

# ACCESS REPORT

MIXED-USE DEVELOPMENT

118-120 STATION STREET PENRITH

PREPARED FOR JIM AITKEN

14 SEPTEMBER 2020



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## EXECUTIVE SUMMARY

This report has been prepared to identify the extent of compliance achieved by the assessment of the architectural documentation for the proposed development in regards to access for people with disabilities.

The proposed development consists of the construction of a new seven (7) storey mixed use building containing residential apartments with retail/commercial tenancy and two levels of basement carparking located at 118-120 Station Street Penrith.

The application for Construction Certificate shall be assessed under the relevant provisions of the Environmental Planning & Assessment Act 1979 (As Amended) and the Environmental Planning & Assessment Regulation 2000.

## REPORT DETAILS

### PROPOSED DEVELOPMENT

The proposed development consists of the construction of a new seven (7) storey mixed use building containing residential apartments with retail/commercial tenancy and two levels of basement carparking located at 118-120 Station Street Penrith.

### BUILDING DESCRIPTION

Proposed Building Classification

- Class 2 - Residential
- Class 6 - Retail
- Class 7a - Carpark

### LOCATION

The subject development is located at located at Lot 5 DP 112466, known as 118-120 Station Street Penrith.

The site is within the jurisdiction of Penrith City Council for the purposes of development approvals.

### REFERENCED DOCUMENTS

The following documents have been reviewed, referenced and/or relied upon in the preparation of this report.

- National Construction Code 2019 (NCC) Building Code of Australia, Amendment 1
- AS1428.1-2009 Design for Access & Mobility Part 1 – General requirements for access – New building work),
- Architectural Plans as prepared ADS Architects (Appendix 1)
- Environmental Planning and Assessment Act 1979

## CURRENT LEGISLATION

The applicable legislation governing the design of buildings is the Environmental Planning and Assessment Act 1979. This Act requires that all new building works must be designed to comply with the NCC. However the existing features of an existing building need not to comply with the NCC unless an upgrade is required by other clauses of the legislation

The version of the NCC applicable to the development, is the version that in place at the time of the application of the Construction Certificate.

## REPORT PURPOSE

The purpose of this Access Report is to identify the extent to which the design documentation complies with the following:

- National Construction Code 2019 (NCC), Building Code of Australia, Amendment 1
- Part D3 (Access for people with a disability),
- Clause E3.6 (Lift Installations),
- Clause F2.4 (Accessible Sanitary Facilities),
- Disability (Access to Premises – Building) Standards 2010,
- AS1428.1-2009 Design for Access & Mobility Part 1 – General requirements for access – New building work),
- AS2890.6-2009 Parking Facilities Part 6 – Off-street parking for people with disabilities,
- AS4299-1995 Adaptable Housing and General best practice access requirements.

The comments within this report do not cover detailed issues pertaining to construction documentation such as internal finishes, evaluation of slip resistant floor materials, lift specification, door schedules, door circulation, tactile ground surface indicators, ramp grades, lighting levels, signage and the like, which will be confirmed at construction certificate stage.

## EXCLUSIONS AND LIMITATIONS

Except as mentioned in the report, the limitations and exclusions of this report are as follows -

- Structural adequacy;
- Fire resistance of primary structural elements;
- Design basis or operating capability of the installed electrical, fire, hydraulic or mechanical services;
- Compliance with the *Disability Discrimination Act 1992*;
- Local Government Act and Regulations;
- Alternative Solution Reports;
- Occupational Health & Safety Act and Regulations;
- Work Health and Safety requirements;
- Requirements of any standards that are not identified within this report;

# NATIONAL CONSTRUCTION CODE ASSESSMENT

## PART D3 – ACCESS FOR PEOPLE WITH DISABILITIES

### CLAUSE D3.0 – DEEMED TO SATISFY PROVISIONS

*A building solution is proposed to comply with the D-t-S provisions found within the NCC. Any building solution that is proposed as an Alternative Solution to the D-t-S provisions must satisfy the performance requirements found within the NCC.*

### COMMENT/RECOMMENDATION

The new building work will generally follow a D-t-S path for achieving compliance.

Where D-t-S compliance is not achievable an alternative solution must be provided.

### CLAUSE D3.1 – GENERAL BUILDING ACCESS REQUIREMENTS

*Access requirements with reference to Table D3.1.*

#### *Class 2 – Residential Sole Occupancy Unit*

*Access must be provided by a ramp or lift:*

- *From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole occupancy unit on that level.*
- *To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.*
- *Where a ramp complying with AS1428.1 or a passenger lift is installed – to the entrance doorway of each sole occupancy unit; and to and within rooms or spaces for use in common by the residents, located on the levels served by the lift.*

#### *Class 6 - Retail/Commercial*

- *To and within all areas normally used by the occupants.*

#### *Class 7a – Carpark*

- *To and within any level containing accessible carparking spaces.*

## COMMENT/RECOMMENDATION

### Class 2 – Residential Sole Occupancy Units

Access is required to the entrance doorway of each sole-occupancy unit (i.e. dwelling) and to any common areas within this development accessed via a compliant ramp or passenger lift. This includes both the storage and garbage areas.

Access is readily achievable to all sole-occupancy units and common areas within this development.

The main entrance door to each sole occupancy unit within this development must have an 850mm wide clear door opening complying with AS1428.1-2009.

### Class 6 – Retail/Commercial

Access is required to and within the Retail/Commercial provided on the ground of this development.

Access is generally provided to and within the Retail/Commercial. Internal fit-out details to be reviewed at the respective times when designed.

### Class 7a – Carpark

Access is required any level containing accessible carparking spaces provided on the ground floor of this development.

Access is provided to and within all required carparking levels.

### Lift

Lift access must be provided to all levels required to be accessible including the basement levels. The proposed lifts will provide access to all levels and areas required to be accessible within this development

### **CLAUSE D3.2 – ACCESS TO THE BUILDINGS**

*An accessway must be provided to a building required to be accessible:*

- (i) From the main points of a pedestrian entry at the allotment boundary; and*
- (ii) From another accessible building connected by a pedestrian link; and*
- (iii) From any required accessible car parking on the allotment.*

*In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and:*

- (i) Through not less than 50% of all other pedestrian entrances, including the principal pedestrian entrance; and*
- (ii) In a building with a total floor area more than 500m<sup>2</sup>, a pedestrian entrance, which is not accessible, must not be located more than 50m from an accessible pedestrian entrance.*

*Where a pedestrian entrance required to be accessible has multiple doorways:*

- (i) If the pedestrian entrance consists of not more than 3 doorways – not less than 1 of those doorways must be accessible; and*
- (ii) If an accessible entrance consists of more than 3 doorways – not less than 50% of those doorways must be accessible.*

*An accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where:*

- (i) All doorways serve the same part or parts of the building; and*
- (ii) The distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance.*

*Where a doorway on an accessway has multiple leaves (except an automated opening door) one of the leaves must have a clear opening width of not less than 850mm in accordance with AS1428.1.*



## COMMENT/RECOMMENDATION

### Accessways

An accessway (i.e. continuous accessible path of travel) is required from the main pedestrian entry point at the allotment boundary and from the accessible car parking spaces provided within this development.

Accessways are generally proposed to this development from the main pedestrian entry points at both street allotment boundary and from the accessible car parking space within basement car parking levels.

### Building Access

Access to this development is proposed via the pedestrian footpaths on Station Street and the accessible car parking provided within the basement car park levels.

The main entrance doorways (principal pedestrian entrance) must have an 850mm clear wide opening and door circulation space complying with AS1428.1- 2009 (where an automatic opening door is provided, hinge and latch side clearance is not required).

### Multiple Doorways

Where a doorway has multiple leaves along an accessway, at minimum one of the door leaves must have a 850mm clear wide door opening.

The CC documents will provide details showing clear opening of doorways, level thresholds, door hardware and door circulation space requirements in accordance with AS1428.1-2009

### **CLAUSE D3.3 – PARTS OF THE BUILDING TO BE ACCESSIBLE**

*In a building required to be accessible—*

*Every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—*

- (i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and*
- (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and*
- (iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and*

*Every passenger lift must comply with E3.6; and*

*Accessways must have—*

- (i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and*
- (ii) turning spaces complying with AS 1428.1—*
  - (A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and*
  - (B) at maximum 20 m intervals along the accessway; and*

*An intersection of accessways satisfies the spatial requirements for a passing and turning space; and a passing space may serve as a turning space; and a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—*

- (i) containing not more than 3 storeys; and*
- (ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m<sup>2</sup>; and*

*Clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and The carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.*

### **COMMENT/RECOMMENDATION**

#### Accessways

Accessways must comply with AS1428.1-2009 and must have the following accessible features:

- A turning space of 1540mm x 2070mm to perform a 180 degree turns within 2 metres of a terminated accessway.
- A 1500mm diameter turning space to perform a 90 degree turn within an accessway.
- An 1800mm wide passing space at 20m intervals along an accessway or where a direct line of sight is not available.
- Accessways must have a minimum 1000mm clear width, except where a turning space or passing space is required.

Accessways are generally provided with appropriate turning and passing spaces within this development.

#### Stairways

All stairs, except for fire-isolated stairs must comply with AS1428.1-2009.

#### Ramps

All ramps, except for fireisolated ramps must comply with AS1428.1-2009.

#### Fire-Isolated Stairs

All fire-isolated stairs must have non-slip nosings with a 30% luminance contrast and a compliant handrail complying with AS1428.1- 2009.

#### Fire Doors

Fire doors must have an 850mm clear wide door opening allowing a person with a disability to seek refuge within the fire stairs.

#### Lift

The CC documents will provide lift details and must state compliance with Clause E3.6 of the NCC and AS1735.12-1999.

#### Soft Floor Coverings

Any carpet within this development must comply with the NCC. The carpet pile height or thickness shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm.

#### Slip Resistant Surfaces

Accessways, stairs and ramps must have a slip resistant rated surface complying with the NCC.

#### Accessible Storage Unit

The accessible storage unit provided must be accessible via an accessway with appropriate turning spaces.

#### Garbage Room

The garbage room must be accessible via an accessway with sufficient door circulation space with AS1428.1-2009.

The garbage room must have provision for a 1540mm x 2070mm clear internal circulation space.

## **CLAUSE D3.4 – EXEMPTIONS**

### D3.4 Exemptions

The following areas are not required to be accessible:

- (a) An area where access would be inappropriate because of the particular purpose for which the area is used.
- (b) An area that would pose a health or safety risk for people with a disability.
- (c) Any path of travel providing access only to an area exempted by (a) or (b).

Information will be provided at fitout stage detailing use of each room, role of personnel to be admitted to each area, security arrangements for independent movement of non-authorised personnel, activities of the people using the area and any OH&S restraints.

### **CLAUSE D3.5 – ACCESSIBLE PARKING**

*Accessible carparking spaces—*

*Subject to (b), must be provided in accordance with Table D3.5 in—*

*(i) a Class 7a building required to be accessible; and*

*(ii) a carparking area on the same allotment as a building required to be accessible; and*

*Need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and*

*Subject to (d), must comply with AS/NZS 2890.6; and*

*Need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.*

### **COMMENT/RECOMMENDATION**

The accessible car parking spaces provided within this development must comply with AS2890.6-2009. It is noted that 4 accessible car parking spaces have been provided.

The accessible car parking spaces must be a minimum 2400mm wide x 5400mm long and must have provision for a 2400mm x 5400mm shared zone.

The accessible car parking spaces must have a minimum 2500mm overhead clearance (pipes, beams and cable trays should not intrude into this overhead clearance).

The entrance door and the vehicle path of travel within the basement car park must have a minimum 2200mm overhead clearance.

Appropriate identification (international symbol of access) and line marking must be provided to the accessible car parking spaces and shared zones.

The shared zone must have provision for a bollard to prevent unauthorised parking by residents or visitors.

The cross-fall within the basement car park must not exceed 1 in 40 in any direction for a concrete surface and 1 in 33 for a bituminous surface (for drainage purposes).

#### Class 2 – Residential Sole

AS4299-1995 requires 1 accessible car parking space for each adaptable dwelling proposed within this development. 2 accessible spaces have been allocated in both basement levels to cover the two proposed adaptable units required by Penrith City Council DCP.

#### Class 6 – Retail/Commercial

The BCA requires 1 accessible car parking space for every 50 car parking spaces provided for the proposed retail shop within this development.

2 accessible car parking space for use by the proposed retail shop will be provided within the basement car park.

## **CLAUSE D3.6 – SIGNAGE**

*In a building required to be accessible—*

*Braille and tactile signage complying with Specification D3.6 must—*

- (i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—*
  - (A) sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3 building; and*
  - (B) space with a hearing augmentation system; and*
- (ii) identify each door required by E4.5 to be provided with an exit sign and state—*
  - (A) " Exit "; and*
  - (B) " Level " ; and either*
    - (aa) the floor level number; or*
    - (bb) a floor level descriptor; or*
    - (cc) a combination of (aa) and (bb); and*

*Signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—*

- (i) the type of hearing augmentation; and*
- (ii) the area covered within the room; and*
- (iii) if receivers are being used and where the receivers can be obtained; and*

*Signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use; and*

*Signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility; and*

*Where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; and*

*Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.*

## COMMENT/RECOMMENDATION

All signage relating to access must comply with Specification D3.6 and AS1428.1-2009.

Signs must be positioned 1200mm-1600mm from the ground, easy to read (large print if possible), non reflective, illuminated and include legible braille and tactile.

### Fire Egress

Signage with legible braille must be provided to all emergency evacuation doors stating "Exit" and "Level" followed by the floor number.

Directional signage must be provided directing a person with a disability to the emergency exit on each floor.

### Unisex Accessible Sanitary Facility

Signage must be provided to the unisex accessible toilet identifying that the facility is for either left hand or right hand use.

Signage details to be provided.

### **CLAUSE D3.7 – HEARING AUGMENTATION**

*A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—*

- (i) in a room in a Class 9b building; or*
- (ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or*
- (iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.*

*If a hearing augmentation system required by (a) is—*

- (i) an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or*
- (ii) a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than—*
  - (A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and*
  - (B) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and*
  - (C) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and*
  - (D) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons.*

*The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D1.13.*

*Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.*

### **COMMENT/RECOMMENDATION**

*A hearing augmentation system is not required within this development.*



### **CLAUSE D3.8 – TACTILE INDICATORS**

*For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching—*

- (i) a stairway, other than a fire-isolated stairway; and*
- (ii) an escalator; and*
- (iii) a passenger conveyor or moving walk; and*
- (iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and*
- (v) in the absence of a suitable barrier—*
  - (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and*
  - (B) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point,*
- (vi) except for areas exempted by D3.4.*

*Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.*

*A hostel for the aged, nursing home for the aged, a residential aged care building Class 3 accommodation for the aged, Class 9a health-care building or a Class 9c building need not comply with (a)(i) and (iv) if handrails incorporating a raised dome button in accordance with the requirements for stairway handrails in AS 1428.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.*

### **COMMENT/RECOMMENDATION**

Tactile ground surface indicators are to comply with Sections 1 and 2 of AS/NZS1428.4.1-2009.

Tactile ground surface indicators must have a 30% luminance contrast to surrounding surfaces.

Tactile ground surface indicators must be provided to the top and bottom landings of stairs and ramps (except fire isolated stairs and ramps), overhead obstructions less than 2m from the ground surface and where an accessway meets a vehicle pathway adjacent to a pedestrian entrance.

Tactile ground surface indicators must be provided 300mm from end of an inclined surface or hazard, 600-800mm wide for the full length of the hazard.

Tactile ground surface indicators must not be provided to intermediate landings.

### **CLAUSE D3.9 – WHEELCHAIR SEATING SPACE IN CLASS 9b ASSEMBLY BUILDING**

Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 must be provided in accordance with the following:

The number and grouping of wheelchair seating spaces must be in accordance with Table D3.9. In a cinema—

- (i) with not more than 300 seats — wheelchair seating spaces must not be located in the front row of seats; and
- (ii) with more than 300 seats — not less than 75% of required wheelchair seating spaces must be located in rows other than the front row of seats; and
- (iii) the location of wheelchair seating is to be representative of the range of seating provided.

### **COMMENT/RECOMMENDATION**

There are no parts or areas of this development that are classified as Class 9b.

### **CLAUSE D3.10 – SWIMMING POOLS**

Not less than 1 means of accessible water entry/exit in accordance with Specification D3.10 must be provided for each swimming pool required by Table D3.1 to be accessible.

An accessible entry/exit must be by means of—

- (i) a fixed or movable ramp and an aquatic wheelchair; or
- (ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or
- (iii) a platform swimming pool lift and an aquatic wheelchair; or
- (iv) a sling-style swimming pool lift.

Where a swimming pool has a perimeter of more than 70 m in length, at least one accessible water entry/exit must be provided by a means specified in (b)(i), (ii) or (iii).

Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1.

### **COMMENT/RECOMMENDATION**

There are no swimming pools within this development.

### **CLAUSE D3.11 – RAMPS**

On an accessway—

- (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and
- (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.

### **COMMENT/RECOMMENDATION**

There are no ramps with a total rise of 3.6m. There are no overlapping step ramp landings.

### **CLAUSE D3.12 – GLAZING ON A ACCESSWAY**

*On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.*

### **COMMENT/RECOMMENDATION**

All frameless glazed doors and windows without mid-rails within common areas of this development must have a luminance contrast strip in accordance with AS1428.1- 2009.

Contrasting strips must have a solid, non- transparent contrasting line with a minimum 30% luminance contrast, not less than 75mm wide with the lower edge located at a height between 900-1000mm from the ground.

### **CLAUSE E3.6 – PASSENGER LIFTS**

*In an accessible building, every passenger lift must:*

- (i). Be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and*
- (ii). Have accessible features in accordance with Table E3.6b;*
- (iii). Not rely on a constant pressure device for its operation if the lift car is fully enclosed.*

#### *Electric passenger lift*

*This lift must not travel more than 12m. The accessible features required for this type of lift include:*

- (i). Handrails complying with AS1735.12;*
- (ii). Lift floor dimension of not less than 1100mm wide x 1400mm deep;*
- (iii). Minimum clear door opening complying with AS1735.12;*
- (iv). Passenger protection system complying with AS1735.12;*
- (v). Lift landing doors at the upper landings;*
- (vi). Lift car and landing control buttons complying with AS1735.12;*
- (vii). Lighting in accordance with AS1735.12;*
- (viii). Automatic audible information within the lift car to identify the level each time the car stops;*
- (ix). Audible and visual indication at each lift landing to indicate the arrival of the lift car;*
- (x). Audible information and audible indication must be provided in a range of between 20-80 dB (A) at a maximum frequency of 1 500 Hz;*
- (xi). Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received.*

## COMMENT/RECOMMENDATION

### Electric passenger lift

The proposed electric passenger lift within this development must comply with Table E3.6 of the NCC 2014 and AS1735.12-1999.

The following accessible features are required:

- Lift door opening to be a minimum 900mm wide.
- Lift car dimensions not less than 1100mm wide x1400mm deep.
- Handrails complying with the provisions for a mandatory handrail in AS1735.12-1999.
- Passenger protection system complying with AS1735.12-1999.
- Lift landings with clear circulation space for a 90 or 180-degree turn.
- Lift car and landing controls buttons must comply with AS1735.12- 1999. Control buttons must have provision for tactile and braille Lighting in accordance with AS1735.12-1999.
- Audible and visual indication systems as prescribed in AS1735.12- 1999.
- Emergency hands-free communication device including a button that alerts a call centre of a problem and a light to signal that the call has been received.

## CLAUSE F2.4 – ACCESSIBLE SANITARY FACILITIES

*In a building required to be accessible—*

- *Accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and*
- *Accessible unisex showers must be provided in accordance with Table F2.4(b); and*
- *At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and*
- *An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and*
- *The circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1; and*
- *An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and*
- *Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and*
- *Where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and*
- *An accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1.*

Class 2 – Residential Sole Occupancy Unit

Table F2.4 (a)

*Where sanitary compartments are provided in common areas, not less than 1 is required.*

Table F2.4 (b)

*Where showers are provided in common areas, not less than 1 is required.*

Class 6 – Retail/Commercial

Table F2.4 (a)

*Where a closet pan is required, one on every storey containing sanitary compartments and where a storey has more than one bank of sanitary compartments containing male and female compartments, at not less than 50% of those banks.*

Table F2.4 (b)

*Where 1 or more shower is required, not less than 1 for every 10 showers or part thereof.*

**COMMENT/RECOMMENDATION**

Unisex Accessible Toilet

The proposed unisex accessible toilet must have circulation space, fixtures and fittings in accordance with AS1428.1-2009.

Detailed drawings showing appropriate circulation spaces, fixtures and fittings will be provided and verified prior to the issue of the Construction Certificate.

## DESIGN FOR ACCESS AND MOBILITY ASSESSMENT AS1428.1 2009

### CONTINUOUS ACCESSIBLE PATH OF TRAVEL (ACCESSWAY)

A continuous accessible path of travel (accessway) must be a minimum 1000mm wide x 2000mm high (except where door circulation space, a turning or passing space is required).

Permanent fixtures must not impose along the continuous accessible path of travel (accessway) or any turning spaces e.g. fire hose reel, signs, bins, cabinets.

Gradients and cross falls along a continuous accessible path of travel must be in accordance with AS1428.1-2009.

The continuous accessible path of travel must be free of any steps, slip-resistant and traversable by a mobility aid user.

### FLOOR SURFACES ON CONTINUOUS ACCESSIBLE PATH OF TRAVEL AND CIRCULATION SPACES

All floor surfaces e.g. tiling, timber and concrete flooring must be slip resistant and must have a slip resisting rating in accordance with the NCC.

The floor surface must be traversable by a person using a mobility aid.

A smooth transition must be provided between abutting surfaces e.g. tiling, timber flooring and carpet. A construction tolerance of up to 3mm if vertical or 5mm is acceptable using a rounded or beveled edge.

Raked joint pavers must be installed so that they do not create any trip hazards.

Recessed mats must be provided in accordance with AS1428.1-2009.

Recessed mats must be traversable by a mobility aid user and must not create trip hazards.

Carpets pile heights and thickness must comply with the NCC.

Exposed edges of floor coverings must be fastened to the floor and must have a trim the entire length on any exposed surface.

Leading edges, carpet trims and any soft flexible materials must not have a vertical face of not more than 3mm or a beveled edge no higher than 5mm or a gradient of 1 in 8 to a maximum of 10mm.

### SWITCHES AND CONTROLS

All new light switches, intercoms and controls (other than power outlets) must be provided 900- 1100mm from the ground and 500mm from internal wall corners.

Power points must be located 300- 500mm from the ground surface and 500mm from internal wall corners.

### WALKWAYS, RAMPS & LANDING

Walkways must have a 1000mm clear width and the abutting sides of a walkway must provide a firm and level surface of a different material to that of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600mm unless a kerb, kerb rail or low wall is provided.

Landings along a walkway are required every 25m intervals for gradients of 1 in 20 to 1 in 33 and every 15m for gradients 1 in 14 to 1 in 20. Where a walkway has a gradient shallower than 1 in 33, landings are not required.

1 in 14 ramps must have a maximum gradient of 1 in 14, landings every 9m, 1000mm clear width between handrails or 1500mm clear width on a curved ramp, handrails on both sides, setback of 900mm from a

boundary, 400mm setback at intersections, handrails extending 300mm at the top and bottom (except where the handrail is continuous) and kerb or kerb rails on both sides of the ramp edge.

Threshold ramps must have a maximum rise of 35mm, maximum length of 280mm and a maximum gradient of 1 in 8. Threshold ramps must not be located more than 20mm from a door opening and the edges must be either tapered or splayed at 45 degrees (where not abutting a wall).

Step ramps must have maximum rise of 190mm, maximum length of 1900mm and a maximum gradient of 1 in 10. The sides of the step ramp (those not abutting a wall) must have either a low wall 450mm high, balustrade with a kerb or kerb rail and if provided at a pedestrian crossing 45 degree splayed sides. Landings must be level unless they require a 1 in 40 grade for shedding of water. Landings for a ramp or walkway must be 1200mm long where a change of direction is not required. A 1500mm long landing is required where a 90 degree turn is required or 1540 x 2070 where a 180 degree turn is required.

### STAIRWAYS

Stairs must have a 1000mm clear width, setback 900mm from a boundary, opaque risers and nosings with a rounded or chamfered profile. Stair nosings must have a non-slip nosing with a 30% luminance contrast complying with AS1428.1- 2009.

Stairway handrails must be continuous throughout the stair flight, provided on both sides, must not have obstructions above and below for a height of 600mm, top extension of 300mm and bottom extension one tread width plus 300mm (where not continuous) and at a constant height throughout the stair flight.

### HANDRAILS

Handrails must not encroach within circulation space requirements, the cross section of the handrail must be clear for not less than 270 degrees for the upper most section of the handrail so as to not obstruct the passage of hand along the entire rail, 30-50mm outside diameter, 50mm clearance to a wall or fixed object, exposed edges must be rounded, positioned at a constant height of 865mm-1000mm from the nosing to the top of the handrail, securely fixed and ends returned 180 degrees or 90 degrees to the wall/ground.

### DOORWAYS, DOORS & CIRCULATION SPACE

All doors including fire doors and gates required to be accessible must have an 850mm clear width and 1980mm clear height. Internal and external door circulation space must be provided in accordance with AS1428.1-2009, except for where an automatic door system is provided (hinge and latch side clearances are not required).

Outward opening doors and gates must have provision for a door closing mechanism, horizontal bar or pull bar on the closing face side of the door (900-1200mm from the ground surface).

Doors including gates must have Dlever type handles with sufficient grasping clearances. Door handles must be provided at 900-1100mm from the ground surface. Door handles and door hardware (e.g. locks, snibs) must be operable with one hand.

Manual automatic door controls must be fitted on both sides of the door. The controls must be located no closer than 500mm from the internal wall corner and between 1000-2000mm from the hinged door leaf when open or closed.

Push button controls must have a 25mm diameter button and be proud of the surrounding surface.

Doors and gates must not exceed 20 newtons of operating force.

Doors and door frames (combined) must have a 30% luminance contrast to surrounding surfaces.

The minimum width of the areas of a luminance contrast must be 50mm.

## UNISEX ACCESSIBLE TOILET AND SHOWER

Circulation space for the accessible WC, washbasin and shower must comply with AS1428.1-2009. The WC pan must have appropriate clearances to a wall, seat height and width as per the setout requirements in AS1428.1-2009.

The WC seat must have a 30% luminance contrast to surrounding surfaces, load rated for 150kgs and securely fixed to prevent accidents.

The WC backrest must be capable of withstanding forces of 1100 newtons, the lower edge of the backrest positioned 120mm-150mm from the top of the WC and at an angle of 95 to 100 degrees.

WC flushing controls must be hand operated or automatic. The controls must be positioned within the allowable zones outlined in AS1428.1-2009.

Toilet paper dispenser must be located within the allowable zone outlined in AS1428.1-2009 and must not encroach into the grabrail clearance zones.

Grabrails must have a 30-40mm outside diameter, 50mm wall clearance, be securely fastened to a wall and must be able to withstand a force of 1100 newtons, exposed edges must be rounded, must not have obstructions above and below for a height of 600mm and the cross section of the grabrail must be clear for not less than 270 degrees for the upper most section of the grabrail so as to not obstruct the passage of hand along the entire rail.

Baby change tables must not encroach into the required circulation spaces when in a folded position and must be positioned at maximum height of 820mm with a clearance underneath of 720mm when open.

WC doors must be hinged or sliding, if outward opening must have a mechanism that holds the door in a closed position without the use of a latch, include an in-use indicator and a bolt or snib catch, latch mechanism that is openable from the outside during an emergency, D-lever handles and must not require more than 20 newtons of operating force.

The washbasin must have lever type taps, insulated exposed hot water pipes and setout as per the requirements of AS1428.1-2009.

A shelf 300-400mm wide must be positioned 900-1000mm from the ground next to the washbasin or a vanity with shelf space must be provided.

Soap, towel dispensers and other fittings (e.g. hand dryers) must be operable with one hand and must be positioned 500mm from internal corners, and 900-1000mm from the ground.

Clothes hanging devices must be positioned 1200-1350mm from the ground and 500mm from internal wall corners.

A portable sanitary disposal unit must be provided within the toilet and located near the WC.

The shower must have grabrails, shower hose fittings, lever type taps, soap holder and folding seat as per the requirements of AS1428.1-2009.

## AMBULANT TOILETS

Circulation space for the ambulant toilet must comply with AS1428.1-2009.

Grabrails must have a 30-40mm outside diameter, 50mm wall clearance, be securely fastened to a wall and must be able to withstand a force of 1100 newtons, exposed edges must be rounded, must not have obstructions above and below for a height of 600mm and the cross section of the grabrail must be clear for not less than 270 degrees for the upper most section of the grabrail so as to not obstruct the passage of hand along the entire rail.

Ambulant toilet doors must be a minimum 700mm wide, include an in-use indicator and a bolt or snib catch and a latch mechanism that is openable from the outside during an emergency.

A coat hook must be provided at a height of 1350-1500mm from the ground.



## ADAPTABLE HOUSING ASSESSMENT

Adaptable Housing requirements in Penrith Council Control Plan 2009 states that mixed use and residential developments requires 10% of all dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995),

2 adaptable dwelling will be provided within this development. Also, 4 livable units required.

The following assessment summaries the compliance status of the design documentation with reference to AS4299-1995 Class C Schedule of Adaptable Features.

To parts that do not comply or design detail is not provided, a comment or recommendation is provided to achieve compliance.

### 1. PRE AND POST ADAPTATION OF ADAPTABLE DWELLINGS

To obtain certification as an adaptable dwelling 'as built' drawings showing the dwelling in pre-adaptation and post adaptation stages must be provided.

#### **COMMENT/RECOMMENDATION**

Detailed pre and post adaptation plans for the adaptable unit must be reviewed and certified by a suitably qualified person at CC design stage

### 2. SITE

A continuous accessible path of travel from the street, letterboxes, car parking, and common areas is provided to the building entry.

#### **COMMENT/RECOMMENDATION**

A continuous accessible path of travel (without steps or stairs) must be provided from the pedestrian footpath to any areas required to be accessible within this development.

The continuous accessible path of travel must be traversable by a mobility aid user.

The continuous accessible path of travel must have gradients, passing spaces and turning spaces suitable for a person using a mobility aid and must comply with AS1428.1-2009.

### 3. LETTERBOXES

Letterboxes are to be provided to a hard standing area connected to the accessible pathway.

#### **COMMENT/RECOMMENDATION**

Letterboxes must be shown in an accessible location on a handstand area preferably covered from the weather.

The letterboxes for the adaptable dwellings must be 900-1100mm from the ground.

### 4. CARPARKING

A car parking space minimum area of 5.5m x 3.2m or garage space minimum area of 6m x 3.5m.

## COMMENT/RECOMMENDATION

The accessible car parking space allocated for the adaptable unit must be provided in accordance with AS2890.6-2009.

### 5. ACCESSIBLE ENTRY TO ADAPTABLE DWELLING

#### Accessible entry.

The adaptable unit must have an accessible entrance door. Internal and external door circulation space must be provided complying with AS1428.1-2009.

#### Accessible entry to be level (maximum 1 in 40 slope)

The entry to the adaptable unit must be level without any slopes.

#### Threshold to be low-level.

The entry to the adaptable unit must be step free with a level threshold

#### Accessible entry door to have 850mm minimum clearance.

The adaptable dwelling entrance door must have an 850mm wide clear door opening when measured from the face of the opened door to the doorstep.

#### Door lever handles and hardware to AS1428.1.

The adaptable dwelling entrance door must have provision for D-lever type handles in accordance with AS1428.1-2009. The door schedule must be provided at CC stage for assessment.

### 6. INTERIOR: GENERAL

#### Internal doors to have 820mm minimum clearance.

The internal doors within the adaptable dwelling must have an 820mm (preferred 850mm) wide clear door opening when measured from the face of the opened door to the doorstep

#### Internal corridors must be 1000mm wide.

Internal corridors must be a minimum 1000mm wide except where a turning space is required. Turning spaces must comply with AS1428.1-2009.

#### Provision for compliance with AS1428.1 for door approaches.

Internal doors required to be accessible must have internal and external door circulation space complying with AS1428.1-2009.

### 7. LIVING ROOM & DINNING ROOM

#### Provision for circulation space of minimum 2250mm diameter.

A 2250mm diameter clear circulation space must be provided between the living and dinning areas.

#### Provide a minimum of 4 GPO's.

#### Telephone line adjacent to GPO's.

#### TV antenna outlet adjacent to GPO's

#### Lighting that can achieve a minimum 300 lux level.

### 8. KITCHEN

#### Minimum width 2700mm (1550mm clear between benches)

The kitchen must be a minimum 2700mm long and must have a 1550mm clear width provided between kitchen benches.

Provision for benches planned to include at least one worksurface of 800mm length, adjustable in height from 750 to 850mm or replaceable.

The kitchen must have provision for a 800mm wide bench with adjustable legs and separate from other benches.

Wall tiling on the rear wall must be extended downwards for post adaptation.

Refrigerator adjacent to work surface.

Kitchen sink adjustable to heights from 750mm to 850mm or replaceable.

Kitchen sink 150mm deep.

Tap set capstan or lever handles or lever Mixer

Tap set within 300mm from front of sink.

Cooktop to include either front or side controls with raised crossbars.

Cooktop to include isolation switch.

Work surface adjacent to cooktop minimum 800mm length and at same height.

Oven located to an adjustable height or replaceable work surface.

GPO's to comply with AS1428.1. At least one double GPO within 300mm of front of work surface.

The double GPO provided at the kitchen must be provided 300mm from the front of the bench and at the same height as the bench.

GPO to refrigerator to be easily reachable when the refrigerator is in its operation position.

Floor within kitchen area to be slip resistant

Flooring must have a slip resistant rating.

## 9. MAIN BEDROOM

At least one bedroom of area to accommodate a queen size bed and wardrobe and circulation space requirements of AS1428.2.

At least one accessible bedroom must be provided with sufficient space to accommodate a queen size bed (1530mm wide x 2030mm length) with 1000mm clear width around all sides of the bed and 1550mm clear width on the side of the bed with a wardrobe.

Two double GPO's on wall where bedhead will be located.

Minimum of one GPO on opposite wall adjacent to TV antenna point.

Telephone outlet next to bed on the side closest to door (with GPO adjacent to telephone outlet).

2 way switches, one located above bed 1000mm high above floor and another at next to the door.

Lighting that can achieve a minimum 300 lux level.

## 10. BATHROOM & TOILET

Provision for the bathroom area to be converted to an accessible sanitary facility in accordance with AS1428.1.

The adaptable dwelling must have a bathroom and toilet that can be converted into an accessible sanitary facility complying with AS1428.1- 2009 (minimum 2350mm x 2750mm internal dimensions).

Slip resistant floor surface.

Flooring must have a slip resistant rating.

No hobs within shower recess area and a minimum size of 1160mm x 1100mm to comply with AS1428.1.

For ease of plumbing, plumbing work for the shower inlets and outlets to be installed at correct distance from walls as shown in AS1428.1-2009.

Capped services must be shown on plan for pre and post adaptation and must be designed to be utilised at post adaptation e.g. size of pipes and connections etc.

Shower area waterproofed to AS3740 with floor falling to floor waste outlet.

All post adaptation areas must be waterproofed during the pre-adaptation stage

Recessed soap holder or shelf for soap.

Provision for a soap shelf within the shower area at 900mm high from the ground.

Shower taps positioned for easy reach to access side of shower sliding track.

Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall strengthening required).

Provision for grabrail in shower to comply with AS1428.1

Ensure all walls are strengthened with 12mm structural plywood if timber stud frame walls used.

Tap sets to be capstan or lever handles with single outlet.

Provision for washbasin with clearances complying with AS1428.1.

For ease of plumbing, plumbing work for the washbasin to be installed at correct distance from walls as shown in AS1428.1-2009.

Capped services must be shown on plan for pre and post adaptation and must be designed to be utilised at post adaptation e.g. size of pipes and connections etc.

Double GPO beside mirror.

## 11. TOILET

Provision of either a 'visitable toilet' or accessible toilet.

Provision for an accessible toilet.

Toilet circulation space must be provided in accordance with AS1428.1-2009.

Location of WC pan at correct distance from fixed walls.

For ease of plumbing, plumbing work for the WC to be installed at correct distance from walls as shown in AS1428.1-2009.

Capped services must be shown on plan for pre and post adaptation and must be designed to be utilised at post adaptation e.g. size of pipes and connections etc

Provision for a grab rail zone.

Ensure all walls are strengthened with 12mm structural plywood if timber stud frame walls used.

Slip resistant floor surface.

Flooring must have a slip resistant rating.

## 12. LAUNDRY

Circulation at doors to comply with AS1428.1.

The laundry doors must have sufficient door circulation space and D-lever type handles complying with AS1428.1-2009.

Provision for adequate circulation space in front of or beside appliances (minimum 1550mm depth).

Clear circulation space of 1550mm diameter must be provided in front of the laundry cabinet doors.

Provision for automatic washing machine.

Provision for drier.

Where a clothes line is provided, a continuous accessible path of travel must be provided to this.

Double GPO.

Slip resistant floor surface.

Flooring must have a slip resistant rating if tiled

## 13. DOOR HARDWARE

Door hardware operable with one hand, D lever type and located 900-1100mm above the floor.

All doors required to be accessible within the adaptable dwelling must have D-lever handles complying with AS1428.1-2009.

The door schedule must be provided for assessment at CC stage.

## 14. ANCILLARY ITEMS

Switches located 900-1100mm above the floor in line with door handles.

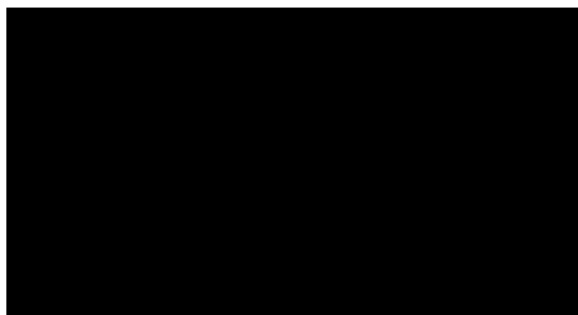
GPO's located not less than 600mm above floor unless otherwise noted

## CONCLUSION

The completion of a review of the provided design documentation with reference to the minimum requirements of Part D3, Clause E3.6 and Clause F2.4 of the National Construction Code 2019 (NCC) Building Code of Australia, Amendment 1, Disability (Access to Premises – Building) Standards 2010, relevant Australian Standards as applicable to this project (i.e. AS1428.1-2009, AS2890.6-2009 and AS4299-1995).

It is the opinion of this office that, on satisfaction of the above recommendation, the proposed building is capable of achieving compliance with the requirements and relevant adopted standards without undue modification to the design or appearance of the building.

Whilst the above recommendation have been made as a means of achieving compliance with the various provisions of NCC Performance Requirements their acceptability has not been verified at this time. It will be necessary for the design to be reviewed by an appropriately qualified person prior to the issue of a Construction Certificate for the works.



ALEKS STOJCEVIC  
DIRECTOR

DESIGN RIGHT CONSULTING PTY LTD

14 September 2020

## APPENDIX A – DOCUMENTATION

The following documentation was used in the assessment and preparation of this report:

DATE: 14/09/2020      REVISION: 02

Dwg No.	Title	Drawing Scales	Current Issue
000	Title Sheet	±1, ±100	02
001	Description Plan	±1:00	01
002	Site Management and Sediment Plan	±2:00	02
041	Site Plan	±1:00	02
101	LOWER BASEMENT FLOOR	±1:00	02
102	UPPER BASEMENT FLOOR	±1:00	02
121	GROUND FLOOR	±1:00	02
131	FIRST FLOOR	±1:00	02
132	SECOND FLOOR	±1:00	02
133	THIRD FLOOR	±1:00	02
134	FOURTH FLOOR	±1:00	02
135	FIFTH FLOOR	±1:00	02
136	SIXTH FLOOR	±1:00	02
141	ROOF	±1:00	02
151	North & South Elevations	±1:00	02
152	East & West Elevations	±1:00	02
161	Section 01 & 02	±1:00	02
162	Section 03	±1:00	02
301	TYPICAL ACCESSIBILITY CONFIGURATION	±2:00, ±50	02
3021	GROUND FLOOR - GFA	±1:00	02
3022	FIRST FLOOR - GFA	±1:00	02
3023	SECOND FLOOR - GFA	±1:00	02
3024	THIRD FLOOR - GFA	±1:00	02
3025	FOURTH FLOOR - GFA	±1:00	02
3026	FIFTH FLOOR - GFA	±1:00	02
3027	SIXTH FLOOR - GFA	±1:00	02
3041	NOTIFICATION PLAN S 10	±1:00	02
3042	NOTIFICATION PLAN S 20	±2:00	02
3061	GROUND FLOOR - BASEX	±1:00	01
3062	FIRST FLOOR - BASEX	±1:00	01
3063	SECOND FLOOR - BASEX	±1:00	01
3064	THIRD FLOOR - BASEX	±1:00	01
3065	FOURTH FLOOR - BASEX	±1:00	01
3066	FIFTH FLOOR - BASEX	±1:00	01
3067	SIXTH FLOOR - BASEX	±1:00	01
801	SHADOW DIAGRAM	±5:00	02