CONCEPT PLAN

NORMAN DISNEY & YOUNG

Entertainment Quarter Master Planning

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Entertainment Quarter, Moore Park

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NDY QA SYSTEM

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Authorisation By:

Verification By:

Project Co-ordinator: James Henshaw
Consultants: Lisa McPhail

NORMAN DISNEY & YOUNG
Consulting Engineers
NDY Management Pty Ltd
ABN: 29 003 234 571
60 Miller Street
North Sydney NSW 2060
Telephone: (02) 9928 6800
Facsimile: (02) 9955 6900
www.ndy.com

OFFICES

Australia: Sydney, Melbourne, Brisbane, Perth, Canberra
New Zealand: Auckland, Wellington
United Kingdom: London
Malaysia: Kuala Lumpur
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1. INTRODUCTION

1.1. PURPOSE

The purpose of this report is to provide preliminary information regarding the services supply and infrastructure for the Entertainment Quarter Master Planning at Moore Park and to identify any services related issues associated with the proposed Concept Plan which proposes an additional 26,500m² of floor area in Entertainment Quarter.

1.2. AUTHORITY

Authority to undertake this report was provided by Aaron Johnson of Colonial First State Property Management.

1.3. REVISION HISTORY

		Date Issued	Comment
First Issue	A	9 March 2007	Draft
Second Issue	B	29 March 2007	Final

2. BUILDING SERVICES SYSTEMS

2.1. ELECTRICAL SERVICES SYSTEMS

2.1.1. High Voltage Infrastructure

The existing high voltage infrastructure should not require upgrade to accomodate the proposed additional floor space. The existing Engery Australia substations are believed to have sufficient capacity to support the new buildings proposed on the site.

Further investigation is however recommended once detailed loading figures become available, to ensure the necessary capacity is available at the proposed substations.

2.1.2. Low Voltage Infrastructure

Extension of the low voltage distribution system to each building will be required. This will be via the existing pit and conduit system, with new extensions as required.

Some modification of existing Main Switchboards will be required to accomodate the larger power demands from sites B, C & F.

2.1.3. Emergency & Exit Lighting

Emergency and Exit lighting will comply with the current Australian Standard AS 2293 for all buildings as required.

2.1.4. External Lighting

Lighting will be provided for external perimeter security for each building. It would comply with the requirements of the Lighting Management Strategy to minimise light spill and to utilise energy efficient light sources.

2.2. HYDRAULIC SERVICES SYSTEMS

2.2.1. Fire services Infrastructure

Fire services will be provided to each building as required by the BCA.

Water supply will be connected to the existing infrastructure on site.

2.2.2. Potable water Infrastructure

Hot and cold water infrastructure will be provided to each building.

Cold water supplies will be connected into the existing infrastructure on site.

Stand-alone hot water plants will be provided to each building.

2.2.3. Sewer Infrastructure

Waste water services will be supplied to each building and will be connected to existing waste water infrastructure services on site. Existing connections will be utilised where available.

2.2.4. Stormwater Infrastructure

Stormwater services will be supplied to remove water from the roofs to the existing site stormwater infrastructure system. The site infrastructure system incorporates detention system that utilises the show ground.

Existing connections will be utilised where available.

2.2.5. Trade Waste

Trade waste provisions will be installed for each building as required.

2.3. Mechanical Services Systems

2.3.1. Heating, Ventilation and Air-Conditioning

All occupied buildings will be served by a stand alone HVAC system.

The thermal plant for each building will be stand alone, except where connection to the site central chilled water system is suitable and available.

All necessary exhaust systems required in each building will comply with the current Australian Standard AS 1668.2.

2.3.2. Building Management System

A building management system will be provided to each building to monitor and meter the systems provided in order to manage and minimise the energy consumption of the buildings.

2.4. Communications Services Systems

2.4.1. Communications Infrastructure

Communications services (voice and data) will be supplied to each building via the existing pit and conduit system with new extensions as required.

3. ENERGY EFFICIENCY & SUSTAINABILITY INITIATIVES

Energy efficient and ecologically sustainability initiatives will be considered both for each individual building and for the site as a whole.

Water conservation and re-use initiatives will be investigated, including efficient fixtures and fittings.

Building services systems will be selected and designed to consider minimisation of greenhouse gas emissions and promotion of indoor environment and comfort levels. This will be acheived by encouraging the use of hybrid and naturally ventilated spaces, as well as energy efficient facades. Renewable energy use will be investigated and used where considered viable.

Materials with low embedded energy or recycled materials will be used where practicable when specifying building materials.

Comparative rating tools can be utilised where relevant depending on the use of the building.