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Compliance Report

Title: Horizon Newcastle – Mixed Use Multi-residential development

Project Address: Lee Wharf 5 - 45 Honeysuckle Drive, Newcastle, NSW

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Executive Summary

Item	Summary	Attention authority
Statement of assessment for Development Approval	A total of 110 Class 2 residential units are proposed, in addition to Retail and Commercial tenancies at Ground Floor. Twenty-two (22) residential units, being 20%, are required to incorporate the Livable Housing Guideline's silver level universal design features, to meet the objectives of the NSW State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (<i>SEPP 65</i>). Twenty-six (26) residential units have been designed to incorporate the Livable Housing Guideline's silver level universal design features. Car parking is required to meet the requirements of the BCA. I am satisfied that the arrangements adopted, whilst not showing complete Detail Design (DD) and all applications for external entries, linking pathways, directional signage, TGSIs and the like, show compliance to the degree necessary and allow for details to be finalised in subsequent stages of the design. This report is suitable for the Development Application and confirms the intent of the Disability (Access to Premises – Buildings) Standards and the SEPP 65 have been met, to the degree necessary. It is anticipated that all final dimensions and details will be resolved prior to the next phase, being Building Approval/Construction Certificate.	Compliant

Related Reports

This document must be read in conjunction with, but not limited to, other project specific Performance Solutions manuals, that are applicable to this project. The table below lists the relevant documents.

Document Reference	Title	Status
Drawings assessed	DDA_J0083_190508_MergedMarked	Completed – Attached to this review

Related Performance Solutions

Potential Opportunities/Departures: Performance Building Solution (PBS)

BCA Clause	Summary	Status
N/A	N/A	N/A

Preamble

The proposed mixed-use and multi-residential development provides 110 Class 2 residential sole-occupancy units. In order to meet the requirements of the State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (*SEPP 65*), a minimum of 20%, being twenty-two (22) units are required to incorporate the Livable Housing Guideline's silver level universal design features.

As the proposal incorporates Class 2 residential dwellings, NCC BCA requirements must be met in addition to the universal design requirements for the residential sole-occupancy units. Therefore, accessibility requirements in accordance with AS1428.1-2009 and AS/NZS1428.4.1-2009 apply to the following areas of the development:

- Class 2 - Common areas;
- Class 5 Commercial – all areas normally used by the occupants;
- Class 6 Retail – all areas normally used by the occupants;
- Class 7a – Car parking areas incorporating accessible parking spaces.

The seven core design features in the Livable Housing Guideline's silver level are:

1. A safe continuous and step free path of travel from the street entrance and / or parking area to a dwelling entrance that is level.
2. Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
3. A toilet on the ground (or entry) level that provides easy access.
4. A bathroom that contains a hobless shower recess.
5. Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date.
6. Stairways are designed to reduce the likelihood of injury and also enable future adaptation.
7. At least one, level (step-free) entrance into the dwelling.

Twenty-six (26) residential units have been designed to incorporate the Livable Housing Guideline's silver level universal design features.

1. Introduction

BLOC, in conjunction with *Hill Thalys and CKDS Architecture*, are responsible for the co-ordination, design and construction of the proposed mixed use and multi-residential development, located at Lee Wharf 5 - 45 Honeysuckle Drive, Newcastle, NSW 2300. They have sought advice regarding their requirements / obligations in achieving compliance with the relevant accessibility codes and standards, as well as the State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (*SEPP 65*).

The project incorporates three residential towers connected at Ground Floor and two levels of basement car park.

Basement Level 02 provides parking for 106 cars (including two in tandem), of which one is a designated accessible car parking space, and Basement Level 01 provides parking for 105 cars (including four in tandem).

Ground Floor contains:

- Retail and Commercial tenancies;
- Secure bike storage;
- Residential foyers for the three residential towers, including common facilities such as Gym, Resident Multi-purpose common room and bin storage;
- Three (3) Class 2 residential sole-occupancy units.

Levels 1-8 contain:

- 107 Class 2 residential sole-occupancy units distributed across three towers;
- Residential communal area including sanitary facilities at Level 7.

Twenty-six (26) residential units have been designed to incorporate the Livable Housing Guideline's silver level universal design features, being unit types W1, W2, E1 and E2.

2. Objective

The purpose of this report is to provide confirmation that a senior accredited access consultant has reviewed the proposed development against the relevant requirements of the Disability (Access to Premises — Buildings) Standards 2010, Building Code of Australia 2016, relevant Australian Standards as they relate to access, and in addition, the broader requirements of the Disability Discrimination Act 1992 (DDA), to ensure it is suitable for use by persons with a disability.

The project has also been assessed against the requirements of the State Environmental Planning Policy No. 65 (*SEPP 65*) and the Apartment Design Guide (*ADG*), the *Newcastle Development Control Plan 2012*, and the Livable Housing Design Guidelines.

The following comments within the remainder of the report are reflective of the entire project. The assessment shows clear consideration to the *SEPP 65*, Apartment Design Guide, Newcastle Development Control Plan 2012 and the Livable Housing Guidelines, and therefore achieves compliance. Furthermore, the project is deemed reasonable by means of meeting the performance requirements set out within the BCA through the use of expert opinion and project specific conclusions.

State Environmental Planning Policy No. 65 (SEPP 65)

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (*SEPP 65*) provides a consistent planning framework to improve the design quality of residential apartment development in NSW. The Apartment Design Guide (*ADG*) is a guide containing design guidance to improve the planning and design of residential apartment development in NSW. *SEPP 65* and the *ADG* applies to residential flat buildings, shop top housing and the residential component of mixed-use developments. They apply to buildings that are three or more storeys and that have four or more dwellings where the development consists of the:

- erection of a new building;
- substantial redevelopment or refurbishment of an existing building; and
- conversion of an existing building to a residential flat building.

Objective 4Q-1 of Part 4 of the Apartment Design Guide requires Universal Design features to be included in the apartment design to promote flexible housing for all community members.

The design guidance for this objective is for developments to achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features.

Newcastle City Council

The *Newcastle Development Control Plan 2012* expands upon the aims, objectives and other provisions of the Newcastle Local Environmental Plan 2012 and applies to all land within the Newcastle local government area to which Newcastle Local Environmental Plan 2012 applies.

In accordance with *Section 3.03.04 Configuration* of the *Newcastle Development Control Plan 2012*, universal design features are to be included in dwellings to promote flexible housing for all community members. All dwellings are to include the Livable Housing Design Guidelines Silver Level universal design features.

Livable Housing Design Guidelines

Livable Housing Australia (LHA) is a partnership between community and consumer groups, government and industry. LHA champions the mainstream adoption of livable housing design principles in all new homes built in Australia. LHA arose from the Kirribilli Dialogue on Universal Housing Design, which established nationally agreed guidelines on designing and building livable homes.

The Livable Housing Design Guidelines, which have been developed by industry and the community, provide assurance that a home is easier to access and safe to use for all occupants including people with disability, ageing Australians, people with temporary injuries, and families with young children, navigate and live in, as well more cost effective to adapt when life's circumstances change.

The seven core design features in the silver level are:

8. A safe continuous and step free path of travel from the street entrance and / or parking area to a dwelling entrance that is level.
9. Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
10. A toilet on the ground (or entry) level that provides easy access.
11. A bathroom that contains a hobless shower recess.
12. Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date.
13. Stairways are designed to reduce the likelihood of injury and also enable future adaptation.
14. At least one, level (step-free) entrance into the dwelling.

Twenty-six (26) residential units have been designed to incorporate the Livable Housing Guideline's silver level universal design features, being unit types W1, W2, E1 and E2.

3. Project Specifics

Purpose	The following statement confirms that the proposal achieves compliance with the NCC Building Code of Australia (BCA) 2016
Applicable Use Classification (A3.2 Classifications)	Class 2 – Residential accommodation Class 5 – Commercial Class 6 – Retail Class 7a – Carparking
Accommodation within the Class 2 Structure	A total of 110 Class 2 residential units are proposed. Twenty-two (22) units, being 20%, are required to incorporate the Livable Housing Guideline's silver level universal design features, to meet the objectives of the NSW State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (<i>SEPP 65</i>). Twenty-six (26) units have been designed to incorporate the Livable Housing Guideline's silver level universal design features.
Common facilities required to be accessible include:	Class 2 – Common Areas 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, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like. Where a ramp complying with AS 1428.1 or a passenger lift is installed— (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.
	Class 5 – Commercial To and within all areas normally used by the occupants, unless exempted by BCA D3.4.
	Class 6 – Retail To and within all areas normally used by the occupants, unless exempted by BCA D3.4.
	Class 7a – Carparking To and within any level containing accessible carparking spaces.

4. NCC BCA – Assessment

4.1 External Approaches, Walkways, Ramps, Accessways and Entries

A continuous accessible path is to be provided to the proposed building:

- From the main points of a pedestrian entry at the allotment boundary, and
- From another accessible building connected by a pedestrian link; and
- From any required accessible car parking space on the allotment

Item	Title & Clause Summary	Clause	Status	Assessment Comments
1.	Ensure external paths of travel from the allotment boundary are clearly signed and address the accessible paths of travel to and within the principal pedestrian entrance of adequate width to accommodate passing and turning spaces.	D3.2	Compliant	Ensure directional signage is provided adjacent stairs to indicate the location of an accessible entrance (i.e. ramp).
2.	In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and in a building with a total floor area more than 500m ² , a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.	D3.2	Compliant	
3.	Pedestrian crossings and or drop-off areas should be designed inclusive of line-marking, kerb ramps and TGSIs in accordance with AS1428.1-2009 & AS/NZS1428.4.1-2009.	D3.2	Condition of approval	
4.	Where pedestrian walkways and vehicular routes are at grade, hazard warning required. Position hazard TGSIs in accordance with AS/NZS1428.4.1-2009.	D3.2	Condition of approval	

Item	Title & Clause Summary	Clause	Status	Assessment Comments
5.	Ensure obstacles abutting a path are readily identifiable and do not obstruct a user on the path.	D3.2	Condition of approval	
6.	Pathway cross grades, directional grades and passing spaces are required to meet AS1428.1-2009.	D3.2	Condition of approval	Requires compliant cross grades accessway $\leq 1:40$ circulation grades
7.	The maximum gradient of a ramps exceeding 1900mm in length over 190mm rise shall be 1:14 grade including the required AS1428.1-2009 features. Where the ramp has a gradient $\geq 1:20$, reduced features apply.	D3.2	Condition of approval	Ensure ramps are provided with landings at appropriate intervals

Key External walkway criteria:

- Walkways to be provided with passing bays (1800 x 2000mm) at maximum 20m intervals.
- Walkway gradient to be 1:20 (max) with landings at maximum 15m intervals.
- Landings in direction of travel 1200mm long; landings at 90° directional change 1500mm x 1500mm. Landings at 180° directional change 1540mm length.
- If gradient of walkway is less than 1:33 no landings are required.
- TGSIs required to warn of hazard along pedestrian and vehicular routes on grade

Key kerb and pedestrian crossing criteria:

- Kerb ramp to have gradient no steeper than 1:8, length no greater than 1520mm.
- Pathways from accessible parking across roadways to have designated linemarking.

Stairs design criteria:

- Common use stairs require AS1428 series compliant handrails, tread features and TGSIs.

Key ramp design criteria:

- Maximum gradient of a ramp exceeding 1900mm is 1:14. Gradient to be consistent throughout ramp.
- Ramp required to have unobstructed width of 1000mm
- Ramps to be provided with landings at bottom and top of ramp.
- Landings required at maximum 9m intervals where grade 1:14, Landings required at maximum 15m intervals where grade 1:20.
- Landings in direction of travel 1200mm long; landings at 90° directional change 1500mm x 1500mm. Landings at 180° directional change 1540mm x 2070mm length.
- Ramps require AS1428 series compliant handrails and TGSIs.
- Ramps to be set back 900mm at property boundaries or 400mm at internal corners.
- Vertical rise not to exceed 3.6m

- **Kerb ramps** – max rise 190mm; 1:8 max gradient
- **Threshold ramps** – max rise 35mm; 1:8 max gradient; within 20mm of door leaf
- **Step ramps** – max rise 190mm; 1:10 max gradient

4.2 Accessible Parking

Objective: The specifications for accessible carparking spaces are contained in AS2890.6. These specifications aim to maximise the area available to people with disability to get into and out of their vehicles.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
8.	Carparking Spaces for persons with a disability. Class 2, Class 5, Class 6 and Class 7a Structure. Class 2 = Not required for residents Class 5 = 1 space for every 100 carparking spaces or part thereof. Class 6 = 1 for every 50 carparking spaces or part thereof (up to 1000 parking spaces)	Table D3.5	Compliant	Class 2 There is no requirement to provide accessible car parking spaces for residential component of the development. Class 5 / 6 Ten (10) parking spaces for the Retail / Commercial component of the development, therefore one (1) accessible car parking space is required. This has been provided within Basement Level 02.
9.	Accessible car parking spaces to be designed in accordance with AS/NZS2890.6-2009, including dimensions of 5400mm (l) x 2400mm (w) for the dedicated parking space and 5400mm (l) x 2400mm (w) for the adjacent shared area.	D3.5	Compliant	The designated accessible parking space and adjacent shared area possess appropriate dimensions.
10.	The vertical clearance along the vehicular path to an accessible car parking space must achieve a minimum of 2200mm. The headroom above each dedicated accessible parking space and adjacent shared area shall be a minimum of 2500mm.	D3.5	To be confirmed	Ensure a vertical clearance of 2200mm is maintained to the accessible car parking space. Ensure a vertical clearance of 2500mm above the dedicated parking space and adjacent shared area. Provide additional details during next stage of detailed design.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
11.	The shared area must be provided with a bollard and chevron line-marking. The dedicated accessible parking space must be provided with the international symbol of access.	D3.5	Condition of approval	Provide additional details during next stage of detailed design.

Key Car parking and transport design criteria:

- Accessible spaces are to be designed in accordance with AS/NZS2890.6-2009.
- Dimensions of angled accessible parking bays 2400mm (w) x 5400mm (l) with adjacent 2400mm (w) x 5400mm (l) shared area and bollard in shared area.
- Dimensions of parallel parking bays 3200mm (w) x 7800mm (l).
- Provide direct kerb ramp access from adjacent to the accessible parking space to pathway.
- Accessible bays to be located near entrances.
- Provide a designated area for accessible drop off from private vehicles, taxis and community vehicles with kerb ramp access to the pathway.
- Height of vehicular path of travel to accessible parking space to be 2200mm and height above accessible parking space to be 2500mm.

4.3 Entranceways

Objective: Access must be provided via the main principal entrance and:

Item	Title & Clause Summary	Clause	Status	Assessment Comments
12.	All entry doors are to comply with AS1428.1-2009.	D3.2	Condition of approval	Provide additional details during next stage of detailed design.
13.	All entry doors must achieve a minimum clear door opening width of 850mm (920mm leaf door required)	D3.2	Condition of approval	Provide additional details during next stage of detailed design.
14.	Ensure doors have light operational forces (less than 20 N). Consider use of bearing hinges or other enhanced hardware to achieve requirement.	D3.2	Condition of approval	Provide additional details during next stage of detailed design.
15.	All full height glazing capable of being mistaken as an opening (typically this is all shopfront glazing) is to be provided with a solid band not less than 75mm thick with the lower edge starting between 900-1000mm above FFL	D3.2	Condition of approval	Provide additional details during next stage of detailed design.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
	extending the full width of the glazed panel. This is to be detailed on the 'for Construction' elevations for approval.			
16.	30% minimum luminance contrast change is required between the door face/leaf, door architrave and wall.	D3.2	Condition of approval	Provide additional details during next stage of detailed design.

Key entrance criteria:

- Main entry must be accessible.
- Entry requires single door leaf width clearance of 850mm (typically 920mm door size).
- Circulation space of 1450mm required either side of entry.
- All glazed doors must be marked with solid and non-transparent contrasting marking not less than 75mm wide for full width of doors with lowest edge at 900-1000mm above the floor.

4.4 Passenger Lifts

Objective: In an accessible building, every passenger lift must 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.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
17.	Emergency lifts (a) At least one emergency lift complying with (d) must be installed in— a building which has an effective height of more than 25 m	E3.4	Compliant	The size of the lift shaft appears to be sufficient to provide a compliant emergency lift. Provide additional details during next stage of detailed design.
18.	All lifts travelling >12m require a minimum compartment size of 1400mm (w) x 1600mm (d) - (requires 2000mm depth where stretcher use indicated and travelling >12m).	E3.6	Compliant	The size of the lift shaft appears to be sufficient to provide a compliant lift. Provide additional details during next stage of detailed design.
19.	Any lift travelling <12m requires a minimum compartment size of 1100mm wide x 1400mm depth.	E3.6	Compliant	
20.	Fit-out must comply with AS1735.12-1999.	E3.6	Condition of approval	Provide additional details during next stage of detailed design.
21.	Stairway platform lift	Table E3.6a	N/A	

Item	Title & Clause Summary	Clause	Status	Assessment Comments
22.	Low-rise platform lift - Must not travel more than 1000 mm.	Table E3.6a	N/A	
23.	Low-rise, low-speed constant pressure lift, Must not— (a) for an enclosed type, travel more than 4 m; or (b) for an unenclosed type, travel more than 2 m; or (c) be used in high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like.	Table E3.6a	N/A	

Key lift design criteria:

- Lift dimensions to be 1100mm x 1400mm (up to 12m) or 1400mm x 1600mm (>12m minimum).
- Lift doorway opening clearance to be 900mm
- Fitout out of lifts to include: Handrail 600mm (min) length; at height between 850-950mm, Tactile and Braille symbols on control buttons and panels, Automatic auditory information detailing lift stops. Control buttons set back from corner.

4.5 Stairs

Objective: Every stairway, except for stairways in areas exempted by D3.4, must comply with AS 1428.1-2009.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
24.	Exemptions: Where a stair is installed on a path of travel used solely for servicing an area exempted under D3.4 of the Access Code this limit is not mandatory.	D3.4	Compliant	
25.	All general circulation stairs are to be designed to comply with AS1428.1-2009 i.e. clear width not less than 1m, handrails both sides, TGSIs and nosings and opaque risers	D3.3	Compliant	All external general circulation stairs appear capable of complying. Provide additional details during next stage of detailed design. Particular care must be taken to ensure stairs are set back sufficiently to prevent handrail extensions from protruding into transverse path of travel.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
26.	If fire-isolated stairs are to be encouraged for general circulation use, the stairs should be upgraded to full compliance with AS1428.1-2009 features.	D3.3	Information only	It would appear all internal stairs have been designed as fire-isolated stairs. Require contrasting nosing strips and an internal/continuous handrail with NO VERTICAL FALL in the handrail at landings

Key stair design criteria:

- Stairs to be set back 900mm at property boundaries or sufficient space to accommodate required handrails and TGSIs.
- Circular or spiral stairs are generally unsafe due to their inconsistent tread width.
- Common use stairs require AS1428 series compliant handrails, tread features and TGSIs.
- Tactile ground surface indicators (TGSIs) shall be installed for the full width of the path of travel.
- TGSIs shall be located at both the top and bottom of the stairs.
- Fire-isolated stairs required a single handrail compliant to Clause 12 of AS1428.1 and non-slip, contrasting stair nosings as a minimum.

4.6 Ramps

Objective: Ramps may be used as part of an accessway where there is a change in level and must comply with the requirements specified in AS 1428.1 including a maximum gradient, landings, TGSIs, handrails and kerbing.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
27.	Every ramp, except for ramps in areas exempted by D3.4 and fire-isolated ramps, must comply with Clause 10 of AS1428.1-2009.	D3.4	Condition of approval	Additional information is required regarding external ramps to ensure they are provided with appropriate gradients, landings and accessibility features.
28.	Landings at 90° directional change require minimum dimensions of 1500mm x 1500mm.	D3.3	Compliant	
29.	Where doorways are at landings, the dimensions of the landing must be in accordance with the requirements of the door circulation clearances.	D3.3	Compliant	
30.	On an accessway, a series of connected ramps must not have a combined vertical rise of more than 3.6m.	D3.11	Compliant	

Item	Title & Clause Summary	Clause	Status	Assessment Comments
31.	A landing for a step ramp must not overlap a landing for another step ramp or ramp.	D3.11	Compliant	

4.7 Internal Walkways

Objective: An accessible path of travel is required to all areas normally used by occupants. Internal walkways should be designed with the following features:

- Suitable circulation spaces to enable turning into adjacent doorways and workstation areas,
- Adequate passing spaces, and
- Turning areas at corridor or room terminators

Item	Title & Clause Summary	Clause	Status	Assessment Comments
32.	Accessways and internal corridors throughout shall be designed to comply as follows:	D3.3	Compliant	
33.	Provide turning spaces of 1500x1500 (corner may be truncated) where a user is required to make a directional turn.	D3.3	Compliant	
34.	Provide turning space within 2000 mm at the ends of corridors, where it is not continuous to offer turning space: minimum width 1540 mm x 2070 mm length.	D3.3	Compliant	
35.	Passing bays (1800mm wide x 2000mm length) are required every 20m where no direct line of sight is provided	D3.3	Compliant	
36.	All rooms- Minimum door circulation dimensional requirements of AS1428.1	D3.3	Compliant	

Key internal walkway and surface criteria:

- Walkways to be provided with passing bays (1800mm (w) x 2000mm (l)) at maximum 20m intervals.
- Minimum width of internal walkway to be 1000mm.
- Path of travel in front of doorways or those accessed from a frontal approach required to be 1450mm width (minimum).
- Path of travel in front of doorways accessed from the latch side to be 1240mm minimum width.
- Landing spaces at directional changes of: at 90° - 1500mm x 1500mm (corner can be truncated); at 180° - 1540mm x 2070mm.

- Turning space at corridor terminations to be 1540mm width x 2070mm length.

4.8 Internal Doorways

Objective: An accessible path of travel is required to all areas normally used by occupants. Future detailed design should provide compliant door circulation space to all doors where appropriate.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
37.	The unobstructed clear width of doors must achieve a minimum of 850mm (920mm leaf required).	D3.3	Compliant	Provide additional details during next stage of detailed design.
38.	Door circulation to comply with AS1428.1	D3.3	Compliant	Provide additional details during next stage of detailed design.
39.	All doors to have light operation forces	D3.3	Condition of approval	Provide additional details during next stage of detailed design. If door closers are installed - ensure doors have light operational forces (less than 20N). Consider use of bearing hinges or other enhanced hardware to achieve requirement.
40.	30% minimum luminance contrast change is required between the door face/leaf, door architrave and wall.	D3.3	Condition of approval	Provide additional details during next stage of detailed design.
41.	Braille signage required to final exit doors per D3.6 stating 'Exit', 'Level Ground' and 'First Floor' in contrasting braille (tactile characters).	D3.6	Condition of approval	Refer to signage below

Key internal doorway criteria:

- All doors require 850mm clearance width (typically 920mm doors) including the active leaf of double doors.
- Latch side clearance of 510mm to inward opening doors; 530mm to outward opening doors.
- Circulation space of 1450mm required either side of doors that are approached from the front. Circulation space of 1240mm required in front of inward opening doors approached from latch side.
- All glazed doors must be marked with solid and non-transparent contrasting marking not less than 75mm wide for full width of doors with lowest edge at 900-1000mm above the floor.

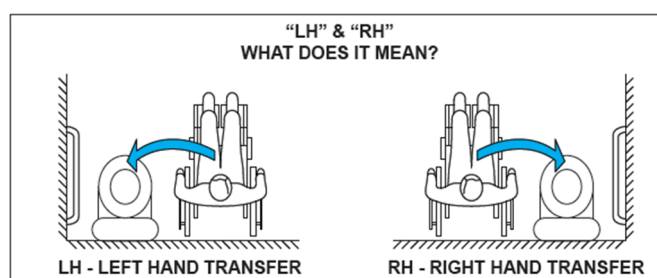
4.9 Sanitary Facilities

Objective: Facilities to be provided in accessible parts of the building. Accessible sanitary facilities must be provided on each level where other sanitary facilities are also provided and if the Storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks. The accessible facilities should be located adjacent/opposite the gender facilities.

Where one or more pans are provided, an ambulant toilet within each of the male and female facilities is to be provided.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
42.	Accessible unisex sanitary compartments must be provided in accessible parts of the building	F2.4	Condition of approval	Provide additional details during next stage of detailed design.
43.	Where two or more accessible sanitary facilities are installed there shall be an even distribution of mirror imaged layouts to provide left-hand and right-hand transfer.	F2.4	Condition of approval	Provide additional details during next stage of detailed design.
44.	Ambulant accessible compartments are required in addition to the accessible facility.	F2.4	Condition of approval	Provide additional details during next stage of detailed design.

LH & RH image



Key sanitary facility criteria

- Accessible sanitary facilities to be in same location as gender facilities and located on all levels of a multi-level building.
- Minimum room dimension with WC and basin: 1900mm x 2630mm or 2330mm x 2200mm.
- Provide AS1428 series compliant fixtures inclusive of shelf, clothes hooks, full length mirror
- A sanitary compartment suitable for a person with an ambulant disability must also be provided for use by males and females
- Baby change tables are not permitted to encroach on fixture circulation spaces and are to be installed in accordance with Clause 15.2.8.2

4.10 Symbols and signs

Objective: Mandatory Braille and tactile signage must be provided to sanitary facilities (except SOUs), spaces with hearing augmentation, for required exit signage and directional signage to alternative accessible entrances, paths of travel or alternative sanitary facilities

Item	Title & Clause Summary	Clause	Status	Assessment Comments
45.	Mandatory Braille and tactile signage will be required in the following areas:	D3.6	Condition of approval	Provide additional details during next stage of detailed design.

Item	Title & Clause Summary	Clause	Status	Assessment Comments
	• Unisex accessible sanitary facilities; • Ambulant compartments (if provided); • Each door required by BCA E4.5 of the BCA to be provided with an exit sign (all levels)			

Key Signage design criteria:

- Accessible way finding should highlight the pathway from entrance to reception to lifts/stairs, amenities and to key components of the facility.
- Ensure accessible way finding signage is:
 - Located at appropriate viewing heights
 - Perpendicular to the path of travel or beside identifiable features (e.g. door faces)
 - Of suitable colour contrast (luminance contrast min 30%)
 - Of compliant notation inclusive of use of the international symbol of access.
- Signage to accessible sanitary facilities requires identification with the international symbol of access, raised tactile and Braille signage and letters RH or LH to indicate side of transfer to the WC pan.
- Signage required to areas with required hearing augmentation provided

4.11 Hearing augmentation

Objective: Hearing augmentation must be provided in certain situations.

NOT APPLICABLE

4.12 Seating

Objective: Wheelchair seating spaces in Class 9b assembly buildings

NOT APPLICABLE

4.13 Swimming Pools

Objective: Accessible entry/exit is required to and within swimming pools in accordance with D3.10 of the BCA.

NOT APPLICABLE

5. Livable Housing Assessment

SEPP65 requires at least 20% of the total number of apartments to incorporate the Livable Housing Design Guideline's Silver Level universal design features.

The residential component of the development comprises 110 dwelling units. Twenty-two (22) dwelling units are required to meet Silver Level. Twenty-six (26) dwelling units have been designed to meet Silver Level.

Item	Requirement	Comment
Dwelling Access		
1.	Provide a safe, continuous step-free pathway from the street entrance and / or parking area to a dwelling entrance that is level.	Ramped access is provided from the street to the entrance doors of the Residential Foyers. Passenger lifts provide access from the Residential Foyers to all levels containing residential apartments.
2.	The path of travel should have a minimum clear width of 1000mm.	All external and internal accessways are provided with minimum clear widths exceeding 1000mm.
Dwelling Entrance		
3.	Provide at least one, level (step-free) entrance into the dwelling.	All required dwelling units are accessible directly from the common corridor in their respective towers, and as such are provided with a level step-free entrance into the unit.
4.	The entrance door should have a clear opening width of 820mm.	To be confirmed
5.	A level landing with minimum dimensions of 1200mm x 1200mm should be provided to the external side of the door.	All required dwelling units are provided with a level landing of appropriate dimensions to the external side of the entrance door.
Internal Doors and Corridors		
6.	Internal doors and corridors should facilitate comfortable and unimpeded movement between spaces.	To be confirmed. Can be detailed during next stage of detailed design.
7.	Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide a minimum clear opening width of 820mm.	To be confirmed. Can be detailed during next stage of detailed design.
8.	Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes	To be confirmed. Can be detailed during next stage of detailed design.

	should provide a level transition and threshold (maximum vertical tolerance of 5mm between abutting surface is allowable provided the lip is rounded or bevelled).	
9.	Internal corridors / passageways should be provided with a minimum clear width of 1000mm.	All internal corridors appear to be provided with a clear opening width of 900-910mm. These corridors will need to be widened. Can be detailed during next stage of detailed design.
Toilet		
10.	A toilet should be provided on the ground (or entry) level.	All required dwelling units are provided with a toilet at the entry level.
11.	Toilet should be provided with a minimum clear width of 900mm between the walls of the bathroom if located in a separate room.	The toilet is provided with a clear distance between the wall and adjacent fixture/fitting of min. 900mm.
12.	Toilet should be provided with a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door.	The toilet appears to have less than 1200mm clear circulation space in front of the pan. The circulation space will need to be increased in length. Can be detailed during next stage of detailed design.
13.	The toilet pan should be located in the corner of the room to enable installation of grabrails at a future date.	The toilet pan is located in the corner of the room within all required dwelling units.
Shower		
14.	One bathroom should feature a slip resistant, hobless shower recess.	All required dwelling units are provided with at least one hobless shower recess.
15.	Shower screens are permitted provided they can be easily removed at a later date.	All required dwelling units are provided with shower screens that can be easily removed at a later date.
16.	The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.	All required dwelling units are provided with a shower recess located in the corner of the room to enable the future installation of grabrails if needed.
Reinforced Walls in Bathroom and Toilet		
17.	The walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.	Condition of approval

	(Refer to Livable Housing Design Guidelines for additional details regarding reinforcement.)	
Internal Stairways		
18.	Where installed, stairways in dwellings must feature a continuous handrail on one side of the stairway where there is a rise of more than 1m.	Not Applicable

6. Conclusion

Whilst the arrangements adopted may not show complete Detail Design (DD), it is my opinion that the project is capable of meeting the Performance Requirements with the BCA through the use of deemed-to-satisfy solutions and performance-based solutions. Within the next phase of the design, it is anticipated that dimensions and additional features will be identified to show compliance with the intent of the BCA, Disability (Access to Premises – Buildings) Standards and relevant Australian Standards as they apply to this project.

7. Document Use

The National Construction Code (NCC) makes reference to some of the Australian Standards applicable to the design of equitable access. The NCC indicates which edition of Australian Standards it refers to. The NCC does not always refer to the most recent version of a standard. However, under the Code, the most up-to-date Australian Standards, applied by the code, are applicable to relevant development proposals. At the time of the preparation of this Code the following standards apply:

- AS1428.1 Design for Access and Mobility – General Requirements for Access – New Building Work
- AS1428.2 Design for Access and Mobility - Enhanced and Additional Requirements – Buildings and Facilities
- AS1428.3 Design for Access and Mobility - Requirements for Children and Adolescents with Physical Disabilities
- AS1428.4 Design for Access Mobility - Tactile Indicators
- AS 1680.0 Interior Lighting – Safe Movement
- AS1735.7 Lifts, Escalators and Moving Walks – Stairway Lifts
- AS1735.12 Lifts, Escalators and Moving Walks – Facilities for Persons with Disabilities
- AS1735.14 Lifts for People with Limited Mobility - Restricted Use - Low Rise Platforms
- AS1735.15 Lifts, Escalators and Moving Walks – Low-Rise Passenger Lifts - Non-Automatically Controlled
- AS1735.16 Lifts, Escalators and Moving Walks – Lifts for Persons with Limited Mobility – Restricted use - Automatically Controlled
- AS2890.1 Parking Facilities: Part 1 – Off-Street Car Parking
- AS/NZS2890.6 Parking facilities: Part 6 – Off-Street Parking for People with Disabilities
- AS2899 Public Information Symbol Signs - Part 1 General Information Signs
- AS4428.4 Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Intercommunication Systems for Emergency Purposes
- AS4586 Slip Resistance Classification of New Pedestrian Surface Materials

Additional documents referenced in this report include:

- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (*SEPP 65*)
- The Apartment Design Guide (*ADG*)
- Newcastle Development Control Plan 2012
- Livable Housing Design Guidelines

8. Responsibilities

Compliance with the National Construction Code, Building Code of Australia, Australian Standards and Disability (Access to Premises – Buildings) Standards will provide an environment, which is considered accessible under the Building Codes. However, whilst this legislation focuses on the physical aspects of the building design and construction, the DDA goes further. The DDA focuses on the people, who use the building and the way the premises are administered. Therefore, there will always be a need for those responsible for buildings and their uses to consider broader issues of access, such as management and staff training, as well as matters such as maintenance.

As identified, the Building Code of Australia, Disability (Access to Premises – Buildings) Standards and associated Australian Standards provide technical guidance and specific recommendations on accessible design, covering elements such as:

- Access to buildings from allotment boundaries
- Provision of car parking for people with disabilities
- Access into the building and circulation routes
- Accessible sanitary facilities
- Suitable hearing augmentation
- Provision of tactile indicators
- Provision of suitable lifts

However, realistically, there are often constraints with a proposal, which prevent the design meeting the deemed-to-satisfy provisions in the BCA. In such a case, the provision of an “alternative solution” can be provided to demonstrate compliance with the performance requirements of the BCA, as is the case with this report.

In such circumstances, a broader holistic view may be required to achieve the optimum level of accessibility, when considered in conjunction with the end use of the building, along with the constraints, which are imposed. In this respect, the proposal will still meet the broader Performance Requirements and intent of the NCC (BCA).

9. Appendix A – Drawing Register

The following architectural drawings, prepared by *Hill Thalys* and *CKDS Architecture*, project number 18122, were assessed as part of this report:

- DA-101 issue G – Plans – Basement Level 02;
- DA-102 issue H – Plans – Basement Level 01;
- DA-103 issue F – Plans – Ground Floor;
- DA-104 issue G – Plans – Typical Floor Plan (L1-6);
- DA-105 issue F – Plans – Level 07;

- DA-106 issue F – Plans – Level 08 / Roof;
- DA-301 issue B – Elevations/Sections – Proposed Elevations;
- DA-302 issue B – Elevations/Sections – Proposed Elevations;
- DA-303 issue B – Elevations/Sections – Proposed Elevations;
- DA-304 issue B – Elevations/Sections – Proposed Elevations;
- DA-401 issue C – Sections – Section A;
- DA-402 issue A – Sections – Section B;
- DA-403 issue A – Sections – Section C;
- DA-600 issue A-WIP – Subset – Glazing Schedule.

Curriculum Vitae

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QUALIFICATIONS & ACCREDITATIONS

- DDA/Access Consultant – Association of Consultants in Access Australia (ACAA), Accredited Member #428 Qualified
- Building Designer – Lic. # 1168941
- Builder Open – Lic. # 1168941
- Livable Design Guidelines Qualified & Registered Assessor # 10023
- Livable Housing Design - Technical Advisor
- Livable Housing Design Appointed Panel member (TAP)
- Advanced Diploma in building management

SUMMARY

With over 20 years of experience in the construction industry and performing duties in Access Consulting, Building Codes Compliance, Building and Building Designing, Rhys has worked in both the private and commercial sector as an access consultant, certifying compliant access conditions and has built a reputation as a specialist in this sector.

With over 5 years managing a non-for-profit program *Home and Community Care* (HACC), Rhys has designed and built for the individual clinical needs of a person with a disability under 65 and over 65 years of age. Additionally, he has worked closely with community-based Occupational Therapists and local Council conditions to achieve the best clinical outcome and solution for the client, while keeping within the funded budget.

Moreover, Rhys has been part of the forward thinking of Livable Housing Design Guidelines as one of the 6 members on their Technical Advisory Panel (TAP), developing the performance requirements and ruling on changes made. This has given him the ability to work with the residential sector at the Property Council of Australia and develop a usable product.

While building the same reputation in the commercial sector, Rhys became qualified as an access consultant in public spaces and the urban environment. His understanding of both Local and State Government legislation, right down to the dimensional requirements of the Australian Standards for the use of products and servicing a person with a disability, is second to none.

Lastly, Rhys is proficient in collaborating with clients and working with people who have changing needs and mobility limitations. His experience with industry stakeholders includes property and facility managers, building owners, builders, architects, engineers, occupational therapists, commercial lessees, landscape designers, heritage architects, and the general public. Therefore, clients can be assured that they will receive high quality information and evidence-based recommendations.

Association of Consultants in Access Australia, Inc

Certificate of Membership Accredited Member



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Mr Bryce Tollday

This is to certify that

Mr Rhys Tappenden

Membership Number

428

Was admitted as an **Accredited Class Member** of the
Association of Consultants in Access Australia, Inc. on the 2nd day of
September 2015.

Membership is only valid whilst a current financial member.

Mr Chris Porter
ACA NATIONAL PRESIDENT

Mr Terry Osborn
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