



To: Beachlands South Limited Partnership From: Andrew Williams

South Brisbane

Project/File: 310204447 Date: 30 April 2024

Reference: Beachlands South Fast Track Referral Application – Sustainability and Greenhouse Gas Emissions

Introduction

Stantec has been engaged by BSLP to provide a global perspective on trends in sustainable development, identify the common attributes of sustainable communities, and consider the Beachlands South Project against those global trends.

Through Plan Change 88 (PC88), approximately 307 hectares of land from Rural Countryside Living was re-zoned to a combination of live urban residential, commercial, and open space zones, in addition to a Future Urban Zone (FUZ). PC88 was granted by independent hearing commissioners on 12 April 2024. This memo has been prepared to support a referral application for the project to be listed in Schedule 2A of the Fast Track Bill.

This memo provides a high-level summary of the work that Stantec has undertaken for PC88 and summarises the sustainability initiatives of Beachlands South that are baked into its design and reflected in the Beachlands South precinct provisions. In granting PC88, Independent Hearing Commissioners endorsed PC88's sustainability initiatives and confirmed that it supports reductions in GHG emissions as required by the National Policy Statement on Urban Development.

Methodology

Stantec assessed the following in assessing the sustainability performance of the development:

- Review of reports prepared for PC88 available via Auckland Council PPC88 website (including the PPC88-specific Sustainability Strategy).
- Drew from experience of local, national and international Stantec expertise relating to sustainable development.
- Review of various Government and Council plans and policies pertaining to sustainability and GHG policy.

Context

Sustainable community developments comprise various characteristics, however, the following overarching attributes are considered key in delivering an integrated and holistic sustainable community development:

- Connection and liveability
- · Healthy and active living
- · Biodiversity and ecological conservation, and

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Resilient and future focused.

Sustainability aspects including decarbonisation and resilience are increasingly becoming a non-negotiable consideration for any community or infrastructure development. Several statutory documents, strategies, and plans have been established across various governance levels in Aotearoa New Zealand that provide guidance on how proposed developments should be assessed and implemented with respect to sustainability, climate change and GHG emissions.

Provision of a range of low-carbon transport options, supported by prioritising the retention and restoration of natural elements, is recommended across the policy landscape to support resilience and decarbonisation. For example, Te Tāruke-ā-Tāwhiri, Auckland's Climate Plan sets the objective to halve GHG emissions by 2030, and reach net zero emissions by 2050, emphasising the importance of "quality company urban form".

In addition, Te Tāruke-ā-Tāwhiri, the Aotearoa Emissions Reduction Plan (ERP) places a substantial emphasis on the innovation and implementation of low-carbon urban development, actively promoting sustainable greenfield development. The plan stresses the significance of robust planning and infrastructure systems that facilitate the rapid and expansive delivery of low-emission and efficient buildings and infrastructure both from an upfront carbon perspective, including through low emissions building design and materials in addition to operational energy efficiency and GHG reduction, ensuring promotion of walking, cycling, and the use of public transport.

Beachlands South Project

As a *comprehensively planned and public transport focussed community*, the Beachlands South project inherently aligns with the attributes of a sustainable community development and delivers on the objectives of key national strategies, policies and plans.

Key sustainable development features incorporated within the project include:

- Establishment and progressive regeneration of the approximately 89-hectare Ecological
 Protected Area Network (EPAN) across the live zone application site and FUZ, acting as an onsite carbon sink consisting of terrestrial revegetation and habitat enhancement, vegetation
 buffers, and native wetland enhancement.
- Capacity for 20ha of significantly enhanced open space and road planting measures to provide further carbon sequestration within the application site (calculated to provide sequestration of embedded emissions from the residential buildings in the live zone).
- Inherent compact urban form, promotion of connectivity, planned walking and cycling paths and
 public transport (including increased ferry capacity) encouraging mode shift (noting the
 calculated decrease in transport GHG emissions per household when set against the baseline
 growth within the current Beachlands).
- Based on extensive modelling, the Development has a demonstrated reduction in Vehicle Kilometres Travelled (VKT) and CO2 emissions per household when compared with a designated baseline of organic growth of Beachlands without the project.
- Reduction in travel through internalisation through increasing local employment opportunities and enabling education facilities.

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• Precinct provisions requiring incorporation of energy efficient design and on-site renewable energy generation in order to reduce the energy consumption of the development.

• Precinct provisions for building adaptability and reduction of building material waste in order to reduce upfront carbon emissions and reduce waste.

 Precinct provisions requiring the adoption of water efficiency measures including water efficient fixtures and non-potable water harvest and reuse strategies for each new building and dwelling.

 Precinct provisions requiring sustainability certification, including 5-star NABERS (commercial) and 7-Star Homestar (residential buildings).

Restoration, replanting and enhancement of the native forest vegetation within the site.

• Forest sequestration to mitigate carbon from the project.

 Providing the opportunity for people to live, work and recreate close to nature offering significant benefits for health and wellbeing and connection to nature.

 The creation of compact neighbourhoods surrounded by nature and an enhanced ecological network to deliver an innovative spatial framework with increased residential densities enabling increased forest yield.

• A balance of nature and urban development while respecting landscape character features.

 Creation of a transit-adjacent development to reduce car dependency and encouraging a modal shift to active mobility and the greater uptake of public transport by creating attractive, connected and walkable urban environments.

Conclusion

Overall, the project promotes sustainability and GHG emissions reduction. This will be achieved through a modal shift to public transport as well as requiring the provision of a highly integrated and connected walking and cycling network including a coastal walkway, implementation of water sensitive design principles (including rainwater harvesting) and promoting low-carbon development with on-site carbon sequestration through native planting to enhance biodiversity values.

Regards,

STANTEC AUSTRALIA PTY LTD

Auto Mandrew Williams

Associate Director

Specialist Services Group Leader

Phone: s 9(2)(a)

s 9(2)(a)