



4<sup>th</sup> November 2017

ref:2016-0007-bca1

Robbin Gibbon  
FoodBoss Cold Storage  
24-27 Lambridge Place,  
Penrith NSW 2750

**Re: Proposed Alterations and Additions to 24- 27 Lambridge Place, Penrith  
Building Code of Australia – BCA Capability Statement**

Reference is made to your request for Consult Code Solutions to undertake an assessment of the design documentation related to the Development Application for the alterations and additions to the rear of the above premises.

The design indicates that development proposal comprises of alterations and additions to the rear an existing food storage warehouse building and includes a new loading dock, receiving and dispatch areas with a small plant room above.

Additional carparking and truck manoeuvring areas are also proposed on the eastern side of the property.

The new warehouse areas are to be used as freezer rooms for the medium and long term storage and holding of packaged food products.

The new additions are to be constructed as a separate addition to the existing building however new access through doors are proposed to connect the new building areas with the existing building.

In this regard, we have undertaken an assessment of the DA design drawings against the provisions of the National Construction Code – Building Code of Australia (BCA 2016).

The assessment contained in this report is not intended to demonstrate that the requirements of Clause 98 of the Environmental Planning and Assessment regulation 2000 have been satisfied but rather are capable of being met as such conclusion can only be made following a detailed assessment of all plans, documentation and the like submitted with any subsequent Construction Certificate application.

It should be noted that the assessment of the proposal against the Disabled Access provisions of the BCA including the Disability ((Access to Premises – Buildings) Standards 2010 will be subject to a separate Disability Access Assessment report.

This report has been based on the following design documentation as prepared by Ezzy Architects.

| Sheet List |                                  |            |
|------------|----------------------------------|------------|
| Number     | Name                             | Issued     |
| A00        | Cover                            | 19/10/2017 |
| A100       | Existing Site                    | 19/10/2017 |
| A101       | Proposed Site                    | 19/10/2017 |
| A102       | Flood Area                       | 19/10/2017 |
| A200       | Existing Floor Plans             | 19/10/2017 |
| A201       | Proposed Ground Floor Plan       | 19/10/2017 |
| A202       | Floor Plans and Travel Distances | 19/10/2017 |
| A203       | Truck Refuelling Plan            | 19/10/2017 |
| A204       | Truck Turning Circle             | 19/10/2017 |
| A300       | Sections                         | 19/10/2017 |
| A301       | Detail Wall                      | 19/10/2017 |
| A400       | Elevations                       | 19/10/2017 |
| A401       | Elevations                       | 19/10/2017 |
| A500       | Landscape plan                   | 19/10/2017 |
| A501       | Landscape Plan Details           | 19/10/2017 |
| A502       | External Colour Schedule         | 19/10/2017 |
| A600       | Shadow Diagrams                  | 19/10/2017 |
| A601       | Visual Analysis                  | 19/10/2017 |
| A700       | 3D Views                         | 16/10/2017 |

## Building Description

The subject as proposed to be used would be described by the Building Code of Australia (BCA) as follows: -

- Having a rise-in-storeys of one (1)
- Having the following Classifications: -
  - Warehouse & Loading Dock – Class 7b (existing and proposed)
  - Administration/ Office – Class 5 (existing)
- Required to be of Type C Construction.
- Subject to maximum floor area and volume limitations of:-
  - Class 5 - Maximum Floor Area of 3,000m<sup>2</sup>, Maximum Volume 18,000m<sup>3</sup>
  - Class 7 - Maximum Floor Area of 2,000m<sup>2</sup>, Maximum Volume 12,000m<sup>3</sup>
- Having an Effective height of less than 12m.
- Being in Climate Zone 6

## Fire Resistance (BCA Section C)

The proposed building additions will be required to be in Type C Construction having the following fire resistance levels (FRL's) as set out in Specification C1.1 as follows: -

### Type C Construction

| Item   |  | Class 5                      | Class 7b                     |
|--|--|------------------------------|------------------------------|
| External Walls <ul style="list-style-type: none"> <li>less than 1.5m to a fire source feature</li> <li>1.5 – 3m from fire source feature;</li> <li>more than 3m from a fire source feature.</li> </ul>   |  | 90/90/90<br>60/60/60<br>-/-/ | 90/90/90<br>60/60/60<br>-/-/ |
| External Columns <ul style="list-style-type: none"> <li>less than 1.5m to a fire source feature</li> <li>1.5 – 3m from fire source feature;</li> <li>more than 3m from a fire source feature.</li> </ul> |  | 90/-/-<br>60/-/-<br>-/-/     | 90/-/-<br>60/-/-<br>-/-/     |
| Fire Walls   |  | 90/90/90                     | 90/90/90                     |
| Internal walls bounding sole occupancy units   |  | -/-/                         | -/-/                         |
| Internal walls bounding public corridors, hallways and the like:   |  | -/-/                         | -/-/                         |
| Floors   |  | -/-/                         | -/-/                         |
| Roofs  |  | -/-/                         | -/-/                         |

As the proposed new walls will be setback greater than 3m from the property boundaries, such walls will not require an FRL.

### Compartmentation & Separation (Part C2)

The proposed new addition which included warehouse areas of 1,218m<sup>2</sup> and 1,020m<sup>2</sup> and a 200m<sup>2</sup> loading dock are required to be fire separated from the existing building by a fire wall having an FRL of 90/90/90 in accordance with Specification C1.1. The existing rear wall of existing warehouse will need to be upgraded accordingly to achieve the require FRL of 90/90/90.

In addition, the new warehouse areas which have been designated as a medium term holding freezer room and a long term holding freezer room are proposed to be fire separated by a fire wall having an FRL of 90/90/90 in accordance with Specification C1.1 and as such will not exceed the maximum floor area and volume limitations as specified in Clause C2.2.

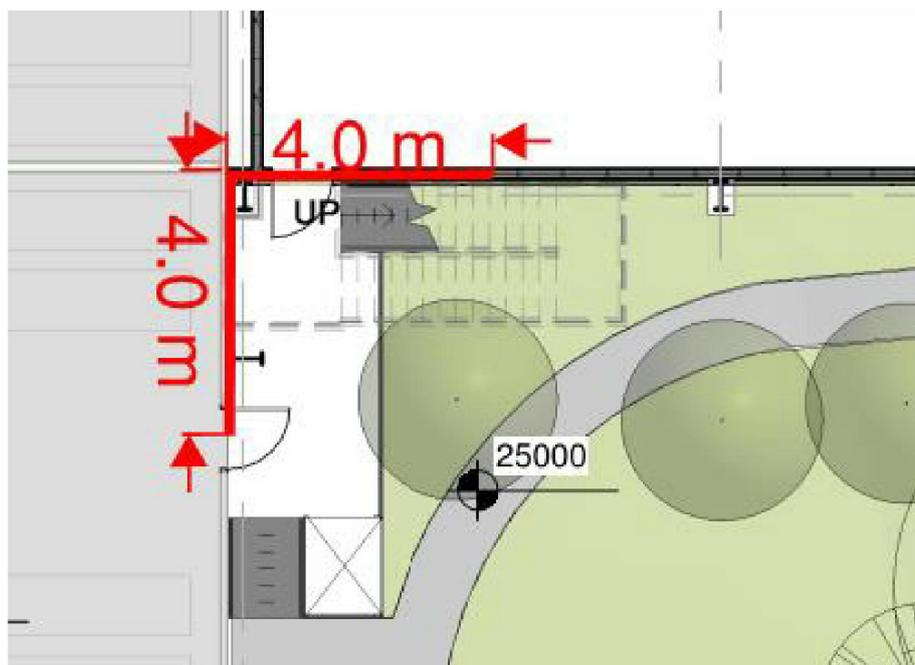
The new fire walls which will separate the separate fire compartments will need to be constructed in accordance with C2.7 including any openings in such walls will need to be protected in accordance with Part C3.

Building elements other than roofing battens with dimensions of 75mm x 50mm or less or sarking material, must not pass through or cross the fire walls unless the required fire resisting performance of the fire wall is maintained.

### Protection of Openings (Part C3)

The new external walls are to be located greater than 3m from the property boundaries such that no need exists for the protection of openings in the external walls as required by Clause C3.2.

As the new medium term holding freezer room and the new loading dock area will be a separate fire compartment to that of the existing building any openings in the external walls of these separate fire compartments within 4m of the fire wall will need to be protected in accordance with Clause C3.3. In this regard the new entry door to loading dock and the new existing chiller room will need to be self-closing - 60/30 fire doors and the external walls for a distance of 4m from the fire wall will need to have an FRL of 60/60/60 – see below



The doorways in the fire walls will need to be protected by self-closing or automatic closing fire doors or fire shutters having an FRL of -/90/30 in accordance with Clause C3.5.

If a sliding fire door is proposed to protect the opening in the fire wall between the medium term holding freezer room and a long term holding freezer room it must comply with Clause C3.6.

### Occupant Egress (BCA Section D)

The proposed egress system in the building comprises of various exit doorways in the external walls which open onto external exit stairways.

The exits are suitably distributed throughout the building such that no point on the floor is more than 20m from an exit or a point of choice of exits in different directions with at least one of those exits being not

more than 40m from the start with the exits not greater than 60m apart, as such comply with the egress travel distance requirements of Clauses D1.4 and D1.5.

The exit stairways discharge to open space around the building and the path of travel from the exits to the road must not be obstructed in accordance with Clause D1.10

Whilst not detailed on the drawings the exits will need to be and are capable of being constructed in accordance with the specific requirements for width, stair geometry, landings, door thresholds, balustrades, handrails, doors and door hardware including signage as outlined in Part D2 of the BCA.

### Fire Fighting Services & Smoke Hazard Management (BCA Section E)

Whilst no assessment was undertaken we understand that the building currently contains the following firefighting and life safety essential services: -

- Fire Hydrant System
- Fire Hose Reels
- Automatic Fire Detection and Alarm System
- Emergency Lighting
- Illuminated Exit Signage
- Fire Blanket
- Portable Fire Extinguishers

Based on the proposed new alterations and additions to the building the following fire safety measures are required for the whole of the building.

| Item | Required Essential Fire Safety Measure                                      | Minimum Standard of Performance  |
|------|---|--|
| 1    | Automatic fire detection and alarm system                                   | BCA Clause E2.2a, Clause 3, 4, 5, 6 of Specification E2.2a and AS1670.1-2014 |
| 2    | Emergency lighting  | BCA Clauses E4.2 & E4.4, AS2293.1-2005                                       |
| 3    | Exit signs  | BCA Clauses E4.5, E4.6 & E4.8, AS2293.1-2005                                 |
| 4    | Fire doors  | BCA Spec C3.4, AS1905.1-2005   |
| 5    | Fire hose reel system   | BCA Clause E1.4, AS2441-2005   |
| 6    | Fire hydrant system   | BCA Clause E1.3, AS2419.1-2005   |
| 7    | Fire seals protecting openings in fire resisting components of the building | BCA Clause C3.15, AS1530.4-2005  |
| 8    | Portable fire extinguishers   | BCA Clause E1.6, AS2444-2001   |
| 9    | Fire Shutters   | BCA Spec C3.4, AS1905.2-1989   |
| 10   | Sliding fire doors  | BCA Clause C3.6  |

It should be noted that as there is no fire compartment greater than 2,000m<sup>2</sup> in area or 12,000m<sup>3</sup> in volume no sprinklers are required.

### Health & Amenity (BCA Section F)

Although not shown on the drawings, compliance with such issues as stormwater drainage & damp/weatherproofing (BCA Part F1), ceiling heights (BCA Part F3), and ventilation (BCA Part F4), are considered to be readily achievable.

We have been advised that the proposed additional building areas will not increase the existing personnel accommodated in the building and as such there is no need to include additional sanitary facilities in the new building portion.

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

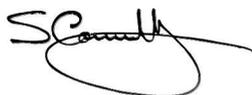
Any new work proposed to the building fabric, glazing, building sealing, air-conditioning and mechanical ventilation systems, artificial lighting and power, heated water supply or access for maintenances of services will need to comply with the relevant provisions of Section J of the BCA and as such is considered to be readily achievable.

### **Conclusion**

The assessment undertaken with respect to the proposed development indicates that it is capable of achieving compliance with the required Deemed-to-Satisfy provisions of the National Construction Code – Building Code of Australia (BCA 2016) subject to the recommendations included in this report.

Submitted for your information and assistance and should you require further detail or explanation please do not hesitate to contact the undersigned.

Yours faithfully,



Sean Connolly

**Consult Code Solutions**

Accredited Building Certifier – Grade A1