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Olympic Park-A.docx

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Dear Jamie,

Site 8c Olympic Park

This letter outlines the proposed environmental initiatives for the office development located at Site 8c, Sydney Olympic Park. The building design will be developed to achieve performance metrics including a 5 Star Green Star – Office Design v3 rating, and a 4.5 Star NABERS office – base building rating.

The targeted 5 star Green Star rating represents Australian excellence for green building design and the NABERS target ensures that the ongoing performance of the building will have reduced environmental impact compared to the standard practice. The new building will be integrated into the SOP precinct with pedestrian and public amenities provided at street level, and good access to public transportation.

Within this letter preliminary strategies are proposed which outline the sustainability initiatives to be incorporated in the project.

NABERS Objectives

The NABERS office rating tool for base buildings assesses the energy performance of a building, with a NABERS rating calculated based on the emissions from electricity and gas consumption of the building normalised to a per square metre rate, 50 hour working week.

The achievement of a good NABERS rating relies on the building having efficient mechanical systems, a well designed facade, detailed building management systems and low internal gains from lighting.

The mechanical system is proposed to be a Variable Refrigerant Flow (VRF) system, which will allow efficient heating and cooling of separate zones within the building. Any refrigerants used will have zero Ozone-depleting potential (ODP).

The facade design will include a laminate or double glazed unit with low solar heat gain coefficient to reduce direct solar loads. Shading devices will be used, where required, to further reduce direct loads. The building fabric will be predominantly precast concrete panels meeting the requirements of the Building Code of Australia, Section J for energy efficiency.

Green Star Objectives

Green Star has 9 categories which are addressed, each of which is discussed below. For a 5 Star rating, a minimum of 60 points across the 9 categories must be achieved.

- **Management**
 - An environmental management plan and waste management plan will be implemented throughout construction, with comprehensive commissioning and building tuning to be carried out post construction.
- **Indoor Environment Quality**
 - The VRF system will allow high levels of control ensuring thermal comfort objectives are achieved.
 - Low emitting materials to be used including paints, carpets and engineered wood products.
- **Energy**
 - The efficient mechanical system and building facade will allow an energy reduction compared to a standard office building. This will also allow the 4.5 Star NABERS rating to be achieved.
- **Transport**
 - Sydney Olympic park has a dedicated train line for which the train station is in close proximity to the building site. It is envisaged that many building occupants will use this service.
 - Fuel efficient transport will be promoted by providing fuel efficient vehicle parking and cyclist facilities.
- **Water**
 - Potable water use for amenities will be reduced with minimum 5 star WELS ratings for all toilets, taps, shower heads and urinals;
 - Water use for toilet and urinal flushing, landscape irrigation and washdown/cleaning will be sourced from the SOP Water Recycling and Management System (WRAMS) which provides recycled water on a precinct wide basis;
 - The VRF system does not have water based heat rejection, thereby saving water.
- **Materials**
 - Recycling waste storage facilities are to be provided for the use of all office occupants.
 - Reduced impact materials will be sourced, including concrete, steel, PVC and timber.
- **Land use and Ecology**
 - It is assumed that the site is not located where there are rare, threatened or vulnerable flora or fauna on site, or on a wetland;
 - Where productive topsoil exists on site, there will not be a net change in the volume of topsoil on the site; and 95% of all topsoil (by volume) is to retain its productivity.
- **Emissions**
 - Refrigerants and insulants specified will have zero Ozone Depleting Potential (ODP).
 - A reduction in stormwater and discharge to sewer will be realised through inclusion of efficient water fittings and fixtures and connection to the WRAMS.
- **Innovation**
 - The ninth category, innovation, awards points for any innovative features of the building. Any innovative strategies will be addressed during design development.

The NABERS and Green Star strategies outlined within this document show that the development at Sydney Olympic Park site 8c will represent best practice sustainability in design and operation for commercial offices.

The initiatives outlined above will be considered further during design development however the current targets ensure the project has the potential to achieve the designed NABERS and Green Star ratings.

Yours sincerely
For and on behalf of
Cundall



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