



A Jensen Hughes Company

Cardno (NSW/ACT) Pty Ltd

Duke of Kent Housing Project  
(Spring Street & North Parade  
Wagga Wagga NSW) - LAHC  
Residential Flat Building

**Access Review –  
DA Final v2**

11 October 2022

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## 1. Executive Summary

The Access Review Report is a key element in the design development of the LAND AND HOUSING CORPORATION (LAHC) Duke of Kent residential flat buildings located at 18-22 Spring Street and 21-25 North Parade, Wagga Wagga NSW, and an appropriate response to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) 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 review will ensure that ingress and egress, paths of travel, circulation areas, and sanitary facilities comply with relevant statutory guidelines, and in addition, compliance with a higher level of accessibility and inclusiveness benchmarks set by the project.

## 2. Introduction

### 2.1 Background

Cardno (NSW/ACT) Pty Ltd has engaged Morris-Goding Access Consulting, to provide a design review of Duke of Kent residential flat buildings located at 18-22 Spring Street and 21-25 North Parade, Wagga Wagga NSW. The development consists of the construction of 24 residential units over 2 levels, split in 3 buildings (2 facing Spring Street and 1 facing North Parade), serviced by 4 pedestrian entries (2 from Spring Street and 2 from North Parade).

There is a provision for 4 Adaptable units (2 Spring Street and 2 in North Parade). This will provide a combined 16 associated carparking bays with inclusion of 4 adaptable carparking bays.



*Figure 1. Residential Development Site Plan*

The proposed development falls under a number of BCA classifications:

- Class 2 (residential)
- Class 10a (carport)

The requirements of the investigation are to:

- Review supplied drawings of the proposed development;
- Provide a report that will analyse the provisions of disability design of the development, and
- Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA), relevant Australian Standards, and enhanced benchmark requirements set by the project.

## **2.2 Objectives**

The Report seeks to ensure compliance with statutory requirements and enhanced benchmark requirements set by the project. 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); and
- People with a dexterity impairment

The Report seeks to provide compliance the Disability Discrimination Act 1992. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

## **2.3 Limitations**

This report is limited to the accessibility provisions of the building in general. It does not provide comment on detailed design issues, such as: internals of accessible/ambulant toilet, fit-out, lift specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSIs, handrail design, signage etc. that will be included in construction documentation.

## **2.4 Accessibility of Design**

The proposed design will utilise the Federal Disability Discrimination Act (DDA), Disability (Access to Premises – Buildings) Standards 2010, BCA/DDA Access Code, Universal Design principles, the AS 1428 Series, and other design guidelines, to develop appropriate design documentation, to provide reasonable access provisions for people with disabilities.

The Project Architect and an appropriately qualified accessibility consultant will examine key physical elements during design development stage, to identify physical barriers and incorporate solutions as a suitable response to disability statutory regulations and other project objectives.

The design will be developed to ensure the principles of the DDA are upheld. Under the DDA, it is unlawful to discriminate against people with disabilities in the provision of appropriate access, where the approach or access to and within a premise, makes it impossible or unreasonably difficult for people with disabilities to make use of a particular service or amenity.

The design will comply with the requirements of the DDA Access to Premises Standards and include requirements for accessible buildings, linkages and the seamless integration of access provisions compliant with AS1428.1. The developed design will consider all user groups, who include members of the public, visitors, resident and staff members.

## **2.5 Statutory Requirements**

The statutory and regulatory guidelines to be encompassed in the developed design to ensure effective, appropriate and safe use by all people including those with disabilities will be in accordance with:

- Federal Disability Discrimination Act (DDA);
- Disability (Access to Premises – Buildings) Standards 2010;
- Building Code of Australia (BCA) Part D3, F2, E3;
- AS 1428.1:2009 - (General Requirement of Access);
- AS 1428.4.1:2009 - (Tactile Ground Surface Indicators);
- AS 2890.6:2009 - (Parking for People with Disabilities);
- AS 1735.12:1999 - (Lift Facilities for Persons with Disabilities);
- AS 4299:1995 – (Adaptable Housing);
- Wagga Wagga City Council DCP 2010 (Part D) Residential Development and
- State Environmental Planning Policy Housing 2021.

Please note that there are also additional advisory standards (not currently referenced by BCA or DDA Premises Standards) as well as other relevant guidelines that will be considered, as relevant to promote equity and dignity in line with over-arching DDA principles and aspirational objectives. These include:

- Universal Design Principles;
- Human Rights Commission (HEREOC)
- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture;
- AS1428.2:1992 Enhanced and Additional requirements;
- AS1428.4.1 Draft Way-finding Standard;
- AS3745:2010 – Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance);
- Livable Housing Design Guidelines (LHA) – Fourth Edition and
- Land and Housing Corporation (LAHC) Dwelling Requirements.

### 3. General Access Planning Considerations

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Right Commission is the governing body who control and enforce DDA compliance.

Nevertheless, building elements that provide insufficient accessible provisions for people with disabilities remain subject to the DDA. The improvement of non-compliant building elements and areas to meet current access requirements will mitigate the risk of a DDA complaint be made against the building owner.

Since the 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009 in the same manner as they would comply with the BCA by meeting deemed-to-satisfy provisions or by adopting an alternative solution that achieves the relevant performance requirements.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

A UD approach has numerous benefits for the client, the residents, visitors and the individual users and for society in general. An inclusive environment that can be accessed, understood and used by as many people as possible, is good business sense, is more sustainable and is socially progressive, in line with the aims of the Disability Action Plan (DAP).

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximized, without adding on specialized 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1: Equitable Use
- Principle 2: Flexibility in Use
- Principle 3: Simple and Intuitive Use

- Principle 4: Perceptible Information
- Principle 5: Tolerance for Error
- Principle 6: Low Physical Effort
- Principle 7: Size and Space for Approach and use

## 4. Ingress & Egress

### 4.1 External Linkages

The BCA and DDA Premises Standards contain requirements for site approaches for the use of persons with disabilities. These requirements can be summarised as follows:

- It will be necessary to provide an accessible path of travel from main pedestrian entry points at the site allotment boundary to all building entrances compliant with AS1428.1:2009.

Spring Street – currently, this requirement is achieved as compliance is provided via walkways.

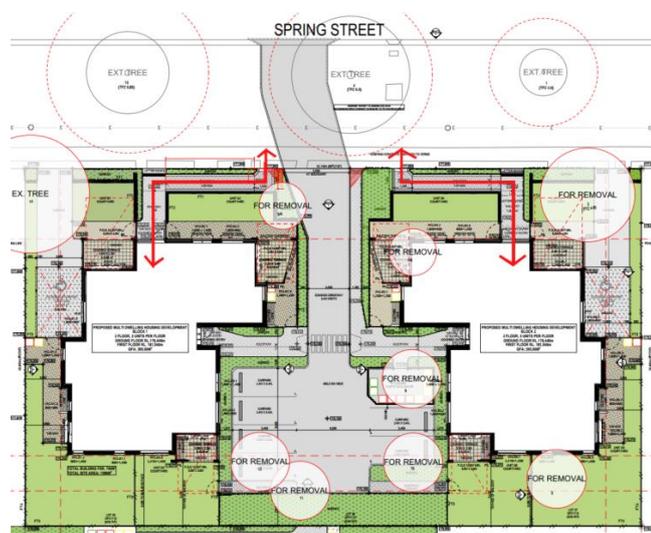


Figure 2. Spring Street linkage from Allotment Boundary

North Parade – currently, this requirement is partially compliant. Linkage from North Parade has been provided, however, there is a walkway from the boundary that lacks 1200mm level landing prior to 1:23 walkway. There is sufficient space for amendments to be made to readily achieve compliance during a further stage.



Figure 3. North Parade linkage from Allotment Boundary

- An accessible path of travel between buildings (or parts of buildings) that are connected by a pedestrian linkage, within the site allotment boundary, compliant with AS1428.1:2009 is also required.

Currently, this requirement is achieved for both Spring Street and North Parade with linkages between buildings in accordance with AS1428.1.

- An accessible path of travel to building entrances (required to be accessible) from associated accessible car-parking bays, compliant with AS1428.1:2009 is required.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

#### **4.2 Entrances**

The BCA and DDA Premises Standards contain requirements for building entry for the use of persons with disabilities. These requirements can be summarised as follows:

- Access is required through at least 50% of entrances, including the principal pedestrian entrance/s to all buildings or parts of buildings (ie. when they have a separate function and/or use eg. external retail tenancy). Note it is preferred that all entrances are accessible.
- A non-accessible entry cannot be located more than 50m distance from an accessible entry (for buildings greater than 500m<sup>2</sup>).
- All accessible doors to have 850mm min. clear width opening and suitable door circulation area, compliant with AS1428.1:2009. Note: Manual doors require lightweight door forces to be operable by people with disabilities (20N max.).
- An accessible path of travel eg. ramp or lift needs to be provided adjacent (or in reasonable proximity) to any stair access. Note: providing choice of access route directly adjacent so that people can start and finish in the same location/travel similar route promotes inclusion and UD principles.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. Principal and secondary doors provide threshold ramps that address the internal/external floor finish level differences. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

#### **4.3 Emergency Egress**

The project does not include emergency egress, all proposed stairs are communication stairs. Refer to Item 5.3 for further information.

## 5. Paths of Travel

### 5.1 Circulation Areas

The BCA and DDA Premises Standards contain requirements for circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair passing bays (1800mm width x 2000 length) are also required when a direct line of sight is not available and are to be provided at 20m max. intervals along access-ways. Currently, this requirement has not been achieved as both North Parade and Spring Street have a lack of a passing bay, where there is lack of line of sight. There is sufficient space (landscape) for amendments to be made to readily achieve compliance during a further stage.
- Turning spaces (at least 1540mm W x 2070mm L) are required within 2m of every corridor end and at 20-metres max. intervals along all access-ways.
- Turning spaces required for (at least 1250mm W x 1250mm L with splays) are required to achieve AS1428.1:2009. Fig.4. This is needed for wheelchairs to make 30 and 90 degrees turn.
- All common-use doors (ie. not excluded under Part D3.4) to have 850mm min. clear width opening (each active door leaf) and suitable door circulation area, compliant with AS1428.1:2009.
- All common-use corridors and accessible paths of travel to be at least 1000mm min. width when traveling in linear direction or 1200mm min. under (DSAPT). Note: Increased clear width paths of travel required for doorway circulation, turning areas, etc.
- Doorways at ramps and walkways landings are to comply with AS1428.1 Fig. 25(D). Currently requirement appears capable of being achieved.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

Passing bay above noted to be provided for compliance. The proposed design is capable of achieving compliance, subject to details noted in the above clause being addressed. It is understood this will be refined during the design development stage and prior to Construction Certification (CC).

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

### 5.2 Passenger Lifts

The project does not include lifts.

### 5.3 Stairs & Ramps

The BCA and DDA Premises Standards contain requirements for stairs and ramps for the use of persons with disabilities. These requirements can be summarised as follows:

- Ramps and walkways landings are to have 1200mm length with 1500 mm length at 90 degree turns. Currently, this requirement has not been achieved as there is a lack of 1200mm wide ramp at the boundary facing North Parade. It is recommended for these walkways to be 1:14 ramps to address the lack of 1200mm level landings. There is sufficient space for amendments to be made to readily achieve compliance during a further stage.
- Stairs are to have handrails on both sides in accordance with AS1428.1.
- Stairs and ramps are to be offset to ensure no encroachment of handrail extensions into transverse path of travel at top and bottom of stair/ramp.
- Stairs and ramps are to be offset from the property allotment boundary 900mm min. this is to ensure no encroachment occur at later stage of handrail extensions into the transverse path of travel.
- Doorway threshold ramp is to have 1:8 gradient, 35mm max. height and 280mm max. length, compliant with AS1428.1.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

1200mm Level landing above noted to be provided with in the allotment boundary for compliance. The proposed design is capable of achieving compliance, subject to details noted in the above clause being addressed. It is understood this will be refined during the design development stage and prior to Construction Certification (CC).

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 6. Adaptable Units

### 6.1 Adaptable Unit Provision

The concept of adaptable housing is to design units with provisions in place from the outset (pre-adaptation) so they can be easily adapted to meet changing needs of residents in the future (post-adaptation) in accordance with AS4299.

The Wagga Wagga City Council DCP does not have a development control to include adaptable housing.

The LAHC brief calls for Adaptable Housing as:

*“The Land and Housing Corporation (LAHC) Dwelling Requirements inform the design and development of the LAHC social housing property portfolio.” Also:*

*Gold standard – future adaptation*

*LAHC may opt to provide a percentage of ‘adaptable’ dwellings, to be specified in the development brief. These are designed for cost effective future conversion to Gold Standard. Apply AS 4299 Class C to adaptable dwellings.*

#### *Assessment*

- 2 x adaptable dwellings have been proposed throughout the development Spring Street. The nominated units are Unit G1 (2 Bed) and unit G6 (2 Bed).

There is no indication on the drawings making reference to ‘Gold Standard’.

- 2 x adaptable dwellings have been proposed throughout the development North Parade. The nominated units are Unit G3 (2 Bed) and unit G4 (1 Bed).

There is no indication on the drawings making reference to ‘Gold Standard’.

### 6.2 Adaptable Unit Design

The following requirements are to be satisfied in the provision of adaptable unit design at pre-adaptation stage.

- The entry door of the unit achieves 850mm clear width opening (920 door leaf). Latch side clearance of 530mm needs to be achieved at pre adaptation, externally and internally of the door in accordance with AS4299.
- The kitchen needs 1550mm circulation space outside of the kitchen work spaces.
- The bathroom needs to be of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The shower recess will require review during design development.
- The living area needs to be large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

- The bedroom needs to achieve 1 metre either side of queen size bed and 1550 x 2070mm at the base of bed or similar configuration.
- The laundry area requires 1500mm in front of laundry appliances in accordance with AS4299.
- All doors need to achieve 850mm clear opening width from the outset and easily achievable latch side clearances at post adaptation, compliant with AS1428.1:2009. Doors leading to open area at North Parade do not provide latch side clearance. Ensure panels are swapped to achieve suitable latch side for compliance. There is sufficient space for amendments to be made to readily achieve compliance during a further stage.

### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The proposed design is capable of achieving compliance, subject to detail noted in the above clause be addressed. It is understood this will be refined during the design development stage and prior to Construction Certification (CC).

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 7. Silver Livable Units

### 7.1 Silver Livable Unit Provision

Livable Housing Australia (LHA) Silver rating is to be applied to all new LAHC dwellings where level access is available (including ground level and dwellings serviced by a lift). For upper-level dwellings without a lift, Silver equivalent rating is to be applied to the interior.

#### *Assessment*

A total of 24 dwellings have been proposed throughout the development. 20 units are designed to be (LHA) silver and to meet the following requirements.

### 7.2 Silver Livable Unit Design

The following requirements are to be satisfied in the design of these units

- The entry door into the units are to be detailed to achieve suitable clear width of at least 820mm during detailed design development stage to be compliant with Silver Level rating requirements in accordance with Livable Housing Design Guideline 2015.
- From the unit entry, there needs to be appropriate 1m clearances throughout the unit to allow suitable accessible paths of travel within accordance with Silver Level rating requirements in accordance with Livable Housing Design Guideline 2015.
- All internal doorways into bathroom, bedroom and out to balcony are required to achieve at least 820mm clear open widths in accordance with Silver Level rating requirements in accordance with Livable Housing Design Guideline 2015.
- The silver levels units require bathrooms that can accommodate the required 900mm wide by 1200mm long clear visitable toilet circulation space in front of the leading edge of the pan (excluding door swing) compliant with Silver Level rating requirements in accordance with Livable Housing Design Guidelines 2015.
- The walls surrounding the shower and toilet pan require sufficient reinforcements for the provision of grab rails in the future when required. Provide reinforcement notes in the drawings for compliance.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 8. Facilities and Amenities

### 8.1 Sanitary Facilities

The project does not have common sanitary facilities.

### 8.2 Common Areas

The BCA and DDA Premises Standards contain requirements for common use areas suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- For class 2 buildings, access is required to a unique common use facility such as swimming pool, sauna, common laundry, entertainment rooms.
- Accessibility is required to common use courtyards within buildings.
- Mailboxes and garbage rooms within residential buildings require appropriate accessibility.
- Wheelchair access is required to any external and outdoor terrace areas compliant with AS1428.1.

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

North Parade mailbox/letterbox is not located in level landing. Ensure 1540mm x 2070mm level landing provision in front of mailbox/letterbox.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

### **8.3 Car Parking**

The BCA and DDA Premises Standards contain requirements for parking which are applicable to this project. These requirements can be summarised as follows:

- Class 2 residential. Provide an adaptable unit car bay for each adaptable unit. These car bays can have 3.8 metre width or 2.4 m with 2.4 metre shared zone.
- Accessible car bays require 2.4 metre with 2.4 metre shared area.
- Class 2 residential. Provide an adaptable unit car bay for each adaptable unit. These car bays can have 3.8 metre width or 2.4 metre with 2.4 metre shared zone x 5.4metre length.
- Ensure 2.5m min. height clearance, compliant with AS2890.6 fig 2.7 over accessible car bays with 2.2 m min. vertical clearance leading to the accessible and adaptable unit car bays (Note: consideration for 2.3 or 2.4m min. height preferred for higher vans/adapted vehicles is recommended as good practice).

#### *Assessment*

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 9. Conclusion

MGAC has assessed the proposed scheme for the Duke of Kent residential flat buildings located at 18-22 Spring Street and 21-25 North Parade, Wagga Wagga NSW. The proposed drawings indicate that accessibility requirements, pertaining to external site linkages, adaptable doorways, silver level clearances building access, common area access, sanitary facilities and parking can be readily achieved.

It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in building design and external domain design.

Refer to the below Tables for outstanding compliance issues which are to be addressed during later design stages.

<b>Table of Outstanding Compliance Matters</b>			
<b>Item</b>	<b>Page Reference</b>	<b><u>Non Compliance</u> Description</b>	<b>Required Amendment</b>
1	13	Requirement for wheelchair passing bays where direct line of site is not available.	On paths where end to end line of site is not achievable, wheelchair passing bays are required. There is sufficient space available for compliance to be achieved.
2	14	Partial compliance of the access walkway from North Parade	Requires the addition of a 1,200mm level landing at the entry to the site. There is sufficient space for amendments, and this is deemed achievable without major modifications.
3	16	Requirement for easily achievable latch side clearance for gates leading to Unit G1 & G6 rear terrace.	Relocate bin nearest to gate to ensure clear latch side clearance. There is sufficient space for amendments which can occur at later design stages.
4	16	Doors leading to open area at North Parade do not provide latch side clearance.	Ensure panels are swapped to achieve suitable latch side for compliance. There is sufficient space for amendments to be made to readily achieve compliance.
5	18	North Parade letterbox is not located in level landing.	Ensure 1540mm x 2070mm level landing provision in front of letterbox. There is sufficient space for amendments to be made to achieve compliance.