

# **Designing Community Appropriation**

How can a change in infrastructure on Dominion Road facilitate community appropriation?

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## Abstract

In this project I will investigate how a change in infrastructure can facilitate community appropriation. The type of community appropriation I am referring to is when the landscape allows people to take ownership, perhaps only temporarily, of a space for which they feel they can accommodate. The best way to illustrate community appropriation is through current examples, such as the Dominion Road upgrade project. In the industry there can be a difficulty in facilitating this kind of appropriation, particularly when large-scale planning approaches are given priority. I will explore how the understanding of urban context on Dominion Road can aid design that produces spaces which will be appropriated by the community.

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# Introduction

There is a preexisting problem in the discipline, which is how to facilitate community appropriation. In other words how is it possible to influence people's behavior through design that causes a collective temporary ownership of an area? Where people feel as if its theirs, and are willing to offer something of themselves in return for claiming temporary ownership? Community appropriation is where individuals feed into a system that collectively feeds into the whole area. Simply by being in an area or doing some sort of activity there a person inadvertently change the feel of the place, possibly contributing to a collective feeling of 'publicness'. Community appropriation is the reaching of a certain level of activity that is active in the claiming of space. This may permanently alter how people perceive and behave in that given location.

I am of the opinion that the discipline of landscape architecture does not cover all aspects of a landscape. It could be said that it is impossible to fully comprehend and understand the world around us. Each part of it is different and unique and we are constantly faced with different circumstances and settings. What then is the best way to approach designing for community appropriation in such diversity? Should it be designed according to the needs of the commuter; the shopper; the wanderer or the local? The next section is my summation of the way in which modern development understands how the landscape can offer opportunities to fulfill the needs of the user.

## My interpretation of past attempts to facilitate community appropriation

### How we tend to treat the landscape

Historically, people treated the landscape as something that needed to be tamed. Early gardeners and landscape designers had a moral view on what the landscape should represent. During the picturesque movement they sought to remove or mask the

'disagreeable', and designed according to the 'picturesque' ideal. The 'disagreeable' refers to the masking of elements in the landscape they disliked and shaping the landscape into an ideal. Those who spent time and money on their estate held dominion over the land and it was treated in such a way that it served the owners personal taste. Humphrey Repton's 'Red Books' during the late 1700's are a series of before and after images of how the landscape was manipulated in this way. These images highlighted what was considered disagreeable as well as displaying the effects and consequences of change. For example, it was common to mask views of neighbouring property with vegetation while still enabling views out into the distance, making the property seem larger than it really was. The idealised picture was viewed as an improvement, as well as being a dramatic change compared to how the landscape used to look.

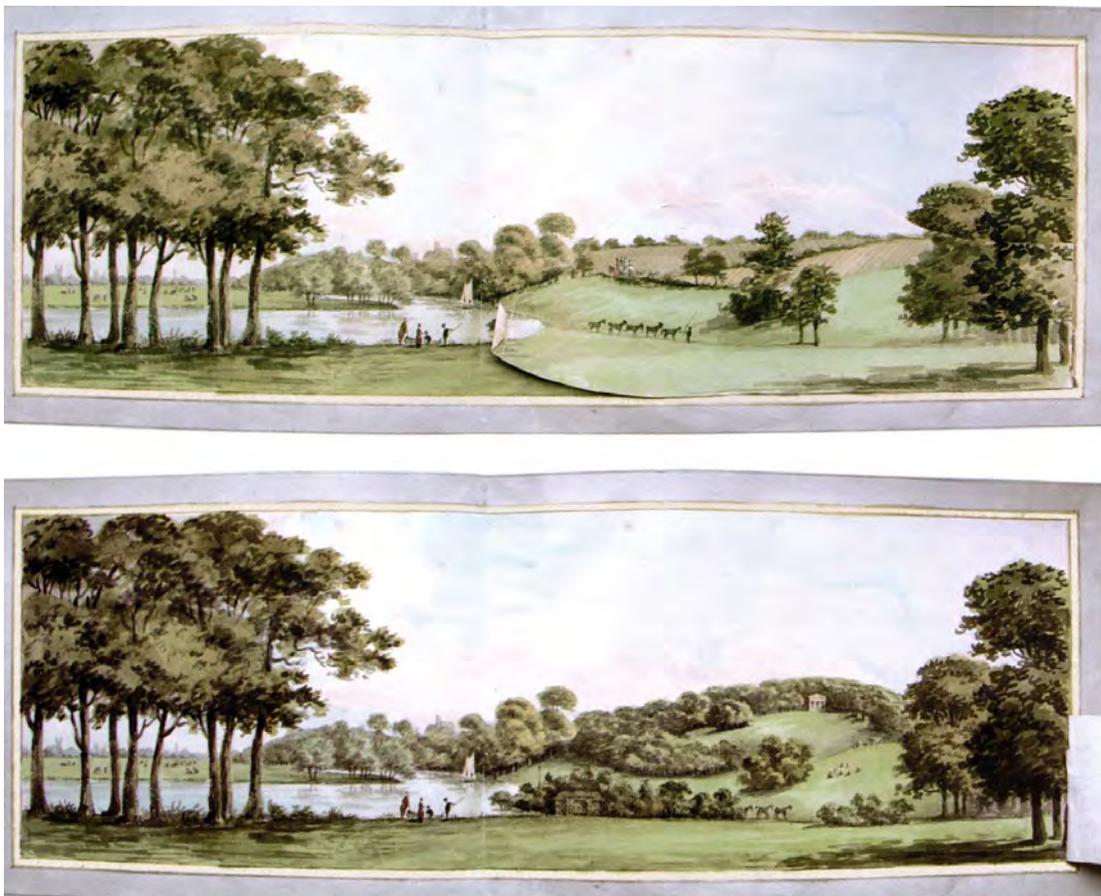


Fig 1. Image of Humphrey Repton's Red Books (Rogger, 2007)

There can be a dichotomy between planning initiatives and on the ground research and design. Without the mutual acknowledging of both the bigger picture and complex detail, it is difficult to find appropriate solutions in landscape architecture. Since the early garden

design era of Humphrey Repton, the approach to how we treat the landscape has not changed a great deal. It is rare to find in current practice, a concerted effort in understanding how a place functions, utilising its unique characteristics to inform change. In the 1960s it was overlooked even more, as there was a push for preconceived ideas without first acknowledging and understanding the functionality of the landscape. In *'The Death and Life of Great American Cities'*, Jane Jacobs describes the city as being car dominated and made to fit an artistic ideal. She states,

*"to approach a city, or even a city neighborhood, as if it were a larger architectural problem, capable of being given order by converting it into a disciplined work of art is to make the mistake of attempting to substitute art for life"* (Jacobs, 1961).

What she means is that overarching planning themes are imposed onto the landscape ignoring what is actually happening on the ground. They are artistic ideals that have not considered the unique characteristics of a place and how it functions. 'The City Beautiful Movement' and the 'Garden City Movement' are examples of planning themes that subjugated cities to their will. During the Garden City Movement, cities had to adhere to a concentric pattern including greenbelts, public parks and radial boulevards in specific locations. Consequently, these movements tended to ignore what was already unique about a place. This continued Repton's legacy of attempting to create the idealised landscape.

This approach denies the complex detail of the landscape, treating it as less important in comparison to the greater overriding scheme. The fallout is that by retrofitting the landscape to suit the ideal will of the designer, its life and functionality often become suppressed. Jacobs's (1961) enforces this notion by saying how "life attracts life" and criticizing the overuse of popular concepts such as pedestrian separation. She labels these arrangements as 'abstract niceties', stating how too many forms of life and activity are suppressed to make the nicety work leaving the arrangement unappreciated (Jacobs, 1961). Jacobs describes how there is an effort to make the landscape fit into an idea of what it should be, forcing it to conform to a particular system, not necessarily considering its more important landscape characteristics or its life that already exists.

Opposed to the generality of a fixed design method Jacobs' (1961) states that a city is made up of "*bits and pieces that supplement each other and support each other*", implying that a city is an ecology of fine grain detail. Each part is interlinked and connected, forming a system where each piece influences neighbouring and connected parts of the greater whole. Without a thorough understanding of this complexity, it would be easy to misjudge the landscape. Any attempt to force liveliness on the landscape ignores its preexisting potential doing it a disservice in the process. Jacobs talks about how it is "*better to illuminate and clarify life, helping to explain its meaning and order*" (Jacobs, 1961), meaning that we should first seek to understand the life of a place, then design in such a way as to enhance and fulfill its potential. This is a bottom up conception that will likely yield a far more appropriate response to creating life in a given landscape.

## How we tend to represent the landscape

Kevin Lynch changed the way landscape architects viewed the landscape in '*Image of the City*'. He formulated a theory based on what people could piece together of the city in their collective memory. This image is a base plan of what the city means to people, portraying how the city fits into people's lives; where they work, what they do and where they live. It breaks the city into districts, nodes, landmarks, paths and edges.

The author focused his attention on the large-scale top down view of the city. City Council plans look similar to Kevin Lynch's image of the city as they break up a city into key areas, such as landmarks, arterial roads and nodes. It has become a planning blueprint of how the city is mapped. However, what it fails to do is understand how the landscape detail functions on the ground. That is the interrelationships between the different aspects of the landscape. For example, how do we know what a node does? How does it function as a node and what relationship does it have to the surrounding paths and edges?

The Kevin Lynch approach, taken in isolation, is a reductive method that denies the power of the landscape at ground level. However, I acknowledge that there are other ways of designing outside of the plan format. To understand how the landscape functions we need to know how different parts relate and influence other parts and how together they affect the whole system. The landscape may produce particular affects such as appropriation.

For example a sunny bank may invite people to sit there. This is a result of a combination of factors within the landscape that produces this affect, such as its location, orientation to the sun and its sloping nature. The Kevin Lynch approach does not tell you how the landscape produces these affects. How can the landscape be understood if we are unable to give concrete reasons as to why certain landscape phenomena happens? It is important to understand the complexity of the landscape, how it works and how it produces phenomena such as appropriation. If one designs a place and expects it to have particular outcomes without considering how the place works and produces certain abilities, then the intended outcome may not occur. These relationships in the landscape cannot be fully understood by simply labeling particular areas in relation to one another as the Kevin Lynch approach prescribes.

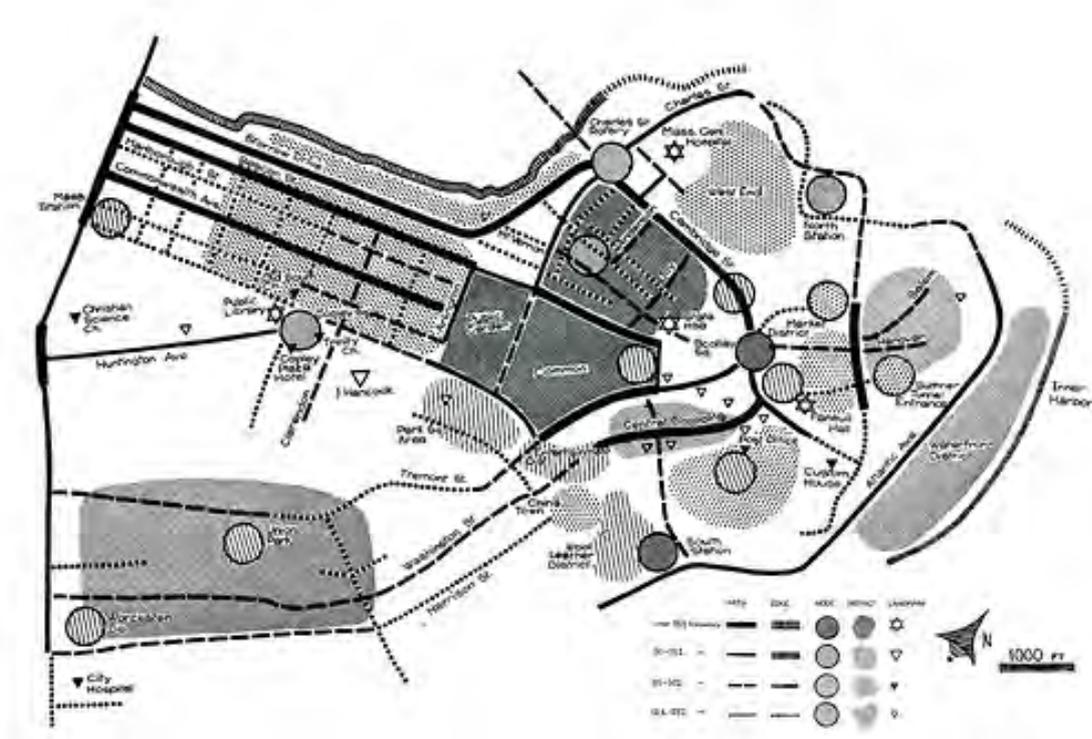


Fig 2. Image of the City by Kevin Lynch (1960)

Ian M. Simkins and Kevin Thwaites took the Kevin Lynch approach further in *'Experiential Landscapes.'* Based in a romantic European setting the experiential landscape theory attempts to understand people's behavior as a result of their surroundings as well as understanding how the detailed landscape framework influenced ones experience. It does not merely label parts of a city. The experiential landscape explains what is going on

according to ones experience when moving through the landscape. This concept concentrates on a 'bottom up approach' to open space analysis and design. It emphasises the fine grain details of a setting, considering how these components work together to influence the 'experiential character' of the wider landscape.(Simkins & Thwaites, 2006). It seeks to alter the feeling of a place resulting in a change in behavior towards the landscape. This results in new abilities and opportunities for people to interact and engage with the site. This is in total contrast to how the discipline normally designs the landscape. Simkins and Thwaites (2006) state that the role of design is *"less about prescribing and fabricating form and more about creating the conditions in which to optimize experiential opportunity, accepting that to some extent final form will appear as it will and change and evolve"* (Simkins & Thwaites, 2006). It is interesting that they sought to create the right 'conditions' in order to achieve their design goals. This is not unlike the way in which community appropriation can be used in design. Although there are a lot of positive aspects to this approach there is still an air of generality. The next paragraph will explain the shortfalls of this approach.

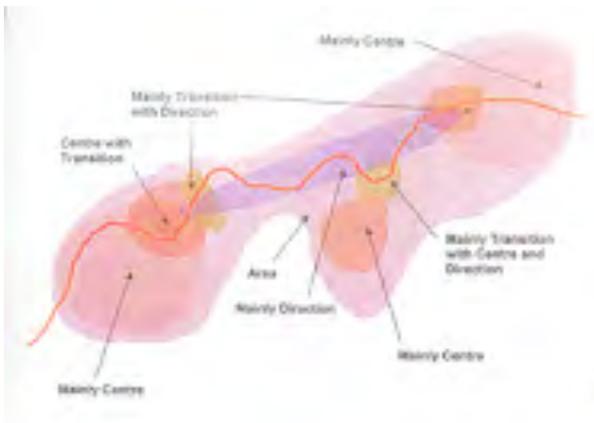


Fig 3. CDTA diagram. (Simkins & Thwaites, 2006).

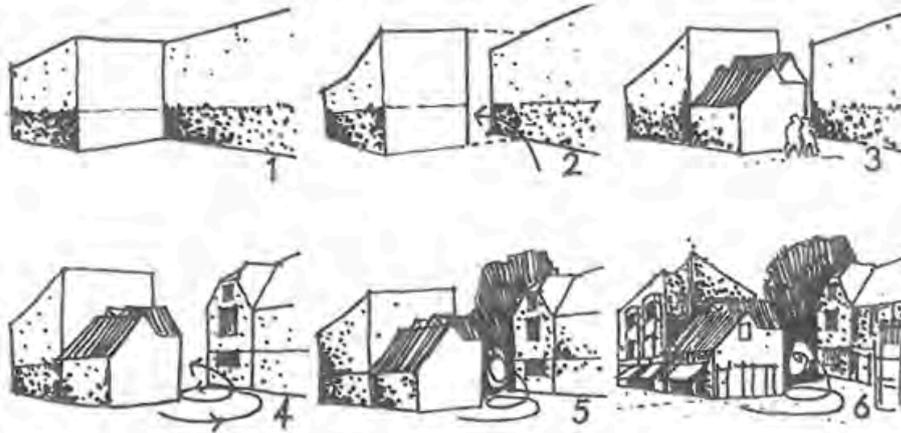


Fig 4. Creating the right conditions. (Simkins & Thwaites, 2006).

The experiential landscape theory lacks an understanding of how the landscape produces particular abilities. Using four key elements to describe a landscape; center, direction, transition, area [CDTA], they use a somewhat reductive method in trying to understand site functionality. It groups different parts of the landscape together, treating them as the same thing. This is not unlike the Kevin Lynch approach that also seeks to categorise parts of the landscape, treating some places as one and the same. What this does not do however is show how each part of the landscape is unique, questioning the fairness of treating them the same. Not all 'centers' are exactly the same, nor 'direction, transition or area' in the CDTA model. On top of that because this site is in a romantic European setting, it does not take into consideration more every day locations, such as a car park. A car park cannot be easily defined in the CDTA model. That being the case I would say the experiential landscape theory can be guilty of being too simplistic.

Kevin Lynch mentions in '*Image of the City*' that there is room to explore further the possibility of using his theory at smaller scales such as a valley region or transportation system (Lynch, 1960). Even though there are flaws in '*Image of the City*' regarding the interrelationship of landscape form and ability, there is potential to use some elements that can contribute to understanding the landscape. On its own, '*Image of the City*' is not enough, however in combination with other important representation techniques such as those in '*Experiential Landscapes*', a more thorough understanding of landscape abilities can lead to unlocking landscape potential, and producing more community appropriation.

## Rationale

The study of fine grain detail can sometimes be ignored when an overarching theme of development takes precedence. It is necessary to have a thorough understanding of the landscape using a 'bottom up' approach. This will help understand the different interrelationships and abilities a landscape produces, helping to inform future design moves. This project seeks to improve upon past attempts at understanding the landscape enabling Landscape Architects to design in such a way that produces more community appropriation.

## My contribution: Community appropriation assemblages

### The Assemblage

I want to explore the notion of community appropriation through the understanding of assemblages. How they influence the world around us through the formation of territories and how that contributes towards community appropriation.

An assemblage is a coming together of various elements and relations. These assemblages are the very set of preconditions that produce certain abilities in the world which lead to the formation of territories. Deleuze and Guittari (1988) describe assemblages as *"a multiplicity which is made up of heterogeneous terms and which establishes liaisons, that is relations between things"*. In this sense, assemblages can be an involuntary creation as they are a group of heterogeneous elements and relations that must be brought together. Macregor Wise (2005) elaborates by stating that assemblages are not 'preconceived' or random. This is because there is a *"sense that an assemblage is a whole of some sort that expresses some identity and claims a territory"*. Assemblages display a oneness, a unified collection of elements that express a particular character. Another way to understand this is that assemblages have an affect, producing specific abilities as a result of the qualities it possesses. So it is not just about what it is, but rather

what it can do. Deleuze and Guittari (1988) also infer that we cannot know what an assemblage is until we know how it functions.

Assemblages exhibit particular traits that are the sum of the collective whole. They are representative of how a place functions and what that functionality produces in the landscape. Once we know what an assemblage can do, having observed how it functions, the elements and qualities they combine become visible. As a result we can understand how they work together. For instance, when two or more elements come together, like a person and a bike in a hilly setting, they produce the effect of a mountain bike rider assemblage. The hilly location may ordinarily be a standard ecological setting. Perhaps hikers and bird watchers might go there to enjoy the outdoors and witness the wild life and vegetation. However when a mountain biker is present, it transforms the environment into an altogether different territory. It becomes a 'mountain biker territory' where there is potential danger at every dip and turn. It is an altogether different experience turning a slow quiet ecological track, into a fast paced mountain biking territory. Assemblages then are a group of heterogeneous elements brought together by particular relations in an autonomous unfolding process. They get at why things work in a particular way by conveying how various elements and their subsequent qualities come together to produce certain abilities that claim a territory.

Macregor Wise explains how assemblages are also 'expressive.' That is having a sense of its significance or meaning, knowing what it can afford. An assemblage cannot be separated from its ability, it is an involuntary production, where the individual aspects are made sense of prior to thought. Using the example of a seat, we already know that it affords the opportunity to sit down. Having a sense of its meaning is a prior form of knowledge. J Macregor Wise goes further, to describe how assemblages express a particular character, enabling it to claim a territory. The mountain biker subconsciously has created the sense of the place, changing its very nature from an 'ecological territory' into a 'mountain biking territory'. Assemblages then are an assortment of connections that are subconsciously learned, perfected and created. The world is already made territory. It is made up of objects with sense, significance, value and abilities but these cannot be separated from sense.

Deleuze and Guattari used the example of a Stagemaker bird to illustrate how nature automatically transforms itself as a result of a combination of heterogeneous actions and components coming together. It shows how a particular series of unfolding events can be the becoming of a territorial assemblage. The Stagemaker bird unintentionally creates a territory through its mating ritual. It picks leaves from a tree, drops them on the ground, and then upturns the leaves to show the pale side whilst sitting on a nearby perching stick to sing its birdsong in an effort to attract a mate to the area he created. The pile of leaves below, its perching stick, and the refrain of its birdsong mark and communicate to other wildlife a mating territory. (Deleuze & Guattari, 1988).

This example displays how the borrowing of certain qualities from existing milieus is part of the assemblage that contributes to the unfolding of events causing territorialisation. It is an expression of the Stagemaker's intentions that formed the territory. Even though these actions were not necessarily made to claim a territory, it is the unintentional consequence of this expressive behavior. Deleuze and Guattari (1988) assert,

*"In effect, expressive qualities or matters of expression enter shifting relations with one another that "express" the relation of the territory they draw to the interior milieu of impulses and exterior milieu of circumstances. To express is not to depend upon; there is an autonomy of expression. On the one hand, expressive qualities entertain internal relations with one another that constitute territorial motifs"* (Deleuze & Guattari, 1988).

It is this autonomy of expression, and the circumstantial combined elements that form territorial assemblages. The multiplicity of elements and the different relations between them create and inform the very functionality of place dynamics. This is the territorial assemblage.

Assemblages underpin everything seen in nature. They are a complex array of circumstances and relations that create and inform particular capabilities. These can be witnessed in the landscape as territorial assemblages and can be used to inform designers to how a site functions and what set of circumstances lead to particular behaviors and uses. Like the example of the Stagemaker and the mountain biker, territorial assemblages in the landscape are formed out of circumstantial elements

combining and the various relations between those elements. The following case study will explain this concept in more detail.

## Case study of the territorial assemblage

Territorial assemblages can occur all the time in a variety of locations. The following example details a regular journey home from work in Wellington. Heading out of the city there is a series of parks and pathways that connect the CBD with nearby suburbs. What is unique about this pathway is it is part of a series of steep climbs and terraces. When walking home from work one cannot escape the exertion required from walking up flights of steps, followed by the relief in walking along a flattened terrace, usually in the form of a park. To add to this, behind the walker there is an increasingly better view of the city for each level of terracing he or she climbs up to. When nearing the top, on the second to last terrace there is a clearing with tree stumps overlooking the city. This provides a seat, and an incredible view over the city, prompting an ideal opportunity and reward to finally get a rest from the exhausting hill climb. It is the last view of the city as the next flight of stairs traverses through trees and into the suburban streets above.

This modest territorial assemblage has been created out of fairly basic circumstances. The journey home might ordinarily be a mundane experience but it does not have to be. What is observed here is a particular part of the journey that reaches a tipping point, turning a seemingly mundane journey into an opportunity. It is the result of prior circumstances such as the working day and the exhausting climb, as well as the anticipation of heading home and relaxing. This continuous unfolding assemblage produced an opportunity to rest, reflect upon the working day and enjoy the view over the city, before making the final journey home. Furthermore this patch of tree stumps creates an opportunity for community appropriation, where a group of people can transform this forlorn patch of land into something more. Upon sharing this space people may interact producing a communal environment in addition to a resting and viewing spot.

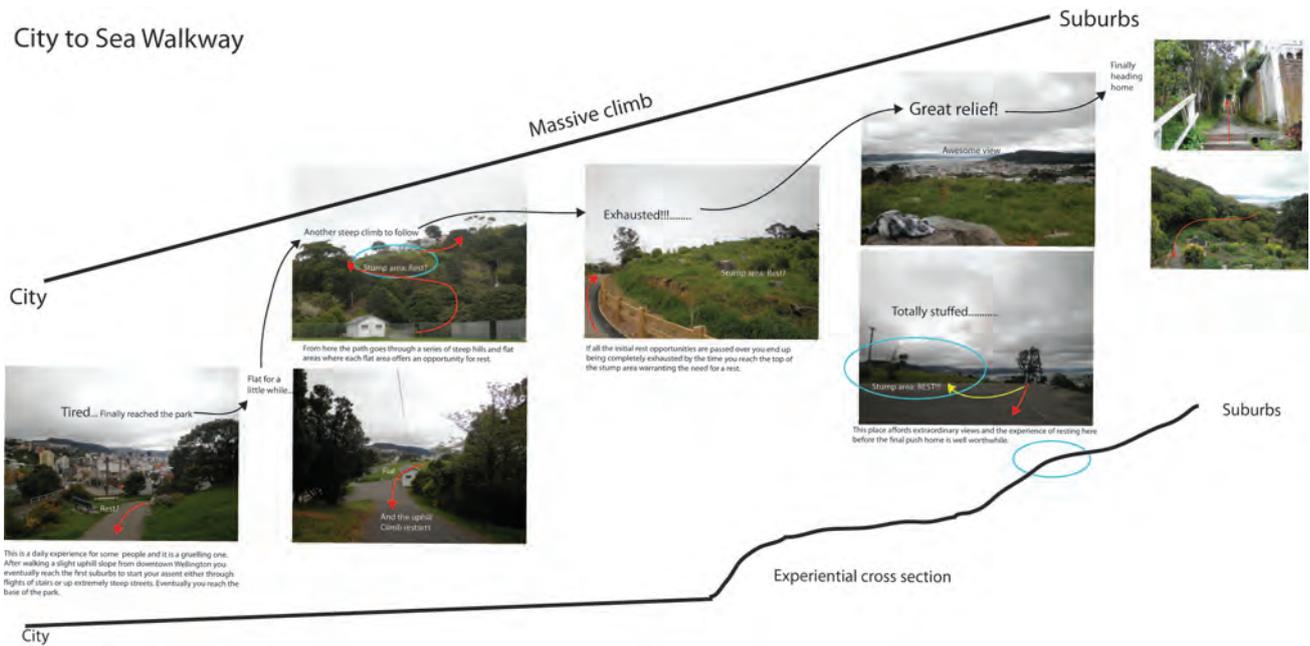


Fig 5. Territorial assemblage case study: Journey home from work

## Summary of assemblages

Assemblages are an argument against the putting together of predetermined parts to create an already conceived structure. Landscape architects do not work on a clean slate. There is an already established structure that works from within the landscape itself, and all its subsequent relations. It is a series of assemblages and territories that determine the characteristics of the landscape. In the light of landscape, assemblages are much more than meets the eye. This requires an in depth understanding of the various systems at work in the landscape that form these assemblages. This knowledge is important in knowing how to be most effective in bringing about change. An assemblage is a tool designer's can use to understand how the landscape works and how they can seek to alter it. The understanding of how milieu components are selected and brought together in a particular way offers an insight into the various components of the landscape and how they work together.

Community appropriation assemblages take the notion of the territorial assemblage further. This goes beyond simple appropriation and considers how they have an effect on the surrounding area, contributing to the overall atmosphere and character of a place.

## Literature review of community appropriation assemblages

Community appropriation assemblages are dependent on the ability of the landscape. This can only be produced by how everything in the landscape interacts and works in a particular way. The following are some examples of how territorial assemblages can engage the community, enabling it to be something more by promoting community appropriation. These examples are the 'Haarlemmer Houttuinen Housing Project' and 'AO1 Arenales Tapotios.'

### Haarlemmer Houttuinen Housing Project

The 'Haarlemmer Houttuinen Housing Project' in the Netherlands is a great example of community appropriation in a residential setting. Herman Hertzberger designed this housing project with the intention of reconquering the street. That is essentially to create a form of community appropriation with the street as the focus. To do so, Hertzberger made design decisions based on affect as the catalyst, producing particular conditions to create opportunities for community appropriation. To begin with, vehicular movements were reduced and controlled by having a narrow street and allowing only resident vehicles. Other obstacles on the street such as trees and other parked cars also helped restrict vehicular movement. The resulting quieter and safer street set the platform for people to reconquer it.

Particular landscape relationships were also used in another idea related to the 'in-between concept,' that of 'differentiated spheres of responsibility'. Hertzberger states, "*The in-between concept of public and private space is to eliminate the sharp division between areas with different territorial claims. The point is therefore to create intermediary spaces*" (Hertzberger, 2005). To further bridge the divide between public and private and create a more communal environment in this project, Hertzberger transforms the in-between concept using the technique 'differentiated spheres of responsibility'. That is to say, allowing people to claim ownership of responsibility to a section of public land outside their apartments making the houses and street spatially and programmatically interdependent. This is evident in the bottom story patio's that have been formed on the public space. They create a situation where there is interplay between the public and

private realms helping to create a more communal environment. Using the subtleties of affect, Hertzberger counters the typical urbanism process by creating a situation where people are “*caught between not being concerned with the space outside their house to not really being able to ignore it*” (Hertzberger, 2005). The residents of this neighborhood appropriated the street and took responsibility for the patios as small gardens were formed. The low patio walls contributed to the conditions due to their low stature and informal nature, creating a subtle divide. This is known as partial definition, as it does not compel you to interact but allows the opportunity. In addition to public patios the restriction on vehicle access enabled people to use it at their discretion, the street was safer and it acted more as a communal driveway than a regular street. The key to the success of this project is that it fostered a community environment by ‘encouraging’ appropriation of the public street rather than forcing the issue. It is designed in such a way that people and the community can reconquer the street.



Fig 6. Haarlemmer Houttuinen Housing Project. (Hertzberger, 2005).

## AO1 Arenales Tapotios

Diego Ramirez-Lovering studied appropriation in 'Opportunistic Urbansism', based on case studies in Mexico. He echoes the notion of landscape affects causing appropriation, stating that "*various spaces lend themselves to appropriation due to their spatial characteristics*" (Ramirez-Lovering, 2008). Using the example, AO1 Arenales Tapotios, he remarked that there appeared to not be any hard rules regarding public or private space. There were no clear boundaries or urban definition and what happened was that it assumed the status of a plaza (Ramirez-Lovering, 2008). This clarifies how the arrangement of the landscape affects they way the landscape is perceived and used. The confusion of the boundaries provided the necessary conditions for people to turn this landscape into a communal space. This is a community appropriation assemblage.

## Summary of case studies

Spatial characteristics causing landscape abilities precede community appropriation. Spatial characteristics have an affect on behavior resulting in the landscape having these particular abilities. Such a notion offers a means to link up site analysis with design. It is better to discover the potential of a site using its characteristics to produce new abilities. Essentially landscape affects are the primary reason why things happens the way they do, so it is vital that a designer seeks to understand it in order to use it. The best way to do that is to look at examples and study them. A designer can operate with this information, altering the infrastructure of a site to produce certain abilities that are conducive to community appropriation.

What is important for me is that it's not just about the landscape affecting appropriation but it's also about appropriation affecting the community. Ramirez doesn't quite go far enough to consider how certain types of appropriation can affect a community in a positive way. This is the final outcome and it is far more powerful than simply understanding appropriation. Whereas Hertzberger formed a new way of living by making subtle adjustments to infrastructure that facilitated the opportunity for public interaction.

## Design research case study: Dominion Rd

The street can also be an example of a community appropriation assemblage. How does it fit into people's lives? Is it easy to cross, therefore convenient, or is it difficult and inconvenient. I want to highlight the importance of how the road itself can be considered an important passage between sidewalks and businesses on each side and whether the street has the ability to contribute towards community appropriation or detract from it. This example will compare and contrast two areas on Dominion Road

### Mt Roskill

The part of Dominion Road passing through the Mt Roskill shops precinct shows how a busy road can be easy to cross, promoting community appropriation. This road is easy to cross because of the affect of the various components that make up the infrastructure and geography of Mt Roskill. The fact that there is a raised median in the middle of the road, affords the pedestrian a safety platform. Pedestrians need only look one way to cross half the road making it safer and easier. What was observed in my field studies were people, often in groups, casually strolling across the road as vehicles approached the intersection. The fact that those vehicles were driving up hill heading to a blind intersection caused them to drive slower, as they took into account the anticipation of reaching a red light and stationary traffic. The shear volume of pedestrians also causes vehicles to move carefully, culminating in an increasingly safer street environment for pedestrians.

Traffic on the northbound lane is a lot quicker, but with regular red lights this lane is often completely empty. This causes a tidal effect for pedestrians as people wait till its clear then everybody crosses. The outside lane on this side of the road often has cars looking to pull in or out of car parks taking up the whole lane. This aids in slowing down traffic, allowing pedestrians to utilize that lane when looking to cross, made even easier by the reduced crossing distance.

The fact that it is easy to cross resembles a type of appropriation, where pedestrians can claim temporary ownership of the road as they dominate its use, affecting also the

liveliness of Mt Roskill itself. In this stretch of road, vehicular movements are non-threatening and become little more than a distraction. In general, people can walk across at will, in a safe and appropriate manner. The advantage of having easy access across a road through a shopping street allows a greater ability to reach shops on both sides of the road. This then increases business and adds to the community feel of Mt Roskill, as the street is not a barrier. The social and economical benefits of having easy access across the street cannot be underestimated.



Fig 7. Easy pedestrian access in Mt Roskill

## Eden Terrace

In contrast with Mt Roskill, a busy car orientated road divides the Eden Terrace shops at the northern end of Dominion Road. It is the start of Ian Mckinnon Drive and is much wider than any part of Dominion Road. There are two wide lanes of traffic going both ways and a complex intersection. The busy nature of the road and the frustratingly slow crossing cycle makes it difficult for pedestrian to cross the road.

One of the most important factors that make this road feel unsafe for pedestrians is the speed in which traffic flows through this area. Ian McKinnon Drive is in essence a bypass that makes for a quick connection to the CBD. The speed limit becomes greater and in many ways it liberates drivers from the slow movement created on Dominion Road and other city streets. This fast flowing street suppresses any potential appropriation of the

road by pedestrians due to the risk involved in crossing it. Clearly this limits the potential for the area, as businesses suffer from lower pedestrian traffic.

Not only does the road contribute to the problem but also the large buildings themselves detract from the area. The lack of distinction makes one less aware of the various shops below contributing to the unfriendly pedestrian environment. Entrances are sometimes hard to distinguish and they are more spread apart. This makes everything seem the same, making it hard to orientate or gain familiarity with the shopping area.



Fig 8. Difficult pedestrian access in Eden Terrace

## Summary of case studies

These two examples show how the configuration of the landscape and the infrastructural elements play a part in producing the character of the landscape. The road itself and other elements such as the type of buildings or the nature of the sidewalk are major factors in how the place functions.

## My contribution

My contribution will be to find a method that will help understand the nature of the various assemblages in the landscape and how designers can use that understanding to prescribe changes. Through the exploration of a design project I will look at how to alter and capitalize upon current site characteristics of Dominion Road to produce more appropriation.

Furthermore this project will seek to understand how more appropriation can influence and fundamentally change the way Dominion Road operates through the subsequent change in social dynamics, a change that leads to more community appropriation.

## Design project: Dominion Road

### Research question

How can a change in infrastructure on Dominion Road facilitate community appropriation?

### Design project abstract

The Dominion Road upgrade, is a project that is being dominated by potential changes in roading infrastructure. There is a focus on road widening, traffic and parking configurations. As a result, I fear that little attention will be given to town centre upgrades. There is a risk that the communities along Dominion Road will largely be ignored and miss out on an opportunity for their town centres to receive a proper revamp. In this project I will explore how the understanding of urban context can guide infrastructure in such a way that facilitates community appropriation.

### Introduction

The overarching theme of the Dominion Road project is to widen the road and make car travel easier and faster. Transport is therefore the primary focus, and it is this premise that may restrict the potential of the landscape. In the Liveable Arterials Plan (LAP), the Auckland council acknowledges that,

*“The retention of high-speed, high volume arterials through town centres can become incompatible with retail viability. Centres need passing traffic. But they also need relatively calm, lower speed conditions and plenty of parking to allow people*

*to interact with and use stores, public amenities, community facilities, and so on. A high degree of pedestrian priority is essential.”* (Auckland City Council, 2009)

The 2010 Dominion Road proposal did not seem particularly conducive to this plan, it sought to widen the lanes, reduce many right hand turns, turn the bus lane into a T2 lane and remove on street parking. The community was vehemently against the scheme and voiced their disapproval, setting up the campaign to ‘save Dominion Road’. They were against most of the measures that they thought would turn Dominion Road into a four-lane highway.

What I believe to be more important than the roading project is that the community is given priority. Retailers and consumers, office workers and locals, road users and pedestrians all need to feel they have gained something from the whole exercise and not feel as if they have lost something. It is necessary to consider the whole system of Dominion Road in relation to those that use it and those that are neighbouring it. This system is made up of a series of components producing the greater assemblage of Dominion Road. Dominion Road is one assemblage that is neighbored by other assemblages such as the CBD and SH20. This project should seek to look beyond the road itself and its transport needs. In such a system, all things should be considered.

## **Part 1: Transport scheme**

### **Introduction**

This project will be divided into two sections. Firstly it is necessary to find a transport arrangement that not only achieves the transport goals of the Auckland council but also contributes and somehow facilitate a positive atmosphere that leads to community appropriation.

A change in transport infrastructure can facilitate community appropriation in a variety of ways. The Auckland Regional Growth Strategy (ARGS) mentions that, “*passenger transport investment can act as a catalyst for achieving urban intensification*” (Auckland Regional Council, 1999). Urban intensification can lead to community appropriation simply because increasing the local population will provide a natural increase in local activity. The ARGS goes on to say that “*more intensive development can support a greater range*

*of local services and facilities, increase the opportunity for safe walking and cycling and help support passenger transport, by bringing people closer to the main routes”* (Auckland Regional Council, 1999). They mention the importance of creating an ideal environment for walking and cycling. This seems in contrast with the original scheme for Dominion Road that appeared to do the opposite. In fact the Auckland Regional Land Transport Strategy list their main priorities in the following order:

1. Pedestrians
2. Cyclists
3. Public transport
4. Mopeds & Motorbikes
5. Private transport (cars)

(Auckland Regional Council, 2010)

According to the community response the original Dominion Road scheme reversed that priority order. Turning the bus lane into a T2 lane does not seem to prioritize pedestrians in any way. Nor does it promote safe walking and cycling. The ARLTS states that *“Providing pedestrian and cycle friendly environments supports local economies, enabling social and business interactions”* (Auckland Regional Council, 2010). Providing such a pedestrian and cycle friendly environment would ensure that the community gains something from the upgrade. It would not be at the mercy of a car-dominated street but would benefit from an upgrade that supports community life. It would put their interests first as well as achieve the goals of the council as stated in the ARLTS.

There is a process outlined in these various council documents that show how investment in transport infrastructure can facilitate community appropriation. They mention how investment in public transport can lead to urban intensification that can draw more people to the area. Subsequently, this intensive development can support a more pedestrian and cycle friendly environment, where prioritising pedestrians and cyclists also helps to support local businesses. The next section will explain why light rail is the best transport infrastructure investment that can be made and how it can help facilitate community appropriation.

## My proposal: Light rail

The main suggestion for this design project is to introduce a light rail system onto Dominion Road. Investment in a light rail system will contribute towards a positive atmosphere on Dominion Road as well as contributing to a more efficient transport corridor. It would create a more pedestrian friendly environment and lead to more community appropriation. In the following sections I will address the effects of light rail on communities and explain why bus rapid transit is not as effective as light rail. I will also use the example of the Melbourne light rail system to demonstrate how light rail could work in Auckland.

### *What Light Rail Transit (LRT) does to a community?*

Below is a case study and a list of facts about the benefits of light rail. What it can achieve and how it can fundamentally change the area in both the short and long term. What is most compelling is the economic argument for light rail, indicating the value it can bring to communities.

*“Investment in transit spurs other investment in the community”* (Project for Public spaces, 2011)

#### Case Study: Croydon (South London)

The light rail scheme in Croydon, known as Tramlink, encouraged in excess of £2 billion in inward investment. This included two major retail schemes with two multi-screen cinemas as well as bars/restaurants and sports club facilities. There was also office development, housing development, industrial warehouse and retail development. Since Tramlink launched it saw a 35% reduction in unemployment and nearby residential property prices increased by 14%. (LRTF, 2009).

Light rail has transformed the London suburb of Croydon. Investment in the area has boomed and the local populace has benefited greatly. It shows how the introduction of this light rail scheme has changed people’s lives in the form of increased property prices and improving employment levels. Below are some more facts that help explain why LRT is such an effective mode of public transport and one that gives back to the community.

Further examples where this occurs include Charlotte, Portland, Dallas, Minneapolis and Salt Lake City (Project for Public spaces, 2011).

**Table 1. Positive outcomes of LRT**

<b>Positive outcome</b>	<b>Why it is positive</b>	<b>Reference</b>
Tends to result in unexpectedly high ridership	Helps justify the extra capital cost involved in LRT	Transit for livable communities, 2010
Developers move in to areas around new stations and invest in new complexes	Brings new jobs to the area. Also allows more local amenities.	Project for Public spaces, 2011
Increased housing prices	Builds confidence in the local housing market. Further making it a desirable place to live.	Transit for livable communities, 2010
Increased demand for new property	This results in higher density gains causing an increase in the local population.	Transit for livable communities, 2010
Greater access to jobs	Helps to grow the local population and reduces unemployment	Transit for livable communities, 2010
Attracts ridership from beyond the corridor itself	Helps to justify the extra capital cost involved in LRT. Also encourages people to walk more.	Transit for livable communities, 2010
Significant modal shift from private car	Improves pedestrian environment due to less vehicular traffic	Irtf, 2009
Reduces vehicle ownership	Improves pedestrian environment due to less vehicular traffic	Litman, 2004; Lane, 2008; Kenworthy, 2008

What is abundantly clear is that LRT gets people out of their cars and it provides an economic growth stimulus. This massively improves the wellbeing of communities as congestion is reduced, improving the street amenity, and local businesses thrive as development and intensification increases. These are all factors that can contribute towards facilitating community appropriation. The increased amenity and subsequent population growth and commercial reach will bring greater numbers of people to the area as well as encouraging them to spend more time in the area.

### *Why Light Rail, why not Bus Rapid Transit?*

One could argue that any upgrade in public transport could provide the said improvements in the community. Busses are the main mode of public transport on Dominion Road and they have one of the highest ridership rates in Auckland. It would be easier to keep this same mode of public transport and simply improve it to achieve the desired outcomes. To improve the bus system on Dominion Road a shift to Bus Rapid Transit (BRT), like the Northern Busway, would be a viable option. The initial cost is much cheaper and it would be easier to implement. It is necessary then to compare how BRT measures up against LRT and whether it can provide the same improvements for a much lower cost.

When comparing the successes of BRT to LRT, BRT falls substantially short. Research made by E L Tennyson on the behalf of the American Public Transportation Association (1989) found that when service conditions are equal LRT attracts from 34% to 43% more riders than BRT. Furthermore BRT attracted only one third the ridership that the forecasting models by the Federal Transit Administration predicted. By contrast LRT attracted 122% of their projected ridership. In Los Angeles they have found similar differences between BRT and LRT in ridership where LA's Blue line LRT has attracted four times the ridership of the parallel Harbor Transitway BRT. (Los Angeles County Metropolitan Transportation Authority, 2006).

These facts show how LRT completely outperforms BRT when it comes to ridership numbers. In order to achieve a maximum modal shift from private transport to public transport, LRT would appear to be the best solution. In addition to better ridership numbers, light rail was the preferred mode of public transport as indicated in this 2001 United Kingdom survey. The survey revealed that light rail was considered an acceptable alternative to the car and was considered to be frequent, quick, clean and safe. By contrast buses were perceived as falling well short of people's needs. This was because busses were considered uncomfortable and less reliable making it seem undesirable and low status (Light rail now, 2006). This goes some way to explaining why light rail is more successful as it is simply a more socially acceptable form of transport than a bus.

Councils will consider cost benefit ratios and ridership forecasting models when making a decision about the best option. Most forecasting models are reliant on assumptions made

about how far people are willing to walk to catch public transport. The benefits about BRT is that it is a much cheaper system to implement and forecasting models tends to treat catchment areas as the same between BRT and LRT, but is this justified? A survey conducted in America found that people were willing to walk from further away to access LRT than they were for BRT (DVCCCA survey staff, 1991). This suggests that changes to these forecasting models is warranted as there is approximately one third greater walking access for LRT.

Beyond basic economics and ridership numbers it is necessary to recognize what LRT does for communities and how it affect the community. More specifically how can LRT be part of an assemblage that facilitates community appropriation. The Victoria transport policy institute in Canada found that *“Rail Transit stations provide a catalyst for creating compact, mixed, walkable urban centers.”* Then in multiple studies conducted in America the conclusions stated, *“In addition, where LRT provides a catalyst for more accessible land use, it tends to increase overall transit transport (rail and bus), increase overall walking transport, and reduce per capita vehicle ownership and use.”* (Litman, 2004; Lane, 2008; Kenworthy, 2008).

LRT is the superior transport investment for the community. LRT may be more expensive than BRT to implement, but the long-term gains far out way the short term costs. When comparing BRT with LRT it is clear is that LRT is a major driver in achieving more walkable urban centers. It causes residential and urban densification attracting more people to live in the area. It draws a much higher ridership rate prompting a significant model shift out of the private car and reducing the level of car ownership. This then helps provide a more walkable environment that further aids business growth and community appropriation. LRT is a key component that can help bring about the desired change set out in this project. It is an important element to the community appropriation assemblage that sets the roading infrastructure in place. The next section will discuss how such a system could be implemented on Dominion Road

### ***Design research: light rail in Melbourne***

Melbourne will be a case study for how a light rail system could be implemented on Dominion Road. In Melbourne, the transport system has managed to include multiple forms of transport and it is important to investigate how this transport system functions.

Also it will be interesting to see how their trams affect the community and the way people use the road.

One cannot avoid the difficulties involved in implementing a LRT system on Dominion Road. The road is narrow, and the community wants car parking to be kept and right hand turns to remain. On top of all that, a cycle lane is encouraged as the council seeks to reduce the overall traffic volume. The aim of this case study is to find out how a LRT could work on Dominion Road while still achieving these other goals.

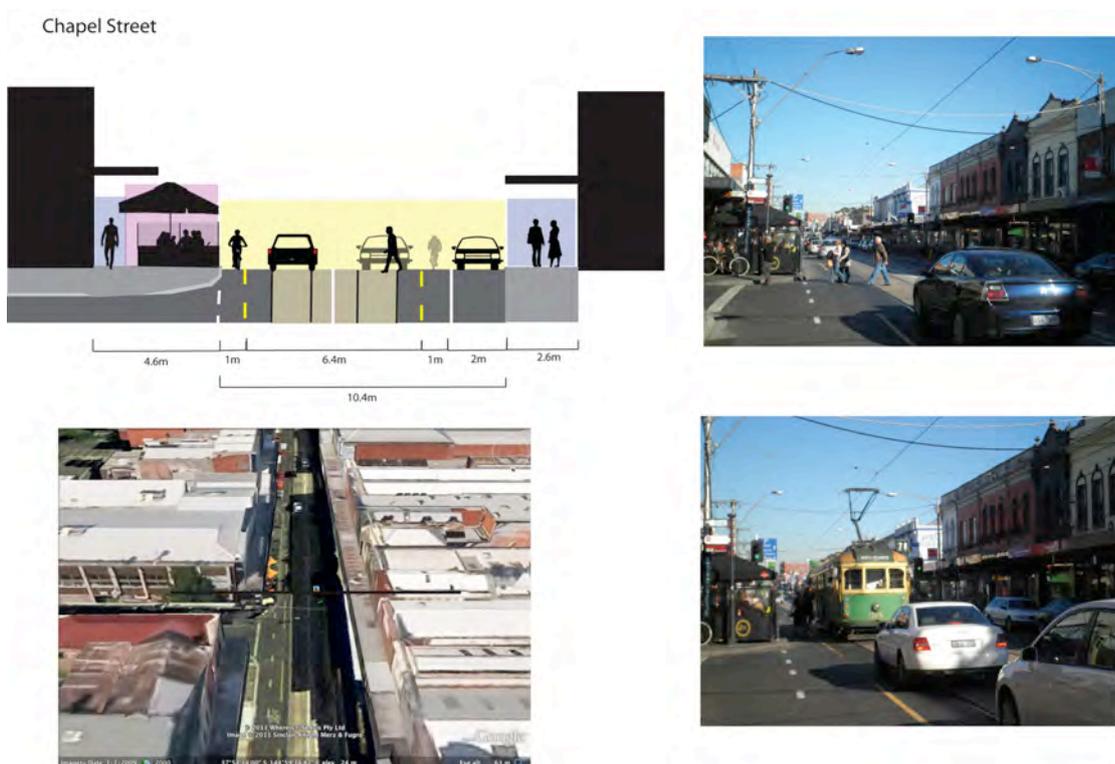


Fig 9. Chapel Street

- The top photograph indicates the ease in which people cross this narrow road to the point where cars regularly give way to pedestrians even when there are no pedestrian crossings
- The bottom photograph shows how trams stop to pick up passengers, forcing the cars behind to wait.
- On the cross section the blue areas represent the standard footpath where it is safe to walk. The yellow area is the road where it is easy and relatively safe to cross and the purple area is an area of community appropriation where people can claim a territory.

Chapel Street is an interesting case study because it is an early 20<sup>th</sup> century street much like Dominion Road. It has a narrow width yet still manages to cater for public transport, private vehicles, parking and cycle lanes. One of the most important features to the success of this street when it comes to generating community appropriation, is the tram. It stops regularly to pick up passengers causing a slow traffic speed, which in turn allows pedestrians to cross the road almost at will. This undoubtedly has helped form the nature of shopping on Chapel Street where the sidewalks are lively with multiple cafés and boutique shops. The street itself is no barrier as the top photograph shows a car giving way to pedestrians as they cross in front of it. It is the result of the combination of all these factors that has led pedestrians into appropriating the street. Together with the overall nature of Chapel Street, it has formed a community appropriation assemblage where people have turned this road into an informal pedestrian street.

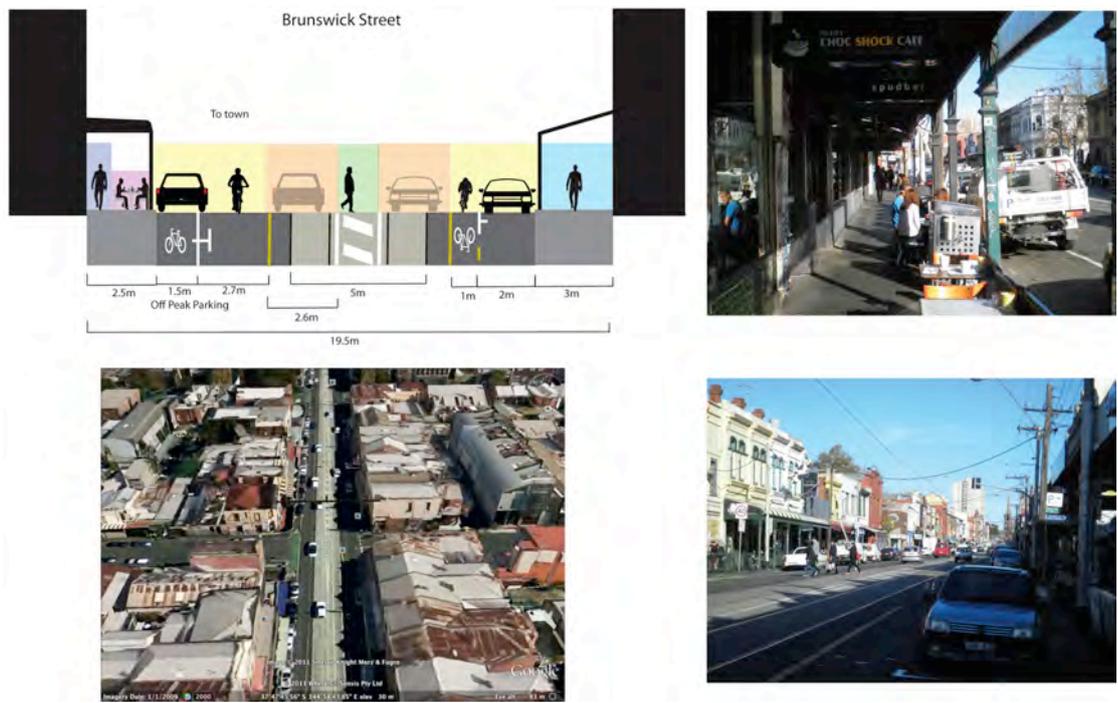


Fig 10. Brunswick Street

- The top photograph shows how an extremely narrow footpath can still provide a variety of different territories that people can appropriate proving that a wide footpath is not necessary to create a 'lively' street.
- The bottom photograph shows the use of a narrow 1m wide median strip that people use as a stopping bay when crossing the road.

- The aerial photograph shows how the green cycle lane goes through car parks as is also shown in the cross section. This works on a peak and off peak basis where at peak times car parking is not allowed enabling this part of the road to be used as a cycle lane.
- In the cross section the dark blue represents a walking territory and the purple is an area of community appropriation. The light blue shows a wider walking territory that gives people more freedom to move or stop. On the road the green indicates a safe zone in the road while the orange is mildly dangerous. The yellow indicates a relatively safe area of the road to be in.

This case study is particularly significant for this research project. Again it is a narrow old fashioned 20<sup>th</sup> century street not unlike Dominion Road. One of the most important discoveries in this case study is the economical use of its narrow road. It is precisely the same size of the narrowest point on Dominion Road yet it caters for on-street parking, cycle lanes, regular traffic, a median strip and an extra road lane on the left hand side for peak times.

Brundswick Street is a lively cultural street not unlike Chapel Street. People can cross the road with relative ease thanks to a specially made pedestrian median strips. There are also railings on the side of footpaths, allowing for a degree of separation between the footpath and road. The railing is particularly useful at peak times when two lanes of traffic and a cycle lane operate without the buffer of parking between the sidewalk and road. The railing provides the necessary degree of separation, helping pedestrians feel safer. This in turn affords the sidewalk the ability to cater for more relaxing activities such as sitting down and having a coffee as shown in the top photo. Even if the parking buffer was permanent, as it is for most of the day, the railing still acts as a mechanism that contains the footpath. This helps create better conditions for a sitting down territory to form, as the railing acts as a wall between the on street parking and footpath. Because the railing completely cuts off the footpath from the road, it isolates the footpath turning it into a narrow corridor. The insular nature of the footpath has enabled it to develop independently of what's happening on the outside, helping to form the contrast between the walking territory and stopping territory inside this narrow sidewalk.

The major intrigue however is the road itself. How does it cater for such a diversity of transport modes in this fairly narrow road corridor? Firstly, the cycle land on the left traverses through car parking. This is because it operates only at peak hour when there is

no parking. The extra room created as a result of no parking enables regular traffic to switch over to the outside lane. This enables the center lane to become a public transport only lane.

The Brundswick Street model is the basis of what could work on Dominion Road. It is an important discovery that would enable multiple modes of transport to fit in a narrow corridor. It enables a peak hour public transport only lane and caters for cyclists. The idea of cycle lanes through car parks where there are peak and off-peak scenarios is precisely the method in which it will work. The next section will show how the Brundswick Street transport arrangement can work on Dominion Road.

*Road design: Proposed traffic plan for Dominion Road*



Fig 11. Dominion Road traffic configuration plan

Before going any further it is important to consider practical considerations regarding other difficulties in introducing LRT to Dominion Road. It is important to note that such a scheme will need to cater for busses as well as LRT as there will still be bus routes that

use Dominion Road. The plan and cross section of the scheme has a Public transport (PT) lane wide enough to cater for busses.

It may also be necessary to consider how to save on the capital cost of implementing LRT. A good way to reduce costs is to start off using busses and then gradually replace them by phasing in LRT. This allows for rail tracks to be laid down slowly over time, substantially limiting any initial expenditure.



Fig 12. Dominion Road traffic configuration cross sections

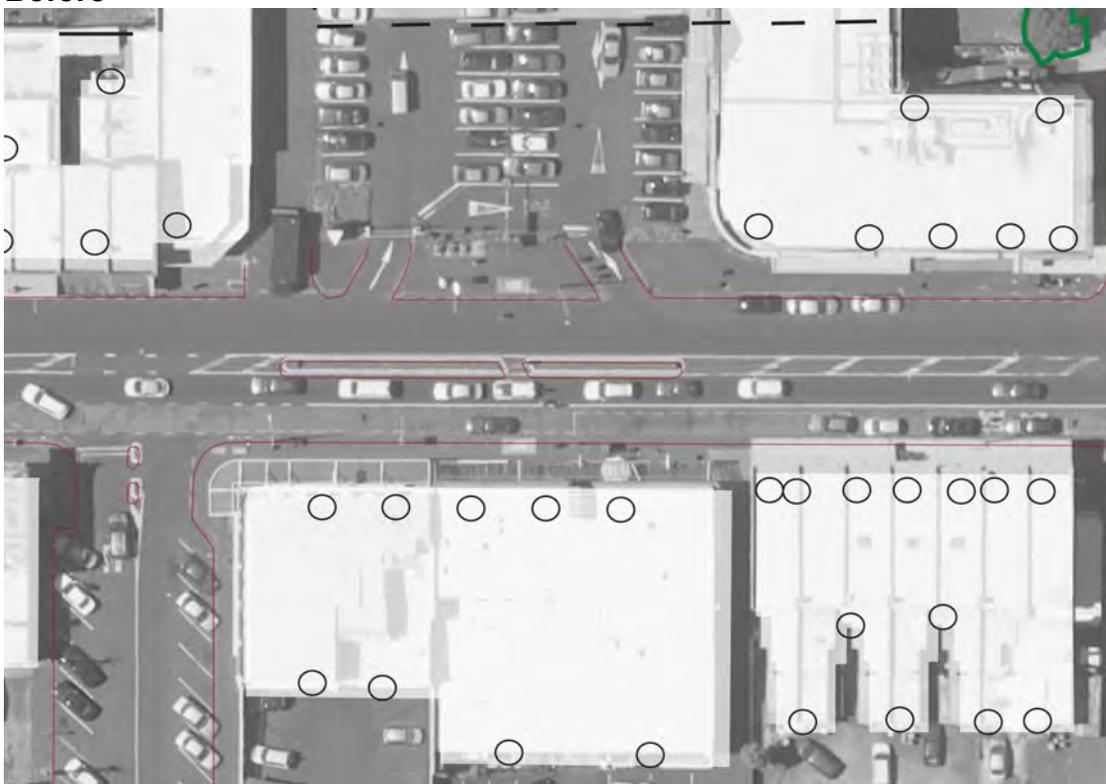
- The top cross section (the standard road) shows both the off peak and peak hour scenarios. In narrower parts of Dominion Road the footpath and median strip can be reduced or dropped to enable room. 22 meters is the standard size for the majority of Dominion Road however.
- The bottom cross-section shows a public transport (PT) stop where passengers can board either a bus or a light rail train. PT Stops can fit in a road width of around 16 meters.

The Eden Valley corridor cross section in Fig 12 shows how such a system can work on Dominion Road. During the day public transport (PT) and regular traffic share the same lane but at peak hour the regular traffic will have to drive on the outside lane that becomes

free due to no peak hour parking. This allows the center lanes to be for PT only and it frees up the cycle lane to be used in peak times.

The PT stop cross section shows how such a scenario works when picking up passengers. Along Dominion Road there will be a series of 'PT stops', these will act as nodes where people can wait for public transport. PT stops will be 24/7 public transport only. This will need to be marked clearly for motorists in order to avoid confusion. Motorists will need to use the outside lane and may need mechanisms such as signaling or barrier arms to direct traffic there.

### Before



**After**

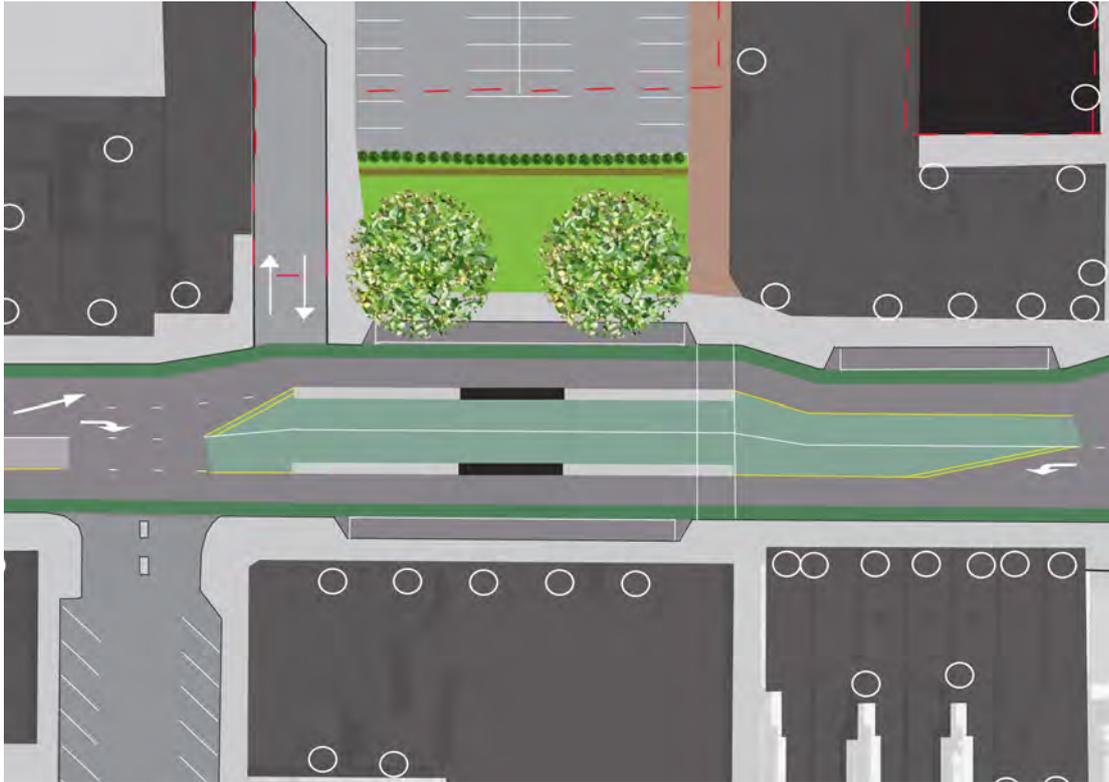


Fig 13. Plan for the PT stop

The 'after' plan of the PT stop in Fig 13 shows how it will operate in Eden Valley. There will be a crossing point for pedestrians to enable safe access onto the center platforms or over the road. Alternatively pedestrians may wish to cross at will on the left hand side. One of the key features of the PT stop is that the light green area (24/7 PT zone) will be empty most of the time making for a safe and easy crossing point for pedestrians. The raised platforms in the center also help to make it easier to cross the road.

The existing 'before' scenario is unusual because there are three entrances into the Eden Quarter car parking area. This makes for an unfriendly pedestrian environment, especially as upon crossing the road there is an immediate need to cross a car park entrance or exit as well. The proposed design seeks to simplify this scenario by reducing it to just one entrance and exit, providing for easier pedestrian access. In this design, the only way into the car park is via the entrance that goes directly into the underground car park. This underground car park is rarely used, and by forcing people to park underground it frees the ground level car parking area to be utilised for other purposes. The new space created as a result of the new car park entrance configuration will be discussed in greater detail in the Eden Valley upgrade segment.

### *Dominion Road LRT route*

The LRT scheme would start from Brittomart and build upon the light rail route already created in Wynyard Quarter. That scheme planned to have a route that would run to Brittomart along Quay Street. My scheme would simply be an extension of this, continuing up Queen Street onto Ian Mckinnon Drive, along Dominion Road and finally ending at a train station and park and ride where Dominion Road meets SH20. The LRT system on Dominion Road can connect to a planned heavy rail link that is planned to go alongside SH20.

All along SH20 there has been ongoing development and recently a new town center has emerged called Roskill Center. This is a result of the SH20 development that has redefined the land use for the area. Once the Waterview Connection is finished Roskill Center will almost be at the crossroads of a major motorway, heavy rail line and one of Auckland's main arterial roads going into the city. Therefore, it is an ideal location to have a train station and park and ride at the crossroads of these major transport routes.



Fig 14. SH20 Train link connection

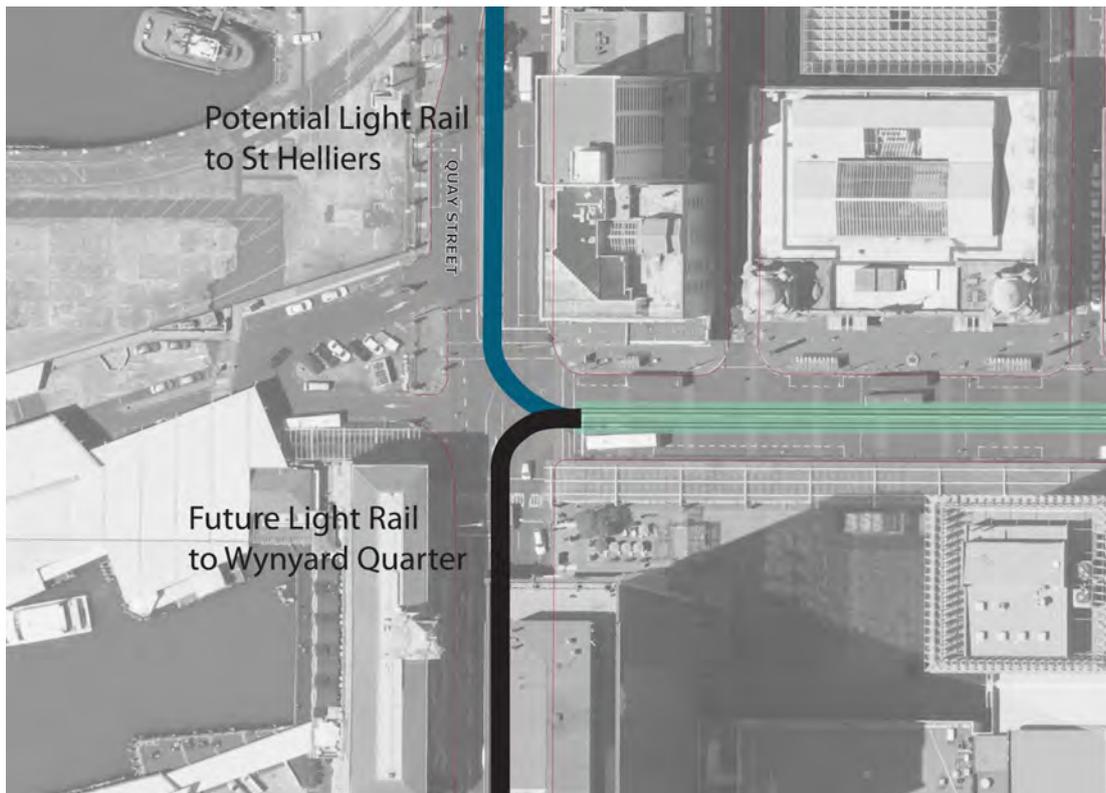


Fig 15. Brittomart light rail connection

### *Summary of the Dominion Road LRT plan*

#### Dominion Road traffic proposal (SH20 to Queen St)

- Tram within the next 20 years, gradual phasing out of buses
- Peak hour continuous cycle lane
- Peak hour public transport lane
- Keeping right hand turns
- Keeping off-peak parking
- Park & Ride facility at the SH20 intersection
- Train station at SH20 intersection (when SH20 heavy rail line is built)
- 24/7 cycle lane on Ian Mckinnon Drive & Queen Street
- 24/7 public transport lane on Ian Mckinnon Drive & Queen Street
- Possible future rail links
- Tram & train station is catalyst for increased housing density and subsequent community appropriation

The Dominion Road LRT scheme would achieve the transport goals set out by the council, as well as cater to the needs of the community. Research showed that LRT system could facilitate more community appropriation, as it is a catalyst for pedestrian friendly environments, economic growth and increased housing density. A LRT scheme is one method in which a change in infrastructure could facilitate community appropriation. The next section will discuss further methods.

## Part 2: Eden Valley upgrade

### Introduction

So far transport solutions have been discussed at length in terms of how they can be a catalyst that drives community appropriation on Dominion Road. Beyond that, it has been discussed how such a LRT system could work in Auckland. This next segment will explore in more detail other changes in infrastructure that could facilitate community appropriation. This section will be a design research project based on the area on Dominion Road known as Eden Valley.

### Design research

This section will seek to understand the unique characteristics of Eden Valley. It will focus particularly on how it functions and how people use the area.



Fig 16. Areas of Eden Valley

## Areas of Eden Valley

To begin with, Eden Valley is not one homogenous place. There is an assemblage of different areas that make up Eden Valley. There are a number of public car and private car parks, various shopping areas, office blocks, bars and restaurants, out the back areas as well as Ballantynes Square. Each coloured box represents one of these areas and their borders are often defined by infrastructure. These infrastructural elements are either buildings, fences, roads, car parks, or property boundaries. They define to a certain extent how the place is used, by determining where people can and cannot go. Infrastructural elements can prompt certain activities in some areas but not in other areas, or subtly suggests taking one path over another. The next image builds on this concept and helps to explain where there are different levels of activity and inactivity in Eden Valley. From this information it is possible to make judgments as to why activity is centered in some places and not others.

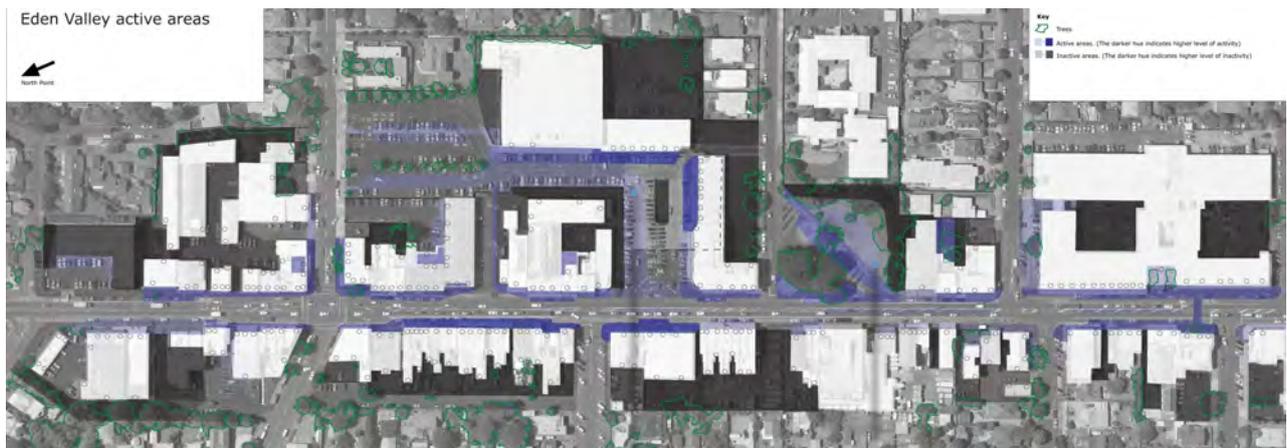


Fig 17. Active areas

Eden Quarter

Ballantynes Square

- The blue areas are areas of activity with the darker shade being the most active. The grey areas are areas of inactivity with the darker areas least active.
- The green outlines are trees.

## Active areas

On the active areas map in Fig 17 there is a public square that is defined by edges of roadway and private property. On the map the square shows an angular area of activity. This is because a path bisects the square as a route towards the main shopping area of

Eden Valley, known as Eden Quarter. What is interesting about the type of activity in this square is that the edges are not desirable places to be in, as indicated by the dark grey shading. The photographs below display the way in which the edges of the square are elevated and shady. This separates the area from the rest of the square making it seem an improper place to be in.



Fig 18. Ballantynes Square

The next series of maps will break this down into more detail, showing where people go and why. Based upon this information of basic movement patterns in conjunction with areas of activity, a better picture begins to unfold as to how infrastructural elements plays a part in the way Eden Valley functions.



Fig 19. Pedestrian flows

Whale car park

- The red lines indicate pedestrian flows with the thickest lines proving the most popular.
- The circles are shop entrances
- The dotted line represents the underground car park
- Black lines are fences

### ***Pedestrian flows & Stopping areas***

Fig 19 breaks down the basic movement patterns of pedestrians. Note that these routes do not always follow along proper paths. Many in fact meander through the car parks, as that is the most direct route between Dominion Road and the supermarket. The main pedestrian routes however, are based on footpaths that run alongside shop entrances. Where there are multiple entrances close together, there tends to be a higher pedestrian flow. There are also linking flows such as one which goes through Ballantynes square, acting as a short cut for those coming from the southern end of Dominion road. Another popular shortcut is a small car park in the middle of Eden Quarter that has a distinctive whale mural. The following photographs show how people cut through this car park as it is a direct link from Dominion Road to the supermarket.



Fig 20. Whale car park

The pedestrian flows map also highlights areas where people do not go. These are often areas behind shop frontages or where there are no obvious links to anywhere. The type of infrastructure often determines why some areas are active and why other areas are not. Buildings, fences or footpaths are configured in such a way that can either keep people out of certain places or guides people in a particular direction.

Another reason why some areas are more active than others is because people choose to stop and linger in those areas. Fig 21 highlights places where people often stop. They might be found talking to others, window-shopping, waiting, eating and drinking or just sitting down. These opportunities are part of an appropriation assemblage largely defined by infrastructural elements. Ballantynes Square, for example, would not be such a popular place to stop if there was not a footpath going through it. That coupled with available seating, affords people an opportunity to stop and sit down. The fact that this location is also a popular footpath, allows for a greater opportunity for interaction with those passing by, creating precise points where such activity occurs. These points of interaction are moments of community appropriation where people inadvertently form a collective temporary ownership of an area. Consequently, this begins with the way in which the infrastructural elements in the landscape are configured.



Fig 21. Stopping areas

Lunch break

- The blue indicates stopping areas with the darker hue highlighting where this occurs the most.
- The yellow stars indicate more specific spots where people interact.
- The black spots show specific locations where antisocial behavior often occurs. That is people loitering and generally being a nuisance.

One of the more interesting stopping points is located outside an office block at the southern end of Eden Valley. Here, office workers regularly gather outside the main entrance to take a break from work. It is possible to speculate as to why this particular area gets appropriated. The main reason is probably because of its close location to the building entrance, making it a convenient spot to enjoy being outside on a break. Other reasons may include the fact that it is a relatively quiet and sunny location with plenty of room for a group to gather. Due to the high quantity of staff in the building, it is safe to assume that these people would head to Eden Quarter on a regular basis. This makes it highly likely that work colleagues could pass one another at this point, prompting conversation. Also, the nearby garden has a low wall that people can use to sit on or place their coffee, helping to establish a point of appropriation.



Fig 22. Large office building

### *Structural affects*

This design research has sought to investigate how the structure of the landscape affects the way that it is used. It attempts to discover why some areas of Eden Valley have more activity than other areas. The previous maps looked at it from the perspective of how people use the landscape. This next map and series of photographs in fig 23 seek to understand the structural elements themselves, and how they determined how Eden Valley works.



- Dominion Rd to Supermarket accessed via car park



- Railing utilized as a seat



- Columns create a stopping zone



- Stopping zone formed by cafe



- Informal outdoor point for workers

Current structural affects



- Car parks and grass/vegetation can behave like structural elements that determine where people tend to go.



- On street retail items



- Whale car park access way



- Empty underground car park



- Shortcut through Ballantynes Square



- Footpath outside restaurant



- Slow zone formed by retail items and furniture



- Pedestrian island



- Access from Square to EQ is partially blocked



- Lack of entrances forms dull sidewalk



- Two footpaths separate activity

Fig 23. Structural affects

An interesting discovery in this research is how small areas of community appropriation can form because of obstacles on the footpath. Some of the photographs indicate how slow areas are formed due to columns, signs, posts or retail objects on the side of the footpath. When people walk on a footpath they take the fastest and easiest route through

the middle where nothing is in the way. However, the series of objects on the sides act as obstacles, creating 'eddy environments' where people can stop without getting in the way of pedestrian traffic. These eddy environments can provide the right conditions for community appropriation as people stop to sit at a café table, observe retail items, or to converse.

Another discovery is the difficulty in reaching the supermarket and Eden Quarter shops. The supermarket is easily the most popular destination, but it is not integrated into the pedestrian system of Eden Valley. There are few footpaths connecting Dominion Road with the supermarket, and as has been discovered, the activity on footpaths can generate community appropriation. In order to generate more community appropriation it would be necessary to consider making more pedestrian connections with the supermarket that reflect the popular routes taken in Eden Valley. The next section will propose changes in the infrastructure that will facilitate more community appropriation.

## **Design strategy**

This section will seek to find ways in which a change in infrastructure can facilitate more community appropriation. Having completed the research to understand how Eden Valley works, this strategic phase will use that knowledge to make recommendations as to what needs to change. The following map prescribes making improved connections to strategic points in Eden Valley.

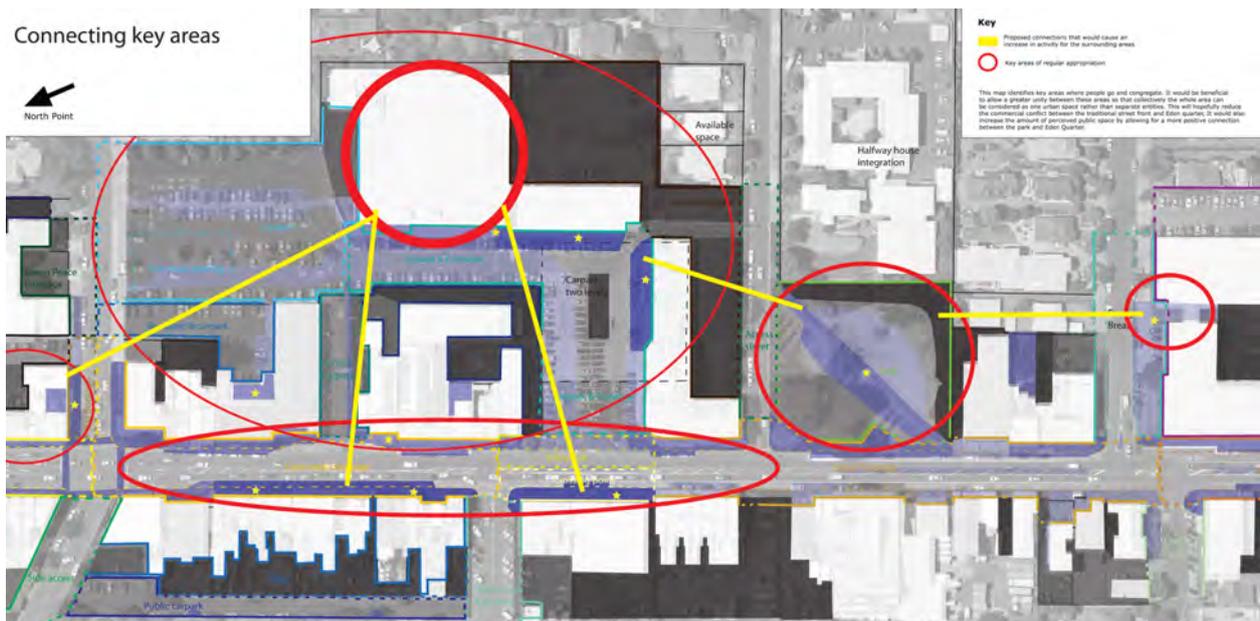


Fig 24. Connecting key areas

- The red arrows are key areas of Eden Valley including the supermarket, EQ shops, Dominion Rd, bar area, public park and the large office building.
- The yellow lines are proposed connections that will need to be made
- The background is the current activity of the area where the darker shades of blue are more active areas and the darker shades of grey are the least active areas. They yellow stars are key areas of community appropriation.
- The coloured outlines indicate the existing areas of Eden Valley

### Connecting key areas

Improving the connectivity between the key areas of Eden Valley would increase the chances for community appropriation to occur. As previously mentioned, this process is about creating the right conditions to facilitate community appropriation. By changing the landscape and manipulating where people go it is possible to form a series of circumstances that might prompt community appropriation. The next map will show in more detail the design initiatives for Dominion Road.

### Design initiatives and expected outcomes

The main design strategy for Eden Valley is to create a unified path that connects the key areas. This path will run parallel to Dominion Road from the office building to the end of

the supermarket car park at Valley Road. This path will be at the cross roads of all access routes from Dominion Road to the supermarket, hopefully creating a point of union between these major destination points. By creating a direct link between Eden Quarter, Ballantynes Square and the office building, it is hoped that the square will become a more popular destination. The fact that this connection would make Eden Quarter more inclusive of the wider area should lead it to attract more people.

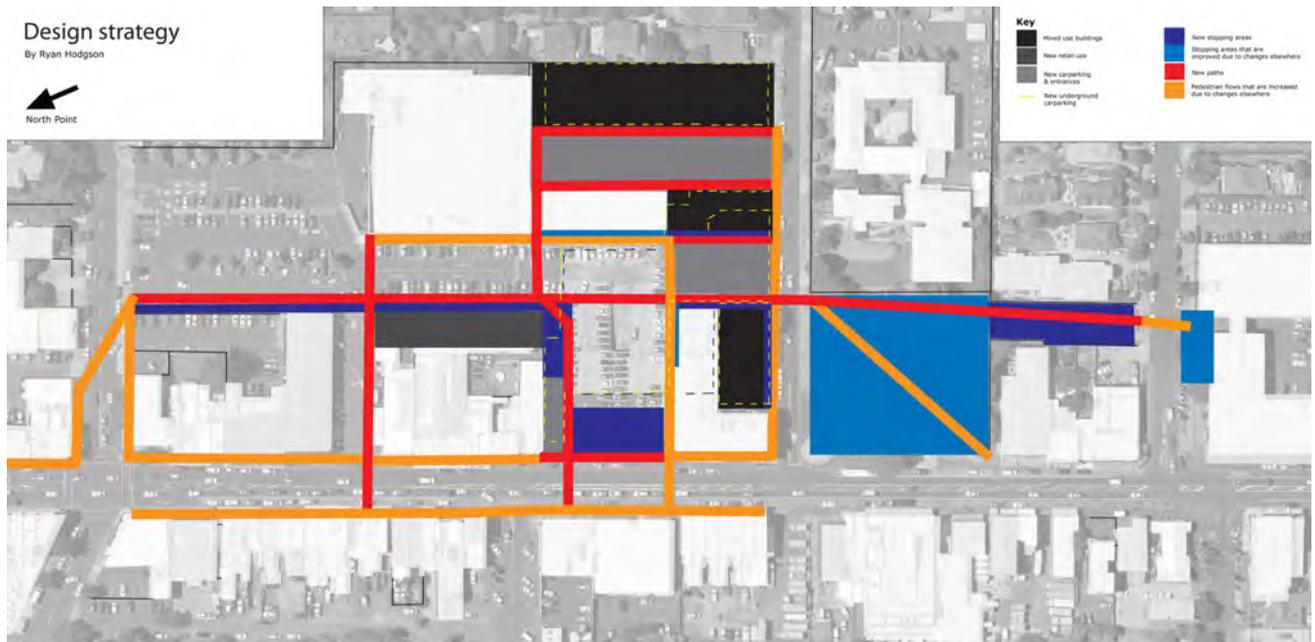


Fig 25. Design strategy

- Black areas are new mixed use buildings or apartments helping increase the density of the area as Eden Valley is a region designated for growth according to the Auckland plan.
- The dark grey is a building designated for new retail use. It will be a new shop frontage by the new path.
- The light grey areas are new car parking areas and entrances
- The dotted yellow lines are new areas designated for underground car parks to serve the new residents of the apartment buildings.
- The red areas are new paths. These will help unify the area in an attempt to create conditions that will facilitate more community appropriation.
- The orange areas are existing paths that would likely see an increase in activity as a result of proposed changes elsewhere.
- The dark blue areas are expected to become new stopping areas
- The light blue areas are existing stopping areas that are expected to see an increase in activity as a result of proposed changes elsewhere.

Other important design initiatives include new retail and mixed-use blocks to complement the new pathway. This will turn the car park into an informal street, as shops line both sides. The presence of new apartment blocks provides increased housing, expanding the local population and helping to provide a stronger customer base for local businesses and the light rail service. A larger local population will also lead to an increase in community appropriation, as it would become more of a local neighborhood. Ballantynes Square and Eden Quarter would essentially become the back yard for the apartment dwellers.

The greater connectivity of Eden Valley should see increased foot traffic in the area. What is particularly important is that the series of new pathways help provide the right conditions for community appropriation to occur. Using a change in infrastructure to redirect people's activity allows for an opportunity to create spaces that will be appropriated by the community. The next section will highlight in greater detail the specific design initiatives throughout Eden Valley.

# Eden Valley design

**Before**



**After**

Exit path

Rejuvenated building

New entrance



Eden Valley concept design

By Ryan Hodgson



**Before**



**After**

Whale car park

Frontage

Square path



Fig 26. Key design initiatives

### Exit path

This change in infrastructure sought to capitalize on frequent pedestrian traffic through the area. This pathway is set into the ground slightly, preventing people from walking across the car park. The railing can be used as a temporary seat, and picnic tables can be set into the garden on the other side. It is hoped that these changes would create a more pedestrian friendly route to the supermarket, while also facilitating community appropriation

### Rejuvenated building

This old brick building would become the centerpiece of a new shop frontage. It is hoped that the rustic nature of the building would add character to Eden Quarter, attracting increased levels of businesses. The intention is that having shops on both sides will turn this car park into an informal street. The expected result is that this area will become more popular, increasing the potential for community appropriation.

### New entrance

The existing situation has no obvious connection to Ballantynes Square. This is a lost opportunity, as people may be unaware of this nearby square. Removing the pharmacy at the end of this block would provide a direct connection, linking the Square and Eden Quarter, improving the flow of pedestrians between these two areas.

In addition, the introduction of mixed-use apartment buildings would add to the local population. One of these mixed-use buildings will look over Ballantynes Square, helping to improve safety through visual surveillance. This will also aid in turning the area into more of a local neighborhood, where residents might adopt the area as their own back yard. New retail shops below the apartments would cater to the displaced pharmacy and any other interested retail outlets, helping to attract people to this part of Eden Quarter. This new area will become a major entrance and exit for vehicles, increasing its profile. In all, it is expected that there will be a larger local population and increased pedestrian flows as a result of these changes. With more people using this pedestrian route, an increase in community appropriation would be expected.

### Whale car park

Currently this car park is separated from the supermarket by a fence. Frequent shoppers to the area are aware of the gap in the fence that connects the supermarket with Dominion Road. However, this connection could be made clearer by the removal of that fence and turning it into more of an official route. By making a clear connection more people would be expected to use the route, possibly increasing the chances for community appropriation to occur.

The whale car park is owned by the fruit and vegetable shop on Dominion Road meaning the car park would need to be bought. In order to justify such an investment, this car park could double up as a public space in the evenings when the shops close. Lights can be used to light up the whale mural and luminous posts can replace the fence. These posts serve a practical element in that they would prevent people taking trolleys beyond that point, as well as lighting up the thoroughfare at night to make it safer.

### Frontage

As previously discussed, this area would be the location of a PT stop. Here people will be able to cross the road easily and use a newly created footpath towards the supermarket. The space saved from reducing the number of access ways in and out of car park enables this area to become a proper frontage. The existing open nature of this area is not conducive to the traditional character of Dominion Road. The park frontage with large plane trees will help mitigate the effects of the open car park, helping to recreate the 1930's character of Dominion Road. On top of that, the newly created public park will serve as a place to relax. Being at such a popular pedestrian point, this park would further facilitate community appropriation.

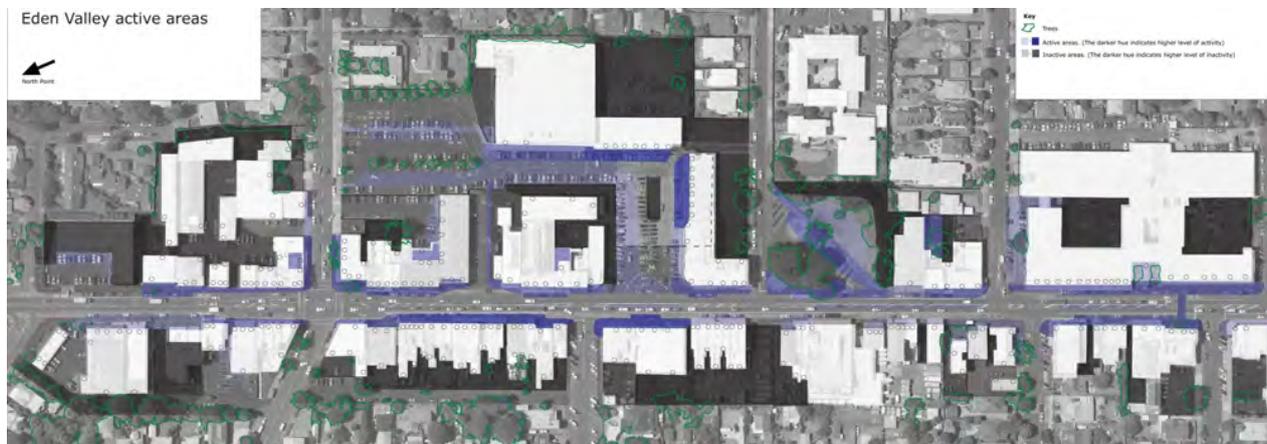
### Square path

Currently the edges around Ballantynes Square are somewhat 'dodgy', meaning that it would seem improper for someone to be there. By putting a new path along these edges and tidying up the vegetation, it would make this area of the park more fitting for appropriation. This path would not only go around the edges but also continue through a newly purchased piece of land towards the large office building. This would complete the connection between all the key areas in Eden Valley, helping to unite the community

through this main axial pathway. The newly purchased piece of land would not just be an access route, but would double up as a community garden. The elderly home adjacent to this piece of land may choose to adopt and care for this garden, helping with its upkeep, and the office workers and locals may opt to pick fruit off the trees instead of going to a shop. This initiative will ensure that the edge pathways of Ballantynes Square are utilised, helping to create a safer environment.

## Expected results in how Eden Valley will work

### Before



### After



Fig 27. New active areas

### Before

Current pedestrian flows



### After

New pedestrian flows



Fig 28. New pedestrian flows

### Before

Stopping areas



## After

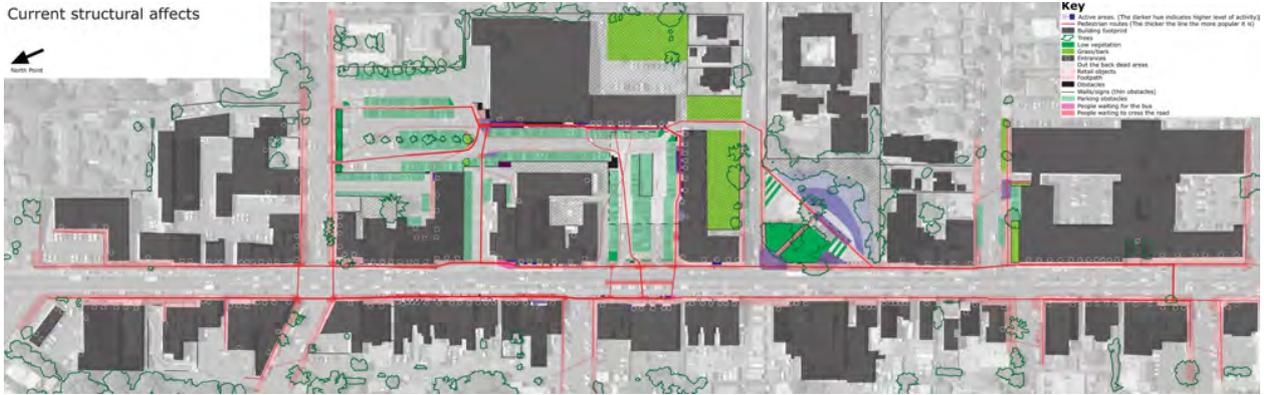
New stopping areas



Fig 29. New stopping areas

## Before

Current structural affects



## After

New structural affects

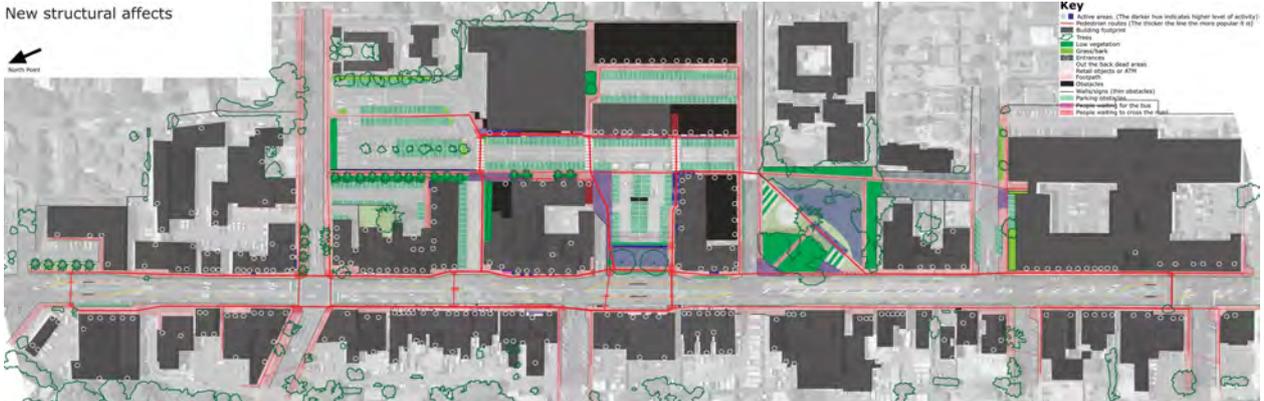


Fig 30. New structural areas

In each 'after' map there are changes as a result of the proposed design moves. Changes in infrastructure have opened up new possibilities, affecting how people use the place. For instance, the new path connecting the supermarket with Valley Road redirects pedestrian traffic. This path leads pedestrians through areas that provide opportunities to stop,

whereas the current pedestrian route through the car park does not provide this possibility. This path goes on to become part of the main boulevard that connects Valley Road with the office building. This boulevard would develop into a major pedestrian route as it links key areas of Eden Valley. By directing people into circumstances that affords them an opportunity to stop, this provides an ideal platform for community appropriation to occur.

Each location affects other locations. In some cases, areas have seen increases in activity as a result of changes in infrastructure elsewhere. For instance it is likely that there would be more foot traffic between the new frontage and the supermarket due to the PT stop and improved pedestrian conditions. Ballantynes Square would also see more activity due to its newfound connection between the office building and Eden Quarter. It is expected that the boulevard will bring together all the key areas, allowing for them to influence each other. Primarily this will be manifested by more pedestrian interchange between these areas. Coupled with the increased local population of the apartment buildings, this will have a profound effect on the amount of people in these places. Together, these conditions will facilitate more community appropriation.

## Conclusion

More community appropriation can be achieved through a change in infrastructure. LRT and the stated design initiatives would set in motion the right conditions for community appropriation to occur. Unlike previous attempts at designing community appropriation this project is not about forcing the issue. Rather is about prescribing a set of circumstances that might form a community appropriation assemblage. For instance introducing LRT, improving connectivity, increasing the population density, improving safety and creating more pedestrian friendly environments can all contribute to a community appropriation assemblage. The process required looking at individual parts of the project separately to understand how can each contribute to the greater whole, and how they themselves can produce more community appropriation.

Each key design area is different, possessing unique qualities and characteristics. It was important to treat each one as its own design challenge, without forgetting its place in the wider area. Eden Valley is not a homogenous landscape. In many ways it's a divided landscape where most of the key areas are unique and separated from each other. By understanding how each key location works and understanding how the wider area works, it has been possible to advocate particular changes. Such changes were meant to not only improve the potential for that given area, but still contribute to the greater area of Eden Valley. Using a holistic approach such as this, it is hoped that the process of creating the right conditions for community appropriation would go beyond the key design area into the greater region of Eden Valley.

This project has been about how to design community appropriation. The notion may initially seem absurd, as it would be impossible to design a particular behavior. However, by changing the conditions of the landscape in such a way, it is possible to alter how people use the landscape. The expected results show how this has been achieved. It is expected that the proposed changes made to the infrastructure of Dominion Road will provide the right conditions for community appropriation to occur.

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