



## Accessibility Design Review

Lismore Base Hospital - Stage 3C North Tower  
Extension

60 Uralba Street, Lismore NSW

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## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	3
1.0 INTRODUCTION .....	4
1.1 Current Legislative and Statutory Requirements .....	4
1.2 Legislation .....	4
1.3 Documentation .....	4
BUILDING & ENVIRONMENT ASSESSMENT DATA FOR THIS PROJECT.....	4
2.0 ROOM DESIGNATION STRATEGY .....	5
3.0 EXEMPTIONS AND PERFORMANCE BASED SOLUTIONS.....	6
3.1 Areas considered as exempt from the requirement to be Accessible under the BCA Clause D3.4: .....	6
3.2 Performance Based Solution.....	6
4.0 TECHNICAL REVIEW .....	6
4.1 Mandatory Compliance Requirements .....	6
4.2 Recommendations to Enhance Accessibility .....	10
5.0 CONCLUSION .....	11
6.0 APPENDIX A – Drawing List .....	12
7.0 APPENDIX B – Room Designation Strategy Plans .....	13

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## **EXECUTIVE SUMMARY**

The proposed project is located at 60 Uralba Street Lismore NSW 2480.

The project involves the new extension to the North Tower construction on Levels 7,8,9 and 10

The following report is a review of the preliminary Design documentation and provides a summary of the compliance strategy of the development highlighting the key principles of accessibility as well as the technical requirements of a building to ensure visitors staff and patients have independent, equitable and dignified use.

In general, the design provides a high degree of accessibility, with the few matters highlighted, requiring clarification or additional detail as the design progresses.

The main items requiring clarification are as follows:

- Provide a schedule detailing the rooms / spaces where in-built amplification is installed;
- Provide statutory signage schedule for further review

## 1.0 INTRODUCTION

The proposal includes the construction of the North Tower extension which is part of stage 3C.

The subject site is located at 60 Uralba Street, Lismore.

This report provides a compliance overview of the project with respect to the nominated legislation with recommendations on achieving compliance with the spirit and intent of Disability Discrimination Act (DDA), within the project scope. Detailed Design documentation and compliance assessment will be undertaken as the design develops.

The compliance advice is provided in two parts, the first relates to areas of compliance that are mandatory with the second part relating to recommendations/enhancements that could be adopted to improve building functionality, accessibility and the safety of occupants.

### 1.1 Current Legislative and Statutory Requirements

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

The Access to Premises Standards applies in addition to the DDA and contains provisions relating to existing buildings and a range of technical provisions which were introduced into the Building Code of Australia in 2011. The enhanced BCA technical provisions if complied with, are deemed to satisfy the provisions of the DDA for the base building only.

Notwithstanding the above compliance with the provisions of the DDA is required for non-base building elements including fitout, access to services and equipment, and outdoor areas and services associated with buildings.

### 1.2 Legislation

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

- Disability Discrimination Act (DDA) 1992.
- Disability (Access to Premises – Buildings) Standards 2010 (DAPS 2010).
- Building Code of Australia (BCA) 2016
- AS1428.1 2009 Part 1: General Requirements for access – new building work.
- AS1428.2 1992 Part 2: Enhanced and additional requirements – Buildings and facilities.
- AS1428.4.1 2009 Part 4.1: Means to assist the orientation of people with vision impairment – TGSi.

### 1.3 Documentation

This report has been provided based on the review of the documents listed at Appendix A at the end of the report.

## BUILDING & ENVIRONMENT ASSESSMENT DATA FOR THIS PROJECT

<b>Number of Storeys</b>	12
<b>BCA Classification</b>	9a

## 2.0 ROOM DESIGNATION STRATEGY

Given the function of a Hospital, and the complexity of operational requirements, it is accepted that it is not necessarily possible or practical that as per the deemed to satisfy provisions of the BCA (for a Class 9a building) that access can be provided “to and within all areas normally used by the occupants.” It is also understood that within some clinical areas of a hospital building, every patient and visitor is escorted on a supervised basis for a number of reasons.

McKenzie Group has undertaken a Room Designation Strategy over the whole project. The rationale underpinning the room designation strategy is to determine potential conflicts between BCA & AHFG prescribed Accessibility and is to be read in conjunction with the colour coded floor plans attached to the back of this report.

A summary of the rationale is described as follows and colour-coded accordingly on the plans located in Appendix-C:

- **Level 1 – BCA deemed to satisfy compliance required (White Areas)**
- **Level 2 - Assessment – Staff-assisted rooms/spaces (Yellow Areas)**  
The rooms/spaces designated as Level 2 compliance level have been designed to provide the required door circulation spaces, internal circulation but permits controls to be located outside of the range of the minimum requirements of AS1428.1.

This however does not mean that all rooms designated as Level 2 do not have all controls within the required range. This may be applicable for some rooms only.

- Although in-patient units (IPUs) have patient ensembles suitable for a patient with disabilities, none of the wards have full regular wheelchair user facilities (AS1428.1). This implies that all patients are provided equity by nursing support where beyond the normal acute incapacity of a patient reasonably expected in a hospital. (staff assist facilities (for patient use only) in open common use circulation spaces of department areas). It is noted that some of these WC's would not be deemed part of a “bank” of toilets.
  - Beverage bays are designed without voids under the sinks. This does imply, side-on access to the beverage bays for wheelchair users. The taps for sinks, the boiling water unit (if any) and at least one power outlet would be anticipated to be within the reach zone (within 300 mm) from a side on user approaching the unit
  - Heights and distance from corners of clinical switches and the like used in patient bed/ seat bays (holding, recovery, ward etc). AHFG requirement only
  - Emergency call point heights and distance from internal corners.
- **Level 3 - Assessment – Clinical rooms/spaces (Green Areas)**  
Within the clinical areas of the hospital, there is a requirement for a level of mobility, dexterity and safety that would reasonably exclude staff member with a disability from accessing/working within these areas.

This however does not mean that all rooms designated as Level 3 do not have compliant door circulation spaces, but if required for operational reasons, this may be applicable for some rooms.

- ICU ward has no provision for disabled staff, this includes the staff station areas.
  - That implies that the tasks of all staff must practice wider within the department and require to be able bodied due to workplace health and safety requirements.
  - Department Clinical areas, where it is understood & accepted that all patients are assisted by staff members; a typical example would be Door controls and switching or Reachability of light switches for secondary switching other than the door entrance.
- **Level 4 - Exempt Areas (Pink Areas)**  
In accordance with D3.4 of the BCA, accessibility does not need to be provided to areas that are deemed exempt. D3.4 states that 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).

Rooms/spaces designated as level 4 meet the above criteria and are exempt from providing access for a person with a disability. Typical rooms may include cleaner’s rooms, dirty laundry, plant room, store room or the like.

### 3.0 EXEMPTIONS AND PERFORMANCE BASED SOLUTIONS

The overarching strategy to be followed in relation to Accessible design is confirmed below under 2 distinct headings:

#### **3.1 Areas considered as exempt from the requirement to be Accessible under the BCA Clause D3.4:**

- Plant including plenums, service routes, equipment rooms for computers or data (including persons with ambulant aids).
- Pathways used to gain access exempted plant spaces only.
- Cleaner’s rooms used only by cleaners.
- Rooms used only by central staff associated with linen, waste and supply\*.
- Staff only circulation stairs - no tactile indicators. (note if domed buttons are provided, this will meet the Deemed-to-Satisfy provisions of the BCA)
- Store rooms where the door is left open while accessing them- only to have required door clearance on the outside.

#### **3.2 Performance Based Solution**

- The distance between successive doorways into the Level-8 (ICU 3 and ICU 51), 9 (-bed isolation), 10 (1-bed isolation) Ante room do not meet the minimum prescribed measurement of 1450mm. Due to the functional requirements of the isolation room, the door to the Anti-room is required to be fully closed prior to entering the isolation room, providing sufficient wheel chair and door circulation space within the Anti-room. This is considered as a technical non-compliance and shall be addressed in a separate alternative solution report.
- Due to pressurization requirements for the Ante room located at the entrance of the Isolation rooms on Level-9 and 10, and ICU-3 and ICU-5 located on Level-8, door operational forces will be greater than 20N.
- Use of a chair in lieu of a fold down seat in the shower area to the combined unisex accessible shower and WC located on Level-8.
- Omission of accessible staff facilities on Level-8, 9 and 10.

### 4.0 TECHNICAL REVIEW

#### **4.1 Mandatory Compliance Requirements**

Element	Accessibility Requirement	Action Required
<b>A. Access to Buildings</b>		
a) Access to Building Requirements	An accessway must be provided:	<b>Complies</b> The plans indicate that level access is

	<ul style="list-style-type: none"> <li>From the main points of a pedestrian entry at the allotment boundary, and</li> <li>From another accessible building connected by a pedestrian link</li> </ul>	provided
<b>B. Doors</b>		
<p>a) Features</p>	<p>Ensure a single leaf door achieves a minimum unobstructed width of 850mm (920mm doors required).</p> <p>All doors shall have light operational forces (less than 20 N)</p> <p>Ensure 30 % minimum luminance colour contrasting between the door face and the door surround.</p> <p>Ensure any key swipe or push button release control is located within 2 metres of the door leaf.</p>	<p>A door schedule has been provided.</p> <p>All doors shall achieve a minimum clear width of 850m.</p>
<p>b) Door circulation spaces</p>	<p>Adequate door circulation spaces need to be provided along a Continuous accessible path of travel.</p> <p>In accordance with Clause 6.3(b) of AS1428.1-2009 fixtures such as fire extinguishers shall not encroach into the required circulation space.</p> <p>Ensure latch side clearances for:</p> <ul style="list-style-type: none"> <li>Inward opening door, front approach: 510 mm</li> <li>Outward opening door, front approach: 530 mm</li> </ul>	<p><b>Complies</b> - All doors to accessible areas appear to have compliant door circulation.</p> <ul style="list-style-type: none"> <li>Level 9, Meeting Room</li> </ul> <p>It is noted there are two entry doors into Meeting room 9503.</p> <p>Eastern entry door circulation space complies with As1428.1-2009</p> <p>Western Door latch side circulation space at room egress measures 488mm in lieu of 530 mm. As there is an alternative complying entry into the Meeting room, no further action is required.</p> <div> </div> <div> <p>1 A95-09 N-9503 Meeting Room 1:50</p> </div>

<b>C. Internal Paths</b>		
a) Internal Path of Travel / Surfaces	<p>Ensure an unobstructed clear width of 1000 mm along all corridors to rooms or spaces, with an 1800 mm wide and 2000 mm long passing area every 20 meters.</p> <p>Provide turning space within 2000 mm at the ends of corridors, where it is not continuous to offer turning space: minimum width 1540 mm x 2070 mm length.</p> <p>It should be noted that as a minimum all pathways between fixed furniture and seating etc. should provide a clear unobstructed width of 1000mm</p>	<p><b>Complies</b></p> <p>The internal walkways indicate compliance.</p>
b) Floor Finishes	<p>Changes in surface shall have abutment vertical rises of 3mm or less; or 5mm or less where rounded or bevelled edges are provided.</p>	<p><b>Complies</b></p> <p>The documents indicate compliance</p> <p>Ongoing review at construction phase</p>
<b>D. Sanitary Facilities</b>		
a) Number of Accessible sanitary facilities	<p>Accessible sanitary facilities must be provided on each level where other sanitary facilities are also provided and if the storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.</p> <p>The accessible facilities should be located adjacent/opposite the gender facilities.</p>	<p><b>Complies</b></p> <p>2 off Combined unisex accessible shower and WC facilities are provided on Level-8.</p> <p>LH and RH transfers have been indicated.</p>
b) Design	<p>Ensure fit out of the compartments are in compliance with AS 1428.1 for internal circulation space, fitting location and heights, fixture provisions and sanitary compartment signage.</p> <p>Ensure provision of lift off hinges for the inward opening WC door.</p> <p>Ensure the accessible sanitary facility has a minimum compartment size of: 1900x2630mm or 2300x2330mm</p>	<p><b>Complies</b></p> <p>Detailed documents have been provided.</p> <p>Fixtures and fittings indicate compliance</p>
c) Ambulant Cubicles	<p>Where one or more pans are provided, in addition to an</p>	<p><b>Complies</b></p>

	<p>accessible sanitary facility, an ambulant toilet for use by male and females is to be provided.</p> <p>Ensure all ambulant cubicles are compliant with AS1428.1 for provision of grabrails, door clearance and coat hook.</p>	<p>A single ambulant cubicle is provided on Levels 8, 9 and 10</p>
<p><b>E. Signage</b></p>		
<p>a) Sign Locations</p>	<p>Provide signage at exits, rooms containing hearing augmentation systems and at accessible toilets in accordance with AS 1428.1</p> <p>Signage to accessible sanitary facilities requires identification with the international symbol of access, raised tactile and Braille signage and letters RH or LH to indicate side of transfer to the WC pan.</p>	<p>Way finding review to take place when the signage package becomes available</p>
<p>b) Sign Features</p>	<p>Ensure signage has tactile and colour luminance contrasting, in accordance with AS 1428.1.</p>	<p>Further review as design progresses</p>
<p><b>F. Amplification / Hearing Augmentation</b></p>		
<p>a) Location</p>	<p>A hearing augmentation system must be provided in a room in a Class 9b building where an inbuilt amplification system, other than one used only for emergency warning.</p> <p>If an induction loop system is provided, it must provide to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or</p> <p>If a system requiring the use of receivers or the like is provided, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater for a room or space that accommodates up to 500 persons.</p>	<p>Please confirm if it is intended for meeting rooms to have hearing augmentation system.</p>

## 4.2 Recommendations to Enhance Accessibility

The following recommendations for design enhancement are provided for areas in which potential compliance risks have been identified with respect to the DDA or where improved outcomes with respect to accessibility, functionality and safety have been identified.

Element	Accessibility Recommendation	Proposed Action
Building Evacuation	<p>Consider implementation of an emergency evacuation plan for people with disabilities.</p> <p>Fire evacuation plans should include provision of management plans to assist individuals with disabilities or access requirements. Individuals with accessible requirements should be provided with a “fire buddy” to escort them to pre-determined areas of refuge.</p> <p>Fire engineering reports should detail accessible evacuation within a sub section of the plan.</p> <p>The current best practice is detailed in the 'AS 3745 - 2010 Planning for emergencies in facilities' and should be used as a guideline to assist in the implementation of the Emergency Plan</p>	<p>The emergency evacuation strategy for the hospital should address the operational solution of evacuating occupants that cannot use fire stairs.</p> <p>The types of accessible emergency evacuation include “protect in place” i.e. 1 hour rated hotel rooms on non-fire effected levels; smoke isolated lift lobbies with managed lift access; or provision of fire refuges within fire stairs or identified zones.</p>
Staff Beverage Bays	joinery / plumbing @ staff BBEV is recommended to be accessible	Recommended
Beverage Bays	joinery / plumbing @ BBEV is recommended to be accessible	Recommended
Vending Machines	Vending machine controls are recommended to be accessible in accordance with AS 1428.2-1992 Clause 29	Recommended
Furniture/Fittings	Provide accessible furniture and fittings throughout:	Future fitout/design of fixtures, furniture and fittings should consider accessible requirements in accordance with AS1428.2
Seating – Internal	<p>Recommend that any internal seating considers accessible needs and is provided with both backrest and armrests in accordance with AS1428.2.</p> <p>Any seating to be set back 500mm from the walkway.</p>	Provide a range of seating within waiting/lounge areas to accommodate all users i.e. some with backrest, some with armrests and at various seat heights etc.
Waiting areas	Recommend the provision of at least one space for a wheelchair user to occupy - minimum dimension 800 mm x 1300 mm	Review and respond
TV/Display Screen	Televisions should be installed within an accessible viewing range	The recommended viewing range for a TV is between 1227-1709mm above FFL

## **5.0 CONCLUSION**

The recommendations in this report have been provided to assist in the creation of a universally accessible environment within the development proposed.

In summary, we are satisfied that the design documentation is capable of satisfying the spirit and intent of Disability Discrimination Act (DDA), the principals of universal accessibility and the relevant technical requirements of the AS1428 series for access and mobility; the Access to Premises Standard (2010) and applicable associated documentation.

In the next phase of the design process it is anticipated that as additional detail is provided - particularly dimensions and features- the accessibility of this development can be further detailed.

If you have any further queries in relation to this report and recommendations contained please contact Augustina Lie on 07 3834 9800.

### **Report Provided by:**

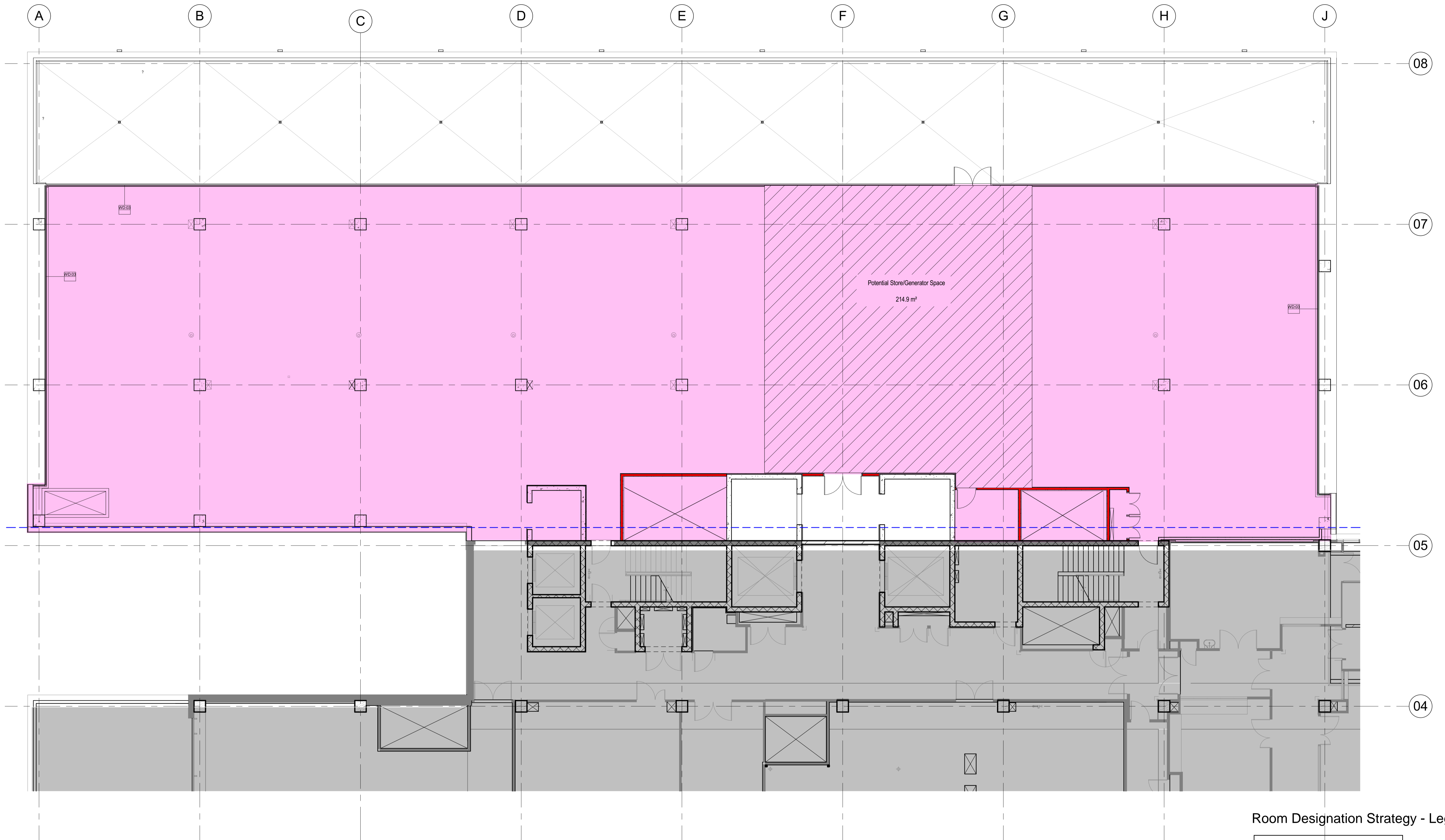


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## 6.0 APPENDIX A – Drawing List

Drawing Issue	Title	Issue	Date
Architectural Set	Lismore Base Hospital – North Tower Extension	B	7.7.2018

## 7.0 APPENDIX B – Room Designation Strategy Plans

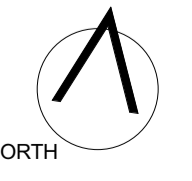


1 GA - Level 07 NTX  
A30001 1:100

Room Designation Strategy - Legend

- Level 1
- Level 2
- Level 3
- Level 4 (Exempt)

PRELIMINARY





1 GA - Level 08 NTX  
1:100

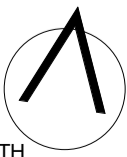
Room Designation Strategy - Legend

- Level 1
- Level 2
- Level 3
- Level 4 (Exempt)

PRELIMINARY

ISSUE	REVISION DESCRIPTION	DATE	APD
A	Issue for Information	21/04/17	IM
B	Issue for Information	24/04/17	IM
C	Issue for Information	04/05/17	IM
D	Issue for Sign Off	15/05/17	IM
E	Issue for 50% DD	24/05/17	IM
F	Issue for Sign Off	26/05/17	IM
G	Draft DD Issue	20/06/17	IM

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1 GA - Level 09 NTX  
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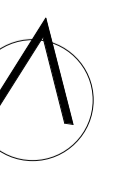
Room Designation Strategy - Legend

- Level 1
- Level 2
- Level 3
- Level 4 (Exempt)

PRELIMINARY

ISSUE	REVISION DESCRIPTION	DATE	APD
A	Issue for Information	09/05/17	IM
B	Issue for Sign Off	15/05/17	IM
C	Issue for 50% DD	24/05/17	IM
D	Draft DD Issue	20/06/17	IM

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1 GA - Level 10 NTX  
A30001 1 : 100

Room Designation Strategy - Legend

Level 1
Level 2
Level 3
Level 4 (Exempt)

