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Livable Housing Report

Development Application

Palmdev Pty Ltd

1112-1116 Barrenjoey Road

Palm Beach NSW 2108

Fire Safety Engineers | Inclusive Accessibility Consultants | Building Code Consultants

Suite 6 | 113 Reservoir Street Surry Hills NSW 2010 t (02) 8399 3707
hello@dcpartnership.com.au www.dcpartnership.com.au ABN 72 896 582 485

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Project: 1112-1116 Barrenjoey Rd, Palm Beach
Document Type: Livable Housing Design Guidelines Assessment Report
Our Reference: P221_249-3 (LHA DA) DY

The following report register documents the development and issue of this and each subsequent report(s) undertaken by DC Partnership.

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Revision History—

OUR REFERENCE	REMARKS	ISSUE DATE
P221_249-1 (LHA DA) JLS	Draft report issued to client for review and comment	13 July 2023
P221_249-2 (LHA DA) JLS	Report issued as FINAL	6 September 2023
P221_249-3 (LHA DA) DY	Report issued as FINAL to reflect current design, namely the reduction in the number of units.	01 April 2025

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CONTENTS

1.0 INTRODUCTION

1.1 General

This Livable Housing Design Guidelines (LHA) has been prepared at the request of Palmdev Pty Ltd and relates to the proposed mixed-use retail and residential development located at 1112-1116 Barrenjoey Road, Palm Beach NSW 2108.

1.2 Basis of Assessment

This report is based upon Livable Housing Design Guidelines Fourth Edition, Livable Housing Australia, 2017.

1.3 Documentation Provided for Assessment

This Livable Housing Design Guidelines (LHA) assessment is based upon the architectural documentation prepared by Koichi Takada Architects and listed within **Appendix 1**.

1.4 Limitations

This report is based upon, and limited to, the information depicted in the documentation provided for assessment and does not make any assumptions regarding design intention or the like.

1.5 Report Exclusions

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken—

(i) The National Construction Code 2022, Volume One, Amendment 1, Building Code of Australia Class 2 to Class 9 Buildings, The Australian Building Codes Board; and

(ii) Work Health & Safety Act and Regulations; and

(iii) Work Cover Authority requirements; and

(iv) Structural and Services Design Documentation; and

(v) The Disability Discrimination Act (DDA) 1992; and

(vi) The individual requirements of service authorities (i.e. Telecommunication Carriers, Sydney Water, Energy Australia).

1.6 Interpretation Notes

To provide the reader with additional context the following information regarding assessment methodology used in this assessment is provided below—

(i) Movable furniture is the ongoing responsibility of the occupants who should maintain appropriate circulation spaces between and around furnishings;

(ii) For an assessment of the accessibility provisions as required by the BCA 2022, refer to the report prepared by DC Partnership [reference P221_249-2 (ACCESS DA) JLS].

2.0 DEVELOPMENT DESCRIPTION

2.1 General

The concept of Livable Housing Design is to provide guidelines for the design of new homes (of Classes 1a, 1b, 2, 3 and 4 buildings as defined in Part 3 of the BCA) which will reduce the need for future costly modifications.

The assessment undertaken relates to ensuring compliance with the *Livable Housing Design Guidelines Fourth Edition* as prepared by Livable Housing Australia (LHA).

It should be understood that only a registered LHA Design Guideline Assessor is authorised to submit the Assessment Form to LHA in order to obtain compliance with the desired LHA Performance Level.

2.2 Purpose of Report

The purpose of this report is to identify the extent to which the architectural design documentation complies with the provisions of Livable Housing Design Guidelines (LHA).

LHA Performance levels are based on 15 Livable Housing Design Elements—

1. Dwelling access;
2. Dwelling entrance;
3. Internal doors and corridors;
4. Toilet;
5. Shower;
6. Reinforcement of bathroom and toilet walls;
7. Internal stairs;
8. Kitchen space;
9. Laundry space;
10. Ground (or entry level) bedroom space;
11. Switches and power points;
12. Door and tap hardware;
13. Family/living room access to external areas;
14. Windowsills; and
15. Flooring.

Based upon the above design elements there are three (3) levels of performance (Silver, Gold and Platinum) ranging from basic requirements through to best practice in Livable home design. The levels identified within the LHD Guidelines are as follows—

Silver Level

Seven core Livable housing design elements focusing on key structural and spatial elements to ensure flexibility and adaptability. The seven core elements are as follows—

1. A safe continuous and step free path of travel from the street entrance and / or parking entrance to a dwelling entrance that is level;
2. At least one, level (step free) entrance into the dwelling;
3. Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces;
4. A toilet on the ground (or entry) level that provides easy access;
5. A bathroom that contains a hobless shower recess;
6. Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date;
7. Stairways are designed to reduce the likelihood of injury and also enable future adaptation.

Silver level Livable housing concerns itself with design elements 1-7.

Gold Level

Enhanced requirements for most of the core Livable housing design elements plus additional elements allowing for more generous dimensions. Gold level Livable housing concerns itself with design elements 1-12.

Platinum Level

Further enhanced requirements for the core Silver and Gold Livable housing design elements plus all remaining elements. Platinum level Livable housing concerns itself with design elements 1-15 (all design elements).

2.3 Development Description

A total of five (5) residential units are proposed within the subject development. Units 102are designated as Liveable. The Pittwater 21 Development Control Plan – Section C1.9 requires a min. 20% of the dwellings in a Shop Top housing and Mixed Use developments to be in accordance with Silver Level of the Liveable Housing Guideline.

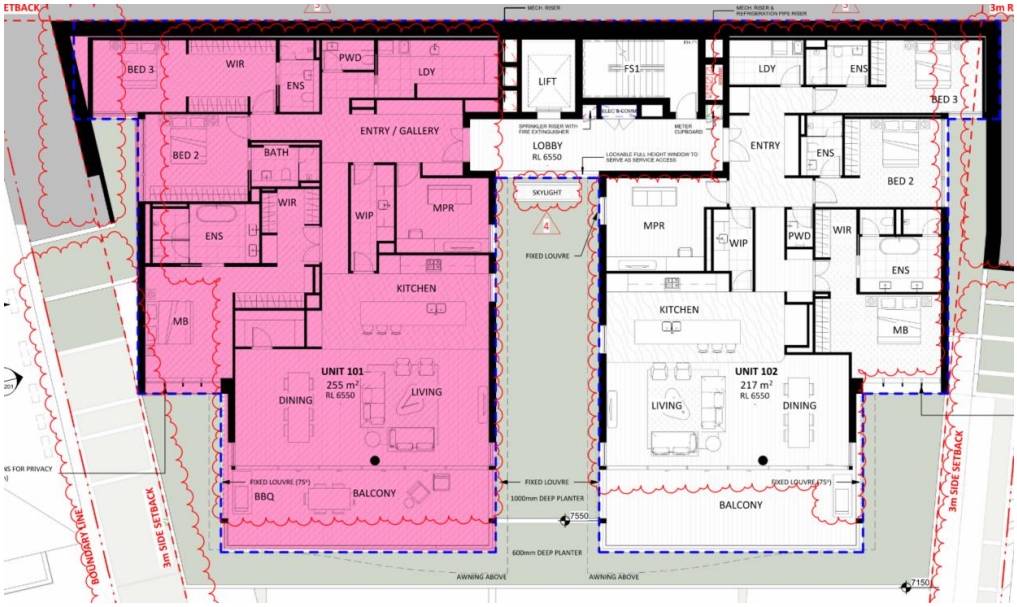

Figure 1 – Level 1 – Unit 102

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3.0 LHA GUIDELINES ASSESSMENT SUMMARY

3.1 General

The following table summarises the compliance status of the architectural design in terms of the fifteen (15) design elements of the Livable Housing Design Guidelines.

The intent of LHD Silver level is to comply with basic structural and spatial design elements.

The intent of LHD Gold level is to comply with more generous dimensions than required at Silver level and to comply with additional design elements.

The intent of LHD Platinum level is to comply with enhanced requirements to those required at Silver and Gold level and to comply with additional design elements.

It should be recognised that in the following table instances exist where prescriptive non-compliance occurs, or design detail is required. Such instances should not necessarily be considered deficiencies; but matters which need to be considered by the design team and any assessment authority at relevant stages of construction.

For those instances of either prescriptive non-compliance or design detail, detailed analysis and commentary have been provided within **Section 4.0** of this report.

3.2 Schedule of Livable Housing Design Guidelines

	SILVER DESIGN ELEMENT	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
1	Dwelling Access			✓
2	Dwelling Entrance	✓		
3	Internal Doors & Corridors	✓		
4	Toilet	✓		
5	Shower	✓		
6	Reinforcement of Bathroom & Toilet Walls			✓
7	Internal Stairs	**N/A**		

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4.0 LHA GUIDELINES DETAILED ASSESSMENT

4.1 General

With reference to the Livable Housing Design Guidelines Assessment Summary contained within **Section 3.0** of this report, the following detailed analysis and commentary is provided.

This commentary is formulated to enable the design documentation to be further progressed, for the purpose of evidencing the attainment of compliance with the relevant provisions of the LHD Guidelines.

4.2 Detailed Assessment

4.2.1 Dwelling Access

A safe, continuous, step-free, level pathway from the street entrance and or parking area to a dwelling entrance is required.

The following comments are provided in regards the requirements of Design Element 1 of the Livable Housing Guidelines—

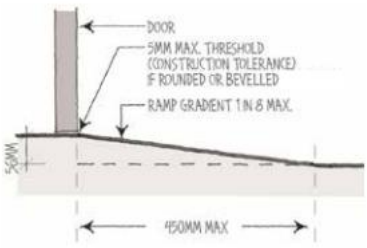
ITEM	REQUIREMENT	ASSESSMENT
Path of Travel	A continuous, step free pathway is required from the front boundary to the entry door of each LHA dwelling.	Reference is made to the Access Design Assessment Report prepared by DC Partnership [ref. P221_249-2 (ACCESS DA) JLS] for areas of concern relating to access from the site boundary. This will be updated further, as currently design development is ongoing.
Path Design	The path of travel should be a minimum 1000mm wide from the street entrance (or from the carparking space) to the front door. If the pathway incorporates a ramp, it is required to comply with the provisions of AS1428.1-2009.	The path of travel to the building entrance is capable of achieving compliance.
Car Space Pathway	If the pathway is provided via an associated carparking space the carparking bay is required to be a minimum width of 3200mm and a minimum length of 5400mm to be relied upon as the safe and continuous pathway to the dwelling entrance.	Not applicable. A separate path is provided from the boundary to the building entrance.
Step Ramp	If the doorway incorporates a step ramp, it is required to comply with the provisions of AS1428.1-2009.	Not applicable. The entrance doorway threshold is shown level with the FFL.

ITEM	REQUIREMENT	ASSESSMENT
Ramp Landings	Where ramps form part of the pathway they are required to have level landings of no less than 1200mm length at the head and foot of the ramp, exclusive of any door or gate swing.	Not applicable. There are no ramps along the required pathway.
Specification	Silver level dwelling access specification to be satisfied.	Ensure the Dwelling Access Specification as listed within Appendix 2 is noted on design and construction drawings, compliant with Design Element 1 of the Livable Housing Guidelines.

4.2.2 Dwelling Entrance

At least one (1) step free entrance into the dwelling is required to enable home occupants to easily enter and exit the dwelling.

The following comments are provided in regards the requirements of Design Element 2 of the Livable Housing Guidelines—

ITEM	REQUIREMENT	ASSESSMENT
Entrance Door	A level (step-free) transition and threshold are to be provided. A maximum tolerance of 5mm is permitted if the lip is rounded or bevelled.	The building entrance door complies as specified on drawing.
Door Opening Width	The dwelling entrance doorway requires a minimum clear opening width of 820mm.	The entry door/s are shown to comply.
Entry Threshold	A level threshold complying with Figure 1 (b) of the LHA Guidelines is required to the step free entrance doorway.  Figure 1(b) Weather protection: 1 in 8 max. ramp at threshold	Design detail – ensure step free access will be achieved at the entry door.
Entry Landing	A level landing area of 1200x 1200mm is to be provided at the arrival (external) side of the entrance door.	The entry door/s are shown to comply.
Entry	The entrance requires reasonable shelter from the weather.	The entry door/s are shown to comply.

ITEM	REQUIREMENT	ASSESSMENT
Specification	Silver level dwelling entrance specification to be satisfied.	Ensure the Dwelling Entrance Specification as listed within **Appendix 2** is noted on design and construction drawings, compliant with Design Element 2 of the Livable Housing Guidelines.

4.2.3 Internal Doors & Corridors

Internal doors and corridors are required to facilitate comfortable and unimpeded movement between spaces.

The following comments are provided in regards the requirements of Design Element 3 of the Livable Housing Guidelines—

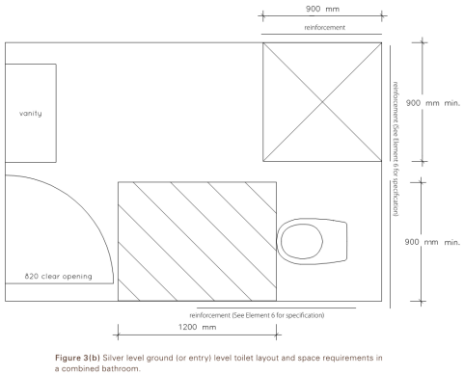
ITEM	REQUIREMENT	ASSESSMENT
Internal Doorways	Doorways to entry level living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartments are required to have a minimum clear opening width of 820mm.	Doors are shown to comply.
Corridor Width	Internal corridors and passageways to have a minimum clear width of 1000mm	Corridor widths are shown to comply.
Specification	Silver level internal doors and corridors specification to be satisfied.	Ensure the Internal Doors & Corridors Specification as listed within **Appendix 2** is noted on design and construction drawings, compliant with Design Element 3 of the Livable Housing Guidelines.

4.2.4 Toilet

The ground (or entry level) toilet is required to support easy access for home occupants and visitors.

The following comments are provided in regards the requirements of Design Element 4 of the Livable Housing Guidelines—

ITEM	REQUIREMENT	ASSESSMENT
WC Width	Where located in a combined bathroom the toilet pan is to be located in the corner of the room to enable the future installation of grabrails.	Drawings indicate the ensuite toilets are shown to achieve compliance
Clear Space	Provide 1200mm clear in front of the toilet pan as per Figure 3b of the LHA Guidelines.	Drawings indicate the ensuite toilets are shown to achieve compliance (suitable for DA stage level of detail, the exact dimensions

ITEM	REQUIREMENT	ASSESSMENT
	 Figure 3(b) Silver level ground (or entry) level toilet layout and space requirements in a combined bathroom.	shall be finalised during detailed designs stage).
Specification	Silver level toilet specification to be satisfied.	Ensure the Toilet Specification as listed within **Appendix 2** is noted on design and construction drawings, compliant with Design Element 4 of the Livable Housing Guidelines.

4.2.5 Shower

The bathroom and shower is to be designed for easy and independent access for all home occupants.

The following comments are provided in regards the requirements of Design Element 5 of the Livable Housing Guidelines—

ITEM	REQUIREMENT	ASSESSMENT
Shower Position	The shower is to be located in the corner of the room to allow for future grabrails.	The shower position complies.
Specification	Silver level shower specification to be satisfied.	Ensure the Shower Specification as listed within **Appendix 2** is noted on design and construction drawings, compliant with Design Element 5 of the Livable Housing Guidelines.

4.2.6 Reinforcement of Bathroom & Toilet Walls

Bathroom and toilet walls are to be built to enable grabrails to be safely and economically installed.

The following comments are provided in regards the requirements of Design Element 6 of the Livable Housing Guidelines—

ITEM	REQUIREMENT	ASSESSMENT
Toilet Pan Reinforcement	Walls (other than solid masonry or concrete) around the shower and bath (if provided) to be reinforced	Provide fixing details or specify requirements as shown in Appendix 2.

ITEM	REQUIREMENT	ASSESSMENT
	to provide a fixing surface for the safe installation of grabrails.	This can be coordinated to achieve compliance at future stages of the project.
Wall Construction	The walls around the toilet are to be reinforced by installing: (i) noggings with a thickness of at least 25mm in accordance with Figure 6(a) of the LHA Guidelines; or (ii) sheeting with a thickness of at least 12mm in accordance with Figure 6(b) of the LHA Guidelines.	Drawings indicate the ensuite toilets are shown to achieve compliance.
Specification	Silver level reinforcement of bathroom and toilet walls specification to be satisfied.	Ensure the Reinforcement of Bathroom and Toilet Walls Specification as listed within **Appendix 2** is noted on design and construction drawings, compliant with Design Element 6 of the Livable Housing Guidelines.

4.2.7 Internal Stairways

Not applicable. There are no internal stairways within the selected livable housing dwellings.

5.0 CONCLUSION

5.1 General

Our strategy for ensuring compliance will be refined and documented during the design process in conjunction with the continual development of the architectural documentation, as required.

Based upon our assessment to date we are of the opinion that the subject development is capable of achieving compliance with the relevant *Class C* provisions of the *Silver Level* provisions of the *Livable Housing Design Guidelines Fourth Edition*, Livable Housing Australia, 2017, subject to the comments and the design detail contained in **Section 4.0**.

We trust that the above information is sufficient for the consent authority in assessing the merit of the architectural design from a planning perspective.

Report By

David Yan
Building Code Consultant
For DC Partnership

Verified By

John La Scala
Principal | Accessibility
For DC Partnership

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APPENDIX 1 – ASSESSED DOCUMENTATION

This adaptable housing assessment was based upon the architectural documentation prepared by Koichi Takada Architects namely—

DRAWING NUMBER	REV	DRAWING TITLE	DATE
A0099	C	BASEMENT 1 - FLOOR PLAN	14.03.25
A0100	C	GROUND FLOOR - FLOOR PLAN	14.03.25
A0101	C	LEVEL 01 - FLOOR PLAN	14.03.25
A0102	C	LEVEL 02 - FLOOR PLAN	14.03.25
A0103	C	LEVEL 03 - FLOOR PLAN	14.03.25
A0105	C	ROOF PLAN - FLOOR PLAN	14.03.25
A0200	C	WEST ELEVATION (BARRENJOEY RD)	14.03.25
A0201	C	NORTH ELEVATION (SIDE)	14.03.25
A0202	C	EAST ELEVATION (REAR)	14.03.25
A0203	C	SOUTH ELEVATION (SIDE)	14.03.25
A0450	C	LANDSCAPE AREA DIAGRAM	14.03.25

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APPENDIX 2 – SILVER LEVEL SPECIFICATION

1.	DWELLING ACCESS
1.1.	The pathway is to have an even, firm, step-free and slip resistant surface (in accordance with HB197-1999) and a crossfall of not more than 1:40.
1.2.	If the pathway is provided via an associated carparking space the carparking bay is required to have— a. An even, firm and slip-resistant surface; and b. A level surface with a maximum gradient of 1:40 (1:33 permitted for bitumen finish).

2.	DWELLING ENTRANCE
2.1.	A level (step-free) transition and threshold are to be provided. A maximum tolerance of 5mm is permitted if the lip is rounded or bevelled.
2.2.	If a threshold exceeds 5mm and is not more than 56mm a threshold ramp in accordance with LHA Guidelines Figure 1(b) may be provided.
2.3.	The dwelling entrance is to incorporate waterproofing and termite management requirements as specified in the BCA.

3.	INTERNAL DOORS & CORRIDORS
3.1.	Doorways to entry level living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartments are to have a level threshold with a maximum vertical tolerance of 5mm between abutting surfaces (if rounded or bevelled).

4.	TOILET
4.1.	The toilet pan is to be located in the corner of a combined bathroom to enable the future installation of grabrails. Reinforcement guidelines for walls in bathrooms and toilets are found in Element 6 below.

5.	SHOWER
5.1.	One (1) bathroom is required to provide a slip-resistant (in accordance with HB197-1999), hobless shower recess. Shower screens are permitted provided they can be removed at a later date. Note: For hobless specification refer to Australian Standard AS3740-3.6.
5.2.	The shower is to be located in the corner of the room to enable the installation of grabrails at a future date. Reinforcement guidelines for walls in bathrooms and toilets are found in Element 6 below.

6.	REINFORCEMENT OF BATHROOM & TOILET WALLS
6.1.	Walls around the toilet, bath (if provided) and shower are to be reinforced by installing— - Noggins with a thickness of at least 25mm; or - Sheeting with a thickness of at least 12mm.
6.2.	Wall reinforcement to be capable of withstanding a force of 1100N applied in any position and in any direction.

7.	INTERNAL STAIRWAYS – (When Installed)
7.1.	A continuous handrail on one side of the stairway (where there is a rise of more than 1000mm) to be constructed in accordance with the applicable National Construction Code for the project.

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Design Confidence (Sydney) Pty Ltd *trading as* DC Partnership

Suite 6 | 113 Reservoir Street, Surry Hills NSW 2010
ABN: 72 896 582 485

T: 02 8399 3707
E: hello@dcpartnership.com.au
W: www.dcpartnership.com.au

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