



# PLIMMERTON FARM STAGE 1

MFE FAST TRACK REFERRAL  
URBAN DESIGN ASSESSMENT

30 January, 2023

For: KM & MG Holdings  
Limited

Prepared by: Urban Acumen Ltd



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This report has been prepared by Lauren White, Director and Principal Urban Designer of Urban Acumen Limited for the purpose of supporting an Application for Referral for Plimmerton Farm Stage 1.

Lauren White is a qualified urban designer with over 20 years industry experience across a wide range of projects with a focus on growth planning, subdivision design, and medium density housing. She provides design direction, review and assessment, expert evidence and stakeholder engagement in the pursuit of delivering high performing urban environments.

Lauren has been involved with Plimmerton Farm for over 10 years, was the principal urban designer for the Plimmerton Farm Plan Change and is the author of its accompanying Urban Design Report. She has been actively involved in the subsequent masterplanning for Stage 1.

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# 01 Background

This document is prepared by Urban Acumen Ltd on behalf of KM & MG Holdings Limited. It provides background information and an urban design assessment of the proposal to create approximately 880 sites and associated dwellings in Plimmerton Farm Stage 1, across 6 comprehensively developed areas. This assessment is based primarily on plans produced by Voxell Architects and submitted with the application, along with supporting information from other design team consultants. It is also informed by the Urban Design Report prepared for the Plimmerton Farm Plan Change and Precinct Plan (November 2019).

If this Application for Referral is approved, the future resource consent for comprehensive land use and subdivision will include the final subdivision plan and housing plans along with a further urban design assessment report. As part of preliminary planning, the design team have produced a comprehensive and detailed three-dimensional design which includes preliminary designs for housing and landscaping. This level of detail and illustration easily enables the high level urban design commentary.

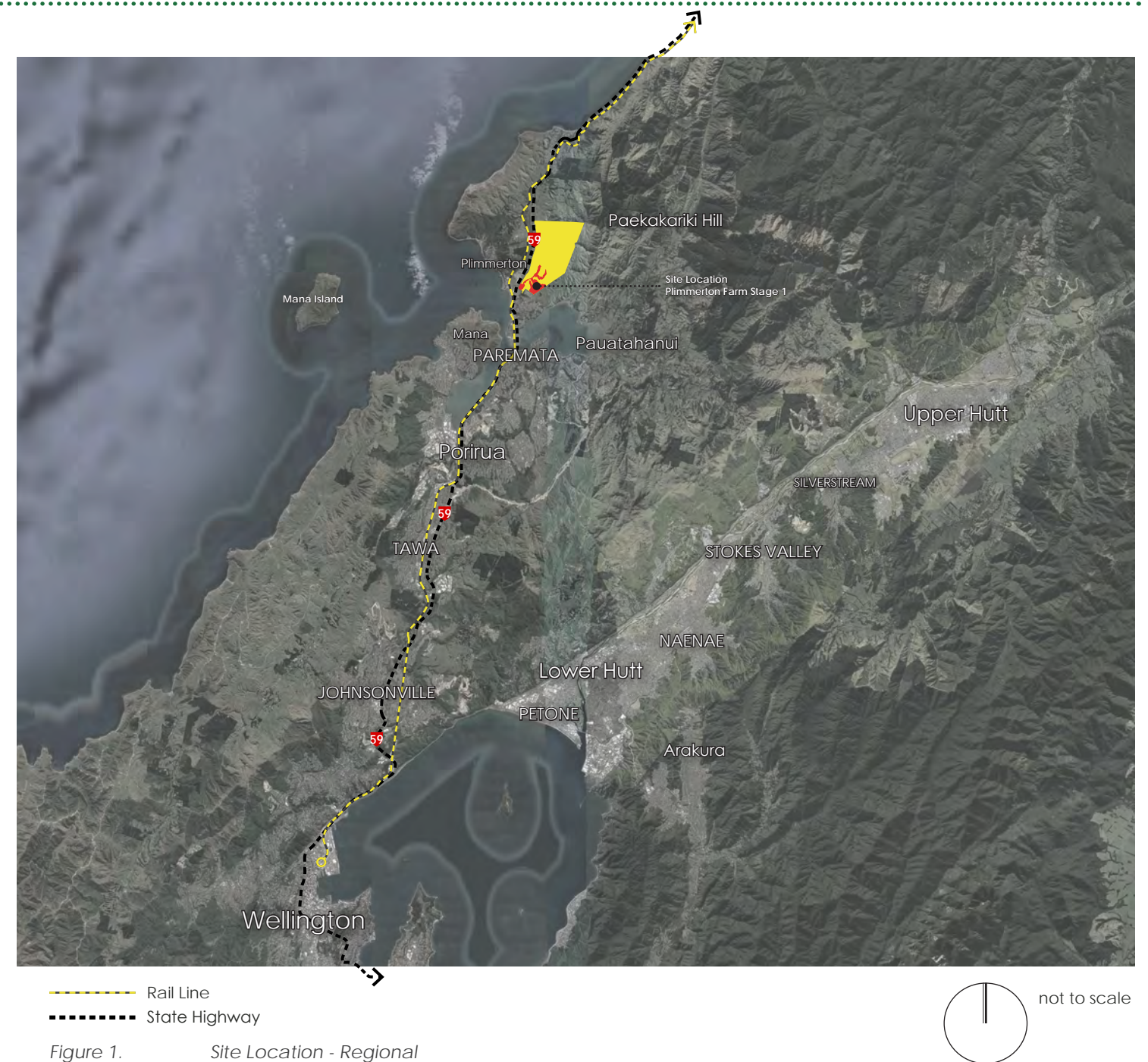
Plimmerton Farm was recently the subject of a Streamlined Plan Change that was approved by the Minister for the Environment in February 2021. The plan change introduced 'the Plimmerton Farm Zone' into the Operative Porirua City District Plan ("the District Plan"). Overall, the Plimmerton Farm site is large and intended to be a staged development, delivering a variety of housing over a number of years, along with supporting land uses including local centres, a primary school and a retirement village. Stage 1 is anticipated to provide approximately 880 dwelling units across a variety of housing typologies. Along with contributing to the provision of housing and housing diversity in Porirua, this site will be the first to be developed and establish the beginning of the new residential community.

## 1.1 Site Location

Plimmerton Farm is located adjacent to the established suburb of Plimmerton, approximately 10min drive north of Porirua. Plimmerton Farm Stage 1 is located at the southern end of the Plimmerton Farm Zone, with close proximity to the existing urban areas of Plimmerton and Camborne and the existing public transport networks. It is therefore the logical first development stage of the Plimmerton Farm site and is proposed to establish as a predominantly medium density residential area with all supporting infrastructure.

Plimmerton Farm has a close relationship with Plimmerton but considering its size and capacity for urban development, should be seen as part of the greater developed (and developing) urbanised area around the Porirua Harbour.

The full extent of Stage 1 is located within 2km (as the crow flies) of the Plimmerton train station which provides regular and convenient rail services into Wellington CBD. SH59 functions as an important link between Porirua and Paraparaumu and further north. This proximity to high order transport infrastructure is an asset and an opportunity and highlights the need to utilise the land resource in an efficient and responsible way.





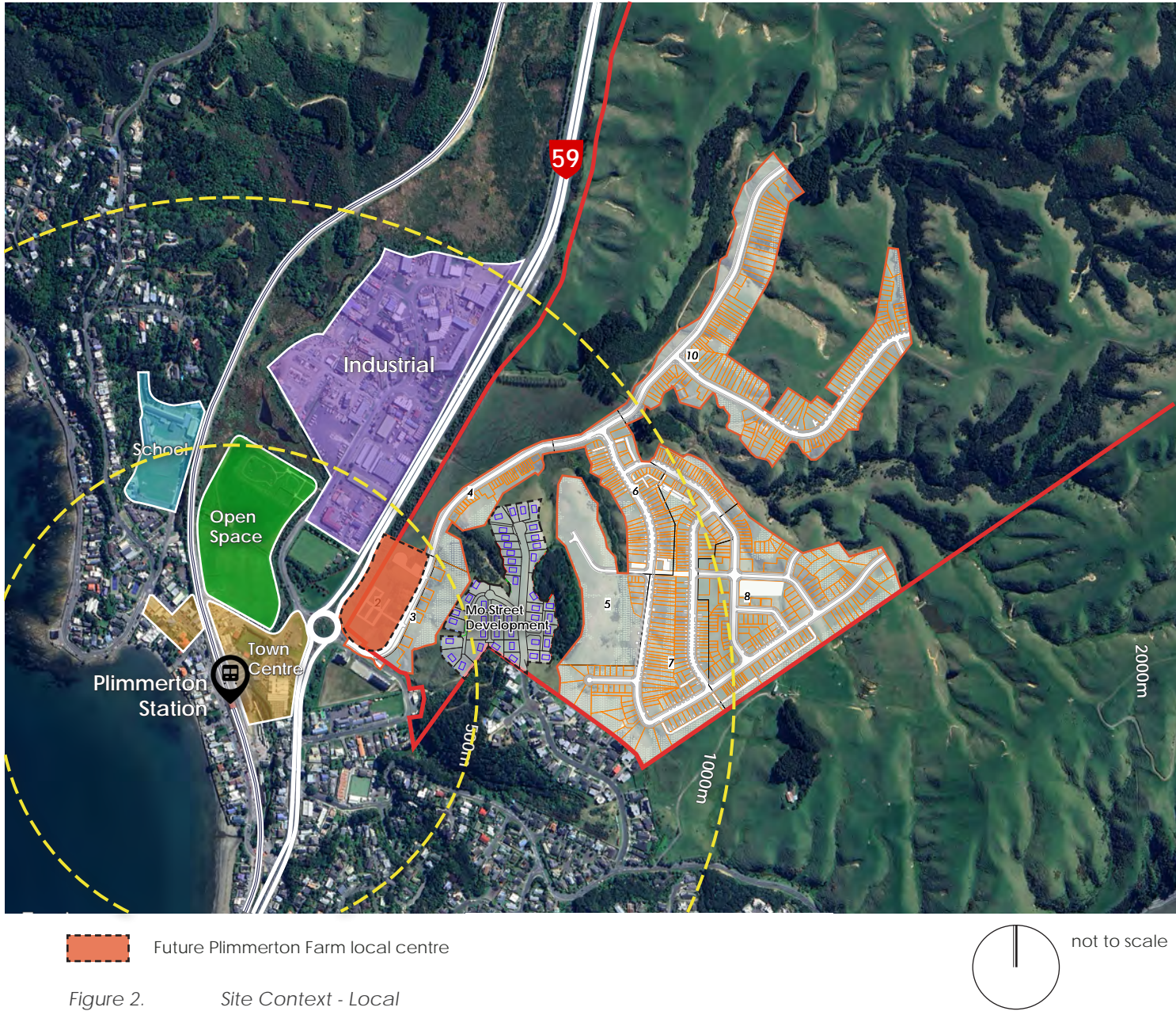
## 1.2 Local Context

Plimmerton Farm Stage 1 is located close to Plimmerton Village centre which is small and compact and includes shops and cafés. The railway station and primary school are also within close proximity. State Highway 59 forms the western boundary for Stage 1, along with Taupo Swamp. Land to the west of State Highway 59 accommodates an industrial area. With an easy 10 min walking distance to Plimmerton Village and the train station means this development stage has the opportunity to provide a significant residential catchment to support Plimmerton and the public transport services.

The adjacent area to the south of Stage 1 (Mo Street) is an established residential community characterised by single and double storey dwellings at low to medium density with a wide range of lot sizes from approximately 300m<sup>2</sup> to 2000m<sup>2</sup>. The existing subdivision layout is an 'organic' pattern, with roads following existing ridgelines and providing long distance views.

The future Mo Street Extension development (currently progressing through a resource consent process) is an extension of this area and located at a higher elevation than the Stage 1 development area. There is a variety of lot sizes in this development stage as it responds to the varied, and often steep, topography, ranging from around 600m<sup>2</sup> to approximately 1400m<sup>2</sup>.

Due to topographical constraints, there is no vehicular connection between Mo Street and Stage 1. A pedestrian/cycle connection between Mo Street and Stage 1 is possible, planned for, and anticipated by the Plimmerton Farm Precinct Plan contained within the Plimmerton Farm Zone of the Porirua City Operative District Plan.







*Plimmerton town centre*



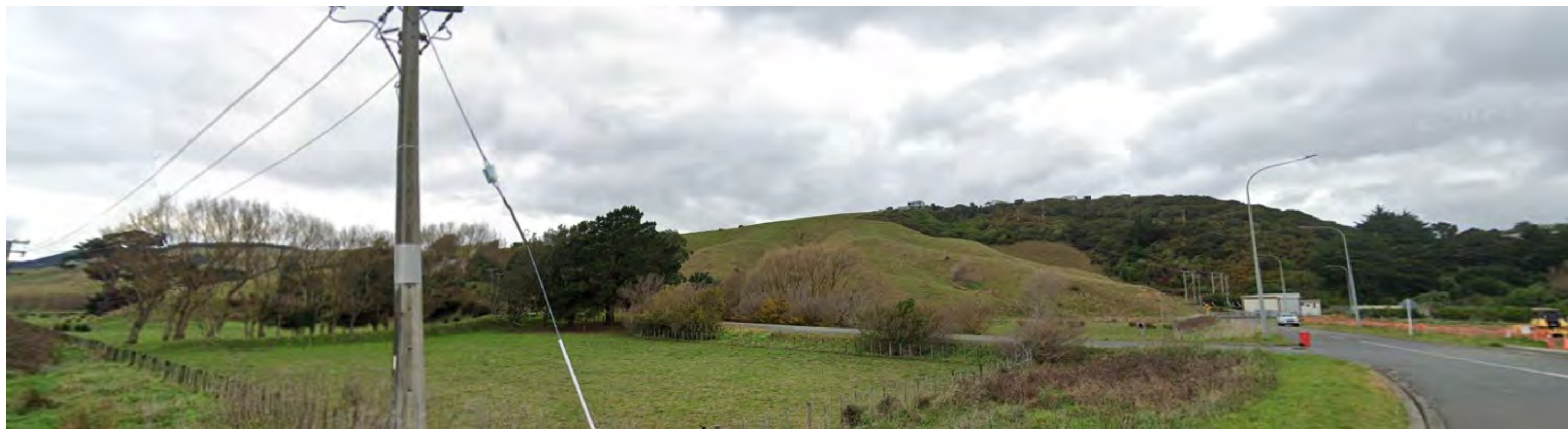
*Mo Street residential environment*



*View of lower slopes of Stage 1 from SH1*



*Ulric Street industrial area with site in background*



*View towards development area from entry to James Street*



### 1.3 Site Description

The Plimmerton Farm Stage 1 site is an irregular shape as its boundaries are defined by the design of the development blocks and associated necessary earthworks and landscape mitigation areas.

Typical of the Plimmerton area, the topography of the site is varied, with rolling hills incised with drainage channels. The gradient of the slopes vary from flatter hilltops to steep valley sides. With a variation in elevation of approximately 55m, the site forms part of the rural backdrop to Plimmerton, which lies between the ridgelines and the coast. This elevation, in turn provides for good views across to the coast and to the west/afternoon sun. Given its location and north facing orientation, the Stage 1 area is not particularly visible from viewpoints to the south or along State Highway 59 where it is screened by rising banks.

Access to the site is currently limited due to the topography, the restrictions of SH59 and adjacent landholdings and development. At present, the site has formed vehicular access from one location on James Street. Existing farm tracks traverse the site, often on ridgelines.

The slope gradients vary across the development stage with flatter areas located either at lower level or on elevated knolls and steeper slopes associated with drainage gullies.

There is a stand of native bush adjacent to Stage 1, along with wetland areas located within Stage 1.



not to scale

Figure 3. Site Aerial with Topography



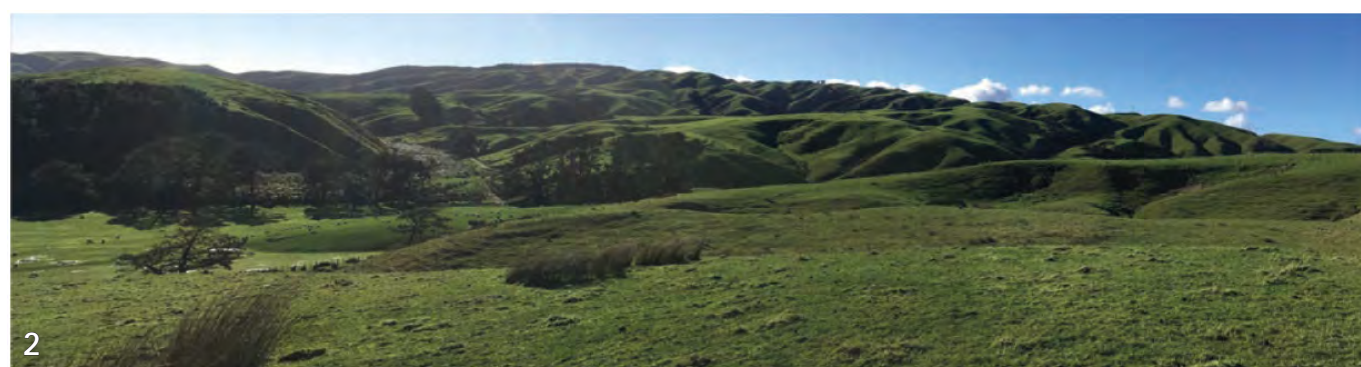
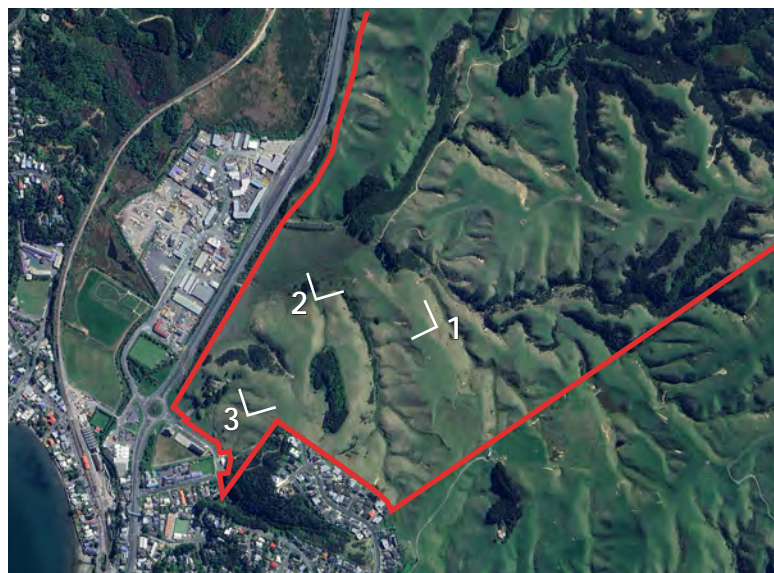


Figure 4. Site Panoramas

## 1.4 Opportunities & Constraints

With its existing zoning for residential and commercial development and location closest to the existing established suburb of Plimmerton Village and bus and train service, the site is suitable for medium density residential development and therefore plays a key role in delivering residential yield on the Plimmerton Farm site.

Given the site's location, proximity to community facilities and transport options, there is a significant opportunity to accommodate a variety of land uses and to build a varied and integrated community.

### constraints

- limited access from existing roading networks
- steep slopes require land modification, and development has potential environmental and ecological impacts to avoid, remedy or mitigate; this also challenges residential density and housing affordability
- drainage corridors provide a challenge for roading access without either environmental effects or costly bridging
- existing native bush areas, wetlands and flood prone areas

### opportunities

- already zoned for residential and commercial development with a site specific precinct plan to guide development
- good proximity to the existing town centre and transportation infrastructure
- include a mix of residential typologies, including a focus on comprehensively developed medium density typologies (duplexes, terraces and low rise apartments) to promote affordability and a mixed community
- maximise solar gain, views and outlook
- retain and revegetate steep, highly visible parts of the site to help visually integrate development
- leverage amenity of passive open spaces as outlook and recreation spaces for higher density housing
- ensure good quality public open spaces connecting active spaces with a network of passive recreation spaces
- clear ownership and maintenance of steep slopes and passive open spaces
- create a good pedestrian and cycle network, particularly through open space



## 02 Proposal

The proposal is fully described and illustrated in the application documents. In summary it proposes to:

- define the overall access/roading network
- identify 10 development areas for the subdivision of sites for dwellings on a staged basis
- include a significant majority of comprehensively designed dwellings and a small number of vacant lots (final yield to be confirmed during resource consent stage but estimated to be 880 units across 6 development blocks and 4 superlots)

Concurrently with the plan change, over 9 months from late 2018 to early 2019 the multi-disciplinary project team designed Stage One of the development with the intention that resource consents for this first stage would be lodged as soon as the Ministers decision on the plan change was released. This earlier proposal was refined based on pre-application meetings and correspondence with PCC and GWRC that included site visits and workshops. The roading network and connectivity through the site was the subject of a number of iterations and detailed assessments by each of the project experts due to the necessity to alter drainage corridors and reclaim small areas of wetlands.

In response to this, an Urban Design Memorandum was prepared that provides background to the wider planning and design process, focusses on the proposed layout of roads and blocks which has informed the earthworks design, and addresses specifically the issue of connectivity within the area. Providing access into and through the Stage 1 area results in modification to landform as well as a reduction to the extent of retained wetland areas and the memorandum sought to confirm that, from an urban design perspective, there are *"no other practicable alternative methods of providing for the activity"* without unsurmountable constraints and/or unacceptable urban design outcomes. (This memorandum is attached as Appendix 1).

The Stage One proposal was put on hold due to the release of the National Environmental Standard for Freshwater that made wetland reclamation a prohibited activity. Revised masterplans were developed to analyse the implications of the NES-F but did not advance past concept stage due to a significant reduction in yield and poor urban design outcomes that rendered the revised masterplan unfeasible.

In anticipation of changes to the NES-F, the project team recommenced masterplanning of the site in accordance with the Plimmerton Farm Precinct Plan with the intention of meeting the overall plan change objective of *"managing the effects of development and providing for high levels of amenity and a high quality built environment"*.



Figure 5. Stage 1 development areas within early overall draft masterplan for Plimmerton Farm



Stage 1 design intentions that will meet the above objective and contribute to a well-functioning urban environment 1 are:

- integrate land use and transport by maximising the opportunity to benefit from access to passenger train service and bus routes
- provide for a local centre and gateway to the wider Plimmerton Farm development
- provide pedestrian connections between disparate housing clusters
- maximise outlook over riparian corridors/wetlands
- maximise solar gain and coastal views
- balance density/yield with maintenance and enhancement of ecological values including the retention of significant areas of wetland habitat and through wetland restoration and creation
- minimise necessary earth modification and secondary earthworks
- establish clear ownership and maintenance of open spaces, avoiding any "left over" spaces
- provide variety and flexibility with respect to site size and house types
- provide a mix of two, three and four level building forms
- maximise street parking and tree planting, especially on boulevard roads
- promote planting between housing clusters to visually divide and integrate development

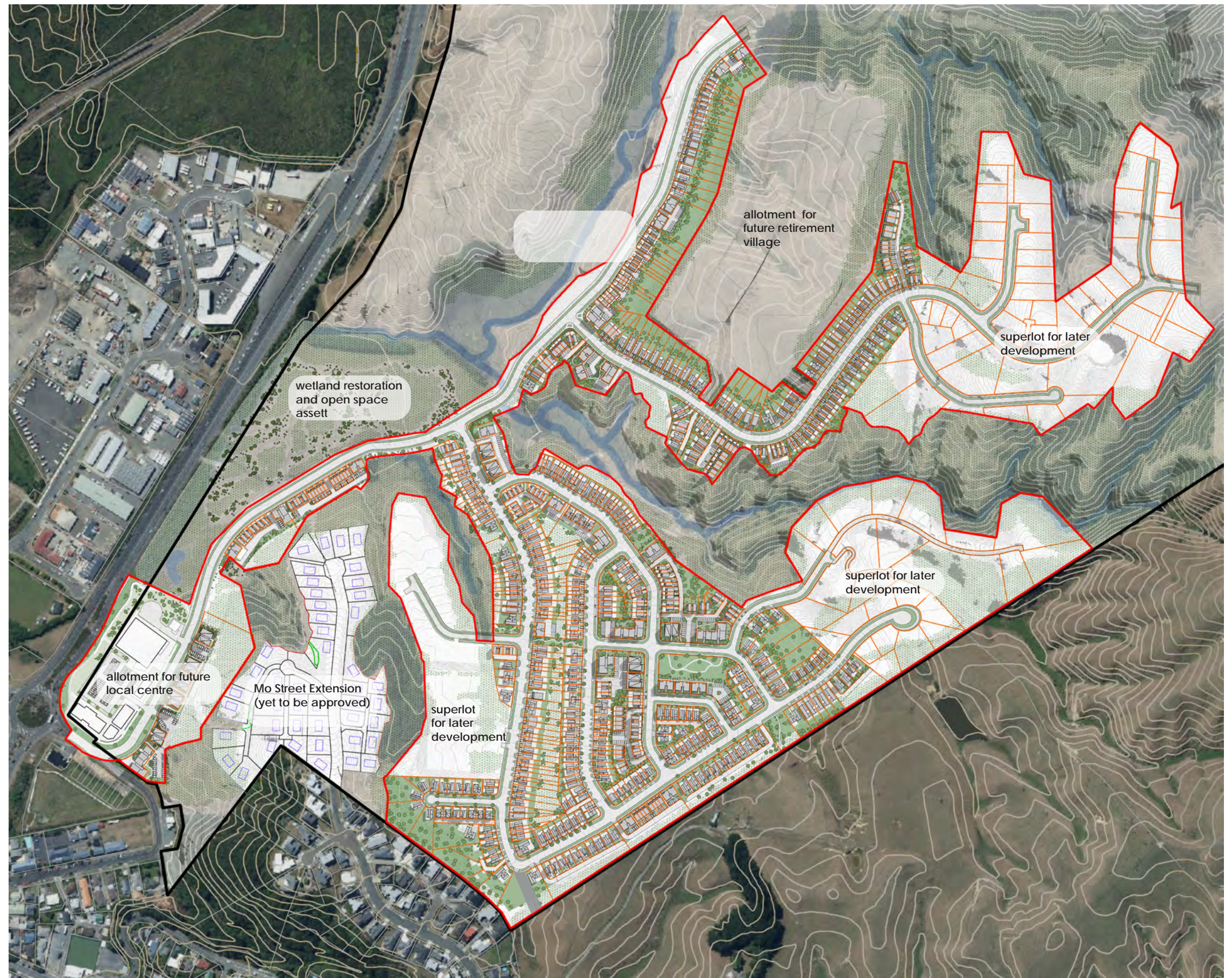
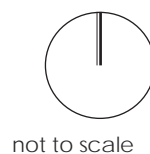


Figure 6.

Stage 1 Masterplan



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## 03 Assessment

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### 3.1 Approach

The proposal is for a comprehensively designed masterplanned development where the careful consideration of detailed urban design outcomes will be assessed at a subsequent resource consent stage as a Discretionary Activity. This is a beneficial approach to development, particularly given the challenging nature of the site's topography and the intention to develop at a density where the careful and integrated design of dwellings, streets and public spaces is key to achieving good residential amenity and public realm.

The documents which are considered relevant assessment frameworks for this report include:

- National Policy Statement on Urban Development 2020
- The Plimmerton Farm Zone Chapter in the Porirua City Operative District Plan
- Proposed Plan Change 19 to the Porirua City Operative Plan - Plimmerton Farm Intensification
- The Multi-Unit Design Guide in the Porirua City Proposed District Plan

Design direction provided by the following documents is acknowledged but not considered useful for assessment here:

- National Medium Density Design Guide - not a statutory document and its content is generally covered by either Operative District Plan development standards for Plimmerton Farm
- The Medium Density Residential Standards (MDRS) which are incorporated into Proposed Plan Change 19

**Relevant extracts from the above documents are reproduced in green text prior to assessment commentary.**

**Where the additional advice is provided for future consent applications, these recommendations are indicated in red text.**

Note: The proposal includes the identification of 10 "Development Areas" which are generally aligned with staging and engineering aspirations. Development Areas 2 (Commercial centre), 5, 9 and 11 are proposed only as "superlots" as part of this application and any illustrated subdivision is indicative only. These superlots will be comprehensively designed (integrated subdivision and housing) and delivered in due course as subsequent stages. The urban design outcomes associated with development in the superlots will be the subject of future resource consent application and urban design assessment.

### 3.2 National Policy Statement on Urban Development 2020

The overall alignment of the proposal with this high level document is discussed in the application document by Scope Planning. From an urban design perspective, the key direction is considered to be:

**Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:**

- (a) **have or enable a variety of homes that:**
  - (i) **meet the needs, in terms of type, price, and location, of different households; and**
  - (ii) **enable Māori to express their cultural traditions and norms; and**
- (b) **have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and**
- (c) **have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and**
- (d) **support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and**
- (e) **support reductions in greenhouse gas emissions; and**
- (f) **are resilient to the likely current and future effects of climate change**

Aspects of the proposal which contribute to achieving a well-functioning environment include:

- the inclusion of a wide variety of housing types, including detached dwellings, duplexes, terraces and low rise apartments, which promote housing choice, social resilience and a broad demographic
- site and housing typologies which promote affordability
- an overall residential density which maximises potential residential yield in close proximity to public transport infrastructure while responding to site constraints such as topography and ecological values
- a connected road network that can accommodate walking, cycling and bus services to promote public transport and reduce green house gas emissions associated with individual car use
- provision/support for a local centre development block which can promote accessibility to local jobs and services and reduce the need for private vehicle use to meet daily convenience needs
- the provision of a range of open spaces, both active public open space as well as passive open spaces accommodating trails and providing visual relief/outlook for residents
- the retention of significant native bush and some natural drainage corridors, civil design to address extreme flood events and a water sensitive design approach to stormwater management, all of which promote resilience in the face of climate change



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### 3.3 Porirua City Operative District Plan - Plimmerton Farm Zone

Strategic Objectives and Policies

PFZ-O1 Integrated Development

*Subdivision, use and development of Plimmerton Farm occurs in a comprehensive, structured and integrated way to increase housing supply, housing diversity and employment opportunities within the environmental constraints of the site, resulting in:*

- 1. Implementation of the Plimmerton Farm Precinct Plan;*
- 2. A range of housing densities and typologies;*
- 3. Compatible non-residential activities;*
- 4. High levels of amenity; and*
- 5. Connected and integrated infrastructure, active transport and the safe and efficient operation of the transport network.*

The proposed development plan is the result of an integrated design process involving a wide range of design professionals and stakeholders. This has allowed the close alignment of project objectives across all disciplines and the optimal balance of sometimes competing requirements. The careful preliminary consideration of both macro and micro design outcomes associated with house design, landscape components, ecological values and engineering requirements delivers a proposal which responds well to site specific opportunities and constraints.

The proposal includes a range of sites sizes and housing typologies (please refer Voxel documents) which are appropriate for the location and also respond to the topography. Subsequent development blocks will accommodate a local centre, primary school and retirement village (see Figure 5). These uses will promote active transport modes and enable residents to meet their daily convenience needs.

The house typologies and overall masterplan illustrate a high level of residential amenity will be achieved through:

- development blocks which take advantage of outlook over the passive open space network
- subdivision design which uses levels to promote views and solar gain for dwellings
- a wide variety of lot sizes promoting choice
- a wide variety of housing designs
- a variety of housing along each street
- a variety of ways to accommodate car parking, including rear lanes where practical
- low rise apartment blocks located on corners and/or adjacent to open spaces to promote legibility, spatial definition and passive surveillance
- views along streets to passive open space corridors to promote visual links and amenity
- street planting, including specimen trees
- local open spaces for recreation and social interaction

PFZ-O2 Landscapes and Indigenous Biodiversity

*Landscapes and indigenous biodiversity values within the site are recognised, protected and enhanced.*

The masterplan has sought to balance land use efficiency and development costs with landscape and biodiversity values. Significant natural areas are generally retained and provide backdrops and outlook for dwellings. Environmental mitigation and biodiversity offsetting is an integral part of the development. The project ecologists have provided key design advice and their support is detailed in the ecological report accompanying the application.

PFZ-P2 Spatial Integration

*Require subdivision consents issued for the Zone to achieve the following:*

- 2. Confirmation of the location of a pedestrian and cycle connection across St Andrews Road to connect the Zone and Plimmerton Station and Plimmerton School, giving effect to the requirements of TRPFZ-P2 and SUBPFZ-P3, and having regard to the timing of that connection to achieve safety and connectivity for Zone residents.*
- 3. Identification, including by way of a street and block layout, the Plimmerton Farm Commercial Centre in Precinct A, showing key road connections between it, St Andrews Road, and the Primary Collector Road, giving effect to the requirements of policies PAPFZ-P2 and PAPFZ-P7.*

The pedestrian connection between Stage 1 and Plimmerton Train station is proposed and detailed in the transportation report accompanying the application.

Although not part of the Stage 1 application, the masterplan indicates a conceptual layout of the commercial centre, showing anticipated access, parking arrangements, and location of built form. It is intended to include a supermarket, a range of speciality stores and potentially apartments. The centre will address the Stage 1 entry road in the first instance, establishing a gateway to Plimmerton Farm.

Precinct A

*The purpose of this Precinct is to provide for medium density residential in a built form of predominantly two-storey and three-storey buildings, detached, semi-detached and terraced housing and low-rise apartments, supported by a commercial centre. A retirement village is also anticipated. The Precinct A objectives, policies and rules provide the framework for managing the effects of development and providing for high levels of amenity and a high quality built environment. A single commercial centre, home businesses and other non-residential activities that support the social and economic health and wellbeing of the community are provided for in Precinct A, as long as they manage adverse effects on residential character and amenity values.*

PAPFZ-O1 Purpose of Precinct A

1. *Primarily provides for medium density residential activities; and*
2. *Provides for a range of non-residential activities, including one commercial centre, that support the social, cultural and economic wellbeing of people and communities, and are compatible with the character and amenity values of Precinct A.*

PAPFZ-O2 Character and Amenity Values of Precinct A

*The scale, form and density of subdivision, use and development in Precinct A is characterised by:*

1. *A built form of predominantly two-storey and three-storey buildings, detached, semi-detached and terraced housing, low-rise apartments and compatible commercial development;*
2. *High quality urban design and amenity; and*
3. *An urban environment that is visually attractive, safe, easy to navigate and convenient to access.*

The proposal is strongly aligned with Policy 1 and 2 given the proposed predominance of medium density housing typologies. It indicates the future development site for the commercial centre and balances residential yield with landscape values in this key location close to public transport. As noted, the site is bisected with steep sided gullies with streams and wetlands in lower lying areas. Changes to the National Environmental Standards for Freshwater (NES-F) enables some wetland areas to be reclaimed in order to achieve a legible and connected movement network through the development. As discussed above, high residential amenity will be delivered through:

- development blocks which take advantage of outlook over the passive open space network
- subdivision design which uses levels to promote views and solar gain for dwellings
- a wide variety of lot sizes promoting choice
- a wide variety of housing designs
- a variety of housing along each street
- a variety of ways of accommodating car parking, including rear lanes where practical
- low rise apartment blocks located on corners of adjacent to open spaces to promote legibility and passive surveillance
- views along streets to passive open space corridors to promote visual links and amenity

- street planting, including specimen trees
- local open spaces for recreation and social interaction
- visual and physical interaction between people and natural landscape through the retention of some drainage corridors and significant vegetation and ecological enhancement

PAPFZ-P1 Residential Activities

*Enable residential activities and a diverse range of residential unit types and sizes that are compatible with the built form, character and amenity values anticipated in Precinct A and are suitably serviced by infrastructure.*

The development plan and typology documentation illustrate the wide range of housing proposed in Stage 1. This range extends the housing choice in Plimmerton and Porirua, is consistent with current market trends and offers more housing choice, promotes affordability and makes good use of land within close proximity of good transport infrastructure (public and private).

PAPFZ-P4 Integration and Connectivity

*Provide for built development that integrates and connects with the surrounding environment.*

The topography of the site and the requirement and desire to retain significant ecological and biodiversity values of wetland areas drives a development plan that clusters development in pockets/locations generally clear of significant natural areas and valuable wetlands. A connected roading network ensures development areas are linked to each other. Connectivity can be increased through pedestrian and cycling trails that traverse passive open space areas.

Connection to Plimmerton and the train station is provided by the main collector road which can accommodate bus services and has a shared path.

Potential connection to the rest of Precinct A is provided, as well as north to Precinct B. Connections to the future retirement village are also provided.

With respect to connection to land to the south of the site (zoned Future Urban Zone in the Proposed Porirua District Plan), a potential link road is provided in line with the Plimmerton Precinct Plan.

**The overall pedestrian and cycle network connecting various development areas to each other (either by road or through open space corridors) and particularly to the local centre should be confirmed as part of detailed design, included and illustrated in the future resource consent application.**



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**PAPFZ-P5 Buildings and Structures**

*Provide for buildings and structures that are of a form, scale and design that achieve the character and amenity anticipated for Precinct A. When considering height of buildings to enable greater residential density, consideration must be given to:*

1. *The distance (for all transport modes) from non-residential land uses and Plimmerton Railway Station.*
2. *Elevation and gradient of the site, and the effects that this will have on visibility of the building from within and outside of the Zone;*
3. *Measures proposed to mitigate adverse effects on the character of Precinct A through:*
  - a. *The location, design and scale of the building or structure;*
  - b. *The visibility, reflectively and colour of the building or structure;*
  - c. *Visibility and similarity with surrounding colours, textures, pattern and forms; and*
  - d. *How proposed landscaping contributes to amenity and balancing the building or structures scale and form.*

The housing typologies indicate that the proposal will generally comply with the development standards that establish residential amenity and character, particularly building coverage, setbacks/yards, landscaping and private outdoor space.

The maximum permitted building height in Precinct A is 11m + 1m for the roof. Matters for consideration in the case of exceeding this height do however acknowledge that topographical constraints may generate height infringements and that landscaping (e.g. planted backdrops) may serve to mitigate potential effects.

The majority of proposed dwellings are likely to easily meet the maximum permitted building height. Whilst the majority of apartments are three levels in height and likely to comply with permitted building height (or have minor infringements due to topography), Apartments A and B are proposed to be four storeys in height and will exceed this development standard. This building height is acceptable, indeed, desirable for the following reasons:

- greater building height is anticipated by P5 and includes measures to mitigate it
- they are located adjacent to the local centre which provides supporting retail and community services which make it more convenient for residents in apartments to meet daily convenience needs
- the building height will be comparable/compatible with potential scale and bulk buildings in the local centre
- the are located within easy walking distance of Plimmerton Train Station
- the apartments are “backdropped” by a vegetated bank which helps to visually integrate them with the landscape (as opposed to breaking the skyline)
- the buildings are north facing which enables good solar access for units
- the additional height provides greater opportunity to capture views to the coast
- the additional height contributes to the creation of a strong gateway to the Plimmerton Farm development

It is also acknowledged that the maximum building heights in a portion of Precinct A are proposed to increase to give effect to the intensification provisions of the NPS-UD. Refer discussion on Plan Change 19 in the following section' PAPFZ-P6 Urban Design (Residential).

*Require residential development in Precinct A to achieve high quality urban design by taking an integrated, comprehensive site planning and design approach to achieve the following:*

1. *Site planning that:*
  - a. *Integrates building form and open space;*
  - b. *Achieves a consistent pattern of building alignment;*
  - c. *Provides access to sunlight or daylight to buildings;*
  - d. *Provides a positive frontage to the street;*
  - e. *Provides convenient, safe and legible connections and circulation;*
  - f. *Provides front doors that are clearly legible from the street or accessway;*
  - g. *Achieves passive surveillance of the street or accessway;*
  - h. *Minimises the visual impact of car parking and garaging on the streetscape;*
2. *Building design that:*
  - a. *Achieves visual interest and avoids visual monotony while also achieving aesthetic coherence and integration;*
  - b. *Provides internal visual privacy for all units within a development;*
  - c. *Provides for servicing that is suitable, convenient and visually discreet;*
3. *Open space and landscape design that:*
  - a. *Ensures all outdoor living areas in the development are well located and accessible;*
  - b. *Ensures any shared outdoor living areas are well located and of high quality;*
  - c. *Uses planting to achieve visual amenity, safety and functionality;*
  - d. *Includes driveways, manoeuvring and parking areas that are safe, convenient and attractive; and*
4. *Lighting that enhances safety and security without adversely affecting the amenity of other sites.*

As a comprehensively designed development, careful consideration of design details and outcomes are possible. Development areas are located between passive open spaces which provide relief and outlook. An active open space is located in a flatter elevated area where the whole community can enjoy sun and view and passive surveillance and spatial definition provided by multi-level buildings.

The typology plans also illustrate how dwellings will front the streets, with clearly visible front doors, and front yard landscaping. Parking is accommodated in a variety of ways, either as single garages or car pads, paired driveways or in rear lanes. This provides for good street landscaping and habitable rooms which overlook the street.

The variety of designs are distributed across the development resulting in varied and interesting streetscapes (see Typology plan by Voxell). The architectural language/facades will be carefully detailed to balance variety and coherence.

Outdoor spaces are located generally at the rear of the dwelling and directly accessible from the internal living space. The typology toolkit includes designs which can successfully accommodate private outdoor space to the front of the dwelling, particularly in locations where dwellings face north and/or have a level change with the street (e.g. Type F.A, C.G, C.C3).



# Precinct Plan Map

The Plimmerton Farm Precinct Plan is included in the Plimmerton Farm chapter of the Porirua City Operative District Plan and all development is required to align with it and its associated provisions. It is based on a preliminary masterplan developed during the plan change process illustrates the spatial layout of various precincts, land uses, movement networks and open spaces.

The adjacent diagrams illustrate the close alignment between the proposed masterplan and the Plimmerton Farm Precinct Plan with respect to roading, land use and open space.

## PRECINCTS

- A Medium Density Residential
- B General Residential
- C Residential Clusters

## INDICATIVE ACTIVITY LOCATION

- RV Retirement Village

## OPEN SPACE NETWORKS

- Significant Natural Areas
- Biodiversity Offsetting and Restoration Areas
- 📍 Indicative neighbourhood park - Vest with PCC
- 📍 Indicative pocket parks / playgrounds
- ✱ Indicative lookout / viewpoint
- Boulevard road treatment in Precinct A + B
- Prominent Ridgeline
- Landscape buffer to St Andrews Road
- Ecological Corridor
- Primary Collector
- Local Roads
- Access and low volume roads
- Potential future connections
- Primary walking and cycling trail
- Kakaho Special Amenity Landscape

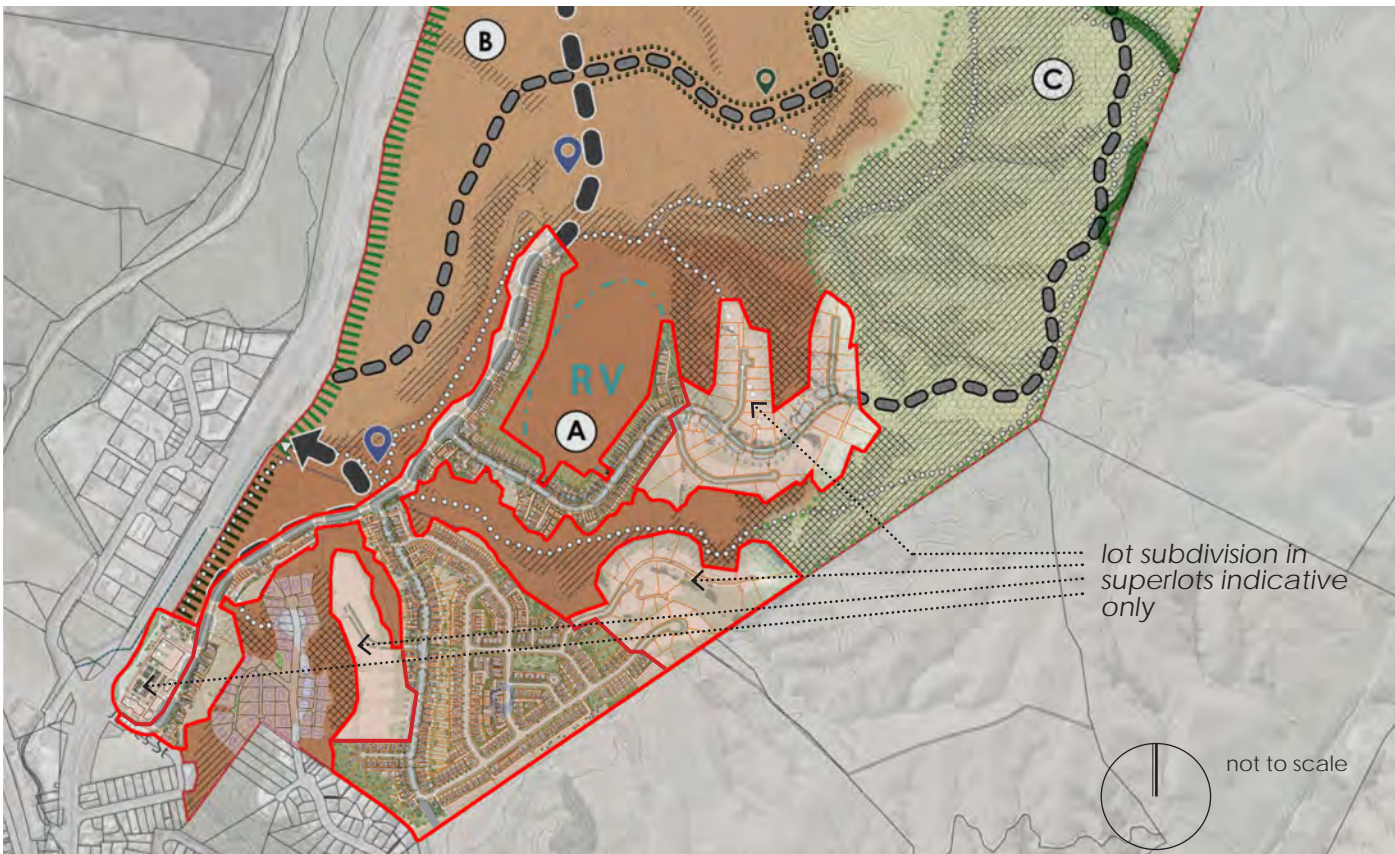
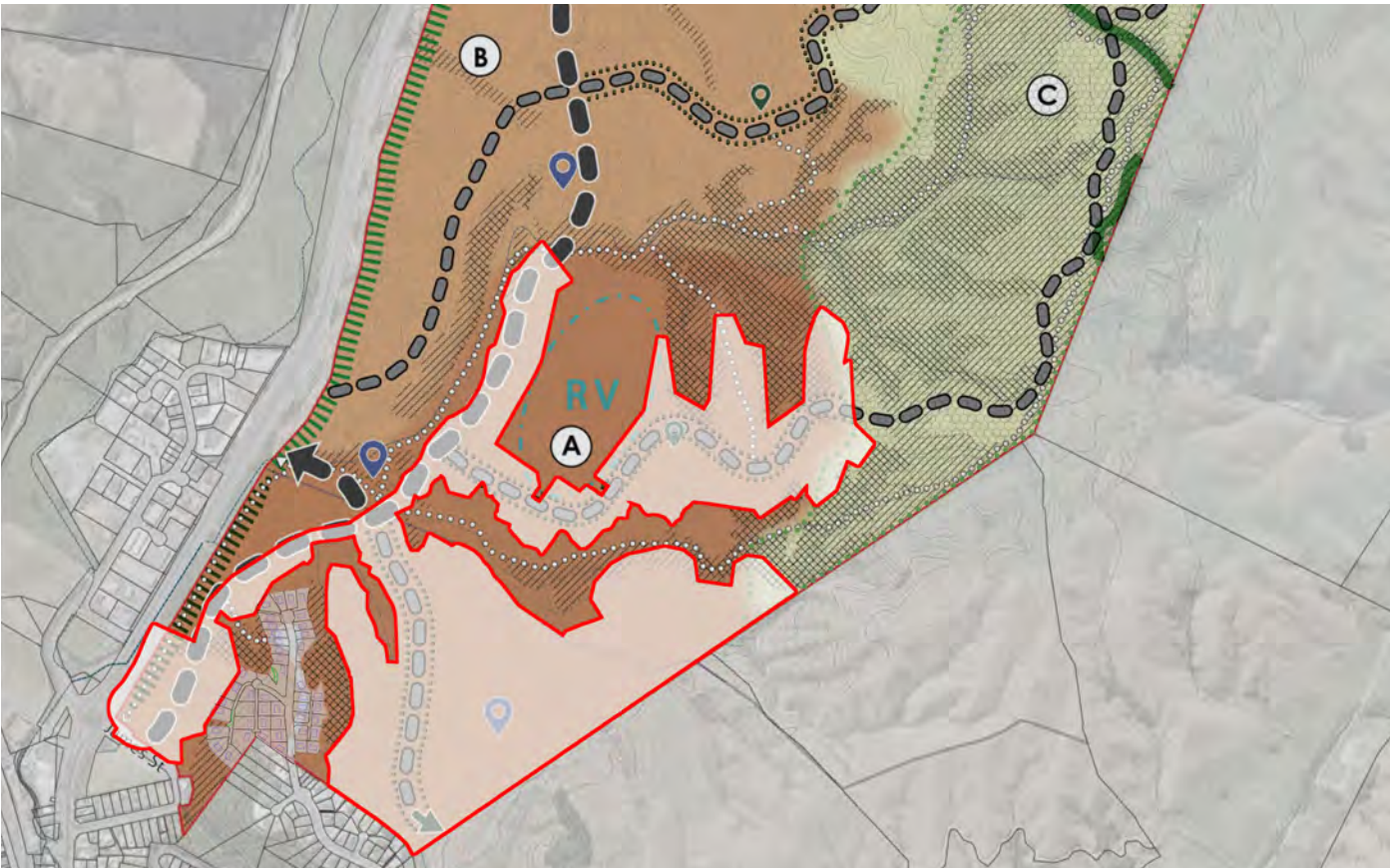


Figure 7.

Stage 1 Masterplan overlaid on Precinct Plan



.....

### 3.4 Porirua District Plan - Proposed Plan Change 19

Plan Change 19 - Plimmerton Farm Intensification enables Plimmerton Farm to help Porirua's City Council's meet its obligations under the Resource Management (Enabling Housing Supply and Other matters) Amendment Act and National Polict Statement on Urban Development. It amends the Plimmerton Farm Zone chapter to allow for greater residential density close to the Plimmerton train station (through a new high density sub-precinct) and applies the Medium Density Residential Standards to the balance of Precinct A and all of Precinct B.

New strategic objectives and policies include:

**PFZ-O4 Well-functioning urban environment**

*A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.*

**PFZ-O5 Housing Choice**

*Precincts A and B provide for a variety of housing types and sizes that respond to:*  
*1. Housing needs and demand; and*  
*2. The neighbourhood's planned urban built character, including 3-storey buildings*

**PFZ-P3 Residential activity**

*Enable a variety of housing types with a mix of densities within Precincts A and B, including 3-storey attached and detached dwellings, and low-rise apartments.*

**PFZ-P4 Medium Density Residential Standards**

*Apply the MDRS in precincts A and B except in circumstances where a qualifying matter is relevant (including matters of significance such as historic heritage and the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga).*

**PFZ-P5 Safety and street scene quality**

*Encourage development to achieve attractive and safe streets and public open spaces, including by providing for passive surveillance.*

**PFZ-P6 Health and well-being**

*Enable housing to be designed to meet the day-to-day needs of residents.*

**PFZ-P7 Providing for development**

*Provide for developments not meeting permitted activity status, while encouraging high-quality developments*

The Stage 1 development is considered to be consistent with the above additional objectives and policies, specifically due to:

- the proportion of comprehensively design medium density housing
- the wide variety of housing typologies, including duplexes, terraces and apartments
- the street based design where units front high quality public streets which accommodate all transport modes

- attractive and efficient architect designed housing

For Precinct A specifically, the following additional policy and rules are proposed to align development standards with the National Medium Density Residential Standards. Key amended rules for Precinct A include:

- a more permissive Height In Relation to Boundary standard which provides for 4m +6deg in Precinct A (originally 3m +45deg or 3m +55deg on a north facing boundary)
- a greater building coverage (50% rather than 45%)
- reduced yards (front yard 1.5m rather than 2m and rear boundary 1m rather than 3m)
- reduced minimum site landscaping
- reduced requirements for size and shape of private outdoor space at ground level (20m<sup>2</sup> rather than 30m<sup>2</sup>)
- introduction of outlook space requirements for principal living rooms and other habitable rooms (4m and 1m respectively)
- the introduction of minimum glazing requirements for street facing facades (20%)

Whilst the Stage 1 development has been designed to generally comply with Plimmerton Farm Zone provisions in the Operative District Plan, the above standards would provide additional design flexibility, particularly for the location/siting of dwellings which would assist with dealing with topography/level changes.

The proposed Stage 1 development and comprehensive housing typology catalogue illustrates a general ability to comply with the new rules for outlook and glazing and this will be confirmed at a subsequent consenting stage.

Through a new policy and amended rules, and the identification of a high density sub-precinct in Precinct A, even greater residential density is provided for.

**PAPFZ-O3 Planned urban built environment of the High Density Sub-Precinct**

*The planned urban built environment in the High Density Sub-Precinct is characterised by:*  
*1. A planned built form of terraced housing and apartments buildings up to six stories in height;*  
*2. A greater intensity of buildings than anticipated elsewhere in Precinct A; and*  
*3. A quality built environment that provides for the health and wellbeing of people residing in the Sub-Precinct.*

This Sub-Precinct allows for even greater residential density through:

- provision for buildings up to 22m in height in the High Density Sub-Precinct
- a Height in Relation to Boundary standard in the High Density Sub-Precinct of 8m + 60deg
- no maximum building coverage

(Please refer to further disussion in next section overleaf).



## The High Density Sub-Precinct

The extent of the high density sub-precinct in relation to the proposed development plan is illustrated on the adjacent page. It includes part of Development Area 1 (Mo Street Extension) Development Area 2 (commercial centre for later design and consenting), Development Area 3 (approximately 75 units in 6 four level apartment blocks) and a portion of Development Area 4 (one 3 level apartment block and 3 terrace units).

As identified in the Plimmerton Farm Precinct Plan, part of the low lying flat area adjacent to SH59 is identified as an ecological corridor (wetland restoration) and part of this area will also be used for stormwater management. As discussed by other experts, the large open space area in the low-lying flat area of the site is required to enable hydraulic neutrality to be achieved as well as providing a significant wetland restoration opportunity.

As outlined in the separate resource consent applications for the Mo Street development which have either been granted or are in the consenting process, development along the Mo Street Extension is not considered appropriate for high density given:

- its location within an already developed neighbourhood of lower density
- its elevation, at which multi-storey buildings which would likely generate significant visual effects
- its lack of connectivity due to the location on a vehicle cul-de-sac
- the steep gradient which impacts the design of the pedestrian and cycle connection to the local centre and train station
- the status of design and development plans which are awaiting consent

The new standards provide the opportunity for apartment buildings in Development Area 3 and 4 to increase in building height and yield. Greater building height (i.e. up to 6 storeys) would be supported from an urban design perspective due to:

- the proximity to Plimmerton Train Station and the local centre which provides supporting retail and community services which make it more convenient for residents in apartments to meet daily convenience needs
- building height will be comparable/compatible with potential scale and bulk buildings in the local commercial centre
- the height of the vegetated backdrop which still visually integrate them with the landscape (as opposed to breaking the skyline)
- the north facing orientation which enables good solar access for units
- the additional height provides greater opportunity to capture views to the coast
- the additional height contributes to the creation of a strong gateway to the Plimmerton Farm development
- additional height/units in Development Area 4 would increase passive surveillance of the open space across the road although additional building height should also be balanced with lower heights in this development area
- additional building height assists with development affordability and feasibility

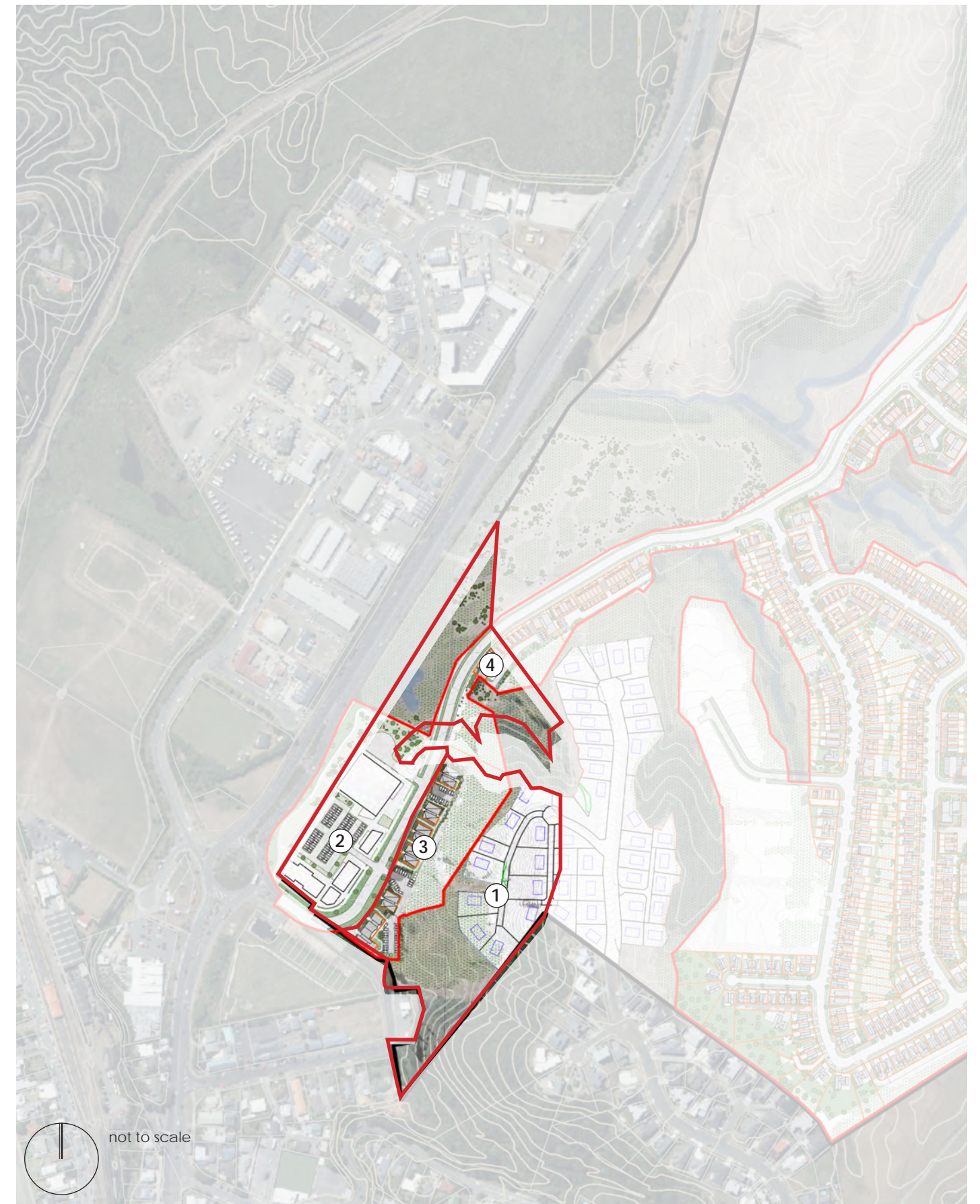


Figure 8.

Proposed High Density Sub -Precinct overlaid on the Stage 1 Masterplan



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## 3.5 Porirua City Proposed District Plan - Multi-Unit Housing Design Guide

This design guide applies to multi-unit residential development in the residential zone. Although it has no statutory weight as the Plimmerton Farm Zone was excluded from the PDP given that it advanced through a separate but very comprehensive SPP process, it is considered a useful assessment framework.

**Part A** applies to all multi-unit residential, including townhouses, apartments, and detached houses that are part of any multi-unit development.

**Part B** applies only to townhouses and detached housing.

**Part C** applies only to apartments.

When a multi-unit housing development includes a mix of housing types then the relevant parts of this guide will apply to each housing type within that development.

Considering all design and planning matters together is important to achieve a design outcome that is optimal for its site, and which will be a coordinated and integrated response to the full range of relevant issues rather than a piecemeal response to individual guidelines. Optimisation of design outcome in relation to the full range of objectives and guidelines recognises trade-offs are likely to be required. But good design will reconcile different demands, providing an acceptable outcome in relation to all aspects of amenity.

The full resource consent application will illustrate the detailed housing design and include an urban design assessment against relevant statutory documents. At this stage, general assessment is provided based on the proposed development plans and housing typology catalogue which includes examples of duplexes and townhouses. Assessment of design outcomes associated with apartment buildings will be made as part of the resource consent. However, initial assessment of the proposal indicates that the siting and orientation of apartment buildings are likely to deliver good urban design outcomes by locating car parking away from street frontages where possible, defining the street (particularly corners), providing landscaped areas and not dominating adjacent dwellings.

### **A1 To optimise the quality of the outcome with an integrated, comprehensive design approach.**

- There should be clear and integrated site planning and building design strategy, and coherent aesthetic composition of buildings and related landscape.

The integrated design of sites and dwellings enables the careful consideration and assessment of residential amenity. The project urban designers, architects and landscape architects are working together to maximise residential amenity and ensure complementary design outcomes.

### **A2 To achieve a positive frontage to the street**

- orientate dwelling fronts to the street
- Ensure garage doors do not dominate either the street façade or the edges of spaces within the development.

The proposed subdivision is a primarily street based subdivision, with dwellings fronting public streets in the first instance. A very small number of private laneways/ROW's are utilised to provide access to areas that are impractical to access with public roads due to topography or block shape/size.

The proposed duplexes and terraces include either a single internal garage or a single car pad which limits potential dominance of garages and car parking along the streetscape. Where possible, driveways are paired which minimises crossings over footpaths/shared paths and maximises space for front yard landscaping. Front doors are generally visible from the street.

### **A3 To achieve visual interest and avoid visual monotony while also achieving aesthetic coherence and integration.**

- Avoid excessive regimentation in the alignment of buildings.
- Integrate facade setbacks and secondary forms and elements to give richness and detail.
- Avoid large, flat blank walls.

The typology plan in the architects drawing package indicates a wide range of house designs and that they are mixed along street frontages, Low rise apartments are dispersed amongst terraced blocks, and every street has a mix of designs. Many house plans have the flexibility/ability to be grouped in different ways to generate a variety of blocks.

The topography promotes an irregular grid and curved roads which assists with variety in the alignment of buildings. Terraces can be stepped/staggered to avoid long flat walls and recessed garages also contribute to varied building forms. All building forms are residential in scale and unlikely to result in large blank walls. End terrace units have windows in side elevations.

### **A4 To achieve visual amenity, safety and functionality with planting.**

- Place planting to contribute to the quality of outlook from, light and sun into, and privacy and shelter for units, and use planting to give visual interest

### **A5 To achieve driveways, manoeuvring and parking areas that are safe, convenient and attractive.**

- Consider driveways as main entrances and parking spaces as multi-functional spaces and use landscape to create visual interest and variation in parking and vehicle circulation areas.

### **A6 To respect identified valued aspects of neighbourhood character.**

- Relate new development to common patterns of building alignment and scale if these are a defining characteristic of the local neighbourhood.
- Seek to retain existing good quality mature vegetation and reinforce neighbourhood character with plant and tree species.



.....

Stage 1 establishes its own new residential character. It does not directly adjoin an existing neighbourhood and is physically and visually separate from development in the Mo Street Extension. However, it will reference typical contemporary medium density residential development in the Porirua area through building scale, form and materials.

- B1 To integrate building form and open space design to achieve high internal amenity and form well-located and usable private open spaces.**
- Design buildings and related private open spaces together so that dwellings define sunny, attractive and accessible private open spaces.
  - Provide garden spaces which include potential for tree planting.

The design of outdoor areas, including access and service spaces and outdoor spaces will be assessed at resource consent stage.

- B2 To achieve reasonable sunlight and daylight to and outlook from dwellings.**
- Ensure that at least one living area within each dwelling receives reasonable sun during the day.
  - Provide for outlook from all units.

The typology catalogue illustrates that townhouses will meet this criteria.

- B3 To achieve high quality, legible and efficient circulation to dwellings.**
- Make circulation to dwellings efficient, convenient and understandable.

The typology catalogue illustrates that townhouses will meet this criteria.

- B4 To minimise the visual impact of garages and car parking on the streetscape.**
- Place garaging generally beside or behind the house and restrict the amount of parking in any front yard.

The typology catalogue illustrates that townhouses will meet this criteria.

- B5 To provide reasonable internal visual privacy for all units within a development.**
- Provide for reasonable visual privacy within and between units by considering the relative placement of rooms and related private open spaces, and the orientation and design of windows.

The subdivision plan indicates that this outcome can generally be achieved and can be confirmed at resource consent stage.

- B6 To provide for servicing that is suitably generous, convenient and visually discreet.**
- Provide for convenient and discreet parking, rubbish and recycling storage.
  - Provide for laundry facilities and drying

The subdivision plan indicates that this outcome can generally be achieved and can be confirmed at resource consent stage.

- B7 To ensure all outdoor living areas in a development are well-located, accessible and sunny.**
- Orientate the main private outdoor living area to the north and directly connect it to a main living room within the unit.
  - Design outdoor living areas and related building edges and windows to screen any short range or excessive overlooking of or by neighbours.
  - Provide supplementary outdoor living areas with a sunny, north-facing balcony.
- B8 To ensure any shared outdoor living area is well-located and of sufficient quality to be attractive to residents.**
- Locate any shared outdoor living area to receive good sun and design it to be an amenity focus for the development.

The subdivision plan indicates that this outcome can generally be achieved and can be confirmed at resource consent stage. Placement and orientation of dwellings is driven by roading arrangements and topography in the first instance. However, there are sufficient house designs (including some which have dual aspect living to the front of the dwelling or balconies which will enable this outcome to be achieved.



## 04 Conclusion

The development proposed in the referral application is a product of an integrated design-led process which has sought to respond to site-specific opportunities and constraints and balance residential yield and landscape and biodiversity values. It represents a new, ambitious and contemporary neighbourhood that extends housing choice in Porirua and offers a wide variety of housing typologies and designs, promoting a mixed community and enhances landscape values of large areas of adjacent open space and wetlands.

The design is consistent with respect to the Operative District Plan and further current and future national and regional directions relating to increasing residential density/yield in appropriate locations. The intentions for Precinct A as described and permitted in the Plimmerton Farm Zone are consistent with outcomes described by the National Policy Statement on Urban Development (2020), the Proposed District Plan and the National Medium Density Standards.

This assessment is based on a the proposed development plans and catalogue of housing designs. Many urban design outcomes can only be assessed at a more detailed design and consenting stage (Fast Track Stage 2) but initial assessment has indicated close alignment with direction and guidelines, both operative and proposed.

The proposal will enable a sustainable and well-functioning urban environment, with good residential density based around a local centre and public transport infrastructure and has the potential to establish a strong gateway to the rest of Plimmerton Farm.

Recognising this project is currently at an advanced conceptual stage, a number of urban design issues will be refined and resolved during the next stage of planning and design. This notwithstanding, these plans and drawings describe a robust and complete concept and the approach that will be taken to deliver a suitably high amenity outcome in all areas.

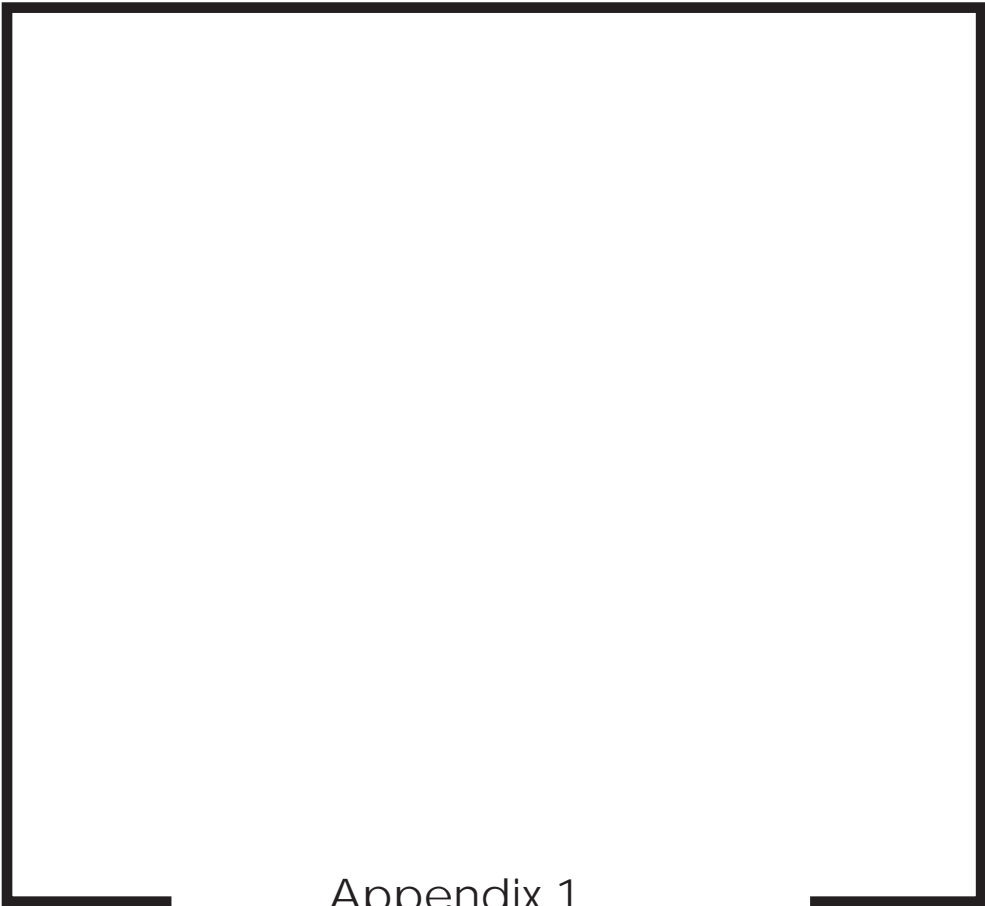
On this basis, it is considered that the development will not give rise to adverse urban design related effects. While further design refinement is required, there are no critical urban design issues that remain unresolved. In conclusion, the proposal can be supported from an urban design perspective and offers an exciting opportunity to deliver a quality urban design outcome that sets a high bench mark for future development stages.



Figure 9.

Stage 1 Masterplan - Voxell





Appendix 1

16 May 2019

To	Stephanie Blick, Egmont Dixon		
Copy to	Brendan Hogan, Gillies Group		
From	Lauren White, Senior Urban Designer	Tel	027 646 4156
Subject	Stage 1 Development at Plimmerton Farm	Job no.	12504258
Urban Design Commentary			

1. Purpose

This memo is provided in support of the application for a resource consent for earthworks to enable the development of Stage 1 at Plimmerton Farm. It provides some background about the wider planning and design process, focusses on the proposed layout of roads and blocks which has informed the earthworks design, and addresses specifically the issue of connectivity within the area. Providing access to the Stage 1 area results in modification to land form as well as a reduction to the extent of retained wetland areas. The memo seeks to confirm that, from an urban design perspective, there are “no other practicable alternative methods of providing for the activity” without unsurmountable constraints and/or unacceptable urban design outcomes.

2. Background

The subject site is a large landholding commonly referred to as ‘Plimmerton Farm’ located at 71 State Highway 1, Plimmerton. With an area of 385 hectares, the site, legally described as Pt Lot 30 DP 328137, is the largest single rural landholding in the Plimmerton area.

Plimmerton Farm is currently zoned rural in the Operative Porirua City District Plan and has been identified as a growth area in the Porirua Development Framework (2009), Northern Growth Area Structure Plan (2014) and the Porirua Growth Strategy 2048 (2019).

Council Officers confirmed to PDL in May 2018 that PCC would consider including the rezoning of the Plimmerton Farm site from rural to residential or a combination of land-use zones as part of the District Plan Review. This was confirmed on the basis that a Draft Precinct Plan and supporting investigations and evaluations be provided ahead of the October deadline for the release of the Draft District Plan.

The design proposal for the land use and layout of Stage 1 has been informed by the Draft Precinct Plan for Plimmerton, developed through a collaborative multi-disciplinary team exercise during 2018. This precinct plan was developed to support the inclusion of the site for rezoning in Porirua City Council’s draft District Plan. The rezoning of the site will enable the development of a new residential neighbourhood and supporting social infrastructure.

As the landowner of Plimmerton Farm, Plimmerton Developments Limited is also the developer, and has a keen understanding of the realities of land development. Managing the full development process from land purchase through to the construction and sale of houses, Plimmerton Developments Limited has an ongoing long term interest in the quality, livability and durability of the environments it develops. From the outset, the nature of the

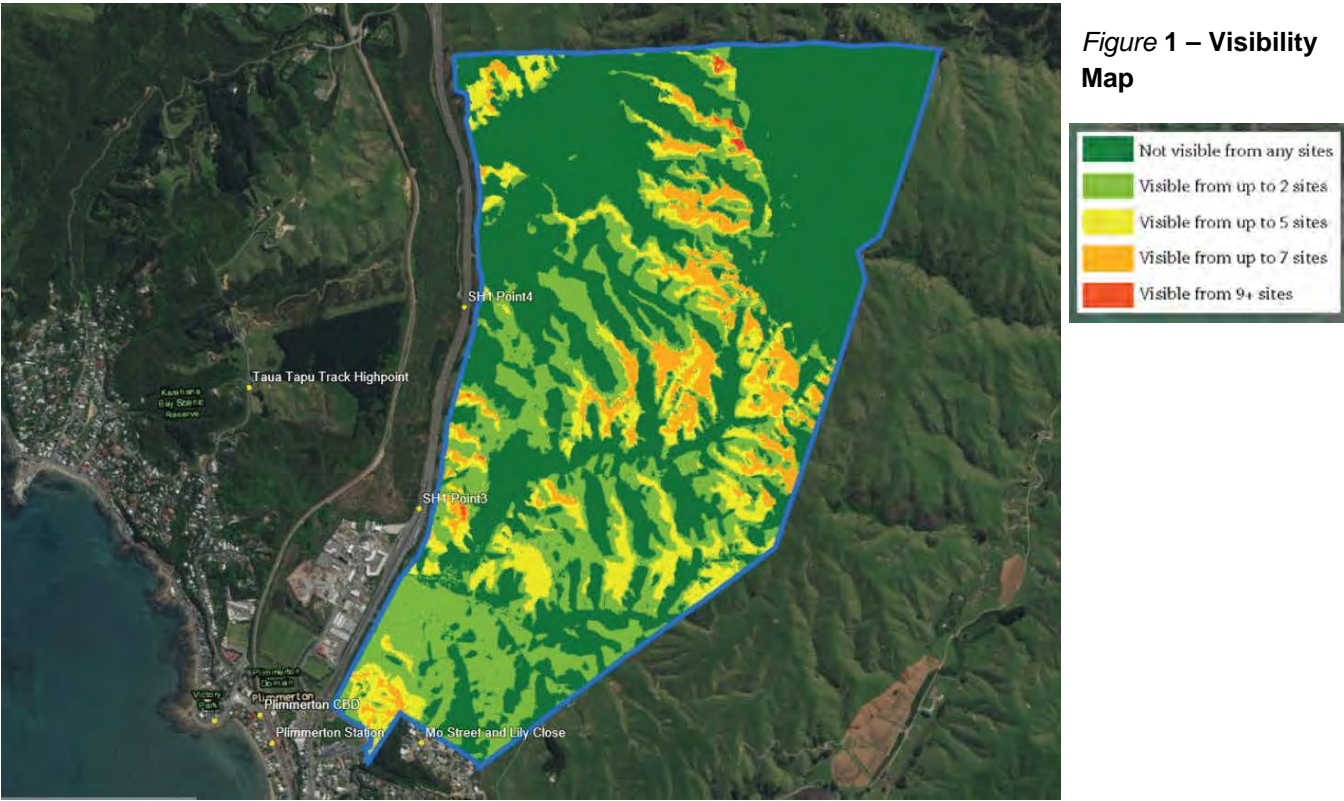


site, particularly topography, ecology and access were carefully considered to ensure the proposed precinct plan was feasible, achievable and essentially “buildable”.

3. The Stage 1 Site and Urban Design Drivers

3.1 General

Whilst the overall approach is to recognize the topographical constraints of the site, due to its location relative to Plimmerton village and public transport infrastructure, Stage 1 (Precinct A) is identified as most suitable for more intensive residential development (relative to other precincts). Other precincts are more difficult to access and have generally steeper topography. Also, an analysis of the visibility of the site from a number of public viewpoints determined that the Stage 1 has generally a relatively low visibility and therefore less sensitive to visual change and perceptions of increased density.



As a result, and with a view to maximizing the value of the land resource, promoting a compact city (to align with the Greater Wellington Regional Policy Statement), contributing to a well-functioning urban environment and providing a diverse range of housing environments (to align with the NPS-UDC), the Draft Precinct Plan describes Stage 1 as a mixed use, medium density residential area, with a high proportion of comprehensively developed dwellings.

3.2 Access and Connectivity

The urban design assessment (August 2018) describes the constraints of the overall site with respect to access and connectivity, specifically:

- The existing restriction of access to SH1;
- The limited opportunity for access to SH1 after revocation due to the topography which rises steeply from the road reserve;
- The general challenge to connectivity through the site due to the topography.

It is acknowledged in other technical reports that prior to the revocation of SH1, primary access to the site will be taken from James Street as further intersections with SH1 to the north can only likely be provided at a later date.

The urban design assessment also includes opportunities and recommendations for the site as follows:

- Strong and convenient connection to its surrounds, particularly Plimmerton Village;
- connection to existing public transport infrastructure (train), support for park and ride facilities etc;
- provision of a connected and legible network of public streets which link to key destinations;
- provision of a road network that supports public transport (bus); and
- provision of a connected pedestrian and cycle network.

The issue of connectivity is a fundamental urban design consideration. It is widely acknowledged that high levels of physical connectivity facilitate ease of access, economy of movement and improved social interaction.

*“Connected street systems give people choices. Having roads that are joined together in a network, rather than ending up in cul-de-sacs, makes it easier for all people – children, teenagers, the elderly, as well as other adults – to get around their neighbourhood. This helps integrate communities and overcome isolation.*

*Connected street patterns:*

- *facilitate movement and exchange while spreading traffic loads*
- *make places safer and more alive by bringing activity and passive surveillance to an area*
- *make walking and cycling more enjoyable and convenient*
- *reduce dependence on motor vehicles*
- *help ensure traffic and roads do not divide communities.*

*Ensuring new areas are designed with a high degree of connectivity, and improving connectivity within existing urban areas by adding new links and completing missing links, helps support the concentration of activities and a greater diversity of activities.”*

From: People + Places + Spaces, by Ministry of the Environment 2002

3.3 Environmental Responsiveness

The urban design assessment also recognizing the value of the natural environment in placemaking and recommends:

- protection and enhancement of drainage corridors, overland flowpaths and wetland areas;
- retiring slopes unsuitable for urban development;
- promoting visual integration and limiting earthworks and retaining structures, and
- utilising water sensitive design practice.

*“Designing urban areas so they reduce the impacts of urban activities on the environment – such as mitigating stormwater pollution, improving energy and water efficiency and reducing greenhouse gas emissions – makes these areas more sustainable.*

*Environmental responsiveness is also a key way of developing character and identity. The strong natural landscapes our towns and cities are set in are an important influence on their distinctiveness.*

From: People + Places + Spaces, by Ministry of the Environment 2002

The Plimmerton Farm site is dissected by numerous drainage corridors and wetland areas and these pose a constraint to achieving high levels of connectivity. During the development of the Draft Precinct Plan, areas of



native bush and wetland were identified for retention/protection and enhancement. Drainage corridors in Stage 1, allow for the flow of stormwater towards the boundary with SH1, where a large flood prone area is identified.

While promoting connectivity, providing vehicular and/or pedestrian/cycle connectivity across drainage corridors has both an economic and environment cost. Earthworks and construction activity can be damaging to ecological areas and alter the landform. High costs of land development due to excessive earthworks and bridging structures are invariably passed onto the end user (house buyer) so this also effects housing affordability and development feasibility. However, preventing access across such spaces can result in isolated communities, the inefficient provision of infrastructure, higher carbon emissions etc.

On a site such as this, there is therefore an inherent conflict and need for compromise when considering the issues of connectivity, environmental quality and land development cost. Balancing these intentions is key to achieving a good urban design outcome in the long term and ensuring the 'best practicable option' is achieved.

#### 4. Proposed Access and Layout for Stage 1

The Stage 1 development includes all of Precinct A and a small portion of Precinct B. The proposed layout for Stage 1 has been undertaken through the collaboration of the wider project team, including urban designers, ecologists, and engineers addressing roading, earthworks and stormwater design.

With respect to access and connectivity, the following outcomes were established:

- No vehicular intersection with SH1;
- Access to Stage 1 to be taken from James Street;
- The main entry road (Road 1) should have a gradient that accommodates buses;
- The road network in Stage 1 to provide for connection to SH1 in the future, as well as set up the primary internal road system for the wider site;
- Flood prone areas alongside SH1 to be retained for stormwater detention and treatment and enlarged to both provide water neutrality for the development and help alleviate flooding at the roundabout;
- No vehicle connection / through road can be made with Mo Street;
- Earthworks and batter slopes associated with roading to be minimized as far as practical.



Figure 1 – Draft Precinct Plan showing Access and Location of Road 1 (Primary Collector)

Road 1 allows for residential development on its south eastern side, making good use of the land resource in close proximity to the train station, and providing passive surveillance over the stormwater detention area (Precinct A) and the primary wetland area (Precinct B). It is aligned across the toe of the natural bank that rises from the flood prone area adjacent to SH1 and provides for primary linkage to both SH1 in the future as well as the rest of the site to the north. Due to the topography and the need for a gentle gradient to accommodate a bus route, the route travels around the base of the slope. In order to provide sufficient land to accommodate the stormwater detention area, deliver water neutrality and help alleviate flooding around the SH1 Roundabout, the slope has been cut and battered back. The alignment of the road is such that it avoids two existing wetland areas in the southern portion of the stage but does require the removal of some existing vegetation (within the proposed SNA PCC050 area). (See Figure 2 below).

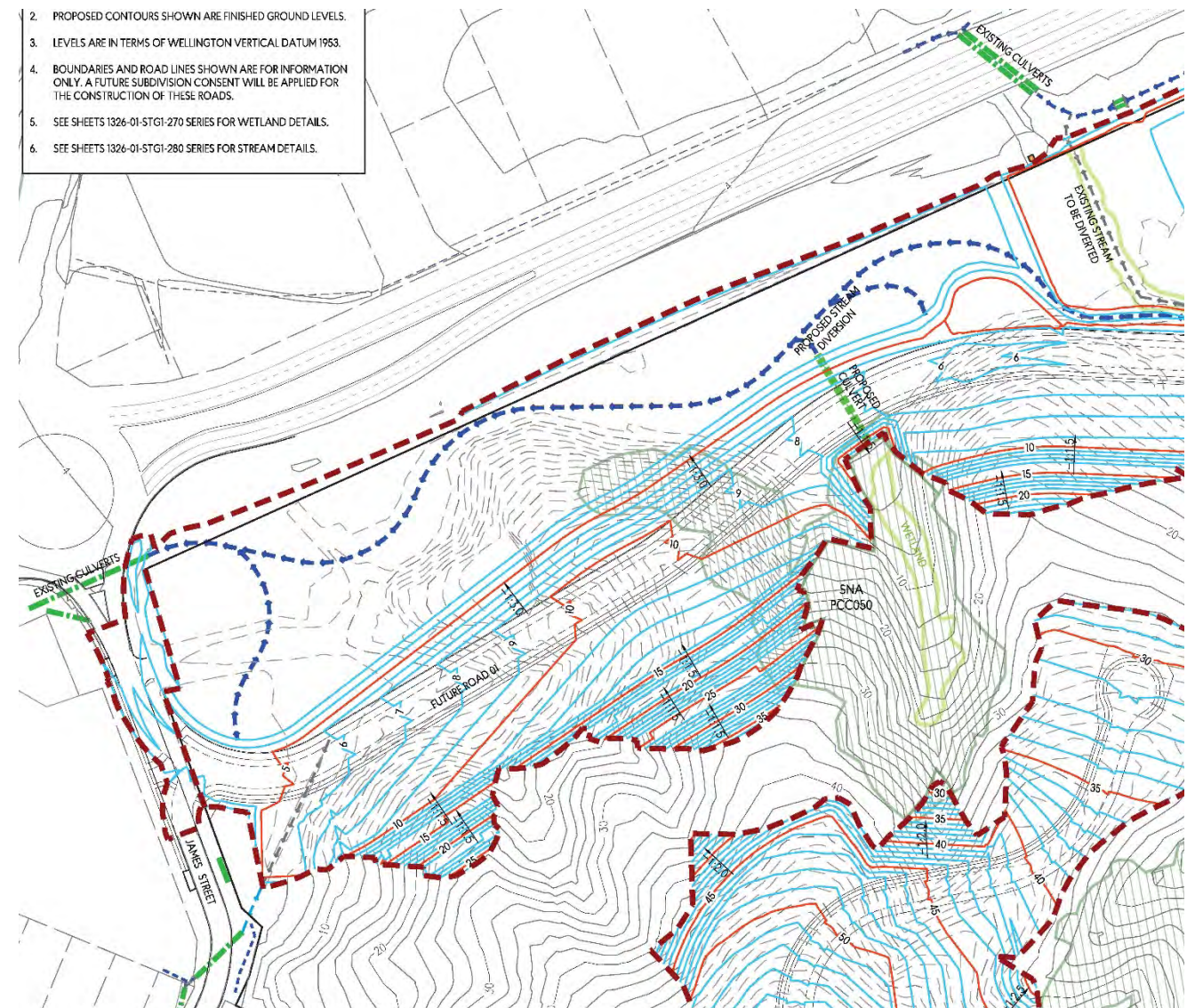


Figure 2



Further north, Road 1 requires the removal of some wetland area. Culverts under the road allow for water from the wetlands to drainage to the diverted stream.

Road 1 sets up the primary collector loop through the wider site, linking access points on SH1 (James Street Roundabout and two future intersections). Considering both the timing of revocation (and the potential construction of the new intersections) and the intention to ensure internal site connectivity, it is important that Road 1 extend northwards from Precinct A to Precinct B. Due to the location of the primary wetland area on the site, the constraints of topography and gentle road gradient, and the long term primary road network, Road 1 is aligned along the eastern boundary of the primary drainage corridor (alongside the proposed retirement village). This alignment of this route necessitates the removal of wetland areas as illustrated in Figure 3. The road cannot avoid the wetlands by re-alignment south of the retirement village and achieve gradients acceptable for public transport.

The road network in the rest of Stage 1 responds to the topography as much is practical, but does require significant earthworks and land modification to enable residential development to occur. Existing high value vegetation (SNA PCC0 48 and 49) have been retained and helps to visually separate future residential development.



Other natural drainage corridors have been altered to allow for a contiguous residential community to be developed. In these instances, the existing landform has been modified to allow for a connected higher density residential area on less visible slopes. Whilst this requires the alteration of existing drainage patterns and associated vegetation, this is considered acceptable due to the benefits of connectivity, community and residential yield. Other parts of the wider site are identified for a more sensitive environmental response.

Figure 4 – Loss of wetland areas to provide for connected medium density residential

In addition to internal connectivity, the Stage 1 residential area will still enjoy physical and visual connection to the primary stream corridor (around SNA PCC048). Whilst desirable from a connectivity perspective, road connections across this stream corridor (to the retirement village area) are not proposed due to the potential impact on the stream environment and the visual impact of crossing structures. Instead, pedestrian and cycle links can be provided to promote a high level of internal pedestrian and cycle connectivity. In this location, the environmental value has been prioritised over the level of vehicular connectivity.

5. Conclusion

Balancing connectivity and environmental value is required to achieve the overall intentions for Stage 1 as described by the Draft Precinct Plan. Its location, proximity and relatively low visibility point to its potential to accommodate a significant proportion of the overall site's residential yield. To access the Stage 1 area and provide an acceptable level of internal connectivity, the modification of landform and drainage patterns, along with the removal of vegetation is required. From an urban design perspective, and in the context of the detailed site specific approach to identify different precincts and their corresponding treatment relative to proximity,

topography and visibility, this is considered appropriate due to the benefits derived from increased connectivity, residential yield, and the provision and support of public transport infrastructure.

Furthermore, the proposal to retain, extend and enhance wetland and stream corridors in other precincts achieves a balance between connectivity, environmental response and land utilisation when considering the wider Plimmerton Farm site.

Lauren White  
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