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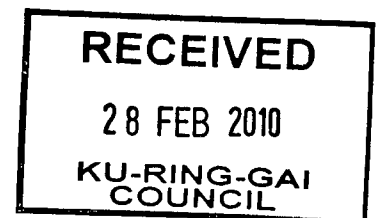
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***West Pymble Pool,
2 Lofberg Road,
West Pymble***

Proposed Redevelopment

***Access Audit Peer Review
for
Ku-ring-gai Council***

Final Report 25.02.11



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Executive Summary:

This Final Peer Review of Access Reports carried out by Access Consultants, Equal Access Pty Ltd on the proposed redevelopment of the West Pymble Pool, have been requested by Mr. Corrie Swanepoel, Manager Development Assessment Services, Ku-ring-gai Council. It consults applicable legislation listed below, plus Council's Development Control Plan and policies.

In their reports to Suturs Architects, dated 21.9.10 and 24.2.11, Equal Access Pty Ltd, advised that, they had been instructed to audit the project to Australian Standard AS 1428.1-2001 instead of the latest version available AS1428.1-2009. The 2009 version will become mandatory from 1 May 2011, as it will be referenced in the 2011 issue of the Building Code of Australia.

In their report to Suturs Architects, dated 29.9.10, the BCA Consultants, BCA Logic, advised that the 2011 BCA will be adopted on 1 May 2011, and will include the new Premises Code that covers Access and Mobility aspects of building design. BCA Logic recommended that the 2009 version of AS1428.1 be used in design development.

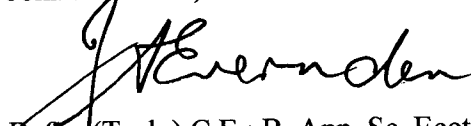
From 1 May 2011, several other Standards covering 'design for access and mobility' will be adopted by reference in the BCA Access Code, including Standards covering Tactile Ground Surface Indicators, Lifts and Parking. These Standards are known as the *Disability (Access to Premises – Buildings) Standards 2010 (DAPBS)*. Part D5 of the new Access Code relates to 'Accessible water entry/exit for swimming pools'.

This Peer Review will compare the assessment of pre-DA drawings by Equal Access Pty Ltd. against the DA-issue drawings as provided to APD, and AS1428.1-2001, and report on any new requirements of AS1428.2 – 2009, as appropriate. The review will further develop the Equal Access assessment and comment on matters not previously covered.

The methodology adopted by APD is to review a proposed development on a 'whole of site and surrounds' basis. This includes elements exterior to the actual footprint of the site, such as parking, continuous accessible paths of travel and bus stops.

Access and Mobility Standards provide for equitable and dignified access for people with disabilities, but also benefit the whole of the community. Application of the Standards enables Council to reduce its exposure to claims under the Disability Discrimination Act 1992 and to reduce the incidence of OH&S and accident claims. It also supports current best management trends in Falls Prevention, Connectivity and Public Health.

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Applicable Legislation and References:

- The Australian Disability Discrimination Act 1992.
- The Building Code of Australia 2010.
- Australian Standard AS1428.1 (2001) – *Design for access and mobility. Part 1: General requirements for access – New building work.*
- Australian Standard AS1428.1 (2009) – *Design for access and mobility Part 1: General requirements for access – New building work.*
- Australian Standard AS1428.2 (1992) – *Design for access and mobility. Part 2: Enhanced and additional requirements for access – Buildings and facilities.*
- Australian Standard AS1428.4 (2002) – *Design for access and mobility: Part 4: Tactile ground surface indicators for the orientation of people with vision impairment.*
- Australian Standard AS/NZS 1428.4.1 (2009) – *Design for access and mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators.*
- *Disability (Access to Premises – Buildings) Standards (2010).*
- *Disability Standards for Accessible Public Transport (2002).*
- BCA Access Code for Buildings, *Part D 5. Accessible water entry / exit for swimming pools.*
- Australian Standard 1735.12 (1999). *Part 12: Facilities for persons with disabilities.*
- Australian Standard AS/NZS 2980.6 (2009). *Part 6: Parking facilities for people with disabilities.*

Council Documents

- Ku-ring-gai Council's Ku-ring-gai Access Policy and Disability Discrimination Act Action Plan 2005-2009
- Ku-ring-gai Council's Access and Equity Policy
- Ku-ring-gai Council Community Plan 2005-2009
- Ku-ring-gai Development Control Plan No. 31, Access
- Ku-ring-gai Council's Car Parking Development Control Plan

Drawings:

Drawing Number	Location	Version audited by Equal Access Pty Ltd	Versions audited by APD
DA 01	Site Plan		F, K
DA 02	Demolition Plan	C	D
DA 03	Lower Ground Floor	E	F, K
DA 04	Ground Floor	E	F
DA 06	Sections	C	D
DA 07	Elevations	B	A
DA 08	Elevations		B
85-058	Lofberg Park		Sheet 1 of 1
08P172-DAC130	Siteworks & Stormwater		A

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
1.00	Site Plan		
1.01	Path of travel from Accessible Parking	Confirm accessible path of travel from accessible car space to the entry gradient is no greater than 1:20 with crossfall no greater than 1:40 especially at change of direction. Landings and walkway design to be in accordance with AS1428.1-2001.	<p>Agree.</p> <p>The nominated levels appear to indicate that these requirements could be met, except for the short ramp from the footway adjacent to the carpark to the Arrival Court.</p> <p>From Drawing DA03 (K) it appears that the ramp is approximately 3.5m in length, with a difference in level of 340mm. This approximates to a gradient of the ramp of 1:10, which does not comply with AS1428.1 (2001 and 2009).</p> <p>The Standards require a landing every 25 m, if the gradient is between 1:20 and 1:33. For gradients flatter than 1:33, no landing is required. Landings should be 1200mm long in the direction of travel.</p>
1.02	Accessible Parking Spaces	Recommend accessible parking spaces to be in accordance with AS/NZS 2980.6:2009. Parking facilities Part 6: Off-street parking for people with disabilities.	<p>Agree.</p> <p>The space dimensions and signage requirements are set out in this Standard. (See Item 5.05 on Accessible Parking).</p>
1.03	Path of travel from front boundary	Clarify accessible path of travel from front boundary in accordance with BCA D3.2 (c).	This Part of the BCA requires that external access to a building must be provided from the allotment boundary to the main points of entry; and from any accessible car parking space.

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
			<p>The Arrival Court should have a maximum crossfall of 1:40, in each direction.</p> <p>The forecourt between the top of the ramps and the main entry should have a maximum crossfall of 1:40, in each direction.</p>
1.04	Number of Accessible Parking Spaces	Recommend providing more spaces than required by BCA due to usage of the facility by the aged and people with disability. Consideration should be given to at least 6 spaces.	<p>There are currently two Accessible Parking Spaces adjacent to the existing main building, which are proposed to be deleted. There is only one new Accessible Parking Space shown on drawing DA03 (K).</p> <p>(See Item 5.05 on Accessible Parking).</p>
1.05	Crossfalls	Ensure falls & crossfalls to car parking spaces to be no greater than 1:33 for asphalt and 1:40 for other surfaces (subsequent email from Equal Access Pty. Ltd.).	<p>Agree.</p> <p>Crossfalls are to be considered for both directions, across the parking space, and from front to back.</p> <p>Note: It is preferable for the parking space to slope forwards so that, if the wheelchair rolls during the transfer of a person from the car seat to the wheelchair, it will roll forward and stop against the open door.</p>
1.06	Kerb Ramp	If a kerb ramp is required at the junction of the access path/carpark, ensure it complies with AS1428.1 Fig 8.	Drawing DA01 (K) shows a kerb ramp to the Arrival Court, adjacent to the Accessible Parking Space. This kerb ramp should be constructed to conform to Figure 24A in AS1428.1 (2009).

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
1.07	Ramp access to 50m pool	We note ramp access to the 50M pool has not been provided. As a 50M provides a different opportunity to the 25M pool for people with a disability we would strongly recommend complying access be provided.	<p>People with a disability should have an equal right to use the 50m pool, and it is noted that Ku-ring-gai Council has purchased a swimming pool lift to be installed at the 50 m pool.</p> <p>To comply with Section D 5.5 of the new Access Code a fixed sling-style swimming pool lift should be installed at the side of the pool, where the water depth is no more than 1300mm, and where the spatial requirements of can be provided. (1300mm parallel to the pool and 900mm at right angles to the pool).</p> <p>It is understood that a ramp into a pool that is used for competition may cause water circulation problems, to the disadvantage of swimmers in the lanes nearest the ramp.</p>
1.08	Stairs near air lock	<p>External stairs S/E air lock.</p> <ol style="list-style-type: none"> Provide handrails in accordance with AS1428.1 Fig 17 Provide TGSIs in accordance with AS1428.4 Provide contrasting nosings to landing in accordance with AS1428.1 9.1(c) 	Drawing DA03 (K) shows that this stairway has been deleted.
2.00	Lower Ground Floor Plan		
2.01	Reception Desk	a. Provide low height section of counter in accordance with AS1428.2.	Agree.

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
		<p>Height of unit where a single table, counter or worktop only can be provided Where a single unit only is provided, the height to the top of the unit and the height beneath the unit shall be as follows:</p> <p>(a) Height from the finished floor to the top of the unit: 850 ±20 mm.</p> <p>(b) Height of clearance beneath the unit from the finished floor: 820 ±20 mm.</p> <p>Width of seating spaces In order to provide a wheelchair seating space, the minimum clearance width between the legs or other fixtures beneath a table, counter or worktop on at least one accessible face of the unit shall be 800 mm.</p> <p>Knee and foot clearance A minimum clearance beneath the table, counter or worktop at wheelchair seating spaces shall be maintained as shown in Figure 25.</p> <p>b. Consideration should be given to installing a hearing loop for customer service in accordance with AS1428.5.</p>	<p>Note:</p> <p>A section of the reception desk that complies with these requirements allows people with various forms of disability to carry out transaction such as registration and payment of fees.</p> <p>The desk should also be provided with adequate lighting for the benefit of persons with vision impairment.</p>
2.02	Admin. Accessible WC	<p>a. door approach circulation insufficient due to desk placement, ref AS1428.1 Fig 12(a)</p> <p>b. Nominate shelf in accordance with AS1428.1 10.4.2</p>	<p>Note:</p> <p>It appears that an office in the Administration area, adjacent to Reception, has been mistaken for a WC.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
		c. Nominate clothes hook in accordance with AS1428.1 10.4.4. d. Provide detail plan and elevations for assessments.	
2.03	Crèche Accessible WC	a. Nominate shelf in accordance with AS1428.1 10.4.2 b. Nominate clothes hook in accordance with AS1428.1 10.4.4. c. Provide detail plan and elevations for assessments.	<p>Agree:</p> <p>Note: The shelf, soap dispenser and hand dryer should all be mounted between 900mm and 1100mm above the finished floor level.</p> <p>The front of the pan should be 800mm from the rear wall.</p> <p>Handrails should be 800+/-10 mm above the finished floor level.</p> <p>If the toilet roll holder is near the handrail, there should be 50mm clearance between the two.</p> <p>(See later notes about floor surfaces, colour contrast and border tiles in 5.17).</p> <p>Note: Drawing DA03 (K) shows a change in potential use of this facility from Child Minding/Play Area to Multipurpose Community/Child Minding.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
2.04	Foyer Stair	<p>a. Provide handrails in accordance with AS1428.1 Fig 17</p> <p>b. Provide TGSIs in accordance with AS1428.4, in addition as stair is open under TGSIs are required in accordance with AS1428.4 Fig A6.</p> <p>c. Provide contrasting nosings to landings in accordance with AS1428.1 9.1(c)</p>	<p>Agree:</p> <p>Note:</p> <p>Risers. For the benefit of people with cognitive disabilities, stair risers should be opaque. For the benefit of all users, stair risers should be of equal height to each other, and for the full width of the stair.</p> <p>Nosings. The contrasting strip on tread nosings (50-75mm) has not changed, but the strip on risers has been reduced in AS1428.1 (2009) to a maximum of 10mm. It has been found that a thicker strip on risers causes some people with vision impairment to misjudge the step edge.</p> <p>TGSI's. Handrails are required for the full length of an intermediate landing, so TGSI's are not required on the intermediate landing. TGSI's are required at the top and bottom of the stairs.</p> <p>Underside of Stairs. The underside of the stairs appears to be open between the two voids, as shown on drawing DA04. If this is so, the space below the stairs may create a hazard for people with impaired vision unless measures are taken to prevent them from walking below the stairs where the vertical clearance is less than 2m.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
			<p>Two options for protection are advised in AS1428.4 (2009) –</p> <ol style="list-style-type: none"> 1) A strip of warning TGSI's 600-800 mm wide is placed around all sides of the stairs where the vertical clearance is less than 2000 mm; or 2) Physical barriers are placed around all sides of the stairs where the vertical clearance is less than 2m. <p>My recommendation would be to adopt Option 2. People who are taught to read tactile markers are taught in accordance with AS1428.4 (2009). Warning TGSI's indicate that a hazard exists 300mm beyond the tactile mat. This indication is successful when a person approaches at right angles to the TGSI mat. However, if warning TGSI's are placed such that a person could walk longitudinally along the mat, a confusing message might be relayed.</p>
2.05	Program Rooms	Ensure clear opening of active leaf is a minimum of 800mm.	<p>Note: AS1428.1 (2009) requires a doorway to provide a minimum clear opening of 850mm, when the door is fully open. For double doors, at least one leaf must provide a clear opening of 850mm.</p> <p>For the benefit of people with impaired hearing, it is recommended that a spot light be installed in at least one of the rooms, so that it can illuminate a person who is using sign language to address an audience, or who is interpreting for a speaker.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
			<p>This lighting should provide an illumination of 150 lux.</p> <p>For the benefit of people who use assistive hearing devices, a hearing loop should be provided in at least one of the rooms.</p> <p>A sign bearing the international symbol for deafness should be placed at the entrance to these rooms to indicate the existence of a loop in the room.</p> <p>Some tables in these rooms should have a height of 850 +/- 20mm, with a clearance below of 820 +/- 20mm, for the benefit of people who use a wheelchair.</p>
2.06	External stairs X2 N/E of 50m pool	<p>Provide handrails in accordance with AS1428.1 Fig 17</p> <p>b. Provide TGSIs in accordance with AS1428.4</p> <p>c. Provide contrasting nosings to landings in accordance with AS1428.1 9.1(c)</p>	<p>Agree:</p> <p>Note:</p> <p>Risers. For the benefit of all users, risers should be of equal height to each other, and for the full width of the stair.</p> <p>Nosings. The contrasting strip on tread nosings (50-75mm) has not changed, but the strip on risers has been reduced in AS1428.1 (2009) to a maximum of 10mm. It has been found that a thick strip on risers causes some people with vision impairment to misjudge the step edge.</p> <p>TGSI's. TGSI's are required at the top and bottom of the stairs.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
3.00	Ground Floor Plan Area A		
3.01	Gym	Ensure clear opening of active leaf is a minimum of 800mm.	<p>Note: AS1428.1 (2009) requires a doorway to provide a minimum clear opening of 850mm, when the door is fully open. For double doors, at least one leaf must provide a clear opening of 850mm.</p> <p>A path of travel at least 1000mm wide should be provided between all items of equipment, for the benefit of people who use mobility aids (wheelchairs, walking frames, crutches).</p>
3.02	Cafe	<p>Provide low height section of counter in accordance with AS1428.2</p> <p>Height of unit where a single table, counter or worktop only can be provided Where a single unit only is provided, the height to the top of the unit and the height beneath the unit shall be as follows:</p> <p>(c) Height from the finished floor to the top of the unit: 850 ±20 mm.</p> <p>(d) Height of clearance beneath the unit from the finished floor: 820 ±20 mm.</p> <p>Width of seating spaces In order to provide a wheelchair seating space, the minimum clearance width between the legs or other fixtures beneath a table, counter or worktop on at least one accessible face of the unit shall be 800 mm.</p>	<p>Agreed.</p> <p>Note: Café South is accessed from inside the building.</p> <p>The lower section of counter is to be 900mm long.</p> <p>Some tables in the cafe should have a height of 850 +/- 20mm, with a clearance below of 820 +/- 20mm, for the benefit of people who use a wheelchair.</p> <p>Some seating should be provided with arm rests for the benefit of older citizens.</p> <p>A 1m wide clear path of travel should be maintained throughout the dining area, for the benefit of people who use mobility aids, and parents with strollers.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
		Knee and foot clearance A minimum clearance beneath the table, counter or worktop at wheelchair seating spaces shall be maintained as shown in Figure 25.	
3.03	Deck (North)	<p>Deck (North) multiple stairs.</p> <p>a. Provide handrails in accordance with AS1428.1 Fig 17</p> <p>b. Provide TGSIs in accordance with AS1428.4</p> <p>c. Provide contrasting nosings to landings in accordance with AS1428.1 9.1(c)</p>	<p>Agree with a. and b.</p> <p>Note: c. Nosings. The contrasting strip on tread nosings (50-75mm) has not changed, but the strip on risers has been reduced in AS1428.1 (2009) to a maximum of 10mm. It has been found that a thicker strip on risers causes some people with vision impairment to misjudge the step edge.</p> <p>Deck (North) is accessed from outside the building, but is serviced from the servery inside the building.</p> <p>Some tables in the cafe should have a height of 850 +/- 20mm, with a clearance below of 820 +/- 20mm, for the benefit of people who use a wheelchair.</p> <p>Some seating should be provided with arm rests for the benefit of older citizens.</p> <p>A 1m wide clear path of travel should be maintained throughout the dining area, for the benefit of people who use mobility aids, and parents with strollers.</p> <p>For further comments about Access to the Café on Deck (North), see 5. 17.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
3.04	Fully Accessible Change Facility	Serious consideration should be given to the provision of a fully accessible change facility that includes overhead hoist and adjustable height change table, similar to the following.	<p>Agree.</p> <p>This is an excellent suggestion as it provided drop-down grab rails that suit either right-hand or left-hand transfers.</p> <p>Signage that identifies a Unisex Accessible Toilet and Shower Facility, with right-hand and left-hand transfers would be required.</p> <p>See comments at 5.03.</p>
3.05	Amenities - General	<ol style="list-style-type: none"> 1. Lift up seats are to be provided. 2. Coat Hooks have not been provided as per AS1428.1 Part 10.4.4 & 10.5.1(d) 3. HD to be outside WHB circulation. 4. If concealed cisterns are used the grabrail must be continuous across the front of it. 5. Nominate floor gradients in accordance with AS1428.1 15.5.2. 6. Provide baby change table in accordance with AS1428.1 10.5.2 (c) & (d) 	<p>Agree with 1, 2, 3 and 4.</p> <p>Note:</p> <ol style="list-style-type: none"> 2. Coat hooks are required at a height of 1200 - 1350mm above the finished floor level, and at least 500mm from an internal corner. <p>Collapsible coat hooks are recommended.</p> <ol style="list-style-type: none"> 5. Floor gradients are set out in AS1428.1 (2009), Clause 15.5.2, Figure 49. 6. This Standard reference should be AS1428.1 (2009), Clause 15.2.8.2. Baby change tables are required to have a maximum height of 820mm, with a minimum clearance below of 720mm, for the benefit of people who use a wheelchair. <p>Combined Accessible Toilet and Shower Facilities should be designed to comply with AS1428.1 (2009), Clause 15.6.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
			<p>There should be no hob in the shower recess.</p> <p>For the benefit of persons with impaired vision or a cognitive disability such as Acquired Brain Injury, the mirror should be erected flush with the wall.</p> <p>[It is noted that the mirror in the public Unisex Accessible Toilet in Prince of Wales Drive is fixed at an angle to the wall. It is recommended that this mirror be re-fixed to comply with the Standard].</p> <p>The shelf, soap dispenser and hand dryer should all be mounted between 900mm and 1100mm above the finished floor level.</p> <p>The front of the pan should be 800mm from the rear wall.</p> <p>Handrails should be 800+/-10 mm above the finished floor level.</p> <p>If the toilet roll holder is near the handrail, there should be 50mm clearance between the two.</p> <p>(See later notes about floor surfaces, colour contrast and border tiles in 5.17).</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
3.06	External Elevations	<p>1. All full height glazing Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid contrasting line. The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between 900 mm and 1000 mm above the plane of the finished floor level. Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.</p> <p>NOTE: Decals are unacceptable.</p>	<p>Agree.</p> <p>The contrasting strip should provide the 30% luminance contrast when viewed from inside and outside, and under daylight and nighttime conditions.</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
4.00	General Conformance Issues		
4.01		The following items have been supplied for reference purposes and are to be used as a guide in developing the next phase of the documentation. Attention should be given specifically to AS1428.1.	Note: Design development should conform with AS1428.1 (2009) and the Access Code, to be incorporated into the BCA from 1 May 2011.
4.02	Caution	Wall set outs: ensure wall set out sizes include finished surfaces not stud to stud. • Fully dimension all accessible fittings and fixtures (do not expect the builder to understand 1428.1)	Agree.
4.03	Doorways	All door controls shall be located between 900 – 1100mm above the level of the finished floor • “D” type lever handles are preferred with a clearance behind the handle of 35 – 45mm. • Door forces:- To open 20N • Manual controls to power operated doors shall be positioned above a level surface no closer than 1000mm from the arc of a hinged door or clear of a sliding door in the open position and the door shall remain open for a sufficient period to enable a person with impaired mobility to pass safely through the doorway. • Doors or doorframes shall have a minimum luminance contrast of 30% to their adjacent surfaces.	Note: Door handles should be located at least 500mm from an internal corner. The “D” type handle should return as close as possible to the face of the door, to avoid clothing or other possessions being caught. Inward-opening doors to Accessible facilities should be so hinged that they can be removed from the outside in the event of an emergency, such as a person falling against the door. Entry and exit gates should to be designed to allow the passage of a wheelchair, motorized scooter or twin-stroller.

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
4.04	Floor Surfaces	<ul style="list-style-type: none"> • Must be slip resistant • Carpet must have a short pile under 6mm. Wheelchairs cannot traverse long-pile carpet. Recommend considering Interface carpet tiles or similar due to low pile and trafficability. • Floor covering must be antistatic to prevent interference with hearing aid reception. • The floor finish must be glare free. 	<p>Agree.</p> <p>Note: The slip-resistance of all surfaces is to comply with AS/NZS 4586.</p> <p>(See additional notes in 5.17).</p>
4.05	Controls	<ul style="list-style-type: none"> • Switches & GPO's shall be mounted between 900 – 1100mm above the plane of the finished floor surface and be a minimum of 500mm from internal corners. GPO's can vary if required in specific circumstances. • Rocker action, toggle and push pad switches with a minimum width of 35mm are easier for people with severe finger or hand disabilities. They can easily be operated by arm or an elbow. • Taps must have levers, capstan handles or sensor plate controls or the like. • Hot water if provided must be through a mixing spout. Capstan handles must be set away from adjacent surfaces by a minimum of 50mm. This eliminates any restriction to hand movement. • Hot taps must be placed to the left or above the cold water tap. 	<p>Agree.</p> <p>Note: The size of rocker action and toggle switches is reduced to 30mm X 30mm in AS1428.1 (2009), Clause 14.2</p>

Ref. No.	Item	Assessment by Equal Access	Assessment by APD
4.06	Signage	Wayfinding signage to comply with SPECIFICATION D3.6 - BRAILLE AND TACTILE SIGNS & AS1428.1 14. We strongly recommend a typical elevation is prepared to detail signage position as builders generally install directly to doors which is incorrect.	<p>Note: Wayfinding is a major cause of concern for people with impaired vision or cognitive disabilities such as Acquired Brain Injury. The provision of appropriate signage and other environmental cues is important.</p> <p>Signage should comply with Part D 3.6 of the BCA and AS1428.1 (2009), Clause 8.</p> <p>It is recommended that a Signage Schedule be compiled, which includes all directional, advisory and tactile signs, as well as colours, text and location.</p>
4.07	Miscellaneous	<p>Provide at least one baby change station in accordance with AS1428.1-2009 15.2.8.2.</p> <ul style="list-style-type: none"> • Ensure all doors operating force is no greater than 20N and delay action closers are specified (NOTE Floor Springs generally do not comply) • Stores – Note: all stores excluding cleaners stores need to be accessible. <p>AS1428.1 2001 vs 2009 Standard</p>	Agree.

5.00	Additional Considerations	Assessment by APD
5.01	Emergency Egress ; Ambulance Entry; and Accessible Assembly Area	<p>For older people and people with disabilities, egress is as important as ingress. Emergency exits therefore should be level, and there should be no steps along the emergency path of travel.</p> <p>An emergency exit should be provided at a location remote from the main building, to provide egress in the event that an incident takes place in the main building.</p> <p>There appears to be no provision for ambulance access. An ambulance bay should be provided adjacent to the main entry. This would allow access to the Lower Ground Floor areas, and to the Ground Floor areas via the lift. The turnstiles therefore should provide for the passage of an ambulance trolley.</p> <p>A fully accessible Emergency Assembly Area should also be designated.</p> <p>Evacuation Floor Plans should be drawn so that they are unique to their location and clearly direct the reader to the nearest emergency exit.</p>
5.02	Lift	<p>A lift forms part of a Continuous Accessible Path of Travel, so it must comply with AS1735.12 and Part E 3.6 of the new Access Code, and have the following features:</p> <p>Minimum floor dimensions, 1100mm X 1400mm. NOTE: This lift would accommodate an ambulance trolley with a tilt back, but would not accommodate a 2m long manual stretcher, if a person was required to be transported from the Lower Ground Floor areas to the First Aid Room on the Ground Floor. Consideration should be given to the inclusion of a lift with floor dimensions in excess of 1100mm X 1400mm</p> <p>Minimum clear opening of doors, 900mm when the doors are fully open.</p> <p>An operation that does not require a constant pressure device.</p> <p>Handrails and control buttons to comply with AS1735.12.</p>

		<p>There appears to be adequate circulation space in front of the lift on the Lower Ground Floor and the Ground Floor. However, this circulation space should not be less than 1350mm.</p> <p>The call button is to be between 900mm and 1100mm above the finished floor level, and a minimum of 500mm from an internal corner. On the Ground Floor, the call button should be located on the 'void' side of the lift.</p> <p>The Management Plan for the Complex should include alternate arrangements for the transfer of a patient to the First Aid Room in the event of a lift breakdown.</p>
5.03	First Aid Room	<p>No details are provided for the First Aid Room. It should be provided with a ceiling hoist and a motorised height-adjustable change table.</p> <p>There should be circulation space beside the change table to allow for a person in a wheelchair to make a 180 degree turn (2070mm in length parallel to the bed and 1540mm wide).</p> <p>The doors into the room should have a minimum clear width of 850mm, when the door is fully open. Consideration should be given to the provision of at least one 'cat and kitten' door, to allow for the entry of an ambulance trolley, wide wheelchair or twin stroller.</p> <p>The Pool Manager/Lifeguard might be consulted on any particular requirements for the facility.</p>
5.04	Accessible Sanitary Facilities	<p>There are two Accessible Toilets on the Lower Ground Floor. The one in the Accessible Change Facility has the grabrail on the right hand side of the pan, and the one in the Child Minding Area has the grabrail on the left hand side of the pan, to allow for right and left-hand transfers.</p> <p>Although this arrangement would allow for persons who are either right-hand or left-hand proficient, the need to ensure security for children in the Child Minding Area does not provide a choice of facility.</p> <p>There are two Accessible Toilets on the Ground Floor, in the Access Change and in the AC Shower facility; both have the grabrail on the right-hand side of the pan. This means that the three Accessible Toilets available for use by the public are identical, and only provide for right-hand transfer.</p>

		<p>Consideration should be given to changing the position of the pan in the Access Change facility on the Ground Floor to the opposite corner, so that the grabrail is mounted on the left-hand side. This arrangement provides the public with a choice, depending on their left or right-hand proficiency. It also provides a choice for carers and reduces the risk of OH&S issues.</p> <p>Each Unisex Accessible sanitary facility is to be identified as such. As well, tactile and Braille signage is required for each, which should also indicate that the facility provides for left or right-hand transfer. See AS1428.1 (2009), Section 8.</p> <p>Consideration should be given to the inclusion of a flushable urinal at floor level in each of the Accessible Sanitary Facilities. This would allow a person to discharge their urine bag hygienically, without having to lift the tube for discharge into a WC pan, and would remove the incidence of unhygienic discharge into a floor waste or external grassed area or drain.</p>
5.05	Ambulant Toilets	<p>Section F 2.4 Clause (c) of the Access Code requires the following: “At each bank of toilets where there is one or more toilets in addition to an <i>accessible</i> unisex <i>sanitary compartment</i> at that bank of toilets, a <i>sanitary compartment</i> suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females”. This requirement provides space and grabrail support for older people who those who may have a mobility disability.</p> <p>One ambulant compartment is therefore required in each bank of male and female toilets on the Lower Ground Floor and the Ground Floor. Tactile and Braille signage is required to identify the ambulant compartments.</p> <p>Ambulant toilets should be designed to comply with AS1428.1 (2009), Section 16.</p>
5.06	Accessible Parking	<p>There are two Accessible Parking Spaces located adjacent to the current main building, one in front of the public toilets in Prince of Wales Drive, and more in the centrally located general parking area in Prince of Wales Drive.</p> <p>Only one Accessible Parking Space is shown on the drawings, in Prince of Wales Drive, but it is understood that Council is proposing to include a second Accessible Space at this location.</p>

	<p>The climb uphill from the Accessible Parking Spaces in Prince of Wales Drive to the Pool entrance is in the vicinity of 40-50 m. This distance could prove excessive for some people who use a wheelchair and have upper body restrictions or who fatigue easily. It would also be excessive for some carers.</p> <p>Not all visitors with disabilities will be involved in active recreation, some may come to watch events, visit the café, attend a meeting or take part in water therapy or light gymnastic exercises. It is considered that the removal of the two existing Accessible Parking Spaces, which comply with Disability Standards, to a more remote location, may draw criticism of Council.</p> <p>If Council cannot successfully justify the proposed relocation it may be exposed to a complaint under the Disability Discrimination Act.</p> <p>Equal Access Pty Ltd recommends that consideration be given to the provision of six spaces, with the likelihood of greater patronage of the new complex by people with disability.</p> <p>Traffic Consultants ARUP report (23.9.10) that an additional 100 car parking space would be required for the new complex, the Access Code would therefore require another two Accessible Parking Spaces.</p> <p>Ku-ring-gai Council's Car Parking DCP requires that 2-3% of spaces be designated as Accessible Parking Spaces, i.e. 2-3 additional spaces would be required.</p> <p>It would seem appropriate to provide a minimum of four Accessible Parking Spaces in the vicinity of the Pool, at least two of which should be closer to the main entry than that proposed on the drawings.</p> <p>It is noted that the wheel stops shown on drawing DA 03 are to be deleted. It is considered that this is a good exercise in 'Falls Prevention'. There is circumstantial evidence to show that wheel stops in exposed areas are a trip hazard.</p> <p>Consideration might also be given to an adjustment to the central parking area in Prince of Wales Drive to create two 'drive-through' Accessible Parking Spaces. Some people with upper body disabilities have difficulty in twisting their body when reversing, and rely heavily on the side and rear-view mirrors. 'Drive-through' spaces would provide such drivers with increased comfort and safety.</p>
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5.07	Scooter Parking	<p>With the growing usage of motorised scooters by people with ambulant disabilities and older citizens it has become necessary to consider their safe and convenient parking, for the benefit of the driver and the rest of the community.</p> <p>Most people who drive scooters are able to walk short distances.</p> <p>It is recommended that consideration be given to the provision of a parking area for 4-5 units within the foyer on the Lower Ground Floor, possibly under the stairs near the lift.</p>
5.08	Steps and Ramps to the 25m Pool and Learn to Swim Pool	<p>The drawings show step access to these two pools. It is also understood that ramp access will be provided.</p> <p>Double handrails are required on each side of the steps, to comply with Part H 2.7 of the Access Code and AS1428.2 (1992), Clause 13.</p> <p>The steps should have risers of equal height to each other, for their full width. The contrasting strip on tread nosings should be 50-75mm wide, but the strip on risers should be a maximum of 10mm. (AS1428.1 (2009)).</p> <p>Ramps should have a maximum gradient of 1:14, with double handrails on each side (similar to the stair handrails).</p> <p>Steps and ramps are to have a non-slip surfaces that comply with AS/NZS 4586.</p>
5.09	Paving Surfaces	<p>All walking surfaces have a slip resistance value. There is increasing circumstantial evidence that adjacent surfaces which have significantly different slip resistance values are causing people to slip as they walk from a surface with a high value to a surface with a low value, or stumble as they walk from a surface with a low value to a surface with a high value. This has been noted with older people as they walk from carpet to tiles or from tiles to carpet.</p> <p>Recent research by the Victorian Injury Surveillance Unit identified that, "The major specified cause of fall injury at all levels of severity was same level falls including slips, trips and stumbles (17% of fall deaths, 47% of fall hospital admissions and 19% of Emergency Department presentations)".</p>

		<p>It is recommended that paving and flooring be selected so as to provide adjacent surfaces of similar slip-resistance values.</p> <p>Slip-resistance values of all surfaces should comply with AS/NZS 4586, in wet and dry conditions.</p>
5.10	External Paths of Travel	<p>It is understood that visitors to the pool will travel by car, bicycle, motorised scooter or bus, or walk to the venue via one of a number of pathways. The topography of Bicentennial Park does not allow for all walking paths of travel to the pool to meet Australian Standards for Access and Mobility. However, they should all provide a passage that is free of overhanging branches or other projections that create a hazard for people with impaired vision, and be free of 'trips' that could result in falls.</p> <p>As the venue provides nighttime activities, paths of travel to the complex should have adequate lighting, which is clear of shadowing caused by trees.</p> <p>It appears from drawings DA 03 and DA 04 that a pathway is to be retained from the Deck (North) area down to Prince of Wales Drive, in addition to the proposed new path of travel that includes steps.</p> <p>Although that section of pathway from the Pool Entrance uphill towards the north may not meet the gradient requirements of the 'Disability' Standards because of topography, the pathway needs to be free of trip hazards and overhangs for the benefit of people with impaired vision, parents with strollers and people who drive motorised wheelchairs or scooters.</p>
5.11	Drainage Grates	<p>Drainage grates in or across any path of travel should have slots no wider than 13mm, and no longer than 150mm. The slots should be oriented at right angles to the main direction of travel.</p>
5.12	Child Minding Play Area	<p>This facility should be fitted with child-proof gates/doors.</p> <p>For the purpose of child protection, the door between the Child Minding Area and Program Room 1 should only be opened from the Child Minding Room side.</p> <p>Consideration might be given to the provision of a Baby-feeding Cubicle, with curtain, for the benefit of mothers who may require privacy while feeding.</p>

5.13	Bus Stops	<p>The Disability Standards for Accessible Public Transport 2002 require all Bus Stops to be fully Accessible by 31 December 2022. As the new pool complex will attract greater patronage, it is recommended that Council take this opportunity to ensure that all Bus Stops in the vicinity of Bicentennial Park meet the Accessibility criteria.</p>
5.14	Landscaping	<p>People with impaired vision or cognitive disabilities such as Acquired Brain Injury tend to walk close to walls or other physical cues such as the edge of a garden or a grassed area, to assist with their orientation.</p> <p>Vegetation should therefore not encroach onto paths.</p> <p>Trees that overhang pathways should have a vertical clearance to the underside of their canopy of 2 m.</p> <p>Consideration might be given to the creation of a small Sensory Garden, with features such as Accessible seating, circulation space, hardstand pathways, running water, wind chimes, wind sculptures, plants with a variety of colours, tactility and fragrances, and tactile signage.</p>
5.15	Colours	<p>Colour contrast is most important for people with impaired vision and people with a cognitive disability.</p> <p>Access Consulting does not become involved in colour selection, other than to identify compliance with the 30% luminance contrast required by the Standards.</p> <p>It is known, however, that colours provide cues for people with cognitive disabilities, and that features coloured grey, such as poles, can pose a hazard for some people with impaired vision.</p>
5.16	Furniture	<p>A variety of seating should be provided throughout the complex, with some seats having backrests and arm rests. Wheelchair space should be provided at the side of some seating.</p> <p>Wheelchair spaces should be provided in viewing areas beside the 50m pool.</p> <p>Wheelchair Accessible bubblers, planter boxes and bins should be located in areas where there do not encroach on paths of travel.</p>

5.17	Tiling	<p>In Accessible Sanitary Facilities it is important that the colour of floor tiles provides a luminance contrast of at least 30% to the wall tiles.</p> <p>It is also important that a border tile of different colour to the floor and wall tiles be not used. Such a border does not allow a person with a cognitive disability to determine the join between floor and walls.</p> <p>If an upturn tile, or upturn in vinyl flooring, is used for the purpose of cleansing the facility, the height of the upturn should not exceed 75mm</p>
5.18	Deck (North)	<p>The café area on Deck (North) provides for patrons from parts of Bicentennial Park, other than the Pool.</p> <p>This facility must also be Accessible.</p> <p>Step requirements are mentioned in 3.03.</p> <p>For the benefit of parents with strollers and patrons with mobility disabilities, a short ramp should be provided from the Deck to the pathway, along the wall of the Male Change. The gradient of the ramp should not exceed 1:14, and handrails should be provided on both sides. The slip-resistance of the surface of the ramp should comply with AS/NZS4586.</p>