RESEARCH

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MIKAELA MANALO

**RE-AWAKENING CANNONS CREEK:
REVITALISING THE COMMERCIAL CENTRE**

BY
MIKAELA MANALO

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submitted to the Victoria University of Wellington
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I cannot wait to see what the future will hold for me.

**“Nothing in this world is more
simple and more cheap than
making cities that provide better
for people.”**

- Jan Gehl
(Danish Cultural Institute, 2020)

ABSTRACT

As of last year, the Prime Minister and Minister of Housing and urban development has announced a 25-year project to regenerate Eastern Porirua. \$1.5 billion will be contributed towards delivering better public housing as well as a safer and better neighbourhood. (Ministry of Housing and Urban Development, 2020) “This is a large, long investment to deliver a step-change for this strong vibrant community, who are amongst the most disadvantaged in New Zealand” (Ministry of Housing and Urban Development, 2020).

As of right now, Cannons Creek has a dying commercial centre that has been struggling for many years. Research has shown that many locals living in the area are familiar with their ‘negative reputation’ of an unsafe neighbourhood with high crime rates (James, n.d). Therefore, this has affected the community’s growing progress (James, n.d). Based through site observation, the centre has poor infrastructure, unused car park spaces, and abandoned buildings. Therefore, the current state may encourage crime to occur around the area. Moreover, there is no place for social support, public information and other facilities a community would need.

Therefore, the aim of this thesis is to investigate ways of creating a liveable community by integrating an urban intervention into the area. In this context, intervention is defined as combining architecture and urban interventions to create a place of activity and social engagement. Cannons Creek will be revitalised into a vibrant community to live in. Eastern Porirua overall is slowly growing and changing, there is now more diversity within the population. The Transmission Gully that is set to finish within 2020 which will also add more value towards the land and people living in Porirua. There is now an opportunity to foster intensification within the suburbs town centres.

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CHAPTER ONE |

INTRODUCTION + BACKGROUND

1.1 PROBLEM STATEMENT

There is a growing public concern about the state of Eastern Porirua, particularly the suburbs of Cannons Creek and Waitangirua. According to Bev James' research about community safety and residential movement, 24.8% out of 170 people that participated claimed that crime in Cannons Creek is a "fairly big problem" (James, n.d.). This shows that crime is relatively one of the factors that people in the community worry about. Therefore, this affects people from moving into the suburb.

Additionally, there are also further internal issues that was given in the interview. Examples of these are lack of health services, public transport, and loss of mobility for the elderly. (James, n.d.). Furthermore, children do not have enough recreational activities and proper educational support which leaves children wandering around (James, n.d.). Therefore, the mall needs to be more acknowledged and revitalised to suit the community's needs and wants.

Cannons Creek Mall is a suburban shopping centre in between the suburbs of Waitangirua and Ranui. Currently, the shopping centre is dying because of poor management by the Government. "The community was often forgotten by policy advisors" (Manch and Nicoll, 2018). In addition, negative perceptions were created and has been built up over generations (Mcbride, 2013). Therefore, it is important that Cannons Creek mall need to be maintained and utilised properly as Porirua continues to grow and change. By doing this will not only help the community with more support but change the perception of crime that is going around the area (James, n.d.)

Figure 1. Map of Porirua

1.2 PORIRUA SETTLEMENT

Population growth started in 1965 when Hutt Valley could no longer contain the increasing population (McIntock, 1966). The population increased from 669 people in 1897 to more than 19,000 people by 1965 (McIntock, 1966). As a result, the Government had to act quickly to accommodate the rapid population. Therefore, the Government built in more than 2,000 State Houses in Porirua (New Zealand History, 1966). For this very reason, the population expanded further which concludes that a high maintenance and support is needed to keep the community together, according to Bev James' research (James, n.d.).

However, for the past many years, Porirua became less and less involved within the Governments plan of development. (Manch and Nicoll, 2018) Porirua city was not prioritised until only recently when Porirua gained a status of becoming a city (McIntock, 1966). As a consequence, the lack of involvement delayed the progress for developing suburbs like Cannons Creek to grow (Mcbride, 2013). In particular, it is speculated that the community is lacking in social ties such as community attachment which has conspired the negative reputation (James, n.d.).

In contrary, Cannons Creek has built a good foundation up until now. There are many residents that conclude Cannons Creek as safe and a community driven place with lots of support and plenty of opportunity for the suburb to grow (Mcbride, 2013). Moreover, the negative reputation does not define the community itself, "it's reputation isn't reality" (Mcbride, 2013).

1.3 PORIRUA CITY GROWTH STRATEGY

Porirua City has built a good reputation and foundation since people have settled in the area. It grew from being a small coastal settlement to the growing city it is today (Porirua City, 2019). The population has been rapidly growing in which the council has decided to replace the 2008 framework and overlap it with a new framework that will help develop the next 30 years and beyond of Porirua City (Porirua City, 2019).

The framework will identify the big issues that the city is currently facing as well as issues that may arise in the future (Porirua City, 2019). Examples of these are dealing with economic issues, environmental issues and investing in more affordable housing (Porirua City, 2019). The community will have an active part to the change as this allows them to shape the city that they want it to be.

Moreover, one of the plans in the growth strategy is investing \$1.5 billion in the regeneration of Eastern and Western Porirua (Porirua City, 2019). There is now an opportunity to expand the community's facilities as well as supporting other businesses. Furthermore, the number of ongoing and proposed projects such as the Transmission Gully that is set to finish in 2021 will strengthen the area and attract a lot of people

“72% of people thought there should be a mixture of residential and business development around the Transmission Gully Interchanges with 73% of people supporting the land being zoned commercial/industrial”.

(Porirua City Council, 2019)

1.4 TRANSMISSION GULLY

The transmission gully is one of the proposed projects that impacts the development of Eastern Porirua. (Porirua City, 2019). As you can see from the map, (figure 2.) the existing route (red line) only passes through Porirua City and then connects towards Kapiti. Therefore, an assumption is made that most of the attractions and jobs will solely be focused around the city centre only. Additionally, the existing route is also a passing lane for those that want to get out of Wellington as well.

However, the proposed idea is to create several interchanges that will make the road safer, increase the capacity and passing opportunities. (NZTA, 2021) One of the interchanges is linking the main highway towards Kapiti but around the outskirts of the eastern and western suburbs of Porirua.

As a result, this will allow more opportunities for businesses to open, build more housing and gain more attraction. This is because people will likely want to be closer to the motorway interchanges as it is now easily accessible (Porirua City, 2019). Moreover, shopping centres from locations of Cannons Creek, Waitangirua and Whitby have the opportunity to expand whether it would be to regenerate or revitalise the whole area.

Figure 2. View of the Transmission Gully Motorway proposal

1.5 COMMUNITY FEEDBACK

The Porirua City Council has spoken to various communities to get the right answer. They used a fast iterative process that allows people from the community to contribute by making them respond to basic principles that were made. These were often done in workshops or through community panel responses.

Other techniques such as social media and advertising were also used to gather all necessary information that is needed to finalise the plan and to get the information out into the community. Once the main principles have been decided and drafted. Its next discussion was to check how each principle could be put into practice.

PRIMARY AND INTERMEDIATE STUDENTS

- protecting the natural environment
- the safety of the children when walking from school or going to parks
- they like the image of nice houses to live in but not high-rise apartments.

YOUNG ADULTS

- changing the idea of the 'negative image' that Porirua has especially towards Eastern Porirua
- finding work and earning income is a major issue. They cannot stay in Porirua.

OLDER GENERATION

- changing the idea of the 'negative image' that Porirua has especially towards Eastern Porirua
- finding work and earning income is a major issue. They can't stay in Porirua

PASIFIKA COMMUNITY

- importance of connecting more widely with the community through church and youth group networks
- more connection towards the natural environment such as the harbour and creeks
- better training and support for businesses
- more family orientated facilities especially for students and the younger generation

NEW MIGRANTS AND FORMER REFUGEES

- more support and jobs in Porirua. Lots do not often have skills and experience
- a diverse culture, wanting to also fit in the community

1.6 RESEARCH QUESTION

***“How might Cannons Creek
dying commercial centre
be revitalised through the
integration of urban
interventions?.”***

1.7 THESIS DIRECTION

The focus of this research centers around improving and developing Cannons Creek's commercial centre. Specifically, mitigating the negative perception that has been built up about the community for years (Mcbride, 2013). This thesis will propose an analysis on how that reputation came to be by using data and research that already exist. Moreover, understanding the community's style of living in order to investigate how an intervention can successfully improve the centre.

Therefore, the initial intended result of the research of the earlier stages was to expand the commercial centre of Cannons Creek. Intending to improve the physical appearance as well as investigating ways to improve the economy of the area. However, as the research continued it became more clear that the community did not fully depend on businesses but needed a place where they can relax and support one another as a community. It is important to provide necessary facilities that would support the community especially towards the younger generations with proper educational support and provide activities for them to turn to.

Consequently, the new thesis direction is towards designing of a community hub as well as an open commercial centre. It will be a centre that the residents of Cannons Creek as well as other people that can be provided the necessary facilities that are currently lacking. It will become a place that people do not need to go as far as to the city centre to get their necessities or relax.

1.8 RESEARCH AIM

- To investigate what services and facilities that will benefit the community.
- To address the root causes and investigate ways that can mitigate the perception of a 'negative image' of Cannons Creek.
- To investigate ways how the Community hub/ Commercial centre can be differentiated from a normal community centre.
- To investigate how building a Community hub/ Commercial centre will improve the social conditions as well as economic conditions.

1.9 RESEARCH OBJECTIVES

- Critically explore through design achievable needs of the residents in Cannons Creek.
- Reduce the current reputation of Cannons Creek which is a 'negative image' and subconsciously replace with a positive image.
- Re-establishing the important connection Cannons Creek has towards its stream. An idea is to place the community centre nearby the stream which is a very sacred place for them. However, the area has not been maintained and is often forgotten.
- To design a space that integrates the shops, the mall and the community centre with a connection to urban interventions that would help liven the commercial centre

Figure 3. Research Methodology Diagram

1.10 RESEARCH METHODOLOGY

The design process of this thesis will be based on a lot of literature review as well as precedent reviews. On the other hand, scientific research such as demographics and data from the current plan of Porirua City Council's growth strategy will also provide input for the proposed design strategies as well later on.

Overall, the thesis will be research based. The ideas will be influenced by:

1) emergent process (unself-conscious process) - which is a trial and error process. This is when the design develops over time. This can be influenced by constant research or just through theory and observation.

2) Principle based process (self-conscious) - which is a process that follows through rules and principles. This can be gathered from data as well as the literature reviews and precedent reviews.

Overall, the community hub will go through 3 concept stages and will be critically reflected through research, literature reviews and precedent reviews in order to get the final design.

1.11 RESEARCH SCOPE

The scope of this research sets out to generate a criterion of features of a successfully planned masterplan for a community/ shopping centre that will cater the needs of the community appropriately. This criterion will be informed both by knowledge gained from a literature review, case studies and data that is collected from the existing proposal of Porirua City Council's growth framework.

The developed criterion will then be applied towards the design of a new community hub/ shopping centre for Cannons Creek. This investigation will aim to propose a series of concepts and is further developed at each stage. This will help show the process of how the community hub will come through the final design which is critical for this research investigation.

In order to achieve the aims and objectives, it is important not to limit the design by only searching for community design precedents but seeking and exploring for strategies of how community's can be transformed and improved. This is targeted especially for community's that centre around crime in their area. Moreover, it will be an exploration that is more personal and intimate as a fellow resident living in Eastern Porirua. This will help build a strong foundation for the design concepts together with expanding the knowledge about the area through personal observation.

1.12 RESEARCH STRUCTURE

Chapter One (Introduction + Background):

This chapter will be focused on introducing the topic, background information and problem statement. Furthermore, this will influence the research question and then explain the thesis direction as well as the research aims and objectives. Finally, the research methodology and research structure will demonstrate how the thesis document will be arranged.

Chapter Two (Investigative Studies):

This chapter will explain further about the context of Cannons Creek through demographics and other background information. It will also explain the factors/ issues of the commercial centre.

Chapter Three (Site Analysis):

This chapter is the process of researching and analysing the site location. It will be analysed through macro and micro scale in order to gather data of how the community works in different scales. Moreover, using several site analysis methods that are applicable to the research. These consists of road network, existing programmes, public space, and accessibility. Furthermore, the chapter will also analyse more closely into the site to understand what could be the potential problems and issues that the site is experiencing. Overall, the results of the site analysis will help establish the existing site issues which will help towards creating design guidelines and adapting it into design strategies.

Chapter Four (Literature Review):

This chapter will focus on two literature books that will discuss what a public space is and how a sense of place can be created. Both these literature will determine how a space can be successful and unsuccessful. Moreover, it will help establish ideas towards the design of a community hub/ commercial centre.

Chapter Five (Precedents + Case Studies)

This chapter will investigate on precedents that will relate and influence the formation of the building. Moreover, it will also cover case studies that show transformation of places

Chapter Six (Preliminary Design):

This chapter will focus on using techniques of sketching and modelling in order to create architectural forms. Moreover, also starting the masterplan layout which will be influenced by a lot of the site analysis research well as researching and investigating how other commercial centres work.

Chapter Seven (Developed Design):

This chapter will involve in a lot of trial and error. It will expand from the reflection of the preliminary design in chapter four. It will focus on developing the initial concept to articulate a final design outcome. This will be achieved through several techniques such as sketching and digital modelling.

Chapter Eight (Final Design):

This chapter will show all the final drawings of the proposed community hub/ commercial centre. It will include the floor plans, elevation, section and perspective renders. This will be achieved through sketching and digital modelling.

CHAPTER TWO |

INVESTIGATIVE STUDIES

2.1 INTRODUCTION

The array of these topics will later on provide input for the proposed design strategies. The data is gathered through scientific research which means that they are 'soft facts' and will only act as a base. There will be regular checks between what is desired and what is beneficial should take place throughout the design process as well as during implementation.

2.2 ISSUES/ CHALLENGES

The small suburb of Eastern Porirua is famously known for its 'negative reputation' of high violence and unsafe streets because of its history (James, n.d). Therefore, in order to consider strategies to increase safety and security within a community, the barriers and perceptions need to be understood.

There are 3 main factors that may affect the shopping centre which are economic and social performances as well as the urban fabric/ physical environment. All 3 factors affect one another, therefore, it is important that they are all balanced. For example, an unattractive and unwelcoming atmosphere can affect businesses as well as its social performance.

Based on site observation, the shopping centre does not have very good accessibility together with lack of passive surveillance. Therefore, this can encourage violence and crime to occur especially around areas that are dark and empty. Therefore, all 3 factors need to be considered and understood to create an effective strategy to mitigate violence and crime in the area as well as using crime prevention to design and revitalise Cannons Creek shopping centre.

Figure 4. Diagram of the 3 factors that influence the design

Porirua Whanau Centre Trust

Cannons Creek School

Cannons Creek Boxing Academy

Porirua Union & Community Health

Freedom Church Porirua

Figure 5. Map of Cannons Creek

2.3 SOCIAL CONTEXT

The site is surrounded by a lot of existing community facilities especially towards local community's like Churches and Whanau centres. Therefore, there will be lots of children, family's and elderlies. Moreover, the site also consists of other facilities such as health and educational services which cater towards the local community again.

2.4 YOUTH & ELDERLY ENGAGEMENT

According to the age distribution graph of Cannons Creek (figure 6.), it demonstrates that the population consists primarily of younger generations. Specifically, 0-9 year olds with 760 and second ly with 10-19 year olds not too far behind. This means that there are more children than adults living in Cannons Creek. Therefore, it is important that children have proper resources and facilities that can educate them to the right path while they are still young. Moreover, youths play a crucial role in the community. They can shape the future with their voices and opinions.

FOCUS AREA GROUPS

Youth Groups

Eldery Groups

Family's

Athletics

Local Community

"Giving children and young people a say in how their city looks and feel is important."

-ROBYN STEEL (Porirua City Council, 2019)

AGE DISTRIBUTION 2019

Figure 6. Age Distribution Graph of Cannons Creek 2019

ETHNICITIES 2018

Figure 7. Ethnicity Graph of Cannons Creek 2018

2.5 CULTURE

The public living in Cannons Creek consists a balanced portion of females and males. However, according to the demographics (figure 4.) the age distribution is largely 0-9 years old. This means that there are more children than adults living in Cannons Creek. Therefore, it is important that children have proper resources and facilities that can educate them to the right path while they are still young. Moreover, youths play a crucial role in the community. They can shape the future with their voices and opinions.

2.6 ECONOMY

Currently, Cannons Creek Shopping Centre is lacking in its economic performance. Due its history of neglect from the Government, the centre has not been able to take any progress in terms of businesses. The demographics of employment has stated that there are more unemployed people in Cannons Creek compared to people working part time. This may be because, people must find jobs that are outside of their area as the centre currently is lacking job opportunities.

Furthermore, it is important that a community focuses on strengthening and growing in the future. In order to build this, Cannons Creek must have a strong community as this can greatly benefit families and businesses in a variety of ways. People can support one another which creates an even better image for potential future businesses to come into Cannons Creek. This will improve the economic performance as well as providing more job opportunities for people.

25.6%
of people aged
15+ have no
qualification
compared to the
city of 16.6%

16%
of people living in
Cannons Creek is
unemployed
compared to the
city of 7.8%

2.7 THE RISE OF CRIME AND VIOLENCE

Based on the demographics of crime rates in Porirua 2019, the main issue is robbery. This involves property theft or a habit of worrying about being robbed. As a community, crime and violence need to be the top priority towards creating a better community for everyone. Mitigating violence and crime will not only help the economy and social issues of Cannons Creek but also towards its public image. As a result, this will attract many people towards choosing Cannons Creek as a place to stay and live. A safe community always creates a better atmosphere to live in especially towards families and younger people. This will educate younger people to focus on positive lifestyles as well as families to focus on providing a good life overall.

CRIME RATES 2019

Figure 8. Crime Rates Graph of Porirua 2019

“People used to be fearful to go to the shops even during the day because they’d come across intoxicated people.”

-SOSE ANNANDALE

(Zorn, R. 2016)

2.8 WHY IS THIS IMPORTANT?

Crime usually occurs to those that are disadvantaged. Examples are families that are on low income and so their only way is to steal. Another is family dysfunction. Usually, children that are raised in a poor environment are often led to doing incorrect things. This also applies to low educational attainment and substance abuse. Although, there are a variety of ways that initiate crime, it is important that there are support and facilities that everyone of all ages, abilities and backgrounds are able to use.

32.4%
of people living
in Cannons Creek
complained about
safety and security.

2.9 CRITICAL REFLECTION

In conclusion, there are many factors to consider for the research. Young children creates a big impact on the space especially because most of the crime that is done is by the younger generation. Education and having facilities is an important aspect which will need to be thought of when adding it to the design strategies later on.

Moreover, the community hub will need to cater the older generation as well as the rest of the community. Having better facilities may be able to improve the state of the centre right now. Furthermore, the data gathered will be kept in mind when designing the master plans and will be influenced through the site analysis.

CHAPTER THREE |

SITE ANALYSIS

3.1 MACRO SCALE ANALYSIS

In this analysis, the site will be explored in macro scale. The urban scale will help analyse how the community works from all different areas of Porirua. It will specifically investigate the commercial centres of Eastern Porirua suburbs and investigate the already existing community spaces/ services there are in Porirua. Therefore, by doing this can act as a foundation for the design intention later on.

Figure 9. Macro map of Porirua City

3.2 PUBLIC SPACES

In this analysis, It will be analysing the public spaces of Porirua City and Eastern Porirua suburbs. The outcome of this analysis will help towards understanding the context of Porirua as well as demonstrating how the community works. Each public space is near each other, therefore, it is important to know how the proposed idea will differ from other public spaces. Compared to the other public spaces in Eastern Porirua, the Cannons Creek shops is the biggest which gives more potential for future changes.

ANALYSING STORES IN PORIRUA

1. PORIRUA CITY

- The main central area of Porirua that consists of shopping malls, restaurants and some community services
- This is where everyone goes to relax, shop, eat and play
- Also located near the harbour area which can be an attraction
- Many public places that offer towards younger people but not the elderly's or family's

2. RANUI SHOPS

- The Ranui shops is located in the Mungavin Area of Eastern Porirua
- Often busy during the day and night because of certain shops opening till 24/7
- There is a Mungavin Park that caters towards younger people with a playground and sports court
- It is a family-oriented place that consists of places to eat, a community hall and recreational activities

3. CANNONS CREEK SHOPS

- The Cannons Creek shops is located further into Eastern Porirua
- Consists of local shops, takeaway stores and community services
- Also near the creek area which can be used as another attraction for the public
- Not many public spaces that family's can use except for the playground and sports courts.
- There is more facilities in the site than the other sites although it is outdated and unappealing

4. WAITANGIRUA SHOPS

- The Waitangirua shops is located further into Eastern Porirua and is often only for locals and residents that live near the place
- There is only a sports court and playground that is focused towards younger children and not much for the elderly

Figure 10. Macro map of Porirua City showing the main public centres

3.3 COMMUNITY SPACES/ SERVICES

Porirua City conveys the impression of a very active community area to go to. There are currently many community spaces/ services among the central city and is spread towards the Eastern Porirua suburbs. According to the map, Cannons Creek already have a lot of existing community spaces/ services. This demonstrates that the area is very community focused which will need to be taken into consideration when designing the masterplan. Moreover, Cannons Creek suggests to be the center of existing community spaces therefore, it is important to acknowledge and think about how the community hub could be more useful for the public.

COMMUNITY SPACES/ SERVICES

- 1. Cannons Creek Community Pantry
- 2. Mungavin Hall
- 3. Porirua RSA
- 4. Porirua Fire Station
- 5. Wellington Free Ambulance
- 6. Porirua Union & Community Health Service Inc
- 7. Pacific Health Services Porirua
- 8. Wellington SCL
- 9. Cannons Creek Opportunity Centre
- 10. Cook Islands Community Centre
- 11. Hosanna Baptist Porirua
- 12. Pacific Islanders Presbyterian Church
- 13. Maninoa Community Care Trust Inc
- 14. Oasis Community Cafe/Hub - Waitangirua
- 15. Wellfed
- 16. Kenepuru Community Hospital
- 17. Porirua Menzshed
- 18. Nz Police Porirua Community Constable
- 19. Wesley Community Action
- 20. Porirua Community Corrections
- 21. Mana Community Enterprises Inc

Figure 11. Macro map of Porirua City showing community facilities

SCALE 1:5000

3.4 MICRO SCALE ANALYSIS

Cannons Creek will be analysed through a micro scale analysis. This will demonstrate the site conditions of Cannons Creek closely as well as the site context. This site analysis will also highlight the issues that would relate to this research in order to investigate what services and facilities that will benefit the community. Moreover, addressing the root causes in order to investigate ways of how building a Community hub/ Commercial centre will improve the social conditions as well as economic conditions.

Figure 12. Micro map of Porirua City

ROAD NETWORK

The main road network of Cannons Creek goes through Mungavin Avenue and Warspite Avenue. This means that only a certain part of the commercial centre is noticeable. In other words, the 'front area' is where all the retailers are which means that this is likely where most of the public are attracted to.

The main road is often the busiest as it connects towards the direction of the city centre or through another part of the suburb. It is also the road that is shared with buses, as regular services operate to and from the city centre. The other road network are primarily single laned streets and is often used for pick up and drop off's or most likely for getting through the commercial centre.

Furthermore, it is important that the design is well thought out to be able to create a succesful Community Hub. The layout and orientation of the buildings need to be adapted to cater the existing infrastructure. This can influence ideas of how people can stop and buy an item.

NETWORK OF STREETS

- Main Road
- Secondary
- Third
- Fourth

Figure 13. Network of Streets of Cannons Creek

FOOTPATH/ CYCLISTS PATH

- Footpath/ Cyclists

Figure 14. Footpath/ Cyclists Path of Cannons Creek

PUBLIC TRANSPORT

- Bus Route
- Bus Stop Locations

Figure 15. Public Transport of Cannons Creek

IMPORTANCE OF LAYOUT AND ORIENTATION

PUBLIC vs. PRIVATE
It is important to consider how the layout will adapt to the surrounding context. In other words, the site is surrounded by residential and schools which determine the need to organise the layout by considering the public and private side of things.

AMENITIES

- Retail Programme
- Services Programme
- Religious Programme
- Recreation Programme

Figure 17. Perspective view of Cannons Creek showing amenities on site

PROGRAMME

The built programme of Cannons Creek commercial centre is vastly mixed, with a range of demographics catered for. There is a Kindergarten and a primary to intermediate school right across the commercial centre which demonstrates that there is a large group of young children near the area.

Furthermore, the site also consists of Churches and other facilities that cater towards family's such as the Porirua Whanua Centre Trust. This confirms that the place should be focused towards creating facilities and other services that would be convenient for the public to use. At the same time, it should also be a place where the public can relax and be able to shop for their needs without having to go all the way to the city centre.

PUBLIC/ GREEN SPACES

Cannons Creek commercial centre holds little to no public/ green spaces. There is currently only a small playground and a creek that is hidden and covered from the existing vegetation. During the day, they are not very active and usually quiet specifically the creek. Accessibility to the area is important as the creek is secluded from the public which can also lead for crime to occur. Furthermore, this can also interrupt the process of community engagement. Therefore, it is important to design a space that can be accessible to everyone.

Moreover, the public spaces of Cannons Creek commercial centre are not very active and lacks community interaction. Public spaces should be the focus of the community hub as they help towards building social ties with people within the community (Cattel, 2008). In other words, it can create opportunities for the community to get to know each other as well as raising health benefits for people (Cattel, 2008).

PUBLIC SPACES

Public Spaces

Figure 19. Public Spaces of Cannons Creek

EXISTING TREES

Vegetation

Figure 20. Existing Trees of Cannons Creek

LAKE RESERVOIR

Lake Reservoir
Existing Trees

Figure 21. Lake Reservoir of Cannons Creek

IMPORTANCE OF PUBLIC SPACES TO ATTRACT THE PUBLIC AND MITIGATE THE NEGATIVE PERCEPTION OF CRIME

Figure 22. (Top) Seating Area
Figure 23. (Middle) View of the Creek
Figure 24. (Bottom) Playground

Figure 25. (Right) Map of Cannons Creek showing all public spaces on site

URBAN STAMP

Cluster of Building

Figure 26. Urban Stamp of Cannons Creek

ACCESSIBILITY

The accessibility of the commercial centre is mainly focused towards transportation especially for vehicles to pass through. In other words, the site displays no signs of a clear pedestrian access but rather a cluster of openings and entrances from random directions. The front area is separated from the back area which can affect people from accessing the public spaces and other facilities.

Figure 27. (Right) Map of Cannons Creek showing the accessibility on site

3.3 SUMMARY

In summary, both the macro and micro scale has covered the conditions and context of the Cannons Creek shops. By analysing the site conditions will help towards the design of the masterplan and knowing how the centre works with the residents and the environment.

The four frameworks will summarise the work that is related to the site analysis.

MOBILITY

The mobility framework consists of those that make people move which are pedestrian access, network of streets, bus stop routes and cycleways. These helps indicate where a possible shared lane should be or entrance points of an alley or to a building.

Currently, Cannons Creek is lacking access ways into the shopping centre. It is not user friendly with those that have disability, elders, and cyclists. The shopping centre tend to only focus for cars that need to get to the retail stores. Moreover, the front area (Warspite Avenue) which is where all the retail is located are emphasized greatly compared to the back (Bedford Street). Therefore, not many can access the area.

PUBLIC SPACE

The public space framework consists of parks/ open fields, public car parks, lake, and reservoir, and lastly vegetation. The framework helps to indicate the possible locations that could hold social interactions such as a central hub, playgrounds, community gardens.

As of now, Cannons Creek is lacking activities for residents to do. It has lost its purpose to be a place where locals could go to and socialise with friends and families. In other words, there is no place for the community to engage. Although, there is already an existing park and creek, they need to be further developed. They are currently unattractive and are not safe for everyone.

BLOCK TYPES

The block types frameworks consists of story levels. The framework helps to indicate how many stories there will be. Currently, Cannons Creek shops consists of mostly one level with only a few buildings with a second story. This means that there can be many opportunities for people to enter the area as well as figuring out how to attract people to the area. It could also be an opportunity to create a mixed-use building with retail at the bottom and offices at the top.

BUILDING TYPES

The building types framework consists of retail, services, schools and public car parks. The framework acts as a guide to show which type of buildings surround the Cannons Creek shopping centre. This will determine possible locations of buildings for the masterplan of the centre as well as its connection to the area.

Cannons Creek shopping centre is currently more retail focused. This means that people usually come to the centre because it is convenient for them to shop close to their homes. There is a supermarket and a pharmacy that locals find helpful near them. Therefore, it is important that the retail stores should be planned carefully.

3.4 SITE ELEVATION (WARSPITE AVENUE)

Figure 28. Site Elevation (Warspite Avenue)

3.5 SITE ELEVATION (MUNGAVIN & BEDFORD STREET)

Figure 29. Site Elevation (Mungavin & Bedford Street)

3.6 INSIDE CANNONS CREEK

In this analysis, it will analyse the various components of the commercial centre from experiencing how the sidewalks works, to looking into the parking lots. This exercise will gather data in order to draw conclusions about the cause of the problems/ issues of the site. Moreover, the information gathered will help towards thinking and creating about the strategies that can help improve the site.

1 | Connection sidewalk. Integrating functions into meeting point

Figure 30. Site Photo (Bedord Street)

The situation presented here shows that the sidewalk lacks connection to the other functions. This creates an uninviting appearance as well as limited possibilities for interaction. The sidewalk becomes a space for the car parks which is only used when parking near the area or when walking to the other side. Therefore, it is important to regulate interactions within any sidewalk. By adding greenery to the area, it becomes more inviting as it acts as a visual protection. Creating an opportunity to better the street level access to the other side also adds more visual control as well as better accessibility to the area. This results in no blind spot. Adding bike storage as well as integrating street furniture with murals make it livelier and accommodating. Especially for locals who want to walk or bike around.

2 | Empty buildings, lack of visual control. Shops-sidewalk connection. Integrating functions into meeting points

Figure 31. Site Photo of Shops (Warspite Avenue)

The situation possesses great potential to achieve more integrations within the functions and the public space. Currently, the sidewalk on this area is the most active out of all the other areas as this is where most of the shops are. There is also a car park directly in front of the sidewalk that caters people to enter the area easily. However, these meeting points could be improved by combining all the functions into one area that could be accessible from all other streets. This is so that, there is more visual control as well as more activity around the area. Other abandoned shops are also an opportunity to bring in new functions such as a small local company. More greenery can also be added in order to improve and attract more people to the area.

3| Empty buildings, lack of visual control. Small networks of functions. Entrance and ground floor connection. Unused car parks

This area lacks in many aspects especially towards movement and activity. The area is currently empty and uninviting due to the abandonment of some shops. Therefore, the car park space also becomes useless. This could be redesigned into a public space that the community could use which could be combined with a community centre. This allows the community to gather and create movement and activity in the area. There are also many shops that can be strengthened as well as transformed in order to connect it to the ground floor. The area has the potential to make it the meeting hub that connects to all functions.

Figure 32. (Top) Site Photo - Abandoned Buildings
Figure 33. (Bottom) Site Photo - Public Toilet
Figure 34. (Top Right) Site Photo - In Between Alley Way
Figure 35. (Right-Left) Site Photo - Another Alley Way
Figure 36. (Right-Right) Site Photo - Ramp towards Car Park

4| Empty buildings, lack of visual control. Small networks of functions. Entrance and ground floor connection. Activating ground floors

There are a lot of opportunities for this area to be transformed into a better and accommodating place. Currently, the situation gives a very uninviting appearance that allows for crime to occur. Entrances of stores play an important role as it becomes the first physical contact when we enter the building. However, the shops face an alley way that is usually dark and empty. Moreover, the buildings around it are not active which becomes a place where people just cross as quickly as possible. Therefore, the place is not very meaningful as well as useful for the community. It lacks visual control which could lead to vandalism and other unsafe conditions especially during the night. Adding greenery and redesigning the alley way would improve the appearance.

5 | Empty car park spaces, lack of visual control. Back to front connection

The location of the building is situated in the back part of the shopping centre which is usually very empty during the day and night. This is because there is no connection of the front shopping area to the back which is where all the other community facilities are such as a Medical Centre and Alternative school. Therefore, people usually just pass by the area which makes the space useless. The only points of regular interaction are the entrances of the building. Moreover, there is a lot of empty car park spaces that could be used for other facilities that the community can use.

By adding greenery to the area and transforming the space into a public park could enhance the overall connection of the buildings. It can improve the quality of the sidewalk as well as bringing in more movement and (economic) activity. There will also be an increase in visual control because with empty spaces can bring in more crime to occur and so, it is important to have 'eyes' everywhere.

Figure 37. (Top) Site Photo - Back Street
 Figure 38. (Right Page - Top) Site Photo - Car Park Space
 Figure 39. (Right Page - Left) Site Photo - Playground
 Figure 40. (Right Page - Right) Site Photo - Back Entrance to Creek

6 | Empty buildings, lack of visual control. Activating ground floor - sidewalk connection

This part of the shopping centre is the emptiest which means that there is a lot of opportunities for the area to be transformed. Large parking spaces could be used more effectively especially towards public spaces such as sports courts, meeting/ interaction hubs, or a park where people can communicate and relax. The car park space is right next to a playground which could be integrated together and create one big area that is full of activities. Moreover, this would enhance the quality of the sidewalk especially going towards the creek as it is currently hidden and feels unsafe.

7 | Opportunities for strengthening existing functions. Entrance - ground floor connection

The space is currently separated from the other existing buildings in which it goes against the purpose of serving the community. By integrating and redesigning the access to the Cannons Creek Pool, it can enhance the quality of movement and activity into the area. The location is also a good opportunity to integrate it to the park area so that people can have easy access to it. Moreover, combining it with greenery and street furniture will strengthen and attract people into the area.

Figure 41. (Top) Site Photo - Car Park of Swimming Pool
Figure 42. (Bottom) Site Photo - Cannons Creek Swimming Pool

8 | Strengthening existing functions. Entrance, ground floor - sidewalk connection

The situation presented here shows how the entrances of the stores have very little impact towards those coming by the shopping centre. Therefore, there is an opportunity to redesign and strengthen the existing stores by combining them all together in one place that can be easily accessible. Currently, all the stores are separated with some that are unactive which affects the economic performance as well as the movement around the area.

Figure 43. (Top) Site Photo - Alley Way of Some Shops
Figure 44. (Bottom) Site Photo - Public Space

9 | Strengthening existing functions. Activating ground floor and redesigning the connection with public space

The current situation is lacking in a lot of aspects. The whole area encourages for crime to occur such as vandalism, littering and other unsafe conditions. Many people are scared to pass by this area especially during nighttime. Often people never stop in this area because of the lack of visual control. The windows are covered, and the buildings are unactive. Therefore, there is a huge opportunity to strengthen the whole area by redesigning the stores as well as the access way. It could be a great meeting point which could be integrated with a public park. Changing the scenery by adding greenery could attract more long term stay.

11 | shops - sidewalk connection

This part of the area is known as the back road for the stores. It is a place where all the trucks and other services drive through in which it becomes a useless area for the community. Therefore, this could become an opportunity to redesign the area to house small companies. The stores could also be redesigned to face each other instead of facing away so that there is no space where the buildings feel separated. Accessibility is also important because there is no access to the other side. This could be integrated with a public space in order for the place to become more inviting.

Figure 45. (Left Page - Top) Site Photo - Graffiti on Alley Ways
Figure 46. (Left Page - Left) Site Photo - Abandoned Site
Figure 47. (Left Page - Right) Site Photo - In Between Alley Way
Figure 48 (Top) Site Photo - Buildings in the Back Way
Figure 49. (Bottom) Site Photo - Wild Vegetation

3.7 CONCLUSION

Drawing conclusions from all the problems in the investigative studies as well as the site analysis has produced two main key issues that this thesis will investigate. One concerns the architectural issue of creating a successful community hub/ commercial centre using an ideal urban intervention. The other issue is figuring out how to mitigate the current reputation of the centre as a whole. In other words, improving the lifestyle of Cannons Creek in terms of social and economic conditions.

The first issue involves revitalising the whole commercial centre to suit the community's needs and wants. Based on the site analysis, there are some concerns regarding accessibility, inactive buildings, car parks, and public spaces. Cannons Creek commercial centre is largely popular among residents because of the community supermarket and other retail stores open. Therefore, producing a public building of a community hub/ commercial centre contribute in providing services and facilities that the community will need. Cannons Creek is a small commercial centre that is outdated and need more access towards other resources. Creating an urban type will improve the economic and social growth which can expand a lot of businesses and more residents.

The second issue is mitigating the built up 'negative reputation' of the community (Mcbride, 2013). In other words, mitigating the perception of crime that outsiders see due to media only interpreting what they see and happen (Mcbride, 2013). Therefore, the outcome affected the centre's reputation as well. However, not only is the area unsafe but the centre has also demonstrated issues that add towards the reputation.

For example, the public park is located behind the retail stores which can be very evasive towards children. There are also less streetlights around the area which can lead to further violence and crime to occur. Furthermore, this leads to less surveillance around the area which can be solved when the community. Moreover, it is important that the urban fabric is integrated to the architectural building to create more open and safe spaces.

3.8 STRATEGIES FOR TRANSFORMATION

From the site analysis, the data and information gathered will determine the potential strategies for the commercial centre/ community hub of Cannons Creek. The strategies introduced will deal with spatial and communal aspects of the situation in Cannons Creek.

Figure 50. (Top) Diagram
Figure 51. (Bottom) Diagram

Figure 52. (Top) Diagram
Figure 53. (Bottom) Diagram

CHAPTER FOUR |

LITERATURE REVIEW

4.1 INTRODUCTION

Cities are expanding faster than what the current infrastructure and housing is intended to accommodate for. Such a rapid rise in urban development as well as the urban population calls for higher demands in social spaces. (Cho, et al., 2016) Public spaces are an essential and powerful tool for cities and neighbourhoods. (Cho, et al., 2016) Although, a community hub is considered as a public architecture, they can still act as a public space as long as they are generally open and accessible to all people. (Unesco, 2017) Therefore, in order to come up with a design idea, it is important to know what is really needed in public spaces and how they impact the community.

This literature review is intended to investigate a range of relevant theory and information, which will be able to guide the research through the design process. The intention is to be able to develop a design response to the social and economic issues that are faced by the residents of Cannons Creek. Examples of architectural design theory will be investigated, and the conclusions made will drive the design intending to develop strategies to improve the image of Cannons Creek.

The literature review will be focusing on two books that have different methodology when it comes to analysing what and how a public space can affect the community. "Re-framing Urban Space" by Im Sik Cho, Chyre Kiang Heng and Zdravko Trivic. The book talks about the technical aspects such as the current trends and challenges in an urban development. On the other hand, "Situational Urbanism" by Otto Paans and Ralf Pasel talks about the rational side of thinking by analysing the role of identity, sense of a place.

Throughout the design process, I will be applying the ideas from the book and will be using their methodology to analyse case studies and towards the preliminary designs. Moreover, taking into consideration how design guidelines can be created so that it can act as a foundation for the design strategies.

4.2 REDEFINING PUBLIC SPACES

Public spaces are a vital asset to our cities because, the urban population increases day by day. Therefore, there is a need of urban development which leads to an increase in density (Cho, et al., 2016). High density areas especially towards neighbourhoods tend to need more social, environmental and economical support which in return demands for more public spaces (Cho, et al., 2016). Although, high density areas can be beneficial to the community, it can also affect the level of social interactions between residents (Cho, et al., 2016).

Public spaces can be described as an area or place that is generally open and accessible to everyone in the public (Cho, et al., 2016). It is a place where people can develop community interaction and social mixing (Unesco, 2017). In addition, public spaces strengthen communities together. It creates social activities for the public to engage, encourages channels of movement, and creating spaces for play and relaxation (Car, et al., 1992). Overall, it decreases the chances of people distancing and withdrawing from social contact (Cho, et al., 2016).

However, according to Cho, et al., (2016) high density conditions can also drive a community with negative experiences like crime if the space is not well designed or managed. Studies have shown that child and youth behaviour can be easily affected if not given proper facilities such as recreation and leisure activities (James, n.d.). Failure to not have well designed and managed spaces can lead to “greater physiological and psychological stress, social disorder (increasing violence, crime, suicide rates and drug addiction), ill-health conditions and violation of personal space” (Cho, et al., 2016). In other words, it can change a person’s behaviour.

Designing a successful space for the community requires a lot of thought. A crucial point to a successful space is for it to be safe (Shaftoe, 2012). Therefore, it is important that communities should have a well managed and designed public space in the neighbourhood that would cater to the community’s needs and wants (James, n.d.). In addition, public spaces can also be beneficial towards the environmental and economical growth of the community (Cho, et al., 2016). This is because it promotes greenery and biodiversity as well as attracting investments, strengthening the local community (Cho, et al., 2016).

4.3 SENSE OF PLACE

Public spaces are not just a place that the public can go to for social interaction but it can also be looked as a place that holds memories for a certain person. (Paans, et al., 2014). In other words, a place can become something more meaningful when there is identity and content (Paans, et al., 2014). It can be described as an “attachment to the physical location” (Paans, et al., 2014). Having attachment to a place can be very beneficial because it attracts people back to the area where a piece of fragment is created (Paans, et al., 2014).

Furthermore, places play an essential and vital role in human life while it also maintains the quality of the environment (Najafi, 2011). In other words, it can affect a person’s human behaviour and their mental health (Najafi, 2011). According to James (n.d.) that attachment to a place especially for a community can decrease the incident and prevalence of crime to occur (James, n.d.). Having a strong sense of place where the community can gather can build strong friendships and so this increases the feeling of trust and security in the area (James, n.d.). However, this approach can differ to other places as there is also different factors towards measuring what a successful public space is.

Moreover, in order to make a place meaningful for a person, the place needs to omit certain parts and impressions in a way that fragments connect (Paans, et al., 2014). For some residents especially for those who grew up in Cannons Creek, or have lived in the area for a very long time can be very attached to the place. “Being raised in the place affected feelings of rootedness” (Hay, 1998). However, for other people, it could just be a passing point (non-place). According to the book “situational urbanism”, everyone’s perception will be different. In addition, there should be a balance between creating places that can be non-place or anthropological.

Therefore, it is important that a space should be designed to create an identity for a person. It should be a place that people can pass through but also having the opportunity to be able to engage in relations and create some kind of identity towards the place (Paans, et al., 2014). This way, it can become a very lively community as well as a safer community.

4.4 CONCLUSION

In conclusion from the literature reviews, both articles and books have demonstrated that there are different methodology and approaches towards designing a successful public space. There are many factors and guidelines that will need to be considered and thought of properly. According to the book “Re-framing Urban Space” by Im Sik Cho, Chyre Kiang Heng and Zdravko Trivic, it demonstrates that a well managed and good design is the key for a successful space. It can be beneficial for sociability, economical and environmental factors which will be used as a guideline towards the proposal of the community hub/ commercial centre.

On the other hand, the book “situational urbansism” by Otto Paans and Ralf Pasel demonstrates a different strategy towards designing a successful public space. Cannons Creek currently posses the ‘negative image’ that has been planted on the neighbourhood for years which has impacted the development of the centre. In addition, Paans suggests that public spaces should have identity and context to it in order for it to be successful. Therefore, in support of this idea, if the proposed community hub/ commercial centre leaves a good impression towards the residents, and towards the rest of the public, it may benefit the community long term.

In other words, positive experiences can help build a positive reputation of the place which in return can attract more people, businesses and other investments. Cannons Creek centre is currently restrained from developing mostly because of Government support but also because of its reputation. Overall, the proposed idea will look into more design approaches in order to make a successful space for the community.

Design Strategy to consider:

- Having attractions or activities that can be used for everyone. In other words, creating opportunities for people that they can use individually but also offereing the choice for people to engage and connect.
- Spaces with content.
- Keep the design of the buildings interesting that can leave an impression. E.g. colours, materiality, formation.

4.5 PLACEMAKING APPROACH

Town centre management has become recognised as the key to achieving vitality and viability. By focusing on the relationship between the public (local/ residents) and the private (retail/ commercial stores) conclude an effective strategy to enhance the social and economic factors. Thus, Cannons Creek Mall demands an effective strategy that will bring life and improve its status. However, careful attention is needed in order to create a successful space. While town management methods and purpose has evolved over the years, there are still basic principles that must be applied.

PPS (Project for Public Spaces) is a non-profit organization located in New York, America. They dedicate towards helping people create and sustain public spaces that build strong communities. They have a long history of helping to build many public spaces that have been transformed for the better. PPS uses a diagram called 'place diagram' (figure 54) that contain four key principles when it comes to designing. These are accessible, comfortable with a good image, have a range of uses and activities, and lastly be sociable. On top of that, it also must be well-maintained otherwise the design will be unbalanced. This includes providing services, facilities along with scheduling events.

Cannons Creek is lacking community engagement at this time and so it would promote the town centre towards residents if it can provide all the principles and needs of the suburbs. PPS principles of sociability, uses and activities, access, and linkages, and lastly comfort and image are all the major issues of Cannons Creek Mall. Therefore, the place diagram will be a great foundation for the design.

Figure 54. PPS Diagram

There are numerous reports and studies that establish the importance of successful town centres and this is through public spaces. Urban design can help create more efficient and effective places to live, work and play. Not only can it improve lifestyle but also towards the public image. Cannons Creek currently possess a reputation with the highest rate of violence and crime in Porirua City. Records show that many residents feel unsafe walking around the streets especially at night. Thus, creating a public space that improves lifestyle together with comfortability will greatly develop the town centre.

4.6 SURVEY RECOMMENDATIONS

Porirua City Council have already begun to survey the residents of Eastern Porirua in terms of how they would like their community to be. Therefore, the feedback will be used as a guideline for the planning and design. Using PPS's place diagram as a guidance, the survey results have been organised into a pie chart. Considering the pie graph (figure 55), results show that comfort and image is the most problematic. Many feedback comments were commonly about feeling unsafe when walking around the shops. The lighting, broken footpaths and too many trees made it also feel unsafe.

The next issue is related to uses and activities. Many people desired better activities that they could do in the centre. These include cafes, a library, sport centre, art and music centre. Furthermore, they also asked for further community services such as a medical centre, post shop and other family friendly facilities. Moreover, the other two last factors were commonly about easy access to the area especially for those that are disabled. Being able to cross the street safely as well as making the area walkable for everyone.

Moreover, the facilities on the site do not connect to one another making other places empty. Car park spaces also need to be accessible as many feedback were about adding more car parks. However, there are already many existing car parks in the shopping centre. Furthermore, the most important advice from the residents is that they want the area to be safer and provide a stronger community.

Figure 55. Pie Graph of Cannons Creek

Crime prevention through environmental design (CPTED)

CPTED is not an architectural style, it is a series of measures and techniques that can be applied to any kind of building or space.

4.7 WHAT IS CPTED?

Reducing crime is very complicated and cannot simply be done. It needs various observations in order to create a series of measures and techniques. This is because crime is an independent choice to do. It is a person's own free will and so the only way is to mitigate and discourage violence and crime through design. Moreover, it will be impossible to completely analyse and study all the encounters.

CPTED or also known as crime prevention through environmental design is a "new approach but with an old background (Crowe, 2000, p. 3). This means that CPTED was used way before surveillance cameras were being used and other high-tech gadgets that displayed whether there was suspicious activity. These are known as traditional crime prevention methods. However, there is more to it. Designers and architects tend to always look into designing buildings that prevent natural disasters such as earthquakes and tsunamis. However, crime prevention is often made light of. Only do communities look into it when crime is increasing.

Therefore, it is important that each building looks into not only designing through aesthetics but towards the safety of users that will be using the building or space.

HOW DOES CPTED WORK?

The CPTED concept primarily focuses on using design principles that result the built environment, the buildings that are in that area and the surroundings. Furthermore, "it expands upon the assumption of that the proper design and the effective use of the built environment can lead to a reduction in the fear of crime and the incidence of crime, and to an improvement in the quality of life" (Crowe, 2000, p. 1).

Moreover, CPTED does not directly look into reducing crime but also thinking of ways to maximise the liveability. This means increasing the activity around the area, having good accessibility as well as the area being convenient etc. Therefore, mitigating crime needs to be thought about properly. The overall space needs to be improved as well to apply the CPTED techniques. Together the community will be stronger, and it will be more lively towards businesses and people using the space.

4.8 FOUR PRINCIPLES OF CPTED

NATURAL SURVEILLANCE

Promoting natural surveillance by maximising visibility where intruders can easily be observed. Also known as "more eyes" technique.

1.

TERRITORIAL REINFORCEMENT

Distinguishing private and public spaces in order to restrict those that can or cannot be done.

2.

NATURAL ACCESS CONTROL

Naturally controlling streets and sidewalks by preventing access to spaces that are easily crime targets.

3.

MAINTENANCE

Keeping spaces, buildings and landscape maintained to maintain visibility and to prevent it from being a crime target.

4.

4.10 DESIGN PRINCIPLES/ VISION

DIVERSE | INCLUSION, FRIENDLY, CULTURAL

Diversity is not just about different races, religion, and cultures but about having different identities, experiences, and ideas. Therefore, by creating a space that is open for everyone will lead to people learning more about each other in the community. This can build a better image which people can build trust, respect and understanding across each culture.

SAFE | WALKABLE, ACCESSIBLE , CONNECTIVITY

People's perception towards a community is important because it is the 'reality' they are seeing. Perception is a way a person thinks about or understands something. Creating a space where people feel safe will not only mitigate crime and violence but create a better image for the community. Cannons Creek should be a place where everyone can enjoy.

ATTRACTIVE | VIBRANT, ACTIVE, FUN

Cannons Creek shopping centre is currently lacking in a lot of social attractions and activities. Therefore, the design needs to be attractive to all ages especially towards families. A good public space must be inviting and have good design that will accommodate the public (residents) and the private (retailers) sectors.

LIVABLE | CONVENIENT, SUSTAINABLE, COMMUNITY

The community is an important aspect towards a thriving shopping centre. It is important that the shopping centre must be convenient for everybody whether people are coming for work, to shop, engage or eat. They should have access to needs and wants. Moreover, a sustainable community will help the shopping centre in terms of economic factors.

A VISION

The vision for Cannons Creek is to promote the community hub as a liveable community where people of all ages, disabilities, cultures can engage and enjoy. By developing the shopping centre, it will be surrounded with an improved and enhanced environment, attractive and diverse, and lastly with a sustainable approach. The focus of the plan will also be mitigating Cannons Creek's reputation of the highest rates of violence and crime. The perception of safety is the most important factor within this development. Therefore, Cannons Creek shopping centre will be revitalised to deliver better services and space as well as developing the town centre.

CHAPTER FIVE |

PRECEDENT REVIEW

5.1 INTRODUCTION

This analysis will pick a selection of design projects that are relevant to the literature reviews as well as how I think the design should look like. The exploration will look into studies that are relevant to the formation as well as case studies that demonstrate transformation.

5.2 FACTORS TO CONSIDER

- SOCIAL AND HEALTH
- Encourages for social ties to be made
 - Friendly and approachable
 - Open space
 - Attractive and sustainable

- ECONOMIC
- Allows businesses to be part of the space. They are not secluded
 - Easy access to retail stores

- ENVIRONMENTAL
- Encourages greenery
 - Sustainability
 - Materiality

5.3 PRECEDENT 1 - FORMATION

Yuecheng Courtyard Kindergarten, 2020 MAD ARCHITECTS | BEIJING, CHINA

MAD Architects was assigned a project that involves in designing a Kindergarten in a site that holds a lot of sentimental value to people. The site consists of historical buildings such as an original 18th-century Siheyuan courtyard, an adjacent replica courtyard built in the 1990s, and a four-story modern building. In consequence to this, MAD Architects decided to keep the historical buildings and build around it instead. The idea of this was to create a new space that would allow for young children to learn more about their culture as well as teaching them how to reflect on their environmental surroundings.

In other words, MAD Architects decided to create a floating roof that supports young children to access the rooftop. The floating roof (figure) is influenced by an old children's proverb which is demonstrated through the design of the roof forms. It caves around the existing buildings as well as the existing nature. This demonstrates that the historical elements of the building is still considered and adapted into the design. It is important that children at a young age need to be exposed to certain conditions so that it can become a sentimental part of themselves later on. (James, n.d.)

PHYSICAL ASPECTS

Use of Context

Using the existing context as part of the design can create a more meaningful experience for some people which plays into the literature review of place and non places. This can be very useful towards the design intention of the community hub.

Concept/ Form

MAD Architects uses large windows and open plans which helps towards surveillance as well as bringing natural light into the building. This also helps connect spaces together which can be helpful towards circulation in the building.

Circulation/ Layout

The circulation of the building flows very easily and connects together. The floating roof holds the rooms together along with the existing building that is already there.

Spatial Arrangement

MAD Architects uses large windows and open plans which helps towards surveillance as well as bringing natural light into the building. This also helps connect spaces together which can be helpful towards circulation in the building.

Figure 56. (Top Left) Historical Buildings
Figure 57. (Top Right) Circular Glass Wall
Figure 58. (Bottom Left) Accessible Rooftop
Figure 59. (Bottom Right) Large Spaces

Figure 60. Detail of Rooftop

Detailing

The detailing of the roof can act as a reference for the proposed green roof later on.

Figure 61. Masterplan Drawing of Kindergarten

Master Plan Drawing

The master plan demonstrates how the buildings connect together under one roof even when they are split apart.

5.4 CASE STUDY 1 - CHRISTCHURCH BUS INTERCHANGE

ARCHITECTUS | 2015

An earthquake struck Christchurch during 2011 causing many buildings and streets damaged. Therefore, it was time to revitalise the central city and bring a new approach to design. Christchurch central city rebuild using CPTED (crime prevention through environmental design). A new bus interchange was created during 2015 which became a well-known transport hub for buses, taxis, and future light rails. Statistics show that the level of crime in Christchurch is 43.14% compared to Porirua which is 37.50% (Numbeo, 2020). This shows that crime in Christchurch is similar to the crimes in Porirua.

The Christchurch bus interchange designed the transport hub to engage with the public by using an L shaped concourse which connected the buses directly towards people waiting for the bus. Using an L shape not only makes it convenient, but it discourages crime from happening. Large open spaces as well as straight corridors allow for easy crime targets. Therefore, by using 'maze' techniques can confuse those who are trying to commit a crime. Furthermore, other techniques used are the placement of windows. Each edge was connected to a window which increases natural

Figure 62. Bus going through their stops.

Figure 63. (Right) Inside of the bus interchange showing how people move.

Figure 64. (Left) Main entrance of the bus interchange

surveillance in the space. Many people are able to spot easily if there were anything suspicious going on. Moreover, the building is well-maintained which creates a safe atmosphere during the day and night.

Overall, the Christchurch bus interchange showed that using CPTED techniques can be very helpful. There is no need to increase budget by having many security cameras. Using natural surveillance and control is more

significant within a building and space as it should be part of every design. "I'd rather not have to deploy so many police officers in the CBD, I want the CBD to largely police itself. And if we can do that through some basic CPTED principles, which we can, then we should" (Price, 2016).

Figure 65. Hamish Hay Bridge at night

5.5 CASE STUDY 2 - CHRISTCHURCH TE PAPA OTAKARO / AVON RIVER PRECINCT

CHRISTCHURCH CITY COUNCIL | ONGOING

The Avon River Precinct is the heart and soul of Christchurch city. It is one of the first developments to undergo design and construction as it was important to restore the Avon river to the community. The Avon river is 3.2km long which consists of different key points along the trail, linking public spaces of Victoria Square and the Hamish bridge. The city is filled with history and its connection to the Ngai Tahu values, customs, and traditions. Therefore, history became a key element towards the design. Moreover, the main focus was also to bring people and the commerce sector together. It became a space where people can explore, relax, play, and shop.

Figure 66. Watermark

Figure 67. A punt passing the Terraces

CPTED principles have been the foundation and base for all developments of the Christchurch City rebuild. This is because the CPTED principles are able to discourage the fear of crime while creating positive spaces that encourage people to interact. The Avon River Precinct is known to many crimes including shooting, assaults, drugs, alcohol and robbery. Therefore, the Christchurch City Council needed to create a plan that reduced crime and violence along the river. An example of this was achieved by adding a small change of lighting towards the river, the bridge and the walkways.

This discouraged the place to become a crime target and instead encouraged people to feel safe while walking along the river in the dark. The lights also encouraged night time activities such as Chinese lantern festivals and other events which liven up the area. Moreover, the activities around the river help create a better atmosphere for the community that everyone can enjoy. More importantly, it increases natural surveillance and access control meaning that the fear of crime and violence is reduced. However, in order to conserve this image, the river must be maintained.

CHAPTER SIX |

PRELIMINARY DESIGN

6.1 CONTEXT PLANNING EXERCISE

This context planning exercise will list 10 of the well-known town centres in New Zealand. Although 4 on the list will be picked because of scale and context that are relevant to Cannons Creek shops. They will be thoroughly analysed to determine and help towards the design of the layout and programming of the proposed community hub/ commercial centre.

The four centres will be assessed through:

- Acessibility
- Formation of the programmes
- Car park locations
- Overall connection of the place

NEW ZEALAND TOWN CENTRES SURVEY MAP

- [1] Northland - Ruakaka Town Centre
- [2] Auckland - Otara Town Centre
- [3] Auckland - Mangere Town Centre
- [4] Auckland - Botany Town Centre
- [5] Tauranga - Bethlehem Town Centre
- [6] Wellington - Tawa Shops
- [7] Wellington - Newlands Shops
- [8] Christchurch - South City Shopping Centre
- [9] Christchurch - The Landing Town Centre
- [10] Queenstown - Remarkables Park Town Centre

Figure 68. Map showing the locations of existing town centres in New Zealand

AUCKLAND - BOTANY TOWN CENTRE

Has few vegetation around the retail stores. No connection to the streams beside the retail stores.

Accessibility is easy for any type of transportation.

Shared zone between pedestrians and any transportation.

Main Hub outdoor space where everyone can gather.

Easy access to car parks and are scattered around the main centre.

Figure 69. Masterplan of Botany Shopping Centre

WELLINGTON - NEWLANDS SHOPS

Community centre is positioned towards the back but is still visible as it is placed next to the road.

Vegetation is scattered towards every entrance which provides better walkability.

Parking spaces are easily accessible and take you to the retail stores immediately.

Other retail stores face the road which can encourage 'impulse buying' which lead to more sales.

Figure 70. Masterplan of Newlands Shops

CHRISTCHURCH- THE LANDING TOWN CENTRE

Figure 71. Masterplan of the Landing Shopping Centre

QUEENSTOWN - REMARKABLES TOWN CENTRE

Figure 72. Masterplan of the Remarkables Shopping Centre

6.2 CONCLUSION

In conclusion to this exercise, the key findings of the four centres have demonstrated different forms of layout planning. It has given insight into how the town centres in New Zealand work. This will be used towards the masterplan of Cannons Creek.

6.3 DESIGN INTENTIONS AND PROCESS

The intentions of this preliminary design are to:

- Experiment different strategies and develop concepts for a master plan
- Figure out which amenities will need to be included
- Propose and pick a concept that encourages the design guidelines

The experimentation of this preliminary design will start to initiate a couple of quick bubble diagram sketches and layout planning sketches. They will be influenced by data and information that is already gathered. These are including site analysis as well as the context planning exercise. Afterwards, the sketches will be further developed. Scale and context will be considered.

However, the same technique will be applied which is experimenting the layout planning. Although, a digital realm will be added. This will help strengthen the idea and will show how the layout will look like. A series of iterations will be done until an idea has taken place. Moreover, taking into consideration the design guidelines, literature and precedent reviews.

SKETCH 1

RESTORING CANNONS CREEK RIVER / SHIPPING CENTER

- ✓ connects THE SHOPPING CENTRE / RETAIL STORES
- ✓ connects THE MAIN ROAD
- ✓ connects RESIDENTIAL
- ✓ connects SCHOOLS

Figure 73. Sketch 1

In this sketch, a quick bubble diagram was created to demonstrate how each programme would connect to each other. This helped create a clear vision of what was really needed on the site and how it would play out as a plan.

SKETCH 2

Figure 74. Sketch 2

In this sketch, another attempt at creating the layout was made. However, this time it is grouped according to the formation of the site. This thinking showed that having retail was important.

SKETCH 5

Figure 77. Sketch 5

In this sketch, a central hub is integrated into the plan. The accessibility through the site is also integrated which have created spaces for amenities such as the retail stores and community centre.

SKETCH 6

Figure 78. Sketch 6

In this sketch, all the other sketches did not work out and attempted to look further into the site conditions and use it as a foundation to create access ways into the site. This helped group the programmes together and create a quick formation of the buildings.

SKETCH 3

Figure 75. Sketch 3

In this sketch, the layout was more thought about as both sketch 1 and 2 have been merged. The site conditions such as the existing road are added so that it is easier to know the formation of the programme.

SKETCH 4

Figure 76. Sketch 4

In this sketch, the layout has been changed as it focuses more on adapting to the topography of the site and using the site context. It looks into providing several parted buildings and having them all face a certain way so that it creates a space where the public can engage.

SKETCH 7

Figure 79. Sketch 7

In this sketch, the programme became more clear that the site needed a place for all people to gather. The sketch is a collaboration of sketch 4 and 5. The hub is in the middle which could be the main access point to the site.

SKETCH 8

Figure 80. Sketch 8

In this sketch, the formation of the layout is changed and the community centre is prioritised. Parking has also been added with the shared zone acting as some sort of access way and connection into the buildings.

6.4 REFLECTION

From the sketches that were made, the strategy towards a design is more clear and will now be able to cater towards the next development which are the iterations of the master plan. The formation and layout programme have concluded the importance of having retail towards the front of Warspite Avenue compared to Bedford Street which is more suitable towards private programmes.

6.5 QUICK REVIEW OF ITERATION DEVELOPMENTS

ITERATION 1

ITERATION 2

ITERATION 3

ITERATION 4

ITERATION 5

ITERATION 6/ FINAL PRELIMINARY CONCEPT

Figure 81. Quick Review of Iteration Developments

ITERATION ONE

In this first iteration, the last sketch is further developed and put into site. Therefore, there is a lot of trial and error. The shape and formation of the building and layout is alternated into another concept. The retail space is located towards the front to give a straight access from the main street of Warspite Avenue. On the other hand, the community centre and other services will be located towards the back which is Bedford Street. The site contains a creek on the right which should be used and acknowledged. Therefore, there should be a clear access way to the Creek. Moreover, this should also connect to the access points of the building.

ADVANTAGES:

- Bringing the concept of accessible rooftops
- Connection of the buildings together
- Public spaces in between the buildings
- Having a clear public space in the front area helps with the flow of movement coming from different directions

DISADVANTAGES:

- The site is very big and is overlooked
- Access to the site is very limited and not very obvious
- The formation and shape of the building is not scaled properly and will not work with retail stores inside

Figure 82. Iteration One

DIGITAL MODEL - ITERATION ONE

Figure 83. 3D Model Concept - Street Access Perspective View
Figure 84. 3D Model Concept - Street Access Wide View

ITERATION TWO

In both of the second and third iteration of the preliminary design, the overall formation of the building is developed and scaled down to a reasonable size. In iteration two, the concept of circles is created which have been split into further groups to support the other programmes instead of merging all programmes into one area. In iteration three, it focuses on creating a better connection of the buildings as well as circulation in the buildings. In addition, it also looks into how the topography of the site can play with the buildings which is a very important factor to consider.

ADVANTAGES:

- The concept of a circular formation
- The overlooking and accessible green roof can be played with the topography of the site allowing people access without having to enter the building
- Creating a large public space in front can benefit and attract people to come to the area. It can also be shared as a parking space

DISADVANTAGES:

- There is no clear accessible path through the site as well as the buildings
- Re-designing the Creek area maybe be at a disadvantage as the trees may be historical which will need to be re-considered
- The scale of the building is still very big and has no clear connection to each other
- Large scaled rooftops can be very high maintenance

Figure 85. Iteration Two

ITERATION THREE

Figure 86. Iteration Three

DIGITAL MODEL - ITERATION THREE

Figure 87. 3D Model Concept - Building Concept Isometric View

Figure 88. 3D Model Concept - Building Concept View

ITERATION FOUR

In this fourth iteration, the formation of the buildings is scaled down and is more reasonable. The master plan is starting to form a clear idea of how the programmes should be laid out. The retail part will always be towards the front area of the site which is Warspite Avenue and the Community hub towards the back which is Bedford Street. This is because of the public/ private factor. In addition, the pathway next to the Creek will also be removed and will be changed to suit the public space next to it. Moreover, the master plan can still be improved in terms of organising the final layout and its formation.

ADVANTAGES:

- The concept of a circular formation
- Leaving a public space right next to the Creek which can be a very strong connection to each other
- Having an accessible green rooftop that connects the buildings together as well

DISADVANTAGES:

- The scale is still too big and the circular shape will need to be rationale for the floor plans
- The concept needs to be reasonable as the green rooftops can be too much for the neighbourhood
- One retail area is enough for the site
- The community area could be joined together

Figure 89. Iteration Four

ITERATION FIVE

Iteration five is developed further from iteration four and is placed into the digital model. In this iteration, the layout planning of the master plan is more clear and concise. It is influenced by a lot of site analysis which shows better access and building circulation. The main entrances are positioned towards the front and also at the back so that people are able to access from different areas. Moreover, the public space is turned into a plaza/ park and is facing Warspite Avenue as it helps attract people to the area. In addition, creating a park in that area can attract children as there are schools opposite the area.

ADVANTAGES:

- Creating the public space as a plaza or park which helps connect towards schools across the road and towards the Creek
- Having an accessible green rooftop that connects the buildings together as well
- The shared access to the site is more clear
- Public spaces in between buildings

DISADVANTAGES:

- The community centre can be joined together with the commercial centre which can become a better community hub for people
- The building circulation of the buildings is not ideal as there is only one flow of circulation through the building
- The scale is still too big and the circular shape will need to be rationale for the floor plans
- The concept needs to be reasonable as the green rooftops can be too much for the neighbourhood

Figure 90. Iteration Five

DIGITAL MODEL - ITERATION FIVE

Figure 91. (Top) 3D Model Concept - Building Concept Isometric View
 Figure 92. (Bottom) 3D Model Concept - Building Concept Isometric View

ITERATION 6 | FINAL DESIGN CONCEPT

This is the final concept for the preliminary design although this does not mean that it could be further developed again. The concept of this iteration focuses on establishing a ground floor plan so that a clear view of how the building can work is demonstrated. As you can see from the sketch, there are too many corridors which is not ideal for a community hub.

ADVANTAGES:

- The layout of the amenities is more practical. The building does not have to fill the whole space of the site
- Having multiple entrances and exit points

DISADVANTAGES:

- There are too many 'corridors' which can be impractical. Therefore, the circular formation should be taken into consideration again

Figure 93. Iteration 6/ Final Preliminary Concept

DIGITAL MODEL - FINAL PRELIMINARY CONCEPT

Figure 94. (Top) 3D Model Concept - Building Concept Isometric View
Figure 95. (Bottom) 3D Model Concept - Building Concept Close Up View

PROPOSED DESIGN OUTCOME

A quick view of the proposed design outcome of one of the public spaces in the building. It is surrounded by stores that make it easier to have security as well as easy access to shop.

Figure 96. Perspective render of the green space in the building

Figure 97. Perspective render of the green space in the building from above

PROPOSED MASTERPLAN

Figure 98. Masterplan of Preliminary Concept

PROPOSED GROUND FLOOR PLAN

- 1. MAIN ENTRANCE
- 2. LOBBY
- 3. RETAIL SPACES
- 4. LIBRARY
- 5. REST AREA
- 6. FOODCOURT
- 7. SUPERMARKET
- 8. CAR PARKS
- 9. PLAZA
- 10. COMMUNITY GARDENS
- 11. MAIN COMMUNITY CENTRE
- 12. CREEK

Figure 99. Proposed Ground Floor Plan of Preliminary Concept

PROPOSED FIRST FLOOR PLAN

- 3. RETAIL SPACES
- 4. LIBRARY
- 13. COMMUNITY SERVICES

Figure 100. Proposed First Floor Plan of Preliminary Concept

**PROPOSED GROUND FLOOR CIRCULATION
DIAGRAM**

- *Building Circulation*
- *Street Access*
- *Vegetation*

Figure 101. Propose Ground Floor Circulation Diagram

6.6 DESIGN REFLECTION

The preliminary design began through a series of quick concept sketches which are influenced by a lot of site analysis and bubble diagrams. By doing this, a clear strategy to approach the master plan was starting to form. Afterwards, the sketches is then further developed through a series of detailed iterations and is then put as a digital model for scale reference.

The preliminary design is a trial and error stage until an idea is chosen. In this stage, the final concept (iteration 6) was chosen for the design reviews. The feedback will be used for critical reflection along with other self reflections. During the design review, the final concept were lacking in many aspects which will be further developed through the next set of iterations.

Currently, the master plan is underdeveloped because it is lacking in form exploration. The circular form can be further developed as there is no proper reference and how the circular formation was started. Although, a circular building looks attractive and fun. However, in the long term it is not good and will need to be further developed. This can be resolved by looking through case studies or precedents that show how qualities of the design guidelines.

Moreover, the scale of the site is bigger than what was expected which made it difficult to get the scale of the building right. Therefore, it is important to start adding the spaces that is needed as this will also help finalise what amenities need to be together. Connection between the buildings also need to be considered especially for the supermarket.

CHAPTER SEVEN |

DEVELOPED DESIGN

7.1 DESIGN INTENTIONS AND PROCESS

The intentions of this developed design stage are to:

- Revisit the programme layout of the master plan and refine what is really needed and what is not
- Rethink about the formation of the overall building and see how it can relate more to the urban context
- Propose a final master plan piece

The development stage is reflecting back on the last proposed piece of the preliminary design. The same method of analysing and designing will apply such as quick iterations, sketches and 3D modelling. However, in the development stage, it will look into more precedent studies and site analysis to further develop the Community hub.

7.3 SIMPLIFIED FORMATION DIAGRAM

In this exercise, the bubble diagram is simplified to know and finalise the programme layout of the Community Hub.

Figure 105. Formation Diagram of Preliminary Design

PRELIMINARY DESIGN

In the preliminary design, the layout programme of the buildings are spread out throughout the site which can be very confusing as they are separated. Moreover, the street access can become a barrier in between the buildings which may leave the other part of the area unactive. The building access is also not very convinient as it does not provide easy access throughout the site.

Figure 106. Formation Diagram of Developed Design

DEVELOPED DESIGN

In the development design stage, the layout programme of the buildings are clustered together which create an easier access through the building and site. The street access has also changed and is now positioned around the buildings which will make it more convinient for pedestrians and other vehicles as this can become a shared road.

7.4 RECAP OF PRELIMINARY DESIGN

The last iteration of the preliminary design will be further developed again by modifying both layout and formation of the Community Hub through another series of iterations until the final design is proposed. In this iteration, it is focusing on figuring out how the building could be joined together while trying to keep the circular formation.

Refining the shape of the building to get even spaces for the floor plan

Refining the foodcourt into an even shape so that there could be more space for people to sit and eat

Better and easier accessibility coming from both sides of the street.

Need a better public space that would be able to support performances and events

Figure 107. Recap Development Sketch from Preliminary Design

ITERATION 1

In this iteration, there are many changes to consider especially the layout of the programmes. Therefore, this will also change the overall formation of the building. There are currently too many retail stores which is not necessary as the Community Hub needs more services that would benefit the neighbourhood such as shared spaces. Moreover, it would better if the programmes are positioned towards the edge to give easier access into the stores and to lessen the 'corridors'.

Figure 108. Iteration One of Developed Design

Too many retail stores which goes against the idea of a Community Hub.

Retail stores could be combined better with the foodcourt and towards the entrance so that people can flow in and out easily.

The foodcourt will remain its position. However, the shape will need to change to allow more seating space.

The form of the building is not suitable for retail stores. Therefore, it needs to be refined.

The resting area could be combined with the public space outside.

The library and the other retail stores can be positioned better for easier circulation around the building.

DIGITAL MODEL - ITERATION ONE

Figure 109. (Top) 3D Model Concept - Building Concept Isometric View
 Figure 110. (Bottom) 3D Model Concept - Building Concept Isometric View

ITERATION 2

In this iteration, the main change is focused towards the public space. There is now more space for people to gather at one area which can be suitable for events, performances or whether to sit down and relax. Moreover, it would be better if the space can connect towards the library and towards the retail stores as this can attract more people to the area. Another change is towards the main entrance of the building. It is better to split part of the building because it can create a new outdoor shopping experience for those that have the need to quickly buy and go. Overall, the master plan still needs to be developed.

Figure 111. (Left) Perspective View of Changed Concept
Figure 112. (Right) Iteration Two Sketch Plan of Developed Design

Easier access to the first floor.
Access from outside and inside.
Splitting the formation of the building to create a better shopping experience. There will be an indoor and outdoor experience.

Removing the retail stores and keeping it open for better accessibility.

Changing the landscape that will focus more on gathering the community together.

Connecting more space for the library.

Putting a parking lot closer to the street level for easy access.

DIGITAL MODEL - ITERATION TWO

Figure 113. (Top) 3D Model Concept - Building Concept Isometric View
 Figure 114. (Bottom) 3D Model Concept - Building Concept Isometric View

ITERATION 3

In this iteration, the layout of the programmes are more refined which makes the proposal of the master plan closer towards the final decision. There are now more access points from different directions which make it easier for the public to enter and exit the building. Moreover, it provides an open space plan which may be more attractive to the neighbourhood than an actual commercial building. The aim is to make it as community friendly as possible with more shared spaces for the public.

Figure 115. (Left) Perspective View of Changed Concept
Figure 116. (Right) Iteration Three Sketch Plan of Developed Design

Change of formation of the green space to make the public circulate around.

Arrangement of retail stores changed, creating a proper entrance.

Foodcourt program arrangement.

Arrangement of retail stores, the orientation is too sharp and unappealing.

Rearrangement of the pathway. Easier mobility.

ITERATION 4

In this iteration, a few changes were made which have come to the conclusion that it has been finalised. The only changes that were needed was removing a few retail stores in order to make more space for people to gather such as a resting area.

Figure 117. (Left) Perspective View of Changed Concept
Figure 118. (Right) Iteration Four Sketch Plan of Developed Design

Creating a better entrance for the Community Hub by changing the landscape

Closing off an entrance point so that there is more space for the foodcourt

Removing more retail stores in order to make more space for shared spaces.

Changing the landscape that suits the layout of the buildings

ITERATION 5 | FINAL CONCEPT

In this iteration, a few changes were made which have come to the conclusion that it has been finalised. The only changes that were needed was removing a few retail stores in order to make more space for people to gather such as a resting area.

Figure 119. Iteration Five Sketch Plan of Developed Design

7.5 DESIGN REFLECTION

In this iteration, a few changes were made which have come to the conclusion that it has been finalised. The only changes that were needed was removing a few retail stores in order to make more space for people to gather such as a resting area.

Figure 120. Quick Sketch of Section Drawing

CHAPTER EIGHT |

DESIGN DISCUSSION + CONCLUSION

8.1 DESIGN OUTCOMES

Figure 121. Perspective Drawing of Building from Warspite Avenue

DEVELOPED SITE MASTERPLAN

The Community Hub is positioned in between the suburbs of Ranui and Waitangirua. It is designed to cater towards creating a place where the community as well as those outside of the suburbs can gather. The Hub will have local stores as well as other community needs so that residents who live nearby do not have to go all the way to Porirua CBD.

- RESIDENTIAL
- CREEK
- EXISTING BUILDINGS

Figure 122. Masterplan Drawing of Final Concept

GROUND FLOOR MASTER PLAN

- 1. Outdoor Hub/ Resting Area
- 2. Cultural Hub/ Performance Area
- 3. Community Supermarket (Moore Wilsons)
- 4. Recreation Centre
- 5. Sports Court
- 6. Cannons Creek Swimming Pool
- 7. Community Church
- 8. Entrance to Creek
- 9. Creek
- 10. Parking Spaces

Figure 123. Ground Floor Master Plan of Whole Site

SCALE: 1:1000

GROUND FLOOR PLAN | MAIN BUILDING

11. LOCAL - Cafe	28. Food Court Stall
12. LOCAL - Bubble Tea Store	29. Food Court Stall
13. Community Pharmacy	30. Food Court Stall
14. Public Toilets	31. Food Court Stall
15. LOCAL - Bakery	32. Food Court Stall
16. Post Shop/ Dairy/ Lotto	33. Food Court Stall
17. LOCAL - Florist	34. Food Court Stall
18. Outdoor Hub - Resting Area	35. Food Court
19. Community Library	36. Stairs to go Upstairs
20. Elevators	37. Sharing Shed
21. Emergency Stairs	38. Bank
22. Retail Store	39. Retail Store
23. Price Wise	40. Salvation Army
24. Retail Store	41. Community Vet
25. Retail Store	42. Butlers Chocolate Cafe
26. Local - Restaurant	43. Community Laundromat
27. Food Court Stall	44. Solar Battery Storage

SCALE 1:1000

Figure 124. Ground Floor Plan of Community Hub/ Commercial Centre

FIRST FLOOR PLAN | MAIN BUILDING

45. Community Garden/ Resting Area

46. Porirua City Council Office

47. Dental Clinic

48. Retail Store

49. Retail Store

50. Retail Store

51. Retail Store

52. Retail Store

53. Community Cinema/ Ticket Booth

54. Cinema Room 1

55. Cinema Room 2

56. Community Cafe

57. Restaurant

58. Restaurant Balcony

59. Restaurant

60. Restaurant Balcony
61. Storage

62. Community Hall

63. Patio of Community Centre

64. Main Hub of Community Centre

65. Meeting Room 1

66. Meeting Room 2

67. Meeting Room 3

68. Meeting Room 4

69. Inside Seating Area/ Lobby

SCALE 1:1000

Figure 125. First Floor Plan of Community Hub/ Commercial Centre

CONCEPT DIAGRAMS

Figure 126. Programme Diagram

Figure 127. Accessibility, Street Access, and Building Circulation Diagram

Figure 128. Landscape Concept

LONG SECTION A - A

- 1. Community Hall Storage
- 2. Community Hall Entrance
- 3. Library Corridor
- 4. Library Office
- 5. Community Library Entrance
- 6. Community Library Lobby

SCALE 1:1000

Figure 129. Long Section Drawing A - A

LONG SECTION A - B

- 1. Solar Battery Storage
- 2. Foodcourt
- 3. Elevator
- 4. Public Toilet
- 5. Public Toilet
- 6. Corridor

- 7. Solar Battery Storage
- 8. Bank
- 9. Sharing Shed
- 10. Elevator
- 11. Public Toilet
- 12. Local - Florist Store

SCALE 1:1000

Figure 130 Long Section Drawing A - B

Figure 132. Cross Section Drawing B - 2

CROSS SECTION B - 2

- 1. Cinema Corridor
- 2. Cinema Room
- 3. Resting Area
- 4. Patio
- 5. Corridor
- 6. Foodcourt Stall
- 7. Foodcourt Stall
- 8. Foodcourt Stall
- 9. Foodcourt Stall
- 10. Main Lobby
- 11. Outdoor Hub/ Resting Area
- 12. Community Library

SCALE 1:1000

Figure 133. Cross Section Drawing B - 3

CROSS SECTION B - 3

- 1. Community Meeting Room 3
- 2. Community Lobby
- 3. Community Meeting Room 1
- 4. Retail Store
- 5. Community Library
- 6. Children's Library Room
- 7. Solar Battery Storage

SCALE 1:1000

Figure 134. 3D Section Render 1

Figure 135. 3D Section Render 2

Figure 136. 3D Section Render 3

PERSPECTIVE VIEWS

Figure 1 37. Isometric View of Proposed Building

Figure 138. Street Perspective (Warspite Avenue)

8.2 PERSPECTIVE RENDERS

Figure 139. Street Perspective (Bedford Street)

Figure 140. Main Entrance into the Building Perspective

MAIN ENTRANCE INTO BUILDING

The main entrance into the building is through Warspite Avenue, although, there are also other entrances into the building. The main entrance is connected to the outdoor shopping area which can attract people to shop outdoors. In other words, it is creating a strategy that can make people park their car and buy right away. The circular formation helps to keep the public closer together which goes with the idea of community engagement.

Figure 141. Perspective View of Outdoor Retail Stores

OUTDOOR RETAIL EXPERIENCE

The public are able to do anything in this area, whether they are passing by or relaxing. The open space helps lessen the idea of a mall but rather a Community Hub that the local people and the rest of the public can go to whenever they need to buy or simply to engage with the community.

Figure 142. Perspective Render of Main Lobby/ Resting Area

THE MAIN LOBBY/ RESTING AREA

The main lobby can be a place where people are wanting to sit down and relax while also being part of the community. The space can bring the community closer together as people can interact with one another as well as having a place where people can eat or do work.

Figure 143. Perspective Render of Main Lobby/ Resting Area

Figure 144. Perspective View of Outdoor Resting Area

OUTDOOR RESTING AREA

The main outdoor resting area is positioned in between both entrances of the main building and towards the community centre. This allows people to have an easier access as well as help the public interfere paths so that a community engagement can form.

Figure 145. Perspective View of the Outdoor Cultural Hub

CULTURAL HUB

The cultural hub brings the community together for those that would like to create events and do performances. The public is able to gather or watch while reading or sitting down. The formation of the building also allows people from all directions to watch or observe.

Figure 146. Perspective View of the Community Walking around the Site

PERSPECTIVE - DAILY LIFE

The public are free to pass by the area without having to go into the building. Creating a better access route as well as green public spaces allow for the site to be used conveniently and helps keep community interaction. This way the sense of security will also increase.

Figure 147. Perspective View of the Community using the Rooftop and Overlooking the Public Space

PERSPECTIVE - DAILY LIFE

The public are able to access the rooftop which can be used for events such as night markets or simply to look over the building. Solar panels, rain water collection and green roofs may also be considered for sustainable approach to the roof. However, there is only one entrance and exit point.

Figure 148. Perspective View of the Community using the open terrace/ community garden space

8.3 DESIGN REFLECTION | CONCLUSION

In conclusion to this thesis research, there are a lot of parts that could have been improved. From the start of the thesis, gathering of data was very difficult and could have been revised if there was a participatory research. This would have enhanced the ideas of what the residents of Cannons Creek would want for their community rather than just basing it on already done research. In addition, it would give better knowledge when it comes to designing how the community should be or what it should have.

Another part that could have been improved is if I stuck to one concept before the end of the year. On October 2020, the concept should have been finalised and been improved. However, because of insufficient actual community research, it was hard to pin point what the advantages or disadvantages could be. Therefore, the timing for thesis got delayed further which resulted in confusion and lack of concept.

Cannons Creek centre is a very large scaled project which requires a lot of time and research. There was only 1 year to finish and it was all on my own accord. Normally, a large scaled project would have been aimed towards bigger architectural firms. Therefore, this made me lose track of time and management as I did not know if my project was on the right track. Moreover, the design of the building requires a lot of details which will take further time to demonstrate.

Overall, the proposed Community Hub is catered for the local community as well as the rest of the public. Each iteration is implemented and thought about carefully in order to create a successful architecture. By proposing a Community Hub/ Commercial Centre intervention may help mitigate Cannons Creek's 'negative reputation' and allow for attraction. The proposal aims to support social ties within the community as well as helping business for the long term. Re-awakening Cannons Creek Commercial Centre.

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