

ACCESS REPORT
DEVELOPMENT APPLICATION
26-28 SHEPHERD STREET
LIVERPOOL
MULTI-UNIT RESIDENTIAL DEVELOPMENT



Prepared By Mark Relf

20TH December 2016



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Introduction

The purpose of this report is to provide an accessibility review of a Development Application for a multi-unit housing development on a site at 26-28 Shepherd Street, Liverpool.

In particular, the report considers the accessibility of common areas within the development and the provision of 10% of units as Adaptable Housing within the meaning of AS4299.

Assessment Criteria

This assessment considers the following legislation, planning instruments and standards pertaining to access for people with disabilities:

- (1) Building Code of Australia (2016) and DDA Premises Standards
- (2) Australian Standard AS1428.1 – Design for Access & Mobility & referenced standards.
- (3) Liverpool Development Control Plan 2008 – Section 6.1 – *Housing Choice & Mix*
- (4) Australian Standard AS4299 – Adaptable Housing.
- (5) SEPP 65 amdt 3 (2015) – Apartment Design Guide

Development Application Plans - Combined DA/Stage 2 DA

The plans relied upon for this accessibility assessment include:

Dwg No.	Drawing Title	Revision
I20597/I20809 – A01001	Local Context Plan	D1
I20597/I20809 – A11002	Site Plan	D1
I20597/I20809 – A022B2	Basement B2 Plan	D1
I20597/I20809 – A022B1	Basement B1 Plan	D1
I20597/I20809 – A12200	Ground Floor Plan	D1
I20597/I20809 – A12201	Level 1 Floor Plan	D1
I20597/I20809 – A12202	Level 2-3 Floor Plan	D1
I20597/I20809 – A12203	Level 4-5 Floor Plan	D1
I20597/I20809 – A12206	Level 6 Floor Plan	D1
I20597/I20809 – A12207	Level 7-17 Floor Plan	D1
I20597/I20809 – A12218	Level 8-20 Floor Plan	D1
I20597/I20809 – A12221	Level 21 Floor Plan	D1
I20597/I20809 – A12222	Roof Plan	D1
I20597/I20809 – A12620	Cross Ventilation Analysis	D1
I20597/I20809 – A13101	Bldg C1 Riverside Elevation	D1
I20597/I20809 – A13102	Bldg C1 Courtyard Elevation	D1
I20597/I20809 – A13103	Bldg C1 & C2 North Elevation	D1
I20597/I20809 – A13104	Bldg C1 & C2 South Elevation	D1

Dwg No.	Drawing Title	Revision
I20597/I20809 – A13201	Section AA	DI
I20597/I20809 – A13202	Section BB	DI
I20597/I20809 – A18301	DDA (adaptable) Apartment Plans	DI
I20597/I20809 – A19100	Perspective	DI
I20597/I20809 – A21001	Site Analysis Plan	DI
I20597/I20809 – A21002	Site Plan	DI
I20597/I20809 – A21003	Site Setbacks & Separation	DI
I20597/I20809 – A22200	Ground Floor Plan	DI
I20597/I20809 – A22201	Level 01 Plan	DI
I20597/I20809 – A22202	Level 02-03 Plan	DI
I20597/I20809 – A22204	Level 04 & 06 Plan	DI
I20597/I20809 – A22205	Level 05 & 07 Plan	DI
I20597/I20809 – A22208	Level 08, 10, 12 Plan	DI
I20597/I20809 – A22209	Level 09 & 11 Plan	DI
I20597/I20809 – A22213	Level 13 Penthouse & Plant	DI
I20597/I20809 – A22214	Level 14 Roof Plan	DI
I20597/I20809 – A23101	Elevations 01	DI
I20597/I20809 – A23102	Elevations 02	DI
I20597/I20809 – A23103	Elevations 03	DI
I20597/I20809 – A23200	Section AA	DI
I20597/I20809 – A23201	Section BB	DI
I20597/I20809 – A23202	Section CC	DI
I20597/I20809 – A28301	DDA (adaptable) Apartment Plans	DI
I20597/I20809 – A28302	DDA (adaptable) Apartment Plans	DI
I20597/I20809 – A29100	Perspective 1	DI
I20597/I20809 – A29101	Perspective 2	DI
I20597/I20809 – A29102	Perspective 3	DI
I20597/I20809 – A29103	Perspective 4	DI
I20597/I20809 – A29104	Perspective 5	DI

Executive Summary

The development proposes a residential development consisting of the following elements:

No. 26 Shepherd The Gild	No. 28 Shepherd The Bindery	Combined
82 Apts	290 Apts	372 Apts
83 Res Parking Spaces	375 Res. Parking Spaces	458 Res Parking Spaces
8 Visitor Spaces	37 Visitor Spaces	45 Visitor Spaces
2 Service Vehicle Spaces	4 Service Vehicle Spaces	6 Service Vehicle Spaces

- Three hundred seventy-two (372) apartments with wheelchair accessible paths of travel to enter the site and access the principal entrance lobbies of all three Buildings (B, C1 and C2) to satisfy BCA 2016 and Council's DCP accessibility requirements.
- The internal foyers, corridor accessways and lifts facilitate universal access to all storeys and apartment entrance doorway entrances to satisfy BCA 2016 and Council's DCP accessibility requirements. Details of ramps, doorway thresholds and lifts shall be confirmed at a later construction certificate stage in accordance with AS1428.1.
- The communal central plaza and garden areas on the ground floor shall provide wheelchair accessible path of travels to comply with AS1428.1 to satisfy Table D3.1 of the BCA.
- The common area recreational amenities which propose landscaped pathways to barbecue areas and shelters and swimming pool will incorporate accessible features to comply with BCA 2016 and Council's DCP accessibility requirements on;
 - Level 14 of Building B (No. 26 Shepherd)
 - Level 6 podium area of Building C2 (No. 28 Shepherd) and
 - Level 18 of Building C1 north (No. 28 Shepherd) and
 - Level 21 of building C1 south.
- On-site parking for 511 vehicles (458 resident, 45 visitor and 6 service vehicles), which incorporates thirty-eight (38) accessible resident parking bays for the adaptable units and at least three (3) accessible visitor spaces in accordance with AS4299 / AS2890.6.
- The development proposes thirty-eight (38) adaptable units with designs complying with AS4299 – Adaptable Housing to satisfy Council's DCP and SEPP 65.
- With respect to the Universal Access requirements of the SEPP 65 Apartment Design Guide the development does include at least 10% of the 372 apartments that provide design features complying with the Silver Level Livable Housing Guidelines and 100% of apartments are accessible through each entrance.

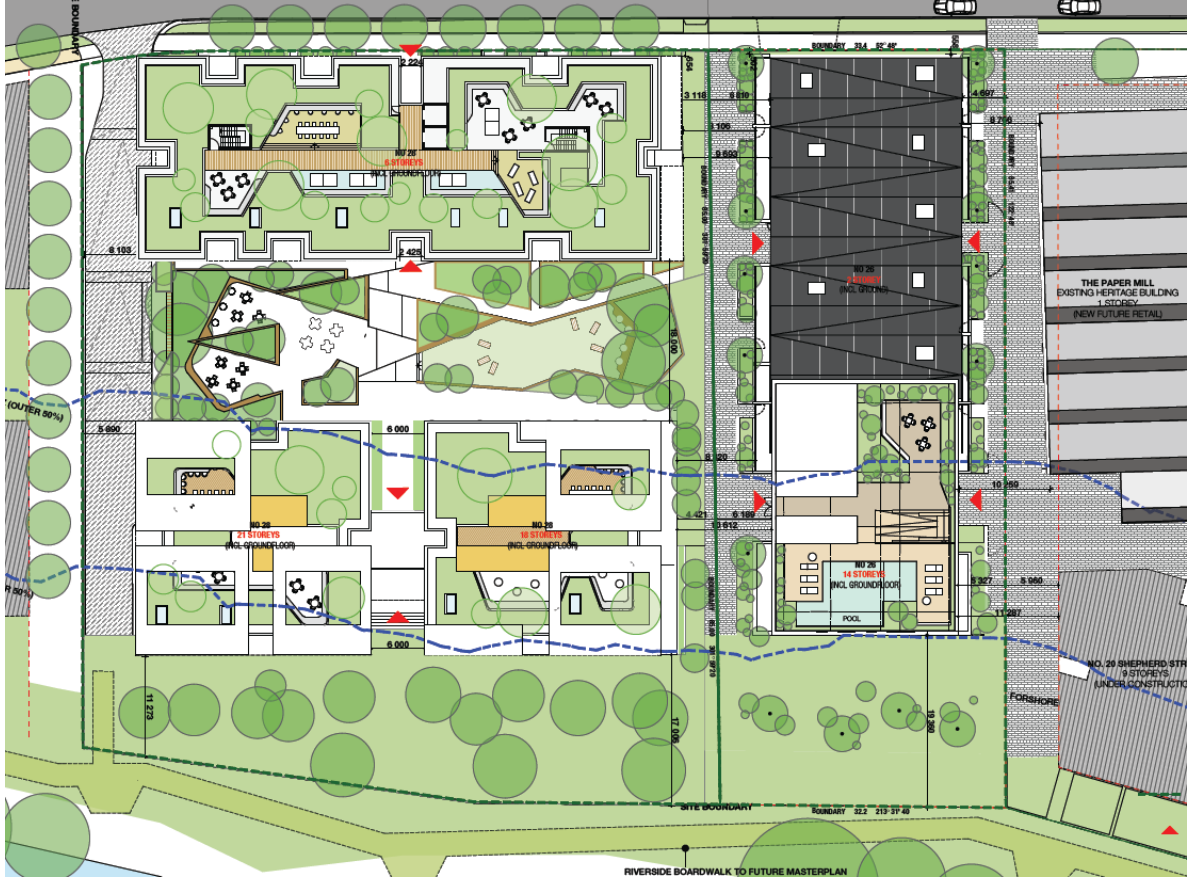
In summary the access and adaptability review of the development demonstrates compliance with the relevant objectives and design code requirements of BCA 2016/DDA Premises Standard pertaining to accessible common domain areas and access to all apartments and the Adaptable Housing standard AS4299 in terms of thirty-eight (38) adaptable units for people with disabilities.



Mark Relf,
Access Consultant (ACAA)

Part A - Residential Access & Adaptability Assessment

External Pathway Links and Building Entrances (Parts D3.2 & D3.3 of the BCA)

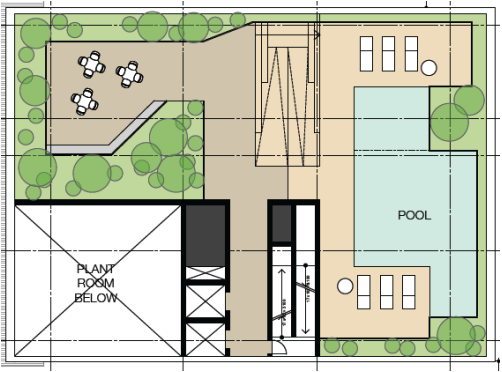
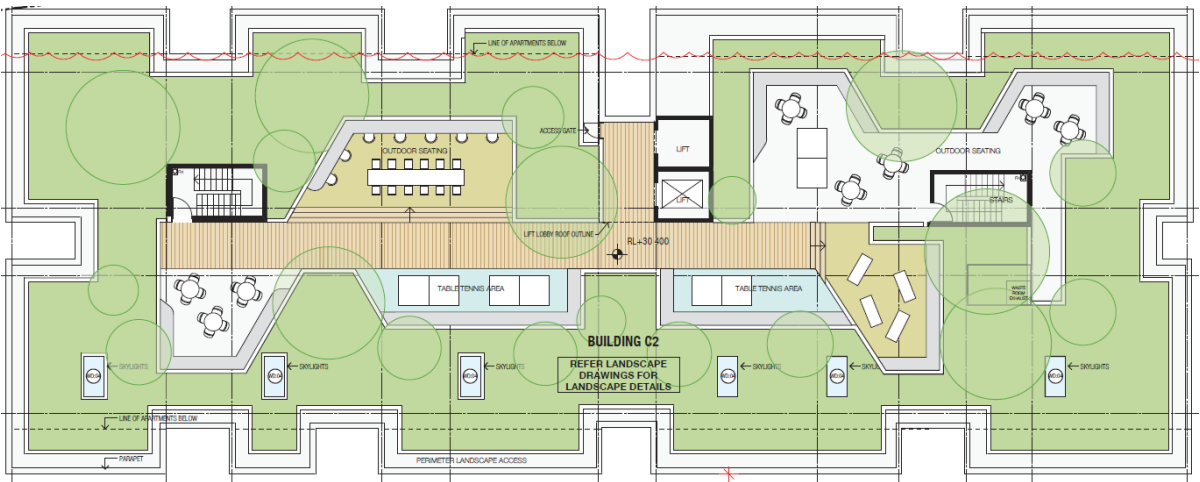
BCA / DDA Access Code Review	Complies
<p>1. The development forms Stage 2 of the “Paper Mills” project and proposes on-grade accessways from the Shepherd Street public domain footpath to a common lobby entrance of Building B (No 26 Shepherd St) and Building C2 (No 28 Shepherd St), which enables direct access to a central plaza to access Building C1.</p> <p>2. The public riverside walkway shall provide an accessible entry to the site that enables a wheelchair accessible path of travel to Shepherd Street.</p>	<p>YES</p> <p>YES</p>
	
<p>3. Building B (26 Shepherd St) - The Shepherd Street entry pathway shall provide a 1:20 maximum gradient walkway approach from the public footpath @RL10.620 to lobby doorways with a level landing and level threshold to enter the lobbies @RL10.900 which contains two lifts that travel to other levels and through access to a central landscaped plaza area.</p> <p>4. The entry lobbies include auto sliding doors and provide ample circulation spaces and direct access to the central plaza.</p>	<p>YES</p> <p>YES</p>
<p>5. Building C2 (28 Shepherd St) - The Shepherd Street entry pathway shall provide a 1:20 maximum gradient walkway approach from the public footpath @RL11.690 to lobby doorway with a level landing and level threshold to enter the lobby @RL11.800 which contains two lifts that travel to other levels and through access to a central landscaped plaza area.</p>	<p>YES</p>


BCA / DDA Access Code Review	Complies
6. The 5500mm minimum width entry lobby and auto sliding doors provide ample circulation spaces and direct access to the central plaza which proposes access to Building C1.	YES
7. The 1800mm width ground floor common corridor proposes a single floor level and enables an accessible path of travel to every ground floor unit to satisfy Table D3.1 of the BCA.	YES
8. Building C1 (Riverside) - The central plaza shall provide a 1:40 maximum gradient walkway between the two buildings with the lobby doorways incorporating level landings and level thresholds to enter the lobbies @RL11.800.	YES
9. The plan illustrates a moderately graded 1:40 to 1:24 accessible pathway link from the public domain Shepherd Street footpath from RL12.180 to Riverside public domain riverside walkway from RL9.910.	YES
10. The riverside frontage also proposes a stairway to the principal lobby which will be detailed at a future design stage to accommodate handrails and tactile indicators and stairway nosings in accordance with AS1428.1 and AS1428.4.1 to satisfy Parts D3.3 and D3.8 of the BCA.	YES at CC stage
11. Building C1 provides a single level within the ground floor with appropriate access paths to all ground floor apartments to satisfy Table D3.1 of the BCA.	YES
12. Details regarding door sizes, door hardware, level thresholds, doorway luminance contrast and accessible intercom controls shall be documented at the construction certificate stage in accordance with AS1428.1 to satisfy Parts D3.2 and D3.3 of the BCA.	YES at CC stage

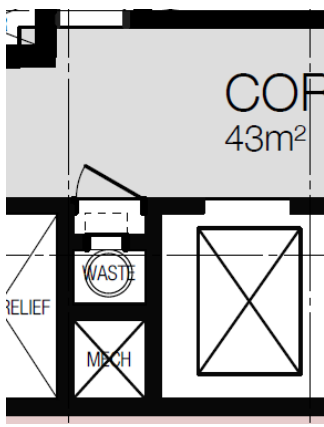
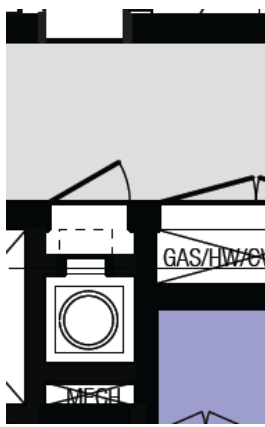
Accessibility of Common Domain Areas (Table D3.1, Parts D3.2 & D3.3 of the BCA)

BCA / DCP Access Review	Complies
<p>13. In accordance with Table D3.1 of the BCA a development is required for Class 2 Areas of a development (residential flat buildings);</p> <ul style="list-style-type: none"> To provide a pedestrian entrance to be accessible to at least one (1) floor containing sole occupancy units and to the entrance doorway of each sole occupancy unit located on that level, and To and within not less than one (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. 	

BCA / DCP Access Review	Complies
<p>Ground Floor accessways –</p> <p>14. As described above the development proposes accessible site entrances and external pedestrian walkways that facilitate accessible pathways to the entrance lobbies at the ground floor.</p> <p>15. Building B (26 Shepherd St) - The lobby areas provide 1600mm minimum common corridors to access to apartment entrance doorways and lifts to access other levels and through access to a central landscaped plaza area.</p> <p>16. Building C2 western lobby to Shepherd Street provides ample internal circulation space within the 5800 X 10000mm lift lobby to approach lifts and the 1800mm corridors to access the apartment entrance doorways to comply with AS1428.1.</p> <p>17. Building C2 entrance lobby provides through access to the central common area plaza with a level pathway link to Building C1.</p> <p>18. Building C1 is also accessible from the public riverside walk into the site to a ramp to access the central plaza areas which provides ample circulation spaces to approach the lobby lifts and apartment entrance doorways.</p> <p>19. The common area corridor within Building C2 provides a 5800 X 10000mm lobby areas with 1800mm minimum width corridors to enable appropriate doorway circulation spaces, access to the lifts, Turning and Passing Areas in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>
<p>Level 1 –</p> <p>20. Building B (26 Shepherd St) - The lobby areas provide 1600mm minimum common corridors to access to apartment entrance doorways and facilitate 1540 X 2070mm Turning Areas at the end of the accessways in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p> <p>21. Building C1 (Riverside) proposes 2300mm minimum width lift landings, which lead to 1800mm width common accessways that incorporate 1540 X 2070mm Turning Areas at the end of the accessways. The spatial areas and layout inherently provide appropriate doorway circulation spaces and enable Turning and Passing Areas in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p> <p>22. Building C2 (Shepherd) proposes 5800mm minimum width lift landings, which lead to 1800mm width common accessways that incorporate double Smoke Doors at the lift landing that will be installed with hold open magnamatic devices for easy everyday access that are designed to automatically close in a fire event.</p> <p>23. 1540 X 2070mm Turning Areas at the end of the accessways. The spatial areas and layout inherently provide appropriate doorway circulation spaces and enable Turning and Passing Areas in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>
<p>Levels 2 to 3 & 4-13 similar No. 26 Shepherd –</p> <p>24. Building B (26 Shepherd St) - The 1800mm width lift landings and 1600mm minimum common corridors enable to access to apartment entrance doorways ,</p>	<p>YES</p>

BCA / DCP Access Review	Complies
<p>Passing Areas and facilitate 1540 X 2070mm Turning Areas at the end of the accessways in accordance with ASI428.1 to satisfy Part D3.3 of the BCA.</p>	
<p>Levels 2 to 5 & 6 for Building C1 –</p> <p>25. Building C1 proposes the same 2300mm minimum width lift landing and 1800mm width central corridors, which inherently facilitates Turning and Passing Areas in accordance with ASI428.1 to satisfy Part D3.3 of the BCA.</p> <p>26. Building C2 proposes the same 5800mm minimum width lift landings up to Level 5, which lead to 1800mm width common corridors that inherently provide appropriate doorway circulation spaces and enable Turning and Passing Areas in accordance with ASI428.1 to satisfy Part D3.3 of the BCA.</p>	<p>YES</p> <p>YES</p>
<p>Level 14 Roof Terrace –</p> <p>27. Building B (26 Shepherd St) provides lift access to a communal roof terrace area and swimming pool, which includes a pedestrian ramp to the pool deck in accordance with ASI428.1 to satisfy Part D3.3 of the BCA.</p> <p>28. The pool indicates a 40 metre perimeter and will include a pool hoist to comply with D3.10 of the BCA.</p>	 <p>YES</p> <p>YES at CC stage</p>
<p>Building C2 – Level 6 Roof Terrace</p>  <p>29. The plans show a communal recreation area on level 6 of Building C2 that proposes landscaped pathways, seating and pergola with barbecue facilities.</p> <p>30. The plans show the lift shall provide direct access to the outdoor areas which have ample outdoor accessways in accordance with ASI428.1 to satisfy Part D3.3 of the BCA.</p>	
	<p>YES</p> <p>YES</p>


BCA / DCP Access Review	Complies
<p>Level 7-8 –</p> <p>31. Building C1 proposes the same 2300mm minimum width lift landing and 1800mm width central corridors, which inherently facilitates Turning and Passing Areas in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p>	YES
<p>Building C1 – Level 9 Roof Terrace</p> <p>32. The plans show a communal recreation area on level 9 of Building C1 that proposes landscaped pathways, seating and pergola with barbecue facilities.</p> <p>33. The plans show the lift shall provide direct access to the outdoor areas which have ample outdoor accessways in accordance with AS1428.1 to satisfy Part D3.3 of the BCA.</p>	YES YES
 <p style="text-align: center;"><i>Building C1 - Level 18 Roof Terrace</i></p>	
<p>34. Summary of Apartment Access - As detailed above the development will provide equitable access to enter the residential foyers and lifts at the ground floor to travel to all levels within the residential development and ultimately from the lifts to approach the entry doorways of all 372 apartments to satisfy Table D3.1 of the BCA.</p>	YES
<p>35. Stairways - In accordance with part D3.3(a)(ii) of the BCA the common area entrance stair from the Riverside walk to the Building C1 entrance lobby will be detailed at construction certificate stage with handrails on both sides, closed stair risers with no overhanging lip and step nosings to the requirements of AS1428.1 to satisfy Parts D3.3(a)(i) and D3.8 of the BCA.</p>	YES at CC stage
<p>36. Stairways (Fire Isolated) - In accordance with part D3.3(a)(iii) of the BCA the fire-isolated stairs will be detailed at construction certificate stage with step nosings to the requirements of AS1428.1 to satisfy Parts D3.3(a)(iii) of the BCA.</p> <p>37. The fire isolated stairways shall also be required to provide at least one handrails complying with clause 12 and figure 28 of AS1428.1 to satisfy Part D2.17(a)(vi) of the BCA.</p>	YES at CC stage

BCA / DCP Access Review		Complies
38. Letterboxes – Buildings B and C2 proposes letter boxes within the external lobby landing area which indicate adequate access that will comply with ASI428.1 and will satisfy part D3.3 of the BCA.		YES
39. Garbage – The indicate basement garbage rooms for Building B (No 26 Shepherd) with appropriate doorway access that complies with ASI428.1 while Buildings C1 and 2 incorporate garbage chutes on each level as follows.		YES
40. Garbage – The plans illustrate resident garbage chutes on all levels with direct access from common corridors to hatch doors, which facilitate appropriate access to comply with ASI428.1 and satisfy Table D3.1 and Part D3.3 of the BCA as a common use residential area.	 <p>Building C1</p>	YES
	 <p>Building C2</p>	

Lifts (Part E3.6 of the BCA)

BCA / DCP Access Review		Complies
41. While the development provides lifts to comply with Table D3.1 / Part D3.3 BCA in enabling vertical access to various details of lift car controls, handrails and the like will be provided at construction documentation stage to confirm compliance with ASI735.12 to satisfy Part E3.6 of the BCA.		YES at CC stage

Accessible Sanitary Facilities (Part F2.4 of the BCA)

BCA / DCP Access Review		Complies
42. Building C2 provides a communal sanitary facility on the ground floor level that will be 2700mm X 2300mm and will comply with ASI428.1 and F2.4 of the BCA.		YES

Tactile & Braille signage (Part D3.6 of the BCA)

BCA / DCP Access Review	Complies
43. The common toilets shall be documented at construction certificate stage with tactile and Braille signage in accordance with ASI428.1 to satisfy Parts D3.6 of the BCA.	YES at CC stage
44. The FIRE EXIT doors shall be documented at construction certificate stage with tactile and Braille signage in accordance with ASI428.1 to satisfy Parts D3.6 of the BCA.	YES at CC stage

Tactile ground surface indicators (Part D3.8 of the BCA)

BCA / DCP Access Review	Complies
45. The 1:14 to 1:19.9 ramps and non fire-isolated stairways within the development shall be documented at construction certificate stage with tactile ground surface indicators (TGSI's) in accordance with ASI428.4.1 to satisfy Parts D3.3 and D3.8 of the BCA on the following areas; (a) Pedestrian ramps steeper than 1:20; (b) Common area stairways (excluding fire-isolated stairs);	YES at CC stage

Swimming Pools (Part D3.9 of the BCA)

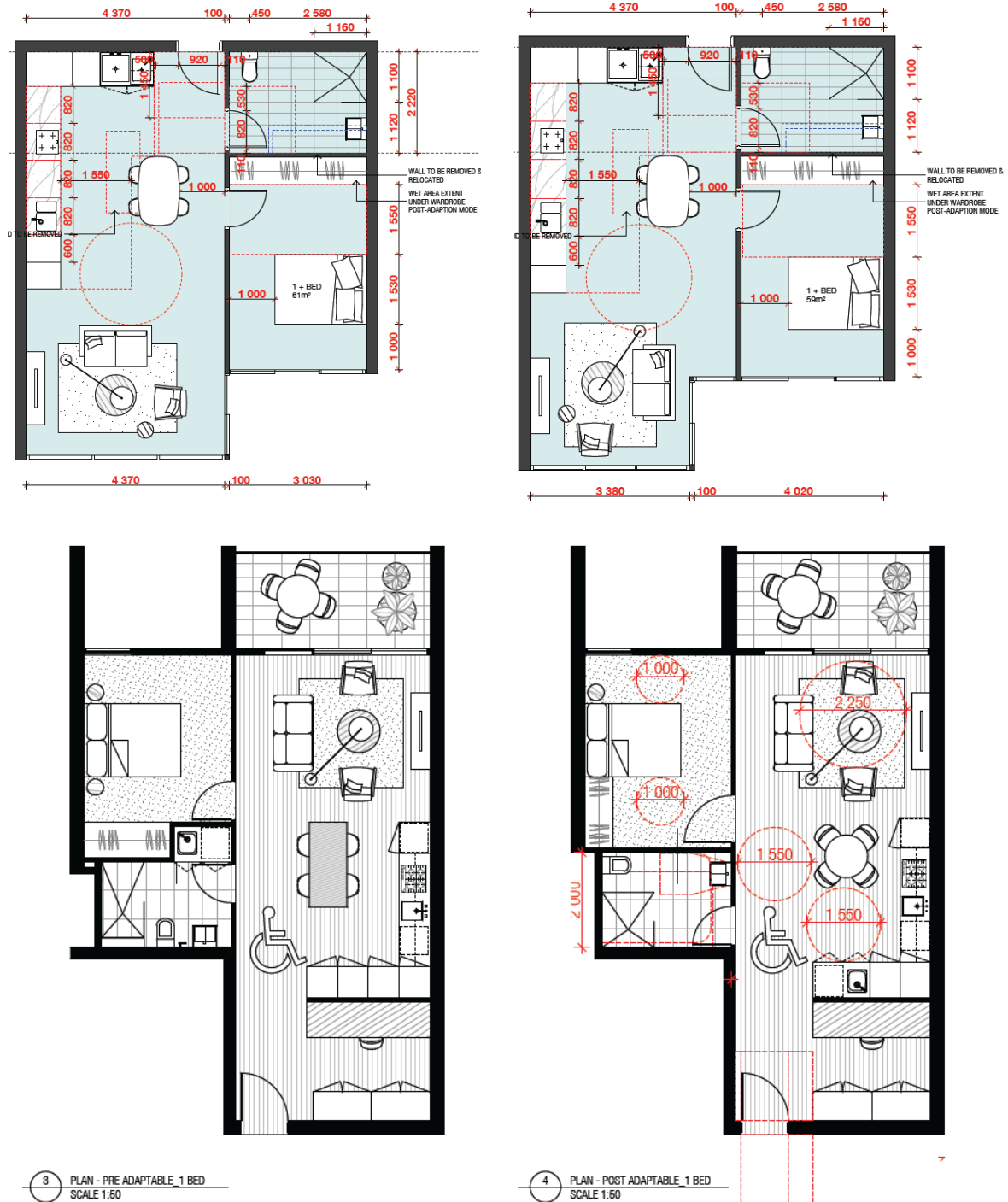
BCA / DCP Access Review	Complies
46. The pool indicates a 40 metre perimeter and will include a pool hoist to comply with D3.10 of the BCA.	YES at CC stage

Part B - Adaptability Assessment

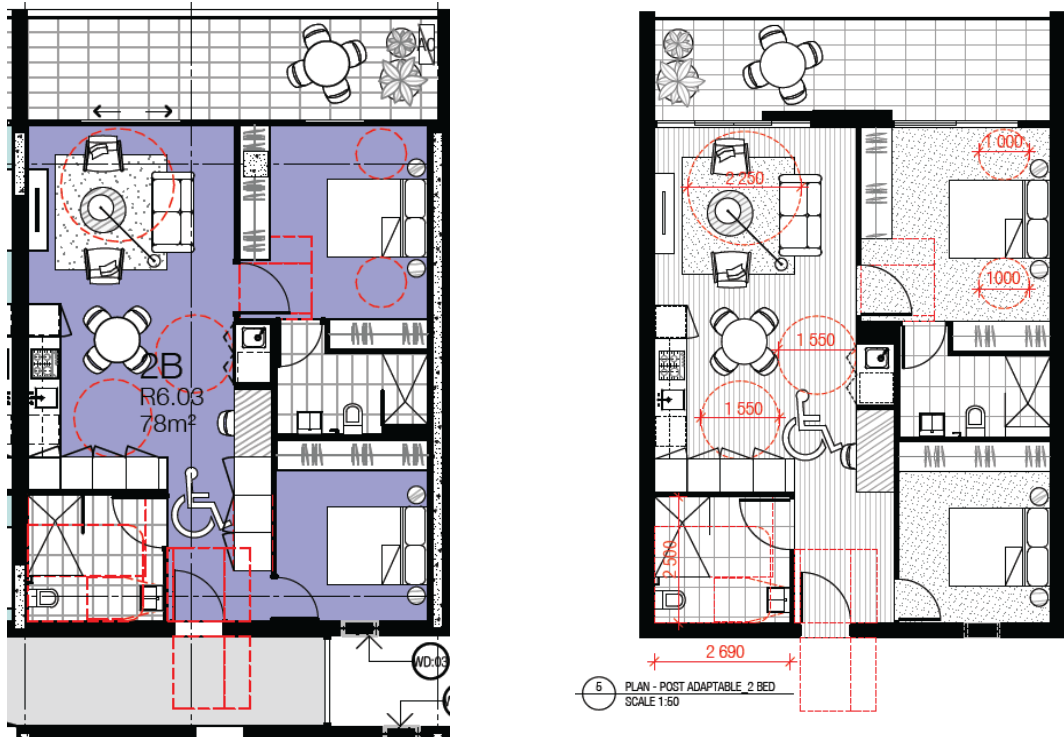
Adaptability Assessment

The following provides an assessment of the designated “adaptable” units in accordance with Category C of the Adaptable Housing Standard – AS4299.

- 8 X 1 bedroom apartments – Building B (No. 26 Shepherd) from Level 00-01 & 04 to 07



- 6 X 1 bedroom apartments – Building C1 (No. 28 Shepherd) from Level 6 to 11.
- 6 X 1 bedroom apartments – Building C2 (No. 28 Shepherd) from Level 1 to 5.



16 X 2 bedroom apartments – Building CI (No. 28 Shepherd) from Level 2 to 17.



2 X 3 bedroom apartments – Building B (No. 26 Shepherd) from Level 00 to 01.

The following provides an assessment of the designated “adaptable” apartments in accordance with Category C of the Adaptable Housing Standard – AS4299.

In accordance with Council’s Access DCP at least thirty-eight (38) of the three-hundred and seventy-two (372) apartments shall be adaptable and shall comply with AS4299 to Class C.

The adaptable apartment types are –

- 8 X 1 bedroom apartments – Building B (No. 26 Shepherd) from Level 00-01 & 04 to 07
- 6 X 1 bedroom apartments – Building C1 (No. 28 Shepherd) from Level 6 to 11.
- 16 X 2 bedroom apartments – Building C1 (No. 28 Shepherd) from Level 2 to 17.
- 6 X 1 bedroom apartments – Building C2 (No. 28 Shepherd) from Level 1 to 5.
- 2 X 3 bedroom apartments – Building B (No. 26 Shepherd) from Level 00 to 01.

Clause	Adaptability Assessment	Compliance
AS4299 Cls 3.3 and 3.5	<p>Common Resident Site Access & Entry Lobbies – Part A of this report confirms that the development will provide accessible lobby entrances and continuous accessible paths of travel to enter the lifts and ensure equitable access in accordance with AS1428.1 to satisfy Parts D3.2/D3.3 of the BCA and Council’s DCP.</p> <p>Overall I am satisfied that the principal site and building entrances and access to the lifts and common corridor accessways will provide appropriate access for people with disabilities in accordance with AS1428.1 / AS4299.</p>	YES
AS4299 Cls 3.7	<p>Resident Car Parking</p> <p>The car park provides thirty-eight (38) accessible resident parking spaces of;</p> <ul style="list-style-type: none"> • 2400mm width that adjoin a 2400mm width shared area to comply with AS2890.6 and be consistent with AS4299; OR • 3200mm width which adjoin a driveway to facilitate the required shared area access space consistent with the intent of AS2890.6 and AS4299. <p>The car spaces will be graded at a 1:40 maximum slope and crossfall in accordance with AS2890 with an accessible path of travel to the lifts.</p> <p>The car parking provides 2200mm minimum entry height clearance and 2500mm height over the designated accessible parking spaces in accordance with AS4299.</p>	YES
AS4299 Clauses 4.3.1, 4.3.2 and 4.3.3	<p>Accessible entries – The front entrances to the adaptable units provide at least 1600mm X 1600mm externally with 530mm minimum latch side clearance, which complies with the spatial requirements of AS4299. The internal foyer areas can also provide 530mm minimum latch side clearance to comply with the spatial requirements of AS4299 by adapting the fridge location within the kitchen.</p>	YES

Clause	Adaptability Assessment	Compliance
	Interior: general – With regard to the internal corridors and doorway approaches to a <u>main bedroom</u> , adaptable bathroom and laundry the post adaption of an adjacent stud wall or sliding door conversion to swing doors will enable complying the doorway circulation spaces to satisfy AS1428/4299.	YES
AS4299 Cls 4.3.7	Doors and Door Hardware The plans will confirm 920mm external door widths, 870mm internal door widths and lever handles at construction drawing stage to confirm compliance.	YES
AS4299 Clause 4.7	Living and Dining rooms – The plans show combined living and dining areas on a single level with sufficient area to provide a 2250mm diameter turning area to comply with this clause.	YES
AS4299 Clause 4.5	Kitchen – The single galley kitchens provide the required 1550mm minimum circulation space adjacent to the benches and appliances to comply with AS4299 requirements. The double galley kitchens with the free standing island bench can be readily adapted to achieve 1550mm clearance to comply with AS4299. With regard to the “adaptability” of the kitchen the construction drawings shall provide details of an appropriate layout of sink, fridge, wall oven, cooktop and height adjustable workbench that readily satisfies the “ease of adaptation” guidelines outlined in section 2 – Performance Objectives of AS4299. Therefore, subject to confirmation of the installation of kitchen cupboards, appliances and the like at the construction documentation stage it is evident that the kitchens will comply with AS4299.	YES YES YES
AS4299 Clause 4.6	Main bedroom – The plans show a main bedroom for the adaptable Units will allow a circulation area of 1540mm X 2070mm clear of a queen sized bed while maintaining 1000-1200mm clearance on the side and 1000-1200mm at the foot of the bed and clear of the wardrobe to satisfy AS4299. The rooms shall have a minimum area of; <ul style="list-style-type: none"> • 1 bedroom type - 4100mm-5800mm X 3000mm clear of the robe when adapted. • 2 bedroom type - 3700mm X 3550mm clear of the robe when adapted. • 3 bedroom type - 4200mm X 3000mm clear of the robe. There are several options to adapt the wardrobe location to enhance internal bedroom access to comply with AS4299.	YES YES YES YES
AS4299 Clause 4.7	Bathroom – The plans show that the bathrooms for each apartment will be at least 2000mm X 3000-3300mm or 2400mm X 2650mm with a post adaptation modification to; <ul style="list-style-type: none"> • Remove the shower screen and relocate the toilet pan which enables compliance with AS1428 in terms of spatial area setout. 	YES YES

Clause	Adaptability Assessment	Compliance
	<ul style="list-style-type: none"> Modify the vanity to a wall basin which enables compliance with AS1428 in terms of spatial area setout. 	YES
AS4299 Cls 4.4.3	Toilet – The toilet within the bathroom shall comply with AS4299 by providing 1250mm X 900mm in front of the WC pan.	YES
AS4299 Clause 4.8	Laundry – The laundry facilities are provided in a closet, which enables 1550mm X 1550mm clear circulation space in front of the appliances to comply with AS4299.	YES
AS4299 Cls 3.5(b)	<p>Outdoor Private Open Space – The plans show outdoor terrace areas adjacent to living areas with sliding doors.</p> <p>The areas provide adequate space to perform a 180 degree wheelchair manoeuvre.</p> <p>While the plans do not indicate thresholds the construction drawings will confirm a 35mm maximum change in level with the capability for threshold ramps to comply with AS1428/4299.</p>	YES

In summary, I conclude that these units and associated common domain facilities will comply with fundamental spatial design criteria of Adaptable Housing AS4299.

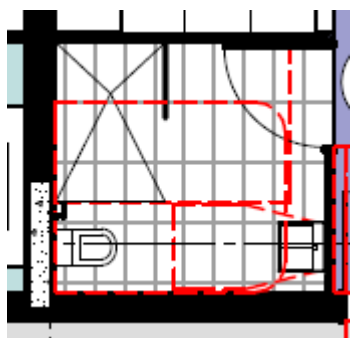
PART C – SEPP 65 Apartment Design Guide Universal Access

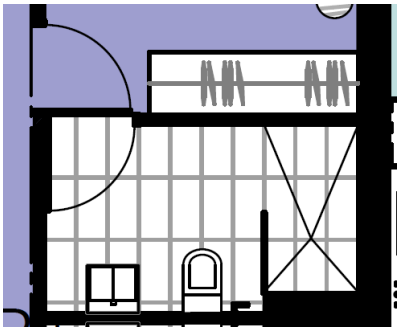
SEPP 65 Apartment Design Code – Section 4Q : Universal Access

The following assessment findings are provided to demonstrate compliance with the Silver Level requirements of the SEPP 65 Apartment Design Code for 20% of the apartments.

The nominated Silver Level Livable Housing apartments are;

- 7 X 2 Bedroom Apartments C203, C303, C403, C503, C603, C703, C803.
- 27 X 2 Bedroom Apartments C2.10, D2.05 and similar ensuites

Silver Level Livable Housing	Assessment Findings	
Element 1 – Common Area Access to Apartments	<p>Section A of this report confirms that the site entrances and pathways to the principal entry lobbies will comply with AS1428.1 and enable access to lifts which travel to all floors and along 1800mm minimum width corridors to the abovementioned apartments within Buildings C & D in accordance with AS1428.1 to satisfy Parts D3.2 and D3.3 of the BCA.</p> <p>As a consequence the access to apartments also satisfies the Silver Level Livable Housing Guidelines.</p>	
Element 2 – Apartment Entrances	<p>The entrances doorways will be detailed with 920mm doors with level thresholds and 1200mm X 1200mm minimum doorway landing areas to comply with the Silver Level Livable Housing Guidelines.</p>	
Element 3 – Car Parking	<p>The parking is located within the basement and does not form, part of an access path to an apartment entrance and therefore Class 2 residential flat building are exemption from this clause.</p>	
Element 4 – Internal Doors & Corridors	<p>The plans illustrate 1000mm minimum width corridors while the construction documentation shall confirm 870mm minimum internal doors to achieve 820mm clear opening widths to comply with the Silver Level Livable Housing Guidelines.</p>	
Element 5 – Toilet	<p>The bathrooms shall provide a toilet in the corner of a room to allow for future installation of grabrails and provide at least 900mm X 1200mm clear circulation space in front of the toilet pan with no inward swing door encroachment to comply with the Silver Level Livable Housing Guidelines.</p>	 <p>7 x Apt R203 and similar</p>

Silver Level Livable Housing	Assessment Findings	
Element 5 – Toilet	<p>The ensuites can be amended to provide a toilet in the corner of a room to allow for future installation of grabrails and provide at least 900mm X 1200mm clear circulation space in front of the toilet pan with A SLIDING DOOR to comply with the Silver Level Livable Housing Guidelines.</p>	 <p>27 x Apt R2.10 and similar</p>
Element 6 – Shower	<p>The bathrooms shall provide a shower in the corner of a room with a level entry (no hob) and a slip resistant floor surface, which will be confirmed at the construction certificate stage to comply with the Silver Level Livable Housing Guidelines.</p>	
Element 7 – Reinforcement of bathroom walls & toilet walls	<p>The construction certificate documentation shall confirm wall reinforcing around the toilet pan and a hobless shower in accordance within the technical specifications of the Silver Level Livable Housing Guidelines.</p>	
Element 8 – Internal apartment stairs	<p>This element is not applicable as all apartments are single level.</p>	

Appendix A – Statement of Expertise



Accessibility Solutions consultancy offers a range of services to provide advice for clients to develop new and modify existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations relevant to people with disabilities.

Relevant legislation and regulations that underpins advice includes the Disability Discrimination Act (DDA) Building Code of Australia, Australian Standards 1428, DDA Premises Standards, DDA Transport Standard, State Environment Planning Policy Housing for Seniors or People With a Disability (SEPP HS) / Seniors Living Policy, SEPP 65 – Apartment Design Guide and various local government DCP's.

The scope of services provided by Accessibility Solutions includes:

- Plan Appraisals and design advice
- Access Reports for development applications and construction certificates
- Expert Reports for Court evidence
- Access Auditing of existing buildings, facilities, transport conveyances and infrastructure
- Policy and document reviews and development of Disability Action Plans
- Staff training in access auditing

The services consider issues concerning people with all types of disability including; physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with a disability consistent with the Disability Discrimination Act.

As principal consultant Mark Relf has considerable experience and expertise in a wide range of access related projects and is an accredited member of the Association of Consultants in Access Australia for the purposes of providing advice concerning access to the built environment and services for people with disabilities.

His expertise has been gained over 20 years working in management and advocacy roles within the disability sector and since 1994 providing advice to clients on access issues. Mark also participates on various key committees concerning access for people with disabilities. His qualifications and affiliations are:

- Accredited Member of the Association of Consultants in Access Australia.
- Member, Standards Australia ME/64 Committee responsible for the AS1428 suite and AS4299 – Adaptable Housing.
- Former Member 2000-2014, NSW Heritage Office's – Fire, Access and Services Advisory Panel.

