



CREDWELL

Project	Seniors Living Development 7-9 Brighton Road, Peakhurst & 21 Charles Street, Riverwood
Report	Access Report
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Document Control

Reference/Revision	Date	Description	BCA Assessment Report
220578-Access-r1	03/03/23	Prepared by	Tatenda Makurumidze Building Surveyor
		Reviewed by	Robert Briant Associate Building Surveyor – Unrestricted BDC0048
220578-Access-r2 <i>Inclusion of State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability updated</i>	14/04/23	Prepared by	Tatenda Makurumidze Building Surveyor
		Reviewed by	Christopher Ward Associate Building Surveyor – Unrestricted BDC2789
220578-Access-r3 <i>Inclusion of State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability updated and comments from the project's planner</i>	22/05/23	Prepared by	Tatenda Makurumidze Building Surveyor
		Reviewed by	Christopher Ward Associate Building Surveyor – Unrestricted BDC2789
220578-Access-r4 <i>Edited to incorporate comments for clients Town Planner</i>	05/06/23	Prepared by	Tatenda Makurumidze Building Surveyor
		Reviewed by	Christopher Ward Associate Building Surveyor – Unrestricted BDC2789

Reference/Revision	Date	Description	BCA Assessment Report
220578-Access-r5 <i>Updated to include the latest revision of the architectural design documents.</i>	14/08/23	Prepared by	Tatenda Makurumidze Building Surveyor
		Reviewed by	Christopher Ward Associate Building Surveyor – Unrestricted BDC2789
220578-Access-r6 <i>Updated to include the latest revision of the architectural design documents.</i> <i>Note: The assessment for this report is only limited to the areas clouded in red on Drawing N.o A200, Site Plan, Revision J.</i>	06/11/23	Prepared by	Tatenda Makurumidze Building Surveyor
			
		Reviewed by	Christopher Ward Associate Building Surveyor – Unrestricted BDC2789
			

1 Introduction

1.1 Development Location and Description

The development being the subject of this report is proposed to be located at 7-9 Brighton Road, Peakhurst & 21 Charles Street, Riverwood.

The proposed development consists of a two (2) storey building with a total of fourteen (14) seniors living development

The main pedestrian entrance to the residential component is located on Charles Street.

1.2 Objectives

The purpose of this Report is to provide an access assessment addressing:

1. all relevant clauses of the National Construction Code 2019 Volume 1 (the “BCA”) relating to the provision of access for people with a disability;
2. the Livable Housing Design Guidelines (LHDG) – Silver Level;
3. the State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability; and
4. associated Standards called up by the BCA and DCP including AS 1428.1-2009, AS 1428.4.1-2009, AS 2890.6-2009.

1.3 Limitations

This Report does not include, nor imply, any audit, assessment, or upgrading of the proposed development regarding:

1. Sections B, C, E (except clause E3.6), F (except clause F2.4), G, H, I and J, and Parts D1 and D2 of the BCA;
2. the adaptable housing requirements of Geroges River Council Development Control Plan 2021 (the “DCP”); and
3. the Apartment Design Guidelines (ADG), other than Objective 4Q-1;
4. The capacity or design of any electrical, fire, hydraulic or mechanical services.

This Report does not include, nor imply, any assessment of, or compliance with:

1. any development consent conditions;
2. the Liquor Licencing Act 2007;
3. the Work Health and Safety Act 2011;
4. the Swimming Pools Act 1992; and
5. requirements of Authorities including, but not limited to, WorkCover, RMS, Council, telecommunications supply authority, electricity supply authority, water supply authority, gas supply authority, and the like.

1.4 Disability Discrimination Act

The Disability Discrimination Act 1992 (Cth) (the “DDA”) is Commonwealth legislation (applies nationally). Amongst other things, it provides an avenue for an affected party to make a complaint of discrimination. Compliance with the BCA does not restrict a complaint of discrimination relating to the provision of access to and within a building from being made under the DDA. However, provided the building complies with the BCA and the Disability (Access to Premises – Building) Standards 2010, such a complaint cannot be successful.

1.5 Disability (Access to Premises - Buildings) Standards 2010

The Disability (Access to Premises – Buildings) Standards 2010 (the “Premises Standards”) was created under the DDA and is also Commonwealth legislation (applies nationally). The Premises Standards identifies buildings to which it applies before specifying construction standards that those buildings are required to comply with. In summary, the Premises Standards are applicable to a new building, a new part of a building, and an affected part of a building, and the construction standards applicable are contained within “Schedule 1 Access Code for Buildings”.

The Premises Standards provides a definition for a new building, a new part of a building, and an affected part of a building. The definition of a new building and a new part of a building is currently considered to be in line with standard dictionary definitions (unless a building or part obtained construction approvals prior to 1 May 2011). However, the term “affected part” is specific to the Premises Standards and is defined by clause 2.1(5) as follows –

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

The upgrade requirements of the Premises Standards are founded on determining whether a development within an existing building results in the creation of an affected part.

As previously mentioned, the construction standards of the Premises Standards are contained within “Schedule 1 Access Code for Buildings”. It should be noted that this part of the Premises Standards was prepared in consultation with the Australian Building Codes Board (ABCB – publisher of the BCA). As such, the requirements outlined in each document are the same. Therefore, assessment of the proposed development against the relevant requirements of the BCA applicable to access for people with a disability ensures that it also complies with the Premises Standards.

The subject proposed development incorporates construction of a new building; therefore, the entire building must comply with the Premises Standards. An assessment of the building against the relevant requirements of the BCA applicable to access for people with a disability, as outlined in this Report, is equivalent to an assessment against “Schedule 1 Access Code for Buildings” of the Premises Standards. Therefore, confirmation of compliance with the BCA should also be taken as confirmation of compliance with the Premises Standards.

1.6 Reviewed Documentation

The assessment outlined in this Report is based on review of the documentation referenced in Annexure A of this Report.

1.7 Specification

The following matters are to be addressed by design certification or a specification issued by the architect or relevant design consultant at the Crown Certificate (CC) stage of the development.

General

1. The subject proposed development will be accessible in accordance with clause D3.1 (including Table D3.1), D3.2, and D3.3 of BCA 2019, and AS 1428.1-2009. Specifically, continuous accessible paths of travel, door widths, circulation spaces at doorways, and floor coverings.
2. The unobstructed height of the continuous accessible paths of travel will be no less than 2,000mm generally, and 1,980mm at doorways.
3. Floor and ground floor surfaces on accessible paths and circulation spaces, including the external accessible areas, will comply with clause 7 of AS 1428.1-2009.
4. Carpets will have pile heights or thicknesses of not more than 11mm, and the carpet backing thickness will not exceed 4mm.
5. Doorways in accessible areas will have a clear opening of not less than 850mm and where a double door is provided the active leaf will provide a clear opening of not less than 850mm in accordance with clause 13 of AS1428.1-2009.
6. Accessible carparking will be provided in accordance with clause D3.5 and Table D3.5 of BCA 2019.
7. Accessible carparking spaces will comply with AS/NZS 2890.6-2009.
8. Bollards will be provided in the shared accessible car space area in accordance with clause 2.2.1(e) of AS/NZS 2890.6-2009.
9. Braille and tactile signage will comply with clause D3.6 of BCA 2019 and clause 8 of AS1428.1-2009. This includes identification of each sanitary facility, all accessible entrances (where there are entrances that are not accessible), and each door required by clause E4.5 of BCA 2019 to be provided with an exit sign.
10. Tactile ground surface indicators will be installed in accordance with clause D3.8 of BCA 2019 at the following locations:
 - a. to the top and bottom of stairways (other than fire-isolated stairways);
 - b. to warn of any overhead obstruction less than 2m above the finished floor level (in the absence of a suitable barrier); and
 - c. to an accessway meeting a vehicular way adjacent to a pedestrian entrance, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point.Tactile ground surface indicators will comply with Sections 1 and 2 of AS/NZS 1428.4.1-2009.

11. Ramps associated with an accessway will not have a combined vertical rise of more than 3.6m. Also, a landing for a step ramp will not overlap a landing for another step ramp or a ramp in accordance with clause D3.11 BCA 2019.
12. Walkways will comply with clause 10 of AS 1428.1-2009.
13. The floor or ground surfaces abutting the sides of the walkways will be firm and level, of a different material to that of the walkway, at the same level, and will follow the grade of the walkway and extend horizontally for a minimum of 600mm. Alternatively, the walkway will be provided with a kerb or kerb rail in accordance with clause 10.2 of AS 1428.1-2009.
14. On an accessway where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights or glazing capable of being mistaken for a doorway or opening will be clearly marked and comply with clause 6.6 of AS 1428.1-2009. A solid non-transparent contrasting line not less than 75mm wide is to extend across the full width of the glazing panel. The lower edge of the contrasting line is to be located between 900mm and 1,000mm above the plane of the finished floor level. The contrasting line is to provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2m of the glazing on the opposite side.
15. The luminance contrast at doorways will comply with clause 13.1 of AS 1428.1-2009. The doorways will have a luminance contrast of 30% between:
 - d. door leaf and door jamb/architrave; or
 - e. door leaf and adjacent wall; or
 - f. door jamb/architrave and adjacent wall.
16. Door controls will be in accordance with clause 13.5 of AS 1428.1-2009.
17. Stairways (except fire-isolated stairways) will comply with clause 11 of AS 1428.1-2009.
18. The fire-isolated stairs will comply with clause 11.1(f) and (g) of AS 1428.1-2009.
19. Handrails will comply with clause 12 of AS 1428.1-2009.
20. Accessible sanitary facilities will be provided in accordance with clause F2.4 and Table F2.4(a) of BCA 2019, and AS 1428.1-2009.
21. Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance with clause 15 of AS 1428.1-2009.
22. Grabrails will comply with clause 17 of AS 1428.1-2009.
23. Switches and power points will comply with clause 14 of AS 1428.1-2009.
24. All switches on an accessible path of travel and to an accessible sanitary facility, other than general purpose outlets, will be located not less than 900mm nor more than 1,100mm

above the finished floor level, and no less than 500mm from an internal corner in accordance with clause 14.1 of AS 1428.1-2009.

25. Within accessible areas of the building, particularly the accessible sanitary facilities, rocker action and toggle switches will be provided in accessible areas. These fittings will have minimum dimensions of 30mm x 30mm. Push-pad switches will have a minimum dimension of 25mm in diameter. These fittings will be located no less than 600mm nor more than 1,100mm from the finished floor level in accordance with clause 14.2 of AS 1428.1-2009.
26. Lift call buttons on an accessible path of travel will be located not less than 900mm nor more than 1,100mm above the finished floor level and no less than 500mm from an internal corner in accordance with clause 14.1 of AS 1428.1-2009.
27. Passenger lifts will comply with Table E3.6b of BCA 2019 and AS1735.12.

Livable Housing – Silver Level

28. The entrance doorway to the livable housing units will have a clear opening width of no less than 820mm.
29. Internal doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment purposes within the livable housing units will have a clear opening width of no less than 820mm in accordance with clause 3 of the Livable Housing Design Guidelines.
30. Internal corridors/passageways serving doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment purposes within the livable housing units will have a clear width of no less than 1,000mm in accordance with clause 3 of the Livable Housing Design Guidelines.
31. One (1) bathroom within the livable housing units will feature a slip-resistant, hob shower recess in accordance with clause 5 of the Livable Housing Design Guidelines
32. Walls around the shower and toilet within the livable housing units will be reinforced to provide a fixing surface for the safe installation of grabrails in the future. The reinforcement will withstand 1,100N applied in any position or direction in accordance with clause 6 of the Livable Housing Design Guidelines.

2 Statement of Compliance

This office has completed a detailed access review of the subject proposed development, as indicated on the drawings referenced in Annexure A of this Report, against the relevant requirements of the documents referenced in Section 1.2 of this Report. The details of this review are specified in the Assessment Tables provided in the discussion of the proposed development against the relevant document. Subject to this review, this office advises that the design of the proposed development complies, or is capable of complying, with the relevant requirements of the BCA, LHDG (Silver), and relevant parts of the State Environmental Planning Policy (Housing) 2021.

3 National Construction Code 2019 Amendment 1 Assessment

For the purposes of the BCA, the building is described as follows:

3.1 Classification

Class	Use	Area
Class 2	Residential Sole-Occupancy Units (SOUs)	Ground floor – First Floor

Note:

3.2 Areas to be accessible

Under the BCA the following areas are required to be accessible:

Level	Description	Area
Ground floor to First Floor	<p>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.</p> <p>To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <p>(a) to the entrance doorway of each sole-occupancy unit; and</p> <p>to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.</p>	Ground floor – First Floor

3.3 Lift travel distance

The lift travels from the first storey (having an FFL of 35.550) to the second storey (having an FFL of 40.200). Therefore, the lift travels 4.650 (40.200– 35.550= 4.650) which is less than 12m.

3.1 SEPP Housing 2021 - Schedule 4, Clause 5 - Private car accommodation

Schedule 4 part 2 Clause 5 of the State Environmental Planning Policy (Housing) 2021 requires, *If car parking (not being car parking for employees) is provided—*

- (a) *car parking spaces must comply with the requirements for parking for persons with a disability set out in AS 2890.6, and*
- (b) *10% of the total number of car parking spaces (or at least one space if there are fewer than 10 spaces) must be designed to enable the width of the spaces to be increased to 3.8 metres, and*
- (c) *any garage must have a power-operated door, or there must be a power point and an area for motor or control rods to enable a power-operated door to be installed at a later date.*

On review of the proposed car parking at the rear side of the allotment, only two (2) accessible carparking spaces have been provided in lieu of all car parking (not being car parking for employees) being provided to meet the requirements of AS 2890.6. The development drawings will be required to be updated to clarify the non-employed carparking that is required to comply with AS 2890.6.

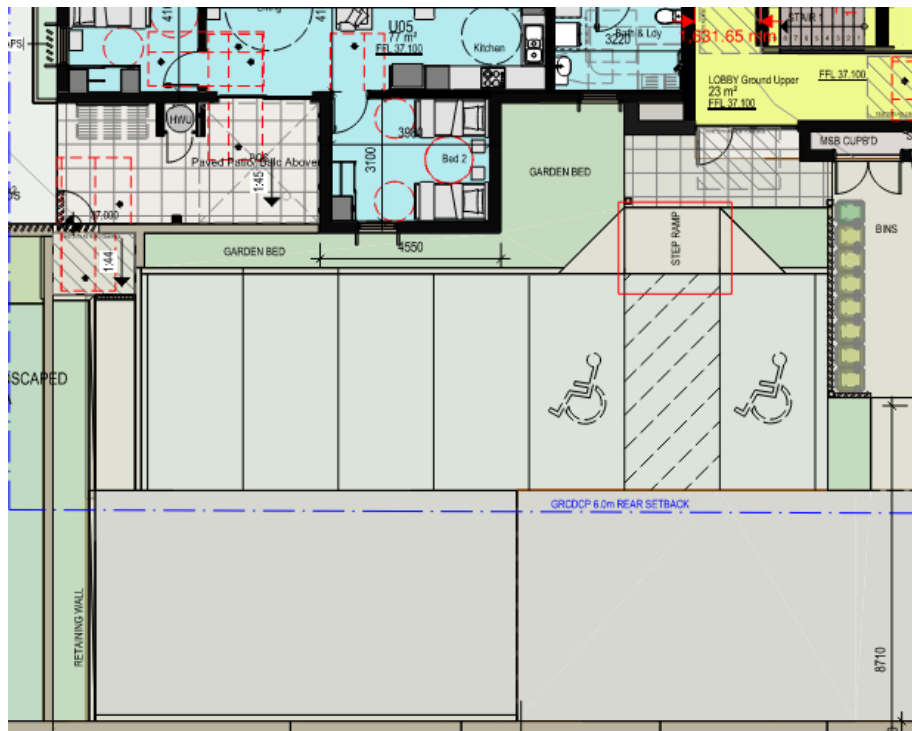


Figure 1 Ground Floor Plan Revision E

3.2 Assessment

The following assessment table outlines a clause by clause review of the subject proposed development against the relevant Deemed-To-Satisfy (DTS) provisions of the BCA that relate to access for people with a disability. All DTS clauses of the BCA that relate to access for people with a disability applicable to the proposed development are referenced and discussed in the table below. Where a clause is not relevant to the proposed development it is not discussed.

The following abbreviations have been used in the table below:

PS	Performance Solution The design does not comply with the clause, however, a Performance Solution is proposed to justify the design in its current format.
CRA	Compliance Readily Achievable It is considered that, whilst there is insufficient information currently provided to determine strict compliance with the relevant DTS clause, the proposed design can comply in its current format.
Complies	The proposed design complies with the relevant DTS clause
DNC	Does Not Comply The proposed design does not comply with the relevant DTS clause and requires amendment.
FI	Further Information Further information is required to determine whether the proposed design satisfies the requirements of the relevant DTS clause.
N/A	Not Applicable The relevant DTS clause is considered not applicable to the subject proposed development but requires further explanation to confirm reason(s).
Noted	The relevant DTS clause specifies information only, no assessment is required.

National Construction Code Assessment Table

Clause		Comments	Assessment
Part D2 – Construction of exits			
D2.0	Deemed-to-Satisfy Provisions	Information only.	Noted
D2.1	Application of Part	Information only.	Noted
D2.10	Pedestrian ramps	The building does not include a pedestrian ramp	CRA
D2.14	Landings	Landing geometry and slip resistance must comply with this clause.	CRA
D2.17	Handrails	<p>The configuration of the fire-isolated stairways must allow for the installation of a compliant handrail. To enable the installation of a compliant handrail, the stairway must be configured so that there is an offset of one (1) tread width between the bottom riser of the upper flight and the top riser of the lower flight.</p> <p>Also, the handrails and doorways providing entry into the fire-isolated stairways must be positioned so that the requisite handrail extensions and method of termination do not encroach on the swing of the door at the point of handrail termination.</p>	CRA
Part D3 – Access for people with a disability			
D3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
D3.1	General building access requirements	<p>Access is required to be provided to each Class located within the building in accordance with the following:</p> <p><u>Class 2</u> From a pedestrian entrance located on Charles Street, at least one (1) floor containing sole-occupancy units, and to the entrance doorway of each sole-occupancy unit located on that level.</p> <p>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 (discussed later), common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1-2009 or a passenger lift is installed -</p> <p>(a) to the entrance doorway of each sole-occupancy unit; and</p> <p>(b) to and within rooms or spaces for use in common by the residents,</p> <p>located on the levels served by the lift or ramp.</p>	CRA
D3.2	Access to buildings	<p>An accessway must be provided to a building required to be accessible -</p> <p>(i) from the main points of a pedestrian entry at the allotment boundary; and</p> <p>(ii) from another accessible building connected by a pedestrian link; and</p> <p>(iii) from any required accessible carparking space on the allotment.</p> <p>The accessway from the property boundary on Charles Street at the north western end of the building.</p>	Complies
D3.3	Parts of buildings to be accessible	Parts of the building must comply with the relevant requirements of this clause.	CRA
D3.4	Exemptions	<p>The following areas are not required to be accessible:</p> <p>(a) An area where access would be inappropriate because of the particular purpose for which the area is used.</p>	Noted

Clause	Comments	Assessment
	(b) An area that would pose a health or safety risk for people with a disability. Any path of travel providing access only to an area exempted by (a) or (b).	
D3.5 Accessible carparking	Class 2 Accessible car parking spaces are not required for Class 2 buildings under the NCC, however AS4299 requires accessible parking be provided for adaptable unit.	N/A
D3.6 Signage	Braille and tactile signage must be provided in accordance with this clause and Specification D3.6. Where illuminate exit signage is provided to an exit door, a braille and tactile sign complying with this clause must be provided stating "Exit" and "Level XX" (XX being the relevant floor level number, descriptor, or a combination of both.	CRA
D3.7 Hearing augmentation	The building does not contain an in-built amplification system therefore this Clause does not apply.	N/A
D3.8 Tactile indicators	Tactile Ground Surface Indicators (TGSIs) must be provided to warn people that they are approaching a stairway, ramp and/or overhead obstruction in accordance with the requirements of this clause and AS 1428.4.1-2009.	CRA
D3.9 Wheelchair seating spaces in Class 9b assembly buildings	The building does not include a Class 9b assembly building therefore, this Clause does not apply.	N/A
D3.10 Swimming pools	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A
D3.11 Ramps	On an accessway, a series of connected ramps must not have a combined vertical rise of 3.6m or more. Also, a landing for a step ramp may not overlap a landing for another step ramp or ramp.	Complies
D3.12 Glazing on an accessway	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS1428.1-2009.	CRA
Specification D3.6 – Braille and Tactile Signs		
1 Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by clause D3.6.	Noted
2 Location of braille and tactile signs	Braille and tactile signage must be located in accordance with this clause.	CRA
3 Braille and tactile sign specification	Braille and tactile signage must have characters in accordance with this clause.	CRA
4 Luminance contrast	The luminance contrast of the signage must comply with this clause.	CRA
5 Lighting	Braille and tactile signage must be illuminated to ensure the luminance contrast requirements are met at all times during which the sign is required to be read.	CRA
6 Braille	The braille characters must comply with this clause.	CRA
Specification D3.10 – Accessible Water Entry/Exit for Swimming Pools		
1 Scope	This Specification sets out the requirements for types of accessible water entry/exit for swimming pools.	Noted
2 Fixed or movable ramp	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A
3 Zero depth entry	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A
4 Platform swimming pool lift	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A
5 Sling-style swimming pool lift	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A

Clause		Comments	Assessment
6	Aquatic wheelchair	The building does not include a swimming pool, therefore the requirements of this Clause do not apply.	N/A
SECTION E – SERVICES AND EQUIPMENT			
Part E3 – Lift Installations			
E3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
E3.6	Passenger lifts	<p>The lift travels not more than 12m, therefore, must have floor dimensions of no less than 1,100mm (wide) x 1,400mm (deep) or 1,400mm (wide) x 1,600mm (deep). The lift has been measured to scale as having dimensions of 1,798 mm (wide) x 1,699 mm (deep).</p> <p>The lift must be provided with features in accordance with Table E3.6b that comply with AS1735.12-1999.</p>	CRA
SECTION F – HEALTH AND AMENITY			
Part F2 – Sanitary and Other Facilities			
F2.0	Deemed-to-Satisfy Provisions	Information only.	Noted
F2.4	Accessible sanitary facilities	The Class 2 of the building does not include an accessible sanitary facilities.	N/A
F2.9	Accessible adult change facilities	The building does not include an accessible adult change facilities.	N/A
Specification F2.9 – Accessible adult change facilities			
1	Scope	This Specification contains the requirements for accessible adult change facilities.	Noted
2	General requirements	The building does not include an accessible adult change facilities.	N/A
3	Hoist	The building does not include an accessible adult change facilities.	N/A
4	Toilet pan, seat, backrest and grabrails	The building does not include an accessible adult change facilities.	N/A
5	Washbasin and tap	The building does not include an accessible adult change facilities.	N/A
6	Fixtures and fittings	The building does not include an accessible adult change facilities.	N/A
7	Change table	The building does not include an accessible adult change facilities.	N/A
8	Changing rails	The building does not include an accessible adult change facilities.	N/A
9	Door and door controls	The building does not include an accessible adult change facilities.	N/A
10	Signage	The building does not include an accessible adult change facilities.	N/A
11	Operating instructions	The building does not include an accessible adult change facilities.	N/A

4 Livable Housing & LAHC Dwelling Requirements Assessment

The proposed development incorporates construction of a multi dwelling building upon land located within an R2 zone. As such, section 9 of Geroges River Council Development Control Plan 2021 (the “DCP”) does not outline the applicable requirements for the provision of livable housing.

The developer is seeking compliance with the Silver Level requirements outlined in the Livable Housing Design Guidelines for all fourteen (14) dwellings, however, all fourteen (14) dwellings are adaptable. This is well in excess of the minimum requirement of were there are 10 or more dwellings at least one adaptable dwelling plus an adaptable dwelling for every 50 dwellings, therefore, if achieved, demonstrates compliance with the DCP.

The Land & Housing Corporation (LAHC) Dwelling Requirements require all LAHC dwellings where level access is available to achieve a Silver Level rating to the interior as a baseline as detailed below. We are not aware of any enhanced requirements for this development.

<p>To support a diverse tenant cohort, LAHC aims for best practice in access and liveability.</p> <p>Universal design principles equally apply to site planning, common areas and individual dwellings.</p>	
<p>Design teams are to consider universal access at the outset of the project in, for example, preferencing walkways to ramps to reduce the extent of tactile and handrails, and integrating access circulation into the architecture and landscape design.</p> <p>The LAHC development brief defines the mix of dwellings and the percentage of dwellings that are to be delivered as adaptable, accessible, or to meet <i>Livable Housing Design Guidelines</i> performance levels (silver, gold or platinum).</p> <p>Unless otherwise noted in the brief, apply the following as a minimum:</p>	
Baseline provision: general housing	Apply <i>Livable Housing Design Guidelines</i> (LHDG) silver level to all new LAHC dwellings where level access is available, including at ground level and on floors serviced by a lift. For upper level dwellings without lift access, include silver-level features in each dwelling, to allow for future adaptation where a lift is retrofitted.
Baseline provision: seniors housing	Housing SEPP Schedule 4 requirements apply to all new LAHC dwellings in seniors housing developments where level access is available, including at ground level and on floors serviced by a lift. For the upper level of 2-storey seniors housing developments without lift access, match arrangements on the ground floor, including latchside clearance, and ensure common circulation is designed in such a way that a lift can be retrofitted to access the upper level.
Adaptable dwellings	Provide the percentage of adaptable dwellings required by local planning controls, at the standard defined by AS4299 Class C.

Figure 2 Requirements from Dwelling Requirements

The following table outlines an assessment of each dwelling in the development against the Silver Level requirements outlined in the Livable Housing Design Guidelines.

The following abbreviations have been used in the table below:

- CRA** **Compliance Readily Achievable**
It is considered that, whilst there is insufficient information currently provided to determine strict compliance with the relevant clause, the proposed design can comply in its current format.
- Complies** The proposed design complies with the relevant clause
- DNC** **Does Not Comply**
The proposed design does not comply with the relevant clause and requires amendment.
- FI** **Further Information**
Further information is required to determine whether the proposed design satisfies the requirements of the relevant clause.
- N/A** **Not Applicable**
The relevant clause is considered not applicable to the subject proposed development.

Livable Housing Design Guidelines Assessment Table

Part	Comments	Assessment
LIVEABLE HOUSING		
Silver Level		
1 Dwelling Access	Access to the livable units is via a pathway complying with BCA Part D3 and AS 1428.1-2009. It should be noted that the LHDG specifies that its requirements “should only be applied to the parts of the building classes not covered by the Disability Standards and BCA (BCA Vol 1)”	CRA
2 Dwelling entrance	<p>The entrance door to the livable units must have a minimum clear opening width of 820mm.</p> <p>The entrance to the livable units must have a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided in accordance with Figure 1(b).</p> <p>The entrance to the livable units must be sheltered from the weather.</p> <p>This has been shown on the plans to comply.</p> <p>The entrance is connected to the accessible path as required by the BCA and AS 1428.1-2009. It should be noted that the LHDG specifies that its requirements “should only be applied to the parts of the building classes not covered by the Disability Standards and BCA (BCA Vol 1 and 2)” – see “Note” on p.15.</p>	Complies
3 Internal doors and corridors	The internal doorways serving the living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment must have a minimum clear opening width of 820mm.	Complies

Part	Comments	Assessment
LIVEABLE HOUSING		
	The internal corridors/passageways to the doorways referenced above must have a minimum clear width of 1,000mm.	
4 Toilet	The toilet must: (i) be located on the ground or entry level of the dwelling; (ii) have a minimum clear width of 900mm between the walls or obstructions in the room it is located; (iii) have a minimum 1,200mm clear circulation space forward of the toilet pan, exclusive of the swing of the door; and (iv) be located in the corner of the room if it is located in a combined toilet/bathroom.	Complies
5 Shower	One (1) bathroom is to feature a slip-resistant, hobless shower recess located in the corner of the room. Shower screens are permitted provided they can be easily removed at a later date.	CRA
6 Reinforcement of bathroom and toilet walls.	Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet must be reinforced to provide a fixing surface for the safe installation of grabrails in accordance with the requirements of this clause.	CRA
7 Internal stairways	This matter is regulated by the BCA for this building. It should be noted that the LHDG specifies that its requirements "should only be applied to the parts of the building classes not covered by the Disability Standards and BCA (BCA Vol 1 and 2)"	N/A

5 State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability Assessment

5.1 Clause 93 of State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability Assessment

The proposed development incorporates construction of a multi dwelling building upon land located within an R2 zone. As such, section 9 of Georges River Council Development Control Plan 2021 (the “DCP”) does not outline the applicable requirements for the provision of livable housing.

The developer is seeking compliance with the Clause 93 of State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability Assessment.

General:

The proposed works address the applicable Clauses in section 93 of the State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability Assessment including the an assessment of public transport frequency from Broadarrow Road and Bonds road shown on drawing A103 and A104.

On review of the Path to Bus Stop Study Bonds Road and Path to Bus Stop Study Broadarrow Road analysis, the overall gradients provided to the Bust stops are proposed to be not more than 1:14 and the gradients along the pathway are not more than—

- (i) 1:12 for a maximum length of 15m at a time, or
- (ii) 1:10 for a maximum length of 5m at a time, or
- (iii) 1:8 for a maximum length of 1.5m at a time.

In accordance with Clause 93 section 4(c)

As part of the proposed the following upgrade works will be required:

Route to the bus stops on Bonds road via Bungalow

- The provision of a new pathway with compliant gradients at the Brighthon Road frontage that connect the existing pathway on Bungalow Road.
- To upgrade the crossing pram ramp at Bungalow Road to be refraded and be not more than 1:8 for a maximum length of 1.5m

Route to bus stops at Broadarrow Road via Mona Road:

- There are sections of Mona Road that appear to be provided with adequate pathways that are suitable to be ramps to cross to Charles Street to connect with Mona Road. The existing crossing will be required to be regarded at Broadarrow Road 1:10 for a maximum length of 5m as shown on the longitude survey plans.

5.2 Part 5 of State Environmental Planning Policy (Housing) 2021 requirements for Housing for seniors and people with a disability Assessment

The standards set out in SEPP Seniors – Part 5 Clause 85 (1) – Schedule 4 apply to any seniors housing development that consist of a hostel, self-contained dwelling or a combinations of these, and the design principles of accessibility (Part 5, Clause 98).

An assessment of the development with the requirement of this policy is as follows:

Item	Room/Item	Clause	Comment	Compliance
1	Application			
	The standards set out in this Part apply to any seniors housing that consists of hostels or independent living units.	-	The building includes self-contained SOU's (independent living units)	CRA
2	Sitting Standards			
	If the site has a gradient of less than 1:10, then 100% of sole occupancy units must have an accessway to an adjoining public road	1	The building has been provided with an accessway from the principal pedestrian entrance on Charles Street to the public road in accordance with AS1428.1:2009.	Complies
	If the site has a gradient of more than 1:10: <ul style="list-style-type: none"> Percentage of sole occupancy units with an accessway to be equal the percentage of the site with gradient of less than 10% (or 50% whichever is greater) the wheelchair access provided must be by a continuous accessible path of travel (within the meaning of AS 1428.1) to an adjoining public road or an internal road or a driveway that is accessible to all residents. 	2a	All sole occupancy units in the building have been provided with an accessway from the principal pedestrian entrance to the public road in accordance with AS1428.1:2009.	Complies
	The accessway is to be provided adjoining public road, internal road or driveway accessible to all residents.	2b	The accessway is shown on Charles Street as capable of complying with AS1428.1:2009. All storeys and sole occupancy units are served by a passenger lift.	Complies

Item	Room/Item	Clause	Comment	Compliance
	Common areas/facilities associated with the development to have an access way compliant with AS1428.1:2009.	3	Common areas are capable to comply with AS1428.1:2009 as provided with an 850mm clear door width and associated circulation spaces at doorways, and served by the passenger lift adjacent to those rooms and connected to all storeys in the building. The common areas are: - Ground floor lobby - First floor lobby	CRA
3	Security			
	Pathway lighting to be: • Designated and located to avoid glare for pedestrian and sole occupancy units	3a	Provisioning to be provided according to this clause	CRA
	Must provide at least 20 lux at ground level	3b	Provisioning is to be provided according to this clause.	CRA
4	Letterboxes			
	Letterboxes are to be situated on a hard standing within the accessway	4a	The letter boxes are located along the accessway to the main pedestrian entrance.	CRA
	Letterboxes are required to be lockable.	4b	Provisioning is to be provided according to this clause.	CRA
	Letterboxes are required to be located together in a central location adjacent to the street entry or, in the case of independent living units, must be located together in one or more central locations adjacent to the street entry.	4c	Provisioning to be provided according to this clause.	CRA
5	Private car accommodation			
	Where Car parking is provided (not for employees): • Car parking space must comply with requirements for parking for persons with a disability set out in AS 2890.6	5a	Car parking spaces must comply with requirements for parking for persons with a disability set out in AS2890.6.	DNC Refer to section 3.1

Item	Room/Item	Clause	Comment	Compliance
	10% of the total number of car parking spaces (or at least one space if there are fewer than 10	5b	10% of the proposed carparking spaces (or 1 of them if less than) must to be 5400x3800mm.	Complies
	Garage to have or to be capable of install a power-operated door (including power point and motor/control area).	5c	Proposed garages require to have increased dimension to cater a power operated gate.	N/A
6	Accessible Entry			
	Every entry (whether a front entry or not) to a dwelling, not being an entry for employees, to comply with 4.3.1 & 4.3.2 of AS4299.	6	The main entrance to the residential buildings and entrances to the sole occupancy units achieve a minimum width of 850mm in accordance with compliance with AS1428.1:2009. Doorways show 850 minimum width clear door width, 110 mm hinge-side clearance, and 530mm latch-side clearance.	Complies
7	Interior General			
	Internal doorways to have a minimum clear opening in compliance with AS1428.1:2009.	7.1	Doorways within the sole occupancy units to have 850mm clear width.	Complies
	Internal corridors to have 1000mm min. clear width.	7.2	Corridors to achieve 1000mm clear width	Complies
	Circulation space at approaches to internal doorways must comply with AS1428.1:2009.	7.3	All internal doorways must have compliant circulation space on both sides of the door in accordance with AS1428.1-2009. Note: Joinery and lightweight walls can be relocated at later stage.	CRA
8	Bedroom			
	At least one bedroom to be able to accommodate a wardrobe and a bed sized as follows: <ul style="list-style-type: none"> Hostel: a single-size bed Self-contained SOU: a queen-size bed 	8a	The development comprises a self-contained sole occupancy unit. One accessible bedroom per SOU is to be provided with at least a queen size bed	CRA
	A clear area for the bed of at least: <ul style="list-style-type: none"> 1200mm clearance at bed base 1000mm side clearance 	8b	One accessible bedroom per SOU is to be provided with at least 1200mm clearance as bed base and 1000mm side clearances.	CRA

Item	Room/Item	Clause	Comment	Compliance
	2 double general power outlets at the head of the bed wall	8c	Provisioning to be provided accordance to this clause during the construction	CRA
	1 general power outlet at the bed foot wall	8d	Provisioning to be provided accordance to this clause during the construction	CRA
	1 phone outlet and a general power outlet adjacent to the bed on the door side	8e	Provisioning to be provided accordance to this clause during the construction	CRA
	Wiring to allow a potential illumination level of at least 300 lux.	8f	Provisioning to be provided accordance to this clause during the construction	CRA
9	Bathroom			
	At least one bathroom on ground floor (or main floor) and have the following facilities arranged to provide circulation space in compliance with AS1428.1:2009:	1a	Bathrooms will be at entry level of the sole occupancy units	Complies
	Floor surface to be slip-resistant	1a	Flooring to be slip-resistant according to this clause and AS4586 –to be reviewed at construction.	CRA
	Washbasin to have compliant circulation space with AS1428.1:2009. Must allow either immediately or in the future knee/toe clearances to comply with Figure 45 of AS1428.1:2009.	1b	Washbasins are shown within the accessible ensuites have sufficient circulations space (generally 1500x800mm in front). Cabinets and vanities can be relocated in the future. Plumbing that allows either immediately or in the future knee/toe clearances to comply with Figure 45 of AS1428.1:2009.	CRA
	Shower to have compliant circulation space with AS1428.1-2009.	1c	Showers have compliant circulation space in accordance with Figure 47 of AS1428.1.	complies
	A well illuminated wall cabinet	1d	Provisioning to be provided accordance to this clause during the construction	CRA
	A double general power outlet adjacent the mirror	1e	Provisioning to be provided accordance to this clause during the construction	CRA
	Shower screen that can easily be removed	2	Provisioning to be provided accordance to this clause during the construction	CRA
10	Toilet			

Item	Room/Item	Clause	Comment	Compliance
	Provision of a visitable toilet on the ground (or main) floor in compliance with AS4299.		Each SOU has been provided with a visitable toilet (900x1250mm) clearance in front of the WC pan, excluding door swing	CRA
11	Surface finishes			
	Balconies and external paved areas must have slip-resistant surfaces. Finishes to comply with AS1428.1 and AS4586.		Provisioning to be provided accordance to this clause during the construction	CRA
12	Door hardware			
	Door handles and hardware for all doors (including entry doors and other external doors) to be in compliance with AS1428.1-2009.		Provisioning to be provided accordance to this clause during the construction	CRA
13	Ancillary items			
	Switches and power points to be in compliance with AS4299.		Provisioning to be provided accordance to this clause during the construction	CRA
14	Application standards additional			
	Applicable to seniors housing (self-contained SOU's only)		Self-contained SOU's are proposed thus items below are applicable.	Noted
15	Living Room and Dining Room			
	A living room must: <ul style="list-style-type: none"> have a 2250mm diameter circulation space after furniture is placed, compliant with 4.7.1 of AS4299. have a telephone adjacent to a general power outlet. 	1	-	CRA
	A living room and dining room to have wiring to allow a potential illumination level of at least 300 lux.	2	Provisioning to be provided accordance to this clause during the construction	CRA
16	Kitchen			
	A kitchen in a self-contained SOU is to have: <ul style="list-style-type: none"> Minimum clearance in front of appliances and between benches to be 1550mm (4.5.2 of AS4299) 	16a	All kitchens are provided with a 1550mm clearance in front of the appliances.	CRA

Item	Room/Item	Clause	Comment	Compliance
	<ul style="list-style-type: none"> A circulation space at door approaches that complies with AS1428.1. 	16b	Kitchen door to be in compliance with AS1428.1	CRA
	Provision of the following fittings in accordance with the relevant subclauses of clause 4.5 of AS4299: <ul style="list-style-type: none"> 800mm min. work surface bench long in compliance with clause 4.5.5 (a) A tap set compliant with AS1428.1 Cooktops in compliance with AS4299 Clause 4.5.7 (800mm adjacent surface, raised crossed bars, isolated switches, exposed front controls) An oven adjacent to the work surface with the door opening away from the bench (AS4299 Clause 4.5.8) 	16c	Provisioning to be provided in accordance to this clause during the construction design documentation.	CRA
	"D" pull cupboard handles that are located towards the top of below-bench cupboards and towards the bottom of overhead cupboards	16d	Provisioning to be provided accordance to this clause during the construction	CRA
	General power outlets: <ul style="list-style-type: none"> At least one of which is a double general power outlet within 300 millimetres of the front of a work surface One of which is provided for a refrigerator as per this clause 	16e	Provisioning to be provided accordance to this clause during the construction	CRA
17	Access to kitchen, main bedroom, bathroom and toilet			
	In a multi-storey SOU's, the kitchen, main bedroom, bathroom and toilet must be located on the entry level		The rooms from this clause to be located at entry level	Complies
18	Lifts In Multi-Storey Buildings			

Item	Room/Item	Clause	Comment	Compliance
	Lift shall comply with Part E3.6 of BCA2019 Amendment 1		See section 3.4 for this report.	CRA
19	Laundry			
	SOU's to have a laundry with: <ul style="list-style-type: none"> Doorway circulation spaces in compliance with AS1428.1. 	19a	Laundry doorways are to be shown with compliant circulation space in accordance with Figure 31 of AS1428.1.	CRA
	<ul style="list-style-type: none"> Provision for the installation of a washing machine and dryer 	19b	Laundry rooms to have provision for a washing machine and dryer side by side.	CRA
	<ul style="list-style-type: none"> 1300mm clearance in front of appliances 	19c	1300mm clearance to be shown in front of appliances.	CRA
	<ul style="list-style-type: none"> Slip-resistant floor surface 	19d	Provisioning to be provided accordance to this clause during the construction	CRA
	<ul style="list-style-type: none"> An accessible path of travel to clothes lines 	19e	Provisioning to be provided accordance to this clause during the construction	CRA
20	Storage For Linen			
	Provision of a linen storage cupboard of 600mm width min, and adjustable shelving		Linen storage to be shown with a 650mm min width.	CRA
21	Garbage			
	Provision of an accessway to the garbage storage	•	Accessway is to be shown to/from the Garbage compliance with AS1428.1.	Complies

Annexure A - Reviewed Documentation

This Report is based on a review of the documentation listed below.

Architectural Details prepared by SARM Architects, project number 22009		
Drawing Number	Revision	Title
A000	G	Cover Page & Drawing List
A101	D	Site Analysis
A103	E	Path to Bus Stop Study – Bonds Rd
A104	C	Path to Bus Stop Study – Broadarrow Rd
A105	G	Demolition Plan
A106	D	Cut and Fill Plan
A200	J	Stie Plan
A201	I	Ground Floor Plan
A202	I	First Floor Plan
A203	I	Roof Plan
A301	J	Elevations North, South
A302	J	Elevations East, West & Material Schedule
A305	G	Long
A306	G	Short