 b)

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Figure 35: Demolition under way at Arlington Two. (Wellington City Council, 2016 a)

Societal Tendencies

The design of many New Zealand low income housing allows for a social segregation of communities based on wealth and class. We can see that council housing is moving towards a more privatised typology (shown through the stages of Arlington, from 1972+75, to 1981, then to the new design for Arlington Site Two in 2016). How is this design change going to affect the way our society functions as a whole?

Council housing blocks are becoming like tiny suburbia's, everything is separate, fenced off, and well defined (fig. 36). While lone reason for this trajectory is that privatisation is understood to be safer. We see that by having fences around individual yards instead of sharing a courtyard to be a more secure scenario.

Also it is believed to be fairer, that everyone be allocated an equal amount of space. These are both important considerations, especially in a state housing situation, as tenants tend to be in a more vulnerable position than other medium density neighbourhoods in New Zealand (see 2.2 Case Studies, Other Wellington Housing).

Sources attribute the feeling of unsafety around Arlington to the way that it looks from the street. In May 2014 one of the laundry buildings on the George Porter Tower burnt-out (fig. 37), which gave local newspapers the opportunity to voice the public's opinion on the complex. Arlington is described as "tired and old", as looking like a "New York ghetto and is encouraging antisocial behaviour" (Stewart, 2014). By which they mean homeless people sleeping, teenagers loitering, and people drinking. Some members of the public are of the opinion that Arlington "wouldn't look out of place in Syria" and is "an eyesore and a slum and should be bowled" (Stewart, 2014).

However, I worry that relying on increased privatisation to deal with those issues will result in physically segregating the city based on socio-economic class. Low income neighbourhoods are already treated with a biased caution. The stigma that surrounds state housing has the potential to be harmful to New Zealand's already present class system culture.

If we continue to separate our communities physically, through zoning or barriers, we run the risk of that attitude affecting the way people think about each other, and the way we treat one another. Arlington itself is pushed into a corner, with a big hillside framing the south and west sides, forcing people to sweep around the site on the north and east sides.

It isn't integrated into the surrounding city block, so there is no need for members of the public to pass through there, which the council think is safer, but adds to the sites already empty, lonely presence. However, it's not locking the public out that creates a secure neighbourhood, but 'eyes on the commons', and the constant presence of people.

"There must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street. The buildings on a street equipped to handle strangers and to insure the safety of both residents and strangers, must be oriented to the street. They cannot turn their backs or blank sides on it and leave it blind" (Jacobs, 1961).

Figure 36: The townhouses at the southern end of the Arlington complex. Author's own

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Figure 37: The George Porter Tower, with its burnt-out laundry room.
(Stewart, 2014)

2.2 Literature Review

Those who changed the way we analyse urban space

In the 1960's and 70's Jane Jacobs and Jan Gehl became two of the most influential author's on the topic of urban design. They have both influenced this work greatly, for different reasons.

Jacob describes her own work as "both gloomy and hopeful" (Jacobs, *Dark Age Ahead*, 2004). Her first book *The Death and Life of Great American Cities* is a critique of cities, aimed at those who need it most; town planners.

Jacobs teaches the reader how to look at the seemingly small, everyday way that people inhabit their neighbourhood. "While you are looking, you might as well also listen, linger, and think about what you see" (Jacobs, *The Death and Life of Great American Cities*, 1961).

While the case studies are vastly different, the same principles which can be extracted from Jacob's work on New York City, can also be applied to Arlington. For example, four factors that are "essential to neighbourhood success" include:

- diversity of functional uses
- short blocks, for accessibility
- age diversity
- sufficient concentration of people

The book is an exploration of how to study cities as they exist, and use that to maintain and design, rather than blindly develop. She writes about "how cities work in real life" (Jacobs, *The Death and Life of Great American Cities*, 1961), a concept which has been so significant throughout this project.

It offers very important insights into the complexities that shape the social and physical conditions of the urban realm. But it is also a passionate plea to understand cities as living worlds, as relevant tools to foster human connection.

"There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans" (Jacobs, *The Death and Life of Great American Cities*, 1961). Where Jacobs inspires, Jan Gehl validates. Gehl's extensive writings and analysis in *Life Between Buildings*, on the way people use public space, gives authority to topics which can seem insignificant, like the social life of a neighbourhood. "Only architecture that considers human scale and interaction is successful architecture" (Gehl, *Life Between Buildings*, 1987).

Gehl uses extensive case studies to illustrate his point, giving readers opportunity to relate to the work. This methodology has inspired the scope of case studies in this research, which has tried to include a wide range of case studies, to illustrate the various complexities of the project.

2.3 Case Studies

The following project reviews aim to extend on the relevant disciplinary tendencies discussed previously. They are real examples of how council housing is being built currently and what the future of council housing might look like.

Also discussed here are examples of other techniques that could be used in design, taken from multidisciplinary precedents, and through discovering how they are relevant to this research, this knowledge can help drive the design stage coming later in the thesis.

“Any city that promotes itself as genuinely diverse and liveable must provide affordable high-quality social housing.” Celia Wade-Brown, Wellington Mayor, 2015

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Figure 38: Model of Athfield's home and office in Khandallah, Wellington. (Griffiths, 2011)

Figure 39: Sketch of the chaotic structure of Arlington Apartments. Authors own

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Figure 40: Athfield Sketch. (Athfield Architects, n.d)

Figure 41: Athfield House, Wellington. (Grant, n.d)

The Athfield Aesthetic

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Ian Athfield, an extremely well-known Wellington Architect, developed a reputation for radical designs in the 1960's and 70's. The project that really pushed him out into the public eye was the construction of his own family home in Khandallah, Wellington (fig. 41). This building would expand and grow over the following years, and also become the office of Athfield Architects. Today the firm describes its work as "architecture that responds with spirit and ingenuity to the pressing challenges of our time" (Architects, A. 2016).

The firm released a BLOCKArchitecture Guide in 2012 (to coincide with the release of Julia Gatley's book on Athfield Architects) which gave a brief description on many of the firm's projects. It states that the Wellington City Council encouraged Athfields to collaborate with King & Dawson architecture and engineering firm on the design and build of Arlington Apartments in the early 1970's. As Athfield was beginning to make a name for himself and his firm, the council wanted to combine the young firm's design flair with the established firm's (King & Dawson) track record and experience. Together they produced the first two stages of Arlington, the first built in 1972 and the second in 1975. The guide describes how Athfield recalls the scheme was compromised by the council's requirement to standardise unit sizes and fenestration (the arrangement of the windows in the buildings). "He complied with their wishes in order to get the scheme built" (Gatley, J. 2012).

*Figure 42: Athfield sketch.
(Griffiths, 2011)*

Through getting to know Arlington, the site, the structure, how the place functions socially, I can't help but pick out the tone of that architecture guide. Athfield's design vision didn't comply with council regulations, and nothing could be done about that. In *The Death and Life of Great American Cities*, Jane Jacobs discusses what Douglas Haskell, editor of the *Architectural Forum* back in 1952, described as 'googie architecture', a technique of exhibitionism (Jacobs, 1961). This phenomenon was seen through neighbourhoods displaying chaotic monotony, where planners would try make something appear unique through acts of exhibitionism ("sophisticated construction: weird roofs, weird stairs, weird colours, weird signs, weird anything"), as an attempt to create 'specialness' (Jacobs, 1961)).

This comparison is made because, it seems like the Wellington City Council, at the time, wanted an innovative design, something different from traditional low-income housing, but were held back by regulations. Therefore Arlington is left lacking that inspiring design, but with a thin mask of 'Athfield-ness' that doesn't quite hide its realities.

Figure 43: Plan, Newtown Park Apartments, Newtown, Wellington. Author's own

Figure 44: Communal courtyard, Newtown Park Apartments. Author's own

Figure 45: Newtown Park Apartments from the street. Author's own

Newtown Park Apartments

Newtown Park Apartments are the Wellington City Council's biggest social housing complex (Wellington City Council, 2013). Upgraded in 2013 by local architecture firm Studio Pacific, the project won the top residential award in the 2013 Resene Total Colour Awards and the Nightingale Maestro Award for its use of colour to create a sense of welcome (Resene, 2013). The upgrade included earthquake strengthening, modern kitchens and bathrooms, enhanced communal spaces, and improved access, safety and security (Wellington City Council, 2013). The redesign also aimed to make homes warmer and drier, as those factors are the ones most commonly complained about by council housing tenants. The upgrade also saw more family units built and less single person bedsits (Wellington City Council, n.d.), a response to the changing demographic of Wellington council housing tenants.

The design is made up of five high rise apartment buildings with communal spaces and car parks, framed by two roads. The award winning colour scheme is used to differentiate the buildings, as well as what is public, and what is private. The front entrances to the apartment buildings are also clearly defined using light and colour (Resene, 2013). However, without research, that it's obvious. It's a subtle design, not made obvious to members of the public. So therefore, how useful can it really be when it comes to finding your way through the site? Different paving materials and planted spaces create thresholds to help define the public thoroughfare as distinct from semi-private and private residents' spaces (fig. 47). This is an interesting way of dividing space, as although the planted strips do act as a threshold, and there is signage around (fig. 48), there's nothing physical to stop me walking straight through. It's as if they're hinting the public shouldn't go there, physically, it's up to them how far I impose.

Figure 46: Occupied balconies. Author's own

Figure 47: Plan of how the planted barriers separate space. Author's own

Figure 48: Privacy Sign. Author's own

Figure 49: Planted barriers separating semi-private carpark from private park space. Author's own

Other Wellington Housing

Rolleston Street: Housing New Zealand

The Rolleston Street Apartments are one of Wellington's Housing New Zealand complexes. It is made up of three mid-rise apartment buildings (between three and four stories) which frame a communal courtyard and garden space, with a tenant carpark and communal laundry building.

Figure 50: Plan of 21 Rolleston Street Apartments. Author's own

Rintoul Street: Private development

A modern medium density development on Rintoul Street, Newtown. This complex has clear public and private boundaries in the form of tall fences (fig. 53). Each house has its own small courtyard/garden, but there are also two bigger communal park spaces which can be used by any resident (fig. WTF). Priority is given to vehicle access, which is made obvious by the road system, and how they lead directly into garages, rather than a front door (fig. 52).

Figure 51: Plan of 21 Rolleston Street Apartments. Author's own

These two sites are so very different. The structure, the way in which allocation of space has been prioritised. The way the design allows the residents to enter their homes, which also suggests an assumption made about the lifestyle of the tenants. Rintoul Street is designed predominately to be accessed by cars, but Rolleston Street is arranged to be traversed mostly on foot, either from the street or the communal carpark. We can see that in figures 50 and 51, the plan views of the sites.

The tenant market is also completely different. One is designed for a high income demographic, and the other for people with a lower income. It is obvious that privacy is made a priority for the high income community, whereas space in the low income housing complex is predominantly allocated to communal use, and privacy is only able to be obtained inside apartments. The plan shows how each of the terrace houses have their own allocated yard. All are practically identical, as if to obtain complete equality of land use, and market value.

Could these calculated differences be a subtle societal predisposition, in which somehow we have all decided on the way that people with a lower income deserve to live? Or do we used council housing as a way to test theories about how people can live, if they absolutely have to?

Figure 52: 21 Rolleston Street Apartments, entrance carpark. Author's own

Figure 53: 21 Rolleston Street Apartments, communal space. Author's own

Figure 54: 89 Rintoul Street development, communal space. Author's own

Figure 55: 89 Rintoul Street development, road off main entrance way. Author's

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Figure 56: Axonometric view of the new design for Arlington Two. (Novak Middleton, 2015)

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Figure 57: Perspective of the central shared courtyard. (Hawkins, 2015)

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Figure 58: View of the entrance from Hopper Street. (Hawkins, 2015)

Arlington Site Two

As discussed earlier in, the south-eastern block of Arlington was demolished in early 2015, construction for the upgrade began in the middle of that same year, with the aim to finish the project in 2018 (Wellington City Council, n.d, a). The new design is by Novak Middleton architects, and Boffa Miskell, a landscape architecture firm, in collaboration with Hawkins Construction and many other consultants. The upgrade takes the complex from 57 units housing 166 residents, to 105 new apartments with space for 324 residents (The Dominion Post, 2016, June). As seen in the design renders figures 56, 57 and 58, the new design boasts a large landscaped central courtyard and modern three storey units. The buildings themselves are modular, designed to be adapted in time to suit the changing demographic of social housing tenants. Walls are designed with areas ready to convert to doorways, rooms built as cells able to convert with low cost, foyer areas that can be adapted into bedrooms, and conversion plans allowing living and bathroom spaces to adapt to suit bedroom numbers (Wellington City Council, n.d, a). Wellington Mayor Celia Wade-Brown says the new design is attractive, sustainable and an excellent use of the very conveniently located site. She describes the Arlington redevelopment as a “long-standing symbol of our Council’s commitment to the right of everyone to have secure, safe, warm and affordable housing.”

Councillor Paul Eagle, chair of the council committee responsible for social housing, says that “our tenants often cannot afford private market rates, or face discrimination in the market” and he believes that this development will usher in a new era of flexible rental housing for those most in need (Wellington City Council, 2015).

As shown in figure 60, there are four distinct layers of privacy in this structure. The first, the street: totally public, shared by Arlington residents and all members of the public. The second, the communal courtyard. This is accessed only by residents, and is free to be shared by all 324 of them. The third, communal stairwell into the units. These are accessed by swipe-card, only by those who live in that set of units. Lastly, the complete privacy of one’s own apartment and individual balcony, accessed only by key (Steve Dunn, principal at Boffa Miskell landscape architecture firm, personal communication, April 2016). This structure gives everyone complete understanding of where it is and is not appropriate for them to be, and the swipe-card and key access allows for increased safety.

The Wellington City Council hope that the central communal landscaped park will be a defining feature of the site and that the space will promote a sense of belonging and community for the tenants (Wellington City Council, 2015). I do agree that having units face directly out into communal space will encourage residents to use the park, even if only to pass through from the road to their front door. However, 324 residents is a lot to be occupying the same space. Although the site is large (estimated 1,480 square metres), to expect so many people to feel comfortable appropriating one place is ambitious. The scale of ownership here is too large. If a space belongs to everyone, does it realistically belong to no one? This thesis will explore a similar courtyard structure, but at a smaller scale.

Figure 59: Entrances to the design for Arlington Two. Author's own

Figure 60: Levels of privacy in Arlington Two. Author's own

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Figure 61: Heller Street Park. (Rodriguez, 2012)

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Figure 62: Diagram of Heller Street development. (Six Degrees Architecture, 2012)

Heller Street, Brunswick

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Brunswick is a popular inner-city suburb of Melbourne with limited open space. Property prices are high so small homes, particularly terraced houses are an affordable option. But with terraced houses comes tiny backyards. Six Degrees Architects developed medium density, family friendly housing next to a communal park (Horrocks, 2012). The development holds ten houses, on a block that might typically hold six to eight at most. Heller Street Park and Residences introduces a new typology for medium-density housing that sets a precedent for the future development of unused infill sites within inner suburban landscapes. The site has been divided, one-third residential and two-thirds community parkland (National Architecture Awards Jury, 2012).

The park is between the street and the houses, so it serves as communal to the wider neighbourhood and the residents of the development (fig. 62). There aren't any fences around the park, instead the designers used topography to suggest boundaries (fig. 61). Access the park from the street, goes up a slight rise, between two well planted strips. From the houses, one steps out on to their semi private courtyard area, then through the threshold of a pergola, onto a grassy strip that leads around the grassy mounds into the park (fig. 64).

Figure 63: Plan of Heller Street development, showing paths from street, and from the homes. (Six Degrees Architecture, 2012)

Below: Figure 64: Topographic section of Heller Street Park and Residences. (Six Degrees Architecture, 2012)

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The success of this project lies in the establishment of public green space in a dense urban environment. The development promotes the use of communal gardens instead of private backyards. Therefore ten townhouses and the local residential community of Brunswick reap the benefits (National Architecture Awards Jury, 2012).

Manipulating the levels of the ground plane is a very simple way of creating subtle boundaries. Walking between tall trees, or around the bend of a low hill, or through a pergola frame are all delicate but concrete thresholds which break down the difference between public and private space. Here, residents experience the full scale of public and private life, from the street (public), through to the communal park, the semi-communal pathway in front of the houses (semi-communal, because it is communal to those who live in the development, whereas the park is communal to the whole neighbourhood). Then the houses have a semi private front courtyard, which creates a planted layer between the semi-communal space and the private area of the home. All of these layers create a richness of diversity, and opportunity for everyday living.

Elliston Estate, Rosanna

Figure 65: Context Plan of Elliston Estate, Rosanna, Melbourne. Author's own

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The Elliston Estate is an example of the fundamental town planning and architectural ideals of the 1960s, which aimed to integrate the private living space into the wider community context.

Built in 1968, as a redevelopment of the Rosanna Municipal golf in the outer suburbs of Melbourne, the design aimed to create an integrated house and garden environment, in a native Australian landscape. Ellis Stones, the projects landscape architect, described his vision for the estate: “the landscape must be strong and simple with one continuous flowing feeling” (Victorian Heritage Database Report, 1999). The private living environment was to be incorporated into a wider community setting. The estate adopts a cul-de-sac street structure which follows the natural slope of the land down to a creek and communal park (Robin Boyd, 2016). Footpaths were eliminated so private gardens would extend to the road side, a concept which relates to the residential designs of Burley Griffin (fig. 67), where front gardens act as communal parks to soften the impact of the buildings from the road (Victorian Heritage Database Report, 1999).

One of the houses in the Elliston Estate is still occupied by its original owners, who selected the Charles Duncan designed home from Merchant Builder's catalogue in 1972. They were a family of five, and particularly liked the setting of the estate, the houses sat close together, arranged in a way that prioritised gardens and communal space over internal living. They've described the home as “an easy house to live in” (Sugihto, 2016).

The estate allowed the owners a lifestyle which was uncommon at the time, the family of five could get by easily with one car due to the proximity of Rosanna Station. The demographic living in the estate, included young professional families with children of a similar age, who went to the same school tended to grow up together. Rosanna Parklands, which sits alongside the estate endorsed an environment which fostered a unique social community (Sugihto, 2016).

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Figure 66: Suburb Map of Elliston Estate. (Robin Boyd Foundation, n.d, b)

Figure 67: Canberra houses without footpaths of front fences, Burley Griffin deign. (ArchivesACT, 1961)

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Figure 68: Cul de sac plan, Elliston Estate. (Stone, n.d)

Each cul-de-sac has a spine running down the middle, behind the houses, down towards the park (fig. 68). The sections of land the houses sit on do not all have complete back fences (fig. 69 and 70), so the private space bleeds into the walkway, communal to that cul-de-sac, then down into the park, which is communal to the whole estate.

These subtle thresholds give privacy when the residents want it, but enhance the social life of the site by keeping communal areas open. Instead of fencing off the park from the houses, as is traditionally done in residential developments, the designers have incorporated subtle physical elements which create veils of privacy.

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Figure 69: Creek park space between culs-de-sac, Elliston Estate (Veld, n.d)

Figure 70: Creek park space between culs-de-sac, Elliston Estate (Veld, n.d)

Veils of Privacy:

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Figure 71: Elliston Estate (Veld, n.d)

The Home: The ultimate sanctuary of privacy.

Soft layer of trees: these create a light visual boundary between the home and the communal space. Most immediately they give privacy to residents who might be sitting just outside their house, but don't feel like being seen.

Taller Trees: These mature trees were something Ellis Stone really wanted to keep in the site. He wanted the design to be informal, native trees rather than planted flower beds (Victorian Heritage Database Report, 1999). The height and thicker trunks build a wall that works to separate space when looked at from a further distance than the smaller trees.

Low log fences: Keep out cars but encourage pedestrians. They mark a boundary, but not a barrier

Ground level shrubs: These create an additional layer of texture, to blur out the view of the houses. They're also something people would feel disruptive walking right through, as they could be crushed under foot.

Figure 72: Privacy diagrams. Author's own

Veils of Privacy:

This content is unavailable. Please consult the print version for access.

Figure 73: Elliston Estate (Veld, n.d)

The Home: The ultimate sanctuary of privacy.

Courtyard Levels: The height between the communal space below and the private courtyard and house above is enough to separate these two zones. If someone is sitting in the courtyard above, then they are enveloped in the climbing plants and veranda, and can see out into the distance, but not directly below, where people may be walking through to the communal space.

Soft layer of trees: Again these create a light visual boundary, and a subtle threshold between communal and private.

Communal Pathway: The pathway along the base of the cul-de-sac connects residents with the parkland, but it isn't too close to houses, so residents can feel free to move through, and people inside don't feel observed.

Figure 74: Privacy diagrams. Author's own

3

SITE EXPLORATION

The documentation of my process of understanding and getting to know the site, through the lenses of sketching, photographing and mapping, with critical reflection.

Figure 75: Existing Plan of Arlington Apartments. Author's own

3.1 The Overview

Figure 76: Existing Plan of Arlington Apartments. Author's own

The Structure of the Site

Arlington is situated on a sloping site, with a 27 metre difference between the lowest point at the northern end, and the highest in the south. Despite this gradient, the spaces within the site don't feel sloped. This is because the site is built using levels. Each courtyard and car park feels flat, because these spaces are in between buildings, and often connected by stairs. The progression of these stacked spaces allow the site to traverse the hillside in chunks.

Where Shadows are Cast

Winter Solstice: June 21st

Summer Solstice: December 22nd

The Public-Private Interface

Access: Residents

Figure 85: Degrees of Privacy; Map 1: what is communal to all residents, through to what is private to an individual household. Author's own

Access: Public

Figure 86: Degrees of Privacy; Map 2: where is and is not appropriate to access, as a member of the public. Author's own

Figure 87: The only sign in Arlington. Author's own

Access: Places within the site this group can freely get to and occupy.

Public: Members of the general public, people who do not live in Arlington Apartments.

Residents: Individuals who live in Arlington Apartments, also called tenants.

Physically, any member of the public can walk right on into Arlington. There aren't gates or really much signage keeping residents and members of the public separate. There are, however, certain characteristics of the site which make people feel uncomfortable in the space, like they shouldn't be there.

Figure 88: Narrow pathways.
Author's own

Figure 89: Clear pathway past townhouses.
Author's own

Figure 90: Proximity to front doors.
Author's own

Appropriate and Inappropriate paths through Arlington

There aren't obvious paths to follow when walking through Arlington. One really needs to know where they're going in order to avoid turning up outside someone's front door. The front door to a home is a delicate threshold between the public and the private. There's an element of ownership to the few metres in front of this threshold, which makes a pedestrian feel inappropriate passing through that space, so close to someone's private realm. Figure 89 shows the townhouses have been designed with a buffer in front of the entrances, whereas figure 90 shows how easy it is to come across a front door in the main body of Arlington.

Figure 91: A public accessible courtyard.
Author's own

Figure 92: A courtyard private to one household.
Author's own

Public and Private Spaces within Arlington

49 out of the 212 units have a private courtyard, which can be accessed only by that individual household (this includes the 20 townhouses at the southern end of the site, which each have private fenced backyards). Figure 91 shows the open spaces scattered through the site, which are accessible by all tenants, and figure 92 shows a private yard. These different typologies of space lend themselves to be occupied in different ways. The first, while big enough to be occupied in the same way as the second, is used predominately as a thoroughfare. The second, a private yard, is used to hang laundry, to sit outside and enjoy the sun, or for somewhere for children to play. It is the unpredictability of complete freedom of access that keeps the first from being occupied in the domestic way the private courtyard may be.

3.2 Getting to know the site

“Landscape architecture should be based on observation, the specific, not the general, what is known through experience, the immediate, and the sensory.” Elizabeth Meyers

Arlington Apartments was not an easy site to get to know. It is not really appropriate, as a member of the public, to wander through at any time, or take lots of photos or intrude on certain areas. It took a long time, and multiple visits, to uncover all of Arlington’s hidden corners, courtyards and passageways, and to better understand how residents occupy and traverse the spaces. Drawing the site was a way to spend time with the space, to study the detail in a particular corner. Through sketching details, it became apparent what daily events are socially relevant, and these became a driving study in the behaviour of people within the site.

Figure 93, 94 and 95: Early site sketches. Author's own

3.3 Socially Relevant Moments

Communal Laundry

Figure 96 and 97: Where laundry is hung to dry. Author's own

Figure 98, 99 and 100: Sections showing how spaces are used to hang laundry. Author's own

The Wellington City Council do not recommend hanging laundry to dry inside the units, because that can cause dampness in the homes (R, Gallen, personal communication, April 1st, 2016). Therefore, there are several communal yards placed around the site dedicated to washing lines. Also, figures 96 and 97 show how much of the site overall is used to hang laundry. This is a simple need, but it dictates the way space is used, and creates spaces where people would bump into each other, while completing this common task.

Figure 101 and 102: Occupying laundry spaces. Author's own

Figure 103 and 104: The unusual places laundry is hung to dry. Author's own

Communal Play Space

Figure 105: Map of communal play spaces. Author's own

Arlington gives its tenants two dedicated communal play spaces, a playground, designed for young children, and a basketball court designed for older children and teenagers. These are socially relevant because they're some of the only examples of purposeful communal activity within the site.

While they may look run down, and while they aren't heavily occupied, these communal play spaces can act as landmarks, like punctuation in the complex. Arlington's structure is like a maze, there doesn't feel like a clear logic to its navigation. Therefore the basketball court and playground, with their definitive titles, act as an easy social meeting point.

Figure 106 and 107: Play spaces. Author's own

Shared Stairwells

Figure 108: Location of shared stairwells. Author's own

Arlington is a low to medium rise, medium density complex. The buildings are one to four storeys, and each house multiple units, accessed by exterior staircases (fig 110 and 111). These staircases are opportunities for interaction, or as the Wellington City Council's Senior Community Advisor, Corrina McGregor describes them: 'bump zones' (C, McGregor, personal communication, April 28th, 2016).

The structure itself acts as a small communal space to those who live in the building. It is observed that residents feel comfortable hanging their laundry over the railings, or leaving shoes and bicycles on the landing (fig 109). This evidence of life is so rare in Arlington, and it's such a great example of people beginning to let their private lives spill into the shared spaces.

Figure 109: A shared stairwell, with hanging laundry. Author's own

Figure 110 and 111: Shared stairwells. Author's own

The Community Centre

Figure 112: Map showing location of community centre. Author's own

The community centre is located at the base of the George Porter Tower, and is where members of the Wellington City Council's Community Action group host tenancy meetings where residents can voice their concerns, or act questions about their tenancy.

This is such an important facility to provide. Council members host social events, as they do in many other Wellington housing estates, to promote community. However the site doesn't have much outdoor space to host these events, so picnics and barbecues tend to happen in the carpark below the tower.

Figure 113: Entrance to community centre. Author's own

Rubbish Bins

Figure 114: Map showing location of rubbish bins. Author's own

Rubbish bins are a basic communal facility, and an opportunity to bump into neighbours. They also act as a sign of life in an area. When walking through Arlington, there aren't often many people outside, making it hard to analyse what spaces are frequently used. But what bins are used the most tells us what spaces are frequented.

Figure 115 and 116: Variation in rubbish bin use. Author's own

Mail Boxes

Figure 117: Map showing location of mail boxes.
Author's own

Mailboxes are another fixture in the site with which to analyse life. They're 'bump zones', somewhere neighbours might run into each other, and therefore have a social interaction. They also act as a piece of protective infrastructure, as one can see if their neighbour hasn't collected their mail, and may need checking on.

Figure 119, 120 and 121: Mailboxes. Author's own

How people move through

Figure 122: Map showing paths taken when moving through the site. Author's own

After observing all the socially relevant moments mentioned previously, we can assume where in the site has the highest volume of pedestrian traffic, by drawing paths from each front door to the nearest carpark, communal facility and street access point. This shows that people are most likely to pass people in the narrow corridors between buildings, as the funnel through tight space into the openness of a carpark or the street.

Figure 123, 124 and 125: Points in the site where paths may cross. Author's own

3.4 Learning from the Site

In assuming the site will not be demolished, this research has the opportunity to learn from the way the site currently operates, and the way the specific community occupied the spaces they have.

Shared yards which act communally

The 'backyard' is treated as an extension of the home in most New Zealand houses. It is appropriate to leave belongings outside, and one can garden and furnish it as they would the rest of their house. So imagine sharing that space with four or five neighbours. You might be more careful about what you leave outside, your affect might be lighter, less permanent. But you would still exist in that space, hang laundry, sit in the sun, and maintain the garden. But there would be other people using that space too, and you would function alongside each other. 16 out of 192 units (excluding the 20 townhouses with private backyards) have access to communal backyard spaces. That's a lot of houses without any outdoor living space.

There are two areas of Arlington, which are built differently from the rest of the site. A building, or a cluster of buildings, face out onto a grassed yard, which is fenced off from the rest of the site, and can be accessed only by those who live in the adjoining units. Different to the private courtyards, or the overall site structure, these yards exhibit a type of communal life not seen in places with wider access.

In which the site behaves in an anti-social manner

There are very specific ways in which the structure of Arlington promotes an anti-social outdoor environment. These parts of the site give us information, and examples of how to design against such behaviour.

Areas which offer social potential

Due to its varied structure, Arlington has moments within that offer great social potential. Such as the shared yards, there are certain courtyards in between clusters of houses which have the potential to behave in a similar way, and to foster community life.

Shared yards which act communally

Figure 126: Plan showing housing clusters with adjoining backyards . Author's own

Only the ground floor units have access to these yards, homes on the top storeys, with front doors on the other side cannot access. This assures the yard is quite secure. One can assume those with yard access would know each other better than those without, as they have this common ground to live out parts of their lives that tend to be done in private in suburbia.

Figure 127: Section A . Author's own

Figure 128: Communal yard. Author's own

Figure 129: Section B . Author's own

Figure 130: Evidence of life in a communal yard . Author's own

Figure 131: Evidence of life in a communal yard . Author's own

This yard is shared by four households, and it can be seen in figures 130 and 131 that the residents feel comfortable leaving their personal belongings outside. These seemingly small acts of appropriation of the space are relevant to the social life of the space. They're evidence the residents feel comfortable and at home there.

Figure 132: Section C . Author's own

Figure 133: Plan showing housing clusters with adjoining backyards . Author's own

Figure 134: Section A. Author's own

Figure 135: A child's bicycle, left outside in a backyard.
Author's own

Figure 136: A hammock, hung up by the residents. Author's own

Figures 135 and 136 show the specific examples of appropriation of space, which make this yard unique within Arlington.

Figure 137: Section E. Author's own

Figure 138: Section F. Author's own

In which the site behaves in an anti-social manner

Figure 139: Courtyard plan, as is currently on site

Figure 140: Section G. Author's own

Just below one of the communal yards, lies a courtyard. This is one of many in Arlington, which does not serve a purpose other than thoroughfare. This courtyard has the space to be a semi-public (public to those who live in Arlington, not to members of the public) space, but is not currently able to be occupied in such a way. The high wall separating courtyard from back yard (fig. 143) doesn't apply a hospitable feeling to the courtyard, therefore people do not tend to linger there. The lack of purpose to the site makes it difficult to occupy, the space doesn't offer any suggestions, and therefore it is just passed through.

Figure 141: Section H. Author's own

Figure 142: This courtyard is sometimes used as a carpark. Author's own

Figure 143: Topographic levels between courtyards. Author's own

Figure 144: Plan E of Townhouses. Author's own

The townhouses were the last stage of Arlington to be built, and therefore have a different structure to the rest of the site. There are 20 houses, each three bedroom, and each with a private backyard. This is a very generous living environment compared to other low income housing in New Zealand. But what makes this area anti-social is its separation from the rest of the site. The houses obviously look very different from the body of Arlington, and they're also separated by a carpark. There is a playground in the carpark, something communal to the whole site, but it could be integrated into the landscape better. Also the way in which the design has dealt with the topographic levels creates these huge imposing terraces (fig. 146). The concrete landscape feels impenetrable. The space functions as a carpark, playground and thoroughfare, but doesn't enhance the daily life of the tenants. There isn't space to linger, or sit, or be a part of the environment.

Figure 145: The playground between the townhouses. Author's own

Figure 146: Topographic levels between townhouses. Author's own

Figure 149: View 2. Author's own.

Figure 150: View 3. Author's own.

The hillside between Arlington and Thompson Street offers a potential development site which could help Arlington integrate better into the surrounding neighbourhood. There are a number of houses nestled into the hillside which, if removed, could make way for more council housing, therefore increasing density, and could provide more opportunity for public space, which could be used by Arlington tenants, and the people that live in the surrounding block.

However the site is very steep, densely planted, and privately owned, which made it difficult to access. Photography and digital modelling were used to better comprehend the site.

Figure 151: Plan of Arlington Apartments, featuring the hillside between Arlington and Thompson Street. Author's own

Figure 152: Stairs running from Hankey Street to Thompson Street. Author's own

Figure 153: Entrances to houses at the top of Hankey Street. Author's own

Figure 154: Retaining wall between hillside houses and Arlington townhouses. Author's own

Figure 155: Retaining wall and dense vegetation between hillside and Arlington. Author's own

Figure 156: Section I: slope along hillside. Author's own

Figure 157: Section J: slope down hillside into Arlington. Author's own

4

PRELIMINARY DESIGN

- 4.1 Design stage 1: An exercise in small scale design moves
- 4.2 Design stage 2: The first exercise in restructuring, in axonometric
- 4.3 Design stage 3: The second exercise in restructuring, in plan
- 4.4 Design stage 4: The second exercise in small scale design moves
- 4.5 Design stage 5: An exercise in bridging the gap between the site and its surrounds
- 4.6 Design stage 6: An exercise in carpark problem-solving

4.1 An exercise in small scale design

This design stage explores how small scale design moves, or slight restructuring could affect the existing spaces in Arlington. Two particular courtyards within the site are used in this investigation. They were chosen based of their current ambiguity.

This page explores how the space would be effected if more houses were added, and density increased.

Figure 159: Section of design test G, increasing density. Author's own

Figure 160: Plan of design test G, increasing density. Author's own

Figure 162: Section E, as is currently on site. Author's own

This stage shows the way the site might benefit from connecting the two levels in this particular courtyard. Stairs are used, which, due to the site's north facing orientation, could also double as somewhere for people to site in the sun.

Figure 163: Section of design test F, stairs connecting semi-private yard to courtyard. Author's own

Figure 164: Plan of Second Courtyard, design test F, public space access. Author's own

Figure 165: Plan of Community Centre Courtyard, as is currently on site. Author's own

Figure 166: Section A of Community Centre Courtyard, as is currently on site

If this courtyard was 'filled up' with more units, then it would no longer operate as a courtyard. Instead people would need to flow around the new building, and there wouldn't be as much space to occupy.

Figure 167: Section of design test B; increasing density. Author's own

Figure 168: Plan of design test B; increasing density. Author's own

Figure WTF: Section C, as is currently on site. Author's own

Due to the size of this courtyard, it has the potential to be used in a communal way. This example shows the space used as a shared garden, but this is among many commonly trialled activities.

Figure 169: Plan of Community Centre Courtyard, as is currently on site. Author's own

Figure 170: Section of design test B, community activity use. Author's own

Figure 171: Plan of design test D, community activity use. Author's own

4.2 The first exercise in restructuring

Figure 172, 173, 174 and 175: Restructuring test 1, how people might move through the terraced streets. Author's own

Figure WTF: Arlington Apartments. Bing Maps, 2016

Figure 176: Restructuring test 2, if the site was structured around small inner courtyards. Author's own

Figure 177: Restructuring test 3, if the the site was made up only of towers. Author's own

Figure 178: Restructuring test 4, if a road was run through the middle, what buildings would be taken out. Author's own

Figure 179: Restructuring test 5, a large central park, a road running up the hill. Author's own

Figure 180: Plan of Arlington Apartments. Author's own

4.3 The second exercise in restructuring

Figure 181: Restructuring test 6, if a road is cut through the site, with resulting open space on either side of the street. Author's own

Figure 182: Restructuring test 6, what buildings might be removed to make way for a road through the site. Author's own

Cutting a road through will result in the need to remove some buildings. This means there will be bigger gaps either side of the road, therefore opportunity for more public space and/or units. The tower will be removed, eliminating 70 units, so these would need to be replaced elsewhere in the site.

Having this road through would increase street surface area, therefore increase opportunity for on street parking, which could eliminate the need for some of the parking lots within the site.

Figure 183: Restructuring test 6, what Arlington might look like without the Tower, and with a road through the middle. Author's own

Figure 184: Restructuring test 6, where communal courtyards could be created, within this structure. Author's own

Figure 185: Restructuring test 6, where communal courtyards could be created, within this structure. Author's own

Figure 186: Section J showing road through Arlington, as a result of restructuring test 6. Author's own

Figure 188: How space could be opened up due to restructuring test 6. Author's own

Figure 187: Section K showing road through Arlington, as a result of restructuring test 6. Author's own

Figure 189: Restructuring test 7, if the centre of Arlington was cut out in favour of a large public space. Author's own

Figure 190: Restructuring test 7, if the centre of Arlington was cut out in favour of a large public space. Author's own

Many co-housing communities attribute their success to communal living environment at the centre of the complex (Milman, 1994). This space is that which everyone in the community can share and benefit from. In most cohousing communities, the ideal size is around eight to twelve households. If less than four, it loses the sense of closeness, and lacks diversity and activity. If beyond twelve or sixteen households, it's harder to connect, and group decision-making becomes difficult (Chapin, 2012). Scale is important.

Figures 191, 192 and 193: Examples of how a large communal space could be utilised. Author's own

4.4 The second exercise in small scale design moves

This next investigation in small scale design moves takes views of certain parts of the site, and depicts them 'before' and 'after' changes have been made. The view is used here to show space as inhabitable, so one can imagine the space being occupied.

Figure 194: Community Centre Courtyard plan. Author's own

Figure 195: 'Before.' Author's own

This view explores how a thoroughfare space might work if the walls creating private courtyards were taken down, and that space was then used communally by that particular cluster of units.

Figure 196: 'After.' Author's own

Figure 197: Existing Courtyard plan. Author's own

Figure 198: 'Before'. Author's own

This view also depicts a courtyard taken over as commons, and describes how that space might need to be fenced of, to keep the space accessible only by those who live in that particular cluster.

Figure 199: 'After'. Author's own

Figure 200: Existing Courtyard plan. Author's own

Figure 201: 'Before' Author's own

Figure 202: 'After' Author's own

This view explores one of the previous restructuring tests, in which a pathway is run through Arlington. It shows how space previously taken up by buildings could then become public space.

4.5 Between the site and its surrounds

The hillside between Arlington and Thompson Street offers many design challenges due to its steep slope, and the private ownership of the land. This set of drawing assumes some of these private sections can be bought by the council, and used to further develop Arlington.

Figure 206: Plan of Arlington Apartments, featuring the hillside between Arlington and Thompson Street

Figures 207-222: Plan sketches of possible layouts of new buildings and public spaces on the Arlington hillside. Author's own

4.6 An exercise in carpark problem solving

The Wellington City Council states that “Under the District Plan, you need to provide one on-site car park when you have a house or propose to build a house on a residential site” (Wellington City Council, 2016). However the majority of Wellington City medium density developments and apartment buildings do not follow that rule. We can assume that there are slightly different rules applied to council housing, although it is unclear what they may be. Figure WTF shows a map of the area surrounding Arlington Apartments, with local amenities highlighted. Wellington is an extremely walkable city, with an excellent public transport system (especially in the Mount Cook area, where Arlington is located). From this it can be argued that it isn’t necessary for Arlington to follow current car parking regulations, as tenants can walk or take public transport anywhere they may need to go, within reason. This was taken into consideration when restructuring the site. So much of Arlington’s available space is taken up by carparks, most of which are always empty. The aim is to optimise available space, without limiting the options of the tenants.

Figure 223: Plan of Arlington and surrounding area, highlighting local amenities. Author's own

Figure 224: Plan of current vertical parking spaces in Arlington. Author's own

Figure 225: Section A of current vertical parking spaces. Author's own

Figure 226: Section B of current vertical parking spaces. Author's own

Figure 227: Plan of restructured diagonal parking spaces. Author's own

Figure 228: Section A of restructured diagonal parking spaces. Author's own

Figure 229: Section B of restructured diagonal parking spaces. Author's own

Figure 230: Plan of ground level. Author's own

Figure 231: Plan of middle level. Author's own

Figure 232: Plan of top level. Author's own

One option for increasing car parking, is a building. This example has three levels, to deal with the slope in this area.

The ground level (fig. 230) builds off Arlington Street, cars could drive right into the building from the street level.

The middle level, is at the level of the current car park spine within Arlington (3-4 metres above the street level). Cars could drive through from the existing car parks, into the second level. These two levels would be connected with a ramp.

The top level (fig. 232) is a continuation of the park space near the base of the Arlington hillside. This increases options for public space or increased housing density.

Figure 234: Sketch of how the levels and entrances of the proposed car park building might work. Author's own

Figure 235: Plan of Arlington Apartments as they are now. Author's own

5

DEVELOPED DESIGN

Representation of the resolved design work

Figure 236: Restructured plan of Arlington Apartments. Author's own

The Maser Plan

The Public 'Spine'

This plan shows what part of the site is available to members of the public. Public access has been limited to a walkway through the site, with park space along the way. This creates boundaries and definitions to what was previously a very ambiguous place. This design brings public activity and movement through the site, in attempt to engage people with the environment. Through creating smaller courtyards which are communal to a group (communal because they can only be accessed by those who live in the surrounding housing cluster), the design builds spaces with which to foster social connections and a sense of place in the site.

Figure 237: The public walkway through Arlington. Author's own

This architectural site plan illustrates a residential development layout. The plan features several building footprints, some of which are shaded in light grey, and others in light green. The buildings are arranged in a cluster, with some featuring internal courtyards. The site is characterized by numerous elevation points marked with black dots and numerical values in meters (e.g., 46.80m, 41.65m, 39.25m, 34.10m, 33.80m, 35.00m, 37.10m, 40.60m, 40.05m, 40.85m, 44.50m, 44.80m, 44.50m, 43.00m, 42.90m, 42.80m, 42.60m, 42.50m, 41.00m, 40.60m, 39.10m, 37.10m, 37.00m, 37.10m, 40.60m, 41.00m, 42.50m, 42.00m, 42.00m, 37.85m, 40.60m, 40.60m, 41.75m, 40.50m, 39.00m, 38.00m, 36.20m, 36.50m, 37.45m, 37.40m, 37.50m, 37.60m, 37.10m, 40.60m, 41.55m, 40.60m, 42.55m, 40.60m, 38.55m, 38.50m, 37.55m, 37.50m, 37.40m, 37.35m, 37.30m, 37.25m, 37.20m, 37.15m, 37.10m, 37.05m, 37.00m, 36.95m, 36.90m, 36.85m, 36.80m, 36.75m, 36.70m, 36.65m, 36.60m, 36.55m, 36.50m, 36.45m, 36.40m, 36.35m, 36.30m, 36.25m, 36.20m, 36.15m, 36.10m, 36.05m, 36.00m, 35.95m, 35.90m, 35.85m, 35.80m, 35.75m, 35.70m, 35.65m, 35.60m, 35.55m, 35.50m, 35.45m, 35.40m, 35.35m, 35.30m, 35.25m, 35.20m, 35.15m, 35.10m, 35.05m, 35.00m, 34.95m, 34.90m, 34.85m, 34.80m, 34.75m, 34.70m, 34.65m, 34.60m, 34.55m, 34.50m, 34.45m, 34.40m, 34.35m, 34.30m, 34.25m, 34.20m, 34.15m, 34.10m, 34.05m, 34.00m, 33.95m, 33.90m, 33.85m, 33.80m, 33.75m, 33.70m, 33.65m, 33.60m, 33.55m, 33.50m, 33.45m, 33.40m, 33.35m, 33.30m, 33.25m, 33.20m, 33.15m, 33.10m, 33.05m, 33.00m, 32.95m, 32.90m, 32.85m, 32.80m, 32.75m, 32.70m, 32.65m, 32.60m, 32.55m, 32.50m, 32.45m, 32.40m, 32.35m, 32.30m, 32.25m, 32.20m, 32.15m, 32.10m, 32.05m, 32.00m, 31.95m, 31.90m, 31.85m, 31.80m, 31.75m, 31.70m, 31.65m, 31.60m, 31.55m, 31.50m, 31.45m, 31.40m, 31.35m, 31.30m, 31.25m, 31.20m, 31.15m, 31.10m, 31.05m, 31.00m, 30.95m, 30.90m, 30.85m, 30.80m, 30.75m, 30.70m, 30.65m, 30.60m, 30.55m, 30.50m, 30.45m, 30.40m, 30.35m, 30.30m, 30.25m, 30.20m, 30.15m, 30.10m, 30.05m, 30.00m, 29.95m, 29.90m, 29.85m, 29.80m, 29.75m, 29.70m, 29.65m, 29.60m, 29.55m, 29.50m, 29.45m, 29.40m, 29.35m, 29.30m, 29.25m, 29.20m, 29.15m, 29.10m, 29.05m, 29.00m, 28.95m, 28.90m, 28.85m, 28.80m, 28.75m, 28.70m, 28.65m, 28.60m, 28.55m, 28.50m, 28.45m, 28.40m, 28.35m, 28.30m, 28.25m, 28.20m, 28.15m, 28.10m, 28.05m, 28.00m, 27.95m, 27.90m, 27.85m, 27.80m, 27.75m, 27.70m, 27.65m, 27.60m, 27.55m, 27.50m, 27.45m, 27.40m, 27.35m, 27.30m, 27.25m, 27.20m, 27.15m, 27.10m, 27.05m, 27.00m, 26.95m, 26.90m, 26.85m, 26.80m, 26.75m, 26.70m, 26.65m, 26.60m, 26.55m, 26.50m, 26.45m, 26.40m, 26.35m, 26.30m, 26.25m, 26.20m, 26.15m, 26.10m, 26.05m, 26.00m, 25.95m, 25.90m, 25.85m, 25.80m, 25.75m, 25.70m, 25.65m, 25.60m, 25.55m, 25.50m, 25.45m, 25.40m, 25.35m, 25.30m, 25.25m, 25.20m, 25.15m, 25.10m, 25.05m, 25.00m, 24.95m, 24.90m, 24.85m, 24.80m, 24.75m, 24.70m, 24.65m, 24.60m, 24.55m, 24.50m, 24.45m, 24.40m, 24.35m, 24.30m, 24.25m, 24.20m, 24.15m, 24.10m, 24.05m, 24.00m, 23.95m, 23.90m, 23.85m, 23.80m, 23.75m, 23.70m, 23.65m, 23.60m, 23.55m, 23.50m, 23.45m, 23.40m, 23.35m, 23.30m, 23.25m, 23.20m, 23.15m, 23.10m, 23.05m, 23.00m, 22.95m, 22.90m, 22.85m, 22.80m, 22.75m, 22.70m, 22.65m, 22.60m, 22.55m, 22.50m, 22.45m, 22.40m, 22.35m, 22.30m, 22.25m, 22.20m, 22.15m, 22.10m, 22.05m, 22.00m, 21.95m, 21.90m, 21.85m, 21.80m, 21.75m, 21.70m, 21.65m, 21.60m, 21.55m, 21.50m, 21.45m, 21.40m, 21.35m, 21.30m, 21.25m, 21.20m, 21.15m, 21.10m, 21.05m, 21.00m, 20.95m, 20.90m, 20.85m, 20.80m, 20.75m, 20.70m, 20.65m, 20.60m, 20.55m, 20.50m, 20.45m, 20.40m, 20.35m, 20.30m, 20.25m, 20.20m, 20.15m, 20.10m, 20.05m, 20.00m, 19.95m, 19.90m, 19.85m, 19.80m, 19.75m, 19.70m, 19.65m, 19.60m, 19.55m, 19.50m, 19.45m, 19.40m, 19.35m, 19.30m, 19.25m, 19.20m, 19.15m, 19.10m, 19.05m, 19.00m, 18.95m, 18.90m, 18.85m, 18.80m, 18.75m, 18.70m, 18.65m, 18.60m, 18.55m, 18.50m, 18.45m, 18.40m, 18.35m, 18.30m, 18.25m, 18.20m, 18.15m, 18.10m, 18.05m, 18.00m, 17.95m, 17.90m, 17.85m, 17.80m, 17.75m, 17.70m, 17.65m, 17.60m, 17.55m, 17.50m, 17.45m, 17.40m, 17.35m, 17.30m, 17.25m, 17.20m, 17.15m, 17.10m, 17.05m, 17.00m, 16.95m, 16.90m, 16.85m, 16.80m, 16.75m, 16.70m, 16.65m, 16.60m, 16.55m, 16.50m, 16.45m, 16.40m, 16.35m, 16.30m, 16.25m, 16.20m, 16.15m, 16.10m, 16.05m, 16.00m, 15.95m, 15.90m, 15.85m, 15.80m, 15.75m, 15.70m, 15.65m, 15.60m, 15.55m, 15.50m, 15.45m, 15.40m, 15.35m, 15.30m, 15.25m, 15.20m, 15.15m, 15.10m, 15.05m, 15.00m

Figure 239: Entrance to public walkway, with public space, to be shared by residents and the public. Author's own

The public 'spine' walkway opens up with this park space. The aim of the park design is to make it feel appropriate for people to be walking through council housing. This, like any other neighbourhood park, can be used as a shortcut to the city, but also an enjoyable place for both tenants and the public to spend time.

Figure 240: Entrance to public walkway, with public space, to be shared by residents and the public. Author's own

Part of the public walkway through the site, somewhere people can sit and socialise, but also pass through.

Figure 243: Public park space along the walkway through the site. Author's own

Figure 244: Existing Space. Author's own

Figure 245: Public park space along the walkway through the site. Author's own

Adjoining the previous space, this terraced park connects the hillside neighbourhood to the public walkway. Various steps and levels offer somewhere to sit, while dealing with the slope of the site.

Figure 246: Public park space along the walkway through the site. Author's own

Figure 247: Existing Space. Author's own

Figure 248: Example of courtyard shared by the houses which surround it. Author's own

This is an example of how spaces have been restructured to create environments between the public and the private: the communal. These communal courtyards are only able to be accessed by those who live in the houses which surround the space. This creates a level of security, and gives those who inhabit it some ownership of the space. Before the majority of space within Arlington was accessible by all tenants. Now there is more opportunity to know neighbours, because the number is reduced.

Figure 249: Example of courtyard shared by the houses which surround it. Author's own

Figure 250: Existing Space. Author's own

Figure 251: Restructured community centre courtyard. Author's own

The courtyard was one that wasn't practical to become one of the courtyards communal only to the houses which surround it. Instead it has been repurposed to hold the community centre. The outdoor space here can now be used for tenants and Wellington City Council members to host events. This space also holds a playground, because it can be accessed by all tenants.

Figure 252: Restructured community centre courtyard. Author's own

6 CONCLUSION

The future of low income housing is tending towards a model of privatisation. But this thesis give an optimistic option to challenge that trajectory. When designing for spatial appropriation or to enhance social engagement, participation has to be assumed. In reality a design can suggest occupation, but people cannot be forced to oblige. This thesis teaches us that it's important to listen and learn from the very people whose homes and daily lives are being shaped. The developed design may not be exactly what the tenants of Arlington Apartments would accept in reality, but the process that lead up to those choices is the most important part.

The aim of this thesis was to restructure Arlington Apartments in a way that enhanced the social life of the place. With a combination of large scale urban restructuring, and the creation of both human scale communal spaces and public parks, this design gives council housing tenants the opportunity to appropriate the space between the buildings and allow that to be a part of their home. The work challenged the current disciplinary tendencies, by learning from the way in which the site currently operates and what that means to the people who live there.

7

References

7.1 Bibliography

- Architects, A. (2016). Athfield Architects. Retrieved from <http://athfieldarchitects.co.nz/studio/>.
- Casas, J. O. (2007). *Confusion in Urban Design*. Amsterdam: Techne Press.
- Chapin, R. (2012, May). Pocket Neighborhoods: Building Blocks for Resilient Communities . Retrieved from Planetizen: <https://www.planetizen.com/node/56611>
- Easton, P. (2014, May). Apartments upgrade forces tenants' move. Retrieved from The Dominion Post: <http://www.stuff.co.nz/dominion-post/news/10057731/Apartments-upgrade-forces-tenants-move>
- Eichler, M. (1995). *Change of Plans*. Toronto: Garamond Press.
- Fainstein, S. S. (2010). *The Just City*. Ithaca: Cornell University Press.
- Gatley, J. (2012). Athfield Architects 1: Housing in Wellington. Auckland: Broadsheet of the Auckland Branch of the NZIA.
- Gehl, J. (1987). *Life Between Buildings*. New York: Van Nostrand Reinhold Company Inc.
- Gehl, J. (2010). *Cities for People*. Washinton, DC: Island Press.
- Gehl, J., & Svarre, B. (2013). *How To Study Public Life*. (K. A. Steenhard, Trans.) Washington, DC: Island Press.
- Harris, C. (2015, September). The Dominion Post. Retrieved April 2016, from Wellington City Council poised to spend \$33m on Arlington Apartment block: <http://www.stuff.co.nz/dominion-post/business/commercial-property/72435413/wellington-city-council-poised-to-spend-33m-on-arlington-apartment-block>
- Harvey, D. (2003). The Right to the City. *International Journal of Urban and Regional Research*, 27(4), 939-941.
- Horrocks, T. (2012, August). Heller Street Park and Residences. Retrieved from Architecture AU: <http://architectureau.com/articles/the-common/>
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York: Random House.
- Law, L. (2011). Home Cooking: Filipino Women and Geographies of the Senses in Hong Kong. *Cultural Geographies*(8.3), 264-283.
- Leviathan. (2015, September). The Eye of the Fish. Retrieved from Arlington: <http://eyeofthefish.org/arlington/>
- McLaren, V. (2015). Building Homes, Transforming Lives. NZIOB Conference. Retrieved April 2016, from <http://nziob.org.nz/files/Conference%202015/Building%20Homes,%20Transforming%20Lives.pdf>
- Murray, S., Ramirez-Lovering, D., & Whibley, S. (Eds.). (2008). *reHousing: 24 Housing Projects*. Melbourne: RMIT University Press.
- National Architecture Awards Jury. (2012, November). 2012 National Architecture Awards: Sustainable. Retrieved from Architecture AU: <http://architectureau.com/articles/2012-national-architecture-awards-sustainable-1/#img=1>

Ramirez-Lovering, D. (2008). The Sustainable and Affordable Home Initiative: A Case Study Exploring an Architectural Contribution to Volume Housing in Australia. In S. Murray, D. Ramirez-Lovering, & S. Whibley (Eds.), *reHousing: 24 Housing Projects* (pp. 103-111). Melbourne: RMIT University Press.

Randolph T. Hester, J. (1984). *Planning Neighborhood Spaces with People* (2nd ed.). New York: Van Nostrand Reinhold Company Inc.

Resene. (2013). Resene. Retrieved from <http://www.resene.co.nz/total-colour-awards/13-Newton-Park-Apartments.htm>

Richards, P. (2008). Suburban Urbanism: The Urbanism of reHousing. In S. Murray, D. Ramirez-Lovering, & S. Whibley (Eds.), *reHousing: 24 Housing Projects* (pp. 59-69). Melbourne: RMIT University Press.

Robin Boyd. (2016). Past event: Merchant Builders: re-thinking the suburban dream. Retrieved from Robin Boyd: design matters: <https://robinboyd.org.au/category-events/75-open-house-program/232-merchant-builders>

Scott, K., Opit, S., Dolan, E., Banwell, K., Witten, K., & Kearns, R. (2015). Community Formation: Literature review of factors that enhance place-based social relations in compact cities. Residential Choice and Community Formation Strand. Resilient Urban Futures.

Statistics New Zealand. (2013). 2013 Census QuickStats about a place: Wellington Region. Retrieved from Statistics New Zealand: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14322&tabname=

Statistics New Zealand. (2013). Census QuickStats about housing: Households Who Rent. Retrieved from Statistics New Zealand: <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-housing/households-who-rent.aspx>

Stewart, M. (2014, September). Tower tenants 'living in fear' on inner city housing block. Retrieved from The Dominion Post: <http://www.stuff.co.nz/dominion-post/news/10506671/Tower-tenants-living-in-fear-on-inner-city-housing-block>

Sugihto, E. (2016). *The Social Life of the Elliston Estate*. Melbourne: Robin Boyd Foundation.

The Dominion Post. (2016, June). Diggers and demolition as council development gets under way. Retrieved from The Dominion Post: <http://www.stuff.co.nz/dominion-post/news/80728758/diggers-and-demolition-as-council-development-gets-under-way>

The Dominion Post. (2016, July). Old houses on the move again as Wellington social housing gets a refresh. Retrieved from The Dominion Post: <http://www.stuff.co.nz/dominion-post/business/residential-property/81679980/Old-houses-on-the-move-again-as-Wellington-social-housing-gets-a-refresh>

Tillu, J. S. (2011). *Spatial Empowerment: The Appropriation of Public Spaces by Filipino Domestic Workers in Hong Kong*. Cambridge: Massachusetts Institute of Technology.

Victorian Heritage Database Report. (1999). Elliston Estate. Banyule City: Banyule Heritage Study, Allum Lovell & Associates.

Weisman, L. K. (1992). *Discrimination by Design: A Feminist Critique of the Man-Made Environment*. Chicago: University of Illinois Press.

Wellington City Council. (2013, September). Newtown Park Apartments Upgrade Wins Top Paint Award. Retrieved from Wellington City Council Web site: <http://wellington.govt.nz/your-council/news/2013/09/newtown-park-apartments-upgrade-wins-top-paint-award>

Wellington City Council. (2015, September). Arlington Apartments revamp design unveiled. Retrieved from Wellington City Council Web site: <http://wellington.govt.nz/your-council/news/2015/09/arlington-apartments-revamp-design-unveiled>

Wellington City Council. (2016, June). It's all go at Arlington with Demolition under way. Retrieved from Wellington City Council Web site: <http://wellington.govt.nz/your-council/news/2016/06/its-all-go-at-arlington-with-demolition-under-way>

Wellington City Council. (n.d, a). Arlington Site 2. Retrieved April 2016, from Wellington City Council Web site: <http://wellington.govt.nz/services/community-and-culture/housing-support/council-housing/about-the-improvements/arlington-apartments/site-2-taranaki-and-hopper>

Wellington City Council. (n.d, b). Newtown Park Apartments. Retrieved March 2016, from Wellington City Council Web site: <http://wellington.govt.nz/services/community-and-culture/housing-support/council-housing/about-the-improvements/newtown-park-apartments>

Whibley, S. (2008). Trojan Houses. In S. Whibley, D. Ramirez-Lovering, & S. Murray (Eds.), *reHousing: 24 Housing Projects* (pp. 15-21). Melbourne: RMIT University Press.

Whyte, W. H. (1980). *The Social Life of Small Urban Spaces*. Washington, DC: Conservation Foundation.

7.2 Figure List

All images not listed below are the author's own.

Figure 1: webbaviation. (2010). Aerial view- image taken from the west [Photo].

Figure 2: Google Earth. (2016). Social housing in Fitzroy, Melbourne [Screenshot].

Figure 13: Bing maps. (2016). Arlington Apartments [Screenshot].

Figure 31: Gatley, Julia. (2012). Arlington & George Porter Towers Hopper & Arlington Streets Te Aro. BLOCK Architecture Guide, Athfield Architects. Retrieved from <http://www.architecture-archive.auckland.ac.nz/docs/block-digital/2012-Athfield-Guide.pdf>

Figure 33: Harris, Catherine. (2015). Arlington Apartments, as they are now. [Photo]. Retrieved from <http://www.stuff.co.nz/dominion-post/business/commercial-property/72435413/wellington-city-council-poised-to-spend-33m-on-arlington-apartment-block>

Figure 34: Wellington City Council. (2016) b. The redevelopment in Mt Cook will provide 105 new apartments with space for 324 residents. [Photo]. Retrieved from <http://www.stuff.co.nz/dominion-post/news/80728758/diggers-and-demolition-as-council-development-gets-under-way>

Figure 35: Wellington City Council. (2016) a. Demolition is now well under way at Wellington City Council's Arlington apartment's site. [Photo]. Retrieved from <http://www.stuff.co.nz/dominion-post/news/80728758/diggers-and-demolition-as-council-development-gets-under-way>

Figure 37: Stewart, Matt. (2014). The Arlington Tower block with its burnt-out laundry that has not been fixed since May. The Dominion Post.

Figure 38: Griffiths, Catherine. (2011). Athfield's Home and office cascading down the hill - Kandallah, Wellington. [Photo]. Retrieved from <http://www.catherinegriffiths.co.nz/01-athfield-architects.html>

Figure 40: Athfield Architects. (n.d). Title unknown. [Drawing]. BLOCK Architecture Guide, Athfield Architects. Retrieved from <http://www.architecture-archive.auckland.ac.nz/docs/block-digital/2012-Athfield-Guide.pdf>

Figure 41: Sheehan, Grant. (n.d). Athfield House, Wellington. [Photo]. Retrieved from <https://dunedinstadium.wordpress.com/tag/ian-athfield/>

Figure 42: Griffiths, Catherine. (2011). Athfield's Home sketch. [Drawing]. Retrieved from <http://www.catherinegriffiths.co.nz/01-athfield-architects.html>

Figure 56: Hawkins. (2015). Arlington Two. [Visualisation]. Retrieved from <http://wellington.govt.nz/services/community-and-culture/housing-support/council-housing/about-the-improvements/arlington-apartments/site-2-taranaki-and-hopper>

Figure 57: Hawkins. (2015). Arlington Two, inner courtyard perspective. [Visualisation]. Retrieved from <http://wellington.govt.nz/services/community-and-culture/housing-support/council-housing/about-the-improvements/arlington-apartments/site-2-taranaki-and-hopper>

Figure 58: Hawkins. (2015). Arlington Two, view from Hopper Street. [Visualisation]. Retrieved from <http://wellington.govt.nz/services/community-and-culture/housing-support/council-housing/about-the-improvements/arlington-apartments/site-2-taranaki-and-hopper>

Figure 61: Rodriguez, Patrick. (2012). the raised park has a central circular depression [Photo]. Six Degrees Architecture. Retrieved from <http://architectureau.com/articles/the-common/>

Figure 62: Six Degrees Architecture. (2012). Heller Street Perspective. Retrieved from <http://1hellerstreet.blogspot.co.nz/p/heller-st-history.html>

Figure 63: Six Degrees Architecture. (2012). Heller Street Plan. Retrieved from <http://1hellerstreet.blogspot.co.nz/p/heller-st-history.html>

Figure 64: Six Degrees Architecture. (2012). Topographic section of Heller Street Park and Residences. Retrieved from <http://architectureau.com/articles/2012-national-architecture-awards-sustainable-1/#img=1>

Figure 66: Robin Boyd Foundation. (n.d, b). Elliston Estate Plan [Map]. Robin Boyd Open Day Catalogue, 2016.

Figure 67: ArchivesACT. (1961). Canberra houses in Campbell [Photo]. ArchivesACT (CC BY NC 2.0)

Figure 68: Stone, Ellis (n.d). Elliston Estate Site Plan [Drawing]. Robin Boyd Open Day Catalogue, 2016.

Figure 69: Veld, Kurt. (n.d). Elliston Estate creek between culs de sac [Photo]. Robin Boyd Open Day Catalogue, 2016.

Figure 70: Veld, Kurt. (n.d). Elliston Estate creek between culs de sac [Photo]. Robin Boyd Open Day Catalogue, 2016.

Figure 71: Veld, Kurt. (n.d). Elliston Estate creek between culs de sac [Photo]. Robin Boyd Open Day Catalogue, 2016.

Figure 72: Veld, Kurt. (n.d). Elliston Estate creek between culs de sac [Photo]. Robin Boyd Open Day Catalogue, 2016.

7.3 Appendix

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MEMORANDUM

TO	Niamh Cahill
COPY TO	Peter Connolly
FROM	AProf Susan Corbett, Convener, Human Ethics Committee
DATE	1 September 2016
PAGES	1
SUBJECT	Ethics Approval: 22925 Social Living Environments

Thank you for your application for ethical approval, which has now been considered by the Standing Committee of the Human Ethics Committee.

Your application has been approved from the above date and this approval continues until 28 February 2017. If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Kind regards

Susan Corbett
Convener, Victoria University Human Ethics Committee

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