Re-Orientating The Experience Of A Small Town

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Re-orientate experience

Abstract

An experience by definition can imply that it leaves an impression. It can be how people experience our small towns that influence its viability and success. Small towns in Aotearoa face aging populations, growing social issues and tend to lack economic viability. Current statistics show population growth in our large cities and declining populations in our regions impacting the urban landscape and the experience of our regional towns. So, how can designing from an experiential approach make a difference to town life?

A traditional approach to changing the experience of towns and cities is through consultation, a production of a master plan and then staging the design over time. Consider what could be gained if we used on-the-ground experience to inform the structure our towns?

If we intensely engage with the 'on the ground experience' of the town, looking at how the town structures experience, we should be able to identify opportunities that could re-orientate how people interact with the town. These opportunities or potential design alterations, could reshape the way that the town is structured and therefore inform the development of a master plan or long term plan. Through an experience-based design approach the opportunities that can be identified from this method are often not visible from other techniques such as top down mapping and other common forms of data collection. Through a combination of; an understanding of the experience of the town, its history, influences, through various forms of mapping and the understanding the viability of proposed design alterations we could strategically transform the experience.

Therefore, through an experiential design approach and understanding how our small towns work in Aotearoa; can we focus design actions in the public environment to develop potential future change?

Preface

This research will be a landscape architectural contribution and approach to improve the position of the profession and move into more of a proactive, responsive role in the future development of our small towns.

I have a vested interest in small towns as a result of growing up in a remote, rural region. I witnessed changes in small towns from businesses closing, poverty and watched many people including some of my family leave for cities or overseas looking for work. The lack of money available in the district to drive change in these environments is limited.

I have a long history with Kaitaia and its surrounding area, as its the nearest town to where I grew up. Therefore, I am familiar with its political and economic status, perceived issues and demographics. This knowledge has informed my decision-making process. I have also been involved with small change-orientated projects such as the Kaitaia Youth Centre.

Overall this project tended to involve strategic consultation, discussion and information gathering from the many conversations I had with people over the past 12 months. I have intentionally stayed away from formal community consultation because it was impractical for me to do this, however it has an important role in designing town-space.

2014

2015

2016

2017

2018

2019

Acknowledgements

I would like to acknowledge the many people who have been incredibly patient, helpful and supportive with me over the last 5 years.

My family, and friends, especially my Mum, my Sister and Best Friend.

My Landscape friends, for their insightfulness.

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And to myself, for finally getting there.

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Tough choices ahead for small-town New Zealand

LIBBY WILSON, DEBBIE JAMIESON AND JOANNE CARROLL
Last updated 05:00, March 5 2017

Ohura pensioner John Farnham lives a thrifty lifestyle so he can afford to pay his rates and lines company bills.

Fig 1.0

NORTHLAND AGE

Bay of Islands benefits from government spend

20 Mar, 2018 9:33am

3 minutes to read

Economic Development Minister Shane Jones announces the funding boost for Bay of Islands wharves with, from left, Ngati Hine leader Waihoroi Shortland, Northland-based Labour list MP Willow Jean-Prime and Tourism Minister Kelvin Davis

Fig 1.2

NORTHLAND AGE

Millions to be invested in Northland's 'untapped potential'

27 Feb, 2018 9:30am

4 minutes to read

The Government will invest in a two-year pilot aimed at determining the totara's potential contribution to Northland's forest industry.

Northland Age

Fig 1.4

Small town New Zealand is tipped to struggle

JULIE ILES
Last updated 18:46, February 28 2017

Small towns may face difficulties supporting infrastructure growth.

New Zealand's population is tipped to keep growing but many regions are going to decline in the next 30 years, a report predicts.

A Maxim Institute report says 44 out of New Zealand's 67 authorities would have populations that are stagnating. Eleven areas are already seeing this kind of decline.

Large cities and popular areas will continue to grow, albeit with ageing populations.

Fig 1.1

NORTHLAND AGE

Letter: Time to talk about how to spend Far North rates

13 Mar, 2018 6:30pm

3 minutes to read

Cr Felicity Foy (right) when she was sworn in to council.

Northland Age

Fig 1.3

NORTHLAND AGE

Letters: Fix State Highway 1 and watch Northland fly

15 Feb, 2018 12:30pm

3 minutes to read

Fix our roads and watch Northland flourish, says a reader.

Northland Age

Fig 1.5

Introduction

Experience of place is essential to determining its success. Regional towns in New Zealand are showing population decline in 23 out of 67 territorial authorities and recent research published by the Maxim Institute states that: 'Oncoming long-term economic and demographic change will deepen the existing divide between our cities and our regions, meaning we must act to develop customised development pathways for the future of New Zealand's small communities.' (Slatter) (Wood 5)

There is a tendency of small, regional towns in Aotearoa to lack specific focus on urban design, growth and development. They are usually included in District Long Term Plans alongside other towns. The limited population sizes and limited funding available in the region restricts opportunities for all the towns in the district. Many are facing issues such as population decline due to aging and skilled worker exodus to larger regional centres or cities, rising social issues, and rising unemployment.

These factors impact the experience of our towns. With limited funding available, there is a need to come up with crafty design solutions to improve the experience of our towns. So how can designing the town through an experiential approach affect change in our small towns? Landscape Architecture deals with designing experience, place making and people. Can we focus our efforts and understand effective, efficient and cost effective design solutions to strategically redesign the experience of our towns? This research endeavors to investigate how this is possible.

Richard Weller, when he addressed a larger city context stated that 'Landscape Architecture has remained relatively ineffectual in shaping the world' and further discusses in the *Art of Instrumentality* the 'power' the act of design can have in the world. Weller highlighted that it is up to us, as Landscape Architects to become more powerful as environmental designers. (Weller) This research has an ambitious goal – to lift the perception of a Landscape Architect's role in our regional centres, where we could be identifying strategic design changes that can utilise each town's natural and experiential features. This research would like to move beyond the over-viewing tendencies of master plans and explore the very concrete ways that locals use their town space and investigate how it could be re-orientated. How can restructuring the experience be a powerful tool in the development and growth of our small towns?

Research Question

Fig 1.6: Towns in Aotearoa with a population size of 3000-10000

Research Question

How landscape architecture can affect change in small regional towns?

This is an important question for the landscape discipline in New Zealand. This research investigates an approach to this question - the restructuring of experience. It is necessary break this investigation down into smaller sections.

Aim:

Restructure the experience of the town through strategic design actions.

Objectives:

- Choose an appropriate small town (Kaitaia).
- Develop practical knowledge of how the town functions and identify perceived problems facing the region.
- Produce forms of fieldwork, interpretation (documentation of landscape assemblages focused on the involuntary actions produced by landscapes).
- Discover opportunities in small towns that reveal viable design options for experiential changes to occur and understand how the changes could be applied at different scales, re-orientating and restructuring the experience of the town life.
- Develop enough of an understanding about the political-economic drivers and technical workings of the town to gain insight into viability and feasibility of various restructuring proposals.
- Identify relevant practices and types of thinking focused on this problem in practice and apply appropriate techniques to the chosen site.

There are perceived challenges with designing in small towns, as the smaller population size correlates to a lack of available funding necessary affect meaningful design change. The attention given to small towns tends to be driven from the District Plan and is often treated as a service town, a destination by necessity not for enjoyment or experience. Therefore, the focus is on investigating how to manipulate the experience through viable design options in a small town and could result in a potential understanding in how to improve town life.

For this project a small town has been defined by population size between 3000 and 10000. New Zealand has about 52 towns in this range. (See Fig 1.6)

Methodology

Fig 1.7: Methodology: The diagram shows the actors in the method, the WHY, HOW and WHAT. The influences and reflections made in the process and the development of ideas.

Methodology See Fig 1.7

Four 'ins' into the project were established to direct the research: current landscape theories and approaches; precedent studies; personal background and historical understanding of the site, and on-site experience and fieldwork. Through a comprehensive study focusing on how people use the town-space and mapping interactions, comparing them to 'top' down mapped information, potential experiences began to form. An understanding of what happens spatially and where the opportunities to re-orientate or restructure how people use space were able to be identified.

Using an 'open systems' approach and developing an interaction analysis, a sense of how space in a small-town works emerges and can indicate where to shape space that re-orientates the experience of the town. This approach was intended to move beyond the limitations of traditional top-down master planning to informing the master-plan through restructuring the experience of the town from the human scale and local experiences.

The challenge lies in communicating the discoveries and the techniques of how the town-scape could be shifted and was key to understanding the difference a Landscape Architect can make. Using tools together such as mapping, photographs and sections can build a deeper understanding of space, and inform what kind of differences a design shift could do to the experience. Moving between scales and drawing mediums has the ability to build, clarify or break down the spatial relationships.

Stages:

There were four stages of importance which tended to be carried out simultaneously in achieving an understanding and the outcome of this research:

- 1:** Gathering as much data as possible.
1. Develop a current theory understanding of 'open systems and space' that is helpful to understanding 'how life works' on the ground
 2. Applying past theories and practice studies to on-site field work
 3. Gathering historical information and personal knowledge relevant to site
 4. On-site fieldwork that identifies experience.

- 2:** Producing mapping representations that allow on-site experience and mapping to work together in different scales e.g. mapping, diagrams to investigate the spatial relationships revealed.

- 3:** From the mapping, identify strategic locations for restructuring experience and whether they are isolated occurrences or a multitude of the same.

- 4:** Design testing in relation to experience.

- 2-4:** Critical reflection and evaluation is necessary to test what is successful and informative.

Chapter 1

The Far North

The Far North District is a prime example of how towns have developed in Aotearoa and as a district. It's towns face many development issues and aging populations. Overall, the Far North has a very high deprivation rate compared to other districts in New Zealand (Profile id). It's geographical location contributes to these factors, located at the top of a narrow peninsula and features endless rolling hills, tight windy roads, many in poor condition. The District begins three hours north of Auckland but the landscape has created isolation and travelling north can be quite an arduous journey. This generated a need for self-sufficient service towns.

The Far North is known as the nation's birthplace, where the first Maori and then later Pakeha settled. Most areas were settled along coastlines or rivers and the landscape is scattered with Pa sites throughout the region. The Far North has strong iwi connections and is home to six tribes that are collectively called the Muriwhenua tribes. The Muriwhenua tribes are very influential in how we treat and experience the landscape in the Far North. There are many outstanding landscape features in the area and it is often labelled as the winter-less north (see Fig 1.14 - 22)

Statistics

Fig 1.10
Change in five year age structure, 2006 to 2013
Far North District

Fig 1.11

Aging population
Less skilled workers

Change in workforce industry sector of employment, 2006 to 2013

Far North District

Source: Statistics New Zealand, Census of Population and Dwellings, 2006 and 2013
Compiled and presented by id, the population experts.

id
the population experts

Fig 1.12

Workforce industry sector of employment, 2013

Far North District Northland Region

Source: Statistics New Zealand, Census of Population and Dwellings, 2013
Compiled and presented by id, the population experts.

id
the population experts

Fig 1.13

Rapid rise in health care & social assistance

Natural Features

Average Temperature: 18.5 Degrees

Coastline: 1700kms Long - approx.

Highest Point: Mangataniwha - 780m

Fig 1.15: Commerce St, Kaitia

Fig 1.16: Rolling Hills, Peria

Fig 1.17: Kerikeri Stone Store

Fig 1.18: Whangarei Falls

Fig 1.19: Far North Coastline

Fig 1.20: Mangonui Harbour

Fig 1.21: Ahipara

Fig 1.22: Okura Beach

Fig 2.0: Kaitaia as a Service Town

Focus: Kaitaia

Kaitaia, is the northern most service town in Aotearoa with a resident population of 4887 (2013 census) and helps service a regional population of up to 64,400 consistent residents as well as tourists, and holiday makers. 50.5% of the population have Maori Heritage (see Fig 2.3) (profile id). Statistics show that Kaitaia and surrounds have a high rate of unemployment, low wages compared to the rest of Northland, and a mixture of social issues common in many of our regional centres in Aotearoa(See Fig 2.1 & 2.2) (Profile id).

Its aging population has contributed to the rise in the need for social assistance and health workers, but there is a decrease in skilled laborers jobs. The area primarily sustains itself through forestry and agriculture, and although tourism is a factor, it is not nearly as prominent as it should be. The town has a low socio-economic reputation and has high deprivation areas.

Employment status, 2013

Source: Statistics New Zealand, Census of Population and Dwellings, 2013
Compiled and presented by .id, the population experts.

Fig 2.1

Annual individual income, 2013

Source: Statistics New Zealand, Census of Population and Dwellings, 2013
Compiled and presented by .id, the population experts.

Fig 2.2

Ethnic groups, 2013

Source: Statistics New Zealand, Census of Population and Dwellings, 2013
Compiled and presented by .id, the population experts.

Fig 2.3

Highest qualification achieved, 2013

Source: Statistics New Zealand, Census of Population and Dwellings, 2013
Compiled and presented by .id, the population experts.

Fig 2.4

Chapter 2

Kaitia Aerial Photograph
Scale: 1:20000
Fig 2.5

Fig 2.6 - Far North District Plan Map Area 71

Fig 2.6 - Far North District Plan Map Area 72

Fig 1.32 - Contextual Information on Kaitaia.

Features relevant to how Kaitaia is experienced

Kaitaia features two rivers that flow almost parallel to State Highway One that runs through the centre, and both systems are around three-four minutes walk from the main street. Kaitaia has multiple sports fields, and immediately on the map you can see river reserve margins that could be very beneficial to the experience of the town. They are underused and largely ignored by the residents due to being fenced off, overgrown, hard to navigate and a flooding risk. Water and especially rivers are seen as a vein in the landscape and a source of Mauri. There is an immediate opportunity to change the perception of the river through revealing and designing an inclusive experience, therefore influencing and restructuring how people experience Kaitaia while giving opportunity to restore accessibility to water. By providing a better connection to water, it could improve the life of the town and there are a number of strategies that could be employed to achieve this.

The sports fields could have a strong relationship to the river margins, and interconnect in a seamless way, but currently have very little interaction and movement between these activities. Other programmes such as the Primary School, Te Ahu Community Centre, The Switzer Retirement Home, Hospital, College and Commerce St all have the potential to create a more interconnected public realm in Kaitaia.

Fig 1.33 - Kaitaia Contextual Section A-a

Fig 1.34 - Kaitaia Contextual Section B-b

Fig 1.35 - Kaitaia Contextual Section C-c

Fig 2.7 - Programmes and relationships in Kaitia highlighted by importance and their affect.

Relationships

The relationships that shaped the town proved to be best communicated through relationship/circle diagrams, to show the pull of each programme. The importance of each function was based on how busy the place seemed and a background understanding. The bigger the circle the more dominant it seemed in the town, drawing people towards it. Interestingly the Warehouse and Pak'n'Save located to the north (the large pink dots) seemed just as busy as they did when they were located in the centre of Kaitaia, but now the space seemed more generic and removed from the town because of the lack of interaction the shops have with the town.

- 1** Commercial & Retail have very little relationship with the river and stream

Fig 2.8 - Looking down Empire St towards Awanui River

- 2** Big box shopping attracts people to this area north of the town

Fig 2.9 - Image of a big box shop carpark

- 3** There seems to be a close spatial relationship to the southern part of town and sports programmes such as rugby

Fig 2.10 - Looking down the river from near the rugby fields

Fig 2.11 - Highlighting two opportunities in Kaitiaki.

Initial Findings

1) People didn't tend to venture below the bridge

2) Seems to be no relationship to the river systems

The second issue actually turned into the biggest opportunity. The lack of relativity to the Awanui River, and Tarawhataroa Stream led into investigating the potential opportunities they possessed. It was clear from the initial reconnaissance mission that they both have wide flat margins within the stop banks, and large flat spaces that could be very accessible. Both systems are within three-four minute walk from the centre of Commerce St and could have a close relationship to four different sporting activities. For reference, this space ended up being labeled the Kaitaia Greenbelt as it could have a similar function to the Inner Wellington Greenbelt.

Literature & Project Review

A series of authors, landscape concepts and projects were identified and applied to help formulate ideas about approaching the design methodology throughout scale, site, and experiences. Together they developed a higher level of understanding space, affects, movement, and people. Landscape Urbanism has been the most original, interesting, and encompassing idea that has been formulated to approach landscape architecture in the 21st century. Interestingly, it is not often explored in such a small town scale setting or in particular small town Aotearoa.

Landscape Urbanism has been discussed by great modern landscape architects such as James Corner, Charles Waldheim, Alex Wall, Adriaan Geuze and Richard Weller. By using this approach to design in a flexible and responsive manner, Landscape Architects could have influential role in the way we redevelop our declining regional towns. Corner indicates Landscape Architects should be adapting their techniques to the environment that they are designing in, which is especially relevant in small and perhaps poorer towns. What techniques are required if experience and viability are the drivers of the design? How can we craft experience in the small town environment?

The 'affectual' and the 'involuntary'

One approach used in identifying experience is the concept of the 'affectual' and the 'involuntary' of how life works on the ground. Experience is directly related to affect, and the involuntary aspect of what creates an experience needs to be understood to facilitate the making experience. Authors such as Gilles Deleuze and Felix Guattari or more specifically Peter Connolly's application of 'Open systems thinking', defined as the ability to understand the world through assemblages, affects and therefore express 'how things work' in landscape architecture is especially relevant. This concept and its application is relevant in this project because it focuses on the one to one bodily scale, and pays specific attention to aspects of the real world that top-down mapping and other traditional quantitative techniques that have a tendency to not engage and communicate well in relation to experience (Connolly).

Nigel Thrift is another author who focuses on Non-representational Theory and Affect. This is the relation of the world to the body and its 'constantly emergent capacities to act and interact' (Simpson, P). Thrift focuses on 'how life takes shape' from many different kinds of interactions and experiences. This concept contributes to the understanding that interactions and experiences are a critical component in the landscape and the formation of

that landscape especially because they are constantly shifting and evolving. In a slightly different context James Gibson's Theory of Affordances, specifically in Chapter 8 where Gibson discusses the 'complementary' of relationships between object and animal and what each thing 'affords' or in a sense allows the other to do. If affordances within landscape architecture can be understood, we can design spaces that can facilitate interactions between objects and non-objects and potentially facilitate the development of relationships as an integral part of the experience (Gibson).

Bruno Latour's Actor Network Theory is another approach to consider as it's essentially the understanding that objects and non-objects are all actors in our environment and are a continually shifting network of relationships. This build up and breakdown of relationships what we have to consider and is the realm we design in.

Latour, Gibson, Deleuze, Guatarri, and Thrift all have built an understanding of the affectual, and working in the realm of time-space. They are influential in developing an understanding of constantly evolving experiences.

Mapping the 'affectual' and 'involuntary'

The communication of discoveries, assemblages, and affects can be especially challenging when the world is a constantly evolving experience. Building a set of drawings that cohesively communicate these discoveries is especially tricky. Often information is broken up into individual maps, instead of as a single map of interactive overlays. When defining ideas such as spatial territories, barriers, and object or non-object influence, it is easier to communicate in separate maps; however, design opportunities can be missed when the maps are separated.

Kevin Lynch, James Corner, and Raoul Bunschoten have influenced mapping in Landscape Architecture and have very different styles of engaging with mapping and the idea that maps can have and produce potentials and possibilities. James Corner, in his writing 'The Agency of Mapping' uses mapping as a 'productive and liberating instrument,' unfolding potentials, and showing relationships that aren't obvious in traditional mapping styles. Corner approached mapping more creatively, to work out how space is interpreted and experienced. In small regional towns, we are trying to discover the most useful techniques to engage with the existing spatial conditions and identify the viability of each proposed design, therefore the engagement with 'potentials' is essential.

Raoul Bunschoten introduced the idea of Game Board Mapping: Shifting and pairing different combinations to assess various opportunities and possibilities with the world's 'skin.' Bunschoten pays attention to stakeholders and issue mapping and attempts to understand these as spatial/geographical issues. Bunschoten's engagement with stakeholders and using them as 'levering' opportunities in the design formation, highlighting the influences businesses and activities have in our urban landscape.

The Landscape Architectural Application of the 'affectual':

Peter Connolly developed techniques to approach and understand concepts of affects, assemblages, and investigated how they apply in landscape architecture, particularly to engage with life on the ground. Connolly, a professor at Victoria University of Wellington presses for students to pay particular attention to the bodily scale experience and how it can affect the wider city system. To communicate the forces involved with how we experience Awanui River different techniques needed to be developed to explain the experience. It's not just the physical landscape that determines how people interact with the river, it's the constant build up and break down of relationships that make an experience, and this becomes a challenging aspect to convey in landscape architecture especially if a small scale experience could be applied a larger scale and potentially make a positive difference to the town.

Traditional Urban Design Principles applied in New Zealand

The approach into designing in New Zealand has tended to follow traditional master planning methods found throughout the world. The New Zealand Urban Design protocol highlights national aspirations to create a more attractive and livable environment for all New Zealanders to inhabit through quality urban design. It discusses the seven essential design qualities of context, character, choice, connections, creativity, custodianship, and collaboration in application to both towns and cities. The big C's are aspects of experience, but don't always address and emphasise specific experiences as a concrete spatial relationship that can be translated into a master plan.

An Urban Design Tool Kit developed from the Urban Design Principles to facilitate quality outcomes includes many different approaches to achieve a more attractive and livable environment. Legibility Mapping is one approach, in reference to Kevin Lynch's, 'An image of the City' discusses mapping and the use of overlays, adding and removing layers of information to reveal patterns that are not otherwise obvious. This type of mapping approach has heavily influenced understanding on-the-ground experience, however, in this research, more attention has been paid to communicate experience through photographs with reference to study maps and intensively engages with sections to make a comprehensive understanding of 'On the Ground' experience. Another technique discussed was a Walk-through Analysis as a way of engaging with what happens on the ground. This method is based on observational techniques, however, could be diluted through the generation of pre-specified checklists, and lack of openness to discovery. This method doesn't seem to reference or interact with understanding the affectual, using more quantifiable references such as characteristics, styles, and detailing.

Te Aranga Design Principles

In response to the New Zealand Urban Design principles, the Te Aranga Design Principles were developed in 2006 to connect with the Maori world view and 'gain a better understanding about Auckland's different context and characters.' (ADM) The Te Aranga Design Principles were developed

specifically to reflect the values Iwi tend to have regarding our landscape and how we should be approach urban design in Aotearoa. These helped focus the ecological and cultural views of the landscape in Kaitia, specifically giving regard to the Awanui River, its Mana, and its integrity as a source of 'Mauri.' These principles shouldn't just be applied with traditional methodologies and approaches to the landscape; they must be embodied throughout the whole discovery and design process. When designing in small town Aotearoa it is vital to consider and embed Maori principles and values as integral aspects of the design process.

Precedents & Town Studies

The precedent study focused on projects that influenced or paid special attention to object based experiences such as Nigel Bertram's Wimmerra River project and on current revitalisation projects in Aotearoa. There was also a focus on how other small towns currently shape and highlight their experiences within the town. These precedents have influenced the research through how they have approached an aspect of understanding space and experience:

- Nigel Bertram - Furniture Structure & Infrastructure
- Masterton Wairarapa Redevelopment - Shaping our Future
- Masterton, Cambridge, Ohakune, Hamilton, Turangi – Site visit studies to the towns or cities that had been identified with having a river or stream close to the centre of town, a main road and how the town interacted with the river system.

Furniture , Structure, Infrastructure - Nigel Bertram

The book focuses on how the urban environment is created, used and initiates design proposals based on how these two concepts work together. Bertram uses concepts such as the dynamics of use, interaction and modification to inform his projects. Bertram refers to the affectual, involuntary and 'how life works on the ground' as rules and has developed this in an architectural design context. His attention to analysing existing conditions in real time and understanding the forces that produce them relates to my research of restructuring of experience. A project, the Pioneer Museum Plaza had an aim (part of the longer-term urban strategy) of strengthening a main connection to the Wimmera River, and to 'let the river infiltrate public life' (Bertram). The site was to act as an entrance into the opportunities the Wimmera river possessed; the network of walkways, trails, river and used furniture as a tool to interact with the urban environment (Bertram). This is not unlike the approach to design taken for Kaitia and posed a question of how we can allow the river and greenbelt system infiltrate public life in a meaningful way through our design moves.

Fig 3.0: Map of Masterton

Masterton Investigation

Masterton, Wairarapa Redevelopment – Shaping our Future is a current project at Boffa Miskell that aims to deal with the viability of the town, its relationships to the river and how to improve the current life of the town. Boffa Miskell have had extensive consultation process over past couple of years gathering information and presenting proposals and are now in the phase of concept design and consulting with community the proposed designs.

Boffa Miskell used objectives to drive the project - these objectives were derived from the consultation period and initiatives were outlined to 'cataysed' to achieve the objectives. (Boffa, 5) Shaping Our Future project objectives look to be achieved over many years and take into consideration many aspects of the urban environment. The Waipoua River is outlined as a key feature of Masterton because of its proximity and size as well as being an asset to the town. This project was noted as similar to the aspirations for the redevelopment of Kaitaia, and is a great local example of techniques such as drawings and consultation that can be used to achieve the objectives.

The project was presented in such a way that a picture is built through analysis phase through timelines, land-uses, demographics economy, and characteristics and used to drive the design, however what would happen if the experience was solely focused on as a driver for reorientating Masterton?

Figure 3.1: Boffa Miskells Shaping Our Future project strategy

Chapter 3

River Focus:

During a site visit to investigate Masterton, identified early in the research project as a town going through change, it was noted that it had ahas extensive park area along Waipoua River. The variation of vegetation such as the tall trees, lower undergrowth, and areas of maintained grassy flats provided for more of a picturesque scene. The pathways were wide with light gravel and looked rustic, casually promoting a meandering experience alongside the river. The pathways were well used by walkers, runners, bikers and horse riders. There is access to the river in multiple areas and the river cross section is quite wide with low stop-banks.

Figure 3.2 Close up of Waipoua River, north of Masterton's three main streets

Fig 3.3 Section A-a

Fig 3.4 Section B-b

Fig 3.5 Section C-c

Fig 3.6 - Bollards are a permeable barrier that doesn't hinder walking movement.

Fig 3.7 - The light gravel pathway within the stop-banks looks like it meanders next to the river.

Fig 3.8 - The river is not far below the pathway and produces a gentle noise.

Fig 3.9 - The low barrier stop motorised movement through the site.

Fig 3.10 - Tall trees capture the movement.

Fig 3.11 - Pathway moves below the bridge, and is high enough for horses to move through.

Fig 3.12 - The movement in the site is linear, and stays beside the river.

Fig 3.13 - The river and pathway work together to create leading lines that compel a walker to discover where it ends.

Fig 3.14 - Map of Ohakunes main features.

Ohakune

Ohakune is a low lying town near a smaller stream system and has successfully integrated the town with the river experience by surrounding the river with parks and pathways. The stream is parallel to the main road that passes through the town. There were no stop-banks, the crossings were basic bridges that passed over the river (see Fig 3.16). There were a range of mediums used for developing the pathways, such as concrete, gravel, and clear bare ground especially the walking tracks in the native bush.

Fig 3.16 - Simple wooden bridge structure, flat and low, and you can see the main shops.

Fig 3.18 - The pathway follows the 'leading lines' of the stream, and is concrete.

Fig 3.15 - The stream follows the main road with no stop-banks and crumbly river banks.

Fig 3.17 - Native vegetation grows along the riverbank.

Fig 3.19 - View from the pathway where you can see the main shopping area along the main road.

Fig 3.20 - Map of Cambridge main features.

Cambridge

Cambridge has a different relationship to the river due to how far below the Waikato River it is from the town, and resembles more of river canyon. There is very little ability to interact with the river other than visually. The town has tracks that follow alongside the river, and provides opportunity for movement alongside on the high river banks and include a visual experience with the water. Cambridge could take more opportunities to harness the experience of the Waikato River.

Fig 3.22 - Basic seating provided along the walking tracks.

Fig 3.24 - The main bridge across was connected to walking tracks and pathways.

Fig 3.21 - The walking tracks allowed for a visual connection to the river even though the river is far below the town.

Fig 3.23 - Constructed wooden walking tracks with barriers made for easy navigation.

Fig 3.25 - Looking down Waikato River the walking tracks are well hidden.

Fig 3.26 - Map of Turangi & main features.

Turangi

Turangi features a wide, fast flowing river with shallow rise stop-banks. The river skirts the edge of the town, and features gravel walking tracks that usually follow along the top of the stop banks and a shallow incline towards wide river rock beaches that allow for a close interaction with the river. Fishermen can easily access the river for recreational use. There are subtle parks on the edge of the river and opportunities are given to residents to interact with the river, especially with the Tongariro River trail. Residents with dogs walked alongside the river, and could freely move in areas to the water's edge and back up to the stopbanks.

Fig 3.27 - Turangi advertises a river trail experience that any one can try.

Fig 3.28 - Small stop-bank rise over to Tongariro River, and a gravel walkway follows the top of the stopbank.

Fig 3.29 - The walkway gravel seems to resemble the river stones and follows the river around the town.

Fig 3.30 - Fishermen use the river below SH1 for trout fishing. There is a wide river margin.

Fig 3.31 - The stop bank walking trail was very bare around the southern side of the Tongariro walking trail.

Fig 3.32 - The river seemed to be rushing, and producing a loud rapid sounds that accompany you along the trail.

Analysis Mapping Approach

Informed from on 'On the Ground' experiential mapping

During the analysis phase of the project, it was very important to be able to communicate the experiences that were prominent on the ground and whether the experiences had the possibility to be extended at the town scale. Entrances or lack there of created a frustration while investigating the greenbelt and therefore implied it gets you to ignore the river. The experience in Kaitia tended to be limited to commercially orientated spaces because of how the town is designed and utilised.

Developing communicative analysis methods to convey the experience that was being created was a challenging aspect in the project, especially if the drawings needed to relate to each other in order to successfully communicate the relevant spatial conditions of the experience, and whether that formulated into a viable design option.

The series of zone mappings work concurrently with the larger scale mapping investigations from the previous chapter. The investigations along the river and stream are sectioned into areas to really zero into what was happening in the experiences.

A combination of mapping, sections and photos were used together to inform the spatial conditions found in Kaitia. There was a challenge with processing and cross-referencing the information between three different methods and scales, especially trying to communicate the on-site experience to someone other than myself.

Fig 4.0 - Experimental barrier mapping drawings.

Fig 4.1 - Map investigations divided up by logical areas and territories.

Zone Area Investigations Base Map

Scale: 50m 100m 200m

- Area Outline
- Rivers
- 5m Contours
- Building Footprints
- Residential Areas
- Kaitiaki Greenbelt

Chapter 4

Lower Matthews Ave Area 1

Awanui River

The area around lower Matthews Ave has piecemeal relationships and territories that create a dis-jointed feeling while within the space. There is only one clear entrance to the river reserve (see Fig 4.8), and when walking into the maintained grass area, it eventuates to a slight rise up a small stop-bank. While moving over the stop-bank the river is revealed to be like a deep canal. The area between the stop-bank and opposite river bank is wide, vast and seemed very isolated. There was nobody else in sight even though it's located close to the Central Business District, and overlooked part of the busy rugby fields. The only way to cross to the other side was to walk back towards the road and down to the bridge. The riverbanks are crumbling, and the grass was thigh high, and extremely hard to move through in places. The tall grass was very wet and added an extra hinderance, making it uncomfortable to move through. Both aspects created a barrier to accessing the waterside. Aa number of interesting features noted in this area; compelling lead lines that initiate movement (see Fig 4.8, image 9) and wide and mostly level river bank terracing that available for easy movement and could create connections to other open spaces, even simply by mowing the grass.

Fig 4.2 - Drawing of the rivers leading lines that tend to pull you around the corner while walking

Fig 4.3 - The slight stop-bank rise allows for a revealing experience of the long sweeping river

Fig 4.4 - Section changes in the lower Matthews ave area

Fig 4.5 - Spatial investigation map of the Lower Matthews Ave area

Fig 4.6 - This area around Remembrance Park investigates the relationship to the river and highlights the lack of clear openings

Fig 4.7 - The plain pathway along the side of Matthews Ave provides a revealing experience to an opening of green space beside Awanui River, however is located in-front of a big empty building and it obscures the entrance

Fig 4.8 - The lawn area is 10m wide with barriers and leads up to the a gentle stop-bank, and at the top provides long views down the both lengths of the river with compelling sweeping river lines that suggest movement.

Fig 4.9 - The entrance from the rugby fields is narrow and obscure but opens up to more compelling leading lines down the length of the river.

Chapter 4

Fig 4.10 - Section A-a

Fig 4.11 - Section B-b

Fig 4.12 - Section C-c

Fig 4.13 - Section D-d

Fig 4.14 - Section E-e

Fig 4.15 - Section F-f

Fig 4.16 - Section H-h

Fig 4.17 - Section I-i

- Section study highlights multiple pathway opportunities on top of or within the stop-banks
- - - - - Physical and Territorial Barriers
- - - - - Available walking spaces

Chapter 4

Concrete Factory - Area 2

Awanui River

This area was best communicated through section and photographs that reflected the sections. This was a different communication method than area 1, and allowed for images to directly relate to the sections to build a better spatial understanding.

This space had two pathways that were maintained by a lawn mower, approximately 75cm wide cut through thigh high Kikuyu. It created an intimate, calming relationship with the surroundings, allowing the walker to enjoy a meandering pathway experience (see Fig 4.22). With the pathway elevated above the river it provided the experience of looking down upon the moving water which creates a calming effect. The pathway diverged off, with two clearly defined pathways, one on the top of the stop-bank, and one located halfway down. The elevation of both pathways created a different walking experience (see Fig 4.26).

Fig 4.20 -First drawing investigations on site

Fig 4.21 -Mapping investigation of the concrete plant area and the end of Empire St

Fig 4.22 - The image illustrates the diverging pathways and how the mowed pathway sweeps around the river bend

Fig 4.23 - The entrance off Empire St connects with a the sweeping mowed pathway in a seemingly seam-less way.

Fig 4.24 - Area 2 Section Map

Fig 4.25 - Section A-a

Chapter 4

Fig 4.26 - Section B-b

Fig 4.27 - Section C-c

Fig 4.28 - Section D-d

Fig 4.29 - Section E-e

Fig 4.30 -Mapping opportunities discovered in the concrete plant area and the end of Empire St

- 1 The riverside area located beside the concrete factory is a wide river side berm that has one very wide large flat space (see Fig 4.23).
- 2 There is a range of vegetation on the opposite bank, some of which are native vegetation.
- 3 A large part of the rivers edge is steep, with poorly structured riparian planting.
- 4 The mowed tracks made for a pleasant walk above the river, (see Fig 4.22).
- 5 Three access points available into the riverside - but no structured access to the waters edge.

Chapter 4

Allen Bell Drive Bridge - Area 3

Awanui River

Fig 4.31 - Mapping investigation of the Allen Bell Drive river area

Fig 4.32 - Area 3 Section Map

- 1 The area around Allen Bell Drive has wide river side berms that have relatively large, wide flat spaces within the stop-banks (see Fig 4.44, 45, 47).
- 2 There is a range of vegetation, some native, but mostly features inappropriate use of planting.
- 3 The riverbanks along this part of Awanui river has poor riparian planting, with crumbling edges that add another barrier to accessing the water.
- 4 There is no access along and through the left side of the bridge heading north (see Fig 4.35, 36, 43)
- 5 There are four access points of note, but are underutilised and overgrown.
- 6 This studies showed there is no new available space to add to the public space (see Fig 4.41).

Fig 4.33 - Section A-a

Fig 4.34 - Section B-b

Fig 4.35 - Section C-c

Fig 4.36 - Section D-d

Fig 4.37 - Section E-e

Fig 4.38 - Section F-f

Fig 4.39 - Section H-h

Fig 4.40 - Section I-i

Fig 4.41 - Mapping opportunities discovered in the Allen Bell Drive & river area

Fig 4.48 - Mapping investigation of the Parkdale Reserve Area

- 1 Parkdale Reserve is maintained and established park surrounded by residents located on Allen Bell Drive
- 2 It is a wide and flat mown space and the expanse is very dominant however it felt like an underutilised public space.
- 3 This section of the river, has poor riparian planting, with crumbling edges that minimise the access to the rivers edge.
- 4 The four access points available are very open, easy to access but lack an inviting presence.
- 5 There is a small playground and run down half court very visible to the surrounds.

Fig 4.50

Fig 4.49 - Area 4 Section Map

Fig 4.51

Fig 4.52 - Section A-a

Fig 4.53 -Mapping opportunities discovered in the Parkdale Reserve Area

Fig 4.54

Fig 4.55 - Section B-b

Fig 4.56

Fig 4.57

Fig 4.58 - Section C-c

Fig 4.59 - Section E-e

Fig 4.59 - Section D-d

Fig 4.60 - Section F-f

Fig 4.61 - Mapping investigation of Matthews Park

- 1 Matthews Park is maintained and established in the area.
- 2 It has long rolling stop-banks that hinder the park user's visual access to Awanui River (see Fig 4.73).
- 3 This part of Awanui river has poor riparian planting (see Fig 4.76).
- 4 Interestingly, it also has the only spot along the river that leads right down to the water line (see Fig 4.74).
- 5 Three access points available.

Fig 4.62 - Area 5 Section Map

Fig 4.63 - Section A-a

Fig 4.67 - Section E-e

Fig 4.64 - Section B-b

Fig 4.68 - Section F-f

Fig 4.65 - Section C-c

Fig 4.69 - Section H-h

Fig 4.66 - Section D-d

Fig 4.70 - Section I-i

Fig 4.71 - Mapping opportunities discovered in the Matthews Park area.

Fig 4.72

Fig 4.73

Fig 4.74

Fig 4.75

Fig 4.76

Fig 4.77

Fig 4.78

Chapter 4

Memorial Park - Area 6

Tarawhataroa Stream

This area is on the other side of town – almost opposite to Area 1. The Tarawhataroa Stream is smaller than Awanui River but it had very similar issues of overgrowth, lack of access and connections. Although there is a opportunity to get close to the water – touch it even in a couple of places, it seemed contaminated. The grass is also thigh high, but it had a river bank shelf that was about 6-10 metres wide. It is in close proximity to a newly formed Kaitia Youth Centre and the swimming pool were visually evident however there was no direct way connection between these programmes across the stream.

Fig 4.79 - Mapping investigation of Memorial Park

Fig 4.80

Fig 4.81

Fig 4.82

Fig 4.83

Fig 4.84

Fig 4.85 - Mapping opportunities discovered in the Memorial Park area

- 1 Memorial Park is established with the local swimming pools.
- 2 Range of vegetation, some native.
- 3 This area along Tarawhataroa Stream has poor riparian planting.
- 4 Can get very close to the streams edge.
- 5 Four Access points available.
- 6 Has great relationships to neighbouring activities such as the Kaitia Youth Centre development.

Fig 4.86 - Area 6 Section Map

Fig 4.87 - Section A-a

Fig 4.88 - Section B-b

Fig 4.89 - Section C-c

Fig 4.90 - Section D-d

Fig 4.91 - Section E-e

Fig 4.92 - Mapping investigation of around Pukepoto Road and north of Memorial Park.

- 1 The area near Pukepoto road is largely inaccessible due to private ownership and no access ways.
- 2 Range of vegetation, some native.
- 3 Has poor riparian planting, with crumbling edges.
- 4 No access along the bridge.
- 5 4 Access points available.
- 6 Can visually see flat river bank ledges that are walkable but are hard to access.

Fig 4.93 - Area 7 Section Map

Fig 4.94 - Section A-a

Fig 4.95 - Section B-b

Fig 4.96 - Mapping opportunities around Pukepoto Road and north of Memorial Park.

Fig 4.97 - Section C-c

Fig 4.98 - Section D-d

Fig 4.99 - Section E-e

Fig 4.100 - Section F-f

Chapter 4

Bank St & Redan Rd - Area 8

Tarawhataroa Stream

Fig 4.101 - Mapping investigation of between Bank St and Redan Rd

Fig 4.102

Fig 4.103

Fig 4.104 - Mapping opportunities between Bank St and Redan Rd

- 1 Has quite extensive earthworks along the inside of the stream riverbanks that has caused all vegetation to be cleared.
- 2 Has a wide open maintained area above the stream - with a good connection to Commerce St.
- 3 Has poor riparian planting, with crumbling edges.
- 4 Very accessible from the shopping side .
- 5 Can visually see flat river bank ledges that are walk-able and maintained.

Fig 4.105 - Area 8 Section Map

Fig 4.106 - Section A-a

Fig 4.107 - Section B-b

Fig 4.108 - Section C-c

Chapter 4

Middle of Commerce St Area

The middle of Commerce St Area has the highest concentration of activities in Kaitaia. Commerce St is a shopping orientated area and it has moments that are vibrant with human interaction with larger groups who gather and hang out together. The area that connects with Commerce St and Melba St has little collections of territories formed by different types of people that completely alter the feeling of the space compared to other parts of Commerce St. The street has a strong linear orientation and no noticeable visual relationship to Awanui River or Tarawhataroa Stream. There are fewer closed down shops and empty spaces in this area but there are a few old buildings that are run down.

Fig 4.109 - Mapping investigation of mid Commerce St

Fig 4.110 - Considered the centre of Kaitaia, where Melba St meets Commerce St. It is the busiest part of town, and people cross through the middle of this intersection.

Fig 4.111 - Mapping opportunities of mid Commerce St.

Fig 4.112 - Looking north up Commerce St.

Fig 4.113 - Flat, relatively empty carpark close to centre of town.

Fig 4.114 - Outside the main Pharmacy, looking south down Commerce St.

Fig 4.115 - The Post Office Building is a Heritage building.

Fig 4.119 - Bare shop frontage along Commerce St.

Fig 4.120 - Small alley way off Commerce St.

Fig 4.121 - Public social services buildings.

Fig 4.122 - Less pedestrians found on the lower end of Commerce St.

Fig 4.123 - Liquor Store next to Jaycee Park.

Fig 4.124 - Jaycee Park areas that shows traces of an old stream that ran through it.

ROADS & PATHWAYS

Scale: 50m 100m 200m

- Rivers
- 5m Contours
- Building Footprints
- Roads
- Pathways
- Right of ways

Fig 4.125 - Shows the hierarchy of roads in Kaitiaki

Testing

On the first dedicated site visit in Kaitia time was spent wandering the streets trying to identify relationships between programmes, people and finding the different ways to experience the town by testing walking routes, and playing experiential games such as 'the best way' to get from bridge to bridge. This experiential testing highlighted you couldn't easily move from bridge to bridge or between programmes unless you were on the mains street. You were also unable to follow the river, and existing pathways didn't connect in a cohesive way.

Fig 4.127 - Highlights extensive barriers to access the Awanui River and Tarawhataroa Stream

River Barriers

An in-depth investigation of the river and stream showed a town-wide issue of a lack of access with the water corridors. Vegetation and fences contributed to physical barriers and territorial/privately owned conceptual barriers all contributed to the lack of human interaction and access to Awanui River and Tarawhataroa Stream. Beyond that, the inaccessible sections of the river had very little ecological benefits to the overall systems with poor planting and crumbling edges. It was extremely difficult to move from one space to the next or across the systems. Overall relationships highlighted the issue that the river was disengaged from the public realm.

Fig 4.128 - This study investigated in mapping access, soft and hard barriers from the walking experience on the ground.

Territorial Relationships

To understand the territorial relationships in Kaitaia it was beneficial to show these relationships at different scales. At the town scale there were two obvious territories, the town and the new big box shopping development to the north, (see fig 4.127). That seemed to be defined at the bridge. There was a tendency for visitors not wanting or needing to travel below the bridge. Secondly, the suburb scale displayed a poor relationship with the river and stream systems. This was highlighted further with disengagement of the natural systems at the street scale (see Fig 4.128 & 4.129).

When compiling this information together, the information communicated was seen in the three separate territory scales clearly.

- 1
- 2
- There is a major territorial issue where a lot of visitors don't venture below 'the bridge' keeping them in the big box shopping area.
- Most of the territories don't have a meaningful relationship to the Kaitaia greenbelt (the two rivers) despite the proximity.

Fig 4.129 - Lack of engagement from visitors with the main township.

Fig 4.130 - Serious lack on engagement with the river and stream systems.

Fig 4.131 - Further lack of smaller scale engagement with the river and stream systems.

Fig 4.132 - The overlay of territories highlighted two issues. 1) No strong visitor engagement with the CBD, 2) the disengagement with the water systems.

Flooding issues

Flooding is a serious issue in Kaitaia and during visits there were site works occurring along Awanui River focusing on upgrading the storm water, drainage systems, and the stop banks.

Major flood protection works occurred in 1962 after the devastating 1958 flood, see (Fig 4.142) which is why the existing stop-banks are in the condition they are today. There has been little work that has occurred in the last 50 years, until recent the works seen on the site in 2018.

To engage with creating a public realm in the Kaitaia Greenbelt system, large scale restructuring within the riverbanks is not practical due to the flooding. However, the flooding is not a frequent everyday experience and small design shifts such as pathways and the use of planting to help secure the eroding stop-banks could be a potential way to re-orientate the town experience.

Fig 4.133

THE COUNTRY | Environment

Work begins on \$15.5m project to protect Kaitaia from floods

Fig 4.134

Work is about to begin on a \$15.5 million flood prevention scheme which aims to safeguard Kaitaia from Northland's riskiest river. The Awanui River, which rises in the ranges south of Kaitaia before flowing through the town and emptying into Rangaunu Harbour, is often cited as Northland's biggest flood risk

The occupants of three cars have been rescued by emergency service workers after they were trapped on a bridge in Kaitaia, surrounded by rising water. It's believed the cars have been abandoned on the bridge, about 1km from the Heseikino pub on Whangape Rd. Heavy rain has been pelting the Far North, with the MetService earlier issuing a severe thunderstorm watch and warning of possible flash flooding.

Fig 4.135

Housing concerns in Kaitaia after flooding

Official concerns have been raised over a flood-prone Kaitaia street after a family was rescued and four homes evacuated during a flash flood at the weekend. Housing New Zealand Corporation Northland area manager Rick Boraston said today three HNZ homes in Allen Bell Dr, Kaitaia, were uninhabitable after a flash flood hit the street about 3 pm on Saturday. It was the third time in about 11 years the area had been hit by serious flooding. Official sources said only 28mm of rain fell in Kaitaia on Saturday. But firefighters said today parts of the street were one metre under water after a 20 to 30-minute deluge of rain and hail, accompanied by thunder and lightning. A nearby stream that overflowed had contributed to the flooding. The downpour left a family of five trapped by one-metre-deep floodwaters. Kaitaia Volunteer Fire Brigade spokesman Ron Attwood said two children aged about 18 months and three were lifted out a window of the house and carried to safety.

Fig 4.136

Fig 4.137

THE COUNTRY | Environment

Kaitaia residents: Yes, they did mention the flooding

Tahiti Tatai and her family moved into their new address, a Housing NZ property in Allen Bell Drive Kaitaia, less than two months ago. "We needed a bigger house," she said on Thursday. And yes, her tenancy manager had mentioned that there had been history of flooding.

Fig 4.138

WHANGATANE SPILLWAY

TARAWHATAROA STREAM
BUILT TO WITHSTAND
1:30 YEAR FLOOD

Flooding Extents Map

Scale: 50m 100m 200m

5m Contours

Major Road

Rivers

Public Areas

10 Year Flood

100 Year Flood

Fig 4.139 - Highlights the majorly affected flooded areas within Kaitiaia

1962 Flood Protection Works

The Flood Protection Scheme

The Awanui Flood Protection Scheme has been initiated since 2013 from Northland Regional Council. The main objectives included improving the Annual Exceedance Probability to a 1% chance of flooding per year, improving the safety of the river banks against slope failure and protecting urban Kaitaia from flooding (Tonkin & Taylor). The upgrades would widen some parts of the river, build up the height of the stop-banks and therefore implicates potential opportunities in the Kaitaia Greenbelt system.

2013 Flood Protection Works

Awanui River Scheme Asset Management Plan 2015

Figure 6 Awanui River Asset Conditions Color Coded

Fig 4.140 - Map highlights the shows where the stop-banks need strengthening

Fig 4.141 - Photos of the 1962 Flood Works

Major Flooding Events

1958

Fig 4.142 - Photos from the Te Ahu Museum of Flooding in Kaitia

2003

Fig 4.143 - Photos from the 2003 floods

2007

Fig 4.144 - Photos from the 2007 floods

Chapter 4

De-cyphering Land Parcels

This map investigation attempted to identify the areas included in the Greenbelt from on-site experience and online data. There was conflicting information from the regional and district council websites surrounding public land. Spaces identified clearly didnt include all of the puclic land. There we smaller bite sized pieces that were not defined at the map scale.

Fig 4.145 - Highlights the potential public space that can be unlocked and utilised.

This first map shows the current public space. The orange highlights the fact there is a lot of underutilised public space that has a close relationship to the blue (utilised public space) - local activities such as sports, the community centre and schools.

Fig 4.146 - Highlights relationships with surrounding parcels.

This map shows public space in orange, and the occupied public sector activities such as schools in blue but also land identified as attainable for further opportunities in grey. This land could be bought by the council because it was flood prone, unused or located close to town. This could strengthen the Greenbelt if needed.

The map on the right identifies in orange the area envisioned for the Kaitaia Greenbelt and proposes to build on experiential and beneficial spatial relationships with current surrounding programmes that could form (Blue) – such as improving the movement to and from the rugby fields.

Fig 4.147 - This map highlights the full public space possibility for the Kaitia Greenbelt.

Fig 4.148 - Base of the new Kaitia Greenbelt informed by previous analysis.

Kaitaia Greenbelt

The inspiration for the Kaitaia greenbelt comes from a local example, the Wellington Greenbelt system. More specifically the Wellington Inner City Greenbelt, is a green spine surrounding the central city and its has great relationships to sports fields, provides a connected, cohesive and ecological experience that succesfully brings wildlife into the city. Kaitaia has a major advantage with opening up its belt system because it has Awanui River and Tarawhataroa Stream with the two water systems flowing parallel to the main street. It provides two unique opportunities for huge ecological and experiential benefit to the town. The Kaitaia greenbelt has the ability to provide opportunities for types of new movement from one side of town to another the other beside a river that is conveniently located near the CBD.

Fig 4.149 - Images of the Proposed Kaitaia Greenbelt.

Discoveries

Riverside Space Available

Fig 5.0 - Typical river section along Awanui River.

1 Large wide open space, either over grown or mowed. Tends to be just below the top stop-bank line. Found along 60% of the rivers in the town.

2 Narrower walking spaces within the river stop-banks that curve and follow the river. Found along 80% of the rivers.

3 Cut-in areas in the rivers cross section that range from water level to near the top of the stop-bank. Tendency to be overgrown, curve around with the river 1-2m wide. Found along 70% of the rivers and generally is located below the narrow walking spaces.

Poor Riparian Edging

There is a lack of suitable planting along the edge of most of Awanui River and Tarawhataroa Stream resulting in crumbling water edging, along approx. 90%. This could be due to the flood plan construction and engineering logic. The planting has no ecological benefits or suitable for stabilisation.

Fig 5.1 - Typical section of planting along Awanui River.

Almost nil opportunity to touch the water and interact with it

Fig 5.2 - Typical example of barriers to access the waters edge.

Crumbling and steep river banks makes it difficult to access and interact with the river other than visually. On-site investigation revealed only one opportunity to touch the water along 4.5km of Awanui River.

Major Barrier Issue

Fig 5.3 - Close up of Townscale Territory Map.

A lot of people do not venture below the bridge because they do not need to; Big box shops north of the bridge such as Pak 'N' Save and Warehouse service most local visitors and tourists. Currently there is little 'reason' for these people move below the bridge.

Mowed Pathways can be quite effective

Fig 5.4 - Mowed pathway in Area 2

An inexpensive way to create movement through space especially when a lot of the grass around the river bank is thigh high.

Few Access points to Awanui River/Tarawhataroa Stream

An opportunity exists to create more usable entrances to access the river and create a more cohesive pathway network. This would provide the ability to be able to move along the river as currently there are 30 opportunities that could be created to access the river.

- Current access available to the river
- Potential Access

Fig 5.4 - All possible access points into Awanui River and Tarawhataroa Stream.

Fig 6.0.0 - Initial Design Hunches

Design Actions

The design focus of the project was to identify changes that could make the most beneficial impact to the public realm in Kaitaia. These changes investigated how to re-orientate the experience of the everyday human life within the town in a viable manner.

The analysis highlighted a series of design possible design actions to investigate further. Each action was designed to shift how people experience of the town. They were all developed to support the overall ambitions to positively restructure the experience of the town.

To determine the validity of the proposed actions, a deep spatial awareness and political understanding of Kaitaia was necessary to evaluate whether an experiential shift would make a difference and be a viable to consider.

The shifts were defined to four categories:

- **Masterplanning Shifts**
- **Town Restructuring Shifts**
- **Restoration Shifts**
- **River Access Shifts**

Master-planning Shifts

The first approach developed from the initial hunches revolved around developing full town scale master-plan shifts. This approach was about understanding how the whole town experience could be re-orientated using multiple actions and combinations.

Full master-plan shifts and planning are a more traditional approach to restructuring towns and didn't seem to develop a stronger understanding of more viable and human scale experiential shifts.

Connecting Four Major Activities

This restructure is about strengthening the centre point in Kaitia and creating better connection and stronger relationship with four main areas that are currently isolated from each other. The CBD, Hospital and High school, Community Centre and the Sports Fields.

The strategy is to connect the four important spaces in the most direct way possible through providing accessible pathways, removing barriers and creating four key connection points. It resulted in creating a pathway loop system.

- 1 - Access
- 2 - Reserve/Restoration
- 3 - Connect Main Activities
- 4 - Main Street
- 5 - Park Areas
- 6 - Spaces for redevelopment

Fig 6.0.1 - Restructure of the Memorial Park Area.

Fig 6.0.2 - Close up of the restructuring of Lower Matthews Ave Area.

Opening up the River & Stream by Providing Access

This restructure is about creating a cohesive system of walking and/or cycling connections around Awanui River and Tarawhataroa Stream.

This is to be done by strengthening existing pathways, improving existing access, creating access where it does not exist and developing a pathway network. A pedestrian bridge system will help movement around the two water systems.

1 - Access

2 - Reserve/Restoration

3 - Creating a pathway network

4 - Pedestrian bridges

Fig 6.0.4 - Close up of the Memorial Park restructure.

Fig 6.0.5 - Close up of the Memorial Park restructure.

Creating two East - West Connections

This restructure is about extending two east - west streets (Melba St) and (Bank St) which connect the Awanui River and Tarawhataroa Stream.

The intention of these moves was to create a direct lines of sight between the two water systems and highlights the rivers as destination at each end of the roads to encourage more movement towards and along the river. This action creates a walking loop, provides waterside time and passes directly through the centre of the Central Business District thus keeping foot traffic central, and has two interaction points along Commerce St.

- 1 - Main street hierarchy**
- 2 - Reserve/Restoration**
- 3 - Development opportunity**
- 4 - Market Space**
- 5 - Walkway to the highest point in Kaitiaia**

Fig 6.0.7 - Close up of the restructure at Memorial Park.

Fig 6.0.8 - Close up of the lower Matthews Ave area.

Fig 6.0.9 - Adding two strong East - West streets to connect reorientate the experience in Kaitia.

Intensifying the Town Centre

This restructure attempts to create one new East - West Street (extending Melba St), two reserve/riverside parks. This is achieved through strengthening entrances to the river and streams and introducing a new housing development six minute walk away from the CBD.

This Master-plan shift attempts to add a direct line of sight between the two water systems and changes how people can move through the space. The development helps to intensify the population in the centre of Kaitia, and the street extension opens up more retail opportunities.

- 1 - Main street hierarchy
- 2 - Reserve/Restoration
- 3 - Development opportunity

Fig 6.0.10 - Close up of the lower Matthews Ave area restructure.

Fig 6.0.11 - Close up of the Memorial Park Restructure.

Fig 6.0.12 - Intensifying the town centre through a Melba St extension, new development opportunities and two accessible parks.

Central Business District

Sports Grounds

Police &
District Court

Council

Kaitiaki Hospital

Tarawhataroa Stream

Strong North - South Streets

Town Infrastructure Shifts

This investigation into infrastructure moves teases apart what could occur bold restructuring moves were initiated. The town has a strong north - south axis with the three main streets; Commerce St, Matthews Ave and Puckey Ave, which have weak east-west connections. This concentrates the movements of cars and pedestrians on Commerce St and keep people away from the river's edge.

Kaitaia has a strong tendency to facilitate certain types of movement and keeps the experience predominantly to central to the three main streets. Moving through the town, north - south is a prominent feature and there is no natural pull away from Commerce St. There are also no visuals of the river or stream, therefore the experience is limited to retail and commerce.

Fig 6.1.0 - Melba st extension, east - west street with green reserves located at each end.

Action 1

By extending Melba St to create a full east - west street could strengthen the centre of town and create a direct connection from Tarawhataroa Stream to Awanui River. The addition of developing recreational parks at both ends of the extended Melba St that are two-three minutes walk away from the centre of town could provide people with a new experience in Kaitia, and change the way a pedestrian interacts with the town. This action also presents opportunities for lingering activities such as coffee or to have lunch breaks along the river close to town. If there was a new inviting experience added to the river it could provide new, more convenient routes to and from the town center and around other parts of town.

1. Extension of Melba St
2. Reserve/Park Space
3. New CBD Park Space
4. Redevelopment opportunities

Fig 6.1.1 - Melba St extension investigation.

This investigation shows how the introduction of a Melba St extension could work and investigates what you can see at different points along the extension.

Fig 6.1.2 - Looking down Melba St you would see a direct line to Tarawhataroa Stream and the tall gum trees.

Fig 6.1.3 - Progressive and closer photo to the centre of Commerce St than image 1

Fig 6.1.4 - Images taken from West Lane, along the potential Melba St extension looking at the tall gum trees.

Fig 6.1.5 - Images taken from Puckey Ave highlighting the house that would need to be removed to extend Melba St.

Fig 6.1.6 - View from the Youth Centre looking towards the Gum Trees.

Fig 6.1.7 - Looking back towards the existing Melba street through the potential new Melba St extension.

Fig 6.1.8 - View down the existing Melba St that highlights the highest point in Kaitia.

Fig 6.1.9 - Vegetation at the end of Melba St highlights and marks Awanui River.

Fig 6.1.10 - Action 1 masterplan highlighting the extension of Melba St.

Vegetation to suggest movement along Melba St

Fig 6.1.11 - Vegetation shifts and changes alter the experience of the street.

Street & Pathway Size

Fig 6.1.12 - The dimensions of a street can determine how comfortable it is to walk along, interact with the shops and the amount of time spent in a space. The narrower the pathways, the more they act like a thoroughfare, where as the wider the pathway more lingering experience options that can be created.

Fig 6.1.13 - Melba St extension - Looking towards Tarawhataroa Stream, where the tall gum trees are visible.

Fig 6.1.14 - Looking down the new Melba St extension.

Fig 6.2.0 - Proposed extension of two East - West Streets.

Action 2

This action aims to introduce two east - west streets into the CBD which could strengthen the centre of town and would create two direct street connections from Tarawhataroa Stream to Awanui River, creating a cohesive park structure, and introduces a loop in the Central Business Area involving the rivers.

This action aimed to question what adding the two east - west streets would do to Kaitaia. It would double the opportunity to see across the town and provide connections the river and stream. It would open up more redevelopment opportunities in the currently unused old warehouse building and large flat car park. In reflection, this move seemed more unrealistic when compared to Action 1 as it was almost too ambitious. It could be viable if there were developers interested, but it seemed like quite a drastic shift compared to introducing just one east - west street.

1. Extension of Melba St & Bank St
2. Reserve/Park Space
3. Restoration
4. Redevelopment opportunities

Fig 6.3.0 - Proposed North - South, East - West Axis

Action 3

This move attempts to strengthen the hierarchy of the streets, introduce further vegetation and specific trees to visually show where the two new main axes are.

Action 3 moved back to extending Melba St, but also investigated reinforcing Commerce St to make a stronger centre axis. The addition of an urban development across the Awanui river to densify the centre of Kaitaia is a four minute walk from Commerce St. This provided an added viability aspect by having more residences located centrally to the shopping centre.

1. Reinforce the street hierarchy of Commerce St
2. Create an East/West Street, extending Melba St
3. Create a development across the river, 4 minute walk from CBD
4. Tarawhataroa Stream & Awanui River could be restoration/recreational reserve

Restoring the rivers edge

Restoration Shifts

The next set of shifts seemed more focused on restoring the health and life of Awanui River and Tarawhataroa Stream. Mauri is an essential part of raising the wellbeing for Maori and is integral part of the Te Aranga Design Principles. By increasing the Mauri of a place, it increases the Mana therefore providing the spaces own significance.

Vegetation has the potential to change the experience of place by improving the health of the environment and introduction of a variation visual textures.

Fig 5.4.0 - Introducing planting back into the public environment.

Fig 6.4.1 - Revegetating the river spaces closest to Commerce St

Action 4

Creating recreational and ecological corridors in the town, focusing on re-vegetating the rivers in the areas closest to the CBD.

Over time this could be extended down the full length of the river, creating a green network that champions cycling and walking with nature.

- 1. Riparian Edges
- 2. Park Areas
- 3. Stop-bank vegetation
- 4. Pathways

Planting Palette Options

Fig 6.4.2 - Planting options that could be added and reinforced back into the public environment.

Fig 6.5.0 - Strategic reserve spaces

Action 5

Action 5 investigates focusing on reinvigorating two reserve spaces that are located closest to the central business district. They have existing qualities and facilities to tap into and enhance. By re-invigorating the reserve areas that can gather the most foot traffic, it could initiate a reorientation of experience towards the river and stream.

- 1. Lower Matthews Ave Reserve
- 2. Memorial Park & Tarawhataroa Stream

Fig 6.5.1 - Lower Matthews Ave Reserve is an already established area that could be enhanced by adding a direct connection with the water, such as a swimming space, accessible picnic areas and healthier riparian planting.

Fig 6.6.0 - Possible wetland areas around Kaitia.

Action 6

Action 6 began to investigate introducing wetland/swamp systems back into the environments around Kaitia as a reflection of the past ecological systems before they were drained for farmland. It would also raise awareness around water quality and pollution along with reintroducing natural plant systems such as flax and oioi that were historically used by Maori.

This action would be completed in stages:

- 1) Encourage the development of wetlands in the southern area of Kaitia, further up the stream and river.
- 2) Add in further wetlands closer to the town, integrating with park areas.
- 3) Create wetlands on further down the river, to further clean the river/water systems before flowing away from the town.

Fig 6.7.0 - Possible major swamp reforestation areas.

Action 7

Re-introduce two large swamp forest areas closer to town that reflect the swamp areas two kilometres out of town. This would create a different type of revealing experience driving into Kaitia especially on the southern end of town.

Fig 6.6.1 - Areas that could be most suitable for wetlands, treatment areas and/or swamps

Providing better access to the waters edge

River Access Shifts

The third set of actions investigated simple approaches to shifting experiences in cost effective ways. One of the biggest issues identified in the Mapping Analysis was the lack of accessibility to the river systems especially around central locations resulting in a lack of interaction with them. By creating accessible riverside spaces, it could initiate experience and interaction with the river systems therefore provide a sense of belonging to the rivers and therefore enhancing the rivers Mana. This would highlight the importance of Taiao and Mauri Tu in relation to the Te Aranga design principles.

Fig 6.8 - Entrance experience near Arnold Rae Park into the Awanui River area.

Fig 6.8.1 - Key entrances around Kaitia

Action 8

This action studies all the possible connection points to Awanui River and Tarawhataroa stream and pin pointed the most important ones to change the way people used the entirety of the proposed greenbelt. The design eventuated into providing a full town loop.

One of the earlier discoveries was about the lack of access to the Kaitia Greenbelt system, and perhaps simply by providing clear access and a simple gravel walkway around the river could drastically change the way people interacted and treated the space.

Action 8 investigated how a small restructuring to an entrance experience could be applied at a large master plan scale.

1. Provide access to the river/stream side
2. Walking loop around the reserve space

Fig 6.8.2 - Entrance to Tarawhataroa Stream from Oxford St.

Fig 6.8.2 - This map highlights the strategically located entrances that would provide the best access to Awanui River and Tarawhataroa Stream

Entrance Investigation

This investigation determined that each entrance into the greenbelt had very similar issues and barriers preventing interaction. It also identified strategic entrance points and where bridges would be most valuable.

The images how the before images of the entrances and highlighted:

Chapter 5

Entrance Designs

These entrances are designed to be more inviting from the street, hooking into forces identified in the analysis phase such as the leading and pull lines found at entrances along the river. The mowed pathway edge that fade around corners or the river that moves around bends draw people into the green belt system and invite exploration. Plants could enhance the 'exploratory' pulling experience and double as native restorative planting. The chosen pathway medium could be gravel, or mowed grass or even concrete within the stopbanks. Gravel or mowed grass would be a more viable option and can be maintained with minimal maintenance.

Fig 6.8.3 - Suggested Pathway materials

Fig 6.8.4 - Empire St Entrance

Fig 6.8.5 - This entrance had a poor existing planting structure had an established mowed pathway but had strong 'leading lines' that pulled walkers along the river.

Fig 6.8.6 - Dunn St Entrance

Fig 6.8.7 - The diverging pathway highlighted by vegetation would provide stronger defined 'leading lines'.

Fig 6.8.8 Matthews Avenue Entrance

Fig 6.8.9 - This area along the river had curving bank benches and a defined stop-bank therefore the addition of defined pathways would lead people along a riverside experience.

Fig 6.8.10 - Rugby Grounds Entrance

Fig 6.8.11 - This entrance had thick stop-bank vegetation and underutilised pathway options that could to be brought to life.

Fig 6.8.12 - Oxford St Entrance

Fig 6.8.13 - The clearly structured engineered stream bank has wide flat river berms with minimal planting allowed for restoration planting to strengthen experience of the proposed entrances.

Fig 6.8.13 - Bank St Entrance

Fig 6.8.14 - No defined pathways were along this area of Tarawhataroa Stream and therefore needed to be defined.

Fig 6.8.15 - Memorial Park Entrance

Fig 6.8.16 - Only one defined pathway leading away from the river existed to the left and therefore a pathway into the Tarawhataroa Stream river section was created to provide an encounter.

Fig 6.9.0 - This map highlights important entrances that would need to be redeveloped to create a successful walking circuit.

Fig 6.9.1 Two inner-town loops, and two outer city loops

1. Shorter loops with easier access to the shopping centre
2. A bigger walking loop experience available, where they can join up to create different variations

Action 9

Action 9 was an examination of possible different loop journeys that were dependant on length and time spent next to river, capability and connections. Currently there are limited experiences on Commerce Street and opening up the river could add a range of other options for experiencing Kaitia that are not just shopping related.

Action 9 investigated what could happen if you pushed Action 8: Creating Entrances further by creating walking loops, testing distances for each loop and investigating what experiences could be a part of the loops such as; human interaction, visual stimulation and relaxing journeys along the river.

A section investigation (Page 116) explored what the experience of walking along the Awanui River would feel like. It was noted early in the mapping analysis section the pathways could move up and down within the stop bank area and could create vastly different experiential moments. The section investigation was focused along the Lower Matthews Ave area along the Awanui River as it has been a major focus in other actions and has proved relevant to all potential journeys.

Fig 6.9.2 - Create one cohesive journey around both rivers and through the suburbs keying into sports and community programmes around Kaitia.

Fig 6.9.3 - Create one journey around the central business area of Kaitia that provides a varied experience different from shopping.

Chapter 5

Fig 6.9.4 - Create two loop journeys around the entirety of Awanui River and Tarawhataroa Stream that connect the man different sport programmes and parks located along the water systems. For example; along Tarawhataroa stream the aim would be to connect the retirement village to the swimming pool, and provide a safe, inviting pathway connection into the shopping area that is away from the main road.

Fig 6.9.5 - Create two short loop journeys between existing bridges and focus the designs on a shortened space along Awanui River and Tarawhataroa Stream. This would provide two different experiences for the workers in Kaitia different from shopping.

Fig 6.9.6 - Create multiple loop circuits of varied distances to cater for short walks and longer walks, connecting a variety of activities. These walks can meet up and cross over to become longer if the user prefers and can integrate a variety of activities within the over all pathway plan.

Fig 6.9.7 - Create two circuits close to the CBD that follow and interact with Awanui River and Tarawhataroa Stream. It could be one big loop and would connect different types of programmes such as sports, community centres and shopping and would highlight and interact different experiences.

Chapter 5

Understanding the Walking Experience by the River

These sections explored an integral part along Awanui River relevant to most actions; Lower Matthews Ave. The section analysed how the journeys experience can change by shifting the cross section, pathway dimensions and planting surrounding the walking spaces. It highlighted ways to achieve an interaction with the water and manoeuvre back up to the top of the stop bank. The area within the stop-bank cross section was maintained to keep with the flooding requirements.

Fig 6.9.8 - Section Reference Map, Lower Matthews Ave

Blue line follows the pathway in sequence

Fig 6.9.9 -Section A-a

Fig 6.9.10 -Section B-b

Fig 6.9.11 -Section C-c

Fig 6.9.12 -Section D-d

Fig 6.9.13 -Section E-e

Fig 6.9.14 -Section F-f

Fig 6.9.15 -Section H-h

Fig 6.9.16 - Section I-i

Fig 6.9.17 - Section J-j

Fig 6.9.18 - Section K-k

Fig 6.9.19 - Section L-l

Fig 6.9.20 - Section M-m

Fig 6.9.21 - Section N-n

Fig 6.9.22 - Section O-o

Fig 6.10.0 Single Track

Fig 6.10.1 Loop Track

1. Create entrance way to track from Melba St
2. Create Bridge over Awanui River
3. Experiential climb 6-10% gradient to the top. This will be mainly situated in a gully to make it less visually present adding to the sense of unfolding surprise at the top.
4. Viewing point
5. Alternative Entrance/Exit from Allen Bell Drive
6. Another experiential climb 6-10% gradient
7. Connecting the 2 entrances together to create a loop

Action 10

Action 10 focused on developing an experiential walk up to the highest point in Kaitaia, that could overlook the town and surrounds. This journey has the potential to be enjoyed by both locals and tourists. By creating the access from within the town, close to Commerce St it could focus visitors to stay in Kaitaia instead of passing through to go experience somewhere else such as Cape Reinga. This idea formed because throughout the town you are able to see this radio tower. Questions developed such as: What would it be like to journey to the top?

Fig 6.10.2 View of Radio tower from Kaitaia Youth Centre

The experience was designed in experiential sections (see Page 123). Fig 5.10.4; section 2 is designed to have an intimate walk close to the river, then in section 3 the track leads up in a slight gully with tall vegetation that removes yourself from the proximity of the town, and therefore strengthen a revealing experience once you reach the first view point in section 5. The first view point would reveal the town below, and then if you keep walking up the hill on an open ridge walking track, eventually reaching the highest point at 92m high, you may be able to glimpse the sea, and an almost 360 degree view. A second entrance and journey to the top from Allen Bell Drive allowed the design of a loop journey that could start at different points.

Both journeys up the hill are about 1.2km to the top and have a gradient of 6-7%, therefore accessible and not overly strenuous.

This is intended to be an attraction as well as a restoration project along the riverside. The land is currently privately owned but there could be incentive given to the property owners to open up the land.

Fig 6.10.3 Proposed Journey Plan for Action 10

Chapter 5

Experiential Section for Action 10

— Orange line cuts into the pathway

Section Experience 2 *The second experience across the river is along the top of the river bank, beside the edge of the paddock. The line acts as a seam to pull you along the experience.*

Section Experience 4 *This experience is the beginning of the journey up the winding track that moves along the hillside.*

Section Experience 5
Fig 6.10.8

This section of the journey is a slow winding trail up a 6-8% slope under tall vegetation cover. The vegetation cover has an enclosed feel that heightens the sense of an unfolding surprise at the top.

Section Experience 1 *The beginning of the journey needs to be inviting and easy to access. The bridge can be a pulling force to experience because of its design.*

Section Experience 3 *The third experience is near the of the flat plain and readys the walker for the movement up the hill.*

Chapter 5

Section Experience 6
Fig 6.10.9

This section is the first view point showing a full view of Kaitaia and surrounds. It is a rest area with a small shelter. As the track continues it dips behind and below into low vegetation

Section Experience 7
Fig 6.10.10

This section is the beginning of the second slope and incline up the hill.

Section Experience 9
Fig 6.10.12

Experience nine is a more gradual incline to the top of the hill, with high wind exposure and sparse trees. The wind is a part of the experience highlighting how high you are from Kaitaia.

Section Experience 8 *This section reorientates the pathway and experiential focus in the journey up the hill.*

Section Experience 10 *Experience Ten is the last re-orientation and movement before reaching the peak of the journey. There is no vegetation in this area highlighting the rise about the town and intensifies the exposure you would feel.*

Chapter 5

Section A-a Close up design of pathway with rocks along the banks to provide stability.
Fig 6.10.14

Section C-c Close up of a corner junction, and the natural curve of the hillside means extra strength is needed with the divergence of the pathways.
Fig 6.10.16

Fig 6.10.17 - The full experiential journey section for Action 10

Section B-b The contours in this area allowed for minimal structural support made from large rocks
Fig 6.10.15

Section D-d While the pathways diverge away from one another, the vegetation thickens highlighting the feeling of separation and privacy.
Fig 6.10.17

Building a viable Experiential Master-plan

During the investigation of the 10 actions, the concept of viability was always at the forefront of the design moves and it morphed into how to viably design for experiences that can then inform a potential master plan. This approach led to an master plan proposal that had a combination of five actions that seemed to have the potential to change the experience of the town, separately and together. These five actions would collectively and potentially work very well together to improve the experience of Kaitaia in a viable way that other individual actions investigated didn't indicate.

The five actions:

1. The most significant change would be Melba St extension and could be a viable option if combined with development opportunities. This redevelopment decision would likely change the experience of the town the most and provide direct visual and physical connections to green spaces such as the Awanui River and Tarawhataroa stream in a way that doesn't currently exist from Commerce St.
2. A relative low-cost experiential change would be to provide clear entrances to the Kaitaia Greenbelt which would make it seem more inviting. These entrances don't need to be fancy, but they do need to be clearly understood and defined as entrances. The spin off effect from this would be to create connections between the entrances.
3. Creating a pathway/cycleway that connects areas between the bridges and across the rivers would strengthen the idea of a walkable/ride-able Greenbelt experience. This pathway could be built by mowing the grass or using gravel for low maintenance. Adding clear entrances in the northern big box area would also be an effective way of drawing visitors in.
4. Introducing a experiential journey to the highest point in Kaitaia could be seen as an attraction, and additional experience in the town. Currently there are no experiential-orientated landscape within Kaitaia. The town is largely limited to more functional activities like shopping which is very much focused on Commerce St. There is little opportunity for exploration, exercise and relaxation.
5. A restoration project for the whole of the Greenbelt system would help clean up the waterways and move away from the clinical engineering of the river-ways and give Mauri and life back. It could eventually allow the river to become swimmable and therefore provide a different type of experience in the town.

Fig 7.1 - Experiential Masterplan for Kaitia.

Chapter 6

Melba St Extension

A significant street restructure in the centre of Kaitia would shift the human experience to orientate to the east - west, and centralise business activities by reinforcing a town centre hierarchy. New opportunities would open up along Melba St and in effect create a central focal point where Commerce St and Melba St intersect.

Fig 7.2 - Close up of the Melba St extension from the Experiential Masterplan.

Fig 7.2 - Looking down Melba St - towards Matthews Ave & Awanui River.

Entrances

The experiential masterplan targets strategic entrance points into the greenbelt system to allow locals to freely move and interact with the river as well as providing connections and shortcuts. Entrances can shift the experience because they allow opportunity to explore Kaitaia in new way. Entrances are strategically placed to allow maximum public penetration into the developing Kaitaia Greenbelt.

Chapter 6

Pathway & Cycle Way

The Pathway/Cycle way is designed to connect areas along and across the river in the most strategic way possible in areas originally identified as imperviable in the analysis and action investigations. There is a primary pathway, and is supported by secondary options.

- 1 Entrances
- 2 Main Pathway/Cycleway
- 3 Secondary experiential pathways

Fig 7.8 - Proposed section in the Concrete plant area.

Fig 7.10 - Current site photo of the grass area of Allen Bell Drive.

Fig 7.11 - Proposed walkway changes in the area above Allen Bell Drive.

Fig 7.12 - Proposed walkway changes in section in the area above Allen Bell Drive.

Fig 7.7 - Current site photo of grassy vegetation.

Fig 7.9 - Proposed walkway changes to the Concrete plant area.

Fig 7.13 - Proposed new pathway system for the experiential masterplan.

Chapter 6

Experiential Journey

The experiential journey is an opportunity for exploration, exercise and relaxation. The journey creates a destination experience and introduces a new way to experience the town that is not focused on shopping and utilities. Essentially it involves building a pathway, specifying appropriate vegetation placement and developing a memorable journey experience. The current existing environment, and the view provides most of the necessary aspects.

Fig 7.14 - Proposed Experiential Journey

Restoration

Restoration should be a part of any project involving designing the natural environments, and is an integral part of highlighting the importance the health of the environment has in our lives. It would be introduced gradually and would need to start from the top of the stop-bank to ensure roots establish themselves so the planting can endure flooding. Planting can slow the river flow, prevent erosion, filter the water and provide habitats to the local fauna.

Fig 7.15 - Proposed Restoration along Tarawhataroa Stream near Pukepoto Road

Fig 7.16 - Current site image of Tarawhataroa Stream.

Fig 7.17 - Proposed planting along the Tarawhataroa Stream.

Fig 7.18 - Proposed section along the Tarawhataroa Stream relating to Fig 7.16,17.

Conclusion

Small viable moves can make a big difference to experience of a town

Small moves can be applied at a large scale

The way the experience of Kaitaia is currently structured is very limited to shopping-related to activities on or near Commerce St and to the big box retail in the north of Kaitaia. You can shift the way the town is experienced through a variety of design opportunities that can go beyond the work-a-day shopping related experience. It's determining what viable shifts could make the most difference in a small town environment especially when they lack the funding to make large restructuring changes.

It seems that in Kaitaia small design shifts could have the potential to change the whole movement of the town and the way people interact with it especially in the greenbelt by providing clear access and developing an intergeated pathway network.

The shifts can be addressed in progressive stages. Options that do not require massive capital investment for potential design opportunities such as mowing the grass to define pathways can be a integral first step to initiate change. Other actions such as restoration or access to the greenbelt system could be achieved easily and wouldn't need wide community consultation because they are not a large restructuring projects in a public space. The actions could subtly shift the experience of the town in quite a cost-effective way.

Reflection

In reflection of the proposed experiential masterplan, a better integration with the new shopping complex on the north of the bridge would be very beneficial as this complex is only going to grow in size and effect how more users will experience Kaitaia. This space was not investigated to its fullest potential and a seamless integration into the Kaitaia Greenbelt could promote walking/cycling along the river as an alternative method of moving through the town instead of primarily through the main streets. This could be addressed through extending the greenbelt to include the shopping centre and exploring the locations and entrance designs to draw people in.

Initial data gathering proved difficult. Regional towns have sporadic data as there is a tendency for the different public bodies to have different information and data focus. Flood mapping was accessible due to the site works currently occurring in Kaitaia to upgrade the storm water, drainage systems, and improving the stop banks, however accessing any other data was difficult, out of date and had to be pulled from multiple sources. The data was conflicting from the Council, Regional Council and the information from on-site analysis showed that the available space for the Kaitaia Greenbelt was more than originally researched, which didn't necessarily mean it was automatically public space but would be massively beneficial if added to the green matrix of Kaitaia.

The scope of the project didn't intimately address the integration of the greenbelt with the flood-works happening over the next few years. This would have been highly beneficial to explore and plug the designs into the major changes currently underway. A shared design focus and partnership could change the perception of the river into a usable public space.

A major challenge was communicating the on-site discoveries that shaped how the town was experienced. To communicate relationships of programmes and the forces they produced proved to be difficult. New mapping techniques had to be tested, and relevant information had to be communicated with other techniques that to build a larger understanding of each site. Then to successfully decypher them lay in how each piece of information or map related to another. It is also entirely subjective as to what was deemed relevant to Kaitaia. A strength lay in the background information and knowledge of Kaitaia prior to the beginning of the project, however for unfamiliar readers to Kaitaia, the information communicated could be diluted and design solutions could lose significance because the historical understanding isn't inbedded.

Even though there was no official participatory design involved in the project, information was gathered through conversations with locals that helped inform design decisions. The benefits and implications of involving the local community in identifying, designing and contributing to their own back yards is immeasurable. It is essential to involve the community and if this project became reality a consultation would be necessary for community buy in. However, it wasn't the intention of this research to formally involve local participants, and change or dilute the design ideas produced. It was more focused on strategic consultation and producing viable design moves from data and on-site experience.

Ultimately

To conclude, by changing the approach in designing small regional towns to focus on designing and understanding small experiential shifts and further, how those shifts can be applied at a town scale we can give more consideration to the experience of people that masterplanning may not offer. Focusing design interventions at the one to one scale we can evaluate and engage with different opportunities that have the potential to be more cost effective than large restructuring changes.

This project identified that in small towns like Kaitaia; small viable design moves can make a big difference to experience at a town scale.

Bibliography

Auckland Design Manual. Te Aranga Design Principals. Website. Retrieved 29/03/19

<http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te_aranga_principles>

Bertram, Nigel. 'Furniture, Structure, Infrastructure' Book. Ashgate Publishing. 2013. UK

Bunschoten, Raoul. Urban Flotsam. Book. 010. 2001. Rotterdam

Boffa Miskel. 'Shaping our future - A strategy for the Masterton Town Centre'. PDF. August 2018

Connolly, Peter. an affirmative open systems conception of how to design landscape. Thesis. RMIT. 2012. Melbourne

Corner, James. The Agency of Mapping. Reaktion Books. 1999. London. Pg 231 - 252

Desvigne, Michel. Intermediate Natures. PDF. Birkhauser Verlag AG. 2009

Gibson, James. The Ecological Approach to Visual Perception, Chapter 8, The Theory of Affordances. Book. Houghton Mifflin Company. Boston. 1979

Latour, Bruno. Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford University Press, 2005. Print.

Lewis, Justin. Reassembling the Social – Latour, A summary of: Bruno Latour. Reassembling the Social: An Introduction to Actor-Network-Theory. New York: Oxford UP, USA, 2005.

Lynch, Kevin. The Image of the City. Book. The MIT Press. 1960. Massachusetts

NRC, Tonkin & Taylor. 'Awanui Flood Scheme 2015'. Report. September 2014

Simpson, P. Ecologies of Street Performance: Bodies, Affects, Politics.

Bibliographhy

Simpson, P. Ecologies of Street Performance: Bodies, Affects, Politics. Unpublished PhD Thesis. 2010. University of Bristol, Bristol, pp. 7-10

Slatter, Daryl. Population Change. Parliment, 2014.

Ministry for the Environment. ' The New Zealand Urban Design Protocol.'PDF. 2005. <https://www.mfe.govt.nz/more/towns-and-cities/urban-design-protocol>

Weller, Richard. The Art of Instrumentality, The Landscape Urbanism Reader. 18/03/19

Wood, Julian."Growing Beyond Growth: Rethinking the Goals of Regional Development in New Zealand." Maxim

Institute, 27 Feb. 2017, doi:<https://maxim.org.nz/wp-content/uploads/2017/02/Paper-Growing-Beyond-Growth.pdf>.

Sources of Figures

All figures not listed here are by the Author.

Figure 1.0 - Wilson, Libby, et al. "Tough Choices Ahead for Small-Town New Zealand." Stuff,

Figure 1.1 - Iles, Julie. "Small Town New Zealand Is Tipped to Struggle." Stuff, Fairfax, 28 Feb. 2017, www.stuff.co.nz/business/89869357/small-town-new-zealand-is-tipped-to-struggle.

Figure 1.2 - De Graaf, Peter. "Bay of Islands Benefits from Government Spend." The Northland Age, 2018, www.nzherald.co.nz/northland-age/business/news/article.cfm?c_id=1503398&objectid=12016254.

Figure 1.3 - Foy, Felicity. "Letter: Time to Talk about How to Spend Far North Rates." The Northland Age, 13 Mar. 2018, www.nzherald.co.nz/northland-age/opinion/news/article.cfm?c_id=1503399&objectid=12011711.

Figure 1.4 - "Millions to Be Invested in Northland's 'Untapped Potential'." The Country, NZ Herald, 27 Feb. 2018, www.nzherald.co.nz/the-country/news/article.cfm?c_id=16&objectid=12002669.

Figure 1.5 - Simms, Danny. "Letters: Fix State Highway 1 and Watch Northland Fly." The Northland Age, 15 Feb. 2018, www.nzherald.co.nz/northland-age/opinion/news/article.cfm?c_id=1503399&objectid=11994928.

Figure 1.10 - Unknown, Unknown. "Five Year Age Groups." Profile.id, 2013, profile.idnz.co.nz/far-north/five-year-age-groups.

Figure 1.11 - Unknown, Unknown. "Change in five year age structure 2006 - 2013." Profile.id, 2013, profile.idnz.co.nz/far-north/five-year-age-groups.

Figure 1.12 - Unknown, Unknown. "Change in workforce industry sector of employment 2006 - 2013." Profile.id, 2013, profile.idnz.co.nz/far-north/Change-in-workforce-industry-sector-of-employment.

Figure 1.13 - Unknown, Unknown. "Workforce industry sector of employment 2013' Profile.id, 2013, profile.idnz.co.nz/far-north/Workforce-industry-sector-of-employment.

Figure 1.16 – Hailstone, Jared. 'Rolling Hills of Peria'. Photograph.2014

Figure 1.17 – Hailstone, John 'Kerikeri Stone Store' Photograph. 2016

Figures

Figure 1.18 – Hailstone, John 'Whangarei Falls' Photograph. 2016

Figure 1.19 – Hailstone, John 'Far North Coastline' Photograph. 2016

Figure 1.20 – Hailstone, John 'Mangonui Harbour' Photograph. 2016

Figure 1.21 – Hailstone, John 'Ahipara' Photograph. 2016

Figure 1.22 – Hailstone, John 'Okura Photograph. 2016

Figure 2.1 - Unknown, Unknown. "Employment Status, 2013." Profile.id, 2013, profile.idnz.co.nz/kaitaia/employment-status.

Figure 2.2 - Unknown, Unknown. "Annual individual income, 2013." Profile.id, 2013, profile.idnz.co.nz/kaitaia/annual-individual-income-2013.

Figure 2.3 - Unknown, Unknown. "Ethnic Groups, 2013." Profile.id, 2013, profile.idnz.co.nz/kaitaia/ethnic-groups-2013.

Figure 2.4 - Unknown, Unknown. "Highest Qualification Achieved, 2013." Profile.id, 2013, profile.idnz.co.nz/kaitaia/highest-qualification-achieved-2013.

Figure 2.6 –FNDC. "Far North District Council - District Plan Map 71 ." Far North District Council, 2019, www.fndc.govt.nz/services/the-far-north-district-plan/district-plan-electronic-version.

Figure 2.7 –FNDC. "Far North District Council - District Plan Map 72 ." Far North District Council, 2019, www.fndc.govt.nz/services/the-far-north-district-plan/district-plan-electronic-version.

Figure 3.1 –Miskells, Boffa, 'Shaping our Future Strategy.' 2018

Figure 4.134 - NRC. "Initiatives Underway to Reduce Flood Impact in Kaitaia in Wake of Edgumbe Report." Northland Regional Council, 15 Dec. 2017, www.nrc.govt.nz/news/2017/december/initiatives-underway-to-reduce-flood-impact-in-kaitaia-in-wake-of-edgumbe-report/.

Figure 4.134 - Northern Advocate. "Work Begins on \$15.5m Project to Protect Kaitaia from Floods." Northern Advocate, 12 Dec. 2018, www.nzherald.co.nz/the-country/news/article.cfm?c_id=16&objectid=12174391.

Figure 4.135 - NZH. "Cars Trapped in Flood on Kaitaia Bridge as Gales, Rain Buffet North Island." The New Zealand Herald, 27 Aug. 2017, www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11911761.

Figure 4.136 - NZH. "Housing Concerns in Kaitaia after Flooding." The New Zealand Herald, 3 Sept. 2001, www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=2132

Figure 4.137 - ONN. "'It Was Just Flooded Everywhere' - Kaitaia Family Step out of Bed into Ankle-Deep Water." One News Now, 11 Mar. 2017, www.tvnz.co.nz/one-news/new-zealand/just-flooded-everywhere-kaitaia-family-step-bed-into-ankle-deep-water.

Figure 4.138 - The Northland Age. "Kaitaia Residents: Yes, They Did Mention the Flooding." The Northland Age, 27 June 2017, www.nzherald.co.nz/the-country/news/article.cfm?c_id=16&objectid=11882457.

Figure 4.140 – NRC. 'Awanui Scheme Management Plan 2015'. Northland Regional Council, 2015, <https://www.nrc.govt.nz/media/10687/awanuischemeassetmanagementplan2015website.pdf>

Figure 4.141 – Attwood, Mary. '1962 Flood Works'. Far North Photo. <http://www.farnorthphoto.co.nz/photo%20archive%20gallery/kaitaia%20floods%20gallery/kaitaia%20flood%20protection%20works.htm>

Figure 4.142 – Unknown, Unknown. 1958 Floods. Te Ahu Museum

Figure 4.143 – Various. Floods 2003. Far North Photo. <http://www.farnorthphoto.co.nz/photo%20archive%20gallery/kaitaia%20floods%20gallery/kaitaia%20floods.htm>

Figure 4.144 - Various. Floods 2007. Far North Photo. <http://www.farnorthphoto.co.nz/photo%20archive%20gallery/kaitaia%20floods%20gallery/kaitaia%20floods.htm>