



Palmerston North Aokautere Masterplan

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The Vision

Making Aokautere

What makes a great place? What will make us want to return there? What makes a place uniquely itself, characteristic of the land and the people who live there? How might this new part of Palmerston North become one of these favourite places?

This plan starts with the unique qualities of the area - the landscape, its plateaus and gullies. These are protected and enhanced offering diverse ecosystems and integrated open space and stormwater management.

A connected network of attractive streets is created that provides high amenity residential settings, balanced with the need to facilitate safe movement and deliver habitat and water management outcomes.

Memorable residential neighbourhoods are established through a 'character areas' approach, providing distinctive, legible locations supporting a range of housing densities.

Good access to local services and facilities is assured through the design of a neighbourhood centre.

Housing is designed and planned with a high level of amenity, ensuring quality outlook, sunlight, open space and multiple connections with adjoining areas.

Lastly, the plan incorporates sustainable best practice including landscape-led approaches, water sensitive urban design, walkable neighbourhoods providing local services /facilities, public transport-based planning and mixed density housing.

a Great Place

A Masterplan for Palmerston North's Aokautere area is proposed that will complete the Aokautere suburb. It will provide for an additional population of around 2,800 supported by local shops all within an exceptional landscape setting that protects and enhances Aokautere's natural gullies system.



1

Introduction

The Aokautere Masterplan (the Plan) sets the conditions for comprehensive development of some 454Ha of land between the foothills of the Ruahine /Tararua Ranges and the south bank of the Manawatū River. The Plan necessarily integrates with the existing neighbourhood areas of Turitea, Aokautere and Fitzherbert. It reflects the Council's aspirations for a sustainable suburb in a high quality landscape setting, helping to guide the development intentions of land owners and inform infrastructure provision. The Plan argues for a departure from standard development practice by promoting a 'landscape-led' approach and development densities that support local services and facilities. It recommends a plan that has been robustly prepared, tested with stakeholders and that can be taken forward as a District Plan Change - ensuring the future for the area is embedded in planning policy.



1.1 Purpose & Outcomes

The underlying purpose of the Plan is to manage growth and change in an area that has hitherto evolved in piecemeal fashion. The Plan does this in a way that takes forward Council intentions towards housing growth. The Plan fundamentally addresses the council's desire for urban design best practice to steer future development across the city. It provides certainty to public and private sector interests.



The Masterplan will support a District Plan Change that will establish a Structure Plan for the area and see up-zoning of specific areas from rural to residential activities.

In summary, the Masterplan:

- Expresses the desired spatial form and structure of the area, completing the Aokautere suburb.
- Acts as a frame of reference for both public and private sector that can inform consent negotiations.
- Informs a District Plan Change.
- Records key analyses - issues and constraints across the area.
- Provides overarching Design Principles to ensure a sustainable development approach and to assess departures from the Plan.
- Provides indicative block layout designs for key elements.
- Assists PNCC to assess proposals and identify infrastructure and public realm requirements.
- Ensures the protection and enhancement of the area's unique gully systems.

1.2 Site Location

The Masterplan occupies an important location to the south of the city connected by State Highway 57 (SH57) and occupying land between Moonshine Valley and Turitea Valley. As the crow flies the closest parts of the Site are some 4.3km from The Square (the farthest parts are 7.6km away). Massey University's Turitea Campus, the Fitzherbert Science Area and IPU Tertiary Institute are nearby. From a mid-point on the Site, the existing local centre at Summerhill is approximately 1.5km away, suggesting the need for more walkable local amenities.

The project area is 454Ha of which approximately 62Ha comprises existing development, leaving some 392Ha to be considered for a combination of landscape /natural gullies / ecology /recreational functions and built development (housing, local centre and amenities).

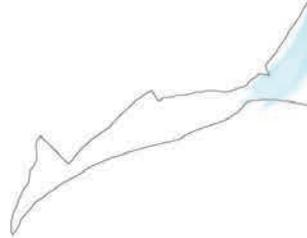
The subject land is contained and defined by several clear landscape boundaries to the west, east and south while to the north SH57 creates a definite infrastructure edge.

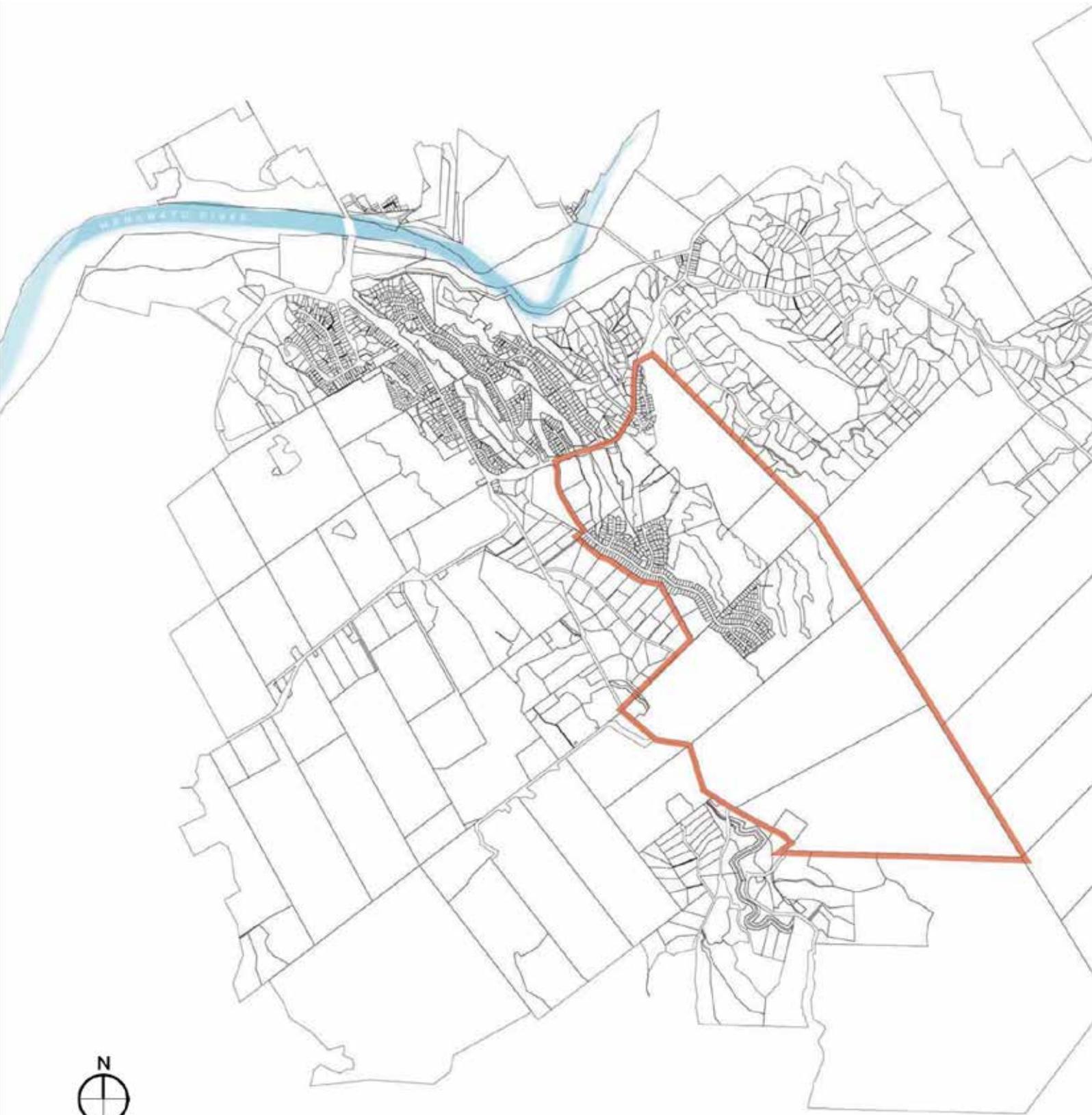
To the west the Turitea Valley escarpment marks a clear transition and edge. Beyond this, the Turitea Stream defines the lower Valley Views terrace. Along Pacific Drive, parts of the escarpment edge are already occupied by residential development. This results in a stark boundary between urban and rural character.

To the south increasing topographical complexity and rising ground towards the Ruahine /Tararua ranges determines southern limits to future suburban extension.

To the east the Moonshine Valley escarpment defines an eastern edge to the flatter plateau 'fingers'. Though the Aokautere boundary extends down to Moonshine Valley Road itself, this eastern strip of land is not considered part of any Aokautere masterplan works and remains intact within the District Plan Moonshine Valley overlay.

To the north, the Aokautere area is generally developed up to SH57, although an opportunity exists to extend the 'Abbey Road plateau' towards the highway. Integration with the existing built areas is a critical issue for the Plan to address.





1.3 Masterplan Process

The Aokautere Masterplan results from mutli-disciplinary collaboration informed by systematic analysis and stakeholder engagement. Four years in the making, the plan has already evolved in response to shifting strategic objectives as well as fast-changing conditions ‘on the ground’. Although several components of the plan remain uncertain, underlying design principles and key implementation methods have remained stable since the project’s inception. This stability points to the plan’s on-going resilience and flexibility.

The Aokautere Masterplan was initiated in early 2018 when a core multi-disciplinary project team was established. From the outset, team members included consultants and PNCC officers. Ongoing ad hoc subdivision at Aokautere provided the genesis for the project. In broad terms, the project team was tasked with producing a coordinated plan for completing the new suburb.

By mid-2018, preliminary results from the discovery phase of the project were available. These led to a series

of spatial planning principles, which adapted international best-practice to reflect specific local conditions. Principles include a joined-up street network, new neighbourhood centre and generous public access to Aokautere’s gullies.

The Masterplan process was re-started in January 2019, after a six-month hiatus. At this point, the project team was enlarged to include Tonkin + Taylor’s geotechnical expertise. This led to a small reduction in the area of subdivisible land along gully edges.

New forecasts of housing demand confirmed the need to make the best possible use of available residential land within Palmerston North. This imperative confirmed an early commitment to enable medium density housing and a range of dwelling types.

In August 2019, an all-day public drop-in session was held in the IPU gymnasium. A specially prepared display conveyed initial findings from site/context analyses along with spatial plan principles and an early version of the masterplan. Feedback was



recorded in text and graphics as a set of marked-up plans (pictured).

In addition to the public drop-in, engagement occurred at an individual level with major landowners and other key stakeholders.

The results of this informal consultation were collated under issues like reverse sensitivity and increased traffic volumes. This feedback prompted further adjustments to the masterplan.

Later in 2019, a GHD hydrologist joined the project team and attention focused on water management. The project passed through another discipline-specific lens, when a consultant traffic engineer and transportation planner augmented PNCC's inhouse transport expertise.

During the Masterplan's four-year gestation, the project's strategic and statutory environment changed significantly. The Government's National Policy Statement on Urban Development (NPS-UD) and subsequent Medium Density Residential Standards (MDRS) have reset expectations for greenfield subdivisions. In response, the area of medium-density development

was extended to encompass North Village. In some cases, Aokautere's development standards were altered to anticipate probable changes to Palmerston North's District Plan.

Waka Kotahi (formerly NZTA) re-conceptualised New Zealand's road classifications, taking account of character and street-edge activity as well as multi-modal movement patterns. The new road categories and nomenclature were incorporated in the Masterplan.

The Masterplan changed in extent as land parcels were added or subtracted. Newly consented subdivisions mean that portions of the original plan were excised to become existing residential fabric. In south Aokautere, a sizeable block of rural land was attached to the masterplan and became the site for additional rural residential lots.

Two components of the Masterplan remain uncertain. A proposed retirement village could change the character of North Village. At Adderstone Reserve, the final configuration of house lots and public reserve depends on a land assembly. In both locations, alternative outcomes are presented as 'call-outs' within the Masterplan drawing.

1.4 Land Ownership & Stakeholder Engagement

The subject land exhibits a variety of land ownership conditions from individual lot /dwelling owners to large consolidated land holdings. These larger undeveloped land banks afford opportunities for comprehensive masterplanning, allowing the Aokautere suburb to evolve in a coordinated and managed way.

Stakeholders, both regulatory bodies and private parties have been engaged at various stages of Plan development. Regional and local councils have provided valuable input, but it is acknowledged that subsequent resource consent processes will be required to further address matters of infrastructure provision including 3waters provision.

Palmerston North City Council

Regulation, asset management, utilities & services

Horizons Regional Council

Public transport, water, hazards

Rangitāne o Manawatū

Ministry of Education

Primary school provision

Land Owners

At the time of writing, the larger land holdings included those shown in the figure opposite. Areas to the north of the subject land are owned and partly developed (shown as Fugle interests). To the south, the majority of land is owned and partly developed by Mr Green (shown as Green interests). To the south of the Green interests southern boundary lies farmland owned by Mr Waters (Waters interests). This land is partly zoned Rural Residential and offers opportunities to connect with the Aokautere suburb.

In August and September 2019 informal consultation on the emerging masterplan was held and a wide range of feedback recorded. Issues raised were categorised under topics that included geotechnical, stormwater, movement / access, housing design, landscape, amenities and zoning matters. All topics were reviewed and, when appropriate, adjustments were made to the masterplan.



2

Existing Conditions

2.1 Overview

Analysis of the Aokautere Masterplan area was carried out in 2018-19 and included a wide range of topics that are described in this chapter. Inputs into the analysis were prepared by McIndoe Urban, Hudson Associates, Tonkin+Taylor, GHD, Forbes Ecology, Acousafe, Tanenuiarangi Manawatū and PNCC.

Findings from the analysis informed the development of design principles and spatial concepts that underpin the final masterplan. The following range of analyses were considered:

- **Strategic context:** The wider growth picture for Palmerston North and District Plan provisions.
- **Access and movement:** Traffic and transport connections that serve the area are identified.
- **Landform and topographical**

conditions: The area is highly complex, featuring gullies and ravines as well as flatter plateaus.

- **Strategic views:** Key visibility into and around the Site highlights the importance of escarpments as landmark features.
- **Landscape - streams and vegetation:** Ravines have been formed by the passage of water. Today streams of various types provide natural stormwater retention and run-off. Vegetation of varying types and quality exists.
- **Ecology:** The gullies play an important biodiversity role across the area.
- **Cultural impacts:** Support for mixed density, gully protection and potential for input into naming of future streets and reserves and creating artwork installations.
- **Urban form & spatial structure:**

Existing form is characterised by piecemeal development with pockets of housing that are often poorly integrated.

- **Land use patterns:** Primarily housing serviced by the Summerhill centre. Westmont School and the IPU offer points of difference and educational facilities.
- **Housing vocabulary:** The range of housing types and lots includes suburban and rural lifestyle.
- **Geotechnical assessment:** Slope, land stability and geo-hazards.
- **Services infrastructure:** The provision of reticulated services is recorded based on PNCC data.
- **Acoustic:** Surveys included noise predictions and contour predictions.
- **Stormwater:** The stormwater management analysis and design provide a Stormwater Management Plan (SMP).



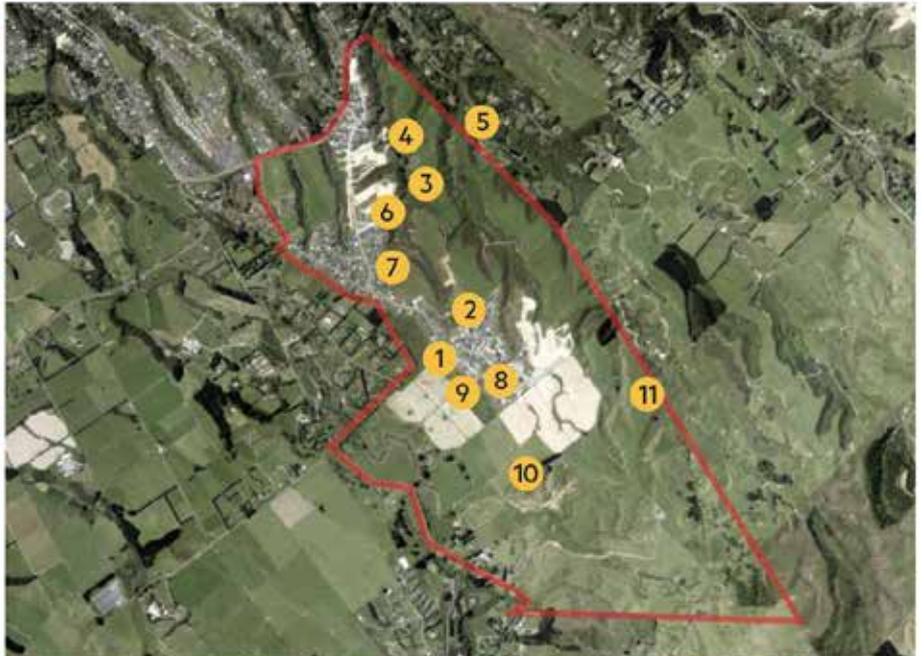
Natural and modified landscapes occur. Preserving gully systems supports high value ecology and amenity.



Improving the relationship between housing and gully edges supports higher quality outcomes.



Integrating and connecting with existing housing areas enhances neighbourhood quality.



Creating a natural, landscaped 'end' to the suburb is more appropriate than terminating at an ownership boundary.

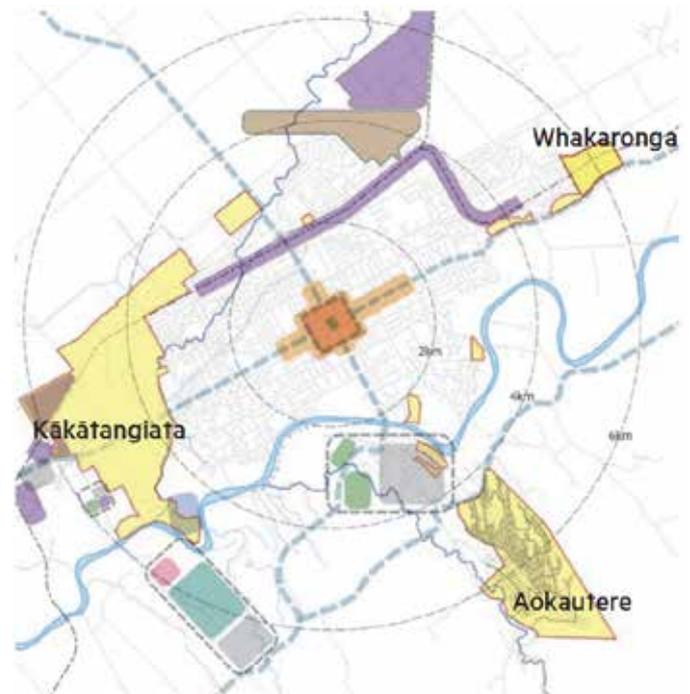
2.2 Strategic Context

Housing Growth

After several decades of low growth, Palmerston North's population is expanding more quickly. The Council anticipates an annual increase of 1.0% over the next ten years followed by more moderate growth of 0.6% to 0.7% per annum. The number of households will increase even faster. If predictions are accurate, the city will need 500 new dwellings each year between now and 2031 and 400 per year between 2032 and 2051.

Council's intentions towards housing growth across the city are set out in the tables below. These indicate that for the city as a whole, construction of 12,971 new dwellings is anticipated in the 30 years to 2051. Half of these are expected to be built on greenfield land.

Three major growth locations are being pursued by Council: Whakarongo, Kākātangiata (formely City West and Anders Road/Racecourse) and Aokautere. Council stated projections at Aokautere range from 400 to 1,200 additional dwellings beyond those currently zoned. The capacity of the Aokautere area is set out later in this report. The projected yield indicates that the upper range of this target is achievable.



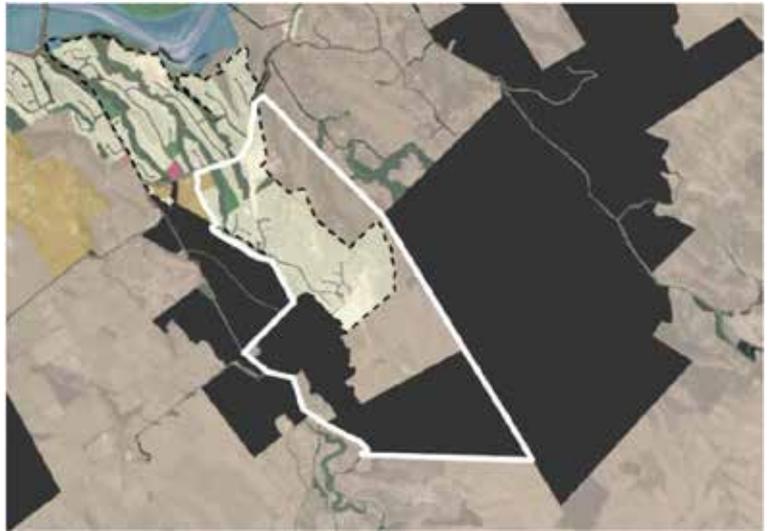
Growth projections and strategy

Time period	% greenfield	#dwellings
2021 - 2024	40	609
2025 - 2031	50	1,762
2032 - 2051	55	4,359
TOTAL		6,730

Greenfield development by area (20-30 years)

Area	# dwellings
Whakarongo	500
Kakatangiata	6,500
Aokautere	1,000
TOTAL	8,000

NPS-UD, MDRS and District Plan



District Plan Zoning showing the Aokautere study boundary and Rural Residential overlay areas (source: PNCC ArcGIS)

The National Policy Statement on Urban Development (NPS-UD) requires all cities to have the capacity to meet housing demand. If necessary, local plans, policies and consenting processes must be adapted to facilitate supply. The NPS-UD raises expectations around population density in relation to public transport and other urban amenities. It also removes the requirement for on-site car parking.

A 2021 amendment to the Resource Management Act introduced Medium Density Residential Standards (MDRS) for major urban areas. As a Tier 2 city, Palmerston North is not currently subject to these new standards. However, the government may impose MDRS in any area that experiences acute housing needs.

PNCC is preparing a District Plan Change that will help to implement NPS-UD and reduce the likelihood of MDRS being imposed. The Plan Change will introduce new provisions for medium density residential areas. In the meantime, current District Plan rules and standards apply.

The Aokautere Development Area is defined in Palmerston North's Operative District Plan Map 10.1. The masterplan area (and subsequent Structure Plan) extends beyond the boundaries in Map 10.1 to include land currently zoned as either Rural or Rural Residential.

Policy provisions for the Aokautere Development Area are reflected in both overarching Section 2 City View Objectives and specific zonal provisions. City View resource management issues identify the need

to increase density to ensure more sustainable use of land and to better support local services. In so doing, a broader density range supports changes in demographics and housing demand. Achieving integrated development through improved connectivity is critical as is providing for active modes and public transport. Protecting natural features and landscapes is also identified. Relevant City View Objectives include: 1, 2, 3, 5, 8, 9, 10, 11, 21, 24 and 26. These objectives address the issues identified above.

Section 7 Subdivision Objectives 1, 2, 3, 4 (in respect of Turitea Stream) and 8 are particularly relevant, as are associated Policies. Aokautere's development is not limited by soil quality because no class 1 or 2 soils exist. In Aokautere and Moonshine Valley Rural Residential Zone areas, subdivision requires minimum lot sizes of 0.5Ha and 1.5Ha respectively. For other Rural Residential Overlay areas a minimum lot size of 1.0Ha exists. As a Restricted Discretionary Activity, subdivision into rural residential lots is subject to Assessment Criteria. In Residential Zone areas, the Aokautere Development Area (Map 10.1) sets a minimum lot size of 400sq.m with an average of 600sq.m and a shape factor accommodating an 18m diameter circle. Assessment Criteria are defined in R7.6.2.1.

Section 10 Residential Zone Objectives 1, 2, 3, 4 and 7 are particularly relevant along with their associated Policies. Objectives seek sustainable use of land, enhancement of amenity and character and mitigation of impermeable surfaces using water-sensitive design.

Maps 10.1 and 10.6.1 apply to the Aokautere Development Area. The latter map defines a 10-15m offset boundary to protect the amenity (visual effects) of the Turitea Valley. Assessment Criteria for Restricted Discretionary activities apply at R10.6.3.1.

City-wide Spatial Context

The Manawatū River once provided Palmerston North with a clear southern boundary. Now, there is an extensive built-up area beyond the river. Development varies in character and intensity. In the west, the Massey University campus possesses central-city scale and complexity. In the east, large rural residential lots merge seamlessly with the surrounding farmland. Between these two extremes, there is a growing area of suburban housing where the pattern of development is more conventional. The proximity of lifestyle blocks and continuously built-up suburban streets provides evidence of rapid evolution from semi-rural fringe to fully fledged suburb. Aokautere differs from the flat gridded suburbs that typify Palmerston North. Its elevated and incised terrain gives the area a distinct identity. Gullies divide the district into a series of gently sloping plateaus. These cross the Site from north-west to south-east, producing a street layout that is organic but also highly directional. Aokautere's broken terrain gives many properties a commanding view and direct access to open space. However the landscape also reduces permeability particularly in an east-west direction.

State Highway 57 passes through the area as Old West Road and Aokautere Drive. As Aokautere's only continuous east-west link, the highway must serve two very different functions. It provides a through route for long distance traffic. It also forms part of most local journeys and locates the Summerhill shopping centre, which is presently the only focus for community identity and commercial activity.

Until a second bridge is built, Fitzherbert Avenue provides the only vehicular link between the two sides of the river. The avenue feeds into Summerhill Drive, giving this north-south street the same strategic importance as SH57. The two primary routes - Aokautere Drive and Summerhill Drive - meet at Turitea Road and create a single transport corridor through the Aokautere district. Branching off in both directions are the north-south streets that access each of the plateaus.

These routes are only locally significant; part of a network of sparsely connected residential streets. The one exception is Pacific Drive, which is longer, wider and endowed with numerous tributary routes.

Despite the bottleneck at Fitzherbert Bridge, Aokautere has ready access to amenities along the north bank of the river. These include the Lido Aquatic Centre, Victoria Esplanade, Manawatū Golf Course and a string of parks: the largest concentration of recreational facilities anywhere in the city.

Although distant from the CBD, Aokautere is close to two major employment centres. Massey University and the Fitzherbert Science Centre are accessible by bike or on foot via the Turitea Walkway. Motorists can travel to and from the two campuses without using Fitzherbert Bridge or the congested Tennent Drive.

