



STATE SIGNIFICANT DEVELOPMENT ASSESSMENT

SPECIALIST HOUSING REPORT

AMOEBIA ACCESS PTY LTD



Project: 15-21 Cottonwood Crescent, Macquarie Park
Document Type: Specialist Housing Assessment Report
Our Reference: P2025_0402-2 (SHR) YW & DC

The following report reflects the review of the SSDA architectural documentation of the proposed development and issue(s) of report(s) undertaken by [Amoeba Access Pty Ltd](#).

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Revision History—

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EXECUTIVE SUMMARY

This Specialist Housing Assessment Report has been prepared by **Amoeba Access** to accompany a comprehensive State Significant Development Application (SSDA) and concurrent Rezoning Proposal (**SSD-94006708**) for a mixed-use development identified at 15-21 Cottonwood Crescent, Macquarie Park (the site).

The proposal includes the demolition of existing buildings and construction of a residential development comprising two residential flat buildings above a common basement car park / sleaved podium, incorporating residential, car parking, and a retail component along the Waterloo Road frontage. The proposal also includes provision of 10% affordable housing in accordance with SSDA uplift. The legal description of the site is outlined in Table 1 below.

Table 1 - Legal Description

Property Address	Title Description
15 Cottonwood Crescent, Macquarie Park	SP8144
17 Cottonwood Crescent, Macquarie Park	SP7630
19 Cottonwood Crescent, Macquarie Park	SP7892
21 Cottonwood Crescent, Macquarie Park	SP7984

This report addresses the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (**SSD-94006708**). It concludes that the proposed development is suitable for approval, satisfies and complies with accessibility provisions outlined in the Amendments of the Disability (Access to Premises - Buildings) Standards 2010 (Premises Standards), the National Construction Code – Building Code of Australia Volume 1, Edition 2022 Amendment 2 (referred to as NCC 2022), the State Environment Planning Policy (Housing) 2021 (Housing SEPP), and the Apartment Design Guild (ADG). The report also recommends implementation of the following mitigation measures.

Table 2 - Mitigation Measures

The development mitigates the reduced provision of mandatory ADG dwellings by delivering a minimum of 74% Livable Housing Silver Category dwellings, which is above and beyond the 20% minimum accessible housing requirement under the ADG. In addition, the proposal complies with the ADG and Council policy requirement for a minimum of 10% adaptable housing. The adaptable dwellings are designed to allow conversion from the pre-adaptation to post-adaptation stage with minimal intervention, avoiding structural alteration and reducing disruption, cost, and inconvenience to occupants. Collectively, these measures embed accessibility and adaptability at the construction stage, future-proof the housing stock, support ageing in place, and achieve outcomes consistent with the objectives of the Housing SEPP, ADG, and Livable Housing Design Guidelines.

The table below outlines scenarios where the implementation of a performance-based design solution delivers outcomes that are equal to or better than compliance with prescriptive provisions —

ITEM	PROPOSED MITIGATED MEASURES	HOUSING SEPP
1	<p>The proposal seeks to deliver 70% Livable Housing Silver Category dwellings in lieu of the 20% mandatory ADG provision.</p> <p>Integrating Livable Housing features at the design and construction stage enables a holistic approach to dwelling layout, structure, and services, resulting in improved functionality, space efficiency, and overall design performance. This approach avoids the practical and design limitations commonly associated with retrofitting, including disruption to occupants, higher costs, and constraints imposed by fixed structural and servicing elements.</p> <p>The performance-based design solution provides enhanced accessibility and usability across a significantly greater proportion of dwellings, delivering benefits to all occupants from day one. This outcome exceeds the intent of the prescriptive control by future-proofing the housing stock and reducing reliance on later adaptations as occupants' needs change.</p> <p>Accordingly, the proposed design solution achieves the underlying objectives of the ADG, Housing SEPP, and Livable Housing Design Guidelines, while delivering a more inclusive, adaptable, and efficient built form outcome than strict compliance with the prescriptive requirement.</p>	<p>70% Liveable Housing Provision in lieu of ADG 20% provision</p>

INTRODUCTION

1.1 SSDA Submission

This report has been prepared in support of a State Significant Development Application (SSDA) and a concurrent Rezoning Proposal ([SSD-94006708](#)) for the site at 15–21 Cottonwood Crescent, Macquarie Park (also known as 88 Waterloo Road).

The proposed SSDA seeks development consent for the demolition of existing buildings and the construction of a residential development comprising two residential flat buildings above a common basement car park and sleeved podium, incorporating residential uses, car parking, and a retail component along the Waterloo Road frontage.

Specifically, this application seeks approval for the following:

Construction of two mixed-use buildings comprising a 60 and 52 storey building respectively, which will accommodate:

- 858 Residential apartments inclusion 10% affordable housing of the uplift being sought
- Six (6) levels of basement with 825 car parking spaces, bicycle parking, services.
- A two-level commercial podium containing:
 - o Retail spaces
 - o Four townhouses
 - o Residential lobbies
 - o Waste Storages
 - o Residential and visitor Parking spaces
 - o Bicycle Parking spaces
- Communal Open Space and residential amenities on level four (4).
- Rooftop Terrace on Level 52 of Cottonwood Crescent Tower and level 60 of Waterloo Road Tower.

The proposal includes amendments to Clauses 4.3 and 4.4 of the Ryde Local Environmental Plan 2014 (RLEP 2014) as part of the concurrent rezoning process. The proposed amendments include the following:

- Clause 4.3 – Height of Buildings:
 - o Amend the current 65 metres maximum building height to 205.5 metres;
- Clause 4.4 – Floor Space Ratio (FSR):
 - o Amend the current FSR of 4.5:1 to 17:8:1

This report has been prepared in response to the requirements of the Secretary's Environmental Assessment Requirements (SEARs), dated 8 October 2025, issued for the State Significant Development Application ([SSD-94006708](#)). Specifically, this report addresses the relevant SEARs requirements and the comments provided by government agencies, as outlined below.

1.2 Site Location and Context

The subject site is located at 15–21 Cottonwood Crescent, Macquarie Park, also known as 88 Waterloo Road, within the City of Ryde local government area. The site occupies a prominent position within the Macquarie Park Strategic Centre, with frontage to Waterloo Road and proximity to key transport, employment, education, and retail infrastructure.

The site currently contains several existing buildings proposed to be demolished as part of the State Significant Development Application. It has a regular configuration and forms part of a larger urban block characterised by large-scale development parcels. The surrounding area comprises a mix of commercial, residential, retail, and institutional land uses, reflecting the ongoing transition of Macquarie Park into a higher-density mixed-use precinct.

The site is surrounded by mid- to high-rise developments, including recently completed and approved State Significant Developments. Waterloo Road functions as a major east–west arterial road, providing strong vehicular, public transport, and pedestrian connectivity and supporting high-density residential development with active ground-floor uses.

The site is well serviced by public transport, with frequent bus services along Waterloo Road and proximity to Macquarie Park Metro Station, providing direct connections across the Sydney metropolitan area. The surrounding area includes major social and physical infrastructure such as Macquarie University, Macquarie Centre, local parks, and community facilities.

The site is also subject to a concurrent rezoning process to facilitate increased height and density consistent with strategic planning objectives for Macquarie Park. The proposed development responds to the site’s strategic context, surrounding built form, and infrastructure capacity, and seeks to deliver high-density residential outcomes, including affordable housing, in accordance with State and local planning priorities.

Figure 1 – Aerial Photograph



Source: Urbis (Nearmap)

1.3 Purpose of Report

This Specialist Housing Assessment Report has been prepared by Amoeba Access at the request of the applicant, Cottonwood Development Pty Ltd, and relates to the proposed residential mixed-use development described in [Section 1.1](#).

For the proposed development:

- 70% of residential apartments are designed to achieve the Livable Housing Silver Category; and
- 10% are allocated as adaptable housing, in accordance with the Housing SEPP (Apartment Design Guide) 2021 and City of Ryde Development Control Plan.

The proposed Livable Housing provision exceeds the minimum mandatory requirements and satisfies the relevant provisions of the Housing SEPP and the Apartment Design Guide 2021.

1.4 Documentation Provided for Assessment

This livable housing assessment is based upon the SSDA architectural documentation prepared by AJC Architects, as listed in [Appendix 1](#).

1.5 Limitations

This report is based upon, and limited to, the information depicted in the documentation provided for assessment and does not make any assumptions regarding design intention or the like.

1.6 Report Exclusions

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken—

- 1) The National Construction Code 2022, Volume One, Amendment 2, Building Code of Australia Class 2 to Class 9 Buildings; inclusive of the NSW variations and
- 2) Work Health & Safety Act and Regulations; and
- 3) Work Cover Authority requirements; and
- 4) Structural and Services Design Documentation; and
- 5) The individual requirements of service authorities.

1.7 Assessment Overview and Interpretation

To provide the relevant stakeholders with additional context, the following information regarding assessment methodology used in this assessment is provided below—

- (i) Loose furniture is the ongoing responsibility of the occupants who should maintain appropriate circulation spaces between and around furnishings;
- (ii) For an assessment of the accessibility provisions as required by the BCA 2022 Amendment 2, the State Environment Planning Policy (Housing) 2021 (Housing SEPP), and the Apartment Design Guild (ADG), please refer to the report prepared by Amoeba Access [reference [P2025_0402 -2 \(SSDA\) YW & DC](#)]

2.0 DEVELOPMENT PARTICULARS

2.1 Purpose of Livable Housing Provisions

The concept of Livable Housing Design is to provide guidelines for the design of new homes (of Classes 1a, 1b, 2, 3 and 4 buildings as defined in Part D4 of the BCA) which will reduce the need for future costly modifications.

The assessment undertaken relates to ensuring compliance with the Livable Housing Design Guidelines Fourth Edition as prepared by Livable Housing Australia (LHA).

The purpose of this report is to identify the extent to which the architectural design documentation complies with the provisions of Livable Housing Design Guidelines (LHA) silver level which concerns itself with the following 7 design elements.

Silver Level

Seven core Livable housing design elements focusing on key structural and spatial elements to ensure flexibility and adaptability. The seven core elements are as follows—

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

2.2 Development Description

For the proposed total of 858 residential units, 70% of units are designed to achieve Livable Housing Silver Category, in accordance with the Livable Housing Guidelines. This provision is above the minimum 20% mandatory accessible housing requirement under the ADG and satisfies the requirements of the Housing SEPP and the Apartment Design Guide 2021.

The current types of dwellings nominated are as follows:



Figure 1 – Silver Category Layout (Level 1)



Figure 2 – Silver Category Layout (Level 2)



Figure 3 – Silver Category Layout (Level 3)



Figure 4 – Silver Category Layout (Level 4)



Figure 5 – Silver Category Layout (Level 5-9)



Figure 6 – Silver Category Layout (Level 10)



Figure 7 – Silver Category Layout (Level 11-19)



Figure 8 – Silver Category Layout (Level 20-22)



Figure 9 – Silver Category Layout (Level 23)



Figure 10 – Silver Category Layout (Level 24)



Figure 11 – Silver Category Layout (Level 25-26)



Figure 12 – Silver Category Layout (Level 27)



Figure 13 – Silver Category Layout (Level 28)



Figure 14– Silver Category Layout (Level 29-30)



Figure 15 – Silver Category Layout (Level 31)



Figure 16 – Silver Category Layout (Level 32-33)



Figure 17 – Silver Category Layout (Level 34)



Figure 18 – Silver Category Layout (Level 35-40)



Figure 19 – Silver Category Layout (Level 41-44)



Figure 20 – Silver Category Layout (Level 45-50)



Figure 21 – Silver Category Layout (Level 51)



Figure 22 – Silver Category Layout (Level 52)



Figure 23 – Silver Category Layout (Level 53-57)

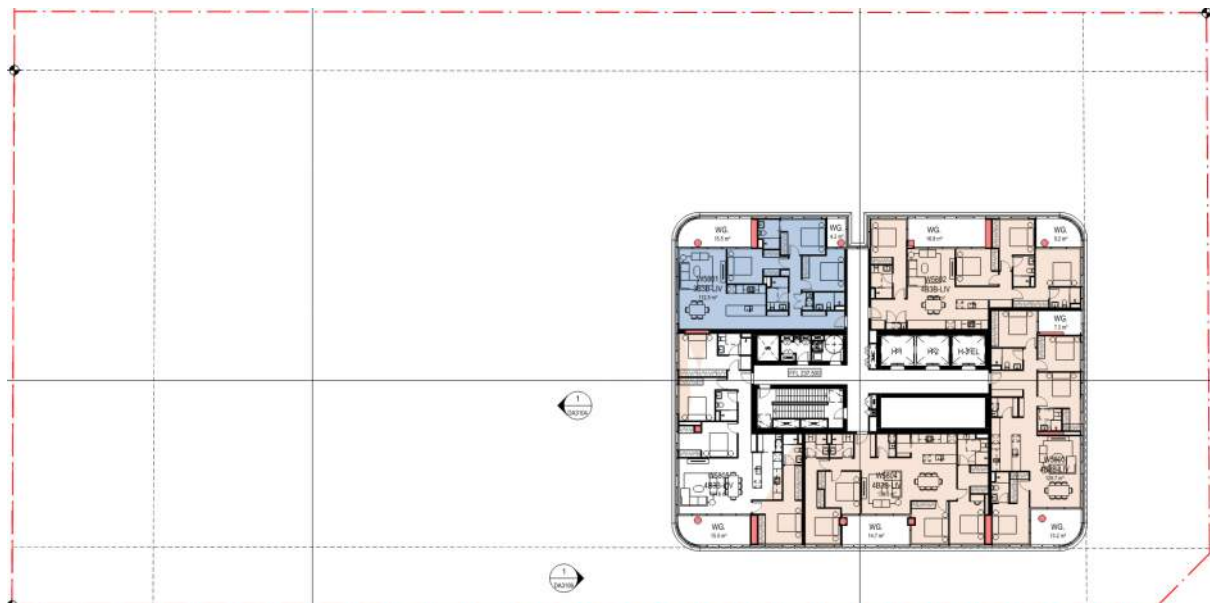


Figure 24 – Silver Category Layout (Level 58-59)

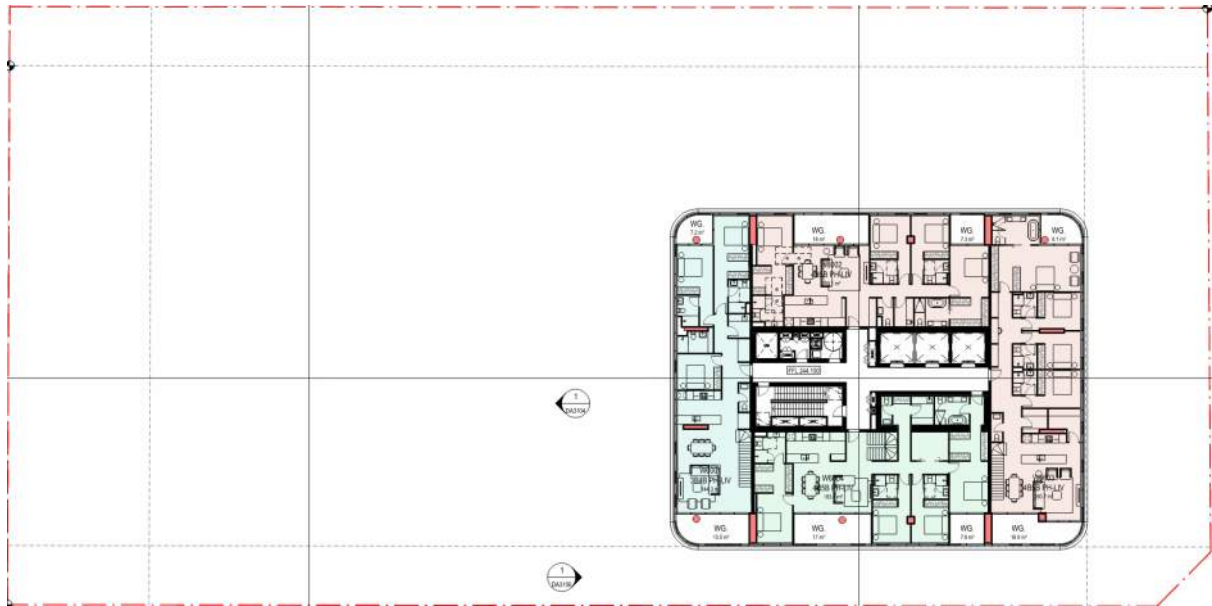


Figure 25 – Silver Category Layout (Level 60)

3.0 LIVABLE HOUSING ASSESSMENT SUMMARY

3.1 General

The following table summarises the compliance status of the architectural design in terms of the prescriptive provisions within livable housing design guidelines and indicates a **capability for compliance** with Silver Level requirements.

A detailed analysis and commentary are provided in **Section 5.3** of this report in the instance that prescriptive non-compliance occurs ('DOES NOT COMPLY') or further 'DESIGN DETAIL' is required.

Such instances should not necessarily be considered design deficiencies, but rather matters which need to be considered by the design team, the certifying authority and all other relevant stakeholders as design progresses in to Construction Certificate stage.

4.0 LIVABLE HOUSING SILVER CATEGORY ASSESSMENT

4.1 Schedule of livable housing design guidelines—All essential features incorporated

No	Clauses	Silver
4.0	Drawings	✓
4.1	Dwelling access	Capable of Compliance
4.2	Dwelling entrance	Further information required
4.3	Internal doors & corridors	Capable of Compliance
4.4	Toilet	Capable of Compliance
4.5	Shower	Capable of Compliance
4.6	Reinforcement of bathroom & toilet walls	Capable of Compliance
4.7	Internal stairways	N/A

4.2 Detailed Provisions under the Livable Housing Guidelines

4.2.1 Dwelling access

Specification shall detail the following—

Clause	Livable Housing Design Guidelines Requirements
1	<p>Silver Level</p> <ol style="list-style-type: none"> 1) Provide a safe, continuous step-free pathway from the front boundary of the property to an entry door to the dwelling. This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14. 2) The path of travel referred to in (1) should have a minimum clear width of 1000mm and have: <ul style="list-style-type: none"> ○ no steps; ○ an even, firm, slip resistant surface; ○ a crossfall of not more than 1:40; ○ a maximum pathway slope of 1:14 ○ Where ramps are required, they should have landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length. 3) The path of travel referred to in (1) may be provided via an associated car parking space for the dwelling. Where a car parking space is relied upon as

Clause	Liveable Housing Design Guidelines Requirements
	<p>the safe and continuous pathway to the dwelling entrance, the space should incorporate:</p> <ul style="list-style-type: none"> ○ minimum dimensions of at least 3200mm (width) x 5400mm (length); ○ an even, firm and slip resistant surface; and ○ a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen). <p>4) A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide:</p> <ul style="list-style-type: none"> ○ a maximum gradient of 1:10 ○ a minimum clear width of 1000mm (please note: width should reflect the pathway width) ○ a maximum length of 1900mm <p>5) Where a ramp is part of the pathway, level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp.</p> <p>Note: the width of the landing will be determined by the adjoining pathway. If the landing directly adjoins the doorway, please refer to Element 2 of the dimensional requirements.</p>

The following comments are provided in this regard—

Information provided at the SSSA stage is adequate to satisfy the submission regarding livable housing provisions for all silver, gold and platinum categories.

4.2.2 Dwelling entrance

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
2	<p>Silver Level</p> <p>1) The dwelling should provide an entrance door with -</p> <ul style="list-style-type: none"> ○ a minimum clear opening width of 820mm; ○ a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and ○ reasonable shelter from the weather. <p>2) A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door. A level landing area at the entrance door should be provided on the arrival side of the door (i.e. the external side of the door) to allow a person to safely stand and then open the door.</p>

Clause	Liveable Housing Design Guidelines Requirements
	<p>3) Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided.</p> <p>4) The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1.</p> <p>Note The entrance must incorporate waterproofing and termite management requirements as specified in the NCC.</p>

The following comments are provided in this regard—

Based on the information provided at the SSDA stage, the submission adequately satisfies the Livable Housing Silver Category provisions.

4.2.3 Internal doors & corridors

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
3	<p>Silver Level</p> <p>1) Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:</p> <ul style="list-style-type: none"> o a minimum clear opening width of 820mm; and o a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). <p>2) Internal corridors/passageways to the doorways referred to in (1) should provide a minimum clear width of 1000mm.</p> <p>* Corridor widths should be measured as described in Clause 6.3 of AS 1428.1 – 2009</p>

The following comments are provided in this regard—

Based on the information provided at the SSDA stage, the submission is considered sufficient to satisfy the Livable Housing Silver Category provisions.

4.2.4 Toilet

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
4	<p>Silver Level</p> <p>Dwellings should have a toilet on the ground (or entry) level that provides:</p>

Clause	Liveable Housing Design Guidelines Requirements
	<ol style="list-style-type: none"> 1) a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and 2) a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door. 3) The toilet pan should be located in the corner of the room (if the toilet is located in a combined toilet / bathroom) to enable installation of grabrails at a future date. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.

The following comments are provided in this regard—

Based on the information provided at the SSDA stage, the submission is considered sufficient to satisfy the Livable Housing Silver Category provisions.

4.2.5 Shower

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
5	<p>Silver Level</p> <ol style="list-style-type: none"> 1) One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date. 2) The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date. <p>For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.</p>

The following comments are provided in this regard—

It is not applicable to the Silver Category.

The information provided at the SSDA stage is considered sufficient to address the submission requirements for Livable Housing Silver Category provisions.

4.2.6 Reinforcement of bathroom & toilet walls

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
6	<p>Silver Level</p> <p>Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.</p> <p>The walls around the toilet are to be reinforced by installing:</p> <ol style="list-style-type: none"> 1) noggings with a thickness of at least 25mm; or 2) sheeting with a thickness of at least 12mm. <p>The walls around the bath are to be reinforced by installing:</p> <ol style="list-style-type: none"> 1) noggings with a thickness of at least; or 2) sheeting with a thickness of at least 12mm. <p>The walls around the hobless shower recess are to be reinforced by installing:</p> <ol style="list-style-type: none"> 1) noggings with a thickness of at least 25mm; or 2) sheeting with a thickness of at least 12mm.

The following comments are provided in this regard—

Based on the information provided at the SSDA stage, the submission is considered sufficient to satisfy the Livable Housing Silver Category provisions.

4.2.7 Internal stairways

Specification shall detail the following—

Clause	Liveable Housing Design Guidelines Requirements
7	<p>Silver Level</p> <ol style="list-style-type: none"> 1) Stairways in dwellings must feature: <ul style="list-style-type: none"> o a continuous handrail on one side of the stairway where there is a rise of more than 1m. <p>Note This is a requirement for all new homes under the NCC. Homes built prior to 2014 may benefit from this element.</p>

The following comments are provided in this regard—

The requirement does not apply to the proposed Livable Housing categories identified for this development.

5.0 DEVELOPMENT PARTICULARS

5.1 Purpose of Adaptable Housing Provisions

The purpose of the adaptable housing is to set out a benchmark on which to develop the accommodation needs of users of all ages and abilities. Adaptable housing by incorporating sensible, functional design features often lacking in typical housing design, serves additional benefits to the owners and occupants.

The purpose of this report is to identify the extent to which the architectural design documentation complies with the provisions of the adaptable housing code, aka AS4299-1995, specifically the Class A requirements.

As stipulated by the AS4299-1995 Adaptable Housing code, the adaptable housing units shall be designed and constructed to meet the following Performance Requirements:

- 1) **Visitability:** to ensure there is at least one accessible entry and path of travel to the living area and to a toilet;
- 2) **Avoidance of level changes:** to have no steps where possible;
- 3) **Manoeuvrability:** to ensure suitable circulation to manoeuvre a wheelchair within the living area, kitchen, bedroom and bathroom/toilet;
- 4) **Ease of adaptation:** to ensure any walls proposed to be demolished to be non-loadbearing and free of electrical and plumbing services;
- 5) **Ease of reach:** to ensure controls (such as light switches and taps) and shelves/cupboards at suitable levels for people who use wheelchairs; and
- 6) **Future laundry facilities:** to ensure laundry facilities after adaptation will be accessible to people who use wheelchairs.

The City of Ryde DCP requires adaptable housing to be provided at a rate of 10% of the total number of units proposed in a development with 70% of the total units to achieve Livable Housing Silver Level as per Housing SEPP (Apartment Design Guide). The project Planning Consultant confirms that the types of units nominated as adaptable units in the development satisfy the planning provision.

5.2 Development Description

A total of 858 residential units are proposed within the subject development, with 10% units designated as adaptable units. The current types of the dwellings nominated as adaptable housing are as follows:



Figure 1 – One-bedroom unit (pre/post adaptation)



Figure 2 – Two-bedroom unit (pre/post adaptation)



Figure 3 – Three-bedroom unit (pre/post adaptation)

6.0 ADAPTABLE HOUSING ASSESSMENT SUMMARY

6.1 General

The following table summarises the compliance status of the architectural design in terms of the prescriptive provisions within AS4299 – 1995 and indicates a **capability for compliance** with Class A requirements.

A detailed analysis and commentary are provided in **Section 7.0** of this report in the instance that prescriptive non-compliance occurs ('DOES NOT COMPLY') or further 'DESIGN DETAIL' is required.

Such instances should not necessarily be considered design deficiencies, but rather matters which need to be considered by the design team, the certifying authority and all other relevant stakeholders as design progresses in to BA stage.

6.2 Schedule of Adaptable housing Class A – All essential features incorporated

CI	AS4299:1995	Satisfactory	Non-Compliance	Design Detail
2.3	Drawings	✓		
3.2.2	Sitting	✓		
3.6.1	Security		N/A	
3.7.2	Private car accommodation		Performance Solution	
3.8	Letterboxes	✓		
4.3.1	Accessible entry	✓		
4.3.4	Exteriors (general)	✓		
4.3.3	Interior (general)	✓		
4.7.1	Living room & dining room	✓		
4.5.2	Kitchen			✓
4.6.1	Main bedroom	✓		
4.4.1	Bathroom	✓		
4.8	Laundry	✓		
4.11	Ancillary			✓

7.0 AS4299-1995 DETAILED ASSESSMENT

7.1 General

With reference to the AS4299-1995 Assessment Summary contained in [Section 6.0](#) above, the following detailed analysis and commentary is provided.

The commentary is formulated to enable the SSDA design documentation to be further progressed for the purpose of demonstrating the realisation of compliance with the relevant provisions of AS4299-1995, specifically Class A Essential Features.

7.2 Detailed Provisions

7.2.1 Drawings

Specification shall detail the following—

Clause	Accessibility Requirements
2.3	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages

The following comments are provided in this regard:

Drawings have been provided for the three types of adaptable units — one-bedroom, two-bedroom, and three-bedroom demonstrating that the proposed layouts are in accordance with AS 4299-1995.

7.2.2 Siting

Specification shall detail the following—

Clause	Accessibility Requirements
3.2.2	Siting specification shall detail the following—
-	
3.3.3	<ul style="list-style-type: none"> (i) A continuous accessible path of travel, in accordance with AS1428.1-2009 is to be provided from street frontage carparking area or drop off point to all adaptable housing units; and (ii) The accessible path of travel to the entrance of adaptable housing units shall be continuous, slip-resistant, hard-surfaced and shall not incorporate any step, stairway or other impediment, compliant with AS1428.1-2009.

7.2.3 Security

Specification shall detail the following—

Clause	Accessibility Requirements
3.6.1 -	(i) An even degree of light shall be provided along main accessible pathways; and
3.6.2	(ii) A minimum lighting level of 50 lux at ground level shall be provided.

The following comments are provided in this regard:

The detailed information is not required at SSDA stage, but as the design progresses, detailed information shall be developed with relevant specialist consultants prior to, and at BA stage to satisfy the above code provisions.

7.2.4 Private car accommodation

Car parking accommodation shall detail the following—

Clause	Accessibility Requirements
3.7.2 -	(i) One car parking space per adaptable unit to be provided with dimensions in accordance with AS4299-1995 or AS/NZS 2890.6:2009;
3.7.3 & 4.10	(ii) Adaptable car spaces and associated shared zone to have a minimum vertical clearance no less than 2500mm. The vertical clearance leading to the accessible car spaces may not be less than 2200mm; and
	(iii) Dedicated spaces and shared zones are to have space delineation in accordance with AS/NZS 2890.6:2009;
	(iv) The requirement for a symbol of access to be placed on the pavement shall not apply to any privately-owned parking space for people with disabilities associated with a single residence and intended primarily for use by occupants of that residence.

The following comments are provided in this regard:

All parking for the development is located across six basement levels, partially occupying lower and upper ground. Access is provided via commercial passenger lifts extending from the basement to the top floor, ensuring ease of movement for residents. Adaptable Housing car spaces and shared zones have a minimum vertical clearance of 2,500mm, while access leading to accessible car spaces provides at least 2,200mm clearance.

Accessible parking bays comply with the City of Ryde DCP 2014, Part 9.2 – Access for People with Disabilities, though structural columns are located within shared areas in some locations.

As design progresses, and as part of the Construction Certificate assessment, a performance Solution is to be prepared to justify the departures at some locations due to the placement of the structural columns.

7.2.5 Letterboxes

Specification shall detail the following—

Clause	Accessibility Requirements
3.8	(i) External letterboxes shall be located on a hard-standing area with a maximum grade of 1:40, connected to an accessible pathway to the adaptable housing unit, in accordance with AS4299-1995.

The following comments are provided in this regard—

Letterboxes are located within the mail room adjacent to the lift lobby on the lower ground floor, providing direct and equitable access to individually allocated letterboxes for the SOUs within the development.

The letterboxes appear to be located on a hard-standing area and connected by an accessible pathway for ease of access, in particular, the nominated adaptable housing units in the development in accordance with the requirements of AS4299-1995.

7.2.6 Accessible entry

The accessible entry shall be detailed as follows—

Clause	Accessibility Requirements
4.3.1 - 4.3.5 & 4.10	<p>(i) Entry door to have clear opening width and circulation space (hinge and latch side clearance) in accordance with AS1428.1-2009;</p> <p>(ii) Where exposed to the weather, the entry door to have a level landing (an area of 1550mm diameter with a maximum 1:40 gradient) with a low threshold to exclude water, compliant with AS4299-1995;</p> <p>(iii) The operational force of entry doors to be lightweight in design to satisfy the operational requirements of AS1428.1-2009 (where provided, door closers to be adjusted to satisfy this requirement); and</p> <p>(iv) Door hardware to be operable with one hand and located at a suitable location in accordance with AS1428.1-2009—</p>

	<ul style="list-style-type: none"> a. D-pull or D-lever type handles with a return; b. Have a minimum 35-45mm clearance between the handle and the backplate of the door face; c. Be located between 900-1100mm above FFL.
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The following comments are provided in this regard:

At the current stage of the design development, only common area doorways/entrance doorways of the SOUs clearances are relevant to the DA submission.

As the design further develops to CC stage, the above provisions shall be reviewed and addressed in detail.

7.2.7 Interior – General

The internal circulation areas shall be detailed as follows—

Clause	Accessibility Requirements
<p>4.3.3 - 4.3.7 4.7.2 4.6.2</p>	<ul style="list-style-type: none"> (i) Floor within units is to be level throughout, if split-levels are used, they are to either incorporate scope for a ramp compliant with AS1428.1, or all essential features are to be located on one level (i.e., entry, living area, kitchen and WC); (ii) Circulation spaces to be capable of modification to comply with AS1428.1-2009 as a minimum; (iii) Doors, other than the main bedroom, main bathroom, laundry and kitchen doors, to have clear opening width of 820mm at pre-adaptation; (iv) Internal corridors to have a minimum width of 1000mm at pre-adaptation; (v) Door hardware to be operable with one hand and located at a suitable location in accordance with AS1428.1-2009— <ul style="list-style-type: none"> a. D-pull or D-lever type handles with a return; b. Have a minimum 35-45mm clearance between the handle and the backplate of the door face; c. Be located between 900-1100mm above FFL.

The following comments are provided in this regard:

Information provided at SSDA stage is adequate to satisfy the submission in respect of accessibility provisions.

Detailed resolution of items such as fixture and fitting details for the common facilities and the nominated adaptable apartments will be required for review as the design development progresses to CC stage.

7.2.8 Living area

The Living Room plan and specification shall detail the following—

Clause	Accessibility Requirements
4.7.1 - 4.7.4 & 4.10	(i) Provision shall be made for a circulation space to enable a 360° wheelchair turn, after furniture has been placed (2250mm diameter turning space will satisfy this requirement); (ii) Indicate provision for a telephone outlet adjacent a power point; (iii) Full height glazed panels or door units where provided shall have a transom at 600-730mm above floor level. Glazing shall be of a safety glazing material; (iv) GPOs shall be located not less than 500mm horizontally from internal corners; and (v) Potential illumination level within living areas to be a minimum 300 lux.

The following comments are provided in this regard—

The overall circulation spaces proposed is capable of meeting the provisions specified above, and considered to be adequate for SSDA submission.

7.2.9 Kitchen

The kitchen plan and specification shall detail the following—

Clause	Accessibility Requirements
4.5.2 - 4.5.11 & 4.5.4	(i) A minimum clearance of 1550mm between all opposing base cabinets and walls to be provided at the outset, to allow for a 180° turn, in accordance with AS1428.1; (ii) Ensure at pre-adaptation continuous tiling / floor surface is provided under all base cabinets to allow for joinery to be reconfigured and that capped services are provided where required to ensure adaptation is at minimal cost and inconvenience. (iii) Kitchen door to have a clear opening width of 850mm and circulation spaces in accordance with AS1428.1-2009;

	<ul style="list-style-type: none"> (iv) Benches to include 800mm work surface adjacent to the sink and cooktop; (v) Provide a workspace adjacent to the refrigerator; (vi) Kitchen sink to be adjustable from 750mm-850mm in height, or replaceable as a unit, plumbing shall be installed to accept supply and drainage connections for sinks mounted at the heights specified; (vii) The tap set shall have levers or sensor plate controls located no greater than 300mm from the front of the bench; (viii) The cooktop shall be provided with an isolation switch and controls which do not require reaching over hotplates and controls shall have raised cross-bars for ease of grip; (ix) Elevation drawings to indicate location of oven to be located adjacent to a work surface (oven to be located underneath cooktop) Where oven doors are hinged, the clear work surface to be on the opposite side to the hinge; (x) Provision shall be made for a microwave shelf to be installed or replaced at any height between 750mm and 1200mm above FFL; (xi) At least one double power point outlet within 300mm of the front of a work surface, and one provided for a refrigerator in such a position as to be easily accessible after the refrigerator is installed; (xii) Hot water systems to be installed to deliver hot water at a maximum of 50°C at the hot water outlet; (xiii) Door pulls or handles for wall cabinets shall be capable of operation without a firm grip. A minimum 50mm clearance shall be provided between the handle and any obstruction; and (xiv) The floor surface shall have a slip resistance wet pendulum test rating of P2, in accordance with AS/NZS4586:2004 / SA HB 198:2004.
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The following comments are provided in this regard—

The overall circulation spaces proposed is capable of meeting the provisions specified above, and considered to be adequate for DA submission.

The relocation of the island bench within the two-bedroom unit would require the provision of provisional plumbing. While this solution is recommended under AS 4299:1995, unused plumbing points may pose a risk of legionella within the water supply system.

Where possible, an “L”-shaped kitchen layout is recommended as an alternative to minimise this risk.

7.2.10 Main bedroom

The accessible bedroom plan and specification shall detail the following—

Clause	Accessibility Requirements
4.6.1 - 4.6.7 & 4.10	(i) The main bedroom shall be capable of accommodating a queen size bed (1530 x 2030mm), a wardrobe and the circulation space requirements of AS1428.2, clear of wardrobe fixtures; (ii) A minimum of two double socket general purpose outlets shall be provided on the wall of the bedroom where the bedhead is likely to be located; and (iii) Main bedroom door to have 850mm clear opening width and circulation spaces in accordance with AS1428.1-2009.

The following comments are provided in this regard—

The overall circulation spaces proposed is capable of meeting the provisions specified above, and considered to be adequate for SSDA submission.

7.2.11 Sanitary facilities

The bathroom plan and specification shall detail the following—

Clause	Accessibility Requirements
4.1.1 - 4.4.4 (d) & 4.10	(i) All sanitary facilities and components shall be adaptable, at minimum cost, to potentially comply with AS1428.1 as a minimum. Any walls that are to be moved or demolished must non-loadbearing and free of electrical and plumbing services. (ii) Each housing unit shall be provided with either a visitable toilet or an accessible toilet, in accordance with AS1428.1. Where a separate toilet and bathroom are used with the intention of future unification, the WC pan shall initially be positioned at the correct distance from fixed walls; (iii) Main bathroom door to have 850mm clear opening width and circulation space in accordance with AS1428.1-2009. An exception can be made to the positioning of the washbasin, which can be located a minimum of 300mm clear of the swing of the door; (iv) A shower shall be provided in accordance with AS1428.1. Provide a shower recess with a level area (i.e. no hob) across the compartment and waterproofed to comply with AS3740; (v) The washbasin shall be located so that circulation space and knee clearance can achieve compliance with AS1428.1 at post adaptation;

	<ul style="list-style-type: none"> (vi) Where shower, bath and WC grabrails are not provided from the outset and framed walls are used, reinforced areas for secure fixing shall be provided to support future grabrails; (vii) Provide a double GPO beside the mirror (in the post-adapted location); (viii) Tap sets throughout shall have capstan or lever handles; (ix) Hot water systems to be installed to deliver hot water at a maximum of 50°C at the hot water outlet; and (x) The floor surface shall have a slip resistance wet pendulum test rating of P2, in accordance with AS/NZS4586:2004 / SA HB 198:2004.
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The following comments are provided in this regard—

Information provided at SSDA stage is adequate to satisfy the submission in respect of accessibility provisions.

Detailed resolution of items such as fixture and fitting details will be required for review as the design development progresses to CC stage.

7.2.12 Laundry

The Laundry plan and specification shall detail the following—

Clause	Accessibility Requirements
4.8 - 4.9 & 4.10	<ul style="list-style-type: none"> (i) Provision for adequate circulation space (1550mm diameter) shall be made in front of or beside appliances; (ii) If a separate room is provided for laundry, the door is to have 850mm clear opening width and circulation space in accordance with AS1428.1-2009; (iii) Provision to be made for an automatic washing machine; (iv) Provide a continuous accessible path of travel to a clothesline, where provided; (v) A double general power outlet shall be provided; (vi) Hot water systems to be installed to deliver hot water at a maximum of 50°C at the hot water outlet; and (vii) The floor surface shall have a slip resistance wet pendulum test rating of P2, in accordance with AS/NZS4586:2004 / SA HB 198:2004.

The following comments are provided in this regard—

For the purposes of future adaptation, the overall circulation spaces proposed are capable of meeting the provisions specified above, and considered to be adequate for SSDA submission.

7.2.13 Ancillary items

Specification shall be detailed as follows—

Clause	Accessibility Requirements
<p>4.11.1 - 4.11.4</p>	<p>(i) Light switches shall be located at a height not less than 900mm not more than 1100mm above FFL, and in line with door handles;</p> <p>(ii) Switches shall be located adjacent to door handles where practical;</p> <p>(iii) Except where elsewhere described (refer to kitchen and bathroom), GPOs shall be located at a height of not less than 600mm, with a preferred height of 1000mm above FFL, and in line with door handles; and</p> <p>(iv) GPOs shall be located not less than 500mm horizontally from internal corners.</p>

The following comments are provided in this regard—

Information provided at SSDA stage is adequate to satisfy the submission in respect of accessibility provisions.

Detailed resolution will be required as the design development progresses to Construction Certificate stage.

8.0 CONCLUSION

8.1 General

Our strategy for ensuring compliance is aligned with the design process in conjunction with the continual development of the architectural documentation, as required.

Based on the assessment to date, the subject development is capable of achieving compliance with the Livable Housing Silver level and the adaptable housing provisions under the City of Ryde DCP, exceeding the requirements stipulated by the Housing SEPP 2021 (Apartment Design Guide), subject to the comments and design details outlined in [Sections 6.0](#) and [7.0](#).

We trust that the above information is sufficient for the consent authority in assessing the merit of the architectural design from a SSDA perspective.

If there are any queries regarding this report, please do not hesitate to contact the undersigned.

Report By



Yolanda Wang

M Arch | Grad Dip Bld Envt (Bldg Surv)

[AMOEBA ACCESS Pty Ltd](#)

ACA Australia, Accredited Member: 600

APPENDIX 1 – Documentation Provided for Assessment

This adaptable housing assessment was based upon the architectural documentation prepared by AJC Architects namely—

Liveable Housing provision:

DRAWING	REV	TITLE	DATE
DA-2012	15	LEVEL 4	30/01/26
DA-2013	15	LEVELS 5 - 9	30/01/26
DA-2014	14	LEVEL 10	30/01/26
DA-2015	14	LEVELS 11 - 19	30/01/26
DA-2016	13	LEVEL 20 – 22 _OUTRIGGER	30/01/26
DA-2017	13	LEVEL 23 _OUTRIGGER + PLANT	30/01/26
DA-2018	13	LEVELS 24	30/01/26
DA-2019	4	LEVELS 25 - 26	30/01/26
DA-2020	4	LEVEL 27	30/01/26
DA-2021	4	LEVEL 28	30/01/26
DA-2022	4	LEVEL 29 - 30	30/01/26
DA-2023	4	LEVEL 31	30/01/26
DA-2024	4	LEVEL 32 - 33	30/01/26
DA-2025	4	LEVEL 34	30/01/26
DA-2026	12	LEVEL 35 - 40	30/01/26
DA-2027	12	LEVEL 41 - 44	30/01/26
DA-2028	12	LEVEL 45 - 50	30/01/26
DA-2029	12	LEVEL 51	30/01/26
DA-2030	12	LEVEL 52	30/01/26
DA-2031	12	LEVEL 53 - 57	30/01/26
DA-2032	12	LEVEL 58 - 59	30/01/26
DA-2033	12	LEVEL 60	30/01/26

Adaptable Housing provision:

DRAWING	REV	TITLE	DATE
DA5110	1	ADAPTABLE APTS WATERLOO	23/01/26
DA5111	1	ADAPTABLE APTS COTTONWOOD	23/01/26



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