Maccess Consulting Group Pty Ltd

ACCESS CONSULTANTS ADVICE

TO:	Knight Frank	FROM:	Maccess Consulting
ATTN:	Nicholas Cavallo	DATE:	13/12/2021
RE:	Harvey Norman Balgowlah	CC:	Harvey Norman – Justin Tedesco
REF:	Harvey Norman Balgowlah – Dedicated Accessible Car Spaces		

Maccess Consultant: Andrew Crosweller

Maccess Pty Ltd has been engaged by Harvey Norman in the capacity of Access Consultant for the proposed alterations to the existing retail building "Harvey Norman Balgowlah". Maccess has been engaged to prepare performance solutions to address the Building Code of Australia (2019, A1) performance requirements in relation to the proposed dedicated accessible carparking spaces (DAPS) on ground floor resulting from alterations to the lobby entry to the retail space on that level.

Maccess has been asked to comment on the two conditions relating to the provision of dedicated accessible carparking spaces contained in the Development Consent from Northern Beaches Council DA2021/1013 dated 22nd November 2021:

13. **Disabled Parking Spaces**
Where disabled parking spaces are provided they must be in accordance with AS2890.6:2009.

A report from an access consultant confirming that the proposed disabled parking spaces are compliant with the standard and appropriately dimensioned to serve their intended purpose is to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To ensure accessible spaces are fit for purpose in accordance with Australian Standards.

14. **Shared Zone Bollard**
A bollard is to be provided at the shared zone between disabled spaces in accordance to Australian Standards AS2890.6:2009.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To ensure compliance with Australian Standards.

Condition 13 requires that the dedicated accessible carparking spaces be provided in accordance with the Australian Standard AS/NZS2890.6-2009 and condition 14 requires

the bollard within the shared zone be set out to comply with AS2890.6-2009. Elsewhere at condition 2 Northern Beaches Council has included prescribed a condition that the works be carried out in accordance with the Building Code Of Australia.

BCA Compliance:

We note the BCA is a performance-based code and that compliance with the BCA is achieved by meeting the performance requirements (ref A2.0). The performance requirements may be met either by demonstrating compliance with the deemed to satisfy solutions or by developing a performance solution.

In the case of the performance requirements for accessible carparking the BCA states:

> **DP8 Carparking for people with a disability**
>
> Carparking spaces for use by people with a disability must be—
>
> (a) provided, to the degree necessary, to give equitable access for carparking; and
>
> (b) designated and easy to find.

It is only within the deemed to satisfy provisions of the BCA the code nominates compliance with AS/NZS2890.6-2009.:

> **D3.5 Accessible carparking**
>
> *Accessible* carparking spaces—
>
> (a) subject to (b), must be provided in accordance with Table D3.5 in—
>
> (i) a Class 7a building *required* to be *accessible*; and
>
> (ii) a carparking area on the same allotment as a building *required* to be *accessible*; and
>
> (b) need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and
>
> (c) subject to (d), must comply with AS/NZS 2890.6; and
>
> (d) need not be identified with signage where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.

The subject works propose to replace two existing dedicated accessible spaces on ground floor (that may have complied with a superseded design standard) with four new spaces designed with the intent to comply with the current Australian Standard AS/NZS2890.6-2009. On the basis of the overall carparking provision on site following works there will 1 additional space over and above the minimum required dedicated accessible spaces for a retail building of this nature under current BCA requirements.

In this particular case the proposed DAPS are to be incorporated in an existing building and design is limited by the existing structural column setout and existing building conditions. The column setout does not permit a standard DAPS set out of 2400mm wide parking space and a 2400mm wide shared space between each pair as required by AS/NZS2890.6-2009. As a result Maccess has reviewed the proposed alternative design and supports it directly meeting the BCA performance requirement DP8 as documented in the appended performance solution report.

The current wording of condition 13 and 14 of DA2021/1013 require direct compliance with the Australian Standard and we suggest would appear to prevent Harvey Norman proceeding with the performance-based design to meet the BCA performance requirements. In this regard we respectfully request that Council re-word the condition to require compliance with the performance requirements of the Building Code of Australia

as the principle legislative document for compliance rather than direct compliance with the Australian Standard referenced by the deemed to satisfy clauses within the BCA.

Should you have any queries on this correspondence please contact me on the number listed below during normal business hours.

Sincerely,

Andrew Crosweller

0419 189 972

ACAA
ASSOCIATE MEMBER
Andrew Crosweller: 699

Maccess Consulting Group Pty Ltd

PERFORMANCE SOLUTION REPORT

PROJECT:

HARVEY NORMAN BALGOWLAH

Subjects Addressed:

1. **EXISTING LIFT – FLOOR PLATE DIMENSION**
2. **SHARED SPACES ASSOCIATED WITH PROSPOSED DAPS**

Maccess Project Number:	21022
Report Date:	18TH August 2021
Prepared for:	Harvey Norman Property Pty Ltd
Client Contact:	Justin Tedesco
Maccess Consultant:	Andrew Crosweller

Access Institute Qualified Access Consultant

ACAA ASSOCIATE MEMBER Andrew Crosweller: 699

Revision History					
Doc #	**Rev**	**Title**	**Author**	**QA Reviewer**	**Date**
01	1	PS Report	AC	BG	18/08/2021

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1. Introduction

The proposed building works relates to alterations to an existing retail building "Harvey Norman Balgowlah" located in Balgowlah, NSW. The use / classification of the building, as determined by the projects building certifier outlined within the BCA Report prepared by McCarthy Consulting Group is as follows:

Existing Building Use Classification	
Classification	**Ground Floor –** Class 6 retail, Class 7a carparking, class 7b warehouse **Level 1 –** Class 6 retail, Class 7a (open air rooftop carpark) Class 5 Office
Rise in stories	2
Type of construction	Type B*
Floor area (existing)	Fire compartment 1 – Ground floor retail 3016m2 Fire compartment 2 – Ground floor warehouse 2600m2 Fire compartment 3 – Level 1 retail area 1a 3100m2 Fire compartment 4 – Level 1 retail area 2 3460m2 (carparking areas not provided for assessment)
Effective Height	<12m
Building Importance	2
Climate Zone	5

Table from BCA Report dated 08/06/2021

The building comprises two levels of retail trading floors adjacent carparking areas on each level. The building has frontage to Condamine and Roseberry Streets however the existing street front pedestrian access from Condamine St (which has not been used in many years) is proposed to be removed under this work.

All access for customers to the retail building will in future be by either vehicular means or a pedestrian path through the ground floor carpark from Condamine St. The proposed arrangement of the building is shown in the images of the ground and first floor on the following pages.

The purpose of this report is to provide a performance solution which demonstrates that the relevant performance requirements of the Access Code for Buildings (in relation to the existing lift) and BCA 2019 A1 have been met in the design.

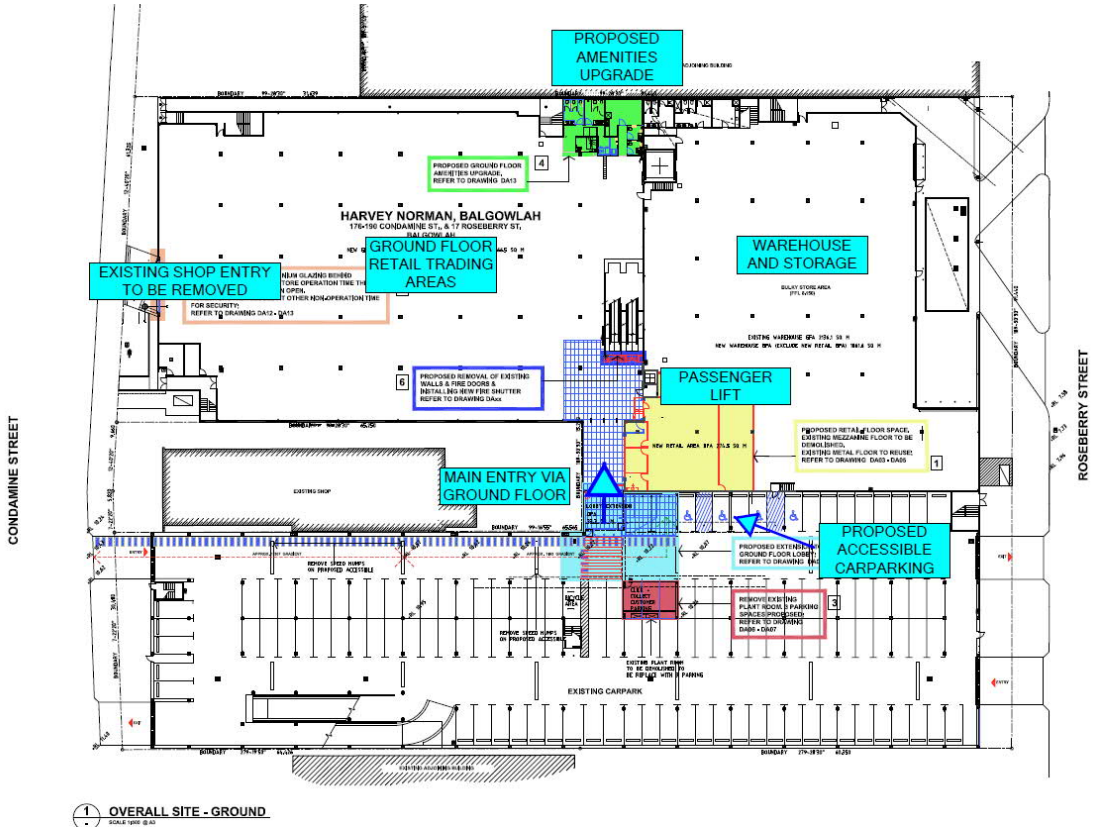


Image 1 – Proposed First Floor (DWG DA-01 A)

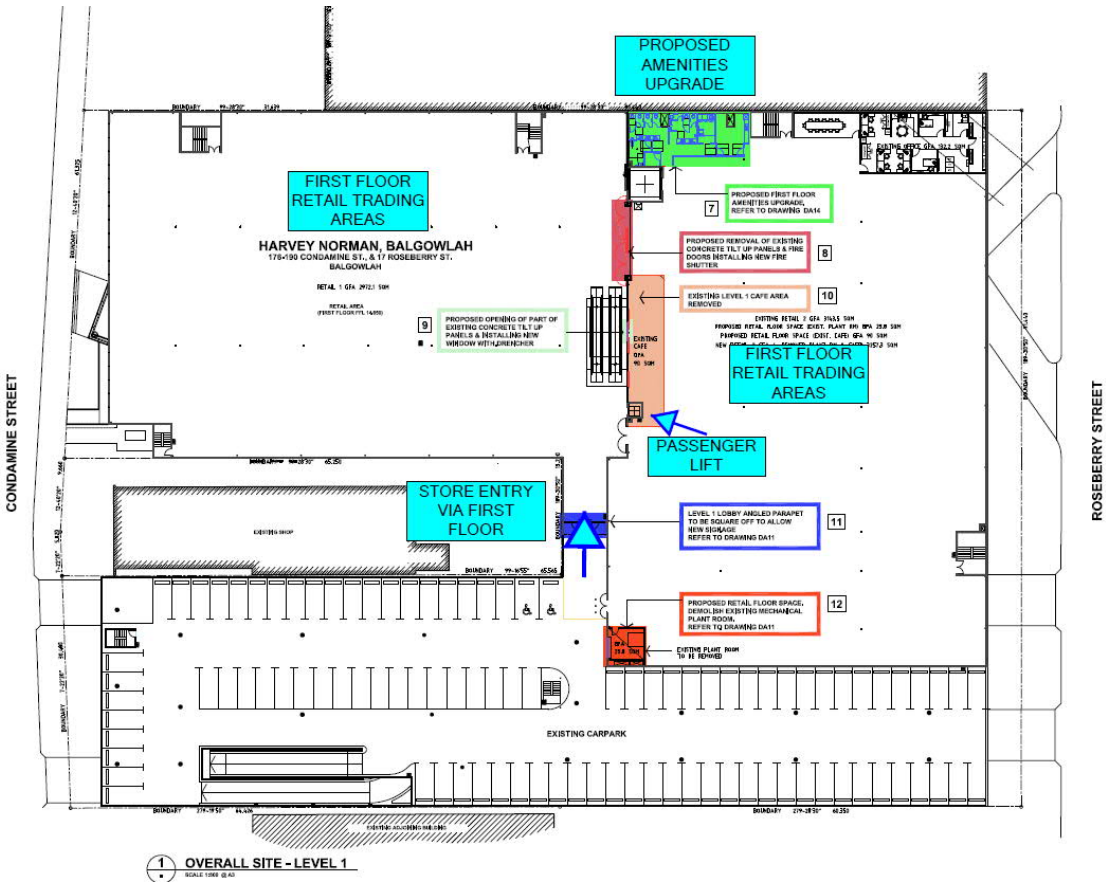


Image 2 – Proposed First Floor (DWG DA-02 A)

Maccess Consulting Group Pty Ltd (Maccess) understand the occupants of this building may comprise a broad spectrum of the general public as shoppers. Staff and contractors working in the building will also be present. We consider staff will be familiar with the building and the functions and use of the surrounds however customers are assumed unfamiliar with the building and may rely on wayfinding signage and assistance from staff in accessing and navigating the store.

The building works have been assessed for this performance solution under the Disability (Access to Premises – Buildings) Standard 2010 (Access Standard) and Building Code of Australia 2019 incorporating Amendment 1 (NCC/BCA).

The Access Standard and NCC/BCA Performance Requirements require access to be provided to class 6 (retail) buildings from a pedestrian entrance required to be accessible to and within all parts of the building by equitable and dignified means. This effectively means all parts of the subject retail building are required to be accessible in terms of compliance with AS1428.1-2009, unless an exemption has been applied to an area under D3.4.

This Performance Solution Report addressed two departures to the deemed to satisfy provisions of the BCA 2019 A1 identified by the Registered Certifier in review. These two items are summarised as follows:

1. Floor plate of the existing passenger lift serving the building has a dimension 1250mm x 1300mm in lieu of the current requirement for a floor plate of 1100mm x 1400mm.
2. The shared space associated with the proposed new accessible carparking spaces on ground floor has a width of 2250mm and is impacted by bollards for an exit door.

It should be noted that the lift car is existing and forms a part of the accessible path of travel to the upper floor of the building. The review of the lift is triggered as the “affected part” forming the accessible path of travel to the upper level under the application of the Commonwealth Governments Disability (Access to Premises – Buildings) Standards 2010. This code applies to existing buildings undergoing building works and aims to ensure access for persons with a disability is made available to existing buildings when they are subject to new works. This performance solution outlines how the existing lift is suitable for persons with a disability in accordance with the performance requirements of this code.

As such, this Performance Solution assessment report addresses the following DtS variations:

No.	Performance Solution Item	Premises Standard & NCC/BCA 2019 PerformanceRequirements	NCC/BCA 2019 DTS Clauses
1.	Floor plate of the existing lift 1250x1300mm	DP1 (a) (iii). EP3.4	D3.3 (b) E3.6 (Table E3.6b)
2.	Shared spaces associated with proposed DAPS has width 2250mm and is impacted by bollards	DP8	D3.5 (c) – must comply with technical requirements of AS2890.6-2009

2. Scope of Appointment

Harvey Norman Property Pty Ltd have engaged Maccess Consulting to provide a Performance Solution report for the specific areas identified above. Maccess have not been engaged or involved with the design or construction of any other areas of the building construction and therefore provide no comment on the accessibility of any other areas within the building.

This report is not transferable to similar situations within this or other projects. This Performance Solution is completed within the parameters of The Disability (Access to Premises – Disability) Standard 2010 and NCC/BCA.

2.1 Supporting documentation

The Performance Solution developed is based on the following supporting documentation:

Drawing/Document	Title	Revision
DA01	Overall Site Plan – Ground	A
DA01	Overall Site Plan – L1	A
DA06	Ground Floor Lobby Extension Plan	A
DA07	Lobby Extension – Elevation and Section	A

In addition to the above architectural drawings, Maccess has been provided with a report on the existing lift:

180248 – Harvey Norman Balgowlah Store, BCA E3 Assessment of Existing Lift prepared by JHA Services dated 10/03/2020. A copy of which is appended to this report.

Maccess accept no responsibility for the accuracy of the drawings or for any design updates that may affect this Performance Solution and supersede the above documentation.

2.2 Relevant Stakeholders

Role	Organisation	Representative
Client and Project Manager:	Harvey Norman Property Pty Ltd	Justin Tedesco
Architect:	Giles Tribe Architects	Danny Yeung
Certifier:	McCarthy Consulting Group Pty Ltd	Paul McCarthy
BCA Consultant	McCarthy Consulting Group (NSW) Pty Ltd	Brett Taylor
Access Consultant	Maccess Consulting	Andrew Crosweller

3. Referenced Legislation

Commonwealth Legislation

- Disability Discrimination Act 1992
- Disability (Access to Premises – Buildings) Standard 2010 incorporating the "Access code for buildings".

State Legislation

New South Wales

- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000

Relevant Codes and Australian Standards

- National Construction Code 2019 Volume 1 - Building Code ofAustralia Class 2 to Class 9 Buildings (NCC/BCA)
- Australian Standard AS 1428.1: 2009 - Design for access and mobility, Part 1: general requirements for access - New building work (AS 1428.1)

- Australian Standard AS 1428.1: 2001 - Design for access and mobility, Part 1: general requirements for access - New building work (AS 1428.1)
- Australian Standard AS 1428.2: 1992 - Design for access and mobility, Part 2: Enhanced and additional requirements – Buildings and facilities (AS 1428.2)
- Australian/New Zealand Standard AS/NZS 2890.6-2009: Parking Facilities, Part 6: Off- street parking for people with disabilities

4. COMPLIANCE

NCC/BCA - Performance Requirements Compliance

The performance requirements of the NCC/BCA are the mandatory level of compliance for new building works. The NCC/BCA states in Part A2.1 that Performance Requirements can only be satisfied by a -

(1) Performance Solution; or

(2) Deemed-to-Satisfy Solution; or

(3) Combination of (1) and (2)

Access Code for Buildings - Performance Requirements Compliance

Part 3 of the Disability (Access to Premises – Buildings) Standard 2010 under clause 3.1 (1) which is relevant to this building states:

> *A building certifier, building developer or building manager of a relevant building (other than an existing public transport building) must ensure that the building complies with the Access Code.*

Under clause 3.2 (1) of the Disability (Access to Premises – Buildings) Standard 2010 it states that compliance with the Access Code is taken to have been achieved where the building complies with the following clauses of the Access Code:

(i) clauses D3.1 to D3.12; (general access provisions)

(ii) clause E3.6; (lifts)

(iii) clauses F2.2 and F2.4; (sanitary facilities)

We note that Clause 3.2 (2) provides that the above listed means of compliance is not intended to limit the way in which a relevant building may otherwise satisfy the applicable performance requirements of the Access Code.

Clause 3.2 (3) carries on to require that any means of compliance under section (2) must be not less than the deemed to satisfy requirements nominated under Clause 3.1, (1).

The performance requirements of the Access Code mirror the BCA in relation to the requirements for lift access for persons with a disability. In this regard the Building Certifier has requested it be demonstrated that the existing lift meets the relevant performance requirement of the Access Code. It is at the discretion of the Building Certifier to accept the performance solution as demonstrating compliance with the Access Code under an approval for building works.

Assessment Methods for Performance Solutions

The NCC/BCA details the options below (or a combination of them) as acceptable assessment methods to determine a building solution complies with the Performance Requirements.

The assessment methods available for this report are noted in Part A2.2 –

Performance Solutions of the BCA identified below:

(1) A Performance Solution is achieved by demonstrating—

(a)compliance with all relevant Performance Requirements; or

(b)the solution is at least equivalent to the Deemed-to-Satisfy Provisions.

(2) A Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of the following Assessment Methods:

(a) Evidence of suitability in accordance with BCA Part A5 that shows the use of a material, product, and plumbing drainage product, form of construction or design meets the relevant Performance Requirements.

(b) A Verification Method including the following:

(i) The Verification Methods provided in the NCC.

(ii) Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.

(c) Expert Judgement.

(d) Comparison with the Deemed-to-Satisfy Provisions.

Maccess believe they provide a suitable case, based on A2.2 (2)(c) Expert Judgement and (d) Comparison with the Deemed-to-Satisfy Provisions to assist in the development of a performance-based solution in conjunction with Maccess' level of specialised knowledge within the area of accessibility.

5. PERFORMANCE SOLUTION 1 – EXISTING LIFT CAR FLOOR PLATE

Proposed Performance Solution – Lift Car Floor Plate

The proposed Performance Solution demonstrates that the existing lift is suitable for use by people with a disability.

Relevant Performance Requirements

The objective of this Performance Solution is to demonstrate compliance with the relevant Performance Requirements identified below. This also provides access that is fair, equitable and dignified for all persons who require access to, and egress from the building.

The specific sections of the relevant Access Code Performance Requirements are:

DP1 Access for people with a disability

Access must be provided, to the degree necessary, to enable—

(a) people to—

(i) approach the building from the road boundary and from any *accessible* carparking spaces associated with the building; and

(ii) approach the building from any *accessible* associated building; and

(iii) access work and public spaces, accommodation and facilities for personal hygiene; and

(b) identification of *accessways* at appropriate locations which are easy to find.

EP3.4 Lift access for people with a disability

When a passenger lift is provided in a building required to be accessible, it must be suitable for use by people with a disability.

Assessment Method:

This performance solution is demonstrated as meeting the relevant performance requirements of the Access Code by means of a comparison to a deemed to satisfy design incorporating expert judgement.

DTS Requirements

The following details the applicable Access Code provisions used for comparative purposes, as summarised in the introduction of this report:

Table D3.1 states that Buildings and parts of buildings must be accessible as required by Table D3.1:

For a Class 6 Building Table 3.1 requires access:

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

Access Code Clause D3.3 Parts of buildings to be accessible:

(a)…

(b) every passenger lift must comply with clause E3.6;

Access Code E3.6 Passenger Lifts:

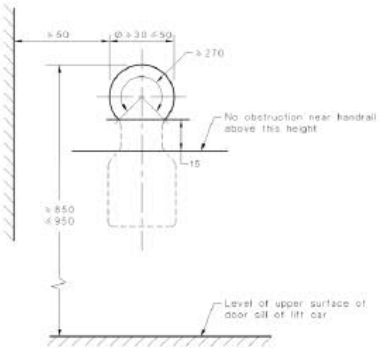
In an accessible building, every passenger lift must:

(a) be one of the lift types identified in Table E3.6 (a), subject to the limitations on use specified in the table; and

(b) have accessible features in accordance with Table E3.6 (b); and

(c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.

The table of BCA E3 compliance from JHA Vertical Transport report is copied below:

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
1.	E3.2 Stretcher facility in lift	Lift travel < 12 m, not applicable	N/A
2.	E3.3 Warning against use of lifts in fire	Signage at landing call stations and wall 	Comply
3.	E3.4 Emergency lifts	Lift travel < 25 m, not applicable	N/A
4.	E3.5 Landings	Clear access provided	Comply
Table 3.6a Limitations on use of types of passenger lifts			
5.	Lift type • Electric passenger lift • Electrohydraulic passenger lift • Stairway platform lift • Inclined lift • Low-rise platform lift • Small-sized, low-speed automatic lift	Electrohydraulic passenger lift	Comply
Table 3.6b Application of features to passenger lifts			
6.	Handrail complying with the provisions for a mandatory handrail in AS 1735.12 	Distance from wall: 60 mm Diameter of handrail: 35 mm Top of handrail: 890 mm Support: below handrail 	Comply

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
7.	Lift floor dimension of not less than 1,400 mm wide x 1,600 mm deep. All lifts which travel more than 12 m.	Lift travel <12m, not applicable	N/A
8.	Lift floor dimensions of not less than 1,100 mm wide x 1,400 mm deep. All lifts which travel not more than 12 m.	1,250 mm wide x 1,300 mm deep	Not comply
9.	Lift floor dimensions of not less than 810 mm wide x 1200 mm deep. A stairway platform lift.	Not applicable	N/A
10.	Minimum clear door opening complying with AS 1735.12. *Minimum 900 mm wide* All lifts except a stairway platform lift.	900 mm wide	Comply
11.	Passenger protection system complying with AS 1735.12. *A series of beams which shall be able to detect a 75 mm diameter rod at any position across the section of the door opening between 50 mm and 1550 mm above the level of the upper surface of the lift car door sill while the door is within 600 mm of being fully closed* All lifts with a power operated door.	Infrared light ray beams (2D) consisting of 94 beams arranged between 25 mm and 1860 mm above the lift car door sill.	Comply
12.	Lift landing doors at the upper landing. All lifts except a stairway platform lift.	Landing doors at upper landing	Comply
13.	Lift car and landing control buttons complying with AS 1735.12. *Landing buttons located between: ≥900mm and ≤1200mm* *Car buttons located between: ≥700mm and ≤1250mm* All lifts except— (a) a stairway platform lift; and (b) a low-rise platform lift.	Landing button located 1070 mm Car buttons located between 1050 mm and 1250 mm	Comply
14.	Lighting in accordance with AS 1735.12 *The lighting system installed within lift cars shall provide a minimum illuminance of 100 lx on a horizontal plane at the level of the car floor.* *The average illuminance on the surface containing the controls shall be not less than 50 lx and the variation in illuminance shall be not more than 3:1."* All enclosed lift cars.	Illuminance on floor: 207 lx Illuminance on controls: 50 lx	Comply Comply
15.	(a) Automatic audible information within the lift car to identify the level each time the car stops; and (b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and (c) audible information and audible indication required by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz All lifts serving more than 2 levels.	Lift serves only two levels	N/A

Item No.	BCA Requirement (AS1735.12 Requirement)	Observation	Status
16.	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. All lifts except a stairway platform lift.	Emergency phone included in Car Operating Panel	Comply
17.	Not rely on a constant pressure device for its operation if the lift car is fully enclosed.	Automatic control	Comply
18.	E3.7 Fire services control	Lift travel <12m, not applicable	N/A
19.	E3.8 Residential care building	Not residential care building	N/A
20.	E3.9 Fire services control switch	Lift travel <12m, not applicable	N/A
21.	E3.10 Lift car fire service drive control switch	Lift travel <12m, not applicable	N/A

Background

The existing lift was reviewed for compliance with the Access Code at the outset of planning for the project. A report was prepared by JHA Vertical Transport Services following a survey of the lift installation. The report is appended to this performance solution.

The vertical transportation compliance report identified that the existing lift complies with all parts of E3 except for the depth of the car being less than 1400mm for the full width of the floor plate. A sketch of the floor plate is below:

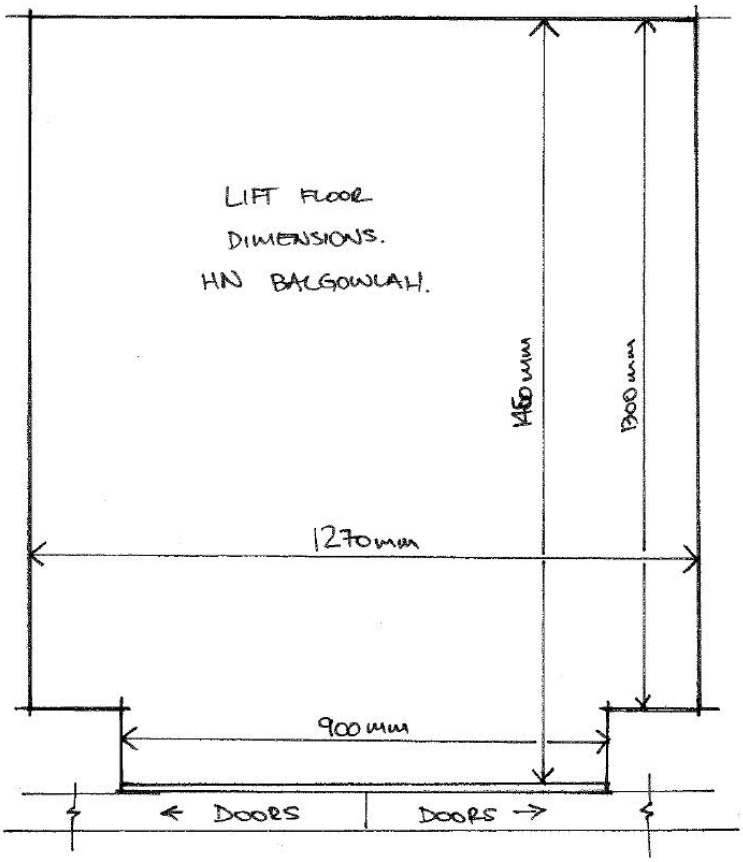
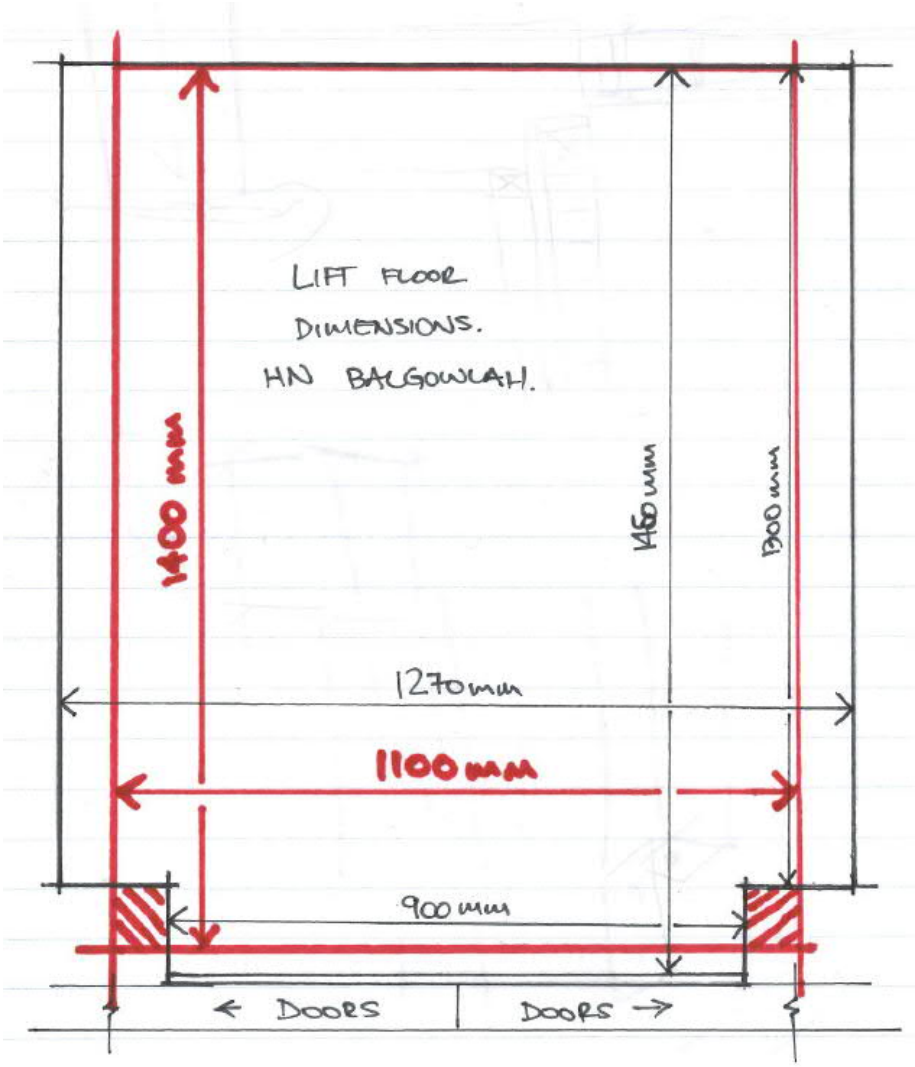


Image 4 – Lift floor dimensions

It can be seen in the above sketch that the lift floor plate has an overall dimension of 1450mm to the internal door face. The width of the floor plate is 1270mm wall to wall at the floor and 1250mm wall to wall at mid height.

Performance Solution Assessment – Lift Floor Plate

As noted above the DtS application of E3.6b requires a lift floor plate of 1100x1400mm. The existing lift, when overlaid with a DtS compliant footprint for the floor plate in red is shown in the image below:



The lift is a single-entry type and is not intended that a person would try to turn around in the lift. A user would enter the lift in the forward direction and reverse out of the lift at the destination floor or the opposite if they see fit and are capable to reverse in.

AS1428.1-2009 includes reference to the A80 and A90 wheelchairs which are representative of the two largest wheelchairs on the market when the research behind AS1428.1 was undertaken. The data set underpinning this standard is a report known as the “Bails Report”, which was commissioned and conducted in 1983.

Implemental in the methodology of the Bails Report was sampling the wheelchairs available for use at the time including manual and powered wheelchairs. By determining the dimensions of wheelchairs, Bails determined and 80th and 90th percentile wheelchair footprint. The 80th percentile (A80) wheelchair footprint represented the size of 80 percent of all wheelchairs at the time, and the 90th percentile (A90) wheelchair footprint represented the size of 90 percent of all wheelchairs sampled at the time.

The below image from AS1428.1-2009 demonstrates the footprint of the A80 and A90 wheelchairs. Note the A90 footprint is 1300mm x 800mm.

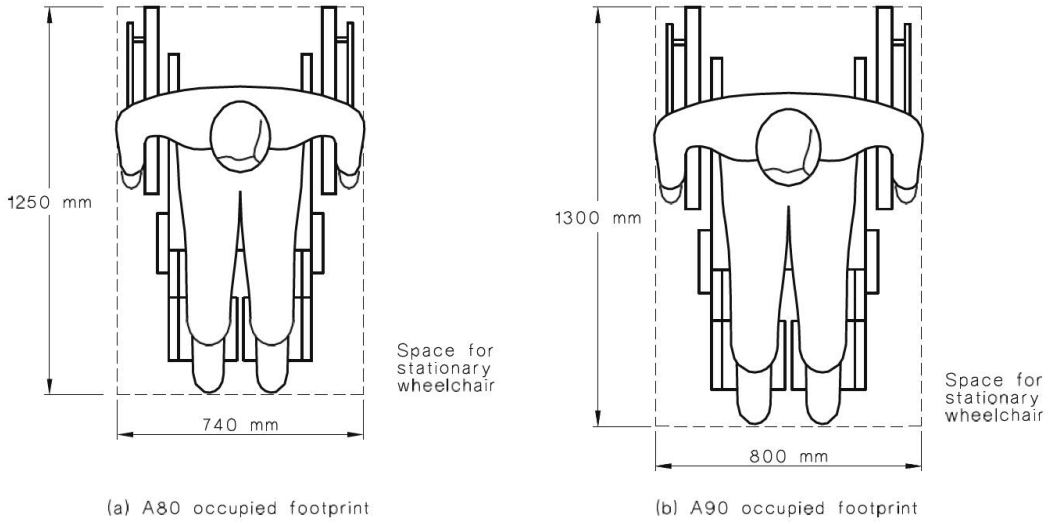


FIGURE 1 FOOTPRINT FOR AN OCCUPIED WHEELCHAIR

It can be seen above that the section of the floor that is outside the 1100mmx1400mm floor plate is limited to the two corners adjacent the doors. This area is minimal and is unlikely to impact on the ability of a person to use the lift. It can also be seen from the dimensions in figure 1 from AS1428.1-2009 the footprint of the A90 wheelchair would fit easily within the clear space of the lift car.

The building has only two levels and the lift provides access between these. In addition to the passenger lift there is an escalator that provides travel between levels for most able bodies persons. Thus it is unlikely demand for the lift is high and queuing is unlikely to occur, allowing a person using a mobility aid sufficient time to enter and operate the lift. We also note that each level of retail trading areas of the building has accessible carparking provided at each level adjacent the entry to the retail spaces on that level. Accessible amenities are also provided on each retail level, avoiding the need for a person relying on the lift to access amenities.

With consideration of the above it is our opinion that the existing lift is suitable to provide access for persons with a disability based the comparison to a DtS design. We also take guidance from AS1428.1-2009 in terms of the footprint of the largest wheelchair

addressed under the Australian Standard for access for persons with a disability noting this will be accommodated by the floor plate of the existing lift.

Conditions Specific to this Performance Solution Report

1. The lift must be kept in good working order at all times the store trades.
2. The lift doors on ground and first floor must achieve luminous contrast of not less than 30% in accordance with Clause 13.1 of AS1428.1-2009.
3. Signage incorporating the international symbol of access shall be provided at the entry to the travelator on ground and first floor indicating the location of the lift and at the lift itself.

General Conditions

1. All parties that have responsibility for the management of the building/tenancy are aware of the existence and conditions of this Performance Solution. Information pertaining to this solution is required to be communicated to any current or future management staff, occupants, contractor, etc. of the building who may be affected by this Performance Solution.
2. This report may no longer be valid if there is a change of circumstances and compliance with the relevant performance requirements of the NCC/BCA will be required.
3. This Performance Solution report is expected to be referenced on the Occupancy Certificate issued by the relevant building surveyor and it acknowledges that all assumptions, recommendations and conditions of this report are adhered to as part of the occupation of the subject building.

Performance Solution Compliance Statement

Maccess Consulting Group Pty Ltd believe that the proposed Performance Solution will satisfy the performance clause DP1 (a) (iii) and EP3.4 of the Access Code and NCC/BCA to a level which is as far as reasonable, and to the degree necessary to ensure suitable access for occupants of the building.

This solution has considered the function of the building, the nature of the building's occupants and the nature of the lift and its use.

6. PERFORMANCE SOLUTION 2 – DAPS

Proposed Performance Solution – Shared space 2250mm wide, columns in DAPS

The performance solution is to support the design of proposed dedicated accessible carparking spaces (DAPS) adjacent a redesigned store entry on ground floor despite dimensional requirements under AS2890.6-2009 not being strictly achieved. The departures to the Australian Standard are noted to be as follows:

1. Shared space 2250mm wide in lieu of 2400mm
2. Bollard for egress door located in the shared space
3. Column within and between DAPS and shared space

Relevant Performance Requirements

The objective of this Performance Solution is to demonstrate compliance with the relevant Performance Requirements associated with designated accessible carparking spaces provided for a class 6 building identified below. This also provides access to carparking that is fair, equitable and dignified for all persons who require access to the building.

The specific sections of the relevant NCC/BCA Performance Requirements are:

DP8

Carparking spaces for use by people with a disability must be—

(a) provided, to the degree necessary, to give equitable access for carparking; and

(b) designated and easy to find.

Assessment Method:

This performance solution is demonstrated as meeting the relevant performance requirements of the BCA by means of a comparison to a deemed to satisfy design of accessible carparking spaces.

DTS Requirements

The following details the applicable BCA DtS provisions used for comparative purposes, as summarised in the introduction of this report:

BCA D3.5 Accessible carparking states

Accessible carparking spaces—

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

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

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

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

(c) subject to (d), must comply with AS/NZS 2890.6; and

(d) need not be identified with signage where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.

Background

As part of the retail store refurbishment, it is proposed to redesign the main entry to the store from the ground level carparking areas and provide additional dedicated accessible car parking spaces adjacent this location. The existing and proposed layouts are indicated in the below two images, existing shown in black and proposed in blue.

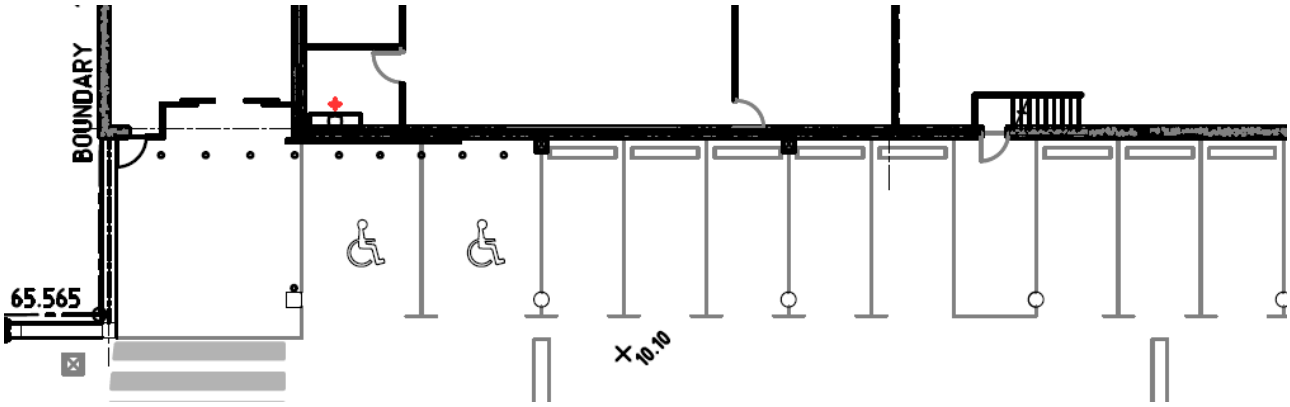


Image – Existing store entry, two existing "accessible carparking" spaces

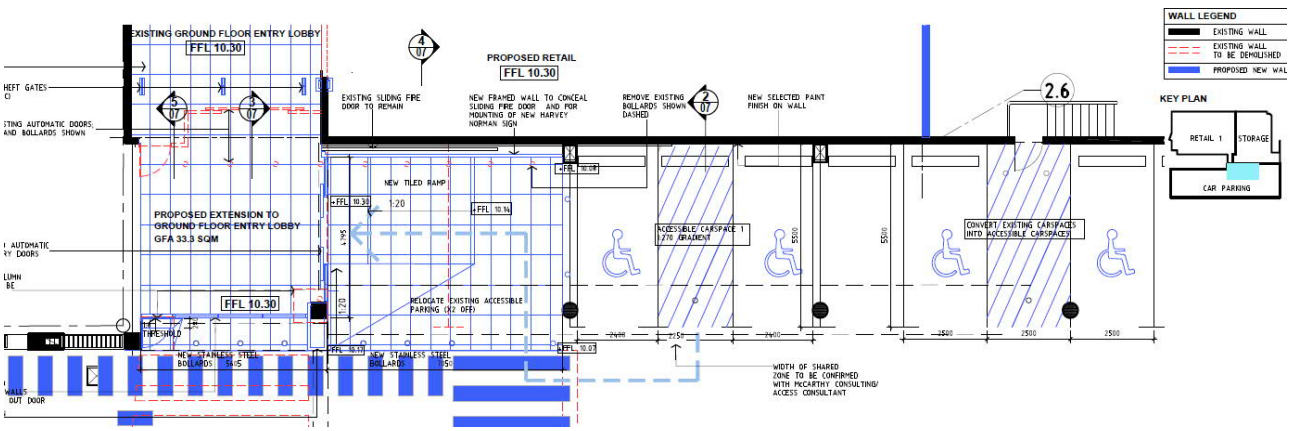


Image – Proposed store entry, four proposed accessible carparking spaces, shared spaces.

The existing building has a total of 222 carparking spaces and therefore application of the current BCA would require not less than five DAPS. Under the proposed works there will be a total of six DAPS provided on site, albeit with two on the upper storey remaining to an

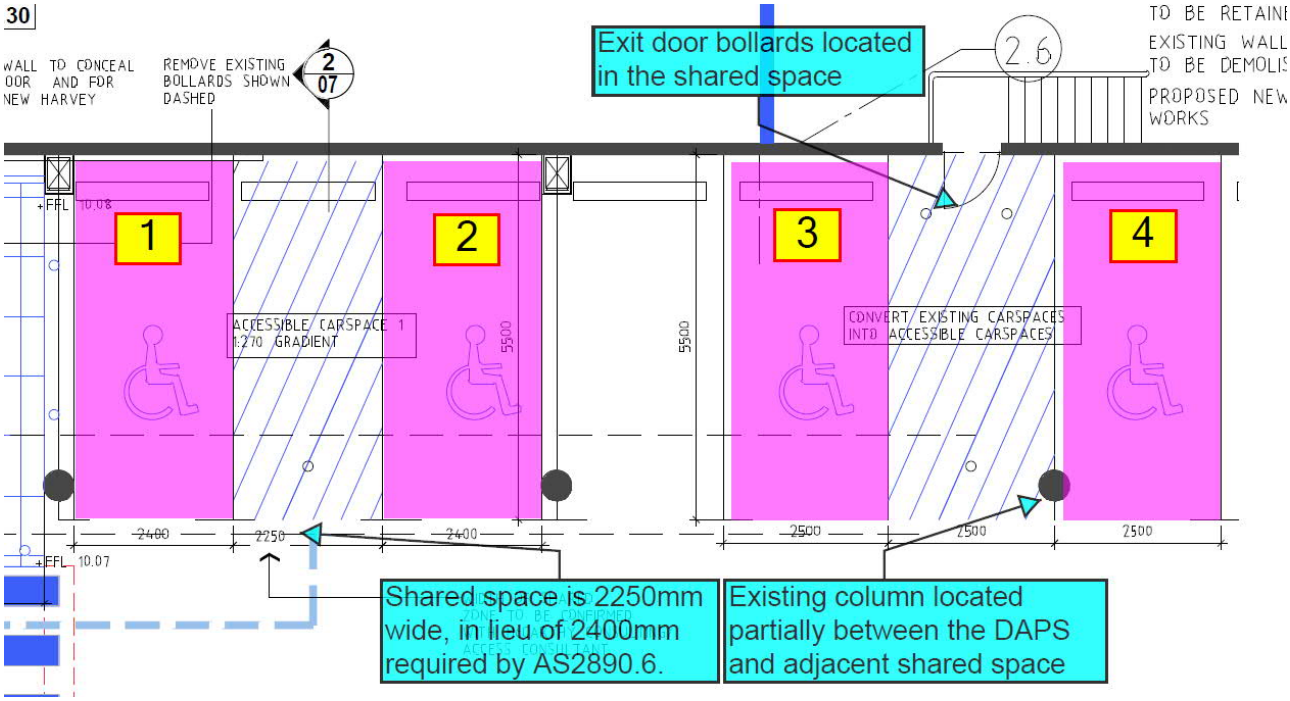
earlier code in force at the time of the original construction.

The proposed four spaces on ground floor are an increase of two over the existing provision and present an improvement in the availability of accessible carparking in the building. The spaces are proposed in a convenient location adjacent the main entry at ground floor. It is also noted that on completion of the proposed works there will be one space in excess of the minimum required under current BCA for a building of this nature.

The proposed spaces have been designed with the regard to the intent of the current Australian Standard for accessible carparking, albeit with some minor technical shortcomings. The departures to the standard are due to the spaces being accommodated within the structural constraints of the existing building which are addressed herein.

Performance Solution Assessment – Design of DAPS and shared spaces

The below image identifies the identified non-compliances with the technical requirements of AS2890.6-2009 for the set out of the dedicated accessible carparking spaces.



AS2890.6 defines a shared area as:

An area adjacent to a dedicated space provided for access or egress to or from a parked vehicle and which may be shared with any other purpose that does not involve other than transitory obstruction of the area, e.g. a walkway, a vehicular aisle, dual use with another adjacent dedicated space

Non compliances in design review are summarised as follows:

Proposed design	AS2890.6 Requirement	Comment
Shared space between 1 and 2 proposed to have 2250mm width	Shared space must have minimum width 2400mm	See item 1 below.
Bollards for egress door located in the shared space between 3 and 4	Clause 2.2.1 (c) nominates location for a bollard within the shared space, 800mm (+-50mm) from front of space at vehicular way.	Suggest exploring with the Building Certifier if the bollards can be removed given bollard provided at the entry to the shared space.
Column located between space 4 and adjacent shared.	Shared area is required to be free of transitory obstructions at all times	See item 2 below.

Item 1 – Shared space dimension 2250mm wide

The proposed shared space between DAPS spaces 1 and 2 is 2250mm wide. This is a result of the two accessible spaces being designed with the intent to comply with AS2890.6 but must fit between the existing structural columns that support the building.

It is noted that Appendix A of AS2890.6 provides commentary on the use of the shared space which includes reference to an area not less than 1200mm x 1200mm being required for the unloading of a ramp or hoist to allow a person to alight the vehicle in a wheelchair and a further area of 1200mm x 1200mm to manoeuvre off the ramp. This is considered as the most conservative case and is not necessarily representative of all users of all DAPS. There will be users of the space that have a range of disabilities and do not require the full area to alight the vehicle. Given there are a range of spaces available in the building it is argued that the provision of the additional DAPS with the shared space 150mm narrower than required by AS2860.9 provides for equitable access to carparking to a greater degree than the minor reduction of shared space is negates it.

To further ensure that users are aware of the slightly narrower space between spaces 1 and 2 a sign shall be installed on the wall at the end of the shared space identifying “NARROW SHARED SPACE - 2250mm WIDE ONLY” in letters 100mm high achieving 30% luminous contrast to the wall.

Item 2 – Column partially located in DAPS 4 and between adjacent shared space

There is an existing column located between space 4 and the adjacent shared space. This column may reduce the final width of the local zone of DAPS 4 to by around 100mm, subject to set out on site. The column also obstructs access to the shares space at that point.

This column is located approximately in line with the bollard required for the designation of the shared zone and in this regard we consider it is located at a point where it is unlikely to form an obstruction to a person unloading a mobility aid, as the bollard is already there. As the column is easily identified a person approaching this space in their car will see the obstruction and is expected to have a high degree of familiarity with the operation of their mobility aid and the means of loading and unloading the vehicle. This means that person can make a decision early to either park in the space in a forward or reverse direction or use one of the adjacent spaces that provides for alternative means to park their vehicle, allowing them to unload.

Given the obvious nature of the structural column and that it is located at a point consistent with the required bollard Maccess confirms that it is of the opinion the column does not prevent the accessible carparking being equitable and functional for users.

Conditions Specific to this Performance Solution Report

1. Signage is to be provided in the shared zone between DAPS 1 and 2 identifying “NARROW SHARED SPACE - 2250mm WIDE ONLY” in letters 100mm high achieving 30% luminous contrast to the wall.
2. Signage is to be provided at the ground floor accessible carparking area indicating two accessible carparking spaces located on the roof top carparking.
3. All other aspects of the dedicated accessible carparking spaces on ground floor are to comply with AS2890.6-2009.

General Conditions

1. All parties that have responsibility for the management of the building/tenancy are aware of the existence and conditions of this Performance Solution. Information pertaining to this solution is required to be communicated to any current or future management staff, occupants, contractor, etc. of the building who may be affected by this Performance Solution.
2. This report may no longer be valid if there is a change of circumstances and compliance with the relevant performance requirements of the NCC/BCA will be required.
3. This Performance Solution report is expected to be referenced on the Occupancy Certificate issued by the relevant building surveyor and it acknowledges that all assumptions, recommendations and conditions of this report are adhered to as part of the occupation of the subject building.

7. Conclusion

Maccess Consulting Pty Ltd believe that the Performance Solution outlined within this report provides a suitable outcome that achieves compliance to the degree necessary with the relevant Performance Requirements of the National Construction Code - Building Code of Australia 2019A1.

The Performance Solutions listed is specific to the current proposed function and use of the building. Should this alter, this report is no longer applicable and the building owner and/or operator may expose themselves to a complaint under the Disability Discrimination Act.

The solution detailed is subject to the conditions that are outlined above.

Should there be any queries regarding this report please contact the office of Maccess Consulting Group Pty Ltd.

Kind regards

Andrew Croswller
0419 189 972
Maccess Consulting Group Pty Ltd

Access Institute Qualified Access Consultant

ACAA ASSOCIATE MEMBER Andrew Crosweller: 699

Appendix A - Referenced Legislation

The relevant legislation and standards listed below are applicable to this report.

Commonwealth Legislation

- Disability Discrimination Act 1992
- Disability (Access to Premises – Buildings) Standard 2010

State Legislation

Queensland

- Building Act 1975
- Building Regulation 2006
- Planning Act 2016
- Planning Regulation 2017
- Queensland Building Code

Relevant Codes and Australian Standards

- National Construction Code 2019 Volume 1 - Building Code ofAustralia Class 2 to Class 9 Buildings (NCC/BCA)

- Australian Standard AS 1428.1: 2009 - Design for access and mobility, Part 1: general requirements for access - New building work (AS 1428.1)

- Australian Standard AS 1428.1: 2001 - Design for access and mobility, Part 1: general requirements for access - New building work (AS 1428.1)

- Australian Standard AS 1428.2: 1992 - Design for access and mobility, Part 2: Enhanced and additional requirements – Buildings and facilities (AS 1428.2)

Appendix B – Experience

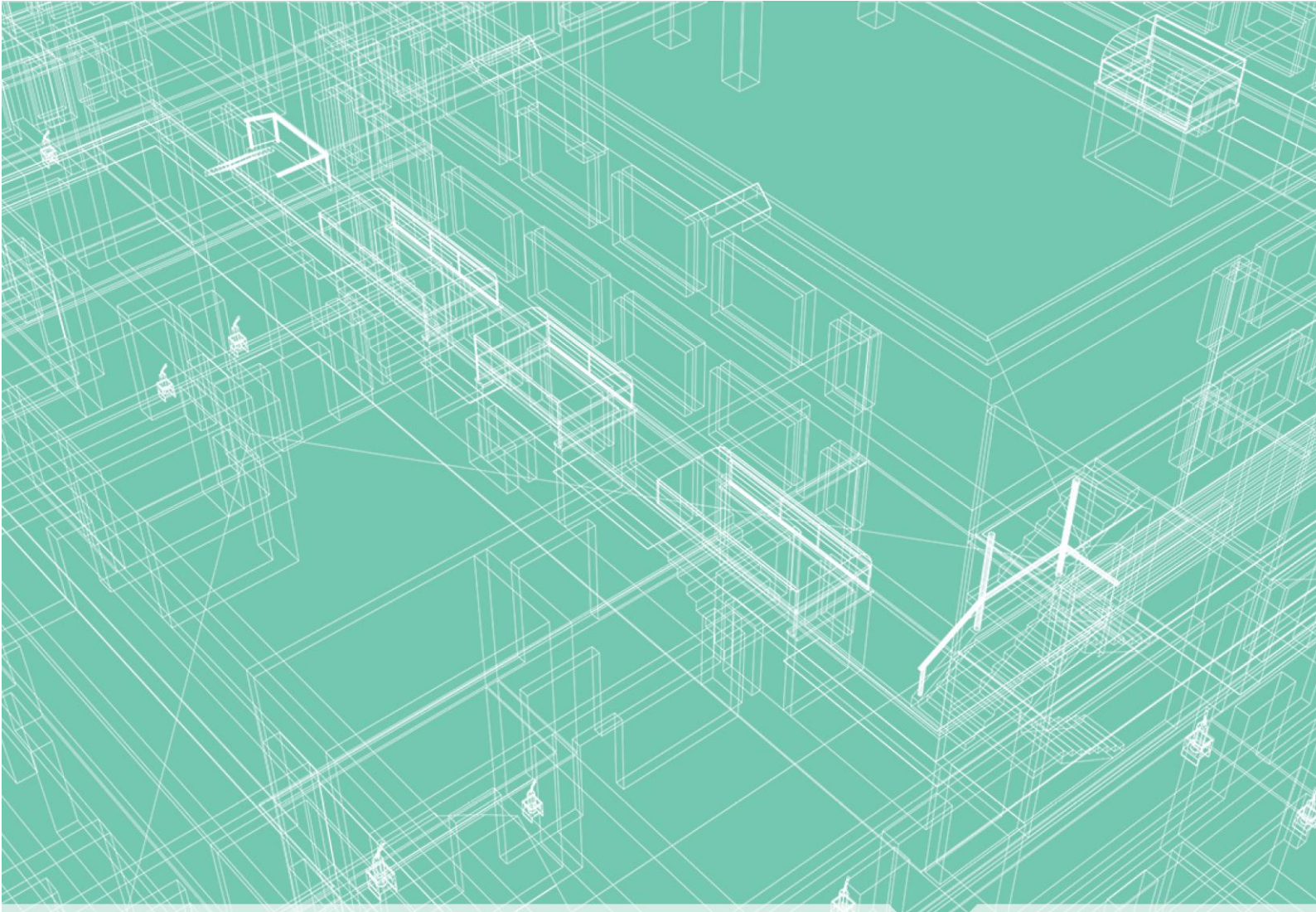
Maccess Consulting Group Pty Ltd is a small business providing consultancy services to the construction and property industry. Our staff have relevant backgrounds, qualifications and experience including building surveying and access consulting. The company employees ACAA Associate Membership holders.

The team at Maccess are passionate advocates with a strong belief in the spirit and intent of the Disability Discrimination Act 1992 (Cth), whose specialised knowledge is highly regarded within the building industry. They approach the built environment from the perspective of creating an accessible environment for all users.

Within any environment Maccess apply the obligations of the Disability Discrimination Act (DDA); the Disability (Access to Premises - Buildings) Standards 2010; National Construction Code, Building Code of Australia and relevant technical requirements of the AS1428 series for access and mobility and applicable documentation. The desired outcome within any project is an environment that ensures functionality, equity and independence of movement for all users.

Appendix C – Document relied upon

JHA Vertical Transport Consultant lift report



BCA E3 ASSESSMENT OF EXISTING LIFT

HARVEY NORMAN BALGOWLAH

176-180 CONDAMINE ST, BALGOWLAH NSW 2093

VERTICAL TRANSPORTATION SERVICES

JHA

JHASERVICES.COM

This report is prepared for the nominated recipient only and relates to the specific scope of work and agreement between JHA and the client (the recipient). It is not to be used or relied upon by any third party for any purpose.

DOCUMENT CONTROL SHEET

Project Number	180248
Project Name	Harvey Norman Balgowlah Store
Description	BCA E3 Assessment of Existing Lift
Key Contacts	Aaron Vega (0402 405 891), Director, Giles Tribe Pty Ltd

Prepared By

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Revision History

Issued To	Revision and Date								
Aaron Vega (Giles Tribe)	REV	A							
	DATE	10.03.20							

CONTENTS

1 SUMMARY

JHA conducted an inspection of the existing lift at Harvey Norman Balgowlah store to assess compliance with National Construction Code 2019 BCA E3 on Wednesday, 4 March 2020.

The lift installation was found to be complying with the BCA except with the lift floor area. The Building Certifier to confirm if this deviation is acceptable.

For any further questions, contact the author.

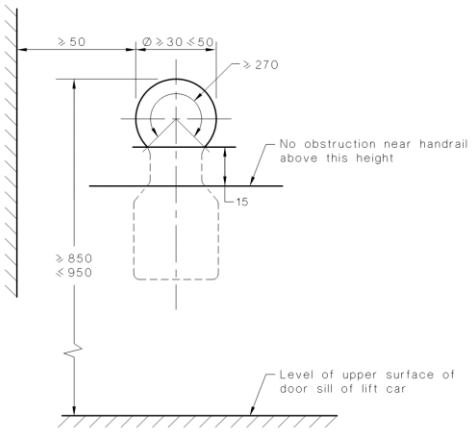
2 UNIT INSPECTED

The site consists of one lift.

Lift	No. 1	
Classification	Passenger	
Original Elevator Manufacture	Deve	
Type	Electrohydraulic	
Speed	0.3 m/s approx.	
Capacity	612 kg	
Passenger Rating	9 (AS 1735.2)	
Travel	4,343 mm approx.	
Levels Served	Two (2)	
Car Dimensions	1,250 mm W x 1,300 mm D	
Ceiling Height	2,400 mm	
Car Entrances	One (1)	
Controller	Automatic	
Door Protection	Infrared multi-beam	
Emergency Communication Device	Included	

3 BCA ASSESSMENT

The lift was assessed against National Construction Code 2019 BCA E3 for compliance.

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
1.	E3.2 Stretcher facility in lift	Lift travel < 12 m, not applicable	N/A
2.	E3.3 Warning against use of lifts in fire	Signage at landing call stations and wall 	Comply
3.	E3.4 Emergency lifts	Lift travel < 25 m, not applicable	N/A
4.	E3.5 Landings	Clear access provided	Comply
Table 3.6a Limitations on use of types of passenger lifts			
5.	Lift type • Electric passenger lift • Electrohydraulic passenger lift • Stairway platform lift • Inclined lift • Low-rise platform lift • Small-sized, low-speed automatic lift	Electrohydraulic passenger lift	Comply
Table 3.6b Application of features to passenger lifts			
6.	Handrail complying with the provisions for a mandatory handrail in AS 1735.12 	Distance from wall: 60 mm Diameter of handrail: 35 mm Top of handrail: 890 mm Support: below handrail 	Comply

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
7.	Lift floor dimension of not less than 1,400 mm wide x 1,600 mm deep. All lifts which travel more than 12 m.	Lift travel <12m, not applicable	N/A
8.	Lift floor dimensions of not less than 1,100 mm wide x 1,400 mm deep. All lifts which travel not more than 12 m.	1,250 mm wide x 1,300 mm deep	Not comply
9.	Lift floor dimensions of not less than 810 mm wide x 1200 mm deep. A stairway platform lift.	Not applicable	N/A
10.	Minimum clear door opening complying with AS 1735.12. *Minimum 900 mm wide* All lifts except a stairway platform lift.	900 mm wide	Comply
11.	Passenger protection system complying with AS 1735.12. *A series of beams which shall be able to detect a 75 mm diameter rod at any position across the section of the door opening between 50 mm and 1550 mm above the level of the upper surface of the lift car door sill while the door is within 600 mm of being fully closed* All lifts with a power operated door.	Infrared light ray beams (2D) consisting of 94 beams arranged between 25 mm and 1860 mm above the lift car door sill.	Comply
12.	Lift landing doors at the upper landing. All lifts except a stairway platform lift.	Landing doors at upper landing	Comply
13.	Lift car and landing control buttons complying with AS 1735.12. *Landing buttons located between: ≥900mm and ≤1200mm Car buttons located between: ≥700mm and ≤1250mm* All lifts except— (a) a stairway platform lift; and (b) a low-rise platform lift.	Landing button located 1070 mm Car buttons located between 1050 mm and 1250 mm	Comply
14.	Lighting in accordance with AS 1735.12 *The lighting system installed within lift cars shall provide a minimum illuminance of 100 lx on a horizontal plane at the level of the car floor.* *The average illuminance on the surface containing the controls shall be not less than 50 lx and the variation in illuminance shall be not more than 3:1.*" All enclosed lift cars.	Illuminance on floor: 207 lx Illuminance on controls: 50 lx	Comply Comply
15.	(a) Automatic audible information within the lift car to identify the level each time the car stops; and (b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and (c) audible information and audible indication required by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz All lifts serving more than 2 levels.	Lift serves only two levels	N/A

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
16.	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. All lifts except a stairway platform lift.	Emergency phone included in Car Operating Panel	Comply
17.	Not rely on a constant pressure device for its operation if the lift car is fully enclosed.	Automatic control	Comply
18.	E3.7 Fire services control	Lift travel <12m, not applicable	N/A
19.	E3.8 Residential care building	Not residential care building	N/A
20.	E3.9 Fire services control switch	Lift travel <12m, not applicable	N/A
21.	E3.10 Lift car fire service drive control switch	Lift travel <12m, not applicable	N/A

4 CONCLUSION

The lift is generally compliant with the requirements of NCC 2019 E3, with the exception of:

Item No.	BCA Requirement (*AS1735.12 Requirement*)	Observation	Status
22.	Lift floor dimensions of not less than 1,100 mm wide x 1,400 mm deep. All lifts which travel not more than 12 m.	1,250 mm wide x 1,300 mm deep	Not comply

Whilst we acknowledge that the car width exceeds the requirements, the car depth is below what is nominated in the BCA, your Building Certifier to confirm if this deviation is acceptable.

Additional comments

- Lift's door closing control is opening and closing the doors 2-3 times before allowing the lift to move. Maintenance provider to assess and rectify.
- The lift levelling at both landings is 12 mm which is the maximum allowable in AS 1735.12. Maintenance provider to ensure.

Appendix D – Performance Based Design Brief

Maccess Consulting Group Pty Ltd

PERFORMANCE BASED DESIGN BRIEF **(BCA 2019 Amendment 1 Clause A2.2 (4))**
PROJECT: HARVEY NORMAN BALGOWLAH
Scope of PBDF: **1. EXISTING LIFT – FLOOR PLATE DIMENSIONS** **2. DIMENSION OF SHARED SPACE ASSOCIATED WITH PROSPOSED DAPS**

Building Description	Harvey Norman Retail Store – Balgowlah
Building type/Function	Class 6 retail, class 7a carparking
Effective Height	<12m
Storeys	2
Location	176-180 Condamine St, Balgowlah

Key stakeholders	**Name**	**Date Consulted**
Building owner/Representative	Harvey Norman Property Pty Ltd	11/08/2021
Builder	Not engaged	-
Project manager	Justin Tedesco (HN)	11/08/2021
Architect	Giles Tribe Architects – Danny Yeung	11/08/2021
Access Consultant	Maccess Consulting	11/08/2021
Registered Certifier	Paul McCarthy	11/08/2021

Summary Of Proposed Building Works:

The proposed building works includes the refurbishment of an existing two-level retail store including changes to entry and carparking.

Proposed Performance Solutions

Solution 1 – Assessment against performance requirements of the access code to address the dimensional set out of the floor plate of the existing lift being less than required under E3.6 in corners adjacent doorway.

Solution 2 – Performance solution for the proposed dedicated accessible carparking that does not meet technical requirements of AS2890.6

Applicable BCA Performance Requirements:

Solution 1 – (Access code) DP1 (a) (iii), EP3.4

Solution 2 – BCA DP8

Agreed Analytical Assessment Processes:

The following are the potential assessment methods to be utilised for the assessment process in developing the performance solution.

a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.
(b) A Verification Method including the following:
(i) The Verification Methods provided in the NCC.
(ii) Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.
(c) Expert Judgement.
(d) Comparison with the Deemed-to-Satisfy Provisions.

Maccess suggests a combination of (c) and (d) above will be used in the justification.

Agreed Acceptance Criteria:

Access consultant to review both proposed performance solutions and assess against the identified performance requirements using the analytical assessment process above to confirm the performance solution designs meet relevant performance requirements identified herein.

Required Supporting Evidence:

Nil specified for these two items.

Format and Content of Final Report

Written report with diagrammatic commentary on performance solution items.