

Attachment 13

Revised Access Report

ABE Consulting



Accessibility Review Report – DA Review

Project Title: East Quarter Residential Development
St Leonards South - East Quarter (Lot 18,19 & 20)

Job Number: 21488

Date: 6 October 2022

Prepared For: CIFI ST Leonards Development Management PTY LTD

Report Version: 21488_ADR_v1.2

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| Report Status | Revision | Date | Details |
|---------------|----------|-----------------|-----------------------------|
| Draft | 1.0 | 24 March 2022 | Draft for comment/review |
| Final | 1.1 | 09 May 2022 | Issued for DA documentation |
| Updated | 1.2 | 06 October 2022 | Updated for DA resubmission |

ACCESSIBILITY DESIGN REVIEW

PROJECT: East Quarter Residential Development

ADDRESS: St Leonards South - East Quarter (Lot 18,19 & 20)

1.0 INTRODUCTION

This report provides an Accessibility Design Review of the proposed East Quarter Development located at St Leonards South - East Quarter (Lot 18,19 & 20).

1.1 Project Information & Classification

The proposed development consists of 4 towers of residential apartments over a common multi-level basement carpark.

It is understood the following Building Code of Australia 2019 Amendment 1 building classification(s) apply to the subject building / building part (to be confirmed by the BCA Consultant / PCA) –

| Level/Building Part | Building Classification | Use |
|----------------------------|-------------------------|------------------------|
| Basement 4 - 1 & Mezzanine | Class 2 | Residential Carpark |
| Basement 4 - 1 & Mezzanine | Class 2 | Residential apartments |
| Ground Floor – Level 9 | Class 2 | Residential |

1.2 Purpose of the Report

CIFI ST Leonards Development Management PTY LTD engaged the services of ABE Consulting as Accessibility Consultants for this project to undertake an assessment of the proposed design documentation in relation to the accessibility related requirements as identified in Part 1.3 of this report for submission to the Local Council as part of the Development Application documentation.

1.3 Report Scope

This report provides an Accessibility Design Review of the relevant project architectural documentation in the context of the following –

- Part D3, Clause F2.4 and Clause E3.6 ‘deemed-to-satisfy’ (DtS) requirements of the Building Code of Australia 2019 Amendment 1 (BCA);
- The Disability (Access to Premises - Buildings) Standards 2010.

This Accessibility Design Review is based on –

- Architectural design documentation prepared by Koichi Takada Architects, as follows.

| Dwg# | Title | Date – Issue |
|-------|---------------------------------|----------------|
| A0032 | SITE PLAN | 15/09/2022 - E |
| A0095 | BASEMENT 04 (RIVER ROAD GROUND) | 15/09/2022 - M |
| A0096 | BASEMENT 03 | 15/09/2022 - N |
| A0097 | BASEMENT 02 | 15/09/2022 - N |
| A0098 | BASEMENT 01 | 15/09/2022 - N |
| A0099 | BASEMENT MEZZANINE | 15/09/2022 - M |
| A0100 | GROUND FLOOR PLAN | 15/09/2022 - O |

| | | |
|-------|----------------------------|----------------|
| A0101 | LEVEL 01 FLOOR PLAN | 15/09/2022 - O |
| A0102 | LEVEL 02 FLOOR PLAN | 15/09/2022 - O |
| A0103 | LEVEL 03 FLOOR PLAN | 15/09/2022 - O |
| A0104 | LEVEL 04 FLOOR PLAN | 15/09/2022 - O |
| A0105 | LEVEL 05 FLOOR PLAN | 15/09/2022 - O |
| A0106 | LEVEL 06 FLOOR PLAN | 15/09/2022 - O |
| A0107 | LEVEL 07 FLOOR PLAN | 15/09/2022 - O |
| A0108 | LEVEL 08 FLOOR PLAN | 15/09/2022 - O |
| A0109 | LEVEL 09 FLOOR PLAN | 15/09/2022 - O |
| A0460 | APT TYPE 1B_A ADAPTABLE | 15/09/2022 - H |
| A0461 | APT TYPE 2B_B ADAPTABLE | 15/09/2022 - H |
| A0462 | APT TYPE 1B_A SILVER LEVEL | 15/09/2022 - G |
| A0463 | APT TYPE 2B_B SILVER LEVEL | 15/09/2022 - G |
| A0464 | APT TYPE 2B_C SILVER LEVEL | 15/09/2022 - H |

- The Building Code of Australia 2019 Amendment 1 (BCA) prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019 Amendment 1, prepared by the Australian Building Codes Board.
- The Disability (Access to Premises – Building) Standards 2010.
- Australian Standards AS1428.1-2009 - Design for Access and Mobility - Part 1: General requirements for access - New building work.
- Australian Standards AS/NZS 2890.6-2009 – Off-street parking for people with disabilities.
- Australian Standards AS/NZS 1428.4.1-2009 - Design for Access and Mobility - Part 4.1: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators.
- Australian Standards AS1735.12-1999 - Lifts, escalators and moving walks, Part 12: Facilities for persons with disabilities.
- AS4299-1995 – ‘Class C’ adaptable housing units checklist.
- Lane Cove Development Control Plan - Part F - Access and Mobility.

1.4 Limitations of the Report

The Disability Discrimination Act (DDA - 1992) is Federal Government legislation enacted in 1993 that seeks to ensure all new building infrastructure, refurbishments, services and transport projects provide functional, equitable and independent accessibility. The DDA is complaints based legislation, which is administered by the Australian Human Rights Commission (AHRC). For any built environment the key requirement of the DDA is to ensure functionality, equity and independence of movement by people with disabilities, their companions, family and carer givers.

A key component of compliance to the DDA is the use of the Disability (Access to Premises - Buildings) Standards 2010, Part D3, Clause F2.4 and Clause E3.6 of the Building Code of Australia 2011 (BCA) and the relevant referenced standards primarily being Australian Standards Suite AS1428 and Australian Standards AS2890.6 – Off-street parking for people with disabilities. The AS 1428 series details technical requirements related to design for access and mobility.

The Building Code of Australia adopted key accessibility and DDA legislation into the 2011 BCA. In particular adherence to the Access to Premises Standard (2010); AS1428.1 2009; AS1428.4.1 2009 and AS2890.6 2009 has become mandatory. However, compliance with these elements does not necessarily

result in compliance with the Disability Discrimination Act if the elements of equality, independence and functionality remain compromised within an environment.

This report does not include or assess the following –

- The provisions of the BCA not directly referenced in Part 1.3 of this report;
- Standards not directly referenced in this report; including AS4299-1995 (Adaptable Housing) unless otherwise explicitly specified in Part 1.3 of this report;
- Disability Discrimination Act 1992 (as explored earlier);
- Federal / State / Local planning policies and/or guidelines unless otherwise explicitly specified in Part 1.3 of this report;
- Work Health & Safety considerations or Work Cover Authority requirements;
- This report does not provide any performance based assessments (Performance Solutions) of the BCA;
- This report does not provide any exemptions from the requirements of the BCA.
- This report is not a Part 4A compliance certificate under the Environmental Planning & Assessment Act 1979 or Regulation 2000;
- Review or specification of slip-resistance classification(s) for floor surface finishes / materials. We recommend surface finish advice be sought from an independent specialist slip safety consultant.

2.0 ACCESSIBILITY DESIGN REVIEW

The following tables provide an assessment of the architectural design documentation in relation to the DtS provisions of the BCA / Premises Standards in the context as outlined in Part 1 of this report.

The tables identify each of the relevant assessment outcomes into six (6) main categories, as follows –

| | |
|--|--|
| <u>Capable of Complying (CoC) –</u> | Spatial allowance has been made to accommodate compliance where the specification provided has been satisfied. |
| <u>Compliance Departure (CD) –</u> | A compliance departure with the DtS provisions of the BCA. |
| <u>Design Detail (DD) –</u> | A detail commentary/specification is offered within the report. |
| <u>Performance Solution (PS) –</u> | A Performance Solution Report is being pursued to justify the compliance departures |
| <u>Not Applicable (N/A) –</u> | Not applicable or not relevant to the project. Commentary provided. |
| <u>Informational (Info) –</u> | Provided for informational purposes |

Interpretation Note(s) –

- Readily moveable furniture has been treated as indicative only unless otherwise noted within the report as it is not considered to form part of the building as addressed by the BCA.

BCA Part D3 – ACCESS FOR PEOPLE WITH DISABILITIES

Cl. D3.1: General building access requirements

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|--------|
| <p>Buildings and parts of the building must be accessible as required by Table D3.1, unless exempted by D3.4. Table D3.1 requires that access is provided –</p> <p><u>Class 2 –</u></p> <ul style="list-style-type: none"> From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level. To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like. Where a ramp complying with AS 1428.1 or a passenger lift is installed— <ul style="list-style-type: none"> a) to the entrance doorway of each sole-occupancy unit; and b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp. | <p>Access is generally proposed throughout the required portions of the building as prescribed by Cl. D3.1 of the BCA.</p> <p>Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage.</p> <p>Doorways</p> <p>All doorways along an accessway are required to have a clear door opening width no less than 850mm clear (to the active leaf) and be provided with door circulation spaces as prescribed by AS1428.1-2009.</p> <p>Basement Storage Rooms & Waste Rooms will require minor modifications.</p> <p>Smoke door active leaf <850mm will require a Performance Solution.</p> <div data-bbox="771 1029 1299 1339"> <p>850 min. clear opening</p> <p>Face of door</p> <p>(a) Swing door</p> </div> <p>Ensure hardware circulation space of 60mm either side is provided to sliding doorways in the open/closed position.</p> <div data-bbox="771 1486 1299 1753"> <p>850 min. clear opening</p> <p>Door handle</p> <p>Face of door</p> <p>60 min.</p> <p>60 min.</p> <p>(b) Cavity sliding door</p> </div> <p>Design Detail:</p> <p>Ensure the prescribed doorway latch-side clearance is provided to the active leaf of all</p> | CoC |

| | | |
|--|--|--|
| | <p>common area doorways used by the occupants in accordance with AS1428.1-2009.</p> <p>This must be achieved from the inside edge of the opening, regardless of the opening width.</p> <p><u>Design Detail:</u> Where sliding doorways are power operated, the latch-side clearance may be reduced to 0mm for a front on approach.</p> <p>Ensure control buttons and card readers are located $\geq 500\text{mm}$ from an internal corner, over a level surface/landing and installed at a height between 900mm - 1250mm.</p> <p><u>Design Detail:</u> Ensure <u>level</u> transitions or compliant ramps with landings are provided between internal and external areas (refer to mark-up options).</p> <p><u>Design Detail:</u> Ensure minimum 30% luminance contrast between doorways and surrounding surfaces is provided.</p> <p>Verification of 30% luminance contrast between doorways and surrounding surfaces should be provided prior to OC sign off. This can be estimated by obtaining the luminance reflectance value (LRV) of the paint colour or product from the manufacturer, laboratory testing or on site testing prior to completion.</p> <p>The actual contrast may vary when applied.</p> <p>Access between areas</p> <p>Access is required to and within all areas normally used by the occupants (excluding areas that are unsafe or unsuitable for everyday access, refer D3.4 exemptions).</p> <p>A Private Residence gate will be required at the beginning of the stairway access off River Road to the Basement 03/04 units.</p> <p><u>Design Detail:</u> Ensure level transitions or compliant ramps with landings are provided for access</p> | |
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| | <p>between new and refurbished/ internal and external areas (<i>refer to example below or attached mark-up</i>).</p> <p>Paths of travel</p> <p>All pathways require a minimum unobstructed width of 1000mm. Pathways shall not include impediments such as steps or turnstiles without an accessible alternative provided.</p> <p>Circulation spaces prescribed by AS1428.1-2009 are required at changes in direction and other circumstances may require a greater width than 1000mm.</p> <p><u>Design Detail:</u></p> <p>Verification of slip resistant surface finishes on all accessways should be provided prior to OC sign off. It is recommended to refer to HB-198 for area ratings and test in accordance with AS4586-2013.</p> <p><u>Design Detail:</u></p> <p>Ensure any tracks/grooves (including for water shedding or sliding doors) and grate slots/holes are no greater than 13mm wide (depending on orientation) and are recessed to maintain flush/level pathways.</p> <p>7.5 Grates</p> <p><i>Grates shall comply with the following:</i></p> <p><i>(a) Circular openings shall be not greater than 13 mm in diameter.</i></p> <p><i>(b) Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.</i></p> <p><i>NOTE: Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.</i></p> | |
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Cl. D3.2: Access to Buildings

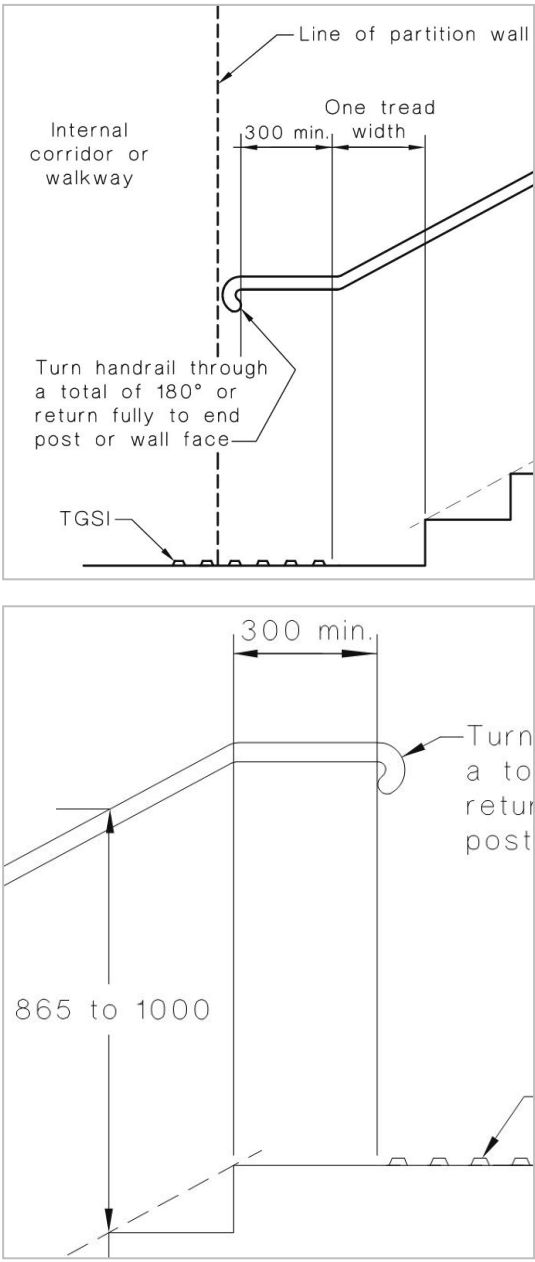
| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|-------------|
| An accessway must be provided to a building required to be accessible – | Access is required from the main points of pedestrian entry at the allotment boundary, from associated accessible carparking spaces | CoC/ PSR |

| | | |
|---|---|--|
| <ul style="list-style-type: none"> • from the main points of pedestrian entry at the allotment boundary; and • from another accessible building connected by a pedestrian link; and • from any required accessible carparking space on the allotment. <p>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –</p> <ul style="list-style-type: none"> • through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and • in a building with a floor area more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance. <p>except for pedestrian entrances serving only areas exempted by D3.4.</p> | <p>and from another accessible building connected by a pedestrian link to the subject building.</p> <p>Compliance is readily achievable with Performance Solution and minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage.</p> <p>Allotment Boundary</p> <p>Access to the site is not achieved from River Road due to the existing topography and will need to be addressed via Performance Solution.</p> <p><i>N.B. - the external pathways around the edges and within the site have had no review and will require design development to ensure compliance at the detailed design stage.</i></p> <p>Accessible parking</p> <p>Accessible visitor parking is proposed within the basement levels and accessed via passenger lifts.</p> <p>Other accessible buildings</p> <p>Plans indicate several pedestrian pathways on the ground floor for pedestrian access between buildings.</p> <p>Principal Pedestrian Entrances (Building)</p> <p>Each building appears to be accessed via ground floor entries or via passenger lift in the basement levels.</p> | |
|---|---|--|

Cl. D3.3: Parts of buildings to be accessible

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|--|---------------|
| In a building required to be accessible every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with – | | |
| <ul style="list-style-type: none"> • for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and | <p>All non-fire-isolated ramps are required to comply with AS1428.1-2009.</p> <p>Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage.</p> <p><u>Design Detail:</u></p> | CoC/ DD |

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|--|--|------------|
| | <p>Ensure all walkways (regardless of gradient) and ramps are provided with the associated accessible features such as handrails and TGSIs in accordance with AS1428.1 & AS1428.4.</p> <p>Basement ramps will require modification.</p> <p><u>Design Detail:</u></p> <p>Ensure a level landing is provided at changes in direction, prescribed intervals and doorways along walkways and ramps in accordance with AS1428.1-2009.</p> <p><u>Design Detail:</u></p> <p>Ensure one of the following forms of abutment from AS1428.1-2009 will be provided to either side of all walkways (1:20 or shallower).</p> <ul style="list-style-type: none"> • The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600mm; • Kerb in accordance with Figure 18 (AS1428.1); • Kerb rail and handrail in accordance with Figure 19; or • A wall not less than 450 mm in height. | |
| <ul style="list-style-type: none"> • for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and | <p>All non-fire-isolated stairways are required to comply with AS1428.1-2009.</p> <p>Ensure all non fire-isolated stairways are provided with the associated accessible features such as handrails and TGSIs in accordance with AS1428.1 & AS1428.4.</p> <p>Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage.</p> <p><u>Design Detail:</u></p> | CoC/ DD |

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|--|---|------|
| | <p>Ensure handrail extensions are provided at top and bottom landings of common area stairways and setback/protected by a wall or similar in accordance with AS1428.1-2009.</p>  | |
| <ul style="list-style-type: none"> for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and | <p><i>N.B. – Cl. D2.17(a)(vi) of the BCA is generally assessed by the PCA / BCA Consultant. Where assessment of this Clause is required by this office please confirm and provide detail.</i></p> | DD |
| <p>A Cl. 10 & Cl. 11 summary of AS1428.1-2009 is provided below to assist the project team during specification / construction stages.</p> | | Info |

| | | |
|---|--|-----|
| <p>Accessways must have—</p> <ul style="list-style-type: none"> • passing spaces complying with AS 1428.1 at maximum 20 m intervals where a direct line of sight is not available • turning spaces complying with AS 1428.1 at 20m intervals or within 2m of the termination of an accessway. | <p>Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage.</p> <p><u>Design Detail:</u></p> <p>Ensure 180° turning (2070mm x 1540mm) space and is provided within 2m of a termination or at maximum 20m intervals along any new or altered accessways (e.g., bin rooms).</p> <p>Ensure passing (2000mm x 1800mm) space and is provided at maximum 20m intervals along any accessways where there are obstructed lines of sight along any new or altered accessways.</p> | CoC |
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Cl. D3.4: Exemptions

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|--|---|---------------|
| <p>The following areas are not required to be accessible –</p> <ul style="list-style-type: none"> • An area where access would be inappropriate because of the particular purpose for which the area is used. • An area that would pose a health or safety risk for people with a disability. • Any path of travel providing access only to an area exempted by (a) or (b). | <p>Exemptions are to be reviewed on a case-by-case basis. We highlight that the following parts of the building have been offered an access exemption (not exhaustive) –</p> <ul style="list-style-type: none"> • Plant & equipment room(s) • Loading Dock • Storage rooms | Info |

Cl. D3.5: Accessible carparking

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|--|---------------|
| <p>Accessible carparking spaces are to be provided in accordance with Table D3.5 of the BCA in a Class 7a building and a carparking area on the same allotment as a building required to be accessible.</p> <p>Accessible carparking spaces –</p> <ul style="list-style-type: none"> • are to comply with AS2890.6-2009. • need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public • need not be designated where there is a total of not more than 5 carparking spaces, | <p><u>Class 2</u></p> <p>The BCA does not prescribe the provision of accessible carparking spaces for Class 2 buildings.</p> <p>Refer to Section 3.0 of this report for residential accessible/adaptable carparking spaces requirements.</p> <p><u>Design Detail:</u></p> <p>2x accessible visitor spaces have been proposed.</p> <p>Compliance is readily achievable with minor design development and/or specification to</p> | CoC |

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| so as to restrict the use of the carparking space only for people with a disability. | BCA & AS2890.6-2009 at the Detailed Design Stage. | |
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Cl. D3.6: Signage

| DtS Provision | Status |
|--|---------------|
| <p>In a building required to be accessible signage complying with Spec. D3.6, AS1428.1-2009 and incorporating the appropriate recognised symbol (as appropriate) for persons with disability must be provided as follows —</p> <ul style="list-style-type: none"> • braille and tactile signage must identify each sanitary facility and space with hearing augmentation; • braille and tactile signage must identify each door required by E4.5 to be provided with an exit sign and state “Exit” and “Level” followed by the floor level number; • signage must be provided within a room containing a hearing augmentation system identifying; the type of system, the area covered within the room and if receivers are being used and where the receivers can be obtained; • signage must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use; • signage to identify an ambulant accessible sanitary facility must be located on the door of the facility; • directional signage where a pedestrian entrance is not accessible. • directional signage where a bank of sanitary facilities are not provided with an accessible sanitary facility. <p>Signage shall be installed in accordance with and a design/install certificate is to be provided to confirm compliance with the relevant provisions of the BCA and Australian Standards.</p> | DD |

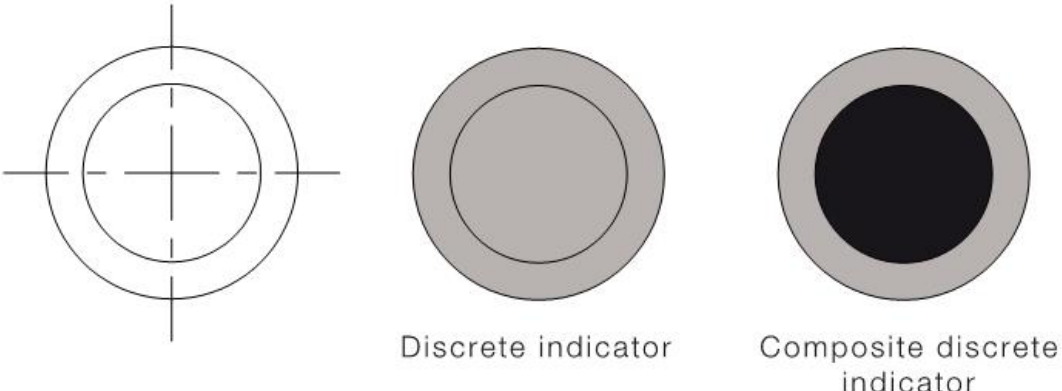
Cl. D3.7: Hearing augmentation

N/A - No areas requiring hearing augmentation proposed.

Cl. D3.8: Tactile indicators

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|--|---------------|
| <p>Tactile ground surface indicators complying with sections 1 and 2 of AS/NZS 1428.4.1.:2009 must be provided to warn people who are blind or have a vision impairment that they are approaching —</p> <ul style="list-style-type: none"> • a stairway, other than a fire-isolated stairway; • an escalator/moving walk; • a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; • in the absence of a suitable barrier an overhead obstruction less than 2 m and where an accessway meeting a vehicular way | <p>Ensure TGSIs are provided to common area stairways, ramps and overhead hazards under 2m (unless suitably barricaded).</p> <p>TGSIs are not required in fire-isolated stairways or on elements leading solely to D3.4 exempt areas.</p> <p><u>Design Detail:</u></p> <p>Ensure TGSIs are provided where a building entry meets a carriage way in</p> | DD |

| | | |
|---|--|--|
| <p>adjacent to any pedestrian entrance to a building.</p> | <p>accordance with AS1428.4.1-2009 if there is no kerb or kerb ramp at that point.</p> <p><u>Design Detail:</u></p> <p>TGSIs need only be a depth of 300mm - 400mm in locations where the next hazard/building element is $\leq 3000\text{mm}$ away. TGSIs shall be 600mm - 800mm deep when the hazard is $\geq 3000\text{mm}$ away.</p> <p><u>Design Detail:</u></p> <p>TGSIs are required at every stairway/ ramp landing where either 1 or both handrails are not continuous. Either provide continuous handrails or TGSIs at all landings with a discontinuous handrail.</p> <p><u>Design Detail:</u></p> <p>Confirm where any overhead obstruction is provided below 2m as these areas are required to be treated with either a barrier or TGSIs.</p> <p><u>Design Detail:</u></p> <p>Ensure all integrated TGSIs (tiles) have a minimum 30% luminance contrast to the ground surface they are fixed to.</p> <p><u>Design Detail:</u></p> <p>Ensure all individual discrete TGSIs have a minimum 45% luminance contrast to the ground surface they are fixed to.</p> <p><u>Design Detail:</u></p> <p>Ensure all individual discrete composite TGSIs have a minimum 60% luminance contrast to the ground surface they are fixed to.</p> <p>LC can be estimated by obtaining the luminance reflectance value (LRV) of the paint colour or product from the manufacturer, laboratory testing or on site testing prior to completion.</p> | |
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| | <p>Compliance Notes:</p> <p>TGSIs shall be specified and installed to comply with AS1428.4.1-2009 including size, spacing, width, depth and luminance contrasting as follows –</p> <ul style="list-style-type: none"> • 30% - Integrated TGSIs • 45% - Discrete TGSIs • 60% - Composite Discrete TGSIs | |
|  | | |

Cl. D3.9: Wheelchair seating spaces in Class 9b assembly buildings

N/A – No fixed seating is proposed.

Cl. D3.10: Swimming pools

N/A - The pool perimeter is <40m therefore, an accessible pool entrances is not required.

Cl. D3.11: Ramps

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|--|--------|
| On an accessway; a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and a landing for a step ramp must not overlap a landing for another step ramp or ramp. | Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage. | CoC |

Cl. D3.12: Glazing on an accessway

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|--|------------------------------|--------|
| Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1. Glazing indicators shall be installed in accordance with and a design/install certificate is to be provided to confirm compliance with the relevant provisions of the BCA and Australian Standards. | | DD |

BCA Part E3 – LIFT INSTALLATIONS

Cl. E3.6: Passenger lifts

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|--|--|--------|
| <p>Every passenger lift must –</p> <ul style="list-style-type: none">• be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and• have accessible features in accordance with Table E3.6b; and• not rely on a constant pressure device for its operation if the lift car is fully enclosed. | <p>The proposed passenger lifts shall have the following features –</p> <ul style="list-style-type: none">• Handrail complying with the mandatory handrail provisions of AS1735.12,• Lift floor dimensions not less than 1,100mm x 1,400mm where the lift vertical travel is less than 12m,• Lift floor dimensions not less than 1,400mm x 1,600mm where the lift vertical travel is more than 12m,• Minimum clear door opening complying with AS1735.12,• Passenger protection system complying with AS1735.12,• Lift landing doors at the upper landing,• Lift car and landing control buttons complying with AS1735.12,• Lighting in accordance with AS1735.12,• Automatic audible/visual information within the lift car and at the landings as prescribed,• Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received. <p>A design compliance certificate is to be obtained from the lift designer to confirm compliance with the relevant provisions of the BCA and Australian Standards.</p> <p><u>Design Detail –</u></p> <ul style="list-style-type: none">• Ensure lift landing controls are provided no less than 500mm from an internal corner. | CoC |

BCA Part F2 – SANITARY AND OTHER FACILITIES

Cl. F2.4: Accessible sanitary facilities

N/A – Plans no longer appear to indicate common sanitary facilities.

3.0 ADAPTABLE & VISITABLE HOUSING REVIEW

The following is a summary of the adaptable & visitable housing requirements prescribed by the access & mobility provisions of the Local Council DCP, identified in Section 1 of this report and reproduced below.

Provisions

1. Adaptable housing to comply with AS4299, including the essential features in Appendix A for Class C housing (essential items only).
2. Adaptable housing to be equitably distributed throughout all types and sizes of dwelling units.
3. Adaptable housing to be provided at the rate of 20% of all dwellings in a Class 2 development.
4. Dual occupancies (attached) are to be visitable (where topography permits – 1:10 fall or less steep).
5. Dwellings are to be visitable at the rate of 80% in developments requiring adaptable housing.
6. Single Class 1a dwellings are not applicable to this part.

The following table is provided as a summary of measures implemented in excess of the minimum BCA requirements (AS4299.1-1995) required by the aforementioned conditions of consent.

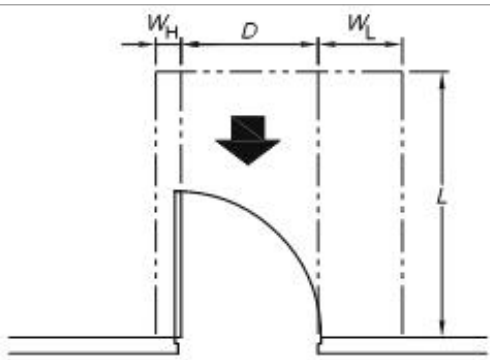
| Comments(s) |
|--|
| <p>238 units are proposed. The following number of adaptable, Livable and Visitable housing has been indicated on plan.</p> <p>39x Class C Adaptable Housing units (16%).</p> <p>12x silver Livable Housing units (5%).</p> <p>125x Visible Housing units (74%).</p> <p>48x adaptable housing unit carparking spaces (20%) are proposed within the basement. These carparking spaces are mostly designed to AS2890.6-2009 and are readily capable of complying.</p> <p>Several unit types/configurations are proposed and are spatially capable of catering to visitable requirements and are readily capable of complying with minor design detail at the detailed design stage.</p> <p>A checklist of the visitable & adaptable housing requirements is provided in the following tables.</p> |

Visitable Housing Units – As per AS4299-1995

The following tables provides an assessment of the architectural design documentation against the Visitable Housing provisions of AS4299-1995. The visitable housing provisions require the following –

- At least one accessible entrance; and
- Access to one living area; and
- Access to an accessible or visitable toilet.

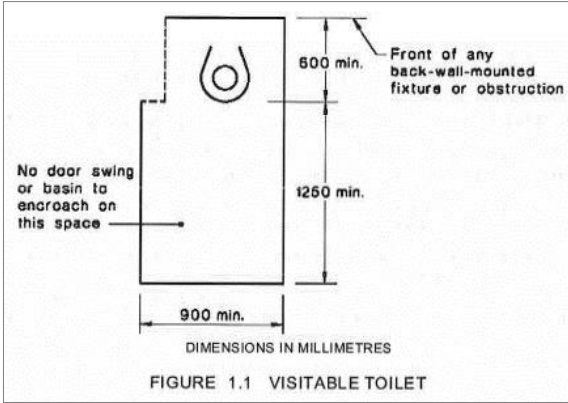
Accessible Entrance

| Requirement/Specification | Comment(s)/Recommendation(s) | | | | | | | | | | | | | | | | | | | | |
|--|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|------|------|-----|-----|
| 1x accessible entrance complying with AS1428.1-2009 is to be provided. | <p>Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage.</p> <p><u>Design Detail:</u></p> <p>Ensure visitable front doors can achieve clearance and circulation space to AS1428.1-2009.</p> <div><table><tr><th>Dimension <i>D</i></th><th>Dimension <i>L</i></th><th>Dimension <i>W_H</i></th><th>Dimension <i>W_L</i></th></tr><tr><td>850</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>110</td><td>530</td></tr></table><p>(h) Front approach, door opens towards user</p></div> | Dimension <i>D</i> | Dimension <i>L</i> | Dimension <i>W_H</i> | Dimension <i>W_L</i> | 850 | 1450 | 110 | 530 | 900 | 1450 | 110 | 530 | 950 | 1450 | 110 | 530 | 1000 | 1450 | 110 | 530 |
| Dimension <i>D</i> | Dimension <i>L</i> | Dimension <i>W_H</i> | Dimension <i>W_L</i> | | | | | | | | | | | | | | | | | | |
| 850 | 1450 | 110 | 530 | | | | | | | | | | | | | | | | | | |
| 900 | 1450 | 110 | 530 | | | | | | | | | | | | | | | | | | |
| 950 | 1450 | 110 | 530 | | | | | | | | | | | | | | | | | | |
| 1000 | 1450 | 110 | 530 | | | | | | | | | | | | | | | | | | |

Access to one living area

| Requirement/Specification | Comment(s)/Recommendation(s) |
|---|--|
| An accessible path of travel to at least one living area. | <p>Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage.</p> <p>Ensure all corridors are 1m wide clear of skirting or any other protrusions.</p> |

Toilet

| Requirement/Specification | Comment(s)/Recommendation(s) |
|--|--|
| An accessible path of travel to an accessible toilet complying with AS1428.1-2009 or a 'visitable toilet' is to be provided. | <p>Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage.</p> <p><u>Design Detail –</u></p> <p>Ensure visitable units have a ground floor bathroom that accommodates 900mm x 1,250mm clear circulation space in front of the closet pan & clear of the door swing.</p>  |

To comply with the requirements of AS4299, adaptable housing units must include all 'essential' features listed at Appendix A of AS4299. A dwelling that satisfies this requirement can be certified as an Adaptable House Class C - AS4299-1995.

The following table provides a review against the required AS4299 – Class C adaptable housing units which includes all 'essential' features –

| Item No | Description | Clause No. | Comments |
|---|--|------------|--|
| DRAWINGS | | | |
| 1 | Provision of drawings showing the housing unit in its pre-adaption and post-adaption stages along with a description of how the adaptation is to be achieved shall also be provided. | 2.3 | <p>The adaptable process is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage.</p> <p>Passenger lifts are indicated for vertical transport and are to comply with BCA Cl. E3.6.</p> <p>Capped services are to be provided where required in order to provide a suitable adaptation process.</p> |
| SITING | | | |
| 2 | A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1 | 3.3.2 | Refer to Cl. D3.1 & D3.3 for street access requirements. |
| LETTERBOXES IN ESTATE DEVELOPMENTS | | | |
| 3 | Letterboxes to be on a hard standing area connected to accessible pathway | 3.8 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| PRIVATE CAR ACCOMODATION | | | |
| 4 | Carparking space or garage min. area 6.0m x 3.8m. | 3.7.2 | <p>48x residential accessible carparking spaces in accordance with AS2890.6-2009 are indicated within the basement to satisfy this requirement.</p> <p>These spaces are to be allocated to the adaptable housing units and need not be identified with the international symbol for access (wheelchair symbol).</p> |

| ACCESSIBLE ENTRY | | | |
|-------------------|---|-------|---|
| 5 | Accessible entry | 4.3.1 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 6 | Accessible entry to be provided with a landing outside the door with a maximum fall of 1:40 with a low threshold if not protected from weather by a minimum of 1,600mm overhang. | 4.3.2 | N/A – entrance doors are internal/under cover. |
| 7 | Threshold to be low-level | 4.3.2 | Where threshold ramps are proposed to service external areas, they must comply with AS1428.1 and AS4299. |
| 8 | Landing to enable wheelchair manoeuvrability | 4.3.2 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 9 | Accessible entry door to have 850 mm min. clearance | 4.3.1 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 10 | Door lever handles and hardware to AS1428.1 clause 11.1 door to be unlocked and opened with one hand. Where lever handles are provided, the clearance between the handle and the back plate or door face at the centre of the handle shall be not less than 35 mm and not more than 45 mm. | 4.3.4 | To be specified at detailed design stage. |
| INTERIOR: GENERAL | | | |
| 11 | Internal doors to have 820 mm min. clearance | 4.3.3 | <p>Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage.</p> <p>It is to be noted that AS4299 is superseded in this case by AS1428.1 which requires the appropriate 850mm clear opening width of all accessible doors.</p> <p>Internal doors to areas required to be adaptable are required to comply including –</p> <ul style="list-style-type: none"> • Adaptable bedroom • Sanitary facility |

| | | | |
|--------------------------------------|---|----------|--|
| | | | <ul style="list-style-type: none"> • Kitchen • Laundry |
| 12 | Internal corridors min. Width of 1000 mm | 4.3.7 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 13 | Provision for compliance with AS1428.1 for door approaches | 4.3.7 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| LIVING ROOM & DINING ROOM | | | |
| 14 | Provision for circulation space of min. 2250 mm diameter | 4.7.1 | Compliance is readily achievable. |
| 15 | Telephone adjacent to GPO | 4.7.4 | To be specified at detailed design stage. |
| 16 | Potential illumination level min. 300 lux | 4.10 | To be specified at detailed design stage. |
| KITCHEN | | | |
| 17 | Minimum width 2.7 m (1,550 mm clear between benches) | 4.5.2 | Floor & wall surfaces are to extend under the cabinets with sufficient capped services to allow island benches to be removed/relocated in the future. |
| 18 | Provision for circulation at doors to comply with AS1428.1 | 4.5.1 | N/A – No kitchen doors proposed. |
| 19 | 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 | 4.5.5 | <p>Kitchen cabinets, benches and appliances are capable of being removed/relocated to achieve compliance.</p> <p>Capped services are required where appliances, electric features or plumbing/electrical fixtures are to be relocated.</p> |
| 20 | Refrigerator adjacent to work surface | 4.5.5 | As per Item 19. |
| 21 | Kitchen sink adjustable to heights from 750mm to 850mm or replaceable | 4.5.6 | As per Item 19. |
| 22 | Kitchen sink bowl max. 150mm deep | 4.5.6 | As per Item 19. |
| 23 | Tap set capstan or lever handles or lever mixer | 4.5.6(e) | As per Item 19. |
| 24 | Tap set located within 300mm of front of sink | 4.5.6(e) | As per Item 19. |

| | | | |
|---------------------|--|----------|---|
| 25 | Cooktops to include either front or side controls with raised cross bars | 4.5.7 | As per Item 19. |
| 26 | Cooktops to include isolating switch or gas stop valves which can be easily and safely operated while the cooktop is in use. | 4.5.7 | As per Item 19. |
| 27 | Worksurface min. 800 mm length adjacent to cooktop at same height. | 4.5.7 | As per Item 19. |
| 28 | Oven located adjacent to an adjustable height or replaceable work surface | 4.5.8 | As per Item 19. |
| 29 | GPOs to comply with AS1428.1. At least one double GPO within 300 mm of front of worksurface | 4.5.11 | As per Item 19. |
| 30 | GPO for refrigerator to be easily reachable when the refrigerator is in its operating position | 4.5.11 | As per Item 19. |
| 31 | Slip-resistant floor surface | 4.5.4 | To be specified at detailed design stage. |
| MAIN BEDROOM | | | |
| 32 | At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS1428.2 | 4.6.1 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| BATHROOM | | | |
| 33 | Provision for bathroom area to comply with AS1428.1; circulation spaces at doors and around WC pans, washbasins and showers shall be able to be provided without major plumbing changes. | 4.4.1 | Capped services and wall reinforcement are to be provided to allow future adaptation of the sanitary facility. Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 34 | Slip-resistant floor surface | 4.4.2 | To be specified at detailed design stage. |
| 35 | Shower recess-no hob. Minimum size 1160 x 1100 to comply with AS1428.1 (refer Figures 4.6 and 4.7) | 4.4.4(f) | As per Item 33. |
| 36 | Shower area waterproofed to AS3740 with floor to fall to waste | 4.4.4(f) | As per Item 33. |
| 37 | Recessed soap holder | 4.4.4(f) | Compliance is readily achievable. |
| 38 | Shower taps positioned for easy reach to access side of shower sliding track | 4.4.4(f) | As per Item 33. |

| | | | |
|----------------|---|----------|--|
| 39 | Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision) | 4.4.4(h) | As per Item 33. |
| 40 | Provision for grabrail in shower (refer to Figure 4.7 in AS 4299) to comply with AS1428.1 | 4.4.4(h) | As per Item 33. |
| 41 | Taps sets to be capstan or lever handles with single outlet | 4.4.4(c) | As per Item 33. |
| 42 | Provision for washbasin with clearances to comply with AS1428.1 | 4.4.4(g) | As per Item 33. |
| 43 | Double GPO beside mirror | 4.4.4(d) | As per Item 33. |
| TOILET | | | |
| 44 | Provision of either 'visitable toilet' or accessible toilet | 4.4.3 | Compliance is readily achievable. |
| 45 | Provision to comply with AS1428.1 | 4.4.1 | Capped services are to be provided to allow for future adaptation. Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. |
| 46 | Location of WC pan at correct distance from fixed walls | 4.4.3 | Capped services are to be provided to allow for future adaptation. Compliance is readily achievable. |
| 47 | Provision for grabrail zone. (refer Figure 4.6) | 4.4.4(h) | Walls to be reinforced to withstand loading of grabrails. |
| 48 | Slip resistant floor surface (vitreous tiles or similar) | 4.4.2 | To be specified at detailed design stage. |
| LAUNDRY | | | |
| 49 | Circulation at doors to comply with AS1428.1 | 4.8 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 50 | Provision for adequate circulation space in front of or beside appliances (min. 1550 mm depth) | 4.8 | Compliance is readily achievable with minor design development and/or specification AS4299 & AS1428.1 at the Detailed Design Stage. |
| 51 | Provision for automatic washing machine | 4.8(e) | To be specified at detailed design stage. |

| | | | |
|-------------------|--|--------|---|
| 52 | Where a clothes line is provided, an accessible path of travel to this | 4.8(a) | N/A – No clothes lines proposed. |
| 53 | Double GPO | 4.8(g) | To be specified at detailed design stage. |
| 54 | Slip-resistant floor surface | 4.9.1 | To be specified at detailed design stage. |
| Door Locks | | | |
| 55 | Door hardware operable with one hand, located 900-1100 mm above floor | 4.3.4 | To be specified at detailed design stage. |

4.0 ACCESSIBILITY COMPLIANCE STATEMENT

This report has provided a review of the relevant project design documentation to determine the compliance status of the proposed development against Part D3, Clause F2.4 and Clause E3.6 'deemed-to-satisfy' (DtS) requirements of the Building Code of Australia 2019 Amendment 1 (BCA), The Disability (Access to Premises - Buildings) Standards 2010 and the Australian Standards referenced on Pg. 3 & 4.

Furthermore, this report has provided an assessment of the proposed visitable & adaptable housing units against the AS4299-1995-Class C checklist.

Following this review and with the adoption of the recommendations/Performance Solutions proposed, ABE Consulting can confirm that at the Development application stage of design, the development readily achieves compliance with the referenced BCA/Australian Standards and adaptable housing unit provisions.

5.0 REVIEW PROVIDED BY

Prepared by:



Sam Freeman

Accessibility Consultant

Reviewed by:

Draft



Abe Strbik

Director

Member - Association of Consultants in Access
Australia # 405

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