GROUPDLA

01/07/2021

Our Ref: GDL190178.2

NSW Department of Education, School Infrastructure NSW
Att: Anthony Manning
Level 8, 259 George Street
Sydney NSW 2000

SINSW - East Leppington Public School
Corner Commissioners Drive & Willowdale Drive, Denham Court NSW 2565

BCA DESIGN COMPLIANCE STATEMENT (MODIFIED CROWN CERTIFICATE)

Further to our engagement for the abovementioned project, please find attached the Building Code of Australia (BCA) Design Compliance Review completed in respect to the proposed BCA & Crown (s6.28) Consultancy Services.

In reviewing the content herein, we draw particular attention to both the design documentation listed and conditions of approval listed in this statement.

In terms of the conditions of approval, the content therein reflects BCA related matters that where not fully documented or need to be complied with during the construction to achieve compliance with the referenced BCA.

The builder and the applicant need to be aware of these conditions whilst undertaking the works, as they represent items that we shall either be focusing on in the inspection or be seeking installation certificates for on completion of the works, and it is the responsibility of the applicant and builder engaged for the works to ensure these are complied with as part of the works.

Should you have any further enquiries please do not hesitate to contact Mauricio Vera or the undersigned.

Yours faithfully

Brett Clabburn
Director

GROUPDLA

BCA DESIGN COMPLIANCE STATEMENT

PRELIMINARIES

STATEMENT NO.	GDL190178.2
Property Address	Corner Commissioners Drive & Willowdale Drive, Denham Court NSW 2565
Client	NSW Department of Education School Infrastructure NSW
Date	01/07/2021
Proposal	New Public School

DEVELOPMENT DESCRIPTION

Proposed Works	Description
Classification(s):	9b
Use of Building/Part:	Educational Establishment
Subject Area (Area of Works):	Both buildings (E & A-D) **This Modified Crown Certificate relates to updated Fire Engineering Report No. S19033.EL, Revision 4.0, issued by MCD Fire Engineering Pty Ltd**

BASIS OF STATEMENT:

This statement is based upon: -

- The National Construction Code, Volume 1, Building Code of Australia BCA 2016 Amendment One Class 2-9 Buildings (BCA)
- The Design Documentation listed in this statement below

EXCLUSIONS

This statement relates only to the assessment and application of the Building Code of Australia to the proposed building works contained within the Design Documentation listed below and excludes: -

- General (non-BCA) electrical, mechanical, hydraulic building services
- Service providers requirements relating to electricity, gas, water and telecommunications.
- The regulatory compliance of existing components/areas of the premises/site unaffected by the works.
- Disability (Access to Premises – Buildings) Standards 2010 compliance
- This statement relates to BCA compliance only and excludes any requirements for development consent or conditions of any approval documents, or any other form of planning or certification obligations required by the Environmental Planning and Assessment Act 1979 or any other legislation.
- Review of existing population densities throughout the building with respect to the new works
- Any existing elements of the building, as this statement relates to BCA confirmation of new works only, and not an assessment of any existing elements or portions of the building

- Any elements the subject of the documentation relied upon, or the conditions are not the liability of Group DLA as reliance upon this documentation, certification and information in issuance of this statement.

STATEMENT OF COMPLIANCE

We hereby confirm that the proposed design shall accord with the relevant principles and provisions of the Building Code of Australia 2016 Amendment One subject to: -

- Compliance with the conditions of approval nominated below; and
- Reliance upon the listed documentation relied upon, listed drawings/plans
- Certification of the installation of the relevant portions on completion of the works

FIRE SAFETY SCHEDULE

Building A-D

Fire Safety Measures	Standard	BCA Clause(s)	Existing Fire Safety Measures
Access panels, doors & hoppers to fire resisting shafts	AS 1530.4 – 2014	C3.13	☑
Automatic fail-safe devices	--	C3.8, D2.21, Spec C3.4	☑
Automatic fire detection & alarm systems (associated to automatic shut-down system)	AS 1670.1 – 2015 AS 1668.1 – 2015	Spec E2.2b	☑
Emergency lighting	AS 2293.1 – 2005	E4.2, E4.4	☑
Exit signs	AS 2293.1 – 2005	E4.5, NSW E4.6 & E4.8, EP4.2	☑
Fire dampers	AS 1668.1 – 2015	Spec E2.2a	☑
Fire doors	AS 1905.1 – 2015	Spec C3.4, C3.10	☑
Fire hydrant systems	AS 2419.1 – 2005	E1.3, EP1.3	☑
Fire seals (protecting openings in fire resisting components of the building)	AS 4072.1 – 2005 AS 1530.4 – 2014	C3.12, C3.13, C3.15	☑
Lightweight construction	--	C1.8, Spec C1.8, CP1, CP2	☑
Mechanical air handling systems • Auto shutdown	AS 1668.1 – 2015 AS 1668.2 –2012	E2.2, Spec E2.2a, Spec E2.2b	☑
Portable fire extinguishers & fire blankets	AS 2444 – 2001	E1.6	☑
Paths of Travel	--	D1.6	☑
Fire Engineering Performance Solutions prepared by MCD Fire Engineering. Rev: FER4.0, date: 10/06/2021. ; 1. To review and permit a reduction in	C2.6, CP2	C2.6	☑

Fire Safety Measures	Standard	BCA Clause(s)	Existing Fire Safety Measures
spandrel/balcony separation between vertically aligned openings for building of Type A construction (Blocks A-D). 2. To permit the reduction in general FRLs; • from the required FRL of 120 minutes down to 60 minutes for building of Type A construction, i.e., main School Buildings (Blocks A-D); • from the required FRL of 90 minutes down to 60 minutes for building of Type C construction, i.e., Hall Building (Block E). 3. To permit the reduction of FRLs to the floors for buildings of Type A construction (Blocks B, C & D), from 120/120/120 to a ceiling having a Resistance to Incipient Spread of Fire (RISF) of 60 minutes. 4. To permit the use of combustible sarking material (Bradford Enviroseal ProctorWrap RW) inside the external walls of the building of Type A construction (Blocks A-D). 5. To permit the use of plywood timber noggings/reinforcement (for handrails/grabrails/wall mounted wet areas systems such as WHBs etc) in cavities of fire rated walls (internal or external) and non-fire-rated external walls the building of Type A construction (Blocks A-D). 6. The residual pressure of internal fire hydrants is to be designed in accordance with AS 2419.1-2017 instead of AS 2419.1-2005, i.e., 250 kPa instead of 700 kPa by viewing them as “unassisted attack fire hydrant”. 7. To permit the location of the fire hydrant booster to not technically be within sight of each building entry on the site, and not adjacent to the vehicular entrance. 8. To permit the omission of Fire Hose Reels serving parts of the buildings that are not forming part of the main classroom areas of the	Spec C1.1, Table 3. Table 5, CP1 and CP2 Spec C1.1, Clause 3.1 Table 3, CP1 and CP2 C1.9, CP2, CP4 C1.9, Spec C1.1, Clause 3.1(d), CP2. CP4 E1.3, AS 2419.1, EP1.3 E1.3, AS 2419.1, EP1.3 E1.4, EP1.1	Spec C1.1, Table 3, Table 5 Spec C1.1, Clause 3.1, Table 3 C1.9 C1.9, Spec C1.1, Clause 3.1(d) E1.3, AS2419.1 E1.3, AS2419.1 E1.4	

Fire Safety Measures	Standard	BCA Clause(s)	Existing Fire Safety Measures
building (i. e. admin, BOH, etc). 9. To permit the exit door handles (latches) greater than 1.1m above floor level (up to 1.2m instead). 10. To permit the use of Dincel Wall system that contains combustible formwork to be used as external walls of lower ground of Block D toilet block. 11. To permit that Blocks A-D and Block E are considered two separate buildings whilst being connected by a covered external walkway.	DP4, EP2.2 CP1, CP2, CP4 and CP8. C1.1, C2.7, C3.2, C3.3, C3.4, Spec C1.1.	D2.21(a) (i) C1.9 C1.1, C2.7, C3.2, C3.3, C3.4, Spec C1.1.	

Building E

Fire Safety Measures	Standard	BCA Clause(s)	Existing Fire Safety Measures
Access panels, doors & hoppers to fire resisting shafts	AS 1530.4 – 2014	C3.13	☑
Automatic fail-safe devices	--	C3.8, D2.21, Spec C3.4	☑
Automatic fire detection & alarm systems (associated to automatic shut-down system)	AS 1670.1 – 2015 AS 1668.1 – 2015	Spec E2.2b	☑
Emergency lighting	AS 2293.1 – 2005	E4.2, E4.4	☑
Exit signs	AS 2293.1 – 2005	E4.5, NSW E4.6 & E4.8, EP4.2	☑
Fire doors	AS 1905.1 – 2015	Spec C3.4, C3.10	☑
Fire hydrant systems	AS 2419.1 – 2005	E1.3, EP1.3	☑
Lightweight construction	--	C1.8, Spec C1.8, CP1, CP2	☑
Mechanical air handling systems • Auto shutdown	AS 1668.1 – 2015 AS 1668.2 –2012	E2.2, Spec E2.2a, Spec E2.2b	☑
Portable fire extinguishers & fire blankets	AS 2444 – 2001	E1.6	☑
Paths of Travel	--	D1.6	☑
Fire Engineering Performance Solutions prepared by MCD Fire Engineering. Rev: FER4.0, date: 10/06/2021. ; 1. To review and permit a reduction in spandrel/balcony separation between vertically aligned openings for building of Type A construction (Blocks A-D). 2. To permit the reduction in general FRLs; • from the required FRL of 120 minutes down to 60 minutes for building of Type A construction, i.e., main School Buildings (Blocks A-D); • from the required FRL of 90 minutes down to 60 minutes for building of Type C construction, i.e., Hall Building (Block E). 3. To permit the reduction of FRLs to the floors for buildings of Type A construction (Blocks B, C & D), from 120/120/120 to a ceiling having a Resistance to Incipient Spread of Fire (RISF) of 60 minutes. 4. To permit the use of combustible sarking material (Bradford Enviroseal ProctorWrap RW) inside the external walls of the building of	C2.6, CP2 Spec C1.1, Table 3. Table 5, CP1 and CP2 Spec C1.1, Clause 3.1 Table 3, CP1 and CP2 C1.9, CP2, CP4	C2.6 Spec C1.1, Table 3, Table 5 Spec C1.1, Clause 3.1, Table 3 C1.9	☑

Fire Safety Measures	Standard	BCA Clause(s)	Existing Fire Safety Measures
Type A construction (Blocks A-D).			
5. To permit the use of plywood timber noggings/reinforcement (for handrails/grabrails/wall mounted wet areas systems such as WHBs etc) in cavities of fire rated walls (internal or external) and non-fire-rated external walls the building of Type A construction (Blocks A-D).	C1.9, Spec C1.1, Clause 3.1(d), CP2. CP4	C1.9, Spec C1.1, Clause 3.1(d)	
6. The residual pressure of internal fire hydrants is to be designed in accordance with AS 2419.1-2017 instead of AS 2419.1-2005, i.e., 250 kPa instead of 700 kPa by viewing them as “unassisted attack fire hydrant”.	E1.3, AS 2419.1, EP1.3 E1.3, AS 2419.1, EP1.3	E1.3, AS2419.1 E1.3, AS2419.1	
7. To permit the location of the fire hydrant booster to not technically be within sight of each building entry on the site, and not adjacent to the vehicular entrance.	E1.4, EP1.1	E1.4	
8. To permit the omission of Fire Hose Reels serving parts of the buildings that are not forming part of the main classroom areas of the building (i. e. admin, BOH, etc).			
9. To permit the exit door handles (latches) greater than 1.1m above floor level (up to 1.2m instead).	DP4, EP2.2	D2.21(a) (i)	
10. To permit the use of Dincel Wall system that contains combustible formwork to be used as external walls of lower ground of Block D toilet block.	CP1, CP2, CP4 and CP8.	C1.9	
11. To permit that Blocks A-D and Block E are considered two separate buildings whilst being connected by a covered external walkway.	C1.1, C2.7, C3.2, C3.3, C3.4, Spec C1.1.	C1.1, C2.7, C3.2, C3.3, C3.4, Spec C1.1.	

DESIGN DOCUMENTATION

The following architectural documentation was reviewed as part of this assessment.

Drawing No.	Titled	Prepared by	Revision	Dated
NHQC2 – LP – AR – DWG – 00_S021	Composite Roof Plan - Part 1	Perumal Pedavoli	4	10/12/2020
NHQC2 – LP – AR – DWG – 00_S022	Composite Roof Plan - Part 2	Perumal Pedavoli	4	10/12/2020
NHQC2 – LP – AR – DWG – 00_S101	Overall Elevations - Sheet 01	Perumal Pedavoli	1	16/10/2020
NHQC2 – LP – AR – DWG – 00_S102	Overall Elevations - Sheet 02	Perumal Pedavoli	2	17/11/2020

SUPPLEMENTARY DOCUMENTATION

The following additional documentation was reviewed as part of this assessment, and has been relied upon in confirming compliance for those elements listed / certified or confirmed as compliant;

- Application for Crown Certificate Form issued by Anthony Manning on NSW Department of Education, School Infrastructure NSW, dated 01/07/2021
- Accessibility Performance Solution Report No. 19131-201-PS1, Revision 01 issued by du Chateau Chun, dated 31/0/2021.
- Fire Engineering Report No. S19033.EL, Revision 4.0, issued by MCD Fire Engineering Pty Ltd, dated 10/06/2021
- Design Certificate for Access Consulting Services issued by Tegan Ma of du Chateau Chun, dated 30/06/2021.

Information previously relied upon in Crown Certificate No. GDL190178.1, dated 12/03/2021

- Certificate of Compliance for Landscape Design issued by Ian Brammer of Hansen Yuncken Pty Ltd, dated 01/03/2021
- Statement of Compliance for Accessibility Design issued by Tegan Ma of du Chateau Chun Pty Ltd, dated 10/03/2021

Information previously relied upon in Crown Certificate No. GDL190178, dated 14/09/2020;

- Application for Crown Certificate issued by Martin Karm of NSW Department of Education – School Infrastructure NSW, dated 08/09/2020
- BCA Design Statement issued by Salvatore Rigoli of Perumal Pedavoli Pty Ltd, dated 03/08/2020
- Fire Engineering Report No. S19033.EL, revision FER 1.1, issued by MCF Fire Engineering, dated 19/06/2020
- Structural Design Compliance Certificate and associated Plans issued by Jonathan Low of Northrop, dated 02/09/2020
- Design Statement for the Electrical and lighting issued by Ivan Mira of Steensen Varming, dated 03/08/2020
- Design Intent Statement for Fire Detection & Smoke Control System and Automatic Shutdown of Air Handling Systems issued by issued by Stephen Soner of Fire Prevention Technologies Pty Ltd, dated 04/08/2020
- Design Certificate for Hydraulic Services issued by Ian Stalker of Woolacotts Consulting Engineers, dated 30/07/2020
- Design Statement for the Mechanical Building Services issued by Chris Arkins of Steensen Varming, dated 18/08/2020

- Design Certificate for Access Consulting Services issued by Tegan Ma of du Chateau Chun, dated 03/08/2020
- Letter of Confirmation of Population Numbers issued by Sam Rigoli of Design Statement for the Electrical and lighting issued by Ivan Mira of Steensen Varming, dated 27/08/2020
- NCC Section JV3 Report No. SY190518-SER 05, Revision 05, issued by Northrop, dated 15/06/2020
- Letter of Compliance for SSD Condition B6 - External Walls and Cladding issued by Paul Nelson of Hansen Yuncken
- Dilapidation Report No. 20016 issued by Project Solutions Pty Ltd, dated 25/07/2019
- Design Statement for the External Lighting design issued by Ivan Mira of Steensen Varming, dated 27/08/2020
- Construction Environmental Management Plan No. SC126, Revision 2, issued by Hansen Yuncken, dated 31/08/2020
- Letter of Compliance for SSD Condition B15 – Construction Environmental Management Plan (CEMP) issued by Zac Casimatis of Hansen Yuncken Pty Ltd. dated 11/09/2020
- Civil Engineering Design Certificate for SSD Conditions B22 - Operational Car Parking and Access Arrangements & B25 - Stormwater Management System and associated Plans issued by James Gilligan of Northrop Consulting Engineers, dated 10/09/2020
- Letter referencing SSD Condition B11 - Further Request to alter the timing for registering for Green Star Certification issued by Jim Lewis of School Infrastructure NSW, dated 11/09/2020
- Construction Traffic and Pedestrian Management Plan Reference No. 1048r02v04 issued by Ason Group, dated 10/09/2020
- Drawing No. NHQC2-EL-PM-DWG-REV1 – Site Layout Plan, Revision 1 issued by Hansen Yuncken Pty Ltd, dated 03/08/2020
- Weatherproofing Performance Solution Report No. NHQC2, Revision B, issued by Hansen Yuncken Pty Ltd, dated 09/09/2020

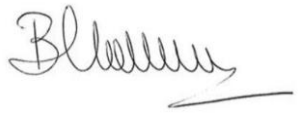
CONDITIONS OF APPROVAL

PART A – CONDITIONS OF CONSTRUCTION

BCA CLAUSE	Comments
BCA 2016 Amendment One	The construction works must be undertaken and installed in accordance with the requirements of BCA 2016 Amendment 1 and any referenced Australian Standards in BCA 2016 Amendment 1.
C1.10	Materials must have fire hazard properties in accordance with BCA Specification C1.10 as follows: - • Floor Coverings (i) a critical radian flux no less than **2.2kW/m²** for non-sprinkler protected buildings (ii) a maximum smoke development rate of 750 percent minutes • Wall and Ceiling linings (i) a group number of 1 or 2; and (ii) a smoke growth rate index of not more than 100; or (iii) an average specific extinction area less than 250m2/kg • Air handling ductwork (i) Rigid and flexible ductwork must comply with the fire hazard properties set out in AS 4254 – 1995 Note: BCA 2016 Amendment 1 has specific Australian Standards that must be complied with in determining the above requirements, consult BCA 2016 Amendment 1 to establish the relevant testing requirements prior to specifying, ordering or installing finishes
C3.15	Any new service penetrations in fire rated elements must be fire sealed in accordance with Clause C3.15 of BCA.
D1.6	Paths of travel to exits must have a clear width of no less than 1000mm. Note: Measured between fixed items, such as workstations, openings without doors, etc
D2.21	All door latching mechanisms to be located between 900-1100mm from the finished floor level.
E4.2/E4.5	New emergency lighting to be undertaken in accordance with BCA Clause E4.2 and AS2293.1 - 2005
E4.5/E4.6	New exit signage and alterations to suit new arrangement must be undertaken in accordance with BCA Clause E4.5, E4.6 and AS2293.1 - 2005
F4.4	New artificial lighting must accord with AS/NZS 1680.0 – 2009 to all rooms and corridors, lobbies and internal circulation spaces, and certified by a suitably qualified contractor upon completion.
F4.5	New / alterations to ventilation must be in accordance with AS1668.2-2012
Part J6	New artificial lighting must accord with Part J6 of BCA 2016, and certified by a suitably qualified contractor upon completion.
Table D2.14	Slip Resistance of new stairs / ramps, including relining of such must be provided in accordance with the required slip resistance listed in Table D2.14 of the BCA.

BCA CLAUSE	Comments
Fire Services	Any Fire Services being installation, modification or alteration must be undertaken in accordance with the listed standards of performance and BCA clause requirements of the Fire Safety Schedule.

This statement confirms compliance of the Design to BCA 2016 Amendment 1 for the proposed works and is reliant upon the listed documentation, design certification and plans referenced, as well as compliance with the conditions of this document.



Brett Clabburn
Director
Building Professionals Board / BDC0064