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ARCHITECTURE | MASTERPLANNING | INTERIORS

## SEPP 65 REPORT

SALVATION ARMY CORP & AFFORDABLE HOUSING | 23 DALCASSIA STREET,  
HURSTVILLE

prepared for The Salvation Army  
for submission to Georges River Council

29 September 2020



## INTRODUCTION

This report has been prepared in consideration of the proposed Salvation Army community project at 23 Dalcassia Street, Hurstville, which incorporates 27 residential apartments to house people in need. The report will assess the design qualities of the proposed development and comment on the important components of the urban form having reference to the provisions of SEPP No. 65 and the Apartment Design Guide, Liveable Housing Design, Georges River Council LEP and relevant DCP.

The proposed development is a Community Use building including a 7-storey plus roof terrace and 4 basement levels. Salvation Army Corp, Salvation Army Cafe (used for job training), Community support programs, housing people within the Salvation Army's housing continuum. There will be a mix of 18 x Studios, 4 x 2 bed and 5 x 3 bed apartments.

The proposed development responds strongly to the existing context and contributes to the overall perception of a vibrant, lively and safe streetscape. It will be visible along both street frontages in the surrounding area and forms part of the transition from the Town Centre precinct to the adjoining medium to high density residential areas.

Attention to form, massing and facade details ensures that the building is a positive statement within the local area. As the site is on a corner location opposite a large residential flat building, the relatively new private hospital and opposite smaller Heritage cottage, the building is a key transitional site in its context.

A thorough design process has been undertaken in the development of this project to ensure a high quality product is provided.

site and context

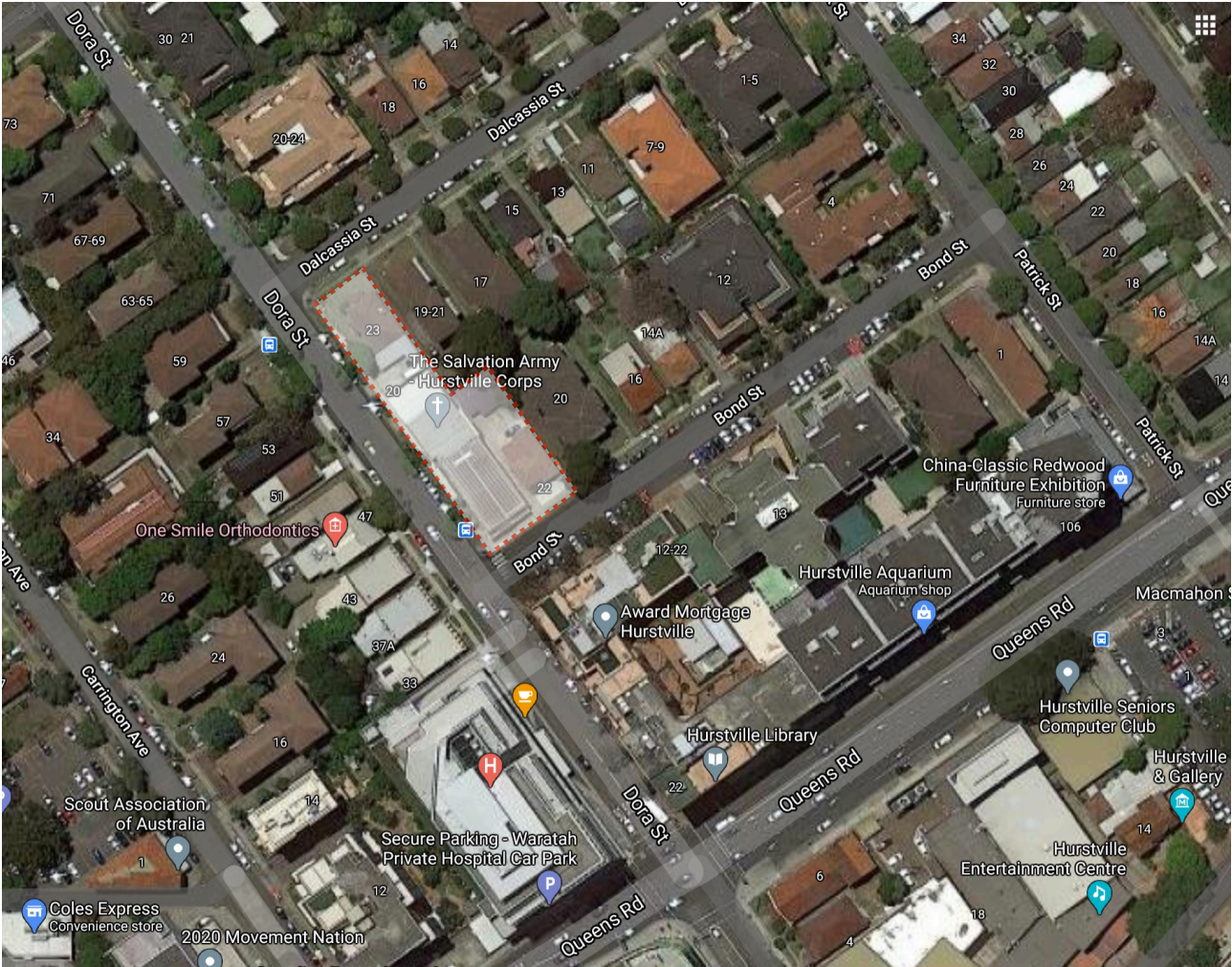
The report and associated architectural plans provide an analysis of the site conditions and their relationship to the surrounding context. The site analysis and site plan have detailed all key aspects and constraints on both the site and surrounding development.

Well-designed mixed use multi-unit residential buildings in new precincts can have the effect of transforming the overall impression of the streetscape and bring about vitality that is often lacking in higher density development, borne about by poor design and failure to successfully manage bulk, scale and landscape setting.

The subject site is located alongside a precinct known as the “Hurstville Town Centre,” located within the Georges River Local Government Area (LGA). Its extents are defined by Dalcassia Road to the north, Dora Street to the West and Bond Street to the South.



fig1: site locality



*fig 2: site and context*

The development site (the 'site') is currently The Salvation Army Hurstville Corps (Church) and Community Facility and associated ancillary buildings. It is elongated in shape, falling from the southern frontage to the northern frontage. The northern boundary fronts Dalcassia Street, the western boundary fronts Dora Street, the Southern boundary fronts Bond Street, while the eastern boundary steps along its length and adjoins 3-4 storey walk-up strata unit buildings.

There is limited vegetation on the site and the proposed development portion of the site has essentially no soft landscaping.

The southern side of Bond Street is dominated by high density residential, and Waratah private hospital exists to the south west. The adjoining properties to the east and north are a mix of low and medium and high density residential dwellings, with a number of 3, 4 and 5 storey residential apartment buildings.

### building design principles

As noted the building is located at a transitional point in the local urban pattern. The buildings to the south and south west are built to the boundary and typically 7-9 storeys in height. The buildings opposite to the west, north and east are typically set back ranging 4-6m and varying in height from 1-4 storeys.

In response to these existing conditions, the building has developed with a colonnaded podium on the south western corner, and the building form setting back along both frontages to pick-up the typical setbacks within the street. (fig 3)

The Corp (church), cafe and community uses have their entry to both Bond Street and the corner of Bond & Dora Street and the residential apartment entry is located part way along Dora Street, with the apartments forming 2 narrower vertical forms, articulated by the lobby and stair.



*fig 3: proposed building 3D model view*

The proposed building has a 7-storey in Western component, and a 6-storey in Eastern component. The planning and positioning of the building is cognisant of the likely future DCP planning and development of the adjoining sites. This has been illustrated in the 3D model view. (fig.3)

councils key development standards

The following statement provides an assessment of the development against the Hurstville Local Environment Plan 2012 and Hurstville Development Control Plan 1.

control	proposed	compliance
<b>Floor Space Ratio</b>	<p>The proposed development has a FSR which can be defined by 2 methods</p> <p><u>Pre-subdivision</u>            Site Area is 1679 sqm            Existing GFA = 167sqm            Proposed GFA = 2755.79 sqm            Total GFA = 2922.79sqm            Overall FSR = 1.74:1</p> <p><u>Post-subdivision</u>            Site Area is 1085 sqm            Proposed GFA = 2755.79 sqm            Overall FSR = 2.54:1</p>	<b>LEP or DCP merit assessment</b>
<b>Height</b>	28.8m to the top of the lift overrun (24.5m to the roof terrace level)	<b>merit assessment</b>
<b>Front Setbacks</b>	The proposed development fully complies with the front setbacks	<b>consistent with adjoining sites</b>
<b>Side Setback (DCP)</b>	The proposal development fully complies with the setbacks	<b>consistent with adjoining sites - generally 3m and 6m</b>
<b>Rear Setback (DCP)</b>	The proposed development fully complies with the rear setbacks.	<b>consistent with adjoining sites - generally 3m and 6m</b>
<b>Site coverage</b>	The proposed development will have a site coverage of; Pre-subdivision - 48% Post Sub-division - 58.9%	<b>LEP or DCP N/A</b>

Also refer to Summary Report for LEP and DCP Compliance Table.

SEPP 65 key standards

The following statement provides an assessment of the development against the State Environmental Planning Policy No 65 - Apartment Design Guide, Design Quality Principles Part 3 and Part 4.

standard	comment
<p><b>Communal and public open space</b> To provide adequate area of communal open to enhance residential amenity and provide opportunities for landscaping.</p>	<p>Communal open space has been provided. The proposed development will comply and provides <b>156 m<sup>2</sup></b> of the communal open space across the 2 roof terraces.</p> <p>Hurstville Oval is located 1 block to the north providing further outdoor play and activity space</p> <p>The development will comply with the required <b>50%</b> of direct sunlight to the principle useable area, receiving a minimum of 2 hours direct sunlight on the 21 June between 9am and 3pm.</p>
<p><b>Deep soil zones</b> To provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.</p>	<p>The proposed development has provided 79m<sup>2</sup> deep soil area to the north and 12m<sup>2</sup> to the south with a minimum dimensions of 3m. It complies with the 7% of the site's open space to be deep soil. Refer to drawing DA 1100</p> <p>The development will comply with the required <b>7%</b> of the site, achieving <b>8.3%</b> (91m<sup>2</sup> of 1085m<sup>2</sup>) refer to DA1100</p>
<p><b>Visual Privacy</b> To provide adequate building separation distances for achieving reasonable levels of internal and external visual privacy, visual privacy during day/night, maximise outlook and views from private open space without compromising visual privacy.</p>	<p>The principles utilised to ensure visual privacy have been developed as described in the Building Design Principles described earlier in this document. The western apartments have their living spaces facing the street, habitable rooms have been placed with screening and windows suitable to maintain privacy.</p> <p>For the eastern boundary, the proposed development has been planned with blank walls to respond to future development as per Council DCP planning. It will mean that separation can be achieved without impacting the adjoining development opportunities.</p>
<p><b>Bicycle and Car Parking</b> Underground parking with ventilation and bicycle storage providing safe and secure access for building users. Car park design and access is safe and secure.</p>	<p>The proposed development complies with RMS for the apartments Council DCP requirements for the other uses Occupants will be able to store bicycles within the secured basement, or in their secured storage cage.</p> <p>All car parking including the basement will be well lit for security and safety. Ventilation to basement car parking will be in accordance with BCA requirements.</p>
<p><b>Solar and Daylight Access</b> To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space. Living rooms and open space for at least <b>70%</b> of apartments to receive <b>2 hours</b> direct sunlight in winter. (in accordance with the SEPP allowance for urban areas).</p>	<p><b>19 of the 27</b> apartments receive minimum 2 hours direct sunlight on the 21 June between 9am and 3pm when assessing the building form.</p> <p>The development will comply with the required <b>70.3%</b> solar access.</p>

standard	comment
<p><b>Natural Ventilation</b> The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents. Overall 60% of apartments should have natural cross ventilation.</p>	<p>All apartments will receive access to fresh air. <b>27 of the 27</b> apartments achieve natural cross flow ventilation. The prevailing north easterly and southerly aspect will provide thermal comfort to the occupants.</p> <p>The development will comply with the required <b>60%</b> cross ventilation to apartments from Ground to Level 8, achieving <b>100%</b></p>
<p><b>Ceiling Height</b> To achieve sufficient natural ventilation and daylight access, increase the sense of space and contribute to the flexibility of building use.</p>	<p>The 2.7m floor to ceiling height is achieved for all units for habitable areas. Lower ceilings are employed in wet areas and corridors to accommodate air conditioning. Some bulkheads at 2400mm are utilised for limited areas over kitchens.</p>
<p><b>Apartment Size and Layout</b> To ensure that the apartments are functional, well organised, accommodate a variety of household activities and occupants needs. Single – aspect apartments should be limited in depth to 8m from a window. Cross over apartments 15 m deep should be 4m wide or wider to avoid narrow apartments. The maximum habitable room depth should be no more than 8m from window.</p>	<p>The design provides for a mix of apartment sizes with a variety of one, two and three bedroom units with a study to suit different family size and for those in needs.</p> <p>The apartment distribution is as follows:</p> <p>Studio - 18 (66.7%) 2 bedroom - 4 (14.8%) 3 bedroom - 5 (18.5%) <u>Total = 27 units</u></p> <p>All the apartments will achieve the minimum requirements of the following size:</p> <p>Studio - 35m<sup>2</sup> 2 bedroom - 70m<sup>2</sup> 3 bedroom - 90m<sup>2</sup></p> <p>A total of 2 apartments will be adaptable, including: 1 three-bedroom 1 studio</p> <p>All habitable rooms have a window within the external wall.</p> <p>Master bedrooms have a minimum area of 10m<sup>2</sup> and all other bedrooms a minimum of 9m<sup>2</sup>.</p> <p>Living rooms or combined living/dining rooms have a minimum width of 3.6m for 1 bed units and 4.0m for 2 &amp; 3 bed units</p> <p>Single aspect apartments have been designed to be compliant with the SEPP 65 rules of thumb.</p> <p>The maximum distance for the combined open plan layout is compliant with the maximum distance of 8m from a window.</p>

standard	comment
<p><b>Private Open Space and Balconies</b> To ensure apartments have appropriately sized private open space and balconies to enhance residential amenity. Private open space and balconies are located to enhance liveability for residents. The design is integrated into the overall architectural form and to maximise safety.</p>	<p>Balcony depth varies from 1m (for studio) to 4m and sizes vary from 4 sqm to 50 sqm.</p> <p>All primary balconies achieve the minimum requirements:</p> <p>Studio : 4m2 2 bed -10m2, 2m depth 3 bed - 12m2, 2.4m depth</p> <p>The balcony areas for each apartment type are included on floor plan drawings.</p> <p>The private open space area is functional and useable with a larger section to accommodate outdoor furniture. The provision of double sliding doors leading from living rooms to balconies ensures an extension of the living areas. Units provide direct casual surveillance of communal open spaces and adjoining streets.</p>
<p><b>Common Circulation and Spaces</b> To achieve good amenity and properly service the number of apartments, promoting safety and to provide social interaction between residents.</p>	<p>The maximum number of apartments sharing a common circulation zone is <b>4</b>.</p> <p>The common circulation areas are articulated with natural ventilation and daylight available at both ends of the typical floor lobbies. Common corridors are generous in size with ample circulation space as well as opportunities for interaction.</p> <p>Entries to units maintain privacy through orientation and are off-set from each other on opposite sides of the corridor.</p>
<p><b>Storage</b> To ensure that each apartment has adequate storage at rate defined SEPP 65.</p>	<p>The design provides for required minimum 50% of required storage within each apartment with additional secured storage space provided in the carpark area of the units.</p> <p>1 bedroom - 6m3 2 bedroom - 8m3 3 bedroom - 10m3</p>

design quality principles

The following statement provides an assessment of the development against the State Environmental Planning Policy No 65 - Design Quality of Residential Flat Developments, Design Quality Principles.

Principle Two : Built Form and Scale	
Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings and an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements	
objective	comments
<p><b>Building Envelopes</b> Building envelopes set appropriate scale of future development in terms of bulk and height in relation to street layout and lot size.</p>	<p>There are no specific height or floor space controls under the existing LEP and DCP, the proposed envelope has been designed to be transitional to the surrounding development.</p> <p>There is minimal impact from overshadowing to existing neighbours.</p>
<p><b>Building Depth</b> Objectives ensure adequate amenity for occupants – sun and ventilation. building depth 10-18m 60% of units to achieve cross ventilation, 25% of kitchens to have access to natural ventilation to comply with SEPP requirements</p>	<p>The apartments have a variety of depths, and are orientated to assist sunlight penetration and ventilation.</p> <p>There are no units which exceed the 18m maximum building depth. There are more than 60% of kitchens with access to natural ventilation.</p> <p>18 of 27 units have kitchens achieving direct natural ventilation (60%)</p> <p>27 of 27 units achieve cross ventilation, above the minimum 60% required, achieving 100%</p> <p>The habitable spaces (living, dining, kitchen) are within 8m of the frontage.</p>
<p><b>Building Separation</b> The objective is to achieve appropriate massing and spaces between buildings</p> <p>Minimum building separation for five storeys to eight storeys (approximately 25m):</p> <ul style="list-style-type: none"> <li>• 18m between habitable rooms/ balconies</li> <li>• 12m between habitable and non-habitable rooms</li> <li>• 9m between non-habitable rooms</li> </ul> <p>Minimum building separation for nine storeys and above (over 25m):</p> <ul style="list-style-type: none"> <li>• 24m between habitable rooms/ balconies</li> <li>• 18m between habitable and non-habitable rooms</li> <li>• 12m between non-habitable rooms</li> </ul>	<p>It is noted that the site is currently surrounded by residential flat building in the south and some single-storey heritage buildings in the west. This area is undergoing transformation according to proposed draft LEP. The proposal has therefore been designed to take into account that residential flat buildings may be developed on the adjoining sites in the future.</p> <p>All the setbacks have been positioned to recognise the likely achievable building form on the adjoining sites to still achieve ADG compliance.</p>

<p><b>Building Entry</b> To provide desirable residential amenity and to contribute positively to the streetscape and building façade.</p>	<p>The residents have been provided with clearly defined and secure entries and building lobbies. Direct access is also available from the secured basement carpark. Entry to building lobbies are accessibly compliant with AS1428.1 (2009).</p> <p>The main pedestrian access to the building is at the western of the site along Dora Street.</p> <p>The pedestrian access is legible and separated from vehicular access. Safe and convenient pedestrian access is provided from the basement car parking</p>
<p><b>Open Space</b> To achieve a passive recreational area for residents which is usable, safe and attractive</p>	<p>156m2 of communal roof terrace has been provided as open space with opportunity for a north-aspect. It is located to the north of the site with good solar access.</p>

**Principle Three : Density**

Good design has a density appropriate for a site and its context, in terms of floor space yields or number of units or residents.

objective	comments
<p><b>Floor Space Ratio</b> To ensure development is within optimum capacity of site and local area, (modulation and depth of walls allow for habitable balconies).</p>	<p>There is no FSR requirements in the current LEP/DCP control.</p>

**Principle Four : Sustainability**

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction phases.

objective	comments
<p><b>Energy Efficiency</b> To reduce the need for mechanical heating and cooling, reduce greenhouse gas emissions and support and promote renewable energy initiatives.</p>	<p>The proposed development is designed with passive environmental principles in planning and solar control.</p> <p>The proposed development is designed with passive environmental principles in planning and solar control but will also incorporate energy saving measures such as energy efficient hot water systems, water saving devices, including a relatively large native garden area, basement light sensors and timers.</p>

## Principle Five : Landscape

Good design recognises that together landscape and building operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

objective	comments
<b>Landscape Design</b> To provide residents with a quality of life in the development in the forms of privacy, outlook and views. To provide for improved micro climate and solar performance.	The landscaping has been designed to satisfy the objectives and Council's Landscape Code, by providing shade, screening, visual softening and improved energy efficiency and solar access.
<b>Deep Soil Zones</b> To assist water table and improve amenity through planting large - medium size trees.	The proposed development satisfies both the SEPP 65 Apartment Design Guide and the Hurstville DCP.  SEPP 65 requires <b>7%</b> of site with minimum 3m dimension for deep soil. This proposal achieves <b>8.3%</b> .
<b>Fencing and Walls</b> To provide privacy and security and to contribute to the public domain.	n/a

## Principle Six : Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development.

objective	comments
<b>Flexibility</b> To ensure that the design meets the broadest range of occupants' needs. To promote 'long life loose fit' buildings which can accommodate whole or partial changes of use.	The design of the residential apartments provides a variety of accommodation options and lifestyle preferences, though designed with owner/occupier in mind.  The design of the residential apartments provides a variety of accommodation options and lifestyle preferences, from individuals, couples, and families. Universally designed two and three bedroom apartments will meet the needs of occupants requiring disability access.
<b>Acoustic Privacy</b> Each apartment is to achieve acoustic privacy between external and internal space.	The design where possible achieves active and noisy areas adjacent to each other: Living rooms to living rooms and quiet areas bedroom to bedroom.  Visual privacy is achieved with screening between balconies as required. Installing seals at the entry door in accordance with the BCA will reduce noise from common corridors.

## Principle Seven : Safety

Good design optimises safety and security, both internal to the development and for the public domain.

objective	comments
<b>Safety</b> To ensure that Residential Flat Buildings (RFB) are safe and secure for residents and visitors, and the public domain.	The development reinforces the distinction between public and private utilising landscaping, terraces and variation in levels, clearly mark entry points. Well-lit access between car park and apartments and between basement car park and stairway. Unsecured concealed areas have been minimised and will be well lit. All common area and pathways will be illuminated. Lobbies are accessed via secure entries.

**Principle Eight : Housing Diversity and Social Interaction**

Good design responds to the social context and needs of the local community in terms of lifestyle, affordability, and access to social facilities.

objective	comments
<p><b>Unit Mix</b> Response to the needs of the local Community.</p>	<p>The proposed apartment buildings contain a range of apartment types, thus providing a number of options to various members of the community. The wide selection of unit types will make these buildings attractive to a broad cross section of the community.</p> <p>Adaptable apartments (2 in total) are provided in accordance with the recommendations of the DCP.</p> <p>Livable apartments are provided in accordance with SEPP 65.</p>
<p><b>Location</b> Access to the local community in terms of lifestyle, affordability, and access to social facilities.</p>	<p>The proposed development is in close proximity to Hurstville railway station and city library as well as private hospital that lead to local eateries and gathering areas.</p>

**Principle Nine : Aesthetics**

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development.

objective	comments
<p><b>Facades</b> To promote high architectural quality in facades which define and enhance the public domain.</p>	<p>The facades of the building respond to the orientation and usage of the rooms within, providing liveable indoor and outdoor spaces therefore encouraging residents to utilise the threshold between semi private and the public domain. Articulation is achieved with the use of multi-faceted and sculptured precast facade elements, balconies, sunshades and plug-on type details giving the buildings a 'human' scale.</p>
<p><b>Roof Design</b> Form and roof type relative to the precinct, and as part of the buildings sun control.</p>	<p>The building is well articulated and so the upper level finishes with a simple building form but the articulation of the floor plate ensures this creates an interesting silhouette</p>

Universal Design

The proposed development is designed to incorporate universal standards. The majority of units achieve the objectives of the Liveable Housing requirements at the silver level, and many at the gold level or platinum.

objective	requirement	compliant
<p><b>1. dwelling access</b> <i>There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.</i></p>	<p><b>silver level</b> a. Provide a safe and continuous pathway from: i. the front boundary of the allotment; or ii. a car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step-free) This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14. b. The path of travel as referred to in (a) should have a minimum clear width of 1000mm and – i. an even, firm, slip resistant surface; ii. a crossfall of not more than 1:40; iii. a maximum pathway slope of 1:14, with 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; and iv. be step-free c. 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: i. a maximum gradient of 1:10 ii. a minimum clear width of 1000mm (please note: width should reflect the pathway width) iii. a maximum length of 1900mm 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>	<b>100%</b>
	<p><b>gold level</b> As for silver level except in (b) replace the minimum clear pathway width of 1000mm with 1100mm</p>	<b>100%</b>
	<p><b>platinum level</b> As for silver level except in (b) replace with a minimum clear pathway width of 1100mm with 1200mm provided from: i. the front boundary of the allotment, and ii. any car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step-free) as specified in Element 2.</p>	<b>100%</b>

objective	requirement	compliant
<b>2. dwelling entrance</b> <i>There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.</i>	<b>silver level</b> a. The dwelling should provide an entrance door with - i. a minimum clear opening width of 820mm ii. a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled); and iii. reasonable shelter from the weather. b. A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door. c. Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided d. The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1. Note: The entrance must incorporate waterproofing and termite management requirements as specified in the NCC.	100%
	<b>gold level</b> As for silver level except replace: (b) with a level landing area of at least 1350mm x 1350mm, and (a) (i) with minimum clear door opening width of 850mm	100%
	<b>platinum level</b> As for silver level except replace: (b) with a level landing area of at least 1500mm x 1500mm, and (a) (i) with a minimum clear door opening width of 900mm	100%
<b>3. carparking</b> <i>Where the parking space is part of the dwelling access it should allow a person to open their car doors fully and easily move around the vehicle.</i>	<b>silver level</b> a. Where the parking area forms part of the dwelling access the space should incorporate: i. minimum dimensions of at least 3200mm (width) x 5400mm (length); ii. an even, firm and slip resistant surface; and iii. a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).	n/a
	<b>gold level</b> As for silver level except replace: (b) with a level landing area of at least 1350mm x 1350mm, and (a) (i) with minimum clear door opening width of 850mm	n/a
	<b>platinum level</b> As for silver level except replace: (b) with a level landing area of at least 1500mm x 1500mm, and (a) (i) with a minimum clear door opening width of 900mm	n/a
<b>4. Internal doors &amp; corridors</b> <i>Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.</i>	<b>silver level</b> a. Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide: i. a minimum clear opening width of 820mm (see Figure 2(a)); and ii. a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled). b. Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm.	100%
	<b>gold level</b> As for the silver level except replace: (a)/(i) with a minimum clear opening width of 850mm (see Figure 2(b)), and (b) with a minimum corridor/passageway width of 1200mm.	0%

objective	requirement	compliant
	<p><b>platinum level</b> As for the silver level except replace: (a)/(i) with a minimum clear opening width of 900mm (see Figure 2(c)), and (b) with a minimum corridor/passageway width of 1200mm.</p>	0%
<p><b>5. Toilet</b> <i>The ground (or entry) level has a toilet to support easy access for home occupants and visitors.</i></p>	<p><b>silver level</b> a. Dwellings should have a toilet on the ground (or entry) level that provides: i. a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and ii. a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). b. If the toilet is located within the ground (or entry) level bathroom, the toilet pan should be located in the corner of the room to enable the installation of grabrails.</p>	100%
	<p><b>gold level</b> As for silver level except replace (a)/(i) with a minimum clear width of 1200mm between the walls of the bathroom if located in a separate room, or between amenities if located in a combined bathroom.</p>	0%
	<p><b>platinum level</b> As for the gold level with the following features added to (a): iii. a toilet pan positioned between 450mm – 460mm from the nearest wall as measured from the centre line of the toilet; iv. 600mm minimum clearance forward of the cistern measured from the front of the cistern to the front of the toilet pan. 800mm (+/-10mm) clearance is required if the cistern is recessed; and v. a height for the pan of between 460mm - 480mm above the finished floor level as detailed in Figure 4.</p>	0%
<p><b>6. Shower</b> <i>The bathroom and shower is designed for easy and independent access for all home occupants.</i></p>	<p><b>silver level</b> a. One bathroom should feature a slip resistant, hobless (step-free) shower recess. Shower screens are permitted provided they can be easily removed at a later date. b. The shower recess should be located in the corner of the room to enable the installation of grab rails at a future date.</p>	100%
	<p><b>gold level</b> As for silver level except: c. The hobless (step-free) shower recess described in (a) should: i. be located in a bathroom on the ground (or entry) level; ii. provide minimum dimensions of 900mm (width) x 900mm (length); and iii. provide a clear space of at least 1200mm (width) x 1200mm (length) forward of the shower recess entry as detailed in Figure 5(a).</p>	0%
	<p><b>platinum level</b> As for gold level except: i. replace (c)/(ii) with dimensions of at least 1160mm (width) x 1100mm (length); and ii. replace (c)/(iii) with dimensions of at least 1600mm (width) x 1400mm (length) forward of the shower recess as detailed in Figure 5(b).</p>	0%

objective	requirement	compliant
<b>7. Reinforcement of bathroom &amp; toilet walls</b> <i>The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.</i>	<b>silver level</b> a. 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. b. The fastenings, wall reinforcement and grabrails combined must be able to withstand at least 1100N of force applied in any position and in any direction. c. The walls around the toilet are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 6(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 6(b). d. The walls around the bath are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 7(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 7(b). e. The walls around the hobless (step-free) shower recess are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 8(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 8(b)	<b>100% possible commitment by builder</b>
	<b>gold level</b> Silver level requirements apply.	<b>100% possible commitment by builder</b>
	<b>platinum level</b> Silver level requirements apply.	<b>100% possible commitment by builder</b>
<b>8. Internal stairways</b> <i>Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.</i>	<b>silver level</b> a. Stairways in dwellings must feature: i. a continuous handrail on one side of the stairway where there is a rise of more than 1m.	n/a
	<b>gold level</b> As for the silver level with the following additional features: ii. a minimum clear width of 1000mm; iii. be straight in design; and iv. be positioned adjoining a load bearing wall. Note: The steps must provide a slip resistant finish and suitable non-slip tread as specified in the NCC. Handrails on both sides of the stairway are preferred.	n/a
	<b>platinum level</b> As for the gold level with the following additional features: v. closed risers; vi. continuous handrails on both sides of the stairway; and vii. minimum landing areas of 1200mm x 1200mm at the top and base of the stairway. Note: The steps must provide a slip resistant finish and suitable non-slip tread as specified in the NCC	n/a
<b>9. Kitchen space</b> <i>The kitchen space is designed to support ease of movement between fixed benches and to support</i>	<b>silver level</b> No requirements.	<b>100%</b>

objective	requirement	compliant
benches and to support easy adaptation.	<b>gold level</b> a. The kitchen space should be designed to support ease of movement and adaptation with: i. at least 1200mm clearance provided in front of fixed benches and appliances; and ii. slip resistant flooring. b. Where practicable, floor finishes should extend under kitchen cabinetry to enable cupboards to be removed without affecting the flooring. An Assessor should ask the builder / client if he/she can confirm that flooring runs completely under cupboards. Sometimes it is relatively easy to confirm that floor coverings have been applied after cupboards have been installed and sometimes it is not so easy. If relying on advice from a third party, Assessors are advised to provide a note in the notes column of the Assessment.	0%
	<b>platinum level</b> As for the gold level except that the kitchen space described in (a) should be designed to support ease of movement and adaptation with: i. at least 1550mm clearance should be provided in front of fixed benches and appliances; ii. slip resistant flooring; and iii. task lighting installed above workspaces.	0%
<b>10. Laundry space</b> <i>The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.</i>	<b>silver level</b> No requirements.	100%
	<b>gold level</b> As for silver level except: a. The laundry space should be designed to support ease of movement and adaptation with: i. at least 1200mm clearance provided in front of fixed benches and appliances; and ii. slip resistant flooring. b. Where practicable, floor finishes should extend under laundry cabinetry to enable cupboards to be moved without affecting the flooring.	0%
	<b>platinum level</b> As for the gold level except that the kitchen space described in (a) should be designed to support ease of movement and adaptation with: i. at least 1550mm clearance should be provided in front of fixed benches and appliances; ii. slip resistant flooring; and iii. task lighting installed above workspaces.	0%
<b>11. Ground (or entry level) bedroom space</b> <i>There is a space on the ground (or entry) level that can be used as a bedroom.</i>	<b>silver level</b> No requirements.	n/a
	<b>gold level</b> a. The dwelling should feature a space (or room) on the ground (or entry) level that: i. is of at least 10m <sup>2</sup> with one wall a minimum length of 3m; ii. provides for a minimum path of travel of at least 1000mm on at least one side of the bed.	n/a

objective	requirement	compliant
	<p><b>platinum level</b> As for the gold level, but it also:</p> <ul style="list-style-type: none"> <li>i. provides a space of at least 1540mm (width) x 2070mm (in the direction of travel) on the side on the bed that is closest to the door approach; and</li> <li>ii. provides for a minimum path of travel of 1000mm on the remaining side of the bed.</li> </ul> <p>For Platinum level, It should be assumed that a bed with dimensions 1500mm x 2000mm (as shown on the sketch overleaf) is present. This will mean that the minimum clear dimensions of a room would need to be 3000mm x 4040mm to meet the Platinum level requirements. Where a bed is present (in the case of an As Built Inspection), the clearance should be measured to the edges of the bed for beds smaller than 1500mm x 2000mm. If the bed provided is larger than 1500mm x 2000mm compliance should be determined based upon a bed with dimensions 1500mm x 2000mm.</p>	n/a
<p><b>12. Switches and powerpoints</b> <i>Light switches and powerpoints are located at heights that are easy to reach for all home occupants.</i></p>	<p><b>silver level</b> No requirements.</p>	n/a
	<p><b>gold level</b> a. Light switches should be positioned in a consistent location: i. between 900mm – 1100mm above the finished floor level; and ii. horizontally aligned with the door handle at the entrance to a room. b. Powerpoints should be installed not lower than 300mm above the finished floor level.</p>	<b>100% possible builder to ensure compliance</b>
	<p><b>platinum level</b> As for gold level with the following feature: c. Light and powerpoint switches should be rocker action, toggle or push pad in design with a recommended width of 35mm.</p>	<b>100% possible builder to ensure compliance</b>
<p><b>13. Door and tap hardware</b> <i>Home occupants are able to easily and independently open and close doors and safely use tap hardware.</i></p>	<p><b>silver level</b> No requirements.</p>	n/a
	<p><b>gold level</b> a. Doorways should feature door hardware installed at between 900mm – 1100mm above the finished floor.</p>	<b>100% possible builder to ensure compliance</b>
	<p><b>platinum level</b> As for gold level with the following features: b. Doorways should feature lever or D-pull style door hardware; and c. Basins, sinks and tubs should feature lever or capstan style tap hardware with a central spout. For Gold and Platinum level, the handle clearances for D-pull style door hardware should be the same as AS1428.1. AS 1428.1 is the most relevant set of specifications aimed at providing the greatest access to the greatest number of people and as such is an appropriate standard to reference for this Element.</p>	<b>100% possible builder to ensure compliance</b>
<p><b>14. Family/living room space</b> <i>The family/living room features clear space to enable the home occupants to</i></p>	<p><b>silver level</b> No requirements.</p>	n/a

objective	requirement	compliant
enable the home occupant to move in and around the room with ease.	<b>gold level</b> No requirements.	n/a
	<b>platinum level</b> a. The family/living room should accommodate a free space, minimum 2250mm in diameter, to enable ease of movement clear of furniture.	<b>100% possible</b>
<b>15. Window sills</b> <i>Windows sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position</i>	<b>silver level</b> No requirements.	n/a
	<b>gold level</b> No requirements.	n/a
	<b>platinum level</b> a. Window sills on the ground (or entry) level in living areas and bedroom spaces should be positioned no higher than 1000mm above the finished floor level to enable enjoyment of the outlook. b. Window controls should be able to be easy to operate with one hand and located within easy reach from either a seated or standing position. Note: A concession from (a) is reasonable in kitchen, bathroom and utility spaces.	<b>100%</b>
<b>16. Flooring</b> <i>Floor coverings are slip resistant to reduce the likelihood of slips, trips and falls in the home.</i>	<b>silver level</b> No requirements.	n/a
	<b>gold level</b> No requirements.	n/a
	<b>platinum level</b> a. All floor coverings should: <ul style="list-style-type: none"> <li>i. be firm and even, and</li> <li>ii. feature a level transition between abutting surfaces (a maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled).</li> </ul>	<b>100% possible</b> <i>builder to ensure compliance</i>