

Accessibility Review Report – DA Review

Project Title:	IC3 West Data Centre 17-23 Talavera Road, Macquarie Park
Job Number:	21302
Date:	22 October 2021

Prepared For: Macquarie Data Centres C/- Giddis Project Management

Report Version:

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ACCESSIBILITY . ESSENTIAL FIRE SAFETY SERVICES

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Report	Revision	Date	Details
Draft	1.0	25/08/2021	Draft for comment/review
Draft	1.1	21/10/2021	Updated draft for comment/review
Final	1.2	22/10/2021	Final issue



ACCESSIBILITY DESIGN REVIEW

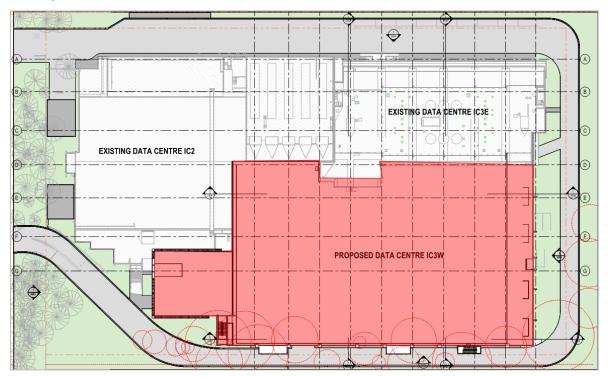
PROJECT: IC3 West Data Centre **ADDRESS:** 17-23 Talavera Road, Macquarie Park

1.0 INTRODUCTION

This report provides an Accessibility Design Review of the proposed IC3 West Data Centre located at 17-23 Talavera Road, Macquarie Park.

1.1 Project Information & Classification

The proposed development consists of a multi-storey mixed use development which incorporates office portions, loading docks, plant/equipment rooms, data storage halls and associated off-street carparking. The proposed IC3 West building will connect into the existing IC2 and IC3 East buildings and form a united building as indicated in the extract below:



It is understood the following Building Code of Australia 2019 building classification(s) apply to the subject building / building part (to be confirmed by the BCA Consultant / PCA) –

Level/Building Part	Building Classification	Use
Ground Floor	Class 5, 7a and 7b	Office, Carpark and Loading dock
Level 1	Class 5 and 7b	Office and Plantroom
Levels 2-4	Class 5 and 7b	Office and Data Storage
Level 5	Class 7b	Plantroom and Data Storage



1.2 Purpose of the Report

Macquarie Data Centres C/- Giddis Project Management engaged the services of ABE Consulting as Accessibility Consultants for this project to undertake an assessment of the proposed design documentation in relation to the accessibility related requirements as identified in Part 1.3 of this report for submission to the Local Council as part of the Development Application documentation.

1.3 Report Scope

This report provides an Accessibility Design Review of the relevant project architectural documentation in the context of the following –

- Part D3, Clause F2.4 and Clause E3.6 'deemed-to-satisfy' (DtS) requirements of Building Code of Australia 2019 Amendment 1 (BCA); and
- The Disability (Access to Premises Buildings) Standards 2010.

This Accessibility Design Review is based on -

• Architectural design documentation prepared by HDR, Project no. 10301489 as follows -

Dwg#	Title	Date – Issue
A1301	Site Plan	22/10/21 – A
A2101	General Arrangement Ground Floor	22/10/21 – A
A2102	General Arrangement Level 1	22/10/21 – A
A2103	General Arrangement Level 2	22/10/21 – A
A2104	General Arrangement Level 3	22/10/21 – A
A2105	General Arrangement Level 4	22/10/21 – A
A2106	General Arrangement Level 5	22/10/21 – A
A2107	General Arrangement Roof Level	22/10/21 – A

- The Building Code of Australia 2019 Amendment 1 (BCA) prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019 Amendment 1, prepared by the Australian Building Codes Board.
- The Disability (Access to Premises Building) Standards 2010.
- Australian Standards AS 1428.1-2009 Design for Access and Mobility Part 1: General requirements for access New building work.
- Australian Standards AS/NZS 2890.6-2009 Off-street parking for people with disabilities.
- Australian Standards AS/NZS 1428.4.1-2009 Design for Access and Mobility Part 4.1: Means to assist the orientation of people with vision impairment Tactile ground surface indicators.

1.4 Limitations of the Report

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, equitable and independent accessibility. The DDA is 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, equity and independence of movement by people with disabilities, their companions, family and carer givers.

A key component of compliance to the DDA is the use of the Disability (Access to Premises - Buildings) Standards 2010, Part D3, Clause F2.4 and Clause E3.6 of the Building Code of Australia 2011 (BCA) and the relevant referenced standards primarily being Australian Standards Suite AS1428 and Australian



Standards AS2890.6 – Off-street parking for people with disabilities. The AS 1428 series details technical requirements related to design for access and mobility.

The Building Code of Australia adopted key accessibility and DDA legislation into the 2011 BCA. In particular adherence to the Access to Premises Standard (2010); AS1428.1 2009; AS1428.4.1 2009 and AS2890.6 2009 has become mandatory. However, compliance with these elements does not necessarily result in compliance with the Disability Discrimination Act if the elements of equality, independence and functionality remain compromised within an environment.

This report does not include or assess the following -

- The provisions of the BCA not directly referenced in Part 1.3 of this report;
- Standards not directly referenced in this report; including AS4299-1995 (Adaptable Housing) unless otherwise explicitly specified in Part 1.3 of this report;
- Disability Discrimination Act 1992 (as explored earlier);
- Federal / State / Local planning policies and/or guidelines unless otherwise explicitly specified in Part 1.3 of this report;
- Work Health & Safety considerations or Work Cover Authority requirements;
- This report does not provide any performance based assessments (Performance Solutions) of the BCA;
- This report does not provide any exemptions from the requirements of the BCA.
- This report is not a Part 4A compliance certificate under the Environmental Planning & Assessment Act 1979 or Regulation 2000;
- Review or specification of slip-resistance classification(s) for floor surface finishes / materials. We recommend surface finish advise be sought from an independent specialist slip safety consultant.



1.5 The Disability (Access to Premises – Building) Standards 2010

The Disability (Access to Premises - Buildings) Standards 2010 provides the prescriptive requirements set out regarding the upgrade of an existing building where works are being undertaken.

The Premises Standards apply to:

- a new building
- a new part of an existing building
- the *affected part* of an existing building.

The new parts of a building and any subsequent affected part are outlines as per the below extracts of The Disability (Access to Premises - Buildings) Standards 2010 –

New Part:

A part of a building is a *New Part* of the building if it is an extension to the building or <u>a modified part of</u> <u>the building about</u> which:

- An application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the state or territory where the building is located; or
- All of the following apply:
 - *i.* The building work is carried out for or on behalf of the Crown;
 - *ii.* The building work commences on or after 1 May 2011;
 - *iii.* No application for approval for the building work is submitted, before 1 May 2011, to the competent authority in the state or Territory where the building is located.

Affected Part:

- the principal pedestrian entrance of an existing building that contains a new part and
- any part of an existing building that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

It is understood that the proposed works are being undertaken by the building owner/whole building lessee and as such an 'affected part' upgrade is triggered. New works and the subsequent 'affected part' are required to comply with the current accessibility provisions of the BCA.



2.0 ACCESSIBILITY DESIGN REVIEW

The following tables provide an assessment of the architectural design documentation in relation to the DtS provisions of the BCA / Premises Standards in the context as outlined in Part 1 of this report.

The tables identify each of the relevant assessment outcomes into six (6) main categories, as follows -

<u>Capable of Complying (CoC) –</u>	Spatial allowance has been made to accommodate compliance where the specification provided has been satisfied.
<u> Compliance Departure (CD) –</u>	A compliance departure with the DtS provisions of the BCA.
<u> Design Detail (DD) –</u>	A detail commentary/specification is offered within the report.
<u>Performance Solution (PS) –</u>	A Performance Solution Report is being pursued to justify the compliance departures
<u>Not Applicable (N/A) –</u>	Not applicable or not relevant to the project. Commentary provided.
Informational (Info) –	Provided for informational purposes

Interpretation Note(s) -

• Readily moveable furniture has been treated as indicative only unless otherwise noted within the report as it is not considered to form part of the building as addressed by the BCA.



BCA Part D3 – ACCESS FOR PEOPLE WITH DISABILITIES

Cl. D3.1: General building access requirements

DtS Provision	Comment(s)/Recommendation(s)	Status
Buildings and parts of the building must be accessible as required by Table D3.1, unless exempted by D3.4. Table D3.1 requires that access is provided – Class 5, 6, 7b, 8, 9a –	Access is generally proposed throughout the required portions of the building as prescribed by Cl. D3.1 of the BCA. Compliance is readily achievable with minor design development and/or	DD
 To and within all areas normally used by the occupants. <u>Class 7a –</u> To and within any level containing accessible carparking spaces. 	 specification at the Detailed Design Stage. Note: An exemption under clause D3.4 of the BCA has been applied to the following areas: Data storage halls and circulation areas on Levels 2-5 of the IC3W building. Associated plant and equipment rooms throughout the IC3W building. Loading dock on the Ground Floor of 	
	 the IC3W building. Mezzanine offices on Level 1. Refer to markup below: 	
	Typical data hall configuration on Levels 2 - 5	
	Mezzanine office on Level 1	
	Key compliance notes for "accessible" parts of the building:	
	 Accessways and Paths of Travel A continuous accessible path of travel shall be 1000 mm wide x 2000mm 	



 high (except at doorways where the height can be reduced to 1980mm). The following turning circulation spaces shall be provided along an accessway: 1500mm x 1500mm to allow for a 90 degree turn 1540mm x 2070mm to allow for a 180 degree turns. The required 180 degree turning spaces are required within 2m of the end of the accessway and at 20m intervals. 1800mm x 2000mm to allow for wheelchair passing spaces. Passing spaces are required at 20m intervals where there is no direct line of site. Floors finishes along an accessway must be slip resistant and not contain any stepped edges >3mm or rolled edges >5mm. Walkways must have a complying gradient with a suitable abutment. Stairways and ramps along an accessway must be provided for all walkways, ramps and stairways as prescribed in the Standard. Doorways All doorways along an accessway (serving accessible parts of the building) are required to have a clear door opening width no less than 850mm clear and be provided with door circulation spaces as prescribed by AS1428.1-2009.
 <u>Accessible Car Spaces</u> Access to and travel from any level containing accessible carparking spaces to the building must comply with AS1428.1-2009. Accessible car

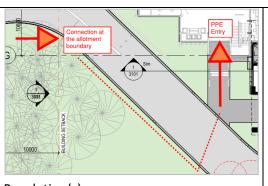


Further details to be provided as part of the design development stage.
 Accessible Sanitary Facilities Where required by clause F2.4 of the BCA, accessible unisex and ambulant sanitary facilities must be provided in accordance with AS1428.1-2009.
space to comply with AS/NZS2890.6-

Cl. D3.2: Access to Buildings

DtS Provision	Comment(s)/Recommendation(s)	Status
An accessway must be provided to a building required to be accessible –	 The following pathway is proposed – 1x main point of pedestrian entrance to 	DD
 from the main points of pedestrian entry at the allotment boundary; and from another accessible building connected by a pedestrian link; and from any required accessible carparking space on the allotment. 	the building from Talavera Road indicated by a green arrow below. Dotted green line indicates the path of travel to the Principal Pedestrian Entry (PPE) from the boundary.	
In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –	F Main entry to the Ground Floor	
 through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and in a building with a floor area more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance. 	G Connection at properly boundary Footpath leading into the building	
except for pedestrian entrances serving only areas exempted by D3.4.	<u>Compliance Departure(s) –</u> A compliant accessway is not provided from the main point of pedestrian entrance at the allotment boundary and via the PPE indicated by the red arrows below –	





Resolution(s) -

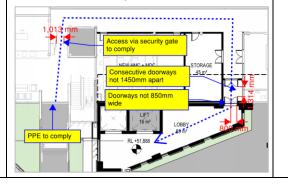
 The proposed compliance departure is proposed to be addressed via a Performance Solution. This is to be determined on a case-by-case basis and will require further development / discussion at the detailed design stage.

<u>Compliance Details/Affected Part</u> <u>Upgrades –</u>

The accessway via the PPE to the new passenger lifts is required to comply with BCA and AS1428.1-2009 due to the "affected part" provisions in the Premises Standard. An audit will need to be completed to verify compliance and address the following key issues:

- Access via the PPE (i.e. doorway design/details, door hardware, visual indicators etc.).
- Access through the existing security gates (gate width and card reader locations).
- Access via the existing corridors and doorways leading to the new passenger lifts.

Refer to "affected part" in red below:





The following will need to detailed at the design development stage:
 Ensure access via the PPE complies with AS1428.1-2009. Access via the security gates is to allow for a compliant 1m path of travel and swipe card readers at the prescribed locations. Doorways to achieve an 850mm clear opening width and circulation as prescribed by AS1428.1-2009. Doorway design including hardware, opening force and contrast to comply with AS1428.1-2009. Consecutive doorways along an accessway must achieve a 1450mm
 clear space between the doors. Travel via the existing corridors and doorways to comply with AS1428.1-2009.

Cl. D3.3: Parts of buildings to be accessible

DtS Provision	Comment(s)/Recommendation(s)	Status
In a building required to be accessible every ramp stairways in areas exempted by D3.4, must comp		
 for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and 	All non-fire-isolated ramps serving accessible areas are required to comply with AS1428.1-2009.	DD
	Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage.	
 for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and 	All non-fire-isolated stairways serving accessible areas are required to comply with AS1428.1-2009.	DD
	Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage.	
 for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and 	Stairway nosing edge strips within the fire isolated exits to be specified.	DD
	Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage.	



	Clause D2.17 of the BCA requires handrails within fire isolated exits to comply with clause 12 of AS1428.1-2009. To achieve a consistent handrail height throughout the stair flight and landings, the exit configuration must allow for the stairway to be offset and include the "one tread" extension of the handrail at the landings. N.B Cl. D2.17(a)(vi) of the BCA is generally assessed by the PCA / BCA Consultant. Where assessment of this Clause is required by this office please confirm and provide detail.	
 Accessways must have— passing spaces complying with AS 1428.1 at maximum 20 m intervals where a direct line of sight is not available turning spaces complying with AS 1428.1 at 20m intervals or within 2m of the termination of an accessway. 	Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage.	DD

Cl. D3.4: Exemptions

DtS Provision	Comment(s)/Recommendation(s)	Status
 The following areas are not required to be accessible – An area where access would be inappropriate because of the particular purpose for which the area is used. An area that would pose a health or safety risk for people with a disability. Any path of travel providing access only to an area exempted by (a) or (b). 	 Exemptions are to be reviewed on a case by case basis. We highlight that the following parts of the building have been offered an access exemption (not exhaustive) – Data storage halls and circulation areas on Levels 2-5 of the IC3W building. Associated plant and equipment rooms throughout the IC3W building. Loading dock on the Ground Floor of the IC3W building. Mezzanine offices on Level 1. Refer to summary and markup provided in clause D3.1 of this report. 	Info



Cl. D3.5: Accessible carparking

DtS Provision	Comment(s)/Recommendation(s)	Status
DtS ProvisionAccessible carparking spaces are to be provided in accordance with Table D3.5 of the BCA in a Class 7a building and a carparking area on the same allotment as a building required to be accessible.Accessible carparking spaces –• are to comply with AS2890.6-2009.• need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public• need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disabilityClass 5 or 7 – 1x space for every 100 carparking spaces or part thereof.	Class 5 and 7b - A total of 71 carparking spaces are proposed on the Ground Floor. Three (3) accessible car spaces are provided within the Ground Floor carpark. Accessible carparking spaces and associated shared zones are to comply with AS/NZS2890.6-2009 – refer to extract below:	Status DD
	An accessway complying with AS1428.1- 2009 must be provided from the accessible car spaces to the building entry. Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage.	

Cl. D3.6: Signage

DtS Provision	Status
In a building required to be accessible signage complying with Spec. D3.6, AS1428.1-2009 and incorporating the appropriate recognised symbol (as appropriate) for persons with disability must be provided as follows —	DD
 braille and tactile signage must identify each sanitary facility and space with hearing augmentation; braille and tactile signage must identify each door required by E4.5 to be provided with an exit sign and state "Exit" and "Level" followed by the floor level number; 	



 signage must be provided within a room containing a hearing augmentation system identifying; the type of system, the area covered within the room and if receivers are being used and where the receivers can be obtained; signage must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use; 	
 signage to identify an ambulant accessible sanitary facility must be located on the door of the facility; directional signage where a pedestrian entrance is not accessible. directional signage where a bank of sanitary facilities are not provided with an accessible sanitary facility. 	
A design compliance certificate should be obtained from the signage designer/contractor to confirm compliance with the relevant provisions of the BCA and Australian Standards.	

Cl. D3.7: Hearing augmentation

DtS Provision	Comment(s)/Recommendation(s)	Status
 A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed – in a room in a Class 9b building; in an auditorium, conference room, meeting room or room for judicatory purposes; at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider. 	If an inbuilt amplification systems (other than one used solely for emergency warning) is provided within the building. Suitable hearing augmentation systems are to be provided in these areas and a design and installation certificate are to be obtained from the relevant consultant to Cl. D3.7. Confirm where an in-built amplification is provided (if any).	DD
Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.		

Cl. D3.8: Tactile indicators

DtS Provision	Comment(s)/Recommendation(s)	Status
 Tactile ground surface indicators complying with sections 1 and 2 of AS/NZS 1428.4.1.:2009 must be provided to warn people who are blind or have a vision impairment that they are approaching – a stairway, other than a fire-isolated stairway; an escalator/moving walk; a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; 	 TGSIs are to be provided to – a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; all stairway landings other than where handrails are continuous at mid landings and fire-isolated stairways; any overhead obstruction less than 2m above floor level. 	DD



 in the absence of a suitable barrier an overhead obstruction less than 2 m and where an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building. 	 where an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building. Compliance is readily achievable with minor design development and/or specification at the Detailed Design Stage. 	
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Cl. D3.9: Wheelchair seating spaces in Class 9b assembly buildings

N/A – Not a Class 9b building.

Cl. D3.10: Swimming pools

N/A – No swimming pool with a perimeter >40m is proposed.

<u>Cl. D3.11: Ramps</u>

DtS Provision	Comment(s)/Recommendation(s)	Status
On an accessway; a series of connected ramps must not have a combined vertical rise of more	Compliance is readily achievable with minor design development and/or	DD
than 3.6 m; and a landing for a step ramp must not overlap a landing for another step ramp or	specification at the Detailed Design Stage.	
ramp.		

Cl. D3.12: Glazing on an accessway

DtS Provision	Comment(s)/Recommendation(s)	Status
Where there is no chair rail, handrail or transom,	all frameless or fully glazed doors,	DD
sidelights and any glazing capable of being mistak	ken for a doorway or opening, must be	
clearly marked in accordance with AS 1428.1.		

BCA Part E3 – LIFT INSTALLATIONS

Cl. E3.6: Passenger lifts

DtS Provision	Comment(s)/Recommendation(s)	Status
 Every passenger lift must – be one of the types identified in Table E3.6a, subject to the limitations on use specified in 	 The proposed passenger lifts shall have the following features – Handrail complying with the mandatory 	DD
 the Table; and have accessible features in accordance with Table E3.6b; and not rely on a constant pressure device for its 	 handrail provisions of AS1735.12, Lift floor dimensions not less than 1,100mm x 1,400mm where the lift vertical travel is less than 12m, 	
operation if the lift car is fully enclosed.	• Lift floor dimensions not less than 1,400mm x 1,600mm where the lift vertical travel is more than 12m,	
	• Minimum clear door opening complying with AS1735.12,	



 Passenger protection system complying with AS1735.12, Lift landing doors at the upper landing, Lift car and landing control buttons complying with AS1735.12, Lighting in accordance with AS1735.12, Automatic audible/visual information within the lift car and at the landings as prescribed, Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received.
A design compliance certificate is be obtained from the lift designer to confirm compliance with the relevant provisions of the BCA and Australian Standards.
<u>Design Detail –</u>
 Ensure lift landing controls are provided no less than 500mm from an internal corner.

BCA Part F2 – SANITARY AND OTHER FACILITIES

Cl. F2.4: Accessible sanitary facilities



 Circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with AS1428.1. An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as a service. 	Design details/fixtures and fittings are to be specified at the Detailed Design Stage.	
possible.		

3.0 ACCESSIBILITY COMPLIANCE STATEMENT

This report has provided a review of the relevant project design documentation to determine the compliance status of the proposed development against Part D3, Clause F2.4 and Clause E3.6 'deemed-to-satisfy' (DtS) requirements of the Building Code of Australia 2019 Amendment 1 (BCA), The Disability (Access to Premises - Buildings) Standards 2010 and the pertinent Australian Standards.

Following this review and with the adoption of the recommendations/Performance Solutions proposed, ABE Consulting are able to confirm that at the Development Application stage of design, the development can readily achieve compliance with the aforementioned BCA provisions.

4.0 REVIEW PROVIDED BY

Prepared by:	Reviewed by:
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