

04 December 2017

Our Ref: P216\_282

TKD Architects  
Level 1, 19 Foster Street  
SURRY HILLS NSW 2010

Attention: Anna Harris

**Re: Alexandria Park Community School**  
**Re: BCA / Access Capability Statement for State Significant Development Application**

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1. Introduction

This Access Design Assessment Report has been prepared by Design Confidence on behalf of the NSW Department of Education (the 'Applicant'). It accompanies an Environmental Impact Statement (EIS) prepared in support of State Significant Development Application SSD 17\_8373 for the redevelopment of 'Alexandria Park Community School' at 7-11 Park Road, Alexandria (the 'Site'). The EIS seeks development consent for the following works:

The redevelopment of the Alexandria Park Community School ('the School') will address issues of capacity for schools in the inner city areas of Sydney and is also driven by the population growth resulting from the large number of residential developments that are transforming the former industrial precincts of Zetland, Waterloo and Alexandria.

The new school has been briefed to accommodate up to 1,000 primary school students and up to 1,200 secondary school students on one campus in an integrated and fully connected school building.

Specifically, this project includes:

- Demolition of all existing buildings on-site, including the temporary pop-up schools;
- Remediation of specific areas of the site containing contaminated fill;
- Construction of multiple school buildings of up to five stories, arranged along the western and southern parts of the site comprising:
  - Classroom home bases;
  - Collaborative learning spaces;
  - Specialist learning hubs;
  - Learning support spaces;
  - Offices for teachers and administrative staff;
  - Library; and
  - Student canteen.
- Construction of a sports hall and multiple outdoor sports courts;
- An all-weather multipurpose synthetic sports field;
- Informal play spaces and Covered Outdoor Learning Space or COLA;
- A community centre;
- A pre-school for 39 children;
- Site landscaping including green links, community garden and open space;
- Construction of a new on-site car park and associated vehicular access point off Belmont Street; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

Delivery of the project will be undertaken in sequential phases to maintain an operational school on the Park Road Campus and will involve enabling works separate to this application followed by three main construction phases for the new building and external works.

The purpose of this report is to provide an assessment of the proposal as described above and detailed within the EIS.

## 2. Background

Design Confidence has been engaged to provide building regulatory advice regarding the compliance status of the proposed educational development when assessed against the relevant prescriptive requirements as contained within the Building Code of Australia (BCA) 2016 – Volume 1.

This statement has been provided to accompany the Development Application, which is of State Significance. A broad assessment has been undertaken of the proposed design (as detailed within the documentation listed in Table 1 below).

Design Confidence has been involved on the project since the development of the architectural concept, the advice being provided to date has been in the context of the following –

- » Building Code of Australia (BCA) 2016;
- » Performance Based Design / Fire Engineering;
- » The Disability (Access to Premises – Buildings) Standards 2010.

The subject development consists of the complete redevelopment of Alexandra Park Community School (APCS). APCS will be used as both a primary and secondary school and has been designed to function as multi-level school. The primary school part will be constructed over three separate levels, whilst the high school will be constructed over five levels. The development will also be provided with a hall which will serve multiple purposes, the hall be designed such that it can be used as an entertainment venue.

**Table 1 – Architectural Drawings**

PLAN TITLE	DRAWING NO	REVISION	DATE
Cover sheet / drawing list	AR.DA 0000	P1	01.12.2017
Existing site plan	AR.DA 1001	P1	01.12.2017
Site analysis	AR.DA 1002	P1	01.12.2017
Site opportunities	AR.DA 1003	P1	01.12.2017
Proposed site plan	AR.DA 1101	P1	01.12.2017
Existing and proposed site plans	AR.DA 1201	P1	01.12.2017
Phase 1 - demolition and construction phasing plans	AR.DA 1202	P1	01.12.2017
Phase 2 - demolition and construction phasing plans	AR.DA 1203	P1	01.12.2017
Phase 3 - demolition and construction phasing plans	AR.DA 1204	P1	01.12.2017
Campus plans - ground and first floors	AR.DA 2001	P1	01.12.2017
Campus plans - second and third floors	AR.DA 2002	P1	01.12.2017
Campus plans - fourth floor and roof	AR.DA 2003	P1	01.12.2017
Key plan	AR.DA 2010	P1	01.12.2017
Key plan - building references	AR.DA 2011	P1	01.12.2017
Ground floor plan - northern hubs	AR.DA 2101	P1	01.12.2017
Ground floor plan - southern hubs	AR.DA 2102	P1	01.12.2017
First floor plan - northern hubs	AR.DA 2201	P1	01.12.2017

PLAN TITLE	DRAWING NO	REVISION	DATE
First floor plan - southern hubs	AR.DA 2202	P1	01.12.2017
Second floor plan - northern hubs	AR.DA 2301	P1	01.12.2017
Second floor plan - southern hubs	AR.DA 2302	P1	01.12.2017
Third floor plan - northern hubs	AR.DA 2401	P1	01.12.2017
Third floor plan - southern hubs	AR.DA 2402	P1	01.12.2017
Fourth floor plan - northern hubs	AR.DA 2501	P1	01.12.2017
Roof plan - northern hubs	AR.DA 2601	P1	01.12.2017
Roof plan - southern hubs	AR.DA 2602	P1	01.12.2017
Elevations 1	AR.DA 3001	P1	01.12.2017
Detailed elevations 1	AR.DA 3002	P1	01.12.2017
Detailed elevations 2	AR.DA 3003	P1	01.12.2017
Detailed elevations 3	AR.DA 3004	P1	01.12.2017
Detailed elevations 3 - screen	AR.DA 3005	P1	01.12.2017
Sections 1	AR.DA 3101	P1	01.12.2017
Detailed section sheet 1	AR.DA 3111	P1	01.12.2017
Perspectives	AR.DA 8001	P1	01.12.2017

### 3. Fire Safety Measures

Table 2 below outlines the relevant statutory fire safety measures that will be provided as part of the development such that compliance with the BCA is achieved.

**Table 2 – Fire Safety Measures**

STATUTORY FIRE SAFETY MEASURES	PROPOSED STANDARD OF PERFORMANCE
Access panels and hoppers to fire-resisting shafts	BCA Cl. C3.13 & AS1905.1-2005 & AS1530.4-2005
Automatic fail-safe devices	BCA Cl. D2.21
Automatic fire detection and alarm systems	BCA Cl. E2.2, Spec E2.2a & AS1670.1-2015
Automatic fire suppression systems	BCA E1.5, Spec E1.5 & AS2118.1-1999
Emergency warning and intercommunication systems	BCA Cl. E4.9 & AS1670.4-2015
Emergency lighting	BCA Cl. E4.2, E4.4 & AS/NZS2293.1-2005
Exit signs	BCA Cl. E4.5, E4.6, E4.8 & AS/NZS2293.1-2005
Fire dampers	BCA Cl. C3.15, Spec. C3.15, AS1530.4-2005 & AS4072.1-2005 with tested prototype and manufactures specifications
Fire doors	BCA C3.2, C3.4, D1.8 & AS1905.1-2005
Fire hose reel systems	BCA Cl. E1.4 & AS2441-2005
Fire hydrant systems	BCA Cl. E1.3 & AS2419.1-2005

STATUTORY FIRE SAFETY MEASURES	PROPOSED STANDARD OF PERFORMANCE
Fire seals protecting openings in fire-resisting components of the building	BCA Cl. C3.15, Spec. C3.15, AS1530.4-2005 & AS4072.1-2005 with tested prototype and manufactures specifications
Fire windows	BCA Cl. C3.4, D1.8 & AS1530.4-2005 with tested prototype and manufactures specifications
Fire shutters	BCA Cl. C3.4, D1.8 & AS1530.4-2005 with tested prototype and manufactures specifications
Lightweight construction	BCA Cl. C1.8, D1.8, Spec C1.1 & AS1530.4-2005 with tested prototype and manufactures specifications
Mechanical air-handling systems (automatic shutdown)	BCA Cl. E2.2 (NSW), Spec E2.2a (clause 5) & AS1670.1-2004
Portable Fire Extinguishers	BCA Cl. E1.6 & AS2444-2001
Smoke dampers	BCA Cl. E2.2 with tested prototype and manufactures specifications
Wall wetting sprinkler and drencher systems	BCA Cl. C3.4 & D1.8 with tested prototype and manufactures specifications
Warning and operational signs	BCA D2.23 & E3.3

#### 4. Summary

Our strategy for ensuring compliance will be refined and documented over the coming months in conjunction with the continual development of the architectural documentation, if required.

In order to achieve compliance with the BCA, whilst preserving the functional and aesthetic requirements of the project, the use of performance-based designs may be required. It is our belief that performance-based design can deliver a building that meets the Performance Requirements of the BCA.

We are of the opinion that compliance can be achieved, be it via either complying with the DTS provisions or Performance requirements of the BCA.

We trust that the above information is sufficient for the Department of Planning in assessing the merit architectural design from a planning perspective.

This statement should not be construed as relieving any other parties of their legislative obligations.

I possess Indemnity Insurance to the satisfaction of the building owner or my principal.

Yours Faithfully



Luke Sheehy  
**Principal**  
 For Design Confidence (Sydney) Pty Ltd