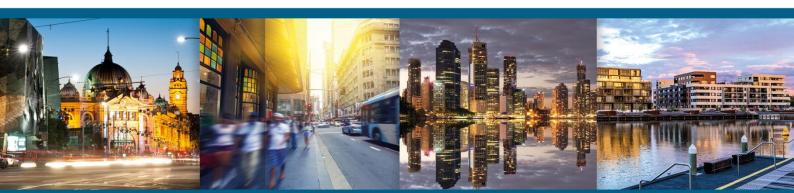
# Victoria Cross OSD – Concept Plan

# 155-167 Miller Street, 181 Miller Street, 187-189 Miller Street, and part of 65 Berry Street, North Sydney

# BCA compliance statement to accompany a MOD to the current approval (SSD 17 8874)



SYDNEY BRISBANE CANBERRA

Level 17, 456 Kent Street, Sydney NSW 2000 MELBOURNE Level 8, 350 Queen Street, Melbourne VIC 3000 Level 4, 276 Edward Street, Brisbane QLD 4000 Level 1, Unit 14, 27 Hopetoun Circuit, Deakin ACT 2600 Phone: (02) 6100 6606 Fax: (02) 6100 6609

Phone: (02) 9283 6555 Fax: (02) 9283 8500 Phone: (03) 9380 5552 Phone: (07) 3088 2333 Fax: (07) 3088 2444

Fax: (03) 9380 5558

### **Report Revision History**

| SWP Quality System      |            |  |
|-------------------------|------------|--|
| Job Number / Reference: | 2019/0506  |  |
| <b>Revision Number:</b> | 1.4        |  |
| Issue Date:             | 16/07/2019 |  |

#### Introduction

This report has been prepared to accompany a section 4.55(2) modification application to the State Significant Development (SSD) Concept Approval (reference SSD 17\_8874) granted for a commercial mixed-use Over Station Development (OSD) above the new Sydney Metro Victoria Cross Station. This report presents the findings of a preliminary assessment undertaken by Steve Watson & Partners against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia (BCA) 2019.

It has been prepared by building regulations consultants and certifiers Steve Watson and Partners for Lendlease.

#### Purpose

The assessment is undertaken for the purpose of, and to the extent necessary for, submission with the amended Development Application submission to the consent authority.

#### Scope

The scope of this assessment is limited to the design documentation referenced in Appendix B of this report.

#### Description of the current development approval

Concept Approval was granted for:

- A maximum building envelope, including street-wall and setbacks for the OSD
- A maximum building height of RL 230 or 168 metres, providing:
  - Approximately 40 commercial storeys and 2 additional storeys for rooftop plant for the high-rise portion of the building envelope;
  - Approximately 13 storeys for the lower eastern portion of the building envelope at RL 118 or 55 metres;
  - A maximum gross floor area (GFA) of 60,000sqm, excluding station floor space; and
  - Basement car parking for a maximum 150 parking spaces.

#### **Assessment / Conclusion**

A review of the proposed design that forms part of the DA MOD scheme submission to the relevant consent authority has been undertaken. SWP confirm that the design as shown on the drawings referenced below are capable of achieving compliance with the BCA.

It is noted that aspects of the design are proposed to be addressed by way of a performance solution to meet the relevant performance requirements of the BCA however will be dealt with as part of the approval process.

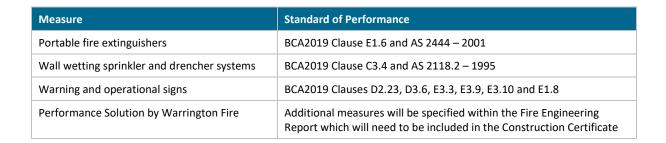
The submission is for the consideration of the following alterations to the already approved concept:

- Reduction in the massing and overall dimensions of the building cantilever above the Miller Street special area setback;
- Relocation of building massing from the low-rise levels the tower, north of the through-site link, to the high-rise levels of the tower;
- Reduction of the Berry Street setback from 5 metres to 4.5 metres, extending the building envelope marginally to the north; and
- Increasing the approved maximum GFA for the over station development from 60,000sqm to 61,500sqm.



| Measure   | Standard of Performance  |  |  |
|---|--|--|--|
| Access panels, doors and hoppers to fire resisting shafts   | BCA2019 Clause C3.13 and tested prototypes (AS 1530.4 – 2014 and AS 4072.1-2005)   |  |  |
| Automatic fail safe devices   | Scheduled devices release upon trip of smoke detection and/or sprinkler activation in accordance with BCA2019 Clauses D2.19 and D2.21.   |  |  |
| Automatic fire detection and alarm system (smoke detection system)  | BCA2019 Clause 4 of Specification E2.2a, AS 1670.1 – 2018  |  |  |
| Automatic fire detection and alarm system<br>(smoke detection system to operate zone<br>smoke control or stair pressurisation system) | BCA2019 Clause 7 of Specification E2.2a and AS/NZS 1668.1 – 2015 and AS 1670.1 - 2015  |  |  |
| Automatic fire detection and alarm system<br>(smoke detection system to automatically shut<br>down air-handling system)               | BCA2019 Clause 6 and 8 of Specification E2.2a and AS/NZS 1668.1 – 2015<br>(System monitoring in accordance with AS1670.3-2018)   |  |  |
| Automatic fire suppression systems (Combined sprinkler and hydrant system)  | BCA2019 Specification E1.5, AS2118.1-2017, AS2419.1-2005 and AS 2118.6-2012 (combined sprinkler and hydrant systems in multistorey buildings)  |  |  |
| Emergency lifts   | BCA2019 Clause E3.4  |  |  |
| Emergency lighting  | BCA2019 Clause E4.2, E4.4 and AS 2293.1 – 2005   |  |  |
| Emergency Warning Intercommunication<br>System  | BCA2019 Clause E4.9 and AS 1670.4 – 2018   |  |  |
| Exit signs  | BCA2019 Clause E4.5, NSW E4.6, E4.8 and AS 2293.1 – 2005   |  |  |
| Fire control room   | BCA2019 Specification E1.8   |  |  |
| Fire dampers  | BCA2019 Clause C3.15 and AS/NZS 1668.1 – 2015 (AS 1682.1-1990 and AS 1682.2-1990)  |  |  |
| Fire doors  | BCA2019 Specification C3.4 and AS 1905.1 – 2015  |  |  |
| Fire hydrants systems   | BCA2019 Clause E1.3, AS 2419.1 – 2005 and AS2118.6-2012  |  |  |
| Fire seals protecting opening in fire resisting components of the building  | BCA2019 Clause C3.15, Specification C3.15 and AS 1530.4 –2014 and AS 4072.1 – 2005 and installed in accordance with the tested prototype.<br>[Note: Systems tested to AS 1530.4 prior to 1 January 1995 need not         |  |  |
|   | be retested to comply with the provisions in AS 4072.1]  |  |  |
| Hose reel system  | BCA2019 Clause E1.4 and AS 2441 – 2005   |  |  |
| Mechanical air handling system<br>(automatic shutdown of air-handling system)   | BCA2019 Clause E2.2 and AS/NZ 1668.1-2015  |  |  |
| Mechanical air handling system<br>(automatic air pressurisation system)   | BCA2019 Table E2.2a and AS/NZ 1668.1-2015  |  |  |
| Mechanical air handling system<br>(zone smoke control system)   | BCA2019 Table E2.2a and AS/NZ 1668.1-2015  |  |  |
| Mechanical air handling system (carpark mechanical ventilation system)  | BCA2019 Table E2.2a and Clause 5.5 of AS/NZ 1668.1-2015 and fans<br>with metal blades suitable for operation at normal temperature may<br>be used and the electrical power and control cabling need not be fire<br>rated |  |  |

## Appendix A – Schedule of proposed statutory Fire Safety Measures



## **Appendix B – Referenced Documentation**

The following documents were used in the preparation of this report:

| Drawing<br>No. | Title  | lssue | Date       | Drawn By   |
|----------------|--|-------|------------|------------|
| A01.001        | Building Envelope – Indicative Ground Floor Plan | 7     | 05/07/2019 | Batessmart |
| A01.002        | Building Envelope – Miller Street Elevation      | 7     | 05/07/2019 | Batessmart |
| A01.003        | Building Envelope – East West Section            | 7     | 05/07/2019 | Batessmart |
| A01.004        | Building Envelope – North West Axonometric       | 7     | 05/07/2019 | Batessmart |
| A01.005        | Building Envelope – South West Axonometric       | 7     | 05/07/2019 | Batessmart |