



Fast Track Approvals Sustainability Assessment

Beachlands South Precinct



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Beachlands South LP

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Prepared by:



Signature

Monique Schmidt

Reviewed by:



Signature

Emily Osborn

Approved by:



Signature

Andrew Williams



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Statement of Qualifications

Andrew Williams

- My full name is Andrew John Williams.
- I am the Business Centre Operations Leader (BCOL) for the Brisbane Buildings business at Stantec Australia (Stantec), a global multi-disciplinary engineering consultancy. I previously held the role of ANZ Corporate Sustainability Regional Leader, where I was responsible for leading sustainability strategy and initiatives across the Australia and New Zealand region. Prior to this, I worked as a Principal Sustainability Consultant, delivering sustainability outcomes across a wide range of projects. I hold a Bachelor of Architectural Studies from the University of Auckland and a Master of Building Science (High Performance Buildings) from the University of Sydney.
- I have 18 years' experience consulting on a wide-range of built infrastructure projects throughout Australia and in New Zealand. My entire career has been spent at top-tier global engineering consultancies including WSP, AECOM and Stantec and such I have had exposure to sustainability trends and practices at a global level.
- Over the course of my career, sustainability in engineering has evolved from a predominantly building sector focus to what is today a sector agnostic discipline, and as such I have been afforded the opportunity to contribute to projects across buildings, transport and water infrastructure sectors, as well as consulting on organisational and corporate level sustainability outcomes.
- I have had the fortune to work on a number of landmark developments in Australia, including the Uniting Communities 'U-City' development in Adelaide, which was at the time the highest rating Green Star development in South Australia; Bernborough Ascot (QLD) which was the first Green Star Communities rated retirement living development in Australia; and Pimpama Sports Hub (QLD) which was designed to be an energy self-reliant community facility. Furthermore, I have been involved in a number of New Zealand projects assessing sustainability performance for infrastructure projects for Waka Kotahi as well as providing climate change risk planning for corporate clients across a number of sectors.
- I have been engaged by Beachlands South Limited Partnership (BSLP) since September 2023 to give a global perspective on trends in sustainable development as they relate to the Beachlands South development (the development or PPC88) and have continued to support this project throughout the Fast-track Approvals Act (FTAA) process.
- I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted material facts known to me that might alter or detract from my evidence.

Monique Schmidt

- My full name is Monique Schmidt.
- I am a Senior Sustainability Consultant at Stantec Australia (Stantec), a global multidisciplinary engineering and consulting firm. I hold a Doctor of Philosophy (PhD) from The University of Melbourne, a Master of Science in Environmental Design and Engineering from University College London, and a Master of Architecture from the University of Cape Town.
- I have more than 10 years of experience in sustainability, climate resilience and sustainable development across Australia, New Zealand, the United Kingdom, South Africa and the United States. My experience spans research, academia and industry, providing me with a broad



understanding of international sustainability trends, policy frameworks and best-practice approaches to sustainable development.

- Throughout my career, I have worked across the building, infrastructure and precinct sectors, supporting public and private sector clients in the integration of sustainability, climate resilience, carbon reduction, resource efficiency and long-term environmental performance outcomes. My work has included sustainability strategy development, climate risk and adaptation planning, life cycle assessment, decarbonisation pathways, sustainable master planning and the preparation of sustainability assessments for major developments and infrastructure projects.
- Relevant to this assessment, I have contributed to a range of large-scale urban development, health, education and infrastructure projects across Australia and New Zealand, providing strategic sustainability advice and evaluating opportunities to support resilient, low-carbon and liveable communities.
- I have been engaged by BSLP to undertake a review of the sustainability initiatives proposed as part of the Beachlands South development and to assess their alignment with recognised sustainability principles, industry best practice and relevant planning objectives.

Emily Osborn

- My full name is Emily Osborn
- I am a Principal Project Technical Leader at Stantec Australia (Stantec) a global multidisciplinary engineering and consulting firm. I hold a Bachelor of Applied Science, Environmental Engineering for the University of Waterloo. I am also an accredited professional with the Green Building Council of Australia, and Infrastructure Sustainability Council of Australia and New Zealand.
- I have nearly a decade of experience in sustainability, climate resilience, and major project delivery across Australia, New Zealand and Canada. I have worked at boutique sustainability firms, major contractors, and global consultancies including Deloitte, Hatch and Stantec.
- I have supported the sustainability assessments of multiple community developments in New Zealand, located in Ruakaka, Karaka and Milldale.
- I have been engaged by BSLP since September 2023 to give a global perspective on trends in sustainable development as they relate to PPC88 and have continued to support this project throughout the FTAA process.
- I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted material facts known to me that might alter or detract from my evidence.



Executive Summary

This report has been prepared by Stantec in support of a substantive application submitted by Beachlands South Limited Partnership (BSLP) under the Fast-track Approvals Act (FTAA). The Project name is 'Beachlands South' and is included in Schedule 2 of the FTAA as a Listed Project with significant regional or national benefits. The Project location or Site is located across approximately 159.58 hectares of live zoned land and approximately 108.6 hectares Future Urban zoned land at 110 Jack Lachlan Drive, and 620, 712, 758 and 770 Whitford-Maraetai Road, Beachlands.

The proposed development seeks resource consent for a comprehensively planned, public transport-focused community within eastern Auckland, comprising approximately 2,000 residential dwellings, 27,000 m² of commercial floor area, 30,000 m² of light industrial space, a hotel and conference venue, community facilities, and the potential development of primary and secondary schools. The Project also includes extensive ecological restoration and open space networks, walking and cycling infrastructure, coastal access enhancements, staged transport upgrades, and the provision of supporting infrastructure including water, wastewater, stormwater, telecommunications, and power services. The Project forms part of Auckland's wider urban growth strategy and will play an important role in responding to long-term housing demand, infrastructure needs, and population growth pressures while supporting the delivery of a well-functioning urban environment.

The purpose of this report is to demonstrate how sustainability measures embedded within Beachlands South contribute toward regional and national benefits relevant to the FTAA pathway, while providing information regarding how those outcomes are secured. The assessment has been prepared to support consideration of sustainability outcomes alongside broader economic; infrastructure and community benefits associated with the development.

Beachlands South has been guided by the Beachlands South Masterplan Sustainability Strategy, which establishes six interconnected sustainability themes:

1. Water Management and Water Sensitive Design.
2. Biodiversity and Ecological Regeneration.
3. Health, Wellbeing and Culture.
4. Low-carbon Development.
5. Renewable Energy and Energy Efficiency.
6. Transport - Modal Shift and Healthy Streets.

Collectively, these themes establish an integrated sustainability framework intended to support environmental resilience, ecological restoration, long-term liveability and reduced environmental impact while strengthening community outcomes and climate responsiveness.

This assessment identifies that Beachlands South contributes toward broader regional and national objectives relating to housing supply, climate resilience, ecological protection, infrastructure resilience and sustainable urban growth. The development responds to changing expectations around liveability, movement patterns and neighbourhood accessibility while supporting Auckland's strategic growth direction and long-term resilience objectives. Sustainability outcomes are assessed through a structured delivery framework distinguishing between mandatory planning requirements, policy-supported outcomes, proposed conditions of consent and measures requiring future confirmation through detailed design pathways.



Beachlands South Precinct, Sustainability Assessment

Executive Summary

It is noted that while a number of sustainability outcomes are set out in the Beachlands South precinct provisions, supporting technical reports prepared for the Fast-track application, and proposed consent conditions, others remain subject to confirmation at future stages of design, detailed engineering, or sub-development. This report provides a snapshot of the development at the FTAA stage, with building-level sustainability measures expected to be refined and confirmed at subsequent design and building consent stages. Accordingly, this assessment distinguishes between measures that are mandatory, committed, or aspirational, and identifies the mechanisms through which these outcomes are intended to be delivered. Outcomes described in this report should be interpreted in the context of their current delivery status and level of certainty.



1 Introduction

This report has been prepared in support of a substantive application submitted by Beachlands South Limited Partnership (BSLP) under the Fast-track Approvals Act (FTAA). The Project name is 'Beachlands South' and is included in Schedule 2 of the FTAA as a Listed Project with significant regional or national benefits.

1.1 Purpose of the Report

This Sustainability Assessment has been prepared by Stantec on behalf of Beachlands South Limited Partnership in support of a FTAA application for the Beachlands South Project. The report provides an assessment of the sustainability outcomes associated with the proposed development and documents how these outcomes align with regional and national benefit considerations relevant to the FTAA approvals pathway.

The assessment draws together sustainability initiatives, planning provisions and supporting technical information to provide a transparent overview of how sustainability outcomes are intended to be delivered across the Project. The report also establishes the strategic sustainability context for the project and demonstrates alignment with the sustainability vision and objectives established through the Beachlands South Masterplan Sustainability Strategy.

1.2 Scope and Objectives

This report provides a strategic assessment of the sustainability outcomes, initiatives and delivery mechanisms associated with the Beachlands South Project. It demonstrates how the proposed development supports the sustainability objectives and policies of the precinct while delivering broader regional and national benefits, including contributions to climate change mitigation through the reduction of greenhouse gas emissions. The report also considers how these outcomes align with the purpose and objectives of the FTAA.

The objectives of this report are to:

- Demonstrate sustainability outcomes and broader benefits: Assess how sustainability initiatives proposed for Beachlands South contribute to regional and national benefits, including environmental, social, infrastructure and long-term resilience outcomes relevant to the FTAA and Beachlands South Precinct framework.
- Document sustainability measures and implementation pathways: Capture sustainability initiatives that are proposed, committed to, or embedded through development provisions, supporting technical documentation and strategic sustainability objectives to demonstrate delivery pathways and build confidence to achieve intended outcomes.

1.3 Fast Track Approvals Context

The Beachlands South Project is being progressed through the FTAA pathway established by the New Zealand Government to facilitate the delivery of infrastructure and development projects that deliver significant regional or national benefits.



The purpose of the FTAA is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.

This report supports that assessment by identifying sustainability measures proposed, embedded or intended across the Project and demonstrating how these measures contribute to achieving significant regional or national benefits in context of the FTAA framework.

1.4 Report Methodology

This assessment draws on a range of source documents, including the Beachlands South Masterplan Sustainability Strategy (March 2022), the operative Beachlands South Precinct Chapter I458, and technical reports prepared in support of both the Plan Change 88 (PPC88) process and the FTAA application.

The assessment is structured around the six sustainability themes established within the Beachlands South Masterplan Sustainability Strategy:

- Water Management and Water Sensitive Design.
- Biodiversity and Ecological Regeneration.
- Health, Wellbeing and Culture.
- Low-carbon Development.
- Renewable Energy and Energy Efficiency.
- Transport - Modal Shift and Healthy Streets.

Each sustainability initiative has been reviewed against operative planning provisions, FTAA supporting documentation and relevant technical assessments to identify the basis through which outcomes are intended to be delivered. Measures are assessed according to their current delivery mechanism, distinguishing between:

- Mandatory requirements secured through operative precinct provisions.
- Outcomes encouraged through policy direction or assessment criteria.
- Commitments proposed through the proposed conditions of consent in the FTAA application.
- Initiatives requiring future confirmation through detailed design, design guidelines or subsequent implementation pathways.



2 Development Overview

2.1 Site Context and Location

Beachlands South is located within the Beachlands-Maraetai area in eastern Auckland, New Zealand, approximately 35 km south-east of Auckland Central. The site is positioned immediately adjacent to the existing Beachlands township and forms part of Auckland's wider urban growth area identified to accommodate future population growth and housing demand. The surrounding environment comprises an established coastal settlement pattern characterised by residential neighbourhoods, rural land, open space networks and ecologically significant coastal environments associated with the Hauraki Gulf.

The site benefits from strategic access to existing transport infrastructure and community amenities, including proximity to Pine Harbour Marina and Ferry Terminal, which provides direct public transport connections to Auckland's city centre, refer to Figure 1. Beachlands and the surrounding eastern growth corridor continue to play an important role in supporting Auckland's long-term urban expansion, housing supply and community infrastructure needs. The location presents an opportunity to integrate future growth with existing transport networks, employment opportunities, coastal open spaces and community facilities while responding to the unique environmental and landscape characteristics of the area.



Figure 1. Beachlands South site location within the wider Auckland context, Source: www.topomap.co.nz

2.2 Beachlands South Overview

The Project location or Site is located across approximately 159.58 hectares of live zoned land and approximately 108.6 hectares Future Urban zoned land at 110 Jack Lachlan Drive, and 620, 712, 758 and 770 Whitford-Maraetai Road, Beachlands.

In summary, the Project will provide for the development of live zoned land at Beachlands into a comprehensively planned and public transport focussed community to achieve a well-functioning urban environment comprising residential dwellings, a hotel and conference venue, community and commercial activities, light industrial activities, protected ecological restoration areas, walking and cycling networks, and community facilities, and enable the potential development of two schools, as well

as all associated earthworks and all associated infrastructure including transport facilities, intersection upgrades and roading, telecommunications, power, and water supply, stormwater, and wastewater infrastructure (including any treatment or storage facilities, drainage, pipes, pump stations, outfalls and discharges). A portion of Future Urban zoned land will be used for wastewater management purposes.

Key elements of the Project include:

- Residential activities comprising approximately 2,000 dwellings in a variety of housing types, densities and vacant sites for future residential development.
- Establishment of a commercial local centre supported by employment opportunities within and around the periphery of the local centre and on the Whitford-Maraetai Road frontage comprising approximately 27,000 m² of commercial GFA and 30,000 m² of light industrial GFA.
- Education facilities comprising the development of both primary and secondary schools.
- Establishment of an Ecological Protected Area Network (EPAN) comprising approximately 75 hectares of land being replanted, restored, maintained and enhanced including preservation of streams and their margins.
- A series of open spaces including a suburban park, neighbourhood parks, the Fairway Reserve, golf course, esplanade reserve and riparian margins.
- Provision of public access to and along the coastal marine area and the creation of a quality coastal pathway.
- Public transport enhancements and integrations including expanded ferry passenger capacity.
- Staged road upgrades including the provision of pedestrian and cycling facilities along Jack Lachlan Drive, the upgrade of Whitford roundabout, a series of intersection upgrades.
- Establishment of infrastructure to service the project including wastewater, water supply, stormwater, telecommunications and power.

3 Strategic Sustainability Context

3.1 Sustainability Strategy for Beachlands South

3.1.1 Approach

The Beachlands South Sustainability Strategy (Studio Pacific Architecture, Jasmax, Studio Woodroffe Papa and Woods Bagot, 2022) prepared as part of the Plan Change 88 (PPC88) process, establishes the overarching sustainability vision, objectives and performance aspirations that guide the masterplanned community. The strategy positions sustainability, biodiversity and resilience as core drivers of the development approach, with an emphasis on creating a low-impact, regenerative and climate-responsive community that integrates with the surrounding coastal and ecological landscape.

The strategy adopts a holistic and systems-based approach to sustainability, recognising the interconnected relationship between water, ecology, transport, energy, carbon, health and community wellbeing. It seeks to deliver long-term environmental, social and economic outcomes that support future residents while contributing positively to the wider Beachlands area and Auckland region.

The Sustainability Strategy is informed by national and international frameworks and policy drivers, including:

- New Zealand climate response objectives and net-zero carbon ambitions.
- United Nations Sustainable Development Goals (SDGs).
- Climate adaptation and resilience principles.
- Whole-of-life thinking relating to environmental outcomes and long-term community resilience.
- Regenerative and low-carbon urban development principles.

3.1.1.1 Key Sustainable Themes

The Sustainability Strategy identifies six key sustainability themes that collectively establish the environmental and community framework for Beachlands South.

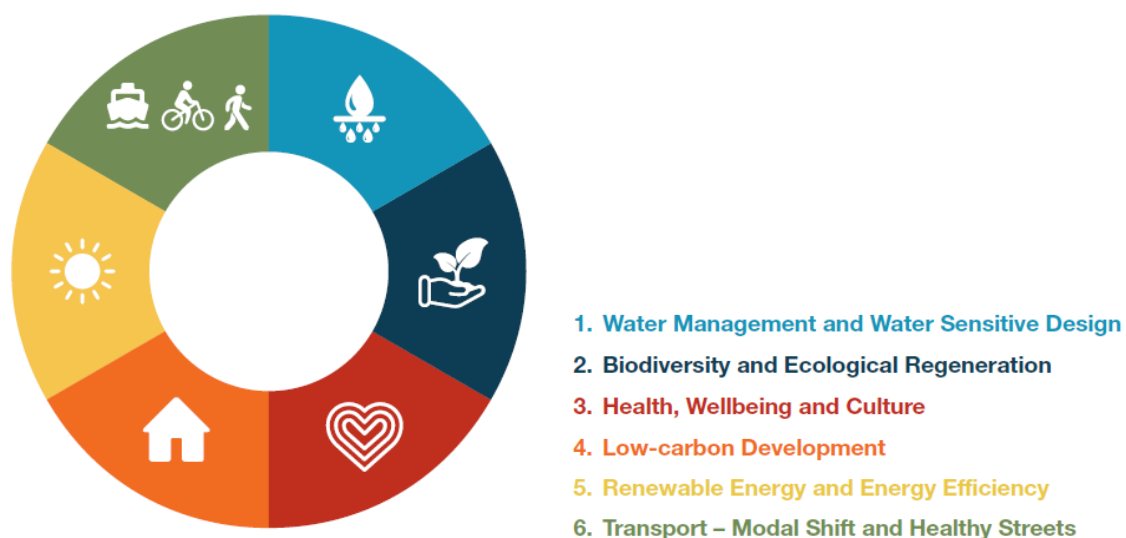


Figure 2. Key Sustainable Themes

Beachlands South Precinct, Sustainability Assessment

3 Strategic Sustainability Context

The sustainability themes have been developed as an interconnected framework rather than standalone initiatives. Water management outcomes support biodiversity enhancement, ecological restoration contributes to climate resilience and carbon sequestration, while transport and urban design initiatives support health, wellbeing and reduced operational emissions.

Table 1. Key Sustainable Themes Intent

Theme	Strategic Intent
1. Water Management and Water Sensitive Design	Integrated three waters management to support long-term water resilience, environmental protection and community outcomes.
2. Biodiversity and Ecological Regeneration	Protection and enhancement of ecological systems through restoration planting, habitat creation and improved ecological connectivity.
3. Health, Wellbeing and Culture	Built environment outcomes that support physical, social, cultural and community wellbeing, including alignment with Te Ao Māori values and connections to nature.
4. Low-carbon Development	Reduction of embodied and operational carbon alongside carbon sequestration opportunities through landscape and planting strategies.
5. Renewable Energy and Energy Efficiency	Energy efficient buildings and infrastructure supported by renewable energy generation and reduced operational demand.
6. Transport – Modal Shift and Healthy Streets	Prioritisation of active transport and reduced reliance on private vehicle use to create healthier and more connected communities.



Figure 3. Key sustainable themes for Beachlands South, Source: Beachlands South Masterplan, March 2022

3.2 Sustainability Framework within the Beachlands South Precinct

The Beachlands South Sustainability Strategy informed the development of the sustainability-related objectives, policies and assessment criteria now embedded within the operative Beachlands South Precinct (I458) of the Auckland Unitary Plan. These provisions form part of the statutory framework for assessing subdivision and development within the precinct and provide the primary mechanism through which many of the sustainability outcomes identified in the Sustainability Strategy are implemented and secured.

The precinct provisions address a range of sustainability outcomes including water management, ecological protection and restoration, active transport, energy efficiency, low-carbon development, cultural values, open space provision and community wellbeing. Together, these provisions establish a planning framework that guides future development and provides ongoing consideration of sustainability outcomes throughout the consenting process.

Accordingly, the sustainability measures assessed in this report are not solely derived from strategic aspirations. Many have been translated into operative planning provisions that now apply to development within the precinct and form part of the statutory assessment framework for the Project.

3.3 Benefits of the Project

3.3.1 Well-Functioning Urban Environment

The FTAA identifies contribution to a well-functioning urban environment, as defined by Policy 1 of the National Policy Statement on Urban Development 2020 (NPS-UD), as a relevant regional and national benefit consideration. Beachlands South has been planned as an integrated, masterplanned community that combines housing, employment opportunities, community facilities, education, open space and transport infrastructure within a connected urban framework.

The development is intended to support a range of housing types and densities alongside local employment opportunities, community services and recreational amenities. Key elements of the project include a local centre comprising commercial and employment activities, provision for primary and secondary schools, community facilities, public open space, and an integrated walking and cycling network that connects residents to key destinations within the precinct and the surrounding area.

The project also seeks to improve accessibility between housing, jobs, community services and natural spaces through a connected movement network that supports walking, cycling and public transport use. The proximity of the development to the Pine Harbour ferry service, together with planned active transport connections and local employment opportunities, is intended to reduce reliance on private vehicle travel while improving access to employment, education and community facilities for future and current Beachlands residents alike.

These outcomes align with the principles of a well-functioning urban environment by supporting access to a variety of housing options, employment opportunities, community services, open spaces and transport choices within a coordinated and connected urban structure. Collectively, these measures contribute to long-term liveability, accessibility and community wellbeing while supporting Auckland's broader urban growth objectives.



3.3.2 Climate Change Mitigation

The FTAA identifies support for climate change mitigation, including the reduction or removal of greenhouse gas emissions, as a relevant regional and national benefit. Beachlands South incorporates a range of measures intended to reduce operational emissions associated with transport, buildings and infrastructure while supporting a lower-carbon pattern of urban development.

Transport is one of the largest sources of greenhouse gas emissions in New Zealand and represents a significant component of the long-term carbon footprint of new communities. Auckland Council's Transport Emissions Reduction Pathway identifies increased active and public transport use as a key mechanism for reducing transport-related emissions. The Beachlands South Project has been structured to encourage walking, cycling and public transport use through an integrated movement network, connections to the Pine Harbour ferry service, and the provision of employment, education and community facilities within the precinct.

The project also incorporates a range of measures that support energy efficiency and reduced operational energy demand. The Beachlands South Sustainability Strategy promotes passive design principles, improved building performance, and consideration of renewable energy technologies to support lower operational emissions across residential and non-residential development. In addition, the extensive ecological restoration and native planting proposed throughout the precinct contribute to long-term carbon sequestration while delivering broader biodiversity and environmental benefits.

3.3.3 Climate Change Adaptation and Resilience

The FTAA identifies support for climate change adaptation, the reduction of risks arising from natural hazards, and the improvement of community resilience as relevant regional and national benefits. Beachlands South incorporates a range of measures intended to enhance the long-term resilience of the community and supporting infrastructure in response to future climate conditions.

The project adopts a multi-source water supply strategy designed to provide a reliable and resilient potable water system for the development. Water supply is proposed to be provided through a combination of bulk supply (PHLL), existing and proposed groundwater bores, with rainwater harvesting incorporated to offset non-potable demand and reduce reliance on groundwater sources. This approach supports overall system resilience and long-term water security (refer Beachlands South Water Supply Concept Report, 2026)

The development also incorporates water sensitive design principles and flood management measures intended to respond to future climate conditions and changing rainfall patterns. Stormwater infrastructure, attenuation measures and waterway management strategies are designed to manage runoff, protect receiving environments and reduce the potential impacts of flooding across the precinct.

In addition to physical infrastructure measures, the project promotes broader community resilience through the integration of green infrastructure, ecological restoration, connected open space networks and climate-responsive planning. These measures support the ability of the community to adapt to changing environmental conditions while contributing to the long-term resilience and functionality of the precinct.



3.3.4 Addressing Significant Environmental Issues

Beachlands South incorporates a range of measures intended to protect, restore and enhance ecological values across the site while supporting the long-term health of terrestrial, freshwater and coastal environments.

A key environmental outcome of the project is the establishment of the Ecological Protected Area Network (EPAN), which provides for the protection, restoration and ongoing management of significant ecological areas throughout the precinct. The EPAN is embedded within the operative Beachlands South Precinct provisions and includes the protection of streams, wetlands, coastal margins and areas of indigenous vegetation. These areas are intended to be managed and enhanced over time through ecological restoration, revegetation and long-term stewardship arrangements.

The project also incorporates measures to improve ecological connectivity across the site and strengthen links between existing habitats and the wider surrounding landscape. Riparian restoration, native planting and habitat enhancement initiatives are intended to improve biodiversity outcomes, support ecosystem function and contribute to the protection of freshwater and coastal receiving environments.

Environmental outcomes are further supported through integrated water sensitive design measures that seek to improve water quality and manage stormwater runoff before discharge to receiving environments. These initiatives contribute to the protection of ecological values while supporting broader environmental resilience objectives.

3.3.5 Building Sustainability Measures

The approach to building-level sustainability for Beachlands South has been developed to ensure that high-quality environmental and occupant outcomes are achieved at the dwelling and commercial building scale, while allowing for appropriate flexibility to respond to evolving standards, tools, and industry practices over the life of the development.

The project has progressed through a period of significant change in both regulatory requirements and sustainability assessment methodologies. Sustainability rating tools continue to evolve over time to reflect updated scientific understanding, regulatory baselines, and market expectations. As such, committing to a specific rating tool or performance threshold at this stage, well in advance of detailed building design and construction, introduces uncertainty as to the precise nature of the obligation being undertaken.

Accordingly, the Project does not prescribe a fixed sustainability rating outcome at this stage. Instead, building-level sustainability performance will be addressed at the building consent stage via a condition of the resource consent process at the appropriate time, commensurate with:

- The design development of individual buildings.
- The relevant sustainability tools, standards and regulatory requirements current at the time of application.

This approach ensures that:

- Sustainability outcomes remain contemporary and relevant.



- The project is able to respond to advancements in tools, technologies and best practice methodologies, rather than being constrained by legacy frameworks.

It is also noted that committing to specific tools and rating outcomes at this stage may, in some instances, result in perverse sustainability outcomes, where design decisions are driven by compliance with outdated or superseded criteria rather than optimisation of actual environmental performance.

3.3.5.1 Building Sustainability Outcomes

Notwithstanding the above, Beachlands South is committed to delivering high-quality sustainability outcomes at the building scale. These outcomes are consistent with the broader sustainability intent of the Precinct provisions and are aligned with established areas of building performance assessment.

To support this, future development will aim to incorporate building performance measures that contribute to sustainable outcomes across the following key areas:

Energy Efficiency and Thermal Performance

Buildings will be designed to achieve improved levels of energy efficiency and thermal performance, including:

- Building envelopes that exceed minimum regulatory requirements where practicable.
- Optimisation of insulation, glazing, building orientation, shading, and air tightness.
- Efficient heating, cooling and hot water systems.

These measures will support reduced operational energy demand and improved indoor environmental quality.

Thermal Comfort and Overheating

Design responses will promote comfortable internal environments throughout the year, including:

- Passive solar design and appropriate building orientation.
- Shading and measures to mitigate overheating.
- Consideration of internal temperature stability under varying climatic conditions.
- Holistic consideration of the façade, passive and mechanical ventilation strategy, where relevant, to optimise air flow.

Ventilation and Indoor Environmental Quality

Buildings will provide healthy indoor environments through:

- Appropriate ventilation strategies (natural and/or mechanical).
- Management of moisture and condensation risks.
- Provision of adequate daylight and access to fresh air.

Water Efficiency

Water efficiency will be promoted through:

- Incorporation of water-efficient fixtures and fittings.
- Opportunities for rainwater harvesting and reuse where feasible.



- Integration with wider precinct-scale water management strategies.

Materials and Resource Efficiency

Building design and construction will consider the environmental impact of materials, including:

- Efficient use of materials and reduction of waste.
- Preference for materials with lower environmental impact where practicable.
- Consideration of durability and lifecycle performance.

Carbon and Environmental Impact

Design approaches will seek to reduce environmental impact over the life of the buildings, including:

- Consideration of operational energy efficiency strategy, energy sources and the associated emissions.
- Opportunities to reduce embodied carbon where feasible.
- Alignment with emerging best practice in low-carbon design.

Health, Wellbeing and Liveability

Buildings will be designed to support occupant wellbeing and long-term liveability, including:

- Optimising access to daylight, amenity, outlook, and nature where practicable.
- Consideration of acoustic comfort strategies.
- Functional, adaptable and inclusive design

Resilience and Durability

Buildings will respond to current and future environmental conditions through:

- Durable material selection and robust construction methods.
- Consideration of climate and operational resilience.
- Integration with broader site-wide resilience strategies.

3.3.5.2 Implementation Through Consent Processes

The above measures will be developed and substantiated at the time of building consent via a condition of resource consent for individual buildings, where sufficient design information is available to:

- Demonstrate alignment with the relevant Precinct provisions; and
- Confirm that proposed buildings achieve high-quality and verifiable sustainability outcomes.

This staged approach ensures that sustainability performance is:

- Assessed at the appropriate level of detail.
- Responsive to current tools, standards and regulatory settings.
- Delivered in a manner that is both practical and robust over the life of the development.



4 Sustainability Themes

The six sustainability themes assessed in this section originate from the Beachlands South Masterplan Sustainability Strategy (Studio Pacific Architecture, Jasmax, Studio Woodroffe Papa and Woods Bagot, March 2022), prepared as part of the PPC88 process and subsequently informed the sustainability related provisions now embedded in the planning framework of the Beachlands South Precinct. That strategy established the overarching sustainability vision for Beachlands South across six interconnected focus areas: Water Management and Water Sensitive Design; Biodiversity and Ecological Regeneration; Health, Wellbeing and Culture; Low-Carbon Development; Renewable Energy and Energy Efficiency; and Transport, Modal Shift and Healthy Streets.

Since the Sustainability Strategy was published, a significant step has occurred: PPC88 became operative on 24 January 2025. In doing so, it embedded a number of the strategy's core sustainability initiatives as assessment criteria and supporting objectives and policies within the Auckland Unitary Plan (AUP) Precinct I458, Beachlands South.

This section assesses each theme against the current state of delivery, making explicit the distinction between:

- **Relevant rules:** operative AUP provisions under I458.6
- **Planning provisions:** objective, matters of discretion and assessment criteria that are assessed in consent applications but are not enforceable as hard standards.
- **Commitments through this FTAA application:** measures being delivered and/or conditioned through this substantive application, which will become enforceable once consented.
- **Future design stage:** initiatives that are intended to explored and implemented in future design stages. These are identified in *italics* in the tables below.

The six sustainability themes are interconnected rather than standalone. For example, water management measures support biodiversity and ecological restoration outcomes, while transport, energy efficiency and low-carbon development initiatives collectively contribute to reduced greenhouse gas emissions. Similarly, access to open space, active transport networks and ecological areas supports both environmental and community wellbeing outcomes. As a result, many sustainability initiatives contribute to multiple environmental, social and resilience outcomes across the precinct.

Outcomes described within each theme vary in their level of certainty, ranging from secured provisions to aspirational initiatives subject to future design and implementation.

4.1 Water Management and Water Sensitive Design

4.1.1 Theme Overview

Water Management and Water Sensitive Design is a foundational theme for Beachlands South, reflecting both the site's coastal and ecological setting. The strategy takes an integrated three waters approach; managing potable supply, non-potable demand, stormwater, and wastewater as an interconnected system rather than separate engineering problems.

The Sustainability Strategy describes this theme as delivering an innovative and resilient three waters management strategy to ensure long-term benefit to the development, the wider community and



surrounding natural environment. Several of the theme's core initiatives have since been embedded as mandatory standards within Chapter I458 of the AUP, as identified in Table 2 below.

4.1.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework for Beachlands South Precinct.

Table 2. Water Management and Water Sensitive Design: Summary of Key Measures

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Potable Water Supply	- All subdivision and development must be serviced by adequate water supply infrastructure. - Private reticulated supply is permitted and connection to a public network is not required. - On-site groundwater aquifer supply and treatment is the confirmed infrastructure solution. - Rainwater tanks required for all dwellings and non-residential buildings for non-potable uses, sized to minimum tank standards. - All buildings fitted with minimum WELS-rated fixtures: 3-star showerheads, 4-star toilets, 5-star kitchen and bathroom taps.	I458.6.4, I458.6.13, non-compliance: NC/D (A12, A16)	Precinct Development Standard / Rule. Committed, This Application
Stormwater Management	- Stormwater from all impervious areas treated to GD01 standard via treatment train approach including WSUD, source treatment, and riparian margin planting. - All development consistent with approved Stormwater Management Plan. - Flood risk managed to 1% AEP including climate change effects on attenuation devices.	I458.6.7, I458.3(25)(26), I458.8.2(9),	Precinct Development Standard / Committed, This Application
Stream and Waterway Health	10m native-planted riparian setbacks on all permanent and intermittent streams, protected in perpetuity. - EPAN legally covenanted on each title. Riparian Planting Plan and Biodiversity Management Plan required at subdivision stage. - Water quality discharge to receiving environments confirmed through modelling. A qualifying matter under s77I RMA.	I458.6.5, I458.6.6, I458.9(1)(2), qualifying matter s77I RMA	Precinct Development Standard / Committed, This Application

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Wastewater	On-site biological nutrient removal with disinfection prior to discharge. Privately managed infrastructure installed by developer, removing reliance on public network. An alternative mechanism exists whereby connection to a public reticulation system may be an option if capacity exists.	l458.6.4	Committed, This Application
Smart Water Management	<i>Potable water reduction targets, smart metering and demand-responsive tariff structures.</i>	-	<i>Aspirational, Future Stage. Non regulatory initiative.</i>

4.1.3 Contribution to Regional and National Benefits

Beachlands South's water management strategy delivers outcomes that extend well beyond the boundaries of the development site, contributing to the long-term resilience of Auckland's water supply, the health of the receiving coastal environment, and the broader national agenda on climate adaptation and water-sensitive urban development.

A significant regional benefit is the proposed locally serviced water infrastructure approach. By establishing on-site groundwater supply, universal rainwater harvesting for non-potable uses, and a privately managed wastewater treatment system, Beachlands South is expected to reduce reliance on Auckland's public three waters infrastructure and particularly the potable water supply from rainfall reservoirs and the Waikato River, both of which are susceptible to low rainfall years/seasons, through a self-sufficient servicing model.

The legally covenanted Ecological Protected Area Network (EPAN), covering the ma stream corridors and wetland habitats across the project area, provides permanent and binding protection for the freshwater values that drain to the Waikopua Estuary and Hauraki Gulf. These are not temporary protections contingent on future decision-making.

The mandatory riparian setbacks, native planting, and Biodiversity Management Plan requirements reinforce this protection across every catchment within the precinct.

Taken together, these measures align with national water resilience objectives identified in New Zealand's National Adaptation Plan 2022, which identifies long-term water supply security and protection of freshwater ecosystems as priority areas of climate risk.

4.2 Biodiversity and Ecological Regeneration

4.2.1 Theme Overview

Biodiversity and Ecological Regeneration addresses the opportunity to go beyond mitigating development impacts to actively restore and enhance the ecological values of the Beachlands South site. The site contains a range of terrestrial, freshwater, and coastal habitats, and the sustainability strategy establishes a comprehensive EPAN that is legally protected in perpetuity through covenant or equivalent mechanism registered on each Certificate of Title. All titles will be subject to the covenant as



the EPAN or parts of it might be a separate lot that all owners will have obligations regarding maintenance and funding that they will be required to contribute to via the Residents Association.

The Sustainability Strategy describes this theme as seeking to protect and enhance existing ecological systems and improve ecological connectivity throughout the site and with the wider landscape, including extensive restorative and regenerative planting, especially around waterways, creating new habitat areas for fauna and flora and a healthy environment for residents and visitors to enjoy.

4.2.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework. Measures shown in *italics* are aspirational in nature and have not yet been secured through a planning or consenting mechanism.

Table 3. Biodiversity and Ecological Regeneration: Summary of Key Measures

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Ecological Protection	- The EPAN is mapped on Precinct Plan 2 and legally covenanted on each Certificate of Title, binding all future landowners to ongoing restoration, maintenance and enhancement. No earthworks or development permitted within the EPAN without resource consent. - Minimum 5m building setback from high value terrestrial and wetland margin areas. - All landowners required to contribute to a Residents Association responsible for ongoing EPAN management and Biodiversity Management Plan implementation.	I458.6.6,	Precinct Development Standard / Committed, This Application
Habitat Restoration and Native Planting	- Protection, restoration and enhancement of terrestrial, wetland and stream habitats required within the EPAN, including revegetation of high value habitats, wetland buffer and enrichment planting. - Restoration of coastal marine biodiversity required, including weed management, selective mangrove management, and mammalian pest control. - Coastal Bird Management Plan required for all subdivision adjoining the coastal marine area.	I458.3(11)(12), I458.9(8)	Precinct Development Standard / Committed, This Application
Ecological Connectivity	Integrated network of green links and open space connections across the precinct as shown on Precinct Plan 3,	I458.3(21), I458.6.8, I458.6.15, I458.9(6)	Precinct Development Standard / Committed, This Application



Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
	connecting homes, the EPAN, coast and existing Beachlands township. - Coastal walkway and Fairway Reserve required prior to occupation. - Ecological corridors designed to contribute to the wider Hunua Ranges to Waitemata Harbour regional connection. - Lizard and Bat Management Plan required for bulk earthworks.		
Pest and Weed Management	Pest and invasive vegetation removal within the EPAN is a permitted activity, enabling proactive management without resource consent. Biodiversity Management Plan required at subdivision stage to address ongoing weed and mammalian pest control.	I458.4.1(A17), I458.9(2)	Precinct Development Standard
Community Stewardship	<i>Community environmental stewardship and education programme, including an on-site native plant nursery and potential partnership with Ngai Tai ki Tamaki for revegetation delivery. Subject to further confirmation.</i>	-	<i>Aspirational, Non Regulatory initiative</i>

4.2.3 Contribution to Regional and National Benefits

The ecological strategy at Beachlands South is intended to contribute towards enhancing Auckland's biodiversity and mitigating environment issues at a scale that is unlikely to be as effectively achieved through fragmented consent processes; such as individual development consents or standard reserve contributions. The EPAN is legally covenanted in perpetuity on every title within the precinct. This is not a voluntary commitment and, once the covenants are in place, cannot be removed without the approval of Auckland Council.

The Biodiversity Management Plan, required at every subdivision stage involving the EPAN, supports that restoration and enhancement. This is not a one-off obligation, but an ongoing, funded, and governed programme across the full development horizon. The requirement for every landowner to contribute to a Residents Association responsible for EPAN management embeds long-term ecological stewardship capacity within the community itself. The development's contribution to the regional ecological corridor between the Hunua Ranges and the Waitemata Harbour is of significance beyond the site boundary.

4.3 Health, Wellbeing and Culture

4.3.1 Theme Overview

The Health, Wellbeing and Culture theme recognises that the built environment is one of the most powerful determinants of community health outcomes. Beachlands South Precinct is designed to support physical, social, cultural, and community wellbeing from the ground up, through walkable



neighbourhoods, biophilic design, accessible open space, community facilities, education facilities, and meaningful integration of Te Ao Maori values in partnership with mana whenua Ngai Tai ki Tamaki.

The Sustainability Strategy describes this theme as delivering a built environment that embodies principles that foster the physical, mental, social, cultural and economic wellbeing of residents and visitors of Beachlands South, including design principles that align with Te Ao Maori values, providing neighbourhoods with strong emotional, visual and physical connections to nature, and including employment opportunity areas and public amenities that promote communities that can sustain themselves.

This theme responds to service gaps identified by Franklin Local Board in its submissions to PPC88, including the absence of a secondary school, limited community facilities, and insufficient open space provision. The key measures are summarised in the Table below.

4.3.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework. Measures shown in italics are aspirational in nature and have not yet been secured through a planning or consenting mechanism.

Table 4. Health, Wellbeing and Culture: Summary of Key Measures

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Community Facilities and Education	- Education facilities (primary and secondary) and community facilities are permitted activities in Sub-precinct C. - Co-location of school and community facilities enabled and encouraged to maximise shared use. - Education facilities with capacity for up to around 2,000 pupils required at development thresholds.	I458.4.3(A38)(A39), I458.9.2 Development Mix Table	Precinct Development Standard / Committed, This Application
Open Space and Active Recreation	- Integrated open space network established across the precinct as shown on Precinct Plan 3, including neighbourhood parks, suburb parks, the Fairway Reserve, and the coastal walkway. - Provision of open space linkages, green links and coastal pathway required prior to occupation. - Publicly accessible open spaces greater than 1,000m² subject to assessment criteria addressing location, design and integration with natural features.	I458.3(21), I458.6.8, I458.6.15, I458.8.2(7)	Planning Provisions / Committed, This Application
Cultural Values and Mana Whenua	Mana whenua cultural, spiritual and historical values recognised, protected and enhanced throughout the precinct.	I458.3(6), I458.6.10,	Precinct Development Standard / Committed, This Application

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Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
	- No buildings or structures permitted within the pa site and surrounds as identified on Precinct Plan 4. - Key views, spiritual connections and sightlines identified on Precinct Plan 4 protected. - Ngai Tai ki Tamaki engaged as a development partner.		
Biophilic Design and Liveability	High quality public realm required throughout the precinct, with buildings designed to address streets and open spaces, provide passive surveillance, and integrate landscape treatment.	1458.3(23), 1458.8.2(1)(b)	Precinct Development Standard / Committed, This Application; implemented through the architectural and landscape drawings that will be consented as part of this application.
Building Comfort and Performance	Passive design principles, including solar orientation, and on-site renewable energy generation encouraged for all dwellings.	1458.8.2(1)(c) (e)	To be delivered as part of building consent design and approval processes
Cultural Landscape and Mahinga Kai	<i>Cultural Landscape Plan to be co-designed with Ngai Tai ki Tamaki, integrating mahinga kai species and Te Ao Maori values throughout the public realm and ecological areas. Subject to further confirmation.</i>	-	<i>Aspirational, Non regulatory compliance</i>

4.3.3 Contribution to Regional and National Benefits

Beachlands South's health, wellbeing and culture outcomes directly address a pattern of underservice that has characterised rapid outer-suburban growth in Auckland, where population growth has consistently outpaced community infrastructure delivery. By embedding schools, community facilities, open space, and active transport infrastructure into the masterplan from the outset, the development supports new residents having access to the services and amenity that support healthy, connected lives from day one.

The provision of education facilities with capacity for up to around 2,000 pupils fills a gap that Franklin Local Board has consistently identified as the most significant community infrastructure deficit in the Beachlands area.

The precinct provisions embed these protections permanently into the planning framework, supports ongoing recognition of mana whenua values across the full development programme regardless of changes in ownership or development parties.



4.4 Low Carbon Development

4.4.1 Theme Overview

The Low-Carbon Development theme addresses the full carbon lifecycle of the development, from earthworks and construction through to operational emissions and long-term sequestration. Transport is treated as the single largest source of lifestyle carbon emissions associated with a residential development of this scale, and the masterplan is specifically structured to reduce vehicle kilometres travelled through mixed-use zoning (resulting in nearby employment), density clustering near public transport, and a high-quality active transport network.

The Sustainability Strategy describes this theme as delivering a low carbon development, with significantly reduced embodied and operational energy for buildings and infrastructure, alongside the enhancement and introduction of significant on-site carbon sequestration through native planting. While the precinct contains objective, policies and assessment criteria relevant to this theme, a number of the more ambitious carbon reduction measures remain dependent on non-regulatory initiative implemented in the future. The delivery status of each measure is identified in the Table below.

4.4.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework. Measures shown in *italics* are aspirational in nature and have not yet been secured through a planning or consenting mechanism.

Table 5. *Low-Carbon Development: Summary of Key Measures*

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Transport and Lifestyle Emissions	- Masterplan structured to enable walking, cycling and public transport as the primary modes of travel, with density clustered around the Pine Harbour ferry terminal and village centre. - Walking and cycling connections to the ferry required prior to occupation. - Measurable mode shift targets required, with transport monitoring at every 500-dwelling threshold. - Travel Management Plan required for all commercial activities greater than 500 m².	I458.3(13)(14)(15), I458.6.3, I458.9(5)(7)	Precinct Development Standard / Committed, This Application
Carbon Sequestration	- Native revegetation required within the EPAN and across the wider precinct to enhance carbon sequestration and biodiversity values. - Restoration planting across inland forest, riparian, and wetland habitat types designed to mature into long-term carbon sinks.	I458.3(8), I458.6.6; 148.62 and Precinct Plan 148.10.1; Precinct Plan 1458.10.3	Precinct Development Standard / Committed, This Application



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Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Embodied and Operational Carbon	- Reduction in embodied and operational carbon encouraged for all buildings. - Building sustainability measures - Optimal solar orientation and passive design principles encouraged for all dwellings.	1458.3(7)(e), 1458.8.2(1)(c)(e), 1458.8.2(5)(j)	Precinct Development Standard / Committed, This Application
Earthworks Optimisation and Waste	- Cut and fill volumes to be optimised through detailed design, using site contours and appropriate housing typologies to minimise soil disturbance. - Waste Management and Minimisation Plans for construction and operational waste to be prepared by sub-developers, aligned with Auckland Council's zero waste to landfill target by 2040.	AUP Chapters E12, E13, 1458. 6.11 + Precinct Plan 1458.10.7' and 'AUP 1458.9.2(1)(d)' and '1458.8.2.(1)(e	AUP Rules and Standards
Design for Adaptability	<i>Design for disassembly and long-term flexibility to support material reuse and extended building lifecycles.</i> <i>Life Cycle Analysis across house typologies to inform embodied carbon assessment. Subject to confirmation of delivery mechanism across sub-developments.</i>	-	<i>Aspirational, Non regulatory compliance</i>

4.4.3 Contribution to Regional and National Benefits

Transport accounts for approximately 17% of New Zealand's total greenhouse gas emissions, with private vehicle use dominant in outer Auckland suburbs (Ministry for the Environment, Emissions Reduction Plan, 2022). Through structuring high density around the Pine Harbour ferry terminal, embedding active transport infrastructure from the outset, increasing access to education, and providing local employment and amenity within the precinct, the Project is contribute to the reduction of greenhouse gas emissions. Current and future residents are encouraged to use of public or active transit through good design and improved services, as well as reducing the need to travel outside Beachlands.

The requirement for native revegetation within the EPAN's open spaces and front yard planting is a growing carbon resource across the project area that contributes to the development's embodied carbon footprint reduction over time.

The encouraged building performance measures, while not mandatory standards, are embedded as assessment criteria in the restricted discretionary consent process, meaning they carry real weight in the evaluation of each development application. Building sustainability measures will be demonstrated at building consent stage.



4.5 Renewable Energy and Household Efficiency

4.5.1 Theme Overview

The Renewable Energy and Energy Efficiency theme focuses on reducing operational energy demand across residential and commercial buildings and generating energy locally through renewable sources where appropriate. New Zealand's electricity grid is already largely renewable, with approximately 85–88% of electricity generated from renewable sources (MBIE, 2024). However, the energy efficiency of the building stock, and the potential for on-site generation and storage to reduce demand on the grid and enhance energy resilience, represents a significant opportunity in a greenfield development of this scale.

The Sustainability Strategy describes this theme as delivering an all-electric, renewable energy sourced residential development with on-site energy generation, energy efficient infrastructure and buildings, reduced water and operational energy demand. The Beachlands South Precinct includes objectives, policies and assessment criteria that support improved building performance and renewable energy outcomes; however, these are not prescribed as mandatory development standards. More ambitious precinct-scale energy infrastructure aspirations identified in the Sustainability Strategy remain subject to further confirmation. The delivery status of each measure is identified in the table below.

4.5.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework. Measures shown in *italics* are aspirational in nature and have not yet been secured through a planning or consenting mechanism.

Table 6. *Renewable Energy and Energy Efficiency: Summary of Key Measures*

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Building Energy Performance	The development supports the incorporation of on-site renewable energy technologies, such as solar PV and heat pump hot water systems, through the detailed design of future buildings where appropriate. To be developed further in future design stages.	l458.8.2(1)(c)(e), l458.8.2(5)(j)	Planning Provisions / Assessment Criteria
On-Site Renewable Energy Generation	- Solar PV panels, solar water heating and heat pump hot water encouraged on residential, commercial and civic buildings where appropriate. - On-site renewable energy generation measures considered as part of restricted discretionary assessment for all dwellings and commercial buildings.	l458.3(7)(d), l458.8.2(1)(e), l458.8.2(5)(l)	Supported Through BSP and Assessment Criteria
Energy Resilience and Smart Infrastructure	<i>Precinct-scale smart energy metering and control systems, battery storage, peak demand management and microgrid connectivity proposed to support energy</i>	<i>No current provision</i>	<i>Aspirational, Non regulatory compliance</i>



		<i>resilience and reduce grid demand. Subject to further confirmation of delivery mechanism and infrastructure staging.</i>	
Life Cycle Analysis	- Life Cycle Analysis across residential house typologies to inform embodied and operational carbon performance across the development's housing mix. - Carbon Assessment (2021) provides an initial evidence base. Subject to confirmation of scope and delivery mechanism at detailed design stage.	No current provision	Aspirational, Non regulatory compliance

4.5.3 Contribution to Regional and National Benefits

The building performance requirements embedded in the precinct provisions, while structured as assessment criteria rather than mandatory standards, carry genuine weight in the restricted discretionary consent process that applies to four or more dwellings across the precinct. Applied consistently across 2,000 plus dwellings and significant commercial floor area, the cumulative effect of the building sustainable measures outcomes contribute toward reduction in operational energy demand compared to standard New Zealand development practice, lowering both carbon emissions and household energy costs across the community.

It is acknowledged that the more ambitious precinct-scale energy infrastructure aspirations, including a microgrid, battery storage and smart energy management system, are not currently secured through the operative planning framework or proposed consent conditions. While these measures align with the long-term vision established in the Sustainability Strategy, their implementation would be subject to future technical, commercial and regulatory assessment. Accordingly, they have been identified as aspirational non regulatory compliance within this assessment.

New Zealand's electricity grid decarbonisation trajectory means that the energy efficiency of buildings, rather than the source of electricity, is increasingly the primary lever for reducing operational carbon in the built environment. The emphasis on passive design, solar orientation, and on-site generation at Beachlands South is well aligned with this national direction, and the scale of the development means that consistent application of these principles across the precinct will support outcomes that go meaningfully beyond what individual consents would achieve in isolation.

4.6 Transport, Mode Shift and Healthy Streets

4.6.1 Theme Overview

Transport is the highest-impact theme in the Beachlands South Sustainability Strategy, both in terms of the carbon emissions associated with private vehicle use and the liveability, health, and community outcomes that flow from walkable, well-connected neighbourhoods. New Zealand has a high level of per-capita vehicle ownership by international standards, with approximately 800 vehicles per 1,000 people, and travel patterns are predominantly characterised by private vehicle use (Environmental Health Indicators NZ, 2025; Ministry of Transport, 2025). In Auckland, this reliance on private vehicles is reflected in urban development patterns that have historically favoured low-density, car-oriented suburban expansion, alongside comparatively lower levels of provision for walking, cycling and public transport infrastructure (Auckland Council, 2018; Daniel & Ovenden, 2025).



The Sustainability Strategy describes this theme as delivering a movement network that prioritises active modes of transport such as walking and cycling, shifting away from car-dependent transportation, making streets safer, quieter and healthier.

4.6.2 Key Sustainability Measures

The Table below summarises the key sustainability measures for this theme, grouped by focus area. The delivery status of each measure reflects its current position in the planning and consenting framework. Measures shown in *italics* are aspirational in nature and have not yet been secured through a planning or consenting mechanism.

Table 7. Transport, Modal Shift and Healthy Streets: Summary of Key Measures

Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
Active Transport Network	- Walking and cycling connections to the Pine Harbour ferry required prior to occupation, including along the coastal walkway and active mode connections within the precinct. - Separated cycling facilities required on all collector roads. Streets designed to provide safe, attractive access for all modes. Low-speed environments on local roads support pedestrian and cyclist priority.	I458.3(15)(17)(20), I458.6.15, (A37, A43)	Precinct Development Standard / Committed, This Application
Public Transport and Ferry Capacity	- Current ferry services operate at or near capacity during peak periods, with reported instances of passengers being unable to board services. Planned upgrades to ferry capacity, including the introduction of larger vessels (up to approximately 170 seats), are expected to increase peak capacity from approximately 550 passengers to approximately 950 passengers. These upgrades are important to support anticipated increases in demand associated with development and to enable mode shift outcomes to be realised in practice. - Development staging tied to ferry capacity upgrades, with specific passenger capacity thresholds required prior to occupation of each development tranche. - Road network upgrades similarly staged and coordinated with development thresholds.	I458.6.3, Tables I458.6.3.1 and I458.6.3.2	Precinct Development Standard / Committed, This Application
Mode Shift Targets and Monitoring	Measurable public transport mode share targets required, scaling from 7% at base to 17% at 2,700 dwellings. Transport Monitoring Report required at every 500-	I458.9(5)(7), Table I458.9.1	Planning Provisions



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Focus Area	Summary of Measures	Key Beachlands South Precinct Provisions	Delivery Status
	dwelling threshold, with remedial action required if targets are not met. - Travel Management Plan required for all commercial activities greater than 500 m². - Existing mode share within Beachlands is relatively low for public transport (approximately 1% for bus and 6% for ferry). The proposed development includes targets to increase this to approximately 4% for bus and 13% for ferry over time. While these targets represent a meaningful increase in public transport use, their achievement will be influenced by the delivery of supporting infrastructure, service improvements, and broader behavioural factors.		
Healthy Streets and Public Realm	- Streets designed to prioritise pedestrian amenity, passive surveillance, and active mode safety. - High quality public realm required throughout the precinct, with buildings addressing streets and open spaces. - Fairway Reserve required as a minimum 20 m wide linear park linking the village centre to the Pine Harbour ferry, available for public use at all times.	l458.3(19)(20)(21), l458.6.8, l458.8.2(1)(b)	Precinct Development Standard / Committed, This Application
Reduced Car Dependency	<i>Car-share scheme operator proposed within the precinct to provide vehicle access without requiring private ownership.</i> <i>Secure residential bicycle storage and end-of-trip facilities including shower and changing rooms in commercial buildings to be confirmed through design guidelines.</i>	AUP E27.6.2.1 (6); AUP E27.6.2.1 (7)	AUP rules and standards. Aspirational, Non regulatory compliance
Multi-Modal Spine and Ferry Enhancement	<i>Multi-modal transport spine providing high-frequency connectivity along the central corridor.</i> <i>Active developer contribution to Pine Harbour ferry service enhancement beyond mandatory capacity thresholds. Subject to further confirmation.</i>	-	Aspirational, Non regulatory compliance

4.6.3 Contribution to Regional and National Benefits

The mandatory staging of development with ferry capacity upgrades supports the public transport infrastructure's evolving pace with population growth rather than lagging behind it as has historically been the pattern in outer Auckland growth areas.



Current mode share within the Beachlands township is approximately 1% for bus and 6% for ferry. The development targets an increase to approximately 4% for bus and 13% for ferry at build-out, broadly representing a significant increase in public transport use.

Planned improvements to public transport connectivity are expected to further support mode shift outcomes. These include the introduction of a new bus route connecting Beachlands to Botany and Panmure via the Eastern Busway, which is anticipated to reduce travel times to Botany from approximately 1 hour 15 minutes to around 1 hour. Longer-term improvements, including enhanced connections toward the airport corridor, are also expected to improve regional accessibility. Auckland Transport has confirmed it will upgrade the Pine Harbour ferry terminal and provide 2 new 160 seat capacity ferries by the end of 2027

Taken together, these improvements, alongside enhanced access to ferry services, are expected to increase the attractiveness and competitiveness of public transport relative to private vehicle use, supporting a gradual shift in travel behaviour over time.

Auckland Council's Transport Emissions Reduction Pathway targets a 64% reduction in transport emissions by 2030, requiring a 10-fold increase in active transport and a 5-fold increase in public transport use. Beachlands South's transport framework is aligned with these regional targets, creating the physical conditions for mode shift from the outset rather than retrofitting active transport into an already car-dependent urban form. The proximity of the development to the Pine Harbour ferry terminal, combined with the active transport network and density clustering around the village centre, has the potential to reduce reliance for daily trips.

The healthy streets design approach generates direct public health benefits, reducing the injury, air quality, and physical inactivity burdens associated with car-dominated urban environments, and contributing to the broader liveability outcomes that underpin the case for this development under the FTAA.

5 Conclusion

This Sustainability Assessment demonstrates that sustainability outcomes have been integrated into the planning and development framework for Beachlands South through a combination of operative planning provisions, proposed development measures and future implementation pathways. The assessment identifies sustainability initiatives across water management, biodiversity and ecological regeneration, health and wellbeing, low-carbon development, renewable energy and energy efficiency, and transport and movement networks that collectively contribute to significant regional or national benefits under the FTAA.

The assessment also demonstrates how sustainability outcomes associated with the project contribute to the regional and national benefit considerations identified within the FTAA. These include supporting a well-functioning urban environment, contributing to climate change mitigation through the reduction of greenhouse gas emissions, enhancing climate change adaptation and resilience, and addressing significant environmental issues through long-term ecological protection and restoration.

This reduction in greenhouse gas emissions is expected to be achieved through a combination of compact, walkable urban form that reduces reliance on private vehicles, energy-efficient building design informed by passive design principles, and the incorporation of on-site renewable energy systems to reduce operational energy demand.

Beachlands South has been planned as an integrated growth area that seeks to respond to contemporary urban development challenges while recognising the importance of environmental stewardship, community wellbeing and long-term resilience. Sustainability measures identified throughout this report contribute toward addressing significant environmental impacts, strengthening ecological outcomes, promoting active and healthy communities, and improving resilience capacity across the development.

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Stantec Australia Pty Ltd
Level 3, 52 Merivale Street
South Brisbane QLD 4101
AUSTRALIA
ABN 17 007 820 322
stantec.com