



# Pokeno West Plan Change

Urban Design Report

For Birch Surveyors  
June 2018

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## Document Control:

Prepared by: Harshal Wagle, Urban Designer

Edited by: Kate Watson, Associate

Reviewed by: Karl Barker, Principal / Toby Mandeno, Senior Planner (Birch Surveyors)

Approved by: David Gibbs, Director

# INTRODUCTION

## Application summary

The land which forms the subject site of this urban design report is located north-west of the existing Pokeno township, and is a culmination of various properties along Helenslee and Munro roads. The subject site adjoins existing residential land, developed in accordance with the operative Pokeno Structure Plan.

The subject site covers an area of approximately 160 hectares of land, located on the western side of Helenslee and Munro roads. The site is contained wholly within the Helenslee catchment. The site currently comprises of agricultural fields. The site is located within the Rural Zone of the Waikato Council District Plan - Franklin Section (WC DP: F). The approximate extent of the subject site is shown on the aerial below.

This report supports the intended rezoning of the subject site, and provides the framework of a structure plan. The design and layout of the structure plan (concept plan prepared by Birch Surveyors) has been developed around the proposed zones and land use controls of the Draft Proposed District Plan, and has been developed through on-going consultation and collaboration with the Waikato District Council (WDC).

## The purpose of the document

This urban design report is based on the information provided by Birch Surveyors. This report explains the rationale for the current concept and makes recommendations for the next stages of the design process.

## The team

The preparation of this application has been supported by a team of experienced design and technical consultants assembled by Birch Surveyors comprising:

**Construkt Associates** (Urban Design)

**Commute** (Traffic design)

**Maven** (Flood risk and utilities)

**Waikato District Council** (Market economics, population forecasting, engineering and strategic planning)

### **This document is structured as follows:**

#### ASSESSMENT

An analysis of the strategic, design and local context.

#### SITE ANALYSIS

Understanding the physical characteristics of the site and highlighting the opportunity and constraints.

#### DESIGN PROCESS

Identifying the vision and key development principles to be considered in the design of the development.

The details of the design including the development description, framework, masterplan, development parameters, access proposals.

#### MASTERPLAN RECOMMENDATIONS

#### SUMMARY



Figure 1: Site Boundary

# ASSESSMENT

## Regional Context

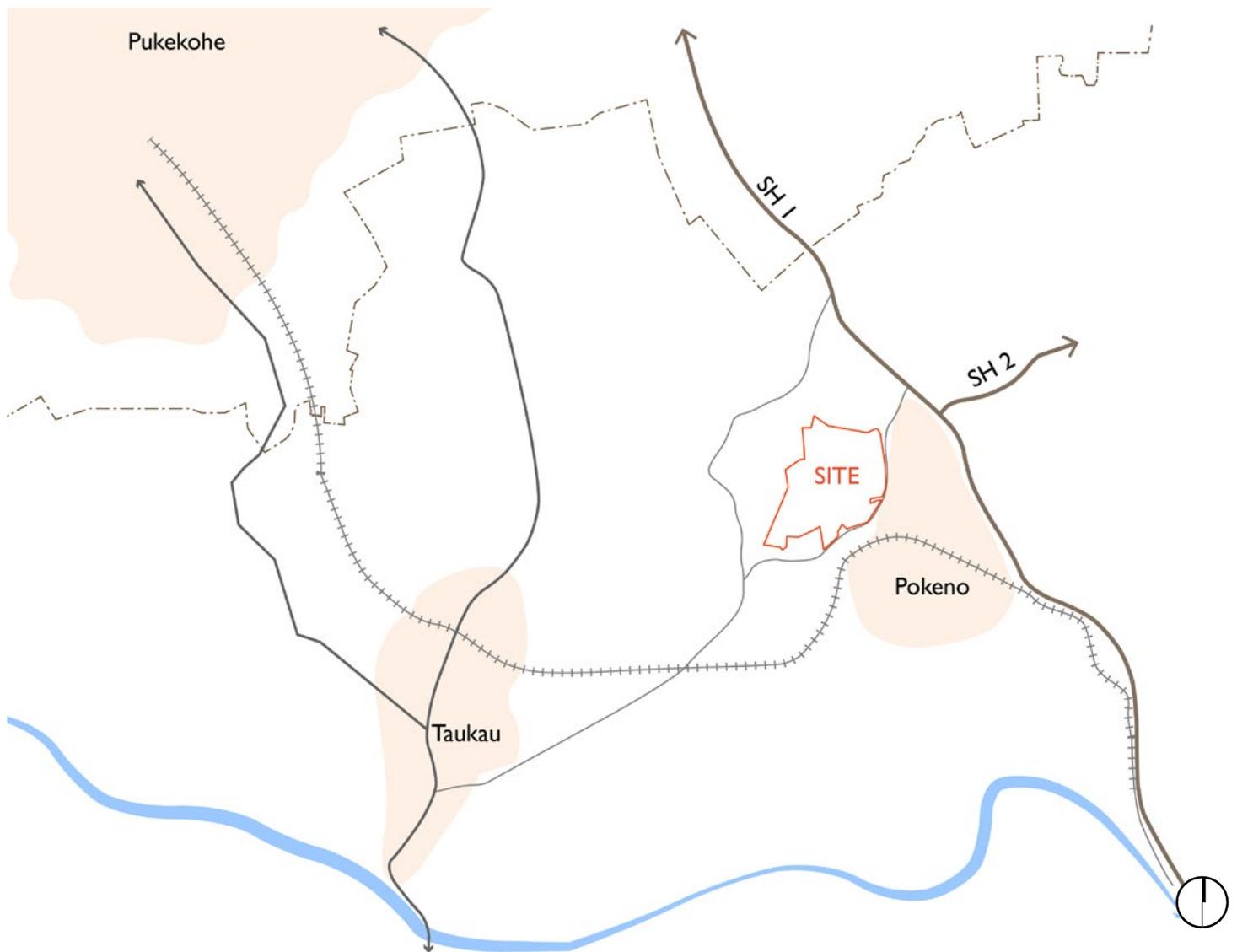


Figure 2: Site location

The subject site is located in the west of Pokeno, and approximately 14km south of Pukekohe. It is surrounded by open countryside on the northern and southern edges and bordered by Helenslee Road and Pokeno Road to southern-west. The existing population of Pokeno is around 1,782 residents (as per Census 2013). Pokeno presents a linear town oriented around a spine road (Great South Road) which leads down to Queen Redoubt which was the beginning of the European settlement in Pokeno. At a regional level, the town is connected to the surrounding local centres such as Tuakau to the west and Pukekohe to the north-west. The town's primary link is along Great South Road, connecting Pokeno to local centers and the main strategic road links to Auckland and Hamilton via Waikato Expressway.

## Local Context

The subject site is on the outskirts of Pokeno, lying on the western edge. The site's south-eastern corner (intersection of Helenslee Road and Munro Road) lies 1km from the Pokeno Town Centre's shops and commercial services located on Great South Road. Great South Road supports a selection of small retail facilities including grocery and convenience stores and local restaurants, as well as the key local centre Pokeno Hall. Community services such as library and medical centre are located in Tuakau which is a 10min drive from the site. Pokeno's early years of education is serviced by Pokeno School. The closest secondary schools to the town are located in the surrounding towns of Tuakau and Pukekohe, both approximately 15 km from Pokeno, or 10 minutes' drive.

Regarding leisure and recreation, the main playing fields are located adjacent to the school, and outdoor play provisions are located near by. While the central riparian reserve offers additional natural open space. There is further scope for additional public amenity through future development in the area.

Great South Road (GSR) is home to some of the local attractions such as the Pokeno War Memorial at the intersection of Market Street and GSR. Some local shops are famous in the wider area and attract visitors from near and far. These places are Pokeno Bacon, Johnson Takeaways (which is famous for ice cream and fish 'n' chips) and the Pokeno market grounds next to fuel stop. Recently the Waikato District Council worked on the refurbishment of the town centre and this effort has started to bear fruit. With increasing residential activity, it is imminent that the local economy is going to strengthen due to additional demands to their service.

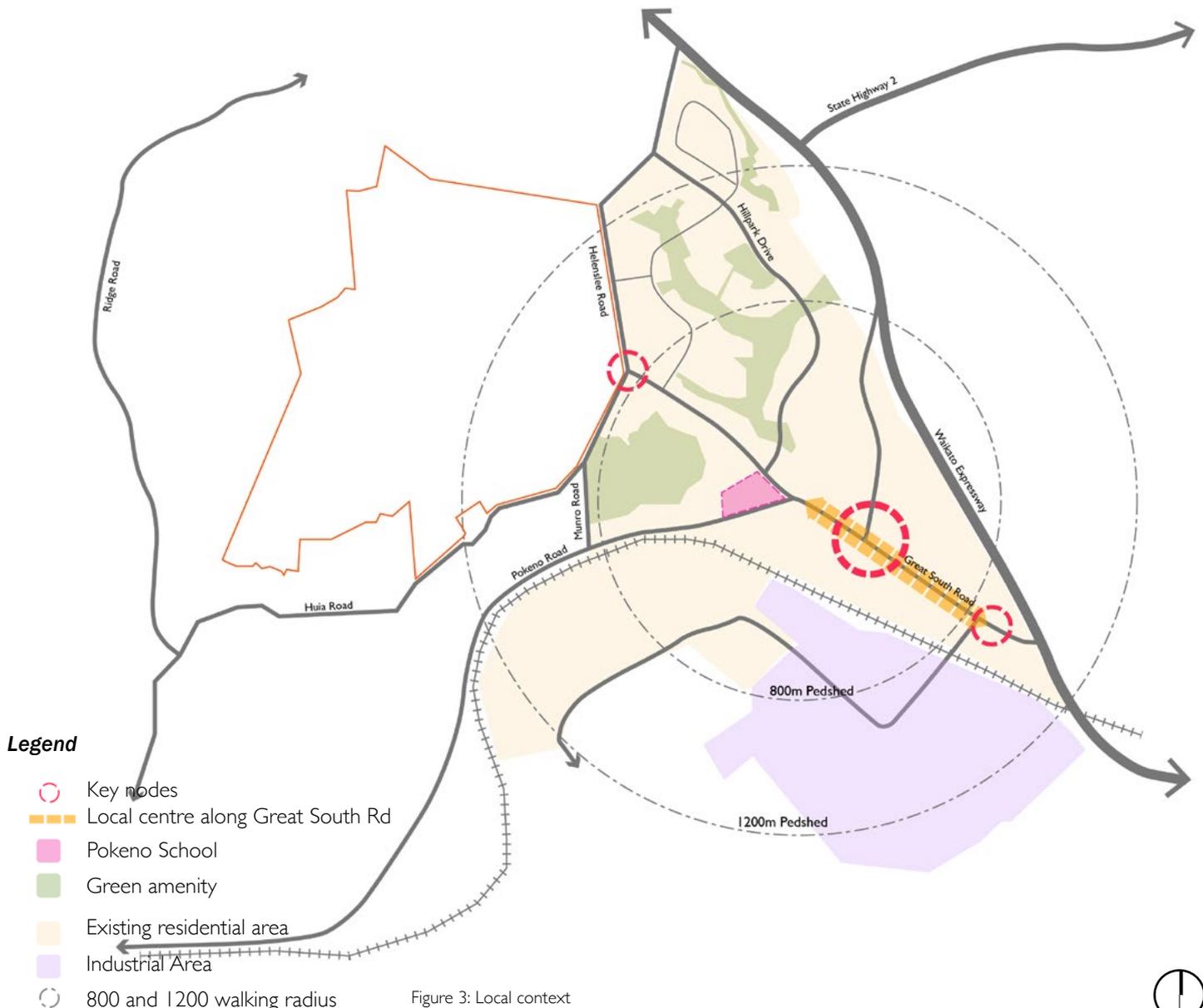


Figure 3: Local context

## Transport & Movement

### Sustainability

The site is well located to the existing facilities and amenities within Pokeno. This encourages walking and cycling as a mode of transport for new residents. The majority of the site is within a 15-20 minute's walk of the Pokeno Town Centre and the regional bus stop on Great South Road. The site is also within acceptable walking and cycling distances of the Pokeno School which should encourage prospective pupils to walk and cycle to school.

### Access

The primary vehicular access is envisaged to be provided via the intersection of Helenslee Road and Munro Road to the south-east of the site. This access is expected to facilitate the majority of all movements to and from the site. There is potential for secondary vehicular access from Huia Road and upper Helenslee Road.

### Public Transport

There are no existing public transport services that serve Pokeno in a substantial manner. However, there are ongoing feasibility studies for a bus route connecting Pukekohe. In addition this, due to the growing population and demand for regional rail between Auckland and Hamilton, there is a prospect that it can go through Pokeno reviving its old railway station. If this becomes a reality, it will transform Pokeno and boost development.

### Movement

The existing travel to work pattern of residents in Pokeno show that more than 30% work in wider Franklin District of which 70% travel with a car. A transport assessment has been conducted to accompany this application, which considers the mode of travel for future residents of the site. The additional traffic generated by the proposed development is likely to impact the local junctions and network, however the assessment has demonstrated that mitigation of this impact can be achievable by intersection planning and travel planning.

Waikato District Council's policy aspirations for growth areas in wider Franklin and



Figure 4: Movement and connections

## Planning Context

Waikato regions are set out within the District Plan. The Council's aspirations for the subject site are set out in Pokeno Structure Plan. The key principles within these policies are:

### Waikato District Council, urban design principles for growth areas

- Density, diversity & mix
- Pedestrian first
- Transit supportive
- Place making
- Completed communities
- Integrated natural systems
- Integrated technical and industrial systems
- Engaged communities
- Redundant and durable life safety and critical infrastructure

Waikato District Council introduced these policy directives to ensure that growth of their towns is resilient to modern challenges such as climate change, energy scarcity and global population growth. These policies outline the importance of a masterplan to coordinate the development and growth of Waikato's town and villages. For the proposed development, these policies will provide strategic guidance to ensure the proposal is aligned to the larger goal established by the Council.

### Pokeno Structure Plan, design elements

- Road reserve and access networks
- Block size, lot type and orientation
- Roads and accessways
- Pedestrian links and routes
- Reserves
- Interface design

The Pokeno Structure plan (adopted in 2008), sets out the vision for Pokeno and provide a comprehensive framework for a phased growth of the village into a town. These design elements under Appendix 54.15B form the assessment criteria for the development, and thus will inform the block structure and movement strategy of the design.

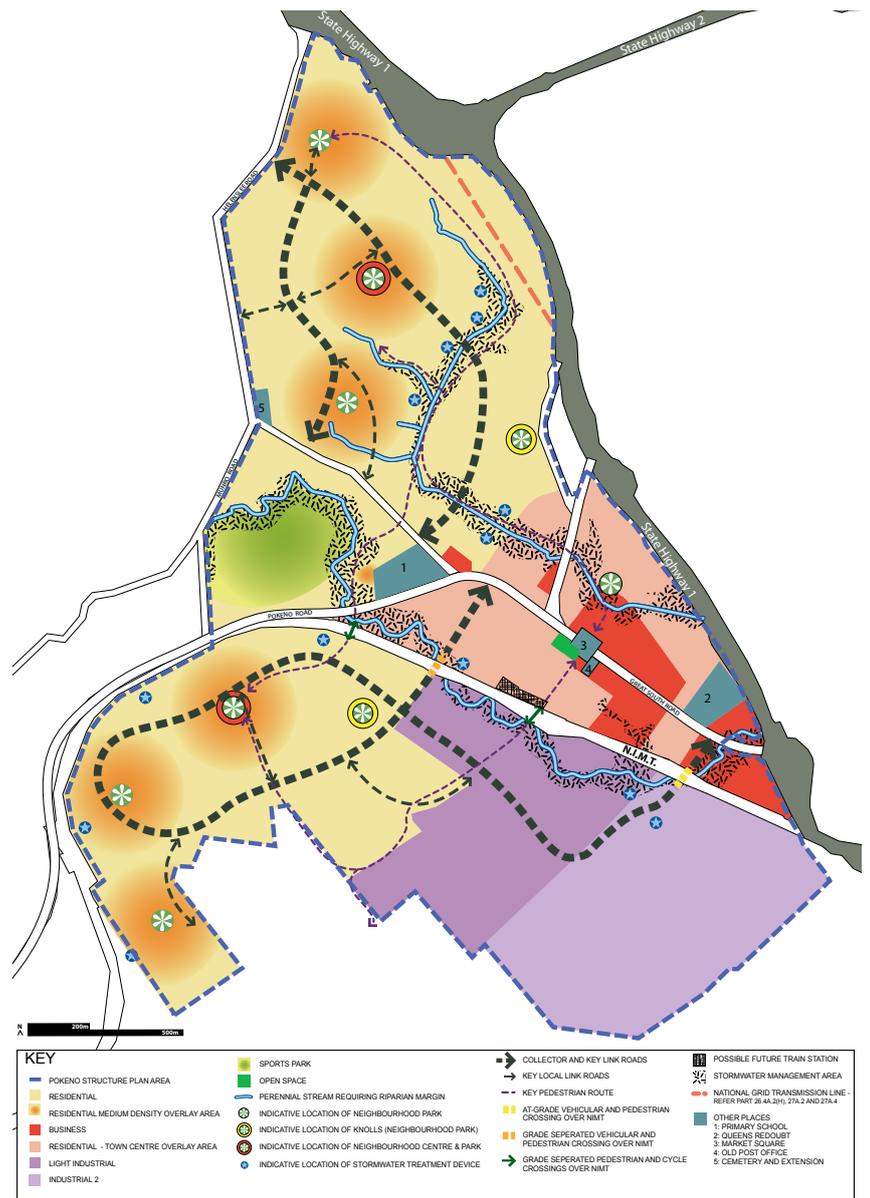


Figure 5: Pokeno Structure Plan

## Historic Context

The wider region's rich volcanic soil made Pokeno the ideal habitat for early Maori who formed the settlement by cultivating grains and poultry. Later in 1860, during the construction of Great South Road, the Military established themselves in Queen's Redoubt, a defensive fort shaped from the land, providing shelter for soldiers from days march towards south. This redoubt was also used during the Waikato wars. The laborers who worked on the road construction were allocated land and this was followed by early settlers who came on HMS Helenslee. Helenslee road is named after this ship. The Pokeno War memorial at the intersection of Helenslee Road and Munro Road is a culturally significant cemetery as there are records of some skirmishes around this land during the Waikato Wars.

Based on the researched information, it can be stated that Pokeno has grown in three occasions:

- The early 1860 settlers and laborers who constructed the Great South Road, establishing the Pokeno village.
- In the 1950s the post-war era saw the foundations of industries which assisted Pokeno's economic activity leading to the rise of residential population. This growth was also due to Great South Road and North Island Trunk line, as they were the important route connecting Auckland and Wellington. The train station also served the mining and manufacturing industry in the Coromandel.
- The next significant chapter in Pokeno's growth came post-2008 when Pokeno Structure Plan enabled residential subdivision delivering 400 homes and a precedent for future growth.

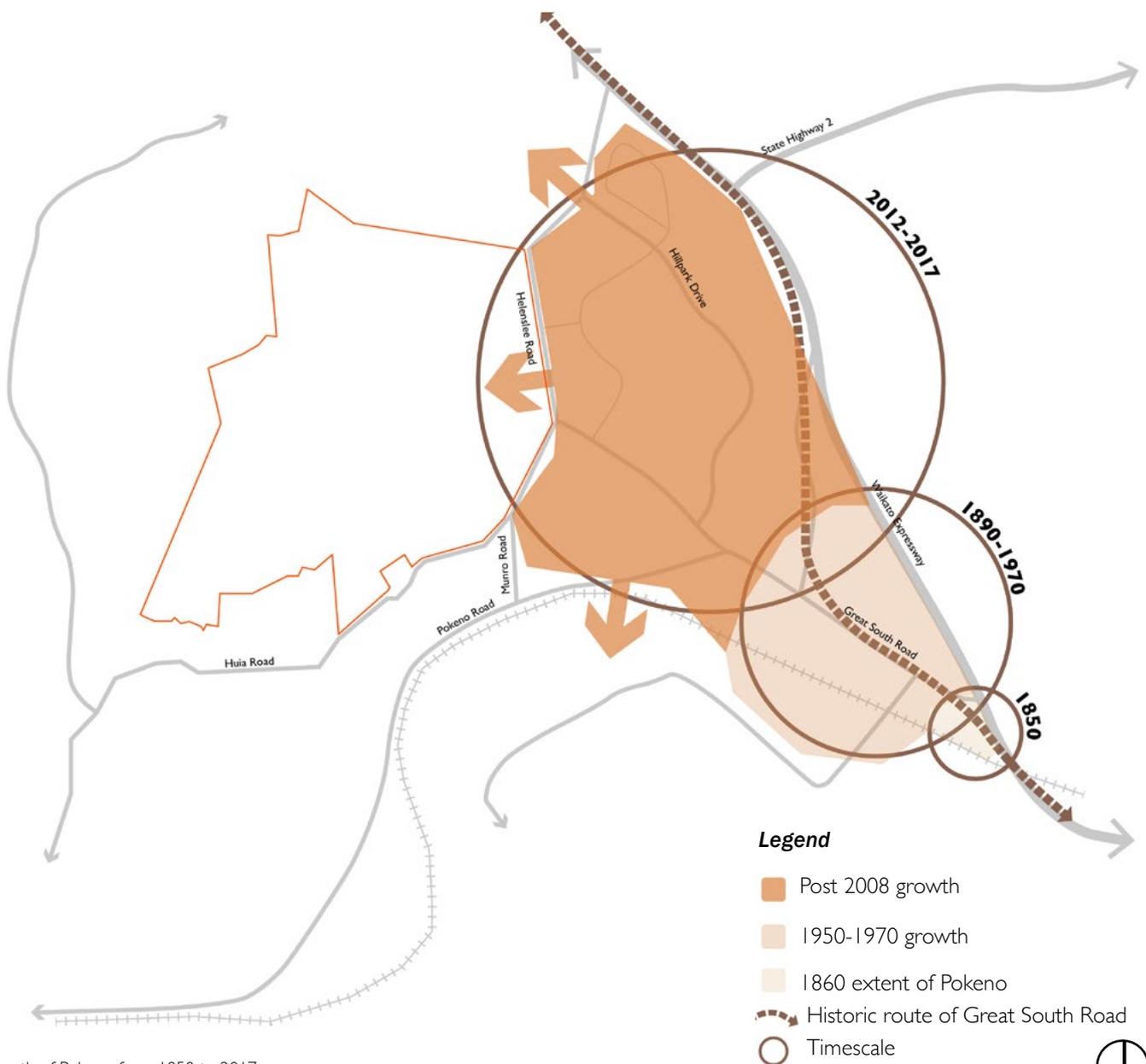


Figure 6: Growth of Pokeno from 1850 to 2017

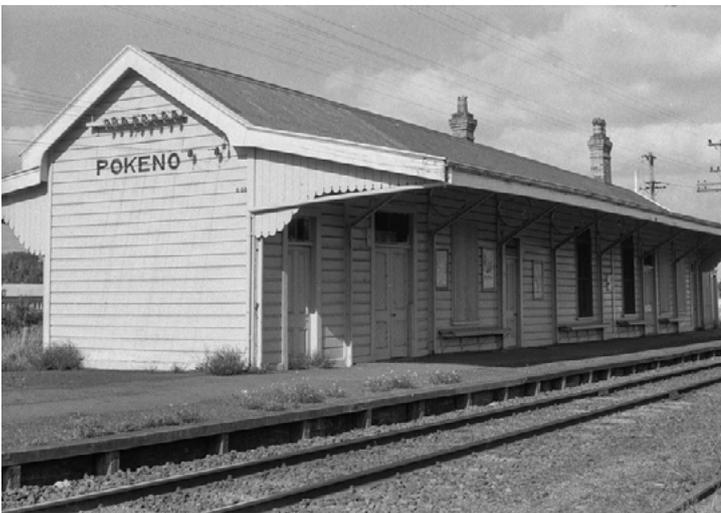


Figure 7: Aerial view Pokeno 1957(Whites Aerials), Pokeno Great South Road 1927, Railway Station early 1900s, post office 1930 (pokenocommunity.co.nz)

# SITE ANALYSIS

## Existing landscape characteristics

### Topography

The site lies across and on the southern side of a broad ridge approximately 40 meters above the site. This ridge descends to the south-west corner of the site forming an overland flow path for the current agricultural activities. This flow path goes eastward in direction across the site and defines the terrain around it. The upper side of the site, near of Helenslee Road is prominent due to its flat terrain than the lower side of the site towards the ridge.

A design response to this topography should be respectful with regard to development density and envelope to reduce the potential visual impact of the proposed housing on the higher side.

### Existing vegetation

The site is largely small-medium sized fields mostly used for grazing. Due to this, the vegetation on the site is largely limited to the hedgerow boundaries. However, there are pockets where the vegetation and trees have special character and hence should be retained.

### Local public views

Views towards the northern ridge area of the site are significant and defines the visual amenity of the site. Across Helenslee Road there are views to the rural Franklin area and Waikato region. The Pokeno Cemetery at the intersection of Helenslee Road and Munro Road creates a focal point at a micro-level. This feature will be respected in the proposed development given the location of this cemetery and its cultural significance

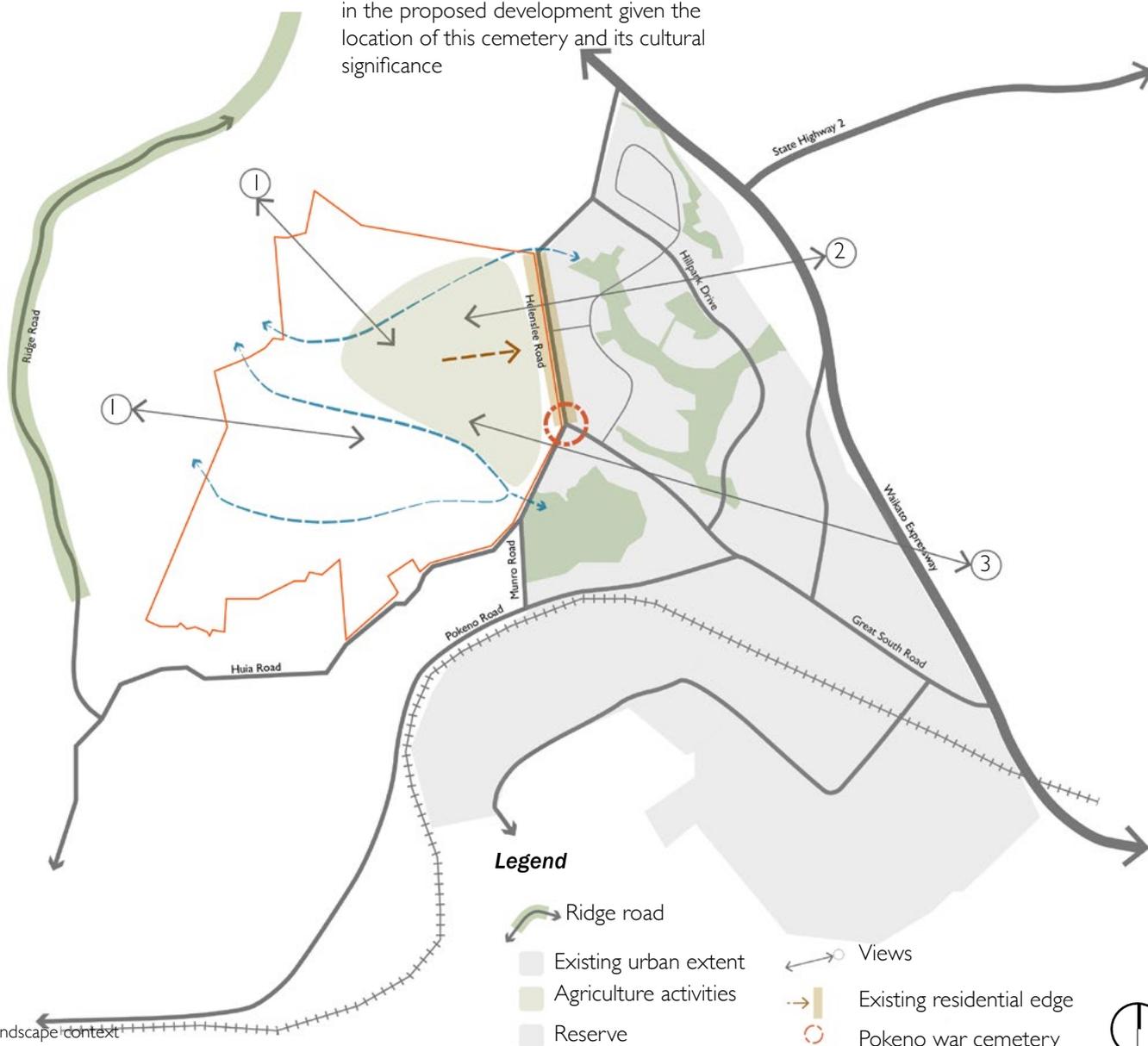


Figure 8: Landscape context



Figure 9: Views towards Ridge Road from Helenslee Road



Figure 10: Southern side of the site

## Key site features

### Buildings

A cluster of buildings stands on the site, none of which are to be retained. These buildings are typical rural farmhouses with no historic characteristics.

### Landscape

The site has a constrained terrain with an approximate land fall of 50m. The valley in the south-west corner of the site will dictate the roading pattern in this area.

### Ecology

The vegetation on the site is sparsely distributed around the site with no significant characteristics. The overland flow path will form the riparian margin defining the developable land of the site.

The quarry to the west of the site although an external impact, needs to be mitigated from an ecological perspective.

### Services

A variety of services and utilities are located in and around the site and include:  
 -storm water  
 -waste water  
 -telecommunication

### Flood risk

The central part of the site is identified as being potential at risk of surface water flooding.

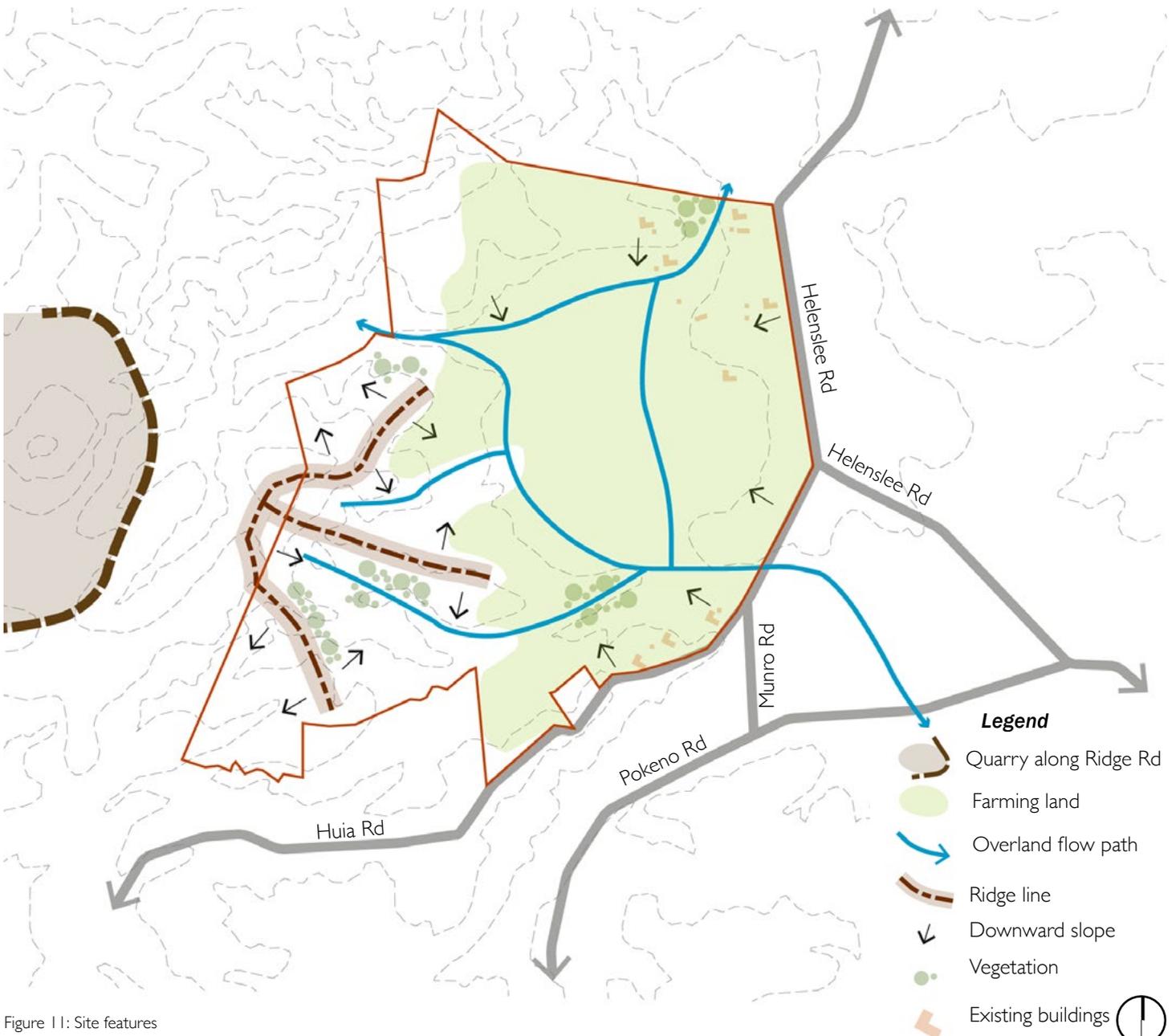


Figure 11: Site features

# Opportunities

## Edges & gateways

The eastern boundary comprises of Helenslee Road with new housing facing it, whilst the south and west sides comprise of rural properties and a quarry. New housing will respond to these edges in a sensitive way and appropriate design principles will be adopted to ensure these interfaces are treated elegantly.

The new vehicular access points off Helenslee Road and Munro Road will create gateways into the development. The entrance off the intersection of these two roads, in particular, has the potential to create an attractive gateway, giving people a positive first impression of the development.

## Movement

The site offers numerous opportunities to enhance and extend pedestrian and cycle links into the centre of Pokeno helping to create a sustainable development/ community.

## Community focal point

The site offers an opportunity to create a community focal point featuring high quality amenity open space. The centre of the site is ideally located to be core of the development and offer potential for higher density development.

## Views

Existing views extending across the Franklin/Waikato countryside are considered within the design process, so they are retained and amplified where possible. The identified locations with significant views can be pockets for medium density housing.

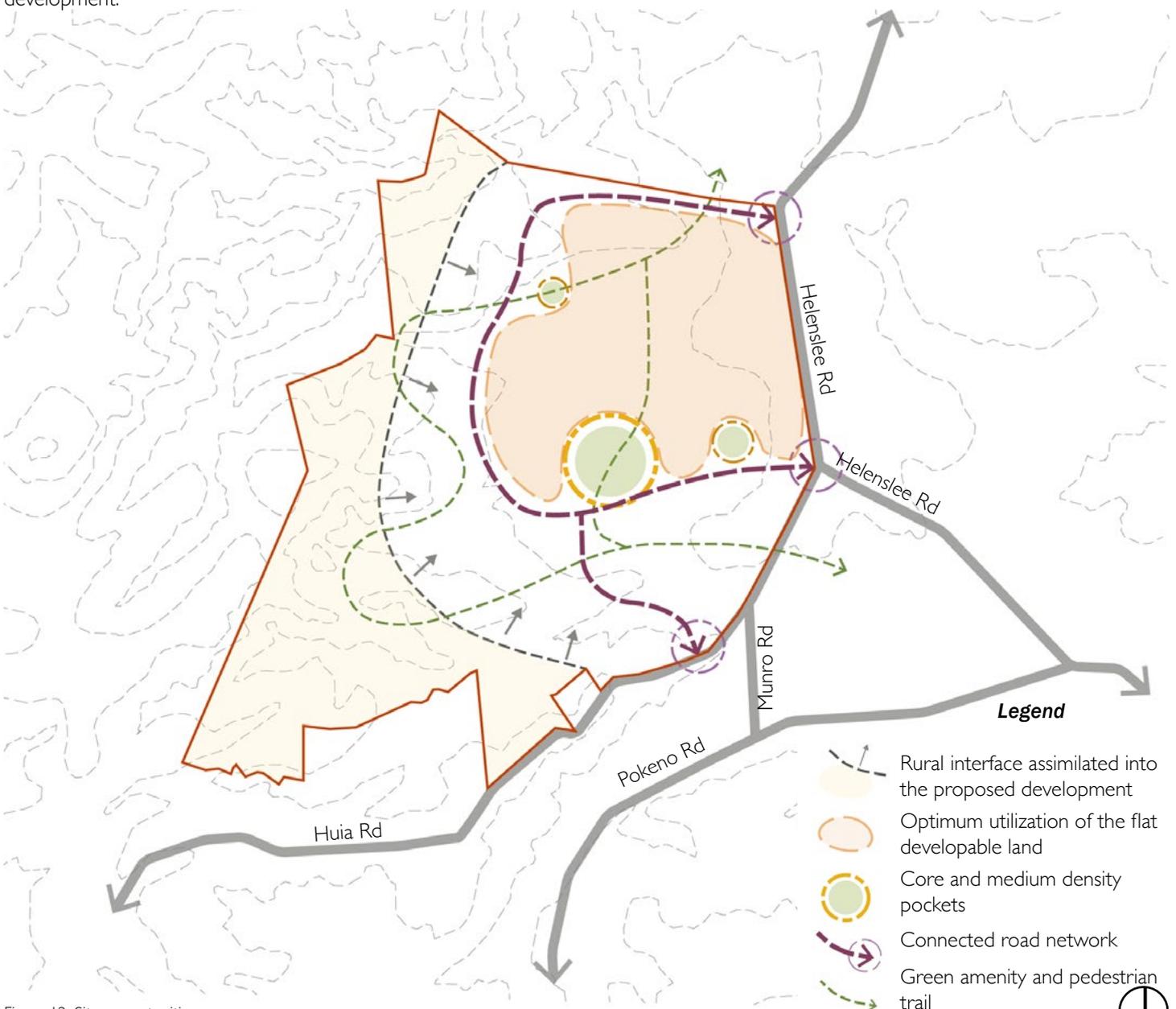


Figure 12: Site opportunities

# DESIGN PROCESS

## Design Principles

The Vision: the site's design is based on a clear vision

**Pokeno West expansion offers a wonderful opportunity to create a new family oriented development while also enhancing Pokeno's growth. A high quality living environment will be achieved through the creation of well-designed dwellings set within attractive streets and varied open spaces that make the most of the site's unique landscape features. The proposal will further enhance Pokeno through the provision of improved links to the countryside, new natural and formal open space, and children's play space. Furthermore, due to its proximity to the Pokeno Town Centre, it will help support and enhance the existing services and facilities, all of which are in close proximity of the site.**

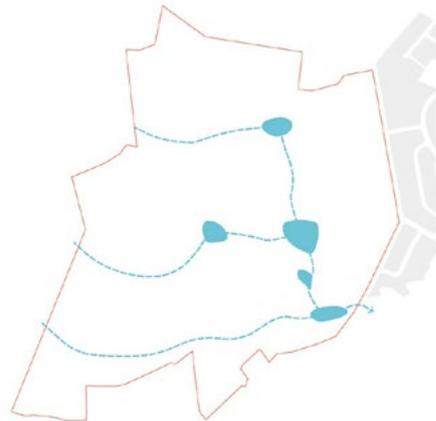
Key considerations:

This vision then informed a series of seven key development considerations which are:

- Connectivity to Pokeno and existing facilities
- Working with contours
- Respecting green assets
- New public open space
- Sustainable drainage that works with the landscape
- Appropriate interface with the countryside
- Sensitive interface with existing urban fabric

Design Principles

Building on the vision and key considerations, a series of design principles have been created. The design principles illustrated below provide the basis for the framework masterplan.



### Open Space

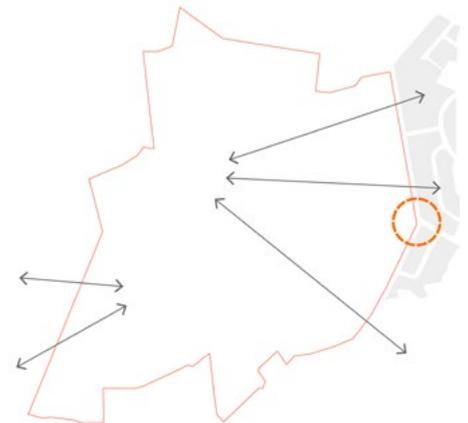
Accessible and natural greenspace, along with recreational space will create an active and attractive neighbourhood. Additional existing trees and vegetation will be retained and reinforced where possible to provide a buffer between new and existing properties.

### Sustainable Drainage

Surface water runoff from the development will be managed with a low impact urban design (LIUD). Runoff from the development would be routed into one of several attenuation features via a series of above and below ground networks including channels and water sensitive planters/rain gardens.

### Pedestrian Links

The Pokeno Town centre is a 20minute walk from the center of the site and is, therefore, within easy access for all new residents. Pedestrian links running through site will provide safe and attractive routes to local shops and community services.



**Street Hierarchy**

Access to the site should be provided primarily from the intersection between Helenslee and Munro Road with a secondary access point from Huia Road. Primary roads will run through the site creating a strong and attractive route. This will be supported by a series of residential roads offering easy access to properties throughout the site.

**Active Frontages**

The proposal will ensure that the built environment overlooks the public realm including areas of open space. Key building lines within significant areas will be accentuated with the use of materials and built form to create a sense of formality and street enclosure.

**Views and Vistas**

With the intention of retaining the identity of the area this scheme has been carefully considered. The urban structure will be varied and will respond to the local views and culturally significant elements. Moreover architectural landmarks will provide familiar markers, helping residents navigate through the site.

## Illustrative Masterplan

### **Green infrastructure**

The illustrative masterplan is set around a network of green spaces and links. The southern extent of the site lies within an area susceptible to surface water flooding and therefore remains free of development. This area will create an open space landscaped area when entering the development from the south and could accommodate a recreational area.

A green link runs along the western edge of the site. This creates a buffer from the rural properties and mitigates any negative impact of the quarry along Ridge road. Since this is the higher side of the site, the dwellings along this edge will have views towards the east and an overview of the entire site. It also creates a set back from the edge of the site, creating a softer transition between the built form and open countryside.

The central large open space acts as a swale for surface attenuation, and will provide visual amenity for the residents. Albeit it creates a restricted landform, but it also provides opportunities for walking trails that connect the site and wider region. The development contains central open space at the heart of the development, accessible not only to the site itself but the rest of Pokeno. The site also contains other smaller pocket parks, areas of open space and green links connecting these spaces. The masterplan has been sensitively designed so as to retain any existing vegetation with appropriate characteristics.

### **Surface water management**

Within the green infrastructure sits a sustainable drainage system. Surface water runoff from the impermeable areas will be held on-site within several attenuation areas, before being discharged at a restricted rate to the water course along Huia Road. The sustainable drainage system comprises of:

- Stormwater pond facilities in the centre and south of the site.
- Channels and LIUD planters/rain gardens.

### **Streets and connections**

The illustrative masterplan shows a network of streets. The street hierarchy is shown later in this document, but largely comprises of primary roads through the centre of the development adjacent to key amenity areas, and secondary roads supporting the remainder of the development.

The masterplan establishes a connected and robust network of roads with provision for a future connection. New pedestrian links are established through the road network and possibly through riparian reserves which will connect both the rural areas in the east and upcoming residential development in the west.

### **Development Blocks**

The illustrative masterplan shows how the development blocks could work on the site. They are designed (by Birch surveyors) as a series of perimeter blocks with public frontages onto the streets network. The Land Use Strategy on Figure 20 show likely key frontages (where the scale and architectural design are of crucial importance), e.g. along the primary roads towards the neighbourhood centre and around green spaces helping to frame their setting.

The illustrative masterplan indicates likely densities on the site. In summary, General Residential covers the majority of the residential development, the neighbourhood centre is located in the centre, and medium density pockets are located around amenity.

The design considers the areas outside the application boundary, and the proposed development will be sensitive to these boundaries.



Figure 13: Illustrative Masterplan (Not to scale)

## Movement Network

### Road hierarchy and character

The design of both access points to the site and the roads within the development aim to facilitate ease of movement to and from Pokeno and the wider region. The importance of providing direct routes through the site and connections to the local pedestrian links and roads will encourage more sustainable movement by the neighbourhood.

The fig. 14 illustrates the proposed major road network running through the site. While these roads represent the key access routes within the site, a further network of minor residential routes will be required to service the extent of the development. Each of these roads are envisaged to present a different function, appearance and character.

In addition to the road network, the diagram also explains the possible locations of bus stops and the catchment it covers. It is crucial to make provisions of a future bus routes as it will encourage sustainable means of transport and help reduce the carbon footprint of the community.

### KEY RECOMMENDATIONS

- Avoid cul de sacs where possible
- Provide a connected street network
- Appropriate landscape treatment for the street along the neighbourhood centre

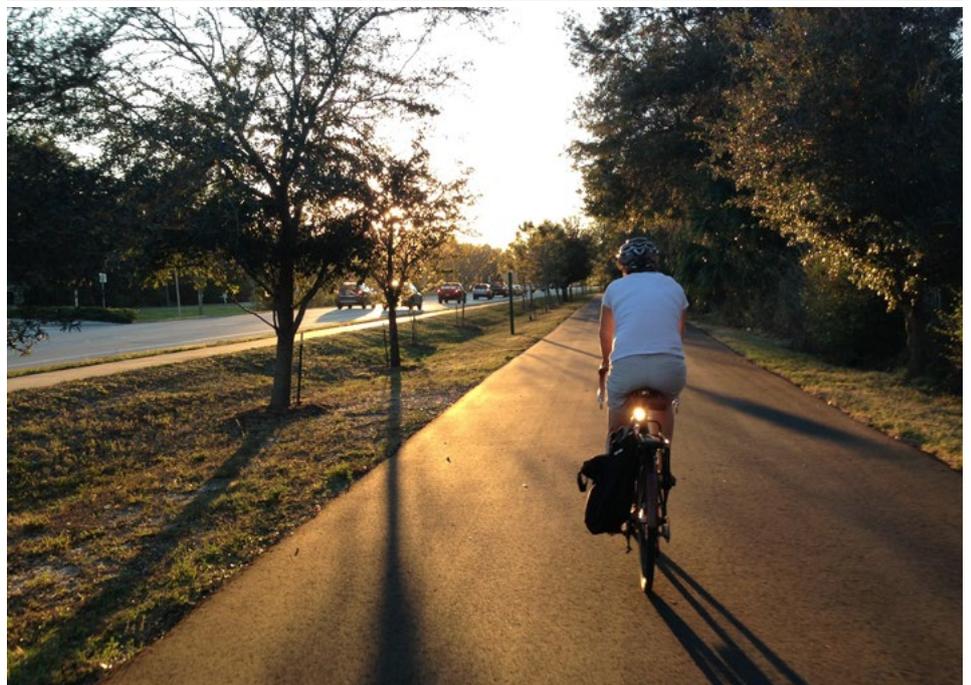


Figure 14: Reference images for public transport, pedestrian and cyclist amenities (Source: Landezine and google)

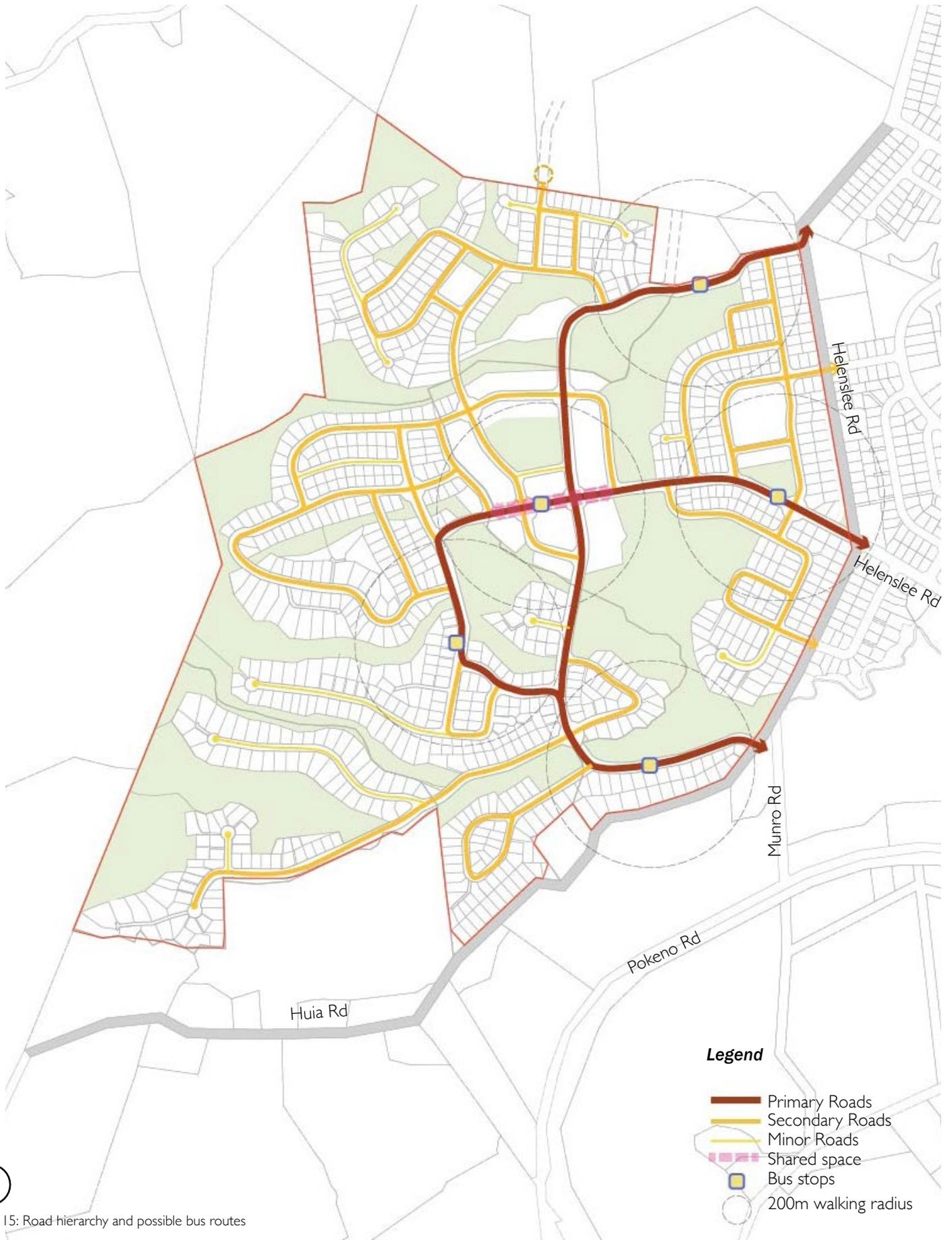


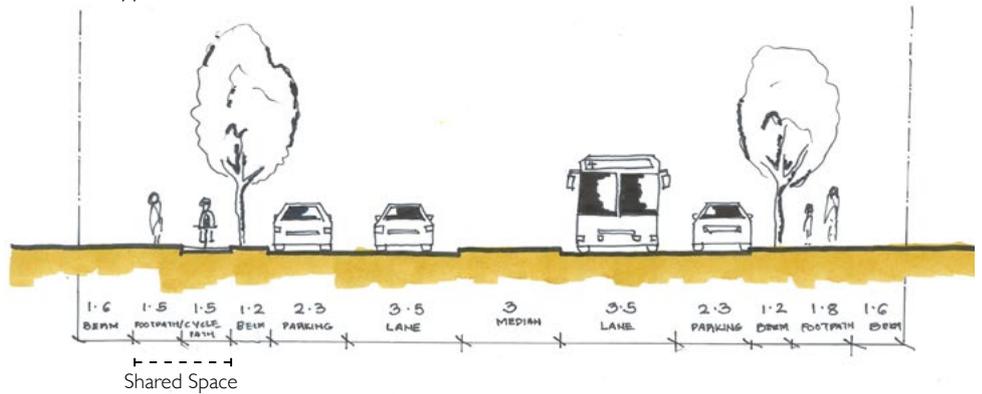
Figure 15: Road hierarchy and possible bus routes

The character and key elements of the proposed road types are:

**Primary Road**

These roads offer a direct route from the wider network through the site. Direct frontage access to dwellings is allowed between planted berms. A 1.8m wide footpath is required on each side of the carriageway.

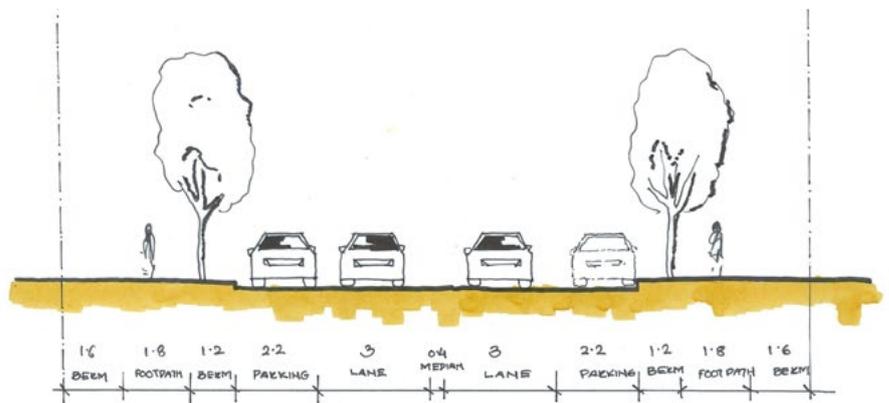
These proposed roads are envisaged to be well designed and landscaped, creating an attractive and safe travel route.



**Secondary Road**

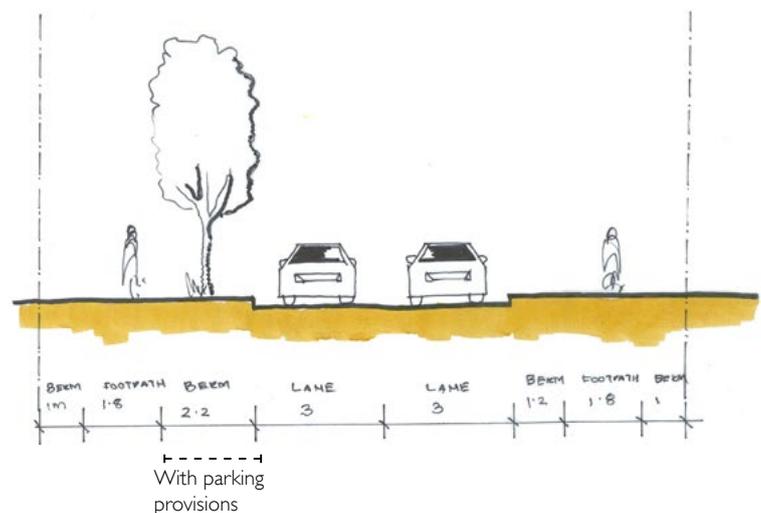
These are minor roads giving direct access to dwellings. A carriageway width of 6.4m is required, with a minimum 1.8m wide footpath.

These roads will serve a dual function as access streets as well as secondary movement routes to people living on the perimeter of the site. Therefore, they will accommodate a defined carriageway with separate verge and footpath, so as to facilitate both movement and an attractive residential streetscape.



**Minor Road**

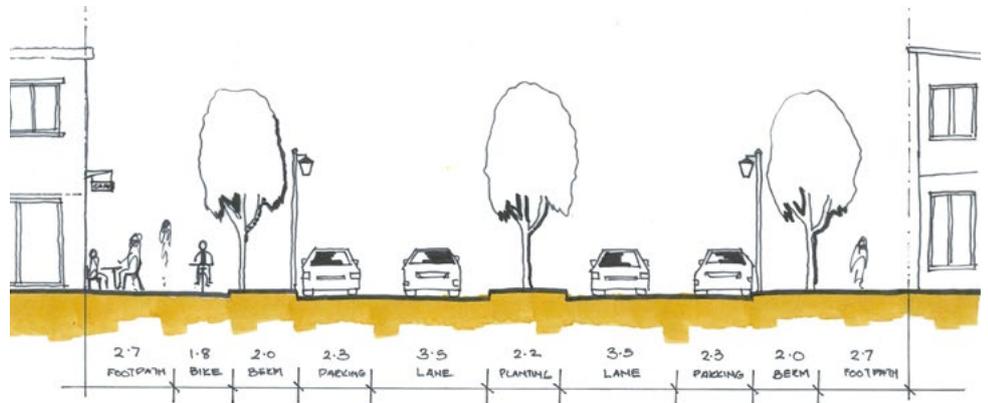
These are minor roads connecting primary and secondary roads. A carriageway width of 6m is required, with a minimum 1.8 wide footpath on both sides.



**Shared surface**

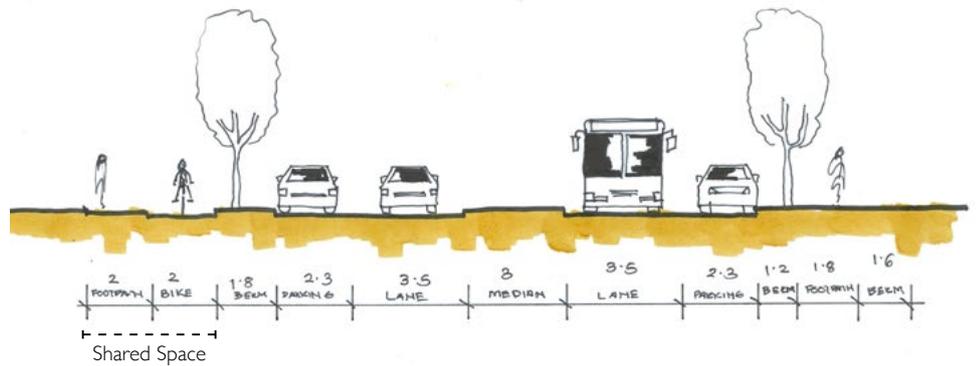
These roads present a combined pedestrian and vehicular surface with a minimum width of 25m (to be consistent with major road). This will be low speed zone, which is to be ensured by speed restraint measures such as on-street parking bays and appropriate landscape treatment.

This road type will be used in the neighborhood centre, presenting attractive and interactive streets designed to deliver a high-quality environment.



**Green edge roads**

These are roads along the riparian margin, storm water ponds, and public open spaces. The intention of this typology is to provide more pedestrian amenity along the reserve/park side of the road.



**Future Connections**

It is important that the development provide opportunities to connect with neighbouring properties to enable links to future developments. This proposed concept currently has one future connection to the north. It is desired that more connections are made as the design progresses.



## Green Network

The green network running through the site is not only a major asset but also forms a significant element of the layout, structure and overall aesthetic of the development.

Fig. I 6, illustrates the sites green infrastructure strategy. The points below highlight key features of the strategy.

### **Riparian reserve**

Accessible natural/semi-natural greenspace, integrated with new housing and drainage requirements, providing multi-functional and connected greenways.

### **Recreational Parks**

In the proposed development, there will be two types of formal recreational parks, being a central park and pocket parks.

The Central Park is to be the core recreational facility in the development. It will create opportunities for community engagement, including events such as the farmers markets and movies in the park. It will also provide an outlook for the buildings around it.

Pocket parks will create an opportunity for higher density pockets and play a vital role to form a diverse community. These parks can be equipped with facilities such as drinking fountains, bike racks, and seats; this will enable the pedestrians/cyclist to rest whilst using the wider green network.

### **Pedestrian amenity**

There is an opportunity to create a robust pedestrian network by utilizing the riparian reserve for walking/cycling networks.

### **KEY RECOMMENDATIONS**

- Provision for kids play areas in parks
- Rules in place to ensure the interface between housing and reserves/parks meets CPTED requirements and best practice urban design expectations.

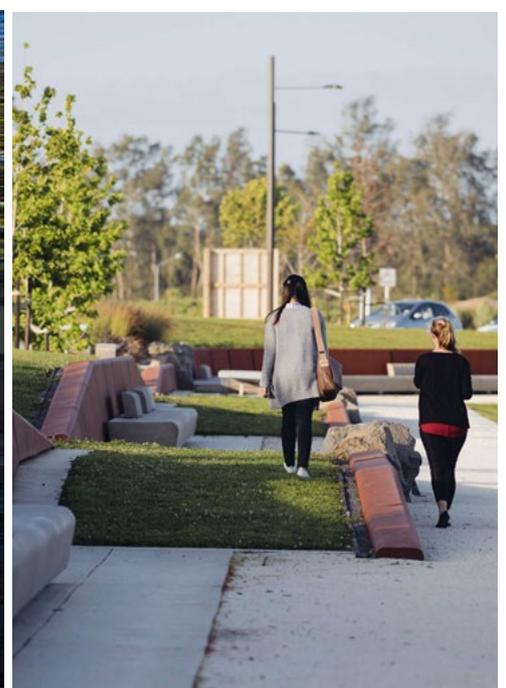


Figure I 6: Landscape character of the development (Source: Landezine.com and Isthmus Ltd)



Figure 17: Green network

## Low Impact Urban Design

To avoid an increase in surface water runoff being shed from the site, surface water will be managed within on-site attenuation facilities.

The plan on Figure 17 illustrates the proposed attenuation facilities. It identifies a series of features designed to temporarily hold surface water runoff from the impermeable areas of the development within the site boundary and discharge at a restricted rate to the natural watercourse along the Huia and Munro Roads in the south. The attenuation facilities will be sized to manage a 1 in 100 annual probability storm meaning that runoff from larger storms, which is currently able to flow freely from the site, would be held within the system and discharged at a lower rate (i.e. the annual greenfield rate). The adjacent images identify examples of low impact drainage techniques that could be considered across the site and how these areas can be made user-friendly.

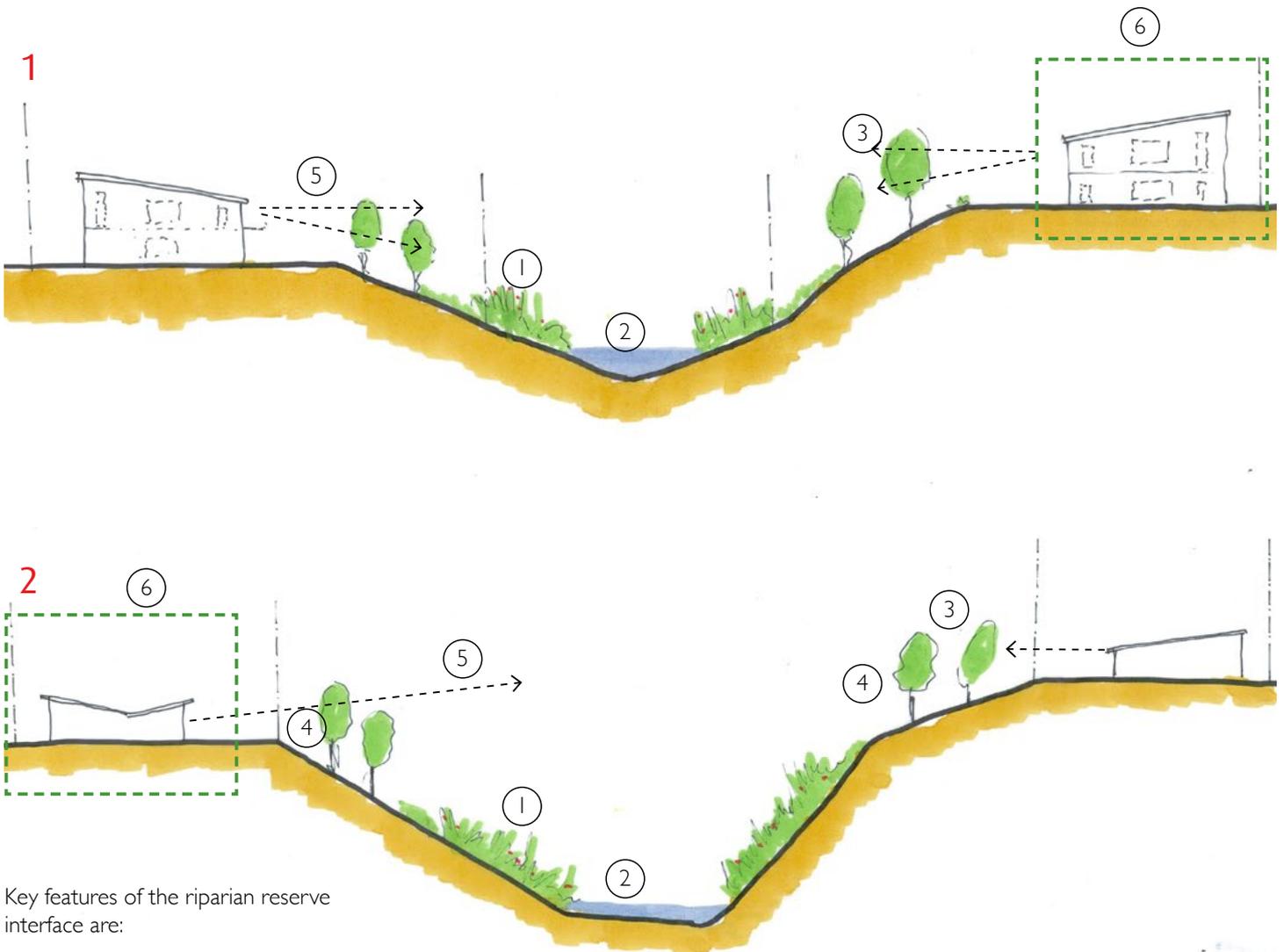
The other aspect of stormwater and the riparian margin is its interface with residential areas. It is crucial that dwellings provide opportunities for passive surveillance over these reserves to avoid any CPTED issues. Given the subject sites physical characteristics, two scenarios are illustrated on the next page. The first scenario is a riparian margin with lots backing into sloping terrain. The other one is for S/W ponds and dwellings having an outlook towards these ponds.

### KEY RECOMMENDATIONS

- A detailed landscape plan for riparian reserve and stormwater ponds
- Rules in place to ensure the interface between housing and riparian margin's meets CPTED requirements and best practice urban design expectations.



Figure 18: Riparian reserve reference images (Source: Reset Urban Design and Isthmus Ltd)



Key features of the riparian reserve interface are:

1. Riparian planting
2. Swale/ponds
3. Trees to provide buffer between the swale and residential property
4. Possible walking tracks along the reserve
5. Outlook towards the reserve. At certain instances the terrain provides natural views.
6. The interface can also be adjoining a road along the reserve. Please refer to the green edge roads in the previous section to get more information.

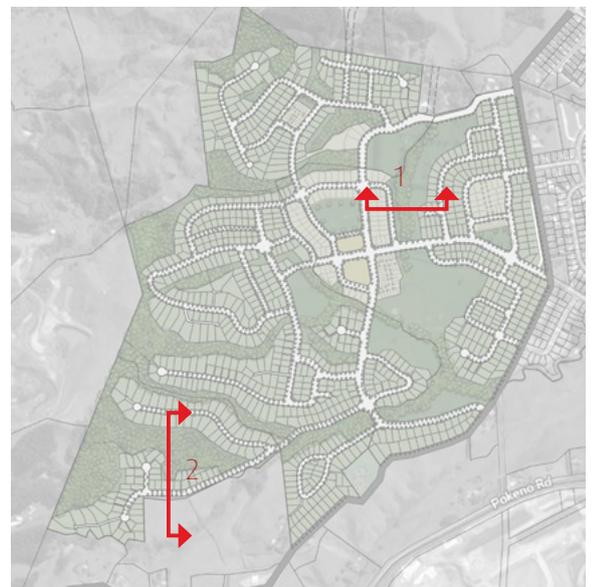


Figure 19: Sections illustrating residential interface with riparian margin

## Land Use and built form

Of the total 160ha land area, the land use in the illustrative plan can be broken down into the following categories:

**Residential Development:** The proposal comprises approximately 85ha of land for residential use. This makes up the majority of the developable area.

**Road network:** the land covered under roading infrastructure is approximately 30ha.

**Landscape and open space:** the proposed masterplan provides 37ha of open space in the form of formal parks and informal riparian margins.

### **Residential development**

To ensure the development results in a sustainable built form, residential development should achieve an average of 15 dwellings per hectare. This does not mean this density will need to occur everywhere, but that there will need to be a range of lot sizes. The master plan seeks to identify certain pockets to be dedicated to medium density housing while leaving lot sizes for the remainder of any subdivision to the developer's discretion. This ensures diversity of lot sizes. Throughout the development, the design of each block should always be configured with a sensible 'back to back' relationship and enable new buildings to provide frontages towards street, open space and pedestrian links.

### **Medium density housing**

The areas specifically identified for medium density development are accommodated primarily within the neighbourhood centre, where they will present a strong urban street edge. The intention behind designating this area for medium density housing is to allow the maximum number of people to live as near as possible to this high amenity area. The other areas specifically identified for medium density housing are those immediately adjoining pocket parks.

### **Aged care facilities**

To respond to demographic change and meet the need of Franklin's ageing population, the development could provide aged care facilities. While the location shown on the plan is indicative, it is considered an excellent use of the parcel. The location is close to the neighbourhood centre and within easy access to high-quality open space.

### **Placemaking**

Across the development, there are special areas that require a particular built form response to give a sense of place. The first of these is along the neighbourhood centre, where the built form response should recognise the greater scale which may be accommodated given the width of the road reserve, but also the need for high quality built form to be provided to create visual interest along the streetscape. Secondly, within the site, some nodes have been identified for placemaking initiatives. At these locations, design elements such as gateway sculptures, surface treatments, and landscape features should be applied to give a sense of place. Among these nodes, the intersection of Helenslee and Munro roads is of prime importance, given the location of the historic cemetery and the primary entrance to the proposed development. These initiatives will ensure that the critical nodes within the development are celebrated and create a unique identity of the development.

### **Character areas**

The following pages will focus on the potential built character and appearance of the development.

### **KEY RECOMMENDATIONS**

- Structure residential blocks so fronts of dwellings face the public realm, and their backs face the backs of adjacent residential properties
- Locate density adjacent to amenity
- Add special design elements in key areas to create a sense of place

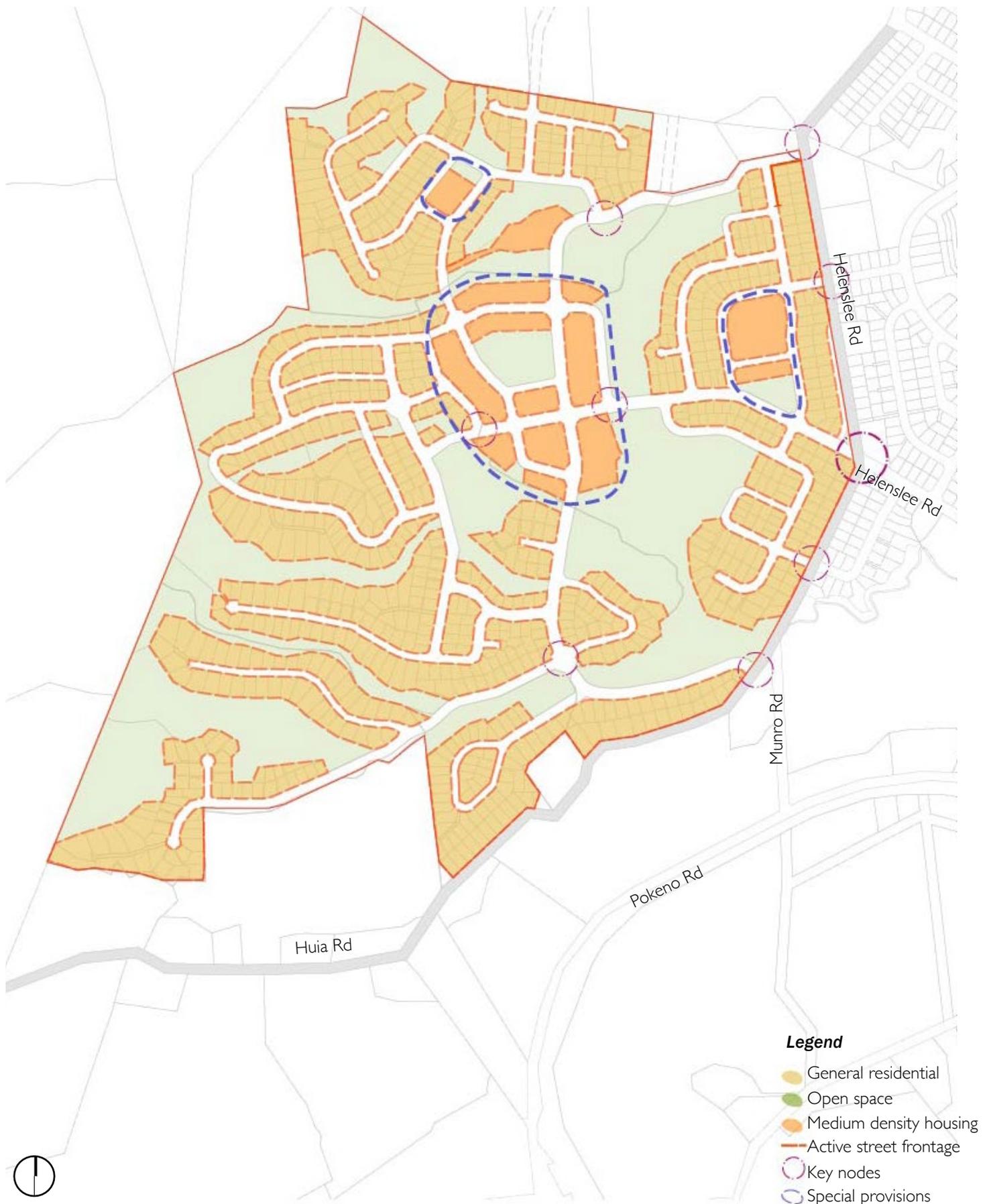


Figure 20: Land use strategy

## Neighbourhood Centre

### Location

The neighbourhood centre is located in the heart of the development. It is an ideal location for a neighbourhood centre as the walking trails, and major routes converge, forming a potentially vibrant community focal point.

### Design

This area will contain a mix of building and dwelling types, including semi-detached and terraced houses with an outlook towards the central park and riparian reserve around it. While being suitable for families, it allows opportunities for a range of demographics, thus creating a more diverse population throughout the site. This area will support a higher density of around 45dph.

Being in the heart of the site it is appropriate that this area supports a small amount of commercial activities which will benefit the local community. These activities can be a superette store, a daycare centre to support the young families, and a local café facing the central park which can facilitate a gathering place for the residents. These commercial buildings should reflect contemporary architectural characteristics in material treatment and design detailing, to maintain a cohesive streetscape.

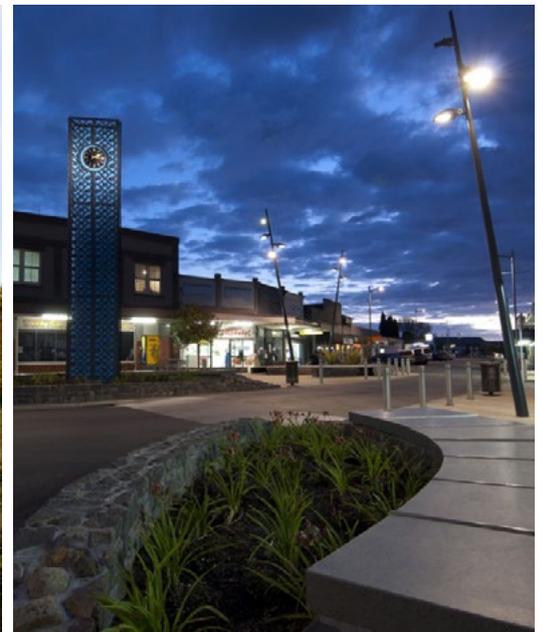


Figure 21: Strategies implemented to achieve a vibrant neighbourhood centre (Source: Reset Urban Design, Wraight + Associates, and Kamo Marsh)



Key features of the neighbourhood centre are:

1. Central park to provide recreational facilities to the entire development
2. A possible semi-open structure to create a focal point of the park and enable community activities.
3. Commercial activity to support the local catchment
4. Entry/exit nodes with installations to provide a sense of direction to the residents/visitors
5. Landscape treatment to reduce speed in the neighbourhood centre
6. Medium density housing to define the streetscape along the primary roads
7. Lots should have outlook towards the centre which enables an articulated built form.

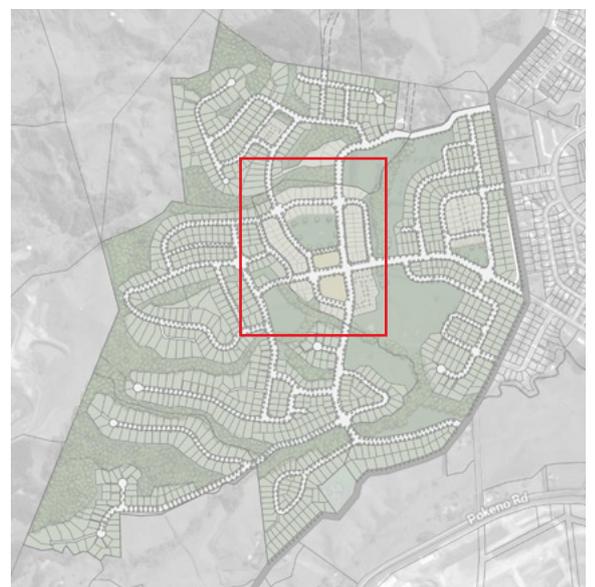


Figure 22: Town centre characteristics

## Medium Density Housing

### Location

Medium density housing is proposed in three major pockets. These pockets help in creating a distinctive identity and character to the development. These areas should support families and should predominantly comprise of semi-detached and detached houses.

### Design

The block in the north has a pocket park with views towards the west of wider Franklin region. In addition to this, these dwellings will also have northern views towards Ridge Road.

The southern block is located along the primary road immediately after the major node of Helenslee and Munro road. The adjacent pocket park provides a buffer between the block and major road. This area is designed to contain three blocks with one block to support terrace houses, and the remaining two can support semi-detached housing typologies.

The characteristics of the blocks around neighbourhood centre have already been discussed.

The overall character of the medium density housing will be responsive to the existing local character of Pokeno which will help the development blend with existing local community.



Figure 23: Medium density area character (Source: Construkt Associates)

## General Residential Housing

### Location

The majority of the development consists of general residential housing.

### Design

This area should comprise the low-density housing with lots sizes above 600 m<sup>2</sup>, predominantly made up of detached family housing.

The character and type of built form expected in the General Residential Area is illustrated in Figure 24.



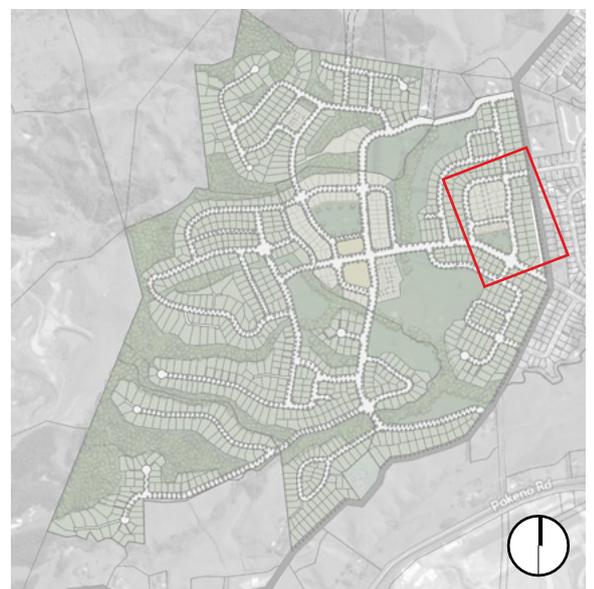
Figure 24: General residential character (Source: Construkt Associates)



Figure 25: Medium density area character

Key features of the medium density housing are:

1. Pocket park to provide amenity and to act as a buffer between major road and the dwellings
2. A strong built form, preferably terraces to face onto the park.
3. Semi-detached housing to maintain the architectural characteristics of medium density housing
4. The streets should be designed with appropriate surface treatment to achieve a slow movement area
5. Medium density pockets along the major road will help with wayfinding



## Masterplan Recommendations

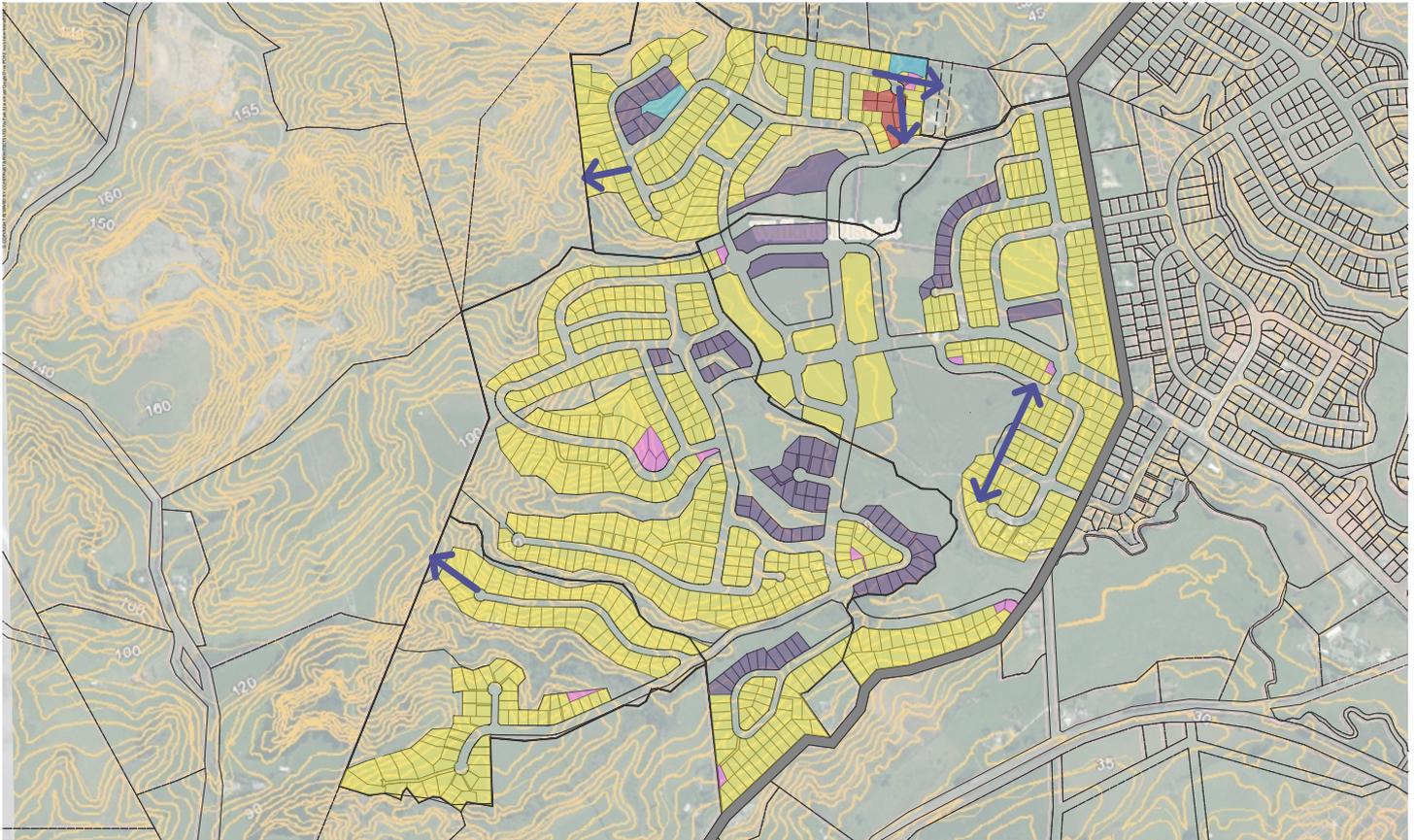


Figure 26: Masterplan recommendations

This urban design report recognises that this is a conceptual masterplan that illustrates that residential development can occur on the subject site despite the site's natural challenges. It has steep contours in many areas and it also includes a one hundred year flood plain. The plan is at an early stage in the design process. More design work will need to occur before the masterplan captures all of the principles of urban design best practice.

### Connectivity

Connectivity is a fundamental urban design principle - ideally a development will give residents choice in what direction they travel, and will provide connections to future neighbouring developments. In regards to the current plan, there is potentially a few more opportunities for road linkages. With reference to the navy blue arrows on Figure 26, there is an opportunity for two western connections to neighbouring properties, one eastern connection to a future road, and two internal connections.

### Urban Structure - fronts and backs

Residential lots should have their fronts facing public spaces such as streets and reserves, and their backs facing other backs of properties. This is for visual amenity, privacy, and CPTED reasons. This ideal has not been achieved in this plan due to the requirement not to have development along the one hundred year flood plain, and because many areas of the site is not developable due to steep terrain. As this is a core urban design principle, it is recommended that future design work focuses on achieving this principle where the terrain makes it possible (refer to the areas highlighted in purple in Figure 26).

### Urban Structure - block depth

Ideally all lots are front lots, where individual dwellings can interact with the public street with activities in semi-public front yards, and visual surveillance from street-facing habitable rooms. With challenging contours, it is very difficult to achieve on the subject site. However, this report recommends that rear lots are avoided where possible. One potential area which could be improved is highlighted in red in Figure 26.

### CPTED

Safety is a key consideration, especially in regards to public green spaces. Reserves should have maximum surveillance and public movement. In regards to the current plan, there are a few reserves that could benefit from additional thought. A couple of these reserves are highlighted in blue on Figure 26. Outcomes to avoid include parks that are bordered with 1.8m high private fences, parks that are difficult to be seen from the street, and parks that are in areas that are expected to have low pedestrian and vehicle movement.

### Lot testing

This plan is at the conceptual stage of the design process, thus it has not been appropriate to assess individual lots under a microscope. However this report does acknowledge that there are lots shown in the current scheme that are unlikely to be viable or are inefficient (highlighted in pink), moreover some may be shown at the wrong density. It is recommended that lot testing is introduced as early as possible, as it can have an influence on block depths and the street network.

# SUMMARY

The Urban Design Report for Pokeno West Expansion has set out the layers of thinking behind the illustrative masterplan. It has also made recommendations about how the plan can develop as the design progresses.

## **Housing**

- Approximately 1500 new homes, this will be a crucial addition to the existing housing shortage.
- A mix of housing ranging from terraces to single detached dwellings.

## **An attractive, well-designed new community**

- Accessible recreational spaces, integrated with medium density housing creating a diverse community.
- Safe, attractive and legible street networks to allow ease of movement through the site and encourage walking and cycling.
- Key nodes help with placemaking
- Sustainable drainage that works with the landscape while creating interesting and high-quality landscape areas.

## **A design which is sensitive to the site's history and interface**

- Retention of existing trees with special characteristics.
- Retention and reinforcement of the boundary vegetation to provide a buffer between new and existing properties to north, and appropriate transition between the new housing and open countryside to the west.

## **New community facilities**

- New recreational provisions catering for the needs of the residents, both within the site and wider Pokeno.
- New formal and informal public open space provisions with flexible parameters to serve the most desired function for the community.

## **Connections**

- Pedestrian and cycle links within the site and towards Pokeno and wider surrounding countryside.
- The development will help to justify a new Pokeno railway station to provide public transport for the future residents. This will provide crucial access to Auckland CBD and possibly Hamilton in the future.

## **Wider social and economic benefits**

- A new gateway at the intersection of Helenslee and Munro Road helping to revitalize first impression of Pokeno West.
- Increased expenditure in Pokeno from the new resident population.
- Increased employment opportunities through construction and the positive impact that the development will have in transforming Pokeno in future.

## **KEY RECOMMENDATIONS**

- Create a connected street network - avoid cul de sacs where possible, and allow for future connections to neighbouring developments
- Focus on creating a successful neighbourhood centre with quality landscaping treatment and an attractive streetscape
- Locate density adjacent to amenity
- Structure residential blocks so fronts of dwellings face the public realm, and their backs face the backs of adjacent residential properties
- Avoid rear lots where possible
- Add special design elements in key areas to create a sense of place
- Provision for kids play areas in parks
- Rules in place to ensure the interface between housing and reserves meets CPTED requirements and best practice urban design expectations
- Prepare a detailed landscape plan for riparian reserve and stormwater ponds
- Lot testing should be carried out to ensure lots are appropriately sized

