



Accessibility Design Review

**Eastern Creek Retail Centre
Stage 1 – Shopping Centre
Rooty Hill Road,
Eastern Creek NSW 2766**

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EXECUTIVE SUMMARY

The following report is a review of the Schematic design documentation and provides a summary of the compliance strategy of the proposed works highlighting the key principles of accessibility as well as the technical requirements of a building to ensure the public, staff and visitors, have equitable and dignified use.

The report is prepared in relation to the Eastern Creek Retail Centre. The proposed works include a series of food and beverage outlets, speciality tenancy shops, a Woolworths and provision of a central plaza / deck area.

Key accessibility issues that need to be addressed are listed below. Specific recommendations associated with these areas are located within the body of this report.

BCA Compliance

(Mandatory minimum compliance with BCA – State legislation)

- Access is required to and within all areas normally used by occupants
- Where pedestrian crossings are at grade please install TGSIs in accordance with AS1428.1-2009
- Ensure where double doors are detailed a clear width opening of 850mm is provided to the active leaf. Please also provide a door schedule for additional review
- Please confirm the longitudinal and crossfall grades at the entrances to the speciality shops and food outlets.
- The accessible parking bays are to be designed in accordance with AS 2890.6 -2009. Parking space and shared zone dimensions are to be 5400 x 2400mm.
- The provision of hearing augmentation system is required where the outdoor cinema is provided.

DDA Compliance

(Additional recommendations to minimise risk of non-compliance under DDA – Federal legislation)

- Develop a wayfinding strategy which will be beneficial for all users.
- Consider the provision of a 'lift and change' Adult Changing facility. 'Refer to section 5.14

1. INTRODUCTION

PDS Group have engaged the services of McKenzie Group Consulting as Accessibility and DDA consultants to conduct a review of the project documentation to ensure that functional and compliant accessibility has been applied to the design. As members of the Access Consultants Association of Australia (ACAA), McKenzie Group Consulting use expert accessibility knowledge to ensure the project complies with the spirit and intent of the Disability Discrimination Act (DDA), within the project scope.

1.1. Purpose of Report

This report forms part of the Development Application. The report is prepared in relation to proposed works at Eastern Creek Retail Centre, Rooty Hill Road, Eastern Creek, NSW, 2766.

This report provides a compliance overview of the project with respect to achieving compliance with the Building Code of Australia (BCA) and the Disability Discrimination Act (and Disability Standards) (DDA), within the project scope. Detailed Design documentation and compliance assessment will be undertaken as the design develops.

1.2. Project Description

The proposed works include the development of a retail mall with major retail tenancies, specialty shops, and a series of food outlets and a supermarket.

Vehicular access to the Centre parking is of the New Access Road via Rooty Hill Road South.

The project proposed is to include the following elements;

- Car Parking
- Major retail tenancies, specialty shops, food outlets,
- Woolworths
- Central plaza Deck with Cinema Screen
- Child care facility
- Gym
- Separate Tenanted Site (PAD Site - Subject to separate DA).

2. LEGISLATIVE REQUIREMENTS

The legislative requirements for this project comprises both Federal and State legislation.

Federal

The Disability Discrimination Act (DDA - 1992) is Federal Government legislation enacted in 1993 that seeks to ensure all new building infrastructure, refurbishments, services and transport projects provide functional and equitable accessibility. The DDA is a complaints based legislation, which is administered by the Australian Human Rights Commission (AHRC). For any built environment the key requirement of the DDA is to ensure functionality, equality and dignity of people with disabilities, their companions, family and carer givers.

The DDA utilises statutory instruments known as Disability Standards to provide detailed requirements. The Disability Standards are: Disability (Access to Premises – Buildings) Standards 2010, Disability Standards for Education 2005 and the Disability Standards for Accessible Public Transport 2002. These Disability Standards draw extensively on technical provisions in the AS 1428 series details technical requirements related to design for access and mobility.

State

The Building Code of Australia has adopted key accessibility and DDA legislation into the 2011 and subsequent BCA. In particular adherence to the Access to Premises Standard (2010) (APS); AS1428.1 2009; AS1428.4.1 2009 and AS2890.6 2009 has become mandatory. This means that compliance with the relevant sections of the BCA, ensures compliance with the relevant 'Premises' component of the DDA.

However, compliance with the BCA alone does not necessarily mean compliance with the Disability Discrimination Act if the elements of equality, dignity and functionality remain compromised within an environment. The building owner/occupier should therefore ensure that their policies, practices and procedures promote equality in all employment, education and services provided, within their built environment.

2.1. Referenced Legislation and Standards

The review of the project has been undertaken against the following legislation;

- Disability Discrimination Act (DDA) 1992.
- Disability (Access to Premises – Buildings) Standards 2010 (DAPS 2010).
- Building Code of Australia (BCA) and BCA referenced standards including:
 - AS1428.1 2009 Part 1: General Requirements for access – new building work.
 - AS1428.2 1992 Part 2: Enhanced and additional requirements – Buildings and facilities.
 - AS1428.4.1 2009 Part 4.1: Means to assist the orientation of people with vision impairment – TGSi.
 - AS2890.1 2004 Part 1: Off-street car parking.
 - AS2890.6 2009 Part 6: Off-street parking for people with disabilities.
 - AS1735.12 1999 Lift facilities for people with disabilities.

3. DOCUMENTATION

The report has been prepared based on a review of the drawings listed in Appendix A, Preliminary Consultants Drawings prepared by i2C dated 01.09.17.

Marked up drawings are attached in Appendix B.

4. EXEMPTIONS AND PERFORMANCE BASED SOLUTIONS

4.1. Exemptions

Based on the use of some areas within a building, it is reasonable to not provide access to some spaces where it is deemed inappropriate because of the required duties to be carried out in the space or if the area poses as a health or safety risk for people with a disability. These areas may include:

- Plant rooms, Store rooms, cleaner's rooms, and the like.
- Loading docks
- Commercial kitchen

4.2. Performance Based Solutions

No performance based solutions have been identified at this stage of the design

5. ISSUES AND RECOMMENDATIONS

The following compliance assessment is set out in tabular format. The comment/issue identifies the issues followed by recommendations and whether relevant to BCA or DDA compliance. 'BCA' compliance means meeting minimum mandatory compliance of the BCA and the Premises Standard component of the DDA. Where 'DDA' compliance is shown against a recommendation, this indicates an area of residual DDA risk, i.e. outside BCA parameters and the Access to Premises Standards. The 'DDA' recommendations relate to best practice design for accessible environments. These recommendations, in conjunction with the owner/occupier's policies, practices and procedures will maximize DDA compliance and meet the spirit and intent of the DDA.

5.1. General Building Access Requirements

Buildings and parts of buildings must be accessible in accordance with Table 3.1 of the BCA.

A continuous accessible path of travel is to be provided as follows:

Part Of Building	Accessibility Requirements	BCA/ DDA
Class 5, office Class 6 – Retail;	<ul style="list-style-type: none"> To and within all areas normally used by the occupants 	BCA
Class 7a – Car parking	<ul style="list-style-type: none"> To and within any level containing accessible car parking spaces 	BCA

5.2. External approaches, walkways, ramps, kerbs and steps

A continuous accessible path is to be provided to the new building:

- From the main points of a pedestrian entry at the allotment boundary, and
- From another accessible building connected by a pedestrian link
- From any required accessible car parking space on the allotment

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> Ensure external paths are of adequate width to accommodate passing and turning spaces 	<ul style="list-style-type: none"> Provide a minimum of 1500mm width to allow a pram and wheelchair to pass Consider a path width of 1800mm to allow two wheelchairs to pass, particularly within the public realm Minimum width must be measured clear of bollards or fixtures Compliance indicated 	BCA
<ul style="list-style-type: none"> Provide warning TGSIs and kerb ramps at Pedestrian Crossings in accordance with AS1428.4.1 	<ul style="list-style-type: none"> Pedestrian crossings have been provided within the car park. Where there is no kerb ramp TGSIs are to be provided in accordance with AS1428.4.1-2009. Warning TGSIs are to be provided, located 300mm from the hazard of the roadway, where an access way meets 	BCA

Comment/issue	Recommendation	BCA/ DDA
	<p>a vehicular way, and where there is no kerb or kerb ramp</p> <ul style="list-style-type: none"> Where bollards are provided, ensure they are positioned either side of the dedicated walkway, maintain a clear width of 1200mm 	
<ul style="list-style-type: none"> Pedestrian crossings and or drop-off areas should be designed inclusive of line marking, kerb ramps and TGSIs in accordance with AS1428.1 & AS1428.4.1. 	<ul style="list-style-type: none"> Taxi drop of zones is located to the North East of the site. Please provide information on gradient, finishes, tactile indicators, colour and textural contrast of surfaces and required kerb ramps. 	DDA
<ul style="list-style-type: none"> Rest seating should be provided adjacent entrances, at taxi drop off points and along external pedestrian paths of travel 	<ul style="list-style-type: none"> Locate rest seating near/adjacent the taxi drop off bay. Provide a range of seating to accommodate all users i.e. some with backrest, some with armrests and at various seat heights etc. Any seating to be set back 500mm from the walkway. 	DDA
<ul style="list-style-type: none"> Ensure obstacles abutting a path are readily identifiable and do not obstruct a user on the path 	<ul style="list-style-type: none"> Ensure bollards, bike racks, rest seating and bins possess a 30% luminance contrast to the surroundings Ensure fixtures and furniture is recessed a minimum of 500mm from required minimum width of path 	DDA
<ul style="list-style-type: none"> The public realm offers significant opportunities to enhance the existing scheme. There will be minimum BCA requirements in terms of access paths, gradient, stairs etc., however, many aspects of good design in external spaces, fall outside these minimum requirements. 	<ul style="list-style-type: none"> The following are some design considerations for providing equitable access to the public realm; Surface treatments e.g.; grass, gravel, stone, pavers – be aware of abutment detail with other surfaces; both level difference and slip resistance differences. Careful design of drainage grates, surface falls and gradients generally Provision of rest seating opportunities along walkways, stair landings etc. Lighting designs that minimise glare. Luminance contrast of features such as; steps, seats, bollards, bins etc. Consistent/compliant use of TGSIs to create a predictable environment Landscape planting can offer tactile and olfactory clues to the environment to enhance different areas. 	BCA/DDA

Key External walkway criteria:

- Walkways to be provided with passing bays (1800 x 2000mm) every 20m.
- Walkway gradient to be 1:20 (max) with landings every 15m.
- Landings in direction of travel 1200mm long; landings at 90° directional change 1500mm x 1500mm. Landings at 180° directional change 1540mm length.
- If gradient of walkway is less than 1:33 no landings are required.
- TGSIs required to warn of hazard along pedestrian and vehicular routes on grade

Key kerb and pedestrian crossing criteria:

- Kerb ramp to have gradient no steeper than 1:8, length no greater than 1520mm.
- Pathways from accessible parking across roadways to have designated line marking.

Stairs design criteria:

- Common use stairs require AS1428 series compliant handrails, tread features and TGSi.

Key ramp design criteria:

- Maximum gradient of a ramp exceeding 1900mm is 1:14. Gradient to be consistent throughout ramp.
- Ramp required to have unobstructed width of 1000mm
- Ramps to be provided with landings at bottom and top of ramp.
- Landings required every 9m where grade 1:14, Landings required every 15m where grade 1:20.
- Landings in direction of travel 1200mm long; landings at 90° directional change 1500mm x 1500mm. Landings at 180° directional change 1540mm x 2070mm length.
- Ramps require AS1428 series compliant handrails and TGSi.
- Ramps to be set back 900mm at property boundaries or 400mm at internal corners.
- Vertical rise not to exceed 3.6m

Kerb ramps – max rise 190mm; max 1:8 gradient

Threshold ramps – max rise 35mm; 1:8 max gradient; within 20mm of door leaf

Step ramps – max rise 190mm; 1:10 max gradient

5.3. Car Parking

Comment/issue	Recommendation	BCA/ DDA
In accordance with Table D3.5 of the BCA, accessible car parking is required to be provided as follows. <ul style="list-style-type: none"> ▪ Class 5, 7, 8 or 9c part ▪ 1 space per 100 ▪ Class 6 & 9b (not school) parts of the building require: ▪ 1 space per 50 	<ul style="list-style-type: none"> ▪ Based on the total number of car parking spaces provided (433) a minimum of 9 accessible spaces are required ▪ 10 have been provided; compliance indicated ▪ Accessible car park spaces are to be designed in accordance with AS 2890.6 – 2009. Parking bays and shared zones are to be detailed at a minimum of 2400 x 5400mm. 	BCA
<ul style="list-style-type: none"> ▪ Confirm vertical clearances are provided to the carpark. 	<ul style="list-style-type: none"> ▪ N/A – Parking is not under cover. 	BCA
<ul style="list-style-type: none"> ▪ The approach from the accessible car parking bays 	<ul style="list-style-type: none"> ▪ Compliance indicated 	BCA

Comment/issue	Recommendation	BCA/ DDA
to the main entrances to be accessible		
<ul style="list-style-type: none"> A bollard is required in the shared area 	<ul style="list-style-type: none"> Annotate drawing to show bollard 	BCA

Key Car parking and transport design criteria:

- Accessible spaces are to be designed in accordance with AS2890.6-2009.
- Dimensions of angled accessible parking bays 2400 x 5400mm with adjacent 2400mm x 5400mm shared area and bollard in shared area.
- Dimensions of parallel parking bays 3200mm x 7800mm.
- Provide direct kerb ramp access from adjacent to the accessible parking space to pathway.
- Accessible bays to be located near entrances.
- Provide a designated area for accessible drop off from private vehicles, taxis and community vehicles with kerb ramp access to the pathway.
- Height of vehicular path of travel to accessible parking space to be 2200mm and height above accessible parking space to be 2500mm

5.4. Entrances

Access for persons with a disability is to be provided to and within all areas normally used by the occupants.

Access must be provided via the main principal entrance and:

- Not less than 50% of all pedestrian entrances including the principal entrance, and
- In buildings with a floor area >500m², a non-accessible entrance must not be located more than 50m from an accessible entrance.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> All entry doors are to comply 	<ul style="list-style-type: none"> All entry doors must achieve a minimum clear door opening width of 850mm (920mm leaf door required). 	BCA
<ul style="list-style-type: none"> All doors to have light operation forces 	<ul style="list-style-type: none"> Ensure doors have light operational forces (less than 20 N). Consider use of bearing hinges or other enhanced hardware to achieve requirement. 	BCA
<ul style="list-style-type: none"> Auto door controller 	<ul style="list-style-type: none"> Auto door controls / swipe cards are to be fitted no closer than 500mm from an internal corner at a height of no greater than 1250mm AFFL. 	
<ul style="list-style-type: none"> Glazing decals 	<ul style="list-style-type: none"> All frameless glazed doors must be marked with contrasting marking not less than 75mm wide for full width of doors with lowest edge at 900-1000mm. 	BCA
<ul style="list-style-type: none"> 30% minimum luminance contrast is required between 2 of the door face, door architrave and wall. 	<ul style="list-style-type: none"> Provide details as design progresses 	BCA

Key entrance criteria:

- Main entry must be accessible.
- Entry requires single door leaf width clearance of 850mm (920mm door size).
- Circulation space of 1450mm required either side of entry.
- All glazed doors must be marked with contrasting marking not less than 75mm wide for full width of doors with lowest edge at 900-1000mm.

5.5. Internal stairs

An accessible path of travel is required to all areas normally used by occupants. All stairs (excluding fire-isolated stairs) must be provided with handrails both sides, nosing strips and TGSIs.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> ▪ All general circulation stairs are to be designed to comply with AS1428.1-2009 i.e. clear width not less than 1m, handrails both sides, TGSIs and nosings. 	<ul style="list-style-type: none"> ▪ All new designed stairs are to comply with AS1428.1-2009. ▪ There are no stairs to be reviewed at this stage of the design. 	BCA
<ul style="list-style-type: none"> ▪ Fire-isolated stairs (FISs) are exempt from full compliance. 	<ul style="list-style-type: none"> ▪ Existing and new FIS shall be upgraded/designed to include a single handrail compliant to Clause 12 of AS1428.1 (circular) and provision of stair handrails as a minimum ▪ There are no Fire Isolated stairs to be reviewed at this stage. ▪ If FISs are to be encouraged for general circulation use, the stairs should be upgraded to full compliance with AS1428.1-2009 features. 	BCA

Key stair design criteria:

- Stairs to be set back 900mm at property boundaries or sufficient space to accommodate required handrails internal corners.
- Circular or spiral stairs are generally unsafe due to their inconsistent tread width.
- *Common use stairs require AS1428 series compliant handrails, tread features and TGSIs.*
- *Tactile ground surface indicators (TGSIs) shall be installed for the full width of the path of travel*
- *TGSIs shall be located at both the top and bottom of the stairs*
- *Fire-isolated stairs required a single handrail compliant to Clause 12 of AS1428.1 and stair nosings as a minimum.*

5.6. Internal Ramps

An accessible path of travel is required to all areas normally used by occupants. All ramps along a continuous accessible path of travel must be provided with handrails both sides, kerb rails, landings and TGSIs as required.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> All general circulation ramps are to be designed to comply with AS1428.1-2009 i.e. clear width not less than 1m, handrails both sides, TGSIs, compliant landing sizes and gradient 	<ul style="list-style-type: none"> The design of all new ramps are to comply with AS1428.1-2009. The (Relative Level) RL's indicate there are no gradient changes steeper than 1:40. Please confirm grades at thresholds to speciality shops and food outlets. 	BCA
<ul style="list-style-type: none"> Ensure a level transition is provided to and within all speciality shops, and food tenancies. 	<ul style="list-style-type: none"> If step free access cannot be achieved ensure thresholds ramps are installed in accordance with AS1428.1-2009. 	BCA

Key ramp design criteria:

- Maximum gradient of a ramp exceeding 1900mm is 1:14. Gradient to be consistent throughout ramp.
- Ramp required to have unobstructed width of 1000mm
- Ramps to be provided with landings at bottom and top of ramp.
- Landings required every 9m where grade 1:14, Landings required every 15m where grade 1:20.
- Landings in direction of travel 1200mm long; landings at 90° directional change 1500mm x 1500mm. Landings at 180° directional change 1540mm x 2070mm length.
- Ramps require AS1428 series compliant handrails and TGSIs.
- Ramps to be set back 900mm at property boundaries or 400mm at internal corners.

5.7. Tactile Ground Surface Indicators (TGSIs) and hazard identification

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> TGSIs are required to be installed in accordance with AS1428.4.1, to the top and bottom of every stair, ramp, escalator/ travelator and to external areas such as where the pedestrian walkway is at grade with the roadway, kerb ramps. 	<ul style="list-style-type: none"> Install TGSIs either side of car park access ways. Where pedestrian crossings are at grade please install TGSIs in accordance with AS1428.4.1-2009 	BCA
<ul style="list-style-type: none"> Hazards with <2000mm head clearance will require to be identified 	<ul style="list-style-type: none"> Review as design progresses 	BCA
<ul style="list-style-type: none"> All glazed doors that are frameless, sidelights and glazing that could be mistaken for a door or opening must be marked with contrast marking 	<ul style="list-style-type: none"> Provide contrast marking no less than 75mm wide for full width of glazing at 910-1000mm height. 	BCA

Key TGSi and hazard identification criteria:

- Standard warning TGSi size is 600-800mm for full width of path of travel
- TGSi's to be set back 300mm +/- 10mm from hazard
- TGSIs to have min 30% luminance contrast for integrated TGSi's and 45% for discrete TGSIs
- Contrast marking to achieve minimum 30% luminance contrast against floor or surfaces within 2m

5.8. Internal Walkways

An accessible path of travel is required to all areas normally used by occupants. Internal walkways should be designed with the following features:

- Suitable circulation spaces are to be provided to enable turning into adjacent doorways and workstation areas,
- Adequate passing spaces, and
- Turning areas at corridor or room terminators

Comment/issue	Recommendation	BCA/ DDA
<p>Public paths of travel and internal corridors throughout shall be designed to comply as follows:</p> <ul style="list-style-type: none"> ▪ Ensure a minimum unobstructed clear width of 1000 mm along all corridors to rooms or spaces. ▪ Provide turning spaces of 1500x1500 (corner may be truncated) where a user is required to make a directional turn. ▪ Provide turning space within 2000 mm at the ends of corridors, where it is not continuous to offer turning space: minimum width 1540 mm x 2070 mm length. ▪ Passing bays (1800mm wide x 2000mm length) are required every 20m where no direct line of sight is provided 	<ul style="list-style-type: none"> ▪ All internal walkways appear to indicate compliance 	BCA
<p>Public Amenities</p> <ul style="list-style-type: none"> ▪ Ensure the corridor/s leading to the public amenities is sufficient width to allow two wheelchairs to pass ▪ 	<ul style="list-style-type: none"> ▪ The corridor leading to the public amenities is more than 1800mm wide, and is of a sufficient width to allow two wheelchairs to pass 	DDA

Key internal walkway and surface criteria:

- Walkways to be provided with passing bays (1800 x 2000mm) every 20m.
- Minimum width of internal walkway 1000mm.
- Path of travel in front of doorways or those accessed from a frontal approach required to be 1450mm width (minimum).
- Path of travel in front of doorways accessed from the latch side to be 1240mm minimum width.
- Landing spaces at directional changes of: at 90° - 1500mm x 1500mm (corner can be truncated); at 180° - 1540mm x 2070mm.
- Turning space at corridor terminations to be 1540mm width x 2070mm length.

5.9. Internal Doorways

An accessible path of travel is required to all areas normally used by occupants. Future detailed design should provide compliant door circulation space to all doors where appropriate.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> ▪ The unobstructed clear width of doors must achieve a minimum of 850mm (920mm leaf required). 	<ul style="list-style-type: none"> ▪ All doors along an accessible path of travel must have compliant door circulation and a clear opening width of 850mm ▪ Where double doors are used, ensure the 850mm minimum clear opening applies to the active leaf. 	BCA
<ul style="list-style-type: none"> ▪ All doors to have light operation forces 	<ul style="list-style-type: none"> ▪ Ensure doors have light operational forces (less than 20 N). Consider use of bearing hinges or other enhanced hardware to achieve requirement. 	BCA
<ul style="list-style-type: none"> ▪ Airlocks require clear circulation spaces between doors 	<ul style="list-style-type: none"> ▪ No airlocks between door sets are shown on the drawings 	BCA
<ul style="list-style-type: none"> ▪ 30% minimum luminance contrast is required between 2 of the door face, door architrave and wall. 	<ul style="list-style-type: none"> ▪ Provide details as design progresses 	BCA

Key internal doorway criteria:

- All doors require 850mm clearance width (920mm doors) incl. active leaf of double doors.
- Latch side clearance of 510mm to inward opening doors; 530mm to outward opening doors.
- Circulation space of 1450mm required either side of doors that are approached from the front. Circulation space of 1240mm required in front of inward opening doors approached from latch side.
- All glazed doors must be marked with contrast marking no less than 75mm wide for full width of doors at 910-1000mm height.

5.10. Sanitary Facilities

Facilities to be provided in accessible parts of the building. Accessible sanitary facilities must be provided on each level where other sanitary facilities are also provided and if the storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks. The accessible facilities should be located adjacent/opposite the gender facilities.

Where one or more pans are provided, an ambulant toilet within each of the male and female facilities is to be provided.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> Limited details provided at this stage of the design regarding provision of sanitary facilities 	<ul style="list-style-type: none"> Please provide details for review when available. Elevations and sections of the accessible sanitary facility and ambulant compartments are required to determine the layout of grab rails and other fittings Include an accessible shower/WC within the the EOT (End of Trip) facilities. 	BCA
<ul style="list-style-type: none"> Where two or more accessible sanitary facilities are installed there shall be an even distribution of mirror imaged layouts to provide left hand and right hand transfer. 	<ul style="list-style-type: none"> Facilities nearest central plaza indicate a Left hand transfer Facilities (staff use) indicate a right hand transfer. Accessible shower/WC facility provided in EOT to be either left/ right hand transfer. 	BCA

Key sanitary facility criteria:

- Accessible sanitary facilities to be in same location as gender facilities and located on all levels of a multi-level building.
- Minimum room dimension with WC and basin: 1900mm x 2630mm or 2330mm x 2200mm.
- Provide AS1428 series compliant fixtures inclusive of shelf, clothes hooks, full length mirror
- A sanitary compartment suitable for a person with an ambulant disability must also be provided for use by males and females
- Baby change tables are not permitted to encroach on fixture circulation spaces and are to be installed in accordance with Clause 15.2.8.2

5.11. Signage

Mandatory Braille and tactile signage must be provided to sanitary facilities (except SOUs), spaces with hearing augmentation, for required exit signage and directional signage to alternative accessible entrances, paths of travel or alternative sanitary facilities.

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> Will a wayfinding strategy be developed for the precinct 	<ul style="list-style-type: none"> Further review of a wayfinding design package to be undertaken when available 	DDA

Key Signage design criteria:

- Accessible way finding should highlight the pathway from entrance to reception to lifts/stairs, amenities and to key components of the facility.
- Ensure accessible way finding signage is:
 - Located at appropriate viewing heights
 - Perpendicular to the path of travel or beside identifiable features (e.g. door faces)
 - Of suitable colour contrast (luminance contrast min 30%)
 - Of compliant notation inclusive of use of the international symbol of access.
- Signage to accessible sanitary facilities requires identification with the international symbol of access, raised tactile and Braille signage and letters RH or LH to indicate side of transfer to the WC pan.
- Signage required to areas with required hearing augmentation provided

5.12. Hearing Augmentation

Hearing Augmentation Listening Systems are an essential assistive device for people who use hearing aids and are mandatory at screened reception counters, lifts and areas with public announcement systems.

Comment/issue	Recommendation	BCA/ DDA
Hearing Augmentation will be required, if in-built amplification is available within the Buildings/rooms Consider provision of hearing augmentation early in design	Hearing augmentation must be provided where in - built amplification is provided. Provide hearing augmentation to the central plaza/ cinema zone. Portable receivers should be made available through centre management. The area should be signed accordingly.	BCA

Key Hearing augmentation criteria:

- Hearing Augmentation systems must be provided where inbuilt amplification is provided in rooms (e.g. auditoriums, conference rooms or meeting rooms)
- Hearing Augmentation systems must be provided where inbuilt amplification is provided to ticket offices, tellers booths, reception areas or the like where the public is screened from the service provider.
- Hearing augmentation systems can be permanent or portable. The nature of the built environment will dictate the desired outcome.

5.13. Emergency Evacuation

Comment/issue	Recommendation	BCA/ DDA
<ul style="list-style-type: none"> Consider implementation of an emergency evacuation plan for people with disabilities. 	<ul style="list-style-type: none"> The emergency evacuation strategy for the development should address the operational solution of evacuating occupants that cannot use fire stairs. 	DDA

Key emergency evacuation criteria:

- Consideration of individuals with disabilities is required as part of emergency evacuation planning. The types of accessible emergency evacuation include "protect in place" i.e. 1 hour rated rooms on non fire effected levels; smoke isolated lift lobbies with managed lift access; horizontal evacuation movement to other building areas; or provision of fire refuges within fire stairs or identified zones.
- If areas of refuge are provided spaces of 1300mm x 800mm are required per individual. This space needs to be set back from the main egress thoroughfare.
- Fire evacuation plans should include provision of management plans to assist individuals with disabilities or access requirements. Individuals with accessible requirements should be provided with a "fire buddy" to escort them to pre-determined areas of refuge.
- Fire engineering reports should detail accessible evacuation within a sub section of the plan.
- The current best practice is detailed in the 'AS 3745 - 2010 Planning for emergencies in facilities' and should be used as a guideline to assist in the implementation of the Emergency Plan

5.14. Additional Site Specific Components

Comment/issue	Recommendation	BCA/ DDA
<u>Internal Seating</u> <ul style="list-style-type: none"> Recommend that any internal seating considers accessible needs and is provided with both backrest and armrests in accordance with AS1428.2. 	<ul style="list-style-type: none"> Provide a range of seating within waiting and kiosk areas to accommodate all users i.e. some with backrest, some with armrests and at various seat heights etc. Any seating to be set back 500mm from the walkway. 	DDA
<u>Baby Change facility</u> Baby change facility should be at an accessible height to cater for all users in accordance with the requirements of AS1428.2	<ul style="list-style-type: none"> Designated parent room design to clauses 15.2.8.2 of AS1428.1 and AS1428.2 	DDA
<u>Lift & Change Facility</u>	<ul style="list-style-type: none"> Consider the provision of a lift and change facility Option 1 without shower 3200 x3860mm Option 1B without shower 3500 x 3360mm Option 2 with shower 3200 x 4360mm 	DDA
<u>Reception/Service Desk/counters</u> <ul style="list-style-type: none"> Any reception/service desk/counter or the like should be at an accessible height to cater for all users in 	<ul style="list-style-type: none"> Counters should be at a universally accessible height of 900mm or if higher 	DDA

Comment/issue	Recommendation	BCA/ DDA
accordance with the requirements of AS1428.2	provide an 850mm wide section of 850mm height with under bench clearance.	
<u>Furniture & Fixtures</u> <ul style="list-style-type: none"> Future design should consider accessible requirements tea point, vending machines, drinking fountains, telephones, controls etc. <p>Items shall be a minimum of 500mm away from the path of travel.</p>	<ul style="list-style-type: none"> Future fitout/design of fixtures, furniture and fittings should consider accessible requirements in accordance with AS1428.2 	DDA
<ul style="list-style-type: none"> Provide accessible locker facilities for staff use 	<ul style="list-style-type: none"> Ensure staff lockers in the EOT facility are positioned at an accessible height for staff: <ul style="list-style-type: none"> Provide clear circulation in front of the fixtures of 800mm x 1300mm Position lockers at a height of between 700-1200 above FFL Consider providing lockers in the unisex accessible sanitary facility. 	DDA

6. COMPLIANCE SUMMARY

The recommendations in this report have been provided to assist in the creation of a universally accessible environment within the proposed development. In the next phase of the design process it is anticipated that as additional detail is provided - particularly details, and features- the accessibility of this development can be further detailed.

If you have any further queries in relation to the reports and recommendations contained please contact Daniel Craddock on 38349800

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7. APPENDIX A – DOCUMENT LIST

I2C project number: 2015-088

Drawing No.	Rev	Title
DA05	A	Proposed Site Plan – Stage 1

8. APPENDIX B – DRAWING MARKUPS

I2C project number: 2015-088

Drawing No.	Rev	Title
DA05	A	Proposed Site Plan – Stage 1

