

14<sup>th</sup> August 2020

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Dear Katina,

**Re: 23 Howard Street, Dee Why  
Building Assessment Report**

Reference is made to our engagement to undertake an assessment of the proposed alterations and additions to the above building against the provisions of the Building Code of Australia, 2019.

An assessment of drawings from Watershed Design, was undertaken against the provisions of the Building Code of Australia (BCA2016) and an inspection of the existing building was undertaken on 16<sup>th</sup> October 2018 for the purpose of obtaining a Development Application.

The following assessment has been undertaken on the proposed works.

## 1. BUILDING DESCRIPTION

For the purposes of the Building Code of Australia (BCA) the development may be described as follows. It is noted that limited access was provided throughout the building so there are assumptions made regarding the details of the remainder of the building, although it is noted that these are existing and not being modified as part of the new works.

### Rise in Storeys (Clause C1.2)

The building has assumed to have an existing rise in storeys of five (5). This is not being modified under the new works.

### Classification (Clause A3.2)

It has been assumed that the building contains the following classifications.

Class	Description
6	Retail Tenancy
5	Offices
7a	Carparking
2	Residential Sole Occupancy Units

### Type of Construction Required (Table C1.1)

The building is considered to be of Type A Construction

## Floor Area and Volume Limitations (Table C2.2)

The building is subject to maximum floor area and volume limits of:-

Class 6, 7a	Maximum Floor Area Maximum Volume	5 000m <sup>2</sup> 30 000m <sup>3</sup>
Class 5	Maximum Floor Area Maximum Volume	8 000m <sup>2</sup> 48 000m <sup>3</sup>
Class 2	The Class 2 portions of the building are not subject to floor area and volume limitations of C2.2 as Table 3 of Specifications C1.1 and Clause C3.11 of the BCA regulates the compartmentation and separation provisions applicable to buildings, or building portions, of Class 2 classifications.	

## 2. BUILDING CODE OF AUSTRALIA ASSESSMENT

An assessment of the existing building and the proposed internal alteration works was undertaken against the relevant parts of the Building Code of Australia as follows:-

### 2.1 Fire Resistance and Stability – Part C1

1. As existing the building is constructed of concrete and masonry walls located within proximity to the boundary. As an existing commercial tenancy it is considered that the external walls will maintain a sufficient fire rating to suit a Class 2 sole occupancy unit.
2. The new works will need to comply with this Part and need to be provided with walls and floors that maintain the required FRL in accordance with Specification C1.1.

### 2.2 Compartmentation and Separation – Part C2

1. Due to the existing commercial classification of the tenancy and the surrounding tenancies being commercial tenancies it is required that the wall separating the sole occupancy unit from the other tenancies and the corridor will need to act as a 2hr fire wall. During the inspection it was not possible to determine the construction of the bounding walls, however it would be required to confirm they maintain the required 2hr fire rating and where this is not achieved upgraded to comply with Specification C1.1.
2. The existing windows within the building are assumed to be provided with existing spandrels in accordance with Clause C2.6 of the BCA. As part of any new works it would be required that spandrel separation is maintained in accordance with this clause. Confirmation may need to be sought by the PCA as to whether they will require a spandrel to be provided within the winter garden due to the nature of the building. Otherwise they may be willing to accept this is not an external wall and the bi-fold door is the external wall and therefore rely upon the horizontal protection of the slab to maintain the required separation. However, if this winter garden is watertight and deemed more as an internal space it may be required to maintain a vertical spandrel in accordance with Clause C2.6.

### 2.3 Protection of Openings – Part C3

1. The openings along the front elevation are noted to be at the property boundary and would therefore not be exposed to the side property boundaries.
2. The existing door and door frame is noted to be tagged and will maintain an FRL of -/60/30, in accordance with Clause C3.11 as a sole occupancy unit this will be a sufficient fire rating and the existing door may be retained. If a new door is to be installed it will need to be a self-closing -/60/30 door in accordance with AS1905.1.
3. As the new works will fire separate the unit from the corridor and the surrounding tenancies it would be required to fire seal each of the services penetrations where they pass through a fire rated element. During the inspection it was found that there are many services penetrations passing above the unit door which have not been suitably sealed. As part of the new works it

would be required to ensure that each of the existing services are suitably sealed and all new services penetrations will comply with BCA Clause C3.15

## **2.4 Provision for Escape – Part D1**

1. A single exit has been provided from the existing building and would be suitable.
2. It is noted that the new unit is located more than 6m from the fire stair and would therefore have an extended travel distance in accordance with Clause D1.4 and would not comply. It would be required to seek a Performance Solution to address this non-compliance.
3. The egress width within the existing fire stair is noted to be less than the required 1000mm in accordance with BCA Clause D1.6; however this is noted to be existing and not forming part of the new works.

## **2.5 Construction of Exits – Part D2**

1. Egress from the new works is provided via an existing fire isolated stair which provides access to the Ground Floor open space. The existing stairway has been provided with handrails and nosing strips which would be deemed suitable for an existing building and allow for egress to be provided from the new works.

## **2.6 Access for People with a Disability – Part D3**

1. The proposal contains work solely within a residential sole occupancy unit and therefore there are no works which will require compliance in accordance with this part. However, it is noted that access will be provided to the sole occupancy units door via the existing lift.

## **2.7 Fire Fighting Equipment – Part E1**

1. The existing building has a total floor area of more than 500m<sup>2</sup> and has been provided with existing fire hydrants, fire hose reels and portable fire extinguishers on they storey that would be capable of providing coverage.
2. It is noted that the existing building is over 4 storeys and therefore in accordance with the current BCA2019 it is required that residential units are provided with a sprinkler system in accordance with Clause E1.5 of the BCA. In accordance with Clause 93 of the Environmental Planning and Assessment Regulation 2000 Council have the power to require an upgrade of the building. In particular a sprinkler system is deemed a Category 1 fire safety provision and will specifically need to be reviewed by the Council. However due to the nature of the works within the existing building and the limited size of the proposed it is considered that an upgrade to the unit to provide a sprinkler system would be excessive and not required for such a development. This will need to be reviewed by Council and assessed as part of the Development Application.

## **2.8 Smoke Hazard Management – Part E2**

1. The new works are required to be fitted with a smoke detection and alarm system in accordance with Specification E2.2a. This will require smoke alarms to be installed within the sole occupancy unit. The existing tenancy contains smoke detectors through

## **2.9 Lift Installations – Part E3**

1. There is an existing lift within the building providing access to the applicable storey. There are no new works occurring within the lift.

## **2.10 Emergency Lighting and Exit Signs– Part E4**

1. The existing common area is provided with emergency lighting and illuminated exits signs which would be suitable in accordance with this clause.

## **2.11 Health and Amenity (Section F)**

1. The sole occupancy unit has been provided with its own laundry, bathroom and kitchen as required by this clause.

2. Based on the inspection of the existing building, it is noted that there would be sufficient height available within the tenancy to allow for a clear height of 2400mm as required by Clause F3.1 for a sole occupancy unit.
3. Large windows are proposed and existing which are considered to be sufficient to allow for 10% natural lighting and 5% natural ventilation in accordance with Part F4 due to the open nature of the unit and the possibility to borrow from the main open spaces and winter garden.
4. As a new sole occupancy unit, it is required that the unit is acoustically sealed in accordance with Part F5 of the BCA. This will likely require upgrade to the walls and the floor slabs to allow for compliance. It would be recommended to seek comment from an Acoustic Consultant to detail the best ways to upgrade the existing building to allow for compliance to be achieved.
5. In accordance with the latest BCA2019, there is a requirement for condensation management to be addressed in accordance with Part F6 of the BCA. It is noted that the existing external walls will generally be maintained and may remain as existing with no works occurring. However, where new external walls are being provided suitable compliance will need to be provided.

## **2.12 Ancillary Provisions, Special Use Buildings & Maintenance (Sections G H & I)**

1. No requirements are applicable to this building under these Sections

## **2.13 Energy Efficiency (Section J)**

1. The proposed works new works will be subject to requirements under Section J.

## **3. CONCLUSION**

Subject to on-going design development and the comments above the proposed new sole occupancy unit is capable of complying with the requirements of the BCA 2019, subject to the provision of a Fire Engineering Report to address the extended travel distance.

Yours faithfully,



Benjamin Long  
**Senior Building Regulations Consultant**  
**BCA Logic Pty Ltd**