#### DELMEGE

# ACCESS DESIGN REVIEW - DA STAGE

# 1749-1853 Pittwater Road, Mona Vale

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# Table of Contents

| TAE | BLES   |  | 4  |
|-----|--------|--|----|
| EXE | CUTIVE | SUMMARY  | 5  |
| 1.0 | BASIS  | OF ASSESSMENT  | 6  |
|     | 1.1    | LOCATION/DESCRIPTION   | 6  |
|     | 1.2    | PURPOSE  | 6  |
|     | 1.3    | LIMITATIONS  | 6  |
|     | 1.4    | FEDERAL DISABILITY DISCRIMINATION ACT (DDA)                      | 7  |
|     | 1.5    | DISABILITY ACCESS TO PREMISES STANDARDS (PREMISES STANDARDS)     | 7  |
|     | 1.6    | PERSONS TO WHOM THE PREMISES STANDARDS APPLY                     | 7  |
|     | 1.7    | EXEMPTIONS AND CONCESSIONS                                       | 8  |
|     | 1.8    | DESIGN DOCUMENTATION   | 8  |
|     | 1.9    | DEFINITIONS  | 8  |
| 2.0 | KEY CO | DMPLIANCE CONSIDERATIONS   | 10 |
|     | 2.1    | GENERAL  | 10 |
|     | 2.2    | CLASSIFICATION   | 10 |
|     | 2.3    | DIMENSIONS AND TOLERANCES  | 10 |
| 3.0 |        | SMENT OF ELEMENTS REQUIRED TO BE ACCESSIBLE BY THE BUILDING CODE | 11 |
|     | 3.1    | GENERAL REQUIREMENTS FOR ACCESS – BUILDING TYPES                 | 11 |
|     | 3.2    | ACCESSIBLE CARPARKING ASSOCIATED WITH THE BUILDING               | 12 |
|     | 3.3    | BUILDING APPROACHES – ACCESSWAYS                                 | 16 |
|     | 3.4    | DOORS AND GATES WITHIN ACCESSWAYS, BUILDING ENTRANCES            | 20 |
|     | 3.5    | INTERNAL BUILDING CIRCULATION                                    | 26 |
|     | 3.6    | SWITCHES AND CONTROLS  | 34 |
|     | 3.7    | STAIRS   | 35 |
|     | 3.8    | RAMPS AND WALKWAYS   | 40 |
|     | 3.9    | HAZARD IDENTIFICATION INC. TGSI'S                                | 48 |
|     | 3.10   | PASSENGER LIFTS  | 51 |
|     | 3.11   | SANITARY FACILITIES  |    |
|     | 3.12   | SIGNAGE  |    |
|     | 3.13   | LIVABLE HOUSING DESIGN GUIDE – LIVABLE HOUSING SILVER LEVEL      |    |
|     | 3.14   | CLASS 2 – ADAPTABLE HOUSING                                      | 70 |
| 4.0 | ADDITI | ONAL INFORMATION REQUIRED  | 79 |
| 5.0 | SUMMA  | ARY – MINIMUM COMPLIANCE AS REQUIRED BY BCA                      | 81 |
| ANN | JEXURE | A - DOCLIMENTATION REVIEWED                                      | 82 |

|                       | 7 : | 1  |
|-----------------------|-----|----|
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## **Executive Summary**

This document provides an assessment of the architectural design drawings for the proposed mixed use residential development at 1749-1853 Pittwater Road, Mona Vale, against the Deemed-to-Satisfy provisions of the provisions relating to Access for Persons with a Disability.

Part 2 'Matters for Further Consideration' of this report outlines the identified compliance issues that require further information or consideration and/or assessment as Performance Solutions.

Any Performance Solution will need to be detailed in a separate report and must clearly indicate methodologies for achieving compliance with the relevant Performance Requirements.

| Item   | Description   | BCA Provision |  |
|--------|---|---------------|--|
| Comp   | liance Matters to be Addressed with design development  |               |  |
| Livabl | e Housing   |               |  |
| 1.     | Units 11/21 – Require 1200mm clear width for entry  | LHA 2b        |  |
| 2.     | Units 14/24 – Requires 1m width corridors.  | LHA 4b        |  |
| 3.     | Units 11/21 – Require 1200mm in front of WC pans.   | LHA 5a(ii)    |  |
| Adapt  | Adaptable Housing   |               |  |
| 4.     | Units 10/20 – Require 850mm clear width entrance doors.   | AS4299        |  |
| 5.     | Post Adaption drawings to be provided to indicate kitchen, bathroom, laundry design compliance. | AS4299        |  |

## 1.0 Basis of Assessment

#### 1.1 LOCATION/DESCRIPTION

The building development, the subject of this report, is located at 1749-1853 Pittwater Road, Mona ValeMona Vale and comprises a five (5) storey residential flat building located above ground floor level retail tenancies with frontage to Pittwater Road at the front and to Bungan laneway at the rear.

The development comprises 36x residential apartments which are accessed from both the Pittwater Road frontage and the Bungan Lane frontage.

The building is located above three (3) levels of basement carparking and the carpark is accessed from the adjacent Council public carpark.



Front Elevation (Courtesy of Gartner Trovato Architects)

#### 1.2 PURPOSE

The purpose of this report is to assess the proposed building against the documents and their relevant Deemed to Satisfy requirements. The report is intended to clearly outline those areas where compliance is not achieved and provide recommendations to achieve compliance:

- Disability (Access to Premises- Buildings) Standards 2010;
- + Building Code of Australia 2022 (BCA2022) Volume 1 Part D4 and Clauses E3D7 and F4D5
- + Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009, AS 1735 suite and AS2890.6:2009.

#### 1.3 LIMITATIONS

This report is limited to an assessment of the access and amenity provisions for people with a disability against the documents and principles as outlined in 1.2 above. It is not an assessment of the proposal against all provisions of the BCA2022 and if this is required, a separate report will be necessary.

This report does not include, or imply compliance with:

+ The *Disability Discrimination Act* (it cannot be guaranteed that that a complaint under the DDA will not be made, however should the building comply with BCA2019 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint, relevant to the building).

#### 1.4 FEDERAL DISABILITY DISCRIMINATION ACT (DDA)

Disability is broadly defined and includes disabilities which are physical, intellectual, psychiatric, neurological, cognitive or sensory (a hearing or vision impairment), learning difficulties, physical disfigurement and the presence in the body of disease-causing organisms.

All organisations have a responsibility, under the DDA, to provide equitable, dignified access to goods and services and to premises used by the public. Premises are broadly defined and would include all areas included within the subject development.

The DDA applies nationally and is complaint based. While the *Disability (Access to Premises – Buildings)* Standards 2010 and the BCA2022 are recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2022 and the referenced standards does not guarantee that a complaint will not be lodged.

#### 1.5 DISABILITY ACCESS TO PREMISES STANDARDS (PREMISES STANDARDS)

The aim of the Premises Standards is to provide the building and design industry with detailed information regarding the required access provisions associated with the design and construction of new buildings and upgrade to existing buildings.

The Premises Standards intend to provide certainty for the building industry in relation to meeting the requirements for access in new and upgraded buildings. They only apply to elements addressed within the Standards. All other elements related to premises will still be subject to the existing provisions of the DDA for example: provision of goods and services, employment, elements not addressed within the Premises Standards and BCA e.g., food and beverage provision.

The Premises Standards generally align with the BCA2022 and reference a range of Australian Standards relating to access and other associated matters.

They do not apply to existing buildings that are not undergoing upgrade; however they introduce the concept of the "Affected Part". This means that new works need to be connected to the building's Principal Pedestrian Entrance by an accessible path of travel. This can mean that upgrade to the building may be necessary even where none is proposed.

#### 1.6 PERSONS TO WHOM THE PREMISES STANDARDS APPLY

The Premises Standards apply to the following persons to the extent that they are responsible for, or have control over, matters in the Premises Standards Access Code for a relevant building:

- a) A building certifier e.g., private certifiers, building surveyors, local councils.
- b) **A building developer** e.g., property developers, property owners, building designers, builders, project managers, property lessees.
- c) A building manager e.g., property owners, property lessees, property managers, operational staff.

#### 1.7 EXEMPTIONS AND CONCESSIONS

Concessions are provided to recognise cases where it has been decided that it would be unreasonable to require full compliance with the Deemed-to-Satisfy Provisions of the Premises Standard. These relate to:

<u>Lessees</u> – where a lessee is one of a number of lessees within a building and submits an application for a building approval for new works, works to upgrade the affected part of the building is not required.

Existing accessible lifts – a concession is available for existing buildings undergoing upgrade in relation to an existing lift which travels more than 12m, dependent upon the lift being compliant with BCA 2001 circulation space requirements, i.e., lift car size is no less than 1100mm (W) x 1400mm (L).

<u>Existing accessible toilets</u> -a concession is available for existing unisex accessible toilets so long as they are compliant with circulation and fit-out requirements of AS 1428.1-2001.

Exemptions from the requirements of access are applicable within the following areas:

- a. An area where access would be inappropriate because of the particular purpose for which the area is used.
- b. An area that would pose a health or safety risk for people with a disability.
- c. Any path of travel providing access only to an area exempted by this clause.

Client/design team to provide details of rooms and/or spaces where an exemption will be sought from the requirements of access.

#### 1.8 DESIGN DOCUMENTATION

This report has been based on the Design plans and Specifications listed in Annexure Aof this Report.

#### 1.9 DEFINITIONS

#### Accessible

Having features to enable use by people with a disability.

#### Accessway

A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

#### Affected Part

The affected part is:

- a. The principal pedestrian entrance of an existing building that contains a new part; and
- b. Any part of an existing, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

#### Continuous accessible path of travel

An uninterrupted path of travel to or within a building providing access to all facilities required to be accessible. This cannot include any steps, stairs, revolving doorway, escalator, turnstile or other impediment that would prevent it from being safely negotiated by people with disability.

#### Hearing Augmentation

Compensatory equipment used for people who are hard-of-hearing to augment sound in a room, auditorium, or similar space. Includes inductive loop, FM and infrared systems.

#### Luminance Contrast

The light reflected from one surface or component, compared to the light reflected from another surface or component.

#### Ramp

An inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14.

#### Tactile Ground Surface Indicators (TGSIs)

Truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information.

## 2.0 Key Compliance Considerations

#### 2.1 GENERAL

The following is a summary of all the individual elements that relate directly to the ability of a person with a disability to independently access all areas of the building required to be accessible.

#### 2.2 CLASSIFICATION

Under the provisions of Parts A6 of BCA 2022 and Part A4 of the Access Code, we understand that the building has been classified as follows:

Table 1: Building Classification

| Class    | Level                       | Description            |
|----------|-----------------------------|------------------------|
| Class 2  | Part Level 2                | Residential apartments |
|          | Level 3, 4, 5 & 6           |                        |
| Class 6  | Part Level 1 (Retail 1 & 2) | Retail tenancies       |
|          | Part Level 2 (Retail 3 & 4) |                        |
| Class 7a | Basement 2                  | Carpark                |
|          | Basement 1                  |                        |
|          | Part Level 1                |                        |

#### 2.3 DIMENSIONS AND TOLERANCES

The Premises Standards and BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. Jensen Hughes' assessment of the plans and specifications has been undertaken to ensure the minimum dimensions have been met.

The designer, builder and project manager should ensure that the minimum dimensions are met onsite, and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses, luminance reflectance values of matt surfaces compared to reflective surfaces and the like which can adversely impact on critical maters such as access for people with disabilities, stair and corridor widths, luminance contrasts etc.

# 3.0 Assessment of Elements Required to be Accessible by the Building Code of Australia (BCA)

The following elements of the building are required to be accessible:

#### 3.1 GENERAL REQUIREMENTS FOR ACCESS – BUILDING TYPES

#### BCA 2022 Clause D4D2

| Eleme | nt – minimum access requirement   | Commentary   |
|-------|---|--|
| Class | 2 – Residential Apartments  | An accessway is available from:  |
| a)    | An accessway is required from a pedestrian entrance required to be accessible to at least one floor containing sole-occupancy units, and to the entrance doorway of each sole-occupancy unit located on that level.   | Bungan Lane provides access to North and Central residential towers.  Pittwater Road provides access to the South residential town.  |
| b)    | Access is required to and within not less than one of each type of room or space for use in common by residents, including cooking facilities, games room, individual shop, eating area or the like.  Where a ramp complying with AS 1428.1 or a passenger lift is installed: | Vertical circulation is available via a passenger lift and stairways.  Lifts connect basement carpark levels to residential levels via a single lift servicing each residential tower. |
|       | <ul> <li>To the entrance doorway of each sole-occupancy unit; and</li> <li>To and within rooms or spaces for use in common by the residents;</li> <li>Located on the levels served by the lift or ramp.</li> </ul>  |  |

| Element – minimum access requirement   | Commentary  |
|--|---|
| Class 6 – shop or other building for the same of goods by retail, or supply of services direct to the public | An accessway is available from:  Bungan Lane provides access to Retail Tenancies 03 & 04 which is on-level.  Pittwater Road provides access Retail Tenancies 01 & 02.  Vertical circulation is available via a passenger lift and stairways.  Lifts connect basement carpark levels to Retail Tenancies 01 & 02 via Lift 02.  Stairs and a ramp provide access from Pittwater Road to Retail Tenancies 01 & 02. |
| Class 7a – car park  | Vehicular access to the car park is via the adjoining lot.  Lifts connect basement carpark levels to residential levels via a single lift servicing each residential tower.  Lift 02 provides access to Retail Tenancies 01 & 02.   |
| Status:  | Complies in Design  |

#### 3.2 ACCESSIBLE CARPARKING ASSOCIATED WITH THE BUILDING

The minimum number of accessible car parking spaces required is as follows:

- Class 2 no minimum provisions outlined.
- + Class 6 Up to one thousand (1000) car parking spaces one (1) space for every fifty (50) car parking spaces or part thereof. For each additional one hundred (100) parking spaces or part thereof in excess of one thousand (1000) car parking spaces one (1) space.

**Note**: Accessible parking spaces need not be identified with signage where there is a total of not more than five (5) carparking spaces, so as to restrict the use of the car parking space only for people with a disability.

BCA D4D6 Australian Standard References: AS 2890.6-2009 AS 1428.1-2009 AS/NZS 1428.4.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 1.          | Available bays  A minimum of one (1) accessible parking bay/s is required for this building classification. | The minimum number of accessible parking bays is detailed correctly within the drawing for Class 6. |
| Statu       | s:  | Complies in Design  |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 1.          | Slope/cross fall A maximum gradient/cross fall of:  | Gradients are not noted on the car-park levels.   |
|             | <ul> <li>+ 1:40 where concrete.</li> <li>+ 1:33 where asphalt.</li> <li>Is required within the dedicated space and associated shared area (where relevant) in any direction i.e., front to back and side to side.</li> <li>The surface material is to be slip resistant.</li> </ul> | However, it does not appear that steep gradients are likely based upon carparking being within a building where level slabs are needed. |
| Status:     |   | Compliance Readily Available  |
| 2.          | Dimensions of dedicated parking bay  The minimum dimension of the dedicated parking bay is:  Angled to the roadway:  + 5400mm long x 2400mm wide.   | The dedicated parking bay has the compliant 2400mm x 5400mm dimensions.   |
| Status:     |   | Complies in Design  |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 3.          | A minimum overhead clearance of:  + 2500mm above the bay proper is required  + 2200mm at the entry to the car park i.e., into any multi level car park and the bay proper    1750 max   1900 min.   1750 max   1750 max   1900 min.   1750 max   1900 min. | Initial scaling of the Section A shows a clear height of 3300mm.  Services to be designed away from the area to ensure 2500mm minimum clearance to be achieved. |
| Status:     |  | Complies in Design  |
| 4.          | Delineation/Identification  The dedicated parking space is to incorporate:  + The international symbol of access (white wheelchair symbol on a blue background) located centrally within the bay, near the entry point of the bay.  + Be delineated through the inclusion of yellow, slip resistant lines along all sides except any side delineated by a kerb, barrier or wall.   | Linemarking is compliant.  9 RETAIL 8   |
| Status:     |  | Complies in Design  |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 5.          | <ul> <li>Shared area</li> <li>The shared area associated with an accessible parking bay is to:</li> <li>+ extend for a min. 5400mm long x 2400mm wide, with an additional 2400mm x 2400mm unmarked area available within the parking aisle or roadway.</li> <li>+ be delineated with unbroken longitudinal lines on both sides of the walkway excepting any side delineated by a kerb, barrier or wall.</li> <li>+ incorporate a bollard, centrally located within the shared area, near the entry point of the shared area.</li> </ul> | A compliant shared zone is provided.  It is recommended that 1200mm of the shared zone is unobstructed. |
| Status:     | :   | Complies in Design  |
| 6.          | <ul> <li>Connection to available accessway</li> <li>The accessible parking bay:</li> <li>+ should be located as close as possible to an accessible pedestrian entrance.</li> <li>+ incorporate a kerb ramp connection to an existing footpath network. Designs must consider landing requirements relevant to angle of approach and turn, where an attached or inset kerb ramp is proposed.</li> </ul>  | Access from the shared zone is provided to the Lobby and rear entry to retail tenancies 01 & 02.        |
| Status:     | :   | Complies in Design  |

#### 3.3 BUILDING APPROACHES - ACCESSWAYS

Accessways (i.e. a continuous accessible path of travel) are documented from the following locations:

- + Main points of pedestrian entry at the allotment boundary; and
- + Any required accessible car parking space on the allotment.

BCA D4D2, D4D3, D4D4, D4D9 Australian Standard References: AS 1428.1-2009 AS/NZS 1428.4.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 1.          | Accessways - width and overhead clearances, gradients   | Crossfall gradients are shown on plans to confirm compliance with 1:40 crossfall. |
|             | A minimum clear, unobstructed width of 1000mm is required throughout the accessway,   | Minimum 1m clear width and 2m clear height is achieved.                           |
|             | free from intrusions e.g., landscaping, bollards etc.   | To be firmed up with design development.  |
|             | A minimum clear, unobstructed overhead clearance of 2000mm (1980mm at doorway) is required throughout the accessway, free from intrusions e.g., landscaping, flags, awnings.              |   |
|             | The linear grade and crossfall of an accessway is to not exceed 1:40.   |   |
| Status:     |   | Compliance Readily Available  |
| 2.          | Ground surfaces  Surface abutments are to be designed flush, noting that a construction tolerance of 3mm max. where vertical, or 5mm max. where bevelled or rounded is accepted.          | Further details required for all surface levels and materials to be used.         |
|             | Ground surfaces are required to have a slip resistant surface, incorporating a texture that is traversable by a person using a wheelchair and people with ambulant or sensory disability. |   |
| Status:     |   | Compliance Readily Available  |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 3.          | Walkways – access supports  Walkways require the following:  a) A floor or ground surface abutting the sides, which is firm and level, incorporating surface of a different material to that within the walkway, extending horizontally for 600mm unless one of the following is provided:  • Kerb in accordance with Figure 18 of AS 1428.1-2009;  • Kerb rail and handrail in accordance with Figure 19;  • A wall not less than 450mm in height.   | Kerb rails are indicated along ramp from Pittwater Road.  Garden beds are shown at greater than 450mm in height.  |
| Status:     |   | Compliance Readily Available  |
| 4.          | <ul> <li>Walkways – gradients, landings</li> <li>The interval between landings within walkways are:</li> <li>+ 1:33 gradient, landings no greater than 25m apart.</li> <li>+ 1:20 gradient, landings no greater than 15m apart.</li> <li>+ Gradients between 1:20 and 1:33 at intervals obtained by linear interpolation.</li> <li>Where landings are shallower than 1:33, no landings are required.</li> <li>Note: the above listed intervals may be increased where the above listed supports are incorporated. Refer AS 1428.1-2009 Clause 10.2, Clause 12.</li> </ul> | Gradient missing from top of Ramp off Pittwater Road.  It is recommended that gradients be nominated at 1:15 rather than the maximum of 1:14 to allow for some construction tolerances.  The curved landing from Pittwater Road does not provide the compliant 1500mm clear width for the entire curvature and top ramp |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
|             |  | RL 7.150   |
| Status:     |  | Does Not Comply - design to be amended  Alternatively, a performance solution may be considered. |
| 5.          | Passing and Turning Spaces  Passing spaces, 1800mm wide x 2000mm long, are required every 20m, where a direct line of sight is not available to the end of the accessway.  Turning spaces, 1540mm wide x 2070mm long, are required at not less than 20m intervals along the accessway.  Turning spaces are required at changes in direction (1:40 gradient):  + 60° to 90° turn - 1500mm x 1500mm  + 30°to <60° Where accessway is less than 1200mm wide a splay of at least 500mm x 500mm is required on the internal corner.  + >90° to 180° turn – 1540mm wide x 2070mm in direction of travel. | Turning space at the bottom landing access to Pittwater Road provides a compliant turning space. |
| Status:     |  | Compliance Readily Available   |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 6.          | <ul> <li>Drainage grates</li> <li>Grates are to incorporate:</li> <li>+ Circular openings which are not greater than 13 mm in diameter;</li> <li>+ Slotted openings which are not greater than 13mm wide, oriented so that the long dimension is transverse to the dominant direction of travel.</li> </ul>                                | OSD panel is located within access to Retail Tenancy 03 will need heelprrof grate.  21 050  BOUNDARY 24  RETAIL 03  A: 90 m² |
| Status:     |  | Compliance Readily Available   |
| 7.          | Tactile Ground Surface Indicators (TGSIs)  Where there is a level transition within an accessway e.g., no kerb and channel or kerb ramp installed to separate pedestrians and vehicles, no environmental cue for a person with vision loss is available, therefore TGSIs are to be installed:  + Depth 600mm – 800mm, setback 290mm-310mm. | TGSIs indicated to the stairs and ramp from Pittwater Road.  |
| Status:     |  | Compliance Readily Available   |

### 3.4 DOORS AND GATES WITHIN ACCESSWAYS, BUILDING ENTRANCES

The accessways and building entry incorporate the following:

- + Entrance points Front Retail 01, Front Retail 02, Lift 01 Lobby, Rear Retail 01, Rear Retail 02, Retail 03, Retail 04, Bungan Lane entry, Central tower entry.
- + A mix of sliding, hinged swing and auto opening doors are available at the building entrance.

BCA D4D2, D4D3 Australian Standard References: AS 1428.1-2009

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 1.          | Building Entrance - General  | Direct access to Retail Tenancies are accessible. |
|             | <ul> <li>An accessway must be provided<br/>through the principal pedestrian<br/>entrance of the building.</li> </ul>                                       |   |
|             | <ul> <li>Through not less than 50% of all<br/>pedestrian entrances (including the<br/>principal pedestrian entrance).</li> </ul>                           |   |
|             | + In a building with a floor area greater than 500m <sup>2</sup> , an inaccessible entrance must not be located more than 50m from an accessible entrance. |   |
|             | + Building pedestrian entrances which consist of not more than three (3) doorways, a min. of one (1) doorway is required to be accessible.                 |   |
|             | + Building pedestrian entrances which consist of more than three (3) doorways require not less than 50% of the doorways to be accessible.                  |   |
| Status:     |  | Complies in Design                                |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 2.          | Circulation space and clearances— Doors and Gates  Circulation spaces at doors and gates within an accessway are to consider the approach undertaken by a user at both sides of a doorway.  Refer to AS 1428.1-2009 Clause 13, Figures 31 (hinge door) and 32 (sliding door) to address the circulation space requirements relevant to each door and the approaches required for use.  Circulation spaces must incorporate a gradient which is no greater than 1:40. | Circulation spaces externally to doors are compliant. |
| Status:     |  | Complies in Design                                    |

| Item<br>No. | Element – minimum access requirement   | Commentary                                     |
|-------------|--|--|
| 3.          | Controls – Doors and Gates   | Door schedules required to confirm compliance. |
|             | Controls for doors and gates (e.g., security entry, door handles, snibs, locks etc. excluding childproof gates) are to be installed as follows:  |  |
|             | <ul> <li>Where grasped or turned e.g., auto door<br/>lock, key lock etc. 900-1100mm AFFL.</li> </ul>   |  |
|             | <ul> <li>Where pushed e.g., manual control for<br/>auto door, 900-1200mm AFFL.</li> </ul>  |  |
|             | <ul> <li>Where touched e.g., proximity reader,<br/>900-1250mm AFFL and not less than<br/>500mm from an internal corner (except<br/>specs of AS 1735.12)</li> </ul>   |  |
|             | + Sliding door controls are to be no less than 60mm from each doorjamb when open and when closed.  |  |
|             | <ul> <li>Where an outward opening door is not<br/>self-closing, a horizontal handrail or pull<br/>bar is to be installed at 900-1100mm<br/>AFFL on the inside of the door.</li> </ul>  |  |
|             | Manual controls for power operated<br>doors are to have a min. diameter of<br>25mm, sitting proud of the surface.<br>They are to be no closer than 500mm<br>from an internal corner and between<br>1000-2000mm from the hinged door leaf<br>(any position) or clear of a surface-<br>mounted sliding door in the open<br>position. |  |
|             | + Snibs, where installed are to be of lever handle style and measure 45mm from the centre of the spindle.  |  |
| Status:     |  | Compliance Readily Available                   |

| Item<br>No. | Element – minimum access requirement   | Commentary                                     |
|-------------|--|--|
| 4.          | Operation – Doors and Gates  | Door schedules required to confirm compliance. |
|             | The operable force for doors within an accessway is to be no greater than 20N (approx. 2kg), to initially open the door, swing or slide the door, hold the door open between 60 and 90°.   |  |
|             | The weight, type of door or other factors may impact on the ease of this operation. Consider use of weight bearing hinges or other enhanced hardware early in the design.  |  |
| Status:     |  | Compliance Readily Available                   |
| 5.          | Identification and Safety – Doors and Gates  | Door schedules required to confirm compliance. |
|             | All door and gates within an accessway (unless exempt from the requirements of access) shall have a minimum luminance contrast of 30%, (min. width 50mm) between:  |  |
|             | + Door leaf and door jamb;   |  |
|             | + Door leaf and adjacent wall;   |  |
|             | + Architrave and wall;   |  |
|             | + Door leaf and architrave; or   |  |
|             | + Door jamb and adjacent wall.   |  |
|             | Where doors/sidelights are frameless or fully glazed, a solid, non-transparent contrasting line no less than 75mm wide with the lower edge installed at 900-1000mm AFFL is required across the full width of the door and sidelight. |  |
| Status:     |  | Compliance Readily Available                   |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 6.          | Clear opening width – Doors and Gates  Doors within an accessway are to incorporate a min. clear opening width of 850mm, including the active leaf of a multi leaf door. This typically requires a 920mm frame for a hinge swing door, and a 1020mm (1050mm recommended) frame for a sliding door.   | Doors within the accessways are shown with the compliant minimum 850mm clear opening.   |
| Status:     |  | Complies in Design  |
| 7.          | <ul> <li>Threshold – Doors and Gates</li> <li>Threshold ramps where installed are to incorporate:</li> <li>+ A maximum rise of 35mm</li> <li>+ A maximum length of 280mm</li> <li>+ A maximum gradient of 1:8; and</li> <li>+ Be located within 20mm of the door leaf which it serves.</li> <li>Where the threshold ramp doesn't abut a wall or kerb, sides are to be tapered or splayed.</li> </ul> | Threshold ramps to be shown on plans.  Should a step-free threshold be nominated, drainage grates are to be compliant for openings. |
| Status:     |  | Further Information Required  |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 8.          | Vestibules, Airlocks or Enclosed Spaces  – Doors and Gates   | There are no external vestibules, airlocks or enclosed spaces.   |
|             | Airlocks, vestibules or enclosed spaces are to incorporate not less than 1450mm between doorways. Where the doors encroach into the space, the distance is to be not less than 1450mm plus the door leaf width.  |  |
|             | 1450 min.  1450 min. |  |
| Status:     |  | Not Applicable   |
| 9.          | Ground surfaces  Surface abutments are to be designed flush, noting that a construction tolerance of 3mm max. where vertical, or 5mm max. where bevelled or rounded is accepted including the leading edge of carpet and recessed matting.   | Further information is required of the ground surfaces proposed. |
| Status:     |  | Further Information Required                                     |

#### 3.5 INTERNAL BUILDING CIRCULATION

BCA D4D2, D4D4, D4D13 Australian Standard References: AS 1428.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary                                    |
|-------------|---|---|
| 1.          | Passing and Turning Spaces  | Compliant turning spaces provided internally. |
|             | Passing spaces, 1800mm wide x 2000mm long, are required every 20m, where a direct line of sight is not available to the end of the accessway. |   |
|             | Turning spaces, 1540mm wide x 2070mm long, are required at not less than 20m intervals along the accessway.                                   |   |
|             | Turning spaces are required at changes in direction (1:40 gradient):  |   |
|             | + 60° to 90° turn - 1500mm x 1500mm   |   |
|             | + 30°to <60° Where accessway is less than 1200mm wide a splay of at least 500mm x 500mm is required on the internal corner.                   |   |
|             | + >90° to 180° turn – 1540mm wide x 2070mm in direction of travel.  |   |
|             | Turning spaces, 1540mm wide x 2070mm long, are required within 2m of the end of an accessway where it is not possible to continue.            |   |
| Status      | 3:  | Complies in Design                            |

| Item<br>No. | Element – minimum access requirement  | Commentary   |
|-------------|---|--|
| 2.          | Accessways - width and overhead clearances, gradients   | Accessways provide the required 1m clear width with 2m overhead clearance. |
|             | A minimum clear, unobstructed width of 1000mm is required throughout the accessway, free from intrusions e.g., skirtings, heavy and/or fixed furniture etc.                               |  |
|             | A minimum clear, unobstructed overhead clearance of 2000mm (1980mm at doorway) is required throughout the accessway, free from intrusions.  |  |
|             | The linear grade and crossfall of an accessway is to not exceed 1:40.   |  |
| Status      | <b>s:</b>   | Complies in Design   |
| 3.          | Ground surfaces   | Internal finishes to be detailed to verify compliance.                     |
|             | Surface abutments are to be designed flush, noting that a construction tolerance of 3mm max. where vertical, or 5mm max. where bevelled or rounded is accepted.                           |  |
|             | Ground surfaces are required to have a slip resistant surface, incorporating a texture that is traversable by a person using a wheelchair and people with ambulant or sensory disability. |  |
| Status      | <b>3:</b>   | Compliance Readily Available   |

# Item Element - minimum access requirement Commentary No. 4. Circulation space and clearances- Doors The internal access walkway from Bungan Lane has a gradient of 1:20 and the internal 1450mm Circulation spaces at doors and gates within circulation space at the doorway extends into the an accessway are to consider the approach ramp zone. Therefore, it will be necessary to undertaken by a user at both sides of a relocate the ramp inwards to achieve compliance. doorway. Refer to AS 1428.1-2009 Clause 13, Figures 31 and 32 to address the circulation 9.800 space requirements relevant to each door RAMP 5% and the approaches required for use. Circulation spaces must incorporate a gradient which is no greater than 1:40. 9.800 **RETAIL 04** Non-compliant door circulation internally to Central tower. 1346mm provided in lieu of the required 1450mm. It will be necessary to relocate the doorway outwards to achieve compliance. Status: Does Not Comply - design to be amended

# Item Element - minimum access requirement Commentary No. 5. Vestibules, Airlocks or Enclosed Spaces Access to Lift Lobby for Lift 02 on basement Levels - Doors and Gates B1 & B2 has non-compliant door circulation for the enclosed space. 1450mm is required between the Airlocks, vestibules or enclosed spaces are doors. It will be possible to re-swing doors to incorporate not less than 1450mm outwards to achieve compliance. between doorways. Where the doors .30 mm encroach into the space, the distance is to be not less than 1450mm plus the door leaf width. LOBBY LIFT 02 DIMENSIONS IN MILLIMETRES FIGURE 34 (in part) DISTANCE BETWEEN SUCCESSIVE DOORWAYS IN VESTIBULES AND AIR LOCKS

| Item<br>No. | Element – minimum access requirement | Commentary                             |
|-------------|--------------------------------------|--|
| Status      | s:                                   | Does Not Comply - design to be amended |
|             |                                      |  |
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| Item<br>No. | Element – minimum access requirement  | Commentary                                     |
|-------------|---|--|
| 6.          | Controls - Doors  | Door schedules required to confirm compliance. |
|             | Controls for doors and gates (e.g., security entry, door handles, snibs, locks etc. excluding childproof gates) are to be installed as follows:   |  |
|             | Where grasped or turned e.g., auto door lock, key lock etc. 900-1100mm AFFL.  |  |
|             | Where pushed e.g., manual control for<br>auto door, 900-1200mm AFFL.  |  |
|             | + Where touched e.g., proximity reader, 900-1250mm AFFL and not less than 500mm from an internal corner (except specs of AS 1735.12)  |  |
|             | + Sliding door controls are to be no less than 60mm from each doorjamb when open and when closed.   |  |
|             | <ul> <li>Where an outward opening door is not<br/>self-closing, a horizontal handrail or pull<br/>bar is to be installed at 900-1100mm<br/>AFFL on the inside of the door.</li> </ul>   |  |
|             | + Manual controls for power operated doors are to have a min. diameter of 25mm, sitting proud of the surface.  They are to be no closer than 500mm from an internal corner and between 1000-2000mm from the hinged door leaf (any position) or clear of a surfacemounted sliding door in the open position. |  |
|             | Snibs, where installed are to be of lever handle style and measure 45mm from the centre of the spindle.   |  |
| Status      | 3:<br>  | CRA - Compliance Readily Available             |

| Item<br>No. | Element – minimum access requirement  | Commentary   |
|-------------|---|--|
| 7.          | Operation – Doors   | Door schedules required to confirm compliance.   |
|             | The operable force for doors within an accessway is to be no greater than 20N (approx. 2kg), to initially open the door, swing or slide the door, hold the door open between 60 and 90°.  |  |
|             | The weight, type of door or other factors may impact on the ease of this operation. Consider use of weight bearing hinges or other enhanced hardware early in the design.   |  |
|             | The conflict between egress and access requirements e.g., smoke/egress doors are to be considered early in the design, hold open mechanisms could be considered.  |  |
| Status:     |   | Compliance Readily Available   |
| 8.          | Identification and Safety  Where doors/sidelights are frameless or fully glazed, a solid, non-transparent contrasting line no less than 75mm wide with the lower edge installed at 900-1000mm AFFL is required across the full width of the door and sidelight.  Where glazing is capable being mistaken as an opening, a solid, non-transparent contrasting line no less than 75mm wide with the lower edge installed at 900-1000mm AFFL is required across the full width of the glazing. | Retail Tenancies with glazed frontages require window decals in accordance with this clause. |
| Status:     |   | Compliance Readily Available   |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 9.          | Identification and Safety – Doors  All door within an accessway (unless exempt from the requirements of access) shall have a minimum luminance contrast of 30%, (min. width 50mm) between:  + Door leaf and door jamb;  + Door leaf and adjacent wall;  + Architrave and wall;  + Door leaf and architrave; or  + Door jamb and adjacent wall.  Where doors/sidelights are frameless or fully glazed, a solid, non-transparent contrasting line no less than 75mm wide with the lower edge installed at 900-1000mm AFFL is required across the full width of the door and sidelight. | Door schedule and internal finishes schedule required to verify compliance with this requirement. |
| Status      | S:   | Compliance Readily Available  |

#### 3.6 SWITCHES AND CONTROLS

BCA D4D2 Australian Standard References: AS 1428.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary                                    |
|-------------|---|---|
| 1.          | Switches and Controls – General  All switches and controls on an accessway (other than General Purpose Outlets (GPOs)) are to be located 900-1100mm AFFL and not less than 500mm from an internal corner.   | Detailed plans required to verify compliance. |
| Status      | S:  | Compliance Readily Available                  |
| 2.          | Switches and Controls – Unisex accessible sanitary facilities  Rocker action and toggle switches are to incorporate a min. dimension of 30mm x 30mm.  Push pad switches are to incorporate a min. dimension of 25mm diameter.  General purpose outlets (GPOs) are to be:  + located between 600-1100mm AFFL  + no less than 500mm from an internal corner | No document                                   |
| Status:     |   | Compliance Readily Available                  |

#### 3.7 STAIRS

An accessible means of access must be provided as an alternative to stairs.

Stairs are detailed as follows:

- + General circulation stairs:
  - Pittwater Road North
  - Pittwater Road South
- + Fire Isolated Stairs
  - Basement Bungan Lane
  - Basement Pittwater Road
  - Residential Bungan Lane Tower
  - Residential Central Tower
  - Residential Pittwater Road Tower

BCA D4D2, D4D4, D4D9 Australian Standard References: AS 1428.1-2009 AS/NZS 1428.4.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary   |
|-------------|---|--|
| 1.          | Stairs - General  All general circulation stairs are to incorporate the following:  + step risers which are opaque or enclosed.  + a slip resistant surface.  + handrails to both sides.  + contrast stair nosing strips.  + tactile ground surface indicators. | TGSIs shown to external stairs off Pittwater Road. |
| Status:     |   | Compliance Readily Available                       |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 2.          | Stairs – General - Setback  Stairs which abut an allotment boundary are to be set back a minimum of 900mm, to ensure none of the access supports e.g., TGSIs, handrails project into the transverse path.  Stairs which abut an internal corridor are to be set back to ensure that the handrails do not protrude into the transverse path. The set back is nominally 700mm.   | Stairs are setback a minimum of 900mm with TGSIs contained with boundaries.                                      |
| Status:     |  | Complies in Design   |
| 3.          | Stairs – Handrails – height, clearances and extensions  Handrails installed to both sides of the stairs are to extend one tread width, plus a min. 300mm horizontal extension at the bottom of the stair and a min. 300mm horizontal extension at the top.  Handrails must incorporate a min. clearance of 50mm from and adjacent wall, and a min. 600mm above for the entire length of the rail.  Handrails are to be installed at a consistent height between 865-1000mm above the stair nosing i.e., no vertical drops or shift in height through stair.  A min. of 1000mm is required between the inside edge of the handrails through the length of the stairway.  Handrails are to sit outside of required circulation spaces. | Pittwater Road South stair has non-compliant handrail extensions. Top to be a minimum of 300mm and bottom 600mm. |
| Status:     |  | Compliance Readily Available   |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 4.          | <ul> <li>Stairs – Handrails – terminations</li> <li>Handrails are required to incorporate one of the following terminations:</li> <li>turned through 180°.</li> <li>turned through 180° and returned to end post.</li> <li>turned down and back to the floor at the end of the post.</li> <li>turned down through 90° to the floor.</li> <li>turned horizontally through 90° to the wall.</li> </ul>  | Further design detailing required to verify compliance.   |
| Status:     |   | Compliance Readily Available  |
| 5.          | Stairs - Intermediate landings  Consideration should be given early in the design to the impact of intermediate landings on handrails. Offsetting the stair at mid landing or extending the depth of landing will not require vertical sections within the handrail.  300 min.  1000 min. | Stairs to be further detailed for compliance. Handrails etc are not clearly shown to verify compliance. |
| Status:     |   | Compliance Readily Available  |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 6.          | Stairs – nosing strips  | Finishes for stairs required to verify compliance.                          |
|             | Stair nosing strips must be level with the face of the riser, with the max. splay backward of 25mm permitted.   |   |
|             | The profile of nosing strips must incorporate a sharp transition, rounded up to a 5mm radius or chamfered up to 5mm x 5mm.  |   |
|             | Contrast nosing strips which extend across the full width of the path of travel are to:   |   |
|             | + be incorporated on each tread.  |   |
|             | incorporate a min. 30% luminance contrast to the background.  |   |
|             | + incorporate a width of 50-75mm.   |   |
|             | They may be set back from the front of the nosing a max. 15mm. Where they aren't setback from the front of the nosing, then the area of luminance contrast cannot extend down the riser more than 10mm. |   |
| Status:     |   | Compliance Readily Available  |
| 7.          | Stairs – Tactile Ground Surface<br>Indicators (TGSIs)   | TGSIs shown to Pittwater Road North & South stairs as 600mm top and bottom. |
|             | TGSIs are required at the top and base of stairs, extending across the opening width of the stair, at a depth of 600-800mm, with an allowable set back of 290-310mm.                                    |   |
| Status:     |   | Complies in Design  |

| Item<br>No. | Element – minimum access requirement   | Commentary                            |
|-------------|--|---------------------------------------|
| 8.          | Stairs – Tactile Ground Surface<br>Indicators (TGSIs) - landings   | There are no landings requiring TGSIs |
|             | Where the distance of a landing is 3000mm or more to the nearest nosing edge the warning indicators are required to be a depth of 600-800mm.     |                                       |
|             | Where the distance of the landing is less than 3000mm to the nearest nosing edge the warning indicators are required to be a depth of 300-400mm. |                                       |
|             | Where handrails are continuous to both sides of a landing and the landing is less than 3000mm to the nearest nosing edge, no TGSIs are required. |                                       |
| Status:     |  | Not Applicable                        |

#### 3.8 RAMPS AND WALKWAYS

A ramp is steeper than 1:20 and not steeper than 1:14. A walkway is not steeper than 1:20.

Ramps are detailed as follows:

- + General circulation ramps:
  - Pittwater Road Ramp
  - Walkways Bungan Lane Tower Ground Floor
  - Walkway Central Tower Ground Floor

BCA D4D2, D4D4, D4D9, D4D12 Australian Standard References: AS 1428.1-2009 AS/NZS 1428.4.1-2009

| Item<br>No. | Element – minimum access requirement  | Commentary                                     |
|-------------|---|--|
| 1.          | Ramps – General - Setback  Ramps which abut an allotment boundary are to be set back a minimum of 900mm, to ensure none of the access supports e.g., TGSIs, handrails project into the transverse path.  Ramps which abut an internal corridor are to be set back a min. 400mm to ensure that the handrails do not protrude into the transverse path. | The ramp does not discharge facing the street. |
| Status:     | •   | Complies in Design                             |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 2.          | <ul> <li>Ramps – General</li> <li>All general circulation ramps are to incorporate the following:</li> <li>+ a gradient which doesn't exceed 1:14.</li> <li>+ a slip resistant surface.</li> <li>+ handrails and kerb rails to both sides which incorporate a min. width of 1000mm to the inside edge of handrails, a min. of 1500mm wide where curved.</li> <li>+ level landings of the correct size for the direction of travel.</li> <li>+ tactile ground surface indicators.</li> <li>+ sharp transitions between the planes of landings and ramps.</li> <li>A series of connected ramps must not have a combined vertical rise of more than 3.6m.</li> <li>A landing for a step ramp must not overlap a landing for another step ramp or ramp.</li> </ul> | Pittwater Road entrance ramp does not achieve compliance with the minimum 1500mm for the curvature required by AS1428.1-2009. Therefore, it will be necessary to increase the width, or alternatively seek a performance solution at Construction Certificate stage. |
| Status:     |  | Does Not Comply - design to be amended  Alternatively, a performance solution to be obtained.  |
| 3.          | <ul> <li>Ramp - Landings</li> <li>Landings within ramps shall:</li> <li>+ be not greater than 9m intervals where a 1:14 gradient is available.</li> <li>+ be not greater than 15m internals where a 1:20 gradient is available.</li> <li>+ be installed at intervals obtained by linear interpolation where between 1:14 and steeper than 1:20.</li> <li>Incorporate a crossfall/gradient no steeper than 1:40, 1:33 where bitumen.</li> </ul>   | Landing gradients to be shown on plans.  |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| Status:     |  | Compliance Readily Available  |
| 4.          | <ul> <li>Ramps - Passing and Turning Spaces</li> <li>Passing spaces, 1800mm wide x 2000mm long, are required every 20m, where a direct line of sight is not available to the end of the accessway.</li> <li>Turning spaces, 1540mm wide x 2070mm long, are required at not less than 20m intervals along the accessway.</li> <li>Turning spaces are required at changes in direction (1:40 gradient):</li> <li>+ 60° to 90° turn - 1500mm x 1500mm</li> <li>+ 30°to &lt;60° Where accessway is less than 1200mm wide a splay of at least 500mm x 500mm is required on the internal corner.</li> <li>+ &gt;90° to 180° turn - 1540mm wide x 2070mm long, are required within 2m of the end of an accessway where it is not possible to continue.</li> </ul> | Landing at the base of the Pittwater Rd entry ramp achieves a 1500x1500mm circulation space as per AS1428.1-2009. However, a portion of the 1500mmx1500mm landing relies upon the footpath which is outside the boundary.  Technically, to comply with AS1428 all circulation spaces need to be wholly within the allotment boundary. |
| Status:     |  | Compliance Readily Available  |

| Item<br>No. | Element – minimum access requirement  | Commentary                              |
|-------------|---|---|
| 5.          | Ramps – Handrails – Terminations  | Handrail details required.              |
|             | Handrails are required to incorporate one of the following terminations:  |   |
|             | + turned through 180°.  |   |
|             | <ul> <li>turned through 180° and returned to<br/>end post.</li> </ul>   |   |
|             | <ul> <li>turned down and back to the floor at the<br/>end of the post.</li> </ul>   |   |
|             | + turned down through 90° to the floor.   |   |
|             | <ul> <li>turned horizontally through 90° to the wall.</li> </ul>  |   |
| Status:     |   | Compliance Readily Available            |
|             |   |   |
| 6.          | Ramp – Handrails – height, clearances and extensions  | Ramp extensions are a minimum of 300mm. |
|             | Handrails installed to both sides of the ramp are to incorporate a 300mm horizontal extension at the bottom and top.                  |   |
|             | Handrails must incorporate a min. clearance of 50mm from and adjacent wall, and a min. 600mm above for the entire length of the rail. |   |
|             | Handrails are to be installed at a consistent height between 865-1000mm.  |   |
|             | A min. of 1000mm is required between the inside edge of the handrails through the length of the ramp.                                 |   |
|             | Handrails are to sit outside of required circulation spaces.  |   |
| Status:     |   | Complies in Design                      |

| Item<br>No. | Element – minimum access requirement  | Commentary                    |
|-------------|---|-------------------------------|
| 7.          | Kerb ramps – General  | There are no kerb ramps shown |
|             | Kerb ramps are to incorporate:  |                               |
|             | + a max. rise of 190mm;   |                               |
|             | + a max. length of 1520mm;  |                               |
|             | + slope/gradient no greater than 1:8; and   |                               |
|             | + be located within or attached to a kerb;  |                               |
|             | + align with the direction of travel; and   |                               |
|             | + a slip resistant surface.   |                               |
| Status:     |   | Not Applicable                |
| 8.          | Kerb ramp – Profile   | There are no kerb ramps shown |
|             | Kerb ramps require:   |                               |
|             | <ul> <li>a smooth transition between the road<br/>and associated pathways.</li> </ul>                                   |                               |
|             | <ul> <li>a side profile which is played or tapered<br/>at 45°.</li> </ul>   |                               |
|             | <ul> <li>an angle between the ramp surface and<br/>lower surface at base, available at an<br/>angle of 166°.</li> </ul> |                               |
| Status:     |   | Not Applicable                |
| 9.          | Kerb ramp – landings  | There are no kerb ramps shown |
|             | Landings for kerb ramps:  |                               |
|             | <ul> <li>following the direction of travel,<br/>landings 1200mm long.</li> </ul>  |                               |
|             | <ul> <li>available at a T junction, landings</li> <li>1500mm x 2000mm.</li> </ul>                                       |                               |
|             | + at any single change of direction, landings 1500mm x 1500mm.  |                               |

| Item<br>No. | Element – minimum access requirement  | Commentary                            |
|-------------|---|---------------------------------------|
| Status:     |   | Not Applicable                        |
| 10.         | <ul> <li>Threshold ramp - General</li> <li>Threshold ramps at doorways within an accessway require:</li> <li>+ a max. rise of 35mm;</li> <li>+ a max. length of 280mm;</li> <li>+ a max. gradient of 1:8; and</li> <li>+ be located within 20mm of the door leaf it serves.</li> <li>Edges of the threshold ramp are required to be tapered or splayed at a min. 45° where it doesn't abut a wall.</li> </ul> | Threshold ramps to be shown on plans. |
| Status:     | docsii t abut a waii.   | Compliance Readily Available          |
| 11.         | Step ramp Step ramps are to incorporate:  + a max. rise of 190mm;  + a max. length of 1900mm;  + a max. gradient of 1:10; and  Edges of the step ramp are required to have a 45° splay where there's pedestrian cross traffic or be protected by a suitable barrier such as a wall.   | There are no step ramps               |
| Status:     |   | Not Applicable                        |

| Item<br>No. | Element – minimum access requirement  | Commentary   |
|-------------|---|--|
| 12.         | Walkways – General  Walkways and their landings, which include a gradient in the direction of travel shallower than 1:33, a camber or crossfall is required to be available for the shedding of water. This cannot exceed 1:40, except if bitumen where the camber or crossfall must not exceed 1:33.   | Complies in Design   |
| Status.     |   | Compiles in Design   |
| 13.         | <ul> <li>Walkways – Safe movement</li> <li>Walkways are to include one of the following:</li> <li>A kerb in accordance with Figure 18 of AS1428.1-2009; or</li> <li>A kerb rail and handrail in accordance with Figure 19 of As1428.1-2009; or</li> <li>A wall not less than 450mm high.</li> <li>Where none of the above are available, then the floor or ground surface abutting the sides of the walkaway shall provide a firm and level surface of a different material to that of the walkway at the same level as the walkway, following its grade and extending horizontally for a minimum of 600m.</li> </ul> | Both walkways are walls to both sides or enclosed cabinets |
| Status:     |   | Complies in Design   |

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 14.         | <ul> <li>Walkways – Landings</li> <li>Walkways with a gradient shallower than 1:33 require no landings.</li> <li>Walkways with a gradient of: <ul> <li>1:33 require landings at intervals no greater than 25m</li> <li>1:20 require landings at intervals no greater than 15m</li> </ul> </li> <li>Where between 1:20 and 1:33 gradient landing intervals are obtained by linear interpolation.</li> <li>If a wall, kerb or kerb rail is in place, these intervals may be increased by 30%.</li> </ul> | The landing at the entry to Central Tower ground floor has non-compliant landing dimensions.  It will be necessary to shift the doorway outwards to ensure 1450mm internal clearance as per AS1428.1-2009 |
| Status:     |  | Does Not Comply - design to be amended  |

## 3.9 HAZARD IDENTIFICATION INC. TGSI'S

BCA D4D9 Australian Standard References: AS 1428.1-2009 AS/NZS 1428.4.1-2009

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 1.          | Identification and Safety – Fully glazed walls, glazing mistaken as an opening   | Glazing schedule to show decals to verify.                                      |
|             | Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, including glazing capable of being mistaken for a doorway or opening are to be provided with a solid, non-transparent contrasting line no less than 75mm wide with the lower edge installed at 900-1000mm AFFL is required across the full width of the glazing panel. |   |
|             | A min. 30% contrast is required when viewed against the background surfaces within 2m of the glazing on the opposite side.   |   |
| Status:     |  | Compliance Readily Available  |
| 2.          | TGSIs – Location  TGSIs are required at the top and bottom of stairs, ramps, and escalators. They are also required where there is no environmental cue available to a person with vision loss e.g., at grade accessway and roadway.  Note: Excluding residential aged care facilities associated with a Class 3, 9a and 9c building.                          | TGSIs shown to Pittwater Rd are noted as compliant for dimensions and location. |
| Status:     |  | Complies in Design  |

| Item<br>No. | Element – minimum access requirement  | Commentary                              |
|-------------|---|---|
| 3.          | Tactile Ground Surface Indicators –<br>General  | To be detailed in design documentation. |
|             | TGSIs are to incorporate a degree of luminance contrast to the background as follows: |   |
|             | + integrated TGSI – min. 30%  |   |
|             | + discrete TGSI – min. 45%.   |   |
|             | + composite discrete TGSI – min. 60%  |   |
|             | Examples:   |   |
|             |   |   |
|             | Integrated discrete composite discrete  |   |
|             | TGSIs are required to be installed at right angles to the path of travel.             |   |
| Status:     |   | Compliance Readily Available            |

| Item<br>No. | Element – minimum access requirement   | Commentary                          |
|-------------|--|-------------------------------------|
| 4.          | Tactile Ground Surface Indicators – Overhead obstruction within circulation space  | Does not apply to this development. |
|             | Where an overhead obstruction or hazard less than 2000mm is in place within circulation space e.g. under croft of stairs, angled wall etc., TGSIs are required where there is no other form of barrier available.  |                                     |
|             | The state of the s |                                     |
| Status:     |  | Not Applicable                      |
| 5.          | Tactile Indicator – Residential Aged Care  Handrails are required to incorporate a raised tactile warning, in the form of a domed button 4-5mm in height, 10-12mm in diameter, provided on the top of the handrail, 140-160mm from the end of the handrail in-lieu of TGSIs.   | Does not apply to this development  |
| Status:     |  | Not Applicable                      |

#### 3.10 PASSENGER LIFTS

The minimum lift car size for a passenger lift within a new building is based upon the distance travelled, as follows:

- + Travel over 12m 1400mm wide x 1600mm long.
- + Where stretcher use required a min. length of 2000mm is required.
- + Auditory information is required where it travels more than 2 floor levels.

Destination control lifts where proposed for use within a building, will require the development of a Performance Based Solution.

BCA E3D6, E3D7, E3D8 Australian Standard References: AS 1735.12-1999

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 1.          | Passenger lift – travel distance  The passenger lift travels:  + Over 12m – 1400mm wide x 1600mm long.  + Stretcher use if required – a min. length of 2000mm. | Lift dimensions comply with internal shaft dimensions of 2,200mm X 2,500mm. |
| Status:     |  | Complies in Design  |

| Item<br>No. | Element – minimum access requirement  | Commentary                   |
|-------------|---|------------------------------|
| 2.          | Passenger lift – internal fit out general   | Lift details to be provided. |
|             | Passenger lifts require:  |                              |
|             | + a handrail, min. 600mm long, installed 850-950mm AFFL of the lift car;  |                              |
|             | auditory information relevant to distance travelled;  |                              |
|             | <ul> <li>tactile symbol and Braille equivalent on control buttons and panels;</li> </ul>                                  |                              |
|             | <ul> <li>lighting which meets minimum lux.</li> <li>provisions within the car and at the lift control buttons.</li> </ul> |                              |
| Status:     |   | Compliance Readily Available |

#### 3.11 SANITARY FACILITIES

The building incorporates the following sanitary facilities:

Unisex accessible sanitary facility:

- + Retail 01 RH
- + Retail 02 LH
- + Retail 03 LH
- + Retail 04 RH

BCA F4D5, F4D6, F4D7 Australian Standard References: AS 1428.1-2009

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 1.          | Unisex accessible sanitary facilities –<br>Toilet provision  | Each retail is provided with a single unisex facility for staff. |
|             | Unisex accessible sanitary facilities (UASF) are required on each floor level where sanitary facilities are available. If the floor level (storey) has more than one bank of sanitary facilities, an UASF is only required in one of these locations i.e., 50% of the locations. |  |
|             | Signage is required which directs users to this accessible facility from the inaccessible one.   |  |
| Status:     |  | Complies in Design   |
| 2.          | Unisex accessible sanitary facilities –<br>Toilet and Shower provision   | There are no showers proposed.                                   |
|             | A combined unisex accessible sanitary facility which incorporates a shower, toilet pan and basin, requires a minimum compartment size of 2300mm wide x 2650mm long (based on a 430mm basin depth installed to the front of the pan) as per Figure 50 of AS 1428.1-2009.          |  |
| Status:     |  | Not Applicable   |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 3.          | Unisex accessible sanitary facilities – Pan circulation space/design  A unisex accessible sanitary facility incorporating a toilet pan and basin, requires a minimum compartment size of 1900mm wide x 2630mm long (based on a 430mm basin depth installed to the front of the pan) to a height of 2000mm.  Baby change facilities if provided must sit outside of the circulation space or be flush within the wall and be installed as per Clause 15 AS 1428.1-2009. | Retail 01 & Retail 02 have non-compliant width at 1860mm to 1890mm in lieu of 1900mm tile to tile. |
| Status:     |  | Does Not Comply - design to be amended   |
| 4. Status:  | Unisex accessible sanitary facilities – Transfer provision  Where two or more unisex accessible sanitary facilities are provided, the left hand (LH) and right hand (RH) facilities, must be distributed as evenly as possible.  | Of the four facilities, two are left hand and two are right hand.  Complies in Design              |
| Olalus.     |  | Compiles in Design   |

| Item<br>No. | Element – minimum access requirement  | Commentary   |
|-------------|---|--|
| 5.          | Unisex accessible sanitary – door controls  | Door schedule to provide details of controls for compliance. |
|             | Controls for doors (e.g., door handles, snibs, locks) are to be installed as follows:   |  |
|             | <ul> <li>Where grasped or turned e.g., auto door<br/>lock, key lock etc. 900-1100mm AFFL.</li> </ul>  |  |
|             | <ul> <li>Where pushed e.g., manual control for<br/>auto door, 900-1200mm AFFL.</li> </ul>   |  |
|             | <ul> <li>Where touched e.g., proximity reader,</li> <li>900-1250mm AFFL and not less than</li> <li>500mm from an internal corner.</li> </ul>  |  |
|             | <ul> <li>Sliding door controls are to be no less<br/>than 60mm from each doorjamb when<br/>open and when closed.</li> </ul>   |  |
|             | Where an outward opening door is not<br>self-closing, a horizontal handrail or pull<br>bar is to be installed at 900-1100mm<br>AFFL on the inside of the door.  |  |
|             | + Manual controls for power operated doors are to have a min. diameter of 25mm, sitting proud of the surface. They are to be no closer than 500mm from an internal corner and between 1000-2000mm from the hinged door leaf (any position) or clear of a surface-mounted sliding door in the open position. |  |
|             | Snibs, where installed are to be of lever handle style and measure 45mm from the centre of the spindle.   |  |
| Status:     |   | Compliance Readily Available                                 |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 6.          | Unisex accessible sanitary facility- door operation   | To be noted on door schedule.   |
|             | The operable force for doors within an accessway is to be no greater than 20N (approx. 2kg), to initially open the door, swing or slide the door, hold the door open between 60 and 90°.  |   |
|             | The weight, type of door or other factors may impact on the ease of this operation.  Consider use of weight bearing hinges or other enhanced hardware early in the design.  |   |
| Status:     |   | Compliance Readily Available  |
| 7.          | Unisex accessible sanitary facility – Fixtures and fittings  Fixtures and fittings within the sanitary facility are to meet the provision of AS 1428.1-2009 Clause 15. This includes, as necessary:  + Toilet pan/seat  + Basin  + Grabrails  + Flushing control  + Floor waste  + Tapware  + Clothes hanging device  + Hand dryer/towel dispenser  + Soap dispenser  + Shelf  + Mirror  + Switches and General-Purpose Outlets | Basin is not located in accordance with Figure 44(A) of AS1428.1-2009 at a minimum 425mm centre to wall in Retail 01, Retail 02 & Retail 03.  Further details with internal elevations required to ensure all required fixtures are provided. |
| Status:     |   | Does Not Comply - design to be amended  |

| Item<br>No. | Element – minimum access requirement   | Commentary                                 |
|-------------|--|--|
| 8.          | Vestibules, Airlocks or Enclosed Spaces –<br>Doors   | There are no vestibules or airlocks shown. |
|             | Airlocks, vestibules or enclosed spaces enroute to ambulant sanitary facilities are to be in accordance with AS 1428.1-2009 Figure 34(B).                                  |  |
|             | 900 min. 900 min. 900 min. 900 min.  |  |
|             | 900 min.   |  |
|             | DMENSIONS IN MULIMETRES  FIGURE 34 (in part). DISTANCE BETWEEN SUCCESSIVE DOORWAYS IN VESTIBULES  AND AIR LOCKS ON A PATH OF TRAVEL TO AMBULANT TOILETS                    |  |
| Status:     |  | Not Applicable                             |
| 9.          | Ambulant Cubicles – General  | No ambulant facilities provided.           |
|             | Where one or more pans are available in addition to a unisex accessible sanitary facility, an ambulant cubicle is required within the male and female sanitary facilities. |  |
| Status:     |  | Not Applicable                             |
| 10.         | Ambulant Cubicle - Design  | No ambulant facilities provided.           |
|             | Ambulant cubicles within the male and female facilities are to incorporate:  |  |
|             | + A compartment size of 900-920mm.   |  |
|             | + Circulation space 900 x 900mm to front of pan.   |  |
|             | + Circulation space 900x900mm outside of cubicle door.   |  |

| Item<br>No. | Element – minimum access requirement  | Commentary                                      |
|-------------|---|---|
|             | <ul> <li>Partitioning which can support an applied<br/>force of 1100N (approx. 110kg).</li> </ul>   |   |
| Status:     |   | Not Applicable                                  |
| 11. Status: | Ambulant Cubicle – Fixtures  Fixtures and fittings within the ambulant sanitary facility are to meet the provision of AS 1428.1-2009 Clause 16. This includes:  + Toilet pan.  + Grabrails. | No ambulant facilities provided  Not Applicable |
| 12.         | Shower provision  Where two or more shower recesses are provided, at least one shall be of the opposite hand i.e. one LH configured, one RH configured.                                     | No showers provided                             |
| Status:     |   | Not Applicable                                  |

## 3.12 SIGNAGE

BCA D4D7 Australian Standard References: AS 1428.1-2009

| Item<br>No. | Element – minimum access requirement   | Commentary  |
|-------------|--|---|
| 1.          | Signage – General Raised tactile and Braille signage is required to incorporate the international symbol of access or deafness as appropriate to identify:   | Provide signage package (and details relevant to maintenance of luminance where relevant) for review. |
|             | + accessible sanitary facilities including transfer e.g. left hand or right hand.  |   |
|             | + direction to an accessible entry at an inaccessible entry.   |   |
|             | + direction to an accessible sanitary facility at an inaccessible facility.  |   |
|             | + ambulant sanitary facilities.  |   |
|             | <ul> <li>space with a hearing augmentation<br/>system and the location of receivers<br/>where required.</li> </ul>   |   |
|             | <ul> <li>each door required by the BCA to be<br/>provided with an exit sign, stating Exit<br/>and Level and the floor level number, or<br/>floor descriptor, or a combination of<br/>these.</li> </ul> |   |
|             | Illumination of Braille tactile signs may be required in some location to ensure luminance contrasts are met at times that the sign is required to be read.  |   |
|             | Title Case is required on signage.   |   |
|             | Refer to Specification D15 for signage specific information.   |   |
| Status:     |  | Compliance Readily Available  |

| Item<br>No. | Element – minimum access requirement  | Commentary  |
|-------------|---|---|
| 2.          | <ul> <li>Signage - Directional Raised tactile and Braille signage is required to incorporate the international symbol of access or deafness as appropriate to identify: <ul> <li>direction to an accessible entry at an inaccessible entry.</li> </ul> </li> <li>direction to an accessible sanitary facility at an inaccessible facility.</li> <li>the location of where receivers required for use of a hearing augmentation system can be obtained.</li> </ul> | Provide signage package (and details relevant to maintenance of luminance where relevant) for review. |
| Status:     |   | Compliance Readily Available  |
| 3.          | Signage – sanitary facilities  Raised tactile and Braille signage is required to identify:  + unisex accessible sanitary facilities, including which transfer the facility is suited to i.e., left hand (LH) or right hand (RH) transfer.  + the availability of ambulant sanitary facilities at an airlock serving the facilities.  + an ambulant cubicle.   | Provide signage package (and details relevant to maintenance of luminance where relevant) for review. |
| Status:     |   | Compliance Readily Available  |

| Item<br>No. | Element – minimum access requirement   | Commentary   |
|-------------|--|--|
| 4.          | Signage – hearing augmentation   | There is no requirement for hearing augmentation     |
|             | Raised tactile and Braille signage is required to incorporate the international symbol of access or deafness as appropriate to identify: |  |
|             | Space with a hearing augmentation system.  |  |
|             | Signage including the international symbol for deafness with a room containing a hearing augmentation system to identify:                |  |
|             | + the type of system in place  |  |
|             | + area coverage  |  |
|             | <ul> <li>where receivers can be obtained where<br/>they're utilised.</li> </ul>  |  |
| Status:     |  | Not Applicable                                       |
| 5.          | Signage – Required exits   | Provide signage package (and details relevant to     |
|             | Raised tactile and Braille signage is required to incorporate the international symbol of access to identify:                            | maintenance of luminance where relevant) for review. |
|             | + the exit;  |  |
|             | + the exit level;  |  |
|             | + the floor level number; or   |  |
|             | + a floor level descriptor; or   |  |
|             | + a combination of these two options.  |  |
| Status:     |  | Compliance Readily Available                         |
|             |  |  |

#### 3.13 LIVABLE HOUSING DESIGN GUIDE - LIVABLE HOUSING SILVER LEVEL

In accordance with the BCA, a Class 2 building has no minimum requirement for the provision of accessible or livable units. However, in accordance with the requirements of SEPP65 and Pittwater DCP a minimum of 20% of units which incorporate the Livable Housing Design Guideline's silver level features are to be addressed, these features include:

- + Dwelling access
- + Dwelling entrance
- + Internal doors and corridors
- + Toilet
- + Shower

**Number** 

- + Reinforcement of bathroom and toilet walls
- Internal stairways

| LHA    | Room/Item | Current Status |
|--------|-----------|----------------|
| Clause |           |                |

#### **Performance Criteria**

#### 1 Dwelling access

There is a safe and continuous pathway from the street entrance and/or parking areas to a dwelling entrance that is level.

#### Silver

| 1        | Provide a safe and continuous pathway from:   | Refer below                  |
|----------|---|------------------------------|
| 1 a (i)  | the front boundary of the allotment; or   | Capable of complying         |
| 1 a (ii) | a car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step-free) as specified in Element 2. | Capable of complying         |
| 1 b      | The path of travel as referred to in 1.a should have a minimum clear width of 1000mm; and   | Capable of complying         |
| 1 b (i)  | an even, firm, slip resistant surface; and  | Further information required |
| 1 b (ii) | a crossfall of not more than 1:40; and  | Further information required |

| LHA<br>Clause<br>Number | Room/Item  | Current Status       |
|-------------------------|--|----------------------|
| 1 b (iii)               | a maximum pathway slope of 1:14, with landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length, and | Capable of complying |
| 1 b (iv)                | be step-free.  | Capable of complying |
| 1 c                     | A step ramp* may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide:  | Capable of complying |
| 1 c (i)                 | a maximum gradient of 1:10; and  | Capable of complying |
| 1 c (ii)                | a minimum clear width of 1000mm (please note width should reflect the pathway width); and  | Capable of complying |
| 1 c (iii)               | a maximum length of 1900mm.  | Capable of complying |

## 2 Dwelling entrance

There is a safe and continuous pathway from the street entrance and/or parking areas to a dwelling entrance that is level.

| Silver    |  |                      |
|-----------|--|----------------------|
| 2 a       | The dwelling should provide an entrance door with -  | Capable of complying |
| 2 a (i)   | a minimum clear opening width of 820mm - See Figure 2(a); and  | Capable of complying |
| 2 a (ii)  | a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and | Not applicable       |
| 2 a (iii) | reasonable shelter from the weather.   | Not applicable       |
| 2 b       | A level landing area of 1200mm x 1200mm should be provided at the level (step-free) entrance door.   | Does not comply      |

| LHA<br>Clause<br>Number | Room/Item   | Current Status       |
|-------------------------|---|----------------------|
|                         | Unit 11 & 21 does not provide the 1200mm clear width.   |                      |
| 2 c                     | Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided. See Figure 1(b). | Capable of complying |
| 2 d                     | The level (step- free) entrance should be connected to the safe and continuous pathway as specified in Element 1.           | Capable of complying |

## 3 Car parking

Where the parking space is part of the dwelling access it should allow a person to open their car doors fully and easily move around the vehicle.

If the parking space is NOT part of the path of access this section is NA.

#### Silver

| 3 a       | Where the parking area forms part of the dwelling access the space should incorporate - | Capable of complying |
|-----------|---|----------------------|
| 3 a (i)   | minimum dimensions of at least 3200mm (width) x 5400mm (length); and                    | Capable of complying |
| 3 a (ii)  | an even, firm and slip resistant surface; and   | Capable of complying |
| 3 a (iii) | a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).             | Capable of complying |

#### **Performance Criteria**

## 4 Internal doors and corridors

Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.

#### Silver

| LHA<br>Clause<br>Number | Room/Item   | Current Status       |
|-------------------------|---|----------------------|
| 4 a                     | Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:                             | Capable of complying |
| 4 a (i)                 | a minimum clear opening width of 820mm; and   | Capable of complying |
| 4 a (ii)                | a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled).                            | Capable of complying |
| 4 b                     | Internal corridors/passageways to the doorways referred to in 4.a should provide a minimum clear width of 1000mm.  Unit 14/24 does not provide a clear 1m width to the hallway. | Does not comply      |

## 5 Toilet

The ground (or entry) level has a toilet to support easy access for home occupants and visitors.

## Silver

| 5 a      | Dwellings should have a toilet on the ground (or entry) level that provides:  | Capable of complying |
|----------|---|----------------------|
| 5 a (i)  | a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and                                   | Capable of complying |
| 5 a (ii) | a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). | Does not comply      |
|          | Does not comply for Units 11/21 with only 1025mm forward of the toilet.   |                      |

| LHA<br>Clause<br>Number | Room/Item  | Current Status       |
|-------------------------|--|----------------------|
|                         | 1.025.30 T   |                      |
| 5 b                     | If the toilet is located within the ground (or entry) level bathroom, the toilet pan should be located in the corner of the room to enable the installation of grabrails.                                      | Capable of complying |
| Performance             | e Criteria   |                      |
| 6 Shower                |  |                      |
| The bathroor            | n and shower are designed for easy and independent access for all hom  | e occupants.         |
| Silver                  |  |                      |
| 6 a                     | One bathroom should feature a slip resistant, hobless (step-free) shower recess. Shower screens are permitted provided they can be removed at a later date.  | Capable of complying |
| 6 b                     | The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.  | Capable of complying |
| Performance             | e Criteria   |                      |
| 7 Reinforce             | ment of bathroom and toilet walls  |                      |
|                         | n and toilet walls are built to enable grabrails to be safely and economica  | ally installed.      |
| Silver                  |  |                      |
| 7 a                     | Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. | Capable of complying |
| 7 b                     | The fastenings, wall reinforcement and grabrails combined must be able to withstand 1100N of force applied in any position and in any direction.   | Capable of complying |

| LHA<br>Clause<br>Number | Room/Item   | Current Status       |
|-------------------------|---|----------------------|
| 7 c                     | The walls around the toilet are to be reinforced by installing-                             | Capable of complying |
| 7 c (i)                 | noggings with a thickness of at least 25mm in accordance with Figure 6a; or                 | Capable of complying |
| 7 c (ii)                | sheeting with a thickness of at least 12mm in accordance with Figure 6b.                    | Capable of complying |
| 7 d                     | The walls around the bath are to be reinforced by installing                                | Not applicable       |
| 7 d (i)                 | noggings with a thickness of at least 25mm in accordance with Figure 7a; or                 | Capable of complying |
| 7 d (ii)                | sheeting with a thickness of at least 12mm in accordance with Figure 7b.                    | Capable of complying |
| 7 e                     | The walls around the hobless (step-free) shower recess are to be reinforced by installing - | Capable of complying |
| 7 e (i)                 | noggings with a thickness of at least 25mm in accordance with Figure 8a; or                 | Capable of complying |
| 7 e (ii)                | sheeting with a thickness of at least 12mm in accordance with Figure 8b.                    | Capable of complying |

## 8 Internal stairways

Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation. If there are NO internal stairways then this section is NA.

Note: Handrails on both sides of the stairway are preferred

| Silver |
|--------|
|--------|

| 8 a     | Stairways in dwellings must feature:  | Not applicable |
|---------|---|----------------|
| 8 a (i) | a continuous handrail on one side of the stairway where there is a rise of more than 1m | Not applicable |

## **Performance Criteria**

## 9 Kitchen

| LHA<br>Clause<br>Number  | Room/Item   | Current Status      |  |  |
|--|---|---------------------|--|--|
| The kitchen adaptation.  | The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation. |                     |  |  |
| Silver   |   |                     |  |  |
|  | No Requirements   | Not applicable      |  |  |
| Performand   | ee Criteria   |                     |  |  |
| 10 Laundry The laundry adaptation.   | space is designed to support ease of movement between fixed benches   | and to support easy |  |  |
| Silver   |   | T                   |  |  |
|  | No Requirements   | Not applicable      |  |  |
| Performand   | e Criteria  |                     |  |  |
| 11 Ground  | (or entry bedroom space)  |                     |  |  |
| There is a s   | pace on the ground (or entry) level that can be used as a bedroom   |                     |  |  |
| Silver   |   |                     |  |  |
|  | No Requirements   | Not applicable      |  |  |
| Performanc   | e Criteria  |                     |  |  |
| 12 Switches  | s and powerpoints   |                     |  |  |
| Light switch   | es and powerpoints are located at heights that are easy to reach for all ho                                     | ome occupants       |  |  |
| Silver   |   |                     |  |  |
|  | No Requirements   | Not applicable      |  |  |
| Performand   | ce Criteria   |                     |  |  |
| 13 Door and tapware  Home occupants are able to easily and independently open and close doors and safely use tap hardware. |   |                     |  |  |
| Silver   |   |                     |  |  |

| LHA<br>Clause<br>Number   | Room/Item  | Current Status |  |
|---|--|----------------|--|
|   | No Requirements  | Not applicable |  |
| Performanc  | e Criteria   |                |  |
| The family/liv with ease.   | 14 Family/Living space The family/living room features clear space to enable the home occupant to move in and around the room with ease. |                |  |
| Silver  | N 5  |                |  |
| Performanc  | No Requirements  e Criteria  | Not applicable |  |
| 15 Window sills  Windows sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position. |  |                |  |
| Silver  |  |                |  |
|   | No Requirements  | Not applicable |  |

#### 3.14 CLASS 2 – ADAPTABLE HOUSING

In accordance with the provisions of the BCA2022, a Class 2 building has no minimum requirement for the provision of accessible units.

However, in accordance with the provisions of the Pittwater (DCP) it is understood that of the 8 accessible units required, generally 50% of these must be adaptable, the remaining 50% to be silver level livable housing as this is how Gartner Trovato Architects have applied the DCP principles and has previously been accepted by Council.

Therefore, of the 36 units, 7.2, rounded to 8 requires 8 in total, of which 4x units need to be Adaptable.

<u>Units 10, 13, 20 & 23 are proposed to be Adaptable with those units meeting the requirements for Class B</u> – (all essential and 50% desirable features incorporated).

| Item                      | Room/Item   | AS4299<br>Clause | Current Phase<br>Review      |  |  |
|---------------------------|---|------------------|------------------------------|--|--|
| Note:                     | Note: Item - As per Appendix A – Schedule of features for Adaptable Housing                                       |                  |                              |  |  |
| Drawi                     | ngs   |                  |                              |  |  |
| 1.                        | Provision of drawings showing the housing unit in its pre-<br>adaptation and post-adaptation stages               | 2.3              | Further information required |  |  |
| Siting                    |   |                  |                              |  |  |
| 2.                        | A level or gently sloping site with up to 1:14 gradient   | 1.4.7            | Capable of complying         |  |  |
| 3.                        | A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS 1428.1 | 3.3.2            | Capable of complying         |  |  |
| 4.                        | Within a residential estate development, common use facilities to be accessible                                   | 3.3.3            | Not applicable               |  |  |
| 5.                        | Within a residential estate development, street names with house numbers at each intersection                     | 3.3.3            | Not applicable               |  |  |
| 6.                        | Pathway lighting shall be positioned at low height to avoid glare and to provide a min. 50 lux at ground level    | 3.6.1            | Capable of complying         |  |  |
| 7.                        | Clear line of sight from a well-lit vehicle drop-off point to safe pedestrian entry                               | 3.6.2            | Capable of complying         |  |  |
| Letter                    | boxes in Estate Developments  |                  |                              |  |  |
| 8.                        | Within residential estate developments, letterboxes centrally located adjacent to street entry. Lockable          | 3.8              | Capable of complying         |  |  |
|                           | Located off Bungan Lane   |                  |                              |  |  |
| 9.                        | Letterboxes to be on hard standing area connected to accessible pathway   | 3.8              | Capable of complying         |  |  |
| 10.                       | Letterbox area roofed and in a well-lit location  | 3.8              | Capable of complying         |  |  |
| 11.                       | Parcel rack included within letterboxes   | 3.8              | Capable of complying         |  |  |
| Private car accommodation |   |                  |                              |  |  |

| Item  | Room/Item   | AS4299<br>Clause | Current Phase<br>Review |
|-------|---|------------------|-------------------------|
| 12.   | Car parking space or garage a min. area of 6.0m x 3.8m  | 3.7.2            | Capable of complying    |
| 13.   | Roof to car parking space   | 3.7.1            | Capable of complying    |
| 14.   | Covered access to dwelling unit   | 3.7.3            | Capable of complying    |
| 15.   | Illumination level min. 50 lux  | 4.10             | Capable of complying    |
| Acces | ssible Entry  |                  |                         |
| 16.   | Accessible entry  | 4.3.1            | Capable of complying    |
| 17.   | Accessible entry to be level (i.e., max. 1:40 slope)  | 4.3.2            | Capable of complying    |
| 18.   | Threshold to be low-level   | 4.3.2            | Capable of complying    |
| 19.   | Landing to enable wheelchair manoeuvrability  | 4.3.2            | Capable of complying    |
| 20.   | Accessible entry door to have 850 mm min. clearance Unit 10/20 show a clear opening of 820mm. | 4.3.1            | Does not comply         |
| 21.   | Door lever handles and hardware to AS 1428.1  | 4.3.4            | Capable of complying    |
| 22.   | Provision for combined door/security door   | 4.3.5            | Capable of complying    |
| 23.   | Potential min. illumination level 300 lux   | 4.10             | Capable of complying    |

| Item   | Room/Item   | AS4299<br>Clause | Current Phase<br>Review |  |  |
|--------|---|------------------|-------------------------|--|--|
| Exteri | Exterior: General   |                  |                         |  |  |
| 24.    | Provision for security screening to exterior opening or sliding windows and doors   | 4.7.6            | Capable of complying    |  |  |
| Exteri | or: General   |                  |                         |  |  |
| 25.    | Internal doors to have 820mm min. clearance   | 4.3.3            | Capable of complying    |  |  |
| 26.    | Internal corridors min. width of 1000mm   | 4.3.7            | Capable of complying    |  |  |
| 27.    | Provision for compliance with AS 1428.1 for door approaches   | 4.3.7            | Capable of complying    |  |  |
| Living | room and dining room  |                  |                         |  |  |
| 28.    | Provision for circulation space of min. 2250mm diameter   | 4.7.1            | Capable of complying    |  |  |
| 29.    | Minimum 4 double GPOs   | 4.7.3            | Capable of complying    |  |  |
| 30.    | Telephone adjacent to GPO   | 4.7.4            | Capable of complying    |  |  |
| 31.    | Two TV antenna outlets adjacent to GPO (positioned so viewing from dining and kitchen achievable)   | 4.7.5            | Capable of complying    |  |  |
| 32.    | Potential illumination level min. 300 lux   | 4.10             | Capable of complying    |  |  |
| Kitche | en  |                  |                         |  |  |
| 33.    | Minimum width 2.7m (1550mm clear between benches)   | 4.5.2            | Capable of complying    |  |  |
| 34.    | Provision for circulation at doors to comply with AS 1428.1   | 4.5.1            | Not applicable          |  |  |
| 35.    | Provision for benches planned to include at least one worksurface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. Refer to Figure 4.8 (AS 4299) | 4.5.5            | Capable of complying    |  |  |

| ltem | Room/Item   | AS4299<br>Clause | Current Phase<br>Review      |
|------|---|------------------|------------------------------|
| 36.  | Refrigerator adjacent to work surface                                     | 4.5.5            | Further information required |
| 37.  | Kitchen sink adjustable to heights from 750mm to 850mm or replaceable     | 4.5.6            | Further information required |
| 38.  | Kitchen sink bowl max 150mm deep  | 4.5.6            | Further information required |
| 39.  | Tap set capstan or lever handles or lever mixer                           | 4.5.6 (e)        | Capable of complying         |
| 40.  | Tap set located within 300mm min of front of sink                         | 4.5.6 (e)        | Capable of complying         |
| 41.  | Installation of thermostatic mixing valve                                 | 4.5.6 (f)        | Capable of complying         |
| 42.  | Cooktops to include either front or side controls with raised cross bars  | 4.5.7            | Capable of complying         |
| 43.  | Cooktops to include isolating switch                                      | 4.5.7            | Capable of complying         |
| 44.  | Worksurface min. 800mm length adjacent to cooktop at same height          | 4.5.7            | Does not comply              |
|      | Shown adjacent to sink.   |                  |                              |
|      | (ADAPTABLE 2)  2 m² R = Y -N          |                  |                              |
| 45.  | Oven located adjacent to an adjustable height or replaceable work surface | 4.5.8            | Does not comply              |
|      | Oven not shown. Possible under bench proposed.                            |                  |                              |

| Item   | Room/Item  | AS4299<br>Clause | Current Phase<br>Review |
|--------|--|------------------|-------------------------|
| 46.    | Central light with second light over sink. Potential illumination level min. 300 lux with 550 lux over work surfaces               | 4.10             | Capable of complying    |
| 47.    | Locate handles towards the top of below bench cupboards and towards the bottom of overhead cupboards. Provide D pull handles       | 4.5.10           | Capable of complying    |
| 48.    | GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of worksurface  | 4.5.8            | Capable of complying    |
| 49.    | GPO for refrigerator to be easily reachable when the refrigerator is in its operating position                                     | 4.5.11           | Capable of complying    |
| 50.    | Slip resistant floor surface   | 4.5.4            | Capable of complying    |
| Main I | bedroom  |                  |                         |
| 51.    | At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS 1428.2 | 4.6.1            | Capable of complying    |
| 52.    | Two double GPOs on wall where bedhead is likely to be  | 4.6.3            | Capable of complying    |
| 53.    | Telephone outlet next to bed on the side closest to door (with GPO adjacent to telephone outlet)                                   | 4.6.5            | Capable of complying    |
| 54.    | TV antennae point and double GPO on opposite wall to bedhead   | 4.6.6            | Capable of complying    |
| 55.    | 2-way light switches, one located above bed. 1000mm high above floor   | 4.6.4            | Capable of complying    |
| 56.    | Potential illumination level 300 lux   | 4.10             | Capable of complying    |
| Other  | bedrooms   |                  |                         |
| 57.    | Two double GPOs on one wall. Minimum of one GPO on opposite wall   | 4.6.3            | Capable of complying    |
| 58.    | Two-way light switch   | 4.6.4            | Capable of complying    |

| Item  | Room/Item   | AS4299<br>Clause | Current Phase<br>Review |
|-------|---|------------------|-------------------------|
| 59.   | Telephone outlet next to double GPO   | 4.6.5            | Capable of complying    |
| 60.   | TV antennae point adjacent to one GPO   | 4.6.6            | Capable of complying    |
| 61.   | Potential illumination level 300 lux  | 4.10             | Capable of complying    |
| Bathr | oom   |                  |                         |
| 62.   | Provision for bathroom area to comply with AS 1428.1  | 4.4.1            | Capable of complying    |
| 63.   | Slip-resistant floor surface  | 4.4.2            | Capable of complying    |
| 64.   | Shower recess – no hob. Minimum size 1160 x 1100mm to comply with AS 1428.1 (refer Figures 4.6 and 4.7 – AS 4299)                               | 4.4.4 (f)        | Capable of complying    |
| 65.   | Shower area waterproofed to AS 3740 with floor to fall to waste   | 4.4.4 (f)        | Capable of complying    |
| 66.   | Recessed soap holder  | 4.4.4 (f)        | Capable of complying    |
| 67.   | Shower tap positioned for each reach to access side of shower sliding track   | 4.4.4 (f)        | Capable of complying    |
| 68.   | Provision of adjustable, detachable handheld shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision) | 4.4.4 (h)        | Capable of complying    |
| 69.   | Provision for grabrail in shower (Refer to Figure 4.7 – AS 4299) to comply with AS 1428.1   | 4.4.4 (h)        | Capable of complying    |
| 70.   | Provision for additional grabrail   | 4.4.4 (h)        | Capable of complying    |
| 71.   | Tap sets to be capstan or lever handles with single outlet  | 4.4.4 (c)        | Capable of complying    |
| 72.   | Installation of thermostatic mixing valve   | 4.4.4 (b)        | Capable of complying    |

| Item   | Room/Item   | AS4299<br>Clause | Current Phase<br>Review      |
|--------|---|------------------|------------------------------|
| 73.    | Provision for washbasin with clearances to comply with AS 1428.1                              | 4.4.4 (g)        | Capable of complying         |
| 74.    | Wall cabinet with light over or similar   | 4.4.4 (d)        | Capable of complying         |
| 75.    | Double GPO beside mirror  | 4.4.4 (d)        | Capable of complying         |
| 76.    | Potential illumination level 300 lux generally with 600 lux task lighting                     | 4.10             | Capable of complying         |
| Toilet |   |                  |                              |
| 77.    | Provision of either 'visitable toilet' or accessible toilet                                   | 4.4.3            | Capable of complying         |
| 78.    | Provision to comply with AS 1428.1  | 4.4.1            | Capable of complying         |
| 79.    | Location of WC pan at correct distance from fixed walls                                       | 4.4.3            | Capable of complying         |
| 80.    | Provision for grab rail zone (Refer Figure 4.6 – AS 4299)                                     | 4.4.4 (h)        | Capable of complying         |
| 81.    | Slip resistant floor surface (vitreous tiles or similar)                                      | 4.4.2            | Capable of complying         |
| Laund  | dry   |                  |                              |
| 82.    | Circulation at doors to comply with AS 1428.1   | 4.8              | Capable of complying         |
|        | No doors to laundry nook  |                  | 1,7,0                        |
| 83.    | Provision for adequate circulation space in front of or beside appliances (min. 1550mm depth) | 4.8              | Capable of complying         |
| 84.    | Provision for automatic washing machine   | 4.8 (e)          | Further information required |
| 85.    | Provision for drier   | 4.8 (f)          | Further information required |

| Item   | Room/Item  | AS4299<br>Clause | Current Phase<br>Review |
|--------|--|------------------|-------------------------|
| 86.    | Where clothesline is provided, an accessible path of travel to this                      | 4.8 (a)          | Not applicable          |
| 87.    | Installation of thermostatic mixing valve  | 4.8 (d)          | Capable of complying    |
| 88.    | Double GPO   | 4.8 (g)          | Capable of complying    |
| 89.    | Potential illumination level 300 lux generally with 550 lux task lighting                | 4.10             | Capable of complying    |
| 90.    | Slip-resistant floor surface   | 4.9.1            | Capable of complying    |
| Stora  | ge   |                  |                         |
| 91.    | Linen cupboard min. 600mm wide with adjustable shelving Linen cupboard not provided.     | 4.11.5           | Does not comply         |
| Door   |  |                  |                         |
| 92.    | Door hardware operable with one hand, located 900-1100mm above the floor                 | 4.3.4            | Capable of complying    |
| Floor  | coverings  |                  |                         |
| 93.    | Slip resistant surfaces – balconies and external paved areas. (Vitreous tile or similar) | 4.9.1            | Capable of complying    |
| Ancill | ary items  |                  |                         |
| 94.    | Switches located 900-1100mm above floor in line with door handles                        | 4.11.1           | Capable of complying    |
| 95.    | GPOs located not less than 600mm above floor   | 4.11.1           | Capable of complying    |
| Garba  | nge  |                  |                         |
| 96.    | Provision for bin in an accessible location  | 4.11.6           | Capable of complying    |

# 4.0 Additional Information Required

The following documentation is to be reviewed within the next phase/s of design.

| Do | cumentation  | Status                        |
|----|--|-------------------------------|
| +  | Exemptions and performance-based solutions.  |                               |
|    | <ul> <li>Confirm/outline areas to which an exemption from the<br/>requirements of access is being sought.</li> </ul> | To review next drawing phase  |
|    | <ul> <li>Confirm/outline areas to which a performance-based solution<br/>is currently proposed.</li> </ul>           | To review flext drawing phase |
| +  | Site plans, floor plans, general arrangements, FFE etc.  |                               |
|    | - Approaches from allotment, car parking, associated building  |                               |
|    | - Car parking, including accessible parking where applicable   | To review next drawing phase  |
|    | - Location of building entrance/entrances, egress points   |                               |
| +  | Ramp details   |                               |
|    | - Setbacks, gradients, widths, handrails   |                               |
|    | - Tactile ground surface indicators  | To review next drawing phase  |
| +  | Stair details  |                               |
|    | - Stair nosing strips  |                               |
|    | - Handrails  |                               |
|    | - Tactile ground surface indicators location and depth   | To review next drawing phase  |
| +  | Tactile ground surface indicators (TGSIs)  |                               |
|    | - Product selection e.g., integrated, discrete, composite discrete   |                               |
|    | - Luminance reflectance values (LRVs) of TGSIs and substrate   | To review next drawing phase  |
| +  | Door schedule outlining  |                               |
|    | - Clear opening width of hinged, swing and pivot doors   |                               |
|    | <ul> <li>Luminance reflectance values (LRVs) to achieve required contrast</li> </ul>                                 | To review next drawing phase  |
| +  | Raised tactile and Braille signage package outlining   |                               |
|    | - Directional signage:   |                               |
|    | <ul> <li>Location of accessible entrance</li> </ul>  |                               |
|    | <ul> <li>Location of accessible sanitary facility</li> </ul>   |                               |
|    | - Sanitary facility signage  |                               |
|    | - Emergency egress signage   | To review next drawing phase  |

| Documentation  | Status                       |
|--|------------------------------|
| + Passenger lift details                                     |                              |
| - Lift car fit-out outlining handrail, button placement etc. | To review next drawing phase |

## 5.0 Summary – Minimum Compliance as required by BCA

The purpose of this report has been to assess the proposed building against the documents and their relevant Deemed to Satisfy requirements of the BCA in the preliminary, early stage of design, and provide guidance on considerations to improve the function and use of the building/site, above minimum legislative requirements. The report has intended to clearly outline those areas where compliance at this early stage appears not possible and provide recommendations for action based upon the following:

- + Objects of the Disability Discrimination Act 1992.
- + Disability (Access to Premises- Buildings) Standards 2010.; and
- + Building Code of Australia 2022 (BCA2022) Volume 1 Part D4 and Clauses E3D7 and F4D5.
- Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009 and AS2890.6:2009, AS1735.12-1999.

This report outlines the status of the documents relevant to the above noted legislation and referenced Australian Standards.

Subject to addressing the actions identified, and providing the information sought within the next phases of design, Jensen Hughes confirm that the design appears capable of complying with the BCA.

# Annexure A - Documentation Reviewed

| Architectural Plans Prepared by Gartner Trovato Architects |          |           |                    |
|--|----------|-----------|--------------------|
| Drawing Number   | Revision | Date      | Title              |
| A00  | Α        | 5/12/2024 | Cover              |
| A01  | Α        | 5/12/2024 | Site plan          |
| A02  | Α        | 5/12/2024 | Basement 2         |
| A03  | А        | 5/12/2024 | Basement 1         |
| A04  | А        | 5/12/2024 | Level 1            |
| A05  | Α        | 5/12/2024 | Level 2            |
| A06  | Α        | 5/12/2024 | Level 3            |
| A07  | Α        | 5/12/2024 | Level 4            |
| A08  | Α        | 5/12/2024 | Level 5            |
| A09  | Α        | 5/12/2024 | Level 6            |
| A10  | А        | 5/12/2024 | Elevations NW & SE |
| A11  | Α        | 5/12/2024 | Elevations NE & SW |
| A12  | Α        | 5/12/2024 | Section A & F      |
| A13  | Α        | 5/12/2024 | Section B, C, D, E |
| A14  | А        | 5/12/2024 | Context views 1    |
| A15  | Α        | 5/12/2024 | Context views 2    |
| A16  | Α        | 5/12/2024 | Courtyard views    |
| A17  | Α        | 5/12/2024 | Shadow diagrams    |
| A18  | А        | 5/12/2024 | Area calculations  |