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Director General
NSW Department of Planning
PO Box 39
Sydney NSW 2001

Greta Train Support Facility – Sustainability Statement

James McGregor Consulting has been appointed as the Sustainability Consultant for the proposed Pacific National Train Support Facility at Greta.

This letter provides an overview of the proposed sustainability objectives of the project and outlines the proposed BCA Section J compliance method.

Sustainability Objectives

A number of preliminary sustainability initiatives have been identified for the project and will be further developed during the detailed design phase of the project. Each of the sustainability features will be subject to a rigorous business case assessment prior to implementation.

The following is a summary of the key sustainability initiatives, design features and systems to be considered for the project:

General Site

- Establishment of regeneration areas and integration of wildlife corridors with adjacent developments;
- Cycleways for internal staff movement and access to adjacent community infrastructure;
- Onsite low emissions power generation with integrated tri-generation system for heating and cooling of buildings;
- Renewable energy technologies;
- Retention of excess rainwater for recycling for use in local irrigation or nearby public spaces.
- On-site separation for recycling.

Buildings

- Achieve a NABERS Energy 4.5 star rating and a NABERS Water 4.5 star rating for the Administration Building.
- Occupancy-linked controls for Heating, Ventilation and Air Conditioning (HVAC); influencing levels of temperature, fresh air volumes, and lighting.
- Outdoor air supply rate linked to internal CO2 levels

- Wind/convection-driven outdoor air supply through operable windows where possible to minimise use of fans and therefore energy.
- Very high performance glazing.
- Automatic sunlight-responsive glare minimisation controls.
- Extremely low energy lighting.
- Appropriate task lighting with local controls and automatic switch off for high occupant visual comfort.
- Local occupant control of HVAC where possible.
- Optimised indoor acoustic performance.
- Mixed-mode HVAC where possible.
- Use of exposed concrete structure for thermal mass energy storage.
- Optimised daylight penetration.
- Office lighting power density of < 8 W/m².
- Low-use 5-Star water fixtures.
- Humidity control for increased occupant comfort.
- Filtration to reduce indoor air pollutants
- Scavenging of exhaust air heat and cooling.
- Use of materials with zero ozone depletion where possible.
- Metering of 100 % of water, gas and power by level and by zone.

BCA Section J

It is proposed that the buildings will be assessed under verification method JV3 – Verification using a reference building for compliance with BCA Section J Energy Efficiency.

Yours sincerely

A handwritten signature in black ink, appearing to read 'James McGregor', written in a cursive style.

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