

# Ecologically Sustainable Development (ESD) Report

## Introduction

This ESD Report has been prepared for Frasers Property Australia to support a State Significant Development Application (SSDA) submitted to the Department of Planning, Industry and Environment (DPIE) relating to Lot 3 of the Eastern Creek Quarter Site at Rooty Hill Road South, Eastern Creek. The application seeks Concept Plan approval for the staged construction of a new retail outlet centre at Lot 3 with supporting food and beverage tenancies, and ancillary entertainment and recreation usages.

This report addresses the following items of the Secretary's Environmental Assessment Requirements (SEARs):

### 9. Ecologically sustainable development

- Identify how the development will incorporate ESD principles (as defined in Clause 7(4) of Schedule 2 of the Regulation) in the design, construction and ongoing operation phases of the development, and include innovative and best practice proposals for environmental building performance.
- Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy.

## The Site

The 34ha Eastern Creek Quarter site is situated to the north of the Great Western Highway between Rooty Hill Road South and the M7 Motorway. Church Street marks the site's northern boundary. The site forms part of the Western Sydney Parklands and is located within the Blacktown Local Government Area. It is located approximately 1.5km south east of Rooty Hill Station.

This SSDA relates to Lot 3 of the ECQ site, which is the final lot proposed to be developed. It is located in the northern part of the site and has an area of approximately 7.29ha (refer to **Figure 1**).



**Figure 1 - Site location**  
(Source: Nearmap)

## Overview of the Proposed Development

The proposed State Significant Development Application (SSDA) seeks Concept Plan approval for a new retail outlet centre at Lot 3 of the Eastern Creek Quarter site. The Concept Plan will establish the following framework to guide the future detailed design of the Lot 3 development:

- Land uses, including retail (factory outlet), food and drink premises, amusement centre and indoor recreation facility;
- Building footprints, including basement, with a maximum height of 12m;
- A maximum GFA of 39,500m<sup>2</sup> at Lot 3 which will be staged as follows:
  - Phase A: 29,500m<sup>2</sup>
  - Phase B: 10,000m<sup>2</sup>
- Upgrade of Church Street for vehicular access, including traffic signals at the Church Street/Rooty Hill Road South intersection;
- Modifications to the Cable Place/Rooty Hill Road South/Site Access intersection; and
- Modifications to the Francis Street/Eastern Road/Rooty Hill Road South intersection.

It is also proposed to seek consent for a series of early works including:

- Removal of up to 0.73 ha of Cumberland Plains Woodlands in the south west corner of the site;
- Bulk earthworks within Lot 3; and
- Extension of the internal access road to connect to the basement car park.

The proposed outlet centre at Lot 3 will necessitate the inclusion of conditions of consent which requires the modification of SSD 5175 (the existing Concept Plan for the broader ECQ site) to amend the overall allocation of GFA and associated uses, relevant Concept Plans and the existing Design Guidelines.

This report is based on the Concept Plan prepared by i2C, shown at **Figure 2** below.



**Figure 2 – Indicative concept drawing**

Source: i2C

## ESD initiatives

The development is targeting a Green Building Council of Australia 5Star Green Star rating (Design and As-built v1.3). This represents Australian Best Practice in sustainable design. The Green Star framework will provide a strategy to ensure that the design considers sustainability, best practice management processes are implemented during the construction phase and that commissioning and building tuning is implemented to ensure that development operates optimally.

The sustainability concepts of the development are based on 4 categories, and the key initiatives that will be considered are:

1. Energy and Greenhouse gas emissions
  - Passive design solutions including façade optimisation, with good day lighting, glare control and appropriate shading to reduce energy consumption
  - Use of LED lighting and automatic sensor controls
  - Use of a centralised HVAC system to improve energy efficiency opportunities
  - Maximise the use of renewable by considering the use of solar panels
2. Water
  - Water demand reduction through the use of high WELS rated urinals, dual flush WCs and low flow rap ware
  - Rainwater collection to provide non-potable water to service WC and urinal flushing and landscape irrigation
  - Sub-soil landscape irrigation system to minimise evapotranspiration from the soil
  - Use of air cooled chillers to eliminate the use of water in HVAC
  - Use of native plantings for landscaping
3. Material use
  - Prioritise the use of sustainable products such as ones with low embodied energy, recycled content or are certified with a third party sustainability label.
  - Use of FSC certified timber
  - Use of responsible PVC
4. Construction Phase
  - Diversion of construction and demolition waste from landfill of at least 80% by mass
  - A comprehensive Environmental Management Plan that aligns with the NSW EMS Guidelines will be developed to provide a framework to reduce the environmental impact of the development

This report has been prepared by Andrew Thai (Sustainability Manager, Development) from Frasers Property Australia. Andrew is a Green Star Accredited Professional and has over 8 years of experience.



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