An aerial photograph of a coastal town. A winding road runs along the shoreline, with houses and greenery on the left and dark, textured water on the right. The title 'COLLECTIVE COAST' is centered over the water.

COLLECTIVE COAST

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By

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▲ Figure 1 Seatoun Beach.

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Thank you to my parents, Mike and Liz. Without your enduring support and encouragement over the past five years of study, this would not have been possible.

To all my friends who endured the past five years of Architecture School, the studio banter will certainly be missed.

▲ **Figure 2** Seatoun Beach 1963.

ABSTRACT

Deeply rooted with cultural and historic ties, the coastline is inherently linked to the New Zealand way of life. The coast belongs to ‘the people’ and has been legislated so that land adjacent to the sea falls within public ownership. Most New Zealanders take for granted their ability to access the coast and firmly believe coastal access should be unrestricted (Environmental Defence Society, 2012, p. 2). As a result, there is significant public opposition to a built-up waterfront.

The quality of the coastal environment relies on more than natural qualities. In an urban and suburban setting, the built environment determines which activities and functions can occur and the levels of social engagement that can be experienced. Consequently, the root concern for the future of the waterfront may be a fear of ill-designed developments, escalated by fears of spoiling the water’s edge.

The New Zealand Coastal Policy Statement (NZCPS) recognises there is a need for social, economic and cultural development in the coastal marine area. Acting as stimulus for activity, architecture enhances the way the waterfront is utilised. It fosters economic venture and defines the character of the region. The waterfront faces growing pressure from real estate exploitation.

Having to suitably balance the social, economic and cultural needs that come with the location. Impactful decisions concerning the preservation or destruction of historic remnants and the natural condition of the environment must be made. The balance of public and private use of coastal land should also be considered. Arousing local and international contention, these ideologies are at the heart of waterfront debate.

‘Collective Coast’ explores Wellington’s coastal condition and the intersecting desires of public, private, cultural, economic and environmental interests through a mixed residential design proposal. The proposal tests the application of this wide breadth of research, and stretches across many disciplines and design scales. The proposed project is set in Shelly Bay, along Wellington’s Miramar Peninsular. The site allows for a breadth of possibilities gathered from a wide range of literature to be explored. Given the importance of the waterfront as both a destination for the public and a highly sought after residential zone, the project presents major challenges in planning, urban design, infrastructure and community formation. The desired outcome is to create a coastal community that both engages and facilitates the wider public’s engagement with the shared environment.

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An aerial photograph showing a coastal area. On the left, a residential neighborhood with houses and greenery is visible. A road runs along the edge of the land, curving around a bay. The water is dark and textured, with some rocky areas visible near the shore. The overall scene depicts a waterfront area with a mix of urban development and natural landscape.

The waterfront is an expression of what we are as a culture and has tremendous opportunity to create environments that reflect contemporary ideas of the city, society and culture

- Richard Marshall, Urban Designer, Architect.

▲ Figure 3 Breaker Bay.

Chapter_01

INTRODUCTION

INTRODUCTION TO RESEARCH

This thesis is a response to the changing face of New Zealand's urban waterfronts. There is an obligation to design with respect to pre-existing conditions, whilst deeply integrating ideals relating to contemporary public and private life.

'The Coast' is a categorical location far different to any other. The visibility of coastal sites transforms the waterfront into the place in which we display who we are as a culture, reflecting New Zealand's unique lifestyle, cultural identity and history (Marshall, 2001, p. 4).

It is of public opinion that future coastal development should not be solely for profit, but for the benefit of the collective. Coastal areas should augment the vitality, safety, recreational potential, comfort and social inclusiveness of the waterfront (Wellington City Council, 2001, p. 15). Additionally, they ought to create a more meaningful relationship with the water and open up new social and architectural opportunities.

Propelled by the growing desire to have the waterfront as a place to live, work and play, parts

of the coast are undergoing drastic redevelopment. Subsequently, alterations to the coast and/or the adjacent built environment are more topical than ever. The way the coast is built along with respect for the pre-existing conditions, whilst catering for both public and private interests is a continued debate; and a contentious issue within present discourse.

The most opportunistic way to alter the environment is through understanding both the past and present conditions of the built coastal environment. Through this understanding, the collective memory is heightened, and new design is respectfully integrated within a contemporary environment. The social dimension of how we interact with a unique shared location determines the success of the location. These two areas of research hypothesise the role of architecture along the waterfront to enable collective engagement and facilitate more inclusive environments for public and private use.

◀ **Figure 4** Wellingtons building stock in relation to coastal edge.

▲ **Figure 5** Interior perspective of one of the dwellings from the final design outcome.

AIMS & OBJECTIVES

- To investigate the instrumental role of architecture to enable engagement with the waterfront through site-specific design.
- To test a more inclusive relationship between private residents and the greater public along the coast in order to create a more engaging community that facilitates collective interaction with the waterfront.
- To critically reflect upon the design outcome against the broader discursive argument and expose the implications culminating from social, economic, environmental and cultural desires.
- To advocate for the preservation of historic buildings along (but not limited to) the coast, in order to add to the collective memory of the city.

SCOPE OF RESEARCH

This thesis deals fundamentally with the built environment's relationship with the coast, and the societal connections facilitated in this engagement. The scope of the design investigation is limited to the seaside area of Shelly Bay in Wellington, and tests the research aims against a singular urban scale design response.

The discursive component of the research addresses the relationship to the coast on a much broader scope. It identifies a more general coastal condition containing the social, environmental, economic and cultural interests that have played an intrinsic part in influencing coastal development. This discussion, along with a more architecturally focused exploration of urban theory and design which looks at public & private relationships, territorial thresholds and community, forms a singular argument that in turn is used to develop the design response.

This wider scope means the research may have a large set of implications; conversely, it means the research is somewhat limited in the amount of depth or detail it can go into. As a result, certain areas in the 'coastal discourse' chapter are only briefly touched upon in order to focus on the architectural ramifications.

Environmental conditions play a very important role in determining various design limitations. However, this thesis is not an exploration of coastal resilience. Design solutions for accommodating sea level rises are not within the scope of this thesis. This research acknowledges potential environmental concerns, but is focused on the broader social, environmental (natural environment), economic and cultural factors.

Collectively, the design and discussion are limited to the scope of a Masters design-led thesis.

◀ **Figure 6** Wellingtons typography with key locations of cultural significance.

METHODOLOGY

The methodology, as suggested by Blessing and Chakrabarti in 'DRM, a Design Research Methodology' should be used with flexibility to "adapt to the specifics of the research topic and any interesting avenues that may emerge" (Blessing & Chakrabarti, 2009, p. 14). Embodying this approach, this thesis adopts a specific position on design-research that is design-led and uses an approach of research 'for' design 'about' design, and 'through' design.

Research 'for' and 'about' design takes place in both the 'Coastal Discourse' and 'Life between Buildings' chapters. These stages help to create an understanding to inform the following site-specific research 'through' design, in order to address the overall research aims and objectives.

Research 'through' design is conducted through a site-specific response, in which numerous design iterations eventually leads to a final design outcome. Though this design outcome is by far the most significant and valuable in terms of addressing the research aims it is important that the formal exploration and treatment of such a contentious site becomes the stimulant of a broader argument around the treatment of the suburban and urban coast.

In this thesis, iterative design and research takes place through hand sketching, digital modelling, physical modelling, digital diagramming, planning, urban analysis, programming, and computer rendering.

► **Figure 7** Thesis research structure diagram showing an overall linear progression, much of the process involving cyclical referral back to previous research stages.

01
Introduction

DISCOURSE
02
Coastal Discourse

03
Life Between
Buildings

APPLICATION

04
Initial Site Studies

05
Collective Coast

▲ Figure 8 Men setting a crayfish pot. ca.1907.

A black and white photograph of a rocky coastline. In the background, a large, craggy rock formation rises from the water. In the foreground, a rocky beach is covered with smooth, dark stones. Several people are visible: one person on the left wearing a hat and light shirt, another person in the center wearing a hat and dark clothing, and a third person on the right wearing a hat and light-colored overalls. The water is calm, and the sky is clear.

Chapter_02

COASTAL DISCOURSE

This chapter presents a discussion around waterfront inhabitation in context of the Wellington region, identifying the greater social, historical, environmental and economic concerns that have played a part in shaping the unique character of Wellington's waterfront. This section is divided into three key parts: early settlement, societal connection and development and opportunity.

2.1 EARLY SETTLEMENT MAORI CONNECTION WITH THE COAST

At the time of European arrival, the land nearest to harbors, internal waterways and estuaries provided food and a home for most Māori settlements. The Māori way of life, vastly different from western culture, echoed a more respectful interface with the natural world. Europeans had a focus on physical possessions and private ownership of land, while the Māori concept of kaitiakitanga (stewardship) took an alternative approach. Everything in the environment is linked – the physical world is inseparable from the cultural and the spiritual realm (Falconer, 2015, p. 41).

Māori used the coast for numerous purposes, including bringing in canoes, recreation, fishing, battles, burials, and collecting seaweed (New Zealand Government, 2016). Māori always respected the environment, and had a strong understanding of both the lunar calendar and the dangers of over fishing. This guardianship approach to living on the land is similar to emerging western environmentalism and ecological thinking elsewhere in the world. (Falconer, 2015, p. 222)

The tribal society of Māori settlements can be characterised by two distinct forms; the Pa, defensive settlement; and the Kainga, an unfortified village. Although the remnants of these structures and settlements have disappeared, and common law has handed ownership to much of the foreshore over to the Crown (New Zealand Government, 2016), Māori inhabitation on the coast has always played a strong role in allowing for customary rights, public access, fishing rights and environmental protection of coastal regions. In modern times seeking to protect coastal land that had been handed over as part of the Treaty of Waitangi settlements (New Zealand Government, 2016).

◀ **Figure 9** Representation of a traditional Māori Pa.

▲ **Figure 10** Kikopiri Pa at the side of Lake Horowhenua.

▲ **Figure 11** Map showing early sites and known Pa Sites typically located near coasts lakes or rivers.

Lasting coastal division

European discovery brought with it the view that land had a commodity value. One of the very first tasks upon the colonizers arrival to New Zealand was to impose detailed patterns quantifying individual ownership of public and private space. The grid plan was patched onto new areas of flat land, overflowing onto the lower slopes of the steep terrain (Falconer, p. 109). Surveyors precisely delineated all land in relation to its topography in accordance with European based urban forms of community. In doing so, the colonizers disrupted the traditional collective forms of land tenure, rapidly unpicking the fabric of Māori tribal society and the family based Kāinga way of living. This Forced individual title on a culture that operated cooperatively (Falconer, 2015, p. 109).

After the initial landings, a major survey campaign was quickly put into effect and the majority of the land was transformed into a form that allowed it to be mapped into private ownership (Falconer, 2015, p. 41). Sales dating back to the late 1800s resulted in the large amount of detached dwellings being constructed along the residential coastal edge. This initial land division has informed the types of dwellings that were first built, and many of which still remain. This in turn has determined the spatial limitation of more recent dwellings, and often restricts the ability for multi-residential development to occur.

◆ **Figure 12** Overton Block (Miramar Estate) seaside allotments for sale. Monday 20th September 1897.

◆ **Figure 13** Current building footprints of seaside housing imposed on above Overton Block parcel map.

HISTORICAL TIMELINE

This timeline documents Wellington's ever changing coastal environment

- 925 – The first Polynesian navigators, Kupe and Ngahue arrived and setup on the shores of Seatoun
- 1826 – The first map of Wellington's Harbour (Port Nicholson) was produced by Captain Thomas Barnett
- 1840 – Waves of European Settlers begin to arrive, evicting local Maori in the process
- 1852 – The first sizable piece of land reclamation occurred
- 1855 – Earthquake alters the Wellington landscape. In places the coastline rose 1.5m, creating shore platforms encircling the harbor, which formed natural routes for road and rail
- 1865 – Wellington becomes capital of New Zealand
- 1879 – The Harbor Board is established to help develop the city's harbor facilities and port businesses

1943

1987

2017

2006

SHIFT TOWARDS
MORE INCLUSIVE
ENVIRONMENT

1974

“It can truly be said that the
Harbour is Wellington and
Wellington is the Harbour”

Rolland O'Regan
– Chairman of the Wellington
Harbour Board 1974

- 1897 – Large amounts of suburban coastal land becomes available for private purchase
- 1943 – Two large earthquakes cause widespread damage resulting in the demolition of many older buildings
- 1974 – The Chairman of the Wellington Harbor Board outlines more inclusive visions of Wellington's waterfront
- 1987 – First conceptual rendering of more public focused waterfront development
- 1987 - The first conceptual rendering of more a public focused waterfront development
- 2006 – Work begins on Waitangi Park

“Many New Zealanders take for granted their ability to access the coast and consider that it should be unrestricted. However, the surge in development along the coastline that has occurred in recent decades has had a serious impact on the coastal edge and the ability of the public to access this area.”

▲ Figure 14 Car parking, toll beach, Titahi Bay, Wellington 1958.

2.2 SOCIETAL CONNECTION COLLECTIVE INTERESTS

With a long and beautiful coastline, New Zealanders are fortunate enough to enjoy open access to the coast. However, the love of this transitional space has led to conflict regarding the development of waterfronts.

New Zealanders perceive public access to, and the use of coastal land as part of natural law. The beachside batch is seen as a New Zealand icon, and a waterfront within a 30 minute drive is a luxury most New Zealanders have. (Environmental Defence Society, 2012, p. 2).

Consequently, waterfront plots comprise some of the most valuable sections of land in the city. This has led to pressure from developers wanting to build large scale developments that allow people to

live on the water's edge. The urbanisation of coastal cities brings with it increasing pressure to maximize, expand, and manage the littoral edge (Murphy, 2012, p. 3). Suburban coast face similar pressures.

Access to the water and the views associated with the waterfront mean there is potential for a lot of money to be made in these areas. Intersecting desires for private development, public space, and ecological preservation only adds conflict to the coast as a collective resource. It is important to consider all three of these important categories and the potential tradeoffs that occur during coastal development.

▼ **Figure 15** Authors interpretation of collective interests in the coastal edge.

Public debate and concerns about the waterfront have steadily increased in recent decades, with particular regard to the more accessible city waterfronts. As former industrial zones are poised for redevelopment, initial concerns arise. Particular emphasis is being placed on the amount of land proposed for private use. Local groups such as the ‘Waterfront Leaders Group’ fight for the general public and for the preservation of historical buildings. Conflict rages with developers who seek high profits and the public demand amenity and improved public space. In the mind of many Wellingtonians, few issues have had higher profile than the development of the waterfront.

This continued resistance against poor design and greedy developers has moved focus towards designs with a more collective focus on both public and private requirements.

▲ **Figure 17** Members of the public view a model of proposed development to Wellington’s waterfront in 2000.
◆ **Figure 18** Private development has the potential to cannibalize the coast. Dominating the waterfront, reducing public access and the natural qualities.

Access for all

In contrast to the industry dominated waterfronts in cities, large parts of suburban land reserved around the coast was designated as road in the early days. The road was used to ensure public access once the adjacent land was developed, and also provided a barrier to preserve and protect the coastal environment (Environmental Defence Society, 2011, p. 5). Many coastal edges have since been formalised with sealed roads to distinguish between private and public ownership. Public parks and esplanades are an alternative buffer along some areas of the coast. Used as means to separate private and public land, they create more public space at the waterfront than could have been achieved by a paved road. The two methods articulate a collective sense of ownership to the coast, encouraging public engagement with the coast as opposed to a few individuals staking claim to the coastal edge. Public ownership of land adjacent to the sea is an important part of being able to provide for, and enhance, public access to the coastal environment (Environmental Defence Society, 2011, p. 2).

Figure 19 Miramar Peninsula in Wellington is a single example to which almost all suburban coasts follow, whereby roads and public spaces (parks & esplanades) separates private residents from the coastal edge.

Figure 20 The regulations that are in place around much of the suburban coast attempt to ensure the natural qualities and architectural characteristics are retain. Reflecting its earliest condition. Karaka Bay, Wellington, 1910.

Impacting on the landscape

Just as the untouched beauty along parts of the coast has become a highly valued piece of the collective environment, coastal construction shares an equal role in contributing to the collective environment. In the local context, many of these areas are perceived as adding immensely to the local character. As a result, design guides and frameworks such as “Wellington’s Coastal Character Zone” have been set in place to retain much of the character, and to ensure any new construction complies with the desired aesthetic.

“A good building is not one that hurts the landscape, but one which makes the landscape more beautiful than it was before the building was built”

- Frank Lloyd Wright
Architect

SUBURBAN LIVING

These places are often destinations where residents are fortunate enough to enjoy their environment on a daily basis. Non-residents travel to these areas for the location's quality, and unique character, whether it is natural or man-made. In terms of the waterfront's role, in generating social and civic life, the coastal edge is a defining feature that by itself often spurs activity. Some form of sporting or recreational activity takes place at many of these coastal edges. Defined either formally or informally, nature has a pre-existing role of engagement far greater than most other forms of publicly accessible space.

▲ **Figure 23** Runners in Karaka Bay, Wellington. Wider public enjoying the natural environment of the suburban coast.

▲ **Figure 22** Karaka Bay, Wellington. Clearly defined spaces for public activity are mostly located nearest open space and public amenity. Public accessibility however is non restrictive along most of the coast. Thus the balanced consideration of residents and the general public is essential.

- Nearby Residents
- General Public

▲ **Figure 24** Oriental Bay Illustration. External environment designed to facilitate recreational opportunities for the general public.

INNER CITY LIVING

Much of what is now considered open public space along the city waterfront has long been locked away from the average citizen by a line of unyielding buildings and iron gates obstructing access (Wellington City Library, 2016). For Wellington City, the activation of the waterfront began in the 1980s, in line with many other global waterfront projects seeking to transform their coastal centres.

Since then, construction nearest the waterfront has been designed with public use in mind. The Wellington Waterfront Framework states that “buildings and their activities should be focused outwards to address their surroundings and add character to public spaces” (Wellington City

Council, 2001). As such, ground floor restaurants, busy offices, shops and galleries, in combination with careful urban design encourage life and activity to occur.

In contrast, residential zones nearest the inner city waterfront are strongly removed from ground floor interactivity. Densely populated, with most residing in apartments, the ground level is most commonly lined with garages, empty lobbies and the occasional shop or restaurant. This focus seems to clearly distinguish public and private space with blank fortress-like walls, thus drawing public attention towards the large external environment and recreational opportunities of the waterfront.

▲ **Figure 25** Building footprints in Oriental Bay. Strong focus on resident's privacy in order to direct all public interaction towards the waterfront.

2.3 DEVELOPMENT & OPPORTUNITY COASTAL GROWTH

The NZCPS (New Zealand Coastal Policy Statement) explicitly recognises the social, economic and cultural need for development in the coastal marine area. Most harbours and urban waterfronts have now become highly modified with reclamations and sea walls protecting essential infrastructure. With development continuing to occur, this creates pressures on how to suitably address development.

Demand for the development of more waterfront properties is continuously growing. Recent development typically comprises of high value homes or large apartments dominating the coastal landscapes, built to maximize views and proximity to the beach.

▲ **Figure 26** Development of inner-city waterfront living.
 ▲ **Figure 27** Authors interpretation of coastal intensification concerns.

Public space and fewer buildings

Worthy development has huge potential to become the catalyst for wider growth and activity, however the economic trade-off between built and open space then becomes the most arguable debate. Early settlement and European ideals of community have already dictated much of the built locations, influencing decisions for built and open spaces. Redeveloping these spaces brings about the highly controversial decision around public or private use, both in terms of open space and public or private built form.

This issue has arisen locally many times, most notably the infamous ‘Variation 17’ proposal which was successfully lobbied against: a proposal for a high-rise residential complex and waterfront hotel-casino, in the former industrial area which is now Waitangi Park (Waterfront Watch, 2016). This demonstrates sentiment to the public concerns of the quality and availability of open public space along the waterfront.

“Open-minded societies design waterfronts that accept change, recognizing, in a deeply pragmatic way, that all cities and all societies can be improved and thrive on continuous reinvention in their physical and cultural expression”

- Raymond Gastil.
Social Scientist. City Planner

▲ **Figure 28** The Wellington Waterfront – set for massive development.

▲ **Figure 29** The gradual growth of Oriental Parade, Wellington,
From left to right. Oriental Parade, Wellington 1881. Oriental Parade ca. 1906. Oriental Parade ca. 1940s.

PRESERVATION OF HISTORY - COLLECTIVE MEMORY

The waterfront is an expression of New Zealand culture, and should reflect not only our present situation, but also our former industries and way of living. Predominantly in the city, collective building stock has rapidly developed as industries disappear or relocate and land is built up. Many significant timber buildings from early colonisation have been demolished due to fire damage or structural instability. Preserving old buildings means supporting and enriching their contribution to the present (Bollack, 2013, p. 20). The way in which new developments are incorporated into the assemblages of existing structures is one of selective excavation and creative demolition. Creating new spaces is about 'the in-between' that becomes aesthetically and emotionally charged by the tension between the old and the new (Bollack, 2013, p. 20).

Solutions must be reached to ensure old structures are valued the new urban environment. Restoration, reuse and relocation are all methods that have been used to ensure Wellington City's waterfront reflects a broad spectrum of the region's built history. The preservation of all forms of structures adds to the collective memory of a city.

Despite being short, New Zealand's history must be recognised. The multi-cultural gestures are extremely important, as restructuring environments has the ability to change social memory and affect the cultural meaning of these important places (Hayden, 1995, p. 111).

◆ **Figure 30** View over Wellington City, 1958. All buildings that still remain from this date are shown highlighted.
▲ **Figure 31** Adaptive of existing buildings can come in many forms.

Multi-dimensional heritage

Wellington's inner-city waterfront was once a barren wasteland of car parks, unused sheds and redundant maritime ephemera before its later development (Wellington City Library, 2016). The process of development removed the seemingly 'undesirable' elements and the fabric of the urban environment was 'enhanced' in an attempt to remould public perceptions.

As is the case in all developments, historical conservation has been selective. Preservation strategies have focused on the maritime industries that once dominated the waterfront. 'Traditional Maori architecture', small in scale and perishable by design, did not survive the transition to a more built up urban environment. Conveying a one-dimensional sense of the past through structures that are able to be reused, earlier Maori culture and maritime traditions are acknowledged through many contemporary builds. These builds display artefacts and abstract culture through not only the architecture, but through landscape and sculptural interventions.

◀ **Figure 32** Illustration of Taranaki Wharf, 2016.

▶ **Figure 33** Illustration of Taranaki Wharf, 1990.

▶ **Figure 34** Cable Street, Wellington city, 1953.

Old buildings are valued participants in new architecture (Bollack, 2013, p. 12). The adaption of surrounding environments nearby historic buildings and structures (whether through urban landscaping or construction of new buildings) plays an important role in creating a shared environment that tells a story of an area's former life, whilst also reflecting its more contemporary use. Shed 11 and Shed 13 enrich the experience of the Kumutoto area of Wellington's waterfront. The preservation and restoration of the two shed buildings is gratified by the respectful treatment of later developments nearby.

- ▶ **Figure 35** Customhouse Quay (and the Kumutoto area), 1956.
- ▶ **Figure 36** Illustration of Kumutoto precinct, 1990.
- ◀ **Figure 37** Illustration of Kumutoto precinct, 2016.

Evans Bay

Lyall Bay

Island Bay

Seatoun

▲ **Figure 38** Local coastal structures, becoming define features of each given area.

▼ **Figure 39** Evans Bay, coastal structures shown highlighted

Coastal Structures

An important part of the local coastal landscape are the small, humble structures on, or near the edge that have become definitive features of respective coastal areas, and contribute strongly to the sense of identity and place. Many of these structures remain unaltered and have been preserved as a means to strengthen the collective memory of each coastal region and the city as a whole.

In 2012 the Greater Wellington Regional Council released a highly detailed report titled “Coastal Historic Heritage”. The report investigates some 70 sites that fall within the coastal marine area. These structures comprise of wharfs, boat sheds, storage sheds, light houses, slip-ways, machine gun posts, and many other structures, each with their own apparent cultural and historical value. Although these are not places of inhabitation, the structures are an important part of the local cultural landscape and contribute to the sense of identity of the community. Each structure characterises the public realm and adds to the collective memory acting as historic landmark that should be preserved during future construction and development on the coast.

▲ **Figure 40** Local coastal structures - ‘Coastal historic heritage’.

Creative Intervention

There is a need to create space that provides the context in which activity, in both the public space and in nearby buildings can flourish (Wellington City Council, 2001, p. 14). The structures that reside nearest the waterfront have a considerable impact on the way open space is used, and thus dictates the attractiveness and quality of space. The same can be said for spaces absent of structure, which become the most integral part of the waterfront and allow for the diverse range of impromptu activity to occur. Creative measures are necessary to ensure builds suitably fit within the new environment due to the potential impact on public life and public space.

Both locally and internationally, culture and history have been used as a tool for informing design as a strategy that serves to both enhance the image of a place whilst also mitigating the transition between the prior condition and its new development (Kostopoulou, 2013, p. 4579).

► **Figure 41** Selection of various local coastal environments. Observing the way in which space between the interface of built form and the coastal edge is being used.

INTERNATIONAL PRECEDENTS

All over the world waterfronts near city centres have become highly exploitable urban spaces for many large scale projects. These spaces face similar issues around incorporating the social, economic, cultural and environmental challenges associated with waterfront development. Although contextually specific to the culture and history of the area, many lessons can be learnt by looking at the degree to which these multifaceted challenges have been addressed and how local people perceive their success.

These projects stretch across scales ranging from small interventions to large port redevelopment.

List of precedents –

- Hafencity, Hamberg, Germany
- San Francisco's waterfront
- Pirrama Park, Sydney, Australia

► **Figure 42** Part of Hambergs waterfront at the end of the 1800s. What is now known as HafenCity, much of the old buildings have since been repurposed during its most recent mixed use development.

Hafencity, Hamburg, Germany

The former port of Hamburg, now the recently completed Hafencity district, embraced much of the site's historic elements, whereby old and new come together to transform the edge of the port. New buildings interpret the surrounding aesthetic and have been carefully placed within the historic. The restoration of the quay walls, harbour basins and various historic buildings play an important role in integrating the historic image within the context of new development. Traditions of the former port area have been reinterpreted through sculptural gestures referencing the past.

Contemporary buildings mimic
materiality through abstract
representation

- **Figure 43** Aerial of Hafencity, with its mix of new and old buildings sitting harmoniously within the constraints of the port's edge.
- **Figure 44** Exterior of the Speicherstadt district remains largely unaltered from its initial construction at the end of the 1800s.

Pirrama Park

Hill Thalys, Aspect Studios and CAB

Sydney, Australia

The transformation of this former water police site sought to create a design response through a reading of the site, both past and present. The landscaping deliberately alludes to the site's maritime and industrial history through its strong material palette of concrete, steel and recycled timber. Parts of the former wharf's structure are exposed and present narrative of the site for the public to interpret.

- ▶ **Figure 45** The abandoned Water Police wharf prior to the new development.
- ▶ **Figure 46** Pirrama Park, centralising activity around the various gestures alluding to the sites past.

San Francisco's waterfront

The removal of the elevated Embarcadero Freeway shifted the focus of the waterfront's use to the public, allowing it to become a place of life and activity. This change stimulated both the coastal edge and the land once visually blocked by the freeway. As a result of the removal of the freeway, the old pier buildings have become a defining structure of historical significance. This was made possible through new lines of sight and open public space drawing emphasis to their form.

- ◀ **Figure 47** San Francisco's waterfront prior to 1989. Embarcadero Freeway physically and visually separates adjacent space.
- ◀ **Figure 48** San Francisco's waterfront after the removal of the Embarcadero Freeway.

2.4 ENVIRONMENT INFORMING DESIGN

TIDAL CONCERNS

The coastal environment is the most exposed location for inhabitation. Highly desired in summer, the location too faces the full front of winter wind and rain. The various setbacks and regulations on public access have a dual purpose in ensuring the protection of buildings nearest the coast. Areas which are more exposed are treated differently than those which are sheltered, equally so, low-lying structures are designed to adapt to there specific environment.

Debates on the right way to build for the coast's dramatically changing weather and climate conditions have raged for years and many solutions and workarounds have been developed. Materiality and construction details suited to extreme environments have been designed and are now required for new construction. Ensuring resiliency when tidal extremities and storms do occur.

◆ **Figure 49** Waves coming across Eastern Bays Marine Drive at Lowry Bay, Eastbourne.
▲ **Figure 50** Authors interpretation of environmental factor to consider for coastal construction.
▼ **Figure 51** Littoral zone diagram.

EDGE CONDITIONS

The geographical location and wider natural forces shape and create the various coastal edge types which have dictated not only the dwelling types that exist, but the location of major settlements, their engagement with the coast and the distance construction can take place from the water's edge. Large coastal setbacks are needed in many parts of the country to address the different beach types and coastal conditions. This creates a completely different form of social engagement in comparison to inner city or suburban coastlines.

Dangerous edges exposed to the elements were not suitable locations for early settlers who were reliant on port-based economies. Thus, the strategic positioning of Auckland, Wellington and Tauranga in more sheltered locations, radiating their centres and early industries around the coastal edge. Areas dedicated to the port became highly modified through the construction of wharfs and land reclamation, while other locations became suitable spaces for recreation, informing urban decision around public, private and infrastructural requirements.

► **Figure 52** Many of the other beach types are seen throughout New Zealand's rural coast.

These simplified diagrams represent the various local examples of coastal typologies and their relation to the adjacent public space (or lack of). They depict not only the way architecture responds, but the consideration for, and balance of private inhabitation and the natural environment.

- + High density in prime location
- + Every dwelling has a sea view
- + Reduced building footprint, increasing open space
- Lack of individuality/uniqueness
- Parking Issues
- Lack of ground floor connection

- + Medium density in prime location
- + Proximity to the coast
- Not every dwelling has a sea view
- Ground floor lacks collective space and dominated by vehicle space
- Lack of collective public space at waters edge

- + Medium density in prime location
- + Every dwelling has a sea view
- + Strong connection with coast and ground floor
- Residents sense of ownership over costal edge
- Lack of collective public space at waters edge

◀ **Figure 53** Illustration of multi-residential housing found on Wellingtons coast.

MULTI-UNIT HOUSING

In response to the growing desire to live near the coast, higher density dwellings are becoming increasingly common. Tall apartments and attached low rise units allow more people to live within close proximity to the coast. Each housing type has advantages and disadvantages compared to one another and to the detached dwelling alternative.

► **Figure 54** Oriental Parade, Wellington, Apartments.

▼ **Figure 55** Evans bay multi-unit housing.

The analysis of the local coastal housing identifies that formation of useable land and its parcelling has been a large factor in determining the type of dwellings that exist along the coast with size and style changing to reflect land size and construction period.

Outliers in recent decades resulting from redevelopment have shown alternate ways of living, and open up discussion around coastal inhabitation. When restraints are removed and new plots of land become available, new social opportunities arise with the relationship between private residents and the integration within the general public and the public realm.

▲ **Figure 56** Percentage breakdown of coastal dwelling types in various Wellington suburbs.

▲ **Figure 57** Coastal unit types are often contextual to the amount of, and type of land adjacent to the waters edge.

◆ **Figure 58** Karaka Bay Illustration - Dethatched dwelling in relation to public space.

CHAPTER CONCLUSION

This research has established:

- the waterfront is deeply rooted with history and it is important that new interventions allude to and respect the prior condition
- development is crucial to stimulate life along the waterfront. However, development concerns have existed since early settlement. New concerns in recent decades have arisen around the reappropriation of space and discussion has been focused on overdevelopment, privatization of the edge, and encouraging public use
- the coast is a shared commodity, scarce in capacity and desired by all. The way public and private residents' interests interact with one another becomes important in creating successful urban waterfronts
- architectural and design interventions are very much conditional to the coastal qualities, whereby the design has many factors that dictate the creative possibilities.

This illustrates the collective interest of the coastal area and the numerous factors, which must be considered, including concerns for when the built or natural environment is altered. Private dwellings, public buildings and design at the urban scale all have the potential to affect the way the wider public engages with the waterfront. These factors may activate or hinder interaction with the water's edge by altering the natural qualities and opportunity for public activity.

- ▲ **Figure 59** Coastal unit types are often contextual to the amount of, and type of land adjacent to the waters edge.
- ◀ **Figure 60** Collection of various conditions that must be taken into consideration during coastal development with respect to social, economic, historical and environmental effects.

Figure 61 Lyall Bay, Wellington, 1939.

An aerial black and white photograph of a coastal town and beach. In the foreground, a street is lined with vintage cars from the 1930s and 40s, and a large crowd of people is gathered. Several buildings, including a large house with a gabled roof and a smaller structure with a sign, are visible. The middle ground shows a wide sandy beach with many people walking and playing. The ocean waves are breaking on the shore in the background.

Chapter_03

LIFE BETWEEN BUILDINGS

LIFE BETWEEN BUILDINGS

Many architects, urban designers, planners and social activists began emphasising the importance of space between buildings in the 1960s and 1970s. The following chapter applies the work of various international urban planners, architects and theorists in. Examining the relationship between the public realm, territorial transition of space and co-existence of private residents in order to address the cross-party interests of coastal development as identified in the previous chapter.

This chapter is named after the 1987 book published by Dutch Architect and Urban Planner Jan Gehl. This chapter is a study of 'life between buildings or more specifically 'life between buildings' and the waterfront.

Important Definitions

Public realm - In a physical sense is the spaces in an urban environment that are open and physically accessible to residents and visitor, which provide, at least in principle, opportunity for contact, proximity to others, and appropriate space to interact. The quality of our public realm is essential in creating environments that people want to live, work and play (Fleming, Baum, & Singer, 1985).

3.1 SPACES FOR PEOPLE INTEGRATION OF SPACE

Waterfronts are a unique setting, because regardless of the surrounding built environment, they are likely to stimulate some form of engagement assuming they are accessible..

Providing a sovereign meeting point for interaction, the coastal edge is in harmony with the overly privatised suburban world. Having an overt social role in society, it falls within the category of what Corcoran and Hayes categorise as ‘commons’, “where all are welcome, barriers are dismantled, knowledge is exchanged and stereotypes are

challenged” (Corcoran & Hayes, 2015, p. 534). Nevertheless, design intervention can generate greater levels of activity and harness the true potential of the coastal edge. As a direct effect, prospective groups comprised of residents and the public integrate within the coastal environment and in turn determine the success for the collective.

‘Integration’, as defined by Gehl, is the way various activities and categories of people are permitted to function in conjunction or side-by-side (Gehl, 2006, p. 101). Gehl notes it is possible through planning

▲ Figure 62 Ventnor st, Seatoun, Wellington. Looking down to the waterfront.

decisions to influence the activity and patterns of people, creating interaction (Gehl, 2006, p. 101). What is important is not the placement of public and private realms within close proximity, but the design of spaces that naturally allows different people to engage in what Jane Jacobs calls 'chance encounters'. Creating environments where public and private lives co-exist, ideally forming an environment in which residents and the public can spend more time in, and equally enjoy access and interaction with (Gehl, 2006, p. 55).

▲ **Figure 63** Integrating (left) and separating (right) serve different roles in creating specialised use or mixed use zones. Each with different pros and cons associated with each.
▼ **Figure 64** Creating environments for which the general public (red) and residents (blue) engage and equally enjoy access and interaction with the waterfront.

▲ **Figure 65** Series of photos looking at the co-presence of numerous activities on and around the waterfront. Many of these activities are reliant on suitable weather conditions.

Life along the waterfront is created by the co-presence of numerous activities (Marshall, 2001, p. 9). Local residents and those from afar come to use the waterfront at different times of the day and night for a range of different activities (Wellington City Council, 2001, p. 15). As Jane Jacob describes “diverse surroundings have the power of inducing a natural, continuing flow of life and use’, through the presence of ‘economic and social diversity, resulting in people with different schedules, has the power to confer the boon of life upon it (Jacobs, 1961, p. 101). Diversity of spatial use will support the diversity of opportunity.

Gehl puts it in a broad sense, “wherever there are people – in buildings, in neighbourhoods, in city centres, in recreational areas, and so on – it is generally true that being in the same space as and seeing and hearing other people attracts others” (Gehl, 2006, p. 30).

Many of these activities however are a consequence of the external environment which entices the wider public to engage with the space. The quality of the natural environment plays the most important part in creating engagement whilst the treatment of the adjacent built environment contributes to the vitality, recreational potential and social inclusiveness of the waterfront (Wellington City Council, 2001, p. 15).

Jacobs discusses public space in regard to 'neighbourhood parks' in *The Death and Life of Great American Cities*. "The variety of reasons people come to engage and create life in public spaces differs greatly. Even the same person comes for different reasons at different times.

Sometimes to sit tiredly:

to play or watch a game

to read or work

to show off

to fall in love

to keep an appointment

to savour the hustle of the city from a retreat

in the hope of finding acquaintances

to get closer to a bit of nature

to keep a child occupied

simply to see what offers, and almost always to be entertained by the sight of other people". (Jacobs, 1961, p. 101)

▲ **Figure 67** Infrastructure as a result must cater for both the requirements of the local residents and the general public that desires to use the space.

▲ **Figure 68** Public infrastructure, benches, tables, edges to sit on, all encourage people to spend more time within a given space.

▲ **Figure 69** Lack of public infrastructure reduces explicit opportunities for people to occupy a space.

This is equally true for public spaces along the suburban coast, an environment open to all, and non-specific in its intended use: the use is with that of the collective, rather than solely for local residents. What then becomes important is not only the natural qualities of the public space, but also the careful design and placement of built form, both large and small. The built form is likely to increase the duration people inhabit an area for. Non-architectural elements such as; a bench, table, or an edge to sit on; all cause people to use a space for longer than they would have without it. The strategic lack of these features can also force people through a space more quickly when desired, limiting the chance for interaction.

▲ **Figure 70** Survey response as to why people visit the Wellington waterfront.

▲ **Figure 71** Karaka Bay Illustration - The waterfront is used by many people in many different ways.

Figure 72 Island Bay, Wellington 1927.

COMMUNITY

Residents living near a public space or location undeniably have a stronger connection to the area. The space becomes more strongly associated with the necessary, optional, and social activities that make up the residents' daily lives than the lives of the wider public. To put it more simply, residents living near the coast are more likely to visit and interact with the waterfront.

A deciding factor in creating community is the degree residents feel they have something in common with their neighbours such as shared interests. These social desires have a defining effect on the relationship between public space and the social interaction of both local residents and the wider public. The coastal environment offers many social and recreational opportunities for this to occur. Living within an environment where there are more opportunities for chance encounters naturally creates a sense of community as a result of regular social interaction (Talen, 2000, p. 347).

According to Emily Talen, researcher for the 'Journal of Architectural and Planning Research',

there are essentially two key ways public space can be used to encourage resident interaction and promote sense of community: integrating private residential space with the surrounding public space, and careful design and placement of public space (Talen, 2000, p. 5). However, unique to coastal locations where public space is forged and defined by nature as opposed to 'designed', the ability to influence the placement of public space becomes restricted to many external factors. The treatment of the natural environment and the adjacent built environment is decisive in determining the way space is interpreted and able to be collectively used.

▲ **Figure 73** Award winning waterfront housing in Seatoun, Wellington. External public space very much design just for residents – designed to transition the public movement through to the more public beachfront rather than lingering in what is essentially 'semi-private' space with an implied sense of ownership.

▲ **Figure 74** Urban grid of Island Bay, showing tightly packed houses in blocks bounded by vehicle-dominated roads. Open space for private consumption is almost entirely to the rear of the property. The nearby beach and numerous public open spaces nearby provide meeting points creating opportunities for interaction between neighbours.

3.2 PUBLIC - PRIVATE RELATIONS DESIRES OF PRIVACY

Public spaces are commonly understood as outside the unit and completely accessible to visitors, while private spaces are those inside the unit, with access limited and controlled by residents. Aside from these two extremes, there are varying levels or degrees of public and private space depending on the context and specific spatial definers (Northeastern University, 2011, p. 94).

These ‘in-between’ conditions indicate how, and to what extent collective spaces can be interpreted and appropriated by users. As previously discussed, this condition becomes especially important when living in close proximity to public spaces. In these circumstances, open use of land is most sought after, and public- and private-open spaces have the potential to mutually benefit from each other. This is the case for the coastal environment.

“Urban and morphological richness of a contemporary city resides in the collective spaces that are not strictly public or private, but both simultaneously. These are public spaces that are used for private activities, or private spaces that allow for collective use, and they include the whole spectrum in between.”

- Manuel de Solà-Morales
Architect. Urban Designer

▼ **Figure 75** Typical public-private relationship of coastal housing. The two realms separated by physical elements.

TERRITORY

Urban space, from the domestic to the city scale, can be understood as a discontinuous collective space (de Solà-Morales, 1997, p. 26). These in-between spaces and sequential gaps are seen as essential parts of urban configurations and facilitate opportunities of interaction to occur just as the more easily defined public realms do.

Though not all spaces can be treated the same by the public, within these spaces different levels of shared use occur and are expressed by various physical, cultural or territorial boundaries (Scheerlinck, 2011, p. 166). Thus there is a need for deeper understanding when designing engaging environments that caters for both public and private occupancy.

▲ **Figure 76** Implicit territorial boundaries from local housing example.
▲ **Figure 77** Explicit territorial boundary common to local coastal housing.

Evans Bay

Lyall Bay

Island Bay

Seatoun

▲ **Figure 78** Diagram illustrating various ‘discontinuous collective space’ in local coastal areas.

Territory, as simplified by Dutch theorist/architect John Habraken, is essentially the relationship between private and public spaces. This relationship controls the way people can use space through implicitly or explicitly defined boundaries. Physical obstructions delineate access as property owners and neighbours seem to have an increasing need to separate their adjacent territories to deter undesired access (Scheerlinck & Schoonjans, 2016, p. 48).

If more socially inclusive environments are desired, there is a need to allow for the occasional use of implicit boundaries to mark territory based on trust, rather than distrust. The result is more open designs that utilise physical or invisible elements to define territory, such as paths, material and level changes

(physical) or visual exposure and distance (invisible) to define boundary.

Habraken identifies that humans are territorial by nature. Perceived infringement of privacy can occur from outside of what is defined as private property. Enclosed communities can therefore have an overt sense of ownership towards a space that is formally classified as public land. This was demonstrated previously in the case of Seatoun's waterfront housing. Through design strategies, it is essential this aspect of human nature is understood and addressed. This should be achieved through design decisions when designing for the inclusion of both public and private residents' use.

Directing movement through space

▲ **Figure 79** Visual summary of different territorial strategies in defining use of space.
 ▲ **Figure 80** Visual summary of different strategies in order to direct people through a space.

◆ Figure 81 Karaka Bay streetscape.

STREETSCAPE ELEMENTS

Much of Wellington’s coastal streetscape is defined by a continuous line of carports or front gardens, each delineated by a defining implicit or explicit boundary element on the edge of the property. The way greenery is combined with different types of fences and facades defines the character and identity of the area.

Streetscape elements play an important role in creating interesting environments and manifest as territorial boundaries that condition the relationship between public and private realms. This allows for built form that is essentially private to have a valued contribution to the external environment and to positively contribute to the public realm. Balconies, porches, setbacks and front yards are essential parts of the streetscape and the execution of these elements has much to do with the success or failure of the collective engagement with residents and the wider public.

▲ **Figure 82** Although located on private land the garden adds to the visual qualities of public land.

▲ **Figure 83** Little visual interest, and heightened privacy contributes little to the qualities of the public realm.

▲ **Figure 84** Simplistic representation of streetscape elements that positively contribute to the public realm.

Gardens

The streetscape that defines much of the suburban coast is made up of not only building facades, but also various configurations of garden walls, fences, strips of grass and tree lines. In many cases, these garden configurations play the role of separating devices and providing physical protection, while also contributing to the visual quality of the public realm (Scheerlinck & Schoonjans, 2016, p. 43).

The garden in suburbia, although hardly physically accessible to the public, plays an important part in place making for residents and creating local identity within a neighbourhood. Residents often take pride and a sense of ownership in the quality of the space outside of their legal property's legal title.

“Segregation and residential separation can be a problem in many communities. It is often down to circumstances rather than choice, but in general it goes hand in hand with creation of clear psychological and physical boundaries. When it comes to rethinking the wider use of public spaces, physical territorialism is therefore the key challenge.”

- Hannah Lownsbrough
Theorist

▼ **Figure 85** Elevated perspective of Seatoun and the greenery that lines its streets.

Ground Floor

The ground floor is the most visible part of the streetscape and plays an important role in contributing to the public realm. Built up or open, what occurs at ground level influences the way space is perceived and used. It is often necessary to construct vertically (especially when land value is high) as ground space is finite. Multiple storeys allows for a greater number of occupants within a given space. In the case of coastal living, this allows more residents within a given footprint to have a slice of the highly desirable coastal view.

The vertical distinction does far more than increase net floor area. In abstract diagrammatic representation, 'vertical' relationships create hierarchy, acting as a vertical gate connecting private and public and establishing the most basic form of territorial order, in turn creating various thresholds (Habraken, 1998, p. 141).

▲ **Figure 86** Ground floor relationship and connectivity of apartment building and low rise residential.

ANALYSING PRIVACY OF COASTAL MULTI-UNIT TYPES

The following diagrams look at the three examples of multi-unit residential housing seen in the previous chapter. For each building type, the various spatial thresholds crossed are highlighted: from the initial approach up to the building, to the entry of each individual dwelling. This looks at how

residents gain access, while public life and activity continues to occur near the water's edge. These boundaries can be perceived, or actual physical boundaries that help to define public from private, and the varying degrees in-between that separate the two realms.

Outwards facing attached dwellings - 3 Bedroom, 2 Story

▲ **Figure 87** Greta Point apartments - Internal and External analysis of privacy.

▼ **Figure 88** Summary of privacy characteristics.

Semi private outdoor space

Foliage as privacy barrier

Increased privacy in second floor living space

Explicit barriers define private property

Near coast attached dwellings - 2 Bedroom, 2 Storey

Waterfront Apartments - 2 Bedroom, Single level

Privacy through vertical separation

Long transition from fully public to fully private

Near fully private outdoor space

Shared residential amenities with other residents (entry, basement, carpark)

In many places detached dwellings are becoming, or are at risk of becoming cannibalised by multi-residential development as a natural consequence of the high demand for living near the coast. Common to these dwelling types is the disconnect with ground floor activity, taking an approach that favours privacy of the residents in order to sustain full public use in the explicitly defined public realm. The various regulations of councils have as a by-product allowed for these dwelling types to arise; subjectively good or bad. There has to be more creative solutions in order to avoid creating dull environments of high-rise apartments akin to the international style and distant from any sense of vernacular identity or sense of local community.

▲ **Figure 93** Apartments along Oriental Parade, Wellington.

▲ **Figure 94** Apartments along Oriental Parade, Wellington. Lack of visual interest and high level of privacy at ground level. Directing activity and engagement away, towards the waterfront.

3.3 WIDER PRECEDENT STUDIES

The local coastal environment has been analysed throughout the research, however it is important to look at a broader spectrum of design that too is able to be analysed based on individual aspects that serve to address the concerns raised around the cross party interests of coastal development.

Although these precedents reflect different design objects and cater to different social/economic demographics, the following are all projects that embody aspects of the prior research. Critical reflection of these alternate examples provides the opportunity to identify potential design objectives concerning coastal development, space for collective use, and creating engaging/dynamic environments on the coast.

Three types of precedents were researched to inform the design:

- i. Community focused design.
- ii. Inclusive design for public and private use.
- iii. Interventions to enhance public (collective) space.

▲ **Figure 95** Design sketch of Molenvliet showing central courtyard, creating what Van Der Wef describes as 'a contemporary vision of a traditional village'.

i. COMMUNITY FOCUSED DESIGN

**Centre Village - 5468796 Architecture + Cohlmeier Architecture Limited
Winnipeg, Canada**

Designed to serve underprivileged families, Centre Village provides a through-street and a shared courtyard for both residents and the surrounding neighbourhood to enjoy as an informal meeting place. Privacy has been deeply considered by careful planning in tandem of both the internal configuration of rooms and the relation to the connected outdoor space.

- ▶ **Figure 96** Main courtyard of Centre Village.
- ▶ **Figure 97** Street view of Centre Village.

Shared courtyard

Connection to wider neighbourhood

Each dwelling has its own entrance, accessed at either ground or by an exterior staircase. The dwelling entrances open out to the shared courtyards, prompting residents to connect and get to know one another. Multiple unobstructed entrances open out to the street, weaving passers by through the village.

- ▼ **Figure 98** Ground floor plan of Centre Village showing the possible circulation of both residents and the public.
- ▼ **Figure 99** Defining attributes of Centre Village.

Engages wider public

Passive observation of shared space

Focal point of activity

Mix of fully public and semi-public spaces

Fillmore Park - David Baker + Partners Architects
San Francisco, United States

Enclosed landscaped courtyard intended for residents only, creates a small community with semi-public and semi-private open spaces that cater to the desires of the residents. Central access point encourages neighbourly interaction.

▲ **Figure 103** Site plan of Fillmore Park

▲ **Figure 100** Outdoor garden furniture and stair access to one of the dwellings.

▲ **Figure 101** Central shared space nearest dwelling and courtyard access point.

▼ **Figure 102** Defining attributes of Fillmore Park.

Mix of public and private outdoor spaces

Staggered building mass to ensure natural light

Ground floor planting to create privacy

Colour and slight variance personalizes dwellings

ii. INCLUSIVE DESIGN FOR PUBLIC AND PRIVATE USE

Escherpark - E2A Architects
Zurich, Switzerland

A collective of eleven buildings (four unique volume types) strategically scattered throughout a winding field of vegetation. A system of paths intended for both resident and public use leads through the space and in-between the buildings.

▲ **Figure 104** Ground floor plan of one of the building volumes.

▲ **Figure 105** Aerial view over Escherpark.

▲ **Figure 106** Public path that passers by one of the building volumes.

Careful visibility protection at ground level — — — — —

Shared garden for residents and public — — — — —

The relationship between each building block and the outside open space ensures a successful outdoor environment to which all feel welcome, using distance vegetation and careful placement of openings at ground level to ensure privacy.

Residents access

Future planting for privacy

▲ **Figure 107** Ramp directing towards singular opening of building block defines residential access, whilst alternative routes indicate public paths.
▼ **Figure 108** Site plan indicates public paths recess away from building blocks, ensuring adequate privacy for ground level residents.

▼ **Figure 109** Defining attributes of Escherpark.

Molenvliet - Frans Van Der Werf
Papendrecht, Netherlands

Project focuses around people living together, maintaining their houses and gardens in a shared environment. The development is of large enough size so that the fully open courtyards in the centre of the development can cater to the wider public without seeming intrusive. Courtyards act as an amenity for the wider public to enjoy the space and presence of other people.

Connecting arch to next courtyard

Place for all to play and enjoy

▲ **Figure 110** View from one of the central courtyards.

◀ **Figure 111** Ground floor plan of Molenvliet.

▼ **Figure 112** Defining attributes of Molenvliet.

iii. INTERVENTIONS TO ENHANCE COLLECTIVE SPACE

Taranaki Jump Platform - Wraight + Associates Wellington, New Zealand

Designed to enhance an existing activity (wharf jumping), this small intervention proves that small gestures are just as valued as larger ones. Situated along one of the busiest promenades in Wellington City, the platform draws interests and attracts both users and onlookers.

- ▲ **Figure 113** Plan of stairs shows spiral path that jumpers must take.
- ▶ **Figure 114** Two people jumping off Jumping Platform as onlookers watch.
- ▼ **Figure 115** Defining attributes of Taranaki Jumping Platform.

Creates enjoyment for those using and watching people use the jumping platform

Dual purpose as a sculptural piece

Enhances an activity that existed prior to the intervention

Brings life and engagement to the area

CHAPTER CONCLUSION

Concluding the wide range of ideas from leading theorists, urban planners as well as the precedent studies has yielded the following key points most critical for creating an engaging, social environment along the coast that caters to both public and private desires. These will serve as a framework alongside the findings of the previous chapter to help guide the research through design towards addressing the first three research objectives.

1. Fostering sense of community by integrating private residential space with the surrounding public space.
2. Spaces in-between commonly defined 'public' and 'private' space indicate how and to what extent collective spaces can be interpreted and appropriated by wider users.
3. Planning must ensure that spaces that are 'public' don't have a strong perceived sense of private ownership.
4. Design with implicit territorial restrictions to create more socially inclusive environments.
5. Streetscapes, especially at ground level can positively contribute to the quality of the adjacent public realm and its perceived public acceptance.
6. Public amenity to attract and allow for greater use by the wider public.

7. Public space that cater for 'economic and social diversity' stimulates wider activity through the presence of people.

Amenity for residents and the wider neighbourhood

Free space between buildings accessible to all

Shared semi-private space

Spaces that encourage interaction

Little things can make a big difference in creating life

Figure 4.6 Wellington Aerial

Chapter 04

INITIAL SITE STUDIES

SITE SELECTION

Located on Wellingtons Miramar Peninsular, Shelly Bay has been selected to test out the design research. The location is extremely unique in respect to the sites history within the local context, but as with many coastal areas, its future role as both a place for residents and a place for the use by the wider public comes under question. The sites location greatly contrasts the built environment of the nearby bays further around the coast. The hillside and coastal housing along both the east coast of the Miramar Peninsular and the adjacent Evans Bay very much differs from the untouched coast and former Naval location. Posing opportunity for development.

Other local areas that sparked interest for potential design exploration >

All of which are desirable locations that have not met there true potential due to there former uses impeding any new development. It is hoped that the strategies of this site specific design-led research can be applied elsewhere (not just in Wellington) to create an inclusive design strategy that is contextual in its respect for both the sites unique history and environmental conditions.

► **Figure 118** Collection of aerials from potential areas of design exploration.

▲ **Figure 117** Greater connectivity potential of site. Isolation of location creates specific design challenges that too provide unique opportunities.

NIWA facilities, Evans Bay

Evans Bay Marina

370 Queens Drive, Lyall Bay

390 - 430 The Esplanade,
Island Bay

Tip of the Miramar Peninsula

1:10000

MAORI PRECINCT BOUNDARY

CURRENT STATE

The small coastal area has been described as a “walk through the past” due to its unaltered environment (since WWII). Many of the buildings are in a state beyond repair or are not of sufficient historic value in order to justify their preservation. However, almost all of the structures and buildings have been around for decades, defining the character and collective memory of the area. It is important that ‘selective preservation’ occurs to help in redefining the area, and historic building and structure remain a part of the built-environment to allude to the multi layered history of the site.

Old NZRAF and Naval buildings which still remain today help define the areas unique character.

Large pine trees define the hillside, whilst Pohutukawa trees dot the shoreline.

▲ **Figure 119** Elevated perspective of Shelly Bay.

◆ **Figure 120** Series of site photos looking at the existing structures that exist on site and the natural environment/edge conditions.

▲ Figure 121 Shelly Bay from afar during sunrise.

ENVIRONMENT ANALYSIS

The enclosure of the site along the west face of the Miramar Peninsular is relatively sheltered in comparison to Wellingtons south coast and more exposed inner harbour bays. It is however, still an exposed location, vulnerable to storms and sea spray as with all coastal environments.

The elevation of the site is roughly 2m above mean high water and sufficiently protects the land from regular storms. The close proximity of road infrastructure to the coast as well as the sea walls creates a close connection with the waters edge but access in and out of the water is made difficult by uninviting man made edges.

▲ **Figure 122** View from Shelly Bay looking out to Evans Bay. Beautiful location with some of the best coastal views in Wellington.

▼ **Figure 123** Early digital model used to analyse the amount of sun light throughout the site.

▲ Figure 124 Submarine and Torpedo Mining Corps annual camp, Shelly Bay, Wellington, N.Z. 1890

SITE HISTORY

Little is known about the site before European arrival. Archaeological discoveries point to Maori settlements slightly around the peninsular. European intervention along Shelly Bay began at the end of the 18th century and drastically altered the landscape in order to suit strategic naval use. This was done by excavating adjacent hillsides and using it as fill for reclamation work. The creation of new land by the coast is a practice that has mostly stopped (within New Zealand) – as the natural edge has become more valued. Thus any usable land near the coast becomes highly desired due to its scarcity.

In September 2016, Shelly Bay saw a highly developed proposal that differed greatly in ideology and scope from the design proposal made by this thesis. See appendix for more information and discussion.

Timeline

Originally settled by Te Ati Awa before European arrival, Maru-Kai-Kuru was the name of the village at the northern end of the bay.

1839 – Shelly Bay was sold to the New Zealand Company along with most of Wellington.

1855 – Large Earthquake lifted out much of the land around the Miramar Peninsular. Creating beaches at the various nearby bays.

1886 – Depot relocated to Shelly Bay.

1914 – Some munitions stores built and the small tramway connecting the depot with its wharf was extended to service them.

▲ **Figure 125** Star Boating Club Submarine Mining Volunteer Corps, Shelly Bay, Wellington 1899.

▲ **Figure 126** Women of the WAAF marching at Shelly Bay Air Force Base, Wellington 1948.

1942 – trees were cleared from the site and excavations dug for the magazines. Reclamation work started to provide flat land space for the naval base HMNZS Cook. Wharfs as well as workshops, shipwrights shop, and a small hospital were constructed.

1946 – HMNZS Cook was transferred over to the RNZAF and became known as the Shelly Bay Air Force Base.

1985 – ‘Combined Mess’ building constructed.

1995 – RNZAF decommissions Shelly Bay.

2009 – NZ Air force hands over ownership to the Taranaki Whanui.

“Wellington’s coastal location is central to our sense of place, our recreation and to our unique marine and terrestrial biodiversity. The military heritage and cultural significance are outstanding and can be enjoyed by residents and visitors alike,”

- Celia Wade-Brown
Former Wellington Mayor

▲ **Figure 127** Although many of the old structures are in poor condition, the unique history and isolated location still draws large amounts of activity.

▲ **Figure 128** Overlooking Shelly Bay Air Force Base, Wellington 1948.
Buildings that remain today shown highlighted.

▲ **Figure 129** Aerial view of design

An architectural line drawing of a coastal town. In the background, a long pier extends into the water. The middle ground is filled with modern, multi-story houses with gabled roofs, some featuring balconies and large windows. The houses are interspersed with trees and small courtyards. In the foreground, more houses are visible, along with a few people walking on the streets and a small car parked. The overall style is clean and modern, with a focus on the layout and design of the buildings and their relationship to the waterfront.

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DESIGN: COLLECTIVE COAST

▲ **Figure 130** View from pedestrian steps out to central public space.

DESIGN: COLLECTIVE COAST

This thesis is a response to the changing face of New Zealand's urban waterfronts and the need to design with respect for the pre-existing and historic conditions, whilst deeply integrating ideals of contemporary culture. The goal of this section is to test the conclusions drawn from the proceeding research and analysis of the local coastal environment. This is realized through a design proposal which interprets the research finding using a design approach that applies the lessons learnt to a site specific location.

The proposed mixed residential community explores alternative design solutions in order to promote a reciprocal relationship between local residents and the wider public engaging together along the shared space that is the coastal edge. The site, Shelly Bay, is an ideal spot to test the design research due to the locations multi-layers of history, numerous debates around its potential development and its value as a public commodity.

The southern bay section of the site is developed in its entirety to explore the potential for not just housing but considering amenities within the development which is essential for public (non-residents) engagement with the area. The design

► **Figure 131** Primary access way between residential units. Space allows for all sorts of impromptu activities to occur but is ultimately designed to frame the view of the Officers' Mess building and transition people from the road to the coastal promenade.

proposal and decisions are discussed in consideration for use by both residents and the general public in order to find the ideal balance between the desires or public, private & environmental interest in the coastal location.

The design proposal deeply acknowledges the sites history by selectively preserving buildings and reprogramming new use within them. Working within the constraints of the site, the development seeks to emphasis both the natural and built features of significance through stimulating activity within these spaces.

Before any detailed description this section starts by first introducing the projects master plan, with a brief analysis identifying the key design strategies at the urban scale. Conventional floor plans followed by section plans are presented that more clearly illustrate the spatial movement through the site before the design is broken down into 'public use of space' and 'residential' in order to be discussed and show the design in detail.

The process work and earlier explorations that ultimately led to the final design outcome is presented within this chapter as both a visual and written discussion of the design project. The collection of design process work is critically reflected upon, giving the reader an understanding

of the conclusive endpoint. The successes and challenges of the design outcome are discussed along side the respective imagery and diagrams throughout this chapter. These observations are summarised in the reflection chapter and discussed against the social and environmental implications of coastal development.

▲ **Figure 132** The social, environmental, economic and cultural interests that have play an intrinsic part in influencing coastal development and a continued refference point throughout the research have been represented within this simplified diagram.

Existing Site -

In order to fully understand the potential that the site and existing infrastructure had to offer through a design intervention, the area was analysed based on its environmental conditions (page 105) as well as accurately surveyed and was drawn up using sourced plans as well as manual measurement.

Existing Site Plan 1:1000

Master Plan Overview -

The north and south entries to the site are the most open vantage points, funnelling in visitors towards the coastal edge. The cluster of housing carefully steps back from the edge and, freeing large amounts of public space, allowing for a wide range of uses and general access. The existing foliage that currently define the sites natural qualities and previously lined the road edge has been built around and used as means to define large open spaces of conjugation and activity.

Built public amenity focuses on the northern part of the site, allowing for existing structures of historic value to be preserved and adapted to serve as a mixed use space for the wider public to use and enjoy. This cluster of public activity towards the most visibly exposed parts of the site is addressed by ensuring suitable privacy of residents and careful treatment of the ground floor.

69 Dwellings on site ranging from 2-4 bedrooms catering for a mix of demographics, from families to childless-couples

Site Plan 1:1000

▲ **Figure 133** View out to Evans Bay and Wellington City taken from edge of Shelly Bay.

IN CONSIDERATION OF CONTEXT

The unique history of the site and the structures that remain from its former use provided both a challenge and opportunity to work with. Understanding the importance of both retaining history and of growth (through development) resulted in the selective preservation in order to allude to New Zealand's former Naval and Air force history.

The value of each of the structures onsite was initially determined based on historic significance, current physical condition and their potential to be included within a new development.

Two buildings of significance, the Shipwrights building and the Officers' Mess were seen as contributing strongly to the built identity of the area. Two smaller structures were relocated along the coastal promenade in order to add to the collective memory of the site as experienced on the coast. Other existing buildings on site, although in good physical condition and played a role in the sites history, impeded development opportunity. Various landscaping gestures in the design however allude to the former structures on site.

Existing structures that remain or that have been relocated are shown with a dashed red line to indicate their form in relation to the new builds.

First Floor and Second Floor Plans can be found
in the appendix

The use of the warehouse to the north of the site was briefly explored, the structure was modelled to look at the potential integration of residential reuse. However the scope of the project was reduced due to time restrictions.

DESIGN ITERATION

The existing buildings were physically modelled in the early stages in order to experiment with their potential future use and the suitability of new form. Trees were plotted and important view shafts were outlined to help give scope to this urban scale project.

Hand sketching and foam block modelling was used to explore the preliminary design and massing on site. The relationship of the new and old forms, with respect to scale and density informed many of the earlier iterations. Potential internal configuration too informed much of the massing as the design further developed, ensuring privacy through layout, outwards facing views, sun light and adequate environmental protection.

Beyond this stage, ideas were then largely developed through a process of digital modelling. Being refined over numerous iterations, critically reflected upon based on there success and fulfilment of the design goals.

◀ **Figure 134** Work desk during early stages of design.
Analysing the in order to discover the creative possibilities within the context of the sites existing features

At the same time as experimenting with form on site, various conceptual ideas were explored as to how community could be created on site. More intimate spaces were explored as well as the idea of co-housing was briefly looked at. However, this tangent became too privatized and would impact the way the wider public interacted with the site. These ideas developed into creating neighbourly relations through shared outdoor space and shared amenities for residents.

Key ideas from precedent studies were used to inform design decisions around both residential and non-residential areas, and their success was considered with respect to their possible implementation within the coastal environment.

◀ **Figure 135** Cluster approach of units on site and shared spaces in between buildings draws inspiration from the traditional Māori pa layout.

MASSING ON SITE

Initial design decisions involved moving the primary road far back against the Officers' Mess building (which was identified as a defining building of the location and should be repurposed), this would maximise space for public activity allowing for it to be dominated by the movement and activities of people. The relocation of the road inturn created two separated zones, shore-side and hill-side.

The extent to which the shore-side could be built upon was determined by numerous contextual factors as previously identified. These factors outlined the initial points of considerations for massing on site.

▲ **Figure 136** Massing development of one of the housing units. Massing begun at the urban scale initially then progressed down to the consideration of individual units.

▲ **Figure 137** The massing of new built form on site.

ARCHITECTURE & PEOPLE

Spaces, both built up and open have been designed with consideration to their possible relationship and effect on both public and private life. The various courtyards and access routes between the buildings have been designed with strategies to ensure the privacy of residents whilst also allowing for the movement and activity of residents and the wider public.

Above ground level each of the 'shore side' housing units connect via a shared courtyard that serve as a semi private space for residents. The courtyards also serve to break up the physical mass of the collective units, creating interest within each buildings form and ensuring that all residents obtain sufficient light and harbour views. The vertical separation of the courtyard spaces implies implicit ownership for the unit's residents.

Shared laundry spaces for each of the 'shore side' that branch off each of the courtyards within the residential units promote neighbourliness.

Orientation and carefully massing of adjacent buildings ensures that either the main living space or master bedrooms of each unit has sufficient harbour views.

▲ Figure 138 Aerial perspective over site. Looking at the central access between the residential units and the public promenade along the coast.

DESIGN DISCUSSION

The sites overall architectural character has been defined by the integration of new form within the context of the sites existing buildings and foliage. Merging both public and private use within the constructs of the historic site. Adapting and preserving existing buildings with new use in order to add to the collective memory of Shelly Bay as both a place with a rich history and as a place to which new life and activity can thrive.

Spaces between buildings have been designed for collective use in mind, where all are welcome (Corcoran & Hayes, 2015, p. 534) and the desires of public and private life are fairly balanced.

The new development of the site increases density far greater than most other suburban coastal areas as means to both address the economic value of coastal land and to generate greater levels of activity by the sheer number of residents. Building height has been topped at three stories in order to increase resident's connectivity within the shared external environment. Making for a design that is more connected at the human scale and allowing for the creation of intimate space that still feel open due to the low building profile.

▼ **Figure 139** Representation of specific public and private desires.

Public desires

Recreation

Accessibility

Amenity

Edge interaction

- all desires have a direct relationship back to the natural environment

Private desires

Sea views

Levels of privacy

Community

Natural light

▲ **Figure 140** Promenade entrance to the site is marked by the relocation of one of the former buildings. Funneling in visitors through the pohutakawa lined entrance.

Public toilets and changing rooms at northern end of site.

Gallae at ground floor of residential block

Multi-use shipwrights building acts as the architectural focal point of public activity. Facilitating constant use and movement along the northern part of the site.

Jumping platform located near the most visible point of the bay, attracting both users and onlookers

PUBLIC LIFE

The public promenade along the coastal edge and foreshore expands and contracts at various positions. Creating open areas of different size in order to support a wide variety of activities, attracting residents and visitors alike.

Various points of connectivity to the waters edge conjugate around the primary public space to the north of the site. Providing a focal point for public life and facilitating for the opportunity to directly interact with the water.

Collective Coast

◆ Figure 141 Current entrance of site - goal was to retain the openness of the coastal edge and the various elements that defined its identity.

PUBLIC USE OF SPACE

The treatment of the public space drew from the current discourse of public use of the coast. Identifying 4 key points that were extremely relevant to the context of the site.

1. **Free up the coastal edge for public use**
2. **Facilitate for a range of activities**
3. **Utilise historic buildings/structures to add to collective memory**
4. **Design with respect to the environmental context**

As seen on page 145 public use of space occurs throughout the site, with open access between residential units increasing the odds of chance encounters. As a result, the circulation of both residents directly branches of the coastal promenade, drawing life towards the coast.

The proceeding pages go into detail as to how the 4 key points were applied to the coastal promenade.

◀ **Figure 142** Early design sketch as to how the 4 key points could be used in context of the site.

▲ **Figure 143** Perspective looking down at focal point of public activity.

Focusing public activity towards the old structure and buildings on site strengthens the connection to the sites history, breathing new life to an area that has been unused for decades.

New structure extends off Shipwrights building

Paths built across slipway in order to create access to shipwrights building and wharf

Slipway supports enclose space for grass garden.

Former wharf rebuilt in order to define recreation area.

▲ **Figure 144** Perspective looking down at existing site, showing how the design fits within and utilises parts of the existing built structure.

▲ **Figure 145** Rebuilding the former wharf and creating new means of approaching the water stimulates greater levels of direct interaction.

All public activity is directed towards central location

← Opportunity for direct engagement with harbour

← - - - Outwards facing views

▶ **Figure 146** Ground floor section, looking down at focal point of public activity. Objects that encourage stationary activity shown highlighted.

▲ **Figure 147** Rebuilding the former wharf and creating new means of approaching the water stimulates greater levels of direct interaction.

All pedestrian movement is funnelled through the site towards the waters edge. The former wharf that has been rebuilt as well as the urban furniture positioned along the waterfront aims to get visitors and residents alike to utilise the space for all sorts of undefined activities. Formalising ‘public space’ and creating the opportunity to sit, watch or engage with the waterfront.

The focal point of activity centres around the defining features of the site; both the coastal edge and the historic buildings/structures. The range of non-residential activities occurring throughout this area, both outdoors and in the buildings located around the slipway. Playing an important role in generating a range of activities, creating a collective sense of ownership around the coast edge.

▲ **Figure 148** Simplified diagram of movement throughout the site.

◄ **Figure 149** Current edge makes engaging with the water both difficult and dangerous.

▲ **Figure 150** Connectivity of the wider spaces linking to the public promenade.

▲ **Figure 151** View from smaller courtyard out to coastal promenade.

▲ **Figure 152** A diverse range of unspecified activities occur at the edges of the coastal promenade and make their way in between the residential units. Allowing for all sorts of use by the local community and wider public. The expansiveness of some of these areas allows for events such as local markets to take place, further strengthening communal relations.

RESIDENTIAL

Residents integrate within within the wider fabric of the site. Becoming an intrinsic part of bringing life and vibrancy to Shelly Bay. Shared spaces between individual residential units and shared spaces with the wider public create a sense community through the continued activity and occupancy. Privacy and individuality of units has been deeply integrated within the housing scheme ensuring a balance between fully-private, semi-private and semi-public living spaces for the residents.

The configuration of residential units on site encourages chance encounters and interaction between residents and the public alike. Forming routes and paths that intersect the movements of people as they go about their daily life.

Housing is separated into two distinct zones Hill-side and Coast-side units that are shown in-depth in the preceding pages.

- ◀ **Figure 153** Rear access down central path.
- ▶ **Figure 154** Rear access looking side path to small courtyard.

- ▲ **Figure 155** The refitted Officers' Mess becomes the development's focal point. New and old buildings sit proportionately next to one another.
- ▶ **Figure 156** Aerial diagram of relocated Shelly Bay Road and the residential units that line its edge.

Central Access

On street parking and access to shared garages all branch off the relocated Shelly Bay Road. Sidewalks allow for pedestrian movement, with numerous access ways encouraging movement of residents and the general public (on foot and by bike) to travel through the site towards the waterfront. Non-residential activities along this side are limited to move people through the space.

▲ **Figure 157** Retaining the existing line of sight from afar was an important decision made during early site massing

▲ **Figure 158** Preliminary sketches over ground floor and first floor plans. Internal structure determined how the Officers' Mess could be converted into residential unit. Views, the direction of the sun and the external spaces also influenced the internal configuration of new units.

▲ **Figure 159** The most distinguishing feature, the street side facade of the Officers' Mess has been carefully designed around, ensuring that its image is preserve whilst its interior sees new life. New windows retain the same design language of current facade.

▶ **Figure 160** Section ground floor diagram showing how Officers' Mess has been adapted to fit within the new residential environment.

Entry at rear for 2 of the 4 second story units.

Large height difference between window sill and the footpath as well as planting allows for internal privacy for entire ground floor

Intimate courtyards setback from primary road facilitate outdoor use by nearby residents

► **Figure 161** Perspective of people walking through smaller courtyard that connects the main road up with the coastal promenade. Materiality of buildings abstracts the colour and materiality of the hills behind. Representing the paved concrete of the reclaimed land, moving up to the tones of brown and green as representation of the pines.

KEY MOVEMENT PATHS

▲ Figure 162 Spatial Analysis of courtyard at 1:200.

► Figure 163 Perspective of primary access way between residential units.

▲ **Figure 164** Spatial Analysis of courtyard at 1:200.

↔ Distance & planting for privacy
 - - - Movement paths of users
 - - - Screen with planting for privacy

▲ **Figure 165** Perspective of small alley between residential units that connects the main road up with the coastal promenade.

▲ Figure 166 Spatial Analysis of courtyard at 1:200.

▲ **Figure 167** Perspective along coastal promenade.

An aerial photograph of a large, dark body of water, likely a lake or reservoir. On the right side, a paved road curves along the shoreline. To the right of the road, there is a cluster of buildings, including a large red-roofed industrial or warehouse building, several smaller houses with red roofs, and a parking lot. A dense forest of dark green trees surrounds the buildings and follows the curve of the road. In the upper left, a concrete pier or breakwater extends into the water. The water's surface is dark and textured with small ripples.

Chapter_05

REFLECTION

▲ **Figure 169** Site as viewed from afar, also showing greater edge of the Miramar Peninsular.

CRITICAL REFLECTION

This thesis hypothesised the role of architecture along the waterfront in enabling collective engagement and facilitating more inclusive environments for public and private use. In doing so the *social, economic, environmental and cultural* qualities of coastal development had to be deeply connected within the architectural response. These four aspects became influential in shaping all aspects of the design and can be critically looked at in order to determine the designs success.

Early design decisions had to weigh out these four qualities, deciding on the most suited balance that would continue to address the over arching aim in exploring architectures role of enabling engagement at the waterfront. Working within the context of a historically significant location necessitated the selective preservation of both man-made and natural features. Determining ways in which new design could be integrated within the site whilst alluding to and celebrating the locations prior history. This inturn influenced the build up and positioning of built form in order to retain existing lines of sight to significant structures.

The various paths set out allowed for the movement of both residents and the general public through the site, creating opportunities of interaction, whilst still strongly focusing recreational opportunities towards the coastal edge. The success of the inclusive relationship between private residents and the greater public came down to the planning of both internal and external spatial configurations.

The clustered configuration of form on site allows for the crossing of paths and the interaction between neighbour and the general public, however as with current discourse, density of the site could possibly be increased in order to satisfy the economic interest of the coastal location. But as is the case, this comes at a cost of increase in infrastructure and the effect that taller structures could potentially disconnect residents from one another and lessen interaction with the wider public. Higher density communities with a focus on shared amenities is an area of research that needs to be explored in greater depth, and will have a defining role in celebrating the coast as a social environment and to address economic interests.

▲ **Figure 170** Wellingtons coastal environment and building stock.

SCOPE & LIMITATIONS

Due to the time restrictions of a one year thesis, this research focused on establishing one example for an integrated coastal community that meets the research aims and objectives. As outlined at the start of this thesis, the unique nature of each individual coastal area makes the design outcome very contextual as apposed to a generic model that can be re-applied elsewhere.

The scope of the coastal discourse uses Wellington as precedent for much of the discussion and the resulting design output too reflects the societal and economic values of coastal land as seen in suburban Wellington. It is hoped however, that the boarder research and design methods used can be applied to address the potential development of other coastal areas in order to achieve a *site specific* architectural response for an integrated coastal community.

CONCLUSION

Stretching across many disciplines this research looked at not only the current discourse with regard to increase in demand but also cultural and uniquely New Zealand ways of living by the coast that require an alternative design response. Whilst many new builds look to address the collective issue through large apartment buildings, explicitly defining public from private, this design led research advocates for greater social inclusion within the community and the wider public that too use and enjoy the coast. Arguing that through contextual understanding the *social, economic, environmental and cultural* qualities that each coastal location possesses can be harnessed through design intervention to enhance the way the waterfront is collectively used. Given the importance of the waterfront as both a destination for the public and a highly sought after residential zone, the research and design response explores a singular solution to integration public and private resident's inhabitation. The coast must be viewed as more than a place of economic potential but as a place of social opportunity booming with life.

▲ **Figure 171** Elevated perspective of entire site. Capturing the vast public space along the coastal edge, weaving activity through the residential development

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Figure 100 Outdoor garden furniture and stair access to one of the dwellings. < <http://www.archdaily.com/301900/fillmore-park-david-baker-partners-architects>>

Figure 101 Central shared space nearest dwelling and courtyard access point. 91 < <http://www.archdaily.com/301900/fillmore-park-david-baker-partners-architects>>

Figure 103 Site plan of Fillmore Park < <http://www.archdaily.com/301900/fillmore-park-david-baker-partners-architects>>

Figure 104 Ground floor plan of one of the building volumes. < <http://www.archdaily.com/789357/escherpark-e2a>>

Figure 105 Aerial view over Escherpark.

< <http://www.archdaily.com/789357/escherpark-e2a>>

Figure 106 Public path that passers by one of the building volumes.

< <http://www.archdaily.com/789357/escherpark-e2a>>

Figure 107 Ramp directing towards singular opening of building block defines residential access, whilst alternative routes indicate public paths.

< <http://www.archdaily.com/789357/escherpark-e2a>>

Figure 108 Site plan indicates public paths recess away from building blocks, ensuring adequate privacy for ground level residents.

< <http://www.archdaily.com/789357/escherpark-e2a>>

Figure 110 View from one of the central courtyards.

< <http://www.afewthoughts.co.uk/flexiblehousing/admin/images/64/1.jpg>>

Figure 111 Ground floor plan of Molenvliet.

< <http://www.afewthoughts.co.uk/flexiblehousing/admin/images/64/5.jpg>>

Figure 113 Plan of stairs shows spiral path that jumpers must take.

< <http://www.waal.co.nz/our-projects/urban/jump-platform/>>

Figure 114 Two people jumping off Jumping Platform as onlookers watch.

< <http://www.waal.co.nz/our-projects/urban/jump-platform/>>

Figure 116 Wellington Aerial.

Land Information New Zealand 2012-2013 aerial

Figure 118 Collection of aerials from potential areas of design exploration.

Apple Maps

Figure 124 Submarine and Torpedo Mining Corps annual camp, Shelly Bay, Wellington, ca. 1899

National Library of New Zealand

Figure 125 Star Boating Club Submarine Mining Volunteer Corps, Shelly Bay, Wellington 1899.

National Library of New Zealand

Figure 126 Women of the WAAF marching at Shelly Bay Air Force Base, Wellington 1948.

National Library of New Zealand

Figure 128 Overlooking Shelly Bay Air Force Base, Wellington 1948.

National Library of New Zealand

Figure 135 Cluster approach of units on site
an shared spaces in between buildings draws
inspiration from the traditional Māori pa layout
< [http://mp.natlib.govt.nz/
detail/?id=33762&l=en](http://mp.natlib.govt.nz/detail/?id=33762&l=en)>

Figure 168 Site Aerial of Shelly Bay
Land Information New Zealand 2012-2013 aerial

Figure 173 Collection of Dominion Post articles
regarding the development of Shelly Bay.

Figure 174 Aerial concept as part of the
September Master plan release. Showing both the
north and south bays large build up of apartments
that dominate the coastal edge.

Shelly Bay, much of which has been owned by the Port Nicholson Block Settlement Trust since 2009.

JOHN NICOL/CONFERENCE

Vote to halt trust's Shelly Bay sale

COLLETTE DEVLIN

The future of Shelly Bay is uncertain after opponents to a proposed development challenged its sale. A motion was passed at the Port Nicholson Block Settlement Trust (PNBST) annual meeting on Saturday, calling on the board to cease its discussions with developer Ian Cassels.

Last month the trust confirmed it had entered a joint venture with the Wellington Company, Cassels' company, just months after members voted down a different

proposal with the same company.

The trust took ownership of the land in 2010 as part of a Treaty of Waitangi settlement. Since then, there have been a series of proposals to develop the land, however none have progressed and the buildings are deteriorating.

On Wednesday Dr Catherine Love, daughter of the recently listed trustee Sir Ngata Love, said a motion calling on trustees to cease talks with developers had passed with "overwhelming support".

The motion also said the trust should discuss all Shelly Bay

options with its members.

However, she was not clear on the legal position of the board regarding the vote.

Another motion was passed that there should be an independent audit review of the trust's operations, from 2009 to the present.

PNBST chief executive Jason Fox said members would have more opportunities to discuss the proposed joint venture.

Cassels said he was confident the trust would work through and resolve its issues. "Shelly Bay is a good deal for all parties, which will

become obvious when they (beneficiaries) look at it."

Meanwhile, Neville Baker is the only existing PNBST board member to be re-elected, with former members Sam Kahui, Kara Moeselu, and Te Rira Puketapu failing to gain enough support.

Mahina Puketapu, Hannah Buchanan, Wayne Mulligan, John Coffey, and Kara Puketapu-Dentice were elected as trustees.

They will join Holden Hobana, Peter Jackson, Tearamatira Pamaru and Howe Tamati, who are in to the second year of a three-year term.

Shelly Bay one step closer to Sausalito

COLLETTE DEVLIN

Plans for a revamp of Shelly Bay could be given a new lease of life after a developer reached a deal with Wellington City Council.

Ian Cassels, director of The Wellington Company, has been working on a plan for the coastal suburb, which has been likened to San Francisco's seaside town of Sausalito.

The rundown wharf and derelict air force and naval buildings on the Miramar Peninsula would be replaced with a new seaside community.

It is understood Cassels is in the process of buying the council's land at Shelly Bay, which will allow him to proceed with his plans.

While Cassels would only say he was in negotiations, council chief city planner David Chick confirmed an agreement had been reached for Cassels to buy the council land.

The council was working through what a partnership model might look like, he added. "The idea is for a partnership model, where the council land, iwi land and private land come together to create a better outcome," Chick said.

"I think that we can have a housing outcome and rich layers of different

"The idea is for a partnership model, where the council land, iwi land and private land come together to create a better outcome."

Wellington City Council chief city planner David Chick

experiences that people will come to see." Wellington City Council voted in October to expand a previously established special housing area around Shelly Bay. It means the area is part of the Wellington housing accord, which allows for fast-tracked resource consents, with no public notification and limited appeal rights.

Resource consent applications for qualifying developments must be lodged by September when the special housing areas lapse, so a decision was imminent, Chick said.

There were still some decisions on the "look and feel" of a final plan, but Chick believed the council would like to see it aligned with the developer's masterplan.

In the meantime, an important step was an agreement between Cassels and iwi, he said. In December, The Port Nicholson Block Settlement Trust announced

it wanted to sell its Shelly Bay land to The Wellington Company, but the trust failed to get the 75 per cent mandate needed from members of Taranaki Whānui ki te Upoko o te Ika to enable the purchase.

Chick was aware that Sir Peter Jackson was also in discussions with iwi about developing Matiu Somes Island and the council was bringing the relevant people together for conversations.

"Could you imagine having a ferry connection from Somes Island to Shelly Bay and how rich it could be from a tourism and culture perspective?"

Council city shaper manager Ian Pike said a sale transaction with The Wellington Company was not yet complete and commercial terms were being discussed.

"Hopefully, we will reach a satisfactory conclusion and bring it to council before the end of the year."

Trust reveals new Shelly Bay plan

COLLETTE DEVLIN AND HAMISH RUTHERFORD

Port Nicholson Block Settlement Trust is mounting a fresh bid to develop its land at Shelly Bay into a new suburb.

PNBST confirmed a joint venture agreement with Wellington director Ian Cassels yesterday, just months after its thousands of members voted down a different proposal for the same site with the same company.

Acquired as part of a Treaty of Waitangi settlement in 2009, the site has been derelict ever since. The latest proposal would include 300 houses, a restaurant and boutique hotel.

Already the trust is facing fresh threats of legal action, but its chairman insisted the commercial board had acted within the terms of its deed, and that a membership vote on the transaction was not

required.

The commercial terms of the deal will depend on resource consent, but the trust is believed to be poised to receive a payment in the order of \$5-\$7 million from Cassels' company, which will apply for consents "immediately".

Jason Fox, the chief executive of the commercial arm of PNBST, said the joint venture proposal took into account members' feedback from when they voted down the earlier proposal, including retention of the land.

Ahead of the deal being announced, Catherine Love, the daughter of Sir Ngata Love, a former chairman of the trust who earlier this month was found guilty of fraud, led a sit-down protest at the trust's offices demanding information about the deal.

Dr Kara Puketapu, a former secretary of the Ministry of Maori Affairs, said the decision should be

An artist's impression of a joint venture development at Shelly Bay.

voted on at the trust's AGM in October. "If they don't listen, there will be legal action and they as trustees will be personally liable," Puketapu said.

But trust chairman Neville Baker said the decision of the commercial board was legally sound. "They've done all that's necessary to ensure that legally and com-

mercially that we can be confident that this is something that will work and will continue."

Baker said the proposal put forward by the trust in 2015 was a sale to Cassels, but the current proposal was structured as a joint venture, so a vote of members was not required.

The joint venture would see profits shared and allow the trust to take part in the development at a number of stages.

The Shelly Bay development would add "significantly" to Wellington, Baker said.

"This is going to be the first development of this scale in Wellington in many, many years, which is going to create a new suburb in a very special environment."

"We're getting interest from a number of prominent Wellington people wanting to examine the prospect of buying and living there."

Since the trust acquired the site

a number of development proposals have been put forward.

Sir Ngata Love faced fraud charges in relation to an earlier attempt to develop a film museum on the site, however this was dropped when his partner was granted a stay of prosecution on account of her ill health.

Cassels said discussions were also underway with Wellington City Council regarding some of the adjacent land to bring the \$300 million master plan for Shelly Bay to fruition.

The proposed development included 300 houses, offering a variety of housing options, a boutique hotel and a restaurant, he said.

"A key element of the development is approximately 6400 square metres of public open space and a proposed ferry connection to the CBD that will make Shelly Bay not only a short commute, but an easily reached destination for visitors."

APPENDIX - A - WELLINGTON COMPANY PROPOSAL

Ever since its decommission by the Royal New Zealand Air Force, Shelly Bay has been an area of dispute regarding its potential development. Various proposals have been put forward over the last decade but none up until 2016 have seen any true traction. Proposed plans were released in September 2016 by The Wellington Company after months of speculation around its use following the sale from The Port Nicholson Trust. The design proposal accommodates a vast number of residential units in both the north and south bays that will undoubtable generate large profits for the developers.

Although the design portion of this thesis sets out to address more than financials, the critical reflection acknowledged the shortcomings of the designs economic potential. Achieving a comparably high

level of density the proposal is unmatched in comparison to a project which sole goal is to maximise the amount of usable space. Reiterating the contentious debate over how best to utilise coastal land. Rather, the design tests out alternative approaches to design that emphasis working with (and around) the existing context, creating community and establishing public-private interaction, qualities which the conceptual imagery of the proposal set out by the Wellington Company lack.

This perfectly reiterates on one of the concluding points of this thesis, whereby these desired qualities around, economic, social, cultural and environmental factors often come at the cost of one another. Finding a balance between them all becomes the greatest challenge.

APPENDIX - B - ADDITIONAL PLANS

First Floor 1:500 Part 1

▲ November Design Presentation.