CIVIC SPIRIT IN SUBURBAN CENTRES:
Achieving a sense of community in the intensification of Auckland’s existing centres

Master Research Explanatory Document
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Auckland’s population is increasing rapidly and requires high-quality urban and architectural development to accommodate for its growth. After years of suburban sprawl, resulting in spread out communities reliant on private vehicles, and malls surrounded by surface car parking, Auckland Council has acknowledged the need for intensification.

This research project, *Civic Spirit in Suburban Centres*, builds on the council’s current ambition towards the improvement of existing residential centres, and pays particular attention to how the civic realm can be enhanced.

The project analyses ‘sprawl repair’ in terms of its quantitative and qualitative values, and provides a set of guidelines for the intensification of Auckland’s nodes. It acknowledges a lack in civic amenities and space in the current centres, and uses the theory behind establishing a sense of community to achieve successful public architecture.
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1 INTRODUCTION
1.1 RESEARCH QUESTION

How can a sense of community be reinforced through the addition of public architecture in the intensification of an existing centre?

1.2 PROJECT BACKGROUND AND OUTLINE

This research project addresses the inadequacy of Auckland’s public realm and civic amenities in suburban centres. It supports the current drive for the intensification of these areas, and highlights an opportunity to reclaim the civic spirit.

Auckland is New Zealand’s largest city and is home to 1.4 million people; this is approximately one third of New Zealand’s population. With a projection of 2.3 million people by 2043, major planning to do with Auckland’s urban and architectural environment is necessary to accommodate for the growth. Elements to consider include infrastructure, transport, centres and amenities, density, and housing. This project focuses on centres and their amenities, and, in particular, how well they support a sense of community and social belonging.

The Auckland Plan, published by the Auckland Council in 2012 and discussed later in this document, proposes a hierarchy of interconnected centres. They are described as “a focal point for a surrounding neighbourhood or area that contain a mix of activities (e.g. shops, businesses, cafes, libraries, government services, public transport). Generally appears as a node of more intensive land use and taller buildings than the surround area it serves,” providing employment opportunities, higher density living options, better access to amenities, and a sense of community to those involved.

Many nodes at the metropolitan and town centre scales are currently malls or shopping centres, which are notoriously inward-focused and perform as an island surrounded by a moat of surface car parking. Although they generally perform well economically, and provide hospitality and entertainment as well as retail, there are insufficient civic or community spaces, and buildings.

In conclusion, this project looks to intensify an existing centre and improve its sense of belonging to a community by adding successful public architecture.

1.3 AIMS AND OBJECTIVES

The research aims to build on the council’s strategy for the intensification of existing suburban centres in Auckland. It emphasises the importance of civic spirit and community feel, with the resulting design project aiming to increase the amount of well-designed public space and buildings for the benefit of the local community. Factors which make up the sense of community will be used to measure the success of the design.

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By demonstrating one example of adding successful public architecture to a metropolitan mall intensification will aim to show how architecture can support in establishing a strong sense of community. Through investigation into intensification, Auckland’s current planning and design documents, centres and public architecture, plus research through design, a set of guidelines for the improvement of existing centres will be produced.

1.4 Scope and Limitations

The research accepts the principles of the Auckland Plan and the Proposed Auckland Unitary Plan. In particular, it supports the intensification and improvement within existing suburban settings, and the intentions and hierarchy of the centres.

There are three scales concerned with the project. The scope includes an understanding of wider Auckland in terms of town planning and its related elements, the general requirements for the intensification of existing centres, but it is focused on civic and community architecture and urban design.

The design result is specific to Botany Town Centre, in east Auckland. It is allocated as a metropolitan town centre, but retains the current name of the mall; Botany Town Centre. Since similar issues can be found across Auckland, it is intended that the general principles and guidelines could be used as a tool for the design of other centres and public architecture in Auckland. The principles could be applied to all ranks of centres, from metropolitan to local centres, as defined by the Auckland Plan. Examples may include but are not limited to Albany, Manukau, Westgate, Takapuna, Pakuranga, and Meadowlands.

1.5 Definitions

The following terms are used throughout the document and defining them allows for a basic understanding of the research. All definitions are from the Auckland Plan’s glossary, unless referenced otherwise.

Liveable city
a place that Aucklanders are proud of, visitors will return to, business and jobs are plentiful, recreational activities use the natural environment, there are many ethnicities and cultures, equality, heritage is respected, innovation and sustainability are aimed for, natural resources are used but not abused, housing is efficient and is able to accommodate for the projected population, and finally, a liveable city shall provide a lifestyle.⁶

Urban sprawl
“the unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city,” often resulting in low-density communities reliant upon heavy automobile usage, and high segregation between residential and commercial uses.

Masterplan
“detailed plan for a defined area, e.g. a centre for a new urban development. It involves the integration of all elements (including social, cultural, economic and environmental considerations) into one overall design and can include the final expected physical form of the buildings and spaces within.”⁸

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Intensification
“redevelopment, conversion and retrofitting where land is developed with greater intensity (height and coverage) of buildings, or accommodates a greater residential population or workforce than before.”

Centre
“a focal point for a surrounding neighbourhood or area that contains a mix of activities or functions (e.g. shops, businesses, cafes, libraries, government services, public transport). Generally appears as a node of more intensive land use and taller buildings than the surrounding area it serves.”

Mixed-use development
“a mixture of activities such as residential, business, retail, or hospitality that occupy space within the same buildings or within the same block or area (i.e. An apartment building with shops, cafes and offices on the lower floors, or a town centre with these activities).”

Social infrastructure
“a broad term that covers a wide range of facilities, services and locations delivered by council, government and community groups that support and sustain the well-being of people and communities.”

Public architecture
the buildings and the space around them which is open to all people, and can include a variety of functions from civic, to community, to mixed-use.

Sense of community
“the sense that one was part of a readily available, mutually supportive network of relationships upon which one could depend” when a group of people share space or time.

9 Ibid., 377.
10 Ibid., 374.
11 Ibid., 378.
12 Ibid., 380.
2 EXISTING KNOWLEDGE
2.1  Auckland and its Future

2.1.1  Auckland and Unitary Plans

The Auckland Plan
The Auckland Plan is a document published by the city council which outlines the principles to improve Aucklanders’ social, economic, environmental, and cultural well-being, and aims to make Auckland the world’s most liveable city within the next 30 years.

The Proposed Auckland Unitary Plan (Unitary Plan)
The Unitary Plan is the land-use planning document used by the council which implements the Auckland Plan’s principles and replaces the plans of the former city, district and regional councils. It divides Auckland up within the urban boundary into zones for development, centres, and housing types for the intensification of existing areas and provision for new developments.

2.1.2  Physical context

Shape and growth
The growth of Auckland is not only determined by its shapely coastlines, thin isthmus and topography, but by the motorways and public transport routes; in fact, “historically, settlement patterns in Auckland have been concentrated around major transport routes.”14 The shape of Auckland is illustrated in the following diagrams, which show that it forms a cross-axis of urban development. This has led to Auckland’s car dependency and resulting suburban sprawl.

Natural environment
A unique aspect of Auckland’s physical context is its accessible natural environment, which few cities in the world can compete with. Its maintenance is a significant contributing factor in the making of Auckland as the world’s most liveable city. Auckland’s “beaches, islands, harbours, waterways, volcanoes, lush forests and productive rural areas offer a superb combination of physical beauty, recreational opportunity, economic significance and cultural identity.”15 Where applicable, all centres are to address and make use of Auckland’s natural features.

15 Ibid., 20.
2.1.3 Urban and architectural context

The following elements are outlined in the urban section of the Auckland Plan.

Urban environment

Auckland’s urban environment is a result of low-density horizontal growth over the 20th century. The Auckland Plan has opted for a ‘compact city’ model of urban development, shaped by the Unitary Plan’s Rural Urban Boundary (RUB), within which 70% of all development should occur over the next 30 years. The RUB is often criticised for having malleable boundaries due to government schemes such as Special Housing Areas expanding it; the main concern being the extra cost of transport and other infrastructural extensions.16 However, the general principle for intensification within the RUB will assist in the economic growth and the maintenance of Auckland’s character.17

Centres and public architecture

The existing centres in Auckland are often underdeveloped and single-use. In many instances they are actually malls and shopping centres, rather than complex town or suburban centres with multiple functions, as they traditionally used to be. Generally, the urban spaces are sterile, lack civic space and spirit, prioritise vehicles over pedestrians, and reduce social congregation in favour of consumption. This affects the local neighbourhood not only socially and spatially, but reduces the potential benefit for the local economy. To rectify this, the Auckland Plan notes that the public realm and access to amenities is vital to form a liveable and high-quality city. The buildings and spaces of the centres should be attractive and

highly functional to encourage community members to come and linger, and be comfortable.

A hierarchy of centres will support the interregional connections within Auckland and their walkable catchments. These areas shall include a variety of activities and services, plus employment and housing to support the projected population growth. There are five ranks: – city centre, metropolitan centres, town centres, local centres, and neighbourhood centres. The ‘City Centre’ refers to the current Central Business District and connects to secondary major centres, known as metropolitan centres, which provide opportunities for economic, residential and transportation advancements. Town centres are hubs with community amenities and introduce a wider range of housing types and densities. Connected to town centres are local centres, which are within walking distance of most homes. Finally, neighbourhood centres include amenities related to a community facility, or a piece of social infrastructure like a school.18

**Infrastructure**

Due to the compact city model, most of the infrastructure of the city will be used and maintained, with some improvements. The necessary elements that will make up Auckland’s physical infrastructure include water supply, wastewater and stormwater management, plus the provision for energy including its renewable generation, storage and distribution. Telecommunication infrastructure will need to be up-to-date and includes but is not limited to accessible and affordable internet and mobile usage. Finally, an efficient transportation system will be implemented to provide effective public transportation and roading networks.19

**Transport**

Residents of suburban Auckland are notoriously car-dependent and rely on being able to drive and park anywhere to complete their daily activities; in fact 85% of all trips made in Auckland are done by private vehicles.20 Doctor Paul Mees, a lecturer in Transport and Land Use at the University of Melbourne, believes Auckland has one of the worst public transport systems of developed cities and the worst rail system.21 Auckland Council admits that the transport system is “overburdened and inefficient”22 and that Aucklanders mostly rely on their privately-owned vehicles to commute around the city because of years of underinvestment and quick-fixes.23

The new aim of Auckland Council is to get all means of transportation well-connected, working as a single system, and to increase patronage. Walking, cycling, and taking public transport will be made more appealing as alternatives to private vehicles. The health and environmental benefits include being more active, increasing safety, reducing emissions, as well as economic and social benefits for the community.24 Revision of the strategy for car parking is required for a more efficient use of land.

This requires Auckland’s centres to integrate public transport stops and interchanges into their intensification. Attractive architecture of the transport interchange, and functions which support the operation of the interchange, will encourage the local community to use the service.

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18 Ibid., 253.
19 Ibid., 292.
20 Ibid., 314.
21 Auckland, City of Cars: Episode 1, directed by Michael Tritt (Auckland: Creative commons, 2006), last modified December 2, 2006, https://www.youtube.com/watch?v=sCKDBHT3674
22 Auckland Council, The Auckland Plan, 313.
23 Ibid., 313.
Housing
Auckland requires at least 400,000 more dwellings to be built by 2043\textsuperscript{25} to house the projected population growth. The council has acknowledged the necessity of introducing a wider variety of accommodation options. There is a particular market for higher density, mixed-use living in centres for young adults, professionals, and elderly who want high amenity and low maintenance lifestyles. Currently, 76\% of all households are detached suburban dwellings,\textsuperscript{26} proving that choice is quite limited. The diverse range of options will match the changing demographics and family compositions,\textsuperscript{27} with 60\% of all new dwellings to be attached.\textsuperscript{28} An effort to change the negative connotations regarding higher-density living will be necessary.

A live, work, and play ideal is repeated throughout the Auckland Plan with the aim of producing “high-amenity, pedestrian friendly, walkable neighbourhoods.”\textsuperscript{29} Higher density developments encourage pedestrian travel between public amenities through a well-designed system of streets, pathways and public open space. In turn, these spaces encourage neighbourliness and social belonging, as well as enhancing safety and community identity. Many suburbs are becoming more urban for three main reasons: changes in household structure, increasing diversity, and the decline of suburbia.\textsuperscript{30}

This means that centres should provide attractive housing options and everyday urban amenities within close proximity for the residents.

2.1.4 Social context

The people and culture
Auckland is very diverse with more than 180 different ethnicities in the region. Migrants enrich the culture and benefit the lifestyle of all Aucklanders when there is integration and inclusion.\textsuperscript{31} It is important for Auckland’s identity to acknowledge and respect Maori as tangata whenua and appreciate New Zealand’s unique heritage. Young people are to be put first when it comes to local and community services, and education, training, knowledge and employment should be available for all Aucklanders.\textsuperscript{32}

The centres in Auckland should include functions, public space, and services for people of all ages and cultures, in particular young people. Additional opportunities for employment will be a result of the extra hospitality and commercial buildings in an intensified centre. The architectural language may represent the identity of the local community.

Recreation
The development should address the natural features of the area, and provide outdoor and indoor space for recreational activities.

\textsuperscript{25} Gibson, “Quarter-acre dream fades for city,” NZ Herald
\textsuperscript{26} Ibid.
\textsuperscript{28} Auckland Council, The Auckland Plan, 270.
\textsuperscript{29} Ibid., 249.

\textsuperscript{31} Auckland Council, The Auckland Plan, 70.
\textsuperscript{32} Ibid., 89.
“Taking part in recreation, sport and outdoor activities is a notable feature of Auckland’s lifestyle. Aucklanders flock to the beaches at weekends, tramp in the Waitakere and Hunua Ranges, and swim, boat and fish in the harbours. We frequent the city’s walkways and parks, whether to improve our fitness, walk our dogs or stroll and picnic with friends, family and whanau. We congregate at grounds across Auckland to watch and participate in sport. Our temperate climate and natural setting is ideal for year-round outdoor activities, on land and on water. Easy access to the outdoors is an important part of our culture and part of Auckland’s appeal. We will sustain this as Auckland grows and ensure we optimise the recreational opportunities on offer.”

Ibid., 139.
2.2 CENTRES AND INTENSIFICATION

2.2.1 Sprawl

“We changed from a country of villages, towns, and cities to a country of subdivisions, malls, and office parks. We spread out geographically beyond any proportion to our population growth. We built a transportation system dominated by cars in a landscape designed for them. We became a decentralized service economy rather than an urban industrial economy. And we became more segregated — by age, by income, by culture, and by race. All of these shifts found physical expression in our development patterns — suburban sprawl and urban decay, diminished natural resources, and lost history.”

The quote above relates to the extreme sprawl of American cities but the same principles and consequences apply to Auckland.

Sprawl relates to the pattern of horizontal urban growth common to development during the 20th century. There are many contributing factors which led to suburban sprawl, but the biggest were the reformation of the economy and infrastructure planning which focused on roads in the 1950s and 1960s. Advancements in technology and cheap land allowed for zones to be separated by long, sweeping motorways.

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Fig. 2.9: Flat Bush in 1996

Fig. 2.10: Flat Bush in 2001

Fig. 2.11: Flat Bush in 2008
2.2.2 Intensification

“Good design can change the whole culture of a city”

Intensification as a form of re-urbanisation of existing suburbs is necessary to provide not only more space for the growing population, but also for adding more complexity to the local centres. This is how calls for ‘suburban retrofitting’ and ‘sprawl repair’ have entered the urbanist theory in North America and Australia.

Techniques outlined in Galina Tachieva’s Sprawl Repair Manual aim for compact densification with good connectivity, a walkable block structure, a mixture of uses, and public open space. Sometimes it is necessary to de-densify or re-green centres to achieve a good balance. Methods such as prioritising pedestrians and cyclists over cars and parking, designing and defining public space, and mixing buildings’ uses, are principles which need to be considered in centre intensification. These, plus maintaining the area’s identity, living locally, and choosing vocations which make you useful to your neighbours will result in the best outcome for the local community.

Tachieva’s book and similar texts have shown that urban fabric, no matter how low-density, low-rise and car-dependent, can be redesigned and redeveloped in a manner which is beneficial for the social, economic, environmental, and cultural good of a suburb. After over 20 years of such attempts worldwide, we have many good examples.

Oak Hollow Mall
High Point, North Carolina

After purchasing the closed-down shopping centre, High Point University, along with Duany Plater-Zyberk & Co. saw the opportunity for its retrofit and intensification. The scheme keeps the existing structure and a large number of the existing car parks. In the form of small urban blocks, the design provides apartments, retail, food production, hospitality and tertiary education. In terms of urban design, the streets are at a human scale, with larger civic spaces as vibrant meeting points.

High Point University’s mall intensification proposal is quite successful with well-defined public spaces and good connectivity between the uses. The additions are compact and walkable, but are only concentrated on the eastern side of the existing mall, leaving the western edge undeveloped.

38 Wilson, “The City's Shame: Why is Auckland's Urban Design So Bad?” Metro
40 Ibid., 8.
41 Jeff Speck, Walkable City: How downtown can save America, one step at a time (New York: North Point Press, 2012), 71.

Fig. 2.12: High Point University proposal

Fig. 2.13: Oak Hollow Mall currently

Fig. 2.14: High Point University proposal of Oak Hollow Mall post sprawl repair
2.2.3 Centres

“We are beginning to enjoy urban as well as suburban lifestyles. The role of the house and home is changing as we change. Shopping is a new favourite pastime, education is big business and cafes have reinvented then main street.”

Successful centres are nodes for activity, employment and accommodation, and should form the social and economic base for a community. In Auckland and other international cities suffering from sprawl “if you ask a resident to take you to the town centre, more often than not you will end up in a mall.” The standard of existing centres, as well as new centres, needs to be improved to provide a mixture of employment and accommodation types, community facilities and retail to “make neighbourhoods more walkable, liveable and sustainable.”

Pedestrians and cyclists, as opposed to cars, are to be prioritised in all centres in Auckland. Pedestrian and cyclist zones assist with the health and environmental benefits that come with being more active, plus increased safety, reduced emissions, and positive economic and social impacts to the community. For walkability to be successful it must be useful, safe, comfortable, and interesting.

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Rouse Hill Town Centre
Rouse Hill, Sydney, 2008

Rouse Hill Town Centre provides retail, offices, apartments and community facilities with good transport access. It serves the function of a meeting place by providing well-designed public open areas with materiality reflective of the identity of its community. Architecturally, the development maintains a fine grain and human scale while providing all the amenities required of a small town.

This centre is interesting as it has attributes of a mall, which is good economically, but still maintains a main street feeling, which is good socially. Within the development, pedestrians are prioritised and are provided with well-defined and well-designed space for gathering. In the satellite image below, it seems clear that there is little development surrounding the Rouse Hill Town Centre, suggesting that the scheme was a greenfield development, as opposed to an example of town centre intensification. A similar example in Auckland is Westgate Town Centre in Hobsonville, where there is a lot of rural land, but limited urban development currently around the centre.

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45 Calthorpe, The Regional City, 52.
46 Ibid., 202.
48 Fieldhouse, “The route to pedestrianisation,” Rudi.net
49 Speck, Walkable City, 11.
Fig. 2.15: Satellite image of Rouse Hill Town Centre showing greenfield development

Fig. 2.16: Rouse Hill Town Centre public space
2.2.4 Auckland’s centre typologies

Auckland has a variety of town centre typologies; each with positive and negative points, but all with the potential for improvement and intensification.

Mall typology
The mall typology is usually located at the intersection of major roads and with improvement and intensification can make great centres because of their central location and access to public transport. They are inwardly facing and have anchor tenants on either end of the development to bring people through them. They provide plenty of surface car parking around the perimeter; it is often referred to as a moat, as it isolates pedestrians from the street from the interior of the shopping centre. Malls or shopping centres come in different sizes and variations but are generally made up of similar building styles. The ‘big box’ typology refers to the large and quick-to-construct warehouses made of blank materials and large signage. Aesthetic appeal is aimed at cars travelling past the store and not at pedestrians, where there is limited thought regarding human scale and experience. Drive-throughs and a lack of walkable block structure assists in the de-prioritisation of pedestrians visiting malls and shopping centres.

Botany Town Centre – AMP
Botany Town Centre includes a mall, many big box retailers, an ice-skating rink, a library, and a cinema complex. The mall itself is well known for maintaining a main street feeling through its centre, but is otherwise criticised for its vehicular prioritisation with surface car parking and fast-moving roads.

51 Tachieva, Sprawl Repair Manual, 129.
52 de Jong, New SubUrbanisms, 123.
Albany Mall – Westfield

Westfield Albany consists of a typical mall with further commercial strip and big box retail typologies. Vehicles dominate the development overall, requiring users to drive there and make use of the extreme amount of surface car parking. Efforts are currently being made to encourage public transport patronage to and from Albany Mall.

Fig. 2.18: Satellite image of Westfield Albany

Sylvia Park – Kiwi Income Property Trust

Being on the intersection of major roads and State Highway 1, Sylvia Park has many users and a high economic turn-over. The development offers a variety of functions, but lacks accommodation and civic amenities.

Fig. 2.19: Satellite image of Sylvia Park mall
**Business Park typology**

A business park is a development focused purely on employment, either in offices or factories. Here the buildings are single-use, parking is underutilised, and it is necessary for workers to drive to and from work.

**Highbrook/East Tamaki**

Highbrook was developed as an extension of the East Tamaki industrial area in an attempt to provide offices away from the Central Business District. There are a few food stores in the development; however, employees are still required to drive to work.

**Rosebank Road**

Rosebank Road is a single-use industrial development which has spread across the peninsula in west Auckland. The land is very valuable and highly underdeveloped.
Main Street typology
The main street is the typology which feels the most like a village or town centre. This type of centre is located centrally in a neighbourhood along the main road, and usually consists of local retailers and cafes.

Howick
Howick’s main road, Picton Street, has quite a long history, and has advanced while maintaining a walkable block structure by pushing car parking behind the development. Some intensification around the area has begun with apartment complexes, but there is still a lot of opportunity for development.

Dominion Road
Dominion Road has always been a historical route leading from Mount Eden to the city centre. Shop houses, where owner’s operate retail stores on the ground level and live above, still exist but are not as common as they were. There is a mixture of uses, and walkability is achieved; however, there is plenty of room for height and programmatic intensification, whilst maintaining the area’s character.
2.2.5  Intensification of Auckland’s centre typologies

Mall typology

“A better example of intensification in Auckland is New Lynn’s LynnMall and the extension currently being built, containing a cinema complex, more retail, hospitality and public space.”

To improve and intensify a centre which is currently a site with a mall, it is possible to work with some of the existing buildings as well as introducing new building types and uses. Building perimeter blocks activates the streets, and conceals car parking or introduces extra public spaces. To make sure the town centre is always functioning, it is recommended to phase in construction. The images following are from Sprawl Repair Manual and shows how intensification can change an underperforming mall.

Intensification of malls and shopping centres has begun in New Zealand. Not all examples are genuine attempts by the mall owners to integrate with the local community, and fail to provide civic space and buildings. An example is the proposal by Westfield to expand St. Luke’s Mall and monopolise on its surrounding civic amenities. Proposals to the community were not convincing in terms of social infrastructure, and they complained that it did not enhance the character of the area. There has been no further coverage on the issue since 2012.

53 Tachieva, Sprawl Repair Manual, 112.
54 Ibid., 117.
55 Ibid., 129.
Fig. 2.25: Typical mall before ‘sprawl repair’

Fig. 2.26: Typical mall after ‘sprawl repair’
Business Park typology
This form of sprawl repair can also be quite successful as employment opportunities attract residents. Mixing uses and including housing, retail, hospitality, civic, entertainment and public space will result in an economic and socially successful centre. Again, connecting and repairing thoroughfares, infilling perimeter blocks, rationalising parking and including a transport interchange provides the best outcome.\textsuperscript{56} The following images illustrate the transformation of a single-function business park.

\begin{figure}[h]
\begin{center}
\includegraphics[width=0.4\textwidth]{before_sprawl_repair.png}
\caption{Typical business park before 'sprawl repair'}
\end{center}
\end{figure}

\begin{figure}[h]
\begin{center}
\includegraphics[width=0.4\textwidth]{after_sprawl_repair.png}
\caption{Typical business park after 'sprawl repair'}
\end{center}
\end{figure}

\textsuperscript{56} Tachieva, \textit{Sprawl Repair Manual}, 169.
Main Street typology

There is much opportunity for improvement and intensification, both commercially, with housing, and other uses. The inclusion, or update of a transport interchange and dealing with car parking will enable a pedestrian-friendly, vibrant centre. Below are images illustrating the intensification of commercial strips.

Fig. 2.29: Typical commercial strip before 'sprawl repair'
Fig. 2.30: Typical commercial strip after 'sprawl repair'
2.3 SENSE OF COMMUNITY IN PUBLIC ARCHITECTURE

2.3.1 Sense of community

Sense of community is achieved when people within proximity to each other feel like they can depend on, and contribute to, a network of supportive relationships. The most accurate breakdown of the term was defined by social psychologists McMillan and Chavis in 1986, where four factors were outlined as the biggest contributors to achieving a sense of community: membership, influence, integration, and emotional connection.

The four factors are described below and are accompanied by architectural suggestions for each. The resulting guidelines can be applied and used as a form of measurement in public architecture attempting to establish a sense of community. They are used in the following sections of the document to measure the success of the precedents.

1 Membership

Membership relates to the feeling of belonging and producing proud residents. In this research, membership relates to the purpose and functioning in public architecture and urban space. The design should allow for people of various ages and interests to successfully operate in the same area. Examples may include a playground for children, a patch of grass for a family or sports enthusiasts, a basketball hoop for teenagers, an exhibition space for adults, and a chalkboard wall for everyone.

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57 Fremlin, “Identifying Concepts That Build a Sense of Community,” Dr. Jenny Fremlin: Media/Community Psychologist

Spaces in, and between, buildings should encourage the users to stay and feel comfortable to dwell. Ratios which enable a sense of enclosure, orientation to the sun, shading, lighting, plenty of street furniture, and a variety of functions all assist in the feeling of comfort and belonging.

To ensure the occupants of the public architecture are proud, well-designed buildings and grand spaces which are representative of their community are necessary. The architecture may include references to the community’s culture or local materials, and provide civic amenities such as a library.
2 Influence
To be of influence to a community means to matter and to be able to contribute to its running.59
Within one collective community there may be many smaller communities of interest or age, and by providing a spatial and functional variety will ensure an individual feels like they matter in the overall network. Architectural and urban space should be flexible and allow for many uses. An example is a community centre hall which can host day care, dance classes, parties, and performances. Another may be a civic square which can be used to dwell, perform, or gather to protest. Functional planning requires spaces in which people are able to volunteer, like a library or a community kitchen, which allows members to feel needed and that they are benefitting the community.

3 Integration and Fulfilment of Needs
This requires members to feel that they benefit being a part of the community.60
Again, a variety of spaces and functions assist in the fulfilment of needs. Easy access to services, such as doctors, welfare and childcare will enable this, plus free or cheap use of community spaces and participation in their activities also benefits the community. Opportunity for employment in retail, hospitality or commercial offices within a centre is highly beneficial.
Spaces or architectural elements may benefit others. Retail and civic anchors draw people through a development and expose them to secondary retailers and other amenities. Other examples may include the urban space between two buildings creating an attractive space for members to dwell, or a cantilever on one building shading another or a public space.

4 Shared Emotional Connection
The sharing of space, time, hardship or values will result in a stronger connection between the members.61
As with the above factors, if a variety of spaces and functions work separately, but also well as a whole, they enable a shared emotional connection for community members. This assists with planned activities, as well as flexible space for events. Connection between functions and spaces will result in a stronger connection between the members. Architecturally, ensuring clear sight lines and using transparency in buildings will ensure this is strengthened.

In conclusion, it is clear from all four factors that architecture matters. Space between buildings becomes vital, as well as civic or cultural purpose within them. Their quality of architectural expression and arrangement influences the sense of community.

59 Ibid.
60 Ibid.
61 Ibid.

Fig. 2.32: Protestors at Federation Square, Melbourne
2.3.2 Precedents: New Zealand’s public architecture

Auckland Town Hall, Auckland

The Auckland Town Hall is a neo-Baroque building, which was opened in 1911 and restored in 1994-1997. It contains a large performance hall, and its distinctive clock tower marks Queen Street and Aotea Square.62

Sense of community analysis:

1. Membership
The programmatic variety is limited as its main function is a theatre. Although it can be used for many types of events, including music, graduation ceremonies, and performance, it only serves a part of Auckland’s demographic. Because of its age and history, it is definitely a public building which helps with the identity of its community, whether or not they use the building itself. The interior spaces of the building vary from quite grand to small and comfortable; however, the adjacent Aotea Square is very large and not well-defined.

2. Influence
Due to the architectural style, the spaces are quite inflexible, although the performance hall can host a number of events. The vast Aotea Square is currently Auckland’s major civic square and can host thousands of people during protests; this is where a member can best influence their community.

3. Integration and Fulfilment of Needs
In terms of benefit for a member, this building only benefits some of the community by being mostly single-use and providing no community services. The beautiful architecture benefits the street and enhances Aotea Square.

4. Shared Emotional Connection
The performance hall allows for some members of Auckland to share space and time. Architecturally, the limestone façade does not create good connectivity between the outside and inside. However, Aotea Square provides a place for people of all ages and interests to pass through.

Conclusion
The Auckland Town Hall exhibits all four factors which make up a sense of community, with a strong emphasis on identity. There is a lack of varying functions, particularly to do with community services. The adjacent Aotea Square has much potential but requires some architectural interventions to allow for flexible and multi-use space.

Fig. 2.33: Auckland Town Hall to Aotea Square

Fig. 2.34: Auckland Town Hall interior
Tane-nui-a-rangi, Nuhaka

Tane-nui-a-rangi marae's meeting house (whare whakairo) was opened in February 1988, and brings the physical and spiritual worlds together. The symbolism of whare whakairo conceptualises a human body of an ancestor in its architectural elements. The ridgepole symbolises the head, the bargeboards (maihii) are the arms, the main beam (tahuhu) is the spine and the rafters (heke) are the ribs. An interesting element is the porch (roro or brain) which is the place for discussion and gathering, which performs similarly to a town hall's foyer space.

Sense of community analysis:

1 Membership
The meeting house offers a single building divided into two spaces; the porch and the house, which are both very flexible and have limited furniture. The function of the whare whakairo is mostly spiritual and for tribe members; however, if approached correctly, anyone is welcome. The metaphorical influence of the architectural elements clearly help with the community's identity and pride about the building.

2 Influence
The whare whakairo is the heart of the marae and the local community. Its design, construction and running is reliant on the tribe members. Performance, gathering, and spiritual ceremonies are held in the interior of Tane-nui-a-rangi meeting house.

3 Integration and Fulfilment of Needs
The meeting house provides a hub for all groups within the community to use, and the networks formed benefit all members. An adjacent building, the whare kai is where the community eats.

4 Shared Emotional Connection
Due to the spirituality and reference to history that the marae and meeting house have, there is a clear shared emotional connection between the members. The spaces and thresholds enable a connection between members, as well as the spiritual realm.

Conclusion
In conclusion, Tane-nui-a-rangi marae and meeting house perform very well in providing a sense of community. The spirituality and architectural elements support the community's identity well.

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**Te Oro Community Centre, Glen Innes, Auckland**

The Te Oro Community Centre in Glen Innes offers the community free and cheap music and performing arts classes, and spaces to hire. The design was driven by the input from the local iwi and artists whose inspiration was a grove of trees to gather under. This is represented by the timber structure and leaf-inspired geometric façade.\(^{64}\) Certain areas within the community centre are glazed and expose what is happening inside.\(^{65}\)

**Sense of community analysis:**

1. **Membership**
   Te Oro Community Centre provides the area of Glen Innes with various community spaces and functions for many ages and interests. The architecture represents a grove of trees and leaves, and has become a landmark in the area; both are supportive of the community’s identity. The space around the building is undefined and functions as a carpark.

2. **Influence**
   The community centre influences the surrounding community by exposing what is going on inside and having various functions which work well simultaneously. The building requires members to volunteer for its operation and maintenance.

3. **Integration and Fulfilment of Needs**
   Residents of Glen Innes benefit from the building by having a piece of public architecture which provides community services. The building would be even more successful if further improvement and intensification was done around the area; perhaps it will be the catalyst.

4. **Shared Emotional Connection**
   The various activities and spaces help in creating networks in the community. Glazed sections showcase what is happening inside the building to the rest of the area, this connection is vital for strengthening the region's overall relationships.

**Conclusion**

Te Oro Community Centre is successful in establishing a sense of community with its strengths being the architectural representation of a grove of trees, plus the elevation and exposure of the activities within. For improvement, the urban space around it could be developed to form a civic hub for the community.


Manukau Institute of Technology (MIT), Manukau, Auckland

Manukau Institute of Technology’s Manukau campus opened this year and incorporates a bus and train interchange, as well as some hospitality and tertiary amenities. The central atrium, circulation space, and ground floor is open to the public, serves as the main interchange in Manukau, and brings attention to the 21st century style of education taught there. The tertiary institute is flexible with the main structure pushed outside the envelope to keep the building as open plan as possible.66

Sense of community analysis:

1 Membership
MIT’s functions bring people of all ages and interests together in one building, with the different activities operating simultaneously. Members of the community are proud of the building as it makes a statement with the external white-diagrid. It faces Hayman Park, which is well-designed, and used by people of all ages.

2 Influence
The building allows for members of the community to influence others by giving them education, public amenities, space to dwell, and a transport interchange, while at the same time keeping it sustainably connected to the rest of Auckland.

3 Integration and Fulfilment of Needs
The various functions benefit groups within the area, with a particular emphasis on providing tertiary education. Further improvement and intensification of the area around MIT will result in a very successful metropolitan centre with public architecture.

4 Shared Emotional Connection
Time and space is shared within the MIT campus between all users. Transparent facades allow for a visual connection to the rest of Manukau, in particular towards Hayman Park, and showcases tertiary and public transport, and how they can work well together.

Conclusion
MIT is very successful in providing a sense of community in Manukau. Tertiary education and a transport interchange, plus public space, ensure that people of all ages and interests use the building and are proud of it. Development around the building will result in a great metropolitan centre which offers many civic amenities.

Left: Fig. 2.37: MIT Manukau to transport interchange
Above: Fig. 2.38: MIT Manukau exterior from Hayman Park
2.3.3 Precedents: Other public architecture

Baths of Diocletian, Rome

The Baths of Diocletian were built in 298-306AD and were one of the first instances of community architecture. They provided a public environment for up to 3,000 people over an expansive 13 hectare site with a gymnasium, libraries and pools to gather at; they are now a museum.

Sense of community analysis:

1. Membership
The baths, or thermae, were a place to gather, discuss and relax for residents within proximity. As public architecture, both as baths and as a museum, they are very important to Rome because of their history and social significance. The spaces were precisely designed to be grand, suggesting circulation in some areas, and encouraging dwelling in others.

2. Influence
Although the spaces within the Baths of Diocletian are quite open, they are reasonably inflexible; possibly to do with the materiality and the social structure of the time.

3. Integration and Fulfilment of Needs
The area surrounding the baths would have benefitted from having a community space to gather. Its transition into a museum is beneficial for its maintenance and historical preservation.

4. Shared Emotional Connection
Sharing of space, time and discussion were important for their functioning as baths. Space with vaulted ceilings allowed for a visual connection through some parts of the building, and less in the private areas.

Conclusion
The Baths of Diocletian are important in understanding public gathering and work quite well in establishing a sense of community between their members. Their history is of interest to people now who visit the museum.

Seinäjoki Library, Finland

The new Seinäjoki Library is joined to Alvar Aalto’s civic building to form a single community hub, now with multiple uses. The architecture respects and refers to Aalto’s building, whilst aiming to be bold. There is an emphasis on providing space for children and it challenges the role of the library by providing flexible space.68

Sense of community analysis:

1 Membership
The mixed-use library addition to Seinajoki’s civic hub assists in achieving a sense of belonging by providing more functional and spatial options for people of different ages and interests. In terms of identity, the building addresses Aalto’s existing work with respect, and adds to the building that Finland is already proud of. A variety of furniture options inside and outside mean it is comfortable for members to dwell in the spaces.

2 Influence
Being a community hub, there is an opportunity for people to volunteer to assist in its running. Flexible spaces and a variety of uses means members feel like they fit in and matter in the networks making up the community.

3 Integration and Fulfilment of Needs
The scheme provides public spaces and services which benefit most people in the community. The new architectural addition benefits the area, as well as the existing building.

4 Shared Emotional Connection
The community shares space and time here. There is transparent glazing on one elevation which exposes and showcases the activities inside, and strengthens the community’s emotional connection.

Conclusion
This precedent is interesting as it adds to an existing civic building to reinforce the overall sense of community. The variety of functions and its focus on children means the area’s residents can freely use its facilities, see what is happening through the glass, and add to the identity of the civic hub.

Right: Fig. 2.40: Seinajoki Library exterior

Federation Square, Melbourne

Federation Square is a contemporary take on a civic square. Adjacent to St. Paul’s Cathedral and Flinder’s Street Station, civic and cultural buildings with similar façades define the sloped, cobbled square, which has become the heart of Melbourne.69

Sense of community analysis:

1 Membership
The square is surrounded by various cultural functions, which means all residents and tourists use the square. Although it is controversial, the architectural materials are reflective of the area by being made of local sandstone. The warm colour of the cobbled stones and slope enhances the feeling of enclosure in the square. Steps and benches, as well as chairs and tables provide users with a lot of space to sit.

2 Influence
Being Melbourne’s main civic space, Federation Square is home to many protests as it can host thousands of people at one time. Street performers are present and the various buildings defining it feed onto the square, enhancing its atmosphere.

3 Integration and Fulfilment of Needs
Community members feel as if they benefit by having a landmark to showcase the culture of Melbourne and wider Australia. The addition of the buildings and its being a tourist attraction mean that there is more opportunity for employment in and around the area. The buildings surrounding the square all benefit one another in terms of program and space.

4 Shared Emotional Connection
As the buildings all feed onto one shared space, there is a definite connection between the users. People of all ages and different interests come to view the architecture, eat, as well as benefit from its activities. Some of the buildings lack in visual connection between the upper floors and the square due to the façade.

Conclusion
In conclusion, Federation Square and its supporting buildings establish a sense of community in Melbourne, not only for the residents, but tourists too. It is a showcase of the culture of the area and provides a successful place for people to feel like they can influence others, or greatly benefit from being there. The controversy surrounding it only makes it more popular and an important feature supporting Melbourne’s community.

Fig. 2.41: Plan of Federation Square

Fig. 2.42: Federation Square
2.4 CONCLUSION

The control of urban expansion and maintenance of the area’s natural features, culture and people is vital to the creation of the world’s most liveable city. In terms of the urban and architectural realm, Auckland’s urban environment is changing with improving infrastructure, transport, amenities, and housing options to service the growing population. Centre intensification and successful public architecture will provide Aucklanders with the urban spaces necessary for the evolving city and assist in establishing the civic spirit.

There are many existing opportunities for intensification in Auckland to prevent excessive horizontal growth. These centres should be filled by vibrant pedestrian activity and provide accommodation, employment, and public space. A key ingredient in these centres will be one or more public buildings, whose architecture must go beyond usefulness, and express and enhance the sense of community.

To achieve a sense of community in public buildings, it is necessary that their architecture supports the four dimensions of community; membership, influence, fulfilment of needs, and shared emotional connection. Through the analysis of New Zealand and overseas’ examples of public architecture and spaces, there appears to be six common elements to all of them, in successfully achieving a sense of community:

1. Variety of functions
   - The building or public space is useful for people of all ages and of all interests.
2. Hospitality
   - Restaurants, cafes, and community kitchens act as anchors to draw people through the building.
3. Connections
   - The design encourages relationships and human connection.
4. Transition space
   - Horizontal and vertical circulation is considered, and foyers and porches provide space for community engagement.
5. Comfort
   - Proportions for enclosure, street furniture, and planting are designed for to encourage dwelling.
6. Identity
   - The architecture is representative of people and encourages local pride.
3 PROJECT DEVELOPMENT
3.1 **BRIEF**

The first step in the design project was to form a general set of rules for intensification and test them on three existing centres in Auckland. Their aim was to advance each area’s social, economic, health and environmental well-being, while acknowledging local differences and identities.

In terms of quantitative value, the new developments include additional retail, offices, hospitality, entertainment, social and service amenities, civic amenities, public shared space, car parking, residential accommodation options, and a transport interchange.

In terms of qualitative value, the improved centres prioritise pedestrians, cyclists, and users of public transport, and aims to be a vibrant, dynamic and safe environment for people of all ages who live, work, play, and commute there. The development aims to ‘feel’ like a town centre and encourage users to spend time there.

Following this, one site was chosen and analysed further. Amendments to the masterplan were applied, and one new, civic building was designed.

3.2 **INTENSIFICATION**

3.2.1 **Intensification process**

The following is a set of rules created from the existing knowledge regarding centres and intensification, and the principles outlined by the Auckland Plan. The steps are guidelines for the intensification of centres. They are illustrated in plan and section on a simplified version of a typical coastal, suburban centre arrangement.

Note: this process produces the first step in the intensification planning required for the improvement of Auckland’s centres. Its intention is to prove the possibility for existing centre intensification, and sets the scene for the development of the public architecture. It assumes the intensified centre meets its requirements programmatically, socially, and economically. Further exploration is not in the scope of this project which focuses on community and public architecture.
1 – Landscape and climate
Auckland’s centres should take advantage of, and address, the natural environment available. Development should use its proximity to the feature, but not destroy it or the pedestrian realm adjacent to it. Climatic conditions to consider would be where the prevailing wind is coming from and where the sun is at certain times during the day; these factors will affect the shape, orientation, and function of the centre’s buildings.

2 – Connections
These connections could be existing, or proposed roads or walkways which follow the intended pedestrian, cyclist, transit flows and would keep the block sizes walkable.

Fig. 3.1: Identify the landscape and climatic conditions
Fig. 3.2: Identify the connections
3 – Streets and networks

Turn the connections into streets and provide pedestrian access-ways as mid-cuts through blocks. Consider placing service lanes in the least desirable areas in terms of wind and sunlight. Where possible, keep street widths reasonably narrow to slow traffic, or provide enough space for separate bicycle and public transport lanes on arterial roads. Keep pedestrian pathways wide.

4 – Existing buildings and continuous edges

Depending on their function, flexibility, perceived value from the community, construction, cost, and ability to fit into the new vision, there may be existing buildings on the centre site which should be kept and worked into the design. Be sure to build to the edge of the pedestrian footpath, or in line with existing buildings. This provides continuity, clear sight lines, and a sense of enclosure for pedestrians. A particularly important building could be set back, or interrupt the sight lines, to emphasise its significance.
5 – Building depth
For the best natural light and ventilation (dependent on orientation), the ideal building depth is between ten and fifteen metres; but this is flexible depending on function. Depth can be adjusted to form a courtyard or a light well. By wrapping the building around the perimeter of the block, there are opportunities to enclose public courtyards and conceal car parking.

6 – Functions
The development should be flexible programmatically in order to suit the demographics of the area and the climate. Separating larger anchor tenants will attract customers and draw people through the entire development and expose them to the other urban amenities. The uses should be mixed horizontally and vertically, provide higher density living opportunities, as well as employment and recreational activities.

Fig. 3.5: Limit building depth
Fig. 3.6: Mix the uses
7 – Heights
Dependent on the type of centre, the vision, the desires of the users, and the local context, building heights should be increased, allowing for more commercial and residential opportunity. Heights should be reduced on the outskirts of the centre to avoid casting shadows onto existing residents’ houses. The topography shall be taken into consideration as to where heights can be increased. This may provide opportunity for basement functions, such as underground car parking; prioritising the streetscape and public realm.

8 – Materiality
The materiality of the centre and its buildings should be reflective of the area’s identity, should be sustainable, and should consider the human scale. Ground cover and choice of materials can outline usage of areas, and slow, or eliminate vehicle traffic.

Fig. 3.7: Determine suitable heights
Fig. 3.8: Consider materiality
9 – Street furniture
It is important for the space to be well-lit, feel enclosed and comfortable to dwell in. Street furniture including lamp posts, trees, planting, benches, and retail and café spill-out enable this, and soften the harshness of the built environment.

3.2.2 Site option analysis

Three town centre sites were chosen to test the above masterplanning rules; each is a different typology, and has various opportunities and limitations.

Please see following page.
1 – Botany Town Centre: Mall typology

Botany Town Centre is located in south-east Auckland and was built in response to residential growth in the surrounding rural areas during the 1990’s. Opened in 2001, AMP’s shopping centre was quite revolutionary in terms of including a main street through the mall, as well as considerable amounts of green space around the development.

The shopping centre is located at the intersection of three major roads linking Howick, Manukau, and Pakuranga. Although public transport is available, it is underused and “arguably inadequate in range and frequency.” The large site allocated as an emergent metropolitan centre is underdeveloped and covered with surface car parking. The supporting buildings to the mall are of the big box and drive-through typologies; these, and the urban spaces between them lack design and thought regarding human scale. Some planting and benches unsuccessfully attempt to rectify this problem. There is no public space which could be described as civic.

Fig. 3.10: Satellite image of Botany Town Centre and surrounds with 500 and 700 metres 5 minute walking radius

Fig. 3.11: The main street and town square in the existing mall

Fig. 3.12: 'Big box' building typology and underused surface car parking

Fig. 3.13: Benches facing a roundabout and trees in the car parking areas attempt to humanise the vehicle-oriented centre

Fig. 3.14: 'Pedestrian entry' from the major intersection to car park of Countdown where I was dive-bombed by a territorial seagull
2 – Mangere Village: Main street typology

The suburb of Mangere Bridge is close in proximity to Auckland International Airport, and south of Onehunga, across the Manukau Harbour. It has a long history of Maori settlement from the 1800’s, and later European settlement resulting in residential growth.

Mangere Bridge’s local centre is small, but successful and has a strong sense of community. However, there seems to be a missed opportunity by not addressing the Manukau Harbour and integrating the, now pedestrianised, old bridge. The only public facility close to the water is a petrol station, and the best piece of coastal land is occupied by a car park. Some public space exists, but is inadequate.
Fig. 3.16: Mangere Bridge village, with angled car parking, large overhangs, and street furniture

Fig. 3.17: Petrol station close to the harbour

Fig. 3.18: Car parking facing the harbour

Fig. 3.19: Coronation Road, leading to the old Mangere Bridge, towards Onehunga
3 – Half Moon Bay: Miscellaneous typology - Local ferry terminal

Half Moon Bay is in south-east Auckland, along the Tamaki River inlet. It also has Maori, and Fencible history, and was a popular beach destination in the early 1900’s, when the surrounding areas were farmland. Since the 1950’s, the area has had enormous residential growth, has heavily relied on private vehicles, and lacks public amenities.

Interestingly, the Auckland Plan has not allocated Half Moon Bay as a centre, even though its ferry service makes up an important part of the public transport initiative. Recent development has introduced retail space, offices, a supermarket, and hospitality to the area. Berth-holder car parking gets priority to the marina’s edge, rather than the public amenities, and there is still a disconnect between the new development and the ferry terminal, with no clear pedestrian route.

A boardwalk links Half Moon Bay with Bucklands Beach, with part of it along the water's edge, but a large portion of the journey is between the cliff and behind the boat building yard. Civic space exists but is fragmented to such a degree that it is virtually non-existent.

Fig. 3.20: Satellite image of Mangere Bridge and surrounds with 500 and 700 metres 5 minute walking radius
Fig. 3.21: The marina, with the yacht club building on the left, adjacent to the ferry terminal.

Fig. 3.22: Berth-holder’s car parking in front of restaurants.

Fig. 3.23: The boardwalk from Half Moon Bay looking toward Bucklands Beach at low tide.

Fig. 3.24: Looking in the other direction, between the cliff and the boat building yard.
3.2.3 Intensification application

1 – Botany Town Centre: Mall typology

Through the masterplanning process for intensification explained above, the following images illustrate the result for Botany Town Centre. Due to the large site and commercial requirements, building depths do not conform to the masterplanning rules in all areas.

In terms of choosing a site to develop further, Botany Town Centre has a number of positive opportunities: a large area and population to support the intensification, its allocation as a major node for activity, employment, and residential development, and the proposed bus lane. The proposal uses existing connections and some existing buildings. The main challenge would be dealing with pedestrians on the busy, surrounding roads.

Fig. 3.25: Axonometric sketch of Botany Town Centre with proposed intensification
Fig. 3.26: Figure-ground map of Botany Town Centre currently

Fig. 3.27: Figure-ground map of Botany Town Centre with proposed intensification

Fig. 3.28: Programmatic map of Botany Town Centre currently

Fig. 3.29: Programmatic map of Botany Town Centre with proposed intensification
2 – Mangere Bridge: Main street typology

The following images illustrate the result for the suburb of Mangere Bridge, following the intensification process explained earlier.

The positive points of Mangere Bridge include its good connection to surrounding suburbs and wider Auckland, the opportunity to address the harbour, and apparent sense of community in the existing village, which can be carried through the rest of the intensification development. The main negative to deal with would be the busy off ramp and roundabout exiting the motorway.
Fig. 3.31: Figure-ground map of Mangere Bridge currently

Fig. 3.32: Figure-ground map of Mangere Bridge with proposed intensification

Fig. 3.33: Programmatic map of Mangere Bridge currently

Fig. 3.34: Programmatic map of Mangere Bridge with proposed intensification
3 – Half Moon Bay: Miscellaneous typology – Local ferry terminal

The intensification process described at the beginning of this section has produced the following result for the site of Half Moon Bay.

The benefits of choosing Half Moon Bay as the site to continue developing include: the beautiful area and chance to address the water, underdeveloped and valuable land to work with, the boardwalk connection to Bucklands Beach, and the cliff which gives an opportunity to experiment with height. The negative points would be the necessity of re-prioritising berth parking, and inadequate public transport serving the area.

Fig. 3.35: Axonometric sketch of Half Moon Bay with proposed intensification
3.2.4 Critique and conclusion

The comparative assessment highlighted a clear lack in civic space and community buildings. The original intentions for the research project included public architecture and the idea of community, and the intensification masterplanning process did not allow for enough emphasis on this. However, this exercise was still successful in terms of showing the possibilities of town centre intensification, and in setting the scene for the development of public architecture.

At this stage, it became vital to pick one site and assess it further in terms of the current civic and community amenities, and networks. Botany Town Centre was selected as the site to develop, as its role as a metropolitan centre is to provide significant public space and amenities to the large, underdeveloped area it serves.

3.3 Further Site Analysis: Botany Town Centre

3.3.1 General

One of the main roads leading to the centre is called Botany Road, and it is thought that its path was flattened by Moa, then Maori, and formed into roads for European surveyors.\(^71\) The surrounding area of Botany Town Centre is called Botany Downs, which was named after Botany Bay in Sydney. Vern Carr, who leased a farm in the area in 1953, called it Botany Downs, “not because of the undulating land, but because of the many ups and downs of farming in the 1950’s and 1960’s.”\(^72\) Botany Town Centre’s logo is of a titoki, or New Zealand Oak, branch; these were sought after trees from the Mangemangeroa valley north-east of the centre. Over 1,000 native trees and flaxes were planted for the mall’s opening.\(^73\)

Previously, the area was rural farmland, owned and operated by the Fencibles (retired army pensioners). The following images show the change over time and residential sprawl.

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\(^72\) Ibid., 5.
\(^73\) Ibid., 10.
Fig. 3.40: Satellite image of Botany Town Centre and surrounds in 1959 (no record - too rural)

Fig. 3.41: Satellite image of Botany Town Centre and surrounds in 1996

Fig. 3.42: Satellite image of Botany Town Centre and surrounds in 2001

Fig. 3.43: Satellite image of Botany Town Centre and surrounds in 2014
Accordingly to the 2006 Census map data, there are at least 3,500 people living within approximately five minutes walking distance of Botany Town Centre.

Botany Town Centre has been assigned the role of an emergent metropolitan centre, which is one step down in rank from the city centre. A metropolitan centre is intended to be a major hub for transport, social activity, the economy, employment, and housing. The built form and density should be medium to high and provide a social realm with day and night activities, public space, offices, retail, entertainment, education and hospitality amenities. The surrounding areas are proposed to be intensified to include mixed use business and mixed housing densities, according to the Unitary Plan.

3.3.2 Networks

Surrounding centres
The following images show the connections between Botany Town Centre and the surrounding metropolitan centres (yellow), town centres (orange), and local centres (red). It highlights the difference in route and time between driving and taking public transport. Perhaps this is a contributing factor, as well as inadequate service, to the low transit patronage in east Auckland; here only about 3% of all trips made are by public transport.

Metropolitan centres:
Manukau – 8.1 kilometres from Botany Town Centre
- 13 minute drive
- 34 minute bus

Sylvia Park – 8.4 kilometres from Botany Town Centre
- 15 minute drive
- 48 minute bus

Town centres:
Howick – 5.9 kilometres from Botany Town Centre
- 14 minute drive
- 21 minute bus

Highland Park – 4.6 kilometres from Botany Town Centre
- 10 minute drive
- 18 minute bus

Pakuranga – 4.8 kilometres from Botany Town Centre
- 13 minute drive
- 19 minute bus

Ormiston – 4.7 kilometres from Botany Town Centre
- 8 minute drive
- 37 minute bus

Otara – 6.3 kilometres from Botany Town Centre
- 12 minute drive
- 19 minute bus

Local centres:
Meadowlands – 3.2 kilometres from Botany Town Centre
- 8 minute drive
- 12 minute bus

Botany Junction – 4.1 kilometres from Botany Town Centre
- 8 minute drive
- 30 minute bus

Dawson Road – 6.0 kilometres from Botany Town Centre
- 11 minute drive
- 40 minute bus

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74 Auckland Council, The Auckland Plan, 262.
Fig. 3.44: Connections to surrounding centres
Fig. 3.45: Driving routes to surrounding centres
Fig. 3.46: Public transport routes to surrounding centres
Public transport
Auckland Transport’s Auckland Manukau Eastern Transport Initiative (AMETI) aims to provide better public transport from east Auckland to the city. The scheme has already completed its first stage; the Panmure train and bus interchange, and will be fully completed by 2028, with the busway illustrated below linking Pakuranga with Botany Town Centre. However, there are no further plans to extend the busway from Botany to Manukau. Allocating space for a transport interchange in the design will assist in the successful implementation of the AMETI.

Vehicular routes
East Auckland is notoriously dependent on the usage of private vehicles. Botany Town Centre is at the corner of three major, fast-moving roads; Te Rakau Road (from Pakuranga), Botany Road/Te Irirangi Road (to Manukau), and Chapel Road (from Howick). The figure-ground map below illustrates the vehicle-dominated routes and roads, and the orange represents the extensive surface car parking. As a pedestrian there are instances where the footpaths suddenly terminate at a car park. By restricting car access along some of the connections, and providing smarter car parking solutions will ensure land is better utilised for the metropolitan centre.
Civic and community amenities
Botany Town Centre and its surrounding areas lack in civic and community amenities. At three of the corners of the metropolitan centre are churches. Inside the mall itself, there is a small and inadequate library, plus a post office and doctor’s office; all are spread out. The closest community centres are in Howick and Manukau. To rectify this, it is necessary to provide a hub for civic and community space as well as amenities.

Public space
In the entire metropolitan centre, there is only one area for public space; inside the mall, in particular along its main street. For a successful centre of this size, a series of public spaces are necessary to encourage the users to dwell.
Green space
There is an interesting network of green space and stormwater ponds on either side of the mall. This sets Botany Town Centre apart from most shopping centres and refers to the area’s previous rural function. Creating a network or connection between the two green spaces, through the site, will result in a centre reflective of its history and identity.

3.3.3 Critique and conclusion
After a brief look into the history of Botany, the surrounding population and centres, and the plans from the Unitary Plan and of Auckland Transport, it is clear that intensification is severely required and would be successful. Drawings which analyse the current networks show a requirement to prioritise pedestrians, provide a node for civic space and buildings, and implement a series of public and green spaces throughout the development.

Fig. 3.51: Figure-ground map showing showing green spaces, and stormwater ponds and drain
3.4 CIVIC HUB – INITIAL DESIGN

To reinforce a sense of community, a civic hub is required; this includes a square and supporting civic buildings.

3.4.1 Square

A civic square is important as it marks the notional centre of an area, and provides a space for civic celebration and community gathering. Such a grand public space allows for a dynamic mix of community, ages, cultures, and activities. When designing a square, a number of factors need to be taken into account, such as size, shape, proportions, slope, orientation, and style. Proportions are particularly important in creating a well-defined public space. Following are images and ratios of four successful civic squares.

The average proportions of civic squares, traditional and modern, are listed below. Implementing these proportions in the design of the square at Botany Town Centre will allow for grandeur, as well as a sense of enclosure for the users.

Width : length ratio 1:1.5 - 80 x 125 metres
Width : height ratio 4:1 - 20 metres average height

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Proposed civic square at Botany Town Centre

The site for the square is highlighted in the image below. It has been selected as it leads on to the main street which goes through the existing mall and is quite central. Pedestrianising the roundabout represents a shift in thinking regarding vehicles and prioritising people.

The extent of the square, including the existing mall’s elevation, equate to 80 x 125 metres, as suggested by Robert Gatje in *Great Public Squares: An Architect’s Selection*. This, plus the use of an average width to height ratio of 4:1 (20 metres high), result in a grand, but comfortable public square.
3.4.2 Amended masterplan

The following image shows the amended masterplan including the civic square, which mirrors the curve of the existing mall.

3.4.3 Networks

Public transport

Being a metropolitan centre, Botany Town Centre is required to be a major hub for public transport. An extension of the AMETI busway to Manukau would make the development more successful and easily accessible. A well-designed bus station will attract the local community to use more public transport.
**Vehicular routes**
The map below shows the routes vehicles will be able to take through the intensified centre, which are now more limited and lead the drivers to designated car parking. Parking is concealed behind perimeter blocks, in car parking buildings, and provided in basement parking on the northern edge of Botany Town Centre. There will still be plenty of car parking available, but pedestrians and development get prioritisation of the ground level.

**Civic and community amenities**
The churches on the corners of the development will remain but be integrated into the development, and the post office inside the mall will maintain its position. A hub of civic and community buildings face onto the public square.
Public space
There will be an increase in the amount and quality of the public space and pedestrianised streets in the metropolitan centre. This will assist in the creation of a vibrant centre, which prioritises pedestrians, encourages public transport, and supports a sense of community.

Green space
A network of green spaces throughout the development will link the two storm water reserves on either side of Botany Town Centre. This is reflective of the identity of the area and provides a secondary network of public space to that already outlined.
3.4.4 Civic program layout

The image below illustrates the layout of the civic hub proposed at Botany Town Centre, incorporating a library, community centre, theatre, plus social and medical services. The adjacent image highlights the functions and elements explored in the following building concepts, which include social services and a community centre. The pink circles represent hospitality on the corners, the lighter pink represents the square, and the spring green highlights the transition space between the square and amenities.

3.4.5 Building concepts

As mentioned above, this phase of concept design for a community centre mixed with social services focuses on the elements of the square, transition, function, and hospitality. The design accepts the masterplan as a general footprint allowed for the building to ensure the building compliments the entire scheme.
The first concept incorporates the community centre and social services into one building, which is separate on the ground floor and meets on the upper levels. The functions share a foyer and utilities, and use horizontal stacking to arrange the space. This concept is interesting in terms of the metaphorical joining of the buildings to create a community.
The second concept uses two buildings which grow in height to accentuate the corners, helping with the feeling of enclosure. They have separate utilities but focus their transition spaces towards the square. This concept is interesting because it begins to address the square more than the previous concept.

Fig. 3.70: Axonometric view of concept two

Fig. 3.71: Ground floor plan of concept two

Fig. 3.72: Perspective of concept two from square

Fig. 3.73: Perspective of square from concept two’s cafe

Fig. 3.74: Long section through section two
3.4.6 Critique and conclusion

Feedback regarding the amended masterplan and building concepts suggested disregarding the existing mall for the creation of the civic space; instead, the recommendation was for creating a separate, fully pedestrianised space. The existing mall’s current functions on the facing elevation, and its aesthetics, do not assist in creating a hub for community activity. This would also allow for the development to be orientated to the north and make the most of the sun.

Additional exploration of the six elements, obtained from the theory of a sense of community analysis, would result in a further understanding of community, and how both the building and the square function. Their balance and transition spaces need more development and purpose. Public space is best activated by young people, and therefore further thought into their inclusion would be vital. The square is required to be more broken up, provide more functions, and be representative of the community. It is necessary to consider how the green spaces and other networks support a sense of community and can be implemented.

3.5 DEVELOPED DESIGN - CIVIC HUB

3.5.1 Amended masterplan

The amended masterplan for Botany Town Centre’s intensification below disregards the north face of the mall in the definition of the square, orientates toward north and provides a fully pedestrianised space. The eastern extension of the existing mall building has been removed for a perimeter-style building with concealed car parking, rather than keeping the ‘big box’ building.

Fig. 3.75: Figure-ground map showing amended masterplan proposed for Botany Town Centre
3.5.2 Networks

Public transport
This iteration of the masterplan of the metropolitan centre keeps the busway from Pakuranga and extends it through to Manukau along Te Irirangi Road. It provides a pedestrian over-bridge to the transport interchange from the civic and community hub.

Vehicular routes
As per the previous masterplan, this proposal limits the vehicular routes around the site and provides car parking concealed behind perimeter blocks, in car parking buildings and in a basement car park on the northern end.
Civic and community amenities
The three churches remain around the site but are built into the development on the intensification’s periphery. Again, a civic hub concentrates the community amenities, which provides a space and buildings which are free to be used by all members of the community.

Public space
In terms of public space, this proposal adds to the networks illustrated in the previous iteration, and orientates the main civic space north to make the most of the sun throughout the day.
3.5.2 Civic masterplan and program

The civic hub at Botany Town Centre provides a central place for community-related activities. It offers amenities for people of all ages and all interests by providing recreation, social and medical services, performing arts tertiary education, and hospitality. The civic hub acts as a single entity, with the functions spread throughout, as opposed to one function per building. The library building is an exception, due to control issues, but does include a community hall, exhibition space, a community theatre, and a café.

A successful civic square is well-defined and well-designed, and takes the role of the community’s shared outdoor room.79 “A good public space is one that is full of people, a place that tempts those people to slow down, to stop, to chat, or simply to watch the world go by, a place that enriches the lives of those who use it.”80 It acts as an extension of the buildings and provides interconnected spaces as part of the public and green space networks. The square is broken up and provides a variety of spaces and activities, including open space, a grazed area, a stage, amphitheatre seating, a pedestrian over bridge to the transport interchange, and the possibility for a basketball court and a playground.

Green space

The network for green space is developed further in the development, and includes exposure of the stormwater drain through some sections of the development.
Fig. 3.81: Civic masterplan showing overall programmatic layout
Fig. 3.82: Perspective view showing the square, amphitheatre seating and pedestrian over-bridge
Building to develop

Highlighted in yellow, in Fig. 3.81, is the building which has been developed. It includes a library, community hall, theatre, and exhibition space. It was selected for two reasons; the first being its positioning on the site, in which the amphitheatre seating and square faces. The second reason being its programmatic importance in terms of creating a sense of community. The building incorporates a combination of functions for community members of all ages and interests. “Public libraries sit at the heart of their communities. They help create a sense of belonging and they respond to the needs of the people who use them. They celebrate cultural diversity, and they help promote understanding between different cultural groups.”

3.5.3 Critique and conclusion

The developed design advances the networks of the wider site including access to public transport, limited vehicular routes and surface car parking, creating a civic hub, and provides well designed public and green spaces. The civic masterplan creates a pedestrianised hub for community related activities to serve people of all ages and with all interests who use Botany Town Centre.

3.6 DEVELOPED DESIGN – PUBLIC ARCHITECTURE

The design accepts the masterplan as the general footprint allowed for the building, to ensure the building compliments the entire scheme.

The six elements, which were discovered through analysing the four factors which make up a sense of community, were used as steps for the design of a community library at Botany Town Centre. This research document shows the development of the first four steps: functions, hospitality, connections and transitions, and shows a first concept for comfort and identity (to be developed further for the examination).

3.6.1 Variety of functions

The resultant civic building and space includes a variety of functions for people of all ages and interests. Its main function is a library, and also includes a hall, a community theatre, plus exhibition space.

The programmatic and spatial requirements were derived from existing knowledge and Christchurch’s New Central Library, which is programmatically similar.

3.6.2 Hospitality

Hospitality acts as an anchor to bring people through a building and shall be placed accordingly to attract users, and to provide them with a sense of community. In this building there is one café; facing the square, and a bar serving the community theatre.
Library requirements
- Children's books
- Teenage books
- Fictional books
- Non-fictional books
- Tertiary books
- Magazines and newspapers
- Computer and technology labs
- Quiet spaces
- Group study rooms
- Staff room
- Archives

Community centre requirements
- Hall
- Theatre
- Backstage
- Control room
- Storage

Overall building requirements
- Reception
- Foyer
- Porch
- Toilets

Square requirements
- Open space
- Porch
- Outdoor stage
- Playground
- Grass area
- Basketball court

3.6.3 Connections

To achieve a sense of community, architecture should provide the chance for connections between the users. This is the major step in the building development to ensure that the members of the community interact in the best possible way.

General relationships
The diagram below shows the relationship between the different functions within the building, including the outdoor activities. It is clear that hospitality (shown as café) is central to the operation of the architecture and its surrounding space.

Fig. 3.85: Diagram showing the relationships between functions
The following diagram is an iteration of the previous and emphasises the importance of the café, library, and square, and their connections. The sizes of the circles were determined by perceived importance.

Using the same sizes and relationships from the previous diagram, the next step of development explored the overlap between the programs. The major intersections have been highlighted and mark the important transition spaces.

Fig. 3.86: Diagram showing the relationships between functions
Three central, and most important, are the café, library, and square
Note: V/C stands for vertical circulation, P/G stands for playground, B/B stands for basketball court

Fig. 3.87: Diagram showing the relationships, and overlap, between functions
The following diagram illustrates the connections on the ground floor level. The transition space, discovered from the previous diagram, is shown in a rectangular form representing the porch space, and blurs the boundary between the outside and inside of the building. The highlighted circle represents the foyer and vertical circulation space.

**Hierarchy of functions in regards to noise**

The role of the library is evolving and there are areas which do not always need to be quiet. Below is a diagram which shows the hierarchy of the library’s functions (on the right), and complimentary functions (on the left), in terms of noise and their functioning.

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Above: Fig. 3.88: Diagram showing the relationships between functions and the transition spaces on the ground floor level

Right: Fig. 3.89: Diagram showing the hierarchy of noise in the building and square
Three-dimensional relationships
The next step required exploration of these diagrammatic relationships in three-dimensions. The functions are labelled by colour:

Library – yellow
Hall – green
Café – purple
Theatre – blue
Exhibition – red

Iteration one:
The first iteration was a three-dimensional version of the hierarchy of noise diagram. The outcome does not fit within the building’s footprint, as it is too narrow and tall. Connectivity is limited on the horizontal axis, but the overhangs and the potential for some double-height spaces is interesting.

Fig. 3.90: Photograph of iteration one of the three-dimensional exploration of connections
Iteration two:
To reduce the number of floors, this iteration grouped the spaces in terms of relationship to one another and the hierarchy of noise (see diagram below). The connections, both horizontal and vertical, were much better in this iteration, and pushed the overhangs further, which started to create shelter over the square. This concept was still quite high (six levels) so could be too tall for a building north of the square and would cause too much shading over the open public space.

Left: Fig. 3.91: Edited diagram of noise hierarchy, with functions grouped according to their relationships to create less floors
Above: Fig. 3.92: Photograph of iteration two of the three-dimensional exploration of connections
Iteration three:
In this development, the top two levels were relocated to the level of the community theatre to reduce its height and the shadow it would cast. Lowering these levels allowed for a better connection between the theatre and the exhibition space, which now has the potential to create a foyer or atrium space. The relocation resulted in a large overhang on the eastern side of the building, forming the potential for a sheltered porch area facing the square. The highest level, with the best light and views, is taken up by the archive room, which programmatically does not require natural light or views so should be relocated. The highest point, on the north-eastern corner, is in a position which results in the least amount of unwanted shading over the square.

Iteration four:
The final iteration for the three-dimensional diagrams exploring connections within the building included the relocation of the archive room to adjacent to the staff room. The quiet rooms were moved to the main library area, which is the same floor as the exhibition space and community theatre. Instead, a café and bar with outdoor space was added to the top level to service the theatre and create another anchor within the building. The building was moved west to make the most of the site for the square, and the ground level café marks the important eastern entrance underneath the porch.
This iteration was quite successful in terms of connection between functions and its users. Next, exploration of vertical and horizontal transition space was necessary to develop the design.

**Programmatic arrangement by floors**

The floorplates of the final iteration of the connections were as follows:

- **Fig. 3.95**: Diagrammatic ground floor plan as in the final iteration of connections
- **Fig. 3.96**: Diagrammatic first level floor plan as in the final iteration of connections
- **Fig. 3.97**: Diagrammatic second level floor plan as in the final iteration of connections
3.6.4 Transition

Transition in public architecture, in relation to establishing a sense of community, refers to vertical and horizontal circulation, and its role for human transportation, as well as journey and a means to create connections. It also refers to the importance of providing a transition between spaces, and utilisation of the resultant spaces as points for community interaction, as sketched below.
Main circulation
The main vertical circulation route goes through all the functions, especially the anchors (rather than the library which is evenly spread throughout). It goes from the café and reception area on the ground floor to the hall, to the community theatre, to the exhibition space and finally to the upstairs café, bar and viewing deck area.

Transition to and from each level worked well in this exploration, linking the central anchor programs and exposing the operation of the library at the same time.

Fig. 3.101: Photograph of model showing major circulation route

Fig. 3.102: Photograph of model showing major circulation route
Floor plate alteration to assist with transition spaces
This iteration altered the existing floor plates to encourage vertical and horizontal circulation throughout the buildings, as well as developed the foyer and porch spaces in the building. The alterations also allow for more light to penetrate through the building and allow for northern spaces and outdoor terraces. The community theatre is angled out toward the square, which is advantageous for many reasons; exposing the building’s functions, marking the entrance and outdoor stage, as well as providing some shade and shelter for the square.

From ground floor (café) to level one (hall):
This worked well as it is centred in the floor plate allowing for easy access to the computer labs, teenage and children’s areas, as well as the community hall.

From level one (hall) to level two (tertiary books):
The staircase changes direction on the first level and bypasses the library’s section for the tertiary students, but is still central for the staff to access their offices and archives. By going past the tertiary section showcases the performing arts school to the users, but keeps the staff rooms private.

From level two (tertiary books) to level three (exhibition space):
The exhibition space is central to all the amenities on the third floor and provides a chance to use the vertical circulation as exhibition space itself; not only exhibiting work and art, but the building and how it functions for the community too. It presented itself with the opportunity to create an open atrium to bring light into the building.

From level three (exhibition space) to level four (café/bar):
The addition of the viewing deck and a bar at the very top level makes the most of the height of the building; helping with the feeling of enclosure from the square and marks an important corner in the development, without causing too much shading. Programmatically, this level acts as an anchor for the building and will draw people through the whole building; creating as many connections to the other functions and users as possible.
Ramp to green spaces
Leftover spaces on the floor plates, after the alterations, allowed for terraced areas on the northern face of the building. These will not only act as a buffer between the residential development and the civic hub, but become a part of the green network proposed for the intensification.

Fig. 3.104: Photograph of model showing altered floor plans
Fig. 3.105: Photograph of model showing ramps to green terraces
Building to square transition

Connections and their transitions are very important in establishing a sense of community. The bright blue in the image below illustrates the foyer space in the library building. The dull blue represents the porch areas, which are semi-enclosed and attempt to blur the boundary between the square and the building.

3.6.5 Comfort and identity

The following image is the first step in the development of comfort and identity in the civic library building. It begins to show how materiality, walls, and furniture can help define the space of the semi-enclosed porch, plus how the influence of the local identity and plants can provide for a building and space which is not only useful but creates a sense of community.

Using native trees and planting not only softens the built environment, but creates shade, a sense of enclosure and references the identity of the area. The undulating grid on the exterior of the building and on the ceiling of the porch references the topography of the, previously rural, land.

Fig. 3.106: Plan view photograph of model showing transition from square to function

Right: Fig. 3.107: Perspective showing comfort and identity in the porch space shared by the library and the square
3.6.6 Critique and conclusion

The six elements, derived from the four factors which make up a sense of community, were used as steps to design the library building. This document successfully explores the first four steps; functions, hospitality, connections and transition, and begins to address the final two; comfort and identity, which will be presented in the examination.

The six elements are tangible design techniques which were applied during the design development, as the four factors themselves are not able to be directly architecturalised. It is difficult to measure the success of unbuilt public architecture; however, the following analysis considers the intent of the developed design.

Sense of community analysis:

1 Membership
The community library building at Botany Town Centre’s proposed civic hub, is purposeful and highly functional. It provides space and activities for groups within the entire community, and allows for them to operate simultaneously. The building itself incorporates library functions for people of all ages, cultures, and interests, plus a theatre, hall, exhibition space, a café and a bar. The civic square is broken up to include open space, a playground, a grazed area, a stage, amphitheatre seating, and a basketball court, as well as north-facing green terraces in the building. Spaces in, out, and semi-enclosed, encourage the users to dwell, by enabling a sense of enclosure, with some areas facing the sun, some in shade, and with plenty of street furniture and planting. The building and square is well-designed and would make users proud to have successful public architecture. The green spaces, and the façade development, are reflective of the native plants found in the area and reference the area’s identity.

2 Influence
Again, various functions for the members of the community are provided in the design. The exhibition space, which forms the atrium, exhibits the work and art of the community, plus the functioning of the building. The urban design and architecture is reasonably flexible and allows for many uses. The library requires the assistance of the community for its operation and maintenance; therefore, the members have the ability to influence others. The connectivity between the spaces has been considered in the way the building works. The square provides a stage for performance, and open space for protest, if a member chooses to influence their community.
3  Integration and Fulfilment of Needs
Transition spaces and circulation allows for the ease of access to the available services in the library. The variety of functions, especially those community-related, are beneficial to all members. The programmatic and spatial arrangement means that spaces are interconnected and benefit one other. The large eastern, and theatre, overhangs create porch spaces facing onto the square.

4  Shared Emotional Connection
As with the above factors, a programmatic variety enables members of the community to operate successfully within the same space, whilst strengthening the connections within the entire network. Split, and mezzanine levels allow for visual connection between the functions and the users. Transparency, on the ground floor in particular, allows for an understanding of what is happening in the building, and blurs the boundary between the square and the interior.

Conclusion
In conclusion, the civic library and square definitely provides membership, influence, integration and the chance for a shared emotional connection, in turn, enabling a sense of community for the users. It has particular strength in its provision of a variety of functions, their connections, and the transition space between them. Further development regarding enclosure, materials and reflection of identity will strengthen the sense of community even more.
4 CONCLUSION
This research, and resultant design project, endeavours to face two issues in Auckland. The first problem being the need for intensification of existing centres, to assist in solving wider issues. The second addresses the inadequacy of the civic realm and amenities in suburban centres, and how their provision can assist in achieving a sense of community for the users.

Intensification of existing suburbs and their centres is necessary to provide housing, employment, civic space, and other amenities required to service the projected population growth of Auckland. Through existing knowledge and the principles of the Auckland and Unitary Plans, this paper outlines a nine-step set of guidelines for the intensification of existing centres. For the sake of this research, the intensification process, and its test on three various sites, was successful as it set up provisional footprints and programmatic layouts for the project’s development of public architecture. It completes its aim to show that there is great opportunity for improvement in many of Auckland’s centres; in particular those which are shopping malls. In theory, the rules provide a good first step in centre intensification; development at this scale was not in the scope of this project, but could include further consideration of an area’s climate, identity, and demographics. Design development would include investigation into whether the perimeter building forms and courtyard spaces work efficiently in all instances.

To answer the research question regarding the reinforcement of a sense of community in an intensified centre, it became necessary to understand how architectural elements can establish the feeling of belonging. During the breakdown of the four factors which collectively form a sense of belonging (membership, influence, integration, and shared emotional connection), and their use as a form of measurement of precedents, brought attention to six architectural elements. In the later stage of the project development, the first four elements (functions, hospitality, connections, and transition space), were explored, in order, for the design of the civic library building; with the two final elements; comfort and identity, to be developed for the examination presentation. At this stage of the design development, the six elements proved to be a successful tool in producing a sense of community, when measured by the four factors.

In conclusion, the principles for intensification and elements for a sense of community in public architecture have resulted in a positive solution to assist in lessening the inadequacy of Auckland’s public realm and civic amenities. There is much room for improvement for both tools, however their intentions for the project are a good start to solving these issues, and could be implemented in the improvement of all Auckland’s existing centres.
5 BIBLIOGRAPHY


## LIST OF FIGURES

Unless referenced otherwise:
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<td>Flat Bush in 2001</td>
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<td>Flat Bush in 2008</td>
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<td>High Point University proposal</td>
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<td>Oak Hollow Mall currently</td>
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<td>High Point University proposal</td>
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<td>27</td>
<td>2.15</td>
<td>Satellite image of Rouse Hill Town Centre development</td>
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<td>Rouse Hill Town Centre public space</td>
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<td>Satellite image of Botany Town Centre</td>
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<td>Satellite image of Westfield Albany</td>
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<td>Satellite image of Sylvia Park mall</td>
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<td>Satellite image of East Tamaki and Highbrook</td>
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<td>Satellite image of Rosebank Road</td>
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<td>Satellite image of Howick’s main street, Picton Street</td>
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<td>Satellite image of Dominion Road</td>
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<td>Development imagery for LynnMall</td>
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<td>33</td>
<td>2.25</td>
<td>Typical mall before ‘sprawl repair’</td>
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<td>Reproduced from Sprawl Repair Manual</td>
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<td>2.26</td>
<td>Typical mall after sprawl repair</td>
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</table>
3.27 Typical business park before ‘sprawl repair’
Reproduced from *Sprawl Repair Manual*

3.28 Typical business park after ‘sprawl repair’
Reproduced from *Sprawl Repair Manual*

3.29 Typical commercial strip before ‘sprawl repair’
Reproduced from *Sprawl Repair Manual*

3.30 Typical commercial strip after ‘sprawl repair’
Reproduced from *Sprawl Repair Manual*

3.31 Silo Park, Auckland, which provides various spaces for different user groups
Reproduced from http://growmama.blogspot.co.nz/2015_02_01_archive.html

3.32 Protestors at Federation Square, Melbourne

3.33 Auckland Town Hall to Aotea Square
Reproduced from http://www.aucklandidailyphoto.com/?s=aotea

3.34 Auckland Town Hall interior
Reproduced from http://www.aucklandlive.co.nz/aucklandtownhall.aspx

3.35 Tane-nui-a-rangi marae meeting house
Reproduced from http://www.panoramio.com/photo/5990283

3.36 Te Oro community centre, Auckland

3.37 MIT Manukau to transport interchange

2.38 MIT Manukau exterior, Auckland

2.39 Sectional perspective of Baths of Diocletian, Rome
Reproduced from http://www.globalsecurity.org/military/world/spqr/rome-baths-diocletian.htm

2.40 Seinajoki Library exterior

2.41 Plan of Federation Square

2.42 Federation Square, Melbourne

3  **PROJECT DEVELOPMENT**

3.1 Identify the landscape and climate

3.2 Identify the connections

3.3 Determine streets and networks

3.4 Evaluate existing buildings and maintain a continuous edge

3.5 Limit building depth

3.6 Mix the uses

3.7 Determine suitable heights

3.8 Consider materiality
Include street furniture

Satellite image of Botany Town Centre and surrounds with 500 and 700 metre 5 minute walking radius

The main street and town square in the existing mall

‘Big box’ building typology and underused surface car parking

A bench facing a roundabout, and trees in the car parking areas attempt to humanise the vehicle-oriented centre

‘Pedestrian entry’ from a major intersection to car park of Countdown where I was dive-bombed by a territorial seagull

Satellite image of Mangere Bridge and surround with 500 and 700 metre 5 minute walking radius

Mangere Bridge village, with angled car parking, large overhangs, and street furniture

Petrol station close to the harbour

Car parking facing the harbour

Coronation Road, leading to old Mangere Bridge, towards Onehunga

Satellite image of Half Moon Bay and surrounds with 500 and 700 metre 5 minute walking radius

The marina, with the yacht club building on the left, adjacent to the ferry terminal

Berth-holder’s car parking in front of restaurants

The boardwalk from Half Moon Bay looking toward Bucklands Beach at low tide

Looking in the other direction, toward Half Moon Bay between the cliff and the boat building yard

Axonometric of Botany Town Centre with proposed intensification

Figure-ground map of Botany Town Centre currently

Figure-ground map of Botany Town Centre with proposed intensification

Programmatic map of Botany Town Centre currently

Programmatic map of Botany Town Centre with proposed intensification

Axonometric of Mangere Bridge with proposed intensification

Figure-ground map of Mangere Bridge currently

Figure-ground map of Mangere Bridge with proposed intensification

Programmatic map of Mangere Bridge currently

Programmatic map of Mangere Bridge with proposed intensification

Axonometric of Half Moon Bay with proposed intensification

Figure-ground map of Half Moon Bay currently

Figure-ground map of Half Moon Bay with proposed intensification

Programmatic map of Half Moon Bay currently

Programmatic map of Half Moon Bay with proposed intensification

Satellite image of Botany Town Centre and surrounds in 1959 (no record – too rural)

Satellite image of Botany Town Centre and surrounds in 1996

Satellite image of Botany Town Centre and surrounds in 2001

Satellite image of Botany Town Centre and surrounds in 2008

Connections to surrounding centres

Driving routes to surrounding centres

Public transport routes to surrounding centres
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<td>Figure-ground map showing AMETI busway (blue)</td>
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<td>Figure-ground map showing vehicular routes (red) and surface car parking (orange)</td>
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<td>Figure-ground map showing civic and community amenities</td>
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<td>Figure-ground map showing public space</td>
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<td>Figure-ground map showing green space, and storm water ponds and drain</td>
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<td>Piazza San Marco – photograph, section, and plan</td>
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<td>Piazza Del Campo, Siena – photograph, section, and plan</td>
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<td>Piazza del Campidoglio – photograph, section, and plan</td>
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<td>Pioneer Courthouse – photograph, section, and plan</td>
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<td>Satellite image of highlighting proposed square position and size</td>
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<td>Figure-ground map showing amended masterplan of Botany Town Centre</td>
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<td>Figure-ground map showing busway extensions and transport interchange proposed for Botany Town Centre</td>
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<td>Figure-ground map showing vehicular routes, surface car parking and car parking buildings proposed for Botany Town Centre</td>
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<td>Figure-ground map showing civic amenities proposed for Botany Town Centre</td>
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<td>Figure-ground map showing pedestrianised public space proposed for Botany Town Centre</td>
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<td>Figure-ground map showing network of green spaces proposed for Botany Town Centre</td>
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<td>Civic program layout</td>
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<td>Functions, hospitality, square and transition space highlighted</td>
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<td>Axonometric view of concept one</td>
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<td>Ground floor plan of concept one</td>
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<td>Perspective of concept one from square</td>
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<td>Perspective of the upper hall looking over the square</td>
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<td>Long section through concept one</td>
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<td>Axonometric view of concept two</td>
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<td>Ground floor plan of concept two</td>
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<td>Perspective of concept two from square</td>
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<td>Figure-ground map showing amended masterplan of Botany Town Centre</td>
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<td>Figure-ground map showing busway extensions, bus station and pedestrian over-bridge proposed for Botany Town Centre</td>
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<td>Figure-ground map showing vehicular routes, surface car parking and car parking buildings proposed for Botany Town Centre</td>
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<td>Figure-ground map showing civic amenities proposed for</td>
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Photograph of iteration three of the three-dimensional exploration of connections

Photograph of iteration four of the three-dimensional exploration of connections

Diagrammatic ground floor plan as in the final iteration of connections

Diagrammatic first level floor plan as in the final iteration of connections

Diagrammatic second level floor plan as in the final iteration of connections

Diagrammatic third level floor plan as in the final iteration of connections

Diagrammatic fourth level floor plan as in the final iteration of connections

Function to square transition via foyer and porch

Photograph of model showing major circulation route

Photograph of model showing major circulation route

Photograph of model showing altered floor plans, and the light coming through the new atrium

Photograph of model showing altered floor plans

Photograph of model showing ramps to green terraces

Plan view photograph of model showing transition from square to function

Perspective showing comfort and identity in the porch space shared by the library and the square
FINAL PRESENTATION IMAGES
Full name of author: KIM CLARKE

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