BCA COMPLIANCE ASSESSMENT REPORT

LOCATION: 76 Hobart Street, St Marys NSW 2760

PROPOSAL: This report describes the BCA Compliance of a proposed two-story boarding house with ground floor carparking consisting of 17 rooms, located at 76 Hobart Street, St Marys NSW 2760

DATE: May 2021 Rev A
PREPARED FOR: Local Government Engineering Services
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EXECUTIVE SUMMARY

This report provides a National Construction Code, Volume 1, Building Code of Australia, 2019, (Amendment 1) assessment of a proposed two-story boarding house with ground floor carparking consisting of 17 rooms, located at 76 Hobart Street, St Marys NSW 2760.

The primary purpose of this report is to identify any non-compliance in respect of the proposed building against the current Deemed-to-Satisfy (DTS) Provisions of the BCA.

The following is a list of Deemed-to-Satisfy Provisions that should be addressed by design amendments or a performance solution to achieve compliance with the requirements of the BCA.

BCA DEEMED-TO-SATISFY PROVISION	COMMENTS
C3.2 Protection of openings in external walls	There are openings in external walls of the building required to have a FRL that are within 3m of a side property boundary. • Eastern elevation, and • Western elevation These openings must be adequately shielded from exposure or protected by one of the methods specified by clause C3.4. Alternatively, a Performance Solution prepared by a suitably qualified fire safety engineer may be able to justify protection of a lesser standard, or no protection at all.
D1.4 Exit travel distances	The following areas have extended exit travel distances to either a point of choice or where two exits are provided to the nearest exit. **First Floor -** Extended travel distance to an exit 19.2m in lieu of 6m.

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Figure 2: Extended travel distance to a single exit a class 3 part.

A Performance Solution prepared by a suitably qualified fire safety engineer may be able to justify the extended travel distances.

CD Certification have completed a detailed assessment of the subject existing development, against the relevant requirements of the BCA. The details of this are specified in the Assessment Table provided in Section 3.0 of this Report. Subject to this assessment, CD Certification advise that the existing building is capable of complying, with the relevant requirements of the BCA.

Where identified within this report, additional details confirming BCA compliance, are to be provided at the time of Construction Certificate assessment as normal industry.

1.0 INTRODUCTION

This report provides a National Construction Code, Volume 1, Building Code of Australia, 2019, (Amendment 1) assessment of a proposed two-story boarding house with ground floor carparking consisting of 17 rooms, located at 76 Hobart Street, St Marys NSW 2760.

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

1.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2019 (Amendment 1). The scope of services is limited to Section C – Fire Resistance, Section D1 and D2 - Access & Egress, Section E – Services & Equipment, Section F - Health and Amenity of the BCA.

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

• Architectural plans as listed hereunder:

Plan No./s	Revision/s	Prepared by	Date
0001 -4001	-	iDraft Architetcs	3.05.2018

- The NCC 2019 (Amendment 1) Building Code of Australia – Volume One - prepared by the Australian Building Codes Board.
- The Guide to Building Code of Australia – Volume One – prepared by the Australian Building Codes Board.

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1.2 Purpose of the Report

The purpose of this report is to carry out an assessment under the current Building Code of Australia 2019 (Amendment 1) and provide advice in terms of any non-compliance matters.

1.3 Limitations of the Report

- Assessment of any structural elements or geotechnical matters relating to the construction 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 Council's local planning policies, environmental or planning issues.
- Provision of any construction approvals or certification under the Environmental Planning & Assessment Act 1979.
- Assessment of compliance against the requirements of the Disability (Access to Premises - Buildings) Standards 2010 and NCC Volume 1 (amendment 1) Part D3 Access for people with a disability.
- A detailed section J assessment including glazing, shading, lighting calculations and the like required by Section J of the BCA has not been carried out.

2.0 BCA Assessment

Assessment data regarding the current Building Code of Australia:

Building Data	
BCA Building Classification/s:	Class 3 – Boarding house Class 7a – Carparking
Building Rise in Storeys (RIS):	Two (2) storeys
Type of Construction:	Type B construction.
General Floor area limitations:	Ground Floor: 420m2 (approximately) First Floor: 356m2 (approximately)
Effective Height: Effective height is defined in Part A1.1 of the BCA as: *"the vertical distance between the floor of the lowest storey included in the calculation of rise in storey and the floor of the top most storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units)".*	Less than 12m.

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3.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design

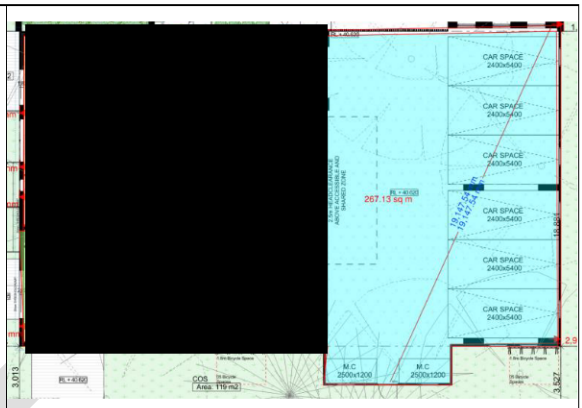
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SECTION C FIRE RESISTANCE					
Part C1 Fire Resistance & Stability					
C1.1 Type of construction required				X	The building has a rise in storeys of two (2). Based on the requirements of Table C1.1, the preliminary type of construction required is Type B. The building must comply with Specification C1.1 as applicable. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C1.2 Calculation of rise in stories			X		The buildings have a rise in storeys of between two (2).
C1.3 Buildings of multiple classifications				X	The top storey of the building contains a Class 3 part.
C1.4 Mixed types of construction				X	The building will be a single Type of construction – Type B.

C1.5 Two storey class 2, 3 or 9c buildings			X		Not applicable.
C1.6 Class 4 parts			X		Not applicable – the building does not contain class 4 part.
C1.7 Open spectator stands			X		Not applicable – the building does not contain an Open Spectator stand
C1.8 Lightweight construction				X	At this stage, the building is capable of complying. If lightweight construction is utilised to achieve an FRL, it must comply with this clause and Specification C1.8. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C1.9 Non-combustible building elements				X	In a building required to be of Type B construction, elements listed in this clause must be non-combustible. Where a building element is required to be non-combustible, all materials forming that element are to be non-combustible. This clause also identifies building elements to which it does not apply. Also, it should be noted that wall systems utilising permanent polymer/PVC formwork (e.g. Dincel, Rediwall, etc.) used where the NCC requires the element to be non-combustible, must be justified by a Performance Solution prepared by a suitably qualified fire safety engineer. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.

C1.10 Fire hazard properties				X	At this stage, the building is capable of complying. Fire hazard properties of linings and materials must comply with Clause & Specification C1.10 of the BCA for floor, wall and ceiling linings, air-handling ductwork, lift cars, sarking-type materials, and attachments. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C1.11 Performance of external walls in fire			X		Note Applicable.
C1.12 Combustible materials			X		Clause is left blank.
C1.13 Fire protected timber: Concession			X		Informational clause only. Fire-protected timber may be used wherever an element is required to be non-combustible, provided— (a) the building is— (i) a separate building; or (ii) a part of a building— (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and (b) the building has an effective height of not more than 25 m; and (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification E1.5; and

					(d) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and (e) cavity barriers are provided in accordance with Specification C1.13. If Fire protected timber is to be used within the building, it must comply with this clause and Specification C1.13a.
C1.14 Ancillary elements			X		"Ancillary elements", other than those listed in this clause, must not be fixed, installed, or attached to the internal parts or external face of an external wall that is required to be non-combustible. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
Part C2 **Compartmentation & Separation**					
C2.1 Application of part			X		Informational clause only. Clause C2.2, C2.3 and C2.4 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 or an open-deck carpark. A class 7a Carpark contains 40 or more car spaces must be provided with a sprinkler system complying with AS2118.1.
C2.2 General floor area & volume limitations				X	At this stage, the building is capable of complying. The floor area and volume limitations for a Class 3 and 7a building of Type B construction. Type C Construction Class 2: The Class 3 parts of the building are not subject to the floor area and volume limitations of C2.2. Rather, Table 4 of Specification C1.1 and clause C3.11 regulate the compartmentation and separation requirements applicable to Class 3 buildings or parts.

					7a | Maximum Floor Area 3,500m^2 Maximum Volume 21,000m^3 **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.3 Large, isolated buildings			X		Not Applicable - the building is not considered large, isolated buildings.
C2.4 Requirements for open space			X		Not Applicable - the building is not considered large, isolated buildings.
C2.5 Class 9a & 9c Buildings			X		Not Applicable - the building will not assume a Class 9a or 9c classification.
C2.6 Vertical Separation of openings in external walls			X		Not Applicable – at this stage, the building is not required to be of Type A construction.
C2.7 Separation by fire walls				X	At this stage, the building is capable of complying. If fire walls are utilised to separate areas within the building, they must comply with this Specification C1.1. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.8 Separation of classifications in the same storey				X	If a building has parts of different classifications located alongside one another in the same storey – (i) Each building element in that storey must have the higher FRL prescribed in Specification C1.1 for that element for the classification concerned, or (ii) The different classifications must be separated from one another by fire walls having the higher FRL prescribed in Table 4 of Specification C1.1

					 ***Figure 1:*** *Ground floor plan showing the different classification.* ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.9 Separation of classifications in different storeys				X	The floor separating the class 2 and the storey below must comply with this clause. (i) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.10 Separation of lifts shafts			X		Not Applicable.
C2.11 Stairways and lifts in one shaft			X		Not Applicable.
C2.12 Separation of equipment				X	At this stage, the building is capable of complying. Equipment including lift motor rooms, emergency generators sustaining emergency

					equipment operating in emergency mode, central smoke control plan, boilers or battery areas with a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours must be fire separated from the remainder of the building in accordance with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.13 Electrical supply system				X	At this stage, the building is capable of complying. A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (ii) have any doorway in that construction protected with a *self-closing* fire door having an FRL of not less than –/120/30. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C2.14 Public corridors in Class 2 & 3 buildings	X				The Class 3 parts of the building do not incorporate any public corridors that have a length of more than 40m. of compliance are to be made apparent at the construction certificate application stage.
Part C3 **Protection of Openings**					
C3.1 Application of part			X		Informational clause only.

C3.2 Protection of openings in external walls		X			There are openings in external walls of the building required to have a FRL that are within 3m of a side property boundary. • Eastern elevation, and • Western elevation These openings must be adequately shielded from exposure or protected by one of the methods specified by clause C3.4. Alternatively, a Performance Solution prepared by a suitably qualified fire safety engineer may be able to justify protection of a lesser standard, or no protection at all. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C3.3 Separation of external walls and associated openings in different fire compartments			X		Not Applicable.
C3.4 Acceptable methods of protection			X		Informational clause only. Window openings are required to be protected by one of the methods outlined below; (A) or external wall-wetting sprinklers with windows that are automatic closing or permanently fixed closed; (B) -/60/- fire windows that are automatic closing or permanently fixed in the closed position. -/60/- automatic closing fire shutters. Options for compliance with C3.4 include for doors; (A) Internal or external wall wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or

					(B) -/60/30 fire doors that are self-closing or automatic closing. Fire doors, fire *windows* and fire shutters must comply with Specification C3.4 of the BCA. Any openings in external walls requiring protection under clause C3.2 and C3.3 must be protected in accordance with the requirements of this clause.
C3.5 Doorways in fire walls				X	At this stage, the building is capable of complying. Any doorways through fire walls must be protected in accordance with the requirements of this clause. Note, any fire door associated with the above requirement are to be self-closing or automatic closing fire rated doors. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C3.6 Sliding fire doors			X		Not Applicable – At this stage, there are no sliding fire doors in the building.
C3.7 Protection of doorways in horizontal exits			X		Not Applicable – At this stage, there are no horizontal exits in the building.
C3.8 Openings in fire isolated exits			X		Not applicable – At this stage, the building does not contain any fire isolated exits.
C3.9 Service penetrations in fire-isolated exits			X		Not applicable – At this stage, the building does not contain any fire isolated exits.
C3.10 Openings in fire isolated lift shafts			X		Not Applicable – At this stage, there are no Fire isolated lifts required in the buildings
C3.11 Bounding Construction: Class 2 and 3 buildings and Class 4 parts				X	At this stage, the building is capable of complying. The doorways to the units, and other rooms

					served by the public corridors, must be self-closing -/60/30 fire door sets. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
C3.12 Openings in floors and ceilings for services				X	A service must be protected in a building of Type B construction by a shaft where it penetrates a ceiling required to have a resistance to the incipient spread of fire. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
C3.13 Openings in shafts			X		Not Applicable – At this stage, the buildings will not be of Type A construction.
C3.15 Openings for service installations				X	At this stage, the building is capable of complying. Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an *external wall* or roof) that is *required* to have an FRL with respect to *integrity* or *insulation* or a *resistance to the incipient spread of fire*, that installation must comply with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
C3.16 Construction joints				X	At this stage, the building is capable of complying. Construction joints in fire rated building elements are to be appropriately treated to maintain the integrity and insulation of the element in which they are located. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.

C3.17 Columns protected in lightweight construction to achieve FRL				X	At this stage, the building is capable of complying. Any columns protected with lightweight fire rated materials to achieve the required FRL must comply with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
SECTION D ACCESS & EGRESS					
Part D1 **Provision for Escape**					
D1.2 Number of exits required	X				The building is serviced by an adequate number of exits.
D1.3 When fire isolated exits are required			X		Not Applicable – the proposed required stairways do not connect more than 2 storeys
D1.4 Exit travel distances		X			The following areas have extended exit travel distances to either a point of choice or where two exits are provided to the nearest exit. **First Floor -** Extended travel distance to an exit 19.2m in lieu of 6m.  **Figure 2:** Extended travel distance to a single exit a class 3 part. A Performance Solution prepared by a suitably qualified fire safety engineer may be able to justify the extended travel distances. **Note:** Full details of compliance are to be made apparent at the construction certificate

					application stage.
D1.5 Distance between alternate exits				X	At this stage, the building is capable of complying. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.6 Dimensions of exits and paths of travel to exits				X	At this stage, the building is capable of complying. In a required exit or path of travel to an exit— *(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* *(B) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than—* *(i) 1 m.* ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.7 Travel via fire Isolated exits			X		Not Applicable- At this stage, the building does not contain any fire isolated exits.
D1.8 External stairways or ramps in lieu of fire isolated stairs			X		Not Applicable – At this stage, the building does not contain external stairways or ramps in lieu of fire isolated stairs.
D1.9 Travel by non-fire-isolated stairs				X	At this stage, the building is capable of complying. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.10 Discharge from exits				X	At this stage, the building is capable of complying.

					(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.* ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.11 Horizontal exits			X		Not Applicable – At this stage, there are no horizontal exits required in the building.
D1.12 Non-required stairways, ramps or escalators			X		Informational clause only.
D1.13 Number of persons accommodated				X	The occupant capacity of the building must be calculated/specified in accordance with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.14 Measurement of distances			X		Informational clause only.
D1.15 Method of measurement			X		Informational clause only.
D1.16 Plant rooms and lift motor rooms: Concession				X	A ladder may be used to access the plant rooms. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D1.17 Access to lift pits			X		Not Applicable – At this stage, there are no proposed lift in the building.
D1.18 Egress from early childhood			X		Not Applicable - At this stage, the buildings will not assume a 9b part.

centre					
Part D2 **Construction of Exits**					
D2.1 Application of part			X		Informational clause only. **Note:** Clause D2.13, D2.14(a), D2.16, D2.17(d), D2.17(e), D2.18, and D2.24 are the only clauses of this Part that apply to the internal parts of a sole-occupancy unit in a Class 2 building.
D2.2 Fire-Isolated stairways and ramps			X		Not Applicable – At this stage, the building does not contain any fire isolated stairways or ramps.
D2.3 Non-fire Isolated stairways and ramps			X		Not Applicable – the proposed non-fire isolated required stairways do not connect more than 2 storeys
D2.4 Separation of rising and descending stairs			X		Not Applicable – there are no separation of rising and descending stairs in the building.
D2.5 Open access ramps and balconies			X		Not Applicable – there are no Open access ramps and balconies in the building.
D2.6 Smoke lobbies			X		Not Applicable – there are no Smoke lobbies in the building.
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 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. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.8 Enclosure of space under stairs and ramps			X		Not Applicable – At this stage, no enclosures beneath stairways have been indicated on the architectural plans.
D2.9			X		Information clause only.

Width of stairs					
D2.10 Pedestrian ramps				X	The floor surface of the ramps must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586-2013. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.11 Fire-isolated passageways			X		Not applicable – there are no fire isolated passageways shown on the architectural drawings.
D2.12 Roof as open space			X		Not Applicable.
D2.13 Goings & risers				X	The geometry of the stairways and slip-resistance of the stairway treads must comply with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.14 Landings				X	The geometry and slip-resistance of landings must comply with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.15 Thresholds				X	The thresholds throughout the building must comply with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.16 Balustrades and other barriers				X	Barriers (balustrades) must be provided in accordance, and comply, with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.

D2.17 Handrails				X	Handrails must be provided in accordance, and comply, with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
D2.18 Fixed platforms, walkways and ladders			X		Informational clause only.
D2.19 Doorways & doors				X	At this stage, the building is capable of complying. The doorways and doors throughout the buildings must comply with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.20 Swinging doors				X	At this stage, the building is capable of complying. A swinging door in a required exit or forming part of a required exit— (a) must not encroach— (i)at any part of its swing by more than 500 mm on the required width (including any landings) of a required— (A)stairway; or (B)ramp; or (C)passageway, If it is likely to impede the path of travel of the people already using the exit ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.21 Operation of latch				X	At this stage, the building is capable of complying. All doors in a required exit or forming part of a required exit & doors in a path of travel must

					be readily openable without a key from the side that faces a person seeking egress by a single device which is located between 900mm and 1.1m from the floor. The door handle must be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch and have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35mm and not more than 45mm. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.22 Re-entry from fire isolated exits			X		Not Applicable.
D2.23 Signs on doors			X		Not applicable – the buildings do not contain and fire isolated exits or smoke doors.
D2.24 Protection of openable windows				X	The windows to the bedrooms must be protected in accordance with this clause. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
D2.25 Timber stairways: Concession			X		Not applicable - the buildings will not contain any timber stairways as shown on the drawings.
Part D3 Access for People with Disabilities					
D3.1 to D3.12				X	An assessment of this Part does not form part of the scope of this Report. At this stage, the building is capable of complying. **Class 3 – Common areas** Access is required to be provided from a pedestrian entrance required to be accessible to at least 1 floor containing sole occupancy

					units and to the entrance doorway of each sole occupancy unit located on that level. Where a ramp complying with AS 1428.1-2009 or a passenger lift is installed – a) to the entrance doorway of each sole-occupancy unit; and (b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp. **Class 3 – Sole-occupancy units** 2 accessible sole-occupancy unit to be provided. **Class 7a part** To and within any level containing accessible carparking spaces Furthermore, access is required to be provided from the main points of pedestrian entry at the allotment boundary and from any accessible carparking space on the allotment. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
SECTION E **SERVICES & EQUIPMENT**					
Part E1 **Fire Fighting Equipment**					
E1.3 Fire hydrants				X	The building must be served by a fire hydrant system compliant with AS 2419.1-2005. If required, the Fire brigade booster system must be orientated to directly face the street frontage. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.

E1.4 Fire hose reels			X		Not applicable. Fire hose reels do not apply to Class 3 parts. The Class 7a carpark fire compartment is less than 500m2.
E1.5 Sprinklers			X		Not Applicable.
E1.6 Portable fire extinguishers				X	At this stage, the building is capable of complying. The building must be provided with portable fire extinguishers. Within the Class 3 parts, a 2.5kg ABE powder extinguisher must be located within 10m of all unit entry doors. Portable fire extinguishers to be selected, located, and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444-2001. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
E1.8 Fire control centre			X		Not Applicable – the building is less than 25m in height and 18000m2 in floor area.
E1.9 Fire Precautions during construction			X		Informational only. **Note:** In a building under construction, not less than one (1) fire extinguisher to suit Class A, B and C, and electrical fires must be provided on each storey adjacent to each required exit or temporary stairway or exit
E1.10 Provision for Special Hazards			X		Informational only.
Part E2 **Smoke Hazard Management**					
E2.1 Application of part			X		Information Clause Only.

E2.2 General requirements				X	The Class 3 parts of the building must be provided with a smoke alarm system complying with clause 3 of Specification E2.2a, a smoke detection system complying with clause 4 of Specification E2.2a, or a combination of a smoke alarm system and a smoke detection system complying with clause 5 of Specification E2.2a. The remainder of the building must be provided with a smoke detection system complying with clause 4. The smoke alarm or detection system must activate a building occupant warning system in accordance with this clause 7. The Class 7a carpark is to be provided with a mechanical ventilation system complying with the requirements of AS 1668.2 and Clause 5.5 of AS 1668.1. **Note:** Full details of compliance are to be made apparent at the construction certificate application stage.
Part E3 **Lift Installations**					
E3.1 Lift installations			X		Not Applicable – At this stage, the building is not required to be provided with lift access to the first floor.
Part E4 **Emergency Lighting, Exit Signs and Warning Systems**					
E4.2 Emergency lighting requirements				X	Emergency lighting shall be provided in each building with a floor area more than 300m2 in accordance with this clause and the requirements of AS 2293.1-2018. ***Note:*** Full details of compliance are to be made apparent at the construction certificate

					application stage.
E4.3 Measurement of distance			X		Informational clause only.
E4.4 Design and operation of emergency lighting			X		Informational clause only. The emergency lighting system must comply with AS 2293.1-2018.
E4.5 Exit signs, E4.6 Direction signs				X	Exit and directional signage is required to be provided in each the building in accordance with this clause and the requirements of AS 2293.1-20018. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
E4.7 Class 2 & 3 buildings & Class 4 parts: Exemptions				X	The requirements of clause E4.5 do not apply to— (a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the exit or balcony— (i) with the word "EXIT" in capital letters 25 mm high in a colour contrasting with that of the background; or (ii) by some other suitable method; and an entrance door of a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
E4.8 Design & operation of exit signs			X		Informational clause only. ***Note:*** The exit sign system must comply with AS 2293.1-2005 and be clearly visible at all times when the building is occupied.
E4.9 Sound systems and intercom systems for emergency purposes			X		Not Applicable – At this stage, the building is not required to be served by a Sound systems and intercom systems in accordance with this clause.

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SECTION F **HEALTH & AMENITY**					
Part F1 **Damp & Weatherproofing**					
F1.1 Stormwater drainage				X	Stormwater drainage for the building must comply with AS/NZS 3500.3-2015. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.4 External above ground membranes				X	Waterproofing membranes for external above ground use, such as balconies and roofs, must comply with AS 4654.1-2012 and AS 4654.2-2012. Note: Full details of compliance are to be made apparent at the construction certificate application stage.
F1.5 Roof coverings				X	The roof covering must be in accordance with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.6 Sarking				X	Sarking-type materials used for weatherproofing of roofs and walls must comply with AS 4200.1-1994 and AS 4200.2-1994. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.7 Waterproofing of wet area				X	Waterproofing of the wet areas in the building must comply with this clause and AS 3740-2010. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.9 Damp-proofing				X	Damp-proofing is to be provided in accordance

					with this clause. Where a damp-proof course is provided, the material must comply with AS/NZS 2904-1995 or, for impervious termite shields, AS 3660.1-2014. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.10 Damp-proofing of floors on ground				X	Damp-proofing of floors on the ground must be in accordance with this clause. Where required the vapour barrier is to comply with AS 2870-2011. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.11 Provision of floor wastes				X	The bathrooms and laundries located above a sole-occupancy unit or public space mush have a floor waste, and the floor must be graded to the floor waste to permit the drainage of water. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
F1.12 Sub floor ventilation			X		Note Applicable.
F1.13 Glazed assemblies				X	Glazed assemblies in external walls or roofs must comply with AS 2047-2014 or AS 1288-2006 as required by this clause and NCC clause B1.4. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage.
Part F2 **Sanitary & Other Facilities**					
F2.1 Facilities in residential buildings			X		At this stage, the building is capable of complying. The architectural plans indicate that the residential units have sufficient facilities.

					Note: Full details of compliance are to be made apparent at the construction certificate application stage.
F2.2 Calculation of number of occupants and fixtures			X		Informational. In calculating the total number of sanitary facilities required in the building, a unisex accessible facility can be counted once for each sex in determining the total number of sanitary facilities required under Table F2.3 of the BCA.
F2.3 Facilities for Class 3 to 9 Buildings			X		Not applicable – the Class 7a carpark is not required to be serviced by a sanitary facility.
F2.4 Facilities for people with disabilities			X		Not applicable – there are no communal sanitary facilities associated with the Class 2 sole occupancy units or the Class 7a carpark
F2.5 Construction of Sanitary Compartments				X	At this stage, the building is capable of complying. The sanitary compartments must be provided with clearance in accordance with NCC Figure F2.5. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F2.6 Interpretation: urinals and washbasins				X	At this stage, the building is capable of complying. The urinals and washbasins to be in accordance with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F2.7 Microbial control				X	At this stage, the building is capable of

					complying. The reference to AS/NZS 3666.1-2011 is deleted from the NCC in NSW, as the need to comply with this standard is regulated in the Public Health Regulation, 2012, under the Public Health Act, 2010. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F2.8 Waste management			X		Not applicable – the building will not contain a Class 9a or 9c part.
Part F3 Room Sizes					
F3.1 Height of rooms and other spaces				X	At this stage, the building is capable of complying. The height of all spaces and rooms must comply with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
Part F4 Light & Ventilation					
F4.1 Provision of natural light				X	At this stage, the building is capable of complying. Natural light must be provided to all habitable rooms within the Class 2 parts. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.2 Methods and extent of natural lighting				X	At this stage, the building is capable of complying. The method and extent of natural light provided to all habitable rooms within the Class 2 parts must be in accordance with the requirements of this clause.

					Note: Full details of compliance are to be made apparent at the construction certificate application stage
F4.3 Natural light borrowed from adjoining room				X	At this stage, the building is capable of complying. Natural light can be borrowed (where required) in accordance with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.4 Artificial lighting				X	At this stage, the building is capable of complying. Artificial lighting must be provided throughout the building in accordance with the requirements of AS 1680.0-2009. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.5 Ventilation of rooms				X	At this stage, the building is capable of complying. Where natural ventilation is not available or non-compliant, the room or space shall be mechanically ventilated or an air conditioning system complying with AS 1668.2 and AS/NZS 3666.1 is to be provided. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.6 Natural ventilation				X	At this stage, the building is capable of complying. If natural ventilation is utilised, a

					ventilating area of no less than 5% of the floor area must be provided. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.7 Ventilation borrowed from adjoining room				X	At this stage, the building is capable of complying. Ventilation can be borrowed from an adjacent room in accordance with the requirements of this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.8 Restriction on position of water closets and urinals				X	At this stage, the building is capable of complying. The location of sanitary compartments complies with this clause. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.9 Airlocks			X		Not Applicable.
F4.11 Carparks				X	At this stage, the building is capable of complying. The carpark must have a system of mechanical ventilation complying with AS 1668.2-2012 or a system of natural ventilation complying with Section 4 of AS 1668.4-2012. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F4.12 Kitchen local exhaust ventilation			X		Not Applicable.
Part F5					

Sound transmission and insulation					
F5.1 Application of part				X	The requirements apply, the development contains a Class 3 BCA classification.
F5.2 Determination of airborne sound insulation ratings				X	At this stage, the building is capable of complying. A form of construction required to have an airborne sound insulation rating must— (a)have the required value for weighted sound reduction index (Rw) or weighted sound reduction index with spectrum adaptation term (Rw + Ctr) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or (b)comply with Specification F5.2. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F5.3 Determination of impact sound insulation ratings				X	At this stage, the building is capable of complying. (a) A floor in a building required to have an impact sound insulation rating must— (i)have the required value for weighted normalised impact sound pressure level (Ln,w) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or (ii)comply with Specification F5.2. (b)A wall in a building required to have an impact sound insulation rating must— (i)for a Class 2 or 3 building be of discontinuous construction. Discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and (i)for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and (ii)for other than masonry, there is no mechanical linkage between leaves except at

					the periphery. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F5.4 Sound Insulation rating of floors				X	At this stage, the building is capable of complying. (a) A floor in a Class 2 or 3 building must have an Rw + Ctr (airborne) not less than 50 and an Ln,w (impact) not more than 62 if it separates— (i) sole occupancy units; or (ii)a sole occupancy unit from a plant room, lift shaft, stairway, public corridor public lobby or the like, or parts of a different classification. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F5.5 Sound insulation rating of walls				X	At this stage, the building is capable of complying. (a) A wall in a Class 2 or 3 building must— (i) have an Rw + Ctr (airborne) not less than 50, if it separates sole occupancy units; and (ii)have an Rw (airborne) not less than 50, if it separates a sole occupancy from a plant room, lift shaft, stairway public corridor, public lobby or the like, or parts of a different classification; and (iii)comply with F3.b(b) if it separates— (A)a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or (B)a sole occupancy unit from a plant room or lift shaft. (b)A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an Rw not less than 30.

					Where a wall required to have sound insulation has a floor above, the wall must continue to— (i)the underside of the floor above; or (ii)a ceiling that provides the sound insulation required for the wall. (f)Where a wall required to have sound insulation has a roof above, the wall must continue to— (i)the underside of the roof above; or (ii)a ceiling that provides the sound insulation required for the wall. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F5.6 Sound insulation rating of internal services				X	At this stage, the building is capable of complying. (a) If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole occupancy unit, the duct or pipe must be separated from the rooms of any sole occupancy unit by construction with an Rw + Ctr (airborne) not less than— (i)40 if the adjacent room is a habitable room (other than a kitchen); or (ii)25 if the adjacent room is a kitchen or non-habitable room. (b)If a storm water pipe passes through a sole occupancy unit it must be separated in accordance with (a)(i) and (ii). ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage
F5.7 Sound isolation of pumps				X	At this stage, the building is capable of complying. A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.

					Note: Full details of compliance are to be made apparent at the construction certificate application stage
SECTION J **ENERGY EFFICIENCY**					
NSW SUBSECTION J(B) ENERGY EFFICIENCY - CLASS 3 and CLASS 5 to 9 BUILDINGS				X	At this stage, the building is capable of complying. A detailed assessment of Section J Energy Efficiency Provisions has not been carried out as this will be subject to a separate dedicated report prepared by an energy efficiency consultant. ***Note:*** Full details of compliance are to be made apparent at the construction certificate application stage

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4. 0 Conclusion

The proposed two-story boarding house with ground floor carparking consisting of 17 rooms, located at 76 Hobart Street, St Marys NSW 2760, has been assessed against the deemed to satisfy provisions of the National Construction Code, Volume 1, Building Code of Australia, 2019, (Amendment 1). The primary purpose of this report is to identify the non-compliance matters in comparison to the current Deemed-to-Satisfy Provisions of the BCA, which are outlined in the ***executive summary*** and further detailed in Section 3.0 above.

Compliance with the recommendations of the report will ensure that the building will be provided with a satisfactory level of fire safety and amenity to the building occupants.

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ATTACHMENT 1 – Inspection and Maintenance

Fire Safety Measures

The fire safety measures within the building must be maintained to always ensure correct operation the building is occupied. All firefighting equipment should be tagged when tested/inspected and logbooks kept up to date for all smoke detection, warning systems and sprinkler systems (where installed).

An annual fire safety certificate must be submitted to the local consent authority and the NSW Fire Brigade each year indicating satisfactory performance of the fire safety measures contained within the building. The annual fire safety statement should be displayed in a prominent place within the building (i.e. the main entry foyer).

The correct operation and maintenance of the buildings fire safety measures is critical in affording an adequate level of fire safety.

Specification C1.1 - Fire Resistance Levels

Table 4 -Building Element – Type B Construction	Class 2, 3 or 4	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing External Walls - Less than 1.5m from a FSF - 1.5 - 3m from a FSF - 3 - 9m from a FSF - 9 - 18m from a FSF - 18m or more from a FSF	90/90/90 90/60/30 90/30/30 90/30/- -/-/-	120/120/120 120/90/60 120/30/30 120/30/- -/-/-	180/180/180 180/120/90 180/90/60 180/60/- -/-/-	240/240/240 240/180/120 240/90/60 240/60/- -/-/-
Non-Loadbearing External Walls - Less than 1.5m from a FSF - 1.5 - 3m from a FSF - 3m or more from a FSF	-/90/90 -/60/60 -/-/-	-/120/120 -/90/60 -/-/-	-/180/180 -/120/90 -/-/-	-/240/240 -/180/120 -/-/-
External Columns (not incorporated into an external wall) - Loadbearing less than 18m from a FSF				

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Table 4 -Building Element – Type B Construction	Class 2, 3 or 4	Class 5, 7a or 9	Class 6	Class 7b or 8
- Loadbearing more than 18m from a FSF - Non-loadbearing	90/-/- -/-/- -/-/-	120/-/- -/-/- -/-/-	180/-/- -/-/- -/-/-	240/-/- -/-/- -/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180	240/240/240
Internal Walls - Fire resisting lift and stair shafts – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120	180/120/120 -/120/120	240/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – - Loadbearing - Non-loadbearing	60/60/60 -/60/60	120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – - Loadbearing - Non-loadbearing	60/60/60 -/60/60	120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-
Other loadbearing internal walls and columns	60/-/-	120/-/-	180/-/-	240/-/-
Floors	-/-/-	-/-/-	-/-/-	-/-/-
Roofs	-/-/-	-/-/-	-/-/-	-/-/-

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