

# **BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT**

# PROPOSED BURMESE BUDDHIST TEMPLE

53 DWYER RD, BRINGELLY

DATE ► 18 SEPTEMBER 2017 REPORT NO. ► PROJECT No. 6994 REV 1 PREPARED FOR ► VT ARCHITECTS PREPARED BY ► AE&D





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REVISION STATUS										
REVISION	DATE	STATUS	WRITTEN	CHECKED						
Rev 0	14.11.16	DRAFT FOR COMMENT	JS	TJ						
Rev 1	18.09.17	FINAL REPORT	JS	TJ						

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#### 1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA) 2016 assessment of a proposed Burmese Buddhist Temple, to be located at 53 Dwyer Rd, Bringelly.

The primary purpose of this report is to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

#### 1.1 Recommendations

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments, additional information **OR** by way of an Alternative Solution:

The following table details the BCA compliance of the assessed design for the class 6 and 9b buildings only.

BCA Clause	Deemed-to- Satisfy Provision to be addressed
D1.10 Discharge from Exits	a) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.
	(b) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—
	(i) the minimum width of the required exit;
	(ii) or 1 m,
	whichever is the greater.
	(c) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—
	(i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D3
	Compliance issue:
	The plans do not detail a compliant pathway from the main shrine area through to the public road via a pathway compliant with the above provision.
	A performance based solution report will be required at the Construction Certificate stage to address this issue.
	<u> </u>





# 2.0 INTRODUCTION

This report provides a Building Code of Australia (BCA) 2016 assessment of a proposed Burmese Buddhist Temple, to be located at 53 Dwyer Rd, Bringelly.

This report provides a BCA assessment table in Section 3.0 that summarises the identified non compliance matters and offers specific recommendations.

#### 2.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2016. The scope of services is limited to Sections C – "Fire Resistance", Section D – "Access & Egress", Section E – "Services & Equipment", Section F "Health and Amenity" and Section J "Energy Efficiency"

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

• Architectural plans prepared by VT Architects – Project 6994, Drawing Numbers:

Drawing No.	Revision	Dated	Drawing Title
857/DA/001	А	17.08.17	Floor Plans – Location & Site / Roof
857/DA/002	А	17.08.17	Floor Plans – Lower & Ground
857/DA/003	А	17.08.17	Floor Plan – Ground – Main Shrine
857/DA/004	А	17.08.17	Floor Plan Ground – WC Block & Kitchen
857/DA/060	А	17.08.17	Schedule Of Finishes
857/DA/070	А	17.08.17	Perspective View
857/DA/101	А	17.08.17	Elevations – North, South, East & West
857/DA/102	А	17.08.17	Site Section & Front Entrance Elevation

- The Building Code of Australia 2016 prepared by the Australian Building Codes Board.
- The Guide to the BCA 2016, prepared by the Australian Building Codes Board.

#### 2.2 Purpose of the Report

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia 2016 and list any departures from the BCA 2016.
- Provide recommendations to address identified non-compliances, and/or identify potential alternative solutions

#### 2.3 Limitations of the Report

- Access and facilities for people with disabilities is addressed however compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report. It should be noted that BCA compliance does not necessarily meet the requirements of the Disability Discrimination Act (DDA).
- Reporting on hazardous materials, OH&S matters or site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistant levels of the building





- Consideration of any fire services operations (including hydraulic, electrical or other systems)
- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Consideration of energy or water authority requirements
- Consideration of Council's local planning policies
- Environmental or planning issues
- Requirements of statutory authorities
- Sections H or I of the BCA are not considered.
- Provision of any construction approvals or certification under Part 4A or Part 5 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out
- This assessment excludes BCA clauses D3.0-3.12 (Inclusive), F2.4 and E3.6. Refer to separate access consultant's report.
- BCA 2016 does not directly specify slip-resistance classification(s) for all *accessible paths of travel*; however, we highlight the need under AS 1428.1-2009 for all *accessible paths of travel* to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.

#### 3.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the building under the Building Code of Australia 2016 in respect to the compliance assessment of a proposed Burmese Buddhist Temple, to be located at 53 Dwyer Rd, Bringelly.

BCA Building Classifications:	6 (kitchen)
	7b (storage)
	9b (main shrine)
	10a (toilet block)
Buildings rise in storeys:	1 (determined in accordance with C1.2 of the BCA).
Type of Construction:	C (determined in accordance with C1.1 of the BCA)
Effective Height (m):	Less than 12-m





#### 4.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design for the class 6,7b and 9b buildings only.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS				
SECTION B STRUCTURE									
Part B1: Structural Provisions				x	<ul> <li>Structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all building elements will comply with Section B of the BCA.</li> <li>Glazing must comply with AS 1288-2006 and AS 2047-1999.</li> <li>Termite control must comply with AS 3660.1-2000 where any primary building elements are timber.</li> <li>If the buildings are in a flood hazard area it is required to comply with BCA clause B1.6.</li> <li>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</li> </ul>				
SECTION C FIRE RESISTANCE									
Part C1 Fire Resistance & Stability									
C1.1 Type of Construction Required			Х		Not applicable. All type C and vertically/horizontally separated				
C1.2 Calculation of Rise In Stories			х		Refer to Section 2.0 of this report for further details				
C1.3 Buildings of Multiple Classifications			х		Not applicable.				
C1.4 Mixed Types of Construction			х		The buildings will need to be of Type C Construction				
C1.5 Two Storey Class 2, 3 or 9 buildings			Х		Not applicable.				
C1.6 Class 4 Parts			х		Not applicable.				
C1.7			х		Not applicable.				





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Open Spectator Stands					
C1.8 Lightweight Construction			х		Not applicable.
C1.10 Fire Hazard Properties				х	Fire hazard properties must comply with C1.10 of the BCA and Spec C1.10 for floor, wall and ceiling linings, or be considered non-combustible.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C1.11				х	Any walls to be of tilt up concrete construction would be
Performance of External Walls in Fire					required to comply with this clause. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C1.12			Х		Noted - Informational clause only
Combustible materials					
C1.13 Fire protected timber: concession			х		Not applicable.

#### Part C2

# **Compartmentation & Separation**

C2.2 General Floor Area & Volume Limitations	Х			Complies
C2.3 Large Isolated Buildings		×		Not applicable.
C2.4 Requirements for Open Space		×		Not applicable.
C2.5 Class 9a & 9c Buildings		×		Not applicable.
C2.6 Vertical Separation of openings in external walls		×		Not applicable as buildings are only of type C construction.
C2.7 Separation by Fire Walls		×	,	Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
C2.8			Х		Not applicable.
Separation of Classifications in the same storey					
C2.9			Х		Not applicable.
Separation of Classifications in different stories					
C2.10			Х		Not applicable.
Separation of lifts shafts					
C2.11			Х		Not applicable.
Stairways and lifts in one shaft					
C2.12			Х		Not applicable.
Separation of Equipment					
C2.13			Х		Not applicable.
Electrical Supply					
C2.14			Х		Not applicable.
Public corridors in Class 2 & 3 Buildings					
Part C3			•		

# Part C3 Protection of Openings

C3.2	X	Not applicable
Protection of openings in external walls		
C3.3	x	Not applicable.
Separation of external walls and associated openings in different fire compartments		
C3.4	X	See clause C3.4 of the BCA for options for fire
Acceptable Methods of Protection		protection.
C3.5	X	Not applicable.
Doorways in Fire Walls		
C3.6	X	Not applicable.
Sliding Fire Doors		
C3.7	X	Not applicable.
Protection of Doorways in horizontal exits		





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
C3.8			х		Not applicable.
Openings in fire isolated exits					
C3.9 Service Penetrations in fire-isolated exits			X		Not applicable.
C3.10 Openings in Fire isolated lift shafts			х		Not applicable.
C3.11 Bounding Construction			х		Not applicable.
C3.12 Openings in floors and ceilings for services			х		Not applicable.
C3.13 Openings in Shafts			х		Not applicable.
C3.15 Openings for Service Installations			х		Not applicable.
C3.16 Construction Joints			х		Not applicable.
C3.17 Columns protected in lightweight construction to achieve an FRL			х		Not applicable.
SECTION D ACCESS & EGRESS					
Part D1 Provision for Escape					
D1.2 Number of Exits required			х		Complies
D1.3 When Fire Isolated exits are required			х		Not applicable.
D1.4 Exit Travel Distances	х				Complies





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D1.5	х				Complies
Distance Between Alternate Exits					
D1.6 Dimensions of Exits and paths of Travel to Exits				х	<ul> <li>In a required exit or path of travel to an exit—         <ul> <li>(a) the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and</li> <li>(b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than 1- m</li> </ul> </li> </ul>
					<ul> <li>Doors must be a minimum of 750-mm clear width, except where required for disabled access where a minimum width of 850-mm is required, so separate access report.</li> </ul>
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D1.7			х		Not applicable.
Travel via Fire Isolated Stairs					
D1.8			Х		Not applicable.
External Stairways or ramps in lieu of Fire Isolated Stairs					
D1.9			х		Not applicable.
Travel by non-fire-isolated stairs					
D1.10 Discharge from Exits		х			a) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.
					(b) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—
					(i) the minimum width of the required exit;
					(ii) or 1 m,
					whichever is the greater.
					(c) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—
					(i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D3
					Compliance issue:
					The plans do not detail a compliant pathway from the main shrine area through to the public road via a pathway compliant with the above provision.
					A performance based solution report will be required at





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					the Construction Certificate stage to address this issue.
D1.11 Horizontal Exits			х		Not applicable.
D1.12 Non-required stairways, ramps or escalators			х		Not applicable.
D1.13 Number of Persons Accommodated Note NSW Table D1.13 Area per person according to use			x		For the purpose of the <i>Deemed-to-Satisfy provisions</i> , the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by— (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D1.13 according to the use of that part, excluding spaces set aside for— (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (iii) reference to the seating capacity in an assembly building or room; or (iv) any other suitable means of assessing its capacity.
D1.14 Measurement of Distances			х		Not applicable.
D1.15 Method of Measurement			х		Informational clause only
D1.16 Plant Rooms and lift Motor Rooms: Concession			х		Not applicable.
D1.17 Access to lift pits			х		Not applicable.
Part D2 Construction of Exits					
D2.1 Application of Part Note NSW D2.1			х		Informational clause only





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D2.2 Fire-Isolated stairways and ramps			Х		Not applicable.
D2.3 Non-fire Isolated stairways and ramps			x		Not applicable.
D2.4 Separation of Rising and Descending Stairs			х		Not applicable.
D2.5 Open Access ramps and balconies			Х		Not applicable.
D2.6 Smoke Lobbies			Х		Not applicable.
D2.7 Installations in Exits and Paths of Travel				x	Any electricity meters, distribution boards; telecommunications distribution boards or equipment; electrical motors or other motors within corridors/hallways/lobbies or the like must be enclosed with non-combustible construction or a fire protective covering with doorways suitably sealed against smoke spread. Electrical wiring may be installed with a fire isolated exit, but only where associated with a lighting, detection, pressurisation, security, surveillance, intercommunication, or hydraulic fire services monitoring valves. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.8 Enclosure of Space Under Stairs and ramps				Х	Not applicable.
D2.9 Width of Stairs			Х		Not applicable.
D2.10 Pedestrian Ramps				Х	All pedestrian ramps are to have a non-slip finish complying with AS 4586-2013 Slip resistance classification of new pedestrian surface materials. <b>Details demonstrating compliance with this clause</b> <b>must be incorporated into the construction</b> <b>certificate plans / specification</b>
D2.11 Fire-Isolated Passageways			х		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D2.12			х		Not applicable.
Roof as Open Space					
D2.13 Goings & Risers				Х	Stairways to achieve compliance with this clause relevant to going and riser dimensions.
,					Stairways to achieve constant risers & goings except:-
					Treads must have a surface with a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013 Slip resistance classification of new pedestrian surface materials.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.14 Landings				Х	Landings must not be less than 750mm long and have a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with <i>AS</i> 4586-2013 Slip resistance classification of new pedestrian surface materials.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.15 Thresholds				Х	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaves unless the doorway is in a building required to be accessible by Part D3, and in which case the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS 1428.1.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.16 Balustrades and other Barriers				Х	Balustrades must be provided where there is a fall of more than 1m. All other balustrades shall comply with D2.16(g) and (h)(ii).
Note NSW D2.16					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.17 Handrails				х	All stairways and ramps must be provided with a handrail as per this clause.
					All ramps with a gradient steeper than 1:20 or more must be provided with a handrail as per this clause, including any driveway ramps that form paths of travel to the street.
					See also clause D3.3 of the separate access consultant's report regarding handrail requirements to assist people with a disability.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.
D2.18 Fixed Platforms, walkways and ladders			Х		Not applicable.
D2.19 Doorways & Doors			х		Not applicable.
D2.20				х	<u>General requirement:</u>
Swinging Doors					As the kitchen and storage buildings are less than $200^{-1}$ m <sup>2</sup> the exit doors may open in, however they are required to be fitted with a hold open device as per clause D2.20(b).
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.
D2.21 Operation of Latch				х	All doors in a required exit or forming part of a required exit AND doors in a path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 $-$
					A. be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and
					B. have a clearance between the handle and the back plate or door face at the center grip section of the handle of not less than 35mm and not more than 45mm; or
					C. a single hand pushing action on a single device which is located between 900mm and 1.2m from the door.
					The above requirements do not apply to doors that serve only or is within a SOU in a Class 2 building.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2.22 Re-entry from Fire isolated exits			Х		Not applicable.
D2.23			х		Not applicable.
Signs on Doors					





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D2.24			х		Not applicable.
Protection of openable windows					
D2.25			Х		Not applicable.
Timber stairways concession					

## Part D3

Access for People with Disabilities – See separate access consultant's report

#### SECTION E SERVICES & EQUIPMENT

Part E1

Fire Fighting Equipment

E1.3		х	Not applicable. All buildings are less than 500-m <sup>2</sup> .
Fire Hydrants			
E1.4		X	Not applicable.
Fire Hose Reels			
E1.5		Х	Not applicable.
Sprinklers			
E1.6 Portable Fire Extinguishers		x	Portable fire extinguishers must be provided in accordance with Table E1.6 of the BCA to the kitchen and shrine buildings and the storage building, and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444-2001.
			Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1.8		х	Not applicable.
Fire Control Centre			
E1.9 Fire Precautions during construction		x	• During construction, not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required / temporary exit; and
			Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1.10	X		Not applicable.
Provision for Special Hazards			
			1

Part E2





					BCA / Certifiers
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Smoke Hazard Management					
E2.2 General Requirements (inclusive of Table E2.2a / Table E2.2b & NSW amendments)				x	Class 9b buildings (shrine)A Class 9b building must be provide with:• automatic shutdown of any air-handling system (other than individual room units with a capacity not more than 1000 litres/second) upon activation of a detection system as per BCA specification E2.2aAppropriate incorporated specificationDesign certification certificate specification
E2.3 Provision for Special Hazards			х		Not applicable.
Part E3 Lift Installations E3.1			x		Not applicable.
Lift installations			V		Neterrischie
E3.2 Stretcher Facility in Lifts			X		Not applicable.
E3.3 Warning Against the use of lifts in Fire			X		Not applicable.
E3.4 Emergency Lifts			x		Not applicable.
E3.5 Landings			x		Not applicable.
E3.6 Facilities for People with Disabilities			x		Not applicable.
E3.7 Fire Service Controls			х		Not applicable.
E3.8 Aged Care Buildings			x		Not applicable.
E3.9 Fire service recall operation switch			х		Not applicable.
E3.10			Х		Not applicable.





					BCA / Certifiers
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informationa	Compliance Required	COMMENTS
Lift car fire service drive control switch					
Part E4					
Emergency Lighting, Exit Signs and	Warn	ing S	Syste	ms	
E4.2				x	an emergency lighting system is required to the main
Emergency Lighting Requirements					shrine. Electrical Design Certification must be incorporated into the construction certificate specification
E4.3 Measurement of Distance			х		Noted. Informational clause only.
E4.4 Design and Operation of Emergency Lighting				Х	The emergency lighting system to the main shrine must comply with AS 2293.1-2005.
E4.5				х	Exit signage is required to the main shrine building.
Exit Signs					Electrical Design Certification must be incorporated into the construction certificate specification and exit sign locations must be illustrated on the architectural floor plans
E4.6 Direction Signs (inclusive of NSW E4.6)			х		Not applicable.
E4.7 Class 2 & 3 Buildings & Class 4 Parts: Exemption			х		Not applicable.
E4.8				х	Exit signs to the main shrine must comply with:
Design & Operation of Exit Signs					• AS 2293.1-2005; or
					• For a photoluminescent exit sign, Specification E4.8.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E4.9			х		Not applicable.
Emergency Warning & Intercommunication Systems					
SECTION F					
HEALTH & AMENITY					
Part F1					

Damp & Weatherproofing





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F1.1				х	Stormwater drainage must comply with AS/NZS 3500.3-2015.
Stormwater Drainage					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.4 External above ground membranes			Х		Not applicable.
F1.5 Roof coverings				x	Roof coverings to comply with the relevant Australian Standards as per this clause. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.6 Sarking				Х	Sarking-type materials used for weatherproofing must comply with AS/NZS 4200 Part 1 and 2-1994. Details demonstrating compliance with this clause must be incorporated into the construction
F1.7 Waterproofing of wet area			х		certificate plans / specification
F1.9 Damp-proofing				X	Where a damp-proof course is required, it must consist of a material that complies with AS/NZS 2904-1995; or impervious sheet material in accordance with AS 3660.1-2000
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.10 Damp-proofing of floors on the ground				х	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870-2011 (N/A to areas that do not require weatherproofing – refer specific clause exemptions).
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.11 Provision of Floor Wastes			х		Not applicable
F1.12 Sub Floor Ventilation				х	Clause relevant to the ventilation of sub-floor spaces located between a suspended floor of a building and the ground.
					Details demonstrating compliance with this clause must be incorporated into the construction





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					certificate plans / specification
F1.13 Glazed Assemblies				Х	Clause relevant to the provision of glazed assemblies within external walls in accordance with AS 2047-1999. <b>Details demonstrating compliance with this clause</b>
					must be incorporated into the construction certificate plans / specification

# Part F2

Sanitary & Other Facilities

F2.1 Facilities in residential buildings		x		Not applicable.
F2.2 Calculation of number of occupants and fixtures		X		Not applicable.
F2.3 Facilities for Class 3 to 9 Buildings	х			Complies
F2.4 Facilities for People with Disabilities		X		See separate access report
F2.5 Construction of Sanitary Compartments		X		Not applicable
F2.6 Interpretation: Urinals and washbasins		X		Not applicable.
F2.7 Microbial Control Note NSW F2.7 (Clause Deleted)		X		Not applicable.
F2.8 Waste Management		X		Not applicable.
Part F3 Room Sizes	_			
F3.1 Height of Rooms and other spaces			x	<ul><li>Heights o0r rooms to comply with the following:</li><li>In a Class 9b building - not less than 2.7 m</li></ul>



•

In the kitchen building – not less than 2.4 m.

Details demonstrating compliance with this clause



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					must be incorporated into the construction certificate plans / specification
Part F4					

Light & Ventilation

Light & Ventilation			
F4.1 Provision of natural light	X		Not applicable.
F4.2 Methods and extent of natural lighting	X		Not applicable.
F4.3 Natural light borrowed from adjoining room	X		Not applicable.
F4.4 Artificial lighting		Х	The provision of artificial lighting in accordance with AS/NZS 1680.0-2009 is required. <i>Electrical Design Certification must be incorporated into the construction certificate specification</i>
F4.5 Ventilation of Rooms		х	All rooms to be provided with Clause F4.6 compliant natural ventilation <b>OR</b> a mechanical ventilation or air- conditioning system complying with AS 1668.2-2012. <b>Details demonstrating compliance with this clause</b> <i>must be incorporated into the construction</i> <i>certificate plans / specification</i>
F4.6 Natural Ventilation	X		<ul> <li>(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—</li> <li>(i) with ventilating area not less than 5% of the floor area of the room required to be ventilated; and</li> <li>(ii) open to—</li> <li>(A) a suitably sized court, or space open to the sky; or</li> <li>(B) an open verandah, carport, or the like; or</li> <li>(C) an adjoining room in accordance with F4.7.</li> <li>(b) The requirements of (a)(i) do not apply to a Class 8 electricity network substation.</li> </ul> Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F4.7 Ventilation borrowed from adjoining room	X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS			
F4.8			х		Not applicable.			
Restriction of position of water closets and urinals								
F4.9			х		Not applicable.			
Airlocks								
F1.11			Х		Not applicable.			
Carparks								
F4.12 Kitchen local exhaust				Х	The provision of a kitchen exhaust hood complying with AS/NZS 1668.1-2015 and AS 1668.2-2012 for the commercial kitchen is required.			
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification			
Part F5 Sound Transmission								
F5.1 Application of Part					The provisions of this Part do not apply.			
SECTION G ANCILLIARY PROVISIONS								
Part G1 Minor Structures and Components								
G1.2 Refrigeration chambers, strong- rooms and vaults					Any refrigerated or cooling chamber of sufficient size for a person to enter must incorporate the safety requirements of this clause relevant to an internal latching device, internal lighting, external lamp indicator and alarm bell features.			
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification			
SECTION J ENERGY EFFICIENCY								
NSW SECTION J ENERGY EFFICIENCY								
SECTION J - NATIONAL ENERGY E	FFIC		CY P	ROV	ISIONS			
Part J0: Energy Efficiency								
Part J1: Building Fabric								
J1.1				x	The DTS Provisions of this Part apply to building			
	<u> </u>	<u> </u>	I	Page	21 of 27			





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Application of Part					elements forming the envelope of Class 2 to 9 buildings where heating or cooling are proposed.
J1.2 Thermal construction –general				х	Where required, insulation must be provided as per AS/NZS 4859.1-2002 and installed as per this clause.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
J1.3 Roof and ceiling construction				X	A roof or ceiling that is part of the envelope, must achieve the Total R-Value specified in Table J1.3a for the direction of heat flow, and must satisfy all requirements of this clause.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
J1.4 Roof lights			х		Roof lights including any shaft or diffuser forming part of the envelope, must comply with the thermal performance requirements of Table J1.4. Refer additional requirements relevant to satisfying Part F4.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
J1.5 Walls				X	Each part of a wall that is part of the envelope must satisfy one of the thermal performance options in Table J1.5, noting the specific exceptions of this clause relevant to doors, vents, penetrations, shutters, glazing, and an earth retaining wall or earth berm, in other than climate zone 8.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate specification
J1.6 Floors				х	A floor that is part of the building's envelope must achieve the Total R-Value specified in Table J1.6, and must satisfy all requirements of this clause.
Part J2: Glazing					
J2.1 Application of Part				Х	The DTS Provisions of this Part apply to building elements forming the envelope of Class 2 to 9 buildings where heating or cooling are proposed.
J2.2			х		Blank clause.
J2.3			х		Blank clause.
J2.4 Glazing				х	The glazing in each storey, including any mezzanine, must be assessed separately in accordance with the requirements of this clause, for:
					<ul> <li>Glazing in the external fabric facing each orientation; and</li> </ul>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Glazing in the internal fabric,
					to ensure that the aggregate air-conditioning energy value attributable to the glazing does not exceed the allowance obtained by multiplying the façade area that is exposed to the conditioned space for the orientation by the energy index in Table J2.4a.
					Glazing calculations demonstrating compliance with this clause must be incorporated into the specification
J2.5 Shading				х	Where required to comply with J2.4, shading must be provided in accordance with this clause.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part J3: Building Sealing		•			
J3.1 Application of Part				х	The requirements of this Part apply to elements forming the envelope of Class 2 to 9 buildings where heating/cooling are proposed , other than:
					• A building in a climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler;
					<ul> <li>A permanent building opening necessary for the safe operation of a gas appliance;</li> </ul>
					<ul> <li>A building or part where mechanical ventilation required by Part F4 provides sufficient pressurization to prevent infiltration;</li> </ul>
					Parts of buildings that cannot be fully enclosed.
J3.2 Chimney and flues			Х		Not applicable
J3.3 Roof lights			x		Not applicable
J3.4 Window and doors				х	Seals to restrict air infiltration to windows and doors must be provided as required (note exceptions listed in J3.4 (b), and requirements for sealing of main entrance in J3.4 (d).
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
J3.5 Exhaust fans				х	Miscellaneous exhaust fans must be fitted with self- closing dampers, where serving a conditioned space or a habitable room in climate zones 4, 5, 6, 7 or 8.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
J3.6				х	Roofs, ceilings, walls, floors and any openings such as a
Construction of roofs, walls and floors					window frame, door frame, light frame or the like must be sealed in accordance with the requirements of this clause to minimise air leakage.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
J3.7				х	An evaporative cooler must be fitted with a self-closing
Evaporative coolers					damper of the like when serving a heated space, or a habitable room or a public area of a building in climate zones 4, 5, 6, 7 or 8.
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

#### Part J4: Blank

Part J5: Air-conditioning and ventilation s	systems		
J5.1 Application of Part	X		The Deemed-to-Satisfy Provisions of this Part do not apply to a Class 8 electricity network substation.
J5.2 Air-conditioning systems		х	An air-conditioning unit or system must comply with J5.2(a) to J5.2(g). Mechanical Design certification must be submitted in support of the construction certificate application
J5.3 Mechanical ventilation systems		x	Mechanical ventilation systems must comply with J5.3(a) to J5.3(c). Mechanical Design certification must be submitted in support of the construction certificate application
J5.4 Miscellaneous exhaust systems		x	A miscellaneous exhaust system with an air flow rate of more than 1000 L/s that is associated with equipment having a variable demand such as a stove in a commercial kitchen or a chemical bath in a factory, must have the means for the operator to reduce the energy used (such as by a variable speed fan), and to stop the motor when it is not needed. Refer concessions contained in this clause.
			Mechanical Design certification must be submitted in support of the construction certificate application

# Part J6: Artificial lighting and powerJ6.1<br/>Application of PartImage: Second Secon





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Electrical Design certification must be submitted in support of the construction certificate application
J6.3 Interior artificial lighting and power control				х	Internal artificial lighting systems must be switched and zoned in accordance with the specific requirements of this clause. Electrical Design certification must be submitted in support of the construction certificate application
J6.4 Interior decorative and display lighting				x	Interior decorative and display lighting, such as for a foyer mural or art display, must be controlled separately from other artificial lighting, and be switched in accordance with the specific requirements of this clause. <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.5 Artificial lighting around the perimeter of a building				х	Artificial lighting around the perimeter of a building must be controlled by sensors or time switches in accordance with the specific requirements of this clause. Refer exclusions relevant to emergency lighting and lighting around detention centres. <b>Electrical Design certification must be submitted in</b> <b>support of the construction certificate application</b>
J6.6 Boiling water and chilled water storage units				x	Power supply to boiling or chilled water storage units must be time switch controlled in accordance with Specification J6. Electrical Design certification must be submitted in support of the construction certificate application

Part J7: Hot water supply and swimming pool and spa pool plant

J7.2 Hot water supply		x	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia. <b>Details demonstrating compliance with this clause</b> <b>must be incorporated into the construction</b> <b>certificate plans / specification</b>
J7.3 Swimming pool heating and pumping	Х		Not applicable.
J7.4 Spa pool heating and pumping	Х		Not applicable.

Part J8: Access for maintenance and facilities for monitoring





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
J8.1			х		Not applicable.
Application of Part					
J8.3				х	Not applicable.
Facilities for energy monitoring					

# 5.0 BCA ASSESSMENT SUMMARY- Volume 2 - Class 1b and 10a

The following table details the BCA compliance of the assessed design for the class 10a building only.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
General Requirements				X	The class 10a building is required to comply with the standard BCA requirements of volume 2 of the BCA. A NASTPEC domestic specification will be required prior to the issue of the Construction Certificate.





## 6.0 CONCLUSION

This report provides a Building Code of Australia (BCA) 2016 assessment of a proposed Burmese Buddhist Temple, to be located at 53 Dwyer Rd, Bringelly.

The primary purpose of this report was to identify the non-compliance matters contained in the proposed design philosophy against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendation

This report provided a BCA assessment table in Section 3.0 that summarises the identified non compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

Further, if compliance with the deemed-to-satisfy provisions is not achievable or desirable, Alternative Solutions could be further developed and verified by an appropriately qualified BCA Consultant or Fire Safety Engineer.

Approved By: Trenton Jones – Director Report prepared By: Jason Storer MAAC G.DIP Build Surv (UWS) Director Dip Env Health and Bld Surv (SIT) Grade A1 - BPB No. BPB0203 Grade A1 - BPB No. BPB0394 A1 - Accredited Building Surveyor A1 - Accredited Building Surveyor for AE&D for AE&D

