

ACCESS REPORT

**1, 1A-5 AVON ROAD &
4 BEECHWORTH ROAD
PYMBLE**

**MULTI-UNIT RESIDENTIAL
DEVELOPMENT**

Prepared By Mark Relf

29TH November 2012



Accessibility Solutions (NSW) PTY LTD

ABN 20 105 200 128 | 20 Begonia Street PAGEWOOD 2035

Tel: 9695-1940 | Fax: 9695-1906 | Mob: 0417-467-007 | Email: markrelf@bigpond.com

Introduction

This report has been prepared to provide an Access Report for a proposed masterplan for a multi-unit residential development on a site at I, 1A-5 Avon Road and 4 Beechworth Road Pymble.

The development proposes four (4) residential flat buildings consisting of 273 apartments, 324 parking spaces and associated outdoor pathways.

The scope of this report considers the various legislation, planning instruments and standards pertaining to access for people with disabilities as listed below in relation to:

- The provision of accessible paths of travel from the street frontages to each building; and
- Detailed review of Building I.

Assessment Criteria

- (1) Building Code of Australia (2012) and DDA Access Code
- (2) SEPP 65 – Design Quality of Residential Flat Development.
- (3) SEPP 65 – Residential Flat Building Design Code (SEPP 65 Design Code).
- (4) LEP 194 – Ku-Ring-Gai Local Environment Plan.
- (5) DCP 55 – Ku-Ring-Gai Multi-Unit Housing.
- (6) DCP 31 – Access.
- (7) Australian Standard AS1428.1 (2009) – Design for Access and Mobility and referenced standards.
- (8) Australian Standard AS4299 (1995) – Adaptable Housing.
- (9) Australian Standard AS2890.1 (1993) and AS2890.6 (2009) – Off Street Parking.

Report Format

The report provides the following Parts to reflect the various elements:

- **Part A – Common Areas:** provides a general assessment of the common area accessways and amenities against the relevant Australian Standards AS1428 (Parts 1 and 4.1) in accordance with Parts D3 and E3.6 of the BCA.
- **Part B – Building No. I:** provides a regulatory review of the residential component of the development against the accessibility and adaptability requirements of Council's LEP 194, DCP 55 and Access DCP 31 and the Adaptable Housing standard AS4299.

Plans

The plans relied upon for this accessibility assessment includes the following:

Architectural Drawings – Issue A**DRAWING LIST**

DA 00.01 COVER PAGE
 DA 02.01 LOWER GROUND
 DA 02.02 GROUND LEVEL
 DA 02.03 LEVEL 1
 DA 02.04 LEVEL 2
 DA 02.05 LEVEL 3
 DA 02.06 LEVEL 4
 DA 02.00 ROOF
 DA 03.01 ELEVATION EAST
 DA 03.02 ELEVATION SOUTH
 DA 03.03 ELEVATION NORTH
 DA 03.04 ELEVATION WEST
 DA 04.01 SECTION AA
 DA 04.02 SECTION BB
 DA 05.01 PHOTOMONTAGE 1
 DA 05.02 PHOTOMONTAGE 2

Landscape Drawings

DRAWING SCHEDULE			ISSUE	DATE
LAN-SI-000	LANDSCAPE COVER SHEET			
LAN-SI-001	LANDSCAPE MASTERPLAN	1:500	B	28.11.2012
LAN-SI-002	TREE REMOVAL AND RETENTION PLAN	1:500	B	28.11.2012
LAN-SI-003	LANDSCAPE ZONES	1:750	B	28.11.2012
LAN-SI-004	LANDSCAPE DESIGN FEATURES		B	28.11.2012
LAN-SI-C100	LANDSCAPE MASTERPLAN- COLOUR	1:500	B	28.11.2012

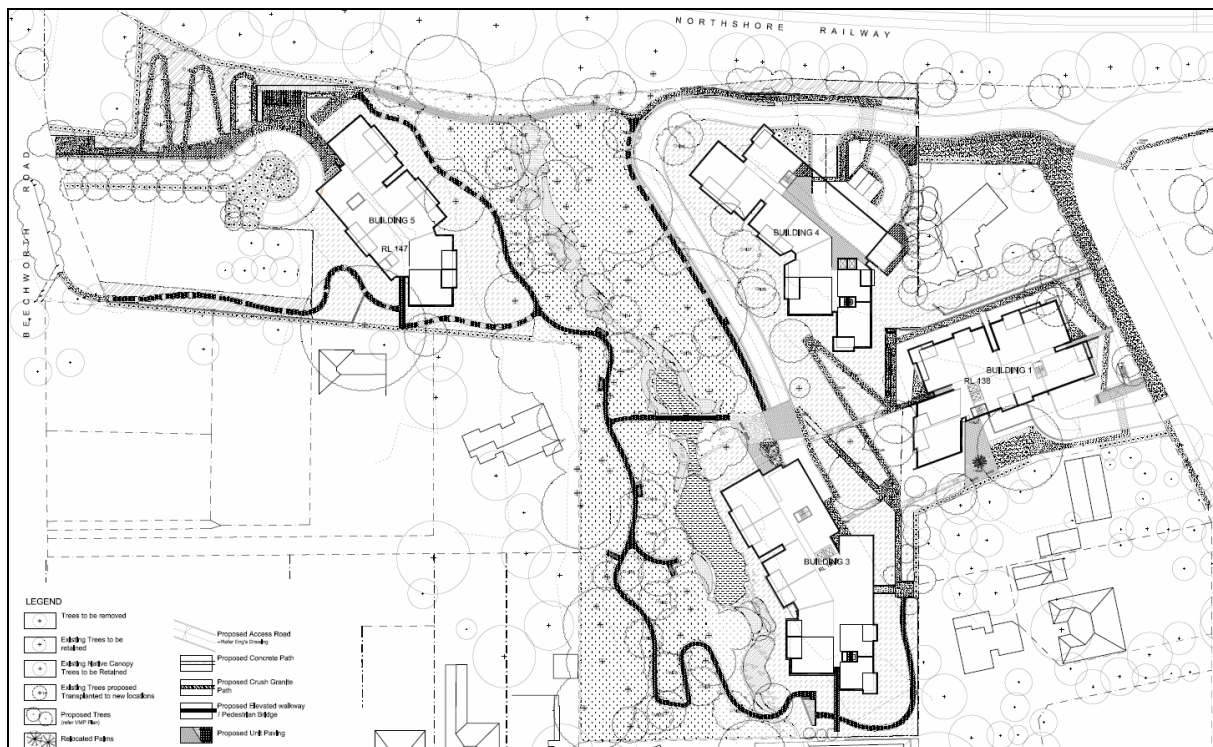
Part A – Accessibility of Common Domain Areas

With respect to residential flat buildings (BCA Class 2) a development is required to provide accessible common domain areas and amenities as described in Table D3.1 and Parts D3.2, D3.3, D3.8, E3.6 of the BCA.

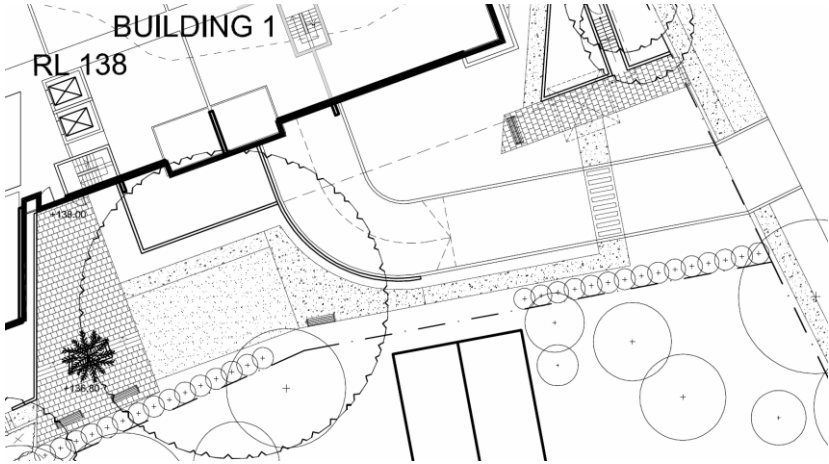
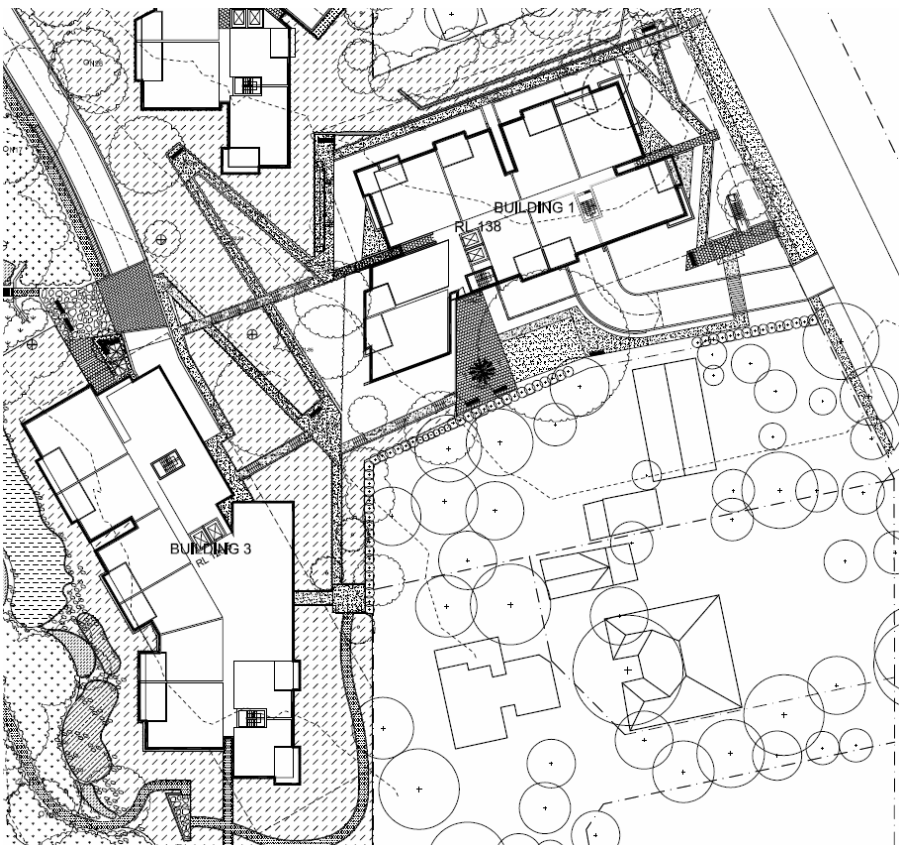
In accordance with Table D3.1 of the BCA a development is required;

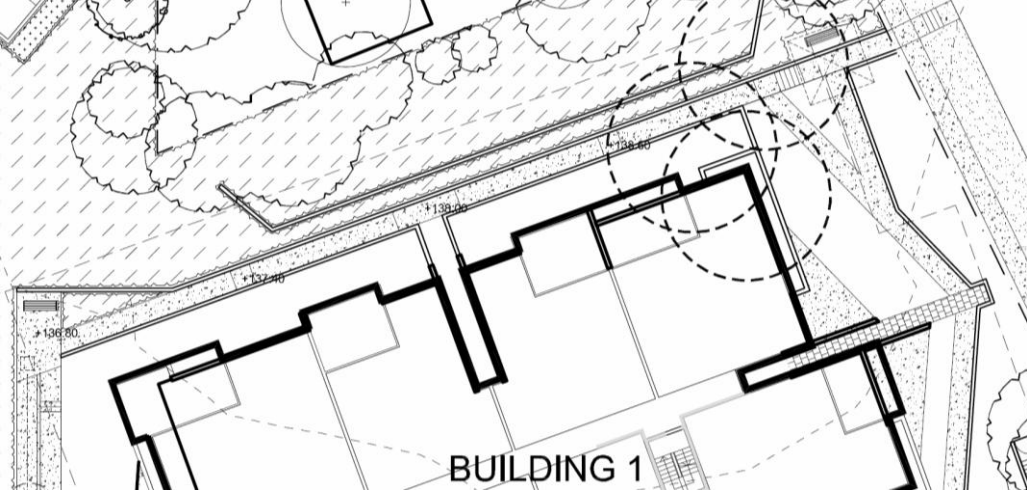
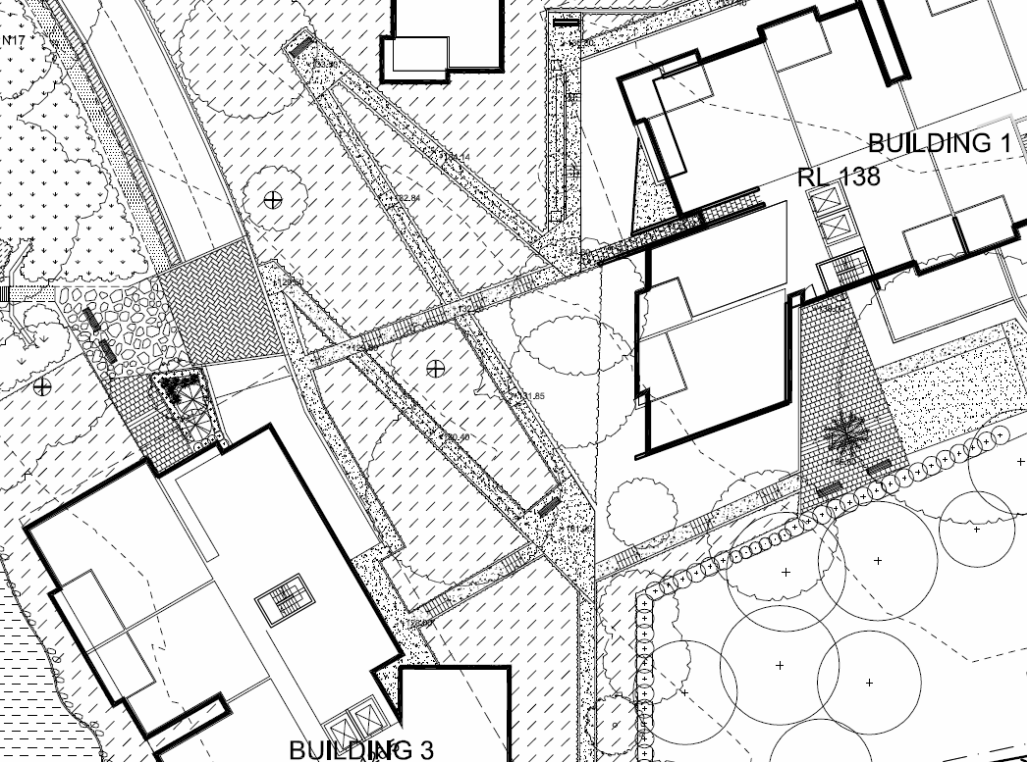
- To provide a pedestrian entrance to be accessible to at least one (1) floor containing sole occupancy units and to the entrance doorway of each sole occupancy unit located on that level, and
- To and within not less than one (1) of each type of room or space for use in common by the residents, including 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 —
 - 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 a lift or ramp.

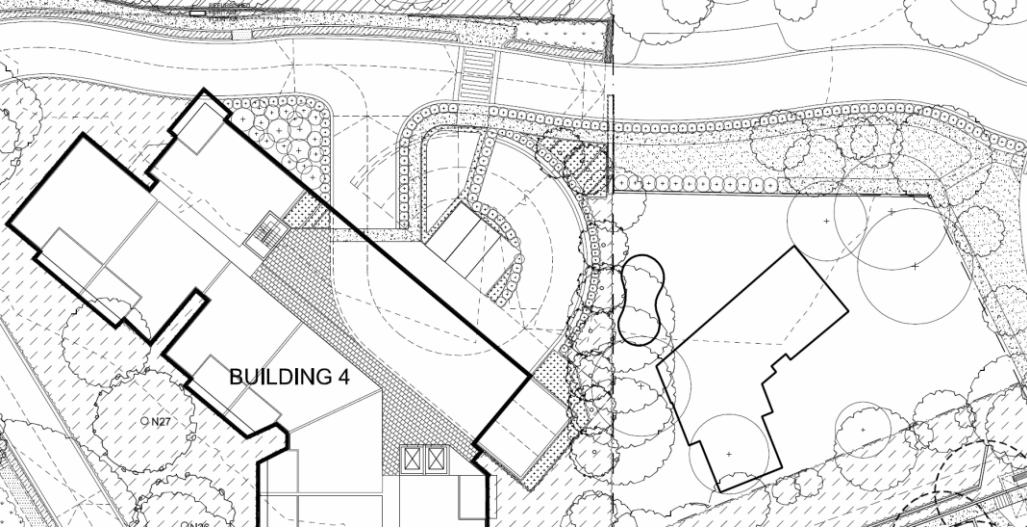
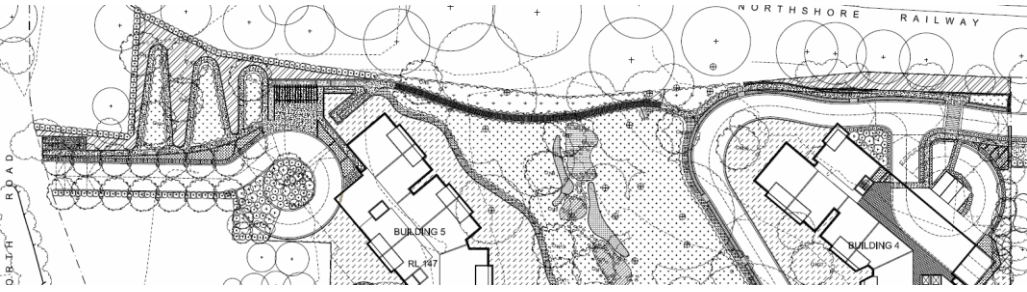
Part A of this report provides an assessment of the outdoor pedestrian access from street frontages each building and generally to the passive recreation pathways through the site.

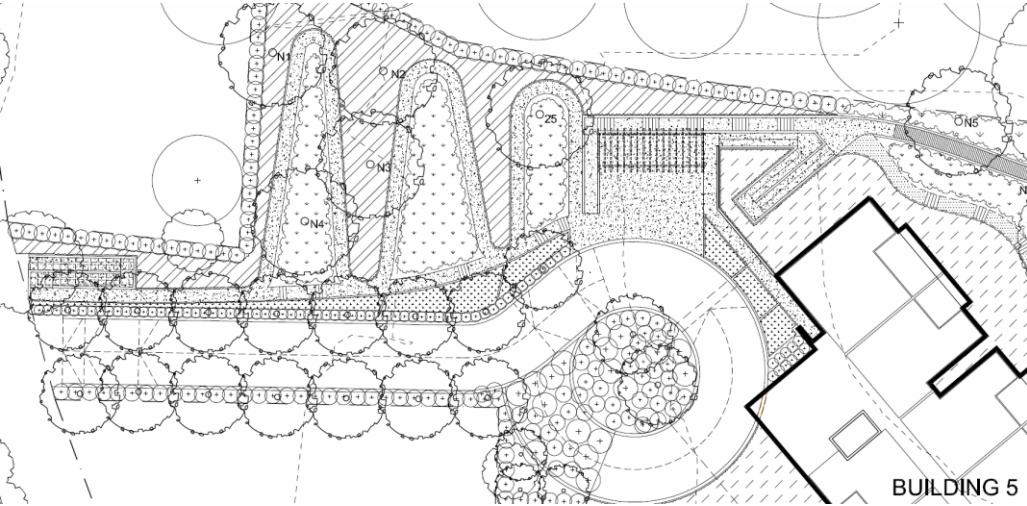


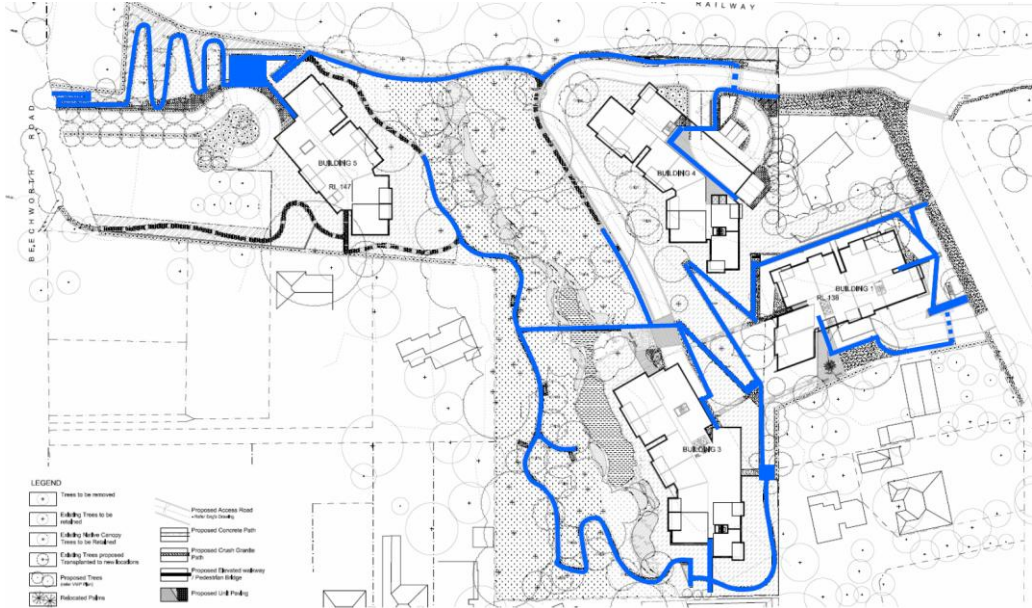
Landscape Site Plan

BCA Review	Complies
<p>Site Access Paths -</p> <p>1. The development proposes four buildings 1, 3, and 4 adjoining Avon Road and building no 5 adjoining Beechworth Road.</p> <p>Building No. 1</p> <p>2. The development proposes a site entry to Building 1 adjacent to the driveway that commences at approximately RL137.00. The 2400mm width entry path travels to a crossing over the driveway and then continues as a 1200mm width walkway not exceeding 1:20 to the principal building entry @RL138.00 in accordance with ASI428.1 to satisfy Table D3.1 and Part D3.2 of the BCA.</p> <p>3. The entry forecourt provides ample circulation space to approach and entry the building lobby.</p> 	<p>YES</p> <p>YES</p>
	

BCA Review	Complies
<p>Building No. 3</p> <p>4. To access Building No 3 the development proposes a site entry on the northern side of Building 1 that commences at approximately RLI 40.00 with a 1:14 ramp travelling into the site and along the northern side of Building 1 to a turn @RLI 36.80 which incorporates a resting point with a seat.</p> 	YES
<p>5. The 1200mm width accessible ramp continues through a landscaped area with a series of ramps and rest landings to the principal building entry @RLI 28.00 in accordance with ASI 428.1 to satisfy Table D3.1 and Part D3.2 of the BCA.</p>	YES
<p>6. The entry forecourt provides appropriate circulation space in accordance with ASI 428.1 to enter the building lobby @RLI 28.00 to satisfy Table D3.1 and Part D3.2 of the BCA..</p>	YES
<p>7. In addition to the ramp systems there are stairway links for people who are ambulant who wish to use the stairways.</p>	YES
	

BCA Review	Complies
<p>Building No. 4</p> <p>8. To access Building No 4 the development proposes a site entry on the boundary that commences at approximately RL148.00 with a 1:14 ramp travelling into the site and adjacent to the driveway for approximately 20 metres to a driveway crossing @RL 146.80. The 1:14 ramp continues for a further 20 metres to the No. 4 building entrance is at RL148.00, which incorporates a large under-croft area and vehicle drop-off point.</p> <p>9. The entry forecourt provides appropriate circulation space in accordance with ASI428.1 to enter the building lobby @RL148.00 to satisfy Table D3.1 and Part D3.2 of the BCA.</p>  <p>10. The plans show an additional 1:14 ramped pathway adjoining the northern side of the driveway that continues into the site to a junction @RL142.50, which forms an accessible through site link to Building No. 5 and Beechworth Road.</p> <p>11. The elevated bridge link across the valley shall provide moderate gradients of less than 1:25.</p> <p>12. This accessible through site link shall be detailed in accordance with ASI428.1 to enable equitable access for people with mobility impairments to satisfy Table D3.1 and Part D3.2 of the BCA.</p> 	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>
<p>Building No. 5</p> <p>13. To access Building No 5 the development proposes a site entry at Beechworth Road that commences at approximately RL159.00 with a 1:14 ramp travelling into the site and adjacent to the driveway for approximately 40 metres to RL156.50 where the plans show a large landscaped area with a meandering ramp system</p>	<p>YES</p>

BCA Review	Complies
<p>that continues for a further 100 metres to the No 5 building forecourt and entrance @RL148.00, which incorporates an under-croft area and vehicle drop-off point.</p>  <p>14. This accessible pathway to Building No 5 shall be detailed in accordance with AS1428.1 to enable equitable access for people with mobility impairments to satisfy Table D3.1 and Part D3.2 of the BCA.</p>	YES
<p>Lobby Entrances</p> <p>15. With respect to the accessibility of entrance lobbies future development applications for each building will provide details of accessible doorways and circulation spaces in accordance with AS1428.1 to satisfy Part D3.2 and Table D3.1 of the BCA.</p>	YES
<p>Internal Building Access</p> <p>16. The plans indicate that each building shall provide lifts that will be detailed to travel to all levels to ensure equitable to satisfy Part D3.2 and Table D3.1 of the BCA.</p>	YES
<p>External Stairways</p> <p>17. In accordance with part D3.3(a)(ii) of the BCA the external stairways that form a primary access path to a building entrance will be detailed at construction stage with handrails on both sides to the requirements of AS1428.1, step nosings, closed risers and tactile ground surface indicators.</p>	YES
<p>Valley Walk</p> <p>18. The plan below illustrates the wide range of wheelchair accessible pathways that meander through the site which confirm a high degree of accessibility and inclusive access.</p>	YES

BCA Review	Complies
	Complies
<p>Conclusion</p> <p>19. It is evident from the plans and above assessment that the development proposal will provide accessible paths of travel to and within the site to all buildings in accordance with accessibility requirements of Part D3 the BCA and Council's LEP / DCP 55 pertaining to accessibility of multi-unit residential development.</p> <p>20. Additionally the plans confirm an accessible through site link from Beechworth Road to Avon Road and various internal site accessways for passive recreation consistent with the DDA Council's LEP / DCP 55 pertaining to access for people with disabilities.</p>	<p>YES</p> <p>YES</p>

Part B – Building No. 1 Access & Adaptability Assessment

In review of Building No. 1 this assessment considers the various codes and regulations as previously listed. In particular:

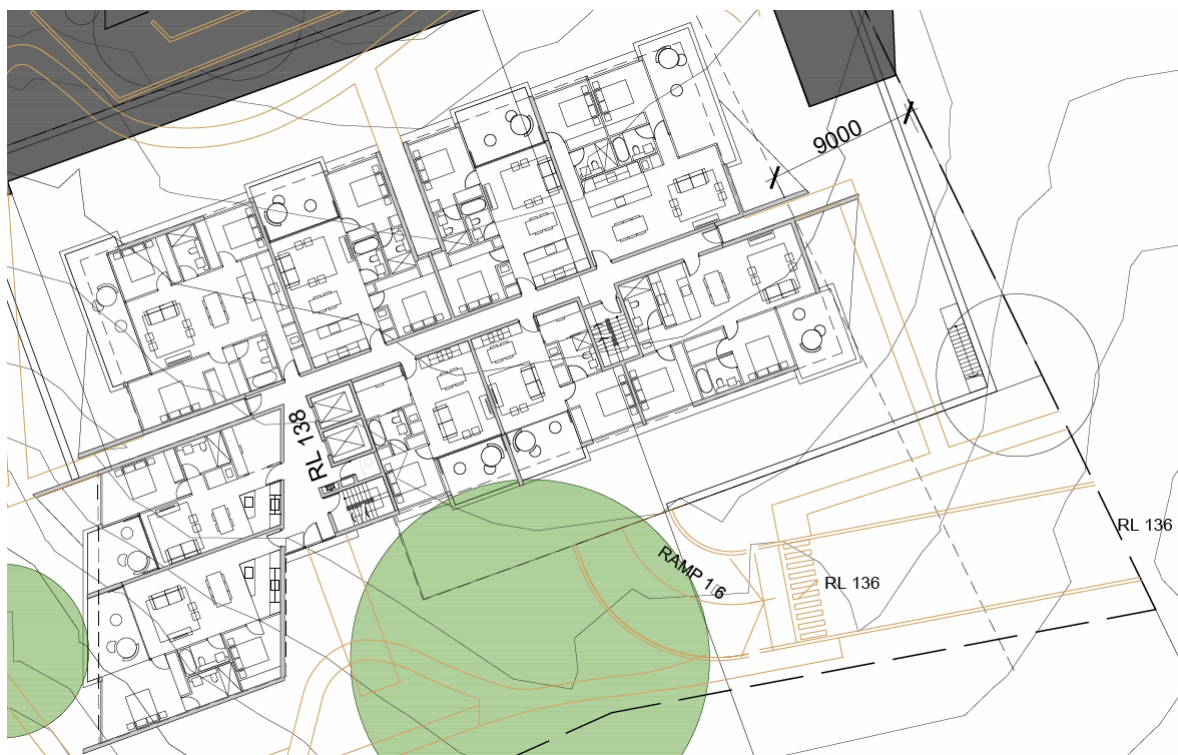
- Site and building entry access;
- Common area accessibility within the building to all apartments entrance doorways on levels served by a lift as required by Table D3.1 of the BCA;
- 70% of apartments to be “visitable” as required by Sections 25N of the LEP 194 and Section 4.7 of DCP 55 of Ku-Ring-Gai Council planning controls;
- 10% of apartments to be adaptable as required by Sections 25N of the LEP 194 and Section 4.7 of DCP 55 of Ku-Ring-Gai Council planning controls;

Building No. 1 proposes a five levels and a small lower ground floor level consisting of 44 apartments and basement parking for 55 cars.



Clause	Accessibility Assessment – Common Domain	Compliance
BCA Table D3.1 & Part D3.2	Site Access Paths - The development proposes accessible site entrance from Avon Road which incorporates a portico structure to identify the principal entry and include the letterboxes. <ul style="list-style-type: none"> • The entry proposes a 1:20 gradient 2400mm width pathway 	

Clause	Accessibility Assessment – Common Domain	Compliance
	from the boundary to a pedestrian crossing of the driveway following by a 1:14 ramp system to the building entrance @RL138.00.	YES
	<ul style="list-style-type: none"> The 1:14 ramps shall be detailed with handrails, rest landings at 9 metre maximum intervals and other features in accordance with ASI428.1 to satisfy Part D3.3 of the BCA. 	YES



Ground Floor entry level – RL138.0

BCA Table D3.1 & Part D3.2	Lobby Entrances <p>The principal entrance lobby on the southern side of the building @RL138.0 can provide a level threshold entry with 920mm minimum doors (more if pivot hinge) providing 850mm minimum clear opening and circulation spaces to comply with ASI428.1 to satisfy Part D3.2 of the BCA.</p>	YES at CC stage
BCA Part D3.3 & Table D3.1	Lobby & Common Corridor Access <p>The entrance lobby incorporates lifts that facilitate easy access to the basement car park levels and upper floor levels to access the designated adaptable apartments.</p> <p>With regard to lift landings the plans show an irregular shaped area approximating 8000mm X 2000mm average width that facilitates appropriate Turning and Passing Areas and ample doorway circulation spaces to comply with ASI428.1 and satisfy Table D3.1, Parts D3.2 and D3.3 of the BCA.</p> <p>With regard to the common corridors and unit entrances the plans show 1200mm width corridor with an indented area adjoining a fire isolated stairway that facilitates a 1800mm X 2000mm Passing</p>	YES YES YES

Clause	Accessibility Assessment – Common Domain	Compliance
	Area to comply with AS1428.1 and satisfy Table D3.1, Parts D3.2 and D3.3 of the BCA.	
	To fully satisfy Part D3.3 of the BCA the end of the central corridor shall be modified to provide a 1540mm X 2070mm Turning Area, which can be readily achieved at the construction certificate stage.	YES
	The 1200mm width central corridor will also require an adjustment to 1250mm to satisfy Council's DCP 55 in terms of "visitable housing" requirements.	YES
	The lift and corridor accessways at each level provide wheelchair accessible paths of travel to all apartment entrance doorways to satisfy Table D3.1 and Part D3.2 of the BCA.	YES
BCA Part E3.6	Lift Access The plans indicate the lift cars will be at least 1400mm X 1600mm as specified by Part E3.6 of the BCA and AS1735.12 – <i>Lifts For People With Disabilities</i> .	YES
BCA D3.3(a)(ii) D3.8	Stairways In accordance with part D3.3(a)(ii) of the BCA the stairway at the external forecourt and other non fire-isolated stairs will be detailed at construction certificate stage with handrails on both sides to the requirements of AS1428.1, step nosings, closed risers and tactile ground surface indicators.	YES
BCA Table D3.1	Letterboxes The letter boxes shall be within the ground level within the portico entrance and will provide at least 1550mm X 1550mm circulation area and access to comply with AS1428.1 to satisfy Table D3.1 of the BCA.	YES
Visitable Housing		
LEP 194 & DCP 55	With regard to Visitability the plans show a 1200mm width central corridor adjoining the majority of the apartments and to achieve and accessible entry with circulation spaces complying with AS1428.1 the 1200mm width shall be adjusted to 1250mm minimum width to facilitate side-on accessible reach to doors.	YES at CC stage
	Subject to the central corridor providing 1250mm minimum width then at least thirty-one (31) apartments (70%) provide wheelchair accessible entrances and access to a living area with the capacity for a "visitable" toilet which satisfies the provisions of Section 4.7– Social Dimensions of DCP 55 .	YES at CC stage

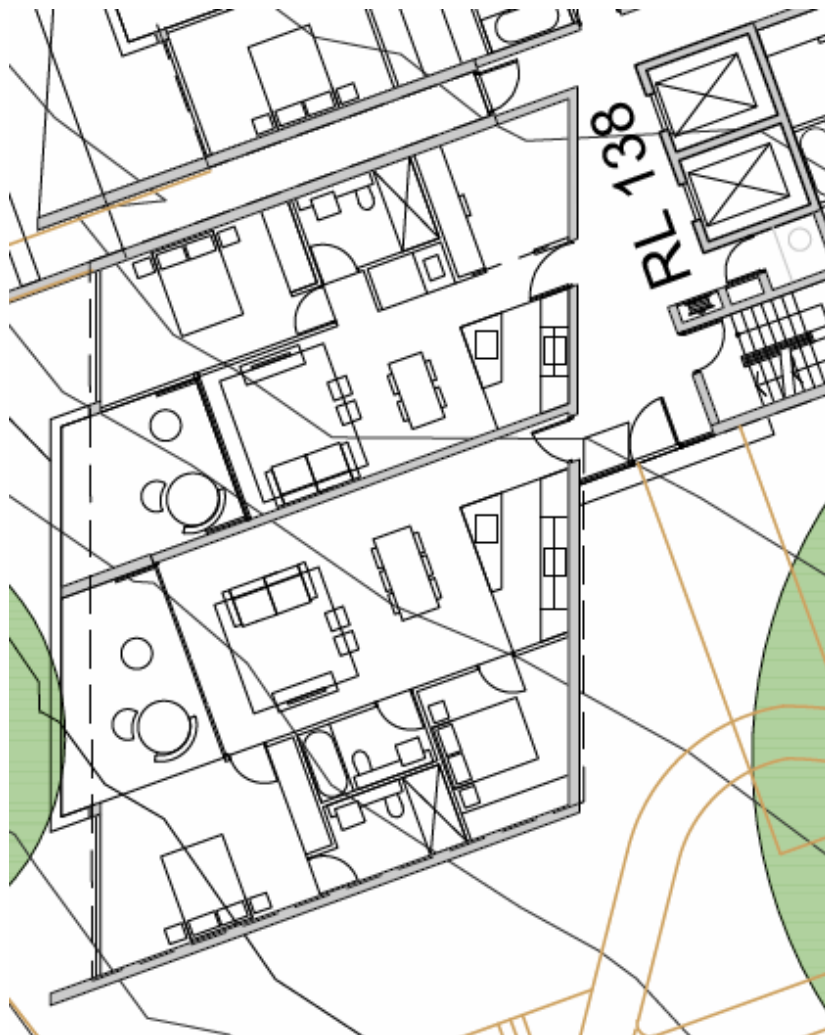
Adaptable Housing

With respect to the provision of “Adaptable” apartments Section 25N of the LEP 194 and Section 4.7 of DCP 55 the development requires 10% of apartments to be adaptable to Class C requirements of AS4299.

Building No. 1 proposes 10% of the 44 apartments, that being 5, will be “adaptable”.

Clause	Adaptability Assessment	Compliance
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The adaptability assessment has been applied to the 1 and 2 bed apartments as below.



AS4299 Clause 3.8	Letterboxes The development will provide letter boxes adjacent the principal entrance on Avon Road and can provide at least 1550mm X 1550mm level landing areas directly adjacent for circulation and access to comply with AS4299.	YES
BCA D3.1 AS4299 Clause 3.3	Building Entrances & Lobby Access See above assessment.	YES

Clause	Adaptability Assessment	Compliance
AS4299 Clause 3.7	<p>Resident Car Parking</p> <p>The basement car park provides 4 and potentially 5 accessible resident spaces of ;</p> <ul style="list-style-type: none"> 2400mm + 2400mm shared areas which are consistent with the intent of AS4299/AS2890.6 and Council's DCP. <p>The 5400mm length of car spaces within an open plan car park provide ample access at the rear of the vehicle to access the boot or for rear loading of wheelchairs and the like to satisfy the intent of AS4299.</p> <p>The basement provides at least 2500mm height clearance over the parking spaces in accordance with AS4299 while the floor area of these spaces will not exceed 2.5% (1:40 slope) to comply with AS4299.</p>	<p>YES at CC stage</p> <p>YES</p> <p>YES</p>
AS4299 Clauses 4.3.1, 4.3.2 and 4.3.3	<p>Accessible entry – The front entrances to these units can provide at least 1550mm X 1550mm externally in the common corridors with 530mm minimum latch side clearance to a 920mm width door (850mm clear opening width), which complies with the spatial requirements of AS4299.</p> <p>Internally the 1550mm wide entry foyers can be provided with 530mm minimum latch side clearance to satisfy the spatial requirements of AS4299.</p>	<p>YES</p> <p>YES</p>
AS4299 Cls 4.3.7	<p>Interior: general – The internal corridors provide 1000mm minimum width to the living areas, kitchens, bathrooms, to enter a <u>main bedroom</u>, additional bedrooms/studies with internal stud walls which are non-load bearing that can be modified to facilitate appropriate doorway circulation space to comply with AS1428/4299.</p> <p>Doors and Door Hardware</p> <p>While the plans do not indicate 920mm external door widths, 870mm internal door widths and lever handles these details shall be provided at construction drawing stage to confirm compliance.</p>	<p>YES</p> <p>YES</p>
AS4299 Clause 4.7	<p>Living and Dining rooms – The plans show combined living and dining area on a single level with sufficient area to provide a 2250mm diameter turning area to comply with this clause.</p>	<p>YES</p>
AS4299 Clause 4.5	<p>Kitchen – The kitchens incorporate a free standing island bench that can be adapted to provide 1550mm X 1550mm minimum circulation to comply with AS4299.</p> <p>With regard to the “adaptability” of the kitchen it is evident that the cupboards and layout provide adequate space to accommodate a wall oven, cooktop and 800mm width adjustable bench unit while the kitchen sink will remain in the same position pre and post adaptation.</p> <p>Therefore, subject to confirmation of the installation of kitchen cupboards, appliances and the like at the construction documentation stage it is apparent that the kitchen will comply with AS4299.</p>	<p>YES at CC stage</p> <p>YES</p>

Clause	Adaptability Assessment	Compliance
AS4299 Clause 4.6	Main bedroom – The plans show the main bedroom for these Units can provide the required circulation spaces around a queen sized bed to achieve 4300mm X 3200mm plus a built-in robe; The post adaptation plans would illustrate 1200mm minimum on two sides and 1540mm X 2070mm circulation space adjacent a queen sized bed with enhanced door access and overall internal manoeuvring area to comply with AS1428/4299.	YES at CC stage YES
AS4299 Cls 4.7	Bathroom – The plans show the bathrooms or ensuites that could facilitate a 2000mm X 3000mm with a layout of sanitary facilities which complies with AS1428/4299.	YES at CC stage
AS4299 Cls 4.4.3	Toilet – The size and layout of the bathroom or ensuites would need to be adjusted at CC stage to enable the toilet to provide 1250mm clearance in front of the pan to comply with AS4299.	YES at CC stage
AS4299 Clause 4.8	Laundry – The laundry closets provide adequate space for a washing machine, drier and basin, while the installation of bi-fold doors or similar will facilitate the required minimum 1550mm X 1550mm clear circulation space in front of the appliances to comply with AS4299.	YES
AS4299 Cls 3.5(b)	Outdoor Private Open Space – The plans show outdoor balcony terrace areas adjacent living areas for these units with sliding doors for convenient access to balcony terraces, which provide adequate area to perform a 180 degree wheelchair manoeuvre. With regard to doorway thresholds to balconies and terraces the details of finished floor levels (FFL) shall be confirmed at construction certificate stage to confirm 1:8 maximum gradient threshold ramps at doorways with a 35mm maximum rise to facilitate wheelchair access and thereby comply with AS1428/4299.	YES

In summary, I conclude that these apartments and associated common domain facilities will comply with fundamental spatial design criteria of AS4299 and consequently the SEPP 65 Design Code and Adaptable Housing as defined by Section 4.7 of DCP 55.

Conclusion

In summary this assessment confirms the following outcomes;

- The common domain pathways and areas of the development will provide appropriate access for people with disabilities consistent with Table D3.1, Parts D3.2 and D3.3. of the BCA, which also satisfies Sections 25N of LEP 194 and 4.7 of DCP 55 and SEPP 65;
- There will be 100% visitability forty-four (31) apartments consistent with the BCA and LEP 194N while at least thirty-one (31) apartments can incorporate a visitable toilet to comply with the Section 4.7 of DCP 55 requirement of 70%; and
- That 10% of the 44 apartments – five (5) will be adaptable to comply with AS4299, which is consistent with Section 4.7 of DCP 55 requirement of 10%.

The access and adaptability review of the development demonstrates compliance with the relevant objectives and design code requirements in accordance with Table D3.1 of the BCA consistent with Ku-Ring-Gai Council's LEP 194 and DCP 55, which also satisfies SEPP 65 for multi-unit residential developments in terms of accessible pathways, visitable and adaptable housing for people with disabilities.



Mark Relf
Access Consultant (ACAA)

Appendix A – Statement of Expertise



CONSULTANCY PROFILE & 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 No. 5 Housing for Older People or People With a Disability (SEPP 5) / Seniors Living Policy, SEPP 65 – Residential Flat Buildings Design Code 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 principle consultant Mark Relf has considerable experience and expertise in a wide range of access related projects and is a recognised Access Adviser approved by the NSW Ageing and Disability Department and has attained accreditation with 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.
- Member, NSW Heritage Office's – Fire, Access and Services Advisory Panel.

