

V BY CROWN, PARRAMATTA

ACCESS REVIEW S75W APPLICATION

Morris Goding Accessibility Consulting

DRAFT

12th June 2012

TABLE OF CONTENTS

| | | |
|------|--|----|
| 1. | EXECUTIVE SUMMARY | 3 |
| 2. | INTRODUCTION | 4 |
| 2.1. | General..... | 4 |
| 2.2. | Objectives | 4 |
| 2.3. | Access Requirements | 4 |
| 3. | INGRESS & EGRESS | 6 |
| 4. | RETAIL AND COMMERCIAL PATHS OF TRAVEL..... | 9 |
| 5. | SERVICED APARTMENT ACCOMMODATION..... | 12 |
| 6. | RESIDENTIAL ACCOMMODATION | 15 |
| 7. | COMMON USE FACILITIES AND AMENITIES | 18 |
| 8. | CAR PARKING | 21 |

1. EXECUTIVE SUMMARY

The Access Review Report is a key element in the design development of the proposed S75W application for the V by Crown development, located at the corner of Macquarie, Marsden and Hunter Streets, Parramatta and an appropriate response to the AS1428 series, Building Code of Australia (BCA), and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris-Goding Accessibility Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The development has been reviewed to ensure that ingress and egress, paths of travel; circulation areas, toilets, serviced apartments, adaptable units, and car parking comply with relevant statutory guidelines.

In general, the development has accessible paths of travel that are continuous throughout. In line with the reports' recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The Section 75W Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, toilets, service apartments, residential accommodation and car parking can be readily achieved.

The recommendations in this report are associated with detailed design and are achievable and should be addressed prior to construction certificate stage.

The main recommendations that have arisen from the access review include:

- (i) Ensure Marsden Street internal entry ramp has a max. 1:14 gradient ramp for 9m max. length compliant with AS1428.1 and DDA Premises Standards.
- (ii) Provide all lifts with 1400mm (width) x 1700mm (length) min. dimensions as required by the Parramatta City Centre DCP clause 4.1(d), and AS1428.2.
- (iii) Provide an accessible toilet or combined accessible toilet/shower, compliant with AS1428.1 adjacent to the male and female toilets or change rooms on each level where provided in accordance with the DDA Premises Standard.
- (iv) Provide alternative accessible linkages (eg. stair platform lifts, compliant with AS1735.7) from level 1 common-use pool areas to conference centre; garden/spa and gymnasium (mezzanine) in accordance with the DDA Premises Standards.
- (v) Provide 1 extra accessible apartment (total of 3) to satisfy DDA Premises Standards Table D3.1.
- (vi) Provide 6 extra adaptable units (min. total of 38) to satisfy Parramatta City Centre DCP clause 6.1(d) for 10% min. adaptable units in accordance with AS4299.
- (vii) Confirmation of public car parking allocations are required to ensure accessible car parking % (commercial, retail and service apartments) car parking is accessible, compliant with DDA Premises Standard Table D3.5.

2. INTRODUCTION

2.1. General

Crown Group has engaged Morris-Goding Accessibility Consulting to provide an access review report for proposed S75W modifications to the V by Crown mixed-use development in Parramatta, NSW. The development was previously approved (Project Approval MP09_0167) by the Planning Assessment Commission on 28 October 2011.

The site of the development is located on the western side of Marsden St between Macquarie Street and Hunter Street. The proposed development consists of a new external plaza, retail tenancies, commercial conference centre, serviced apartment accommodation, upper-level residential accommodation, a public archaeological centre including a subterranean viewing area of former hotel, and associated off-street basement car parking including some stacked parking spaces.

In summary the main changes to the previously approved development include: changes to the building entrance and plaza design, inclusion of a subterranean viewing area within the to the archaeological display area, increased building height due to two new residential levels, the conversion of approved commercial floor space to serviced apartments and a conference centre facility, changes to the number/mix/layout of residential units and some increased basement car parking provision.

The requirements of the investigation are to:

- Review supplied drawings of the proposed development (issued 24 May 2012)
- Provide a report that will analyse the provisions of disability design, and
- Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS 1428 series.

2.2. Objectives

The Report considers user groups, who include residents, staff, and members of the public. The Report attempts to deliver equality, independence and functionality to people with a disability inclusive of:

- People with a mobility impairment (ambulant and wheelchair)
- People with a sensory impairment (hearing and vision)
- People with a dexterity impairment

The Report seeks to provide compliance with the DDA. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

2.3. Access Requirements

The following standards are to be used to implement the Report:

- AS 1428.1:2009 – (80% of people with a disability accommodated)

- AS 1428.2:1992 – (90% of people with a disability accommodated)
- AS 1428.4.1:2009 – (Tactile Ground Surface Indicators)
- AS 1735.12:1999 – (Lift Provision for People with a Disability)
- AS 1735.7 – Stairway Platform Lifts
- AS 4299:1995 – (Adaptable Housing Code)
- BCA 2012 - Building Code of Australia
- Parramatta City Centre DCP 2007
- DDA Access to Premises Standards
- Disability Discrimination Act

3. INGRESS & EGRESS

3.1. Main Entry Plaza

There is a main entry plaza located at the corner of Macquarie Street and Marsden Street. There is a continuous accessible path of travel from Marsden Street to the entry plaza via a wide pedestrian opening. This area provides suitable pedestrian access via a 1:20 walkway near the building line. The walkway has a suitable width path of travel for two wheelchair users to pass each other under AS 1428.1.

It is noted that the entry plaza also constitutes the continuous accessible path of travel to the Archaeology Interpretation Centre main entrance, archaeology viewing areas and Cafe.

There is a wide stairway that fronts Macquarie Street and continues around the northern corner of Marsden Street connecting the footpath to the main entry plaza. The stairway is suitably set back from the site boundary, compliant with AS1428.1.

Recommendation:

- (i) Provide handrails compliant with AS 1428.1 on either side of Macquarie Street and Marsden Street main entry stairway. Due to stairway width, intermediate handrails may be required to satisfy BCA requirements and assist people with ambulant disabilities.

3.2. Central Lobby Entrances

There are three main entrances to the central building Lobby on ground level. The Lobby provides access to internal retail tenancies, concierge/office, residential/serviced apartment lift lobby and conference centre lift lobby.

The three main entrances face the following street frontages: Macquarie Street main entry plaza; Marsden Street; and Hunter Street. There appears to be a continuous accessible path of travel to all main entrances from the surrounding pedestrian footpaths, compliant with the DDA Premises Standards and Parramatta City Centre DCP clause 4.1(e). All main entrance doorways consist of dual-leaf automatic sliding doors with a suitable clear width and circulation areas on both sides, compliant with AS 1428.1.

There is a direct and accessible path of travel from Macquarie and Hunter Street entrances to the ground floor passenger lifts that serve the upper building levels. The Marsden Street entrance is however connected to the Lobby by an internal ramp with approx. 1:11 gradient which is inaccessible to people using wheelchairs. This requires review for compliance with the DDA Premises Standards which requires all ramps (excluding fire-isolated ramps) to be compliant with AS1428.1.

Recommendations:

- (i) Ensure suitable walkway gradients (no steeper than 1:20 with suitable intervals) from site boundary to Lobby main entrances, compliant with AS1428.1.
- (ii) Ensure Marsden Street internal entry ramp has a max. 1:14 gradient ramp for 9m max. lengths, compliant with AS1428.1 and DDA Premises Standards.

3.3. Archaeology Centre Main Entrance

There is an Archaeology Interpretation Centre located in the north-west sector. The main entrance will front the main entry plaza on ground level. At this stage the location/details of the entry doorway is not shown. The available façade and adjacent circulation areas indicate that a suitable main entry doorway compliant with AS 1428.1 and Parramatta City Centre DCP clause 4.1(d) is achievable.

There appears to be a suitably level and wide path of travel from the main entry plaza into the entry level of the Archaeology Centre suitable for a person using a wheelchair. Accordingly, a continuous accessible path of travel from Marsden Street to the main entry doorway via the main entry plaza is achievable.

Recommendation:

- (i) Ensure the main entry doorway has a minimum clear width of 850mm (920mm door leaf) and suitable door circulation area, compliant with AS1428.1.

3.4. Conference Centre Main Entrance (Hunter Street)

The Hunter Street main entry to the Lobby is the primary entry point to the building for the conference facility, located on level 1. The commercial passenger lifts are in close proximity to this entry ensuring a suitable continuous accessible path of travel. There is also an internal communication stair nearby that provides alternative access to this level.

The paths of travel from the entry doorway to the commercial passenger lift have a clear width which will allow two wheelchair users to pass each other whilst travelling in the opposite direction, compliant with AS 1428.1. The lifts are assessed in Section 4.6. The stair is suitably recessed at top and bottom and has a clear width to enable the provision of handrails on both sides.

Recommendation:

- (i) Provide handrails on both sides of the stair to level 1, compliant with AS1428.1.

3.5. Retail Tenancy Main Entrances

There are five retail tenancies at ground level as follows: retail tenancies 1 & 2 front Marsden Street and the internal Lobby; retail tenancy 3 fronts Hunter Street, retail tenancy 4 is internal from Lobby and a Café tenancy located on the Main entry plaza.

At this stage the location/details of the main entry doorways to the tenancies are not shown. The available façades and adjacent circulation areas indicate that suitable main entry doorways compliant with AS 1428.1 and Parramatta City Centre DCP clause 4.1(d) is achievable for each tenancy.

At this stage there is limited detail on internal/external site levels, however it appears that a continuous accessible path of travel from the surrounding street frontage will be provided to each of the tenancies as required by the DDA Premises Standards.

Recommendations:

- (i) Ensure an accessible path of travel, compliant with AS1428.1 from the site boundary to and through all retail tenancies main entry doorways.

- (ii) Provide main entry doorways with a minimum clear width of 850mm (920mm door leaf) and suitable door circulation area, compliant with AS1428.1.

3.6. Emergency Egress

The main accessible entry points described above are the accessible egress points from the ground level of the precinct.

Emergency egress from upper and basement levels is via various emergency egress stairways distributed throughout the building.

Recommendations:

- (i) Consideration to be given for the provision of a minimum clear width of 850mm (920mm door leaf) at each doorway leading to emergency egress stairways. (advisory)
- (ii) Consideration for any emergency warnings systems to be installed to include both audible and visual warnings indicators to assist people with a sensory disability (advisory).

4. RETAIL AND COMMERCIAL PATHS OF TRAVEL

4.1. Archaeological Features Viewing Area (Macquarie Street)

It is proposed that various archaeological features at/below the main entry plaza will be viewable via glazed viewing platforms.

There is a continuous accessible path of travel from Marsden Street to the main entry plaza via the on-grade pedestrian open thoroughfare area which is compliant with the DDA Premises Standards and Parramatta City Centre DCP clause 4.1(e). The paths of travel around the archaeological site viewing platforms are assumed to be level throughout and are sufficient width to allow two wheelchair users to pass one another when travelling in the opposite direction and also allow a person in a wheelchair to turn 180° in an equitable and dignified manner.

4.2. Archaeological Interpretation Centre

The Archaeology Interpretation Centre is located on ground level and basement level 1.

There are continuous accessible paths of travel throughout ground level areas of the Archaeology Centre, which includes a store area and rear access to sanitary facilities and back of house areas. There are suitable circulation areas within the Archaeology Centre that will allow two wheelchair users to pass each other and a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1.

There is a passenger lift facility and adjacent stair that connect the ground level of the Centre to basement level 1 Archaeology display and Subterranean Viewing Area. The paths of travel to/from the lift exceeds 1800mm clear width and will allow two wheelchair users to pass one another when travelling in the opposite direction. A perimeter walkway, at least 1000mm clear width surrounds the viewing area, compliant with AS1428.1. It is understood that due to archaeological site constraints, complete access may not be achievable to all walkway areas for people using wheelchairs or mobility aids.

Recommendations:

- (i) Where achievable, ensure the 1000mm min. width pathway around subterranean area has suitable splayed corners to allow a person using a wheelchair to turn 90 degrees, compliant with AS1428.1.
- (ii) If continuous access is not achievable to all walkway areas, provide suitable viewing platforms at least 1540mm width x 2070mm length to ensure equivalent access to key features of the archaeological experience, compliant with AS1428.1.

4.3. Retail Tenancies (Ground Level)

There are continuous accessible paths of travel within each of the five ground-level retail tenancies. The paths of travel have suitable clear widths which will allow a single wheelchair user to turn 180°, and two wheelchair users to pass each other in an independent and equitable manner, compliant with AS 1428.1.

4.4. Lobby

In general, there are suitable paths of travel within the ground floor Lobby to ensure an accessible path of travel to the commercial and residential passenger lift lobbies, retail tenancies and associated back of house areas. The Lobby has suitable circulation areas to allow two wheelchair users to pass each other whilst travelling in the opposite direction, compliant with AS 1428.1.

There is suitable circulation space in front of the commercial and residential passenger lift banks which will allow a wheelchair user to turn 180° in an equitable and independent manner, compliant with AS 1428.1.

Within the Lobby there is a Concierge, centrally located between the main entrances and lift lobbies. There are continuous accessible paths of travel around this area, which connects via a doorway to Back of House staff only areas.

There is a staff amenities area located on the mezzanine level with access via a stairway from the ground level Back of House Area. It is currently unclear what this area will include however as a staff area it is required by the DDA Premises Standards Part D3.1 to be accessible unless it is shown to be a health and safety risk for people with disabilities under D3.4 Exemptions. This will be explored further during design development phase.

4.5. Conference/Function Facility

There is a commercial conference/function facility located on level 1.

There is a continuous accessible path of travel from street frontage to level 1 via the commercial passenger lifts near Hunter Street. There is suitable circulation area in the ground and level 1 commercial lift lobbies to allow a wheelchair user to turn 180° in an equitable and independent manner, compliant with AS 1428.1.

There is a stairway that connects the ground level commercial entry lobby with level 1. There are suitable circulation areas within the conference centre that will allow two wheelchair users to pass each other and a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1.

There are continuous accessible paths of travel to and throughout most level 1 conference areas, which include pre-function, kitchen, sanitary facilities and external garden.

Recommendation:

- (i) Ensure all doorways have a minimum clear width of 850mm (920mm door leaf) and suitable door circulation area on both sides, compliant with AS1428.1.

4.6. Passenger Lifts

There are two passenger lifts which serve the conference centre on level 1, ground level and basement level 1 car parking. They also connect to levels 1 – 4 serviced apartments and up to level 13 residential levels in the building. They provide a suitable continuous accessible path of travel between the building levels for people with disabilities in accordance with the DDA Premises Standards.

The lift shaft has approx. overall dimensions of 2000mm (width) x 2000mm (length), which can accommodate a lift car with dimensions of 1400mm (width) x 1700mm (length), compliant with the Parramatta City Centre DCP clause 4.1(d), AS1428.2 and the DDA Premises Standards.

There is a single passenger lift that connects the ground level of the Archaeology Centre to basement level 1 display and viewing areas. The lift has approx. overall dimensions of 1100mm (width) x 1400mm (length), suitable for lifts serving less than 12m height in accordance with the DDA Premises Standards.

The circulation space within each of the lift lobbies will allow a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1.

Recommendations:

- (i) Provide lifts with 1400mm (width) x 1700mm (length) min. dimensions as required by the Parramatta City Centre DCP clause 4.1(d), and AS1428.2.
- (ii) Ensure that components in the lift cars (control panels, audio/visual indicators, handrails and light levels) comply with AS 1735.12 and DDA Premises Standards.

4.7. Commercial Sanitary Facilities (Ground and Level 1)

There are sanitary facilities provided on the ground level near retail tenancy 4. There are also sanitary facilities provided in the conference tenancy on level 1. At this stage, there is limited detail provided on the facilities.

There is a continuous path of travel to the above sanitary facilities from the adjacent common-use areas. Review is required of corridors leading to these areas to ensure suitable wheelchair turning areas, compliant with AS1428.1.

Recommendations:

- (i) Ensure all corridor ends provide a wheelchair turning area (1540mm width x 2070mm length) within 2m of the end, compliant with AS1428.1 and DDA Premises Standard.
- (ii) Provide at least 1 accessible toilet, compliant with AS1428.1 adjacent to the male and female toilets on each level where provided in accordance with the DDA Premises Standard.
- (iii) Provide at least 1 ambulant cubicle for people with disabilities, compliant with AS1428.1 within the male and female toilets, adjacent to an accessible toilet

5. SERVICED APARTMENT ACCOMMODATION

5.1. Path of Travel: General

There are a total of 58 serviced apartments provided over levels 1-4 (inclusive) of the development.

There is a continuous accessible path of travel from street frontage and from the commercial basement car parking levels to all serviced apartment levels via the commercial and residential passenger lifts.

Each of the corridors leading to the apartment entry doorways has a minimum clear width of at least 1240mm, which is suitable for a path of travel for a single wheelchair user to approach the entry doors under AS 1428.1.

There is a circulation area at the end of all of the residential arterial corridors which will allow a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1 and the DDA principle of equality of access. Review is required to ensure suitable intermediate turning areas along long corridors less than 1540mm clear width, compliant with AS1428.1.

Recommendation:

- (i) Ensure suitable wheelchair turning areas (1540mm width x 2070mm length) are provided at 20m intervals along long corridors less than 1540mm clear width (eg. along void to Lobby, western corridor), compliant with AS1428.1 and DDA Premises Standard.
- (ii) Ensure dual hinged doors on arterial corridor are magnetic hold open or alternatively provide 850mm min. clear width doors, compliant with AS1428.1.

5.2. Passenger Lifts

There are a total of four passenger lifts in the proposed development for serviced apartment and residential use. The passenger lifts connect the ground floor Lobby to all basement levels and upper levels 1, 2 common-use facilities; levels 3-4 (serviced apartments) and levels 5 – 26 (residential units). They provide a suitable continuous accessible path of travel between the building levels for people with disabilities in accordance with the DDA Premises Standards.

The lift shafts have approx. overall dimensions of 2300mm (width) x 2300mm (length), which can accommodate a lift car with dimensions of 1400mm (width) x 1700mm (length), compliant with the Parramatta City Centre DCP clause 4.1(d), AS1428.2 and the DDA Premises Standards.

The circulation space within each of the residential lift lobbies will allow a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1.

Recommendations:

- (i) Provide lift cars with dimensions of 1400mm (width) x 1700mm (length), compliant with the Parramatta City Centre DCP clause 4.1(d), AS1428.2 and the DDA Premises Standards.
- (ii) Ensure that components in the lift cars (control panels, audio/visual indicators, handrails and light levels) comply with AS 1735.12 and DDA Premises Standards.

5.3. Business Centre

There is a Business Centre located on level 2. Entry is from within the serviced apartment area of the development. There are dual hinged entry doors that appear to have suitable doorway circulation areas, compliant with AS1428.1.

There is an accessible path of travel via the commercial passenger lifts that provide continuous access up to level 2 from the ground floor Lobby.

In general, the circulation space within the Business Centre is sufficient to allow two wheelchair users to pass one another when travelling in the opposite direction and also allow a person in a wheelchair.

- (i) Provide entry doors with 850mm clear widths (920mm door leafs) and suitable latch side clearance compliant with AS1428.1 & Parramatta City Centre DCP.

5.4. Accessible Apartments: Allocation

There are a total of approximately 58 serviced apartments in the development spread over levels 1 – 4. They represent a range of studio, 1 bed, 2 bed and 3 bedroom apartments.

From the information provided by plans/schedule, it is proposed that 2 of the above apartments (Unit 3.13 and 4.13) will be accessible. An additional apartment is required to ensure the development satisfies the requirement under the DDA Premises Standards for at least 3 accessible units under Table D3.1.

As previously noted, there is a continuous path of travel from street level and the from basement car parking to the entrance doorway of all serviced apartments in the development in accordance with the DDA Premises Standard requirement.

Recommendations:

- (i) Provide 1 extra accessible apartment (total of 3) to satisfy DDA Premises Standards Table D3.1 (between 41 – 60 apartments) within the development.
- (ii) As more than 2 accessible apartments are required, ensure the additional unit is another room type (eg. 1 or 3 bed type) to be representative of the range of rooms available in accordance with DDA Premises Standards Table D3.1.

5.5. Accessible Units: Design – Type 4.14

From the information provided, the dimensions and design of the proposed accessible unit type is generally in accordance with AS1428.1 and will be further developed during design development stage.

There is an accessible path of travel to unit entry door via the residential passenger lifts. The unit entry door has 850mm min. clear width (920mm door leaf) and suitable latch side clearance on both sides of the door, compliant with AS1428.1. The internal doors to main bedroom and accessible bathroom have suitable clear width and latch side clearance, compliant with AS1428.1.

The main bedroom has appropriate overall dimensions to allow suitable 1000mm width clear path of travel around the bed, and a 1540mm width x 2070mm length turning area at the wardrobe and door entry area which will satisfy AS1428.1.

The main bathroom has appropriate overall dimensions (2300mm width x 2700mm length min.) to comply with the internal circulation requirements of AS1428.1 between fixtures.

The kitchen design will ensure suitable 1550mm circulation areas in front of the bench and clear bench areas between cooktop and sink, compliant with AS1428.1. The laundry has suitable 1550mm circulation area in front of appliances, compliant with AS1428.1.

The living area has paths of travel at least 1000mm clear width and suitable clear circulation area after the furniture has been placed, compliant with AS1428.1. There appears to be direct and level access to the external balcony area.

Recommendations:

- (i) Provide all doors with 850mm clear widths (920mm door leafs) and suitable latch side clearance compliant with AS1428.1 & Parramatta City Centre DCP.
- (ii) Ensure continuous wheelchair access to external balcony, compliant with AS1428.1.

6. RESIDENTIAL ACCOMMODATION

6.1. Path of Travel: General

There are residential units on levels 5-28 (inclusive) of the development.

There is a continuous accessible path of travel from street frontage and from each of the residential car parking levels to all residential levels via the residential passenger lifts.

The arterial corridors leading to most residential unit entry doorways are at least 1540mm clear width which ensure circulation areas along and at corridor ends for a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1 and the DDA principle of equality of access.

Review is required to ensure suitable intermediate turning areas along long corridors less than 1540mm clear width, compliant with AS1428.1.

Recommendations:

- (i) Ensure suitable wheelchair turning areas (1540mm width x 2070mm length) are provided at 20m intervals along long corridors (eg. western corridor), compliant with AS1428.1 and DDA Premises Standard.
- (ii) Ensure dual hinged doors on arterial corridor are magnetic hold open or alternatively provide 850mm min. clear width doors, compliant with AS1428.1.

6.2. Passenger Lifts

The residential passenger lifts are the same as those used by the serviced apartment accommodation. Refer to Section 5.2.

6.3. Visitable Units

There is a requirement under clause 6.1(c) of Parramatta City Centre DCP for the provision of 'barrier-free' access to a minimum of 20% of all residential units. There is some ambiguity within the DCP as to whether the requirement of 'barrier-free access' to residential units is analogous to the provision of *visitable* units.

There is a continuous accessible path of travel to the main entry doorway of all residential units presently specified in the development. A minimum clear width of 850mm (920mm door leaf) is achievable at a minimum of 20% of all residential units. Currently, all units appear to have a path of travel with a minimum clear width of 1000mm from the main entry doorway to the living area, which is suitable for a visitable unit under AS 4299. However, less than 20% of the units appear to have a suitable bathroom for use as a 'visitable' toilet.

Recommendations:

To ensure 20% of residential units are 'visitable' under AS4299 requirements:

- (i) Provide 20% of unit entry doors with 850mm clear widths (920mm door leafs) compliant with AS1428.1.

- (ii) Ensure 20% of units have a 'visitable' toilet ie. a bathroom with 1250mm clear length x 900mm clear width in front of WC, free of door swing, compliant with AS4299.

6.4. Adaptable Units: Allocation

There are a total of approximately 371 residential units in the development spread over levels 5 – 28. They represent a range of studio, 1 bed, 2 bed and 3 bedroom units.

From the information provided by plans/schedule, it is proposed that 32 of the above units will be adaptable. Additional units are required to ensure the development satisfies the requirement under the Parramatta City Centre DCP clause 6.1(d) for 10 per cent of the residential units are to be adaptable.

As previously noted, there is a continuous accessible path of travel from street level and the from basement car parking to all units in the development. Therefore, there is continuous accessible path of travel to each adaptable unit.

Recommendation:

- (i) Provide an additional 6 adaptable units (min. total of 38) to satisfy Parramatta City Centre DCP clause 6.1(d) for 10 per cent of the residential units to be adaptable in accordance with AS4299.

6.5. Adaptable Unit Type 5.14: Design (2 bed, bath)

From the information provided, the dimensions and design of the proposed adaptable unit type is generally in accordance with AS4299 and AS1428.1 and will be further developed during design development stage. The following analysis is based on GA plans provided.

There is an accessible path of travel to unit entry door via the residential passenger lifts. The unit entry door has 850mm min. clear width (920mm door leaf) and suitable latch side clearance on both sides of the door, compliant with AS4299 and AS1428.1. The internal doors to main bedroom and accessible bathroom have suitable clear width (820mm min) compliant with AS4299 and provision for latch side clearance, compliant with AS1428.1.

The main bedroom has appropriate overall dimensions to allow suitable 1000mm width clear path of travel around the bed, and a 1540mm width x 2070mm length turning area at the wardrobe and door entry area which will satisfy AS4299 and AS1428.1.

The main bathroom has appropriate overall dimensions (2300mm width x 2700mm length min.) to comply with the internal circulation requirements of AS1428.1 between fixtures.

The kitchen design will ensure suitable 1550mm circulation areas in front of the bench and 800mm min. length clear bench areas between cooktop and sink, compliant with AS4299 and AS1428.1. The laundry has suitable 1550mm circulation area in front of appliances, compliant with AS1428.1.

The living area has paths of travel at least 1000mm clear width and suitable 2250mm min. diameter clear circulation area after the furniture has been placed, compliant with AS4299 and AS1428.1. There appears to be direct and level access to the external balcony area.

Recommendation:

- (i) At CC Stage, provide pre- and post-adaptation layouts for adaptable units to ensure compliance with AS4299.

6.6. Adaptable Unit Type 14.15: Design (2 bed, 1 bath)

From the information provided, the dimensions and design of the proposed adaptable unit type is generally in accordance with AS4299 and AS1428.1 and will be further developed during design development stage. The following analysis is based on GA plans provided.

There is an accessible path of travel to unit entry door via the residential passenger lifts. The unit entry door has 850mm min. clear width (920mm door leaf) and suitable latch side clearance on both sides of the door, compliant with AS4299 and AS1428.1. The internal doors to main bedroom and accessible bathroom have suitable clear width (820mm min) compliant with AS4299 and provision for latch side clearance, compliant with AS1428.1 is achievable.

The main bedroom has appropriate overall dimensions to allow suitable 1000mm width clear path of travel around the bed, and a 1540mm width x 2070mm length turning area at the bed base and door entry area which will satisfy AS4299 and AS1428.1.

The main bathroom has appropriate overall dimensions (2300mm width x 2700mm length min.) to comply with the internal circulation requirements of AS1428.1 between fixtures.

The kitchen design will ensure suitable 1550mm circulation areas in front of the bench and 800mm min. length clear bench areas between cooktop and sink, compliant with AS4299 and AS1428.1. The laundry has suitable 1550mm circulation area in front of appliances, compliant with AS1428.1.

The living area has paths of travel at least 1000mm clear width and suitable 2250mm min. diameter clear circulation area after the furniture has been placed, compliant with AS4299 and AS1428.1. There appears to be direct and level access to the external balcony area.

Recommendations:

- (i) At CC Stage, provide pre- and post-adaptation layouts for adaptable units to ensure compliance with AS4299.
- (ii) Ensure provision for 530mm latch side clearance to bedroom doorway on post-adaption plan, compliant with AS1428.1 and AS4299.

7. COMMON USE FACILITIES AND AMENITIES

7.1. General

It is understood that the common-use facilities within the building are for the shared usage of residential units and serviced apartments. There will also be times when these facilities are available for the use of the commercial conference centre.

7.2. Pool and Residents Amenities

There are residents' amenities, indoor pool (less than 70m perimeter) and raised garden with spa located on level 1. Additional amenities are located on level 2. Entry is from the residential lift lobby. There is an accessible path of travel via the residential passenger lifts that provide continuous access from the ground floor Lobby and from the serviced apartments/residential units on levels 3 - 28. It is noted there is no direct internal access to the common facilities from the level 1 and 2 serviced apartments.

There is stair access from the Conference centre to residents' amenities/pool areas and then from this area to a raised garden area with spa. The design is capable of accommodating alternative lift accesses at the stairs as required by the DDA Premises Standards and Parramatta City Centre DCP, to ensure equity for people using wheelchairs to these common-use facilities.

In general, the circulation spaces to and within the residents' amenities/pool areas are sufficient to allow two wheelchair users to pass one another when travelling in the opposite direction and also allow a person in a wheelchair to make a 180 degree turn, compliant with AS1428.1. There is also sufficient area to allow for the operation of a suitable sling style swimming pool lift hoist as required by DDA Premises Standards Part D 3.10 and D5.5.

Recommendations:

- (i) Provide an alternative accessible linkage (eg. stair platform lift, compliant with AS1735.7) from Conference centre to common use pool areas and then onto Garden/Spa in accordance with the DDA Premises Standards.
- (ii) Ensure the stairs have 1500mm min. clear width to accommodate stair lift and between handrails installed on both sides, compliant with AS1428.1.
- (iii) Provide a suitable sling style swimming pool lift hoist as required by DDA Premises Standards Part D 3.10 and D5.5.
- (iii) Provide entry doors with 850mm clear widths (920mm door leafs) and suitable latch side clearance compliant with AS1428.1 & Parramatta City Centre DCP.

7.3. Residential Gymnasium

There is a gymnasium, sauna, male/female toilets and gym store located on mezzanine level. There is currently no passenger lift access to the mezzanine. Entry is via stairs from level 1 common use areas. The design is capable of accommodating an alternative

lift access as required by the DDA Premises Standards and Parramatta City Centre DCP, to ensure equity for people using wheelchairs to these common-use facilities.

In general, the circulation spaces to and within the Gymnasium are sufficient to allow two wheelchair users to pass one another when travelling in the opposite direction and also allow a person in a wheelchair to make a 180 degree turn, compliant with AS1428.1. Review of the stair width and top/base landing areas is required to enable sufficient circulation areas for the use of a stair platform lift. This is achievable.

At this stage no accessible toilet/shower is indicated on the mezzanine level.

Recommendations:

- (i) Provide an alternative accessible linkage (eg. stair platform lift, compliant with AS1735.7) from level 1 common use areas to mezzanine gymnasium/sauna in accordance with the DDA Premises Standards.
- (ii) Ensure stairs have 1500mm min. clear width and base landings to accommodate the above stair lift.
- (iii) Provide handrails installed on both sides of stair, compliant with AS1428.1.
- (iv) Provide an accessible combined toilet/shower compliant with AS1428.1 adjacent to the male/female toilets/change rooms, compliant with DDA Premises Standard.
- (v) Provide at least 1 ambulant cubicle for people with disabilities, compliant with AS1428.1 within the male/female toilets, adjacent to an accessible toilet facility in accordance with the DDA Premises Standard.
- (iv) Provide entry doors with 850mm clear widths (920mm door leafs) and suitable latch side clearance compliant with AS1428.1 & Parramatta City Centre DCP.

7.4. Residents Roof Terrace

There is a Roof terrace with adjacent amenities located on level 12 and 13. There is an accessible path of travel via the residential/commercial passenger lifts that provide continuous access from the ground floor Lobby and from the serviced apartments/residential units on levels 1 - 28.

Entry access is from the arterial corridor via a sliding door with an appropriate clear width, compliant with AS1428.1. There appears to be stair access down to the Terrace. The design is capable of accommodating alternative ramp access nearby as required by the DDA Premises Standards and Parramatta City Centre DCP, to ensure equity for people using wheelchairs to these common-use facilities.

Recommendations:

- (i) Provide ramp access to the Roof Terrace from the adjacent common use areas in accordance with the DDA Premises Standards.
- (ii) Ensure ramp is designed with suitable setbacks, max. 1:14 gradient between landings, compliant with AS1428.1.
- (iii) Provide handrails installed on both sides of stair and ramp, compliant with AS1428.1.

7.5. Additional Residents Facilities

There is one residential garbage disposal rooms per level on levels 3-25 respectively. It is unclear of the provision on levels 26-28 as this is currently being developed. There is a continuous accessible path of travel from each residential unit to the garbage rooms on the corresponding level.

Entry to the rooms is via a doorway with suitable clear width and door circulation space, compliant with AS1428.1. Internally there is a suitable circulation area that will allow a wheelchair user to turn 180° in an independent and equitable manner, compliant with AS 1428.1.

There is a residential mailbox area on ground level near the concierge's desk and residential lift lobby. Entry access is via an open corridor that appears to be 1000mm clear width, compliant with AS1428.1. There is a circulation area in front of each bank of mailboxes that will allow a person in a wheelchair to turn 180° in an independent and equitable manner, compliant with AS 1428.1. A continuous accessible path of travel from the proposed adaptable units to the mailboxes is achievable via the residential passenger lifts.

Recommendation:

- (i) Provide a minimum clear width of 850mm (920mm door leaf) and a minimum internal latch-side clearance of 510mm at the entry doorways of the garbage rooms on each residential level.

7.6. Common-Use Accessible Toilets

There are residential common-use toilets located on level 1, near stairways and on the mezzanine near the gymnasium. Additional toilets/change facilities are also presumed to be located in the Resident Amenities area near the pool on level 1 and near the Roof Terrace on level 12,13.

There are continuous accessible path of travels to these areas from the residential passenger lifts or continuous access is achievable as noted in previous Section 5.2.

At this stage limited detail is provided.

Recommendations:

- (i) Provide at least 1 accessible toilet, compliant with AS1428.1 adjacent to the male and female toilets on each level where provided in accordance with the DDA Premises Standard.
- (ii) Provide at least 1 accessible combined toilet/shower, compliant with AS1428.1 adjacent to the male and female toilets/change rooms on each level where provided in accordance with the DDA Premises Standard.
- (iii) Provide at least 1 ambulant cubicle for people with disabilities, compliant with AS1428.1 within the male and female toilets, adjacent to an accessible toilet.
- (iv) Provide a minimum clear width of 850mm (920mm door leaf) at the entry doorway to common use accessible toilets, compliant with AS1428.1.

8. CAR PARKING

8.1. General

There are approx. total of 519 car bays within the development, comprised of 79 public car bays (presumed for retail, Conference Centre, serviced apartments and visitors) located on basement level 1 and 440 residential car bays located between basement levels 2-6. There are also an additional 20 stacked car spaces between basement levels 2-6.

Recommendations:

- (i) Ensure the vertical clearance leading to accessible/adaptable car bays is not less than 2200mm above the FFL, in compliance with AS2890.6.
- (ii) Ensure there is a clear space of 2500mm above the FFL over the accessible/adaptable car bays, compliant with AS2890.6.

8.2. Retail & Commercial

There are a total of 5 public accessible car bays (of 79 spaces) located on basement level 1. It is unclear of the distribution of car spaces between retail, conference centre and serviced apartments however 33 visitor car spaces are identified on plan.

The provision of 5 accessible spaces appears to satisfy the 1-2% commercial/retail accessible requirement for this type of development under the DDA Premises Standard Table D3.5. The spaces are shown to have dimensions of 2.4m x 5.4m with an adjacent 2.4m x 5.4m shared space, compliant with AS2890.6.

They are located near the residential and commercial lift lobbies to enable ease of access for people with mobility impairment on an accessible path of travel to the upper retail and conference centre levels.

Generally there is an appropriate continuous accessible path of travel from each of the above accessible car parking bays to the passenger lifts. Review is recommended of the 2 accessible spaces to the west of residential lift lobby near the vehicular ramp for improved safety for people with disabilities.

Recommendations:

- (i) Ensure 1% of all commercial and 2% retail car parking is accessible, compliant with DDA Premises Standard Table D3.5.
- (ii) Ensure total amount of serviced apartment car parking is multiplied by 5% (ie. 3 required accessible of 58 total serviced apartments) to determine the required accessible car spaces required, compliant with DDA Premises Standard Table D3.5.
- (iii) Relocate the 2 accessible spaces (eg. to east of the residential lift lobby) for improved safety in line with AS2890.6 and Parramatta DCP objectives as visibility of rear loading car ramps may be impeded for drivers when descending the ramp.
- (iv) Consideration to provide at least 1 accessible visitor car space as an accessible space (advisory).

8.3. Residential

There are a total of 40 accessible car bays (of 440 spaces) allocated over basement levels 2 – 6 for the required 38 adaptable units in accordance with the AS4299 requirement. The spaces are shown to have dimensions of 2.4m x 5.4m with an adjacent 2.4m x 5.4m shared space, compliant with AS2890.6. This satisfies the AS4299 requirement for 1 adaptable car space per adaptable unit provided that the shared spaces remain common-use areas and are not designated to individual unit owners.

Generally there is an appropriate continuous accessible path of travel from each of the above accessible car parking bays to the passenger lifts. Review is recommended of the 2 accessible spaces to the west of residential lift lobby near the vehicular ramp for improved safety for people with disabilities.

Recommendation:

- (i) Relocate the 2 accessible spaces (eg. to east of the residential lift lobby) for improved safety in line with AS2890.6 and Parramatta DCP objectives as visibility of rear loading car ramps may be impeded for drivers when descending the ramp.