

# BOUNDARY FIRE ASSESSMENT REPORT

**PROPOSED SUBDIVISION OF THE DAVID MADDISON BUILDING  
SITE FROM THE ROYAL NEWCASTLE HOSPITAL SITE.**



**Prepared for:**

**LANDCOM**

**Prepared By:**

**MEINHARDT NSW PTY Ltd**

A.C.N. 051 627 591

Level 2, 400 Kent Street  
Sydney NSW 2000

Phone: (02) 9699 3088

Facsimile: (02) 9319 7508

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## **PURPOSE OF REPORT**

This report contains the findings of investigations of the Fire implications, and the purpose of this is to:

- Support the project application for the sub-division for the Royal Newcastle Hospital.
- Identify the fire services requiring modification between the David Maddison Building and the Royal Newcastle Hospital site.
- Identify the fire implications on the David Maddison Building and the McCaffrey Wing with the new proposed boundary.

## **1. EXECUTIVE SUMMARY**

Meinhardt has been commissioned by National Project Consultants, acting on behalf of Landcom Pty Ltd, to undertake a Fire assessment.

A boundary will be created east and south of the David Maddison Building (DMB) as noted in figure 1.

The area of assessment was between the David Maddison Building and the McCaffrey Wing Building (MWB) located within the Royal Newcastle Hospital at the corner of Watt and King Streets, Newcastle.

### **FIRE SERVICES**

The fire services for the DMB and the MWB, including fire sprinklers, hydrant and hose reels, are independent.

Currently, fire separation is maintained between the DMB and the MWB.

In the event of a fire, occupants evacuating from the basement carpark of the DMB will egress in the direction as shown in figure 1. Installation of additional illuminated exit signs to indicate the new egress path, and pedestrian ground markings located at a minimum distance of 3 metres east of the DMB will be required in the access road to King Street.

Fire separation between the two buildings may be compromised if a new development replacing the McCaffrey Wing Building is constructed within 3 metres from the boundary with openings.

## **2. INTRODUCTION**

This report is to support the Project Application for the sub division of the DMB site from the remainder of the RNH site.

It is understood that the development of the RNH will be in stages. A programme of the development is not available.

The proposed redevelopment of RNH site may comprise the demolition of the two wings, the Nickson Wing and the McCaffrey Wing, followed by the David Maddison Building.

The subdivision of the site is proposed as shown on "Plan of Proposed Subdivision of Lot 1 DP 1029006 prepared by Palmer Bruyn & Parker.

## **METHOD OF INVESTIGATION**

The investigations consisted of the following activities:

- "Walk through" site inspection of visible and readily accessible equipment and components
- Interviews with site maintenance personnel
- Contact, where thought necessary, with the suppliers of plant and equipment

## **LIMITS OF INVESTIGATION**

The investigations did not cover the following:

- Inspection of equipment not readily accessible, such as in ceiling spaces and services risers and ducts;
- Disassembly of equipment;
- Detailed inspection of equipment condition;
- Measurement of actual performance; and
- Verification of existing construction and building services compliance.

### **3. EXISTING FIRE SYSTEMS**

#### **FIRE HOSE REEL SYSTEM**

The reticulation of the fire hose reel system for the David Maddison Building is independent of the McCaffrey Wing.

Modification is not required for this system.

#### **SMOKE DETECTION SYSTEM**

The smoke detection system in the David Maddison Building consist a Fire Indicator Panel (FIP) independent of the McCaffrey Wing.

The system consists of independent monitoring for Fire Brigade intervention.

Modification is not required for this system.

#### **EMERGENCY WARNING SYSTEM (EWS)**

The Emergency Warning System in the David Maddison Building consist a EWS panel independent of the McCaffrey Wing.

The system consists of independent monitoring for Fire Brigade intervention.

Modification is not required for this system.

#### **FIRE HYDRANTS**

The reticulation of the hydrant system for the David Maddison Building is independent of the McCaffrey Wing.

Modification is not required for this system.

**3.1 ASSESSMENT OF THE FIRE SEPARATION BETWEEN THE DAVID MADDISON BUILDING (DMB) & McCaffrey Wing (MWB).**

Currently, the DMB and the MWB are generally situated at or more than 6 metres from each other. If this separation is maintained, the requirements of the BCA 2006 for fire separation will be satisfied without further alterations.

As there is no observable openings at present in the MWB, wall wetting drencher system will not be required to maintain fire separation of the existing DMB from the McCaffrey Wing.

In the event of a fire, occupants evacuating from the DMB basement carpark will egress the building in the direction as shown in figure 1. Installation of additional illuminated exit signs to indicate the new egress path, and pedestrian ground marking at a minimum distance of 3 metres east of the DMB will be required in the access road to King Street.

Fire separation of the two buildings may be compromised if a new development replacing the McCaffrey Wing Building is constructed within 3 metres from the proposed boundary with openings.

A building developed on the adjacent property (separate lot,) subject to the construction type, will have to satisfy and comply with the Deem to Satisfy (DTS) provision of the BCA.

The fire stair located on the southern side of the David Maddison Building presently is a fire exit to evacuate occupants from the David Maddison Building and the existing carpark. Should the carpark be demolished, the exit doors presently used to evacuate occupants from the carpark should be removed and sealed with a block work wall.

#### **4. PHOTOS**

1. Access road and carpark east side of DMB looking south
2. Access road and carpark east side of DMB looking north to King Street
3. Access road and carpark east side of DMB looking north to King Street.
4. Access road and carpark east side of DMB looking north to King Street between McCaffrey Wing (MWB) and DMB.
5. Access road and carpark east side of DMB looking south near rear of McCaffrey Wing
6. Carpark at the south eastern corner of the DMB, looking south
7. Carpark at the south eastern corner of the DMB, looking north
8. Carpark at the south side of the DMB, looking east



**ROYAL NEWCASTLE HOSPITAL**  
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Photo 1



Photo 2

**ROYAL NEWCASTLE HOSPITAL**  
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Photo 3



Photo 4

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Photo 5



Photo 6

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Photo 7



Photo 8



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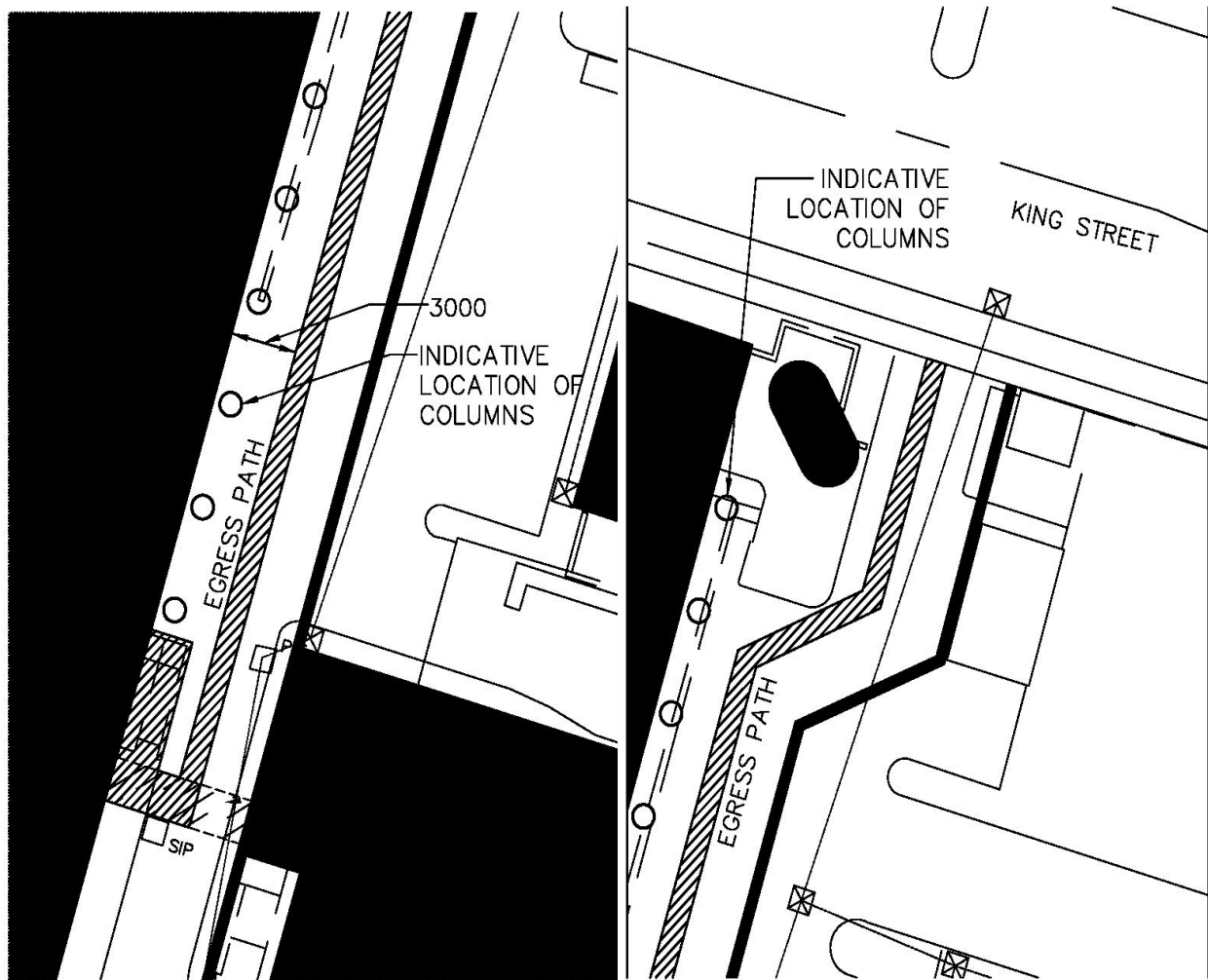


Figure 1