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Azure

Proposed Development

1 Clark St, Southport, QLD



ESD DA Report

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Disclaimer

The buildings were modelled using drawings listed in the Appendix that were current during the period of analysis. Any minor or major changes to the building envelope after the issue of this report may forfeit the results, due to input variables requiring amendments in calculations. Figures generated in this report are based on specific requirements in accordance with Section J of the BCA and do not reflect true annual greenhouse gas emissions.

QA System

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Revision History

Issue	Date	Description	Initials
A	10 th December 2025	Issue A	LH
B	11 th December 2025	Issue B	LH
C`	18 th December 2025	Issue C	LH
D	23 rd January 2026	Issue D	LH
E	30 th January 2026		

INTRODUCTION

Ashburner Francis Pty Ltd has been engaged by Azure to assess the 1 Clark St Development with the Economic Development Queensland, Parklands Priority Development Area Development Scheme (PDA) document, issued Dec 2013. The intent of this report is to outline the ways in which the proposed development addresses the intent of Section 5.4 of the Parklands PDA.

In addition to the items detailed below it should be noted that the update of the QDC MP4.1 and subsequently the requirement to comply with the NCC 2022, is in and of itself a significant jump in the ESD credentials of the development over the requirements of 2013 which was to comply with the 2010 BCA.

Sustainability is a core principle underpinning development within the Parklands Priority Development Area (PDA). The strategy aims to reduce long-term development and living costs by addressing major household burdens such as energy, water, transport, and access to services. Ecological sustainability will be addressed through goals that minimise adverse impacts on natural systems and promote resource efficiency. Key actions include:

- Community education to protect and enhance the natural environment.
- Demand optimisation for water and energy, supported by builder education.
- Renewable energy initiatives to reduce peak demand and greenhouse gas emissions.
- Water self-containment and improved stormwater management.
- Waste reduction and recycling, targeting 60% reuse of construction and demolition waste.
- Urban heat island mitigation to improve amenity and reduce energy use.
- Enhanced public transport access to reduce reliance on private vehicles.

Desired outcomes include:

- 20% reduction in potable water use compared to regulatory requirements.
- Greater than 30% reduction in peak energy demand and 20% reduction in greenhouse gas emissions.
- Increased biodiversity and rehabilitation of degraded sites.
- Use of environmentally responsible materials to lower environmental impacts.

This sustainability framework ensures the Parklands PDA delivers a lasting legacy of ecological responsibility, cost efficiency, and community well-being.

The 1 Clark Street Southport project aims to address these items in the following ways.

WATER

As outlined in the PDA the conservation and optimisation of water use on the project is of the highest importance. Section 5.4 outlines the requirement for demand management strategies including builder education. The goal of reduced potable water use by 20% compared to regulatory requirements is addressed in the following ways:

Optimization of water

- The development proposes the installation of 4-star WELS toilet and showers to residential properties
- Installation of a rainwater tank for irrigation around the community building.
- To reduce evaporation, the installation of a pool blanket should a heated pool be installed
- Installation of 4-star WELS toilets and showers and 5-star WELS urinals in the community building.

WELS fixtures typically yield ~20–35% water savings for showers/toilets. Rainwater for irrigation adds ~5–10% site potable reduction. Combined we believe this pathway reasonably supports ≥20% reduction in potable water use in accordance with the “Desired Outcomes” under Section 5.4 of the Parklands PDA.

TRANSPORT

Section 3.3.1 of the PDA stipulates that a proposed development should create a community which is compact and walkable, comprising areas within a 5 minute walk (400m radius) of a community focal point, which may include a park, public transport stop, active retail use, community facility or similar, in an effort to reduce private vehicles usage the PDA encourages a mode shift to walking, cycling and the use of public transport. In addition to the 400m radius we have adopted industry best practice as a measure of attainment.

Community focal point:

The Woolworths Smith Collective, a group of retail spaces containing a Woolworths, Pharmacy, BWS, Pilates studio and number of café restaurants is located 350m from the proposed site and as such is compliant with this requirement.

Access to public transport:

It is considered best practice in industry to demonstrate access to public transport, such that 75% of dwellings are within:

- 400m walking distance of a bus stop;
- 800m walking distance from a railway station or line haul station; and/or
- 1,200m walking distance from a line haul station located within a town centre.

The Project site is within 600m walking distance of Griffith University Light Rail Station and all dwellings within site are within 200m of a site exit, as such it complies with requirement.

Active transport linkages:

In an endeavour to connect to existing pedestrian footpaths and cycle ways the development proposes to provide connections from the site to existing shared pathways for both walking and cycling. The connections are located on the Clark Street and Village Boulevard frontages, providing direct access to the existing public paths and cycle routes in the precinct. Refer to Landscape Plan for specific details.

Active transport linkages:

Bike parking is to be provided at the central communal facilities building to encourage clean modes of transport for both residents and visitors to the development.

ENERGY

Section 5.4 of the PDA places significant weight on the efficient use of energy by means of demand management, passive design features and addressing the heat island effect to ensure urban amenity and lower energy use in buildings.

Heat Resilience

Industry best practice states to improve heat resilience, at least 75% of the whole site should comprises of one or a combination of the following strategies that reduce heat island effect:

- vegetation
- green roofs
- roofing material including shading structures– For roof pitched <15°– a three-year SRI of minimum 64, For roof pitched >15°– a three-year SRI of minimum 34
- unshaded hard-scaping elements with a 3 year SRI of minimum 34 OR initial SRI of minimum 39
- hardscaping elements shaded by overhanging vegetation
- water bodies and/ or water courses

The development proposes compliance with the above guidelines by a combination of selecting a roof colour with a minimum SRI of 64 and landscaped areas providing vegetation, landscaping and turfed areas to ensure a combination of heat resilience outcomes achieve 75% coverage of the site.

Passive design measures

The development has been designed with particular attention to passive design features to minimise both the air conditioning load on the buildings and by minimising the times when AC is required due to effective cross ventilation of the residences.

We believe this aligns with intent of the PDA in minimising energy use.

ENVIRONMENT AND OPEN SPACE

Landscape

In line with the PDA, the development is designed to incorporate landscaping with endemic drought tolerant species. Refer to Landscape Plans for specific details

Stormwater

The stormwater design shall be completed to minimise adverse impacts on receiving waters and appropriately manage stormwater including use of total water cycle management and water sensitive urban design principles, in line with the water discharge requirements specified in State Planning Policy 4/10 Guideline Healthy Waters and its supporting document Urban Stormwater Quality Planning Guidelines 2010. This is achieved by downstream regional master planned stormwater quality treatment devices as detailed in the Gold Coast Parklands Redevelopment (Commonwealth Games Village) Stormwater Management Plan. Refer to Civil Engineering Services Report for specific details

WASTE

Household Waste

Each townhouse will include space within kitchen or storage areas to house standard waste and recycling household bins ranging in size from 15L-40L. Refuse will be transferred from individual townhouses by the residents and disposed of and stored within the 1100L Mobile Garbage Bins housed within the dedicated bulk bin storage rooms. Two bulk bin storage rooms are provided to the site at each end of the development and centrally located at each end to reduce transfer distance to all Townhouses. The combined bulk bin storage rooms are sufficiently sized to accommodate all the bins required for the entire development

Green waste generated from landscaped areas, private gardens, and communal spaces will be managed through a structured system designed to promote sustainability and ease of use for residents and site staff. Dedicated green waste bins will be strategically located throughout the development, including:

- Multiple locations withing 60m of individual townhouses.
- Within communal open spaces for convenient disposal during routine maintenance.
- At the rear of the maintenance "Shed" for use by site staff and or contracted gardeners.

Green waste bins will be retrieved from the various positions within the development and presented next to the "Shed" for collection. Retrieval and return of bins will be completed by site maintenance staff or assigned contractor and if a site trailer is available the green waste may be decanted and transferred to a transfer stations in lieu of dedicated collections.

In line with the intent of the PDA to encourage waste separation and diversion form landfill.

- Residents will be encouraged to separate green waste from general refuse and recycling streams.
- Educational signage and information packs will be provided to promote correct disposal practices
- and discourage contamination of green waste bins.

- All green waste will be diverted from landfill and sent to approved composting or resource recovery facilities in accordance with Queensland waste management regulations.
- Container deposit/refund schemes are currently in place in Queensland. Various models exist including bottle return facilities and (automated) reverse vending machines. Residents may consider separation of containers that qualify for the schemes from the waste or recycling streams and take them to a local disposal point

Refer to Operational Waste Management Plan for specific details

Construction waste

Scrap metal bins will be provided on site for the duration of construction, all EPS to site will also be recycled.

RESPONSIBLE MATERIALS

Section 5.4 of the PDA outlines that environmentally responsible materials are to be used to lower environmental impact as a desired outcome.

Roads

In accordance with industry best practice, 95% of constructed roads are proposed to be constructed using asphalt which contains at least 10% reclaimed asphalt pavement (RAP) content (or the maximum allowable RAP content for the application).

Soft Landscaping

In line with Industry best practice, all vegetative debris from the site shall be mulched and reused; and all non-contaminated topsoil shall be stockpiled and reused within the site.

We believe this demonstrates the project's commitment to the use of responsible materials as stipulated in the PDA