

08 October 2020

Tyrecycle 30-56 Encore Avenue SOMERTON VIC 3062

Attention: Ludi Van Der Merwe

Dear Luid,

RE: 1 GRADY CRESCENT, ERSKINE PARK NSW 2759
BCA COMPLIANCE STATEMENT FOR DA SUBMISSION

This statement has been prepared to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation that will accompany the Development Application to Penrith Council for the proposed internal fit-out works and change of use within the main warehouse from a Class 7b storage use to a Class 8 manufacturing/processing plant against the Building Code of Australia 2019, Amendment 1 (BCA).

#### PROPOSED DEVELOPMENT

The proposed development comprises of an internal fit-out and change of use of existing warehouse (northern tenancy) from a storage use to a manufacturing/processing/recycling facility.

#### **COMPLIANCE STATEMENT OBJECTIVES**

The objectives of this statement are to:

- a) confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- b) confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to clause 145 of the *Environmental Planning & Assessment Regulation 2000*.
- c) accompany the Development Application submission to enable the Consent Authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

It should be noted that it is not the intent of this statement to identify all BCA provisions that apply to the subject development. The development will be subject further assessment following receipt of more detailed documentation at Construction Certificate stage.

This statement has been prepared pursuant to clause 18 of the Building Professionals Regulation 2007.

# **RELEVANT VERSION OF THE BCA**

Pursuant to clause 145(1)(b) the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time the application for the Construction Certificate was made. The current version of the BCA is the BCA 2019 (incorporating Amendment 1).

### REFERENCED DOCUMENTATION

The following documentation has been reviewed, referenced and/or relied upon in the preparation of this report:

+ Building Code of Australia 2019 (Amendment 1) (BCA).



- + The Guide to the Building Code of Australia 2019 (Amendment 1) (BCA).
- + Preliminary DA Architectural Plans prepared by SJB Architects numbered:

| Drawing No. | REVISION | DATE             | DRAWING No. | REVISION | DATE             |
|-------------|----------|------------------|-------------|----------|------------------|
| GA-101      | Α        | 16 August 2013   | GA-102      | С        | 5 September 2013 |
| GA-103      | С        | 5 September 2013 | GA-201      | С        | 5 September 2013 |
| GA-202      | С        | 5 September 2013 | GA-205      | В        | 5 September 2013 |
| GA-210      | Α        | 28 August 2013   | GA-301      | D        | 5 September 2013 |
| GA-302      | С        | 5 September 2013 | GA-305      | D        | 5 September 2013 |
| GA-501      | Α        | 5 September 2013 | GA-502      | Α        | 5 September 2013 |

#### **BUILDING CLASSIFICATION**

The new building works have been classified as follows:

| + | BCA CLASSIFICATION:             | Class 5 (Office), Class 7b (Warehouse), Class 7a (Basement/undercroft carparking), Class 8 (Proposed Processing Plant) |
|---|---------------------------------|--|
| + | IMPORTANCE LEVEL (STRUCTURAL):  | 2 (TBC by structural engineer)   |
| + | STOREYS CONTAINED:              | Three (3)  |
| + | RISE IN STOREYS:                | Three (3)  |
| + | TYPE OF CONSTRUCTION:           | Type B Construction (Large Isolated Building)  |
| + | EFFECTIVE HEIGHT:               | Less than 12m  |
| + | SPRINKLER PROTECTED THROUGHOUT: | Yes  |
| + | CLIMATE ZONE:                   | Zone 6   |

#### **BCA ASSESSMENT - KEY ISSUES**

We note the following BCA compliance matters with relation to proposed building works are capable of complying with the BCA. Please note that this is not a full list of BCA clauses, they are the key requirements that relate to the proposed work.

#### Section C

- Clause C1.10 Early Fire Hazard Properties: The fire hazard properties of all new building materials and assemblies used in the development must comply with the requirements of C1.10 and all new floor materials, floor coverings, wall and ceiling lining materials must comply with Specification C1.10 Compliance readily achievable. Certification required at Occupation stage.
- 2. <u>Specification C1.1:</u> All new structure are required to be provided with an FRL to comply for Type B Construction and Table 4. Refer to Appendix 1 for details. *Compliance readily achievable by architect and structural engineer.*

#### Section D

- 3. <u>Clause D1.4 exit travel distances</u>: Exit travel distances within the subject part are required to be not more than 20m to a point of choice between alternative exits and 40m to the nearest one. The existing travel distances within the building are currently part of a Performance Solution from the Fire Engineer. The revised travel distances and egress strategy will be subject to a new Performance Solution from the Fire Engineer.
- Clause D1.5 distance between alternative exits: Distances between alternative exits must be not greater than 60m.
   The existing travel distances and egress strategy within the building are currently part of a Performance Solution from



the Fire Engineer. The revised travel distances within the building will be subject to a new Performance Solution from the Fire Engineer.

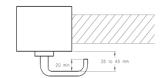
- 5. Clause D1.6 Dimensions of paths of travel to an exit: The minimum clear height through all egress paths is required to be no less than 2m, and a minimum of 1m wide (this width dimension is measured clear of any obstructions such as handrails and joinery). In a required exit or path of travel to an exit there is concession for the unobstructed width of a doorway to be reduced to 850mm min in lieu of 1m, and the unobstructed height for an exit doorway can be reduced to 1,980mm min Compliance readily achievable.
- 6. <u>Clause D2.7 Installations in Exits and Paths of Travel:</u> Any new or altered electricity and communications cupboards located within a nominated egress paths within the proposed building will be required to be suitably smoke sealed and enclosed in non-combustible construction in accordance with D2.7(d) *Compliance readily achievable*.
- Clause D2.20 Swinging doors: All egress doorways must swing in the direction of egress Compliance readily achievable.
- 8. <u>Clause D2.21 Operation of Latch</u>: All new doors in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by a single handed downward or pushing action on a single device which is located between 900mm and 1100mm from the floor *Compliance readily achievable*.
- 9. Part D3 Access for People with a Disability: All access is required to comply with AS 1428.1-2009. It is understood that an assessment from an Access Consultant will be provided at the Construction Certificate Stage or an exemption in accordance with BCA Clause D3.4 will be sort Compliance readily achievable.

General provisions to be incorporated into the design where not subject to concessions under Clause D3.4:

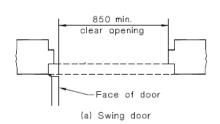
- a) BCA Clause D3.3(g) requires that any proposed carpets within the building are to have a pile height or pile thickness not exceeding 11mm and the carpet backing thickness shall not exceed 4mm (total thickness shall not exceed 15mm).
- b) All floor and ground surfaces on accessways are required to have a slip-resistant surface and the texture of the surface shall be traversable by persons with a disability. Accordingly, all new surfaces or finishes (i.e. tiling or vinyl) must achieve a slip resistance classification under wet & dry conditions to comply with AS/NZS 4586-2004 'Slip Resistance Classification of New Pedestrian Surface Materials'.
- c) D3.3(c)(ii)(B) requires that turning spaces must be provided at a maximum of 20m intervals along an accessway. Note: A required turning space(s) must comply with AS 1428.1-2009 Clause 6.5.
- d) Clause 6.5 of AS 1428.1-2009 requires a turning space between 60° and 90° to be a minimum of 1500mm x 1500mm and a turning space between 90° and 180° to be a minimum of 1540mm wide x 2070mm in length.
- e) Clause 6.6 of AS1428.1-2009 requires a visual indicator on all new fully glazed doors and side panels. Visual indicators must be a solid and non-transparent contrasting line with a width of not less than 75mm wide and shall extend across the full width of the glazed panel. The lower edge of the contrasting line shall be located between 900mm and 1,000mm above the plane of the finished floor level.
- f) AS 1428.1-2009 Clause 13.1 requires a luminance contrast colour of 30% to all new doorways; including door frames (to clearly identify the difference between the door and the adjoining wall/door frame).
- g) In accordance with Clause 13.2 of AS 1428.1-2009 all new doorways are required to have a minimum clear opening width of 850mm (clear opening width does not include the door leaf thickness). Generally, a proposed door width of 920mm will achieve this minimum requirement.
- h) In accordance with D3.2(e) where a doorway on an accessway has multiple leaves (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850mm pursuant to AS 1428.1-2009.
- The circulation space around all new swinging doors is required to comply with Clause 13.3 and Figure 31 of AS 1428.1-2009.
- j) All door handles and related hardware to swinging doorways shall be of a type that allows the door to be unlocked and opened with one hand, and be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch. Sliding doors are required to be a type 'D' handle which allows the door to be unlocked and opened with one hand in accordance with Clause 13.5.2.

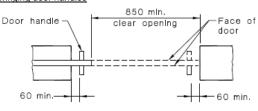




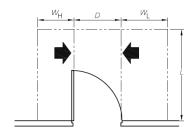


# Swinging door handles





(b) Cavity sliding door

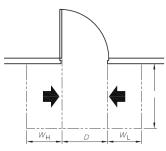


| Dimension Dimension L |      | Dimension<br>W <sub>H</sub> | Dimension<br>W <sub>L</sub> |  |
|-----------------------|------|-----------------------------|-----------------------------|--|
| 850                   | 1670 | 660                         | 900                         |  |
| 900                   | 1670 | 610                         | 900                         |  |
| 950                   | 1670 | 560                         | 900                         |  |
| 1000                  | 1670 | 510                         | 900                         |  |

| Dimension | Dimension | Dimension | Dimension |
|-----------|-----------|-----------|-----------|
| D         | L         | $W_{H}$   | $W_{L}$   |
| 850       | 1450      | 110       | 530       |
| 900       | 1450      | 110       | 530       |
| 950       | 1450      | 110       | 530       |
| 1000      | 1450      | 110       | 530       |

(g) Either side approach, door opens towards user

(h) Front approach, door opens towards user



| Dimension | Dimension | Dimension | Dimension |
|-----------|-----------|-----------|-----------|
| D         | L         | $W_{H}$   | $W_{L}$   |
| 850       | 1240      | 560       | 660       |
| 900       | 1210      | 510       | 660       |
| 950       | 1175      | 460       | 660       |
| 1000      | 1155      | 410       | 660       |

Dimension D Dimension W<sub>L</sub>  $W_{\mathsf{H}}$ 850 1450 510 900 1450 0 510 950 1450 0 510 1450 1000 510

 $W_{\mathsf{L}}$ 

(c) Either side approach, door opens away from user

(d) Front approach, door opens away from user

## Circulation space requirements at doorways



#### Section E

- Clause E1.3 fire hydrants: Fire services design consultant to confirm compliance with AS 2419.1-2005. Fire hydrant
  coverage is required to all parts of the building. A coverage diagram will be required to be provided at the Construction
  Certificate stage Compliance is readily achievable.
- 11. <u>Clause E1.5 Sprinklers:</u> The existing sprinkler system within the building will need to be reviewed by an appropriate fire services consultant to confirm the existing sprinkler system is suitable for the proposed new use. The system may need to be upgraded in this instance *Compliance is readily achievable*.
- 12. <u>Clause E1.6 fire extinguishers:</u> To be provided and designed in accordance with AS 2444-2001 *Compliance is readily achievable.*
- 13. <u>Table E2.2a smoke hazard management:</u> The existing smoke clearance fans within the building are currently part of a Performance Solution from the Fire Engineer. As part of the Construction Certificate documentation the Fire Engineer will undertake a re-assessment of the existing performance Solution in relation to smoke hazard management and provide certification that the existing system is adequate for the new use or will indicate where an upgrade is necessary Compliance is readily achievable.

#### Section F

- 14. Part F3 Room Sizes: The minimum floor to ceiling heights within the affected areas (rooms and corridors) are required to be 2.4m except toilet facilities, storerooms and the like which can be 2.1m in accordance with Clause F3.1(b). The minimum ceiling height within carparks is 2.2m with a minimum height of 2.5m required above accessible and shared parking spaces Compliance readily achievable.
- 15. Part F4 Light and Ventilation: Any installations or modifications to the existing artificial lighting system are required to comply with Clause F4.4 and AS 1680. All mechanical or air-conditioning installations or modifications within the tenancy must be undertaken in accordance with Clauses F4.5(b) and AS 1668.2.-2012. Compliance readily achievable.

#### Section J

16. Part J5 & Part J6 – Energy Efficiency: All new air-conditioning, ventilation systems, artificial lighting & power is required to comply with J5 and J6 respectively. - Compliance readily achievable. Design statements are required for mechanical and electrical installations/modifications.

# **SUMMARY OF KEY BCA COMPLIANCE ISSUES**

Arising from our review, the following comprises a summary of the key BCA compliance issues that will need to be addressed prior to issue of the Construction Certificate:

#### + MATTERS REQUIRING FIRE SAFETY ENGINEERED PERFORMANCE SOLUTIONS:

| 1. | BCA cl. D1.4/D1.5 | Travel distances exceed the DTS permitted distances within the building. The           |
|----|-------------------|--|
|    |                   | existing Performance Solution in relation to travel distances within the building will |
|    |                   | need to be re-assessed   |

2. Table E2.2a The existing smoke clearance system within the warehouse will need to be re-assessed in relation to the proposed new use and hazard classification.

Please note that the above matters have been identified arising from a review of the DA architectural plans. A further detailed assessment of the Construction Certificate architectural plans will be undertaken prior to issue of the Construction Certificate.



# PRELIMINARY FIRE SAFETY SCHEDULE

The following comprises the existing fire safety measures that are currently provided within the existing building.

| Statutory Fire Safety Measure                                      | Design/Installation Standard   |  |
|--|--|--|
| Alarm Signalling Equipment   | AS1670.3 – 2004  |  |
| Automatic Fail Safe Devices  | BCA Clause D2.21   |  |
| Automatic Fire Suppression Systems                                 | BCA Spec. E1.5 & AS 2118.1-1999  |  |
|  | Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09   |  |
| Building Occupant Warning System activated by the Sprinkler System | BCA Spec E1.5<br>Clause 8 and/ or Clause 3.22 of AS 1670.1 – 2004  |  |
| Emergency Lighting   | BCA Clause E4.4 & AS 2293.1 - 2005   |  |
| Emergency Evacuation Plan  | AS 3745-2020 and Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09                                    |  |
| Exit Signs   | BCA Clauses E4.5, E4.6 & E4.8 and AS 2293.1 - 2005   |  |
| Fire Control Centres and Rooms                                     | BCA Spec E1.8  |  |
| Fire Doors   | BCA Clause C2.12, C2.13 and AS 1905.1-2005   |  |
| Fire Hose Reels  | BCA Clause E1.4 & AS 2441 – 2005 and Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09                |  |
| Fire Hydrant Systems   | Clause E1.3 & AS 2419.1 – 2005 and Fire Engineering<br>Report prepared by Bodycote Warrington Fire numbered<br>232-0000-RPT02-03 dated 27/04/09            |  |
| Mechanical Air Handling Systems                                    | BCA Clause E2.2, AS 1668.2-1999  |  |
| Paths of Travel  | EP & A Regulation Clause 186, BCA Parts 1 and 2 and Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09 |  |
| Perimeter Vehicular Access   | BCA Clause C2.4 and Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09                                 |  |
| Portable Fire Extinguishers  | BCA Clause E1.6 & AS 2444 – 2001   |  |
| Smoke Clearance Fans   | Fire Engineering Report prepared by Bodycote Warrington Fire numbered 232-0000-RPT02-03 dated 27/04/09   |  |
| Warning & Operational signs  | AS 1905.1-2005   |  |



| Statutory Fire Safety Measure   | Design/Installation Standard  |
|---|---|
| Fire Engineering Report prepared by Bodycote Warrington Fire Numbered 232-000-RPT02203 dated 27 April 2009, including alternative solutions relating to:  Deletion of smoke exhaust to large isolated building Perimeter vehicle access limitations Excessive travel distances and distances between alternative exits Non-compliant fire hose reel locations | BCA Performance Requirements CP2, DP4, EP1.1 and EP2.2 and Bodycote Warrington Fire Report No. 232-000-RPT02203 |

Please note that the above schedule will need to be revised prior to issue of the Construction Certificate to reference any proposed Fire Engineering Report and incorporate any additional measures required by the proposed Alternative Solutions. This schedule will also be revised upon the issue of the Construction Certificate that included the works above ground level.

#### **DISABILITY (ACCESS TO PREMISES-BUILDINGS) STANDARDS 2010**

The Disability (Access to Premises-Buildings) Standards 2010 (the Access to Premises Standards) requires the building to comply with the Access Code (BCA Part D3 & AS 1428.1-2009).

With respect to the proposed new building, compliance with the Access Code is achieved if the building complies with:

- + BCA clauses D3.1 to D3.12;
- + BCA clause E3.6;
- + BCA clauses F2.2 and F2.4.

The referenced plans show that access for people with disabilities will be available to and within the building from the main points of a pedestrian entry at the allotment boundary and accessible car spaces in accordance with BCA clause D3.1.

Detailed documentation demonstrating compliance with the above BCA provisions and AS 1428.1-2009 will be required for assessment at Construction Certificate stage. However, our review of the DA documentation indicates that compliance with the abovementioned provisions will be readily achievable. In the event that DTS compliance is not achieved, an Alternative Solution will need to be documented by an appropriately qualified Access Consultant.

### CONCLUSION

This report confirms that BM+G have undertaken a review of the DA architectural plans for the proposed change of use and internal fit-out within the existing building against the deemed-to-satisfy provisions of the Building Code of Australia 2019 (Amendment 1) and the Disability (Access to Premises – Buildings) Standards 2010.

It is our experience that such compliance matters raised in this report are not uncommon for a development of this nature and that they can be readily addressed at Construction Certificate stage. In this instance, we are of the opinion that any amendments required to the design documentation in order to comply with the BCA can be addressed in the preparation of the detailed documentation for Construction Certificate without giving rise to significant changes to the proposal as submitted for Development Application.

Arising from our review, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA.

Yours sincerely,

Blokmed

Building Regulations Consultant
Blackett Maguire + Goldsmith Pty Ltd

Accreditation No. BDC0184



# Appendix 1

# FRL of Building Elements

# Table 4 TYPE B CONSTRUCTION: FRL OF BUILDING ELEMENTS

| Building element                              | Class of building—FRL: (in minutes)      |                       |                        |                        |  |
|---|--|-----------------------|------------------------|------------------------|--|
|   | Structural adequacy/Integrity/Insulation |                       |                        |                        |  |
|   | 2, 3 or 4 part                           | 5, 7a or 9            | 6                      | 7b or 8                |  |
| EXTERNAL WALL (including any column           |  |                       |                        | her external building  |  |
| element, where the distance from any fire     | -source feature                          | to which it is expose | d is—                  |                        |  |
| For loadbearing parts—                        |  |                       |                        |                        |  |
| less than 1.5 m                               | 90/ 90/ 90                               | 120/120/120           | 180/180/180            | 240/240/240            |  |
| 1.5 to less than 3 m                          | 90/ 60/ 30                               | 120/ 90/ 60           | 180/120/ 90            | 240/180/120            |  |
| 3 to less than 9 m                            | 90/ 30/ 30                               | 120/ 30/ 30           | 180/ 90/ 60            | 240/ 90/ 60            |  |
| 9 to less than 18 m                           | 90/ 30/-                                 | 120/ 30/-             | 180/ 60/-              | 240/ 60/-              |  |
| 18 m or more                                  | -/-/-                                    | -/-/-                 | -/-/-                  | -/-/-                  |  |
| For non-loadbearing parts—                    |  |                       | •                      | •                      |  |
| less than 1.5 m                               | <b>-/</b> 90/ 90                         | -/120/120             | -/180/180              | -/240/240              |  |
| 1.5 to less than 3 m                          | <b>-/</b> 60/ 30                         | J 90/ 60              | -/120/ 90              | -/180/120              |  |
| 3 m or more                                   | -/-/-                                    | -/-/-                 | -/-/-                  | -/-/-                  |  |
| EXTERNAL COLUMN not incorporated i            | n an external wa                         | II, where the distanc | e from any fire-source | ce feature to which it |  |
| is exposed is—                                |  |                       |                        |                        |  |
| For loadbearing columns—                      |  |                       |                        |                        |  |
| less than 18 m                                | 90/-/-                                   | 120/-/-               | 180/-/-                | 240/-/-                |  |
| 18 m or more                                  | -/-/-                                    | -/-/-                 | -/-/-                  | -/-/-                  |  |
| For non-loadbearing columns—                  |  |                       | •                      | •                      |  |
| For non-loadbearing columns—                  | -/-/-                                    | -/-/-                 | -/-/-                  | _/_/_                  |  |
| 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                                   | 90/ 90/ 90                               | 120/120/120           | 180/120/120            | 240/120/120            |  |
| Fire-resisting stair shafts—                  |  |                       |                        |                        |  |
| Non-loadbearing                               | <b>-/</b> 90/ 90                         | -/120/120             | -/120/120              | -/120/120              |  |
| Bounding public corridors, public lobbies     | and the like—                            |                       |                        | •                      |  |
| Loadbearing                                   | 60/ 60/ 60                               | 120/-/-               | 180/-/-                | 240/-/-                |  |
| Non-loadbearing                               | <b>-/</b> 60/ 60                         | -/-/-                 | - - -                  | -1-1-                  |  |
| Between or bounding sole-occupancy un         | its—                                     |                       |                        |                        |  |
| Loadbearing                                   | 60/ 60/ 60                               | 120/-/-               | 180/-/-                | 240/-/-                |  |
| Non-loadbearing                               | <b>-/</b> 60/ 60                         | -/-/-                 | - - -                  | -/-/-                  |  |
| OTHER LOADBEARING INTERNAL WALLS and COLUMNS— | 60/-/-                                   | 120/-/-               | 180/-/-                | 240/-/-                |  |
| ROOFS   | -/-/-                                    | -/-/-                 | - - -                  | -1-1-                  |  |