

**KNOWLES GROUP**

**25-27 WARRIEWOOD RD,  
WARRIEWOOD**

**ACCESS REVIEW**

**Morris-Goding Accessibility Consulting**

**FINAL**

29 August 2017

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## **1. EXECUTIVE SUMMARY**

The Access Review Report is a key element in design development of 25-27 Warriewood Road, Warriewood 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 and toilets comply with relevant statutory guidelines.

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## **2. INTRODUCTION**

### **2.1. General**

Knowles Group has engaged Morris-Goding Accessibility Consulting, to prepare an accessibility review of the proposed residential development located at 25-27 Warriewood Road, Warriewood.

From the information provided, there is an 11 metre fall from east to west across the site. The proposed development has 32 residential units and 12 townhouses.

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) and AS 1428 series.

### **2.2. Objectives**

The report considers user groups such as residents and residential visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

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

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. 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, TGSI's, handrail design, signage, hearing augmentation etc. that will be included in construction documentation.

### **2.4. Statutory Requirements**

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

- AS 1428.1:2009 (General Requirements for Access-New Building Work)
- AS 4299:1995 (Adaptable Housing Code)
- AS 1735.12:1999 (Lifts, Escalators, & Moving Walks)
- BCA – Building Code of Australia 2016
- DDA Access to Premises Standards 2010
- Pittwater Council DCP Control C1.9 Adaptable Housing and Accessibility of P21

### 3. INGRESS & EGRESS

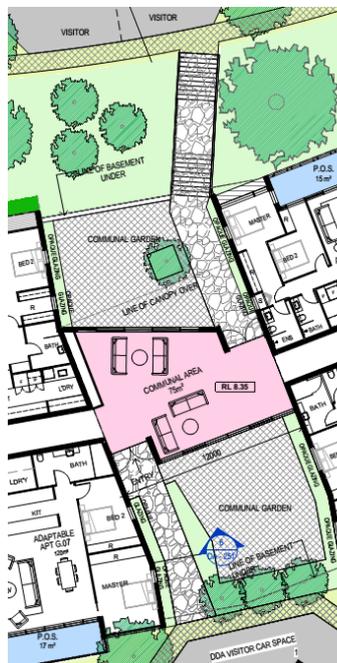
#### 3.1. Apartment Entrance

There are 2 main entrances into the apartment building that display the same level of aesthetic.

The eastern entry has appropriate accessibility. There is a wide level accessible pathway that leads past a communal garden to the building entry door. The entry door has suitable accessibility in accordance with AS1428.1:2009 and the DDA Premises Standards. The communal foyer area has appropriate clearances to allow a person in a wheelchair to perform 180° turns in accordance with AS1428.1:2009. There are suitable circulation areas to allow two persons in a wheelchair to pass one another compliant with AS1428.1:2009. There are appropriate accessible paths of travel from the foyer to the passenger lifts on ground floor.

It is noted there is an accessible car bay that is positioned at commencement of the eastern entry pathway to the building. There is also a pedestrian footpath that connects the entry pathway to the surrounding network of pedestrian footpaths and ultimately Warriewood Road where there is public transport available. The eastern entry is the closest entrance to the Warriewood Road bus stops.

The western entry has stair only access from the pedestrian footpath. There is no wheelchair access at this point. From the information provided by the client, Council does not want ramp construction within the area of the 50 metre creek boundary line. The approach to the building entrance has the same level of aesthetic as the eastern entrance. A stair descends to an entry pathway that leads past a communal garden to the building entry.



#### *Recommendations:*

- (i) If communication systems such as intercoms are to be provided, they will be located at both eastern and western entrances.

- (ii) The western entry stair is to have handrails on both sides in accordance with AS1428.1 as well as TGSI and indicative step nosings.
- (iii) A performance solution report will be required prior to CC relating to the accessible entrance and its proximity to the western entry.

### **3.2. Townhouses Entrances**

All townhouses have individual access from the site boundary. There is no common access and as such there is no accessibility requirement under DDA Premises Standards with exception of the adaptable townhouses.

## **4. PATHS OF TRAVEL**

### **4.1. Apartment Building**

There are 2 passenger lifts located in the south and north of the apartment building that provide an appropriate continuous path of travel to all residential levels of the development compliant with AS1428.1:2009.

Lift lobby areas have an appropriate turning area in front of the lift suitable for a person in a wheelchair to perform 180° turns and for two wheelchair users to pass one another in accordance with the DDA Premises Standards.

The corridors have suitable areas to allow wheelchair turning and passing compliant with AS1428.1:2009 and the DDA Premises Standards.

### **4.2. Apartment Building Lifts**

The development is serviced by 2 passenger lifts which provides a continuous accessible path of travel from the upper residential levels to street level, as well as to the basement level below compliant with AS1428.1:2009 and the DDA Premises Standards.

The passenger lifts have internal dimensions that can achieve compliance with the DDA Premises Standards.

*Recommendation:*

- (i) Lift car components (grabrail, control buttons, lighting) to comply with AS1735.12.

## 5. ACCOMMODATION

### 5.1. Adaptable Dwelling 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). The adaptable unit will also be required to be 'visitable' from the outset i.e. enable visitors with disabilities to enter the unit through the front entry door and have access to the living room and a 'visitable' toilet

There is total of 44 dwellings have been proposed throughout the development.

The Pittwater DCP requires 25% of all dwellings to be designed as adaptable under AS4299.

The proposed apartment building has 32 units, of which there are 8 proposed as adaptable. The adaptable units have been nominated as G.06, G.07, G.08, 1.05, 1.06, 1.07, 1.08, & 1.09.

The eastern section of the site has 12 townhouses proposed, of which there 3 proposed as adaptable. The adaptable townhouses have been nominated as TH09, TH10, & TH11.

In total, there are 11 adaptable dwellings that represent 25% of total dwellings, which complies with the DCP. It is noted that there is a good spread of adaptable dwellings between units and townhouses.

### 5.2. Adaptable Units G.08 & 1.09

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance is not achieved at pre adaptation. A performance solution is required.



The kitchen does not achieve 1550mm circulation space outside of the kitchen work spaces at post adaptation. This needs to be modified and can be carried out at design development stage.

The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.

The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.

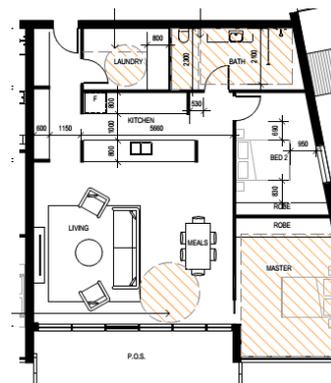
The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

*Recommendations:*

- (i) Entry door to allow for the installation of a door powered actuator including service conduits for the doors' operation.
- (ii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.
- (iii) Allow for the reposition of island kitchen bench to achieve 1550mm between benches. Provide continuous tiling under benches to be relocated and capped off services in the kitchen to achieve low level modification of the kitchen, compliant with AS4299.

### 5.3. Adaptable Units G.07 & 1.08

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance can be achieved at pre adaptation by removal of closet.



The kitchen does not achieve 1550mm circulation space outside of the kitchen work spaces at post adaptation. This needs to be modified.

The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.

The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.

The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

*Recommendations:*

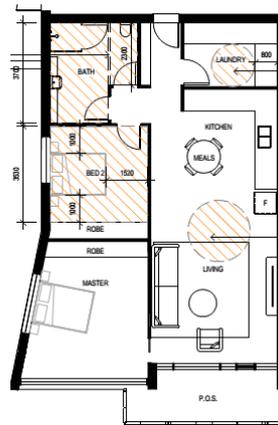
- (i) Allow for the reposition of island kitchen bench to achieve 1550mm between benches. Provide continuous tiling under benches to be relocated and capped off

services in the kitchen to achieve low level modification of the kitchen, compliant with AS4299.

- (ii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.
- (iii) Bedroom door needs to show increased latch side clearance to satisfy AS1428.1

#### 5.4. Adaptable Units G.06 & 1.07

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance is not achieved at pre adaptation. A performance solution is required.



The kitchen does achieve 1550mm circulation space outside of the kitchen work spaces in accordance with AS4299.

The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.

The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.

The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

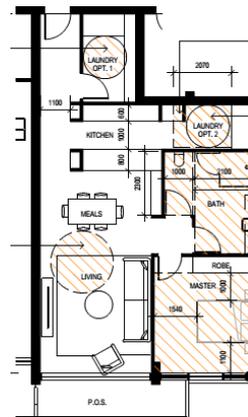
##### *Recommendations:*

- (i) Entry door to allow for the installation of a door powered actuator including service conduits for the doors' operation.
- (ii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.

#### 5.5. Adaptable Units 1.05 & 1.06

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance is not achieved at pre adaptation. A performance solution is required.

The kitchen does achieve 1550mm circulation space outside of the kitchen work spaces in accordance with AS4299.



The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.

The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.

The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

#### *Recommendations:*

- (i) Entry door to allow for the installation of a door powered actuator including service conduits for the doors' operation.
- (ii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.

## **5.6. Adaptable Townhouse TH09 & TH10 Design**

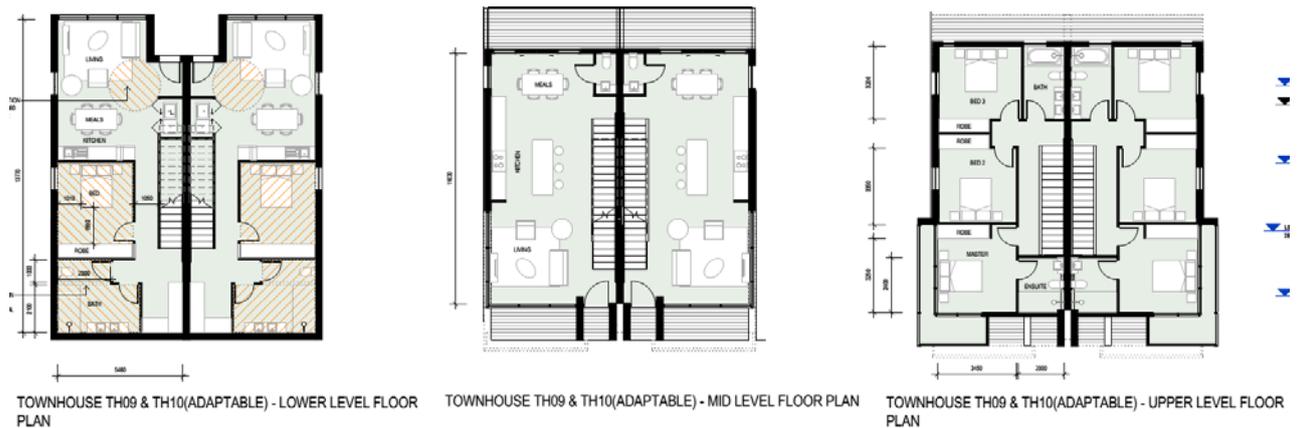
The adaptable townhouse entry level is via the lower level, which has access through the open garage to the street. Whilst this is not a traditional design of an adaptable unit, which has its essential elements accessible from the main entry door.

However in this case, the positioning of the essential elements on lower level is reasonable given the accessibility of the garage and the difficulties that traditional townhouse design faces in complying with AS4299. It is noted that the design has an accessible lift shown between townhouse living area and the garage.

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance is not achieved at pre adaptation. A performance solution is required.

The kitchen can achieve 1550mm circulation space outside of the kitchen work spaces in accordance with AS4299.

The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.



The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.

The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

*Recommendations:*

- (i) Ensure the lift from garage to lower level is installed prior to OC.
- (ii) Entry door to allow for the installation of a door powered actuator including service conduits for the doors' operation.
- (iii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.

### 5.7. Adaptable Townhouse TH11 Design

The adaptable townhouse entry level is via the lower level, which has access through the open garage to the street. Whilst this is not a traditional design of an adaptable unit, which has its essential elements accessible from the main entry door.

However in this case, the positioning of the essential elements on lower level is reasonable given the accessibility of the garage and the difficulties that traditional townhouse design faces in complying with AS4299. It is noted that the design has an accessible lift shown between townhouse living area and the garage.

The entry door of the unit achieves 850mm clear width opening (920 door leaf) at pre and post adaptation. Latch side clearance is not achieved at pre adaptation. A performance solution is required.

The kitchen can achieve 1550mm circulation space outside of the kitchen work spaces in accordance with AS4299.

The bathroom is of an adequate size to achieve an AS1428.1 compliant bathroom of shower, WC and basin with required circulation spaces. The pan in its current position satisfies the visitability criteria under AS4299.

The living area is large enough to achieve a circulation space of 2250mm min diameter after furniture placement, compliant with AS4299.

The bedroom can achieve compliant circulation from the outset around a queen size bed with suitable circulation areas prescribed under AS4299.



The laundry area appears to have suitable circulation areas in front of laundry appliances post adaptation in accordance with AS4299.

*Recommendations:*

- (i) Ensure the lift from garage to lower level is installed prior to OC.
- (ii) Entry door to allow for the installation of a door powered actuator including service conduits for the doors' operation.
- (iii) All doors to achieve 850mm clear opening width from the outset, compliant with AS1428.1:2009.

### 5.8. Livable Unit SEPP 65

The inclusion of 25% adaptable dwellings will satisfy the 20% apartments that have Liveable Housing Guidelines Silver Level Universal design features as nominated in SEPP 65 (including referenced Apartment Design Guide).

## **6. CAR PARKING**

### **6.1. Residential Car Parking**

There are 2 adaptable unit car bays provided within basement level 1. There are 2 adaptable unit car bays provided within basement level 2.

There are 4 adaptable unit car bays located close to the southern lift and 4 adaptable unit car bays located close to the northern lift. The adaptable unit car bays have internal dimensions of 3.8 metre width which is suitable under AS4299.

There are accessible paths of travel from the adaptable unit car bays to the adaptable units via the relevant passenger lift.

*Recommendation:*

- (i) The approach to all adaptable car parking bay should not have vertical clearance of less than 2.2m and height clearance of 2.5m. This also includes the adaptable townhouses.

### **6.2. Visitor Car Parking**

There are 2 accessible visitor car bays within basement levels 1 & 2. The accessible car bays have internal dimensions of 2.4 metre width with adjacent shared 2.4 metre width in accordance with AS2890.6.

The visitor accessible car bays are close to the passenger lift and has an accessible path of travel that connects with the passenger lift.

*Recommendation:*

- (i) The approach to each accessible car bay should not have vertical clearance of less than 2.2m and height clearance of 2.5m at adaptable unit car bays compliant with AS4299.

## **7. COMMON USE FACILITIES**

### **7.1. Garbage Areas**

There is a residential refuse room located on the ground floor of the development near the southern lift lobby.

*Recommendations:*

- (i) Entry door to the garbage room requires a minimum 850mm clear width (920mm door leaf) and 530mm internal latch side clearance compliant with AS1428.1:2009.
- (ii) Provide a minimum 1550mm diameter turning area in front of garbage bins suitable for a person in a wheelchair.

### **7.2. Mailbox Areas**

*Recommendation:*

- (i) Ensure a level area (maximum 1:40 gradient) over 1550mm diameter turning area in front of mailboxes suitable for a wheelchair user to perform 180° turns in accordance with AS4299.