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DISABILITY ACCESS REPORT

Raymond Terrace Health One
Jacaranda Avenue
RAYMOND TERRACE NSW

For:
Kemp Consulting Pty Ltd

Our ref:
1111



1. Introduction

This Access Report considers the proposed Raymond Terrace Health One located at Jacaranda Avenue Raymond Terrace, against the requirements of the Building Code of Australia and The Disability Discrimination Act 1992, with regard to access for persons with a disability.

The proposed development is a health services facility over two levels. Medical consulting rooms are provided at the ground and first floor levels with dental consulting rooms and staff areas at the first floor level. Carparking is provided on the site adjacent to the building. The building is Class 5 under The Building Code of Australia. Access for persons with a disability has been considered in the design of the building through the provision of accessible facilities such as carparking, toilets and lift.

Development application drawings prepared by Kemp Consulting and Schreiber Hamilton Architecture have been reviewed as follows:

- 1004 DA01 C Location + Site Analysis Plan
- 1004 DA02 C Site Plan
- 1004 DA03 C Lower Ground Floor Plan
- 1004 DA04 C Ground Floor Plan
- 1004 DA05 C First Floor Plan
- 1004 DA06 C Roof Plan
- 1004 DA07 C Elevations
- 1004 DA08 C Elevations
- 1004 DA09 C Sections
- 1004 DA10 C Perspectives
- 1004 DA11 C Perspectives
- 1004 DA12 C Perspectives

It is estimated that one in five people in Australia have a long-term disability (Australian Bureau of Statistics – 2003). This includes physical disability, intellectual disability, and sensory impairments such as vision and hearing. It does not include those with a short-term (temporary) disability or the continuing aging population.

Lindsay Perry Access + Architecture have adopted a best practice, performance based approach to access. Assessment is based on project specifics and takes into account various factors such as site topography, heritage and existing site conditions.

2. Legislation

As the construction certificate for this development will be lodged after 1 May 2011, the requirements of BCA 2011 have been adopted in the preparation of this access report. Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- The Building Code of Australia 2011 (BCA) Section D3 – Access for People with Disabilities
- Australian Standards AS1428.1(2009) Amendment 1, AS1428.2(1992), AS1428.4(2009) – Design for Access and Mobility
- Australian Standard AS2890.6 (2009) – Parking Facilities – Off street carparking For People With Disabilities.
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Facilities for persons with disabilities.

The DDA is a complaint based law. Compliance with the BCA alone will not offer protection from a complaint made under the DDA.



The report considers current developments and proposed changes in access legislation such as the draft Access to Premises Standard. This document aims to overcome current inconsistencies between the BCA and DDA. The final document is scheduled to be released this year in conjunction with the 2011 amendment of the BCA.

The accessibility of the proposed development has been considered in regard to the relevant access legislation. A summary of the requirements of relevant legislation follows.

- The **DDA** requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability. The DDA is a complaint based law and is administered by the Human Rights and Equal Opportunities Commission.
- The **BCA 2011** requires access for people with disabilities to and within all areas usually used by the occupants (Class 5 buildings).
- **AS1428 – Design for Access and Mobility** requires the inclusion of a continuous accessible path of travel from the street footpaths and carparking areas to the entry and facilities within the building. It also includes requirements for doorways, stairs, toilets, etc.

Part 1 (2009) of this standard contains access requirements that are mandatory for the provision of access for persons with a disability and will be referred to by the BCA 2011. Amendment 1 of this document was released in 2010.

Part 2 (1992) provides enhanced and best practice requirements. While AS1428.2 is not mandatory, the inclusion of its requirements such as accessible reception counters reduce the risk of a complaint made under the DDA. AS1428.2 is referenced by the Human Rights and Equal Opportunities Commission Advisory Notes for Access to Premises that accompanies the DDA.

Part 3 (1992) – Requirements for Children and Adolescents with Physical Disabilities is applicable to purpose built developments and therefore has not been considered within this development.

Requirements for tactile indicators are included in Part 4 (2009) of this standard. The 2009 version of this standard will be referenced by the BCA 2011. Therefore, its requirements have been adopted for the provision of access for persons with a disability.

Part 5 (2010) provides requirements for Communication for people who are deaf or hearing impaired. It will not be referenced by BCA 2011. However, its requirements should be considered in the provision of hearing augmentation systems required by BCA.

- **AS2890.6** applies to the carparking areas generally. While AS2890.6 was published on 22 October 2009 and will be referenced by BCA 2011.
- **AS1735.12** contains requirements for passenger lifts for persons with a disability.



3. Access and Approach

The approach to the building needs to be considered when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability.

An accessible path of travel is required to the building entrance from the allotment boundary at the main points of pedestrian entry, from accessible carparking areas and from any adjacent and associated accessible building.

In this instance, the approach to the building has been considered from the accessible carparking areas to the main entrance and from the street footpath along Jacaranda Avenue to the main entrance.

3.1 Pedestrian Access

Pedestrian access to the site is from Jacaranda Avenue. An existing street footpath is provided in the immediate vicinity of the site along Jacaranda Avenue. Pedestrian access to the entrance from Jacaranda Avenue is via the driveway area. The driveway should offer an accessible path of travel for persons with a disability. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

For compliance with AS1428.1, the following access requirements apply to the pedestrian areas and should be implemented in the preparation of the construction certificate documentation.

- a. The minimum unobstructed width of all pathways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.
- b. All pathways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6).
- c. The maximum allowable crossfall of pathways is to be 1:40.
- d. Surface of the accessible path of travel to be slip-resistant.
- e. The ground abutting the sides of the pathways should follow the grade of the pathway and extend horizontally for 600mm. We note that this is not required where there is a kerb or handrail provided to the side of the pathway (refer to AS1428.1 Clause 10.2).

3.2 Carparking

Carparking is provided at two levels of the development. The major carparking area is at the ground floor level. There are 51 carparks provided in this area, seven of which are nominated as accessible. Nineteen carparking spaces are provided at the lower ground floor level which forms the secure staff parking area. The number of accessible carparking spaces within the development is considered adequate with regard to BCA requirements.

Access requirements for the accessible carparking are as follows and should be addressed during preparation of the construction certificate documentation.

- a. Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required.
The configuration of the accessible carparking is in keeping with the requirements of AS2890.6(2009). Spaces are provided in a paired configuration with shared circulation areas.



- b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.
- c. The maximum allowable crossfall of accessible carparking area to be, 1:33 (for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.
- d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7 (this requirement is similar in each of the standards).
- e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) –ground and vertical signage is required. Signage is to comply with AS1428.1.
- f. Provide an accessible path of travel, within the meaning of AS1428.1, from the accessible carparking areas to the building entrance.

3.3 Kerb Ramps

Where kerb ramps form a part of the accessible path of travel to the building entrance from the pedestrian and carparking areas, the configuration of kerb ramps is to be in accordance with AS1428.

The following access requirements apply to kerb ramps and should be addressed during construction.

- a. Kerb ramps to comply with AS1428(2009) Amendment 1, Clause 10.7
- b. Maximum gradient of the kerb ramps to be 1:8 and maximum length to be 1520mm (providing a maximum height of 190mm).
- c. Kerb ramps to have a non-slip surface as required by AS1428.
- d. A tooled joint should be provided between parts of the kerb ramp to assist persons with a vision impairment with orientation.

3.4 Entrances

There are two entrances to the proposed building being located at the ground floor and lower ground floor levels. The main entrance is located at the ground floor level and an airlock is provided to this doorway. Automatic sliding doors are provided to both sides of the airlock. The use of this type of doorway is encouraged as it maximizes access for persons with a disability.

The entrance at the lower ground level is a secure staff entrance and is provided with double swinging doors

The following access requirements apply to all entrance doors and should be addressed during preparation of the construction certificate documentation.

- a. Entrances to comply with AS1428.1(2009), Clause 13 as part of the accessible path of travel.
- b. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. For double doors, each leaf should achieve this clearance to allow for single leaf operation.



- c. Door thresholds to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces – refer to Figure 6.
- d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)
- e. Provide decals to glass doors to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.
- f. For the airlock, provide a minimum 1450mm between doorways to allow for wheelchair circulation – refer to AS1428.1(2009), Clause 13.4

4. Interior

The building is over two main levels. The ground floor level provides medical consulting rooms and the main entrance is located at this level. The first floor level also provides medical consulting rooms as well as dental consulting rooms and the staff / administrative areas. The lower ground floor level provides a secure staff entrance from the lower staff carparking area.

4.1 Reception Counters

There is a reception counter located at both levels of the building. Access requirements for service counters are contained in AS1428.2. AS1428.2 provides enhanced requirements for accessibility but is not mandatory. Compliance with this clause will offer protection from a complaint made under the DDA but is not required by the BCA.

We have been advised that each of the reception counters will be provided with an accessible area. Access requirements for the accessible service counters are as follows.

- a. Accessible counters to comply with AS1428.2, Clause 24.1. Height of the counter is to be between 750mm(±20) and 850mm (±20) above the finished floor level and have foot and knee clearance under the counter as outlines in Figure 25. The minimum width of the accessible counter and clearance below is 900mm.

4.2 Hearing Augmentation at Service Counters

For buildings that are required to be accessible, the BCA (Clause D3.7) requires hearing augmentation systems at service counters **where the user is screened from the service provider**. We have been advised that the reception counters will be partially screened, therefore, hearing augmentation will be required.

Requirements for hearing augmentation are now contained in AS1428.5: Communication for People who are deaf or Hearing impaired. This standard will not be referenced by BCA 2011. However, we recommend that the requirements of AS1428.5 be adopted in the provision of hearing augmentation.

- a. Hearing augmentation at service counters to comply with AS1428.5, Clause 3.4 which recommend that provision of an assisted listening system (ALS). Specifications for the ALS are provided in AS1428.5, Clause 4.3.
- b. The hearing augmentation system is to be identified using the International Symbol for Deafness – refer to AS1428.5, Clause 5.1 – and displayed at the reception counters.



4.3 Hearing Augmentation to Meeting Rooms

For buildings that are required to be accessible, the BCA (Clause D3.7) requires hearing augmentation systems within meeting rooms where an inbuilt amplification system, other than the one used for emergency warning is installed.

If an inbuilt amplification system is provided to meeting rooms, an induction loop to at least 80% of the floor area is required.

Requirements for hearing augmentation are now contained in AS1428.5: Communication for People who are deaf or Hearing impaired. This standard will not be referenced by BCA 2011. However, we recommend that the requirements of AS1428.5 be adopted in the provision of hearing augmentation.

4.4 Doorways Generally

AS1428 has requirements for doorways within the accessible path of travel. Access requirements for doorways within the accessible path of travel are as follows and should be adopted in the preparation of the construction certificate documentation. We note that doorways throughout the proposed building offer circulation areas conducive to compliance with the following requirements.

- a. Doorways within the accessible path of travel to have a minimum clear opening width of 850mm (AS1428.1(2009), Clause 13.2).
- b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1(2009), Figure 31. Circulation areas to have a maximum crossfall of 1:40.
- c. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.
- d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)

4.4 Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details.

4.5 Controls

New controls such as light switches, GPOs, alarm keypads, card swipes, intercoms, etc are to be located within the accessible height range of 900-1100mm above the floor level to comply with AS1428.1(2009), Clause 14.

4.6 Signage

AS1428 contains information for signage to assist persons with a disability. Signage acts as a way finding device and so should be easily read by all users of the development.

Access requirements for signage are as follows and should be considered in the design of the signage. It is intended that signage be easily comprehended by all users of the building.



- a. Signage should comply meet the intent of AS1428.1, Clause 8.
- b. The size, type and layout of lettering on signs should be easily comprehensible. The use of pictograms is encouraged wherever possible.
- c. All lettering / pictograms to have a minimum 30% luminance contrast to the background colour to assist persons with a vision impairment.
- d. Signage should be located where directional decisions are made to enable the appropriate decisions to be made prior to the change of direction.
- e. Signage to be located within the height range of 1200-1600mm. Where a sign may be obscured, for example in a crowd situation, it should be placed at a height of minimum 2000mm.



5. Sanitary Facilities

The Disability Access to Premises Standard 2010 requires the provision of sanitary facilities catering for persons with a disability as follows:

- A unisex accessible toilet at each level. Where more than one bank of toilets is provided at any level, at least 50% of those banks will have an accessible toilet facility.
- A unisex accessible shower where one or more showers are provided (1 accessible shower for every 10 or part thereof).
- A sanitary compartment suitable for a person with an ambulant disability (PAD cubicle) for use by males and females at each bank of toilets where one or more toilets are provided.

5.1 Unisex Accessible Toilet Facilities

There is an accessible toilet facility provided at both levels of the building. They are located adjacent to conventional facilities providing equitable access to facilities for all building users. The overall dimensions of the rooms appear comply with AS1428, subject to the arrangement of fixtures and adequate circulation areas being achieved.

Access requirements for the accessible sanitary facility are as follows and should be implemented during preparation of the construction certificate documentation. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin.

- a. Accessible sanitary facility to be a unisex facility for compliance with the BCA.
- b. Unisex accessible facility to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.

Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.

A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.

Grabrails to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.

- c. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.
- d. Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.
- e. Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.



- f. Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).
- g. Doorways to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.
- h. Door hardware to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.
- i. Controls such as light switches within the accessible toilet facilities to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1(2009), Clause 14. Controls should be located not less than 500mm to a corner.

5.2 Unisex Accessible Shower Facility

Shower is to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.

5.3 Cubicles for People with an Ambulant Disability (PAD)

A PAD cubicle is required in each bank of male and female toilets in addition to the unisex accessible toilet. Options for the configuration of the PAD cubicles are illustrated in AS1428.1, Figure 53.

Access requirements for the PAD cubicles are as follows and should be implemented in the preparation of the construction certificate documentation.

- a. Provide a PAD cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.
- b. Minimum width of PAD cubicles to be 900-920mm.
- c. Provide grabrails to PAD cubicles to comply with AS1428.1, Clause 17 and Figure 53A.
- d. Doors to have a minimum opening width of 700mm and comply with AS1428.1, Figure 53B.
- e. Provide signage to the PAD cubicles to comply with AS1428.1, Clause 16.4.



6. Vertical Circulation

A lifts and stairs offer the vertical circulation between the levels of the building. They are centrally located within the building providing easy access between levels for all building users.

6.1 Lift

A lift is provided for access between levels. The size of the lift will accommodate stretchers and will therefore satisfy the requirements of AS1735.12 in terms of the car size.

The following access requirements apply to the lift – please note that requirements with regard to floor area of the lift for stretchers may differ from the requirements of AS1735.12 which caters specifically for access for persons with a disability.

- a. Lift is to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.
- b. Minimum internal dimensions of the lift car to be 1100mm wide x 1400mm deep – AS1735.12, Section 2
- c. Clear opening of the lift door to be minimum 800mm.
- d. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.
- e. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment (Docs requirement).

6.2 Stairs

Stairs are provided adjacent to the lift that are considered of a public nature. AS1428.1 has access requirements for all public access stairs and is applicable in this instance. Designated fire egress stairs are not considered public access stairs and therefore are not subject to the following access requirements.

Access requirements for stairs are as follows and should be implemented during preparation of the construction certificate documentation.

- a. Stair construction to comply with AS1428.1, Clause 11.1.
- b. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open risers.
- c. Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS2418.1 Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.
- d. Provide handrails, with extensions, to both sides of the stair (AS1428.1, Clause 11.2). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails should be continuous around the landings where possible.

Handrails are required on both sides of the stair to cater for left and right handed disabilities. A central handrail is also an acceptable solution where adequate width is available.



- e. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.
- f. Stair nosings shall not project beyond the face of the riser.
- g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

7. Summary

Drawings for proposed Raymond Terrace Health One located at Jacaranda Avenue Raymond Terrace, have been reviewed against the requirements of the Building Code of Australia 2010 and The Disability Discrimination Act 1992 with regard to access for persons with a disability.

We consider that the drawings presented for assessment generally comply with The Building Code of Australia 2010 and the intent of the Disability Discrimination Act 1992, subject to the recommendations made in this report being implemented during the construction process.

Access for persons with a disability has been addressed in the design of the development.

All dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered in the preparation of the construction certificate documentation to account for wall linings and the like.

The requirements of AS1428.1(2009) have been presented throughout the report. Although it is not yet adopted by BCA, it will be included in the next amendment of the BCA to be released in May 2011 and should be adopted in the preparation of the construction certificate documentation.

This report offers recommendations for inclusion in the construction documentation and should be considered in the preparation of these drawings.

Best practice options, as noted in the report, are not mandatory but will minimise the risk of a complaint made under the DDA.

Lindsay Perry is a qualified Access Advisor, being an accredited member of The Association of Consultants in Access, Australia – membership number 136. Lindsay Perry carries public liability insurance, professional indemnity insurance and income protection.

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Disability Access Report

Raymond Terrace Health One – Jacaranda Avenue, Raymond Terrace

18 March 2011