# CREATING A THIRD PLACE

## At Wai Te Whau

A thesis submitted to Auckland University of Technology
in partial fulfilment of the requirements for the degree of
Masters of Architecture (Professional)
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Muddy urbanism image - Mud on the banks of Wai Te Whau (Adjacent to Tiroroa Esplanade)

# THE MUDDY URBANISM LAB

The Muddy Urbanism Lab is an ongoing urban research project focussed on the future of the Wai te Whau, (the Whau river) in Tāmaki Makaurau Auckland. Te Whau bisects the inner west of Tāmaki Makaurau Auckland. Used as a portage connecting two harbours, for Iwi it has provided a natural infrastructure of kai (food), connection and economic production. In the colonial economy the river played a crucial role in the urbanisation of Auckland, as both a transport route and as a source of clay. Bounded by the Rosebank Peninsula and the suburbs of Avondale, New Lynn and Kelston, the river continues to drain away by-product materials from factories and other businesses located on the riverbanks. In latter decades Te Whau, like many other waterways, has lost this 'mobilising' significance and infrastructural importance, and has become ecologically degraded. However, with municipal boundary changes in 2010, the river is now sits at the geographical centre of the Whau Local Board area, and this local authority, iwi and others have started to embrace the opportunities a re-connection with the waterway might offer.

Led by HOOPLA, since 2013 the Muddy Urbanism Lab has worked with students, independent researchers and community groups to collaboratively re-imagine the regenerative future of Te Whau. The Lab has produced an archive and a series of speculative urban proposals, leveraging the powerful nature of utopian thought in imagining possible futures for this river and it's neighbourhoods. The Muddy Urbanism research has been widely exhibited and published, circulating these speculative proposals with the anticipation that these might enter the public imagination. This has been a fruitful strategy with the proposal for a river-side linear park taking hold, and now a project in the first stages of construction as Te Whau Pathway.

In 2021 at Huri Te Ao Hoahoanga (AUT's new School of Future Environments), five Lab members (Dylan Cawte, Ilycia Laverty, Nikitha Kolar Nagabhushan, Quanyin Zhang and Rebecca Burgess), through our design research thesis projects have asked how we can extend the impact of Te Whau Pathway as a new opportunity for reconnection to the awa. Each Lab member's speculative project takes a site on Te Whau Pathway and imagines its specific potential as a neighbourhood or regional place along the linear path. Through this research we have each developed a specific programme for our locations and tested these through design-making, with each project proposing new neighbourhood and river connections in order to restore the mauri (life force) of the awa.

# ABSTRACT

This thesis investigates the potential for civic infrastructure to deliver more to local communities. As part of the Muddy Urbanism Research Lab 2021, this thesis uses the Te Whau pathway (currently under phased construction in Tāmaki Makaurau Auckland) as a location to test the capacity of multifunctional infrastructure to deliver a range of public needs, while also acting as a catalyst for local placemaking.

Drawing on theories of 'Placemaking' and Ray Oldenburg's 'theory of third places' and by developing a strategy of layering, the thesis asks, what is the capacity for the design of adjacent infrastructure to capitalize on Te Whau pathway and "**How can this infrastructure be multi-functional where people not only pass through but also choose to-be?**"

The research is carried out at two scales through two case studies:

The first is a small-scale test design project for a public toilet located alongside Te Whau Pathway that identifies the immense potential of ordinary civic infrastructure to deliver multiple layers of amenity from drinking bowl for pets to wind protection and shade to a wide range of users. This illustrates the thesis contention, that any infrastructure can and should operate at scale between the very small and large.

The second tests the findings of the small-scale project but at a larger scale and with a more complex set of programmes through the design of a bus interchange. The opportunity to synergize on the footfall that transit-oriented development receive and the unique site that the project sits in between the pathway and river-based activities is tested through the lens of multi-infrastructure, acting physically, socially and economically to generate a dynamic public realm for locals. The thesis question is answered through this process of design testing and finds that the design of civic infrastructure for transport provides an opportunity for 'Placemaking' to generate 'Third Places'.

**Key words:** Muddy Urbanism, Te Whau Pathway, Multi-functional Infrastructure, Placemaking, Transit-oriented Development, Third Places

## ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

(NIKITHA KOLAR NAGABHUSHAN)
(15/11/2021)

# ACKNOWLEDGEMENT

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I must express my deep regards and profound gratitude to my guide, Kathy Waghorn for not only being very supportive throughout the year, also for questioning, encouraging and pushing me to work harder. In these times of the pandemic during which this thesis has been completed, I have had her constant support by any and all means possible.

I would like to thank Amanda Yates, Andrew Burgess, Fleur Palmer, Charles Walker, Gill Thurlow and Nina Patel for their input, leads about the project and support that helped me sail through the process. I would also like to acknowledge my friends, classmates and the group of Muddy Urbanism Lab 2021 (Rebecca Burgess, Dylan Cawte, Ilycia Laverty and Quanyin Zhang) for working collaboratively and for constantly motivating me throughout the year.

Finally, I would like to extend my gratitude and heartfelt thanks to my family who have been there supporting me at every stage, virtually.

I would like to acknowledge the ongoing pandemic which has been significant in shaping this journey. With constant stress, seeing friends and family catching the viral infection, a few unfortunately succumbing to it, planning for all that could go wrong, preparing for it, having to work with limited resources, the environment in which this thesis has been completed is very different from what I imagined it to be. There have been many learnings and realisations during this period. It has been an incredible experience, not just academically, personally too.

I cannot be grateful enough for all the people I have had by my side.

A REAL BIG THANK YOU TO EVERYONE.

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# INTRODUCTION

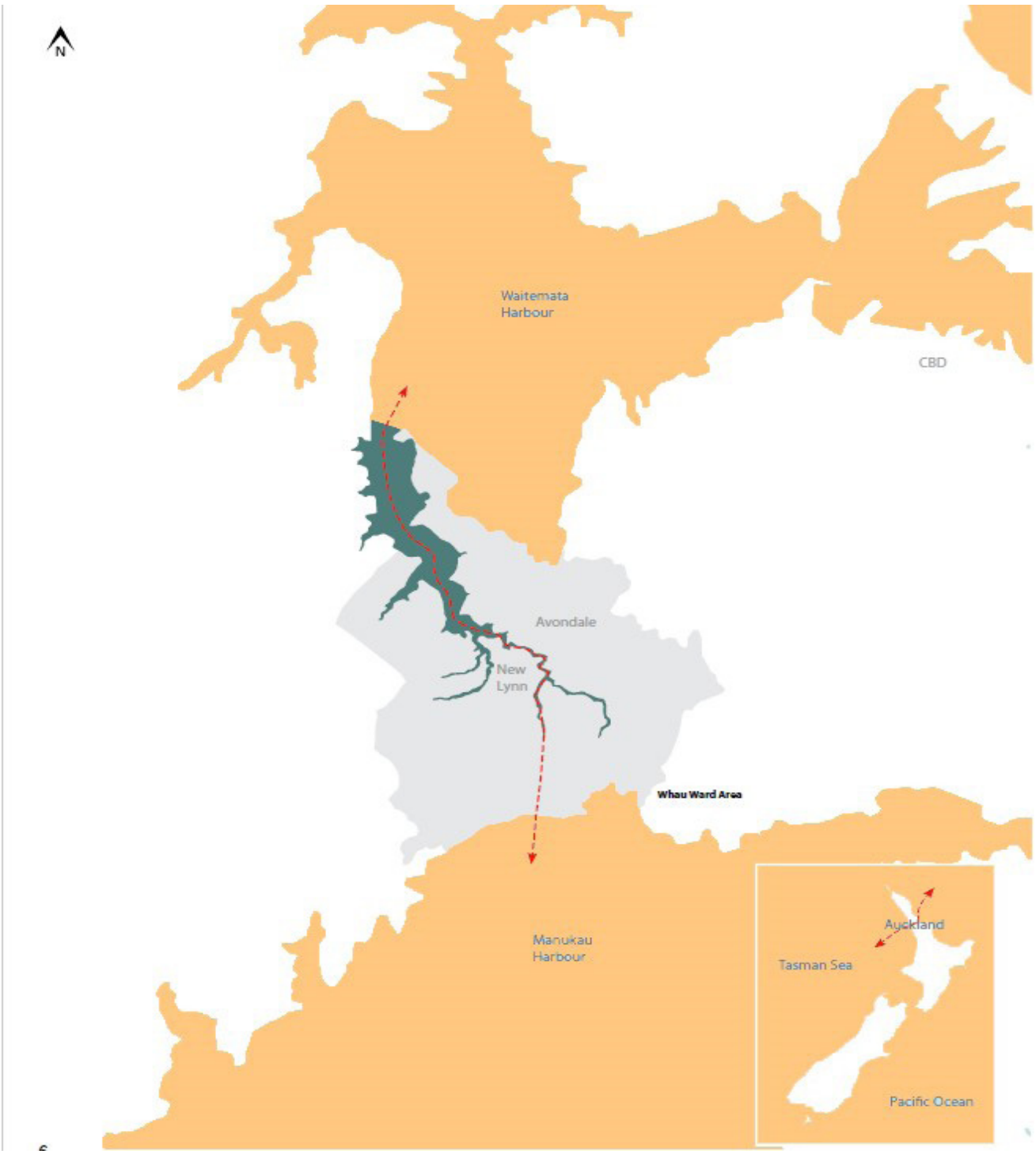



FIGURE 01 - Map showing relationship to Auckland CBD and connection to Waitemata Harbour and Manukau Harbour via Te Whau river.

FIGURE 02 - View of river Whau from Tiroroa Esplanade

Tāmaki Makaurau Auckland, as a developed city, continues to experience high rates of urbanisation. In this context, according to ATEEDs' Auckland Growth Monitor Report (Auckland Growth Monitor 2, 2017) the region is home for one third of Aotearoa New Zealand's population and based on pre-COVID-19 data, it is facing challenges concerning accommodating the rising population growth of about 1900 people on average each month until 2033. This requires planned activity to check haphazard urbanisation. Auckland Council has developed multiple initiatives as well as planning regulations i.e., Auckland Plan 2050 and infrastructure development, i.e., City Rail Link and Te Whau Pathway that are aimed at making all parts of this city conducive for a better quality of living. With this growing population, the requirement for controlling the urban sprawl and developing effective public transport is one of the major concerns for this area. In an attempt to restructure and develop the suburbs and to make them more connected, coordinated and compact, the city has adopted a plan that focuses on promoting mass transportation by investing in public transport. However, these facilities are often mono-functional; a bus interchange, a train platform or a ferry jetty. The multi-functionality of transport architecture can enhance their operating rate (even in local scale and small areas) and as a result (according to Gehl,2011) can improve the quality of urban spaces and hence, the quality of life for the people.

The concept of multi-functional transport architecture has become something of a buzzword in the realm of urban planning. However, there is a need for this buzzword to be imposed on this city's demanding transit facility. This kind of architecture aims to concentrate essential facilities and services for people within the public transport stations. From Transbay Transit centre in San Francisco to Kaohsiung Station in Taiwan, this approach has helped many cities reduce their carbon footprint in addition to becoming more productive and liveable. Apart from being the 'jumping off' point for catching a bus, this multi-functional architecture also serves other community functions.

To solve problems caused by the unprecedented growth in Tāmaki Makuarau Auckland there is a necessity to restructure the transport hubs like the upcoming Te Atatū bus interchange in a strategic way through a hierarchical development within it that could reduce the use of private vehicles as a mode of transport. At the moment, from many Tāmaki Makaurau Auckland suburbs there is a dependency on private vehicles (especially cars) due to the great distances and decreased overlap of bus interchanges and bike routes. This results in a sub-optimal urban realm, with public spaces losing their significance as large areas are dedicated to roads and car parks. To relieve the city from vehicular encroachment, it is important to bring multiple facilities within a boundary to cater to commuters' everyday requirements.

Building a safe, functional, cohesive and inclusive space is found to be the most common intention of urban initiatives. This transport hub at Te Atatu South has a potential to become an active public space by taking advantage of its already existing

footfall. Accompanied with various uses and activities, this existing footfall can result in better imageability and a higher sociability of the place. Providing people with more reasons to visit the transit point is seen to result in a higher footfall, thereby creating a symbolic relationship benefiting everybody (World bank 2017). Ensuring vibrant active public spaces across different hours of the day, designing a robust environment along with a leisure space in the same boundary can drastically change the travel behaviour of the people.

This thesis investigates the potential for civic infrastructure, such as transport infrastructure, to deliver more to local communities. As part of the Muddy Urbanism Research Lab 2021, this thesis uses the Te Whau pathway (currently under phased construction in Tāmaki Makaurau Auckland) as a location to test the capacity of multifunctional infrastructure to deliver to a range of public needs, while also acting as a catalyst for local placemaking. Drawing on theories of 'Placemaking' and Ray Oldenburg's 'theory of third places', the thesis asks, what is the capacity for the design of adjacent infrastructure to capitalize on Te Whau pathway and "How can this infrastructure be multi-functional where people not only pass through but also choose to-be?"

The research is carried out at two scales through two case studies:

The first is a small-scale test design for a public toilet facility along Te Whau Pathway, the safe walking and cycling connection that allows people to get around the community without a car. This toilet block is located near the stretch of the pathway that connects Laurieston Park to the North Western Cycleway. This test idea adds multiple layers of facility supporting a range of needs for pathway users and people from the neighbourhood in addition to its main programmatic function. From the provision of a coat hanger to charging stations for e-bikes, this case study argues that any infrastructure can operate on a different scale and should always consider a wide range of users.

The second test project jumps up in scale to investigate this potential through the design of a bus interchange, a project currently planned to be sited alongside the Te Whau Pathway on the Te Atatu boat club site. The bus interchange architecture is approached through the opportunity to synergise on the footfall that transit stations receive. This opportunity, and the unique site in which the project sits adjacent to the pathway and other river-based activities is tested through the lens of multi-infrastructure, using the capacity of a city-wide bus network, sited alongside a river and pathway, to generate a dynamic public realm where the locals are motivated to come and visit the station for more than just travel, eliminating the notion of a bland passenger processing building. This proposal aims to encourage people to actively use the Te Whau pathway and the bus transit to move around the city becoming the main transport hub with regional significance and functions beyond travel.

# PEPEHA

I whanau mai ahau ki Bengaluru
(I was born in Bengaluru)

I tipu ake ki reira
(I grew up there)

Nō Bengaluru ōku mātua
(My parents are from Bengaluru)

Ko Mullayanagiri tōku Maunga
(Mullayanagiri is my mountain)

Ko Arabhi Samudra tōku Moana
(Arabhi Samudra is my ocean)

Ko Kaveri tōku Awa
(Kaveri is my river)

Ko Yediyur tōku Roto
(Yediyur is my lake)

Ko Kannadiga tōku Iwi
(Kannadiga is my tribe)

Ko Balajiga tōku Hapū
(Balajiga are my people)

Nō Karnataka Ahau
(I am from Karnataka)

Ko Nagabhushan Kolar rāua ko Suvarna Akula ōku mātua
(Nagbhushan Kolar and Suvarna Akula are my parents)

Ko Kolar tōku Whānau
(Kolar is my family)

Ko Nikitha tōku ingoa
(My name is Nikitha)

Tēnei te mihi ki ngā tāngata whenua o te rohe nei
(Sending acknowledgements to the tāngata whenua of this area)

Tēnā koutou, tēnā koutou, tēnā koutou katoa
(Salutations to all)

It is helpful to engage in reflections every now and then. I was born in India, to a family rooted in the Southern part (Bengaluru) of the country. My family has lived in the area for a long time. I was raised in the same place with its rich and unique culture, seeing the trees wave at the turquoise lakes that are clear as glass, smelling the familiar scent of burning incense and hearing multiple languages spoken. This is my heart's home.

In February 2020, I came to Tāmaki Makaurau Auckland to carry out my Masters of Architecture course. Since I am visiting Aotearoa New Zealand for the first time I did not realise how I internalised the ebb and flow of student life, back in the university in the place where I was born and raised. Based in a constantly growing city, life there was what I thought was fast-paced. It is believed that the city's continuous success depends on its social networks that drive the design of innovative people and places. Generally, one does not notice this pace, until one is outside that particular environment. And so, I have, after coming to Tāmaki Makaurau Auckland. This is not to say that there is no growth in Auckland, it is true that everything around me has slowed down. This is something I think about, in my everyday conversations with people and in the long train and bus journeys from one point to another. The pace of life in Auckland has taken me days, perhaps weeks to come to terms with.

"Cities are social accelerators", says Luis Bettencourt (Bettencourt cited in Heidi, 2007). This has inspired me to carry out this design thesis and explore that, the bigger the city, the quicker that innovation needs to happen in order to support the city's growth. This project boasts the chances of new social contacts and gives people an opportunity to squeeze more activities in the day by placemaking and creating a multi-functional space.


FIGURE 03 - Bangalore,India
Source: @hvn_g0wda
Photographer: Havana Gowda

FIGURE 04- Bangalore,India
Source: @clikith17
Photographer: Likith Chidanand

# LOCATION, CONTEXT AND HISTORY OF TE WHAU

# NATURAL HISTORY

Auckland is situated on an isthmus, a narrow strip of land. Located within this isthmus is the Te Whau awa (river), a tectonic estuary created 20 million years ago, and now centered in the Whau area. This estuary was formed when the land was raised by the sea and is situated along the major fault line that is the Manukau harbor as shown in figure 06.

Te Whau awa is located next to Hikurangi, which is the highest summit to the south of Piha and in Te Wau Nui west Auckland (Stuff, 2015). Taking its name from the Whau tree (that grows along its banks), this tidal creek flows as an estuarial arm of the south-western Waitamata harbor. The mouth of the awa is positioned between the Te Atatu peninsula and the long, thin Rosebank peninsula in Avondale running 3.5 miles to the confluence of the Avondale stream and the Whau stream. Te Whau is a shallow estuary which is a good combination of fresh and salt water from the start to the bottom of it, as opposed to a deep estuary where the salty water is at the bottom and fresh water lies on the surface (Northland regional council, n.d.).

The Whau catchment area[1] includes all or part of 11 suburbs and spreads to a land area of 29.4 sq. km. The river itself covers nearly a length of 6 kms and spans about 800 meters at its widest and is about 400 meters wide at its mouth (THE WHAU Our Streams, Our River, Our Backyards, n.d.).

FIGURE 05 - Wai Te Whau Aerial image.
Source: https://at.govt.nz/media/1973046/te-whau-pathway-uldf-volume-1.pdf

1 Catchment area: an area where water enters via precipitation and then flows across the surface and subsurface until it drains into the nearest stream or river (Science Learning Hub Pokapū Akoranga Pūtaiao, 2020)

FIGURE 06 - Wai Te Whau map showing catchment area.
Source: Muddy Urbanism lab 2021 1st symposium presentation.

# SIGNIFICANCE TO MĀORI

Before people came to this land, lush green forest and the noise of native birds surrounded the Whau river. In terms of Māori occupation, the majority of archaeological sites around the north Manukau and north-west Waitemata coastlines are campsites for visiting, fishing and travelling. Perhaps the main reason for the lack of longer-term settlements in these areas is the fact that these were boundary zones between Iwi lands for many centuries. (THE WHAU Our Streams, Our River, Our Backyards, n.d.).

Along the river and the harbour coastlines, Māori cultivated food and gathered Kai Moana, the many shell middens found there today are a reminder of that time. The area of the mouth of the estuary is legally protected as the Motumānawa (Pollen Island) marine reserve. Māori also used the river for transportation as fishermen rowed out to Pollen Island where fishing became the main recreational and commercial activity. Apart from fishing activity, Māori also used the river to move between the Manukau and Waitemata harbours. They moved up the Whau and the Avondale stream and carried their waka over a small piece of land to Green Bay to reach the Manukau. This is how “Portage Road” which runs alongside the stream got its name (THE WHAU Our Streams, Our River, Our Backyards, n.d.).

Several ancestral groups occupied Wai Te Whau, and in particular Te Kawerau a Maki and Ngati Whatua. (Clough et al., 2019). The four Iwi associated with Ngati Whatua are Te Roroa, Te Uri-o-Hau, Te Taoū and Ngāti Whātua-o-Ōrākei (Rāwiri Taonui, 2005).

FIGURE 07 - The Gathering of Kuaka Flocks in Green Bay
Source: https://at.govt.nz/media/1973046/te-whau-pathway-uldf-volume-1.pdf

FIGURE 08 - Whau Point Pā, 1863
Source: https://at.govt.nz/media/1973046/te-whau-pathway-uldf-volume-1.pdf

FIGURE 09 - Waka Curfeww in Waitematā and Manukau
Source: https://at.govt.nz/media/1973046/te-whau-pathway-uldf-volume-1.pdf

# COLONIAL HISTORY

Pakeha discovered the joys of this place in the 1800's, as the gateway to the west, a picnic spot for the families of Tāmaki Makaurau Auckland (THE WHAU Our Streams, Our River, Our Backyards, n.d.). In the early 1840's Avondale formed part of the district of Titirangi. This district was subdivided into allotments of about 100 acres. In 1844 and 1845 most of these allotments were put up for sale. In 1865, the port of New Lynn on Te Whau Awa was a bustling trade centre with five public wharves. In 1890, there were only 29 buildings in the New Lynn borough and most of the surrounding area was farmland. By 1996, the census records show 64,000 people living in the catchment area in almost 22,000 households (THE WHAU Our Streams, Our River, Our Backyards, n.d.). Since 1996, people have continued to move into the area with 2018 census recording 79,356 people which is five percent of Tāmaki Makaurau Auckland's population (2018 Census Results Whau Local Board, n.d.) and to meet the population growth, more houses have been built. The population of New Lynn and Avondale is expected to double in the next 20 years.

FIGURE 10 - Fishing as a recreational activity by Wai Te Whau.
Source: http://projecttwinstreams.com/wp-content/uploads/2012/10/thewhau.pdf

FIGURE 11 - Auckland Unitary Plan extract
Source: https://unitaryplanmaps.aucklandcouncil.govt.nz/upviewer/

# DEVELOPMENT OF INDUSTRIES

Due to large number of perks which mainly included transportation through water and an abundance of clay on the banks of Whau river, many brick makers began to start pottery and brick works in the surrounding area. The brick industry eventually started to develop as a mainstream business here. In 1888, the Astley Tannery was established.

Soon after that, the Tannery and Crown Lynn[2] turned into a main business by the Whau river. During the first world war, the demand for leather supplies increased greatly. The Tannery building still stands and is said to be one of the oldest industrial buildings in Auckland.


FIGURE 12 - Industries along Wai Te Whau.
Source: https://at.govt.nz/media/1973046/te-whau-pathway-uldf-volume-1.pdf

2 Crown Lynn: Crown Lynn was a New Zealand ceramics manufacturer that operated under various names between 1854 and 1989.

# ECOLOGY

The Whau is a home for millions of plant and animal species from the sea and for the migrating non-human families like the Kuaka that uses Te Whau as refuge. It is a wealthy breeding ground and acts as an excellent nursery for the young, especially the mangroves that is a vital vegetation providing coastal protection and stabilising mudflats.

Te Whau's catchments are no different from the others. They play a major role in influencing the ecology of the stream, the biodiversity of the area and the river system. PH, nutrient levels, water temperature and substrate affect the plant and animal diversity in the water.

# TE WHAU PATHWAY

The Te Whau pathway is a 15-kilometre-long shared pathway, currently under construction, along the western edge of the Whau river. The pathway follows the portage route of the river connecting the Waitemata and Manukau harbours. This path is about 3-4 meters wide and reconnects many reserves, 33 parks and esplanade strips on its route (Auckland Council, n.d.).

The initial concept was proposed by Whau west Greenway in the year 2011. Later it was nurtured by HOOP-LA (HOOPLA, 2013) in the year 2013 as the Te Waitahurangi loop [a part of the then Muddy Urbanism Lab (MUDDY URBANISM Lab, personal communication, n.d.)]. Both the proposals focused on the increasing trend on walking and biking as a mode of transport or as a recreational activity by designing a series of greenways that will provide a safe and enjoyable environment for commuters. The pathway is a key element in this plan as it connects various suburbs like Kelston, Glendene, Avondale, Te Atatu south and New Lynn. This provides commuters and residents with an alternative to motorised vehicles or walking and biking in dangerous conditions on arterial roads.

This proposed pathway creates a number of opportunities for potential development along its way, such as enhancing the ecological health of the awa and promoting active transport. Following the Auckland city plan, Te Whau pathway has three important principles- Movement, Identity and Legibility (URBAN AND LANDSCAPE DESIGN FRAMEWORK TE WHAU PATHWAY VOLUME 2 Overarching Principles + Design Concepts, 2017). It is a key link in Auckland's developing cycle network and walking routes, essentially providing much safer access throughout the western part of Auckland city.

The relevance of the Te Whau Pathway highlights the kind of area the river once was and could be again. An important portage route and a significant element in the urbanisation of Auckland as well as a clean, healthy environment for people, natural ecologies and wildlife to inhabit

FIGURE 13 - Te Whau Pathway- preliminary design section plkan
Source: https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-projects/projects-west-auckland/Pages/te-whau-pathway.aspx

FIGURE 14 - Te Whau Pathway- Tiroroa Esplanade

# PROPOSITION OR OPPORTUNITY

The strength of the Whau area has always been its high accessibility and transport infrastructure, be it the historical portage river route, the two metalled roads (The Great North Road and The Titirangi road) and four roads made of clay back in 1890, or 209 kilometres of road currently in the Whau catchment, and now with one of the biggest cycling and walking infrastructures in the city with Te Whau pathway.

With time, the nature of transportation has changed from traditional modes like cars to personalised travel opportunities like the E-bikes and E-scooters which generate benefits personally and environmentally. It has also changed from a fixed route and fixed schedule of just buses to a shared route like Te Whau pathway which is an increased preference by the users for its many benefits like reduced travel time. Hence, Te Whau pathway poses an opportunity to design resources that support its already existing mono-functional transport infrastructure.

This thesis tests the idea of multi-functional transport architecture with a small-scale case study where a toilet block is picked along the Te Whau pathway to see how it can be more than just a toilet infrastructure and add value to the space it occupies. This is intended to demonstrate how multi-functional infrastructure can help users of Te Whau pathway with more than just one function at a pit stop. This idea is then translated to a larger scale of transport architecture at Te Atatu south boat club boundary, also adjacent to the pathway to compliment a bus interchange.

This thesis also draws a relationship to the movement pattern in and around the Whau area to design a multi-functional transport architecture for the area in order to give back space that people are lacking in the city.

# PRECEDENT PROJECTS

City planning with a focus on cars has begun to change. In recent times our means of transportation is diversifying with technological innovations and emergence of new modes of small-scale and personal mobility such as E-bikes, E-scooters and so on. However, there are a number of challenges involved in including all these transport means into our current urban structures that, in Tāmaki Makaurau Auckland, have been primarily designed around transport by private car. Furthermore, transport contributes significantly to carbon production. An advice report that includes advice on the first three emission budgets released by He Pou a Rangi Climate change commission states that the current transport emissions contribute to about 37% of the total long lived gases (all gases excluding biogenic methane).
Figure 15 shows that the road transport dominates and is nearly 90% of the total emissions and indicates how it has increased substantially from the 1990 to 2018.

FIGURE 15 - Transport emission by type in Aotearoa
Source: Ināia tonu nei: a low emissions future for Aotearoa

Figure 16 shows that in the year 2018 it was seen that cars and SUVs (light passenger vehicles) were responsible for 53% of road transport emissions. There are approximately 4.2 milliion vehicles in Aotearoa New Zealand and is said to reach 5.2 million by the year 2043 (He Pou a Rangi, 2021). This is the major reason why we have to shift the way we move around cities. The first and the easiest way to start the process is by changing and exploring better, rather sustainable modes of transport.

FIGURE 16 - Road transport emission by type of vehicle in Aotearoa
Source: Ināia tonu nei: a low emissions future for Aotearoa

It is now essential to rethink movement as some of the different scales of transport like- bicycles, buses/trains and integrated transport modes are going to be deeply rooted in people's lives. Only a few cities like Copenhagen, Melbourne, San Francisco and Kyoto have fully realised the potential of infrastructure which helps people to make the switch to a more sustainable transport choice. There are great and growing expectations for transport infrastructure which have gained world-wide popularity. This thesis section explores some of the best projects arranged across small to large scale.

**Bicycle Scale**

- Norreport Station, Copenhagen

**Bus scale**

- Southern Cross Station, Melbourne

**Integrated amenities Scale**

- Transbay Transit Centre, San Francisco
- Kyoto Station, Japan

The aim of this exploration is to study how, through these particular projects, these cities have thought about the niche of transport away from cars and have reinterpreted their traditional urban structure. These precedent studies demonstrate the necessity of a re-imagination of roles, meanings and structure, prompting basic reconsiderations of urban space as it supports mono-functional transport infrastructure. The projects chosen are of course optimal examples. However, this is an excellent time to look at good examples as  in Auckland, it is largely a work in progress, with the upcoming and big public transport infrastructure like City Rail Link and Te Whau pathway. These examples suggest relevant and successful methods to add to the current mobility infrastructure.

# Norreport Station, Copenhagen (Bicycle scale)

**Location:** Copenhagen, Denmark.

**Designers:** COBE Architects, Gottileb Paludan architects

**Year re-opened:** Oct 19, 2002

FIGURE 17 - Norreport station, Denmark
Source: https://cobe.dk/place/norreport-station

Jan Gehl states that **"the most important scale is the people scale. The city at eye level and at 5km/hour"** while explaining the importance of said experience in his work (Gehl. J, 2015. p. 22). COBE architects and Gottlieb Paludan architects have brought back this lost knowledge through the redesign of Norreport Station in Copenhagen with a primary focus on cyclists and pedestrians. Norreport Station,
Denmark's oldest public transport station, opened in 1918 for train traffic through Copenhagen and it is a newly transformed bustling transport hub. With its growing population and creation of two metro lines, culminating a footfall of about 250,000 people every day, the city challenged the designers with a demand for a new creative solution within urban mobility (COBE, n.d.). This exemplar project provides an insight into the solutions that Denmark has to offer its people within sustainable urban

passenger flow, accessibility, transparency, and urban life are the key values of the project. The focus of redesigning the Norreport Station was to give the station area back to the people by recognising the flow of people, the Infrastructural hierarchy of the space, imagining the way people would naturally move if they were released from the constraints of cars, bicycle stands and traffic lights. The study of this human behavior became the basis of the new station (a+u – Architecture and urbanism, 2021). Some of the other objectives were to cater to a requirement for bicycle parking on a different level and make Copenhagen the world's best city to bike around, with provision for 2100 bikes to be parked, to improve the surroundings and to design a modern transit center to accommodate the increasing number of users.

Before the transformation, it was a worn-down urban area that was ill-lit, badly maintained and the platforms were difficult to access. At the street level, access was from a footpath between two chaotic, noisy, and unsafe roads that were poorly connected to the pedestrian footpaths of the adjacent neighborhood. The bus stops were inconveniently situated on the central strip with several bicycles obstructing the way resulting in a chaotic environment which despite a large footfall of the station was very far away from being a welcoming place where people could linger for any length of time (Landezine, n.d.).

FIGURE 18 - Norreport Station, Before transformation, 1918.

FIGURE 19 - Norreport Station, Before transformation, 1950.

FIGURE 20 - Norreport Station, Before transformation, 2007.

Source: https://cobe.dk/place/norreport-station

Revamping of the station area was divided into three parts.

- Modernising the existing platform for long distance trains
- Refurbishing of bridge structure above station tunnels
- The urban space large sub-project that focused on new design and execution of the station forecourt, station access points, bicycle parking, paving and traffic arrangements (State of green, n.d.).

Based on the human behavior of flow, the zone above the station tunnels in the new design are composed of a series of round, floating roofs set on distinct glass pavilions. This design provides an effective and open public space which is a specific requirement in a busy transport hub. The glass pavilions have rounded corners and are transparent in nature creating a coherent urban space with no backward facing blocks or ignored areas. Dan Stubbergoard (Architect and Founder, COBE) said “In winter time, organic pathways emerged in the snow created by people’s movements in and around the station, clearly showing us where there was a need for passages, shelter and bicycle parking” (COBE, n.d.). Based on this, the traffic is planned and redirected to one side of the road, and this creates free passage and provides an opportunity of ideal framework for city’s cyclists and pedestrians.

FIGURE 21 - Norreport Station, Denmark (In winter)
Source: https://cobe.dk/place/norreport-station

To create a clear pecking order between areas of activity and area for bicycles, all of the bicycle parking is organised 40 centimeters below the city floors as sunken “bicycle beds.” This gives all the cyclists a designated place to park their bikes as an integrated part of the street design while at the same time it is less visually obstructive. Each of these bicycle racks are lit by LED lights which is a lighting feature and it also helps in navigation.

FIGURE 22 - Bicycle parking organised 40 centimeters below the city floors as sunken bicycle beds.
Source: https://cobe.dk/place/norreport-station

The organic white roofs assist users in finding the entrance stairs into the station, bicycle parking, travel center, news agents and toilets. The station's forecourt is bright and is designed using basic materials like – granite, white concrete, stainless steel, and glass. Norreport Station is not only a transit junction, it is also an urban landscape for the users. This urban space is designed to create a place of comfort, clarity, convenience, accessibility, and safety.

FIGURE 23 - Norreport Station organic white roofs.
Source: https://cobe.dk/place/norreport-station

The focus of the project is relevant to this thesis proposal in terms of planning spaces based on people's practices, accessibility, hierarchy of infrastructure that users prefer, and an arrangement of programs based on convenience. This exemplar shows that with simplicity and a certain degree of freedom in terms of space, small-scale mobility like bicycles embody a new mobility lifestyle in a city, one that does not rely on its own dedicated infrastructure. This is the key take away from this project as this thesis revolves around multi-functional transport infrastructure.

FIGURE 24 - Norreport Station organic white roofs.
Source: https://cobe.dk/place/norreport-station

# Southern Cross Station, Melbourne (Bus scale)

**Location:** Melbourne, Australia

**Designers:** Grimshaw with Daryl Jackson Architects

**Year opened:** 2007

FIGURE 25- Southern Cross Station, Melbourne

Source: https://jackrichardson.co.uk/southern-cross-station-melbourne/

Southern Cross Station formerly known as Spencer Street Station opened in 1859. This station is located on Spencer Street in between La Trobe and Collins Street in Central Melbourne. It is said to be the third busiest integrated station (railway and bus) in Melbourne (WSP, n.d.). Southern Cross Station in Melbourne is undergoing a transition from the city's station into its role of station city after its opening in 2007. This station is still a
function of the city and it's not necessarily a destination by itself, it is a spontaneous lived experience at the layers of the City Centre. Its unique feature of the attached, adjacent mixed use allows this station to have a sense of destination and the addition of a pedestrian bridge to the adjacent Marvel stadium encourages its users to use different modes of transport from bus or train to cycling or walking. This station has a daily footfall of about 100,000 people and is an integral part of Melbourne's public transport system (WSP, n.d.).

The design for the redevelopment of this station was given by Grimshaw Architects with Daryl Jackson Architects and was completed in the year 2006. This redevelopment of the station was necessary to effectively manage the anticipated increase in passenger footfall, rail, and coach services. Creating a brand-new world-class transit facility for both buses and trains, transformed the neighborhood precinct and gave rise to a new civic landmark for the city.

The redeveloped interchange facility includes

- A brand-new entrance to the station
- A commercial office tower
- Residential tower along the station for housing opportunities
- A pedestrian bridge connecting to the stadium on the western part of the site
- Concourses on Bourke Street and on Collins Street
- A retail plaza with many shops
- An 800- bay car park zone
- A shopping complex between Bourke and La Trobe streets.
  (Railway technology, n.d.)

FIGURE 26 - Southern Cross Station, Melbourne (Elevation and section)
Source: https://jackrichardson.co.uk/southern-cross-station-melbourne/

Some of the main features of the interchange include

- A facility for a 30-bay coach station, a public car park with a provision for 800 cars, a waiting area, several passenger information screens, a natural light filled open area to both Collins and Spencer streets with the entrance composed of glass.

- This station also offers facilities like luggage lockers, a lounge area to sit and rest, buggy transport for elderly travelers and people with disabilities and it has a public information zone for passenger assistance.

- The coach terminal is placed under the shopping complex and this provides bus services to various other towns. Most of the station area is designed underground to maximise efficiency of space.

- The Southern Cross Station's unique feature is a trapezoidal roof system covering an area of about 60,000 square meters. This roof covers an entire block and is specially designed to allow diesel fumes, exhaust gases and hot air to move up and discharge through the designed louver.
  (Railway technology, n.d.)

FIGURE 27 - Southern Cross Station roof detail.
Source: https://www.irsdc.in/sites/default/files/paul-holmes.pdf

FIGURE 28 - Southern Cross Station roof detail.
Source: https://www.irsdc.in/sites/default/files/paul-holmes.pdf

FIGURE 29 - Southern Cross Station roof detail.
Source: https://jackrichardson.co.uk/southern-cross-station-melbourne/

The key achievement of this station's redevelopment suggests that it changed the face of Melbourne's western edge. Along with delivering the operational needs of a busy city which is its main function, this station has played a major role in connecting the city's CBD with Docklands precinct, marrying the new and old parts of Melbourne with inspiring architectural design.

The City of Melbourne had success in encouraging different modes of transport and this project played an important role in the process. The original station was mono-functional housing only railway facility. In the year 2007, several functions were added to connect the station to the city Centre and increase the footfall. This exemplar offers strategies that make an existing transport infrastructure multi-functional and it is a good case study for the extension of a building with the context of its neighborhood.

# Transbay Transit Centre, San Francisco (Large scale - Integrated amenities):

**Location:** San Francisco, California

**Designers:** Pelli Clarke Pelli Architects

**Year opened:** 2019

FIGURE 30 - Transbay Transit Station
Source: https://pcparch.com/work/salesforce-transit-center

In Le Corbusier's ideal utopia, he says "the circulation of traffic demands the straight line; it is the proper thing for the heart of the city. The curve is ruinous, difficult and dangerous, it is a paralyzing thing" (Corbusier, 1929 p. 10). In this text he considers each element of the city like site, traffic etc., as an individual entity when in fact they should co-exist.

Frey, author of Visions of Sustainability (Hildebrand W. Frey, 2007) says, "Research focusing on a single aspect such as energy efficiency or transport and urban form – is not likely to generate a reliable basis for the generation of concept of a sustainable city or city region and is not likely to come up with appropriate guidelines for planners, designers and politicians". If planners were to consider this "mixed and mingled" concept and apply them not only for zoning of an area, but in transit stations as well, we can exponentially increase interactions and commerce, while simultaneously encouraging the walkable city and decreasing congestion.

Transbay Transit Station presented itself as an ideal project for designers to test this idea since  population of the city has increased over time and cars have gained popularity in the world of San Francisco's transportation. To change this, Pelli Architects have proposed Transbay Transit Center which is going to be an advanced multi model transit station in downtown San Francisco. This station links 11 transit systems and it connects the city to the nation, state and region. Similar to New York's Grand Central Station and London's Victoria Station, Transbay Transit Station will give San Francisco a grand entrance, fitting its status as one of the world's greatest cities.

The distinctive curvilinear steel station design (as can be seen in figure 31) will feature:

- A five level multi – model transit station connecting different transit systems all under one roof (Transbay Joint Powers Authority, 2013. p. 2).

FIGURE 31 - Representation of 5 levels of Transbay Transit Station in a section.
Source: https://pcparch.com/work/salesforce-transit-center

- Fresh retail area integrated with the station and that which lines the surrounding streets, featuring all kinds of stores like cafes', neighborhood shops, specialty shops, urban grocer etc (Transbay Joint Powers Authority, 2013. p. 2).

- Sustainable and a secure design that includes a "living" roof, provision for natural light in the grand atrium of the station and green building systems that aim for energy efficiency, water reuse and passive cooling(Transbay Joint Powers Authority, 2013. p. 2).

- A city park that is 1400 feet long on top of the transit center that houses gardens, open lawns, walking/jogging paths, performing areas, a playground and a unique restaurant space. This is the heart of the transit center that facilitates the ebb and flow of human movements at different scales. This Park is said to be symbolic of the transit center's commitment to sustainability (Transbay Joint Powers Authority, 2013. p. 2).

FIGURE 32 - 1400 feet long rooftop city park of Transbay Transit Station.
Source: https://pcparch.com/work/salesforce-transit-center

A gentle, undulating wall that floats on top of the street on angular steel columns will be seen from a far, creating a luminous, graceful and a welcoming image. At street level, cafes and shops will draw visitors and make the neighborhood lively, which above, the trees of the rooftop park will draw people to visit for longer duration, transforming this transit center from just a commuter hub to an incredible urban destination (arch20, 2020).

FIGURE 33 - View of undulating wall on top of steel columns.
Source: https://pcparch.com/work/salesforce-transit-center

This exemplar is a good fit to study how a transit station can link multiple transport options and connect it to a larger network i.e., the city and the state. This station does not just consist of ubiquitous transport facility like bus stops and bike lanes, but also has various kinds of systemic support for its users in terms of a place to shop or an area to relax like the park that has resulted in creating a comfortable and efficient place for its citizens. This Park operates as a ‘Third place’ which is discussed elaborately in the next chapter and becomes a pivotal theory of this thesis design project. The intention to create a robust civic space that can be easily accessed through its integration with the station is the key take away from this precedent project.

# Kyoto Station, Kyoto
# (Large scale - Integrated amenities):

**Location:** Kyoto, Japan

**Designers:** Hiroshi Hara

**Year opened:** 1997

FIGURE 34 - Kyoto station front elevation.
Source: https://videohive.net/item/kyoto-station-in-japan/26306043

Jane Jacobs states that there are four conditions to generate diversity; mixed use, opportunities to turn corners, buildings varying in age and a dense concentration of people (Jacob, 1961. p. 151). These particular conditions don't only come into play when developing city zoning plans, but they also apply to very large architecture projects as well. One such project that satisfies all these conditions is the Kyoto station in Japan. As per year 2020, population of Kyoto is 1.4 million (Kyoto City Official Website, n.d.). Kyoto is a densely populated city and this criterion makes a large station necessary for commerce in a city enriched by culture and history. We can exponentially increase interactions and commerce, while simultaneously encouraging the walkable city and decreasing congestion.

Kyoto station is located on the Tokaido Shinkansen train line which links Japan's two largest business centers, Tokyo and Osaka. This station was rebuilt by the architect Hiroshi Hara after the old Kyoto station was decided to be replaced. The completion of this project marked the beginning of an entirely new era of high-rise developments in a city that was known for its old shrines and temples, restaurants with ancient Japanese flavor and tiny, narrow historic streets. This development has been very instrumental in modernizing attitudes and its mixed use only adds to the appeal (Design build network, n.d.).

FIGURE 35 - The first Kyoto Station
Kyoto entered the modern age with a Meiji Era red brick building called Shichi-jo Stensho
Source: https://www.kyotostation.com/the-history-of-kyoto-station/

The transit station is very large at 2.5 million square feet and offers a number of ‘corners’ horizontally and vertically creating a range of opportunities.

The features of this station include -

- A 15 storey glass plated grey monolithic structure that houses the train station. It hosts a shopping mall, a few small museums, 3 movie theatres, a department store, a gaming center, the Granvia hotel, assorted restaurants, government offices and it features office spaces in the same tower too.

FIGURE 36 - Kyoto Station 3D model diagram
Source: https://www.researchgate.net/figure/Kyoto-station-model-diagram_fig3_318915760

- This station complex contains two multi-storey car parking garages.

- The enormity of the structure is further stressed by the large escalator system that takes the passenger up nine storeys from the large, 60m high atrium on top of the main concourse up until the roof, which has an incredible view of the city from observation deck.

- One of the main features is the undulating wave like construction of the curved glass and steel roof structure over the platforms of the station.

FIGURE 37 - Kyoto Station undulating wave roof structure.
Source: https://www.dreamstime.com/photos-images/roof-kyoto-station.html

The grand entrance of this station has about 170 steps and is used to host several concerts and comedy shows on the weekends (Design build network, n.d.).
Kyoto station makes most of its environment worthwhile with quality facilities and it gives all its users a symbol of Kyoto on arriving in the city. Kyoto transit states that “Urban practices should be observed in train stations just as they could in the cinemas, department stores, cafes and dance halls that opened around them”, and an obvious effect, this station has become destination in the city itself and is no longer only a thoroughfare (Tiry, 2009).

FIGURE 38 - Kyoto Station 180 steps illuminated by LED.
Source: https://diversity-finder.net/tourism/kyoto-station-building-kyoto

# URBAN AND PLACEMAKING CONCEPTS

# INTRODUCTION

FIGURE 39 - Space management organisation partnered with social service agency to meet the needs of underserved people in their space (Woodruff Park, Atlanta, Georgia)
Source: https://www.pps.org/projects/woodruff-park

This chapter outlines the literature review explored for the research. It considers the relevant theories proposed by urban thinkers like Ray Oldenburg, Kim Dovey, Jane Jacobs and Jan Ghel. Their ideas and concepts are used to support the design of infrastructural public places that are inclusive, adaptable and flexible. This chapter discusses the application of these concepts to the research question set out in this thesis. It starts with the theory put forth by Ray Oldenberg called the theory of third places followed by the understanding of the term “placemaking” and explores the text surrounding the same. This part of the thesis aims to understand the study and literature central to the design research.

This design research, focused on two case studies of public buildings at different scales, aims to negotiate the intersection between our homes, our institutions or businesses and the broader world. Using this space is how we go to work, how we run errands and how we reach home. This place is for buying and selling, playing, meeting, socializing, conveying our biggest aspirations (for example getting fit!), as well as for having the most mundane infrastructure and utilities (for example catching a bus). In short, this place, between home and work, has high potential to become a platform for creativity, experimentation and expression. Hence, designing this right matters.

# RAY OLDENBURG

“What suburbia cries for are the means for people to gather easily, inexpensively, regularly and pleasurably”

**-Ray Oldenburg** (Oldenburg, 1996)

Ray Oldenburg, an urban sociologist has communicated the importance of informal public gathering places. In his book “The Great Good Place” (Oldenburg, 1989) he demonstrates why these sociable spaces are necessary for the community and public life by arguing that coffee shops, general stores, bars and other ‘Third Places’ are key for community vitality and local democracy. He says “Most needed are those third places which lend a public balance to the increased privatization of home life. Third places are nothing more than informal public gathering places. The phrase ‘third places’ derives from considering our homes to be the ‘first’ places in our lives, and our work places the ‘second.’”(Oldenburg, 1989). He explored how these third places work and the various conditions they satisfy to offer concepts for placemaking and insight that is essential for individuals and communities. In an interview published by Steelcase (Steelcase, n.d.) when asked how he started to think about this concept of third places, he quotes the Mayor of Charleston and says “People don’t know how to build cities. A liveable city should have the daily necessities within walking distance, and we’ve moved so far from that. We have to get in the car for everything.” (Mayor Joseph Riley: The Principles of Beautiful & Livable Cities, 2016).

FIGURE 40 - Foro Lindbergh (Parque México)
This Parque in Mexico city has a large plaza, amphitheatre, art decor fountain and is a hub for activities in the middle of a historic park.
Source: Project for public spaces

Ray Oldenburg identifies ten vital functions of a successful third place in his book (Oldenburg, 1989).

- Promoting Democracy: Oldenburg refers here to John Dewey who once said “The heart and final guarantee of democracy is in the free gatherings of neighbours on the street corners to discuss back and forth and converse freely with one another.” (Dewey, 2011 cited in Oldenburg, 1989).

- Neighbourhood unity: Oldenburg Describes neighbourhood unity as an idea in which there is a neutral ground that can help form new friendships where people get to know each other and speak to one another frequently and freely. He says this is important because this is the only way neighbourhoods can offer rich association that is promised. He mentions that it is important for people to come and go as they please, where nobody is required to be the host and where everyone feels comfortable. Otherwise, he says association with one and another will be impoverished and most neighbours will never meet each other and new relationships are hardly formed. (Oldenburg, 1989. p. 21).

- Multiple friendships: He says that the only way people can make new friends is by having a neutral ground gathering place near their houses or on their way to work since people spend increased amount of time travelling to work and running errands in between the day.

- Spiritual tonic: Ray Oldenburg believes that some cultures and their learnings are derived from frequent sociability in public realm.

- Staging area: He expresses that a staging area promotes activities to take place among the people of the community and encourages them to be a part of it. In times of disaster, such public spaces are often of great importance.

- Generation of social capital: Oldenburg describes that social capital is a concept which enables communities to work together to address individual and shared goals. By social capital, he means a degree to which a neighbourhood or people of the community get involved in a voluntary collective activity. He says if people in a particular neighbourhood setting engage in a productive group behaviour in order to solve common problems and help each other out, that means they have high social capital. For example, a teen might mow his neighbour’s lawn for them and they might pay him a little less than a commercial operator.
  This higher social capital is said to lead to lower cost of living.

- Lower cost of living: He says, in a place where people meet often to relax and enjoy each other’s company, natural support groups or mutual aid societies are created. “As we take our relaxation with people, we grow to like them and, as we come to like them, we are inclined to “do for them.” Third places are also easy places to collect time-saving, labour-saving, and money-saving advice — sometimes without

even asking!" (Oldenburg, 1989).

- Enhanced retirement: Oldenburg describes that the need to step out of the house every day after retirement, in order to keep up good connections and avoid the mental and physical impacts of isolation, can be met daily if there is a third place in the neighbourhood.

- Development of individual. The nature of our work environment and our homes keeps us in touch with people who are similar to us and people who have same interests. But he says creating a third place brings people from different occupations, various backgrounds, viewpoints and socio-economic standing together.

- Intellectual forum: He believes that the issues of the day and other matters can be discussed with one another for a third place provides a stage to meet and converse informally and regularly, but not chaotically.

By including what might be called "third places" into the program of this thesis proposal, the community can enjoy these ten functions proposed. This is achieved in the design through -

- Providing local gathering place, allows people of the neighbourhood and the regular users of Te Whau pathway in case-study 1 and between people of the community and the people who travel to or through the suburb in case-study 2 to know and interact with one another. This contributes partly to promote democracy at the scale of the city, encourages multiple friendships and eliminates doubts about safety (for example, waiting for a bus in the night) which helps in neighbourhood unity.

- Providing platform for spiritual tonic with frequent sociability in the public realm.

- In times of disaster, unofficial aid comes well before official aid and this particular large site that sits between the pathway and the boat club acts as a third place which will allow people to help one another.

- By enabling new relationships between people who work in case study 2, regular customers and people living in the neighbourhood , it helps in generation of social capital where people depend on each other for help and engage themselves in voluntary committees.

- Bringing diverse occupations together and letting people from the neighbourhood buy and sell from this particular place will reduce the retail competitiveness and in turn lower the cost of living in that neighbourhood.

- After the State Highway 16 was constructed, the suburb of Te Atatu was divided into two (North and south). Most of the Third Places like the library, Rugby club, Swimming pool and so on can be accessed easily only by people living close to the northern part of the Te Atatu suburb. However, by giving people an opportunity in the chosen sites to meet outside their work environment or homes, will let them converse informally and regularly but not chaotically and helps in development of individuals, contributes to intellectual forum and enhanced retirement.

People and their behaviour are at the core of this public place strategy proposed by Oldenburg. Third places promote engagement, curiosity, positive behavioural change and unexpected opportunities. It is not about designing buildings as individual objects, instead  it is about using architecture (local amenities and infrastructures) to generate inter-connections, breaking down barriers and inspiring users towards behaviour change.

According to (University of Canterbury, 2021) and (Hiremath.P et al., 2020) with the ‘stay at home’ mandate of the Covid-19 pandemic we have not been able to meet in third places and this has had negative impacts on mental health and social cohesion.

# KIM DOVEY: Placemaking

It is tough to consider words such as “place” and “placemaking” that are overused and undervalued and change it into a theory that has a specific and an operational meaning. In a contemporary use, people of the community collectively reimagining and reinventing public places is called placemaking (Project for Public Spaces, 2007). It is a collaborative idea that strengthens the relationship between the people and the place they share shaping the public realm to increase shared value. There is no precise time as to when or where the concept of placemaking arose or who first coined the term. Both Wikipedia and the Project for Public Places (Project for Public Places, 2007) claim that this idea was extracted from the work of theorists like Jane Jacobs and William Holly Whyte and was used by many urban planners as well as architects in the 1960s. However, Edward Relph, author of Place and Placelessness ( Relph, 1976) mentions in one of his articles (Relph, 2015) that “neither Jacobs nor Whyte wrote explicitly about placemaking. Indeed, the first book with the word in the title is an archaeological study by George Andrews, published in 1975 (Andrews, 1975). Andrews used the term to mean simply the founding of settlements.”

The term ‘placemaking’ evolved with time and it ties to the urban scale. Although our homes are places, they would not be considered sites for the activities of ‘place-making’. We might however pick up elements of placemaking in designing a hospital campus, a university, a transport precinct, a regeneration project or any public or civic space that can be accessed by the members of the society. In 1985 Kim Dovey co-organized a conference entitled Place and Placemaking and subsequently became a part of multiple urban projects with complexities involved in both the discourses and practices of place and placemaking (Dovey, 2016). In an article about ‘placemaking’ published by Architecture and Design Scotland (Architecture and Design Scotland, n.d.), the author quotes Kim Dovey-, “a place is a centre for collective meaning”. In one of Kim Dovey’s seminars (Kim Dovey, KTH Centre for the Future of Places, 2017) he mentions that “uniqueness is one of the integral qualities of placemaking. When people try to define what place means or what placemaking means, they often come to a notion of character and of difference. It is not reproduced from a formula and all good places are different from each other.”

Following Dovey’s thinking, it is understood that a public place is fundamentally multidimensional. A successful public place is the one that is used by various people with contrasting needs at different times of the day. Since public places cater to so many users, they are also where a staggering cross-section of design and practicality converge.

FIGURE 41 - The Place diagram
Source: Project for public spaces

The ideas of ‘placemaking’ come in as a way to establish a ‘third place’ in this thesis project. Ideas of placemaking help in accomplishing an important role in moulding everyday life as well as creating a stage for social interaction and various other activities including, entertainment, culture, sporting, relaxation, dining and commercial activities.

Placemaking is not a new concept. While they did not use this term, in 1960’s urban writers and activists such as Jane Jacobs and Willian H Whyte presented radical concepts about designing cities for people and not just for cars, and it is their ideas that underpin many contemporary placemaking concepts. Jacobs inspired people of the community to take ownership of the streets they use. While William Holly Whyte defined crucial elements to generate a vibrant social life in public areas. Applying their ideas that mainly focus on the cultural and social importance of generating inviting public places and lively neighbourhoods, it is easy to develop a broad, all-inclusive placemaking approach.

# JANE JACOBS

“Cities have the capability of providing something for everybody, only because and only when, they are created by everybody.”

**-Jane Jacobs** (Jacob, 1961)

Jane Jacobs argued (Jacob, 1961) that modernist urban planning neglects the city because it neglects the people living in the community that is distinguished by seeming-chaos and layered complexity. In Jacob’s view city planners use hypothetical reasoning instead of trying to know what the people of the community need to derive the principles that help plan the city. Among a number of policies of which Jacobs is critical , the most common one was and is the segregation of uses through policies and practices of zoning. Examples of zoning include residential, commercial, industrial. These policies, she says destroy communities segregating activities and therefore generating unnatural and isolated public spaces, not connected to places of home of work. To correct this, Jacobs advocates four different conditions to create diverse public areas.

1. The district, and indeed as many of its internal parts as possible must serve more than one primary function; preferably more than two. These must ensure the presence of people who go outdoors on different schedules and are in place for different purposes but who are able to use many facilities in common.

   Jacobs defines ‘Primary functions’ as, “Primary functions are those which, in themselves, bring people to a specific place because they are anchorages. Offices and factories are primary uses. So are certain places of entertainment, education and recreation. To a degree, so are many museums, libraries and galleries, but not all”.  (Jacob, 1961. p.161)

2. Most blocks must be short; that is, streets and opportunities to turn corners must be frequent.

3. The district must mingle buildings that vary in age and condition, including a good proportion of old ones so that they vary in the economic yield they must produce. This mingling must be fairly close-grained.

4. There must be a sufficiently dense concentration of people for whatever purposes they may be there. This includes dense concentration in the case of people who are there because of residence.” (Jacob, 1961)

FIGURE 42 - Power of 10+ concept. (Similar to Jane Jacobs first condition to create a successful public place)
The idea behing this concept is that any public place will thrive if people have a variety of reasons 10+ to be there.
Source: Project for public spaces

Jacobs stated., “The necessity for these four conditions is the most important point this book has to make. In combination, these conditions create effective economic pools of use.” (Jacob, 1961. p.151)

She says “Everybody needs networks of other people. It is impossible to make a community without networks.” (The Robert Wood Johnson Foundation, 2009). Jacobs recommended a mixed-use urban environment- the combination of uses and building types, whether commercial or residential, new or old. As per this concept, neighbourhoods depend on diversity of activities, businesses, buildings, residences as well as people of various ages using these areas at different times of the day to create community vitality. She envisioned cities as being spontaneous, organic and messy and sees the mix of city users and uses as deciding factors for urban development.

In this design research, these four conditions provide useful guides, especially for Case Study 2 (large scale). When translated to the design research project they indicate that-

1. The design should have multiple functions in a single area and the activities should be diverse satisfying demands of different kinds of users and operating across different times of the day and night.

2. Since the site sits between the Te Whau Pathway and some Whau river-based activities, the program has to be organised in a way that is clearly visible and easily accessible by the users. This enables safety and mingling.

3. The program operates between smallest to the largest scale of infrastructure, for example from fruit buying to bus parking. So the connection between them should be organic and tightly knit.

4. The site should accommodate a dense concentration of people and should serve different users at the same time, as well as being open and operational across different times of the day and night.

These conditions on the site comply with Jane Jacob's recipe for vibrancy and help design a public place that is diverse, attractive and successful.

Jacob's ideas have been picked up in a contemporary context by Jan Gehl, who has worked to develop the empirical evidence to show how young cities (like Tāmaki Makaurau) might be designed around people and not cars.

# JAN GHEL

“In a society becoming steadily more privatized with private homes, cars, computers, offices and shopping centres, the public component of our lives is disappearing. It is more and more important to make the cities inviting, so we can meet our fellow citizens face to face and experience directly through our senses. Public life in good quality public spaces is an important part of a democratic life and a full life”

**-Jan Gehl** (Gehl Jan & Rogers Richard, 2013. p,288.)

The world urbanisation prospect released by United Nations before Covid-19 opens with this sobering fact: “55% of the world’s population live in urban areas. By 2050 this will increase to about 68%. There could also be an overall growth of the world’s population by 2.5 billion people. (68% of the World Population Projected to Live in Urban Areas by 2050, Says UN, 2018)

This only suggests that now is the best time to plan for people than any other. Accessible public spaces for all are not a luxury but a need for any growing city or community to ensure cultural, economic and environmental resilience.

“We have to get cities to change their ways. If you pay attention to the smaller scale, inviting people to walk and bike, you get livelier and more liveable city, a safer city, a more sustainable city” (Gehl Jan & Rogers Richard, 2010. p,61.) says Jan Gehl who has spent the last fifty years observing, recording and studying meticulously how people actually use public places, to build the required empirical evidence that is necessary to transform the modern take on urban planning. He says, “For most of the 20th century, we’ve been counting cars, not people.” (Shaw Elizabeth, 2013) This has clearly led to an urban landscape that is designed for traffic movement at the cost of sociable spaces in the community.

FIGURE 43 - Copenhagen (Bikeable city)
Source: https://www.wired.com/story/most-bike-friendly-cities-2019-copenhagenize-design-index/

Jan Gehl's book "Cities for People" (Gehl Jan & Rogers Richard, 2010) focuses on the "life between buildings". His study and work begins with public life and the areas where it takes place. He highlights that the 'life between buildings' is an area of architecture that requires more attention because it is where urban recreation, social interaction and sensory experience of city life takes place. The concept of 'life between buildings' consists of a range of human activities in public spaces: the necessary (functional activity), optional (recreational activity) and social activities, each of which Gehl explains in detail. These are important aspects of design and all processes of planning have to start by understanding the need for these spaces in between buildings.

Jan Gehl's ideas of designing in between buildings is fitting for this project because it is about designing more than just one particular space. It is about a series of spaces and about sequences, variety, connectivity and discovery. These spaces can be divided into three categories of public places he has proposed (functional, optional and social) and can be designed according to how they are defined in order to achieve an overall sense of place. This concept of designing between buildings will include every walkable route, every turning point and every plaza on the large site, the site of people oriented future multi-functional infrastructure.

As we become more urbanised globally, the demand for human scale and social environments is increasing. This way of designing cities supports the resiliency and sustainability of our communities the world over- one where shared public place is prioritised and where the right to feel connected to our communities is at the centre of future planning.

# CONCLUSION

The new successful economies of the 21st century are people economies. To make Tāmaki Makaurau Auckland a better city, we need places, especially third places, places that people want to be in, places that work and places that deliver choices. It is the quality of built environment that makes or breaks a place.

Research, study and theories of Dovey, Jacobs and Gehl provide useful guides and rigorous criteria for the design of successful ‘Third places’ which have positive impacts on health and well-being through social cohesion and the production of social capital. In the next two sections of design case studies, the urban concepts and strategies by these theorists discussed in this chapter has been used to develop the design. To make a better third place, to meet the challenges of a changing set of social, cultural and economic contexts we need to think differently and act differently. ‘Placemaking’ comes in as a method to do the same based on real understanding of scale, site context and contemporary skills.

# DESIGN CASE-STUDIES

# INTRODUCTION

In carrying out this research, I followed the process of testing the design idea on a small-scale infrastructure and took all that I discovered into a larger scale design project both of which are set in sites along Te Whau Pathway. This work aspires to improve quality of the lives of commuters as well as the residents in these areas by designing a ‘Third place’ using concepts of ‘Placemaking’. This involved layering of amenities that the users would require at the stop or surrounding destinations.

The sites chosen for this thesis design is adjacent to the Whau river and upcoming Te Whau Pathway which is one of the largest infrastructures in in Tāmaki Makaurau Auckland and is estimated to encourage all small-scale ridership in the city. Both factors enabled me to include as many activities as I could into the programme.

The following chapters discuss –

- Sites chosen, context of the location and its history.
- Programme and its components.
- Concept of the design.
- Design evolution.
- Findings.

FIGURE 44 - Representation of the movement along the Wau river and the Te Whau Pathway

# CASE-STUDY 1 (SMALL-SCALE)

## SYNOPSIS

This small-scale case study explores the research question “How can infrastructure be multi-functional where people not only pass through but choose to-be?”. Through design research it considers a small scale infrastructure, a toilet block located along the Te Whau pathway. Usually a mono-functional infrastructure providing for a single programme. Through this design research  I have explored opportunities for an infrastructure or small public amenity project to generate  place-making and act as a ‘third place’.

## SITE

The Laurie brothers purchased 100 acres of land beside the Whau river (on present day Hepburn Road) where Robert Laurie operated a brick yard from the early 1870s. (Timespanner, 2011) The chosen site for the small-scale test formed part of this historic brickwork site along with the cottages built here along with the Culav house, formerly “Laurieston”, still standing is one of them. This is recorded as an archaeological and historic heritage site. The Te Whau Pathway (currently under construction) will pass through this site along the Whau river edges. This site also has the remains of the Laurie brothers’ brickworks that include cuttings, wooden piles, a tramway slip, brick debris and a kiln floor. It is also said to show deposits of shell midden over several patches along the river at the edge of the site
(Clough & Associates Ltd, 2019. p. 35-39).

FIGURE 45 - Plan showing close up of Laurieston Park and the area immediately south of that, in relation to recorded archaeological and historic heritage sites.
Source: https://www.aucklandcouncil.govt.nz/ResourceConsentDocuments/14BUN60337530AppxDArchaeologicalAssessment.pdf

## SITE SELECTION


FIGURE 46 - Laurieston park (Site chosen) and neighbouring context.


Rosebank Road
West End
Rowing Club
Bunnings Avondale
Trade Centre

## SITE LOCATION

LAURIESTON PARK, GLENDENE,
AUCKLAND - 0602

Neighbouring residence that can be seen from the site.


The land clearance of the site has helped Pukeko (Native bird) to thrive in this environment.

Garbage disposed around the site bo

FIGURE 47 - Site condition and surrounding area.

Rear of the Culav House, formerly ‘Laurieston’ built in 1870s.

Garbage cans from the nearest residences.

oundary.

Power pylons around the site where the Laurie brothers’ brick kiln was once seen.

## SITE IMAGES

FIGURE 48 - . Laurieston Park with two Norfolk Pines

FIGURE 49 - . View of the Whau river from the Waka Ama ramp.

FIGURE 50 - . Culav property built in 1870s.

FIGURE 51 - . Looking towards the site of the kiln associated with Laurie Brothers' Brickworks.

## DESIGN

This small-scale test case study reimagines the framework of public infrastructure (the toilet block) to align with the future of travel in the city of Tāmaki Makaurau Auckland, shifting from car dominant streets to public spaces that enforce positive change by implementing qualities like placemaking, sustainability, safety and convenience. As new modes of transportation (example: E-bikes, e-scooters etc,.) and multi-million-dollar mobility infrastructure i.e., Te Whau Pathway continue to be introduced into the flow of everyday travel, commuting within the city has progressed rapidly and has become more multi-modal than ever. This evolution of transportation has continually reshaped the streets and immediate areas around the Whau river with its potential to create public spaces and connections that lead to rich urban and productive zones.

Yet, despite the city's rapid progress in improving efficiency for spaces involved in transit environments, they are often designed serving a singular purpose or found difficult to access. Areas adjacent to the Te Whau Pathway are a fundamental part of the daily lives of many people commuting in Tāmaki Makaurau Auckland, from its suburbs to the city and vice-versa. This case study implements an innovative way for placemaking by adding layers of amenity to a building usually providing for a singular function. Ranging from solar panels for charging E-bikes, to pet bowls and coat hangers, rather than providing only toilet facility, it considers a wide range of users to create a social hub, a place that engages the local community with pathway users. It facilitates opportunities for the neighbourhood to make better use of the Lauriston Reserve open space while supporting users of Te Whau Pathway who will travel from suburbs further afield.

Using Ray Oldenburg's 'Theory of third places', this case study creates a hospitable condition for the place to develop and thrive near Te Whau Pathway. Accommodating multiple functions in an otherwise single infrastructure, it is a convenient pitstop along the route of the pathway and this is critical for the survival of this third place. Facilities like free wi-fi, charging points for e-bikes and phones, a drinking water fountain, community notice board for announcements, pet drinking bowls and provision for event speakers draw people of different age groups together. Facilities like first aid and a telephone area is provided for people to use in times of emergencies.

Small design explorations like layering these activities next to each other, encourages interaction between groups that might otherwise be cut off from one another. This concept is derived from the idea put forth by Jane Jacobs which she calls 'Ballet of a good city sidewalk' and refers it to be of a complex order. She says "Its essence is intricacy of the sidewalk use, bringing with it a constant succession of eyes. This order is all composed of movement and change, and although it is life, not art, we may fancifully call it the art form of the city and liken it to the dance." (Jacob, 1961. P.50). She compares this to not just any dance form but to the most intricate dance form- ballet in which she says "Individual dancers and ensembles all have distinctive

parts which miraculously reinforce each other and compose an orderly whole". (Jacob, 1961. p.50) when this 'sidewalk ballet' concept is translated into a public place design, carefully placing activities next to each other for people's interaction creates intricate connections between people and offers a platform for conversation. When this happens regularly, doubts about safety are eliminated for people to use the space at all times of the day which is another idea proposed by Jacobs called 'eyes on the street' which she describes as a 'public acquaintance' that help keep the sidewalk safe (Jacob, 1961. p.54).

Another important feature of the small-scale case study is a flag pole that is designed and placed for visibility from both along the pathway and from the river. This wayfinding device creates a sense of identity at this point of the Te Whau Pathway and gives a legible visual cue to the place without the use of signage. A 'layered on' programme such as this could provide opportunities for a local school to engage with the site as children's drawings could be commissioned for a revolving flag, as in the example of the ĀKAU Kaikohekohe Flag Project (ĀKAU Studio, 2018).

As a result of a review with colleagues, the design interprets and respects Māori concepts of Tapu and Noa by clearly separating the toilet function from the washing and other functions and by ensuring that access to the actual toilet rooms is sheltered from view by a screen.

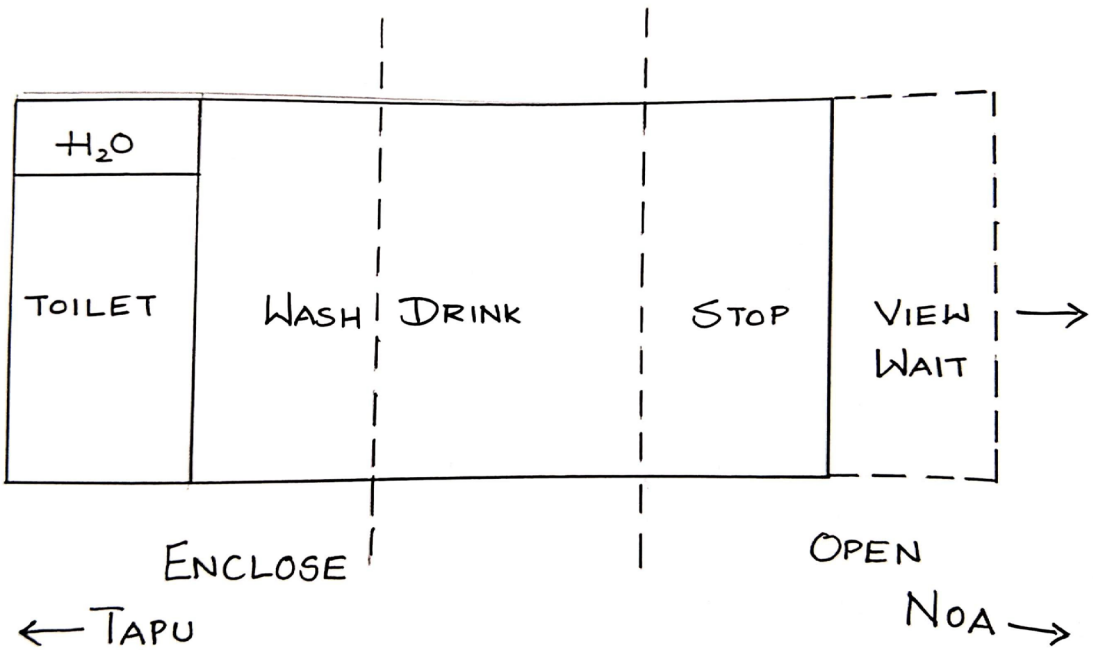



FIGURE 52 - Design interpretation with Māori concepts of Tapu and Noa separating the toilet from other functions.

## DESIGN BRIEF

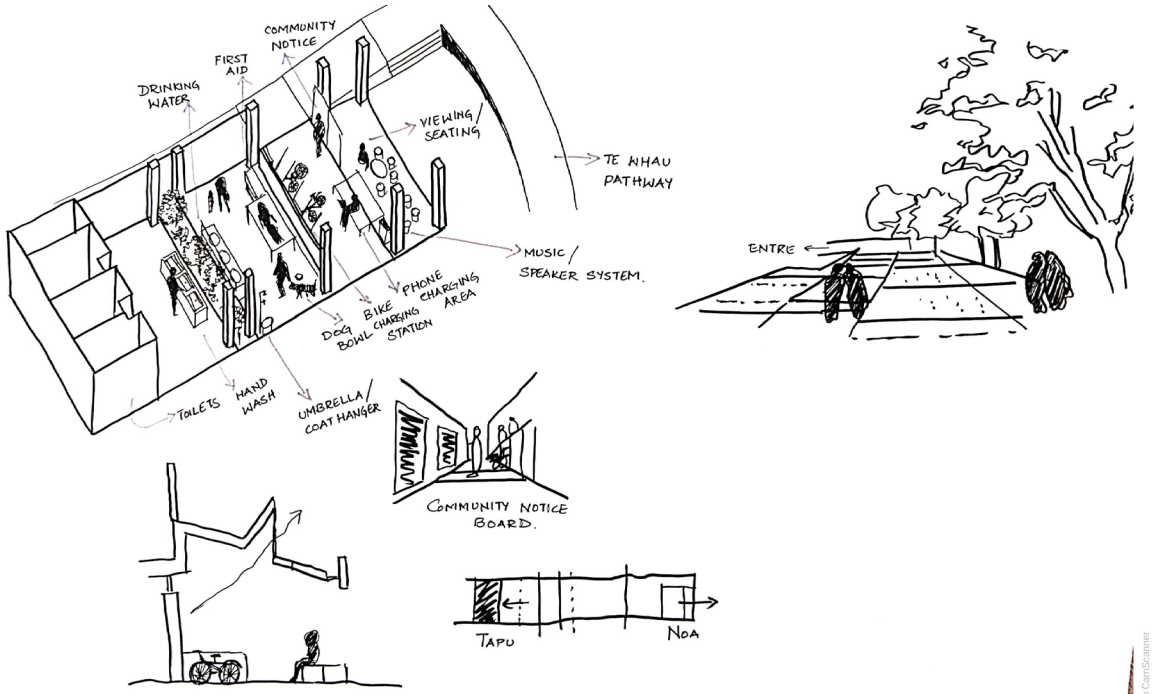



FIGURE _ _ - Distribution of programme.

Following are the functions added to the toilet block:

- Solar panels to power charging stations.
- Bike parking
- Bike charging stations
- Shaded area
- Seating area
- Phone charging area
- Drinking water fountain
- Hand-wash area
- Dappled light
- Pet bowl
- Coat hanger
- Umbrella stand
- Plug-in power area for events
- Community notice board
- First-aid area
- Telephone facility
- Flag-post for way-finding

Scanned with CamScanner

## DESIGN DEVELOPMENT

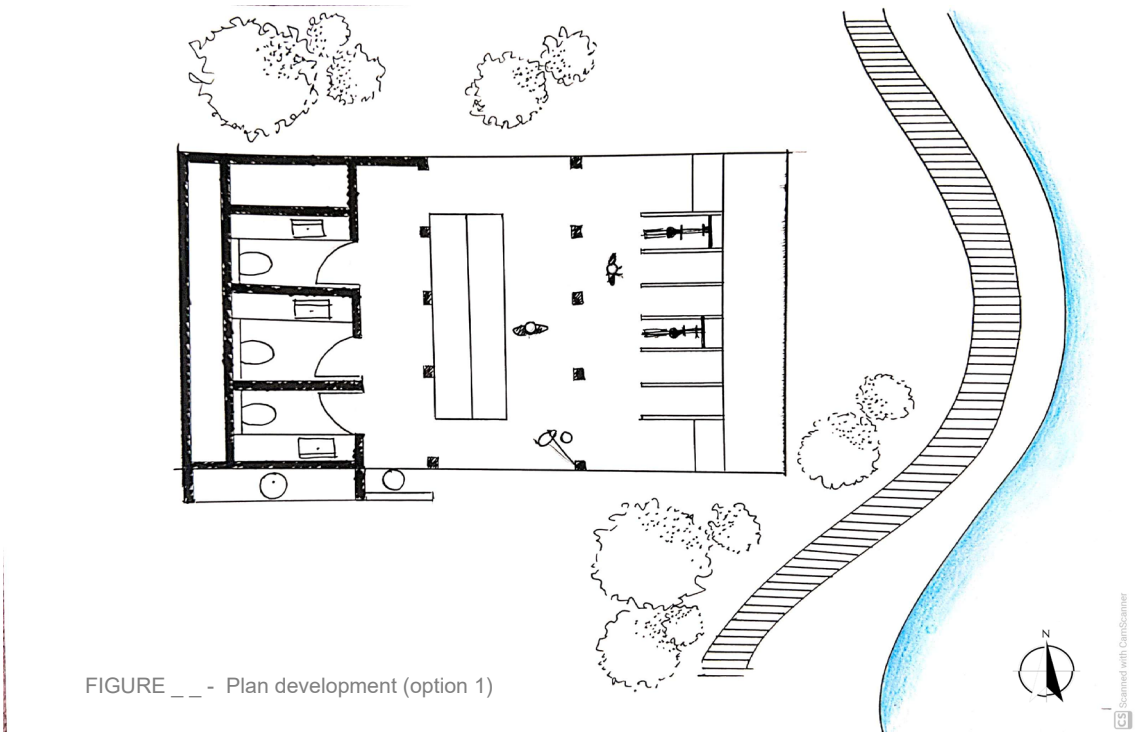


FIGURE _ _ - Plan development (option 1)

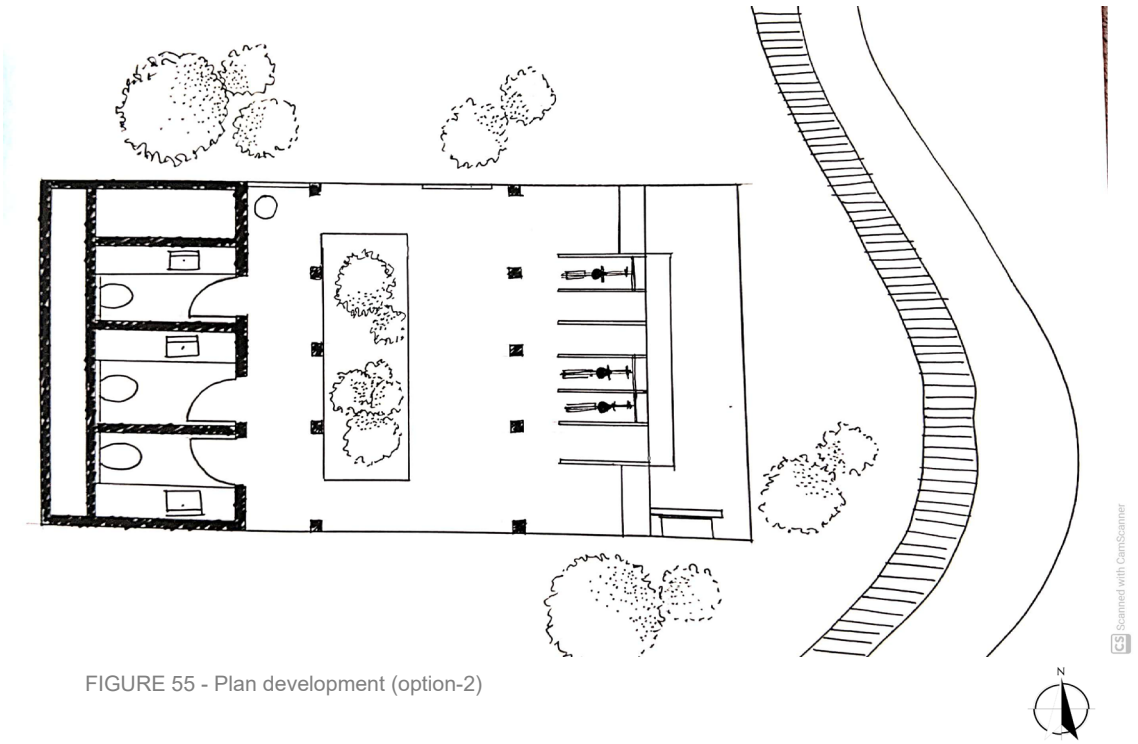


FIGURE 55 - Plan development (option-2)

## DESIGN DEVELOPMENT

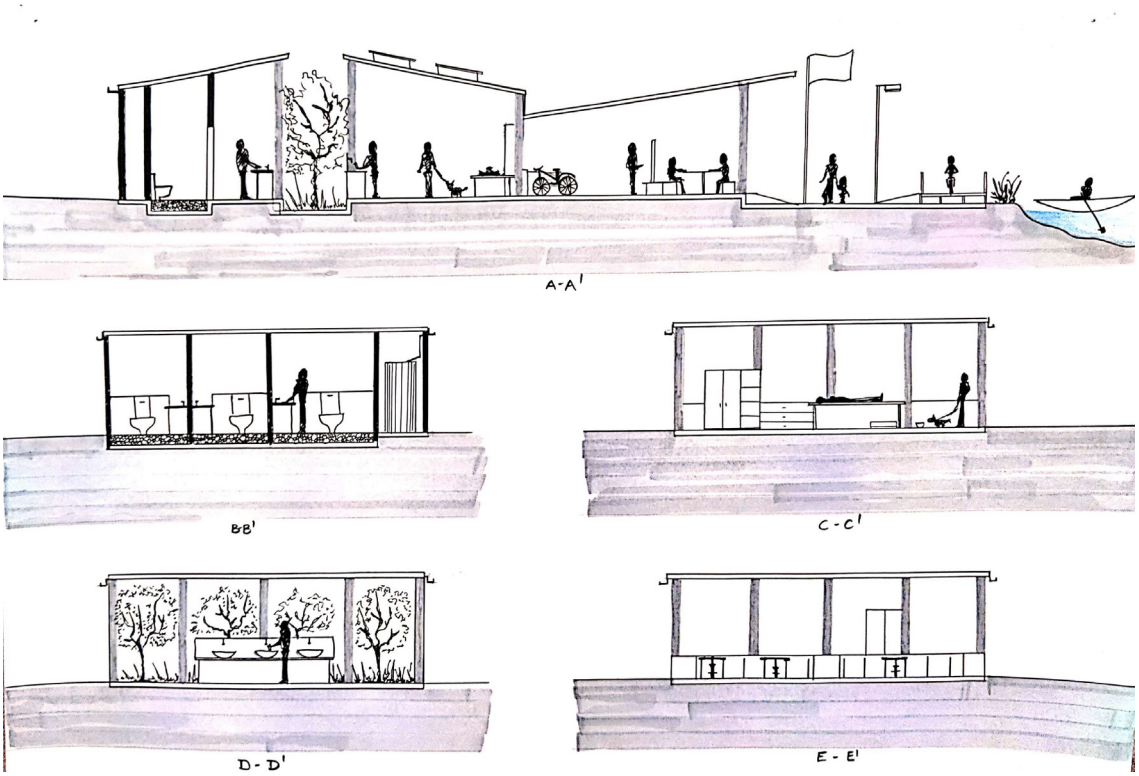
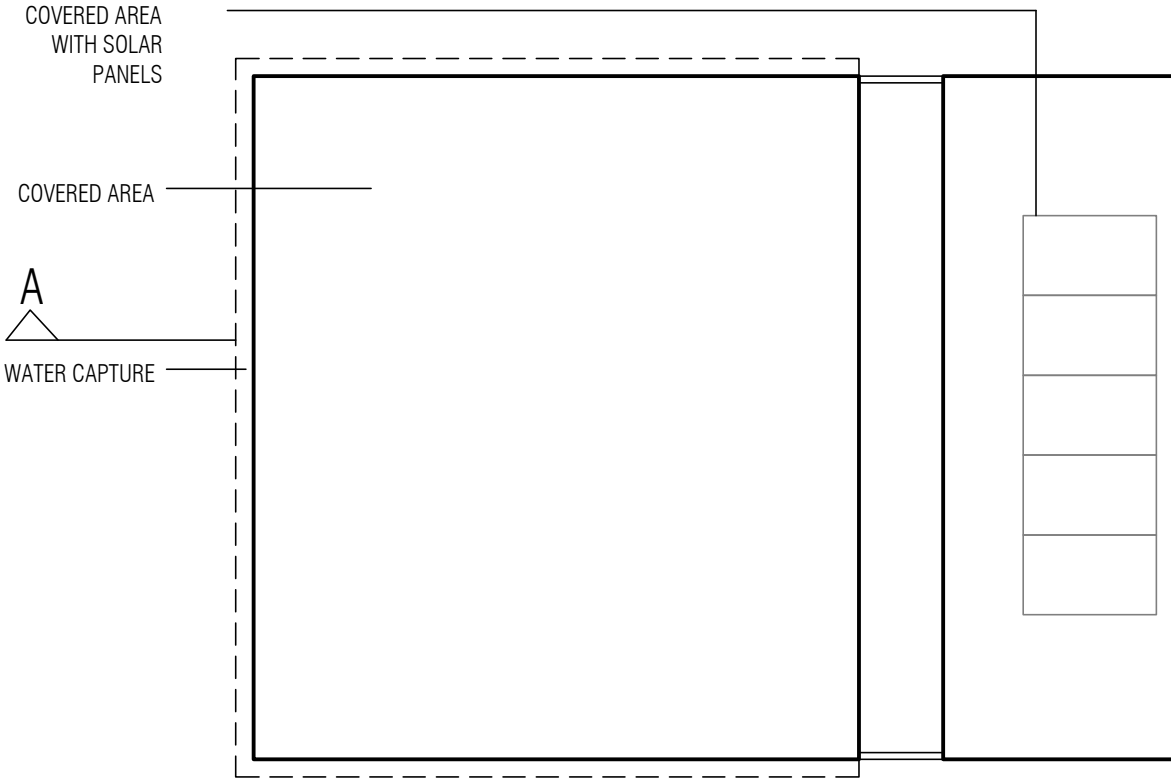



FIGURE 56 - Preliminary sections



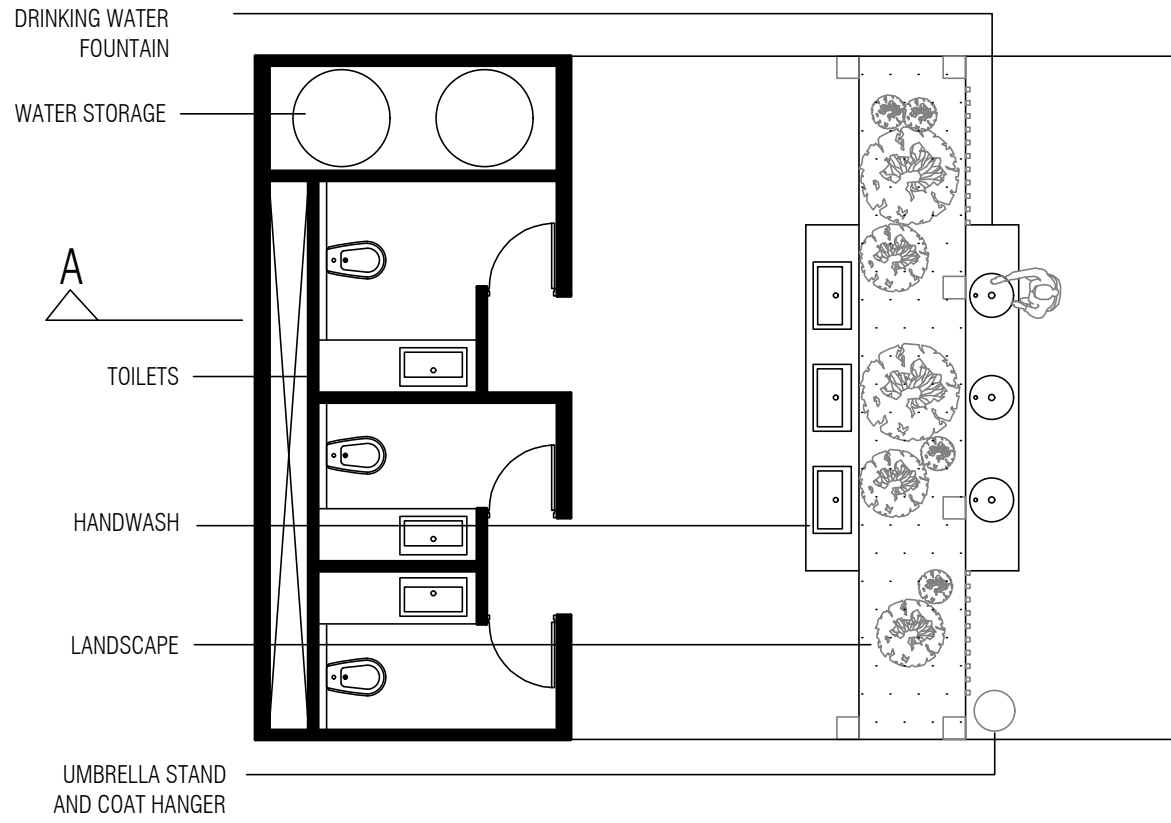
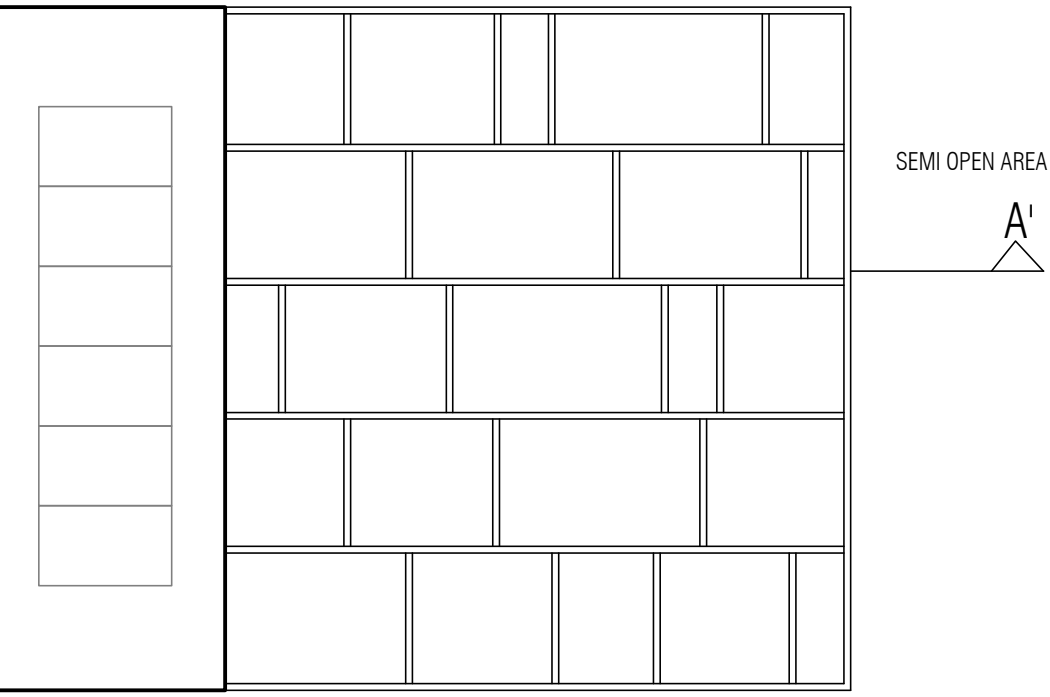
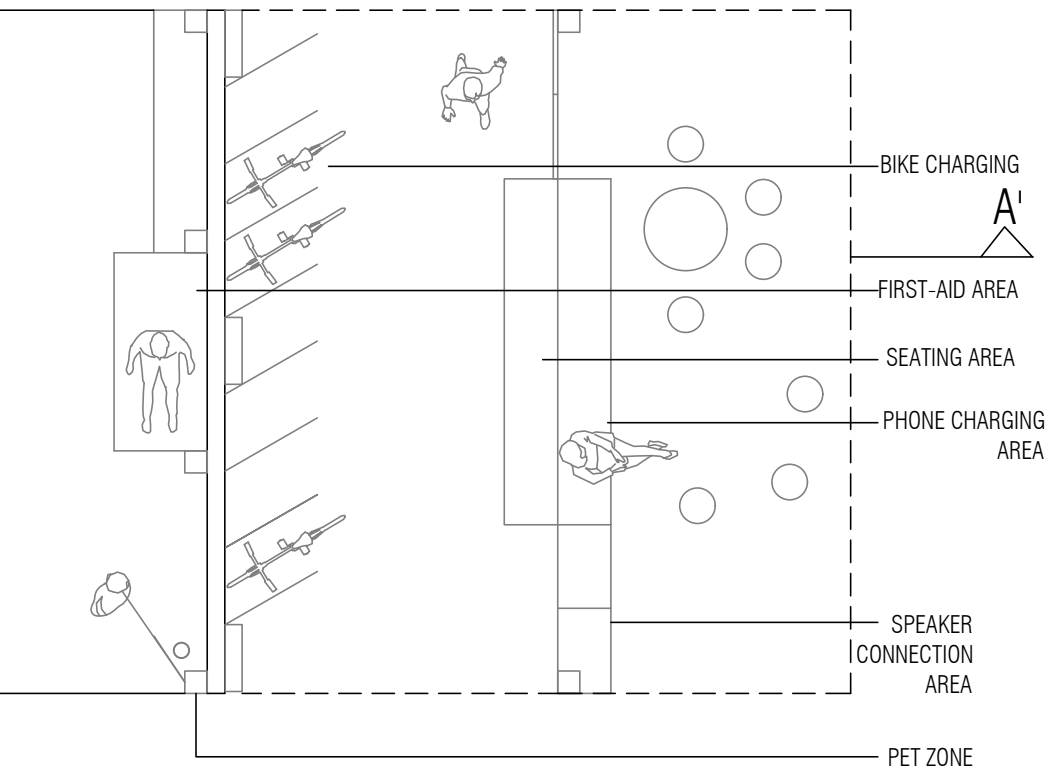




FIGURE 57 - Final plan with Tapu and Noa concept
Scale - 1: 75




LAN




(TAPU / NOA)

N

SCALE 1: 75


FIGURE 58 - Final ground floor plan with Tapu- Noa concept

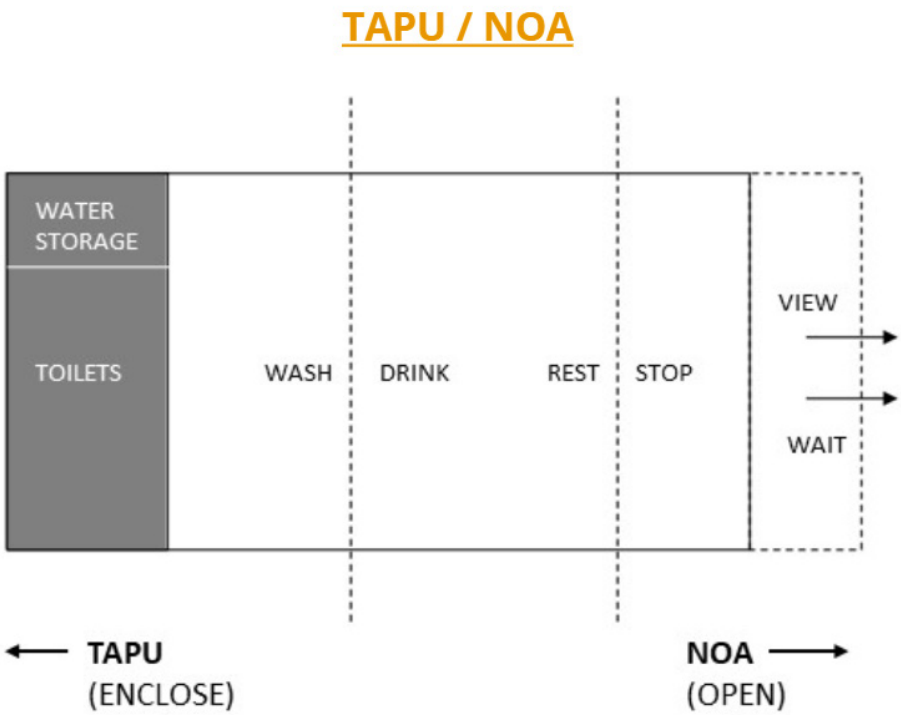
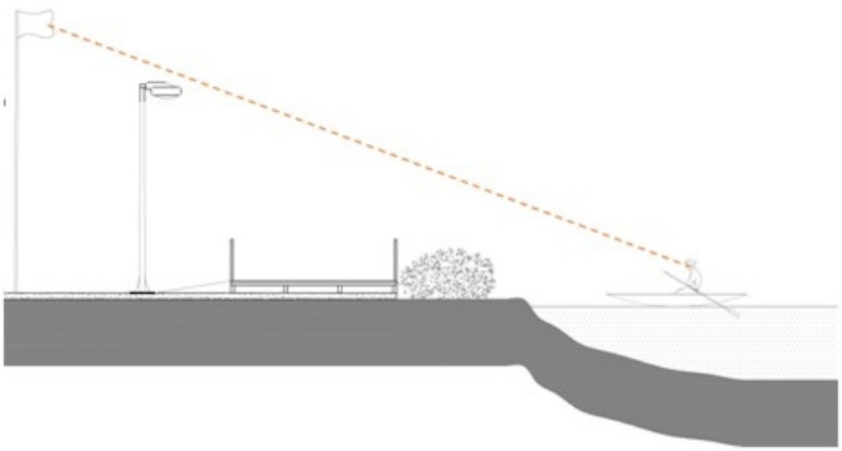



FIGURE 60 -Important concepts used in the design: Tapu- Noa and way-finding


FIGURE 59 - Final roof plan with Tapu- Noa concept

## WAYFINDING



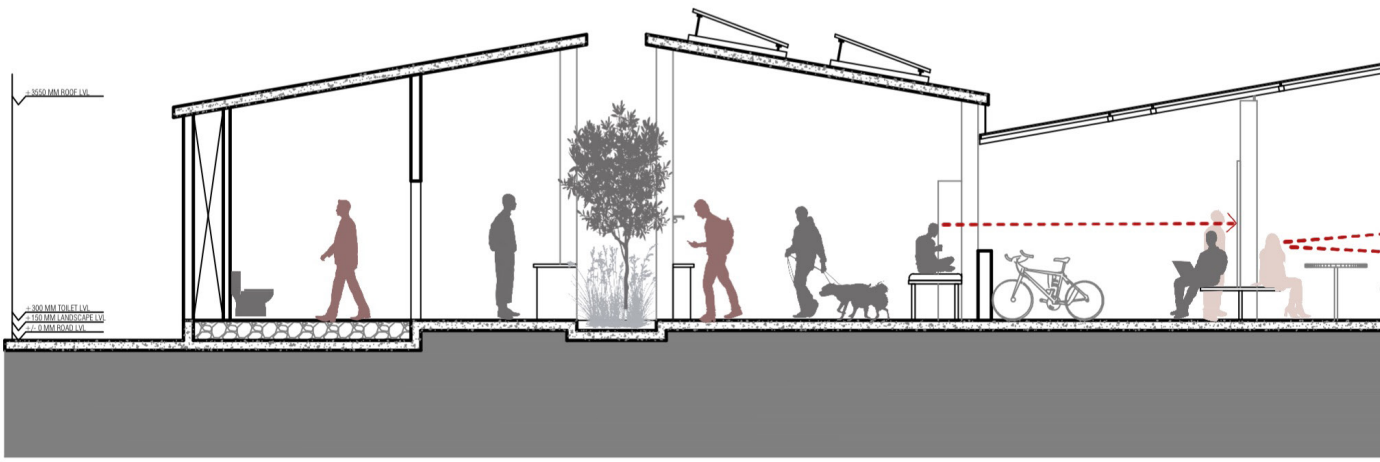
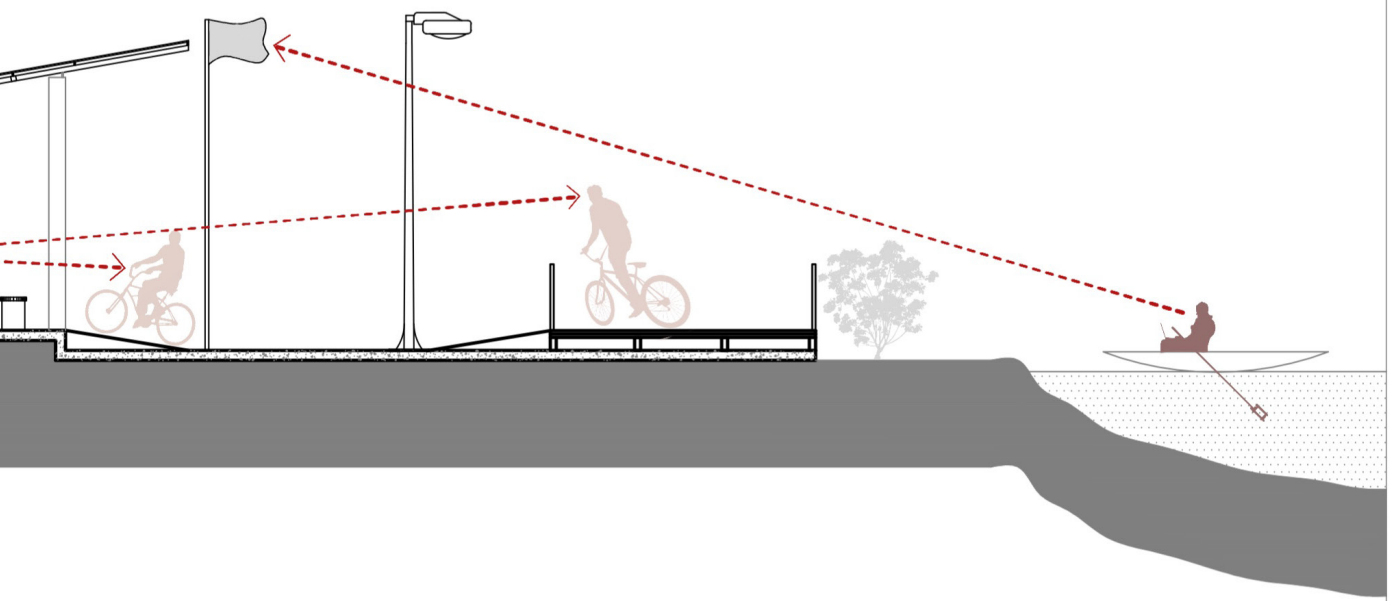



FIGURE 61 - Final section with Tapu- Noa concept and ;ine of sight
Scale - 1: 100



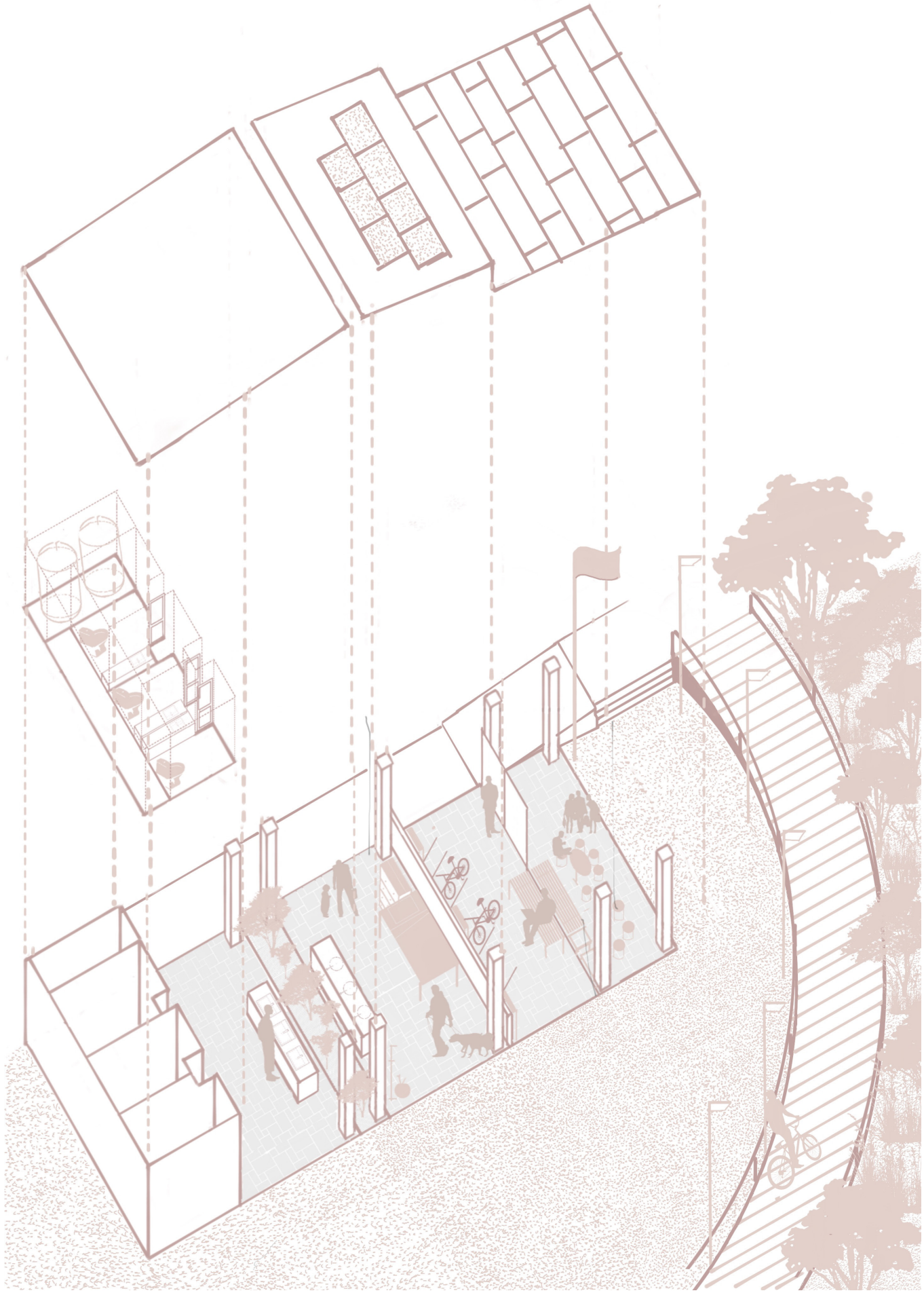


FIGURE 62 - Axonometric view

**FINDINGS FROM CASE-STUDY 1**

- Any infrastructure can and should operate at a scale between the very large and the very small and should consider a broad range of users.

- Creating various programmatic nodes with opportunities to hold diverse activities and uses, including both active and passive engagement, becomes essential to foster an active public realm.

- Distribution of the program should be done only by identifying relative levels of privacy thereby enhancing the activeness of the space, and through respecting local spatial concepts such as tapu and noa.

- Visually connecting different zones with each other and to the outside environment creates pockets for people to connect with their surrounding while enjoying their privacy.

- Enough places to sit or rest lets more people participate in public areas.

- Wayfinding helps orient and locate users and can help to generate an ‘identity’ for a place.

# CASE-STUDY 2
# (Transport Hub at Wai Te Whau)

**Using the findings from the small-scale test case-study, this chapter discusses potential for Te Atatu Boat Club boundary to house a bus interchange program along with other activities to create a successful 'Third Place'. This part of the thesis is going to be developed further in the span of next few weeks and will elaborate this draft of the chapter.**

**INTRODUCTION:**

While the last century was characterized by industrial, commercial and economic systems that subsidized an auto-oriented development around Wai Te Whau it is important to seek more sustainable development solutions that favour multi-modality and mixed-use of infrastructure. Fuelled by the construction of Te Whau Pathway, adding more functions to a fundamental infrastructure will offer one of the most compelling solutions for the lack of 'Third Places' in the suburban community. The small-scale case-study tested 'Placemaking' using the method of 'layered' multi-infrastructure. It catered to a wide range of users from locals to pathway users and required the design to provide them with various nodes of diverse activities including active and passive engagement in order to create a successful public realm.

The second case study tests the findings of the first, only at a much larger scale and with more complex set of programmes through the design of a bus interchange. Auckland Transport have announced they will build a bus interchange in this area but as yet the actual location has not been released. For the purpose of this design research an appropriate riverside location along Te Whau Pathway has therefore been selected and the bus interchange programme has been 'layered' with other essential activities, providing users with access to a city-wide bus link and an impeccable local access to everyday goods and services. The design found in this part of the thesis is not just a jumping off point for buses, but it is a Transit Oriented Development that uses the opportunities of the site to build multiple programs and thus create a successful 'Third Place' in this suburban area.


FIGURE 63 - Location of the chosen site in relation to the route of Te Whau Pathway.
Source: https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-projects/projects-west-auckland/Pages/te-whau-pathway.aspx

**SITE**

The design project is sited in the boundary of Te Atatū boat club area along Te Whau Pathway. One of the most important factors guiding the site selection process was the opportunities provided by the pathway that will be delivered as part of the ‘shovel ready’ Crown Funding. The figure 60 above shows the route of the Te Whau Pathway in Te Atatū area and those sites which lend themselves for it to pass through.

The entire area of the Te Atatū peninsula was divided by the north-western motorway (State Highway 16) in 1961. Within a decade, this area changed from rural to sub-urban (Te Atatū South, n.d.). The presence of this highway is undeniably an influence on development opportunities as it creates a sharp division between Northern and the Southern part of the suburb. Due to this division, most of the potential 'Third Places' like the library, pony club, rugby league club, swimming pool service and much more can be accessed through the Northern Te Atatū suburb but are cut off from the communities in the southern part.

Te Atatū South is a confluence of many things; it is an important transit node, with convenient access to both the Auckland central city and Henderson town centre.  It is an ecological basin with coastlines on east and west with its elevation that gives beautiful views of the Waitakere Ranges and it has an industrial area on McLeod Road. The building on the chosen site is currently in use as a boat club and the existing characteristics have the potential to be enhanced, celebrated and buttressed to highlight the unique place that the Te Atatū Boat Club is now and could become in the future.

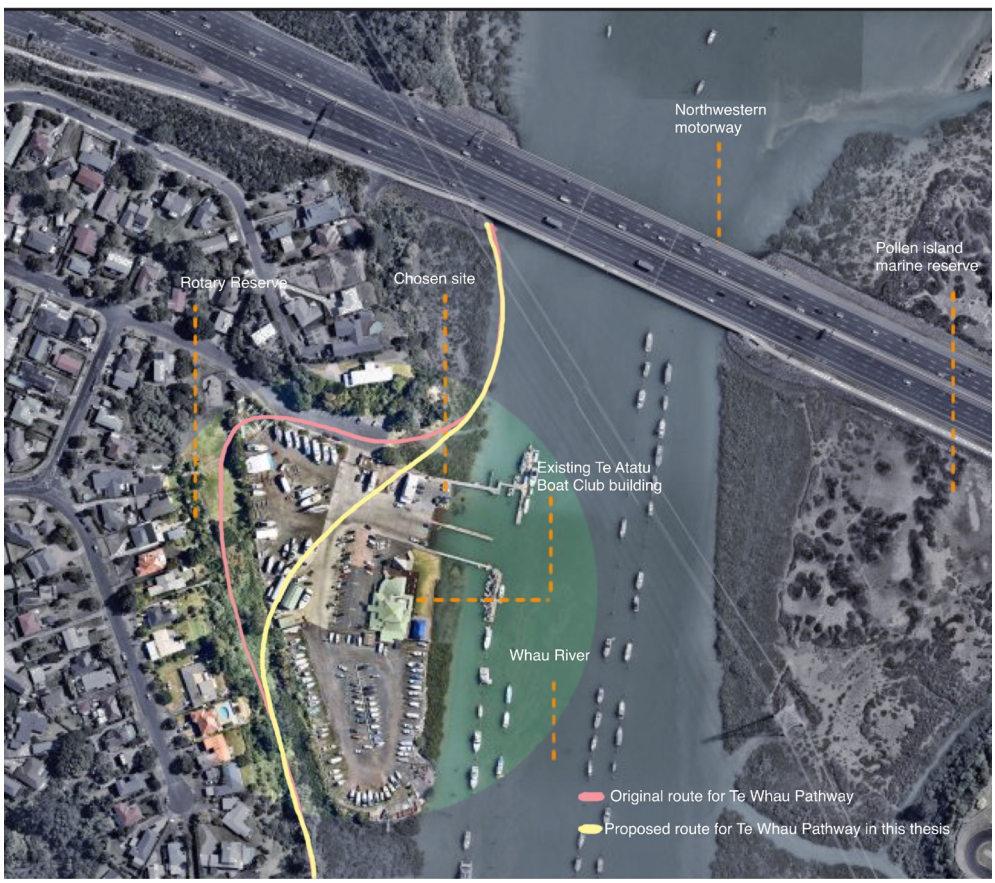



FIGURE 64 - Te Atatu Boat Club (Site chosen) and neighbouring context with the original and proposed Te Whau Pathway route.

FIGURE 65 - Car parking area on the site.

FIGURE 66 - Existing Te Atatu boat club building

FIGURE 67 - Waka Ama launching area

FIGURE 68 - Boat parking area on the site

**DESIGN DETERMINANTS:**

The following Design determinants contribute to a comprehensive understanding of the challenges and opportunities that can be built upon with this site and programme:

**SWOT Analysis:**

**Strengths:**

- Strategic location.
- Site sits in between many river-based activities and Te Whau Pathway.
- Site is located in between many suburbs and is away from the busy part which is the city.
- Site can be viewed from the state highway connecting the two halves of Te Atatū suburb..
- Site also enjoys views from the river.

**Weaknesses:**

- Access and circulation is obstructed by Te Whau Pathway that passes through the site.
- Existing context lacks green spaces and shaded areas for people to use.
- The access to the site is through a residential area. There is a limited large vehicular access to the site due to the same reason.

**Opportunities:**

- Opportunity to create an active public realm.
- Already existing heavy footfall due to the Boat Club. This could be further increased through design.
- Long frontage along the river.
- Potential to become a catalyst for many more ‘Third Places’ in the city using transit-Oriented Development.
- A mix of residential, institutional and industrial areas in the neighbourhood, which can be tapped to create a robust and lively ‘Third Place’.

**Threats:**

- The large number of activities on the site can generate traffic congestion problem if vehicular movement is not resolved properly.

- If the activities are planned and placed vertically or if the entire site is used for design, the development might look over powering as compared to the residential surrounding.

- Parking can become an issue because of additional pressure on the site considering the passage of Te Whau Pathway through it.

**PROGRAMME:**

The transit area plan targets its potential to encourage increased ridership, better integrated land uses and ultimately to serve as a model of neighbourhood Transit Oriented Development for Tamaki Makaurau Auckland.

Taking the findings from case Study 1, the plan takes a two-pronged approach to unlocking that potential with the design of a bus interchange because it has been a potential transit infrastructure project that is going to be proposed at some point in Te Atatū area and a 'Third Place' with infrastructure improvements.

The proposal calls for retail development including an outdoor market, neighbourhood grocer, pharmacy, a small amount of commercial and co-working space, enhanced circulation and parking, new parks and a central bus hub that connects the suburbs to the city centre. This design with a range of programs would compliment the existing boat club building by taking into consideration, the needs of Waka Ama club and also introducing spaces that are missing like the Waka launch area for general public and outdoor restaurant or even area.

The aim of this design is to generate higher population density, greater transit ridership and integrated transport options, more diverse land uses and a high quality 'Third Place' for locals and visitors alike.

## PROGRAMMATIC BRIEF:

| | |
|---|---|
| **PARKING** | |
| • Cars | |
| • Bikes | |
| • Boats | |
| • Buses (20) | |
| | |
| **INTERCHANGE PROGRAM** | **700 m²** |
| • Atrium | 300 m² |
| • Cloakroom | 30 m² |
| • Waiting area | 100 m² |
| • Help Desk | 20 m² |
| • Real time information centre | 30 m² |
| • Ticketing area | 30 m² |
| • Lounge area | 100 m² |
| • Public restrooms | 40 m² |
| | |
| **HUB PROGRAM** | **1125 m²** |
| • Cafe | 180 m² |
| • News paper kiosk | 20 m² |
| • ATM Machines | 30 m² |
| • Florist | 20 m² |
| • Retail stores (4) | 50 m² X 4 = 200 m² |
| • Supermarket | 180 m² |
| • Pharmacy | 30 m² |
| • Emergency medical facility | 30 m² |
| • Bike hub | 75 m² |
| a. Bike repair zone | |
| b. Bike rental | |
| • Fitness centre | 200 m² |
| a. Lockers | |
| b. Showers | |
| • Creche | 120 m² |
| a. Day care | |
| b. Kids play area | |
| • Public toilets | 40 m² |
| | |
| **EXTENSION TO BOAT CLUB PROGRAM** | **2120 m²** |
| • Boat servicing area | 120 m² |
| • Berthing platform | 150 m² |
| • Restaurants (2) | 800 m² |
| • Open area banquet area (Event hall) – 150 to 200 people | 600 m² |
| | |
| **LANDSCAPE PROGRAM** | **730 m²** |
| • Plaza | 400 m² |
| • Picnic table area | 30 m² |
| • Pop-up area | 300 m² |
| | |
| **CIRCULATION AND ANCILLARY PROGRAM** | 30% of the total area |

**DESIGN:**

The design is envisioned as a development that both serves the local population and provides Tāmaki Makaurau Auckland with a new regional destination. The design will consist of different areas each with their own distinct identity and set of amenities. The Te Whau Pathway crosses between and links the different areas while further linkages are made to the river.

- The first area is the bus station with safe transit spaces and waiting areas.

- Another area of development is the shops and the mix of local retail that forms an important part of the design. This stretches along the route of the pathway on the site and establishes a series of exciting public spaces anchored to it. This will encourage people to support local retailers while also providing convenient access to essential items such as grocery and pharmacy for bus commuters

.

- The last area of development re-imagines parts of the site to become series of public spaces designated to encourage an active lifestyle. This incorporates spaces like the fitness centre, kids play area, library kiosk, ramp to carry the waka into the river and so on.

This design revitalises the Boat Club site area using the concept of theorists like Ray Oldenburg who says “Third places mostly focus on social aspects, that it is welcoming and comfortable, is visited by regulars and is a place to meet old friends and make new ones. Often Third Places are small businesses, cafes, coffee shops, bars, pubs, restaurants, community centres, general stores and so on.” (Oldenburg, 1989. p. 25). Even though such destinations are called ‘Third Places’, Ray Oldenburg considers only a few physical aspects of these places such as the proximity or accessibility from work or from home.
However, the writings of Jane Jacobs regarding the four different conditions to create diverse public places, as discussed in the previous chapter, has become a pivotal theory to support use and social interaction for ‘placemaking’ in this design.

## PRELIMINARY DESIGN :

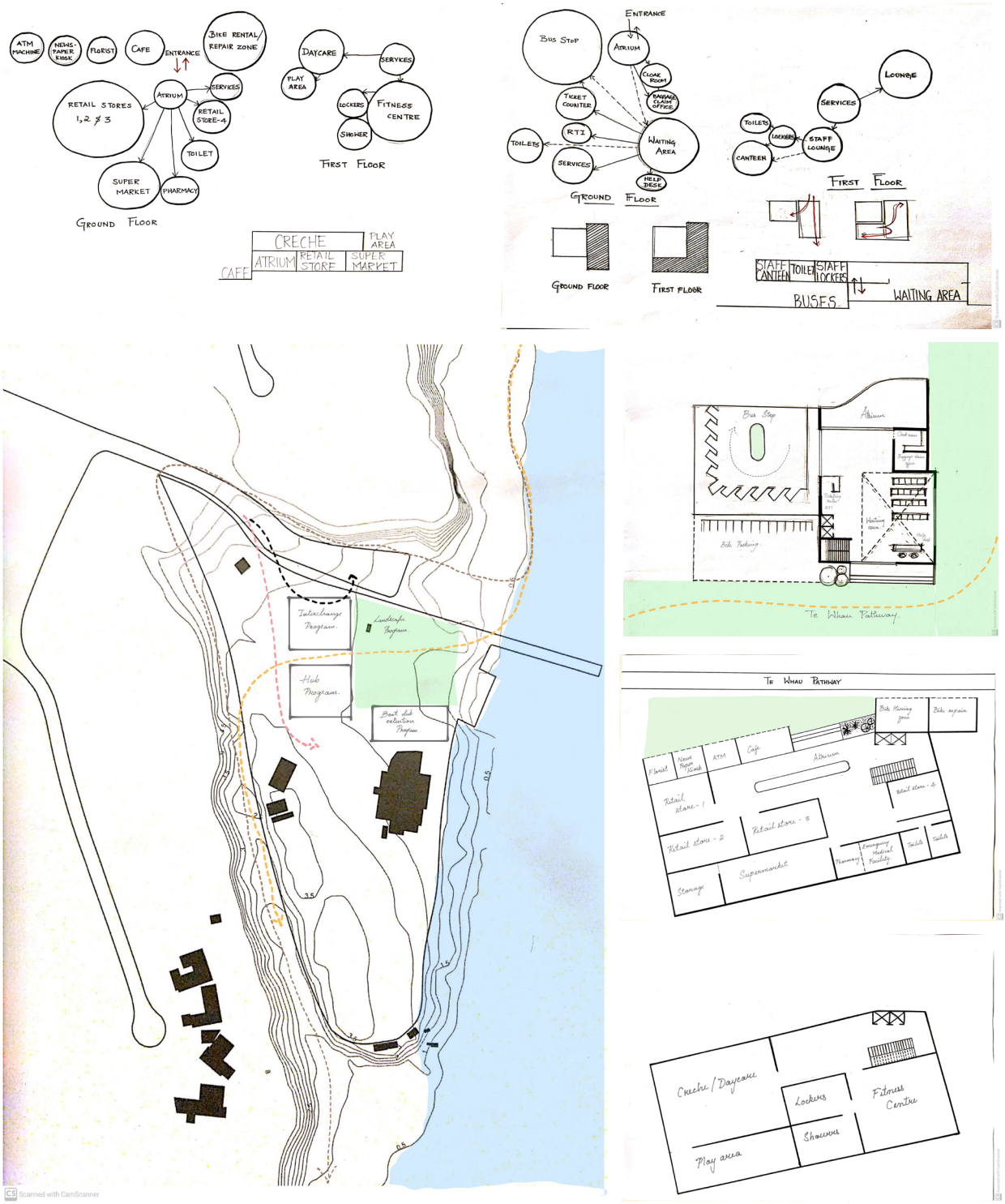



FIGURE 69 - Initial parti diagrams to group various programs together and explore the portential of the site to design between Te Whau pathway and Boat Club activities.

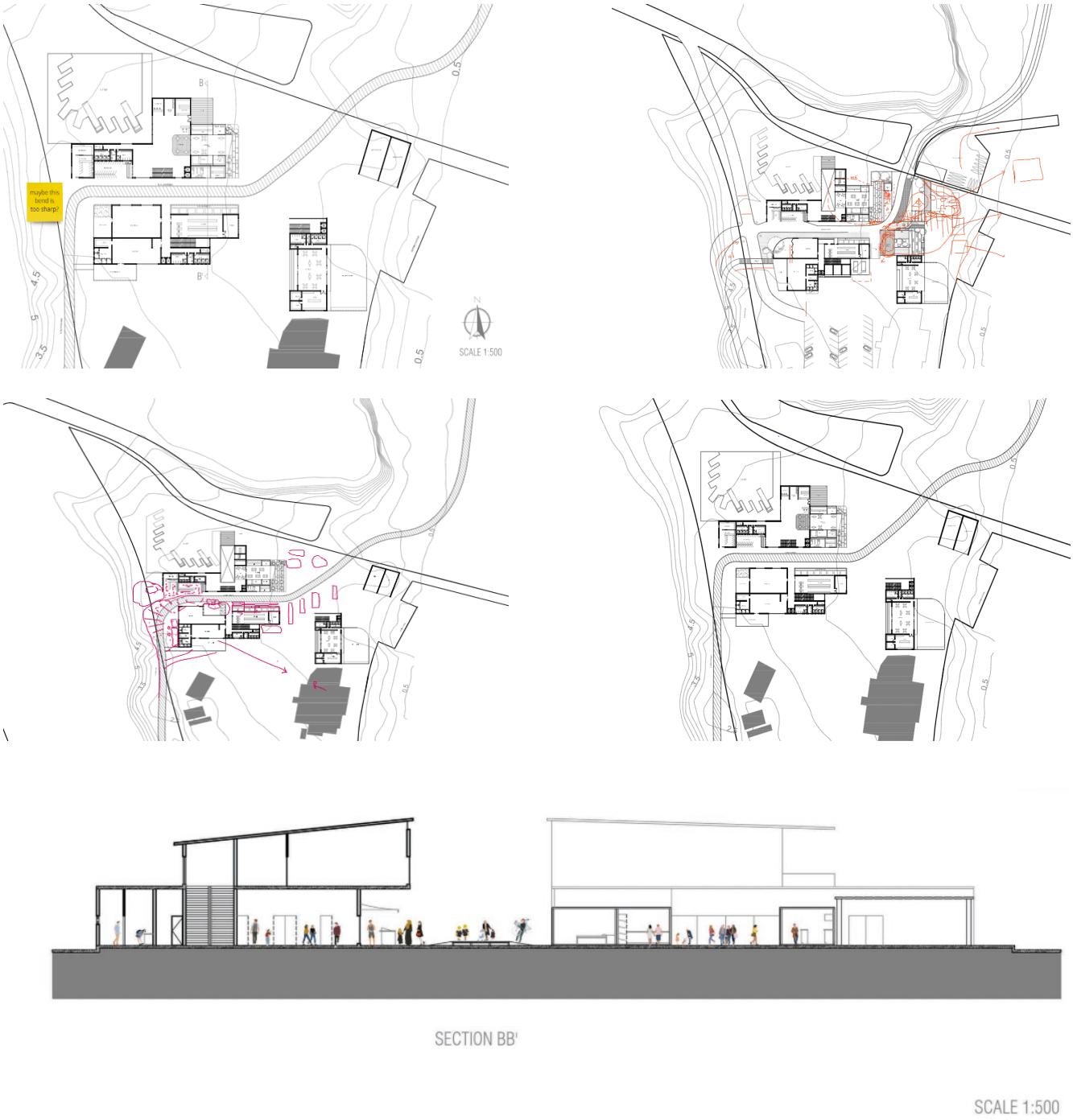



FIGURE 70 - Initial design drawings to group various programs together and explore the portential of the site to design between Te Whau pathway and Boat Club activities.

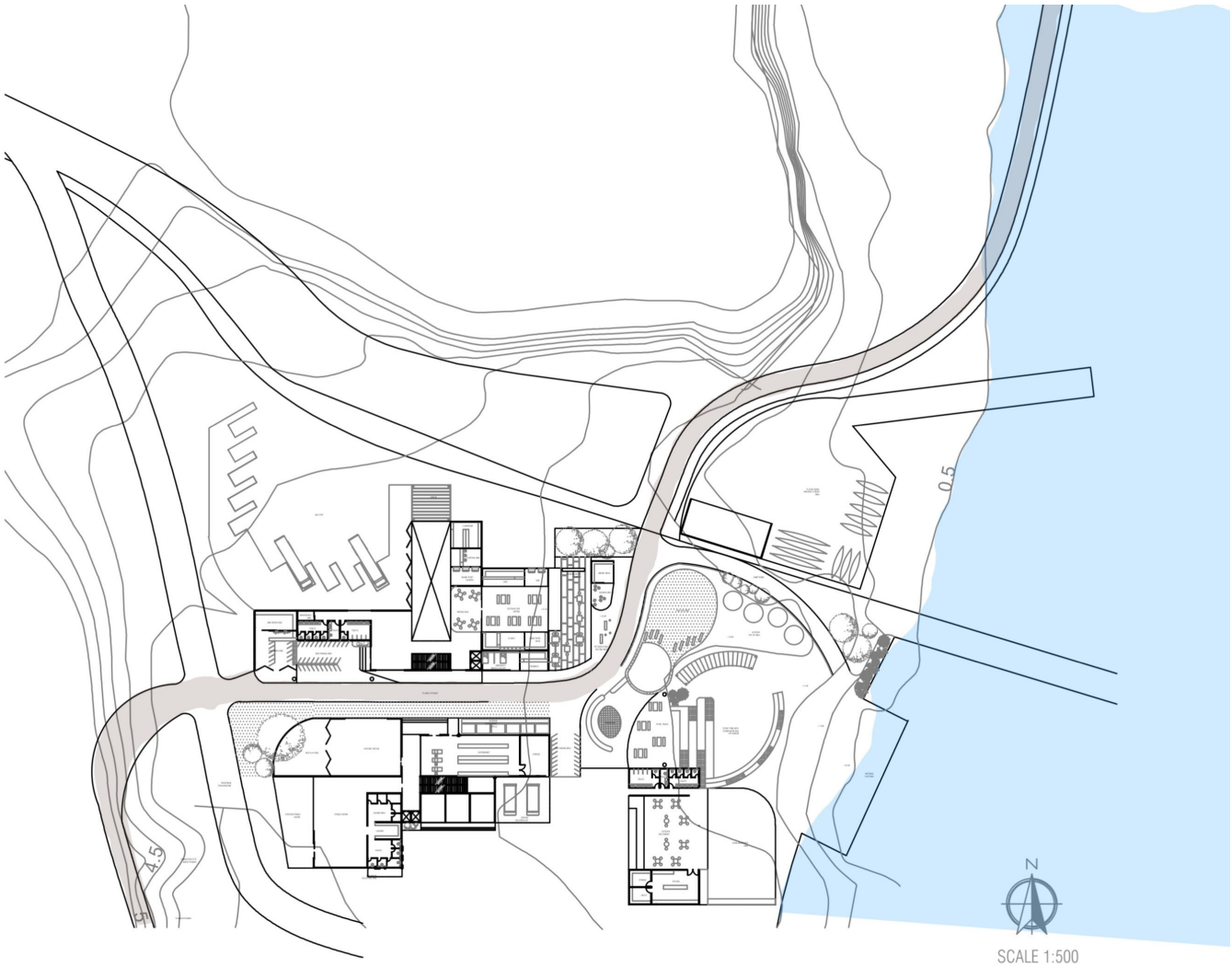



FIGURE 71 - Site plan as of 15/ 11/ 2021


FIGURE 72 - Final Site plan

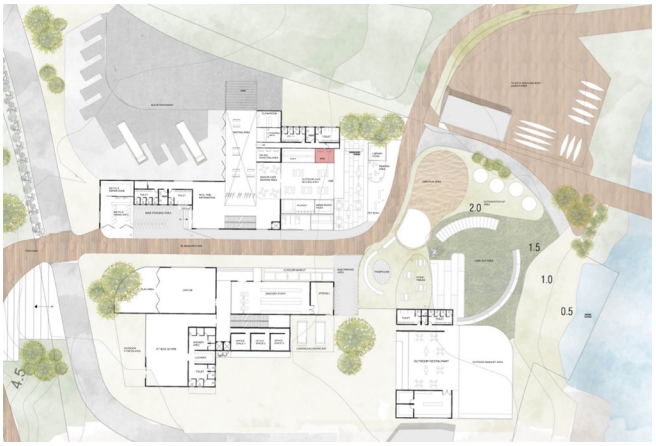


FIGURE 73 - ATM kiosk

FIGURE 74 - Bikle repair and rental area

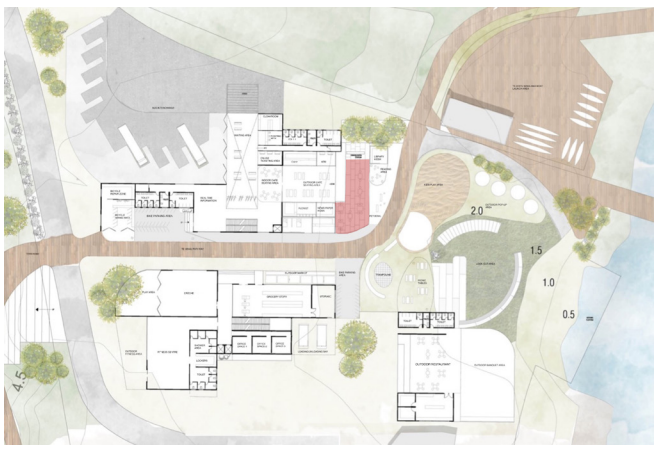


FIGURE 75 - Book reading area

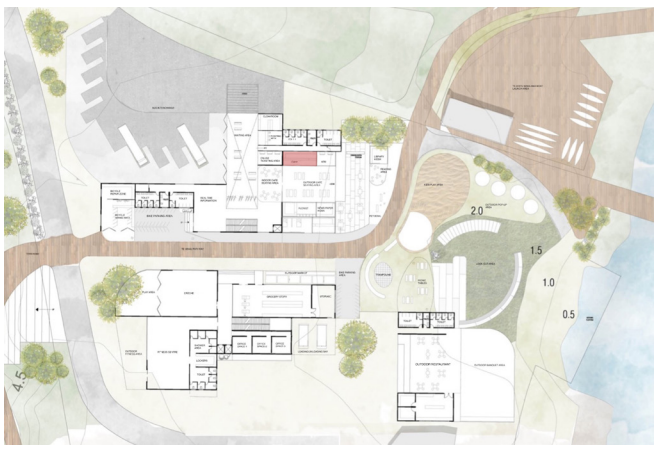


FIGURE 76 - Cafe

FIGURE 77 - Co-working space

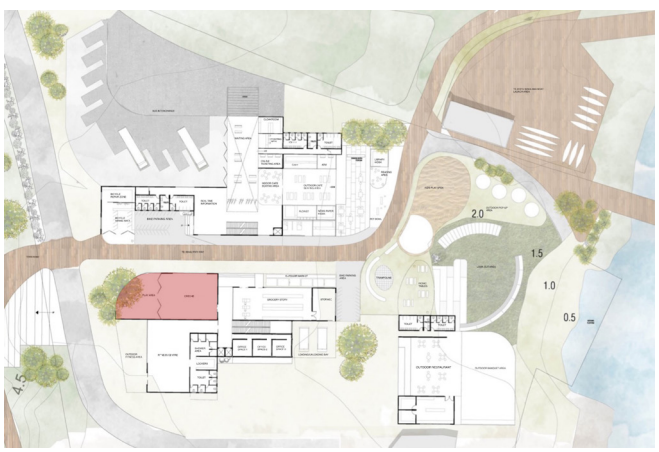


FIGURE 78 - Daycare

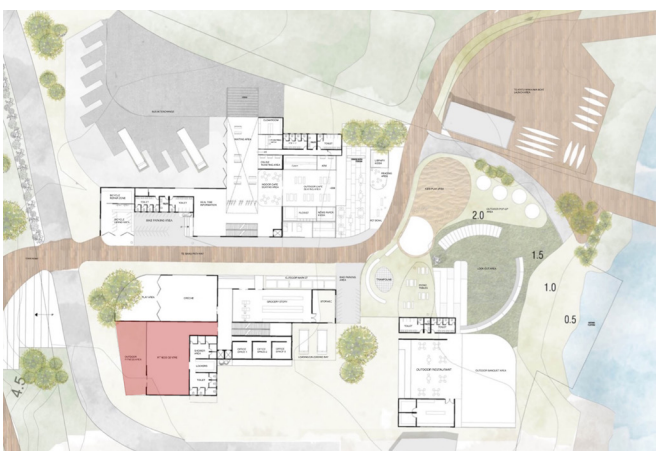


FIGURE 79 - Fitness centre

FIGURE 80 - Library kiosk

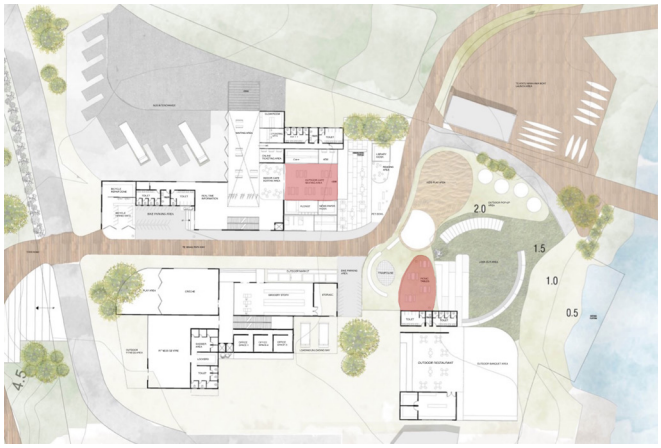


FIGURE 81 - Picnic tables

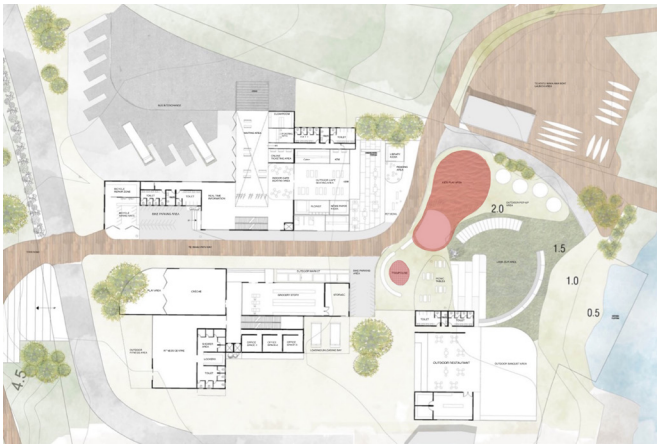


FIGURE 82 - Play area

FIGURE 83 - Shaded seating spaces

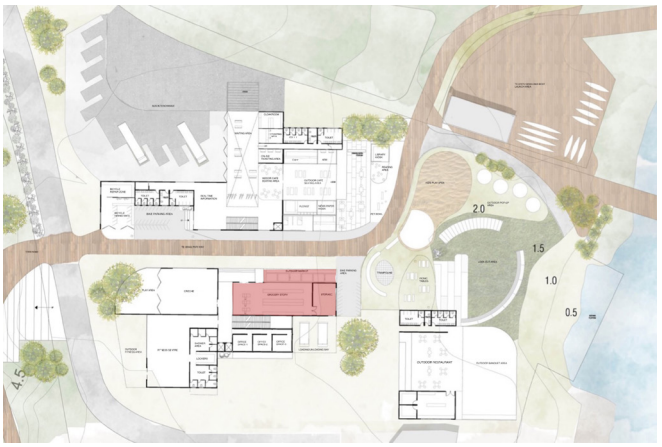


FIGURE 84 - Small supermarket

FIGURE 85 - Waka launch area for general public

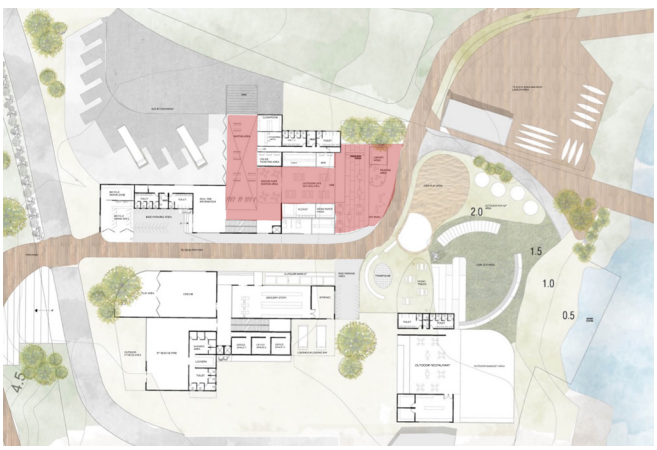
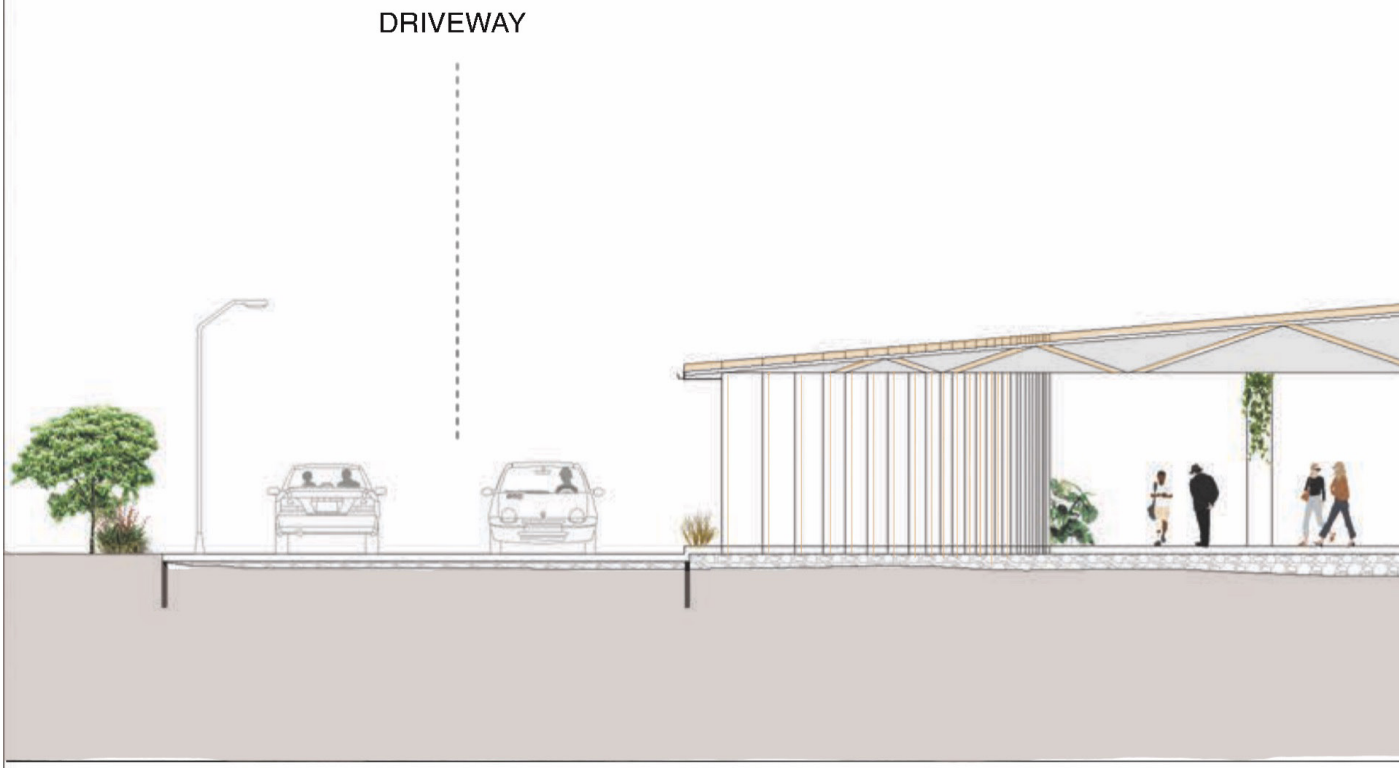


FIGURE 86 - WiFi access zones


DRIVEWAY

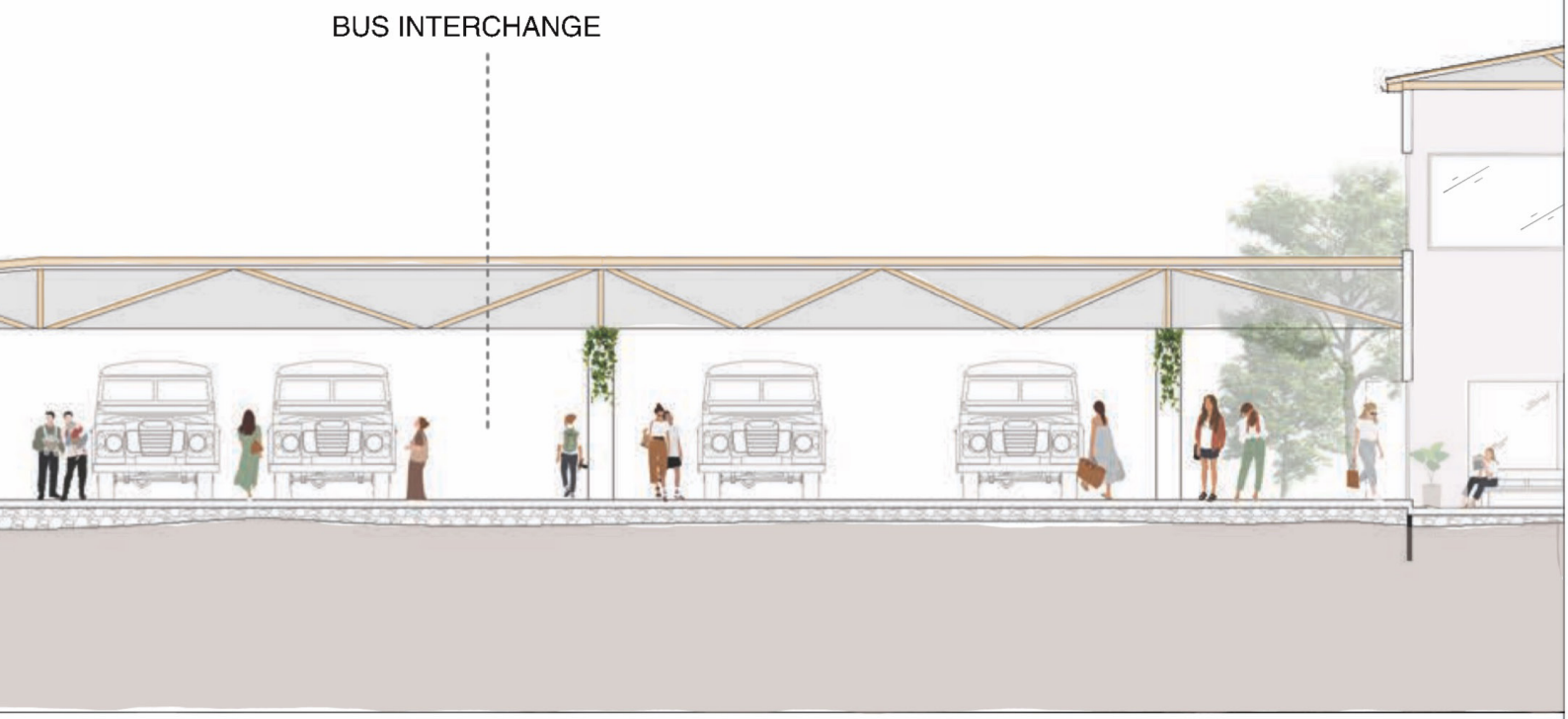
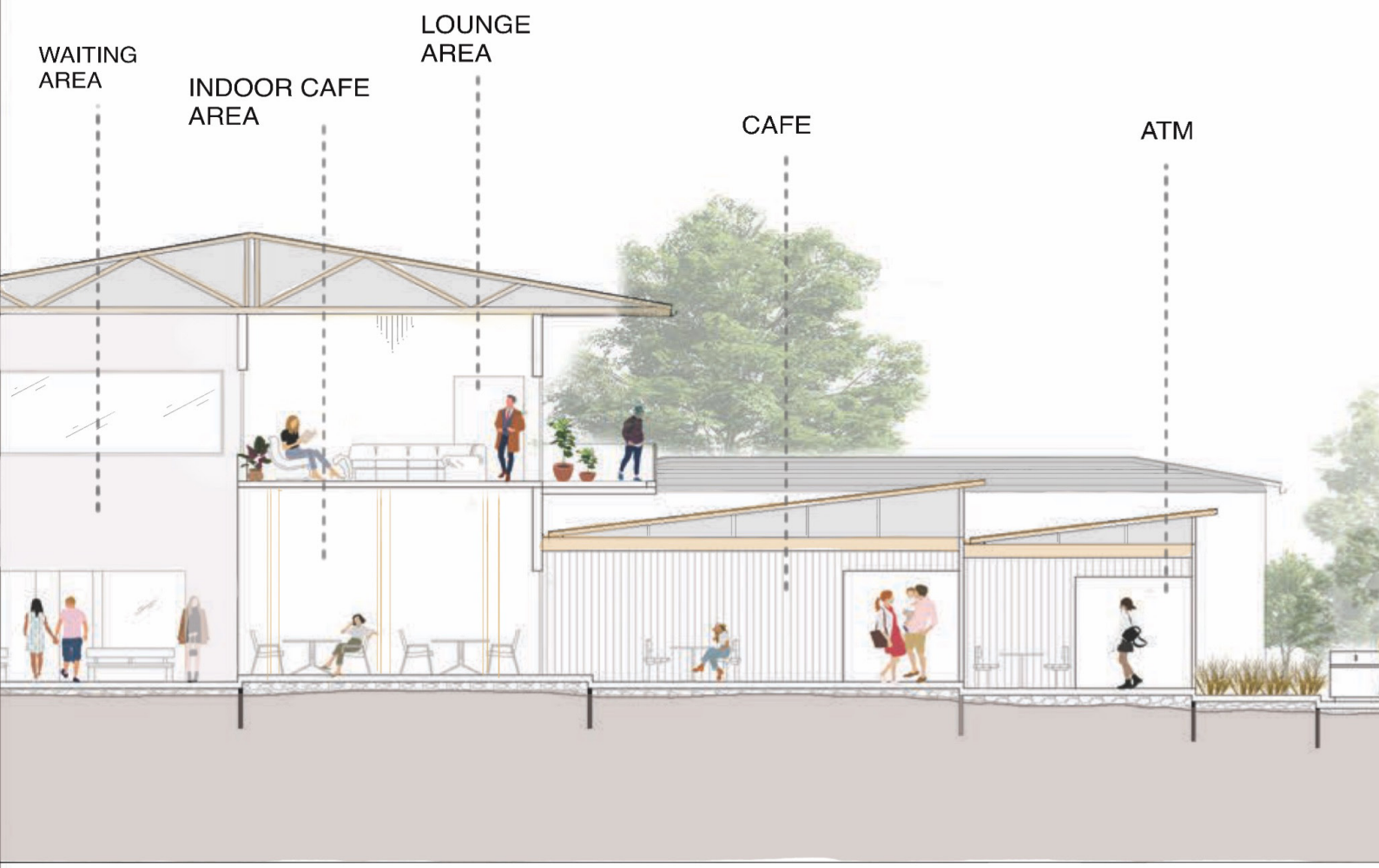



FIGURE 87 - Section AA': Bus interchange


WAITING AREA
INDOOR CAFE AREA
LOUNGE AREA
CAFE
ATM

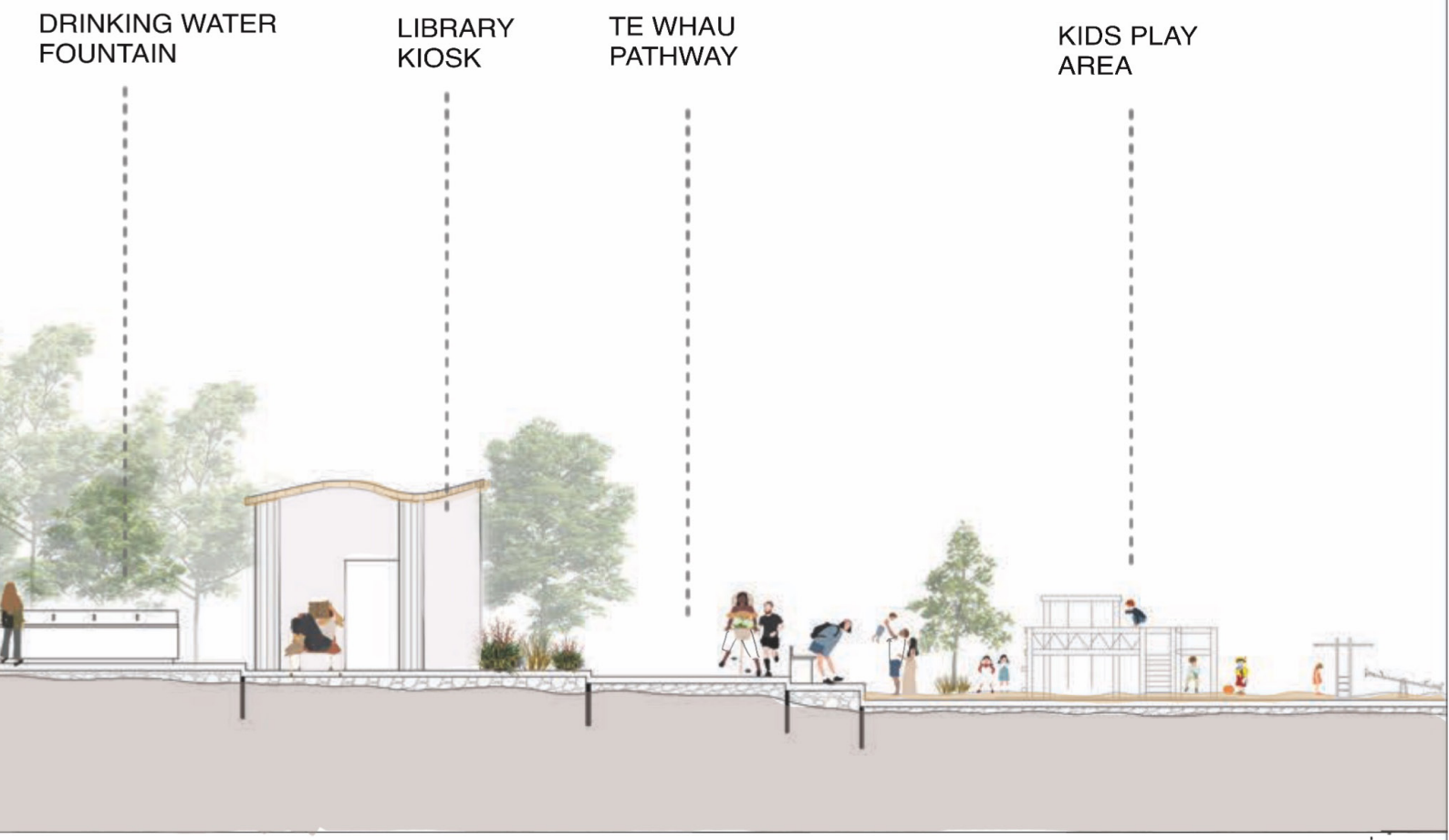



FIGURE 88 - Section AA' : Waiting area to kids play area

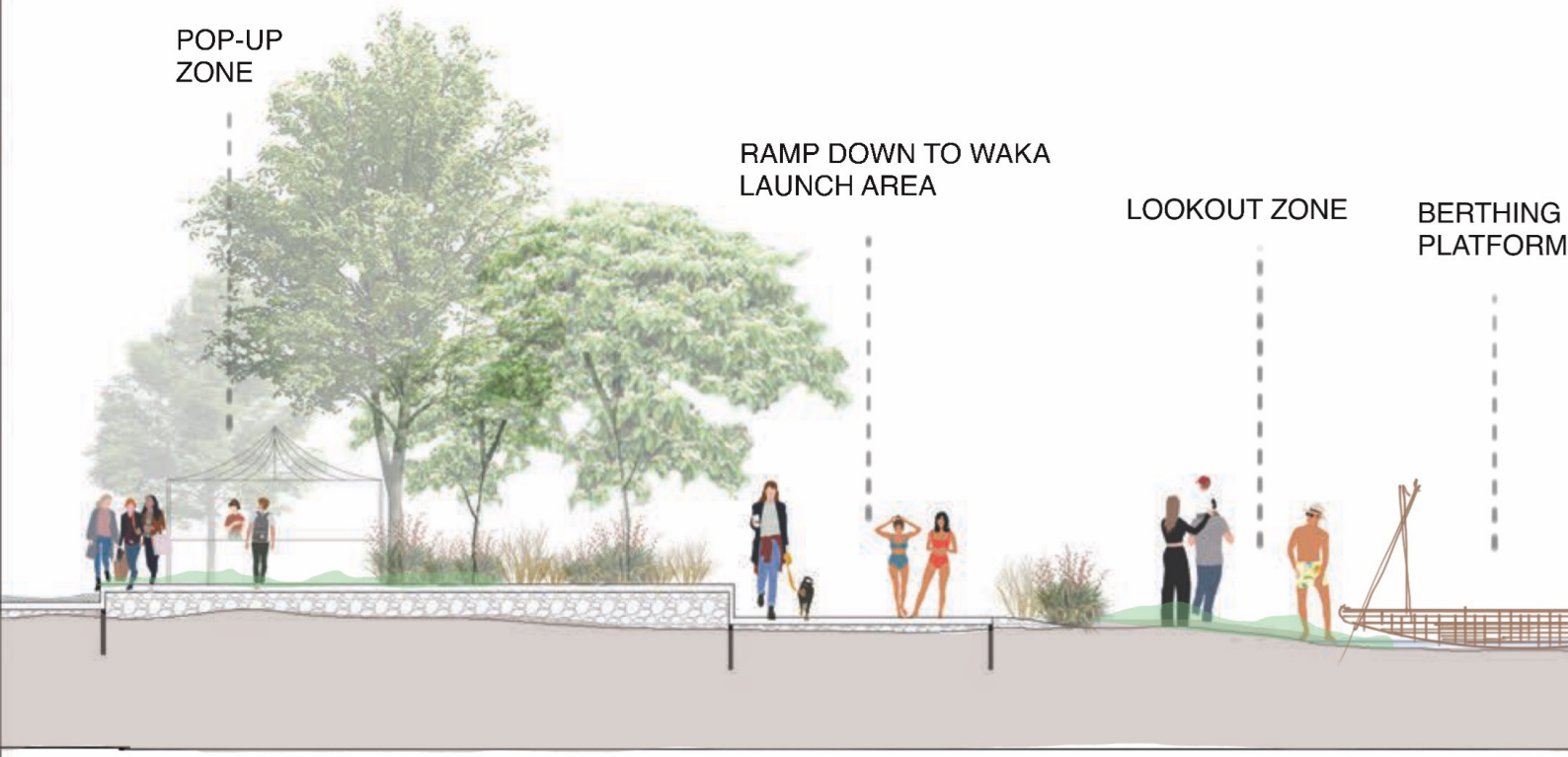
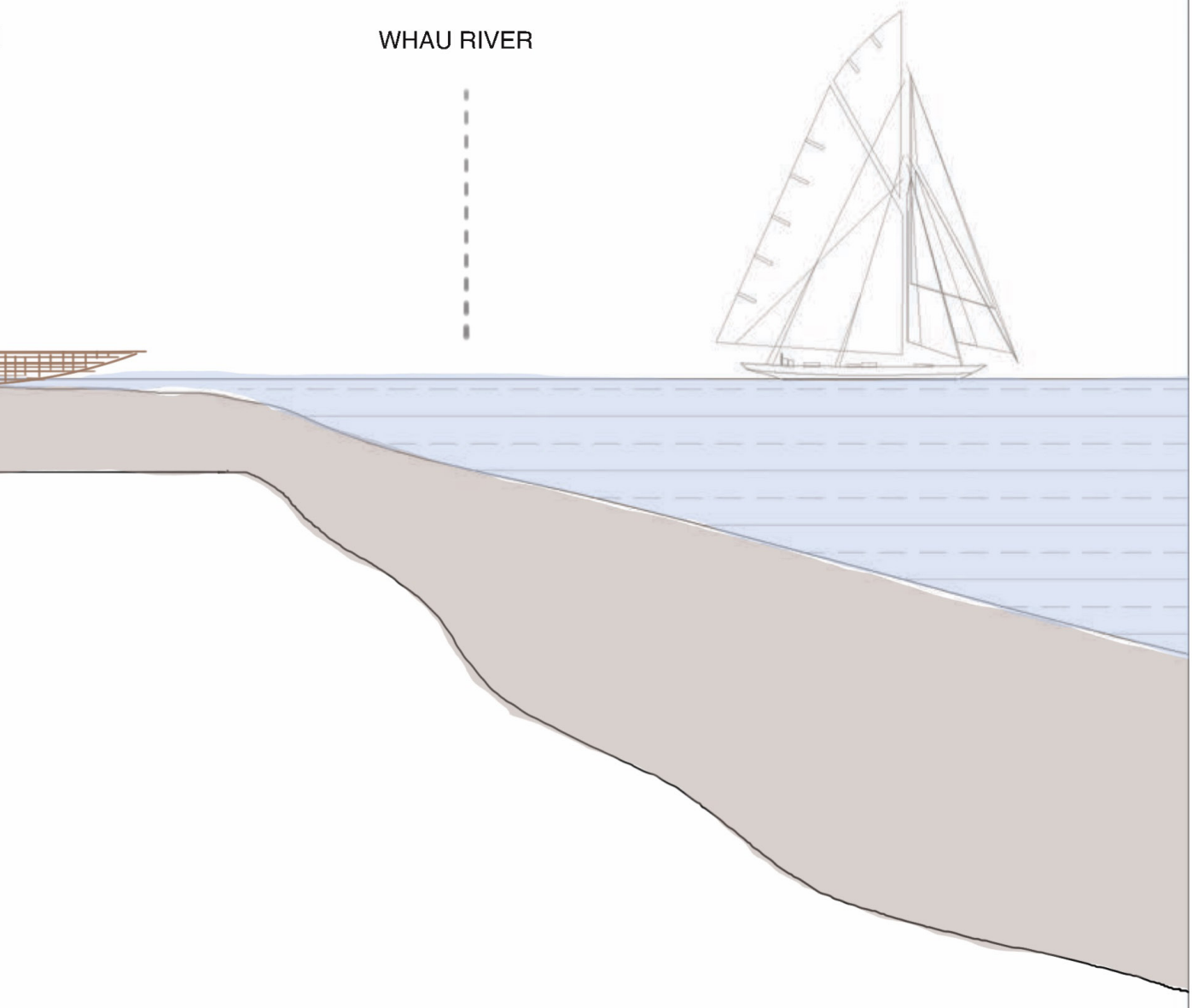



FIGURE 89 - Section AA': pop-up area to whau river


WHAU RIVER

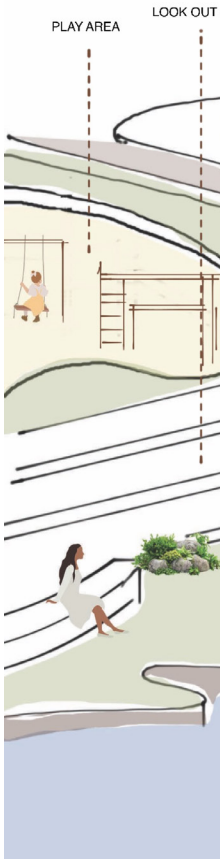




FIGURE 90 - View from Te Whau pathway


FIGURE 92 - View from the entrance of the site

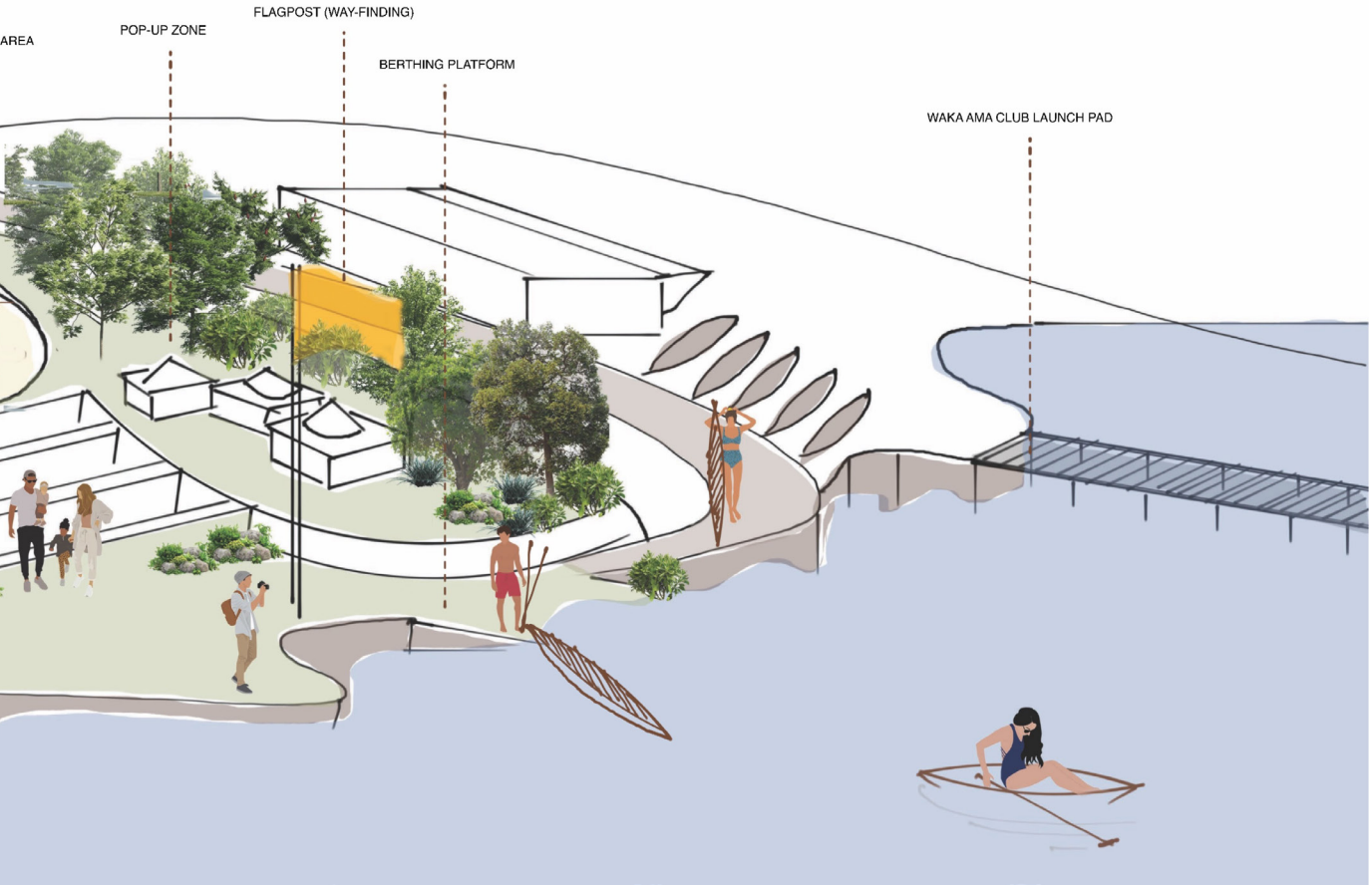



FIGURE 91 - View from wai Te Whau





FIGURE 93 - View from the kids' play area

# FINDINGS AND CONCLUSION

# FINDINGS + REFLECTION

Effective public places are not designed very often because their complexity is scarcely understood. William Holly Whyte said, “It is difficult to design a space that will not attract people. What is remarkable is how often this has been accomplished.” (Whyte, 1988. p. 28). The first step to do this was by understanding the needs of both natural (Whau river) and social (community) systems. A number od practices like site analysis along the river with the Muddy Urbanism Lab of 2021, literature review of history of Te Whau, critical mapping, conversations with people involved in infrastructural development along the Awa and so on has informed many design decisions and has guided this thesis project. The process of continuous research called out over the year uncovered potential for existing infrastructure along the river to make provision fore more than what they were originally designed to perform. This idea was tested in two different scales and a dynamic ‘Third Place’ was created by using ‘Placemaking’ as a tool in both these case studies. With extensive design research, this thesis has –

- Developed a ‘strategy of layering’ that combined micro programmes (like pet bowl. Wayfinding flag etc.,) in case-study 1 to move from the most basic amenity (toilet block) aimed at pathway users, to generate a ‘Third Place’ that can bring local res idents and pathway users together. From this, I propose that any infrastructure holds the capacity to operate at a scale between the very large and the very small and in doing so, should consider a broad range of users.

- Multi-functional infrastructure supports a wide range of users to have maximum effect. This is seen in case-study 1 where both local residents and Te Whau Path way users are provided within what could otherwise be mono-functional facility. Going further, this informed the large scale case-study in which the site was provided with an opportunity to house diverse activities that include both active and passive engagement which helped foster an active public realm satisfying Jane Jacob’s first condition to create diverse public areas that states, “The district and indeed as many of its internal parts as possible must serve more than one primary function; preferably more than two. These must ensure the presence of people who go outdoors on different schedules and are in place for different purposes but who are able to use many facilities in common.” (Jacob, 1961. p. 151) This has been elaborately explained in ‘Urban and Placemaking concepts’ chapter.

- This thesis design process finds that the distribution of the program should be done only by identifying relative levels of privacy for maximum utilization of space by the users. This has been explored with the concept of Tapu and Noa in both the case-studies which enhances the activeness of the space and organises various layers of activity for the users thereby influencing the sociability of the space.

- The ‘Third Places’ designed in both the scales are at the convergence of multiple activities and this benefits from the enhanced connectivity since both the case-studies sit in unique sites between the Te Whau Pathway and the Whau river. These ‘Third Place’ can synergize on the footfall that the sites receive and thrive.

- The chosen sites and the envisioned programme for the design encourages multi-modal transport in Tāmaki Makaurau Auckland. Case-study 1 provides a platform for the users to utilize new and small-scale modes of transportation (like E-bikes, E-scooters, etc.,) with the provision of charging stations and a pit stop. The larger case-study encourages its users to shift from cars to a more efficient and a convenient way to travel by connecting the pathway to a city wide bus network that makes it easy to travel between the city and its suburbs.

In reflecting upon the process chosen to carry out this particular thesis, there has been extensive learning and incredible enjoyment in engaging with sites that are set in a city I wasn’t familiar with, in the start of this academic year. Many challenges and changes were experienced while carrying out a research proposal like this with multiple scales. This process has been engaging through experiences and has taught me concepts that inform this thesis proposal.

# CONCLUSION

Transit infrastructure is one of the most important part of a growing city's plan. Implementation of multiple functions into these infrastructure at Tāmaki Makaurau Auckland is an example of how transit-oriented development can serve to revitalize this city by leveraging the strengths of already existing infrastructure and forming a 'Third Place' in the community by 'Placemaking'.

The infrastructure along Te Whau Pathway is an exciting opportunity to catalyse positive change appropriately integrated within transit areas for surrounding suburbs. The 'Third Places' integrated with areas of transit will encourage people to choose modes of transport other than cars, brings together a range of amenities in one single area and activates spaces to provide people of Tāmaki Makaurau Auckland a vibrant public realm that stages interaction.

The two case studies have been presented as a model to show that multi-functional infrastructure has the potential to turn existing transit infrastructure in Auckland, both at the city scale (a bus interchange) and at the suburban scale (Te Whau Pathway), into productive 'Third Places', and that these places both encourage an increase in transit ridership and the use of mixed-transport modes as well as proving as spaces for the kinds of social exchange that third places support.

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