



Building Code of Australia 2016

## **BCA CAPABILITY STATEMENT**

# Parramatta Public School Macquarie Street, Parramatta

Prepared for: Grimshaw Architects / BVN Architecture Issue date: 21 March 2016 Reference No. 16000063



21 March 2016

Ms Louise Brown Grimshaw Architects Level 3, 24 Hickson Road Millers Point NSW 2000

Dear Sir/Madam,

Re: Parramatta Public School, 175 Macquarie Street, Parramatta Schematic Design Report

Modern Building Certifiers (MBC) have been commissioned to carry out a detailed assessment of the proposed school building which is located at the subject address, against the requirements of the National Construction Code Series (Volume 1) – Building Code of Australia (BCA) 2015. The principals of the BCA 2016 have been considered in our assessment.

The purpose of the assessment is to provide surety to the Consent Authority that the buildings design is capable of complying with the Performance Requirements of the BCA and that subsequent compliance with the provisions of Parts C, D E, F & J of the BCA will not give rise to further modifications to the building that may necessitate additional design changes.

The following Modern Building Certifiers Team Members have contributed to this assessment:

- Eric Bailey Director & A1 Accredited Certifier
- Heath McNab Director & Accredited Certifier

Our assessment of the concept design documentation was based on the following:

- National Construction Code Series (Volume 1) Building Code of Australia 2016 (BCA)
- Architectural Drawings referenced in annexure A prepared by Grimshaw Architects and BVN Architecture.
- Guide to the Building Code of Australia 2016 (BCA Guide)
- Access to Premises Buildings Standards 2010 (Access Code)
- Environmental Planning and Assessment Act 1979 (EP&A)
- Environmental Planning and Assessment Regulation 2000 (EP&AR)
- Summary of amendments BCA 2016

#### The objectives of this statement are to:

- Undertake an assessment of the proposed architectural design documentation against the Performance Requirements of National Construction Code Series 2015 (Volume 1) Building Code of Australia (BCA).
- Assist the Consent Authority to be satisfied that the building design is capable of complying with the with the Performance Requirements of the BCA and that subsequent compliance with Parts C, D, E, F & J of the BCA will not give rise to further significant design changes to the building.
- Identify any BCA compliance issue that require resolution at the Construction Certificate stage. These matters are to be considered pursuant to Cls 53 .4 of the EP&A Regulation 2000.
- Enable the certifying authority to satisfy its statutory obligations under Clause 17 & 18 of the Building Professionals Regulation 2007.
- This Capability Statement is not intended to identify all issues of compliance or non-compliance with the BCA with such other issues to be appropriately addressed prior to issue of the Construction Certificate. Such matters are to the identified through further design development.

#### **Building Description Summary**

The proposed development is a four (4) storey educational building with roof top activity area and the upgrade of an existing two (2) storey heritage building for use as an administration building.

SUMMARY OF CONSTRUCTION DETERMINATION					
Use(s)	Educational Facility and Administration Building				
Classification(s)	Class 9b & 5				
No. of Storeys contained	Four				
Rise in Storeys	Four				
Type of Construction	Type A				
Effective Height	Greater than 12m and less than 25m				
Compartment Size	Floor area and compartment sizes comply with Table 2.2 of the BCA				
Climate Zone	Zone 5				
Fire Protection	It is proposed to sprinkler protect the building to AS2118.1-1999				

#### **Proposed Works**

The proposal development involves the construction of an educational facility and upgrade of an existing heritage building for use as an administration building.

#### The Proposed Works are:

- Construction of a community hall and associated facilities at ground floor
- Construction of Levels 1 to 3 as an educational facility
- Construction of a roof top activity space
- Enhancement of an existing two (2) storey heritage building for administration associated with the school.

#### **Relevant BCA Edition**

The proposed building will be subject to compliance with the relevant requirements of the BCA as in force at the time that the application for the new Construction Certificate is made. In this regard it is assumed that the Construction Certificate application will be made prior to the  $1^{st}$  May 2015, as such <u>BCA 2015</u> Version applies to the new works proposed at the subject development. Construction has also been given to amendment to BCA 2016 in the event application is made subsequent to  $1^{st}$  May 2016.

#### **Compliance with the BCA**

The detailed assessment has been carried out of the schematic design against the technical provisions of the BCA and compliance matters will be addressed in further design development and the Construction Certificate documentation. It is noted that the proposed development must comply with the relevant requirements and this can be achieved by complying with the following:

- a) Complying with the Deemed-to-satisfy (DTS) Provisions; or
- b) Formulating an Alternative Solution which
  - i) Complies with the performance requirements; or
  - ii) Is shown to be at least equivalent to the DTS provisions; or
- c) A combination of the above.

In accordance with the above, Modern Building Certifiers can verify that the proposed building design will entail a combination of compliance with the DTS provisions and Performance Requirements of the BCA, by the development and justification of Performance Based Alternative Solutions.

The relevant fire safety engineer, being Arup, have been appointed and have contributed to the current design.

It is also advised that the proposed design and associated Fire Engineering proposal will be requiring formal referral to Fire & Rescue NSW pursuant to Clause 144 of the Environmental Planning & Assessment Regulation 2000 (due to the Category 2 fire safety provisions identified

in the Fire Schedule below), and this process will need to be undertaken prior to a Part 4a Construction Certificate being issued by the Principal Certifying Authority (PCA).

#### **Matters Requiring a Performance Assessment**

ltem	Non-	DTS	Description	Performance	Comments
	Compliance	Clause		Requirement	
1	Exit Travel	D1.4 & D 1.5	Travel distance to an exit & between exits exceed to prescribed distances of 20/40/60 throughout the new building	DP4 & EP2.2	To Be Addressed by the Fire Safety Engineer
2	Travel by non-fire isolated stairs	D1.9	Travel via the stairs serving the level 1, 2 & 3 exceeds the maximum permitted by the BCA of 80mm	DP4 & EP2.2	To be address by the fire safety engineer
3	Energy Efficiency	Part J	JV3 Analysis to be Undertaken	JP1, JP2 & JP3	To be Addressed by an Energy Consultant
4	Disabled Access	Part D3	Access to be assessed by an Access Consultant	DP 1, 2, 4 & 6	To be addressed by the access Consultants

This report contains an assessment of the referenced architectural documentation for the proposed buildings against the Deemed-to-Satisfy provisions & Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2015.

In view of the above assessment we can confirm that subject to the above measures being appropriately considered, that compliance with the Deemed-to-Satisfy Provisions and Performance Requirements of the BCA are readily achievable.

We trust that the above submission is of assistance to the consent Authority and should you wish to discuss any aspect of this advice, please do not hesitate to contact me.

Best regards,

Eric Bailey **Director** 

**Modern Building Certifiers** 

### **Annexure A – Architectural Drawings**

The following documentation was used in the assessment and preparation of this report: -

Drawing No.	Title	Date	Drawn By	Revision
A03 1101	General Arrangement Floor Plan PPS – GA Ground – Charles Street	10.03.16	Grimshaw	3
A03 1102	General Arrangement Floor Plan PPS – GA – Level 1	10.03.16	Grimshaw	3
A03 1103	General Arrangement Floor Plan PPS – GA – Level 2	10.03.16	Grimshaw	3
A03 1104	General Arrangement Floor Plan PPS – GA – Level 3	10.03.16	Grimshaw	3
A03 1105	General Arrangement Floor Plan PPS – Roof	10.03.16	Grimshaw	3
A03 1106	General Arrangement Floor Plan PPS  – Heritage Building A Existing and Demolition	10.03.16	Grimshaw	1
A06 1101	PPS – Street Elevations	04.03.16	Grimshaw	2
A06 1102	PPS – Courtyard Elevations & Sections	04.03.16	Grimshaw	2