

**At the confluence:  
heritage, landscape and the construction of belonging**

---

Helen Frances  
2014

This thesis is submitted in partial fulfilment of the requirements for the Master in Landscape Architecture degree at Unitec Institute of Technology, New Zealand, 2014.

# Abstract

---

Landscape architecture has a long history of engagement with heritage. Design practice frequently hones in on the expression of narrative associated with the design site to reflect, or promote, a sense of place. However, heritage is a cultural construct, a version of the past created by people to serve their needs in the present. Because it is invented by people it is always contestable; what is significant and valued by one group of people will not be so by others. Additionally, in relation to landscape there is a tendency to think only of built forms, material objects, historical narratives associated with place and scenic qualities as heritage concerns. Intangible heritage such as traditional practices, activities, art and story may be more important than material heritage for some people.

This project uses the design of a riverside walkway in a small rural community with a very strong heritage story to test an engagement with heritage in the landscape that incorporates the political and intangible dimensions as revealed as significant by the community.

The project uses four main streams of research to inform an iterative design process: interviews and focus groups to uncover the politics of heritage on this site, and explore the meanings and value of different kinds of heritage to the community; an examination of rivers, the unique qualities of the rivers in the design site, and their meaning to the local community; an examination of theories of landscape that provide a framework for representing intangible heritage; and an analysis of design precedents that reveal design principles for walkways and the dynamics of politics in contested sites.

From these converging streams of research a design approach for the walkway is proposed that firstly places landscape architecture within the social-cultural-political frame that generates heritage, and thus makes design part of a process that reinvents heritage, rather than simply reflecting it. Secondly, based on occupation of the site and activities within it, time and process are proposed as organising principles for representing heritage, rather than traditional methods of interpretation such as storyboards. Third, utilising design principles that emerged from the analysis of precedents, and a focus on process and community engagement, the design seeks to make a material space that attracts people to use it and works as an amenity for this community.

## Declaration of work

---

I confirm that:

- This Thesis represents my own work.
- The contribution of supervisors and others to this work was consistent with the Unitec Code of Supervision.
- Research for this work has been conducted in accordance with the Unitec Research Ethics Committee Policy and Procedures, and has fulfilled the requirements set for this project by the Unitec Research Ethics Committee (Application number 2013-1075).

Helen Frances

Date: 10 October 2014

1027278

## Acknowledgements

---

I owe a great debt of gratitude to the members of the community of Waipu and Patuharakeke who participated in this research. They generously supported me and this project. They gave freely of their time, memories, thoughts and opinions. Their affirmation of the value of the project kept me going when it felt too hard.

I am also very grateful to my supervisor, Hamish Foote, whose commitment to the process of the project and to my learning contributed immeasurably to the final work.

Thanks too to Ian Henderson for critique and support at critical moments.

I am very grateful to Christina Sanson for her help with Vectorworks at the beginning, and to Mo Pettit for her proofreading at the end.

And finally, thanks to my partner Sue Foster, without whom the work would not have been started, or finished.

|                                     | Page |
|-------------------------------------|------|
| 1. Research proposal                | 7    |
| 1.1 Introduction                    | 8    |
| 1.2 Research question               | 9    |
| 1.3 Aims and objectives             | 9    |
| 1.4 Methodology                     | 9    |
| 2. Introduction to the site         | 11   |
| 2.1 Regional context                | 12   |
| 2.2 Site context                    | 15   |
| 2.3 Social and cultural context     | 16   |
| 3. Theoretical framework            | 22   |
| 3.1 Heritage                        | 23   |
| 3.2 Landscape                       | 27   |
| 3.3 Walking                         | 29   |
| 4. Conversations with the community | 31   |
| 4.1 Objectives                      | 32   |
| 4.2 Methodology                     | 32   |
| 4.3 Themes                          | 34   |
| 5. Rivers                           | 39   |
| 5.1 Rivers in culture               | 40   |
| 5.2 The Waipu rivers                | 42   |
| 5.3 Spatial-temporal processes      | 46   |
| 5.4 Ecology                         | 53   |

# Table of contents

|                                   | Page |
|-----------------------------------|------|
| 6. Design precedents              | 59   |
| 6.1 Selection of case studies     | 60   |
| 6.2 Sites of public commemoration | 61   |
| 6.3 Walkways                      | 63   |
| 7. Design development             | 68   |
| 7.1 Key findings                  | 69   |
| 7.2 Design philosophy             | 71   |
| 7.3 Summary of design objectives  | 71   |
| 7.4 Overarching design strategy   | 73   |
| 8. Final proposition              | 74   |
| 9. Conclusion                     | 102  |
| 10. Appendices                    | 106  |
| 10.1 Design tests                 | 107  |
| 10.2 Plant lists                  | 111  |
| 10.3 Flood risk analysis          | 114  |
| 11. References                    | 115  |

# 1. **Research proposal**

---

**Introduction**

**Research question**

**Aims and objectives**

**Methodology**

# 1.1 Introduction

This research proposes to explore the practice of landscape architecture in relation to heritage, using the design of a walkway in a heritage-rich site as an applied case study. It is concerned with the complex set of relationships between landscape, heritage, place and identity. The research question puts emphasis on the needs of a diverse community. This emphasis reflects the contestable and potentially complex nature of heritage. What is significant and valued by one group of people may not be so by others, so within this set of relationships between landscape, heritage, identity and place is a political dimension. This research explores not just how landscape architecture might engage with heritage, but how it might engage with the social, cultural and political dynamics that generate heritage.

This research topic has relevance for several reasons. Firstly, we seem to be living in a heritage boom. Heritage is a cultural construct, a version of the past created by people to serve their needs in the present, and it is everywhere. Nature reserves seek to conserve fauna, flora and habitats; landscapes are protected as national parks; monuments enshrine people and events; plaques and historic markers tell us certain sites have importance in some way; artefacts are collected, conserved and interpreted; buildings are conserved and protected; clubs and societies ensure that rituals, arts and customs are passed from one generation to the next; businesses and towns use distinctive architecture or history to carve a niche in the tourist market (Howard, 2003).

Secondly, heritage is always somewhere. It is intimately related to place, and to people's sense of identity and belonging. This dynamic has been dramatically illustrated in the aftermath of the Christchurch earthquakes, in which emotional debates about the balance between building safety, conservation of heritage buildings, and heritage protection in the future have played out in the media. In a recent article in the New Zealand Geographic, Professor of Landscape Architecture Dr Jacky Bowring, makes the point that the preservation of heritage goes beyond economic concerns. It is also about identity, history and a sense of place that is constructed not just from buildings but from the familiarity of buildings and streetscapes in general (Blundell, 2013). Quoted in the article, Bowring asserts "It's that sense of place, groups of things that help us to know that this is this place and not that place – the skyline, the texture, the experience of the landscape, our relationship with the world. And that relationship, that connectedness, is really important for our well-being. It's about who we are and where we are" (Blundell, 2013, p. 72).

Words about "sense of place" are commonly heard in relation to contemporary landscape architectural projects. Fleming (2007) asserts that the phrase is over-used, stretched to the point of exploitation, illustrative of an approach that pays lip-service to the concept of "place". This research aims to explicate the complexity of this idea of "sense of place" and how design practice might respond in an informed, thoughtful and nuanced way to people's needs for belonging and a sense of identity.

The case study site for design is a rural village, but as the debates about the Christchurch re-build illustrate, the issues are entirely relevant for our urban environments. The urban environment is increasingly the primary human habitat, and globalisation of culture and urbanism is driving increasing homogenisation, "not all for the betterment of culture, place and individual well-being" (Corner, 1999, p. 37). Concomitantly, heritage as a device for promoting localised representations of place becomes increasingly important. From an exploration of the complexities of heritage and its relationship to the practice of landscape architecture this research is expected to generate a designed walkway for a particular community that responds to the issues of heritage on this site as they are uncovered, and to generate findings that are applicable to both rural and the urban places.

## 1.2 Research question

How can a riverside walkway be designed for a diverse community in a site that is rich in heritage?

## 1.3 Aims and objectives

The primary aim is to design a riverside walkway. The following objectives are integral to the design research process:

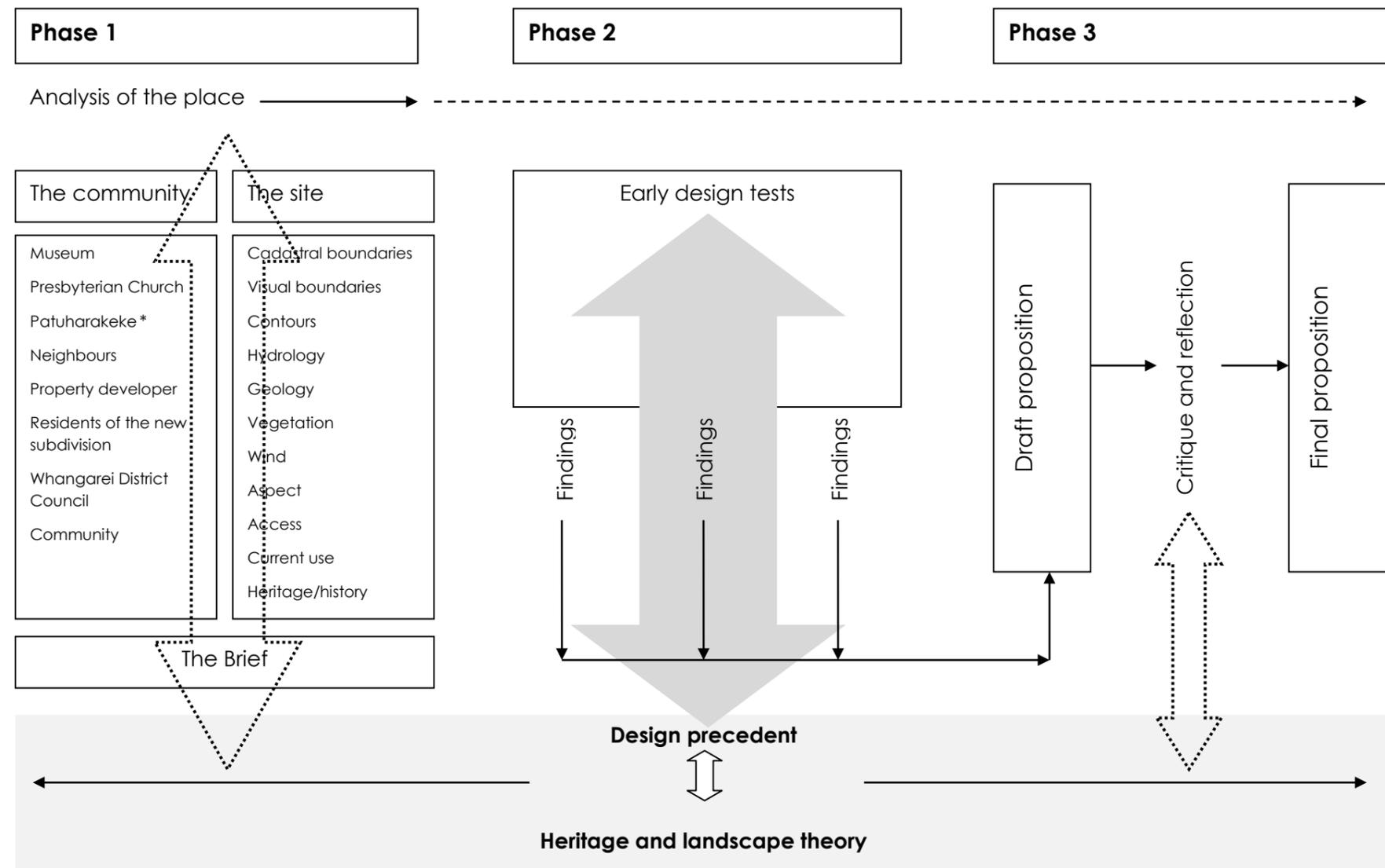
- To identify the types and roles of heritage present on the case study site, informed by the literature and consultation with stakeholders.
- To make the power relations in this site explicit and establish a self-conscious position for design practice within that network of relations.
- To test a theory of landscape in practice at this site, exploring how such a theory may relate to heritage and influence design solutions.
- To identify and analyse relevant design precedents.

## 1.4 Methodology

The methodology is comprised of five intersecting streams of investigation:

- Analysis of the site
- A review of theories of heritage and landscape
- Conversations with the people of Waipu
- A review of relevant design precedent
- Iterative design development

Figure 1.1 Diagrammatic overview of the methodology and the intersecting realms of investigation.



\* Bream Bay tangata whenua

## **2. Introduction to the site**

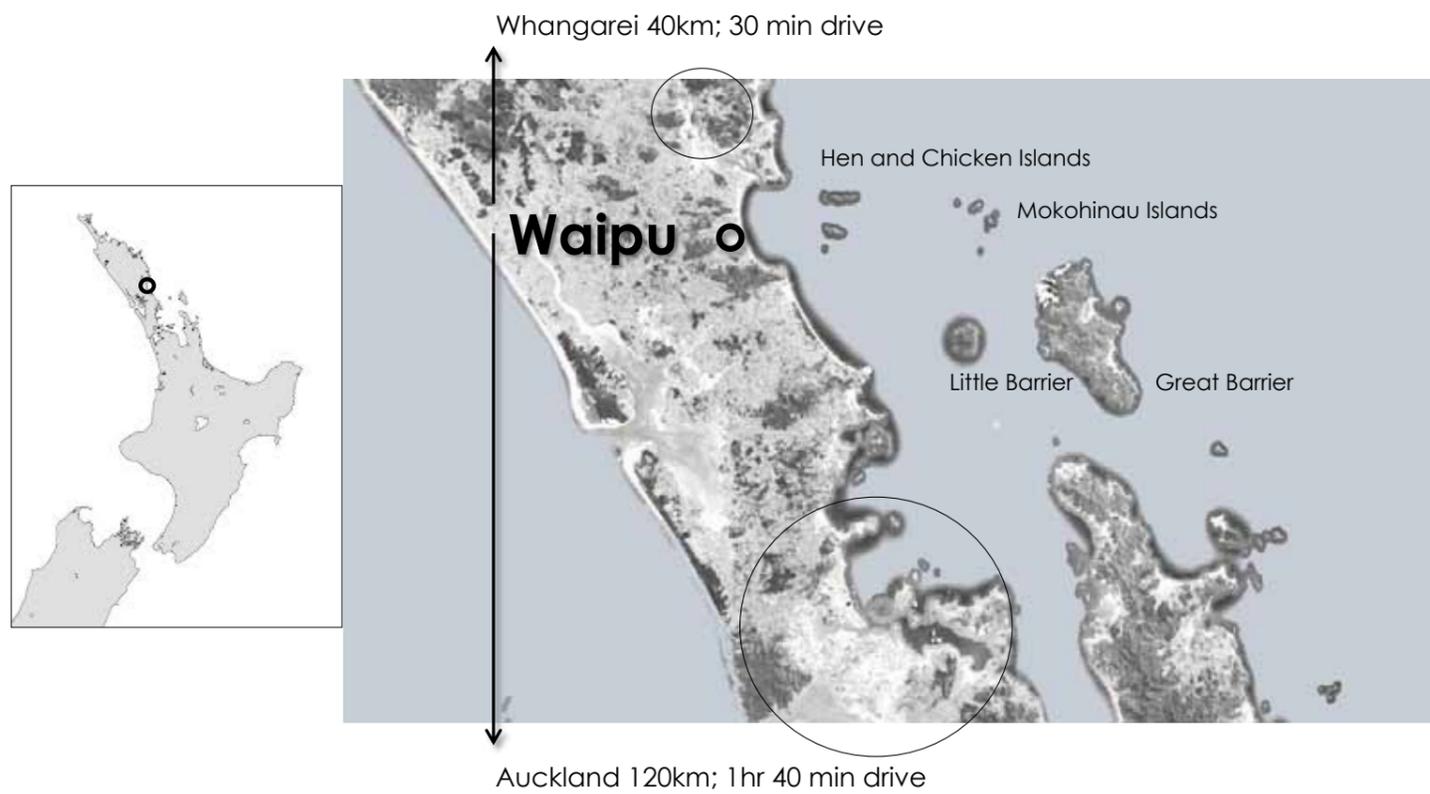
---

**Regional context**

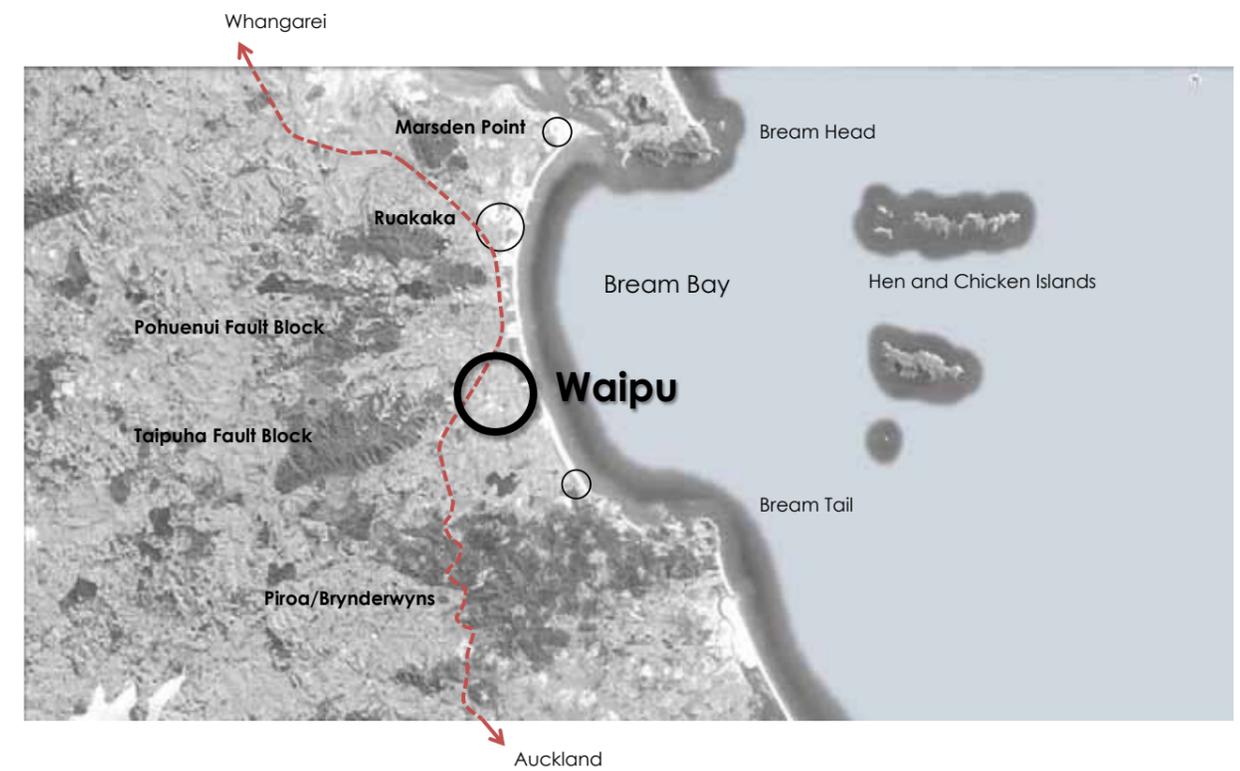
**Site context**

**Social and cultural context**

## 2.1 Regional context



Northland



Bream Bay

## Te rohe o Patuharakeke

Ko Manaia Te Maunga  
 Ko Te Rerenga Paraoa Te Moana  
 Ko Takahiwai Te Whenua  
 Ko Takahiwai Te Marae  
 Ko Rangiora Te Tupuna Whare  
 Ko Patuharakeke Te Hapu

Te Rerenga Paraoa  
 (Whangarei Harbour)  
 Mount Manaia  
 Takahiwai Marae

Manaia is the sacred mountain  
 Whangarei te rerenga paraoa is  
 the sacred waterway  
 Rangiora is the meeting house  
 Takahiwai is the marae  
 Patuharakeke are the people



Figure 2.3: The area of traditional control and authority claimed by Patuharakeke

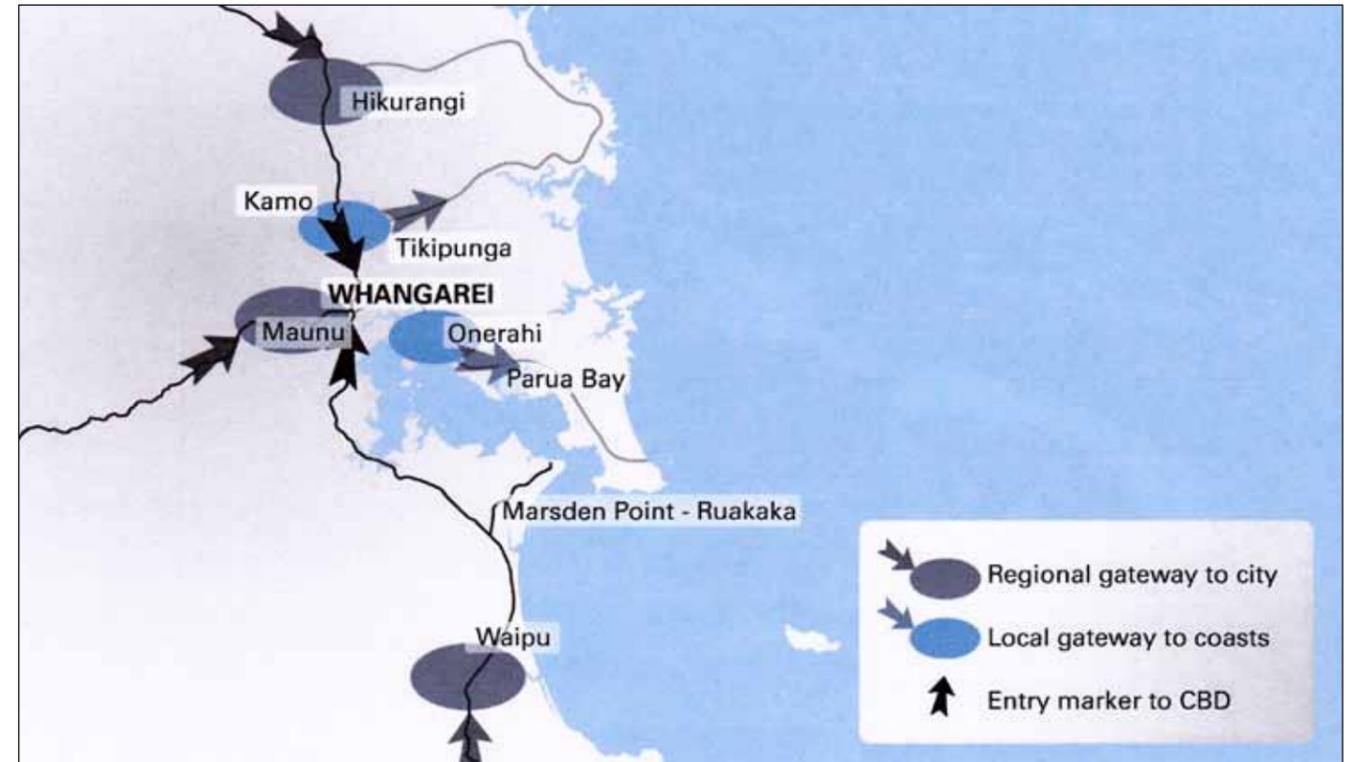
Patuharakeke are a composite hapu descended from most major iwi groups in the north, including Ngati Wai, Ngapuhi nui tonu and Ngati Whatua, and affiliates to a very large number of hapu. Located on the south side of Whangarei Harbour, the Patuharakeke rohe stretches on the seaward side, including foreshore and seabed, from Mangawhai Heads in the south to the entrance of the Mangapai River, just south of Whangarei. The boundary extends inland to include the Brynderwyn, or Piroa, ranges, the hill blocks surrounding Waipu and the Kakanui Ranges further west (Patuharakeke Te Iwi Trust Board (Inc), 2007).

In their statement of evidence to the Waitangi Tribunal Patuharakeke identify over fifty sites of significance in or around their rohe. Notable in relation to this project are the Waipu caves in the Pohuenui Fault Block, the Waihoihoi River that runs through Waipu, Uretiti beach and the whole of the Wangari (Bream) Bay coastal area known as Te Akau. In addition there are twenty-four recorded defensive pa in and around waipu.

## Whangarei District Council Urban Design Strategy

The Whangarei District Council's Urban Design Strategy, adopted in March 2011, identifies Waipu as one of several regional "gateways" to Whangarei. Although a key suburban centre directly accessible through State Highway 1, it is visually detached from the highway. It is very easy for visitors to pass by Waipu, creating on the one hand a challenge to attract visitors and function as a halfway town, and on the other an opportunity to develop as a compact mixed-use centre with high levels of pedestrian amenity and safety.

Waipu is one of several regional gateways. The Strategy identifies opportunity to develop legible markers to these gateway centres to increase visibility of each, and connectivity between. "Enhancing physical and visual connectivity will help increase legibility of the centres in terms of promoting the District as an attractive integrated destination rather than just an uncoordinated halfway place to Northland" (Whangarei District Council, 2011). This approach is very much in accord with current thinking within the Waipu community. The development of visitor amenities and a distinct village environment are increasingly seen by many in the local business community as essential to promoting Waipu's economic vitality.



2.4: Waipu represented as a "regional gateway" in the WDC Urban Design Strategy.

## 2.2 Site context

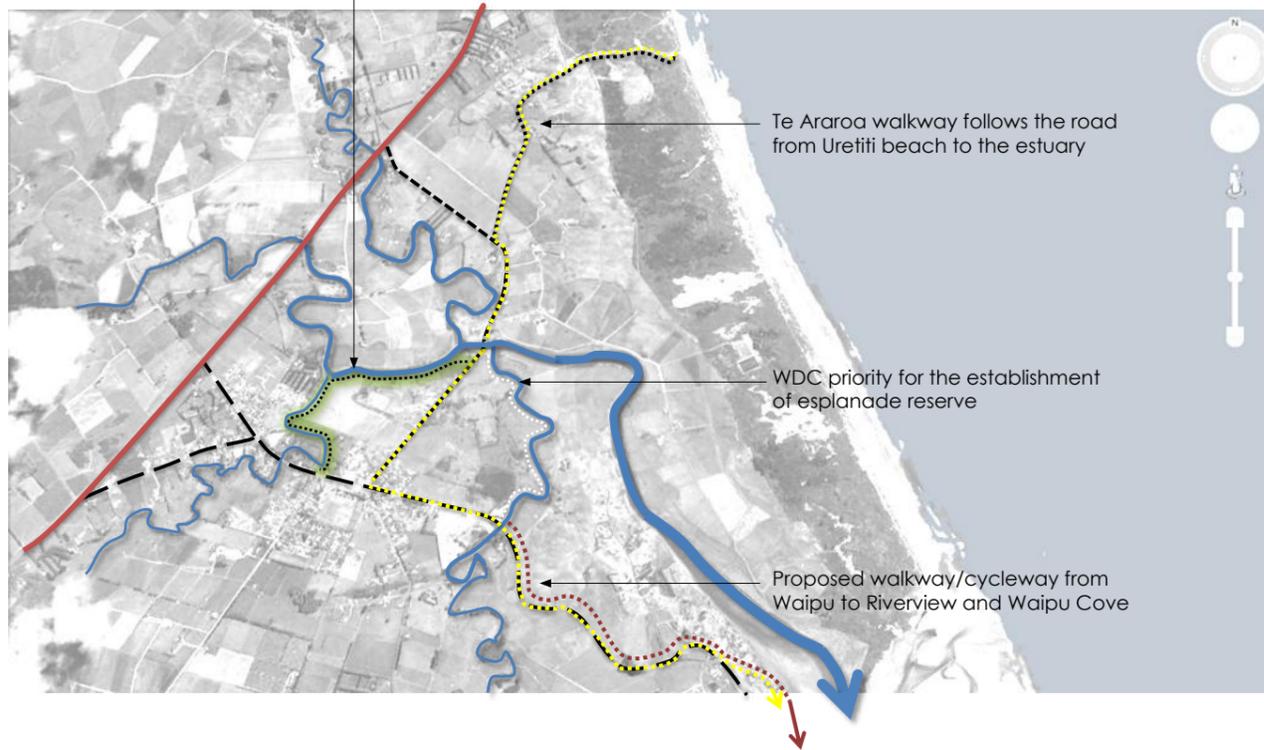


Roads



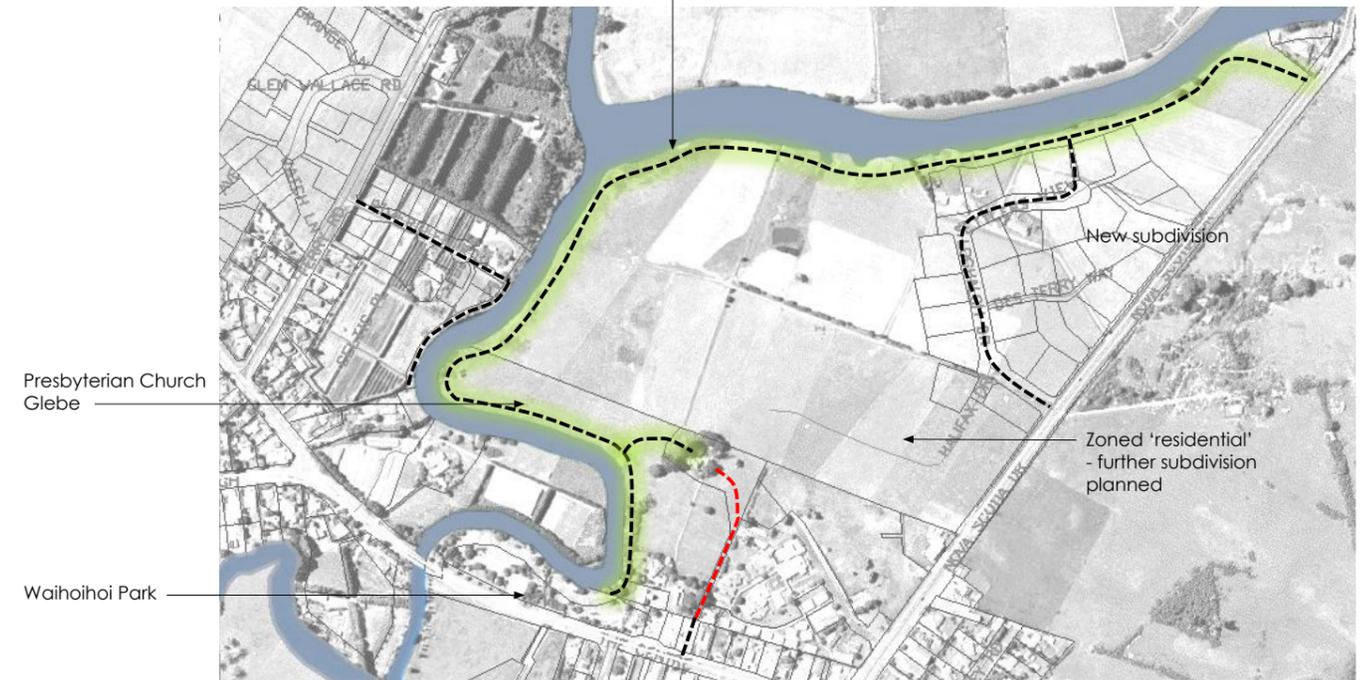
Rivers

Design project walkway site



Walkway/cycleway connections

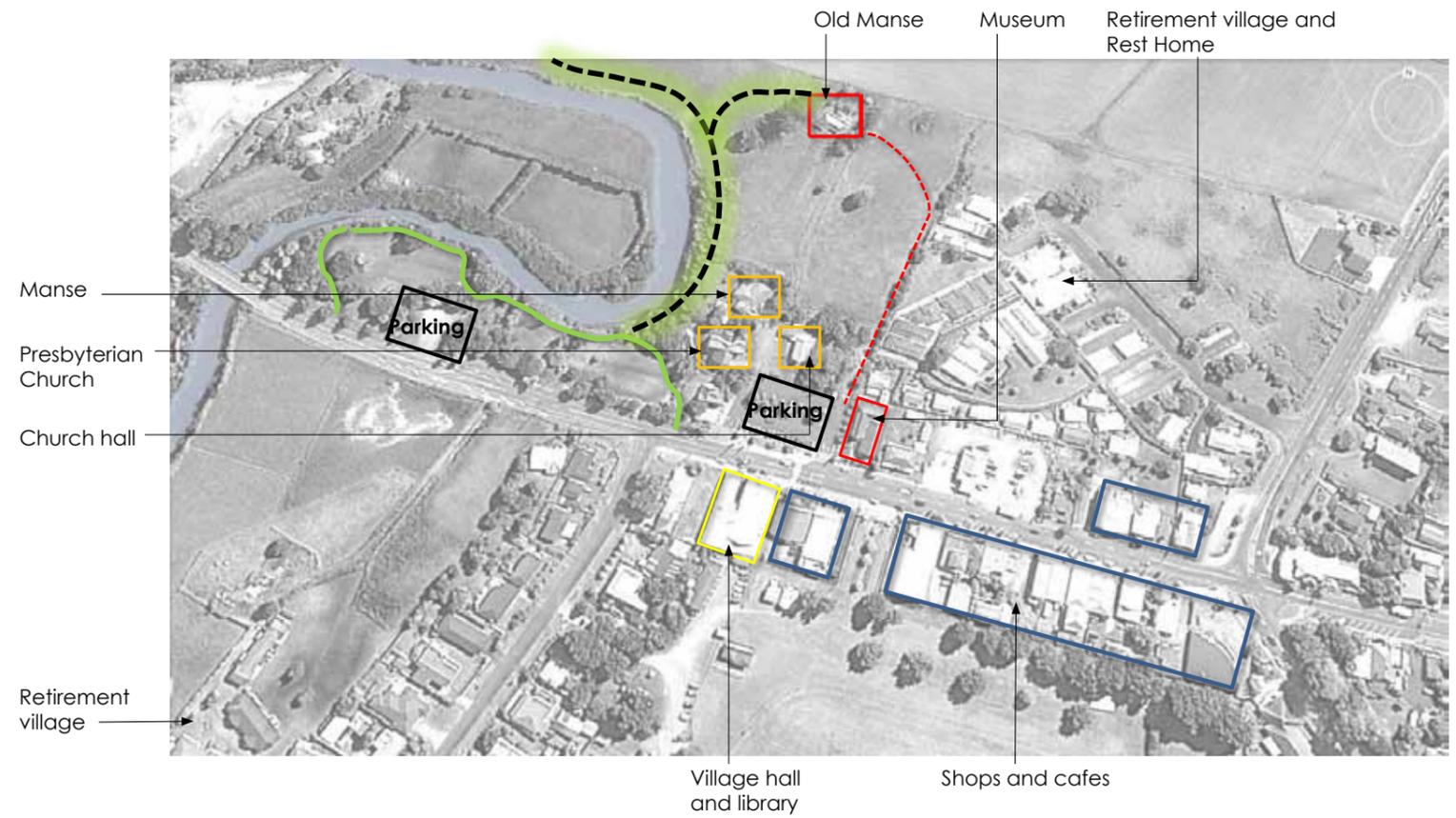
Design project walkway on esplanade reserve land



The site



Current land use



Connections to the village

## 2.3 Social and cultural context

### 2.3.1 Pre-European occupation

Pa sites and oral histories provide evidence that Maori occupied the wider Bream Bay area, including the Hen and Chicken Islands prior to European settlement (Gates, 2002; Prickett, 1984). Maori settlers left evidence of their gardens on the Waipu river flats in a pattern of drains that probably facilitated the growing of kumara in drained areas, and taro in the wet areas (Gates, 2002).

A large number of small archaeological sites on the Chicken Islands, including pa, terraces, midden and stone walls, but a lack of evidence of cultivation suggests occasional, perhaps seasonal, occupation. In contrast neighbouring Hen (Taranga) Island has extensive areas of walls, mounds, platforms and other stone features related to gardening, suggesting larger and less mobile communities (Prickett, 1984). The early settlers found evidence of over 20 fortified pa in the area, but all had been deserted or sacked over the previous 50 years. The nearest strong pa was probably on Limestone Island in the Whangarei Harbour (Gates, 2002).

Captain Cook's log of 25 November 1769 records the sight of fires in the night, indicating that the land of Bream Bay was inhabited, but by the time the Nova Scotian settlers arrived the land was to European eyes apparently "empty of human beings" (Gates, 2002). At least one commentator, quoted by Gates (p24), argued that a number of Maori people were actually living in the area, including for example some men who had fought with Hone Heke in the wars of 1845 and subsequently retreated from the vicinity of European settlements; others who maintained a claim to undivided possession following conquest by their ancestors in pre-European times. There is little doubt though that the area was only sparsely populated at the time it was allocated to the Nova Scotians in 1854.

In 1839 William Colenso counted 250 people in the area gathered to negotiate the sale of the whole area to James Busby, the then British resident in New Zealand. The Land Claims Commission set up in 1841 subsequently disallowed Busby's claim of ownership of the lands of Bream Bay, but it was re-purchased by the Crown for distribution to the Nova Scotian settlers (Gates, 2002).

However, debates about intensity of occupation is a particularly European perspective on relationships with land and fail to recognise a world view in which customary use and ancestral connections render identity and the land indivisible, and Patuharakeke has a claim lodged currently with the Waitangi Tribunal for compensation for alienation from their lands as a result of Crown actions.

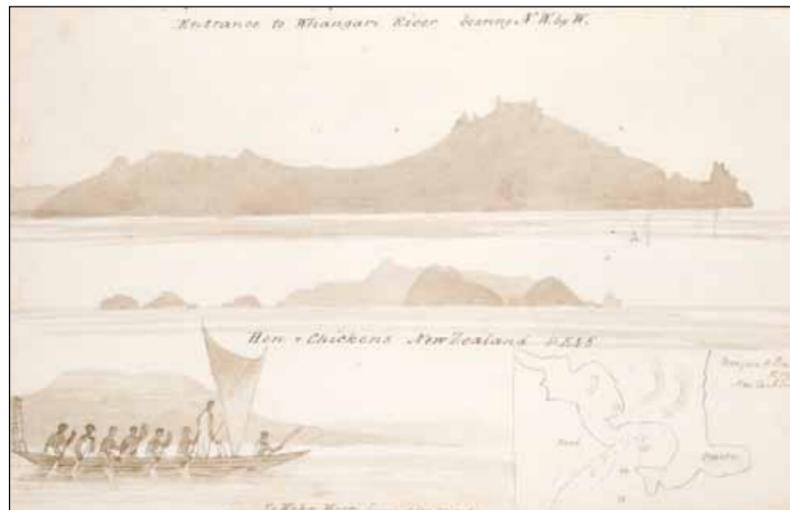


Figure 2.5 Whangarei Harbour depicted by Edward Ashworth, an architect who lived in Auckland from 1842 to 1844. At the top, is Manaia, situated on the northern entrance of the harbour, and below that, the offshore Hen and Chickens Islands. At the bottom right there is a map of Bream Head at the north-east entrance to the harbour.

([www.teara.govt.nz/en/whangarei-tribes/2](http://www.teara.govt.nz/en/whangarei-tribes/2))

## 2.3.2 Nova Scotian settlement

*"The Man...he led a group of men and women across the wide world from the Highlands of Scotland to Pictou in Nova Scotia to St Ann's on Cape Breton Island to Australia to New Zealand. The journeying took thirty-five years...It was like Moses in the Wilderness. It was done in the name of God."*

(Kidman, 1987 p20)

*"...we who were younger remembered how we had followed him from St Ann's across the sea, while our parents, the older ones, recalled the land before that, whence they had come with him.*

*From Assynt in Sutherlandshire...  
Lochalsh and Harris...  
Applecross and Skye.  
The names like litany in the room...*

*Then on to Nova Scotia, and from there to Australia, and the sicknesses, and the mad gold-diggers, and yet we still came, following him to the ends of the earth, forty years or near enough in the wilderness, like the men of old, but he led us to a safe haven..."*

(Kidman, 1987 p35)

The Nova Scotian settlement is an interesting sub-plot within the larger New Zealand migration narrative, different primarily because they migrated as an intact community, but similar in their motivation, characterised by Belich (1996) as a dynamic tension of "push and pull". A powerful push came from Highland Clearances, following the Battle of Culloden in 1746, during which time the people of the Western Highlands were dispossessed of their homes and livelihoods by their landlords who sought to replace their tenants with sheep and deer. Into this turmoil came the "pull" factor – the leadership of Norman McLeod, one of many lay preachers known as "the Men" who rebelled against the liberalism of the established church and exhorted people to return to the principles of Knox and Calvin (Molloy, n.d.). In denouncing all he perceived as being responsible for the plight of the Highlanders, he also offered a way out – re-establishment of kin-groupings in a more favourable economic and political climate, with a sense of mission in an adherence to a strict moral code. "To the oppressed people of the Western Highlands Norman McLeod became an inspiration, a nineteenth century prophet with a message of hope" (Ryan, 2002). There was also a normalising social context for migration: many families were leaving over this time, primarily to North America – the land of opportunity.

McLeod, with some 400 kin and followers emigrated to Pictou, Nova Scotia in July 1817. However, conditions were not to the moralistic McLeod's liking (Ryan, 2002), so in pursuit of McLeod's particular vision of Utopia, his kinfolk and converts sailed toward Ohio in 1819. They found shelter at St Ann's on Cape Breton Island, and impressed by the bounteous fishing decided to stay (Molloy, n.d.). The typical pattern of chain migration followed – friends and family from Pictou and Scotland joined the trailblazers, and a number of small communities built up around the charismatic McLeod. His leadership as a preacher, teacher and magistrate is credited with the success of St Ann's as a "sober, industrious, orderly settlement" (Molloy, n.d.).

McLeod and his followers stayed at St Ann's for 31 years, and may never have moved but for a second round of privation and promise. Increased population put pressure on the land and in 1847 crops failed due to potato blight and wheat rust; and in 1848 McLeod's son, who was living in Australia sent glowing reports of the quality of life there (Molloy, n.d.; Ryan, 2002). Two ships they built themselves sailed to Australia, arriving in April 1852 at the height of the Victorian gold rush. They found land prices exorbitant; a number of the group, including three of McLeod's sons died in a typhoid epidemic, and we can imagine that gold rush society was less than godly. An extensive search for suitable land upon which to settle took them to New Zealand and then to Waipu, having been granted "waste-land" by the Provincial Government. The first group stepped ashore here in September 1854. "After three years with no fixed abode Waipu must have indeed appeared to that pilot group as an answer to a prayer" (Ryan, 2002). A further four ships sailed from St Ann's to Waipu, the last arriving in 1859. Over 800 people took part in this migration. In 2002 the Waipu House of Memories estimated the number of descendants at over 75,000.

### 2.3.3 Nova Scotians in Waipu today

*Here we tell the story...of an extraordinarily powerful leader, "The Man", Norman McLeod...and an equally extraordinary community of Gaelic speaking people who triumphed over injustice and extreme hardship.*

*It is the story of determination, faith, hard work and loyalty...of a people who valued education, were multi-skilled and adaptable...they sought shelter, plain food, choice of worship, the right to their language, the enjoyment of kinship and community...*

*Those that remained in Waipu have ensured the continuance of a very special community and the safeguarding of a unique heritage that binds the hearts of all who share in it."*

*(Waipu Museum)*

*"...shared mythology is ultimately more pervasive and powerful than history..."*

*Michael King (2003, p41)*

Comparing the 1953 centennial celebrations in Waipu with the 2003 sesquicentennial celebrations Stolwerk, Powell, Langsford and McKenzie (2002) note the changes evident in Waipu. In 1953 celebrations were run almost entirely by descendants. The House of Memories was erected to honour and preserve the memory of the forefathers, and in the name of 'independence' the centennial committee declined a subsidy to assist its efforts and only grudgingly and belatedly accepted offers of support from non-descendants (Stolwerk et al, 2002).

In 2003 almost half of the Waipu 150 Trust were 'not of the boats'. The Waipu Heritage Centre explicitly retains the role of protecting the Waipu heritage but that is not now its only role. The museum extension rested heavily on assistance from all quarters, including the Lotteries Grants Board, which fifty years earlier could not have been countenanced by staunch Presbyterians for whom gambling was a sin (Stolwerk et al, 2002).

The congregation of the Presbyterian Church provides another example of the waning of the direct influence of the descendants. In 1950 the congregation would have consisted of about 80% descendants, by the turn of the 21st century it would have been no more than 5% (ibid p 87). The Reverend Paul Norrish, who was the Presbyterian Minister in the mid to late 1980s described at that time "a quiet revolution" taking place. "...the settled, long-established community was being silently invaded by 'out-of-towners' ...Each new family brought with them their own personal history as well as, sometimes, different values and expectations of small town rural living. This inevitably impacted on the life of the church." (Faulknor, 2002 p101).

Such change also impacted on the larger community. In 2002 descendants still farmed approximately half of the original Waipu land grant, but there was not a single Nova Scotian in business in The Centre. Although there are estimated to be more than 70,000 descendants of the original settlers, probably only 10% of Waipu can claim Nova Scotian ancestry. "With this dilution, and with the growing diversity of Waipu, the passion and occasional insularity of the descendants of 1953 has inevitably been replaced with milder sentiments and greater inclusiveness" (Stolwerk et al, 2002).

### 2.3.4 Demographics of the Waipu community

Waipu is in general older, whiter and a little wealthier than Northland as a whole.

- 1,500 people lived in Waipu in 2006, an increase of 17.5% from the 2001 Census. Assuming the same rate of growth about 1700 reside there now.
- 24.5 percent of people in Waipu are aged 65 years and over, compared with 14.5 percent of the total Northland Region population.
- 15.9 percent of people are aged under 15 years in Waipu, compared with 23.4 percent for all of Northland Region.

Ethnicity:

| Waipu           |       | Northland       |       |
|-----------------|-------|-----------------|-------|
| European        | 82.2% | European        | 68.0% |
| Māori           | 12.0% | Māori           | 31.7% |
| Pacific peoples | 1.7%  | Pacific peoples | 2.7%  |
| Asian           | 2.9%  | Asian           | 1.9%  |
| Other ethnicity | 12.4% | Other ethnicity | 11%   |

- 18.0 percent of people in Waipu were born overseas, compared with 14.2 percent for Northland Region as a whole.
- 4.0 percent of people in Waipu speak Māori, compared with 9.8 percent of people for all of Northland Region.
- 14.5 percent of people aged 15 years and over have an annual income of more than \$50,000, compared with 13.0 percent of people in Northland Region.

(Statistics New Zealand 2006 Census)

## 2.3.5 Heritage manifest in the design site



There are few sites of historical significance on the design site itself. The site of the first landing by the Nova Scotian settlers is uncertain, the site shown being the one recounted by one community member. Older members of the community recall, with much more certainty and agreement, the location of the dairy factory, which was central to the farming community and the economic life of the area. The ferry, located at the end of Ferry Road, was key to connecting families on different sides of the river. The existing boat club and boat ramp is on the site of the original wharf, significant in the memory of locals as the place where the scows came in carrying passengers, and all the supplies necessary for the growing settlement. Rivers, harbours and waterways were the main arteries for transport and trade up until the mid 1900s so the river itself is historically significant.

Whilst Patuharakeke have oral and written records of their history in other parts of Bream Bay, there are no identifiable places on the design site that specifically signify Maori occupation. However, the Waihoihoi River is specifically identified as a place of significance on the design site.

# **3. Theoretical framework**

---

**Heritage**

**Landscape**

**Walking**

The purpose of this chapter is to consider firstly some theories of heritage and landscape, to inform understanding of the particularities of the design site as they are revealed in the conversations with the community and the site analysis, and to inform the development of integrated design strategies that respond to considerations of heritage and landscape on this site. Secondly, this chapter reviews theories of walking and the relationship between walking and landscape to inform the purposeful design of a walkway in this site.

## 3.1 Heritage

### 3.1.1 Definitions of heritage

Heritage is a term that is simultaneously heavily freighted with meaning, and so loosely used that it risks becoming meaningless. In relation to landscape there may be a tendency, at first glance, to think only of built forms, material objects, historical narratives associated with place and scenic qualities as heritage concerns. Current landscape design practice frequently hones in on the expression of narrative associated with the design site to reflect, or promote, a sense of place. However, a review of the literature indicates that heritage is complex, layered, and dissonant ground.

Different writers explore the meaning of heritage from different perspectives, resulting in differing emphases, but a consensus emerges that heritage is created, or invented, by people (Graham, Ashworth, & Tunbridge, 2000; Howard, 2003; Stephenson, 2010). Things from the past do not become heritage unless they are identified as such. This perspective puts the emphasis on people and the notion that people collect, commemorate, protect and preserve things, people and places for some perceived benefit to themselves or others. This in turn points to both the purposeful and the unstable nature of heritage. If people create heritage it follows that people also de-construct heritage; it is not necessarily stable over time, and all that is identified as heritage today will not be so in the future. From this perspective it is more useful to think of heritage as a process rather than a product.

Graham et al (2000) put a particular emphasis on heritage as the “contemporary use of the past” (2000, p. 2). In making a distinction between the past, history and heritage, they say that when “we focus on the ways in which we use the past now, or upon the attempts of a present to project aspects of itself into an imagined future, then we are engaged with heritage” (Graham et al., 2000, p. 2). In other words the present needs of people are key in the identification or creation of heritage, and in the construction of heritage as a means of cultural representation.

Serving the needs of people in the present heritage is created and managed for a range of contemporary purposes (Graham et al., 2000) most notably to establish or describe identity and foster group pride (which may deliberately or inadvertently exclude others), and to make profit as an economic commodity (Graham et al., 2000; Howard, 2003). Heritage as a commodity is well illustrated in many places in New Zealand. Oamaru markets itself as “A Victorian Town at Work”; Napier presents itself as the “Art Deco Capital of the World” (McLean, 2000); since early colonial days Rotorua has used Whakarewarewa to market itself as the centre of Maori culture. McLean notes that businesses and local authorities appropriate history or invent new pasts for communities in order to use heritage as a point of differentiation in the tourism market, and that “heritage marketing is often free of the contagion of authenticity” (McLean, 2000, p. 216). This latter is an historian’s particular perspective. Since heritage is something different from history and the present needs of people are central to the definition of heritage, an objective historical past (if such a thing can be said to exist) is not a precondition for the creation of heritage (Graham et al., 2000). However, it must be said that as in most human enterprise the creation of heritage can be done well or badly, and for the benefit of many or a few.

Benton and Cecil (2010) emphasise the relationship between heritage and memory. It is well argued in both the heritage industry and the landscape realm that buildings, objects, places and things enshrine memory. But memories require remembering to survive across generations (Benton & Cecil, 2010, p. 25), hence we see the role of heritage sites, memorial sites and monuments as memory prompts; as mediators for collective remembrance. The rituals of Anzac Day at national, local community and individual levels are a most powerful expression of the relationship between heritage sites, memory and behavioural practice. The re-invention of Anzac Day in the nation's consciousness has changed, or re-charged the meaning of cenotaphs and WW1 memorials for post-war generations as they have become gathering points for re-invigorated communal rituals, practices and story-telling.

Sites of commemoration are designed at the outset to carry meaning, to do the work of remembrance, but over time repeated acts of remembrance ascribe cumulative layers of meanings and value. At an individual level, in the context of the heritage of the home, repeated viewings of photograph albums, for example, has the same cumulative effect. The Vietnam Veterans' Memorial, dedicated in 1982, provides an interesting example of the power of the accumulation of shared meaning such that it now mediates collective and individual remembrance in the abstract through scaled down representations in other towns, several travelling versions, and even a web-based virtual wall. There is an essential and necessary dislocation between most war memorials and the sites of the events of war and the places where the dead are buried, but these replica versions of The Wall add another layer of dislocation that emphasises the extent to which memorials become keys to the imagination.

Smith (2006) argues that all sites and objects we identify as "heritage" are constituted through the processes of human behaviour. None are inherently valuable or innately meaningful. What makes them meaningful are the "present day cultural processes and activities that are undertaken at and around them. It is these processes that identify them as physically symbolic of particular cultural and social events, and thus give them value and meaning" (Smith, 2006, p. 3). From this perspective the dichotomy of tangible and intangible heritage is not useful. She does not dismiss material heritage but she de-privileges it as the self-evident form and essence of heritage.

If we think of heritage in this way, "not as a passive process of simply preserving things from the past...but an active process of assembling a series of objects, places and practices that we choose to hold up as a mirror to the present, associated with a particular set of values that we wish to take with us into the future" (Harrison, 2013, p. 4) then it is best seen as a process emerging from relationships between people, objects, places and practices in a temporal frame. From this view of heritage, articulated or implied in the various definitions above, emerge themes of intangibility; identity and belonging; memory and remembering; performance and practices; place; and dissonance and contestability (Smith, 2006).

### 3.1.2 The politics of heritage

Understanding that heritage is invented by people takes one inevitably to a consideration of the politics of heritage. That heritage is constructed through the frames of class, gender, race, ethnicity, and nationalism is well documented (Howard, 2003; Graham et al, 2000; Hack, 2010). As a consequence all heritage is imbued with power relations; it is almost always contestable. The study of heritage inevitably encompasses the question, whose heritage? What is identified as heritage and how is it interpreted?

The definitions of heritage typically reflect the stories, interests and identities of the dominant culture and ethnicity. The ways in which the heritage of indigenous peoples has been marginalised by colonisation is a potent and relevant example (Graham et al., 2000). To various degrees, in a post-colonial world, this is being redressed, and just as heritage has been used to present a consensus version of history and to support a sense of superior identity, so it may also be used to challenge and redefine received values and identities (Goss, 2014; Smith, 2006). In New Zealand we can see how Maori claims to a unique identity have been expressed through, for example, the revival of te reo Maori, and the re-presentation and validation of traditional forms of art and cultural practices.

Concomitant changes in perspective on colonial processes call into question the legitimacy of settler heritage. New Zealand's colonial narratives of settling in "empty" landscapes are now seen as representative of the failure of a settler society to acknowledge the pre-existing presence of indigenous peoples (Byrnes, 2000; Ruru, 2010; West & Ndlovu, 2010). Mythologizing of the new land, projections of the homeland onto the unfamiliar landscape, and the creation of collective memories and narratives about "here" and "there" are now seen as the dynamics of selective remembering and forgetting that communities typically use to establish a sense of belonging (Ruru, 2010; West & Ndlovu, 2010). Similarly we now recognise colonial narratives about misused or unused land as a failure to recognise alternate concepts of land as a resource and justification for taking possession of new land (Paludan-Muller, 2010; Ruru, 2010; West & Ndlovu, 2010). These linked processes of appropriation, reclamation, and disinheritance "emphasise that the nature of heritage is intimately related to the exercise of power, heritage being part of the process of defining criteria of social inclusion and – by extension – social exclusion" (Graham et al., 2000, p. 34).

The hegemony of a dominant heritage is not necessarily complete or immutable. The designation of heritage, the identities of those who recognise it and those who don't, and the emotional experience of disinheritance are all subject to shifts over time. Heritage dissonance occurs when there is a mismatch between heritage and people in space and time (Graham et al., 2000). Multi-cultural diversity is most commonly at the root of heritage dissonance, where changes in population introduce new value systems through which heritage is perceived, and sub-ordinate voices seek to express their own heritage values and narratives in their quest to assert their unique identity. Chinese New Year celebrations and the annual Diwali Festival in Auckland can be seen as part of a process by which migrant groups negotiate with both themselves and their adopted society new ways of being and being seen.

The most potent examples of heritage dissonance come from societies divided by conflict and atrocity. The re-conceptualisation of former Nazi concentration camps and Robben Island where black activists were held prisoner during the apartheid era, must be amongst the most difficult resolutions of heritage dissonance attempted (Davis & Corsane, 2014; Graham et al., 2000). The Memorial to the Murdered Jews of Europe, discussed in Chapter 6 is an example of landscape architecture's engagement in this very fraught resolution process. This work has attracted criticism both for *being* a memorial and *as* a memorial. Critics have argued that the Jewish and non-Jewish remembrance of the holocaust is very difficult to unite; that there is insufficient consensus on what must or should be remembered and what might be forgotten; that the authentic sites where crimes were committed are more powerful, meaningful and important than the constructed site; that the lack of any representation of who died and by whose hand disconnects the work from its memorial functions. Others argue that it is the very abstraction of the site that most powerfully conveys the horror of the holocaust; that it stands legitimately between representation and imagination.

However, it is important to note that although a reworking of the meanings of the past may be difficult, and acts of remembering may be selective and therefore destructive by omission, it is possible for collective memories to shift and change in response to new community circumstances (West & Ndlovu, 2010), and it may be that the debates that are generated by landscapes such as the Vietnam Veterans' Memorial and the Memorial to the Murdered Jews of Europe are an essential part of the reconciliation process. From their analysis of a range of heritage and landscape initiatives, of which the re-invention of Robben Island is one, Davis and Corsane (2014) conclude that amongst the keys to success is a democratic process that encourages dialogue between local people in order to promote a better understanding of the changing values and meanings associated with heritage and cultural landscapes.

### 3.1.3 Landscape architecture and heritage

All heritage is spatial; it occurs somewhere; places will have more or less depending on, for example, the denseness of the history of the site, the historical events that occurred there, the survival of structures and artefacts or the rarity of artefacts, the breadth and intensity of cultural and social practices that are built around representations of the past. Places will have heritage at different scales – family, local, regional, national and international. Since heritage is selected and created by people, and it is intrinsically linked to particular places, the “sense, or more usually senses, of place is both an input and an output of the process of heritage creation” (Graham et al., 2000, p. 4).

A “sense of place” is an idea that has a great deal of currency in landscape architectural practice. As the construction or reinforcement of identity is a major motivation for the creation of heritage, and heritage is located in “place”, it becomes a principal instrument for shaping distinctive local representations of place. Thus a relationship between heritage and landscape architecture may be forged in practice on a site by site basis, converging in a shared interest in the connectivity between people, landscapes, experiences and things.

Heritage is inextricably linked with broader social, political, economic and environmental concerns, all of which are, to a greater or lesser extent, legitimate concerns for landscape architecture when engaged in public work. The convergence of these realms of human concern is mediated through power relations, and power relations are of legitimate concern to landscape architecture. Power always has cartography; spaces and buildings project more or less authority; they are more or less disempowering or inclusive (Crane, 2014; Massey, n.d.). Built form may say more about keeping some people out than fostering a community within.

Landscape architects cannot in practice stand outside the dynamics of power relations inherent in all manifestations of heritage. Engagement with heritage requires landscape architecture to look beyond material manifestations of heritage in a particular context, to understand the ways in which the past is being produced in the present, the uses to which it is being put, to the benefit of whom. If we consider the design of public space to be a civic enterprise then we must consider some degree of democracy in the basis of design, and the landscape architect must be challenged to understand his/her role and influence as an agent in the system. In this approach the designer is not an external, objective interpreter of the heritage related to the design site; design cannot simply “reflect” a narrative or a heritage story. The acts and processes of landscape design necessarily engage with people, places, objects and practices, and necessarily therefore become part of the process that generates heritage. Consciously or unconsciously landscape architecture engages with political and social concerns when it engages with heritage and “sense of place”. The argument proposed in this thesis is that this engagement should be conscious; that the landscape architect must understand the position she is taking in relation to the politics of the heritage of a design site, and be deliberate in her design decisions in relation to the social, cultural and political dynamics that underpin the notion of heritage. As landscape architecture engages with heritage on a site-by-site basis it is not possible to say what position it should take in principle in relation to, say, suppressed narratives or disinherited voices. Other stakeholders, not least the client, are also agents in the socio-political system that generates heritage and will influence the engagement between design and heritage. But it is possible to say that it must take a conscious position. Finding that position and the design processes and decisions that follow is part of this design research.

### 3.3 Landscape

*"Landscape is loud with dialogues, with story lines that connect a place and its dwellers..."*  
Ann Whiston Spirn

Landscape architecture and heritage intersect both in theory and practice in several overlapping ways. There are clear analogies between heritage and landscape. Both heritage and landscape can be interpreted in terms of cultural representation (Abbott, Ruru, & Stephenson, 2010; Corner, 1999); both are heavily implicated in the concept of identity and sense of belonging, though the discussion is complex and contested (Abbott, 2010; Graham et al., 2000; Kirby, 1996; Stephenson, 2010). They converge on views of landscape as culture and as a canvas for memories, and memory and memorialisation as organising principles in landscape design is well documented (Trieb, 2009). Landscape is itself one of the major categories of heritage; heritage conservation is considered by some to have started with landscape (Benton & Cecil, 2010; Graham et al., 2000), and all heritage occurs somewhere, so an understanding of what is meant by "landscape" and how such understandings might inform representations of heritage and design on this site is relevant.

Discussion about national and cultural identity of Pakeha and Maori in New Zealand almost always invokes reference to the land and landscape as being central to the histories of both, though each view the land in very different ways (Byrnes, 2000; Abbott et al., 2010). The Te Aranga Maori Cultural Landscape Strategy (2006) describes the interconnectedness that is at the heart of Maori perspectives on landscape. "As Maori we have a unique sense of our cultural landscapes. It includes past, present and future. It includes both physical and spiritual dimensions. It is how we express ourselves in our environments; it connects whanau, whenua, awa and moana through whakapapa. It includes both urban and rural, it is not just where we live it is who we are".

Pakeha relationships with the land have been more ambiguous. On the one hand, landscape as scenery has been used to market New Zealand to tourists since colonial times. New Zealand landscapes were celebrated for their naturalness and distinctiveness, their difference from the old world (Byrnes, 2000; Kirby, 1996). This emphasis on "scenic" New Zealand sprang in part from the concepts of landscape that the settlers brought with them. The artistic concept of the "picturesque" was powerful at the time of European colonisation which helped to shape how settlers saw the landscape. The notion of landscape as scenery creates a particular relationship with people; it places landscape outside of human occupation; it is "out there", a pre-given material reality to be observed from a detached distance (Abbott et al., 2010).

On the other hand, Pakeha have seen the land as a resource over which control and ownership must be asserted, giving rise to the so-called "colonial landscape" characterised by changes in vegetation, fields replacing forests, and the delineation of boundaries through which the social order is made visible (Byrnes, 2000; Jackson, 2002). Boundaries structure human relationships. They define both inclusion and exclusion; they create neighbours and keep out strangers. They transform an amorphous space into a human landscape that reflects the cultural assumptions of people (Jackson, 2002). That it was not actually a boundless land – Maori had defined territories and negotiated boundaries – is part of the point. They weren't boundaries the settlers could "see". These two conceptions of landscape demonstrate the ambiguous nature of Pakeha identity with the land - on the one hand valuing the unbounded natural wilderness, on the other fixed boundaries and controlled productive space.

These conceptions of landscape reflect the dualism of "natural" and "cultural" landscapes that has, problematically, characterised the landscape discourse. Ingold (cited in Stephenson, 2006, p.11) describes the debate as "the sterile opposition between the naturalistic view of the landscape as a neutral, external backdrop to human activities and the culturalistic view that every landscape is a particular cognitive or symbolic ordering of space". Corner (1999) argues that the dichotomous nature/culture view of landscape has fostered a "growing contingent that believes that landscape concerns ought to be directed solely toward the stewardship of the natural world...A culturally ambitious landscape architecture that does not revolve around ecological concerns is often construed by environmentalists as belonging to the domain of elitist and intellectual art practices..." (ibid p.3). The rise of the heritage movement and the ascribing of heritage status to "natural" landscapes has to some extent reinforced the notion of a cultureless natural world.

Two perspectives on the heritage value of landscapes emerge from these divergent views of landscape, one being predominantly associated with scenic, aesthetic and ecological values, the other being predominantly represented by the histories, stories and meanings in the land resulting from occupation and culture. Two kinds of relationships between heritage and landscape result. The first is landscape *as* heritage, in which a landscape is imbued with, or has ascribed to it, a weight of cultural value/s such that the preservation and conservation of its qualities is of paramount importance (Abbott, 2011; West & Ndlovu, 2010). Tourist promotions for New Zealand National Parks talk about protection of our most treasured wilderness, dramatic and beautiful parts of the

country, majestic mountains and ancient rainforests – the language of the picturesque. Visitors are required to be appreciative observers, to add nothing to the landscape; to be both present and absent. The other is heritage *in* the landscape, most obviously seen in the signifying and naming of places and objects with fixed spatial locations. These require visitors to engage with contextual representations of cultural artefacts, rather than engagement based on “embodied practices” (Abbott, 2010). In both forms of the heritage/landscape relationship people’s opportunity to be part of the landscape is diminished or interrupted.

Contemporary approaches to landscape have moved away from these dualisms toward more multi-layered understandings (Stephenson, 2006). Berberich, Campbell and Hudson (2012) describe landscape as “not one thing, but always multiple and connected relationally to a host of other cultural and political concerns. They refer to Daniels who wrote of the “duplicity of landscape as a cultural term, carrying meanings of surface *and* depth, solid earth *and* superficial scenery, natural *and* cultural, the ontological *and* ideological” (Berberich et al., 2012, p.19). The idea of an objectifiable nature that is external to culture is largely rejected in contemporary discussion. Similarly the idea of landscape as a product of culture has given way to the idea of landscape as an agent of culture. Interest has turned toward landscape as verb, rather than a noun, in which the focus is on landscape as process or activity, on what the landscape does and how it works (Corner, 1999), and on its subjective and experiential aspects (Stephenson, 2006). Everyday life, embodied experience and the interweaving of people and place has become an integral part of the landscape agenda. Ingold (2000) expresses this as a “dwelling perspective” in which landscape is considered neither a stage upon which we act nor a site upon which we place cultural meanings. Rather it is a time-driven, living process. “It is through living in it that the landscape becomes part of us, just as we are part of it” (Ingold, 2000, p. 191). From this perspective meanings are gathered from the landscape, rather than attached to it, and the world is continually in the making, “processual and performative” (Berberich et al., 2012, p. 23). The landscape can thus be seen as a record of the dwelling of generations before who have left enduring traces of their lives and work. “It is through this process of dwelling in changing landscapes that traditions are formed. The meaning of tradition ...has its source in the very activities, of inhabiting the land, that bring both places into being and constitute persons as of those places, as local” (Ingold cited in Abbott, 2010, p. 37).

Stephenson’s Cultural Values Model posits some key conceptual devices that capture these dynamic, time-laden and interactive aspects of landscape (Stephenson, 2006). Out of her analysis of existing models of landscape and her work with the community of Akaroa she developed a model that proposes that landscape significance can be clustered around three components – forms, practices and relationships.

Forms are the physical and tangible aspects of landscape, including natural features such as landforms and vegetation; forms created by human intervention such as buildings; and features that are created from a mix of both such as farms, gardens and constructed wetlands. Practices are activities and processes associated with a landscape, including both human and natural processes acting in a continuum. These may include traditional practices, contemporary activities and ecological processes. The term relationship encompasses the meanings generated between people and their surroundings, evidenced through such things as stories, genealogies, art and naming.

Forms, practices and relationships are not static; each component influences the other in continual dynamic interchange over time, influencing how the landscape is perceived, occupied and valued. “The model suggests that a landscape’s surface values arise from a response to what is tangibly present, while its embedded values arise from knowledge or experience of a landscape’s past” (Stephenson, 2006, p. 14).

This is a compelling way to think about landscape for this project. Heritage in a landscape conceptualised in this way can be regarded as part of a living continuum of occupation and activities, rather than something static and objectified to be rendered into an interpretation panel. To approach heritage in the landscape in this way requires an understanding of the significance of the forms, activities and relationships to the particular community to whom the design site belongs. It may be that the forms of heritage are of less significance than the practices that have occurred, or the relationships that exist or have existed, in which case design may be less about form and the curation of heritage representations, and more about prompting the landscape performance (Abbott, 2006), “less a matter of appearance and aesthetic categories than an issue of strategic instrumentality”(Corner, 1999, p.4). This is an approach that makes time and process central organising principles in design.

## 3.4 Walking

We cannot think about walkway design without thinking a little about walking and how, as a cultural invention it intersects with landscape and heritage.

Walking is embedded in our evolution, our histories and cultures, our imagination, how we encounter the world and how we encounter our own bodies. We imagine life itself as a journey and our walking is a central metaphor in our language. We take steps, hit our stride, reach our milestones, until something blocks our path, or we reach a fork in the road, perhaps lose our sense of direction, go around in circles and struggle uphill. If we are lucky we find easy street, and avoid the road to ruin and the boulevard of broken dreams. When we actually walk we enter both a material and metaphorical, symbolic world. The pilgrimage is perhaps the most obvious conflation of walking and the symbolism of walking. Solnit (2000) describes the pilgrimage as uniting “belief with action, thinking with doing...that harmony is achieved when the sacred has material presence and location” (p.50). There is also a symbiosis between the journey and the arrival. The arrival has to be earned through trial and hard work and the transformation that comes with a journey.

The idea of the pilgrimage has evolved into a secular form of walking (Solnit, 2000). The 1975 Maori land hikoi, for example, brought together the iconography of the pilgrimage and the military march as a show of strength and conviction in an appeal to civic powers to end the alienation of Maori land. Fundraising walkathons such as the Oxfam 100km walk, are another contemporary mutation of the pilgrimage. The so-called “heritage walkway” converges with pilgrimage. In Waipu the heritage pilgrim can walk from plaque to plaque and stand where buildings once stood, where once something happened, imagination provoked to feel oneself there, a part of the narrative.

Walking is famously associated with philosophising, starting with the Sophists, Socrates and the Peripatetics (Roelstraete, 2010; Solnit, 2000). Rousseau portrayed walking as an exercise of simplicity and a means of solitary contemplation. Solnit (2000) notes that the “association of walking and philosophising became so widespread that central Europe has places named after it:...Philosophenweg in Heidelberg where Hegel is said to have walked, the Philosophen-damm in Konisberg that Kant passed on his daily stroll...” (p.29).

Wordsworth, also famously, composed poetry as he walked and is generally credited with appropriating walking as a form of art, out of a time when walking in public was regarded as the preserve of paupers or footpads. The development of recreational walking was a middle-class phenomenon of the second half of the 18th century, in which people took up walking by choice rather than necessity, and was increasingly undertaken in “natural” surroundings, outside the confines of the country estate. It was a democratisation of walking that went hand in hand with the rise of aesthetic, picturesque tourism (Haywood, 2012; Solnit, 2000).

Haywood argues that the process of walking “transformed space or wilderness into the place we today call the Lake District...” (Haywood, 2012, p.24). “...successive generations of artists, poets and tourists have followed one another, initially just around the Lakes, but soon up and over its fells and mountains. Whereas the earliest footpaths were products of necessity, desire lines determined by settlement and topography, later ones were a product of aesthetics...Whichever path is chosen one will follow the footsteps and boot-prints of innumerable others whose collective action has inscribed the walkers’ tracery that binds together the place we call the Lake District” (p31). The paths that inscribe the place of the Lake District also carry layers of cultural strata – deposits of meaning and narratives.

This integration of landscape, narrative and walking is perhaps most powerfully expressed by the Australian Aboriginal songlines. Bruce Chatwin describes the songlines as a tool for navigation, a map and a direction finder, and the landscape a mnemonic device for remembering the stories, a narrative. As long as you knew the song you could find your way (Chatwin, 1987). The Stations of the Cross are an example of how deeply connected landscape, narrative and walking can be, such that the narrative and the walking are now separated from the landscape with no loss of meaning. Originally a pilgrim’s walk from the the place where Jesus was condemned to the tomb in the cave where his body was laid, the Stations of the Cross became a formalised series of fourteen events in the walk, abstracted from the landscape and represented in art and walking in the ritual life of the church. “The time is past, the place is elsewhere, but walking and imagining are adequate means to enter into the spirit of the events” (Solnit, 2000, p. 68).

There are other kinds of walking. The Situationists came up with the idea of the derive in the 1960s, which now has something of an evolved life in psychogeography. Much oversimplified (politics, literature and performance art are all implicated) these are ideas about walking that emphasise drifting around in urban environments, creating inventive strategies for exploring cities that push people into new awareness of the urban landscape. Psychogeographical practice has less relevance for a rural site such as this, but the general idea of finding interest in the detail of the everyday world is relevant to a local walkway, and provides a counter to the picturesque idea of walking for scenery that is at the heart of much tourism promotion of our National Parks.

In our contemporary world walking is part of the consciousness of the body and physical fitness, and many people will go walking with this in mind. This is not to say that other elements of walking in a landscape do not become part of the experience, only that the motivation to walk in the first place comes from body-consciousness.

Finally, no review of walking in culture could be complete without reference to the reinvention of walking as art. Richard Long's poem below describes walking as a set of relationships between time, distance, measurement, and a way of looking at landscape. It affirms and validates the small experience, the vernacular; it is a reminder that the experience of walking is defined by the walker. Design can facilitate engagement with the site and make it more or less attractive for walking. But walkers come with predispositions shaped by culture and experience, and they will each construct their own narratives of their walking on this site, just as they will interpret and construct meanings for themselves regardless of designed intent.

This brief review of the histories of walking reveals a profound relationship between walking, culture, landscape and place. Walking is a powerful way of engaging with place, converging with heritage in the construction of belonging.

## **WHITE LIGHT WALK**

**RED LEAVES OF A JAPANESE MAPLE  
ORANGE SUN AT 4 MILES  
YELLOW PARSNIPS AT 23 MILES  
GREEN RIVER SLIME AT 45 MILES  
BLUE EYES OF A CHILD AT 56 MILES  
INDIGO JUICE OF A BLACKBERRY AT 69 MILES  
VIOLET WILD CYCLAMEN AT 72 MILES**

**AVON ENGLAND 1987**

**Richard Long**

# **4. Conversations with the community**

---

**Objectives**

**Methodology**

**Themes**

## 4.1 Objectives

The first objective of this research was to examine the perceptions and values that the local community hold in relation to their heritage. The second was to understand the connectivity between heritage, landscape, practices of living and people's sense of place and belonging.

Drawn from the theoretical framework, the research set out with three specific hypotheses to test:

1. The literal story of the Scottish migration holds little personal meaning for those who are not descendants but that the dominant heritage story is valued for the meanings that are constructed from it in the present; that those meanings are constructed through community activities and rituals; and these meanings are primarily about a sense of community, interdependence and belonging.
2. There are suppressed narratives.
3. People's perceptions of the qualities and values of local landscapes are derived from their activities and memories – their lives lived within the landscape.

The third objective, drawn from the view of heritage as a social and cultural process, was to understand the social and political dynamics within which design for this site would occur. From this understanding I could establish my own role as an agent within the system which would inform design decisions.

## 4.2 Methodology

The research involved holding three focus group discussions – one each with members of the Presbyterian Church synod, the Waipu Museum Trust Board and Patuharakeke Te Iwi Trust Board – and fourteen individual interviews with members of the community. The Presbyterian Church was selected as a key stakeholder because the walkway is to pass through land that, although designated as esplanade reserve land, has not been repatriated and is thus under the ownership of the church. As the faith community that has survived continuously from the initial settlement by the Nova Scotians it also represents the core of the heritage story. The Museum most markedly holds the role of “memory activist” in the community, and the responsibility for the renovation and care of the old Manse, which is invested with heritage values by some sections of the community.

Patuharakeke was selected for a focus group discussion for two reasons. Firstly, since the signing of the Treaty of Waitangi Maori have called for their perspectives on land to be appreciated and respected (Brynes, 2000). The 1991 Resource Management Act provides a legal and political response by requiring that anyone engaged in managing, developing, and protecting natural and physical resources must have regard to kaitiakitanga and the ethic of stewardship. Landscape architects are specifically required to recognise, consult and engage with Maori and the concept of kaitiakitanga. Secondly, as local iwi and tangata whenua Patuharakeke are conspicuous by their absence in village life. Based on my hypothesis that the Maori voice is suppressed by the hegemonic Nova Scotian story I made the decision that the research process should specifically include formal Maori representation. In this regard I took a position in the socio-political system at the outset.

I chose to use focus groups with the stakeholder organisations because they offer the opportunity for dialogue and interaction between the participants which generates useful exchange of ideas, and allows the researcher to understand the degree of convergence or diversity of views that are held within the organisation. The participants in each focus group were selected by the organisation, based on their own criteria, which were a mix of convenience i.e. who was available

at the time agreed; and expertise i.e. who in the organisation was seen to have knowledge and opinions about the topic; and interest i.e. who in the organisation was keen to participate. As part of the application for ethics approval I consulted with Unitec’s Dean of Teaching and Learning, Matauranga Maori, regarding the most appropriate way to approach Patuharakeke and to negotiate the formation of a focus group with them.

In order to gather the views of members of the community speaking for themselves as individuals I undertook fourteen individual interviews. Seven of these interviewees were selected randomly on the street one market day. The only criterion for inclusion was that they be resident in Waipu. Every fifth person passing was asked if they would like to participate, and if they met the criteria they were offered an interview there and then or scheduled for a later time. The rest of the sample was identified through word of mouth and reference in order to balance the sample between descendants and non-descendants, and ensure particular key stakeholders such as residents bordering the walkway and the subdivision developers, were included.

A structured set of open-ended questions was used for both the focus groups and the interviews. However, it must be noted that one of the features of the qualitative interviewing process is the readiness with which the interview can change direction affording the interviewer, and the interviewee, considerable freedom to explore new avenues that emerge. Accordingly a greater richness of data was gathered from some interviews than others.

As the project developed, and design tests were undertaken informed by the findings of my research, it became apparent that to ensure integrity of the design process a second consultation with Patuharakeke Te Iwi Trust Board was required. Accordingly the draft proposition for the walkway was presented to them for their critique prior to the last workshop, and design changes incorporated in response to their comments.

#### 4.2.1 The sample

The average age of participants was 57 years, the median 58. 66% were aged under 65 years, 34% aged over 65. Census data records the proportion of people in Waipu aged over 65 as 25%, so the older people were over represented in the sample. At 31% of the sample males were under-represented.

At 31% of the sample Maori were over-represented compared to the census. This distortion is the result of including the focus group members in the sample. In the individual interviews 14% identified as Maori more closely matching the census which records Maori as 12% of the Waipu population.

One quarter of the total sample were descendants of the Nova Scotian settlers. This is probably an over-representation, but ensured that particular views of heritage that descendants might be expected to hold would surface.

Of the total sample 21% were born overseas, 31% were born elsewhere in New Zealand, and 48% were born locally in Waipu or the immediate environs.

Table 4.1: Sample size

| Interview type           | No. of participants |
|--------------------------|---------------------|
| Church focus group       | 5                   |
| Museum focus group       | 4                   |
| Patuharakeke focus group | 6                   |
| Individual interviews    | 14                  |
| Total sample             | 29                  |

Table 4.2: Length of time people have lived in Waipu and/or associated with Waipu

|                | Time lived in Waipu - % of sample | Time associated with Waipu - % of sample |
|----------------|-----------------------------------|--|
| 0 years        | 20%*                              | 0  |
| Under 10 years | 17%                               | 10%                                      |
| 10-19 years    | 21%                               | 21%                                      |
| 20-39 years    | 21%                               | 14%                                      |
| 40+ years      | 21%                               | 55%                                      |

\* These are the members of the Patuharakeke focus group, all of whom were born and live locally but have not lived in Waipu. All have been associated with Waipu all their lives through such things as family connections, schooling, use of the beaches and participation in events. One is a descendant.

## 4.3 Themes

The interview data was analysed for dominant themes related to heritage, sense of place and belonging. The analysis is organised through the lens of heritage theory, but the concepts of heritage map to Stephenson's Cultural Values Model. Intangible heritage maps to practices, activities and meanings; tangible heritage maps to forms. In the discussion below I use the word "occupation" to refer to a subset of Ingold's notion of "dwelling" to capture the idea of occupying and using places within place. Accordingly the values and significance of heritage to this community can be integrated with landscape through the concepts of form, practices and meaning.

### 4.3.1 Identity and social values

*"It's about people working together...I don't think you've got a community if people don't work together."*

*"Something I found incredibly fascinating was when the old manse was being restored, and all those people came to do the work, and there was such a sense of community...and that's heritage, that's what they used to do ...they wanted to build a house, everybody helped. And we're doing it today, so the heritage lives on."*

*"The message that the Nova Scotians gave us was how they succeeded through cooperation...cooperative endeavour is a very powerful and important message forever."*

*"They've got a reasonable committee to put that (new community hall) in place, and as long as they keep going with the ideas that the community are putting forward, and make sure it's going to fit will all interested parties it will come together really well. That's the sort of stuff you really want to see keep going, that's where Waipu will keep thriving."*

*"...such an extraordinary community...it has a really powerful sense of identity, and people enjoy each other."*

Everyone interviewed who was resident in Waipu spoke about the cohesion of the community, or the sense of community spirit that they experienced. This sense of community seemed to be generated by a number of intersecting elements. In part it is a function of small town intimacy. Because the population is small it easy to know many people as you walk down the street; and the longer a respondent has lived here the more likely they are to know people. But there is also a story that people tell that is related to, but is not, the actual migration and settlement story, that generates a sense of cohesion. This is a story about cooperation and collective endeavour that can be seen as "the heritage of the heritage", or "the moral of the story", an intangible heritage of social values that forges a connection between place and identity.

For descendants the Nova Scotian is their personal heritage, their family story, their genealogy. It is an ancestral belonging that is intensely personal and meaningful, expressed very simply by one descendant: "...that's my heritage...that's what my forebears came with, and that's who I am."

In contrast to descendants, all the non-descendants interviewed said that the Nova Scotian migration story meant nothing to them personally. However, many reflected on their engagement in, and enjoyment of, the activities and traditions that are played out in the village, such as the Highland Games, the pipe band and the Christmas Parade, that are more or less generated by the heritage story. More significantly, a number of respondents described the heritage of Waipu not in terms of genealogy or settlement but in terms of the transmission of community values of working cooperatively together.

All but two residents interviewed are actively engaged in some community activity or organisation, so the notion of working together is actually acted out. Motivation was couched in terms of support for the efforts of others, reciprocity, achievement of goals or projects, and enjoyment. There is of course something of the nostalgia of an idealised rural life in these representations. Some people spoke of the dilution of community spirit and the diminution of collective working together associated with the changing population and the increasing numbers of "new" people settling in the village, and as discussed below there are some divisions and tensions beneath the surface. But there is also a sense of possibility for action and activity, expressed by several respondents who reflected on how they have been able to do things and achieve things in Waipu that they could not imagine being able to do in a large urban centre, which they attributed variably to social space and lack of competition in a small population, and a culture of volunteering.

## 4.3.2 Belonging and sense of place

*"Up the other end of Argyle Street we used to graze cows. We used to drive the cows up there..."*

*"Saorsa (retirement village) is sitting on my Primary School land, so that's always a memory. The sheds out on the concrete space ...that's where the buses were. It was such a huge thing when you were little to try and find your bus."*

*"The Hall was always a big place to go... beside the hall where the library sits now there was a wall that ran down the side, and there was a little old cottage there. I was talking to someone just recently about that little cottage."*

*"My grandfather had a small property there in Argyle Street ...there was my grandfather's on one side, and McLeod on the other."*

*"I lived in the old boarding house here in the centre...about where the chemist's shop is. My grandfather owned the boarding house, my mother's father...it was important in the early days for people working in the Dairy Factory."*

*"All the places have got a memory...there was a haberdashery right across the road from the Post Office...that old building's still there. It's a second hand shop now."*

*"The boat shed was a great place...and jumping off the bridge like the kids still do."*

*"When we were growing up it (North River) was part of the playground for us. We used to live in the river for six weeks in the summer."*

*I remember going down there getting kinas. We used to go from the top of the hill, just before you get down into Lang's beach and we used to go down the bottom and get kina.*

People expressed their sense of place and belonging through a complex mix of time, activity, memory and social relationships. Temporal continuity is inextricably entwined with the sense of belonging. Respondents who have lived in Waipu for a long time can trace narratives of their lives through the physical place and a network of relationships. For them the day to day landscape is a map of sites and places that are imbued with meaning so that going about their business in the present is rich with associations. Yi Fu Tuan (1977) described this time-place-memory dynamic as "time made visible" and "a memorial to times past" (1977, p. 179). This form of social memory that is grounded in everyday practices also conforms to what Connerton, cited by Harrison and Rose (2010) calls "embodied memory", which is intimately connected to intangible heritage.

Genealogical continuity adds a further depth of rootedness. This ancestral form of belonging is not only drawn out of the past, and representations of the past in the form of, for example, grave sites and the museum exhibits, but is also projected forward as something to be handed on to the next generation.

*"I encourage my grandchildren (to participate in Scottish dance and music) ...they are conscious of their heritage which is good. My elder granddaughter did Highland dancing and my other granddaughter does regular visits to the Museum...my sister, my mother, my grandparents, my great great grandparents are all buried there in the cemetery. She knows where all the graves are."*

Relph's notion of "insideness", cited in Hawke (2012) and Howard (2003) is a useful way to explore this sense of place. He used the term to refer to the feelings of security, familiarity and belonging that make places meaningful (Hawke, 2012). This view of familiarity and belonging ascribing meaning to the landscape accords with landscape theorists discussed earlier. But "insideness" is also oddly elastic. Ancestral and autobiographical insideness infuses the community, such that relative newcomers "reach out to grasp a sense of their own predecessors" (Hawke, 2012, p. 239), or develop an emotional engagement with history and heritage (Howard, 2003). Both these phenomena were revealed in the interviews. One respondent talked about taking much more interest in the heritage in Waipu than any other place she had lived; another talked about being inspired to look for Scottish ancestry in her own family tree; another talked about how his Scottish (non Nova Scotian) ancestry had come alive for him in Waipu. Similarly people's sense of belonging to place extends beyond their experience and memory of place. This infused and diffuse sense of belonging has implications for this design project. Locked off by private ownership, respondents nevertheless expressed a sense of belonging to the riverside site, coupled with a sense of yearning to be able to get there. They described it as a beautiful place, even though few people have direct experience of it. It seems that the significance of place derived from familiarity extends to places with which there is in fact little familiarity.

Activity and occupation emerged as a critical component to people's sense of belonging and sense of place. Every single person interviewed identified the beaches and/or the estuary as meaningful to them, and the meaning was described through activity and occupation – fishing, swimming, camping, baching, gathering kai moana. Stephenson's (2010) ideas of "embedded landscapes" clearly play out in this community. Landscape is implicit in identity. This convergence of identity and landscape, each being part of the other, was eloquently expressed by one of the members of the Patuharakeke focus group:

*"It's knowing that that's where we come from. It's more like an unconscious reaction, because we all get the same reaction if we talk about driving over the Brynderwyns, seeing our area, we're home. The minute we get to the top of that hill, where the lookout is, everyone relaxes."*

### 4.3.3 Local distinctiveness

*"If it wasn't for the heritage story there might not be a Waipu Tartan, there wouldn't be the Games, there wouldn't be Art in Tartan... and all that keeps the story alive."*

*"I'm very passionate about keeping the story alive, about keeping that community spirit going, so it doesn't just become another suburb of Whangarei, as I've seen Maidstone become another suburb of London. It's really important to keep that community identity going so it's a distinctive community, different from anywhere else."*

*"I think they needed that renaissance of Waipu, and the Nova Scotian story brought it to life...all of a sudden we went through Waipu and there was this Nova Scotian thing going on."  
(Patuharakeke)*

*Our Scottish heritage was not told in schools the way it is now. The story was there but it wasn't something people talked about...not among those of us who are not of the boats anyway...It seems maybe someone woke up one morning and thought, oh this is a story that could put Waipu on the map – let's run with it and like minded people got together...and its all just snowballed really."  
(Long time resident)*

People value what they see as their local distinctiveness which they described not in terms of the landscape but in terms of community life, which is turn underpinned by the migration story. People saw their community as being different from, and better than, the neighbouring communities of One Tree Point and Ruakaka, primarily in terms of its cohesiveness and its representation of itself as “one community”. One respondent described the story as a kind of theatre, a story well told, that drives many of the things that makes Waipu different and distinctive. This respondent clearly saw the reflexive, self-reinforcing nature of heritage in which the story generates events, practices and artefacts, which in turn generate the story. Community distinctiveness is at the heart of the commodification of heritage in Waipu. Long standing performances such as the annual Highland Games bring economic benefits to the village. Events such as “Tartan Week” established more recently by the local Business Association, use heritage as a device to attract visitors to the village. But they are also devices through which the community can retell to itself its story of being a socially engaged community that enacts values of cooperation, mutual support and reciprocity.

### 4.3.4 Invention and reinvention

Patuharakeke and one long term resident observed history turning into heritage. They observed the role the schools played in telling the story, naming the school houses exclusively with Scottish names, and the role of the museum in promulgating the story. A number also reflected on how Waipu is changing now and the implications for its heritage. Many talked about the increasing numbers of “new people”, changing land-use with the conversion of farmland to residential land, the changing purpose of local buildings. The proliferation of new subdivisions signals a new kind of settling, with what Paludin-Muller calls the “suburbanisation or leisurization of rural landscapes” (2010, p. 54). Most people were quite philosophical, accepting that change is inevitable and potentially positive. One descendant talked about the heritage culture and the new culture joining together “*without losing the heritage, but accepting what others bring... because we're actually building a new heritage*”. The proposed walkway is itself at the nexus of much of this change. It represents the transfer of private property to public space, which is a direct result of the transfer of farm land to residential property, and with the possibility of occupying the space comes a sense of restoration of a relationship with the river, of ecology and culture, all of which may contribute to this “new heritage”, which in turn challenges landscape design on this site to be a conscious part of the process of reinvention.

### 4.3.5 Intangibility

*"Some people feel they belong to the Church, because their grandfather, or great grandfather or something built it, so for them, their heritage is still here, and yet they don't probably come in to fellowship and services... I think that's important that the community has that feeling towards the Church. But from the Church's perspective it's the faith heritage that is really important."*

*"By the preservation of the story, or the telling of it you're not only preserving the physical things that can connect and are attached to it, like artefacts that represent people's lives, but you're also celebrating some of the underlying truths that emerge from the story, which have moral and spiritual content."*

The people interviewed between them identified all the typical fields of heritage such as buildings, artefacts, people, customs and practices as having some degree of significance, but none has meaning for everyone. Over and over again the intangible fields of heritage emerged as the most significant. The Presbyterian Church group, for example, recognised that the church buildings have heritage significance but that for them this is secondary to the faith heritage. Despite the enduring presence of the buildings they feel the dwindling of the practicing community very keenly. The Museum sees its conservation and preservation role in terms that go beyond the material to include the promotion of community ideals that are drawn from the story. The emphasis on intangible heritage means that rituals, festivals and performances, music, dance, knowledge, memory and oral tradition are all more important for this community than built form and artefacts, but memory prompts such monuments, storyboards and plaques that materialise social memory will also be important.

## 4.3.6 Kaitiakitanga

*"What I would say is most significant is the river itself. All our rivers are taonga... The river itself is an actual breathing, living entity. There's a whole lot of things that the rivers were used for - kai, spiritual healing...there would have been sites along the river that would have been dedicated to various customs and practices...and the river would also have been valued as a habitat, a place for our cousins, all our other species, to live.*

*We're very interested in ecological heritage and the ecological future. What we would like to see is ecological restoration. That would be a key goal for any river in our rohe."*

*"The restoration of the environment and the ecological values, that's something that everyone needs to take responsibility for, especially if they're living there. We want to be able to be able to guide that process, as Manuwhenua, but I think it's really important that they all take ownership of what that means, and how that might eventualise."*

For Patuharakeke the natural history and the ecology of the site is bound up with cultural meanings and traditional uses. No other expressions of heritage hold meaning for Patuharakeke. They see "heritage" as a pakeha concept subsumed, in their world view, into the principles of kaitiakitanga and the continuum of past, present and future. For this group there is an almost complete overlap between natural heritage, cultural heritage and intangible heritage. Each is an input to the other. Patuharakeke readily admitted that they have largely lost the stories associated with this particular riverside site, and on the one hand whilst that is experienced as a loss, it is also not material to their sense of connection to the site as part of their traditional rohe. They are also very clear that the principles of kaitiakitanga need to be practiced by everyone.

## 4.3.7 Dissonance and disinheritance

*"I am irritated by this kind of myth building around this group of people...what were they, a sect?"*

*"...the business of following some charismatic religious leader leaves me cold."*

*"I think if you look around Waipu today its full of all kinds of interesting people who have come here recently, and who have contributed to making it what it is today, which I think for a small rural community is an incredibly vibrant place...so if you're talking about the heritage of Waipu you would need to take cognisance of that...to reflect the fact you're not necessarily Maori, you're not necessarily a Nova Scotian descendant...you may be from all parts of the globe..."*

*"...there are a lot of people here who have been here for a very long time who have their story as well, and it almost comes second...or third or fourth..."*

*"We should be telling our own stories."*

*"We have a Maori history as well which isn't well known."*

*"The Scottish heritage is heavily pushed, to quite some large extent to the exclusion of the Maori heritage."*

*"I do like it that it has that sense of history, but I would be happier if the Maori side was more expressed in the town as well."*

Not everyone interviewed subscribes to the migration story as it is promoted. Two people interviewed rejected the heroic story of a community following a great leader to overcome hardship. They perceived the story as religious sect held together by a rigid exclusivity.

They also saw the expression of Scottish customs and practices as a "pastiche", a set of ideas about Scottish culture frozen in time. It is interesting to note that although these perceptions are potentially quite alienating they did not stop these respondents appreciating and enjoying Waipu as a cohesive social community. It does not follow that alienation from the literal migration story leads to alienation from the community, indicating that the layers of heritage, "family genealogy" and "community spirit" can function quite independently of each other.

Others spoke about the increasing diversity of the community, and the desire to see diversity and difference valued more explicitly. Some people referred to the fact that there are people in the village who come from other places, some of whom have lived in the area for a long time, who do not necessarily associate themselves with the Scottish story, who have their own stories that are not heard. There is a sense from these people that Nova Scotian "belongingness" was more privileged than theirs.

The way that a dominant heritage voice subsumes and disinherits others is also clearly illustrated in the interviews. Several respondents observed that the story of Scottish settlement edits out the knowledge of prior Maori occupation, about which they felt some considerable discomfort. It is typical that as communities choose how to represent themselves they choose what to remember and what to forget. It is easy to see how selective remembering and forgetting would be essential to the identity and coherence of a community of dispossessed Highland Scots. However, research found that local hapu resent their invisibility and that there is a desire on the part of many people in the village to see a greater representation of Maori. Paradoxically, whilst there is a rich heritage story of Scottish migration that generates rituals and activities, the community is also impoverished by the selective forgetting of Maori stories.

## 4.3.8 Contestability

*"...heritage starts with the tangata whenua, so the heritage of Waipu...must have what we might call a Maori component...I do think it is important that the Tangata Whenua is found a pivotal place (in the heritage of Waipu)".*

*"(the heritage of Waipu is) back to as far as you can go when it was first named, when it was first inhabited, so basically to me it's the Maori, then the Nova Scotians."*

*"The heritage of Waipu is the story of how it became populated in the first place, with the Nova Scotians coming over..."*

*"...(the heritage of Waipu) is how the Nova Scotian settlement evolved and how it got here...because there wasn't really any other people living here prior to that..."*

*"I appreciate there were Maori people here at one stage too, but I think you have to be careful not to emphasise the Maori thing...I'm not denigrating the Maori people at all, but to me (the heritage) is the settlement by the Nova Scotians."*

*"To be quite honest I haven't found anybody, Maori or Pakeha who actually can tell you about the ancient Maori heritage of Waipu...so I see Waipu really as a Nova Scotian story."*

*"We also firmly held the right to participate in the heritage now going forward." (Patuharakeke)*

Competition between different groups for the right to possess, control and give meaning to the past is a typical manifestation of the politics of heritage. Interviews with residents and the stakeholder organisations reveal a contest between local Maori and Nova Scotians as to who are the "first people". Paludin-Muller (2010) proposes three broad positions from which people can act in shaping and interpreting heritage and landscape – natives, settlers and remote controllers. "Natives" are those people who, at least in their own perception, have the longest local continuity of occupation, use and interpretation of the landscape; who hold "first people" status. "This is not necessarily a continuity of unchanged land use, but rather a living tradition of land use and attitudes with emphasis on whatever economic activity would make sense for the natives at a particular time" (Paludin-Muller, 2010, p. 53).

The question as to who are the "first people" is phrased deliberately in the present tense, because the idea of "first people" is not just an objective description of historical order of arrival, but of status and privilege in the present. A few residents clearly see the Maori as being "native" to the area and holding first people status, with implications for how heritage is constructed. However, other residents, and all the descendants interviewed, think of Nova Scotians as the natives, or first people. The Museum holds an ambiguous position and somewhat conflicted position in relation to Maori occupation of the landscape. On the one hand the Museum acknowledges Maori but on the other clearly privileges the Nova Scotian narrative.

Patuharakeke identify Waipu quite simply as part of their rohe, part of the area they identify as their home. Their position is that they unequivocally hold first people status. Their native occupation of the landscape is described in terms traditional food gathering, relationships with sites that are layered with cultural, historical and spiritual significance. Their current occupation is described in terms of the appropriation of land and the hegemony of Nova Scotian and Scottish heritage.

There is a critical issue of power and privilege underpinning these different positions that determines whether the disinherited Maori voice is invited in or present by right, these being very different processes with different meanings. Some residents referred to the representation of Maori in the pageant (a theatrical recreation of the settler narrative) held in January 2014 in positive terms, but Patuharakeke described the process of engagement as "tokenistic...it wasn't 'you're involved with the whole design of this pageant', it was just last minute 'can we get some brown faces down here and hop in a waka?'"

Several respondents referred to the empty, unused, and unwanted land that the Nova Scotians settled on - colonial myth-making that is oddly anachronistic in 2014. At a political level these issues of power and contestability are a typical post-colonial struggle, and can be seen to be played out primarily between the institutions of the Iwi Trust Board and the Museum as the primary heritage activists. At the personal level it is much murkier ground, where many members of Patuharakeke are also Nova Scotian descendents, and there is a long history of personal interaction, and cooperative relationships.

There are significant implications for the processes of design and implementation on the site. There needs to be opportunities for conversations and exchange of views between the various parties who are invested in the site and the project.

# **5. Rivers**

---

**Rivers in culture**

**The Waipu rivers**

**Spatial-temporal processes**

**Ecology**

## 5.1 Rivers in culture

Rivers have a particular and special place in geography and landscape, in the history of human affairs, and in our imaginations. Throughout the world human settlement has concentrated around rivers. Rivers have provided for people a means of transport and commerce, a source of food and water, a means of irrigation, fertile soils in their flood plains, protective barriers and potent symbols of nationhood, political power, religion, myth and mystery. The ancient and enduring metaphor of the river as “an artery” or “a vein” in the landscape captures the notion of the river as a living entity, part of larger living system. It captures the notion of pulsing movement from one point to another; the carrying of nutrients essential to life. Poetically this metaphorical image of the river as a part of the physical body extends to include the attributes of living beings. Writing about rivers in Central Otago, Brian Turner, for example, describes the river as singing, speaking, kicking up its heels, galloping and “*sliding by sly as sly*” (Turner, 2012, p. 160).

The other enduring metaphorical image of the river is as a journey; a line of water expressing the narratives of beginning to end, birth to death, source to issue (Schama, 1995). Ideas about time are explicitly linked to rivers. Colloquially people reflect on the events of the past as “water under the bridge”, and abandon attempts to control events by “going with the flow”. Poetically Lauris Edmond writes in her poem “Waterfall”; “*I do not ask for youth, nor for delay/in the rising of time’s irreversible river...*” (Edmond, 1984, p. 13)

Rivers have become synonymous with place and peoples. They are a constant in history. It is impossible to think of the great cities of the world such as London, Paris, New York, without thinking of the Thames, the Seine and the Hudson. These are rivers that have had both city and nation-building roles. The history of Roman settlement, Mediaeval warfare and politics, art, language, literature, trade and commerce can be traced along the course of the Thames. It reflects and describes national identity. At a regional level the Mississippi similarly occupies a huge geographical, historical and cultural space in the southern states of America. The primary river of the largest drainage system in North America, it is inscribed with the history of Native-American settlement, French and Spanish exploration, colonisation, slavery, the Civil War and commerce. It is immortalised in literature, theatre and song. The Nile too is imbued with myth, mystery and what Simon Schama calls “the learned wonder” (Schama, 1995, p. 380) of ancient Egyptian civilisation. Perhaps more than any other river the Nile embodies the metaphor of the river as the arterial bloodstream of a people.

Rivers also occupy an explicitly spiritual place in some cultures. The Ganges river is sacred to all Hindus, invested with great symbolic and religious significance. Rivers are venerated by Maori as a taonga – a treasure. They hold an integral place in Maori mythology and tribal identity. Tame Iti describes the relationship between Tuhoë and the Ohinemataroa River: “*To us, Ohinemataroa is out tipuna, our ancestor. She carries our stories from within Te Urewera, feeds and sustains our whenua, quenches our thirst, is absolutely vital to our well-being.*” (Iti, 2014, p. 16) Whanganui iwi express their identification with their river in this proverb: “*The Great River Flows/From the Mountains to the Sea/I am the River, and the River is me*” (Parliamentary Commissioner for the Environment, 2012, p. 13).

Rivers both divide and connect. In our imaginations they connect us to faraway places. Quoted by Rada (2012) a Hungarian essayist describes the Danube as symbolising the promise of the ocean. “*The river allows us to reach distant shores; it runs through us and releases us from our isolation*” (Rada, 2012, p. 54). In geography they connect places. The histories and the destinies of rivers are shared between nations, regions and property owners, for whom the river defines the divisions of borders, boundaries and crossings. Rivers contain along their borders a kind of community of common interest, though this common interest may be obscured by national or regional politics and group or individual interests.

But life beside the river is life at the edge, literally and metaphorically. All who live on the edge live in a state of tension, simultaneously in thrall to the waterfront and at the mercy of floods. Those who live downstream and do not understand or manage the headwaters, have even less control of their destinies. The tension inherent in the relationship between communities and their rivers is reflected in the ways in which rivers have been highly engineered.

To varying degrees all over the world rivers have been straightened, channelized and dammed to protect against flooding and preserve navigability. However, catastrophic flooding, the consequences of climate change and diminishing habitat and biodiversity in the rivers and at riparian margins have called these strategies for control into question (Prominski, Stokman, Zeller, Stimberg, & Voermanek, 2012). The disastrous flooding of New Orleans in 2005 is an example of the unintended side-effects of engineering waterways. Although it is true that breaches in the levees of the drainage canals were the proximate cause of the flooding, a more ultimate cause was the extensive loss of wetlands that once absorbed storm surge, consequent to river control measures. There is an increasing shift away from the technical hydraulic engineering approach to shaping watercourses, to a semi-natural biological engineering approach that emphasises multi-functional river spaces that integrate storm water management, ecological systems, biodiversity conservation, and cultural and social needs (American Society of Landscape Architects, 2014; Dreiseitl, 2012; Prominski et al., 2012).

There is also a tension between the functional role of the river as a means of transport, a focus for commerce and agriculture, disposal of waste, and the spiritual and symbolic values that are ascribed to them (Fox & Fink, 2012). Schama (1995) illuminates this tension in his discussion of Turner's paintings of rivers in France undertaken in the 1820's, in which industrial barge traffic and dockyards were edited out, in favour of romantic scenes with crumbling towers, huddled villages, old stone bridges and the occasional fishing boat. These artistic interpretations of the river also express the hegemony of the picturesque ideals of beauty that emerged in England in the eighteenth century. A similar kind of tension exists in New Zealand now between the burgeoning dairy industry and the quality of the water in our rivers and lakes. Whilst most may still pass the postcard test, many do not pass a Ministry for the Environment (MfE) test. In October 2012, MfE reported that freshwater quality was either "poor or very poor" in over half of the 210 river swimming sites they monitor (Hansford, 2013, p. 41).

In New Zealand we have rivers and riverscapes that, as both an input to, and a product of, the tourism industry, are national and regional icons. The Rakaia, the Waikato, the Clutha, the Avon, for example, are all entwined with regional identity. The Avon is particularly significant for its cultural heritage status. The English trees, the grassed berms and bedding displays – the ongoing representation of an idealised colonial vision of home – invest this river landscape with its cultural value. As it meanders its leafy way through the centre of the city it is both an input and a product of the city's civic identity as "The Garden City". However, many would argue that its natural heritage is irretrievably corrupted by the dominance of exotic trees and plantings and the associated paucity of native vegetation in the riparian margins. This argument sets up a tension for the City Council when plantings are to be renewed, and raises questions that apply more generally to New Zealand landscapes and rivers. To what extent should the cultural, colonial narrative continue to dominate the landscape? How can, or should, the natural heritage of the river be expressed in a post-colonial context?

## 5.2 The Waipu rivers

### 5.2.1 Catchments

The surveyed area of Waipu is 267,000 hectares. Over the years the farmed area has varied from a third to a little over half. Pastoral farming has dominated, with a consistent dairy industry. Farm forestry is common. Two big surges in planting of *pinus radiata* in the 1960s and 1990s, with associated loss of large areas of native forest have had a big visual and ecological impact on the area. Many lifestyle blocks have been developed in the last twenty years resulting in small communities growing up in the roads that stretch out from the village (Couper, 2002).

The village of Waipu sits on a river plain, surrounded by hills to the south, west and north. Four separate blocks of greywacke and argillite, the basement rocks of New Zealand, define the hill structure around Waipu. The largest of these forms the range of hills that run westwards from Bream Tail, known as the Brynderwyns. The second, the Taipuha Fault Block, forms the northern wall of Finlayson's Brook, running westward to Mareretu. Further north is the Pohuenui Fault Block. It carries an old beach of limestone that includes the Waipu Caves. The great piles of limestone rocks strewn across these hills are a dramatic visual statement of the geology of the area.

Erosion from these blocks and overlays of more recent materials from folding and submersion make up the soils of this area. Generally speaking the topsoils on the hill are thin, low in fertility, and when denuded of their vegetation readily erode into the rivers. As hardened mudstone and sandstone respectively, argillite and greywacke break down into the dense orange-coloured clays that are readily seen in cuttings and slips around the district (Gates, 2002).

The blocks and valleys that form the catchments that feed into the Waipu River system are comprised primarily of forested hills and farmland. The Pohuenui, carrying run-off from the northern block and North River valley, joins the Ahuroa from the north. The Ahuroa collects runoff from the south side of the Mareretu Forest via Finlayson's Brook, the north side of Mareretu Forest via the Millbrook Valley, and from the Waipu Gorge Forest on the western side of Highway 1. The Waihoihoi River collects from tributaries in the Brynderwyn Hills, runs through the centre of the village to join the Ahuroa. The conjunction of these three rivers forms the Waipu River. The Waioneha Stream drains through the South Road valley from the eastern end of the Brynderwyns and joins the Waipu River in the estuarine area. The estuary is a listed Site of Special Biological Interest, providing habitat for a number of rare bird species and a resting place for migratory species.

The rivers that flow through the project site are the Waihoihoi and the Ahuroa. The Waihoihoi catchment is 27 square kilometres; the Ahuroa catchment is 57 square kilometres.

Figure 5.1: Catchments of the Waipu Rivers

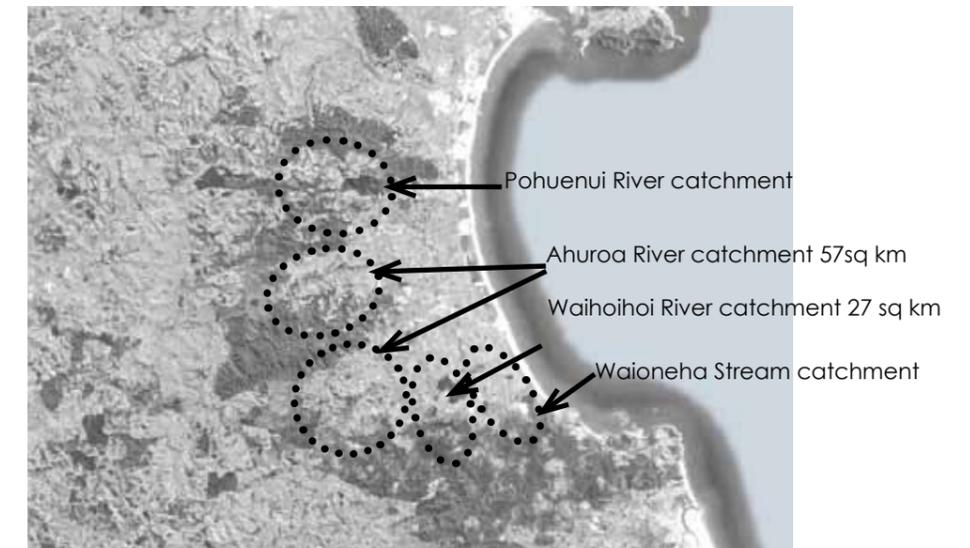


Figure 5.2: The names and locations of the Waipu rivers



## Catchments

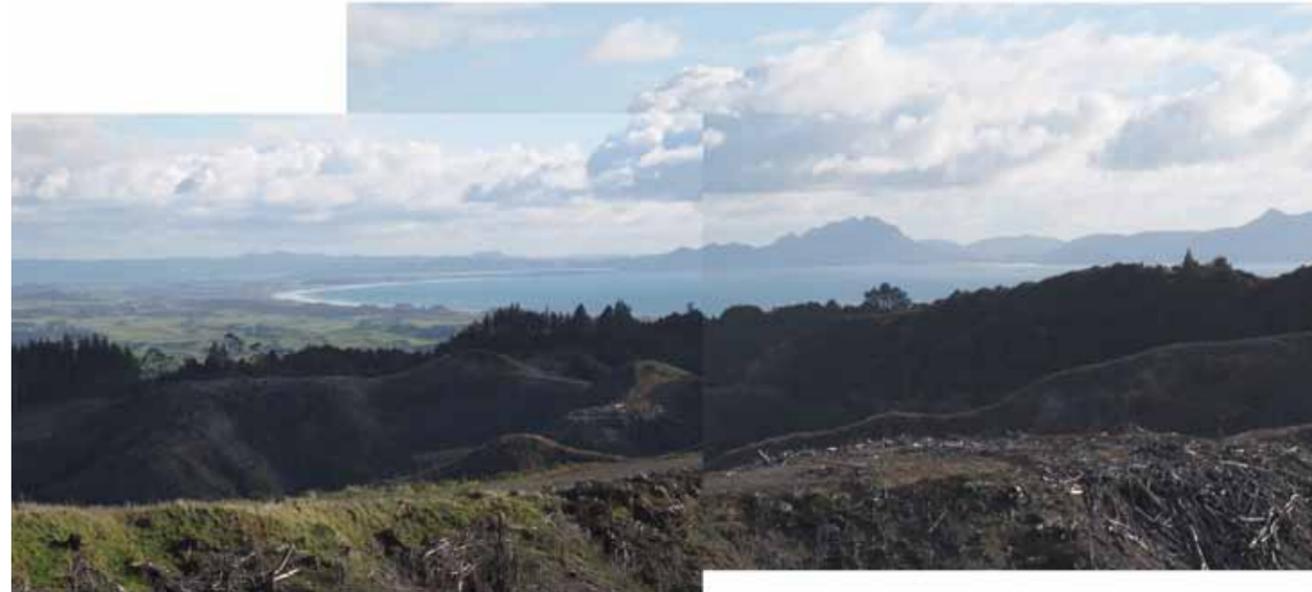


Fig 5.3: Bream Bay from the Brynderwyns. Whangarei Heads are in the distance, looking north. The forest in the foreground is partially recently logged.



Figure 5.4: Pine forest on the south slopes of the Taipuha Fault Block



Fig 5.5: Limestone rocks on the Pohuenui Fault Block



Fig 5.6: Orange clays visible after logging in the Brynderwyn hills

## 5.2.2 The character of the site

The design project site is defined and bounded by the Waihoihoi and Ahuroa rivers and the adjacent residential subdivision at the edge of the Waipu township. Currently the site is a mix of new houses and working agricultural land, accommodating cattle grazing and maize cropping. The agricultural land has been zoned as residential and subdivision has been approved by the Council but for economic reasons this part of the adjacent area is unlikely to be subdivided within the next ten years.

It is a highly modified landscape. None of the original native vegetation survives on the site and almost none in the lower reaches of the catchment areas where pastoral farming dominates. Before the arrival of Europeans the area of Waipu, as in most of Northland was covered in dense broadleaf podocarp rainforests with kauri as the emergent tree, and understoreys of smaller trees, shrubs and ferns. The flat through which the lower reaches of the rivers flow had stands of kahikatea broken by areas of swamp with cabbage trees, flaxes, puriri, kohekohe and tawa on the drier areas (Couper, 2002; Gates, 2002).

One can read the economics and the pragmatism of farming practice in the site. Pasture and cropping extend to the very edge of the rivers. Riparian vegetation is predominantly kikuyu and exotic weeds; bank erosion is extensive and the water brown with sediment. In places the river bank has been armoured against erosion with slabs of broken concrete.

The boundary between the glebe and the subdivision is typical of colonial surveying practice - an arbitrary straight line dissecting the design site, resulting in this instance in divergent land-use on either side of the line. In church tradition the glebe is land that is allocated to the parish priest for his use to augment his stipend. According to parishioners this is one of the few remaining glebes in New Zealand and is invested with both historical and institutional significance even though it appears to be just another paddock carrying grazing stock.

The surrounding hills and Whangarei Heads are visible in the distance. They are not dominant views, but they help to orient the site within the river plain.

The river is a very strong visual element in the landscape, and only the river reflects something of the site's original character in an otherwise ecologically highly degraded site. Nevertheless, at different times when, for example, the water reflects the sky and clouds and skylarks sing, the river has a tranquil beauty.

The river is used recreationally by locals, though not intensely. At high tide it is readily navigable by small boats and it is occasionally used for kayaking. There is landing place at Waihoihoi Park that makes a trip up the river to a local café an enjoyable summer outing. Older locals remember fishing along the river within the design site sixty or seventy years ago, but there are no fish to be had there now, and the brown turbid water is unappealing as a food source.



Figure 5.7: View of the river looking east near the new subdivision



Figure 5.8: Kikuyu, gorse and oioi at the riparian margin



Figure 5.9: Bamboo at the edge of a drainage channel



Figure 5.10: Looking south-west, with the Taipuha Fault Block in the background.

### 5.2.3 The meaning of the rivers to the local community

The rivers of Northland do not attract much touristic or heritage attention. There is no one “big name” river associated with the region; there are no intensely compelling, photogenic riverscapes. In fact Northland’s waterways are known to be some of the most polluted in the country, representing the legacy of colonial settlement and the impact of farming practices on the quality and character of New Zealand rivers. Nevertheless the river in this design project has meaning and significance to the local people. Every person interviewed was enthusiastic about the idea of a riverside walkway. People want access to the river that they don’t currently have. Some respondents viewed the river as part of their heritage, part of a landscape that is rightfully theirs. This is not just a matter of civic rights but of also of emotion and identity. Said one person: “It is grounding to be able to be there.” This perspective accords with local Maori, Patuharakeke, for whom the rivers of Waipu are a taonga. Their sense of dislocation from the rivers is profound, so the idea of a walkway is an opportunity to retrieve and recreate a physical relationship with the rivers that mirrors their spiritual relationship.

Most frequently mentioned amongst village respondents was an aesthetic appreciation of the river, many people seeing it as a beautiful place, even though their experience of it is actually quite limited. People also talked about the recreational possibilities of a riverside walkway – not just walking, but also social space for picnics and meeting friends, boating and kayaking. The idea of a river walkway as a setting for art and sculpture was expressed by some. Others imagine educational displays about natural and cultural history. Two people talked about the role of a walkway in linking the town to the river, seeing the river as an undervalued cultural and social resource, with the potential to contribute to making the town a “centre”.

It is interesting to note that the notion of reclaiming the river does not, for village respondents, include reclamation of the natural vegetation of the river, and/or reclamation of the health of the river. This may reflect a lack of knowledge about the river in its current and past states. It may also reflect the dominance of the cultural landscape and cultural meanings of rivers in people’s minds and imaginations. One of the older village respondents related childhood experiences of catching fish upstream beyond the village, but did not express a desire to improve the quality of the river. Here is a marked difference from Patuharakeke for whom restoration of the health of the river is a significant priority. They too relate transmitted memories of a time when the river was clear and fishing was good but in the context of expressing their agenda for restoration of the river.

In summary, people interviewed see a proposed walkway as a materialisation of an imaginary or spiritual relationship they have already formed with the river, mediated by culture, story and previous experiences; a relationship that is both generalised and localised, imaginary and interactive.



Fig 5.11: View of the river looking north with Whangarei Heads in the background.



Fig 5.12: Boating on the Ahuroa River in the design project site

## 5.3 Spatial-temporal processes

Rivers are by their nature dynamic, best understood as processes. The scope of the river's dynamic is hard for us to comprehend – they are beyond us temporally and spatially. From the limited time-span of a human life it is very hard to see at work the forces of the river that shape entire landscapes. From any single viewing point it is impossible to see the course of the river from its source in the hills to its outflow into the ocean. The river is only knowable in moments of time and space, and in the imagination.

Whilst every river is unique, they all follow a dynamic formative process resulting in different riverscapes and river types along the upper, middle and lower reaches. Figure 5.13 (Prominski, Stokman, Zeller, Stimberg, & Voermanek, 2012, p. 20) shows the different river types formed as the river flows from the upper reaches to its outlet. In the upper reaches constant abrasion cuts deep valleys, and steep gradients prevent meanders forming. As sediment is carried downstream it becomes finer and heavier, and in the lower reaches the gradient of the land flattens and the river slows. Here the slow discharge of water and sediment deposits combines to form the characteristic meanders of a lowland river. Although the Waipu rivers are small, differentiation of river types between the upper and lower reaches is evident. The rivers in the design site are characteristic of rivers in the lower reaches – relatively slow and wide and carrying a lot of sediment. Prominski et al (2012, p. 20) define and describe two sets of spatial processes, each with two sub-processes, that dynamically influence each other and shape the river space.

### 1. Temporary flow fluctuations

Sub-process 1: vertical water level fluctuation

Sub-process 2: lateral spread of the water

### 2. Morphodynamic processes

Sub-process 1: sedimentation shift within the river

Sub-process 2: self-dynamic river channel development

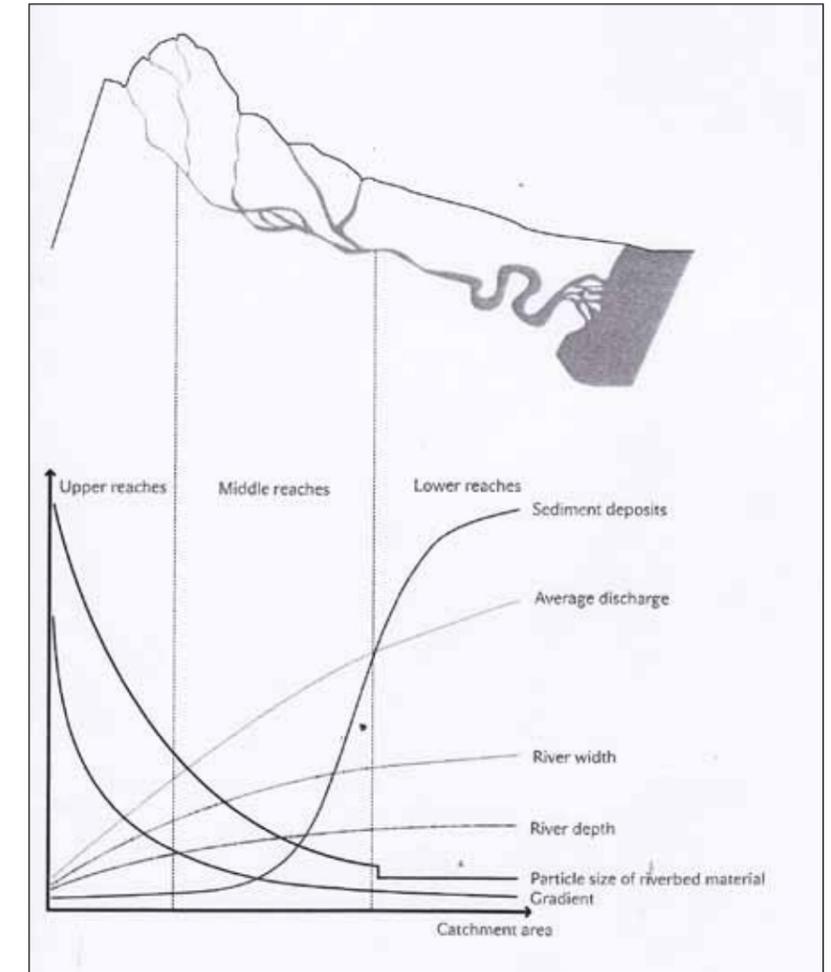


Figure 5.13: River types from upper to lower reaches of the catchment (Prominski et al., 2012)

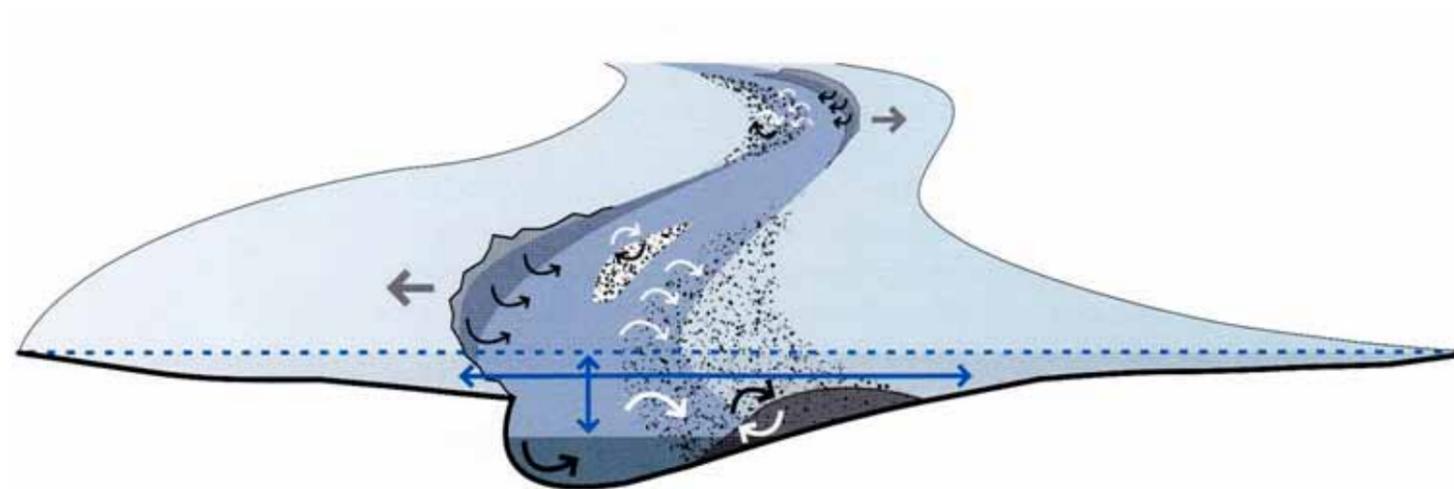


Figure 5.14: Spatial-temporal processes of rivers

In Figure 5.14: The blue arrows distinguish the vertical water level fluctuation and horizontal spread of water into the flood plain; the grey arrows indicate the direction of change in the course of the river, caused by sedimentation (white arrows) and erosion (black arrows).

### 5.3.1 Sedimentation and erosion

The form of the river in the landscape is the result of complex interactions between erosion and sedimentation caused by the flow of water (Prominski et al., 2012). The formation of cut banks and slopes or “beaches” are the result of the shift of sediment in the watercourse. As water flows more slowly on the inner curve of the river sediment is deposited resulting in the formation of slopes. Conversely, because it has further to travel, water flows more swiftly around the outer curve of the river, the current cuts a deeper bed and forms a cut bank.

Because the flow of the river is heavily influenced by tides, the slopes in the rivers on this site are only apparent at low tide. They are muddy from sediment, so are not beaches that are readily useable for access or human activity as they often are in stony rivers that are not tidal.

The self-reinforcing meanders that result from erosion on outside bends and the settlement of sediment on inside bends are apparent in the Waihoihoi River, and the Ahuroa before it reaches the design site. Within the design site the river enters the lower reaches and becomes slower, wider and straighter. The bed of the river here can be expected to be flatter and more even from one side to the other.

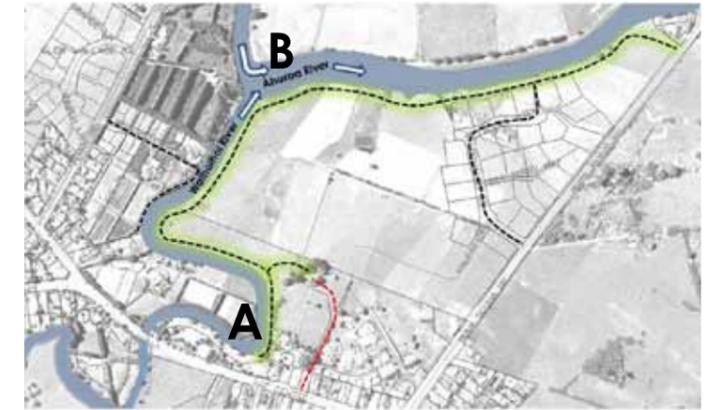


Figure 5.15: Slope on the inside bend of the Waihoihoi at Point A.



Figure 5.16: Slope and cut bank on the Ahuroa at Point B.

### 5.3.2 Tidal flow fluctuations

The volume of water that passes through a river channel, measured by both flow and water level, varies according to rainfall and (in places other than Northland) snowmelt, and in the case of this river, tidal flows. Water levels vary at almost every point within a river system, depending on the characteristics of the catchment, climate and patterns of rainfall. In many rivers that are not influenced by tides the normal fluctuations in water levels may not be much noticed by the people who live beside it (Prominski et al., 2012). However, in the Ahuroa and Waihoihoi rivers, in the area for which the walkway is intended, the daily tidal fluctuation is a visual feature.

In order to understand the tidal fluctuations in a way that informs design I have measured the rise and fall of the water at neap and spring tides. Because the water levels can be expected to vary in different places on the rivers, depending on the width and morphology of the river channel, and because the water level relative to the bank varies with both the depth of the water and the height of the bank, I have used four measurement points marked on the map to the right.

The changes in the level of the water at each point are represented diagrammatically below.

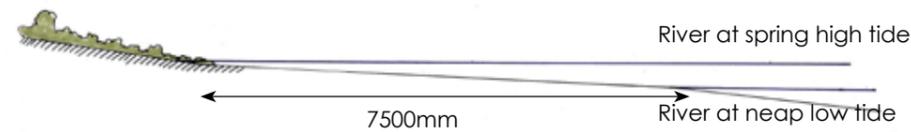
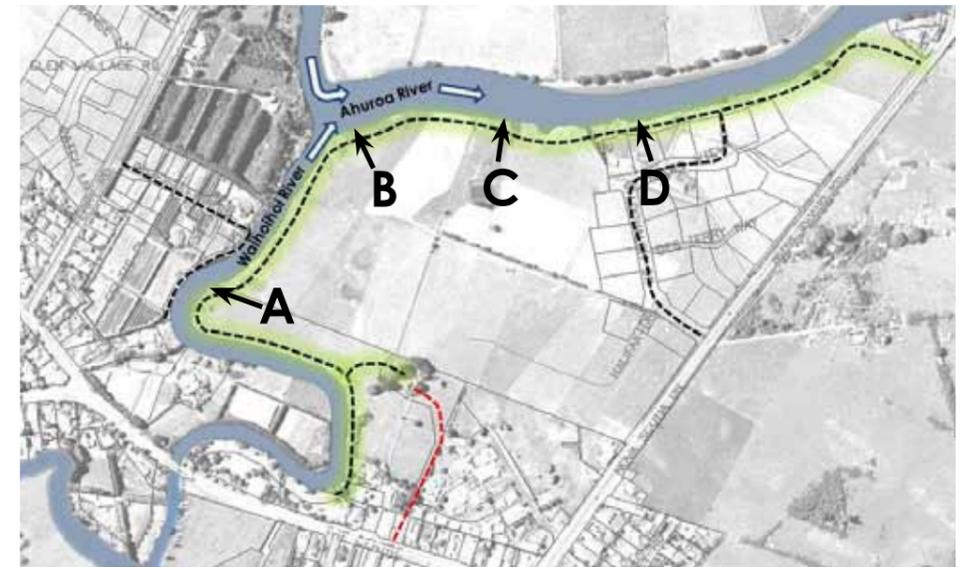


Figure 5.17: Tidal fluctuations at Point A

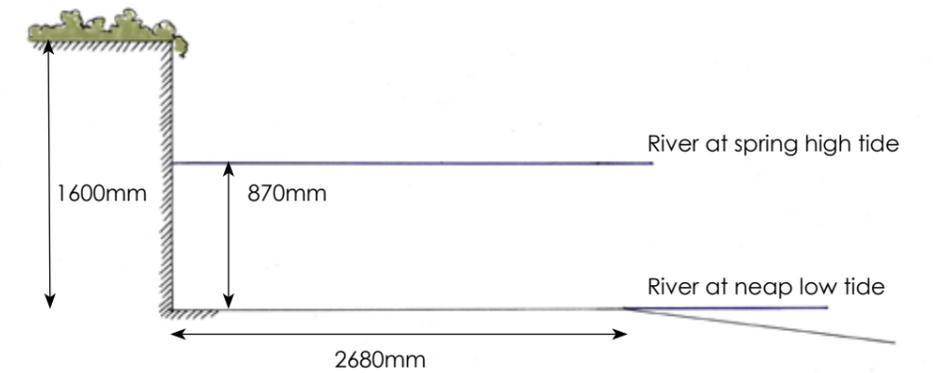


Figure 5.18: Tidal fluctuations at Point B

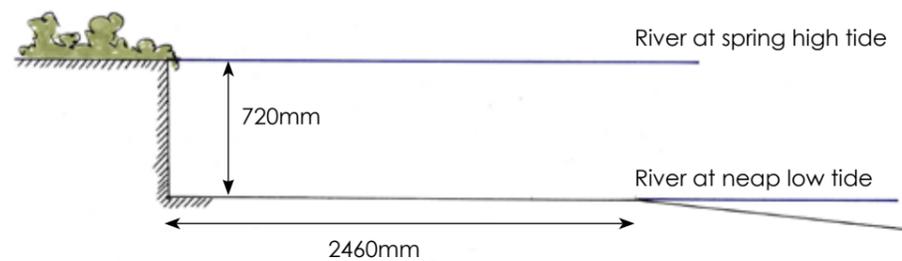


Figure 5.19: Tidal fluctuations at Point C

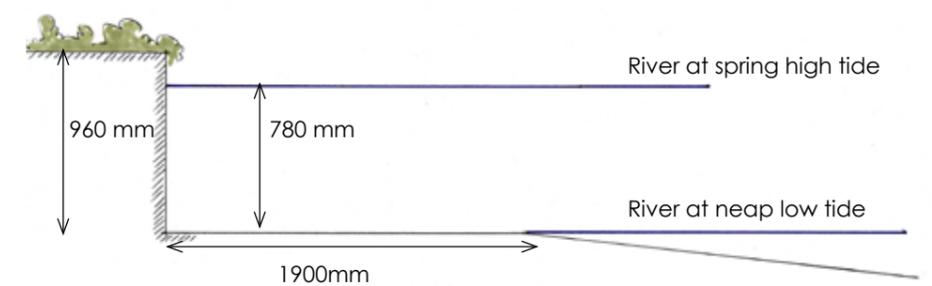


Figure 5.20: Tidal fluctuations at Point D



Figures 5.21 and 5.22: The Ahuroa at spring and neap tides near the confluence with the Waihoi (Point B)

## Tidal flow fluctuations



Figures 5.23 - 5.26: The saltmarsh indent on the Ahuroa at Point C at spring high tide and neap low tide.

### 5.3.3 Flooding

The Northern Regional Council has (NRC) established what it calls its “Priority Rivers Project” which identifies 27 catchments around Northland that are priorities for flood risk planning. Council has undertaken detailed surveys of these catchments to develop computer flood models and flood hazard maps, to assess the likely consequences for a community if flooding occurs, and analyse options for reducing danger and threat (Northern Regional Council, 2013b). The Waipu catchments are not included in this project. Consequently there is a paucity of data regarding the flood dynamics and risk for this area. However, floods have been known in the project area and in the village, and are most likely to occur when a very high rainfall event coincides with a high tide. Figure 5.27 shows the spread of alluvial soils in the project area, delineating where flooding may have occurred in geological time (Northern Regional Council) .

Figure 5.28 shows the flood extent map for the March 2007 flood event based on the LIDAR data NRC holds. The light blue area shows the extent of flooding to 3.1 OTP; the dark blue area shows the extent of flooding to 2.85 OTP. OTP is a vertical datum (One Tree Point 1964) established at approximately Mean Sea Level. In other words, flood waters reached a level of 3.1m above sea level.

An analysis of patterns of water flow and water levels shows the history of peak events, and we know that March 2007 and June 1997 were both floods, which gives some idea of the frequency of flooding in the past.

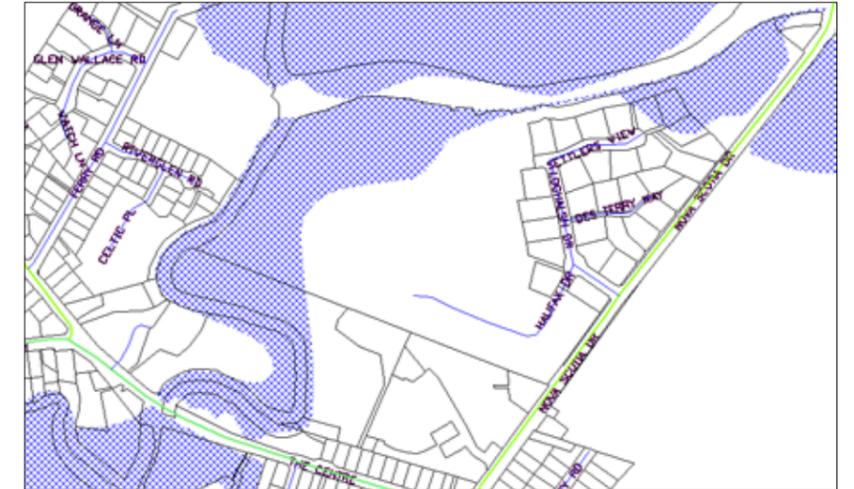


Figure 5.27: Extent of alluvial soils indicating flood extent in the past.



Figure 5.28: Flood extent map for the March 2007 event. (Source: Northern Regional Council Natural Resources Rivers Team)

Figure 5.29: Water level data on the Waihoihoi near the village

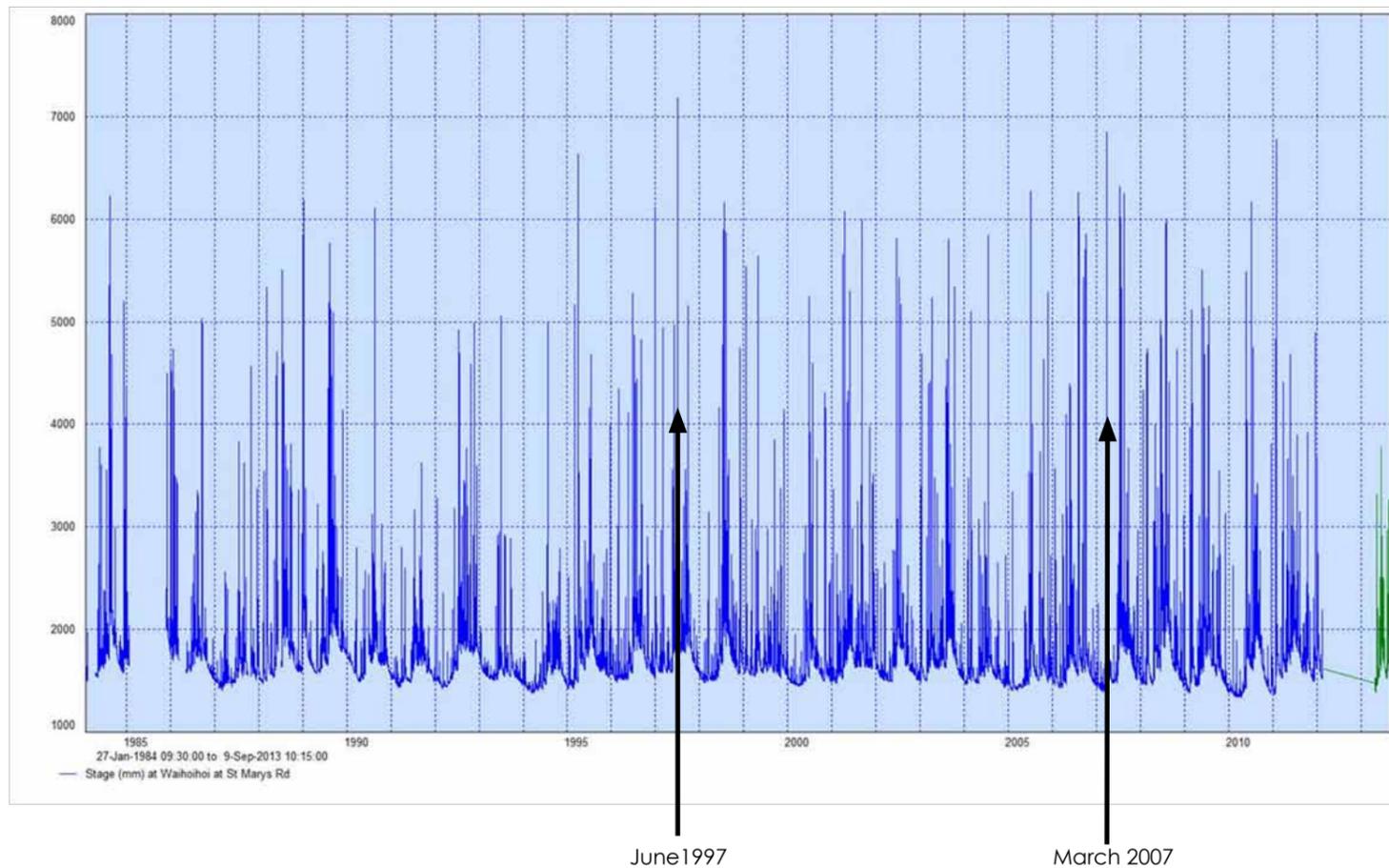


Figure 5.29 plots the water levels measured at the gauge site on the Waihoihoi River. The water level is in millimetres, and is relative to the site datum. The highest water level recorded in the 30 year period was 7,186mm above site datum on 30th June 1997. The second highest event was 6,849mm above site datum on 29th March 2007, this being the event for which flood levels are mapped in Figure 5.28.

### 5.3.4 Climate change impacts on flooding

There is already a large natural variability in rainfall patterns and extreme rainfall events in Northland. With climate change Northland is expected to have an overall decrease in annual rainfall, but more frequent and intense heavy rainfall events. NRC has done some modelling for the impacts of climate change for areas in Northland, but not yet specifically for Waipu. Their modelling assumes 18% additional rainfall in a storm event, though what this means exactly for the water levels in the Waipu rivers is uncertain. The relationship between rainfall intensity and the size of a flood is not linear. The magnitude of flooding will also be influenced by other factors, primarily sea level rise, storm surge, cycles of natural variability and the characteristics of the catchment (Ministry for the Environment, 2014).

According to MfE New Zealand tide records show an average rise in relative mean sea level of 1.7mm per year over the 20th century. MfE recommends planning for future sea level rise of at least 800mm relative to the 1980-1999 average by 2090. NRC is using an assumption of 700mm in its modelling for Northland. It is reasonable to expect that the conjunction of higher high tides and more frequent heavy rain events will result in more frequent and more extensive flooding in the design site. This accords with NIWA's predictions for more severe flooding for Northland (Hansford, 2013).

The interactions of the variables listed above may change the morphology of the river. Sea level rise will increase the inland influence of tides which has obvious implications when coupled with extreme weather events, but may also contribute to flattening of the river's slopes in coastal reaches. Reduction in the slope of the river slows the velocity of the water, which in turn reduces its ability to transport sediment, and leads to a build up of sediment in the channel. If the land elevates sufficiently the river comes to a virtual standstill. With the main channel backed up, new divergent branches form off the main channel creating a delta landscape (Prominski et al., 2012).

Changes in rainfall may also change the amount and size of sediment the rivers are carrying, which in turn may affect the level of the river bed and the width of the channel. If the river bed is raised by the deposit of more sediment the flood-carrying capacity of the river channel is reduced. The opposite may occur where an increase in the velocity of the water allows more sediment to be carried than is deposited, which could result in greater erosion of the river banks (Ministry for the Environment, 2014).

The extent to which a greater load of sediment reaches the rivers depends to some extent on how much rainfall the land in the catchment area can absorb, which in turn depends on the nature of the soil type and the extent to which it is dry or water logged. The amount of vegetation in the catchment will also affect the rate and magnitude of erosion in the hills and the amount of sediment that washes down to the rivers. In the forested areas the amount of vegetation will vary according to the cycle of growth and felling.

### 5.3.5 Assessment of flood risk at the design site

For this project, the assessment of flood risk is confined to the design site only, and does not take into account the proposed subdivision. It is assumed that under the terms of the Resource Management Act (1991) the flood risk has been assessed by the District Council in the course of the Resource Consent process. The boundary of the second part of the subdivision has been set between 85 and 165 metres back from the river bank, this presumably being deemed an acceptable flood avoidance strategy.

Although we can be almost certain that flooding will occur on the site, we need to understand the nature and magnitude of the risk. There are two aspects to assessing all risks – the consequences of the event occurring and the likelihood of it occurring. With regard to consequences MfE recommends these be analysed according to social, cultural, economic and environmental consequences. An insignificant result from flooding would have little or no cost and only some minor inconvenience. A catastrophic result would involve loss of life, significant disruption to community life, and long term financial consequences. In practice the assessment of consequences of flooding would be undertaken in a consultative way with stakeholders and experts, but for the purposes of this project I have made my own assessment, the details of which are outlined in Appendix 4. The results of this analysis indicate that the combined risk rating for this site is either moderate or high for each of the realms listed above.



Figure 5.30: Subdivision set back from the river's edge

### 5.3.6 Designing for future flood risk

Contemporary approaches to dealing with rivers emphasize semi-natural biological engineering over hard, technical engineering, preserving rivers as multifunctional places for flora, fauna, people and water (American Society of Landscape Architects, 2014; Dreiseitl, 2012; Ministry for the Environment; Prominski et al., 2012). Whilst devices such as stopbanks and upstream flood water storage might be considered after natural flood management solutions have been considered or exhausted, these are not appropriate for a river of this size, with a relatively low risk profile.

In the first instance designing for flood tolerance on the project site is essential. Walking surfaces will need to be hard enough not to wash away in a flood. This is most likely to be concrete and boardwalks, rather than compacted gravel. Plantings need to be tolerant of periodic inundation. Built structures need not to create significant resistance or obstruction to a flow of water. However, flood management is a whole-catchment issue. Ideally, design of the walkway would be linked to an integrated, whole-catchment approach to managing flood water. Interventions at a catchment level would include increasing the catchment capability to absorb heavy rainfall primarily through increased vegetation on upland slopes; maintaining an effective water channel by keeping obstructions such as fallen trees out of the river; and maintaining an expanded river space to accommodate flooding, primarily through wide riparian buffers and the restoration and protection of wetlands.

These issues of scale and integration coincide with issues of scale and whole-catchment integration for ecological restoration. Accordingly the discussion regarding design response to scale and environmentalism is included in the section on ecology.

## 5.4 Ecology

### 5.4.1 Water quality

In line with central Government policy the Northern Regional Council (NRC) has a strategy for improving the quality and management of lakes, rivers, aquifers and wetlands, called Waiora Northland Water, focusing initially on priority catchments and outstanding bodies of water. NRC's Regional Water and Soil Plan sets out the criteria for rivers and lakes to be deemed "outstanding". Such bodies of water would have catchments dominated by native vegetation and largely unmodified natural ecosystems; or are recognised to be a toanga requiring flow preservation in a near natural state; or are an essential part of an outstanding natural feature or landscape. The rivers of Waipu meet none of these criteria and are not currently included in the prioritised areas, consequently there is no data measuring their health and quality.

The science of water is complex. There are many factors that influence the condition of a river, including for example, the flow rate of the river, whether sources of pollution are diffuse or point, what the nature of the pollution is, surrounding land-use, riparian vegetation, the weather and the climate, and the geology of the catchment, and these factors interact with and influence each other. There are many different indicators of the health of a river that can be measured and many indicators will vary with the weather, the season, the time of day, and from one part of the river to another (Hauraki District Council, 2003; Ministry for the Environment, 2014; Parliamentary Commissioner for the Environment, 2012).

Understanding water quality is a vexing business. The Parliamentary Commissioner for the Environment (2012) identified the three water pollutants of most concern in New Zealand as pathogens, sediment and nutrients. MfE are taking a congruent approach in their new monitoring regime established in 2014, selecting three sets of indicators – the presence of the nutrients nitrogen and phosphorus; the presence and diversity of macro-invertebrates; and the presence of bacteria estimated by the concentration of Escherichia coli (E.coli) (Ministry for the Environment, 2014). Focusing on these pollutants and indicators it is possible to make some reasonable assumptions about the water quality in the rivers on the design site.

From observation of the murkiness, or turbidity, of the water it is obvious that the Waipu rivers carry a lot of sediment. Some sediment in rivers is normal, as is erosion. It is accelerated erosion and elevated levels of sediment that negatively affects water quality (Hauraki District Council, 2003; Parliamentary Commissioner for the Environment, 2012). The effects of sedimentation in rivers are well documented. High levels of sediment reduce light penetration which adversely affects fish and insect life, causes scouring and abrasion, can smother stream life which in turn deprives fish and birds of food, contributes to the rise of water temperature, provides particles for phosphorus to cling to, and adversely affects the aesthetic and amenity value of a river (Hauraki District Council, 2003; Northern Regional Council, 2013a; Parliamentary Commissioner for the Environment, 2012).



Figure 5.31: NRC designation of priority rivers in Northland



Figure 5.31: Drainage from pasture into the Waihoihoi in the design site.



Figure 5.32: Crumbling bank on the Waihoihoi in the design site.

It is likely given the predominance of clay soils in the catchments of the Waihoihoi and Ahuroa that even in undisturbed conditions there would be some degree of murkiness in these rivers. As rivers in their lower reaches they will carry more sediment as a normal condition. However, the levels of sediment in these rivers will vary according to the cycle of felling of the exotic forests in the catchment, and rainfall events. Turbidity levels are also much lower in catchments with substantial areas of riparian vegetation (Hauraki District Council, 2003). Whilst there are small areas of native forest in some of the gullies in the Waihoihoi catchment and patches of native riparian vegetation in the Ahuroa catchment, there are large areas of farmland in both catchments where the riparian vegetation is grass so sediment levels can be expected to be elevated to some degree.

Nitrogen and phosphorus occur naturally in rivers even in the most pristine catchments. Because the primary source of nitrogen in freshwater is animal urine, rivers that run through dairy farms as these do, can be expected to have elevated levels of these nutrients. Because most phosphorus is bound to soil particles and in these rivers the stream banks are not well stabilised and there is limited riparian vegetation to filter sediment, phosphorus levels are likely to be elevated to some degree. These nutrients cause excessive plant growth but this is not evident in the rivers on the design site. It may be that the tidal activity and brackish water is affecting potential plant growth in the design site. However, there is weed growth in the Ahuroa upstream from the design site.

Pathogens in freshwater come mainly from human and animal waste (Parliamentary Commissioner for the Environment, 2012). It is clear from observation that fencing of waterways and seeps and wetland is variable throughout the catchment and alongside the river. In some places stock have direct access to the waterways, and there is some piped drainage from pasture directly into the river. It is likely therefore that there are some levels of pathogens in the river.

The nearest priority catchment is Whangarei Harbour where water quality is monitored at a number of points. The Purewa and Otaika sub-catchments are similar to the the Waihoihoi and Ahuroa catchments in that they encompass both exotic forest and dairying/dry-stock pasture and fencing of waterways is variable. Monitoring data reveals high levels of nitrogen, phosphorus and faecal pathogens indicators. It is reasonable to expect that monitoring of the Waipu rivers would reveal similar results.



Figure 5.37: Turbid water in the Ahuroa catchment passes through a patch of native riparian vegetation, upstream from the design site.



Figure 5.38: Weed growth in the Ahuroa river upstream from the design site.



Figure 5.33: A patch of native riparian vegetation in the Waihoihoi catchment, with evidence of accelerated erosion in the form of small slips on the hills behind.



Figure 5.34: Fenced wetland in the Waihoihoi catchment.



Figure 5.35: Stock graze to the edge of the Waihoihoi river opposite the walkway site.



Figure 5.36: On the Waihoihoi upstream from the design site unfenced pasture allows stock to access the stream; invasive weeds cover the bank on the left side of the river.

## 5.4.2 Impact of the subdivision

There are likely to be two main effects of the subdivision as the land is developed. Firstly, as earthworks are done the amount of sediment entering the river will increase, and in association with the increased sediment levels of phosphorus will increase. Secondly, an increase in the area of hard surface associated with driveways, paved living areas and paths will increase the amount of storm water run-off. The overall landscape concept plan for the subdivision submitted to the Whangarei District Council for approval by the Parks Manager includes gravel path swales linked to two wetland areas providing a storm water detention and filtration function. The plan allows for additional drainage where required, with final plans for the pathways and the earthworks associated with their construction determining the drainage work required.

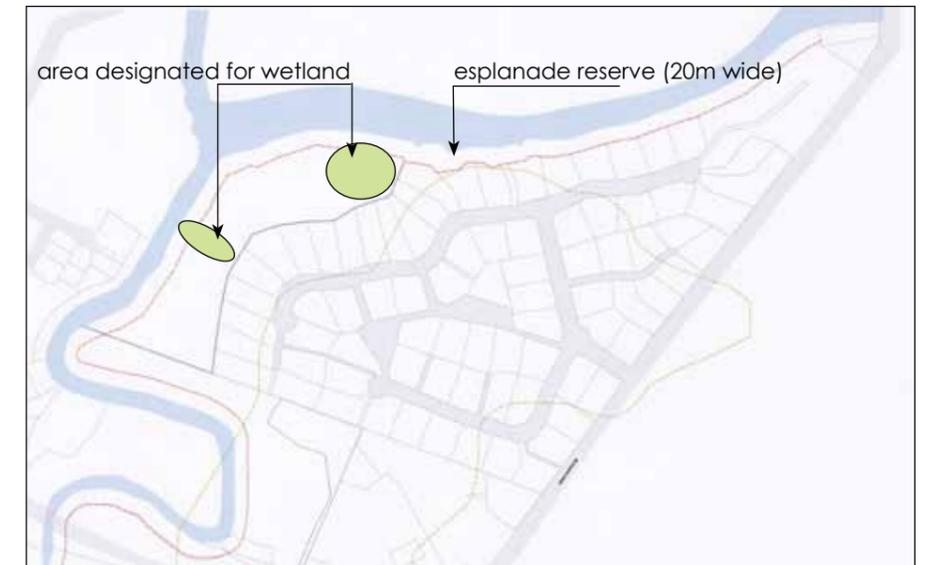


figure 5.39: Subdivision plan

## 5.4.3 Riparian restoration

Riparian vegetation is well proven to influence the health of waterways and how they function. Well-managed riparian buffers improve water quality by:

- Filtering surface run-off
- Taking up nutrients through plant roots
- Removing nitrogen from water
- Preventing stock access which in turn reduces direct input of sediment, nutrients and faecal bacteria to waterways
- Improving bank stability which reduces sedimentation and improves water clarity, and helps to maintain the form of the river

They also improve biodiversity and provide habitat for freshwater life by:

- Protecting fish spawning habitat
- Providing food in the form of leaf litter
- Shading the water which reduces the temperature of stream water and reduces the growth of weeds
- Providing for more diverse plant and animal communities
- Providing native wildlife corridors from the hills to the sea (Northern Regional Council, 2005, p. 5)

Wetlands perform similar functions, acting as sponges that soak up water, absorb and break down nitrogen and trap sediment and so contributing to flood control and improved water quality. They are also important food sources for fish, birds and other animals (Northern Regional Council, 2009). The landscape concept plan for the subdivision does not make clear what kind of wetland is envisaged, but on a river flood plain such as this, and in accordance to the known history of vegetation on the site, a marsh seems the most appropriate. Marshes will support trees such as kahikatea, swamp maire and pukatea, and may be both flooded and dry at different times (Northern Regional Council, 2009).

In the context of increasing awareness of the poor quality of many of our waterways, both regionally and nationally, there is a proliferation of advisory material generated by regional and city councils designed to help landowners and communities manage riparian margins. There has been a concomitant surge in stream-side restoration projects focused on re-establishing or enhancing riparian vegetation. In rural areas this effort has been largely directed toward improved water quality and flood control. In urban areas riparian planting projects have additional objectives that include recreation and aesthetics.

Reeves et al (Reeves, Meleason, & Matheson, 2006) studied 50 riparian buffers in fifteen stream restoration projects to identify the keys for success. They found that in order for a riparian planting to sustain itself over the long term it must form a closed canopy to out-compete weeds and promote natural regeneration. They also found that the elimination of weedy ground cover was related to the density of planting and buffer width. In general dense plantings with widths of 15 metres or more provided the best environment for weed reduction, and plantings of 10 metres or more encouraged self-seeding over time. This evidence has significance for design where there may be multiple objectives. In this project a dense planting 15 metres wide will not accord well with recreational and aesthetic goals. A self-sustaining riparian margin is not a primary goal, in which case design that expects ongoing maintenance will select a narrower and/or less dense planting.

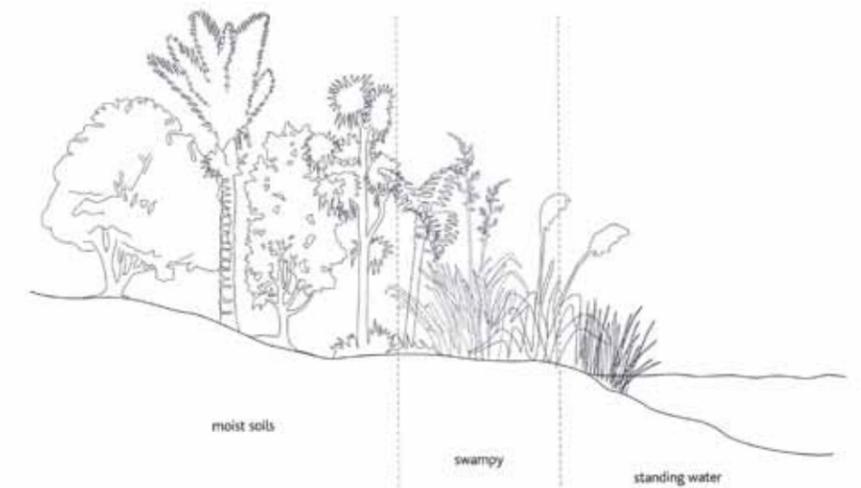


Fig 5.40: Progression of wetland and riparian planting recommended by the Auckland City Council.

## Appendix 2:

Riparian plant list

Wetland plant list

Saltmarsh plant list

## 5.4.4 Riverglen walkway - case example

The walkway on the other side of the river from the design site is an example of a riparian restoration that is unlikely to be self-sustaining, and performs poorly from a recreational and aesthetic point of view. This short walkway was installed as part of the subdivision development on that side of the river. The riparian planting is between two and four metres wide – far short of the requirements for the development of a self-sustaining eco-system. The planting itself is largely *Phormium tenax* (flax) and the *Phormium* cultivars “Yellow Wave” and “Green Dwarf” mixed with *Apodasmia similis* (oioi) and *Cordyline australis* (cabbage tree). It is attractive in colour and form. But the path, at 1400mm wide, is quite narrow, and the riparian planting is quite tall. The proportions of height to width make the walkway feel crowded and confined – a physical sensation of having no elbow room that is only partially compensated by the open grassed area on the other side of the path, and indeed tends to drive the walker off the path and onto the grass. Along much of the path the flax leaves droop over the edge and it is not comfortable to walk two-abreast. The planting also restricts the view over the river, exacerbating the sense of confinement. There are some “windows” where the smaller growing flaxes have been used, but for much of the path one has to stretch and peer to get glimpses of the river and the land on the other side, imposing a sense of dislocation between the walkway and its larger context.

The overall space for planting of this kind and the path is too small. A buffer of at least a metre, preferably two, of smaller plants between the flaxes and the edge of the path would reduce the sense one has of walking next to a wall, and reduce the amount of maintenance required to keep the path free of flax leaves. A lesser proportion of the very big *Phormium tenax* within the overall planting would allow a greater sense of connection to the river. Ironically, an equally dense planting on the other side of the path would create a different feel altogether – one of balanced containment, a sense of walking through a bushy tunnel, which if punctuated by open spaces and expansive views would be more satisfying than the current pathway. In that arrangement the path would need to be a little wider to allow comfortable two-abreast walking.

The absolute width of a riparian planting may be important if a self-sustaining ecosystem is a design goal, but the relative proportions of planting, both horizontally and vertically, to the walking space is also important, and in a maintained environment may be more important than achieving the 10 or 15 metre mark for weed control and self-seeding.



Figure 5.42: Mixed riparian planting of flaxes and oioi.



Figure 5.43 “Window” of lower planting of oioi provides a brief view of the river between tall flaxes.

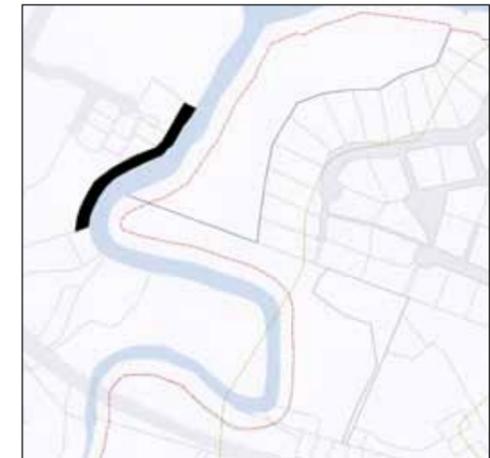


Figure 5.41: Location of the Riverglen Rd walkway. Length approximately 250 metres



Figure 5.44: “Wall” of plants beside the Ferry Rd walkway.

## 5.4.5 Scale, culture and ecology

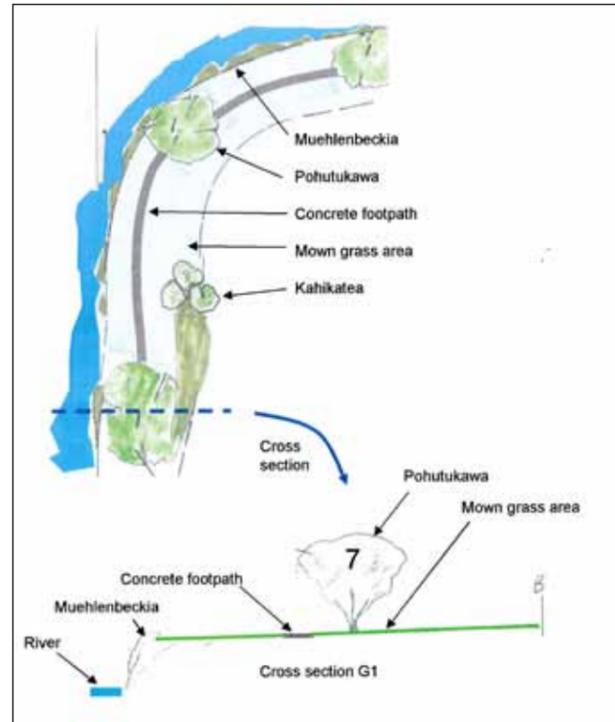


Figure 5.45: Extract from the Nova Scotia River Estate Overall Landscape Concept Plan

From an environmentalist's point of view the site calls out for riparian restoration. People interviewed, in particular local hapu Patuharakeke, also expressed concern for the ecology of the river and a desire to see riparian planting as part of the overall design. The landscape concept plan submitted to the Council makes a very limited response to the issue of riparian vegetation. The plan specifies mown grass along the length of the walkway, with wetland plantings in two areas; fifteen pohutukawa (*Metrosideros excelsa*) and seven kahikatea (*Dacrydium dacrydioides*) dotted along the length of the river bank as specimen trees; and a planting of *Muehlenbeckia complexa* to cover concrete buttressing along one stretch of the river bank and to provide a manageable transition between the concrete and the mown grass. As with flood control, the quality of the river's water is closely linked to the whole river ecosystem. It is largely determined by what is happening throughout the whole catchment, outside the river itself, and in this instance largely outside the project site. Accordingly, an integrated whole catchment approach is required to improve water quality and to mitigate the effects of flooding. One might suppose that given the small scale of the project site in relation to the catchment as a whole, and its downstream position, no ecological interventions will be effective, in which case a pragmatic response in the form of mown grass and specimen trees is sufficient, and may be defensible in cultural terms. However there are theoretical and practice precedents that address such issues of scale, landscape architecture's responsibilities to environmentalism, and implicit assumptions about culture and aesthetics that give rise to a potential range of different design responses.

The issue of scale is common to design projects. All sites sit within a place and a region. Swaffield identifies the need for landscape architecture to mediate between multiple scales as a common and major theme of practice. "Embedded within each site are traces, influences, and signs of natural and cultural processes operating at larger and smaller scales, past and present. While design action may principally be at site scale, design thinking must embrace other relevant scales, from the global to the local...connections between different spatial scales become critical to design integrity" (Swaffield, 2002, p. 228). Swaffield is primarily pointing to a convergence of landscape planning and landscape design, and the application of design thinking to planning, but there is another perspective to design integrity that is relevant to this site. Given the levels of debate and concern regarding water quality in Northland, and indeed throughout the country, and the range and intensity of political processes centred on the tension between dairying and river ecology (Hansford, 2013; Macfie, 2014) it seems that design that pays no attention to the ecology of the site dislocates the site from its larger ecological and political context.

Robert Thayer (1994) argues that our ability to see and understand the inner workings of a landscape is a necessary pre-condition to making environmental decisions and choices. Intentionally making ecology visible, even in a relatively limited way, will meet the expectations of at least some groups in the community. Researching and writing in the mid 1990s, Nassauer addressed the issue of cultural expectations in relation to designed landscapes and ecological quality. She argued that people do not know how to see ecological qualities directly. "We know how to see ecological quality only through our cultural lenses, and through those lenses, it may or may not look like nature. Nature has come to be identified with pictorial conventions of the picturesque, a cultural not ecological concept" (Nassauer, 1995, p. 197). Her response to this problem was to frame ecological function within a recognisable system of form typified by neatness and order, at least to some degree, as signs of human habitation, human intention and care - in shorthand, "cues to care". From her research Nassauer concluded that the naturalness that Americans appreciate is more closely related to an eighteenth century ideal of the picturesque rather than to an understanding of ecological functioning, but how true that is to New Zealanders, and more particularly Northlanders, nearly 20 years later, is open to question. Admittedly without the benefit of research evidence, one might suppose that enough people (at least in Northland) have now experienced board-walked wetlands, restored riparian plantings and native plants in private gardens to have a broader view of what constitutes "naturalness", and that cultural expectations have adapted to embrace landscape forms that include greater biodiversity and more "messiness" whilst still appreciating eighteenth century European ideals of landscape. It is assumed that the community in this context is more able to recognise ecological landscape patterns than North Americans 20 years ago. This is not to say that design interventions that signal human intention are not desirable in this context. Rather, they may be less intrusive or extensive, and/or intended to meet other design objectives than just normalising ecological landscapes.

# **6. Design precedents**

---

**Selection of case studies**

**Sites of public commemoration**

**Walkways**

## 6.1 Selection of case studies

### *Sites of public commemoration*

- *Vietnam Veteran's Memorial, Washington D.C., USA*
- *Princess Diana Memorial Fountain, Hyde Park, London*
- *Memorial to the Murdered Jews of Europe, Berlin*

### *Walkways*

- *The Kennedy Memorial at Runnymede*
- *Whangarei Harbour Heritage Walkway*
- *Hatea Walkway, Whangarei*
- *Te Henui Walkway, New Plymouth*
- *River Lane, Waiuku*
- *Mangorei Track, Taranaki*

Case studies have been selected from two categories. Sites of public commemoration are of interest because they are a major field of heritage, and one of the major ways that landscape architecture engages with heritage. Consequently they receive a great deal of attention in landscape architecture's literature and theory, at least in part because a great deal is required of them. They must be purposefully designed to carry meaning, to facilitate the processes of grieving over time, and to construct a unifying narrative out of diverse and often contradictory perceptions and experiences (Treib, 2009; Wolfson, n.d.). In this latter endeavour landscape architecture converges with heritage. It is also in this latter endeavour that landscape architecture encounters the politics of heritage. I have explored three well known sites primarily from this perspective, rather than a design perspective. I was interested to understand how the politics were manifested in each place, and how design and politics intersected.

The second set of case studies are walkways. I looked at many walkways but chose to focus detailed analysis on walkways that I have experienced directly myself, and to include my experience as part of the analysis. I looked particularly at three riverside walkways that are local and vernacular, as being most relevant to this project, and I have explored these in relation to how they work as walkways, how they relate to the river, and how they intersect with heritage. I included the Whangarei Harbour Heritage walkway, because of its designed intention to engage with heritage; the Kennedy Memorial at Runnymede because it is both a walkway and a memorial and I was interested in how its design worked along both paradigms; and the Mangorei Track in Taranaki because of its place in a National Park, where landscape *is* heritage, and because of the things observed and learned while walking it.

Sites of industrial renovation are of interest because they demonstrate how landscape architecture invents heritage. Richard Haag is generally credited with starting a revolution in the treatment of brownfield sites when he convinced Seattle's Parks Department to preserve the old gas works as part of a public park, and in doing so changed it from an old eyesore to a sculptural representation of the past. Since then the preservation and celebration of industrial sites has become common practice. Edited and layered re-presentations of the past have intentionally changed the relationship between people and post-industrial sites, physically, conceptually and emotionally. However, whilst it has been interesting to explore how landscape architecture can rewrite and redeem the history of a site, epitomised by work such as Gasworks Park, Landshaftspark and Zhongshan Shipyard Park, there is insufficient relevance to this design project to warrant the in-depth analysis afforded the selected case studies.

## 6.2 Sites of public commemoration

There are two levels in which landscape architecture's role in, and contribution to, heritage in these case studies can be viewed: firstly as examples of practice resulting in a material landscape; secondly as a process of engagement with the intense and complex relationship between remembrance, ritual, place, national identity and personal grief. Analysis from both perspectives highlighted issues that are relevant to this project.

*Vietnam Veteran's Memorial, Washington D.C., USA*

*Princess Diana Memorial Fountain, Hyde Park, London*

*Memorial to the Murdered Jews of Europe, Berlin*

### The power and the problem of abstraction

All employ a simplicity of design in which materials are central; all sites are more or less "open". They reflect the influence of minimalism in that they reject the traditional iconography of remembrance, the predictable cues for deriving meaning. They break "the rules" hence attracting polarised responses. Talking about minimalism specifically in relation to the Washington Vietnam War Memorial by Maya Lin, (arguably leading the way in this regard), Andrew Shanken writes "It is art that is assertive with space, not meaning. It sets a stage but leaves it empty for the spectator, who participates as actor in the construction of meaning" (Shanken, 2009, p. 232). This perception can equally be applied to the other two memorials. For some this is a most powerful way to convey human emotion. For others the associative openness of an abstract art work is not fulfilling and meaningful; different people need different things. In the emotional arena of memorialisation this is a significant issue. Two of the projects above have employed ameliorative devices, introducing more literal, didactic and traditional iconography of remembrance to the sites. These too have polarised opinion, political compromise seen by some as resulting in artistic compromise and in the case of the Vietnam memorial, 'memorial babble' (Shanken, 2009, p. 235). But this is also an expression of a central tension between the civics of heritage and "the art" of landscape architecture, that has been inescapable in each of the works studied.

### Walking, place and narrative entwined

All these works require a physical engagement, designed to be walked through, around, along. The physical acts of walking, touching, becoming experientially and bodily engaged with the site is integral to the substance of each memorial. Memorialisation in each case requires an engagement with the self in movement, and the imagination, reflecting the way in which walking, place and narrative become entwined.

### Site-by-site engagement

It is interesting to note that although the problem of associative openness has been definitively resolved in relation to the Veteran's Memorial, the debate resurfaces for subsequent works, evidence that the convergence of landscape architecture and heritage is a site-by-site engagement.

### Memory activism

In the conversations and arguments that have swirled around these particular memorials it is possible to identify different groups of people taking on roles as "memory activists", campaigning for forms of memorial and commemoration that accord with their own group's interpretation of the past, what should be remembered and how it should be remembered. Competing interpretations is typical of all heritage, but perhaps more marked in relation to this particular form of heritage because of the emotional freight that memorials carry. It is interesting to observe that time itself plays a significant role in the political tussles.

### Designed landscapes as process

A major influence on this design project from these precedents is to understand both design and the designed landscape as processes, and that the politics of heritage are negotiated both through design, and through occupation and time. Over time the Vietnam memorial has become so layered with meaning and with the authority of meaning it has become an icon in its own right, a portal to community memory. It is hard to remember that it was once bitterly controversial.

## Vietnam Veterans' Memorial, Washington DC, designed by Maya Lin, unveiled 1982



Such a great deal has been written about this memorial it does not need to be discussed in depth here. The polished black granite walls, the lists of names, the horizontal positioning, the sense of being submerged into the earth, are all very familiar; its success as a memorial and a landscape unquestioned. It is included here because its story demonstrates the politics of heritage played out through landscape architecture. The sources of conflict are too complex to unravel here, pertaining to the unresolved moral ambiguities of the Vietnam war, the ambivalence veterans encountered on return, debates about minimalism in public art, and cultural ferment around emerging multi-culturalism and neo-liberal politics (Shanken, 2009; Wolfson, n.d.).

The point that interested me, and is relevant to this project investigation is the premise upon which the work was commissioned. The design was selected by a panel of architects and sculptors from over 1,000 entries in a competition instigated by the Vietnam Veteran's Memorial Fund. The vision for the memorial was that it should be reflective and contemplative, it should be harmonious with its surroundings, and it should make no political statement about the war. As it transpired attempting to be apolitical became political in itself, as veterans, politicians, critics and the general public found no recognisably heroic statements about the fallen and in the gap interpreted anti-war sentiment. The outrage was tempered somewhat by the addition of a figurative sculpture of three servicemen of different ethnicities positioned to gaze across at the sea of names on the black wall. (That brought on another bout of outrage from other quarters). But once the memorial was dedicated, and no longer negotiable, the controversy disappeared and it became lauded for its tranquillity and emotive power (Wolfson, n.d.). The point for me is that the politics of heritage are unavoidable, but also potentially resolvable, though through processes that are not necessarily under landscape architecture's control. In this regard we can see a negotiation between the civic nature of heritage and the artistic aspirations of landscape architectural practice.

## Memorial to the Murdered Jews of Europe, Berlin, designed by Peter Eisenman, unveiled 2005



Germany's Memorial to the Murdered Jews of Europe is dedicated to the Jewish victims of the Holocaust. It occupies a 19,000 square metre site on what used to be 'no-man's land' between East and West Berlin, and is now part of a civic area of government buildings. The memorial is comprised of a vast grid of 2,711 grey concrete slabs or stelae, set at varying tilts, that form a wave-like, undulating topography. The pillars are identical in plan dimension but varying in height. In places at the periphery of the grid they drop as much as 2.4 metres below the street level, read by some as seeming to sink into the earth, by others as rising casually up from the sidewalks as if from something hiding underground (Ouroussoff, 2005, Wefing, 2005). Progressing from the boundary to the central areas the stelae vary in height from 0 to 5 metres, their proportions in effect transforming from slabs that are reminiscent of coffins (Brody, 2012), to pillars that are reminiscent of tombstones (Ouroussoff, 2005), to a maze of pillars that is disorienting and overwhelming for some (Boyes, 2005) and quiet and reflective for others (Krauel, 2009). The stelae create narrow pathways throughout the site that undulate up and down, so that both the horizontal and vertical planes are "unstable", suggesting a disordered ordered system (Krauel, 2009).

The associative openness of the site, and its ambiguity as a memorial has been a source of debate and controversy. At a most fundamental level people have struggled to know how to relate to it physically. Where is the entry and exit? What is allowed and not allowed at such a memorial? What constitutes the right level of solemnity? Eisenman specifically directed that people should not be prevented from interacting with the place as they choose; that the place should not be protected from what might be regarded as playful or disrespectful behaviour and even graffiti and vandalism (Krauel, 2009; Olin & Palmer, 2008). Eisenman's view was the that "like a prison or a concentration camp the monument should survive the attacks unscathed..." (Krauel, 2009, p. 114). Another reading is that it is a representation of that great truism, "life goes on". It went on for many whilst the victims of the Holocaust were killed; it has gone on since. In this reading the notion of children playing on the pillars has simultaneously a blithe innocence about it, and a sharp reminder about how human beings can become inured to the suffering of others.

People have also struggled to know how to relate to it emotionally. German architecture critic Heinrich Wefing (2005) regards the aesthetic "pleasingness" of the work as problematic. Is a Holocaust memorial allowed to be beautiful? The question of the dedication of the memorial arises even more powerfully. This work avoids all of the devices that contribute to inscribed memory. It does not name names of either perpetrators or victims; it tells no story of who was murdered when, where and by whom. This has been a source of much criticism. It lacks the representations that materialise collective and social memory. For many people this associative openness disconnects it to its memorial function, and much of that concern has been ameliorated by the addition of an underground museum as part of the site. On the other hand it is this abstraction that Ouroussoff (2005), architecture critic for the New York Times, suggests can be the most powerful tool for conveying the complexities of human emotion, transcending culture and time.

## Princess Diana Memorial Fountain, Hyde Park, London, designed by Kathryn Gufstafson, opened 2004



The Princess Diana Memorial Fountain is a large oval moat that forms a ring of water that cascades down both sides to converge in a pool at the bottom. It is supposed to represent Diana's inclusive and accessible nature, as well as be a peaceful place for contemplation, relaxation, and children's play. It has attracted much controversy as a memorial and as an artwork, as an appropriate use of public funds, and perhaps most markedly, as a failed installation. It is restrained and elegant in conception, and many people find it beautiful close up, but from a distance resembling a concrete retaining wall or a giant Scaletrix circuit (Glancey, 2004). Others think it lacks grandeur, and is not sufficiently elaborate to pay proper tribute to Diana. Others complained about the cost. The process of selecting the design, undertaken by the Memorial Fountain Committee reads like a soap opera, fraught with conflict and intrigue as the chief memorial activists and the arts community clashed over the preferred submission. However, the most significant issue has been its performance as a public place. In the first few weeks several people fell whilst paddling, injuring themselves, the pumps broke down flooding the surrounding grass and turning it to a bog under the feet of the thousands. According to one journalist, "whatever aesthetic qualities the original fountain may or may not have had, they have now been eradicated by the municipalisation of Gufstafson's design" (Sudjic, 2005). Originally intended to be delicate white channel in the green sward, it is now bordered on both sides by a hard gravel shoulder that is in places wider than the channel itself. One of the main points to emerge from this study is that work must be fit for purpose, and understanding the purpose is critical. That this memorial, weighted as it is with constructs of both heroism and celebrity, would attract huge numbers of visitors should not have been a surprise.

## 6.3 Walkways

Reflection on meanings and theories of walking, study of the selected walkways and reflection on my experiences of as a walker has highlighted themes and issues that are relevant to walkway design on this site.

### Spatial and experiential sequences

A sequence of different kinds of spaces with changing conditions has a paradoxical effect. On the one hand they can make a walk seem shorter as one can concentrate on movement from one space or section to the next, rather than thinking about the entirety of the walk (Gehl, 2011). In effect a series of small destinations can be constructed. On the other hand a sequence of different conditions and experiences builds a sense of being on, or having completed, a journey. We gather together the places encountered along a walk, the experiences they generated, and the sequence they occurred, and the act of walking unites the disparate into a whole. Children will often relay a walk in this way....” we went up the hill and that’s where I fell over in the mud, and then we went to the pond and we fed the ducks, and then we went ....” In this way story and walking become entwined, with spatial and experiential sequence a kind of punctuation.

### Familiarity and novelty

When you walk the same route or the same path over and over again you become attuned to detail, and the conditions of the moment – the qualities of light and shade in different weather and different times of the day, the colour of vegetation at different seasons, the presence of flowers, people you encounter. Different experiences of the same place build a storehouse of memories so that each walk contains a comparison with all the others, and as each comparison revisits memories it builds a sense of belonging to the place. A palette of changing detail is a concern for design e.g. selection of plants and trees for seasonal change; options for different routes. In this site different ways of experiencing the constant changes of the rivers is also a key to bringing detail into focus.

### Walking and talking

Walking is for many, at least some of the time, a social activity. Several people interviewed in the research phase of this project talked about walking as way of meeting and spending time with friends. The walkway needs to provide enough space for people to walk together. At Te Henui and the Hatea walkway I observed people jogging two abreast, a family of four walking in shifting alliances, a cyclist and a walker passing each other comfortably. The path does not need to be wide enough for two or three abreast walking in its entirety. People can go to single file for short sections if a wider section follows that enable them to regroup.

### Walking and not talking

Given the long association of walking with thinking, we must expect that walking is for many, at least some of the time, a solitary activity. The walkways in the case studies offered varied opportunity for solitude. The Whangarei Heritage Walkway is largely an urban walkway, so it offers the solitude of anonymity. As it progresses away from the town basin it becomes quieter and simpler, whilst remaining very open, which by contrast promotes a sense of solitude. Te Henui has spaces in which enclosed solitude can be found. Both Te Henui and Hatea allow a contemplative walk by virtue of the fact that relatively few people use them at any one time. The Mangorei Track has the aura “back to nature” borrowed from its National Park identity that is associated with a sense of solitude and escape from the madding crowds. The issue for a designed walkway is that both the qualities that facilitate social walking and the qualities that facilitate solitude need to be present. This is not to say that those that seek solitude must be alone at all times. Rather, the space must allow people to both approach social contact and retreat from social contact. Wide enough paths, paradoxically, allow both. Places to walk apart from the main route also facilitate solitude and a more private, intimate form of socialising.

*The Kennedy Memorial at Runnymede*

*Whangarei Harbour Heritage Walkway*

*Hatea Walkway, Whangarei*

*Te Henui Walkway, New Plymouth*

*River Lane, Waiuku*

*Mangorei Track, Taranaki*

## Walking in others footsteps

Whenever we walk on any path we are walking in someone else's footsteps. This is what a path is. It inscribes where others have gone before; it speaks simultaneously of absence and presence. On paved paths the footprints of your predecessors can't be seen. In unpaved spaces the footprints of others are visible and you do literally walk in their footsteps. It is satisfying to be part of the visible process that maps the landscape, but as can be seen at the Mangorei Track too many footprints become destructive. In a site such as this, however, where the population is small and the tourists few, it may be possible to leave parts of the site to be tracked informally, to let desire lines emerge and allow people that sense of continuity without creating impassable seas of mud. In summer the population swells, but the ground is likely then to be hard.

## Crossing open spaces

An open undifferentiated space can be a problem for people. They will tend to skirt around the edge where they will experience detail on one side and open space on the other (Gehl, 2011), or they will cross if there is a clear destination or purpose. At Te Henui I found myself crossing an open space to reach a viewing place at the river's edge, and again to enter the old cemetery. Otherwise I stayed on the path and viewed the open space. At Mair Park the open space is not very wide and bounded by the river and trees which makes it approachable, with a sense of place and purpose. At Pouakai a boardwalk both leads you and confines you, simultaneously opening up and protecting the open space. Similarly a viewshaft or sightline can call you across an open space without necessarily requiring a path. Design needs to ensure that open space is differentiated in ways that make it accessible and usable.

## The path

The material that you walk on creates a different kind of experience. Concrete paths speak of urban environments. Packed gravel speaks of a more relaxed vernacular place. Rocks, tree roots and mud speak of "wilderness". Boardwalks across the wetlands will make them physically accessible but also signal that they are special places needing special care. In a rural site packed gravel or limestone chip feels more appropriate than concrete. A number of people interviewed expressed their preference, unprompted, for gravel rather than concrete. However, the site will flood and concrete will stand up to flooding better than compacted gravel. On the other hand it may be still be cheaper over, say twenty years, to repair a gravel path two or three times than lay concrete.

## Changes of scale

Small and large scale spaces work to enhance each other. The experience of a large space is enriched when the approach is through a small space (Gehl, 2012). This contrasting effect is achieved when the Hatea walkway comes out of the bush and into the open space of Mair Park; there are several places at Te Henui where the path constricts through bush and plantings, then comes out onto park-like space. Neither River Lane nor the Whangarei Heritage Walkway employ changes of scale. They feel like one continuous space. River Lane illustrates how too much intensity at a small scale engenders the need for escape, for the relief of open space. Jellicoe uses contrast of scale very effectively at the Kennedy Memorial, where a narrow enclosed path opens to a wider, lighter space containing the memorial, followed by a large wide open space. The Mangorei walk affords a similar experience, when after a steady climb through bush you come out above the bushline and a panoramic view and the vast space of the mountain side stretches before you. These are of course at the dramatic end of the effect of contrasts of scale, where psychic space and material space conflate to generate a sense of awe, when one feels small but a part of something larger and more powerful than oneself. There is a complex and far reaching discussion about the panoptic perspective, the intersection of spiritual, psychic and material space, and cultural constructions of the picturesque and the sublime (Byrnes, 2000; Solnit, 2000) that is too large for the purposes of this work. It is sufficient to note that contrast of scale at even the most modest level enhances the experience of walking.

## **“Something happens because something happens”** (Gehl , 2011 , p.75)

Gehl’s observation regarding the positive, or negative, self reinforcement of activity in space is made specifically about urban and city spaces, but it can apply equally to any public space. People are attracted to people, so a place where people congregate will become a place people congregate – or not. The challenge for the design of a walkway such as this is to create a space that is attractive to people to come and to spend time there. This is a site in an area with a small population so dense occupation is not the goal. Rather, one might expect local residents from the subdivision to meet up while walking or cycling to the village; in summer one might meet up with an acquaintance at the river’s edge. It is these serendipitous meetings that start to create a sense of community in the space. Creating destinations and places to linger, such as the old boat ramp, or the jetty, are strategies to employ.

The Whangarei Heritage Walkway “borrows” activity from the surrounding spaces. High levels of permeability between the sculpture park, the playground, cafes, and nearby work places create exactly this positive self-reinforcing cycle. In contrast, when I walked down River Lane my companion and I were the only people there. The boundary between the walkway and other sources of public life and activity are impermeable. One would have to visit more often to be sure, but I suspect this a place where nothing happens because nothing happens. No amount of fine design will bring a space alive if it is not stitched into its context in a way that enables and invites people in and encourages them to stay.

## **Interpretation**

Only the Whangarei Heritage Walkway and Te Henui use interpretative storyboards. Those on the Whangarei walkway are a kind of outdoor museum display that are a distraction from the site itself and the activity of walking. Those at Te Henui have relevance to the walkway; they tell you something about where you actually are. But they too reflect a particular approach to heritage that privileges words over experience, creates a distanced, observer relationship between heritage and the present, and isolates the past from the future. This design project seeks to engage with heritage as living activity. Accordingly storyboards and interpretation panels are selectively outside the design scope. However, I know from the case studies on sites of commemoration that abstract representations of heritage may not satisfy some groups in the community, and they may elect to install interpretation panels. However, this will be enacted through political processes, rather than design led, and must be regarded as part of the process of community occupation of place.

## The Kennedy Memorial at Runnymede, U.K., by Geoffrey Jellicoe



As a walkway this is short but satisfying. It has only one access point so it is focused on its destination - the Kennedy Memorial. Richardson (2013) ascribes the success of the Kennedy Memorial to the fact that it is less a memorial than a memorial landscape. You start by walking across an area of flat pasture following only the desire lines in the grass. It was not my experience but apparently there are times of the year when the field is too muddy to cross. A modest timber gate marks the entrance to the path that leads you uphill through shady woodland. The path itself is one of the main designed features of the walkway. It is comprised of some 50,000 setts laid randomly. The setts are hand hewn; no two are the same. "The setts represent the multitudes for whom Kennedy stood as champion for individual freedom" (Jellicoe, 1996, p. 188). The path is a powerful experience; uneven underfoot it has a sense of age, and combined with the trees one has a sense of being enfolded into the place and the journey. The woodland has been largely untended, allowed to be as it is as a natural ecosystem.

At the top of the hill the trees thin and the setts diverge to frame smooth shallow steps at the monument itself. Jellicoe used English and American trees to flank each side of the monument, wanting them to seem to be "in conversation" (Richardson, 2013). A second path at right angles to the first leads to two sets of steps up to large stone bench seats from which there are views across the fields and river. This feels like part of the memorial landscape and the memorial experience, not just a resting place. The monumental qualities of the stone steps and seats contrast with the landscape, in which no neat garden beds or closely cut grass has been allowed to intrude. They have a sense of being left over from another time. You then retrace your steps, back down into the enclosure of the woods.

This walkway/memorial is imbued with allegory and metaphor that is too detailed to go into here. But neither does one need to know it to appreciate the sense of movement through the changing conditions of the field and the woods, then the stillness at destination. It is an intensely designed landscape that feels paradoxically ancient and undesigned.

## Whangarei Harbour Heritage Walkway



This walkway runs alongside the south side of the harbour from the town basin. Just recently a bridge has been installed that allows the walkway to follow a looped route. The walkway is designed as a "heritage walkway". It passes along the front of mown park-like space, which includes a sculpture park and a children's playground, connects directly to theatre and art gallery buildings, the street and neighbouring light industrial buildings. Initially the walkway feels connected into these other spaces and places, and further on it acts as a connection between these amenities and the more distant open space at the harbour edge. Mangroves used to hide and reveal the view of the harbour, but these are now being removed to bring the view of the water and boats into the space. The wide path is concrete punctuated with timber insets and storyboards. Seating is detailed to reference shipping. Overall it has a designed, constructed, urban feel, initially borrowing the activity of the adjoining spaces to feel vibrant and alive. Further on it becomes much simpler and quieter.

The heritage component is interesting because it is not specifically attached to the walkway itself. It is a series of information panels that are about, for example, the history of Maori migration and occupation of the wider area; Maori myths and legends related to Whangarei; the history of the town, referring to places and streets that you can't see from the walkway; the history of shipping and recreational sailing. The story boards themselves are elegant and sculptural, but there is little incentive to read them. They are a distraction from the immediacy of walking and experiencing the place, and seem like a layering of museum-like functions over the top of the walkway, rather like an outdoor exhibition space.

## Hatea Walkway, Whangarei District Council, Whangarei



The Hatea River Walkway follows the river from the Whangarei town basin to the Whangarei Falls in three sections. For the purposes of this case study I have explored the first section from the town basin to Mair Park. At 1.3km this section is similar in length to the proposed walkway at Waipu. It also has two road ends, and can be walked as a loop using the footpath between. The walkway passes through several distinct zones. It begins at the urban waterfront, crosses the river to the Aquatic Centre and passes through a small park area, open and grassed with mature exotic shade trees. It continues to a boardwalk that winds through a mangrove swamp; makes a short transition through a suburban neighbourhood to reach an area of native bush. A narrow compacted gravel path follows the river, the bush hiding and revealing the river as you walk along. The walkway crosses again on a stone bridge to reach Mair Park, where the space opens up again to a grassed area partly shaded with mature trees. From here the river can be accessed for paddling, swimming and fishing. Rocks from the river are used for the bridge and a retaining wall along the edge of the park. The final zone is a gravel track that climbs back to the road through regenerating bush.

The walk offers a series of distinctly different experiences through different kinds of vegetation, different degrees of openness and closure, light and shade, and different experiences of the river. The walking surface changes from one part to another but is always vernacular and "soft". It is a relatively "unbuilt", "undesigned" walkway, inserted into the natural environment, but effectively stitching the urban environment, the bush and the river together. It provides different kinds of recreational opportunities. People can access Mair Park and the river without undertaking the walk; the mangrove section can be walked as a little loop on its own. I found this an altogether satisfying walk.

## Te Henui Walkway, New Plymouth



Te Henui walkway is in many ways similar to the Hatea walkway in its overall vernacular “undesigned” feel. There are some parts that are a little unkempt and weedy. In parts it has the feel of being inserted into natural bush; in others it has a more park-like, planned feel. It starts at the Coastal Walkway, though it can be accessed at many points. It follows the stream through areas of native bush, exotic plantings and open spaces. It passes picnic areas and a swimming hole where children were playing when I was there. It had a wonderfully old-fashioned feel of ideal and idealised childhood experiences. The stream comes in out of view but the sound of it is almost always present. The path is a mix of concrete and packed gravel, suitable for walking, running, biking, and baby buggies. The walkway passes a number of sites of historical significance that are marked with signs and storyboards. There are two pa sites, a cemetery established in 1861, and an old vicarage from 1844. Signs and storyboards address the sites of significance and built artefacts as “found” phenomena on the site i.e. its stories are focused on heritage in the site itself, looking beyond only as context to the place you are standing. This is quite different from the Whangarei walkway, and a much less intrusive, distracting approach.

It offers a variety of layered experiences, different kinds of movement, different ways of relating to the river, and the opportunity to divert to points of interest and take smaller looped routes. This walkway also stitches the urban environment and the river together. Multiple points of access provide multiple possible destinations in the neighbouring urban streets, creating a web of connections that allows the walkway to be an integrated part of people’s neighbourhoods, and to create a sense of the possibility of exploration. This too provided me with a satisfying walk. The local community is also very engaged with the walkway, working in partnership with the City Council through a “Friends of Te Henui” organisation.

## River Lane, Waiuku, by Resēt Urban



River Lane runs between the rear of the shops on the main street and the very upper reaches of the Waiuku stream. It runs between two main roads, with access at each end from these roads. From one end you can cross the road to a reserve where historic remnants of the old wharf are preserved. From the other end you can cross the road and join a pathway that runs along the edge of the last short section of river. River Lane itself is a short walk, with an intense urban feel. The path is concrete, the river banks have been provided in rip rap. The river has been semi-dammed at the bridge so that this part of the river is not subject to extreme tidal movement. This, along with the rip rap gives the look of an “ideal” river. Storyboards at the entrance that tell of an aspect of the history of Waiuku link the area to the larger heritage strategy that has been adopted in Waiuku.

There are several large decked areas that “float” over gabion platforms that jut out into the river that provide seating. Installations of red and black poles are repeated at the beginning and the end and along the walkway, and on the other side of the river, referencing both Maori culture and the poles of wharves and jetties. They provide a strong unifying effect in the space, but also make it feel very busy. Planting is low and soft - primarily oioi and carex. Although there is a path along the river lined with plants, it is a wide short path, with quite a lot of seating, providing one kind of experience with diverting details, so it has the feel of a plaza rather than a walkway.

There is no access from the main road, and all the buildings have their backs to the space, so whilst it is well designed for habitation, it is not readily accessible. It would make more sense if there were some alleys or lanes from the main road that linked the space into the life of the village, bringing shoppers and workers to the space for lunch or coffee, for example. As an urban space in a small town it is marooned and isolated. As a small rural town walkway it is intense and busy, and heavily “designed”. The contrast with the last part of the river where there is nothing but grassed space, a few trees, and a simple path is marked. I experienced the simplicity and openness as a relief.



## Mangorei Track to the Pouakai Hut, Taranaki



The Mangorei Track is in the Egmont/Taranaki National Park. It starts at the end of Mangorei Rd just on the outskirts of New Plymouth and climbs for about five kilometres through native bush up the flank of Pouakai, an old eroded volcano, emerging above the bushline and then taking a relatively flat route to the Pouakai Hut. Here the experience changes dramatically. There are spectacular views of course, and the experience of coming out of the bush and into the open is always a pleasant shock. Its also colder, windier, and the vegetation is markedly different - a new ecological zone.

I walked this in 2013. In 2012 the walk was “refurbished and upgraded” i.e. entirely boardwalked. It was clear that some boardwalk has been there for some time, but it was predominantly all new. The old track could be seen nearby in many places. The effect on the experience of walking this track was profound. It is in fact not a track. It is a boardwalk, and as such it changes the relationship one has with the place. One is no longer engaged with the ground, negotiating rocks, roots and mud, the form of the bush itself. There is no requirement to accommodate one’s walking to the place itself, to forge a knowing of the place through the actions of the body. Instead one marches through in a regular cadence, as if on a street. There is still the changing light and shade and smells and sounds of the bush, all now experienced as if from a distance.

It is easy to understand why the Department of Conservation has done this. It was dry and fine when I was there but evidence of erosion along the old path was clear. Having walked the track around Mt Taranaki in rain I have seen how the tracks become running streams. On a practical level the boardwalks allow walking access in all weathers. The necessity for the boardwalk also highlights the competing objectives that DOC is charged with managing in the National Parks, and conflicts between public access and conservation of natural environments. In this context boardwalks signal care for a fragile environment and over-use by the public.



# **7. Design development**

---

**Key findings**

**Design philosophy**

**Summary of design objectives**

**Overarching design strategy**

# 7.1 Key findings

## 7.1.1 The river and its ecology

- To design around rivers requires an engagement with the dynamic cultural and spiritual forces of memories, meanings and myths. Rivers exist as much in people’s imaginations as in their experiences. Rivers both define and reflect a sense of place. They are integral to people’s identification with place at national, regional and local levels. Despite the way in which property ownership has obstructed public access to the Waipu rivers, and despite their degraded character, the local people interviewed have an aesthetic appreciation of, and a deep sense of identification with, the rivers that define this project site. People’s imaginary relationship with the river in terms of activities and recreational possibilities and iconic visual representations they hold in their minds’ eye can be materialised in design as a way of enhancing their sense of belonging and identification with this place.
- One cannot design for a river in its “ideal” and idealised state. To design around rivers is to design with dynamic forces of nature. Design that responds to the temporal and spatial qualities of rivers can materialise the interplay between the water and the land. The daily tidal fluctuations and the likelihood of flooding must be regarded as key design drivers on this site.
- The river is prone to flooding and is likely to flood more frequently in the future. Plant selection and built structures need to be flood tolerant.
- This is an ecologically degraded river, and there is significant cultural and spiritual investment in improving ecological system quality on the part of local Maori. Both flood risk management and the health of the river are dependent on the entire catchment, and design on one part of the river is inevitably undertaken in much larger spatial, ecological and hydrological contexts. Despite the relatively small scale of the site the design response must contribute to ecological restoration both actually, and representationally, to honour both the site and the local community.
- The catchment has a presence in the village both in the constant backdrop of the hills and the use of limestone from the Pohuenui Block. Limestone rocks have currency as a marker of “place”. The design response is to recall the geology of the site context by using limestone rock on the site.

## 7.1.2 Heritage, landscape and belonging

- The dominant heritage story is really a family story with little meaning for people who are not descendants. But the community tells another story about its identity as a community in the present and the values it holds. For this community place and identity are entwined through the promulgation of shared social values that are both an input to, and product of, joint working and collective projects. The community's second story about itself is a kind of "heritage of the heritage" that people relate to and value, when they don't necessarily relate to the "official heritage" of the migration story, and may indeed feel alienated from it and by it. The design response is to recognise these values, and create an opportunity for the community to enact its ethic of collective working together. A "Friends of the Walkway" organisation is envisaged as part of the implementation and ongoing maintenance and development of the walkway.
- The local hapu contest the dominant heritage story, and resent their invisibility in the village. The disinheritance of Maori is a source of dissonance for some community members. The design response is to surface the disinherited Maori voice and make the historical and contemporary presence of Maori visible in the design site.
- From the consultations held with Patuharakeke it is clear that design needs to be guided by cultural values and knowledge, and that local Maori need to be visible and present not just in the designed landscape but in the design process itself. Accordingly, the design objectives and design strategy for this project need to be informed by the Te Aranga Maori design principles (Auckland Council, Te Aranga Maori Landscape Strategy, 2008).
- Both design and the designed landscape itself are processes through which the politics of heritage can be negotiated. The design process for this project needs to be democratic in that different voices and opinions need to be heard by both the designer and each other, and the design itself needs to remain sufficiently open to allow different groups in the community to occupy the space over time, and to allow different "memory activists" to signify the site in ways that are meaningful to them. Specifically the museum and Patuharakeke will need to determine if, and what, interpretation and storyboards are necessary on the site.
- Occupation of walkways is facilitated by connections to the surrounding context, the opportunity for different kinds of movement e.g. walking, running, cycling, and the qualities and varieties of experiences that the walkway offers, and activity generates activity. Something happens because something happens (Gehl, 2011). Design response is to consider multiple entry and exit points and destinations, the qualities of the paths, changes of scale, interactions with the river, and the qualities of changing conditions along the walkway to encourage people to use it and to linger, to allow meetings and social interaction to occur serendipitously.
- People's perceptions of, valuing and sense of belonging to a landscape is mediated through forms, practices and relationships. The river itself is a significant form, and people articulate meanings associated with the river, but there are few activities and practices directly associated with the site. The design response is to provide prompts for activity and practices of participation in the site that both project heritage into the living present and create heritage of the future. Time and process are central organising principles for bringing the site to life, allowing people to develop new associations and meanings through engagement and imagination.

## 7.2 Design philosophy

Heritage is a temporal thing. What we choose to remember and value changes and shifts in response to changing communities. The design of the walkway is part of a process that re-invents the heritage of the site and the community. It responds not just to the past as it is currently represented, but also to a future that is inclusive of Maori stories and representation. In surfacing the dis-inherited voice design is clearly positioned in the social-cultural-political framework that generates heritage at this place.

Landscape too is a temporal thing. The project sets out to design not just a product but a process in which occupation, participation and time shape the landscape and its meaning to the local people. Heritage in the landscape conceptualised in this way is regarded as part of the living continuum of occupation and activities. Time and process are thus central organising principles for representing heritage in the landscape.

Finally, no matter what the designer's intent, people will experience designed space on their own terms, through their own lenses shaped by their own world views and experiences. The walkway must therefore stand on its own merits, providing physical, sensory and haptic experiences that are enriching for the people who use it.

## 7.3 Summary of design objectives

|  |   |
|--|---|
| Materialise the imaginary relationship people have with rivers.                                    | <i>Different ways of relating to the river – overlook, cross, enter<br/>Archetypal river landscapes<br/>Opportunities to do riverside things – picnic, walk, bike, swim, boat</i> |
| Materialise the interplay between the water and the land.  | <i>Connections between the water and the land<br/>Engagement with the tide – landing, boardwalks, boat ramp</i>   |
| Materialise an ecological response to the conditions of the river.                                 | <i>Riparian planting<br/>Wetlands</i>   |
| Create opportunity for collective, cooperative community engagement with the walkway and the site. | <i>Planting, growing a forest<br/>"Friends of the walkway"<br/>Volunteer labour</i>   |
| Make the historical and contemporary presence of Maori visible on the site.                        | <i>Artworks as signifiers of meaning<br/>Inscribed space<br/>Plants for traditional harvest</i>   |
| Maximise the opportunity and desire to occupy the site.  | <i>Entry and exit points<br/>Multiple destinations<br/>Qualities of the path<br/>Open space/closed space<br/>Seating and meeting places</i>                                       |
| Provide prompts for diverse practices and participation in the site over time.                     | <i>Pa harakeke<br/>Harvesting, learning<br/>Commissioning of artworks<br/>Access to the river<br/>Opportunity for play</i>  |
| Connect the walkway to its context, both actually and metaphorically.                              | <i>Plant and tree selection<br/>Materials<br/>Entry and exit points</i>   |

### 7.3.1 Application of Te Aranga Maori design principles

| Principle                         | Outcome   | Design response   |
|-----------------------------------|---|---|
| Mana Rangatiratanga/Authority     | The status of iwi and hapū as mana whenua is recognised and respected.                    | The methodology for researching heritage associated with the site was constructed to recognise Patuharakeke's status as manawhenua under the Treaty of Waitangi. They were consulted at the outset of the project, and then again during the process of testing designs. Consultation has established in principle an ongoing working relationship. The extent to which they are able to participate directly with the project whilst still very busy negotiating their Treaty settlement is a matter of ongoing discussion.  |
| Whakapapa/Names and naming        | Maori names are celebrated.   | The issue of names and naming, and signifying the landscape has been discussed with Patuharakeke. How this might apply to this site remains uncertain, and at this point in Patuharakeke's hands. One approach to design on the site is to delineate space that "belongs" to Patuharakeke, without specifying detail so that cultural representations can be determined over time as part of the process of occupation. The other approach is to establish a "thread of opportunity" where cultural references can be inserted, and the presence of Maori made visible along the walkway.   |
| Tohu/The wider cultural landscape | Mana whenua significant sites and cultural landmarks are acknowledged.                    |   |
| Taiao/The natural environment     | The natural environment is protected, restored and/or enhanced.                           | The issue of scale notwithstanding, ecological restoration is one of the design objectives for this site, expressed in riparian plantings, wetlands to manage storm water from the subdivision, selection of native flora with regard for food sources for birds and traditional harvesting for weaving and thatching. An implementation and maintenance plan will need combined community effort in which the principles of kaitiakitanga can be promoted.   |
| Mauri Tu/Environmental health     | Environmental health is protected, maintained and/or enhanced.                            |   |
| Mahi Toi/Creative expression      | Iwi/hapu narratives are captured and expressed creatively and appropriately.              | Design philosophy recognises the importance of the river to local Maori and the fact that their physical relationship with it has been severed by private property ownership. The design intent is to promote occupation of the site again, facilitated by representations that allow Maori to recognise themselves in the space. The "thread of opportunity" and the "inscribed space" allow Patuharakeke to express themselves creatively and re-establish a sense of belonging on their own terms.<br><br><i>"... the issue is that we have been precluded from that whole history, so this is an opportunity to arrive at what we want to see happen. This is a great opportunity to discuss what we think and feel about where we come from, and about being part of that space..."</i><br><br>I anticipate an iterative process of occupation and representation enacted through an ongoing implementation process. |
| Ahi Ka/The living presence        | Iwi/hapu have a living and enduring presence and are secure and valued within their rohe. |   |

## 7.4 Overarching design strategy

### 7.4.1 Zones

Informed by the analysis and the experience of the walkway case studies and the literature on walking, the site has been conceptualised as a series of zones, defined by different characteristics of the site and different aspects of heritage. The zones through which the path moves are intended to offer different experiences such as changes in vegetation, transitions between openness and closure and light and shade. They also offer different prompts for participating in the site and different ways of interacting with the river. There are distinct transitions from one zone to the next, creating a sense of journey along the walkway.

### 7.4.2 Threads and themes

From exploration of the site, research into heritage and landscape and the design objectives that were formulated, several threads and themes emerged that are incorporated along the walkway to provide continuity through the changing zones, and to unify the site. These are:

- The use of local limestone as a building material.
- Posts and poles - a motif drawn from existing old fence posts and poles on the site.
- The meandering line - motif drawn from the morphology of the river that influenced the shape of the path.
- Riparian planting.
- Interactions with the river.

### 7.4.3 The path

The path itself requires specific design decisions. Compacted gravel or lime chip is the preferred surface. It has a vernacular look and feel that fits well with the rural environment. But a gravel or lime chip path will be vulnerable to flooding and would need to be repaired from time to time. The alternative is concrete, which will stand up to flooding but will be more expensive to install. A cost analysis that compares installation and repair costs over fifteen to twenty years would help inform the decision. If concrete was selected it should be exposed aggregate to give it a more natural and textured appearance. The path should be quite wide to allow two abreast walking, a pedestrian and a mobility scooter to move along the path together, and to allow cyclists and walkers to pass each other. The path is drawn at 2 metres in all plans. In implementation it could vary between 1.6 and 2m. The surface of the path is the same along the length of the walkway which helps to unify the walk. Variation in ground plane is provided through boardwalks over the wetlands and open grassed space.

### 7.4.5 Design tests

Design was iterated through a series of hand drawings on butter paper, 3D modelling using Sketchup and physical models, and critical analysis in a series of workshops. A summary of the design process is presented in Appendix 1.

# **8. Final proposition**

---

**Zones**

**Connections**

**Nova Scotian settlement**

**Recalling the forest**

**Landings**

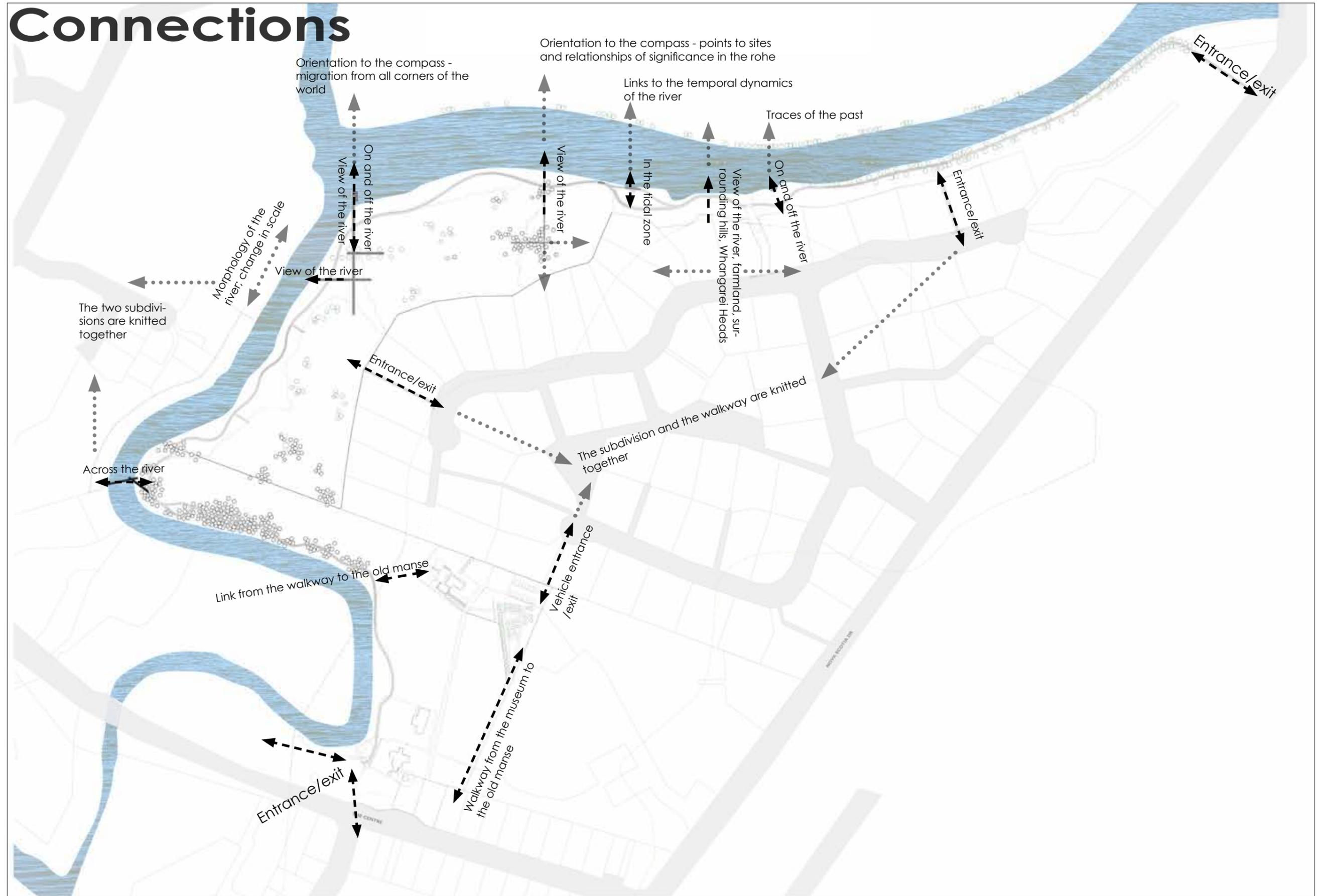
**Restored saltmarsh**

**Tree line**

# Zones



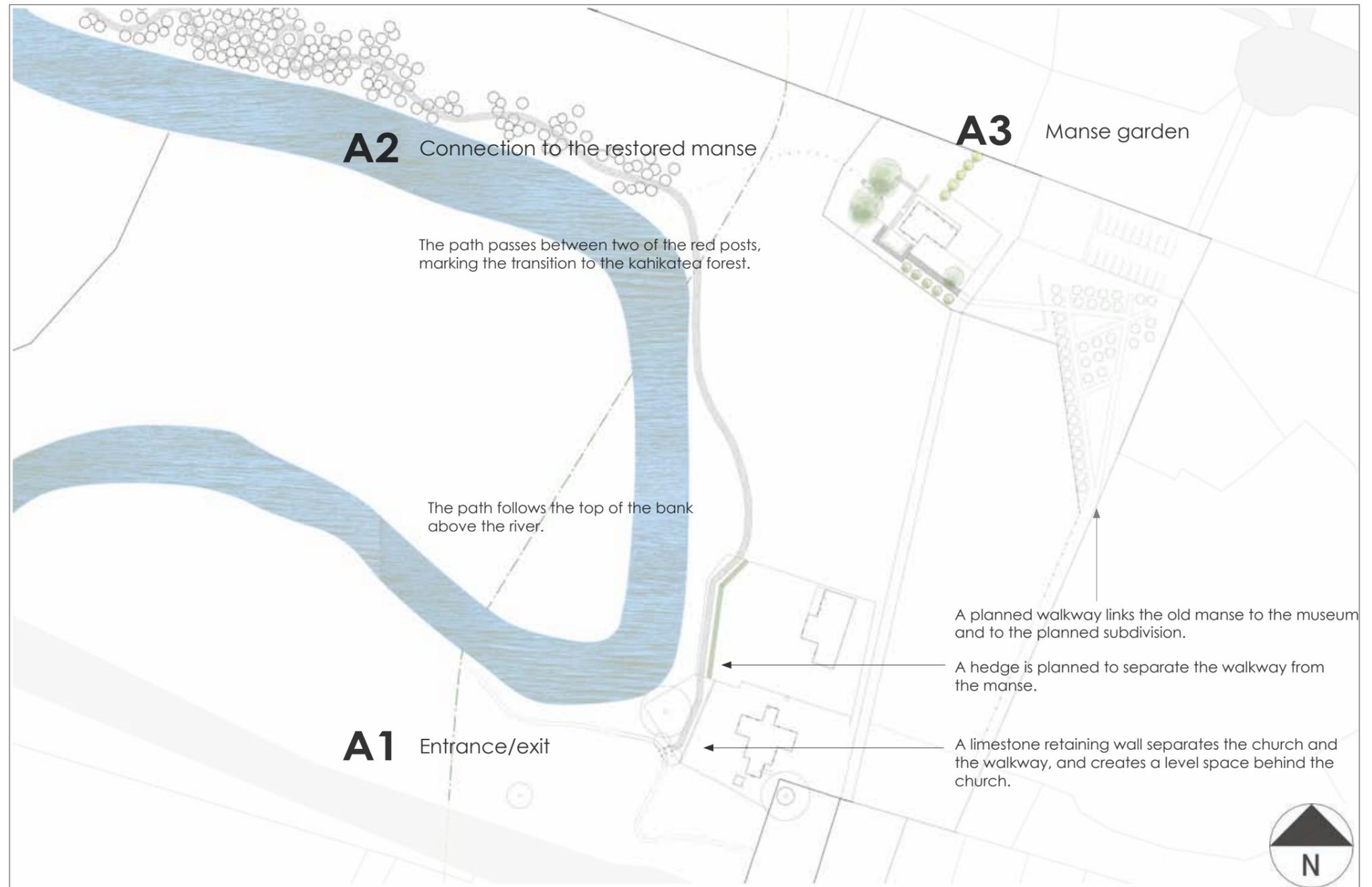
# Connections



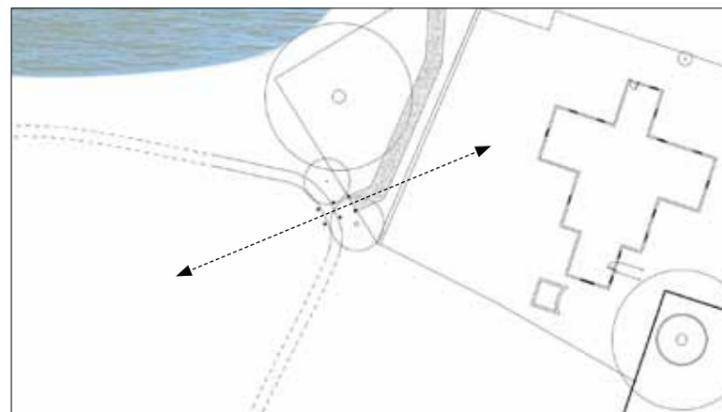
# A Nova Scotian settlement

Design in this area responds primarily to the presence of historic buildings and the Glebe that together materialise the Nova Scotian heritage narrative. The Glebe is a piece of land that the Presbyterian Church traditionally allocated to the minister for his exclusive use to augment his stipend. According to the Church focus group this is one of only two remaining working Glebes in the country so it has both historical and contemporary importance.

Separation between the Church and the manse, and the walkway, and respect for the Glebe are critical to the Church's acceptance of the walkway at its boundary.



# A1 Entrance/exit

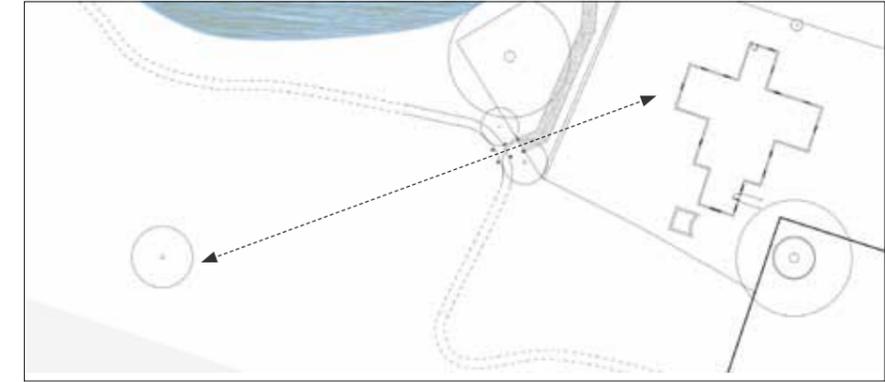
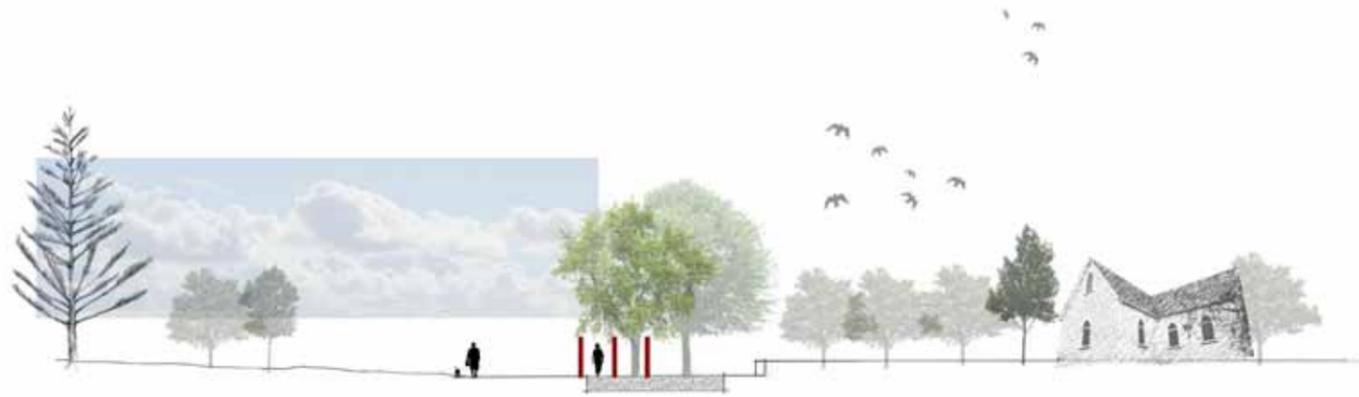


Over-sized red fence posts announce the entrance from the park. The posts reference the farming heritage of Waipu and of the site itself, both of which were revealed as important memories and manifestations of heritage in the interviews with residents. The farming history of the site and its connections to the subdivision is articulated by one of the developers quoted below. The sense of belonging and attachment to place that comes from long association is evident in the sentiments expressed. The colour "barn red" recalls the traditional use of red in farming practice, and the use of red in Maori culture and art.

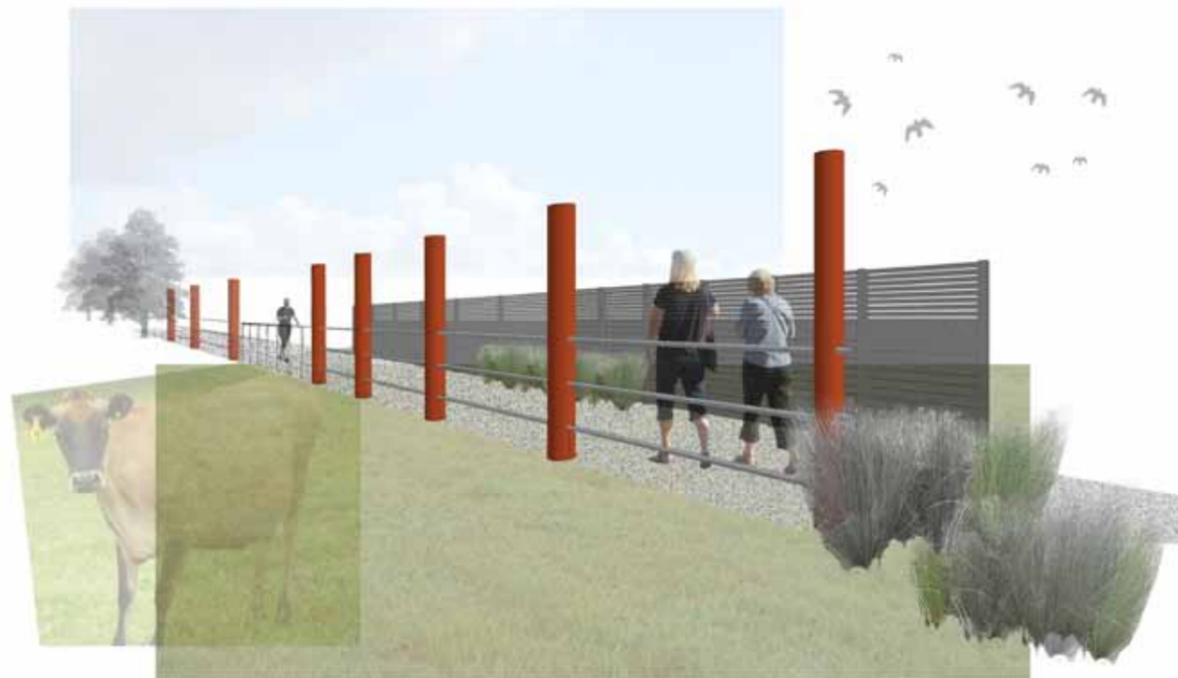
The wall that separates the walkway from the church is constructed from local limestone - the beginning of a thread of limestone that unifies the walkway through its zones, links the site to the geology of the catchment, and to the village where limestone is used as a building material and for plinths and decorative standing stones.

Mass plantings of *Arthropodium cirratum* (renga renga) provide dramatic seasonal flowering and will thrive under the dry shade of existing trees. The combination of the red posts, the white church, the grey textural qualities of the wall and the mass of green plants with white flowers in spring provides a strong, restrained but rich sensory experience at this entrance to the walkway.

*"I helped my brother-in-law farm here. He leased this whole block. We pulled together our resources, and I was down here to help with the silage and help with the cultivation...and that's the reason we ended up buying it. The person that owned it had quite a good offer to sell it to a developer, and we decided we might as well be the developer...because of our history with it we thought it would be better for us to develop it than give to someone totally outside...we wanted it to fit in with Waipu...we're trying to knit in with the people of Waipu..."*  
 (Developer of the Nova Scotia subdivision, interview 2014)



The posts at the entrance are positioned to create a view-shaft between the church and the Norfolk pine in the park. There is a strong association between Norfolk pines and churches quite commonly seen in Northland, perhaps because the shape of a cross appears at the top of the tree; perhaps because their height provided a wayfinding sentinel in the landscape. This association is repeated on this site at the old manse, and the pines there locate the manse from anywhere in the village and on the walkway.



A walkway is planned to link the museum to the old manse, designed by the author as part of an earlier project, that incorporates an over-sized three wire fence with red posts. The fence here has the practical application of keeping stock off the walkway. It also carries the reference to historical and current land-use, and in its over-sized presence celebrates the farming heritage. A railed section in the middle prompts walkers to lean and gaze over the paddocks to the river beyond - a moment of "being rural". Combined with the entrance posts and the link to the manse, the red posts physically inscribe the space that contains the heritage buildings, providing a self-contained loop that walkers can follow. The motif of the fence has a classically colonial resonance that emphasises the colonial settlement represented by the buildings.

## A2 Connection to the old manse



The connection to the old manse is very light - just a dotted line of red fence posts through the paddock that guide the eye and the feet up a gentle slope to the old manse. The association of red poles, Norfolk pines and the church is made again, and the loop of red poles around the representations of Nova Scotian settlement is complete.

This is a working Glebe, used to graze dry stock, and is expected to continue to be grazed for the foreseeable future. The link to the manse needs not to interfere with farming; kissing gates at each end control stock whilst still allowing walkers easy access. Kissing gates allow access to be easily closed off at any time to suit farming needs.

The private ownership of the Glebe has been privileged over access for walking, as indeed has been the case in the history of the site since it was settled by the Nova Scotians. The poled route recreates a relationship with rural land that older residents recounted in the interviews, and has resonance for many New Zealanders.

*"...you just went over the paddocks...as a small boy I remember we walked from the village, and we walked across country, down to the wharf sometimes...exploring..."*  
(Waipu resident, aged 82)

participation

play

memory

a different kind of walking



At different times walkers will encounter mud and cowpats. Grass will sometimes be wet and long, and the ground will be uneven. As an insertion into the existing landscape the act of walking becomes an accommodation to the conditions found. The regular cadence of walking on a smooth even surface is broken, and you are required to be more physically engaged with the landscape. It is a different kind of walking. Instead of the surface accommodating walking, your feet are required to accommodate the paddock; it is an engagement that takes you under the visual surface of the green paddock to a physical and sensory experience of the material reality of a paddock, and for many people back to the memory of experiences of paddocks. The posts provide opportunity for play - children can run and weave between them, and swing on them.

# A3 Manse garden

occupation

participation

Design for the manse garden references the historic role of the manse in the life of the settlement as a place for community gatherings for social events such as weddings, funerals and baptisms; a place of welcome for people who travelled long distances to attend the church; and the museum's plan for the restored site as a community amenity.

Interviews brought up the significance of the old manse. One resident talked about it as a potential community amenity

*"To keep that community spirit the community needs a heart, places to congregate, to celebrate, to meet."*

Others reflected on its restoration as a successful community project that was seen as enacting heritage values.

Rather than put up storyboards that describe the manse, design seeks to articulate the relationships and activities that are represented by the manse.

The organisation of the space around the manse facilitates the realisation of the museum's vision to incorporate a number of other small heritage buildings onto the site and to develop a "men's shed" as a new community facility.

Space is also organised to provide a small performance or outdoor gathering space, and a settler garden. The latter will need to be developed and maintained by community members, providing the opportunity for people to engage in a constructive, nurturing project that will build its own stories, its own heritage. Such a project can be readily sustained through the museum's existing network of volunteers.

Planting fruit trees provides a prompt for participation. People can pick fruit as they are passing; community groups can harvest for fundraising projects or charity.

Whilst built structures materialise time and stimulate reminiscence and imagination, they are not of themselves heritage.

As noted by Smith (2006, p3) *"While places, sites, objects and localities may exist as identifiable sites of heritage... these places are not inherently valuable...what makes these things valuable and meaningful - what makes them 'heritage' - are the present-day cultural processes and activities that are undertaken at and around them, and of which they become a part."*

Accordingly, the design philosophy treats the manse in the present as part of a lived history and a living future.



Space for outdoor events - small performance space; community gatherings.

Space for two small heritage buildings to be moved on site as per the museum's strategic plan.

Space for a "men's shed" and clinker boat building, as per the museum's strategic plan.

Deck extending from the verandah expands the functional space of the manse and the outdoor gathering space. It integrates the route to the river, the settler garden and the outdoor performance/gathering space.

Settler garden bounded by a picket fence - uses plants and fruit trees that were typical of the gardens of the first generations of Nova Scotian settlers, as well those identified in the remnant garden of the manse site itself e.g.violets, hydrangea, fig.

Vehicle entrance via the subdivision and public parking.

# B Recalling the forest

The path passes between two red posts marking the beginning of the transition to a stand of kahikatea planted in the 20 metre space of the esplanade reserve. A few trees drift across the fence line, blurring the boundary with the glebe. Initially the trees are scattered, becoming closer together until a dense stand is reached.

Research into the history of the site established that there was kahikatea forest here prior to Maori and Nova Scotian settlement. Interviews with the local community and the local hapu revealed that restoring the presence of kahikatea is important to a lot of people.

There are existing stands of kahikatea nearby, so this stand links the site to its wider geographical and ecological context. It is part of the overall riparian planting scheme and ecological restoration of the site, contributing to a network of patches of native trees providing food and habitat for birds.

The forest is positioned here as a contrast to the pasture of the Glebe, and because elsewhere on the walkway such a forest would be visually intrusive and physically dominating for the residential setting that is developing.

A commissioned sculpture is planned to punctuate the place where the path divides. Commissioning should involve the community, including Patuharakeke. Kahikatea forest carries metaphorical meaning for Maori captured in the song:

E tu kahikatea  
Hei whakapai ururoa  
Awhi mai awhi atu  
Tatou tatou e

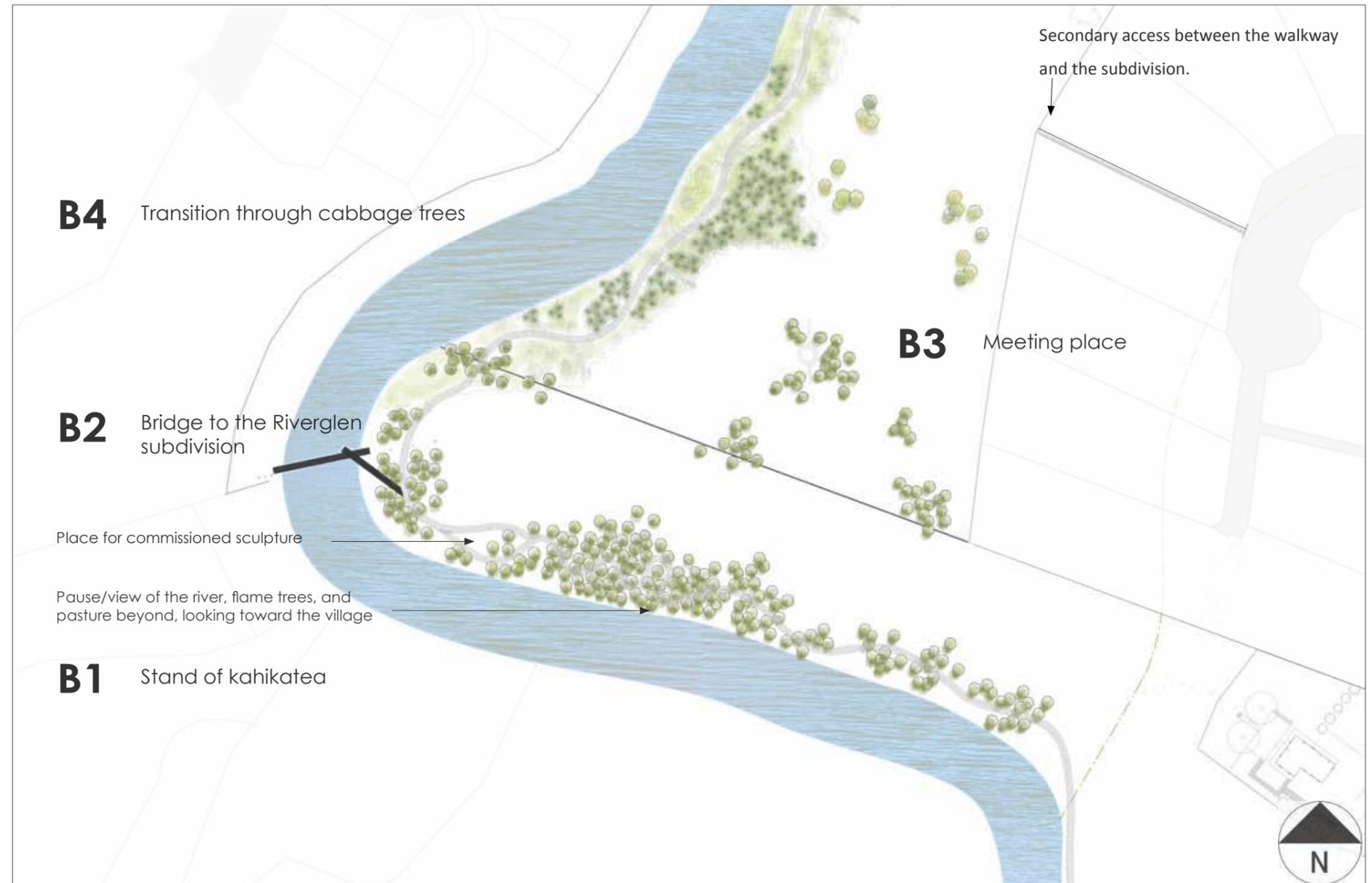
Stand like the kahikatea  
To brave the storms  
Embrace one another  
We are one together

These are sentiments and values that are also reflected in the stories told by the Waipu community about itself.

*"The message that the Nova Scotians gave us was how they succeeded through cooperation...cooperative endeavor is a very powerful and important message forever."*

*"It's about people working together...I don't think you've got much of a community if people don't work together."*

The brief for the sculpture is to include reference to these values.



# B1 Stand of kahikatea

occupation

participation

connection

ecological restoration

Planning a forest reflects the temporal nature of heritage and landscape. This is a twenty year project, materialising the idea that heritage is not just something received but something passed on as well. It makes heritage both a restoration of the past and part of the living future of the site.

Through the interviews the community expressed the values of working together, forging a sense of identity and community cohesion through collective action, and for non-descendants this was a much more important manifestation of heritage than the literal migration story.

Through the process of nurturing the forest a new form, new activities, and new relationships are formed that will build a sense of significance and belonging to the site. It provides an opportunity for the community to enact its ethic of working together that goes to the heart of the meaning of heritage for this community. It also provides an opportunity for Patuharakeke and Waipu residents to collaborate.

sensory

temporal

It is a powerful, archetypal experience to walk in the forest. Going into the bush is in our psyche as New Zealanders. It is sensorally rich with changes in light and shade, temperature, humidity, and changes in enclosure and openness. These qualities will emerge over time as the forest grows. As the trees grow the meandering path will hide and reveal the river, refreshing the view.



Stand of kahikatea near Highway 1



Cube seat - the limestone thread

Projected growth of the forest



1 year



10 years



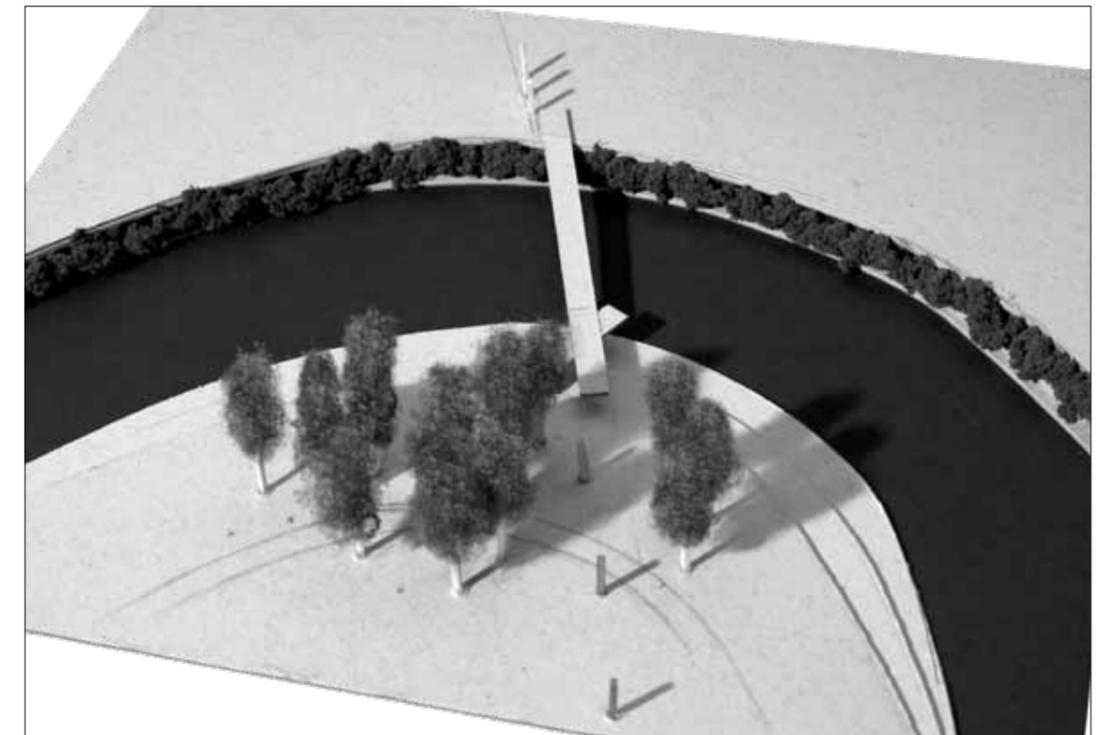
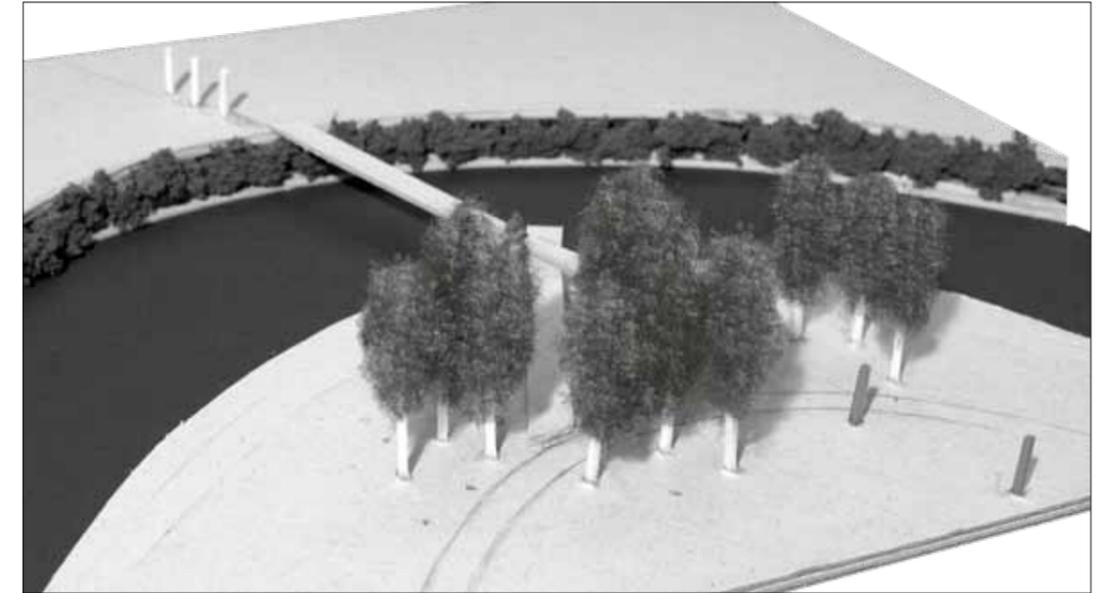
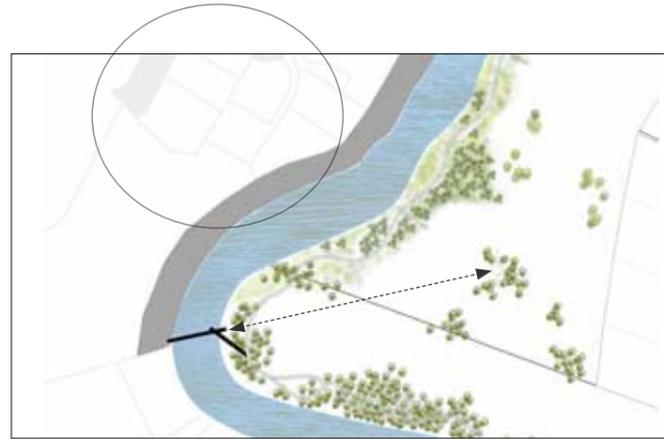
20-25 years

## B2 Bridge to the Riverglen subdivision

The importance of connections was emphasised in the research on walkways. The bridge connects the walkway to a short walkway on the other side of the river that is part of a new subdivision, allowing the walkway to knit the two new subdivisions together, and making the walkway immediately accessible to the growing community on the other side of the river. It also provides a functional purpose for the Riverglen walkway which at the moment provides a short walk of only 250m, and then simply stops.

The orientation of the bridge creates a viewshaft to the seat, which is emphasised by the row of three poles.

Posts at the end of the Riverglen walkway mark the entry to the bridge on that side, and signal a destination when you are on the little Riverglen path.

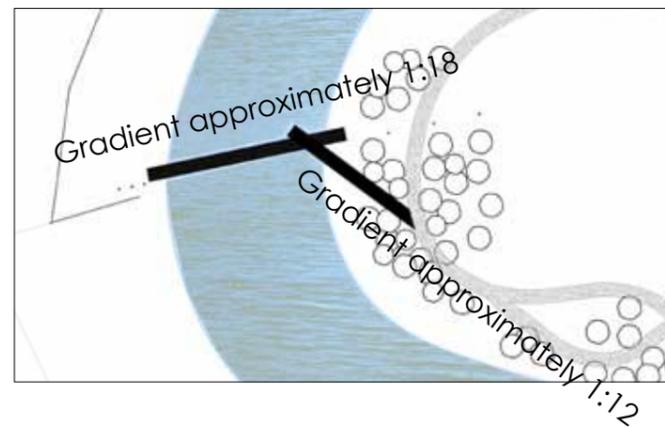


The bridge is configured as two intersecting ramps that allow the gradient from the beached side to the higher cut bank to be gradual.

The intersection provides a small viewing platform over the river.

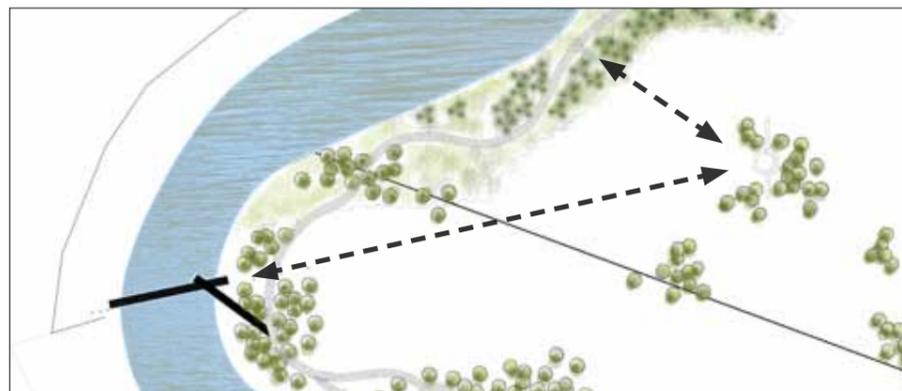
The entrance to the bridge provides a small climb through closely spaced trees. If you approach from the other direction you have the experience of viewing the bridge to the bank on the other side through a "tunnel" of trees.

The posts draw you in to explore down to the river. Coming across from the other side the posts lead the eye along a viewshaft to the seat in the distance.



# B3 Meeting place

- occupation
- socialisation
- connections
- destination
- play

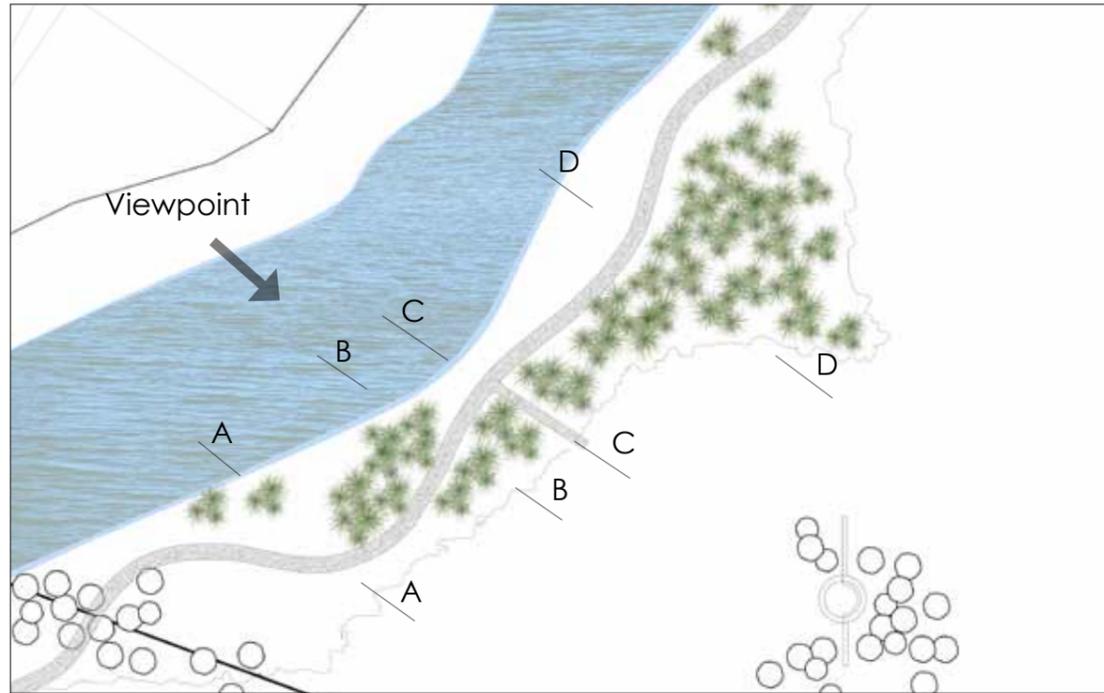


Surrounded by trees, with viewshafts to and from the path and the bridge, the seat has refuge and prospect.

At approximately 450mm wide the stepped wall provides an opportunity for children to play, and different kind of seating.

Made from local limestone, it picks up the thread of connection to geology, catchment and the village.

# B4 Transition through cabbage trees



ecological restoration  
transition from forest to park

# C Landings

Design in this zone uses contrasting materials, contrasting vegetation and spatial arrangements to express the research findings. It expresses the dichotomy between Patuharakeke and Nova Scotian constructions of heritage, whilst at the same time expressing their individual stories. It is both inclusive and contrasting, It suggests the possibility of meeting, but does not require it.

A jetty is positioned at the confluence of the rivers because it is a point of convergence that acts as a metaphor for the convergence of people and place; it amplifies the lovely change of scale as you approach from the west; there is space within the tidal zone to extend a jetty and not impede boats.

The pontoon at the end responds to the tidal movement of the river, and materialises both arriving and leaving. Oriented to the points of the compass it speaks to people coming from all corners of the world.

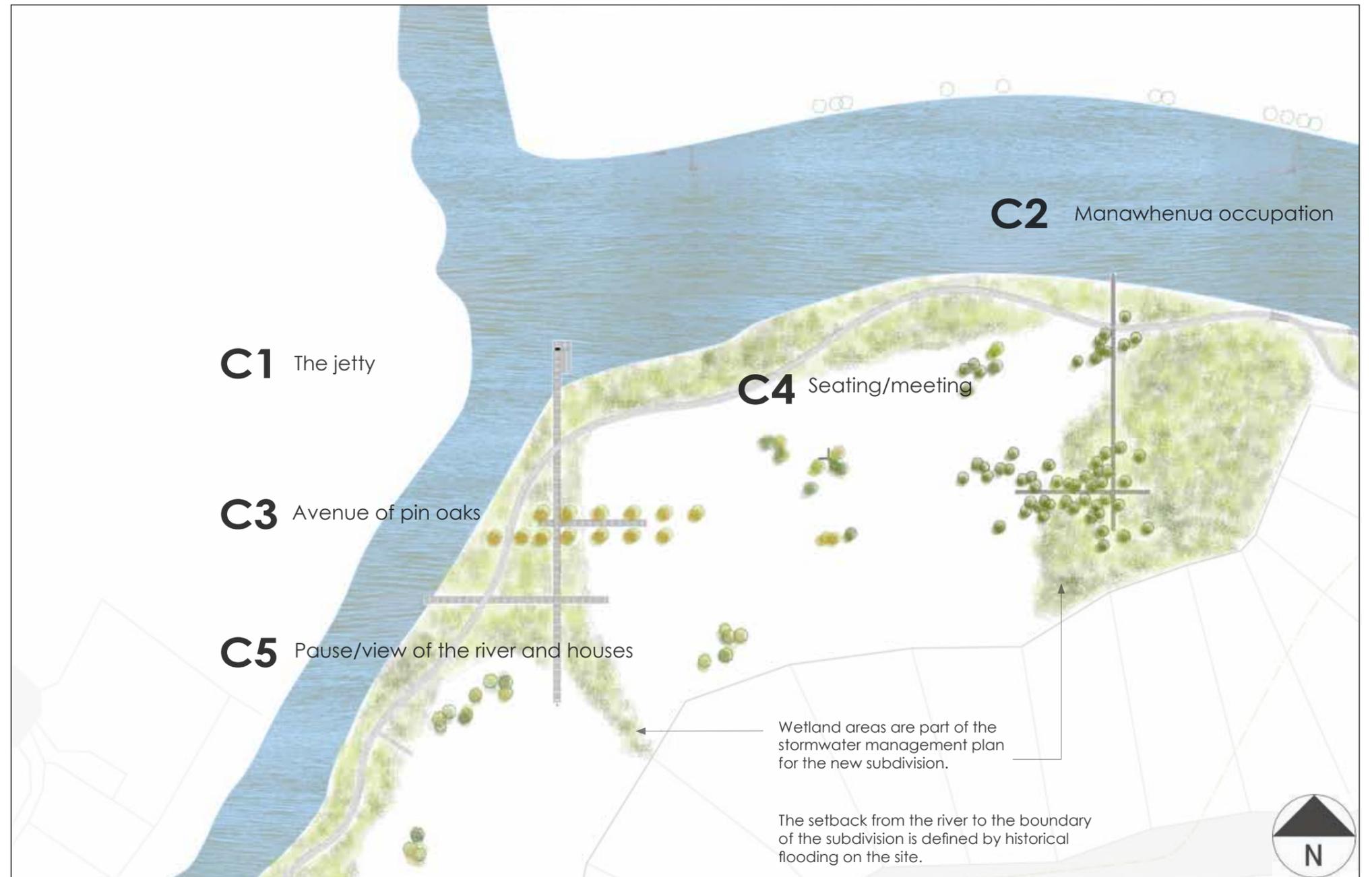
The intersecting boardwalks on the left represent the arrival and settlement of European people. They enable sensible movement across the wetland, but also speak to the idea of intersecting peoples, cultures, landscapes.

The long bold penetrating central spine and the formal corridor of trees is drawn from the European tradition of landscape design, referencing colonial settlement.

Manawhenua occupation is represented by the walkway on the right, using different materials and different vegetation. The walkway is oriented to point to the sites and relationships in their rohe and beyond, that Patuharakeke described as important to them.

A pou in the river signifies the importance of the river to Patuharakeke as a taonga. It is also important for Patuharakeke that their presence in Bream Bay when the Nova Scotians arrived is acknowledged and honoured. The status of "first people" emerged in the research as one of the major points of contestability. The design response is the installation of a pou, or commissioned artwork, at the far end of the boardwalk. My research shows that abstraction is problematic for some people. Some literal representation is necessary to establish a clear Maori presence on the site, and to support Patuharakeke to reclaim a sense of place that they can build on in the future.

Pa harakeke and plants that were used traditionally for weaving and thatching are included in the wetlands and the saltmarsh, providing opportunity for heritage activities to be enacted in the present.

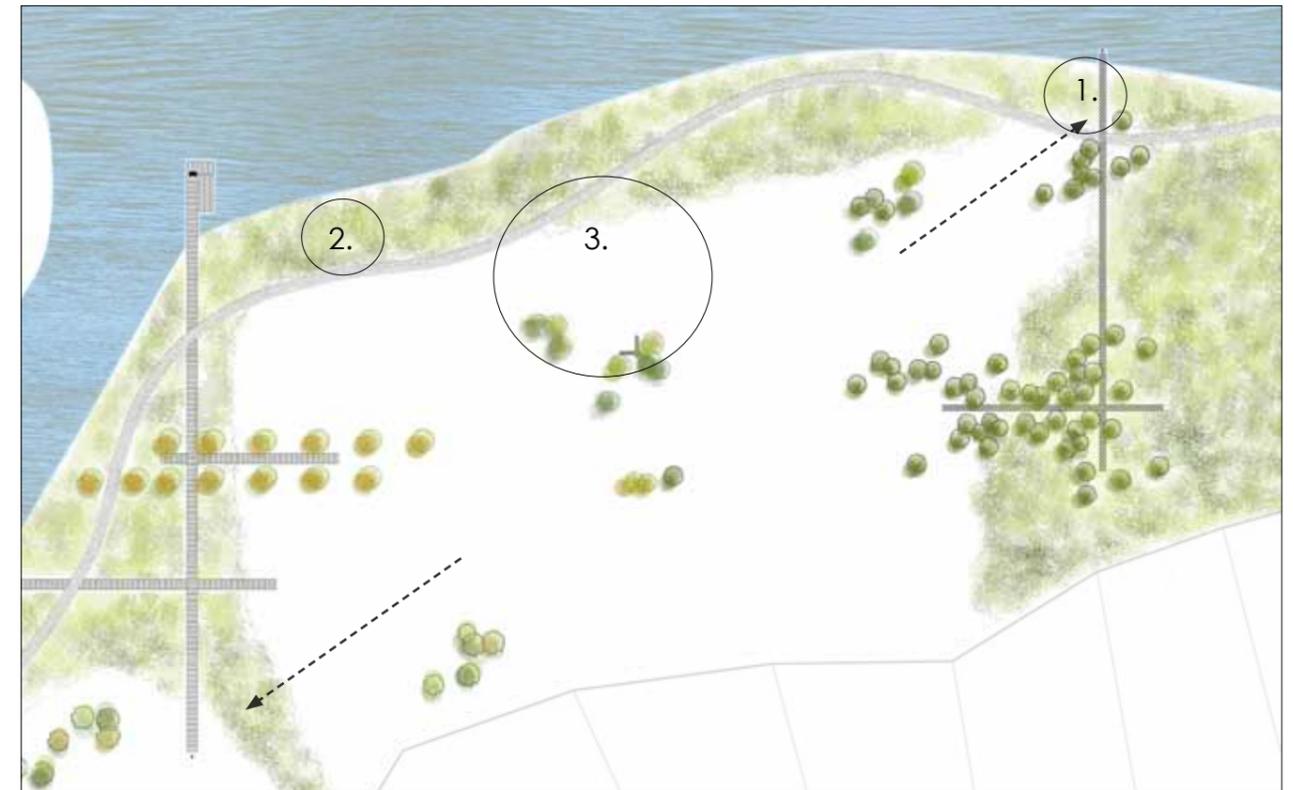
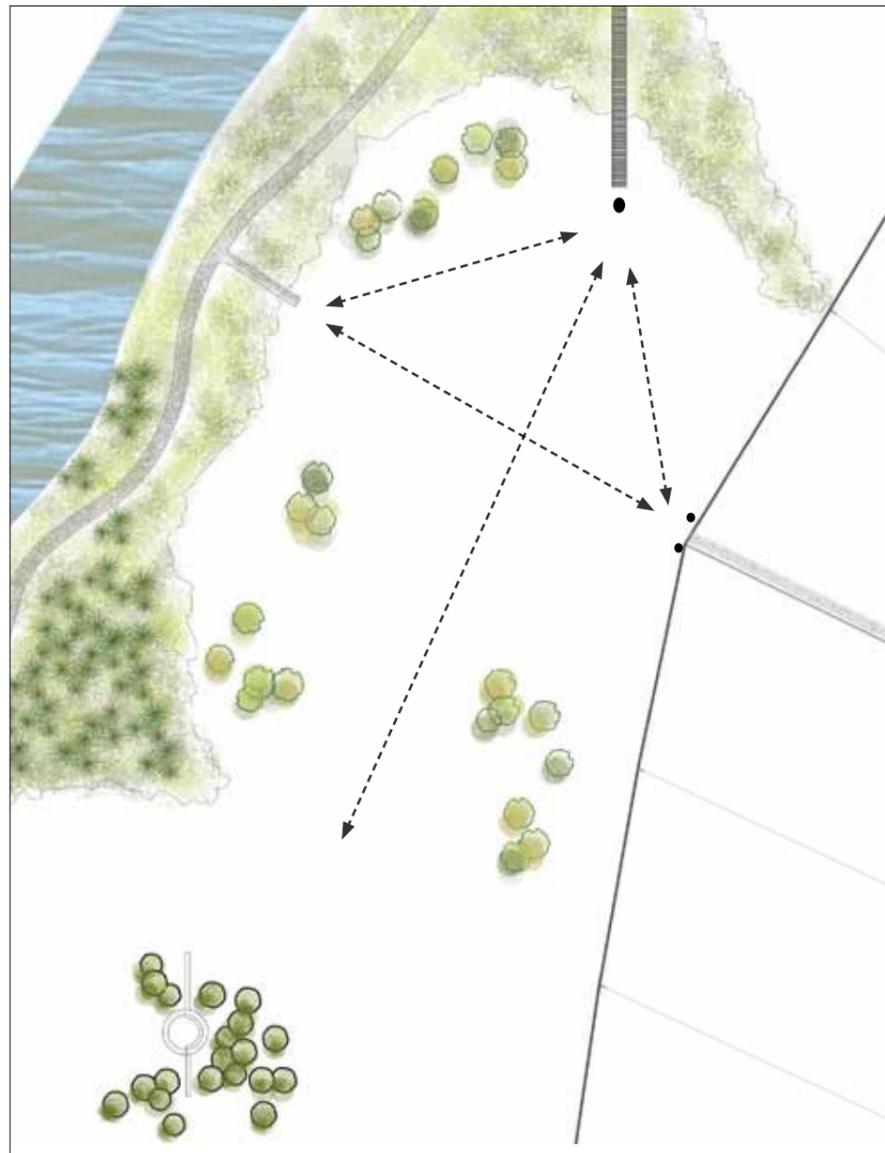


In this open park space the two sets of boardwalks point to each other, but are offset, with only the landscape between them. The positioning of trees suggests a meeting place, but do not require it. The juxtaposition of walkways provides contrasting experiences; from the centre a "duality of interest" - choices for exploration can be made.

1. Here the path comes out of the riparian planting to create an entrance to the park space. The placement of trees creates a viewshaft to the end of the boardwalk and the associated pou on the other side of the wetland, and differentiates the space to suggest a walking route.

2. Here the path forms an edge with the grassed area, and a broad entrance. There are no paths in the grassed park area. It has been left to allow people to walk in each other's footsteps - for informal tracks and desire lines to form as they will. The site is unlikely to be so heavily populated as to make impassable tracks of mud, and it retains a vernacular, rural feel.

3. A smaller space is differentiated by the placement of trees and a seat - a "park within a park" that provides a destination and a degree of enclosure within the larger space for sitting and lingering.



The timber boardwalk physically connects two open park spaces. The pouhenua, or other commissioned artwork, set in the grass in this space provides a visual connection to the other side of the wetland.

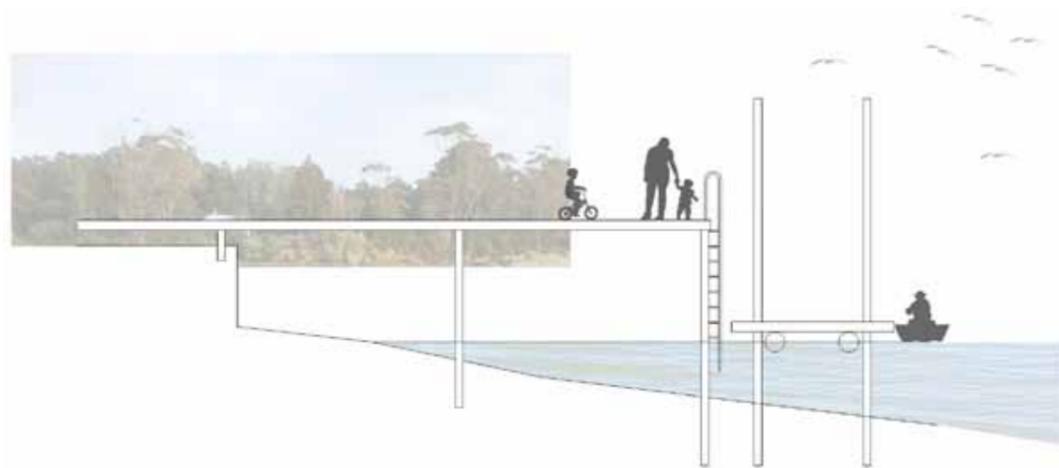
This open space is different in character. The space is reached via narrow paths from the river's edge and the subdivision, providing changes in scale, and via the boardwalk. The trees are placed toward the perimeter, leaving the space open for sports or games - an invitation for different kinds of activities, with the potential of becoming an amenity for the people in the subdivision.

The cabbage tree plantation, the wetland and shade trees demarcate the space. Here the pou at the end of the board walk has a very strong sculptural presence. It becomes the feature of the space and provides a destination - a reason to cross the open space.

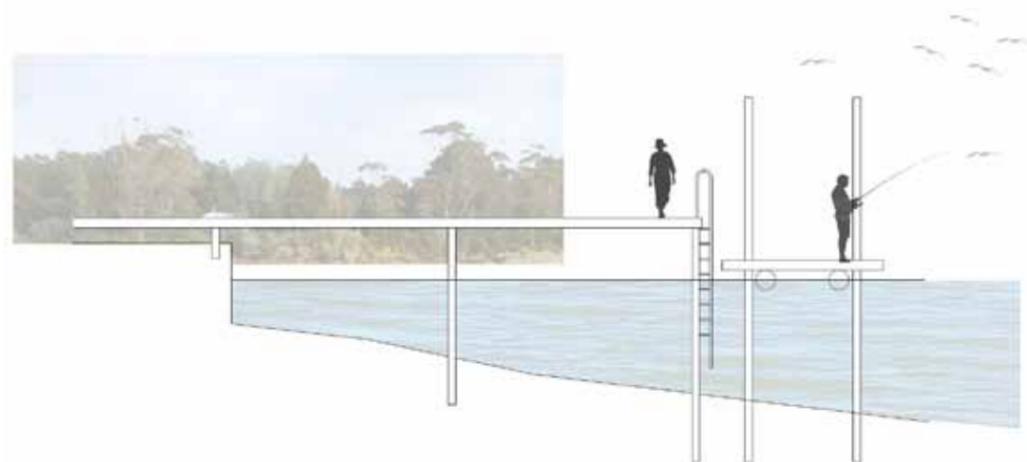
The path to and from the subdivision is marked by two posts at 1.2m high, continuing the thread of posts and poles on the walkway, and serving as a wayfinding device.

The placement of trees creates an entrance to the southern end of this open space. There is a viewshaft from the end of the boardwalk and the pou to the kahikatea and the seat, providing a destinations from this space. There is another entry/exit point here, so a small circuit can be walked encountering the path, a sculptural representation of heritage, trees, seating and open space.

# C1 The jetty



neap tide



spring tide

The pontoon floats up and down with the tide, materialising the interplay between the river and the land. Access on and off the river is possible at all times, encouraging new activities to develop on the site, and the stories of arriving and leaving to be brought to life in the present.

The pontoon is reached from the jetty via a ladder, rather than a ramp, providing a small moment of adventure.

engagement with the river

Nova Scotian heritage

journey and arrival

destination

play

The jetty is deliberately formally predictable, reflecting the vernacular design of jetties and landings all over the country and the universality of arriving; the universality of migration stories in New Zealand and in Waipu. This move was influenced by the residents who in the interviews commented on the hegemony of the Nova Scotian migration story and the suppression of other migration stories.

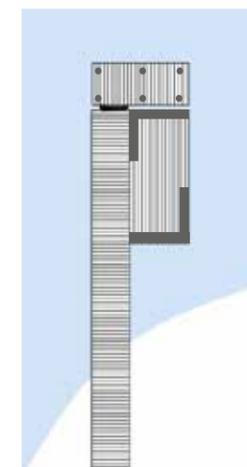
*"The Great Migration...is highly publicised, but the rest of the heritage of Waipu is like much of New Zealand. It's Pakeha settlers coming in from various groups including of course Scottish, and Dalmation, and English...A colonial heritage."*  
(Waipu resident, interview 2014).

*"This great uprooting, little death and little birth, is one of the few things shared by all New Zealand families " (Belich, 1998 p337).*

The poles are to be inscribed with the names of the Nova Scotian ships to acknowledge this particular arrival to this place and their heritage story.

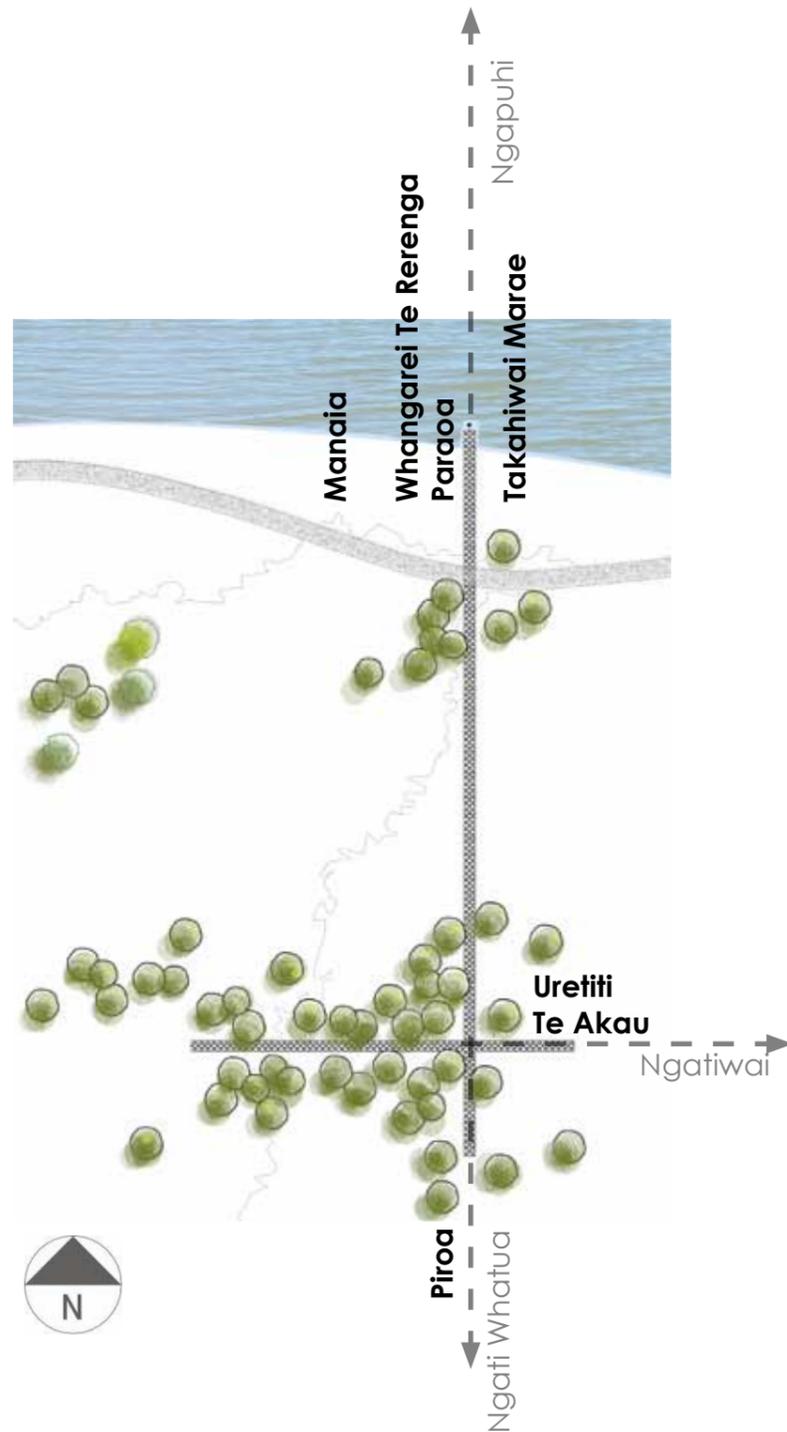
The planks of the jetty alongside the seating area are to be inscribed with the litany of places that trace the journey of the Nova Scotians to Waipu - Assynt, Localsh, Harris, Applecross, Skye, Pictou, St Ann's, Adelaide, Melbourne, Auckland, Waipu. When you walk along the jetty from the river you trace the journey that the Nova Scotians made to get to Waipu. Some of these names are used as street names locally, so there is a link to the wider context.

Seats provide a place to pause, to set up for fishing, to take in the views of the confluence of the rivers.



# C2 Manawhenua occupation

"What I would say is most significant is the river itself. All our rivers are taonga..."



Oriented to the cardinal points of the compass, the walkway points to the sites of significance within and beyond the rohe, that Patuharakeke identified in the consultation process. This includes their marae and sacred sites, tribal areas to which Patuharakeke is affiliated, the boundaries of the rohe, and Te Akau, the coast of Wangari (Bream) Bay.

occupation  
representation  
participation



This walkway through the wetland represents Patuharakeke's occupation of Bream Bay, both in the past and for the future.

A single pou in the river represents historical claim to occupation, points to Takahiwai Marae, Whangarei Harbour and Mt Manaia, and signifies the river as a taonga.

The walkway is cantilevered over the river to represent landing. It also provides another experience of the river - the opportunity to be close to it, enhanced by the "see-through" material.



The walkway is made from gridmesh - steel slit and expanded into a network of shaped openings through which plants can grow and the river can be seen. It is non-slip with a high strength to weight ratio - a durable, strong material sitting lightly on the land, blurring into the landscape, with texture and pattern a little like weaving.

manawhenua occupation  
 pa harakeke  
 participation  
 tradition in the living present  
 play  
 engagement with the wetland



Wetland plants include kuta (*Schoenoplectus validus*) which is used traditionally for weaving mats. It is expected that these plants could be harvested as part of bringing Maori heritage into the living present.

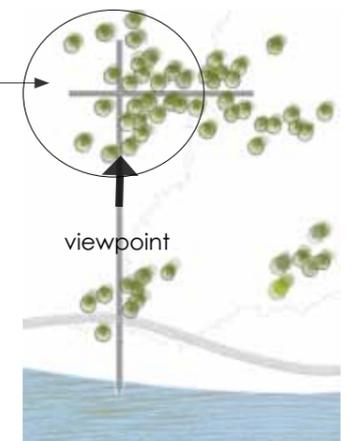
A small stand of kahikatea contribute to the wetland planting, and provide a balance and a contrast to the avenue of pin oaks opposite.

Emanating out from the centre of the intersecting gridmesh walks is a plantation of flaxes to provide open access to high quality varieties of harakeke for use by local weavers and artists.

The flax is an ancient plant, emphasising the long cultural association between Maori and the New Zealand environment. It is an appropriate plant for the wetland and is a food source for nectar-feeding birds.

Pa harakeke can provide a classroom for the transfer of knowledge about using flax as a treasure to the next generation and the local people of Waipu.

**pa harakeke**

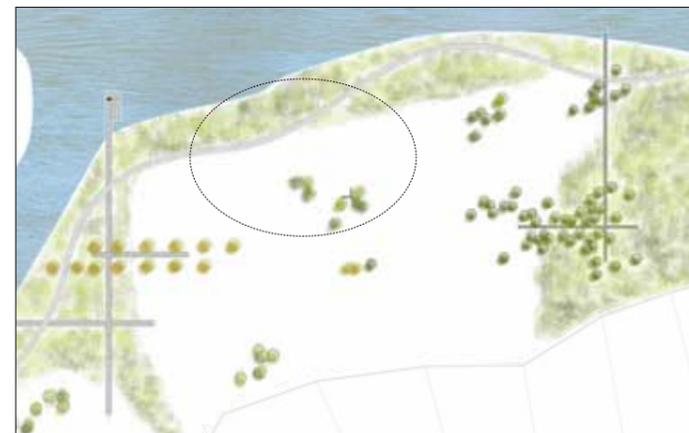


### C3 Avenue of pin oaks

cultural memory  
counterpoint and contrast  
European tradition in the present  
engagement with the wetlands



### C4 Seating/meeting



As part of the larger device of boardwalks referencing European settlement, the avenue of pin oaks recalls European landscape tradition. Pin oaks are selected for their tolerance to damp conditions. It provides a visual and experiential counterpoint to the gridmesh walk and its surrounding kahikatea opPOSITE.

A seat comprised of two intersecting benches, one of timber, one of gridmesh, is placed under shade trees, creating a destination from the path. The seat is semi-enclosed, having both refuge and prospect. It engages visually and spatially with the small group of trees opposite to create a space for sitting, picnicing and play.

# C5 Pause/view of the river

views  
connections  
pause

From this point you can see the changing morphology of the river; narrow and winding to the left, the widening at the confluence on the right. Houses at the edge of the village are visible.



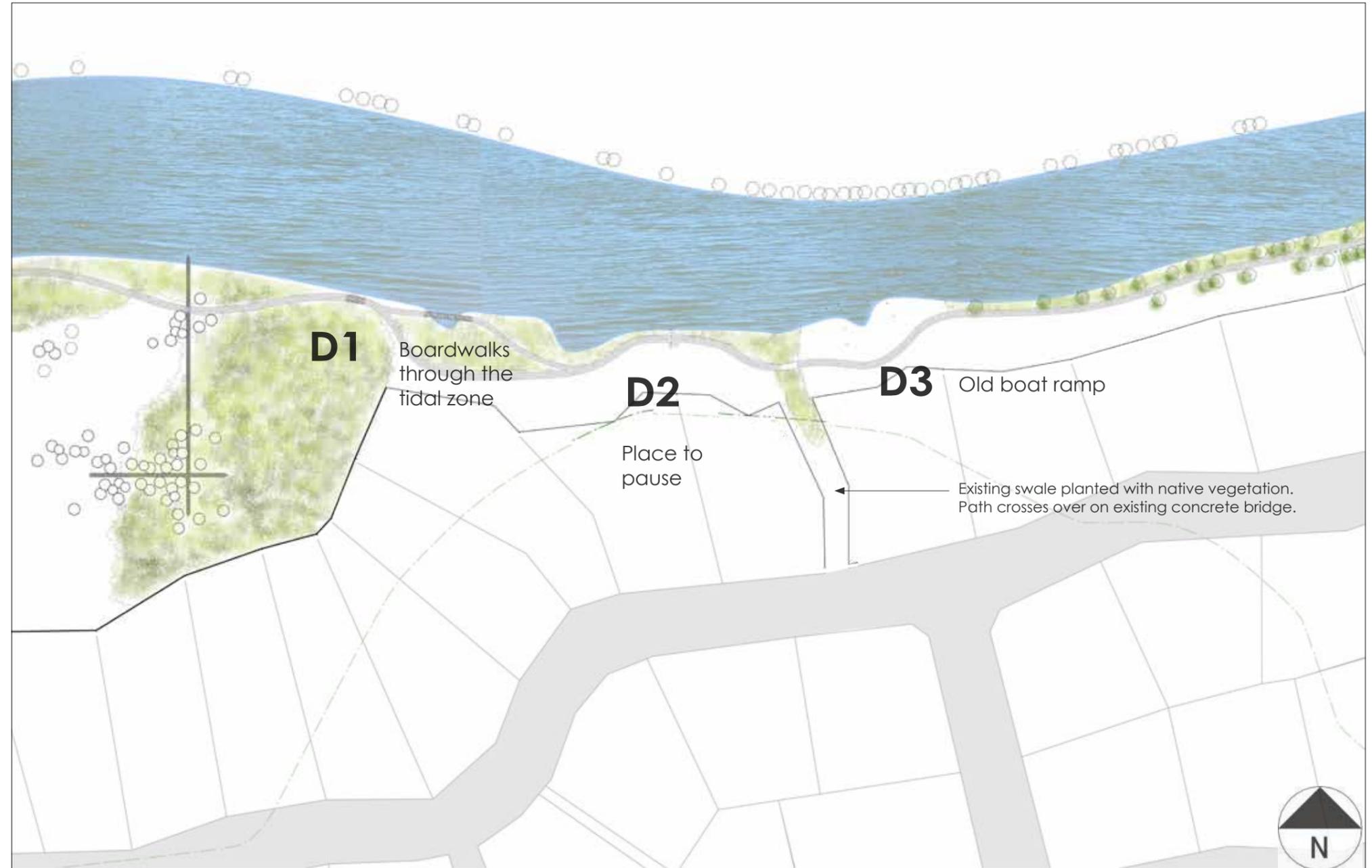
The cantilevered viewing platform links formally to the existing platform in Waihoihoi Park, reinforcing the reference to the settler narrative, and unifying the walkway with its context.

# D Restored saltmarsh

This is a transition zone passing through three main points of interest - the tidal saltmarsh area, the only elevated point on the walkway, and the old boat ramp.

Vegetation changes from mixed wetland planting to sedges and rushes adapted to brackish water and tidal changes.

Restoration of the tidal saltmarsh is a primary goal for this zone, based on the analysis of the site and its degraded character.



# D1 Boardwalk through the tidal zone

- ecological restoration
- manawhenua participation
- engagement with the tide
- different kinds of walking



The boardwalk is positioned to pass between two existing old fence posts, picking up the thread of posts and poles along the walkway.

A narrow boardwalk diverts from the main path, creating the opportunity for exploration, and materialising the difference between wandering and purposeful walking.

- Bolboschoenus fluviatilis*
- Baumea juncea*
- Juncus kraussii*
- Apodasmia similis*

Kukuraho (*Bolboschoenus fluviatilis*) is selected for the salt-marsh planting because it was traditionally used by Maori for thatching. It could be harvested from the site in due course, providing a prompt for participation, bringing the past into a living future.



Transition from wetland to saltmarsh is marked with *Plagianthus regius*, *Plagianthus divaricatus* and *Olearia solandri*.

## D2 Place to pause

views

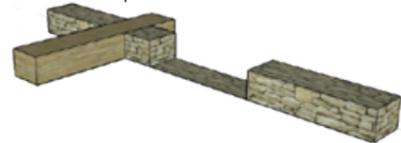
meeting

seating



Intersecting limestone and timber benches provide a place to pause at the only elevated point on the site, providing views up and down the river and to the surrounding hills.

The two parts of the seat are linked by limestone laid across the path as paving. The seat repeats materials used elsewhere but configured differently to create a larger less intimate seating space that literally intersects with the path.



# D3 Old boat ramp

engagement with the river

activities

occupation

memory



Posts in the river - traces of the past.



A light touch is employed at the old existing boat ramp to create a sense of place and invite people to occupy and use the space.

There is no planting around the boat ramp. Mown grass invites people to sit, picnic, spread out towels and rugs. The river can be accessed for swimming here at high tide; it is a good place to launch a kayak.

Rip rap installed on the slopes of the ramp gives it visual weight and presence. The traces of an old hard are amplified by duplicating and extending the posts from the river onto the land. Installing new posts extends the life of the story - the story is preserved rather than the original posts that will rot away in time.

# E Tree line

Design in this zone responds to the existing site conditions, in particular the morphology of the river in its lower reaches, the existing poplar trees on the other side of the river, and the close proximity of new houses in the subdivision.

Design utilises one main gesture - the addition of poplars along the walkway side of the river, creating both a tree-lined river and a tree-lined path, and unifying the landscape.

The simple, open feel of this zone takes its cue from the wide, flat morphology of the river and the flat fields beyond.

Mown grass between the path and the boundary of the subdivision allows residents easy access to the walkway, and allows them to determine the permeability of the boundary between public and private space. People who have moved in already demonstrate very different preferences. One property is completely fenced around all boundaries and has a guard dog. Another has used planting to partially demarcate the boundary with the esplanade reserve; another has no demarcation at all, preferring a continuous flow of green grass to the river, with no plans to change when a path is installed and more people can be expected to pass by.



# E Tree lined river

imagination materialised

seasonal change

the river unified

Poplars (*Populus yunnanensis*) are planted along the walkway to match the existing poplars on the other side of the river. The tree lined river landscape calls up associations with European cultural origins. It is a recognisable, archetypal aesthetic that materialises the images of rivers that people hold in their imaginations that they talked about in the interviews.

Local farming practice of planting poplars to stabilise the river banks is amplified, and with trees on both sides the river is unified. The poplars bring marked seasonal changes to the walkway experience.



Mondrian 1907-08



Banks of the Loing  
Sisley 1885



Ahuroa River

# E1 Place to pause

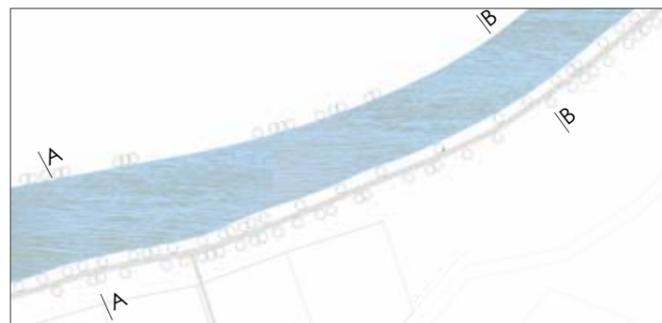
connections

views



The limestone cube seat with a recessed timber cap on one side of the top surface is repeated here, linking the ends of the walkway.

The overall feel is open and simple. Riparian planting is a 2-3 m strip between the path and the river, kept low using *Apodasmia similis* (oioi) and *Phormium* 'Green Dwarf' to maximise views over the river.



A — A



B — B

## E2 Entrance/exit



Over-sized fence posts mark the entrance/exit at the road end, reflecting the posts at the park entrance to the walkway, but here they are stained black recalling the old farming tradition of using creosote, and again materialising the history of land use on the site as revealed in the research.

The posts also link to the posts and poles at the boat club over the road, the site of the original wharf that was central to the life of the settlement. Running down to meet the boats is still a strong memory for many older people in the village.

The path from the river to the road is lined on each side with *Phormium* cultivars with a relatively restrained growth habit, such as 'Black Rage', 'Yellow Wave' and 'Green Dwarf'.

manawhenua

collaboration

integration

The Maori proverb "Ma where ma pango ka oti ai te mahi", translates as "With red and black the work will be complete", referring to each doing their bit in collaboration with everyone else to get the job done.

The colours red and black also reference traditional Maori artwork.



# **9. Conclusion**

---

## The research question

This research set out to answer the question “How can a riverside walkway be designed to meet the needs of a diverse community in a site that is rich heritage?” The question gave rise to four main objectives. Understanding that heritage is a cultural construct and thus political and contested, the first two objectives were to identify the types and roles of heritage present at the site, to identify the politics of heritage and to establish the position that design practice should take within the political frame. The third objective was to test theories of landscape in relation to heritage to see how these together might influence design. The final objective was to explore precedents for design relevant to a riverside walkway.

## The site

A general orientation to the site and its context revealed a small rural Northland community that was settled by Highland Scots, who came to New Zealand via Nova Scotia as an intact community under the leadership of a particularly strong charismatic minister of the Presbyterian Church. This is the heart of the heritage story of Waipu, which is told as a story of courage and cooperative working together to build a community. It is also a genealogical history and a family story. A review of the history of the area revealed that there were Maori living in the area prior to the arrival of the Nova Scotians, but they have little visible presence in the village and their stories are not told. The site’s larger regional context was described, including the connections between Waipu and its nearest cities, Whangarei and Auckland; Waipu’s future as envisaged in the Whangarei District Council’s Urban Design Strategy; and the boundaries of the rohe of local hapu, Patuharakeke. The local context of the design site was described in terms of the areas of residential settlement, road and walkway/cycleway connections, the rivers, land use, and the connections between the design site and the village. The site itself was located at the river side, bounded by the new subdivision, with connections at each end, one to the park in the village and the other to one of the main roads into the village.

## Research

Four streams of research were used to inform an iterative design process:

- an examination of theories of heritage, landscape and walking to find a framework for representing heritage in the landscape in the context of a walkway;
- interviews and focus groups with members of the community to uncover the politics of heritage on this site, and explore the meanings and value of different kinds of heritage to the community;
- an examination of rivers and the unique qualities of the rivers in the design site, and their meaning to the local community; and
- an analysis of design precedents to reveal design principles for walkways and the dynamics of politics in contested sites.

## Theoretical framework

The review of theories of heritage, landscape and walking generated a theoretical framework that integrated heritage, landscape and walking as “process”. Heritage was defined as a process emerging from relationships between people, objects, places and practices in a temporal frame. Sites, objects and buildings are not in themselves inherently valuable. What makes heritage meaningful is the present day activities that are generated around them. Given that landscape design necessarily engages with people, places, objects and practices, it necessarily becomes part of the process that generates heritage. Two challenges for landscape design emerged. The first was to look beyond the material manifestations of heritage to understand the ways in which the past is being produced in the present, the uses to which it is being put, to the benefit of whom. The second was to determine a conscious position within the social-cultural-political frame that generates heritage. Contemporary theories of landscape as a time-driven, living, interactive process emerged as the most compelling way to think about landscape. Heritage in a landscape conceptualised in this way can be regarded as part of a living continuum of occupation and activities, rather than something static and objectified to be rendered into an interpretation panel. From this approach time and process became central organising principles in design. The literature on walking revealed a culturally-rich activity that is entwined with place and narrative, time, distance, measurement and a way of seeing landscape through a progressive unfolding. Within the overall theoretical framework walking is central as a means of occupation of space, and is thus implicated in the interactive process that generates landscape.

## Conversations with the community

A series of interviews and focus group discussions were held, with three main objectives:

- to examine the perceptions and values that the local community hold in relation to their heritage,
- to understand the connectivity between heritage, landscape, practices of living and people’s sense of place and belonging; and
- to understand the social and political dynamics that generate heritage in this context.

The research involved holding three focus group discussions – one each with members of the Presbyterian Church synod, the Waipu Museum Trust Board and Patuharakeke Te Iwi Trust Board – and fourteen individual interviews with members of the community. The Presbyterian Church was selected because of its role as a landowner and its centrality to the heritage story; the museum was selected because of its role as a “memory activist” in the community.

Patuharakeke was selected for two reasons. Firstly, landscape architects are specifically required to recognise, consult and engage with Maori and the concept of kaitiakitanga. Secondly, based on the hypothesis that the Maori voice is suppressed by the hegemonic Nova Scotian story the decision was made that the research process should specifically include formal Maori representation. In this regard a position in the socio-political system was taken at the outset.

The findings from the interviews were analysed according to themes that emerged from the review of heritage theory - identity and social values; belonging and sense of place; local distinctiveness; invention and reinvention; intangibility; kaitiakitanga; dissonance and disinheritance, and contestability. The findings confirmed that the dominant heritage story disinherits Maori; and that the literal story of the Nova Scotian migration has little meaning to people who are not descendants, but the activities and rituals that are generated by the story are highly valued. People expressed their sense of place and belonging through a mix of time, activity, memory and social relationships. The intangible heritage that was most highly valued by the community could be mapped to the activities and meanings that generate landscape, confirming that time and process could be the primary organising principles to represent heritage in the landscape.

Analysis of rivers in culture and the meaning of the rivers in the design site revealed the importance of rivers to people’s sense of belonging to place, and the relationship that the local people have built with these rivers in their imaginations. Re-establishing the physical relationship with the river was particularly important for Patuharakeke for whom it is a taonga.

Analysis of rivers and the design site

The site was revealed to be highly modified, with only the river reflecting something of the site’s original character. The spatial-temporal processes of the rivers were examined, highlighting in particular tidal flow fluctuations and propensity for flooding. The impact of land use on the ecology of the river was examined and from the evidence available, the quality of the water was assumed to be poor. Analysis of the impact of climate change and the planned subdivision revealed greater risk from flooding in the future, and potential negative impact on water quality. From this work constructed wetlands and an approach to riparian restoration was established as integral to the overall design for the site, and tolerance to flooding was considered in relation to plant selection, seating and the path.

Design precedent

Three sites of public commemoration were studied as examples of practice resulting in a material landscape and as processes of engagement with the politics of heritage. Findings were summarised in relation to the ways in which time and politics can be expected to work together to resolve contested design. Six walkways were examined in terms of their materiality and the experience of walking them. Findings were summarised in relation to the material, sensory, experiential and cultural aspects of walking and walkways, to derive a set of principles that could be applied to this walkway.

## Design

Three overarching statements of design intent summarise the answer to the design question:

- The design of the walkway is seen as part of a process that re-invents the heritage of the site and the community; it responds not just to the past as it is currently represented, but also to the future that is inclusive of Maori stories and representation. In surfacing the disinherited voice landscape architecture takes a conscious position in the social-cultural-political framework that generates heritage at this place.
- The project sets out to design not just a product but a process in which occupation, participation and time shape the landscape and its meaning to the local people. Heritage in the landscape conceptualised in this way is regarded as part of the living continuum of occupation and activities. Time and process are thus central organising principles for representing heritage in the landscape.
- People experience designed space on their own terms, through their own lenses shaped by their own world views and experiences. The walkway must therefore stand on its own merits, providing physical, sensory and haptic experiences that are enriching for the people who use it.

Informed by the analysis of the case studies, the literature on walking and experiences of walking, the site was conceptualised as a series of zones, defined by different characteristics of the site and different aspects of heritage, providing different sensory experiences. Informed by the key findings from the research a set of design objectives were formulated to promote the performative qualities of the landscape. Intersecting with the zones is a series of different prompts for participating in the site and interacting with the river.

## Design objectives

The imaginary relationship people have with the river is materialised through different ways of relating to the river, and the opportunity to do riverside things as imagined, such as walk, swim, picnic and go boating. Archetypal river landscapes are designed that recall both European and New Zealand heritage.

The interplay between water and land is materialised by engagement with the tide. The end of the jetty floats up and down with the tide; boardwalks take the walker into the tidal zone; the tide comes in and out at the boat ramp.

Opportunities are created for collective community engagement in the walkway and the site. The kahikatea forest, for example, is a twenty year project that will require an organised community effort. A “Friends of the Walkway” is envisaged as a vehicle for undertaking work, engaging with Council and fundraising.

The historical and contemporary presence of Maori is made visible on the site through a dedicated space, the presence of pou signifying occupation and significance, and plants used in traditional activities. Design remains sufficiently open to allow Patuharakeke to insert representations of identity and culture as part of their process of occupation as it unfolds.

Prompts are provided for diverse practices and participation in the site over time, such as walking across the paddock, harvesting plants, using the river, sitting and lingering, games and sports, some of which are heritage practices brought into the present, some of which will become heritage.

The walkway is connected to its context both physically and metaphorically, through multiple entrances and exits, multiple destinations, a bridge to the subdivision on the other side of the river, plant and tree selection, the use of local limestone from the river’s catchment.

Through its connectivity and prompts for practices the design maximises the opportunity for people to occupy the site. Through occupation people’s sense of belonging, their storehouses of memory, their own narratives will build the heritage of the future. Design remains sufficiently open to allow memory activists to insert storyboards or signifiers as part of ongoing negotiations that emerge from the political frame of heritage, and the processes of community occupation.

## The last word

At first glance this project might have seemed inconsequential and undemanding - a short walkway on a degraded river in a small rural community. But it turns out to be a hugely important opportunity for this community. As a material walkway it returns the river to its community; it helps to knit together the expanding subdivisions and the village; it provides a public amenity.

But more than that, landscape architecture has engaged with heritage to become part of a process that reinvents heritage in response to the changing community as it revealed itself in the research. Migration keeps happening, time passes, all communities change. The design for this site is a contribution to a process of reinvention that preserves and builds upon the values of collective cooperation that are part of the community’s identity, whilst envisaging a future that is more inclusive and culturally richer. It makes heritage in the landscape part of a living present and provides opportunity for new heritage activities to be forged in the future.

The project has demonstrated how landscape architecture can enact the civic and democratic responsibilities that design of public space confers by going beyond the immediate manifestations of heritage and seeking a deeper understanding of how heritage is being constructed, by whom and for what purpose.

These are the constructions of belonging - democratic representations in which diverse members of the community can recognise themselves, and the opportunity to participate in processes that build a sense of place in one’s own place.

# 10. Appendices

---

**Design tests**

**Plant lists**

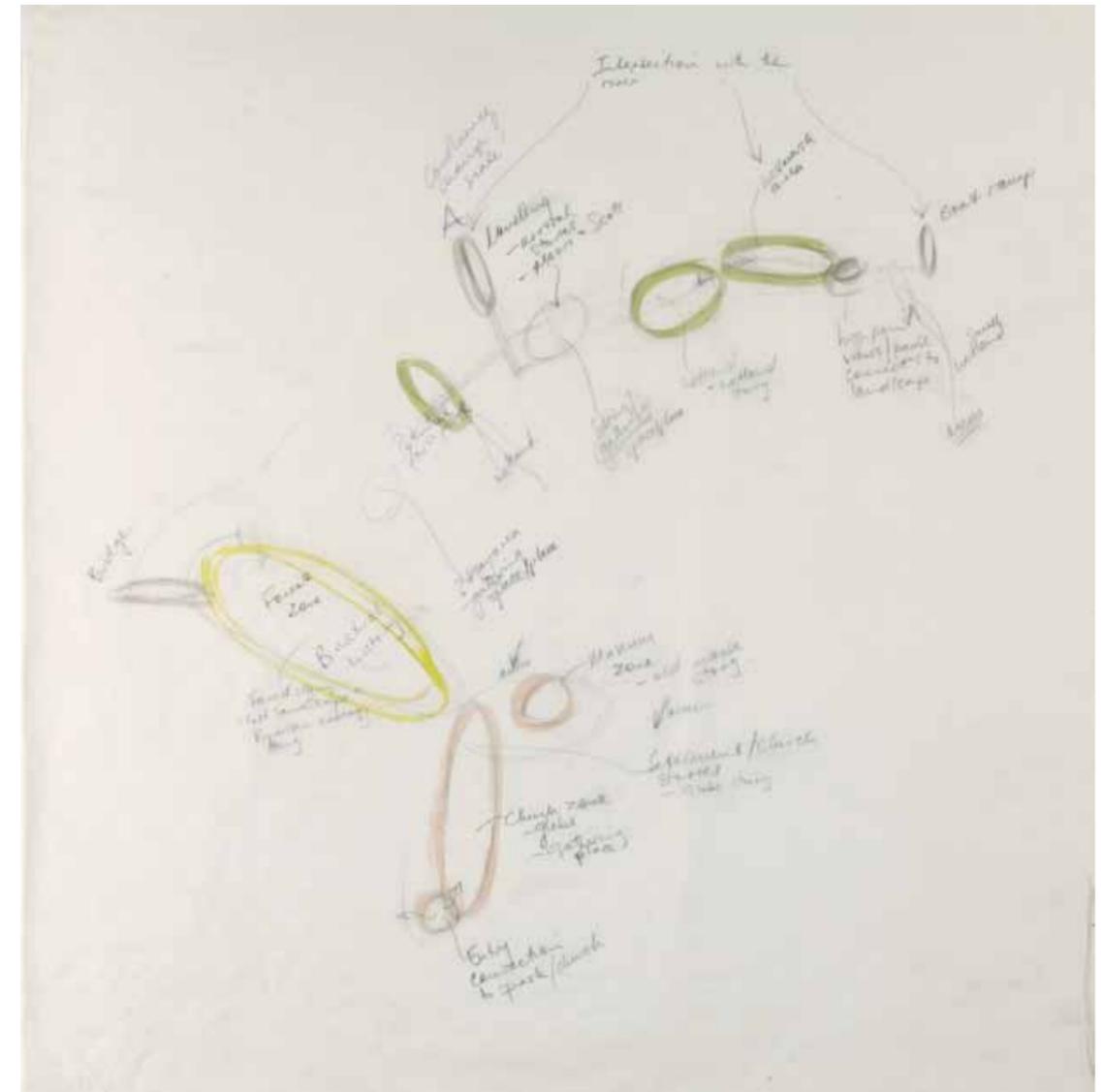
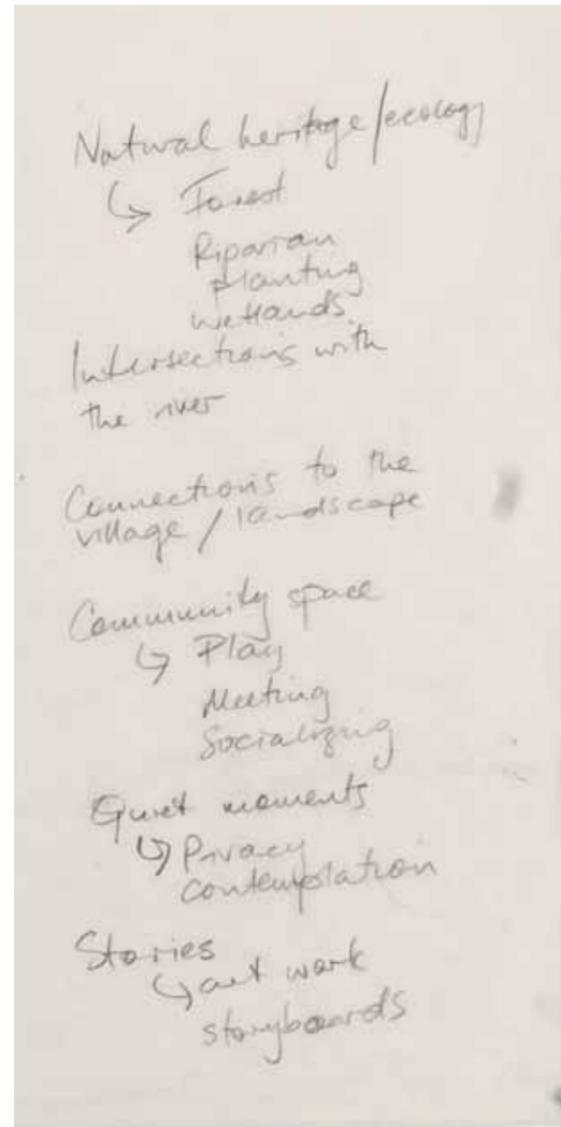
**Flood risk analysis**

# Appendix 1 : Design tests

## Zones

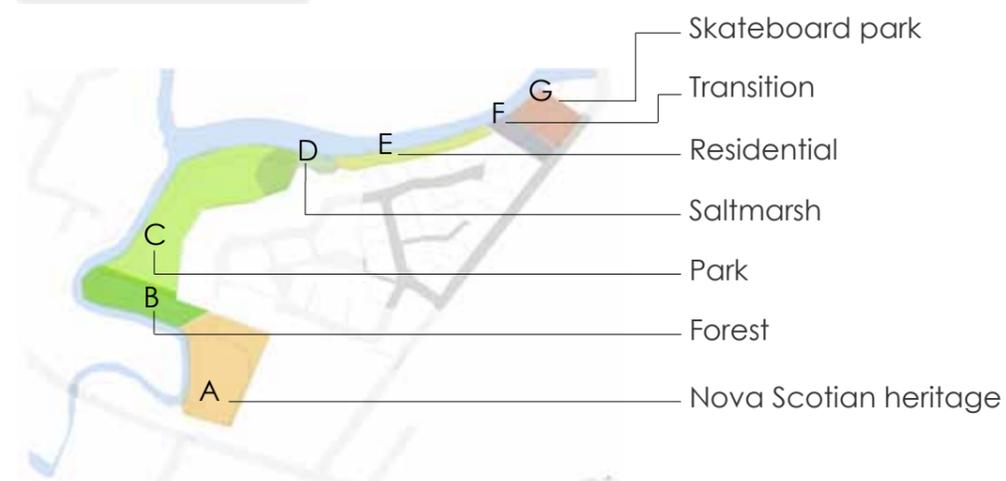
The decision to create a series of zones came out of the research on walking and walkways. The formation of zones was iterated through examination of the conditions of the site, of ways the community might inhabit the site, connections to the subdivision and in particular the river. Early iterations included a skateboard park at the end, influenced by the proposals and plans the developers supplied, and by the long and arduous local debate about the possibility of a skateboard park in the village. This was dropped after critical feedback as being an inappropriate site for the park and a disjointed “add-on” to the walkway.

The conceptualisation of zones as represented in naming also changed from an emphasis on the material qualities of the site as it is now to incorporate elements of heritage and design as envisaged in the future.



## Design approach

### Zones

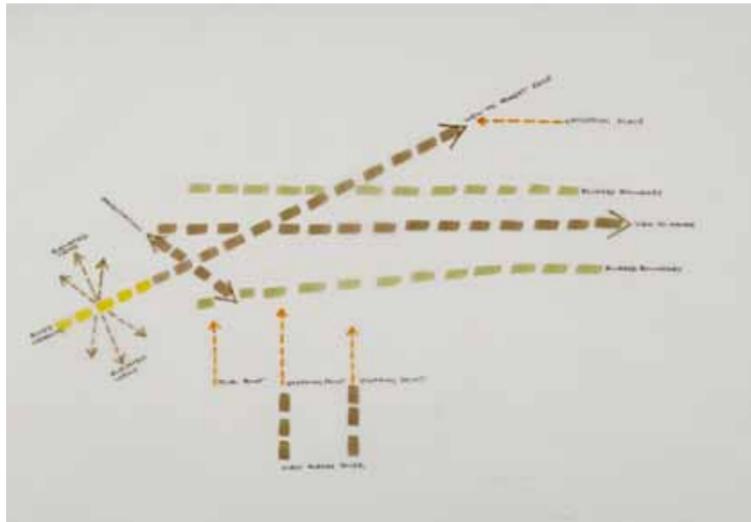


## Recalling the forest

Kahikatea are a signifier of the region and a lost heritage on this site that people want back. The idea of the kahikatea forest was explored and developed through several iterations of drawing and critique. The shape of the path, the design of the bridge, viewshafts and sight lines, boundaries, distribution and placement of trees, light and shade, and transitions were explored. Through the workshops I tested the ideas of community participation, and the temporal nature of heritage and landscape expressed through the forest.

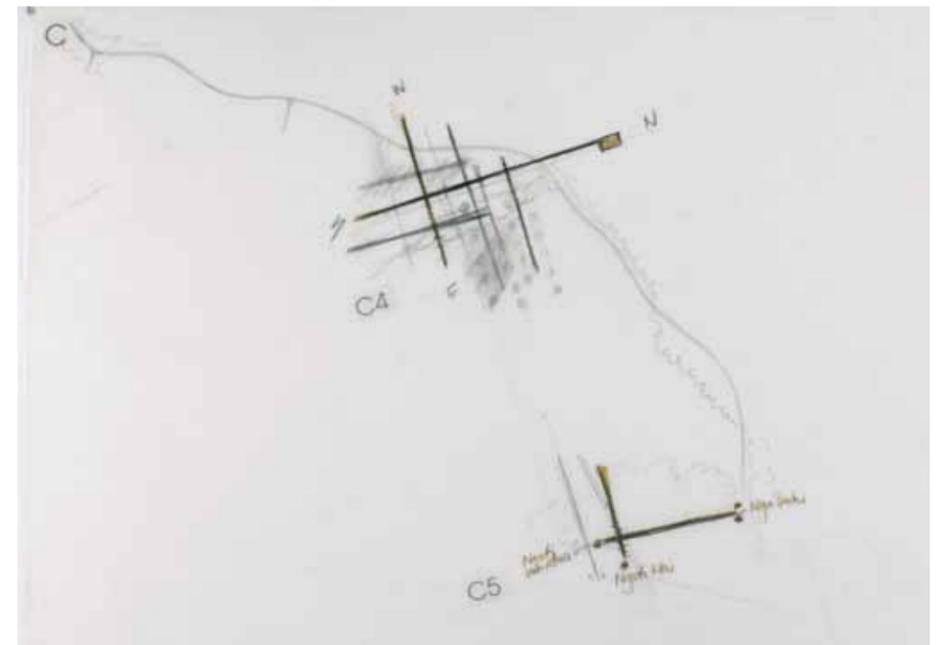
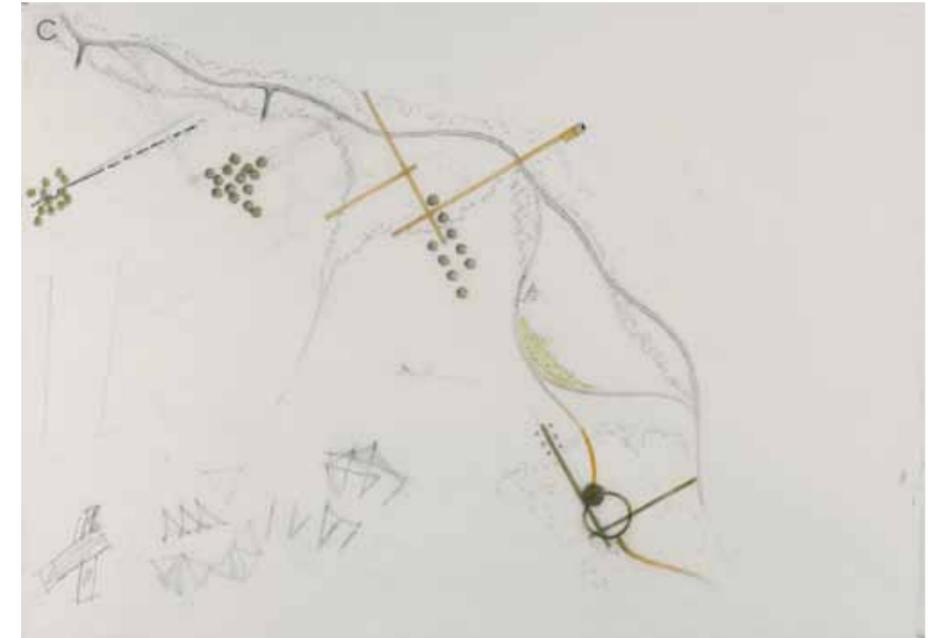
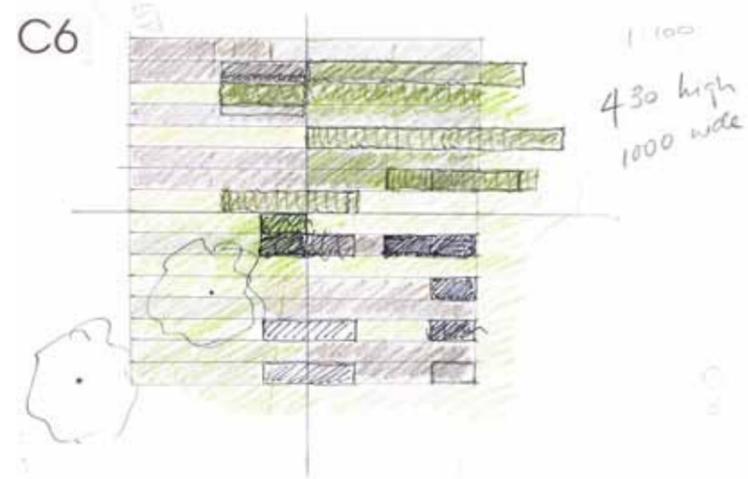
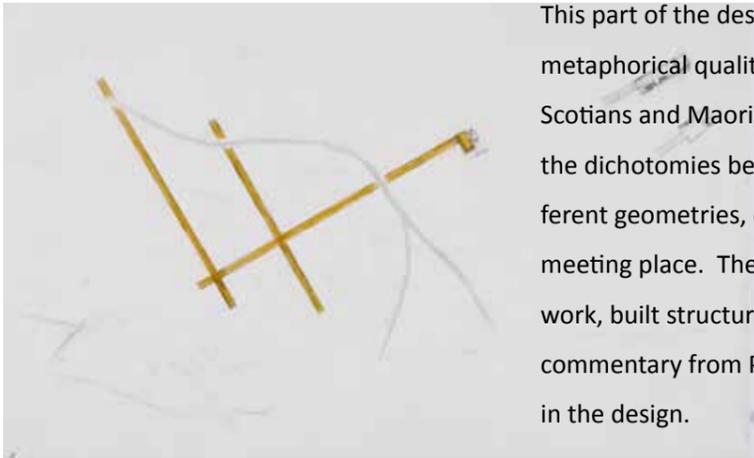
Through the process of iteration and critique the trees became more informal in their distribution, the transition of the forest edge more gradual, gratuitous curves removed from the path.

I included a bridge to link to the subdivision on the other side. The research showed the importance of connections between the walkway and its context, and a bridge allows the walkway to knit the two residential areas together. The design of the bridge went through several iterations, exploring a curve and then a straight ramp as the shortest way across. The solution for the bridge, a pair of crossed ramps, was found through modelling.



# Landings and representation of Maori occupation

This part of the design was the most challenging to resolve. My early intuitions were driven by the spatial and metaphorical qualities of the confluence of the rivers, representation of migrations and occupations by Nova Scotians and Maori, taking into account both differences and similarities, the intersections of the cultures and the dichotomies between their heritage stories. Through many iterations I worked through ideas about different geometries, orientation, the use of trees, paths in the park space, overhead planes, materials and a meeting place. The progression of design was to become simpler and simpler, letting trees and space do more work, built structure less, and making key gestures stronger. The process of external critique included critical commentary from Patuharakeke prior to the last workshop that resulted in a resolution of the presence of pou in the design.

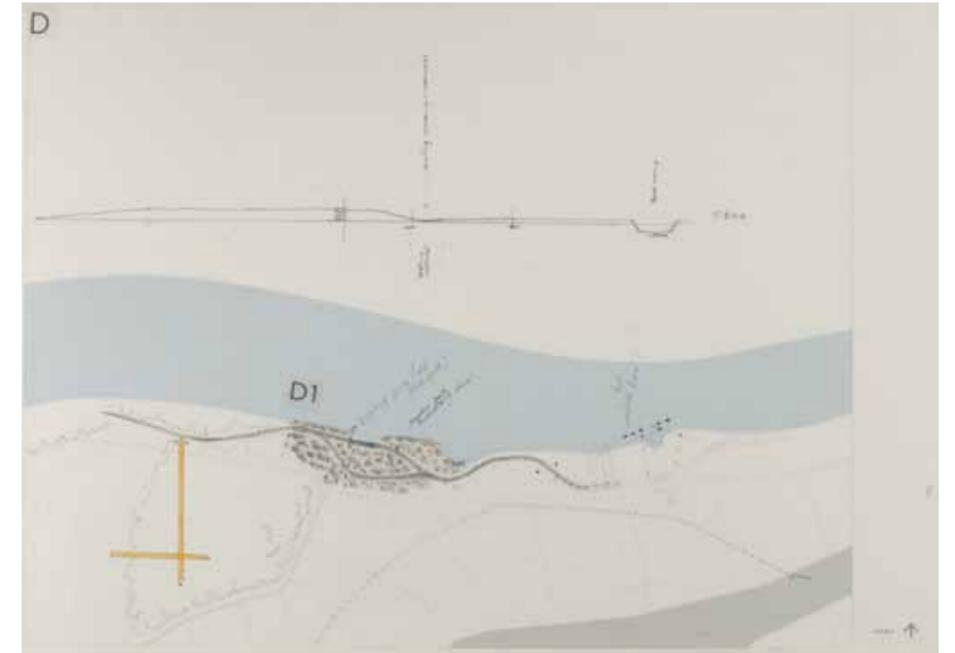


## Nova Scotian settlement



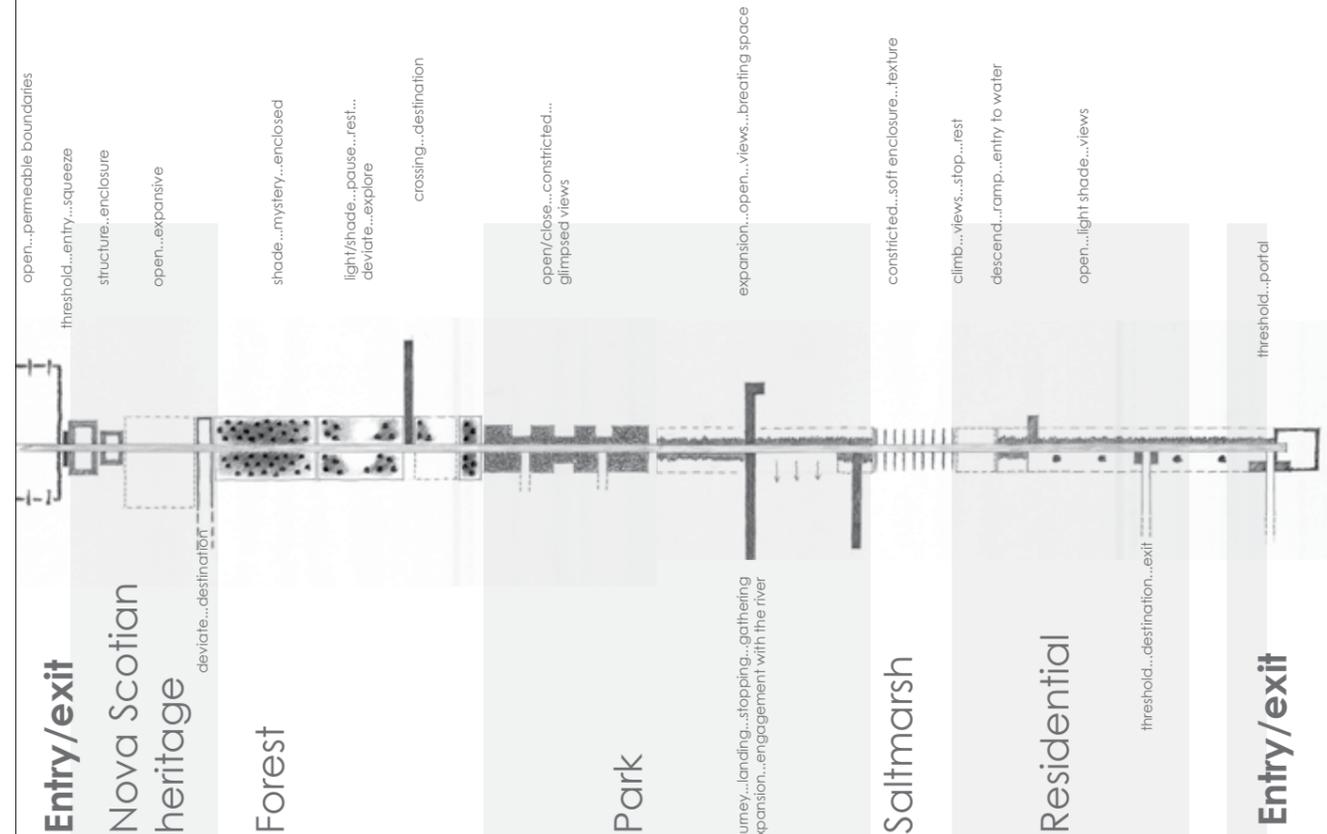
The key issues for resolution in this zone were the entry/exit point and the connection with the old manse. Again design iteration was focused on increasing simplicity and integration between design, representations of heritage and the existing features and conditions of the site.

## Restored saltmarsh and tree line



Resolution of design for the restored saltmarsh seemed to be more straightforward, due to the strong ecological character of this part of the site, and the loud call for an emphasis on ecological restoration. Key moves responded to the morphology of the river, the elevated area, the existing boat ramp and the opportunity to establish points of relationship with the river. These moves were not contested in the workshop critiques. Critique of the last zone influenced a strengthening of the main design gesture. The sketches of this last zone do not seem to have survived to the end of the design process.

## Sequential experience



Based on the work of Catherine Dee (2001) I explored the sequence of the walkway in terms of its spatial qualities - openness and closure, light and shade, edge relationships, and its connections. Whilst in the end I felt the representation was not successful it was a useful process for me to "see" the walkway in its entirety and explore the experiential sequence. It particularly helped me to refine the use of vegetation in the riparian planting and the use of trees at the eastern end.

# Appendix 2: Indicative plant lists

The philosophy behind the design for this site is to encourage and facilitate community engagement, including in the implementation. It is an opportunity for the school to engage with ecological restoration; Patuharakeke are committed to the restoration of the site; there will be residents who want to participate in planting and maintenance. Accordingly people must be allowed to contribute to plant selection, so these plants lists must be regarded as indicative rather than prescriptive. The designer's job is to try and ensure that the functions of the plants and plantings are maintained e.g. form and height where this is part of spatial organisation, contrast between natives and introduced species, stormwater cleansing and erosion control.

## 2.1 Nova Scotian settlement zone - river side of the path

Only the margin between the path and the river is planted here. Pasture is retained on the other side, mown for maintenance purposes, but otherwise is continuous with the adjoining paddock. A farm fence keeps stock off the path.

| Scientific name          | Common name/Maori name | Comments   |
|--------------------------|------------------------|--|
| <i>Apodasmia similis</i> | oioi                   | 1m. Plant in the tidal edge and the riparian margin. |
| <i>Carex germinata</i>   | rautahi                | Plant on the bank edge for erosion control.          |
| <i>Juncus kraussii</i>   | sea rush               |  |

## 2.2 Recalling the forest - Cabbage tree plantation

| Scientific name                            | Common name/Maori name | Comments  |
|--|------------------------|---|
| <i>Cordyline australis</i>                 | cabbage tree           |   |
| Underplanting on the park side of the path |                        |   |
| <i>Apodasmia similis</i>                   | oioi                   | 1m. Distributed around the edges of the planted area to provide a transition of height.                   |
| <i>Coprosma propinqua</i>                  | mingimingi             | 1-2m. Berries provide seasonal detail.  |
| <i>Cortaderia splendens</i>                | toetoe                 | Up to 6m at flowering. Use sparingly.   |
| <i>Cortaderia toetoe</i>                   | toetoe                 | Up to 4m tall at flowering. Use sparingly.  |
| <i>Machaerina sinclairii</i>               | pepepe, tuhara         | 0.5 - 1m. Distributed around the edges of the planted area to provide a transition of height.             |
| <i>Phormium tenax</i>                      | flax                   | Up to 4m at flowering.  |
| <i>Plagianthus divaricatus</i>             | saltmarsh ribbonwood   | 2m  |
| Planting on the river side of the path     |                        |   |
| <i>Apodasmia similis</i>                   | oioi                   | 1m. Plant in tidal edge and throughout riparian zone.   |
| <i>Carex germinata</i>                     | cutty grass            | 0.5 - 1m. Spreading rhizomes are excellent for protecting banks from erosion. Plant along bank edge only. |
| <i>Cortaderia fulvida</i>                  | toetoe                 | 1.5 - 2.5 at flowering. Use sparingly.  |
| <i>Dianella nigra</i>                      | turutu                 | 0.4m. Used as a filler around larger plants.  |
| <i>Libertia grandiflora</i>                | NZ iris                | 0.4m. Used as a filler around larger plants.  |
| <i>Phormium 'Green Dwarf'</i>              | flax                   | 0.8m  |
| <i>Phormium 'Black Rage'</i>               | flax                   | 1.2m  |
| <i>Phormium 'Yellow Wave'</i>              | flax                   | 1m  |

## 2.3 Landings zone - Wetlands

| Scientific name                 | Common name/Maori name      | Comments  |
|---------------------------------|-----------------------------|---|
| <b>Damp edges</b>               |                             |   |
| <i>Apodasmia similis</i>        | oioi                        |   |
| <i>Coprosma propinqua</i>       | mingimingi                  |   |
| <i>Cortaderia fulvida</i>       | toetoe                      |   |
| <i>Machaerina sinclairii</i>    | pepepe, tuhara              |   |
| <i>Phormium tenax</i>           | flax                        |   |
| <i>Plagianthus regius</i>       | ribbonwood, manatu          | Planted at the edge of the wetland to create a transition to the saltmarsh zone.                      |
| <b>Boggy areas</b>              |                             |   |
| <i>Apodasmia similis</i>        | oioi                        |   |
| <i>Carex germinata</i>          | cutty grass                 |   |
| <i>Carex secta</i>              | purei, makura               |   |
| <i>Carex virgata</i>            | purei, makura               |   |
| <i>Cortaderia fulvida</i>       | toetoe                      |   |
| <i>Cortaderia splendens</i>     | toetoe                      |   |
| <i>Plagianthus divaricatus</i>  | saltmarsh ribbonwood        |   |
| <b>Wet areas/standing water</b> |                             |   |
| <i>Carex secta</i>              | purei, makura               |   |
| <i>Carex virgata</i>            | purei, makura               |   |
| <i>Juncus gregiflorus</i>       |                             |   |
| <i>Schoenoplectus validus</i>   | kopupu, kuta, lake clubrush | Used by Maori for weaving mats. Useful for water treatment.   |
| <i>Typha orientalis</i>         | raupo                       | Rhizomes and pollen was used by Maori in cooking; the leaves were used for thatching roofs and walls. |

## 2.4 Landings zone - trees in the park area

Trees in the park area have been selected for their tolerance or preference for damp conditions, and to provide a mix of deciduous and native trees.

| Scientific name                  | Common name/Maori name | Comments  |
|----------------------------------|------------------------|---|
| <i>Dacrycarpus dacrydioides</i>  | kahikatea              | Up to 60 m.   |
| <i>Laurelia novae-zealandiae</i> | pukatea                | 35m. Prefers damp soil.   |
| <i>Luquidamber styraciflua</i>   | liquidamber            | 25 - 30m. Colourful autumn foliage. Tolerant of damp soil.      |
| <i>Metrosideros excelsa</i>      | pohutukawa             | 30m. Tolerant of damp soil. Red flowers in summer.              |
| <i>Populus x 'Manawatu Gold'</i> | golden poplar clone    | 20m. Large crowned tree good for shade.                         |
| <i>Quercus palustris</i>         | pin oak                | 25 - 30m. Colourful autumn foliage, prefers damp conditions.    |
| <i>Vitex lucens</i>              | puriri                 | 20m. Flowers and bright red fruit. Tolerant of damp conditions. |

## 2.5 Landings zone - riparian edge

| Scientific name               | Common name/Maori name | Comments |
|-------------------------------|------------------------|----------|
| <i>Apodasmia similis</i>      | oioi                   |          |
| <i>Carex germinata</i>        | cutty grass            |          |
| <i>Cortaderia fulvida</i>     | toetoe                 |          |
| <i>Machaerina sinclairii</i>  | pepepe                 |          |
| <i>Phormium tenax</i>         | flax                   |          |
| <i>Phormium 'Green Dwarf'</i> | flax                   |          |
| <i>Phormium 'Black Rage'</i>  | flax                   |          |

## 2.5 Saltmarsh

| Scientific name                  | Common name              | Comments   |
|----------------------------------|--------------------------|--|
| In the tidal zone                |                          |  |
| <i>Apodasmia similis</i>         | oioi                     | 1m   |
| <i>Juncus kraussii</i>           | sea rush                 | 1m   |
| <i>Baumea juncea</i>             |                          | 1-1.5m   |
| <i>Bolboschoenus fluviatilis</i> | marsh clubrush, kukuraho | Used traditionally by Maori for thatching.   |
| At the edge of the saltmarsh     |                          |  |
| <i>Olearia solandri</i>          | coastal tree daisy       | 3-4m high. Concentrated at the transition from the wetland. Use sparingly at the path edge of the saltmarsh. |
| <i>Plagianthus divaricatus</i>   | saltmarsh ribbonwood     | 2m high. Concentrated at the transition from the wetland. Use sparingly at the path edge of the saltmarsh.   |

## 2.6 Tree line

| Scientific name                             | Common name   | Comments   |
|---|---------------|--|
| <i>Populus yunnanensis</i>                  | yunnan poplar | Up to 30m. Good for erosion control, unpalatable to possums. |
| Underplanting on the river side of the path |               |  |
| <i>Apodasmia similis</i>                    | oioi          | 1m   |
| <i>Phormium 'Green Dwarf'</i>               | flax          |  |

Sources:

(Northern Regional Council, 2005)

(Northern Regional Council, 2009)

(Bell, 2001)

(Metcalf, 1998)

# Appendix 3: Flood risk analysis

| Social  |   | Cultural  | Economic  |   | Environmental   |
|---|---|---|---|---|---|
| Public Safety   | Community disruption (e.g. displaced people, cancelled events, school closures)   | (e.g. damage to herige sites, historic structures, sites of importance to Maori)  | Local economy   | Lifeline assets (e.g. power, roads, water supply, wastewater systems)   |   |
| Insignificant<br>The catchment is not large enough, nor the river sufficiently constrained, to cause flash flooding. Flooding is most likely to occur during high rainfall events when people are not likely to be using the walkway. | Insignificant<br>The walkway would be unusable for the period of inundation, and potentially compromised during a period of clean-up and repair. People could still walk to the village via the road, and use other areas for recreation. | Minor<br>The Presbyterian Church and the old Manse are historical buildings. It would be of local, and to some degree regional, concern if these buildings were damaged by flooding. They are on elevated land outside previous flood limits. | Minor<br>There is likely to be some cost involved in cleaning up or repairing planting, walking surfaces and/or structures after a major flood, but previous flooding in Waihoihoi Park where hard surfaces are flood resistant has not generated significant cost. | Insignificant<br>There is no lifeline infrastructure associated with the site. If a bridge was included in the walkway it could be damaged in a flood, but this would have no impact on essential services. | Minor<br>Increase in sedimentation in the river as a result of more frequent heavy rain events may impact on the morphology and ecology of the river. |

MfE provides a table that enables the probability of a flood occurring in the design life of an asset that is at risk of being flooded to be calculated. The data on the frequency of flooding on the site is limited, but indicates an interval of ten years. However, if climate change predictions are reasonably accurate then a more frequent occurrence can be expected. Accordingly Table 2.2 includes average recurrence intervals of ten and five years. The design life of the walkway is difficult to assess. Because the concept of a walkway and the reservation of the land of it is part of the resource consent conditions for the subdivision, the life of it in some ways must be related to the life of the subdivision. Once land is developed as a residential area it is likely to be occupied for a very long time – much longer than the hard elements that might comprise a walkway. So the space for, and the concept of, a walkway may have a much longer life than the elements that go into its design. However, it is reasonable to expect that hard surfaces and structures will last at least 10 years, and potentially longer, so a range of life-spans are included. Using the thresholds that MfE recommend in Table 2.3, regardless of design life span it is almost certain that flooding will occur on the site. Bringing the consequences of flooding together with the probability of flooding into a risk assessment matrix (Table 2.4) presents a more compelling picture than the consequence on their own. Consideration of flood risk management is an imperative for design on this site.

| Average recurrence interval of flood | Design life of the walkway |          |          |
|--------------------------------------|----------------------------|----------|----------|
|                                      | 10 years                   | 20 years | 50 years |
| 5 years                              | 89%                        | 99%      | 100%     |
| 10 years                             | 65%                        | 88%      | 99%      |

|                |           |
|----------------|-----------|
| Almost certain | > 85%     |
| Likely         | 60% - 84% |

|   |   | Social        |                      | Cultural | Economic      |                 | Environmental |
|---|---|---------------|----------------------|----------|---------------|-----------------|---------------|
|   |   | Public safety | Community disruption |          | Local economy | Lifeline assets |               |
| Consequence rating                      |   | Insignificant | Insignificant        | Minor    | Minor         | Insignificant   | Minor         |
| Probability of flooding: Almost certain | Combined risk rating (Ministry for the Environment) | Moderate      | Moderate             | High     | High          | Moderate        | High          |

# References

- Abbott, M. (2006). The Creative Practice of Heritage Landscapes: Designing Futures for Historic Stone Walls and Walking Tracks. *Landscape Review*, 11(2), 31-41.
- Abbott, M. (2010). A Future with Our Past: Towards a creative practice of heritage in the coastal Otago landscape. In J. Stephenson, M. Abbott & J. Ruru (Eds.), *Beyond the Scene: Landscape and identity in Aotearoa*. Dunedin: Otago University Press.
- Abbott, M. (2011). Being Landscape. In J. Ruru, J. Stephenson & M. Abbott (Eds.), *Making our place: exploring land-use tensions in Aotearoa New Zealand*. Dunedin: Otago University Press.
- Abbott, M., Ruru, J., & Stephenson, J. (2010). Entering Landscape. In J. Stephenson, M. Abbott & J. Ruru (Eds.), *Beyond the Scene: landscape and identity in Aotearoa New Zealand*. Dunedin: Otago University Press.
- American Society of Landscape Architects. (2014). Interview with Kongjian Yu. Retrieved from [HTTP://WWW.ASLA.ORG/CONTENTDETAIL.ASPX?ID=20124](http://www.asla.org/contentdetail.aspx?id=20124)
- Auckland Council. Auckland Design Manual. Retrieved from <http://aucklanddesignmanual.co.nz/design-for-auckland/auckland-as-a-unique-place>
- Belich, J. (1996). *Making Peoples: A History of the New Zealanders from Polynesian Settlement to the end of the Nineteenth Century*. Auckland: Penguin Books.
- Bell, D. C. (2001). *Trees for New Zealand Town and Country*. Auckland: David Bateman.
- Benton, T., & Cecil, C. (2010). Heritage and Public Memory. In T. Benton (Ed.), *Understanding Heritage and Memory*. Manchester: Manchester University Press.
- Benton, T., & Curtis, P. (2010). The Heritage of Public Commemoration. In T. Benton (Ed.), *Understanding Heritage and Memory*. Manchester: Manchester University Press.
- Berberich, C., Campbell, N., & Hudson, R. (2012). Introduction: Framing and Reframing land and Identity. In C. Berberich, N. Campbell & R. Hudson (Eds.), *Land and Identity: Theory, Memory and Practice*. Amsterdam: Editions Rodopi
- Blundell, S. (2013). What will become of Christchurch's fallen glory? *New Zealand Geographic*(121).
- Boyes, R. (2005). Germany finally admits the Holocaust to its dark heart. Retrieved from <http://www.thetimes.co.uk/tto/news/world/article1979917.ece>
- Brody, R. (2012). The Inadequacy of Berlin's "Memorial to the Murdered Jews of Europe". Retrieved from <http://www.newyorker.com/online/blogs/movies/2012/07/the-inadequacy-of-berlins-memorial-to-the-murdered-jews-of-europe.html>
- Byrnes, G. (2000). Surveying Space: Constructing the Colonial Landscape. In B. Dalley & B. Labrum (Eds.), *Fragments: New Zealand Social and Cultural History*. Auckland: Auckland University Press.
- Chatwin, B. (1987). *The Songlines*. London: Jonathan Cape.
- Corner, J. (1999). Recovering Landscape as a Critical Cultural Practice. In J. Corner (Ed.), *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press.
- Couper, P. J. (2002). The Farming of Waipu. In J. L. W. Haysmith, B. McKenzie (Ed.), *The Pride of the Lion*. Waipu: Waipu 150 Trust.
- Crane, P. (2014). Improving public spaces for young people: the contribution of participatory research. In L. Beddoe & J. Maidment (Eds.), *Social Work Practice for Promoting Health and Wellbeing: Critical Issues*. New York: Routledge.
- Davis, P., & Corsane, G. (2014). Communities, heritage and new cultural landscapes. In M. Roe & K. Taylor (Eds.), *New Cultural Landscapes*. New York: Routledge.
- Dee, C. (2001). *Form and Fabric in Landscape Architecture: A Visual Introduction*. London: Spon Press.
- Dreiseitl, H. (2012). Blue-green infrastructures. *Topos*(81), 17-22.
- Edmond, L. (1984). *Selected Poems*. Auckland: Oxford University press.
- Faulknor, F. (2002). The Churches of Waipu. In W. Haysmith, J. Langsford & B. McKenzie (Eds.), *The Pride of the Lion*. Waipu: Waipu 150 Trust.
- Fleming, R. L. (2007). *The Art of Placemaking: Interpreting Community Through Public Art and Urban Design*. London, New York: Merrell Publishers Ltd.
- Fox, E., & Fink, P. (2012). Irwell River Park: The rediscovery of Manchester's Lost River. *Topos*(78), 29-35.
- Gates, R. (2002). Manaia's Story. In J. L. W. Haysmith, B. McKenzie (Ed.), *The Pride of the Lion*. Waipu: The Waipu 150 Trust.
- Gehl, J. (2011). *Life Between Buildings*. Washington DC: Island Press.
- Glancey, J. (30 June 2004). Diana Memorial Fountain Completed. *The Guardian*.

- Goss, S. (2014). *Open Tribe*. London: Lawrence and Wishart.
- Graham, B., Ashworth, G. J., & Tunbridge, J. E. (2000). *A Geography of Heritage: Power, Culture and Economy*. London: Arnold Publishers.
- Hansford, D. (2013). *Water Liquidation*. *New Zealand Geographic*(125)
- Harrison, R. (2013). *Heritage: Critical Approaches*. Abingdon, Oxon: Routledge.
- Harrison, R., & Rose, D. (2010). *Intangible Heritage*. In T. Benton (Ed.), *Understanding Heritage and memory* (pp. 240). Manchester: Manchester University.
- Hauraki District Council. (2003). *Water Quality Parameters: Chemical and Physical Factors Influencing Water Quality in Rivers and Streams*.
- Hawke, S. K. (2012). *Heritage and Sense of Place: Amplifying Local Voice and Co-constructing Meaning*. In I. Convery, G. Corsane & P. Davis (Eds.), *Making Sense of Place: Multidisciplinary Perspectives*. Suffolk: The Boydell Press.
- Haywood, M. (2012). *Viewing the Emergence of Scenery from the English Lake District*. In I. Convery, G. Corsane & P. Davis (Eds.), *Making Sense of Place: Multidisciplinary Perspectives*. Woodbridge, U.K.: The Boydell Press.
- Howard, P. (2003). *Heritage: Management, Interpretation, Identity*. London: Continuum.
- Ingold, T. (2000). *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*. London: Routledge.
- Iti, T. (2014). *New Zealand Listener*, January 11-17 2014
- Jackson, J. B. (2002). *How to Study Landscape*. In S. Swaffield (Ed.), *Theory in Landscape Architecture: A Reader*. Philadelphia: University of Pennsylvania Press.
- Jellicoe, G. (1996). *Studies in Landscape Design*. U.K.: Garden Art Press.
- Kidman, F. (1987). *The Book of Secrets*. Auckland: Heinemann.
- King, M. (2003). *The Penguin History of New Zealand*. Albany NZ: Penguin Books.
- Kirby, V. (1996). *Landscape, Heritage and Identity: Stories from New Zealand's West Coast*. In M. C. Hall & S. McArthur (Eds.), *Heritage Management in Australia and New Zealand: The Human Dimension*. Melbourne: Oxford University Press Australia.
- Krauel, J. (2009). *Urban Spaces: Environments for the the future*. Barcelona, Spain: Carles Broto i Comerma.
- Macfie, R. (2014, January 11 2014). *Something in the water*. *New Zealand Listener*
- Massey, D. (n.d.). Retrieved from <http://www.publicspace.org/en/post/doreen-massey>
- McLean, G. (2000). *Street-Level Chemistry: The Past in the Present at Historic Places*. In B. Dalley & B. Labrum (Eds.), *Fragments: New Zealand Social and Cultural History*. Auckland: Auckland University Press.
- Metcalf, L. (1998). *The Cultivation of New Zealand Native Grasses*. Auckland: Random House.
- Ministry for the Environment. *Climate Change Projections for the Northland Region*. Retrieved from <http://www.mfe.govt.nz/issues/climate/about/climate-change-affect-regions/northland.html>
- Ministry for the Environment. *Tools for Estimating the Effects of Climate Change on Flood Flow*. Retrieved from [www.mfe.govt.nz/publications/climate/climate-change-effects-on-flood-flow](http://www.mfe.govt.nz/publications/climate/climate-change-effects-on-flood-flow)
- Ministry for the Environment. (2014). *Environmental Indicator for Freshwater: river condition*. Retrieved from <http://www.mfe.govt.nz/environmental-reporting/fres-water/river-condition-indicator/index.html>
- Molloy, M. (n.d.). Retrieved from <http://www.teara.govt.nz/en/biographies/1m39/1>
- Nassauer, J. I. (1995). *Messy Ecosystems, Orderly Frames*. In S. Swaffield (Ed.), *Theory in Landscape Architecture: A Reader*. Philadelphia: University of Pennsylvania Press.
- Northern Regional Council. (2005). *Clean Streams: A Guide to Riparian Management in Northland*. Whangarei: Northern Regional Council.
- Northern Regional Council. (2009). *Looking after your wetland*.
- Northern Regional Council. (2013a). *Sediment Pollution*. Retrieved from <http://www.nrc.govt.nz/Resource-Library-Summary/Publications/Water/Sediment-pollution>
- Northern Regional Council. (2013b). *What is Waiora Northland Water?* Retrieved from <http://www.nrc.govt.nz/Your-Council/Council-Projects/Waiora-Northland-Water/What-is-Waiora-Northland-Water/>
- Ouroussoff, N. (2005). *A Forest of Pillars, Recalling the Unimaginable*. Retrieved from [http://www.nytimes.com/2005/05/09/arts/design/09holo.html?\\_r=0](http://www.nytimes.com/2005/05/09/arts/design/09holo.html?_r=0)

- Paludan-Muller, C. (2010). *Actors and orders: the shaping of landscapes and identities*. In T. Bloemers, H. Kars & A. v. d. Valk (Eds.), *The Cultural Landscape and Heritage Paradox*. Amsterdam: Amsterdam University Press.
- Parliamentary Commissioner for the Environment. (2012). *Water Quality in New Zealand: Understanding the Science*. Retrieved from <http://www.pce.parliament.nz/assets/Uploads/PCE-Water-Quality-in-New-Zealand.pdf>
- Patuharakeke Te Iwi Trust Board (Inc). (2007). *Environmental Plan 7 March 2007*. Whangarei. Retrieved from <http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/SustainableFutures/Documents/Other%20Reports/Patuharakeke-Te-Iwi-Trust-Board-Environmental-Management-Plan-2007.pdf>.
- Prominski, M., Stokman, A., Zeller, S., Stimberg, D., & Voermanek, H. (2012). *River. Space. Design*. Basel, Switzerland: Birkhauser.
- Rada, U. (2012). *The Flow of History*. *Topos*(81).
- Reeves, P., Meleason, M., & Matheson, F. (2006). Sustainable riparian plantings in urban and rural landscapes. *Water and Atmosphere*, 14(1).
- Richardson, T. (2013). JFK Memorial at Runnymede is fit to stand forever. Retrieved from <http://www.telegraph.co.uk/gardening/gardenstovisit/10451578/The-JFK-memorial-at-Runnymede-is-fit-to-stand-forever.html>
- Roelstraete, D. (2010). *Richard Long: A Line Made by Walking*. London: Afterall Books.
- Ruru, J. (2010). *A Cloaked Landscape: Legal devices in Mount Aspiring National Park*. In J. Stephenson, M. Abbott & J. Ruru (Eds.), *Beyond the Scene: Landscape and identity in Aotearoa New Zealand*. Dunedin: Otago University Press.
- Ryan, T. (2002). *The Nova Scotian Settlement*. In W. Haysmith, J. Langsford & B. McKenzie (Eds.), *The Pride of the Lion*. Waipu: Waipu 150 Trust.
- Schama, S. (1995). *Landscape and Memory*. New York: Vintage Books.
- Shanken, A. (2009). *The Memory Industry and its Discontents: The Death and Life of a Keyword*. In M. Treib (Ed.), *Spatial Recall: memory in Architecture and Landscape*. New York: Routledge.
- Smith, L. (2006). *Uses of Heritage*. Abingdon, Oxon: Routledge.
- Solnit, R. (2000). *Wanderlust: A History of Walking*. New York: The Penguin Group.
- Statistics New Zealand. Retrieved from <http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats.aspx>
- Stephenson, J. (2006). Many Perceptions, One Landscape. *Landscape Review*, 11(2), 9-30.
- Stephenson, J. (2010). *Patina: People and place in Akaroa*. In J. Stephenson, M. Abbott & J. Ruru (Eds.), *Beyond the Scene: Landscape and Identity in Aotearoa New Zealand*. Dunedin: Otago University Press.
- Stolwerk, R., Powell, B., Langsford, J., & McKenzie, B. (2002). *Celebrating Waipu's Heritage*. In W. Haysmith, J. Langsford & B. McKenzie (Eds.), *The Pride of the Lion*. Waipu: Waipu 150 Trust.
- Sudjic, D. (8 May 2005). *A Memorial to Incompetence*. *The Observer*.
- Swaffield, S. (2002). *Conclusion: The Theoretical Terrain of Landscape Architecture*. In S. Swaffield (Ed.), *Theory in Landscape Architecture: A Reader*. Philadelphia: Pennsylvania University Press.
- Te Aranga Maori Landscape Strategy. (2008). Retrieved from [http://www.tearanga.maori.nz/cms/resources/TeArangaStrategy28Apr08\\_Ir.pdf](http://www.tearanga.maori.nz/cms/resources/TeArangaStrategy28Apr08_Ir.pdf).
- Thayer, R. (1994). *Gray World, Green Heart*. In S. Swaffield (Ed.), *Theory in Landscape Architecture: A Reader*. Philadelphia: University of Pennsylvania Press.
- Treib, M. (2009). *Remembering Ruins, Ruins Remembering*. In M. Treib (Ed.), *Spatial Recall*. New York: Routledge.
- Treib, M. (2009). *Spatial Recall: Memory in Architecture and Landscape*. New York: Routledge.
- Tuan, Y.-F. (1977). *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- Turner, B. (2012). *Elemental: Central Otago Poems*. Auckland: Random House.
- Waipu Museum. (2003). *Waipu Heritage Centre Publicity Booklet: Discover Waipu's rich heritage and Scottish origins*. Waipu.
- Wefing, H. (2005). *The Holocaust Memorial: Against All Expectations*. Retrieved from <http://www.pbs.org/wgbh/pages/frontline/shows/germans/memorial/wefing.html>
- West, S., & Ndlovu, S. (2010). *Heritage, Landscape and Memory*. In T. Benton (Ed.), *Understanding Heritage and Memory*. Manchester: Manchester University Press.
- Whangarei District Council. (2011). *Urban Design Strategy*. Whangarei. Retrieved from <http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/UrbanDesign/Documents/Urban-Design-Strategy.pdf>
- Wolfson, E. (n.d.). *The "Black Gash of Shame": Revisiting the Vietnam Veterans Memorial Controversy*. Retrieved from <http://www.art21.org/texts/the-culture-wars-redux/essay-the-black-gash-of-shame-revisiting-the-vietnam-veterans-memorial->