SJB Architects

**Attn: Zekerija Krcic**

LEICE PTY LTD
Tower 3, Level 33, 300 Barangaroo Avenue
Barangaroo NSW 2000
zekerijak@omaya.com.au

Date: 29 July 2021

**Re: 2-10 Leicester Ave, Strathfield.**

Dear Zekerija,

Below is a summary of design modifications that are reflected in the amended (revision 10) DA architectural drawings:

- New road reserve relocated further north to be consistent with current LEP location.
- Site boundary adjusted because of relocating the new road reserve.
- New site area 2720sqm
- The northern 10 storey building portion has shifted to address the new boundary location
- New lift core to service additional units because of a larger site footprint
- A larger communal roof top is provided on top of the 10 storey northern building, providing greater communal open space.
- Apartment unit mix changed to achieve the DCP required minimum of 20% 3B and 20% 1B.
- Basement increased to cater for the larger site boundary, and additional cars required to meet controls.
- Greater setbacks provided along Leicester Ave to achieve the DCP minimum 8m tower setback
- Additional deep soil provided as previously, proposed 14.5% of site area.
- Reconfigured loading and waste collection areas
- Substation relocated into chamber within the building footprint
- Basement ramp crest level increased to provide barrier against a 1 in 100-year event flood.
- Improved perimeter landscaping at ground floor, and removed courtyard hardscaped areas that were encroaching into 4m landscape setback.
- Improved public domain interface along Cooper Street with additional soft landscaped areas provided.
- OSD tank relocated in response to flooding requirements
- Internal apartment layouts revised to suit new building design footprint
- External facades amended to reflect new apartment layouts, including window locations, materiality, and balcony locations – retaining original design aesthetics.
- Relocated A/C plant rooms
- Bike storage removed from level 1 and relocated into basement plan accessible via ramp.
- Removed 2 storey maisonettes to provide greater landscape buffer along Leicester Ave.

SJB Architecture (NSW) Pty Ltd
ACN 081 094 724
ABN 20 310 373 425

Level 2, 490 Crown Street
Surry Hills NSW 2010

T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

John Pradel 7004
Adam Haddow 7188

Please contact me if you require any further clarification on the above.

Best regards,

**Nick Hatzi**
Director
SJB Architects

## SJB Architects

REVISED LAYOUT

| | RL | LEVEL | Parking | 1 Bed | 1 Bed + ST | 2 Bed | 3 Bed | total | Solar | Cross | South | NSA | NSA:GFA | GFA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -0.5 | *Parking 4* | 61 | - | - | - | - | | - | - | - | | | - |
| | 2.5 | *Parking 3* | 59 | - | - | - | - | | - | - | - | | | - |
| | 5.5 | *Parking 2* | 59 | - | - | - | - | | - | - | - | | | - |
| | 8.5 | *Parking 1* | 42 | - | - | - | - | | - | - | - | | | - |
| 1 | 12.4 | *Ground* | - | 1 | - | 4 | 2 | 7 | 4 | 1 | 1 | 810 | *76%* | 1061 |
| | | *Retail* | | | | | | | | | | | | 146 |
| 2 | 16.1 | *Level 01* | - | 1 | 1 | 4 | 3 | 9 | 5 | 8 | 1 | 770 | *75%* | 1028 |
| 3 | 19.2 | *Level 02* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 4 | 22.3 | *Level 03* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 5 | 25.4 | *Level 04* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 6 | 28.5 | *Level 05* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 7 | 31.6 | *Level 06* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 8 | 34.7 | *Level 07* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 9 | 37.8 | *Level 08* | - | 4 | 1 | 6 | 3 | 14 | 10 | 10 | 1 | 1070 | *78%* | 1374 |
| 10 | 40.9 | *Level 09* | - | 4 | 1 | 6 | 3 | 14 | 10 | - | 1 | 1070 | *78%* | 1374 |
| 11 | 44.0 | *Level 10* | - | 2 | 1 | 5 | 1 | 9 | 6 | - | 1 | 640 | *70%* | 911 |
| 12 | 47.1 | *Level 11* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 13 | 50.2 | *Level 12* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 14 | 53.3 | *Level 13* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 15 | 56.4 | *Level 14* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 16 | 59.5 | *Level 15* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 17 | 62.6 | *Level 16* | - | 3 | 1 | 5 | 1 | 10 | 7 | - | 1 | 720 | *79%* | 908 |
| 18 | 65.7 | *Level 17* | - | | | | 4 | 4 | 4 | - | 0 | 465 | *82%* | 569 |
| | 69.0 | *Roof* | | | | | | | | | | | | 0 |
| | **TOTALS** | | **221** | **54** | **16** | **91** | **40** | **201** | **141** | **79** | **17** | **15565** | *78%* | **20009** |
| | **MIX** | | | **27%** | **8%** | **45%** | **20%** | | **70%** | **69%** | **8%** | | *avg.* | |
| | **1,2,3's** | | | **35%** | | **45%** | **20%** | | | | | | | |
| | **TOTAL** | | | 201 | | | | | | | | | | |

| **Parking** | | | | | **Totals** | |
|---|---|---|---|---|---|---|
| | Residential | 1 | | | 201 | |
| | Vistor | 1 space per | 20 | | 10.05 | |
| | Retail | | 40 | sqm | 3.65 | |
| | 15% | Adaptable | | | | |
| | Service | 1 | 50 | | 4.02 | |
| | | | | | **221** | Total Carspaces |
| | | | | | **221** | Total Provided |
| | Bicycle | 1 | 1 | | 201.0 | Bikes |
| | Bicycle - Visitor | 1 | 12 | | 16.8 | Bikes |

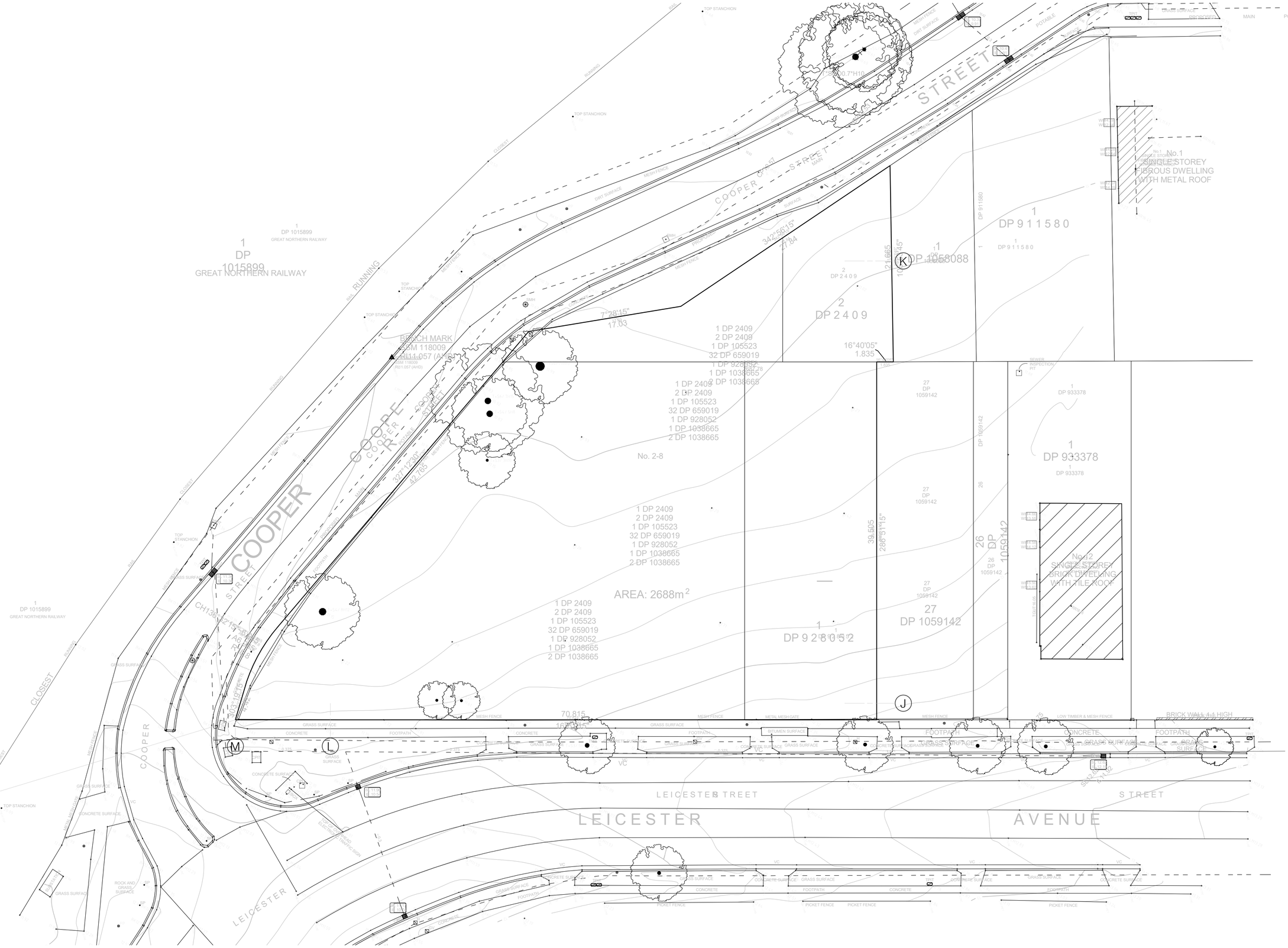
# 2-10 LEICESTER AVE STRATHFIELD NSW 2135

**SJB Architects**
Level 2, 490 Crown Street
Surry Hills NSW
2010 Australia
**T** 61 2 9380 9911
**F** 61 2 9380 9922

Project Number: **6242**
Date: **16.08.2021**
Client: **TRINURA**

## Contents


| Sheet No | Sheet Name | Rev |
|---|---|---|
| 0102 | SITE SURVEY | 10 |
| 0103 | SITE ANALYSIS | 10 |
| 0206 | FLOOR PLAN B4 | 10 |
| 0207 | FLOOR PLAN B3 | 10 |
| 0208 | FLOOR PLAN B2 | 10 |
| 0209 | FLOOR PLAN B1 | 10 |
| 0210 | FLOOR PLAN G | 10 |
| 0211 | FLOOR PLAN L1 | 10 |
| 0212 | FLOOR PLAN L2 | 10 |
| 0213 | FLOOR PLAN L3 | 10 |
| 0214 | FLOOR PLAN L4 | 10 |
| 0215 | FLOOR PLAN L5 | 10 |
| 0216 | FLOOR PLAN L6 | 10 |
| 0217 | FLOOR PLAN L7 | 10 |
| 0218 | FLOOR PLAN L8 | 10 |
| 0219 | FLOOR PLAN L9 | 10 |
| 0220 | FLOOR PLAN L10 | 10 |
| 0221 | FLOOR PLAN L11 | 10 |
| 0222 | FLOOR PLAN L12 | 10 |
| 0223 | FLOOR PLAN L13 | 10 |
| 0224 | FLOOR PLAN L14 | 10 |
| 0225 | FLOOR PLAN L15 | 10 |
| 0226 | FLOOR PLAN L16 | 10 |
| 0227 | FLOOR PLAN L17 | 10 |
| 0228 | FLOOR PLAN ROOF | 10 |
| 0501 | ELEVATION - NORTH | 10 |
| 0502 | ELEVATION - EAST | 10 |
| 0503 | ELEVATION - SOUTH | 10 |
| 0504 | ELEVATION - WEST | 10 |
| 0601 | SECTIONS SHEET 1 | 10 |
| 0602 | SECTIONS SHEET 2 | 10 |
| 1401 | ADAPTABLE UNIT TYPES | 10 |
| 3101 | SHADOW ANALYSIS | 10 |
| 3102 | SHADOW ANALYSIS | 10 |
| 3103 | SOLAR ANALYSIS | 10 |
| 3201 | CROSS VENTILATION ANALYSIS | 10 |
| 3301 | GFA ANALYSIS | 10 |
| 3302 | COMMUNAL OPEN & DEEP SOIL SPACE ANALYSIS | 10 |
| 3410 | HEIGHT PLANE 3D | 10 |
| 5001 | DRIVEWAY SECTION | 10 |
| 6003 | 3D ARTIST IMPRESSION SHEET 3 | 10 |
| 6004 | 3D ARTIST IMPRESSION SHEET 4 | 10 |
| 6005 | 3D ARTIST IMPRESSION SHEET 5 | 10 |
| 6006 | 3D ARTIST IMPRESSION SHEET 6 | 10 |




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m

1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

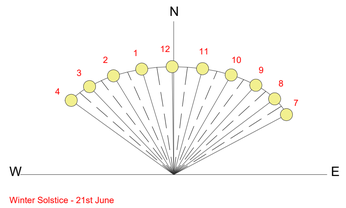
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

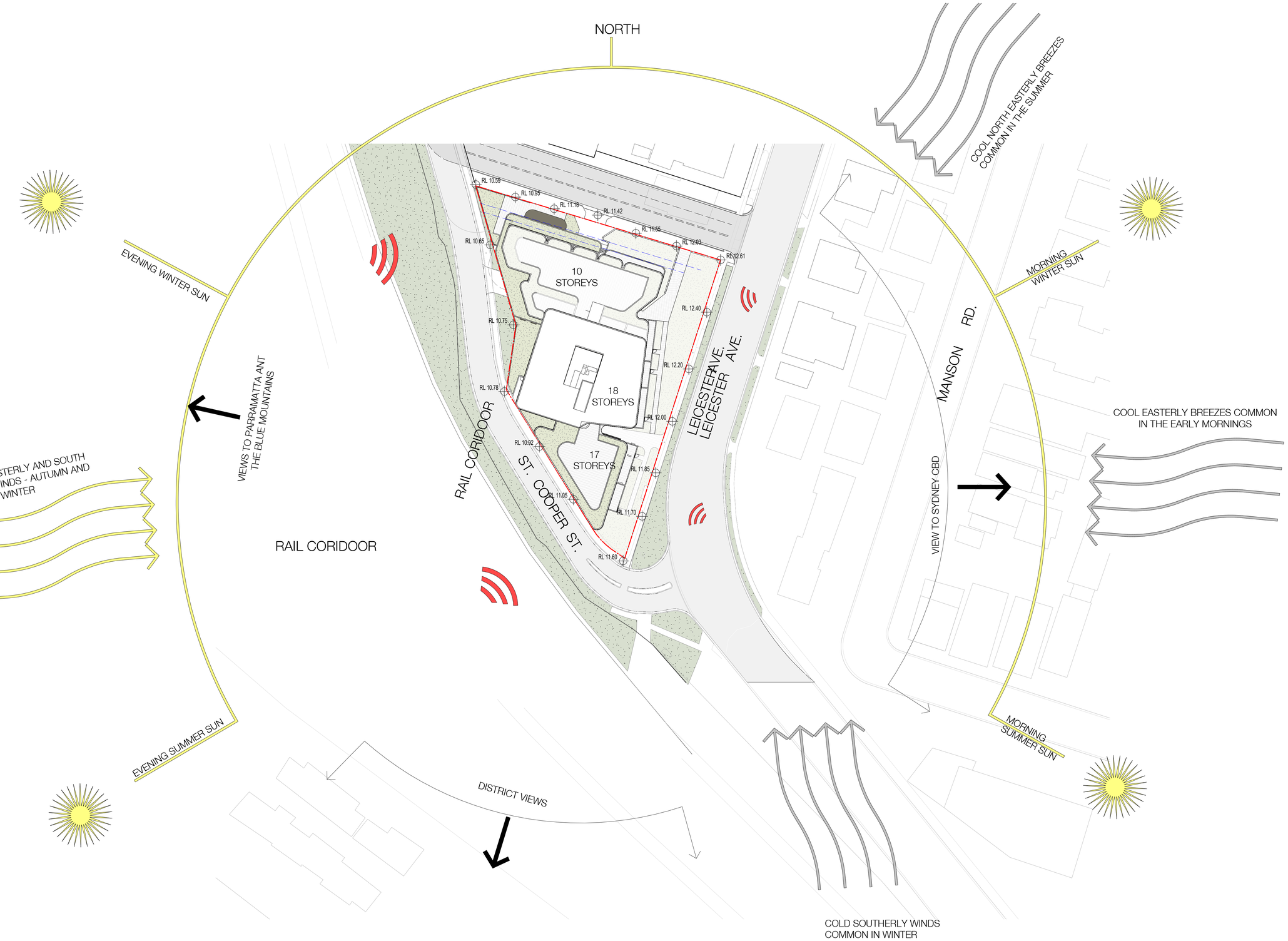
SITE SURVEY

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0102 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




Winter Solstice - 21st June




KEY

- Boundary Line
- Primary views from site
- Prevailing wind directions
- Noise Source

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m
1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

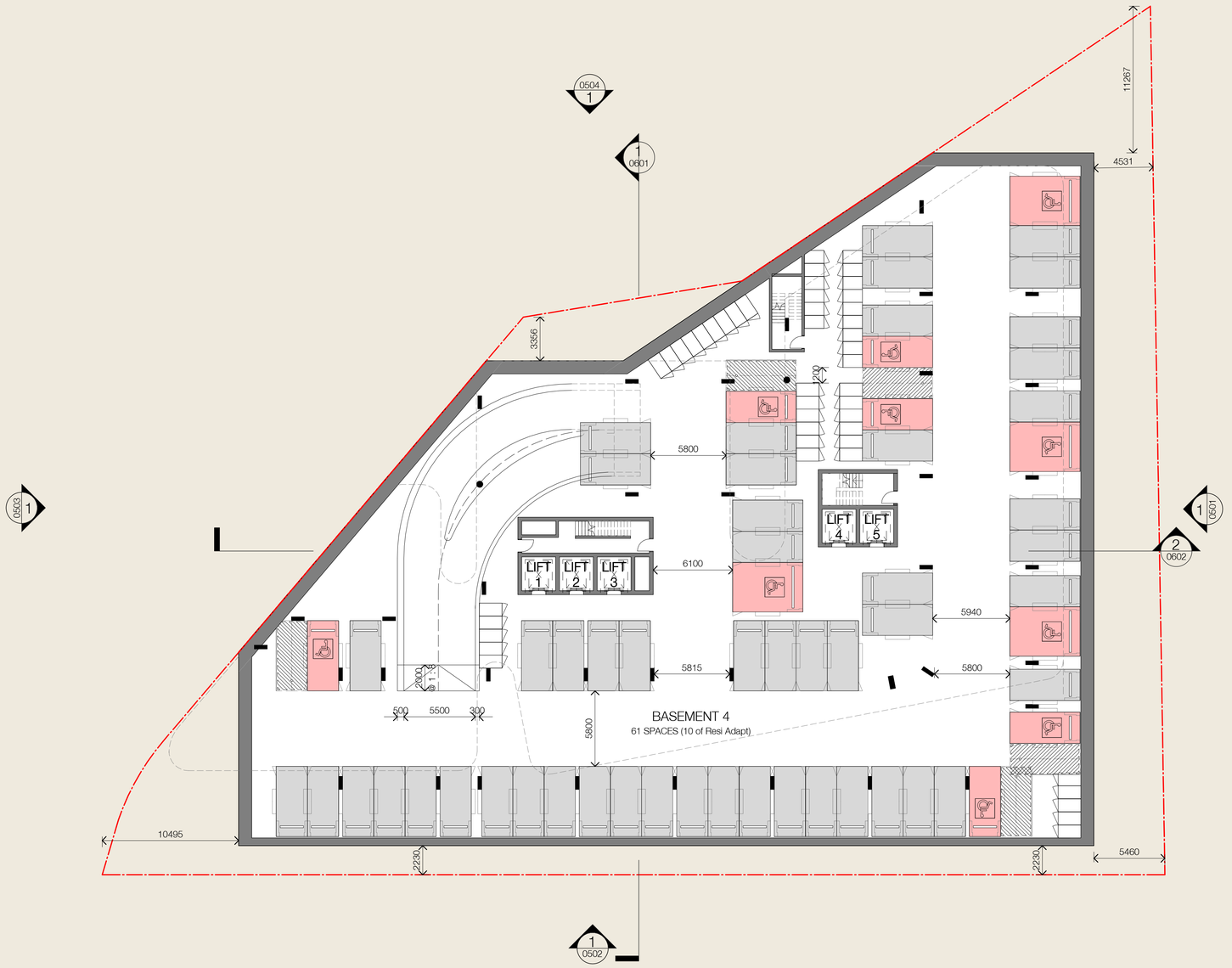
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
SITE ANALYSIS

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 500 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0103 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

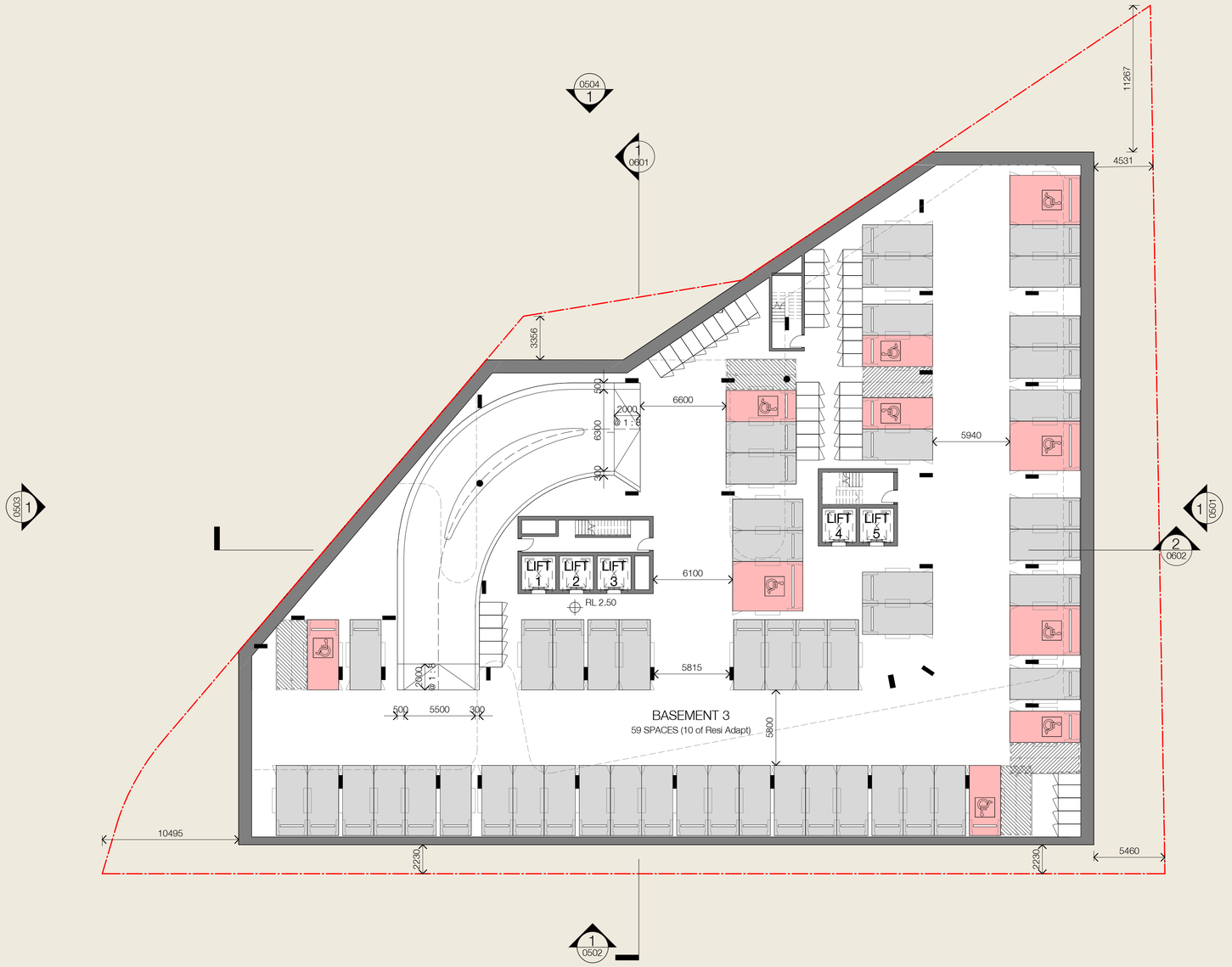
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN B4

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0206 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

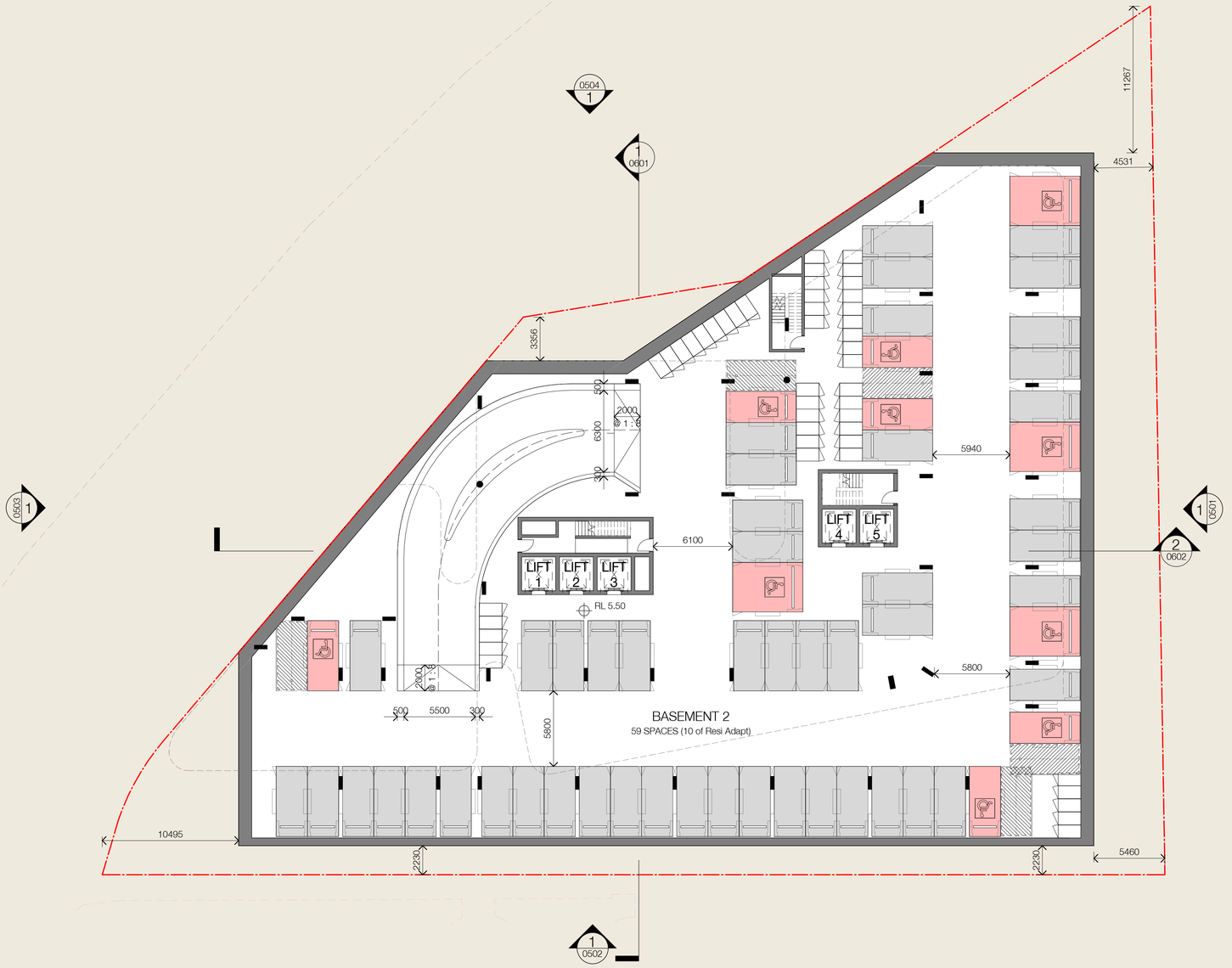
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN B3

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0207 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 1 2 5m
1:100 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

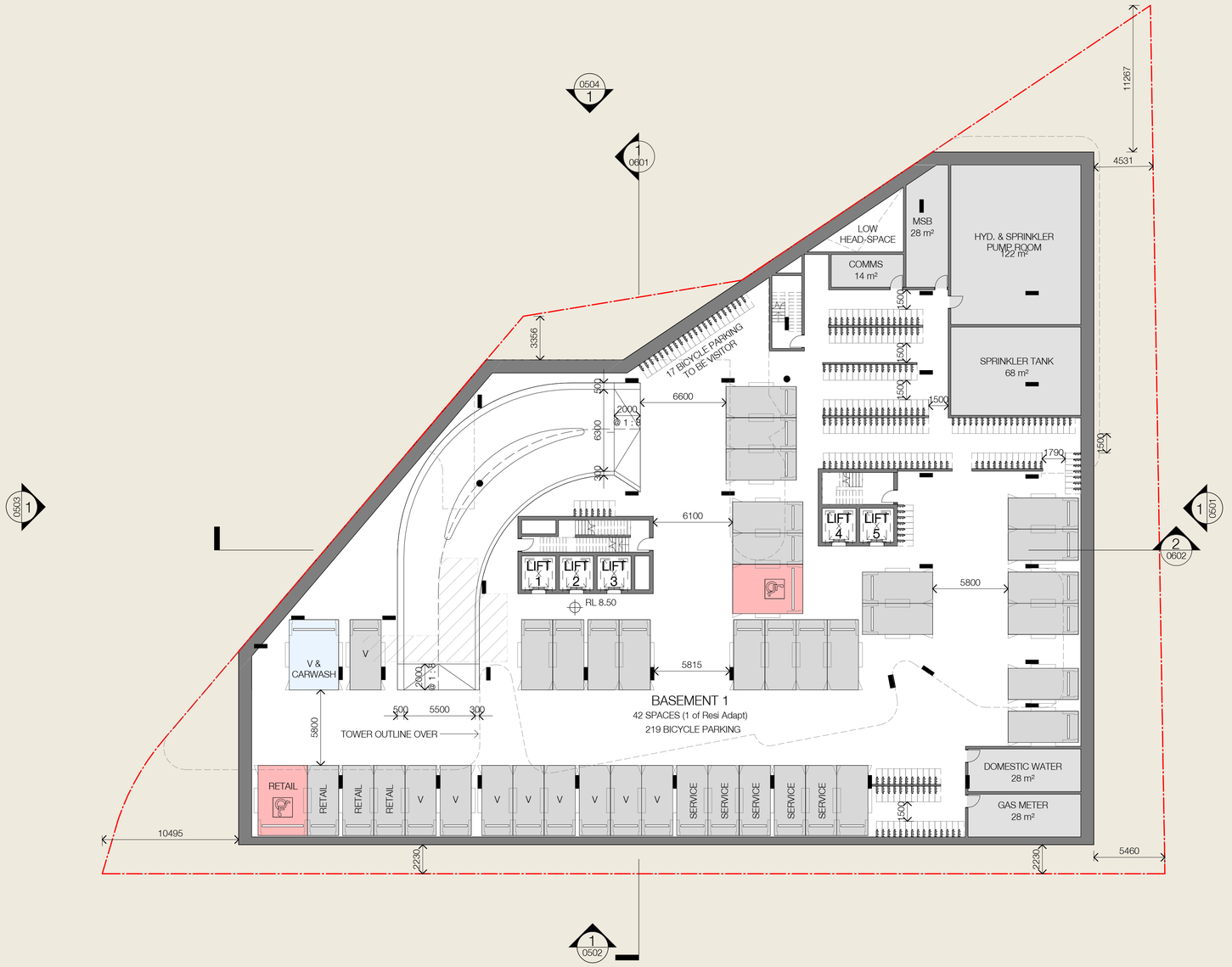
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN B2

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0208 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN B1

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0209 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN G

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0210 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L1

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0211 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m

1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN L2

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0212 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L3

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0213 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L4

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0214 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L5

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0215 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L6

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0216 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L7

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0217 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L8

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0218 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

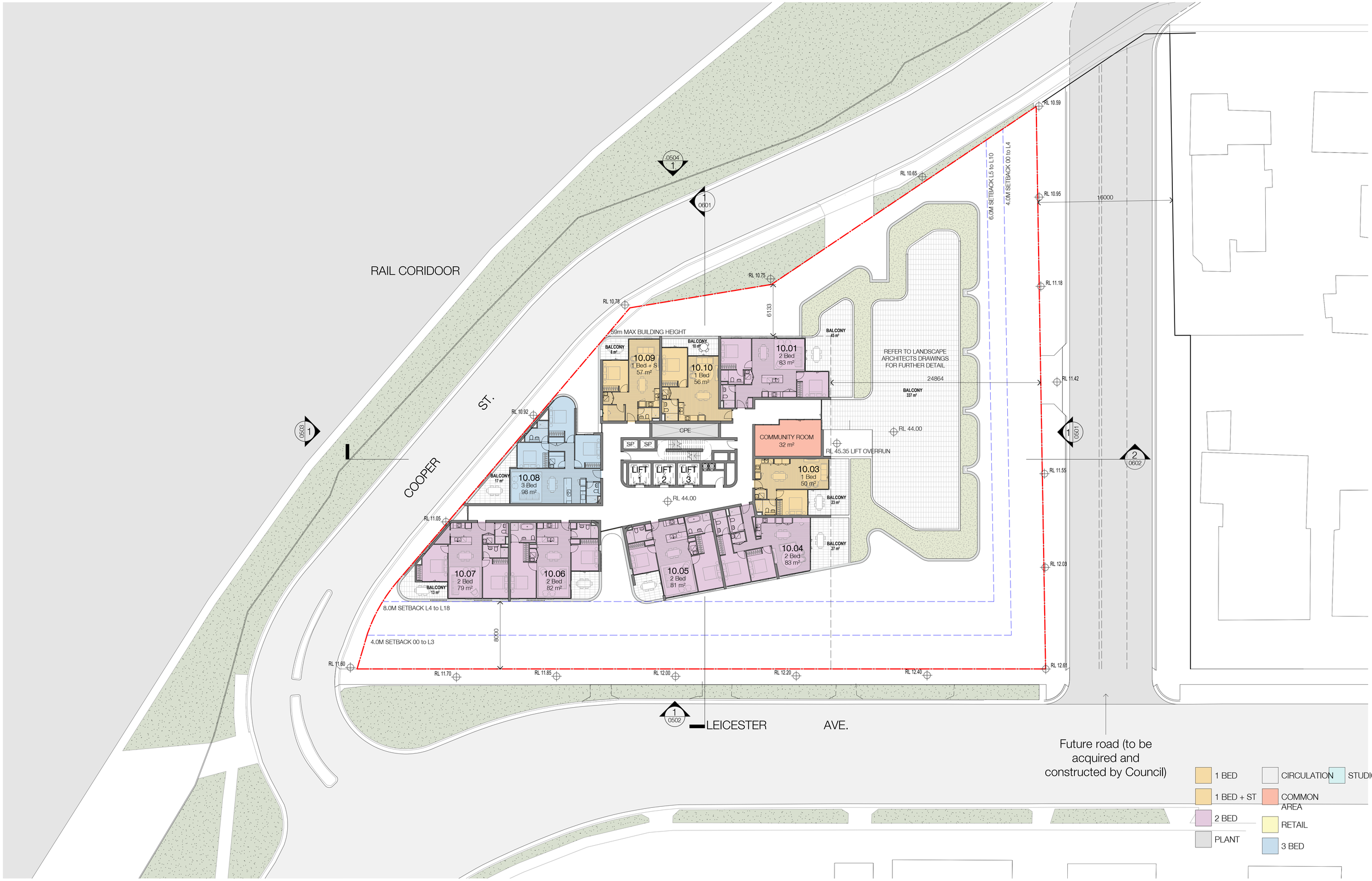
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L9

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0219 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

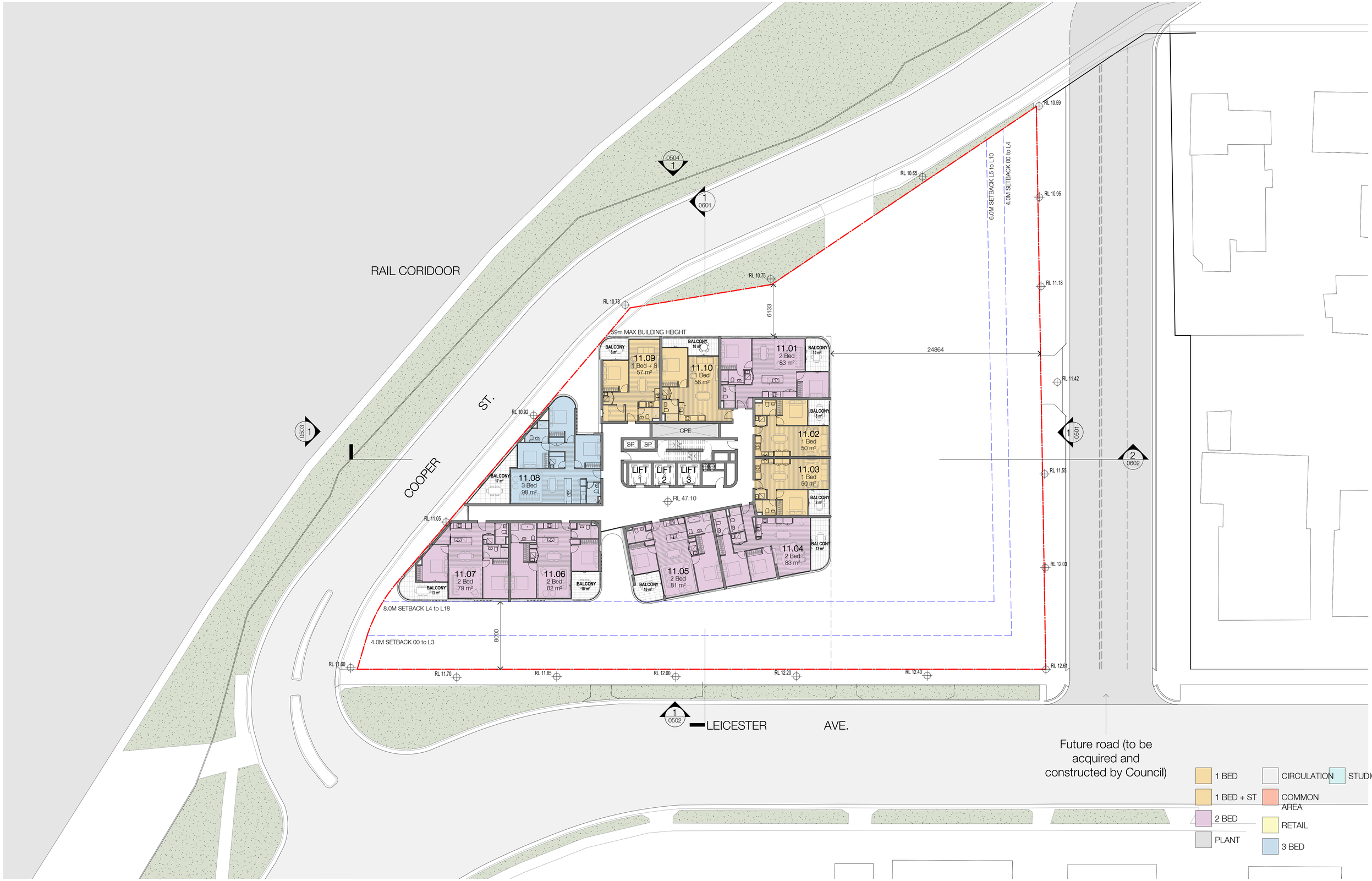
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L10

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0220 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

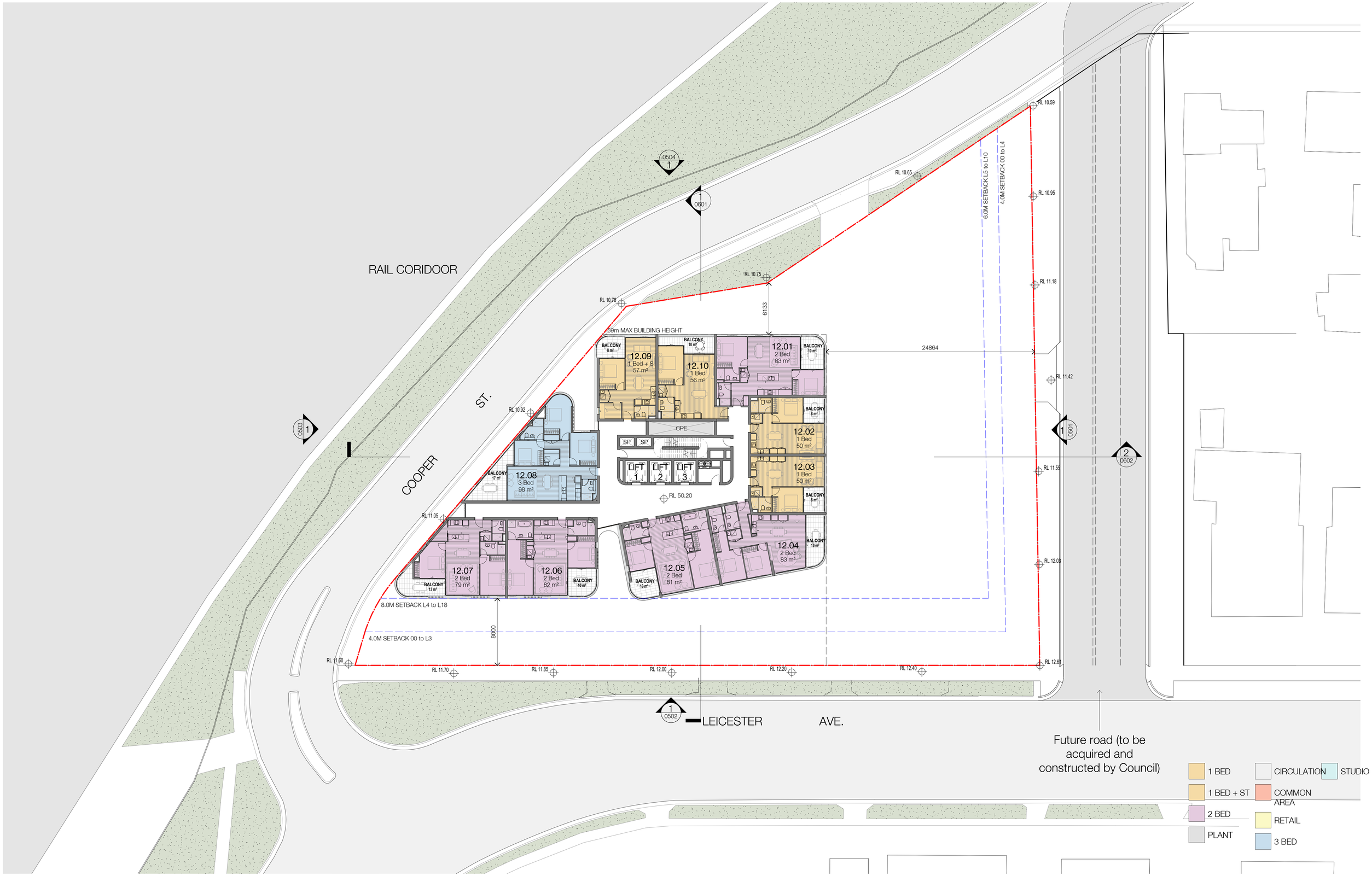
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L11

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0221 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L12

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0222 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

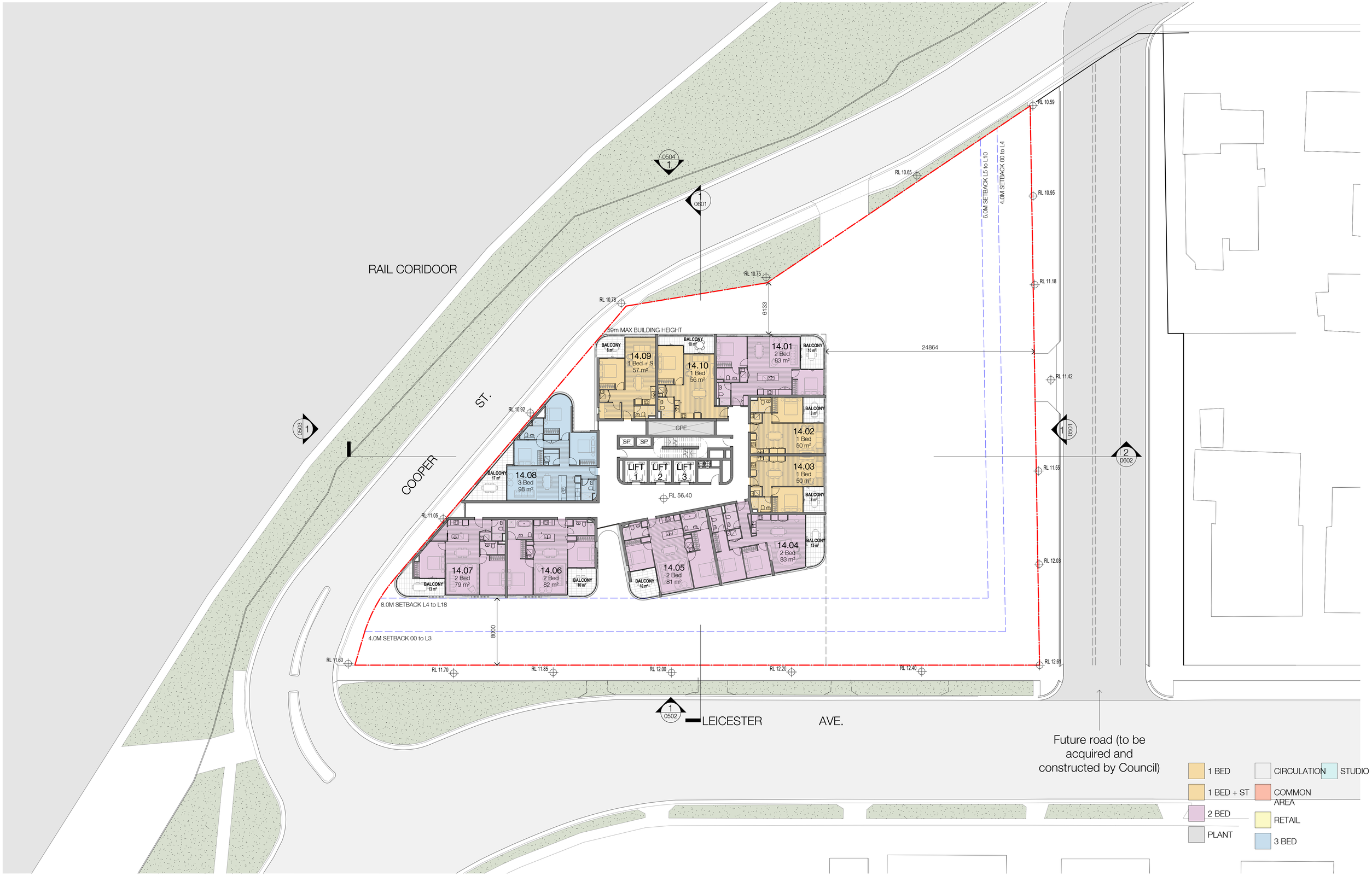
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN L13

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0223 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

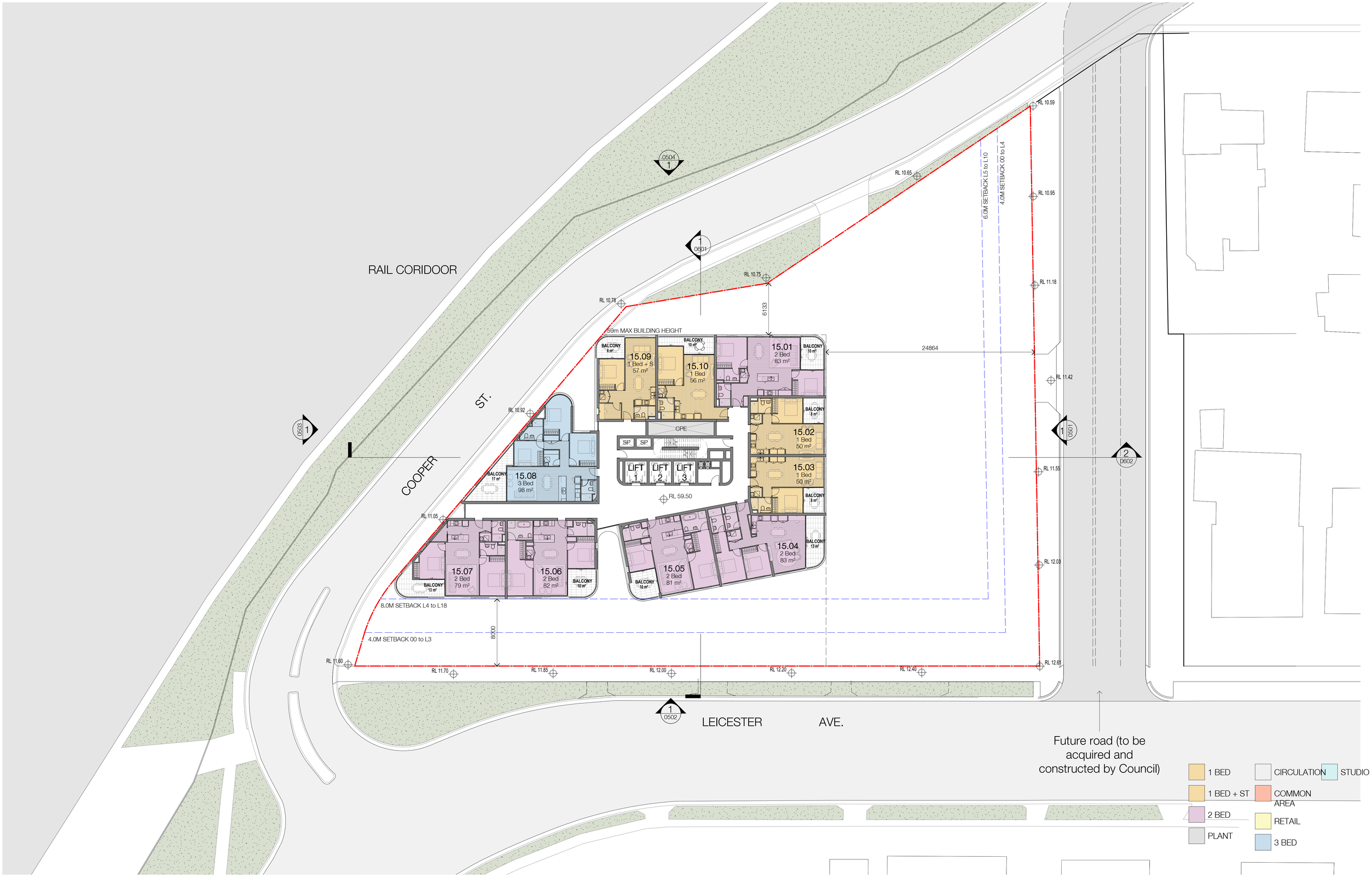
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L14

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0224 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

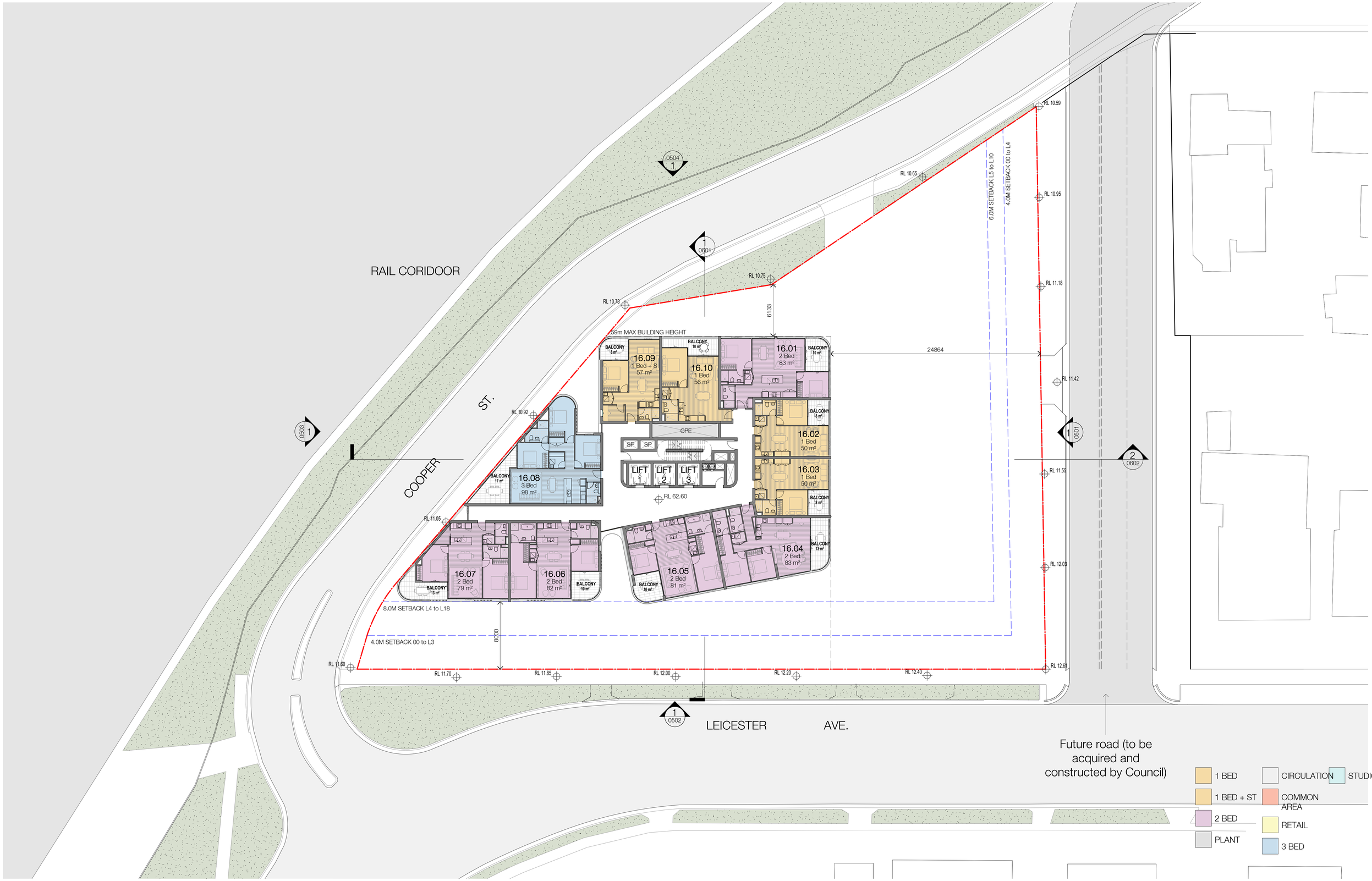
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L15

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0225 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

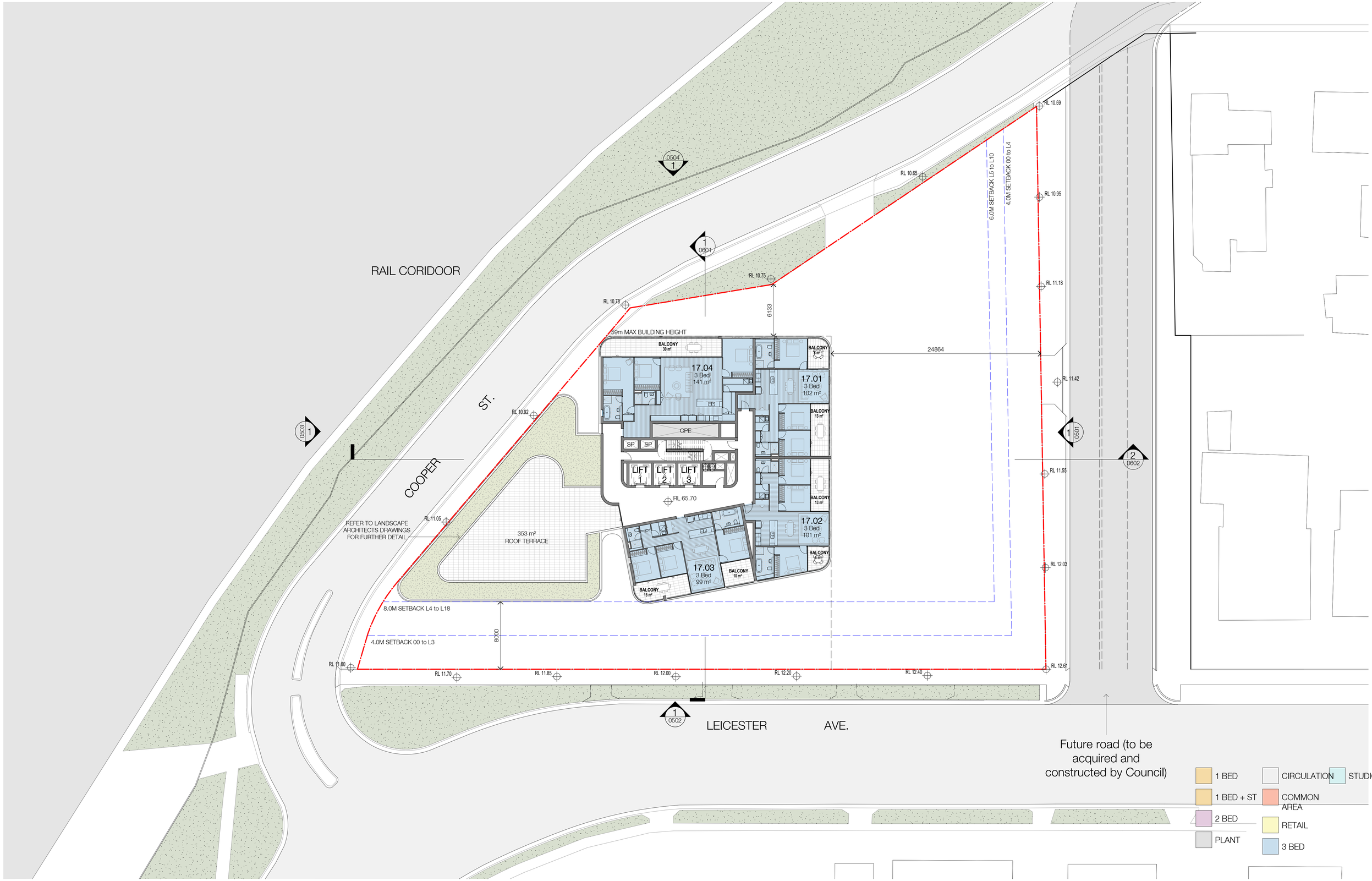
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN L16

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0226 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

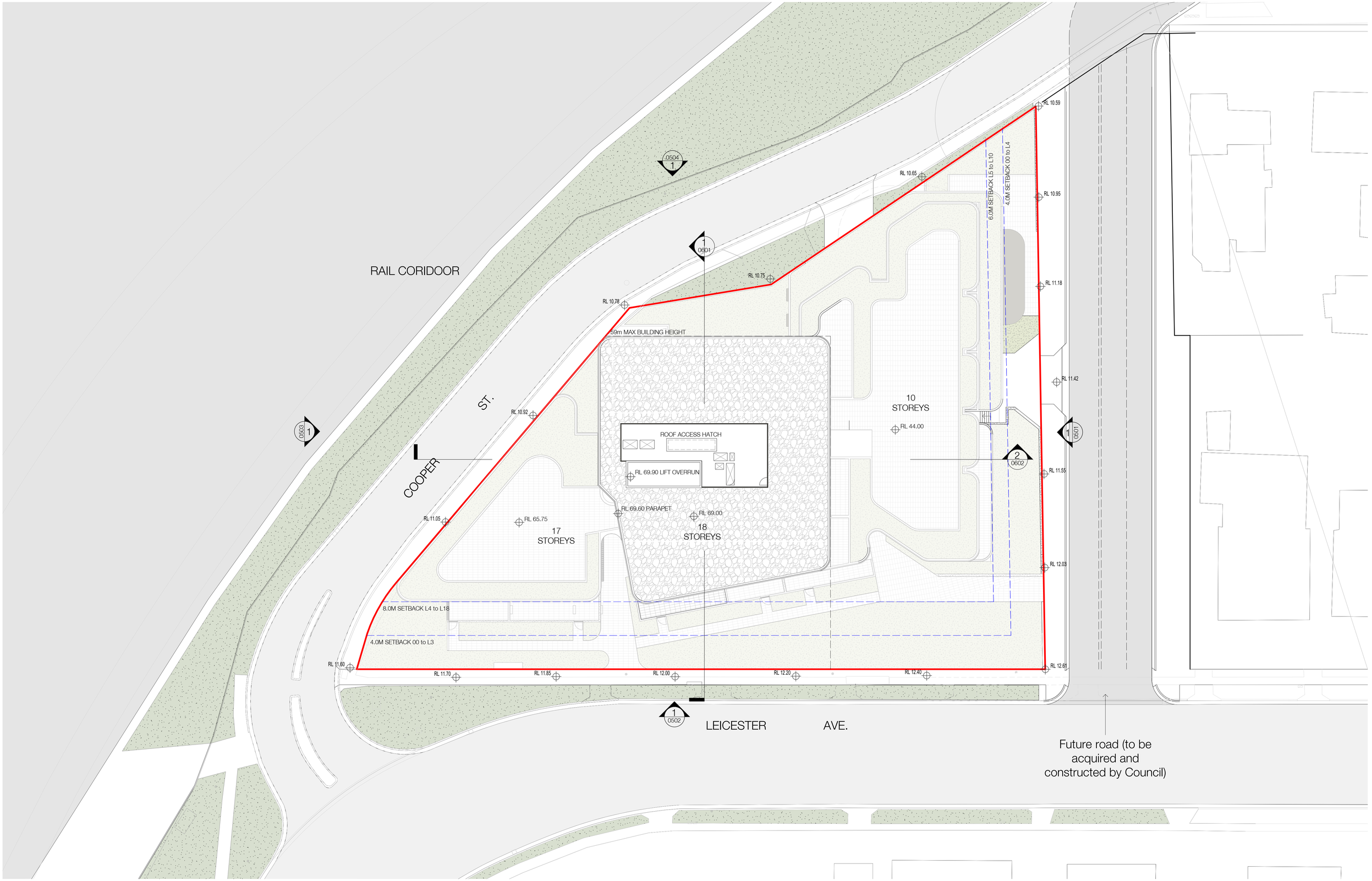
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN L17

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0227 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN ROOF

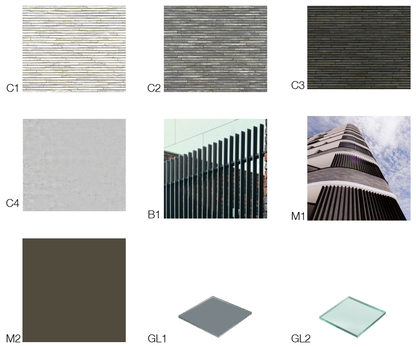
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0228 | | / 10 |

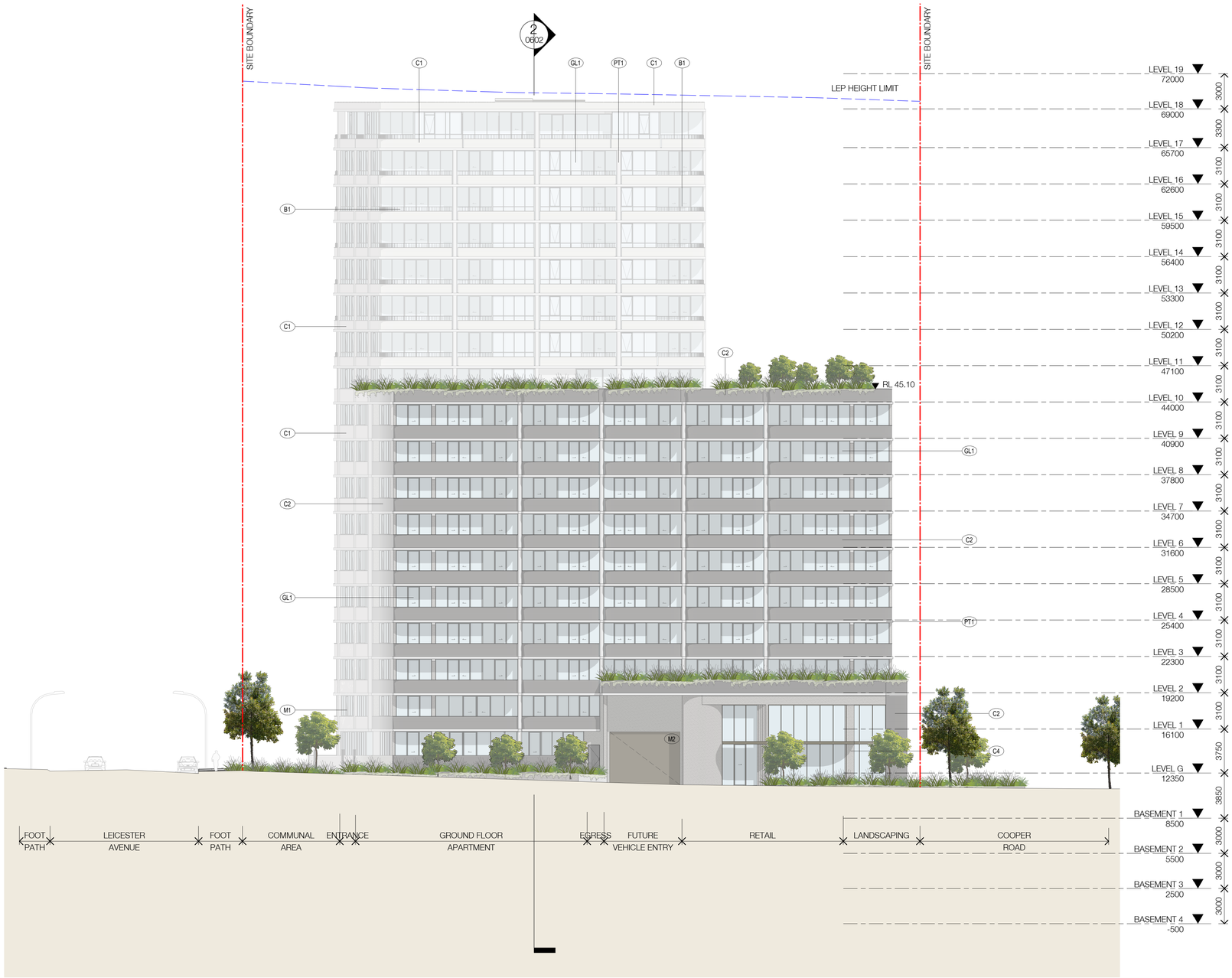
**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

## FINISHES SCHEDULE

MASONRY & CONCRETE FINISHES

| | | |
|---|---|---|
| | C1 | WHITE BRICK |
| | C2 | GREY BRICK |
| | C3 | DARK GREY BRICK |
| | C4 | NATURAL CONCRETE FINISH |
| BALUSTRADE | B1 | METAL BATON - BROZE POWDERCOAT |
| METALWORKS | M1 | METAL BATON - BRONZE POWDERCOAT |
| | M2 | SERVICE LOUVER - BROZE POWDERCOAT |
| PAINT FINISH | PT1 | WHITE PAINT |
| GLAZING | GL1 | TINTED GLASS |
| | GL2 | CLEAR GLASS |




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135
Drawing Name
ELEVATION - NORTH

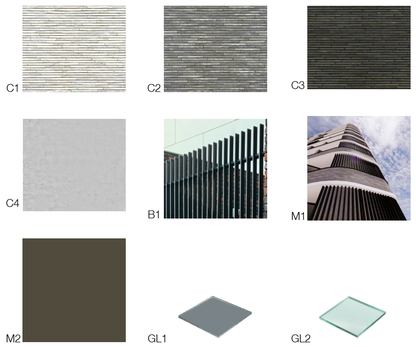
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| Author | Checker | 6242 |
| Drawing No. | | Revision |
| DA-0501 | | / 10 |

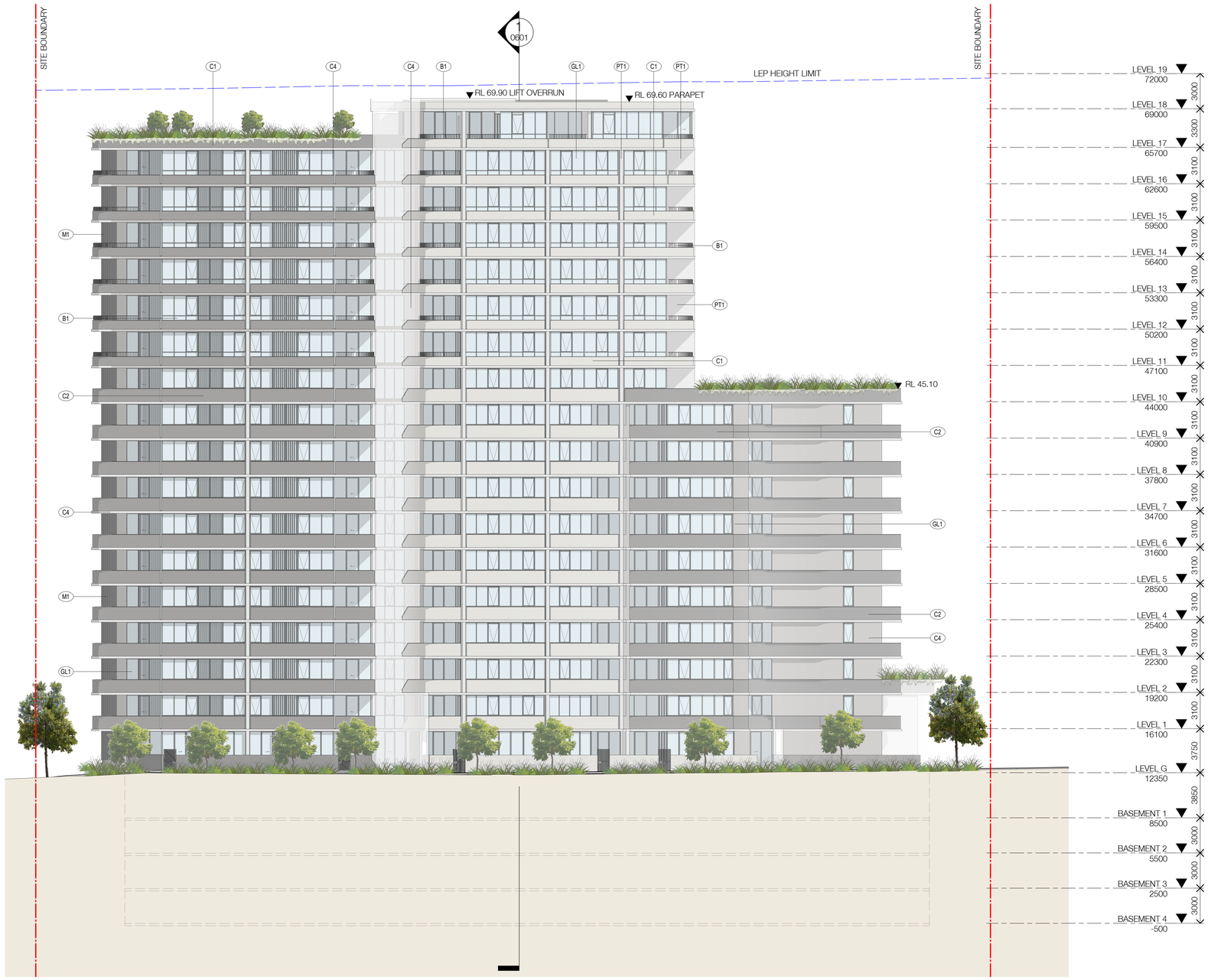
**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

## FINISHES SCHEDULE

MASONRY & CONCRETE FINISHES

| | | |
|---|---|---|
| | C1 | WHITE BRICK |
| | C2 | GREY BRICK |
| | C3 | DARK GREY BRICK |
| | C4 | NATURAL CONCRETE FINISH |
| BALUSTRADE | B1 | METAL BATON - BROZE POWDERCOAT |
| METALWORKS | M1 | METAL BATON - BRONZE POWDERCOAT |
| | M2 | SERVICE LOUVER - BROZE POWDERCOAT |
| PAINT FINISH | PT1 | WHITE PAINT |
| GLAZING | GL1 | TINTED GLASS |
| | GL2 | CLEAR GLASS |




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135
Drawing Name
ELEVATION - EAST

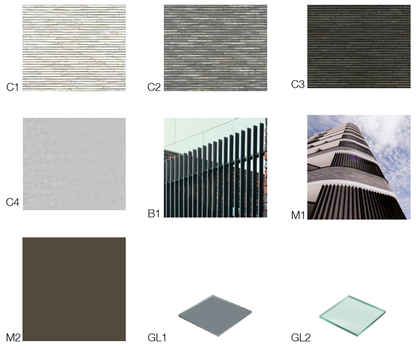
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| Author | Checker | 6242 |
| Drawing No. | | Revision |
| DA-0502 | | / 10 |

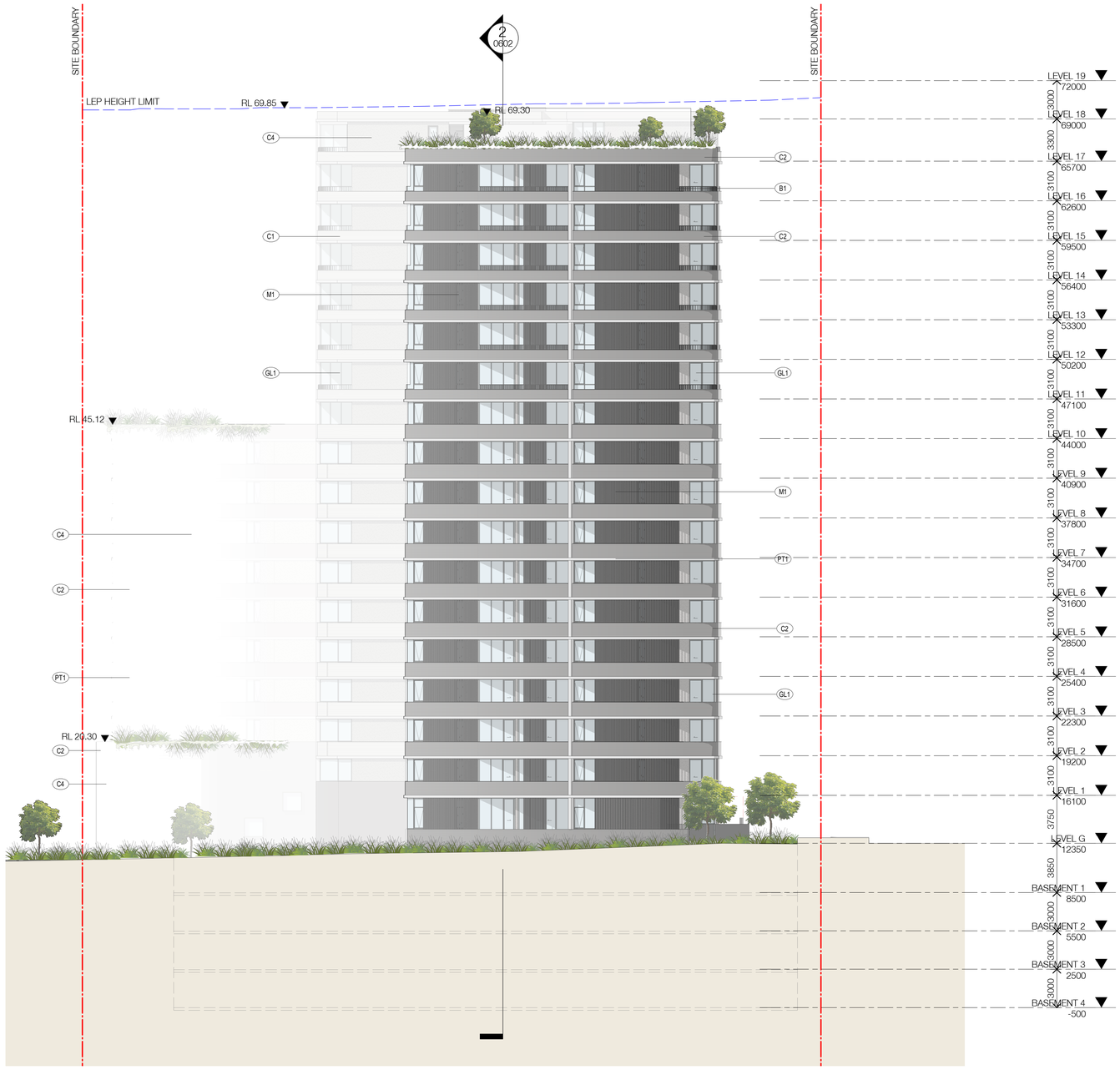
**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

## FINISHES SCHEDULE

MASONRY & CONCRETE FINISHES

| | | |
|---|---|---|
| | C1 | WHITE BRICK |
| | C2 | GREY BRICK |
| | C3 | DARK GREY BRICK |
| | C4 | NATURAL CONCRETE FINISH |
| BALUSTRADE | B1 | METAL BATON - BROZE POWDERCOAT |
| METALWORKS | M1 | METAL BATON - BRONZE POWDERCOAT |
| | M2 | SERVICE LOUVER - BROZE POWDERCOAT |
| PAINT FINISH | PT1 | WHITE PAINT |
| GLAZING | GL1 | TINTED GLASS |
| | GL2 | CLEAR GLASS |




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

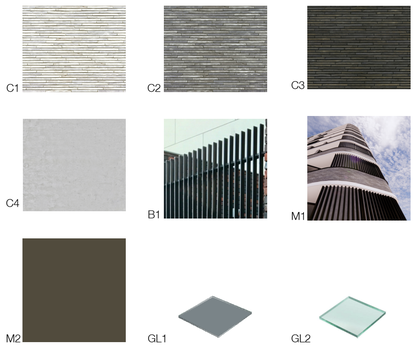
Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135
Drawing Name
ELEVATION - SOUTH

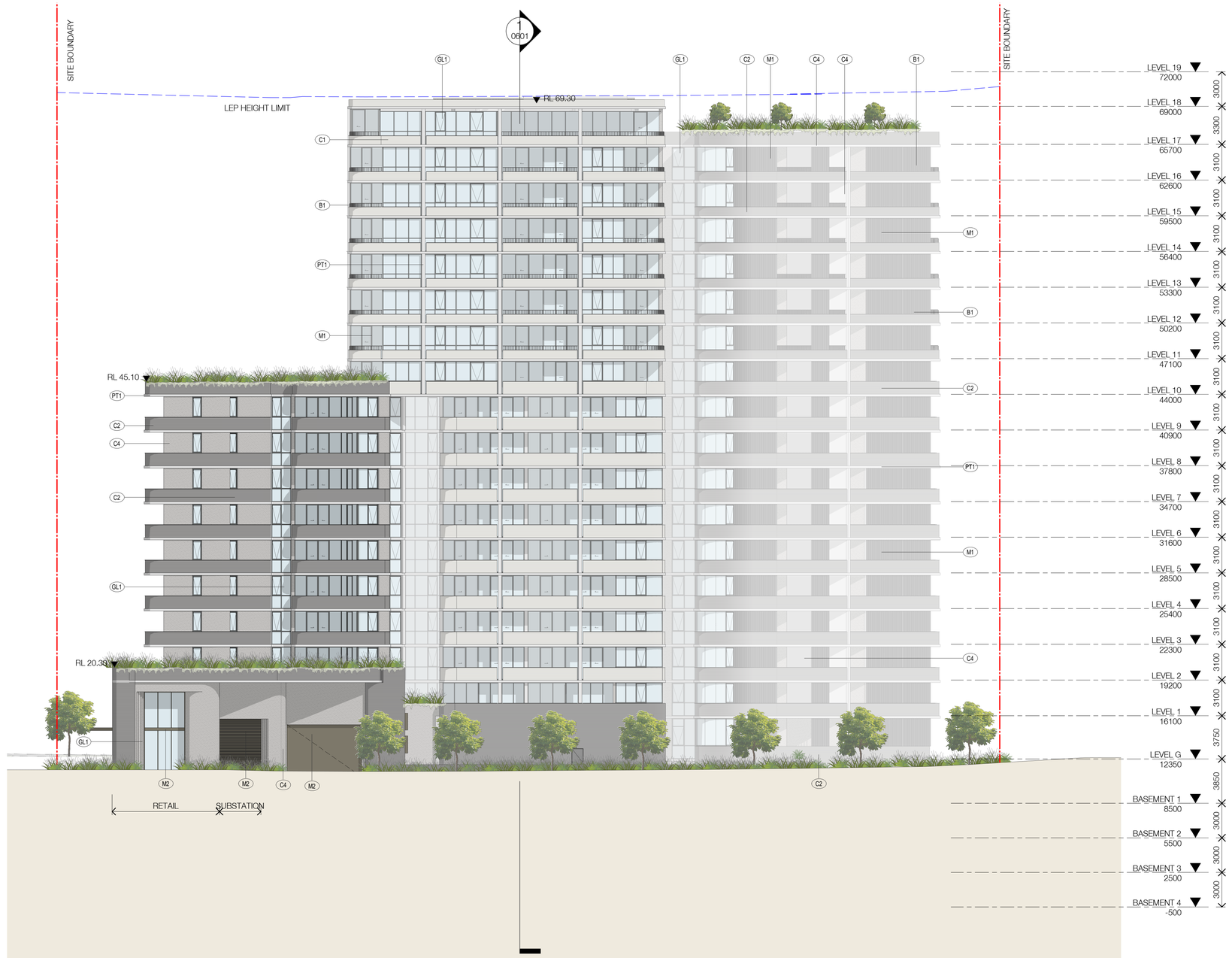
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| Author | Checker | 6242 |
| Drawing No. | | Revision |
| DA-0503 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

## FINISHES SCHEDULE

| | | |
|---|---|---|
| MASONRY & CONCRETE FINISHES | C1 | WHITE BRICK |
| | C2 | GREY BRICK |
| | C3 | DARK GREY BRICK |
| | C4 | NATURAL CONCRETE FINISH |
| BALUSTRADE | B1 | METAL BATON - BROZE POWDERCOAT |
| METALWORKS | M1 | METAL BATON - BRONZE POWDERCOAT |
| | M2 | SERVICE LOUVER - BROZE POWDERCOAT |
| PAINT FINISH | PT1 | WHITE PAINT |
| GLAZING | GL1 | TINTED GLASS |
| | GL2 | CLEAR GLASS |




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

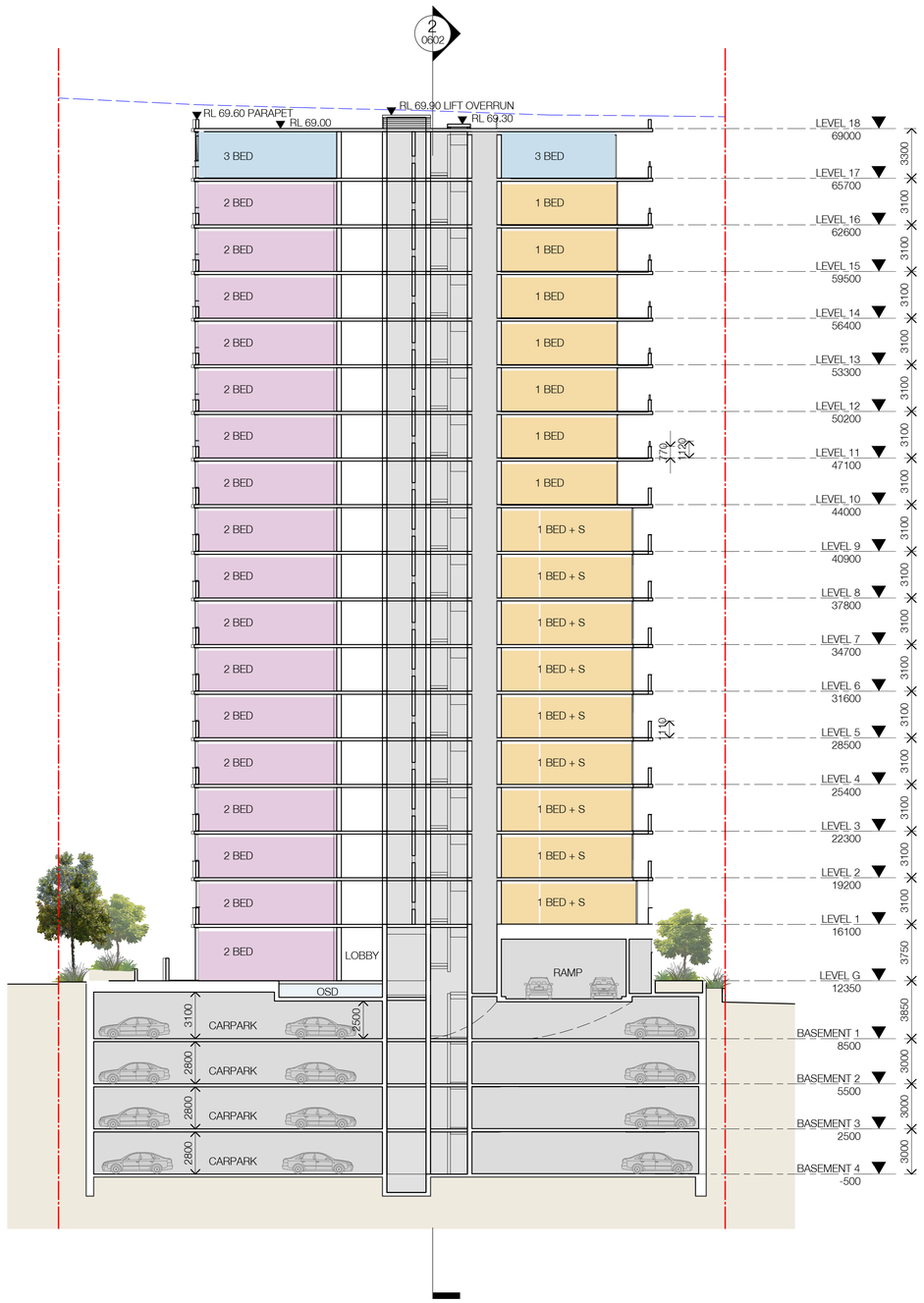
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
ELEVATION - WEST

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| Author | Checker | 6242 |
| Drawing No. | | Revision |
| DA-0504 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

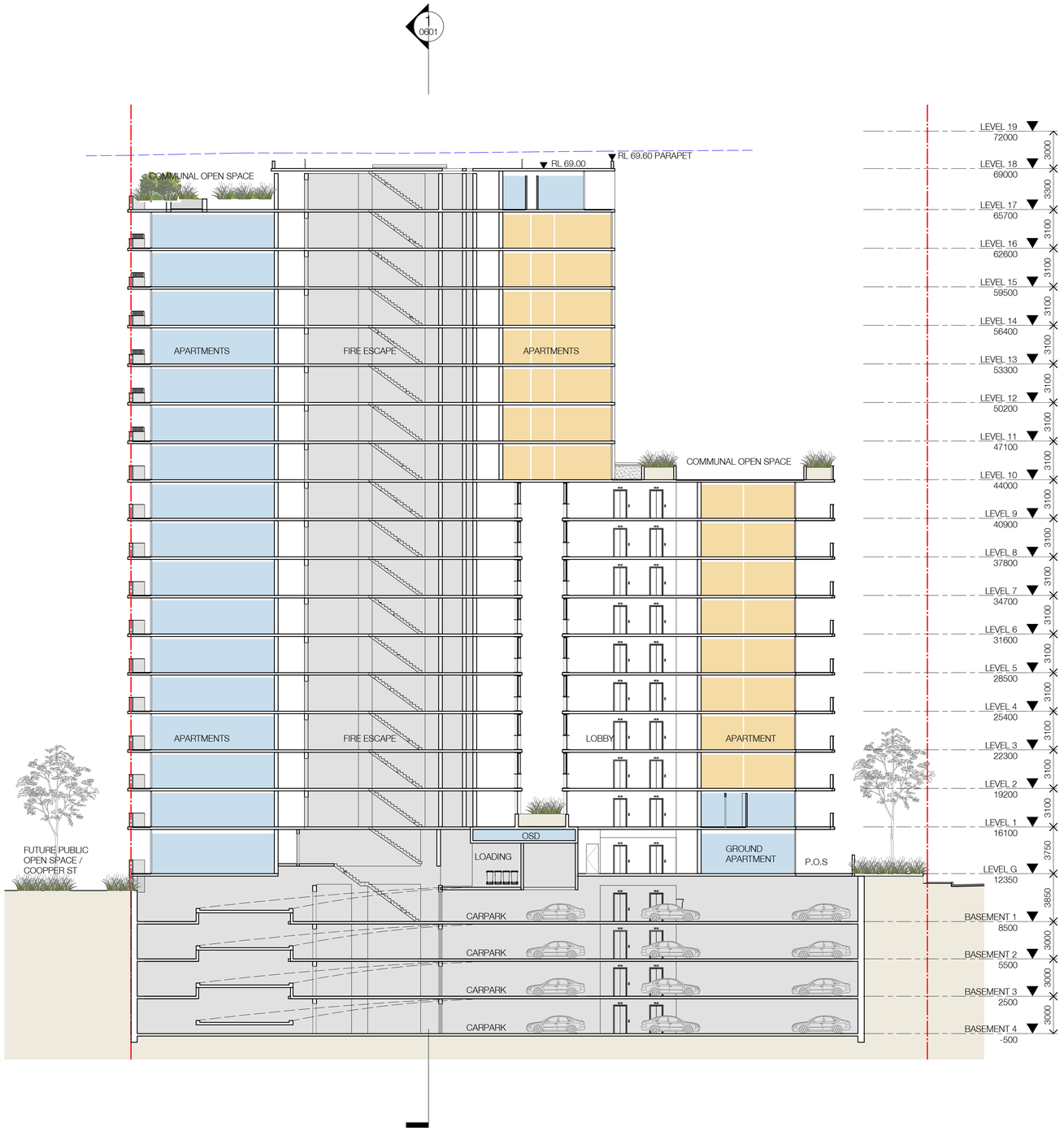
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

SECTIONS SHEET 1

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0601 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

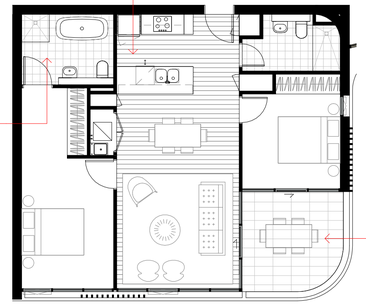
Drawing Name
SECTIONS SHEET 2

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0602 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

KITCHEN TO BE DESIGNED FOR ADAPTATION WITH CAPPED SERVICES

CAPPED SERVICES TO BE PROVIDED IN WALL FOR RECONFIGURED BATHROOM



FLUSH TRANSITION ON TO BALCONY

## 2 Bed PRE ADAPTED

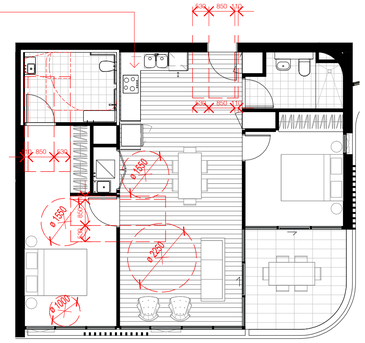
CAPPED SERVICES TO BE PROVIDED IN WALL FOR RECONFIGURED BATHROOM

KITCHEN TO BE DESIGNED FOR ADAPTATION WITH CAPPED SERVICES

FLUSH TRANSITION ON TO BALCONY

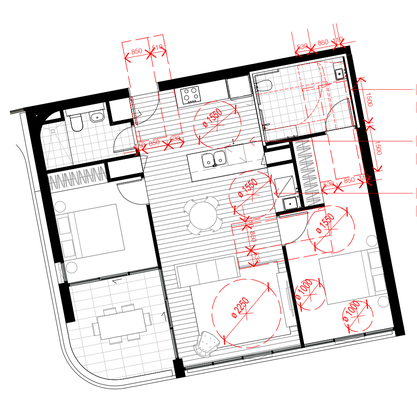
## 2 BED 2 PRE ADAPTED

RECONFIGURED KITCHEN



## 2 Bed POST ADAPTED

16 UNITS TOTAL:
1.10-9.10, 10.06-16.06




## 2 BED 2 POST ADAPTED

15 UNITS TOTAL:
01.09 - 09.09,
10.05 - 15.05

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 1 2 5m
1:100 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

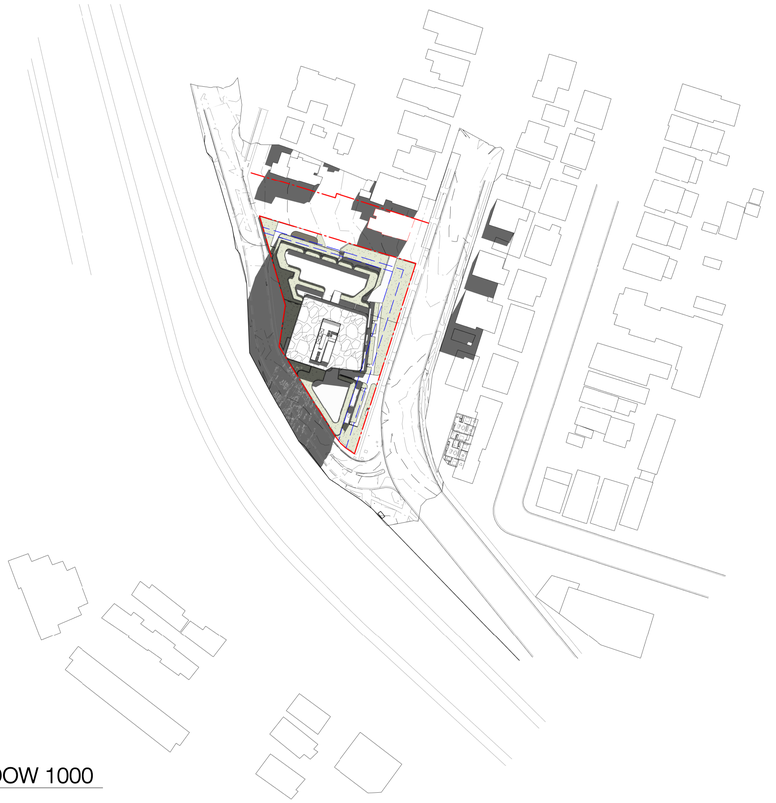
Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
ADAPTABLE UNIT TYPES

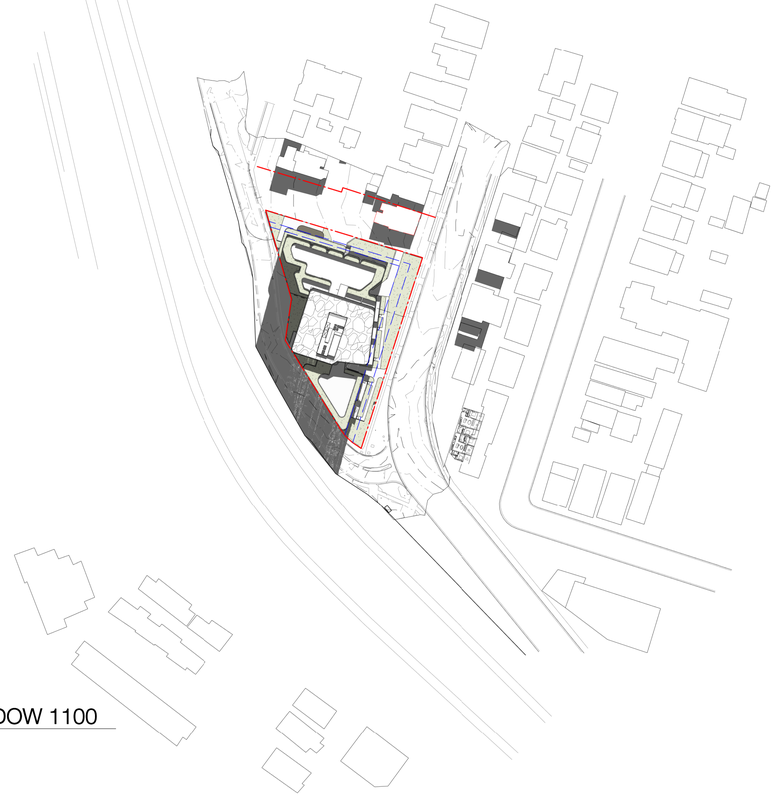
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 100 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-1401 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

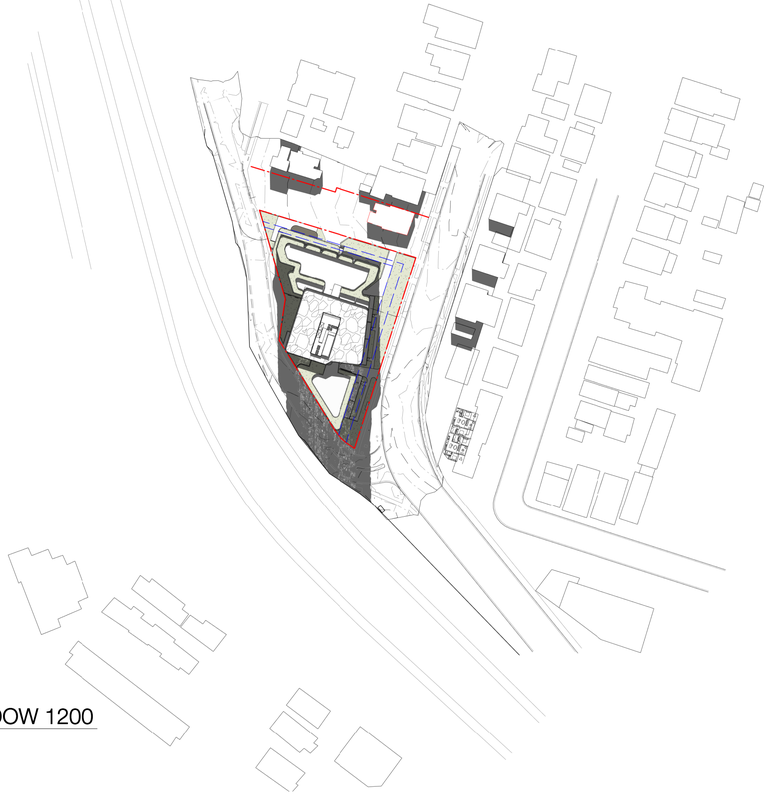
SHADOW 0900



SHADOW 1000



SHADOW 1100



SHADOW 1200

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m
1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

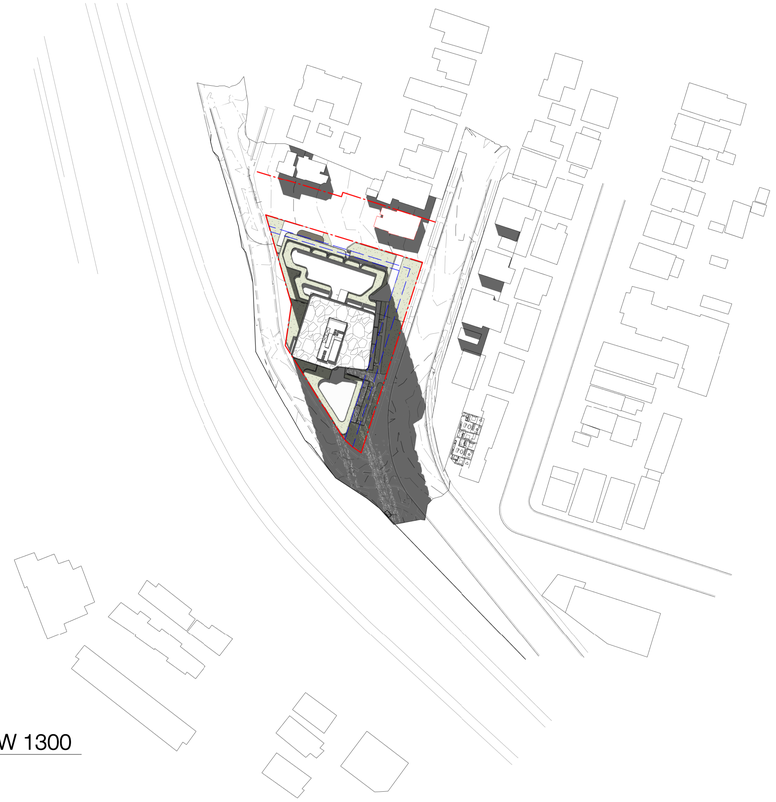
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

SHADOW ANALYSIS

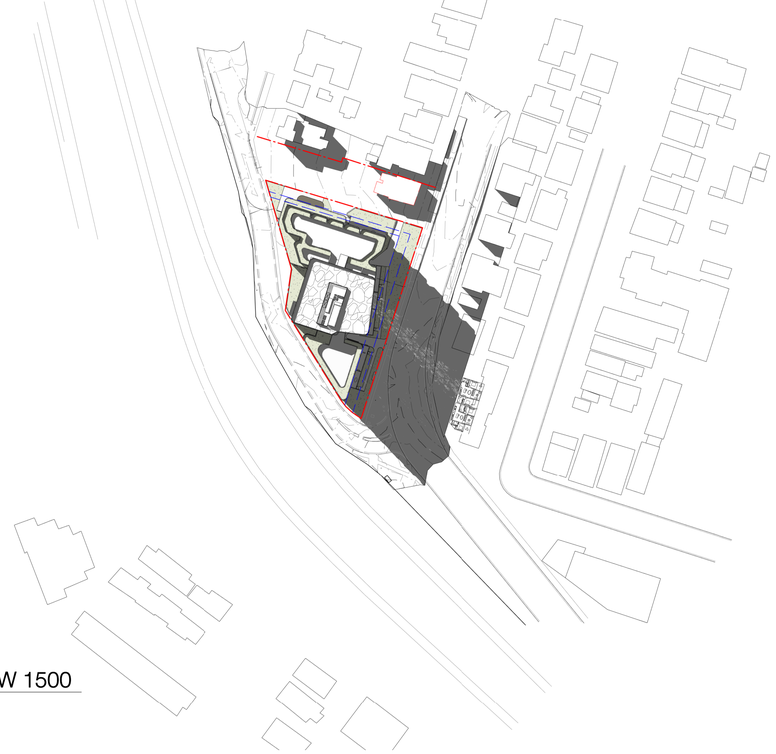
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 1250 | @ A1 |
| Drawn | Chk. | Job No. |
| Author | Checker | 6242 |
| Drawing No. | | Revision |
| DA-3101 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au



SHADOW 1300

SHADOW 1400



SHADOW 1500

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 10 20 50m

1:1000 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

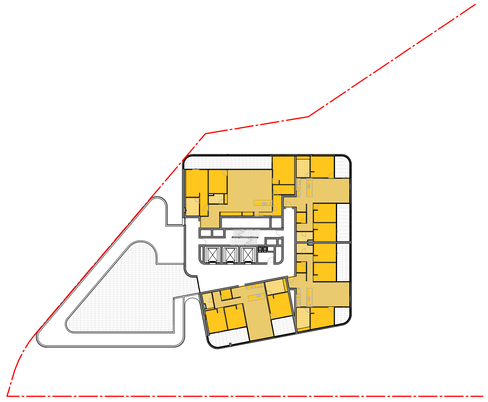
SHADOW ANALYSIS

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 1250 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-3102 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

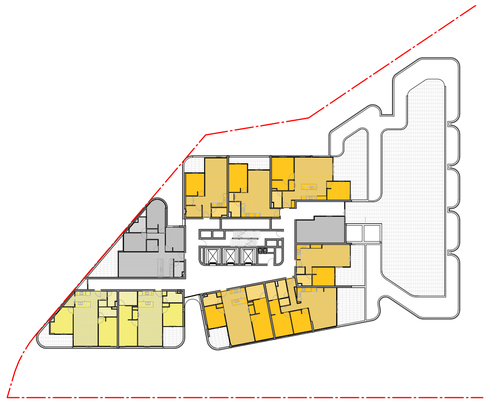
GROUND

LEVEL 3 - 9



LEVEL 17

LEVEL 1



LEVEL 10

LEGEND

2HRS — MINIMUM 2 HOURS SUNLIGHT TO LIVING SPACE & PRIVATE OPEN SPACE RECIEVED ON THE 21ST OF JUNE BETWEEN 9AM AND 3PM

TOTAL: 141/201 = 70%

> 15MIN — MINIMUM 15 MINUTES SUNLIGHT TO LIVING SPACE & PRIVATE OPEN SPACE RECIEVED ON THE 21ST OF JUNE BETWEEN 9AM AND 3PM

TOTAL: 43/201 = 21%

NA — LESS THAN 15 MINUTES SUNLIGHT TO LIVING SPACE & PRIVATE OPEN SPACE RECIEVED ON THE 21ST OF JUNE BETWEEN 9AM AND 3PM

TOTAL: 17/201 = 9%

ADG DESIGN CRITERIA

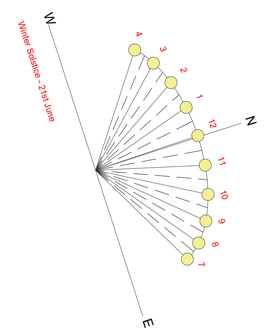
LIVING ROOMS AND PRIVATE OPEN SPACES OF AT LEAST 70% OF APARTMENTS IN A BUILDING TO RECIEVE A MINIMUM OF 2 HOURS DIRECT SUNLGHT BETWEEN 9AM AND 3PM AT MID WINTER.

A MAXIMUM OF 15% OF APARTMENTS IN A BUILDING TO RECIEVE NO DIRECT SUNLIGHT BETWEEN 3AM AND 3PM AT MID WINTER.

LEVEL 2



LEVEL 11 - 16




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m

1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

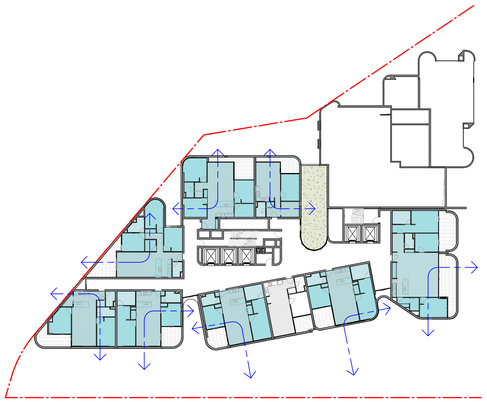
SOLAR ANALYSIS

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 500 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-3103 | | / 10 |

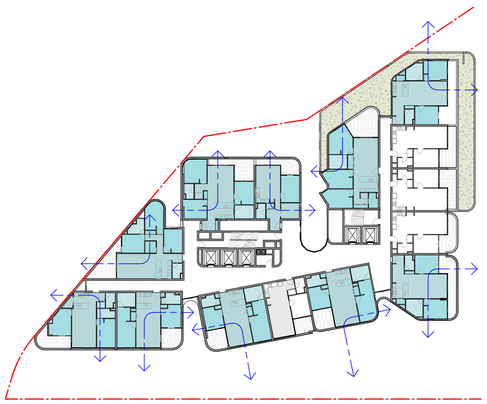
**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

GROUND

LEVEL 3 - 8



LEVEL 1



LEVEL 2

LEGEND

YES — MINIMUM 2 HOURS SUNLIGHT TO LIVING SPACE & PRIVATE OPEN SPACE RECIEVED ON THE 21ST OF JUNE BETWEEN 9AM AND 3PM

TOTAL: 143/181 = 79%

> 15MIN — MINIMUM 15 MINUTES SUNLIGHT TO LIVING SPACE & PRIVATE OPEN SPACE RECIEVED ON THE 21ST OF JUNE BETWEEN 9AM AND 3PM

TOTAL: 38/181 = 21%

ADG DESIGN CRITERIA

LIVING ROOMS AND PRIVATE OPEN SPACES OF AT LEAST 70% OF APARTMENTS IN A BUILDING TO RECIEVE A MINIMUM OF 2 HOURS DIRECT SUNLIGHT BETWEEN 9AM AND 3PM AT MID WINTER.

A MAXIMUM OF 15% OF APARTMENTS IN A BUILDING TO RECIEVE NO DIRECT SUNLIGHT BETWEEN 3AM AND 3PM AT MID WINTER.

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m

1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

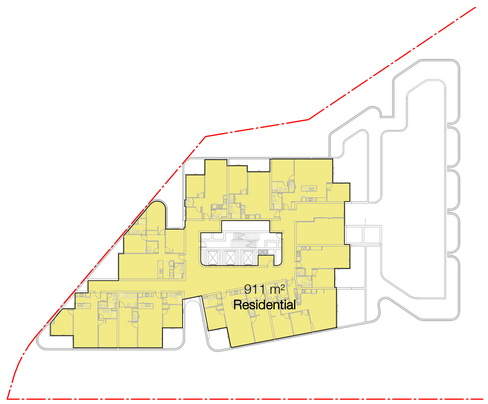
Drawing Name

CROSS VENTILATION ANALYSIS

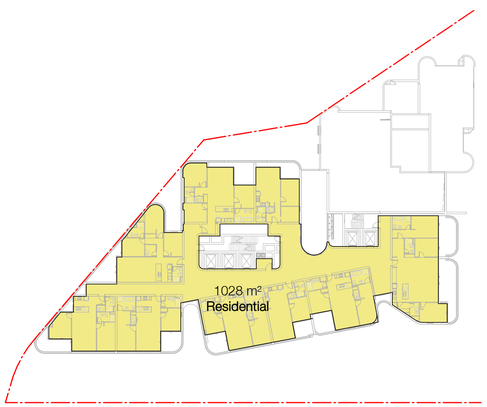
| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 500 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-3201 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

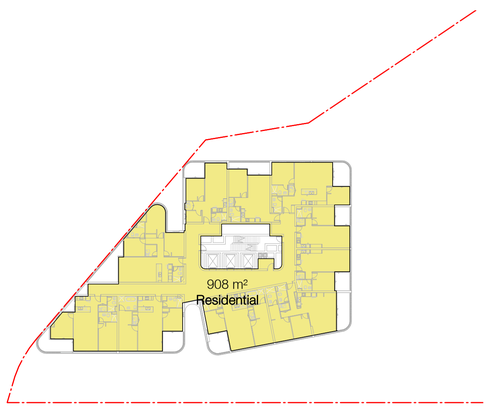
GROUND LEVEL



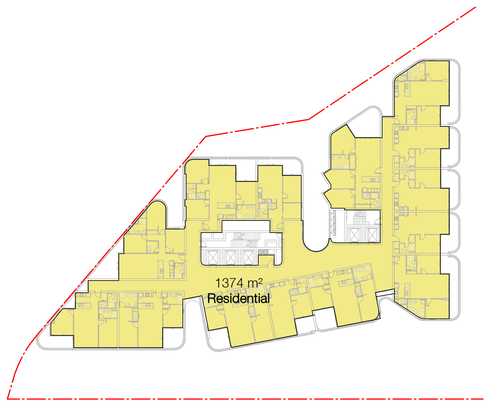

LEVEL 10



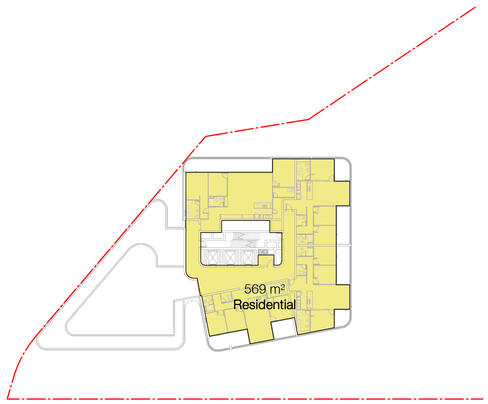

LEVEL 01




LEVEL 11 - LEVEL 16




LEVEL 02 - LEVEL 09




LEVEL 17

# TOTAL GFA: 20,009m²

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m
1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

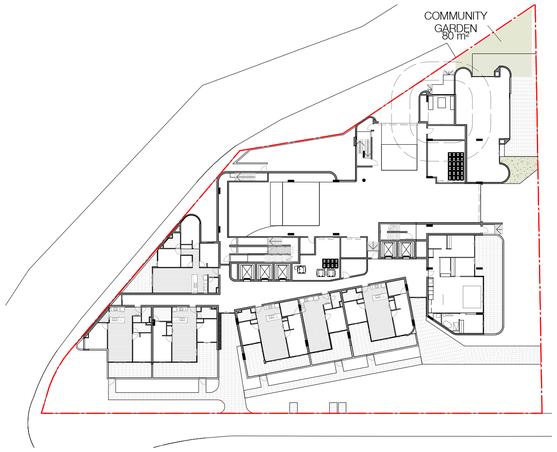
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
GFA ANALYSIS

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 500 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-3301 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




GROUND

LEGEND

COMMUNAL OPEN SPACE

SITE AREA: 3311

TOTAL: 1296/3311 = 39.1%

COMMUNAL AREAS - INTERNAL

ADG DESIGN CRITERIA

COMMUNAL OPEN SPACE HAS A MINIMUM AREA EQUAL TO 25% OF THE SITE.

GROUND

LEGEND

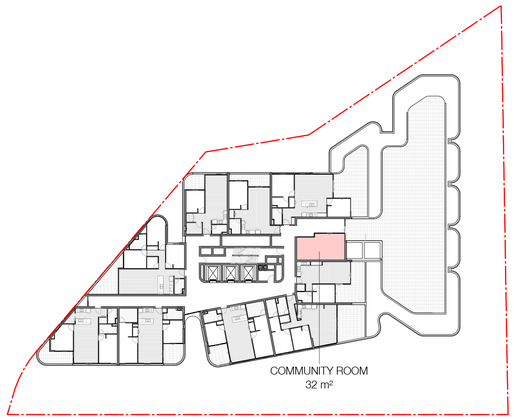
DEEP SOIL

SITE AREA: 3311

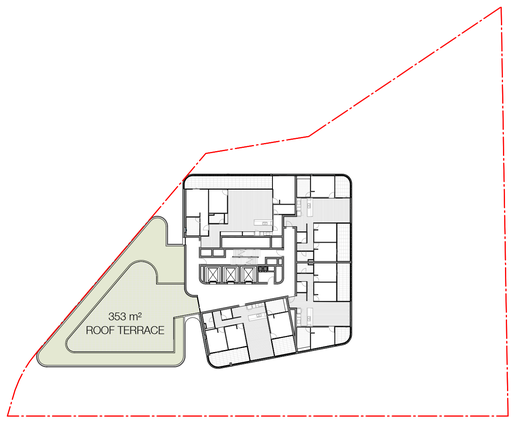
TOTAL: 517/3311 = 15.6%

ADG DESIGN CRITERIA

DEEP SOIL ZONES HAVE A MINIMUM AREA EQUAL TO 7% OF THE SITE.




LEVEL 10




LEVEL 17

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 5 10 25m

1:500 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

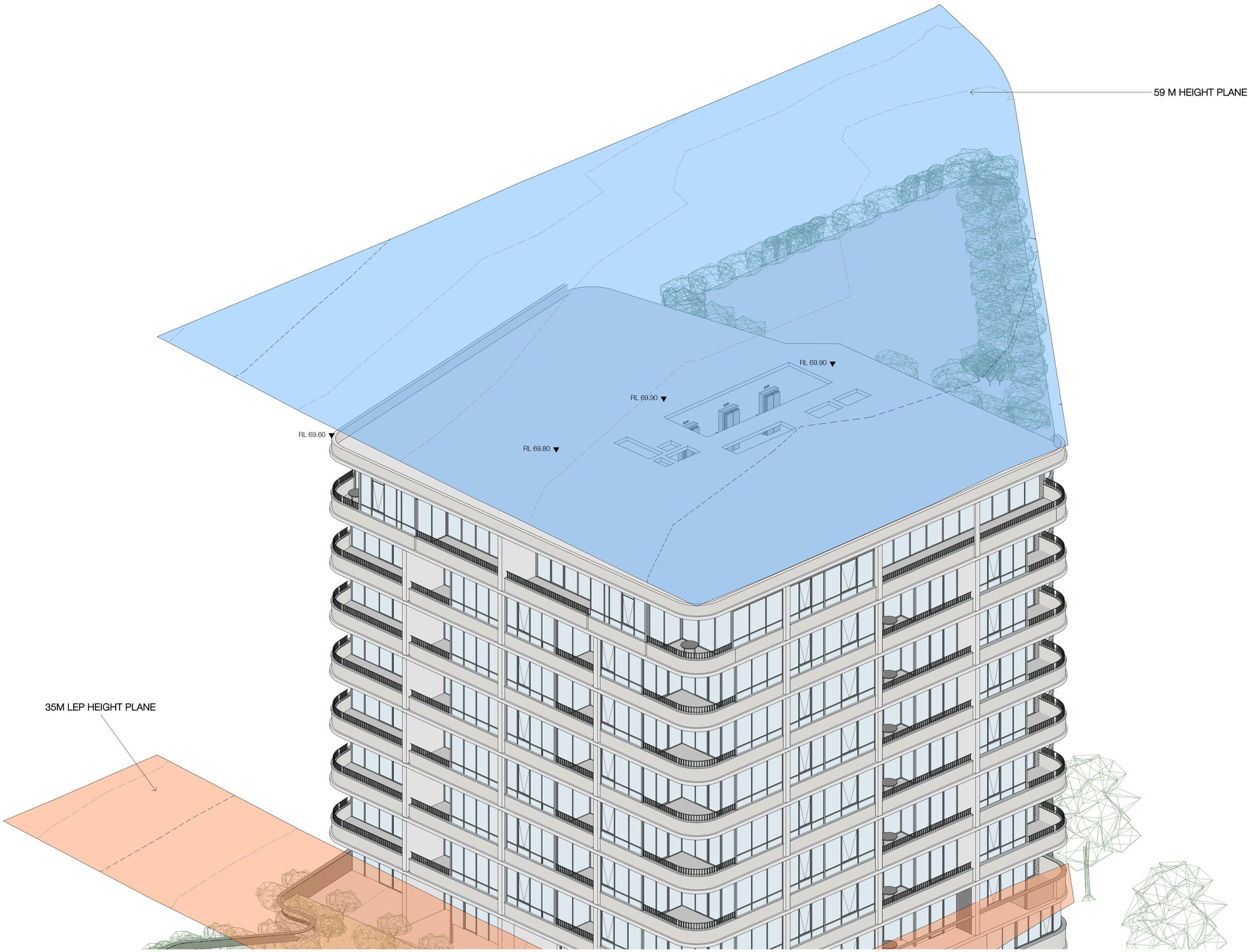
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

COMMUNAL OPEN & DEEP SOIL SPACE ANALYSIS

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 500 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-3302 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

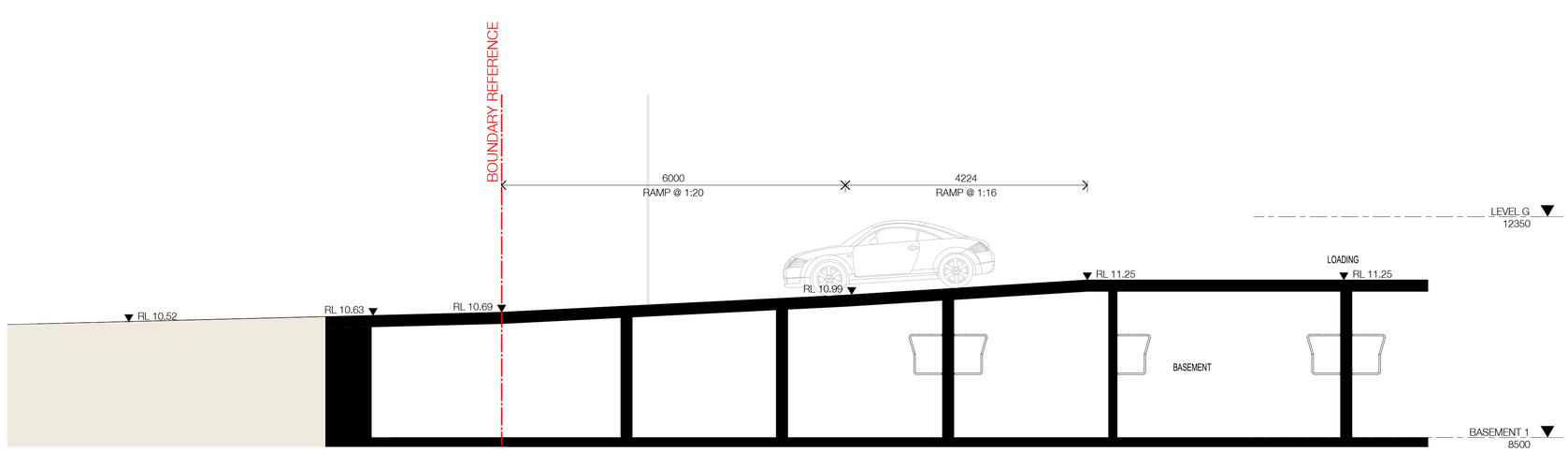
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

HEIGHT PLANE 3D

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | | @ A1 |
| **Drawn** | **Chk.** | **Job No.** |
| JG | NH | 6242 |
| **Drawing No.** | | **Revision** |
| DA-3410 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 250 500 1250mm
1:25 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
DRIVEWAY SECTION

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 50 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-5001 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

3D ARTIST IMPRESSION SHEET 3

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | | @ A1 |
| Drawn | Chk. | Job No. |
| JG | NH | 6242 |
| Drawing No. | | Revision |
| DA-6003 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

3D ARTIST IMPRESSION SHEET 4

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | | @ A1 |
| Drawn | Chk. | Job No. |
| JG | NH | 6242 |
| Drawing No. | | Revision |
| DA-6004 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

3D ARTIST IMPRESSION SHEET 5

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | | @ A1 |
| Drawn | Chk. | Job No. |
| JG | NH | 6242 |
| Drawing No. | | Revision |
| DA-6005 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

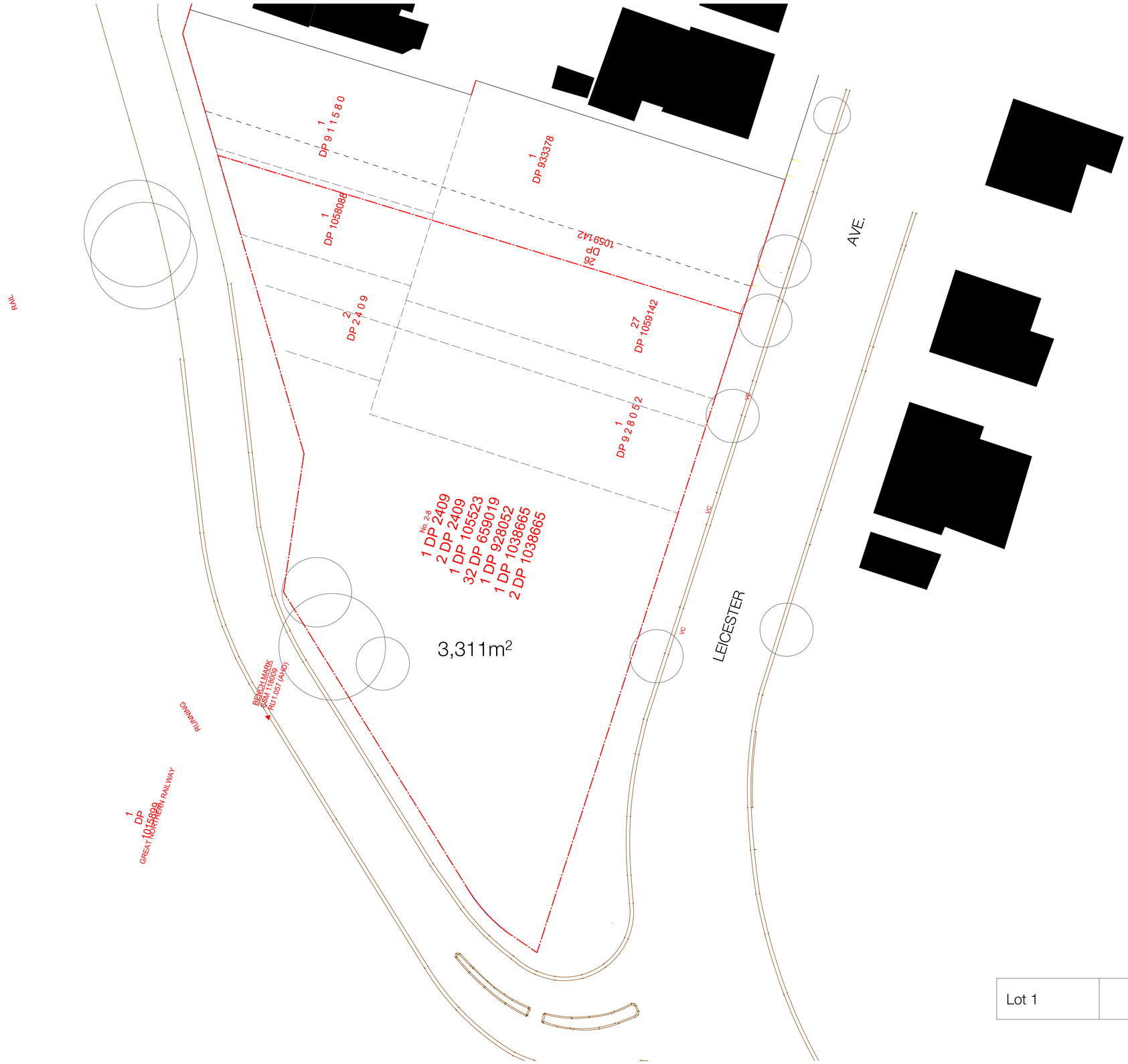
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

3D ARTIST IMPRESSION SHEET 6

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | | @ A1 |
| Drawn | Chk. | Job No. |
| JG | NH | 6242 |
| Drawing No. | | Revision |
| DA-6006 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




| Lot 1 | 3,311m² |
|---|---|

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2.5 5 12.5m
1:250 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 17.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-8 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
SITE AREA PLAN

| Date | Scale | Sheet Size |
|---|---|---|
| 17.08.2021 | 1 : 250 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0104 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

*Alphitonia excelsa*
Red Ash

Angophora costata
Sydney Red Gum

*Cupaniopsis anacardioides*
Tuckeroo

*Elaeocarpus eumundii*
Eumundi quandong

*Syzygium Cascade*
Cascade Riberry

*Murraya paniculata*
Orange Jessamine



*Syzygium Australe-resilience*
Lilly Pilly



*Westringia Grey Box*
Grey Box 'Westringia'

*Carex appressa*
Tall Sedge

*Myoporum parvifolium 'Yareena'*



*Asplenium australasicum*
Crow's nest fern



*Doodia aspera*
Rasp Fern

*Dianella Blue Stream*
Flax lily

*Imperata cylindrica*
Blady grass



*Poa Eskdale*
Tussock Grass



*Xanthorrhoea arborea*
Grass tree

## LEGEND

- DRIVEWAY TO BASEMENT
- PODIUM GARDENS
- DEEP SOIL GARDENS
- PEBBLES
- PROPOSED BUILDING
- AS SELECTED PRIVATE TERRACE TILE
- DECK AREA
- BOUNDARY
- BASEMENT LINE BELOW

EXISTING TREES TO BE REMOVED

DIAL BEFORE YOU DIG www.1100.com.au

### IRRIGATION NOTE

NOTE
ALL GARDENS TO HAVE INSTALLED A DRIP IRRIGATION SYSTEM CONTROLLED FROM WITHIN THE STORE AND RUN OF TANK WATER (POSSIBLE TOWN WATER TOP UP). IRRIGATION SYSTEM CAN BE DESIGNED AND INSTALLED BY
SITEDESIGN + IRRIGATION
CALL DAVID JAMES +61 488 358 180

### LANDSCAPE MAINTENANCE NOTES

| MONTH | MOWING EDGING BLOWING | FERTILISING (SEABOL) | CHECK IRRIGATION | HAND WEED REMOVAL | PRUNING | WEED SPRAYING | WATERING/ IRRIGATION | PLANT REPLACEMENT IF REQUIRED |
|---|---|---|---|---|---|---|---|---|
| DEC | W | M | M | W | F | M | D | W |
| JAN | W | M | M | W | F | M | D | W |
| FEB | W | M | M | W | F | M | D | W |
| MAR | F | M | M | F | M | M | D | W |
| APR | F | N/A | M | F | M | M | D | W |
| MAY | F | N/A | M | M | M | M | D | W |
| JUNE | M | N/A | M | M | N/A | N/A | 2ND D | W |
| JULY | M | N/A | M | M | N/A | N/A | 2ND D | W |
| AUG | M | N/A | M | M | N/A | N/A | 2ND D | W |
| SEP | M | M | M | M | N/A | N/A | 2ND D | W |
| OCT | F | F | M | F | M | M | D | W |
| NOV | F | F | M | F | M | M | D | W |

PLANTING ESTABLISHMENT PERIOD - 12 MONTHS
LANDSCAPE MATERIAL ESTABLISHMENT - 12 MONTHS
KEY D-DAILY, W-WEEKLY, F-FORTNIGHT, M-MONTHLY, 2ND DAY.

## MAINTENANCE GENERAL NOTES

**SECTION C: LANDSCAPE MAINTENANCE SPECIFICATION 1.0 SCOPE**

**1.1 PERIOD**
The 52 week Planting Establishment Period commences at the date of registration of the repective plan.
The contractor is to also allow for maintenance from the date of Practical Completion to the start date of the 52 week Planting Establishment Period. The allowance shall be for a weekly rate which will then be implemented until the formal maintenance period commences.

**1.2 PROGRAM**
Furnish a proposed planting maintenance program with the tender.

**1.3 MAINTENANCE LOGBOOK**
Contractor to keep a maintenance record of works carried out on a monthly basis. Log should include but not limited to: - Activities carried out during each attendance;
- Irregularities encountered and actions taken;
NB: Maintenance payments will be evaluated on submission of monthly logbooks.

**1.4 RECURRENT WORKS**
Throughout the Planting Establishment Period, continue to carry out recurrent works of a maintenance nature including, but not limited to, watering, mowing, weeding, rubbish removal, fertilising, pest and disease control, staking and tying, replanting, cultivating, pruning and keeping the site neat and tidy. All rubbish related to landscape works shall be removed by the landscape contractor before it is allowed to accumulate.

**1.5 PLANTING**
Commence recurrent planting maintenance works at the completion of planting. Ensure the stock arriving on site is protected and maintained for healthy growth.

**1.6 REPLACEMENTS**
Continue to replace failed, damaged or stolen plants for the extent of the Planting Establishment Period.

**1.7 MULCHED SURFACES**
Maintain the surface in a clean and tidy condition and reinstate the mulch as necessary.

**1.8 GRASSED AREAS**
Commence grass maintenance works at the completion of turfing, and continue to carry out grass maintenance throughout the contract and Planting Establishment Period, maintaining healthy weed free growth.

**1.9 STAKES AND TIES**
Adjust or replace as required. Remove those not required at the end of the Planting Establishment Period.

**1.10 WATERING/ IRRIGATION**
An irrigation system is to be installed to all mass planted beds and new tree planting, connected to a pump and the rainwater tank /OSD tank. This system shall be installed and maintained for the duration of the maintenance period (52 weeks) and in perpetuity of the development. All irrigation works shall be performed by a licensed irrigation contractor. Materials to be used are to be submitted to the site superintendent for approval. The contractor shall provide design drawings and material specifications/samples prior to commencing work. All works are to be conducted to all current and relevant Australian Standards.
The contractor is to be completely responsible for the coordination of the installation of the irrigation system with other services throughout the site. Recommended flow rates: The system shall be set up on a trial basis and them adjusted to suit the local requirements and conditions. Once the system is satisfactorily adjusted the contractor shall make fortnightly visits within the establishment period to ensure satisfactory performance of the system and to adjust the watering periods as required. A minimum even coverage of 25mm of water per week is recommended.

**2.0 REPORTS**

**2.1 LANDSCAPE MAINTENANCE REPORT**
'Landscape Maintenance Reports' shall be submitted to the Principle Certifying Authority by the contractor verifying that satisfactory maintenance of the landscape works has been undertaken and that any necessary rectification measures have been carried out to a high professional standard. This documentation is to be submitted through the plant establishment period.

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

AMENDMENTS

**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia, all Local and State Government Ordinances, relevant Australian Standards, Local Authorities Regulations and all other relevant Authorities concerned.
All structural work and site drainage to be subject to Engineer's details or certification where required by Council. This shall include r.c. slabs and footings, r.c. and steel beams & columns, wind bracing to AS 1170
and AS4055, anchor rods or bolts, tie downs, fixings etc., driveway slabs and drainage to Council's satisfaction. All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684. All work to be carried out in a professional and workman- shiplike manner according to the plans and specification.
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference.
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design, builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction. Locate and protect all services prior to construction.
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

| | |
|---|---|
| Project | **APARTMENT** |
| Address | **2-10 LEICESTER AVE STRATHFIELD NSW 2135** |
| Date | **19-07-2021** |
| Drawing Title | **GROUND LANDSCAPE PLAN** |
| Scale | **1:200@A1** |
| Drawing No. | **1314** |

Page
**L-01**

*Raphiolepis 'oriental pearl'*

*Yucca elephantipes*
Spineless yucca

*Agave desmettiana*

*Crassula atropurpurea*

*Senecio serpens*
Blue chalkstick

*Senecio mandraliscae*
Blue Chalk Stick

## LEGEND

- DRIVEWAY TO BASEMENT
- PODIUM GARDENS
- DEEP SOIL GARDENS
- PEBBLES
- PROPOSED BUILDING
- AS SELECTED PRIVATE TERRACE TILE
- DECK AREA
- BOUNDARY
- BASEMENT LINE BELOW

EXISTING TREES TO BE REMOVED

DIAL BEFORE YOU DIG www.1100.com.au

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

AMENDMENTS

**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia , all Local and State Government Ordinances , relevant Australian Standards , Local Authorities Regulations and all other relevant Authorities concerned .
All structural work and site drainage to be subject to Engineer's details or certification where required by Council . This shall include r.c. slabs and footings , r.c. and steel beams & columns , wind bracing to AS 1170
and AS4055 , anchor rods or bolts, tie downs , fixings etc., driveway slabs and drainage to Council's satisfaction . All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684 . All work to be carried out in a professional and workman- shiplike manner according to the plans and specification .
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference .
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design , builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction . Locate and protect all services prior to construction .
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

Project **APARTMENT**
Address **2-10 LEICESTER AVE STRATHFIELD NSW 2135** Date **19-07-2021**
Drawing Title **LEVEL 1 LANDSCAPE PLAN** Scale **1:200@A1**
Drawing No. **1314**

Page **L-02**

*Raphiolepis 'oriental pearl'*



*Senecio serpens*
Blue chalkstick

*Agave desmettiana*



*Yucca elephantipes*
Spineless yucca

## LEGEND

- DRIVEWAY TO BASEMENT
- PODIUM GARDENS
- DEEP SOIL GARDENS
- PEBBLES
- PROPOSED BUILDING
- AS SELECTED PRIVATE TERRACE TILE
- DECK AREA
- BOUNDARY
- BASEMENT LINE BELOW

EXISTING TREES TO BE REMOVED

DIAL BEFORE YOU DIG www.1100.com.au

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

AMENDMENTS

**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia , all Local and State Government Ordinances , relevant Australian Standards , Local Authorities Regulations and all other relevant Authorities concerned .
All structural work and site drainage to be subject to Engineer's details or certification where required by Council . This shall include r.c. slabs and footings , r.c. and steel beams & columns , wind bracing to AS 1170
and AS4055 , anchor rods or bolts, tie downs , fixings etc., driveway slabs and drainage to Council's satisfaction . All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684 . All work to be carried out in a professional and workman- shiplike manner according to the plans and specification .
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference .
All dimensions are to be checked and verified on site before the commencement of any work , all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design , builder's method of construction or materials used , deviation from specification without permission or accepted work practices resulting in inferior construction . Locate and protect all services prior to construction .
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

Project **APARTMENT**
Address **2-10 LEICESTER AVE STRATHFIELD NSW 2135** Date **19-07-2021**
Drawing Title **LEVEL 2 LANDSCAPE PLAN** Scale **1:200@A1**
Drawing No. **1314**

Page **L-03**

*Raphiolepis 'oriental pearl'*

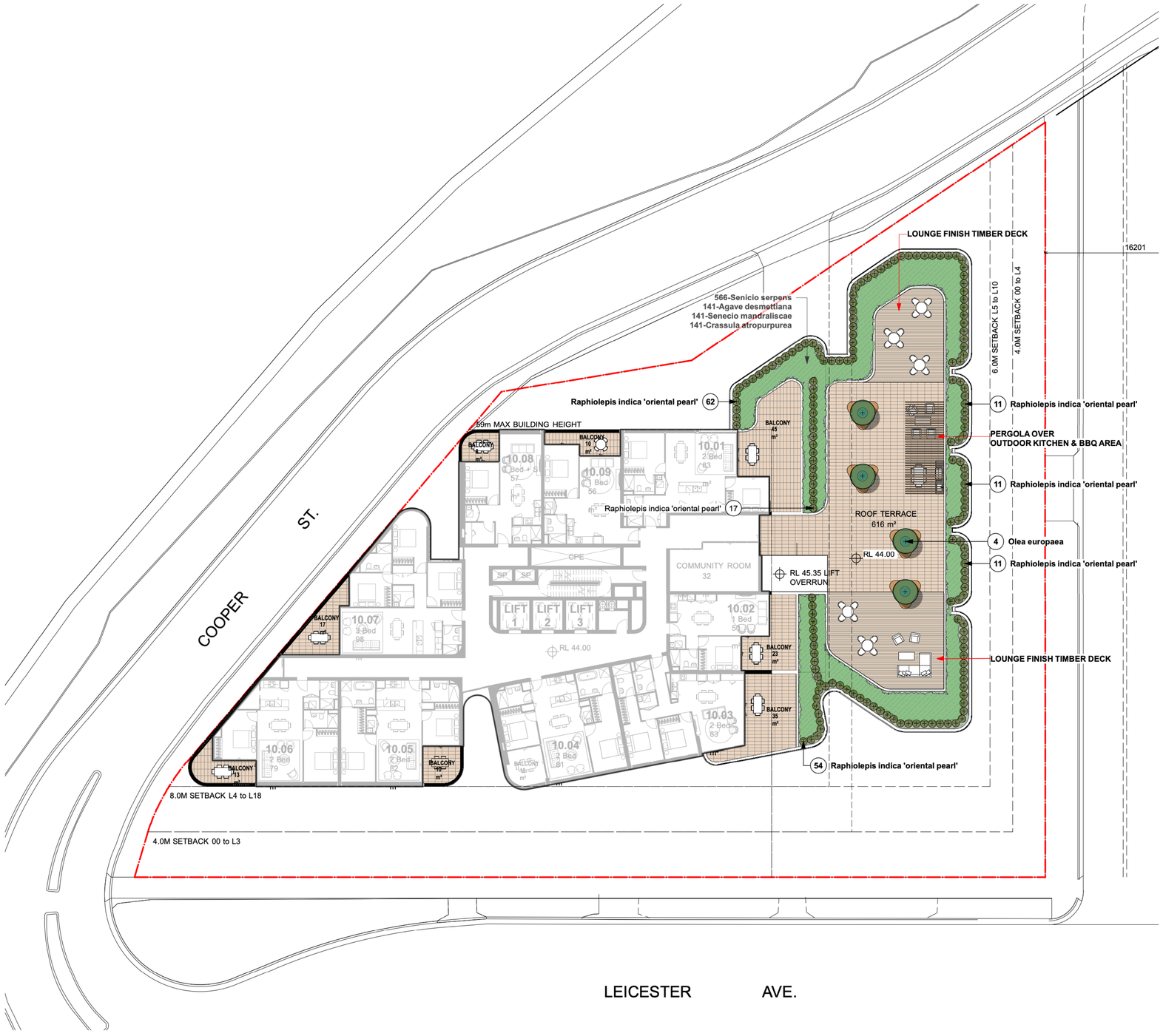
*Olea europaea*
Common Olive

*Agave desmettiana*

*Crassula atropurpurea*

*Senecio mandraliscae*
Blue Chalk Stick

*Senecio serpens*
Blue chalkstick




## LEGEND

- DRIVEWAY TO BASEMENT
- PODIUM GARDENS
- DEEP SOIL GARDENS
- PEBBLES
- PROPOSED BUILDING
- AS SELECTED PRIVATE TERRACE TILE
- DECK AREA
- BOUNDARY
- BASEMENT LINE BELOW

EXISTING TREES TO BE REMOVED

DIAL BEFORE YOU DIG www.1100.com.au

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

AMENDMENTS

**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia, all Local and State Government Ordinances, relevant Australian Standards, Local Authorities Regulations and all other relevant Authorities concerned.
All structural work and site drainage to be subject to Engineer's details or certification where required by Council. This shall include r.c. slabs and footings, r.c. and steel beams & columns, wind bracing to AS 1170
and AS4055, anchor rods or bolts, tie downs, fixings etc., driveway slabs and drainage to Council's satisfaction. All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684. All work to be carried out in a professional and workman- shiplike manner according to the plans and specification.
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference.
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design, builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction. Locate and protect all services prior to construction.
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

| | |
|---|---|
| Project | **APARTMENT** |
| Address | **2-10 LEICESTER AVE STRATHFIELD NSW 2135** |
| Drawing Title | **LEVEL 10 LANDSCAPE PLAN** |
| Date | **19-07-2021** |
| Scale | **1:200@A1** |
| Drawing No. | **1314** |

Page
**L-04**

OOR



*Raphiolepis 'oriental pearl'*



*Yucca elephantipes*
Spineless yucca



*Olea europaea*
Common Olive



*Agave desmettiana*



*Crassula atropurpurea*



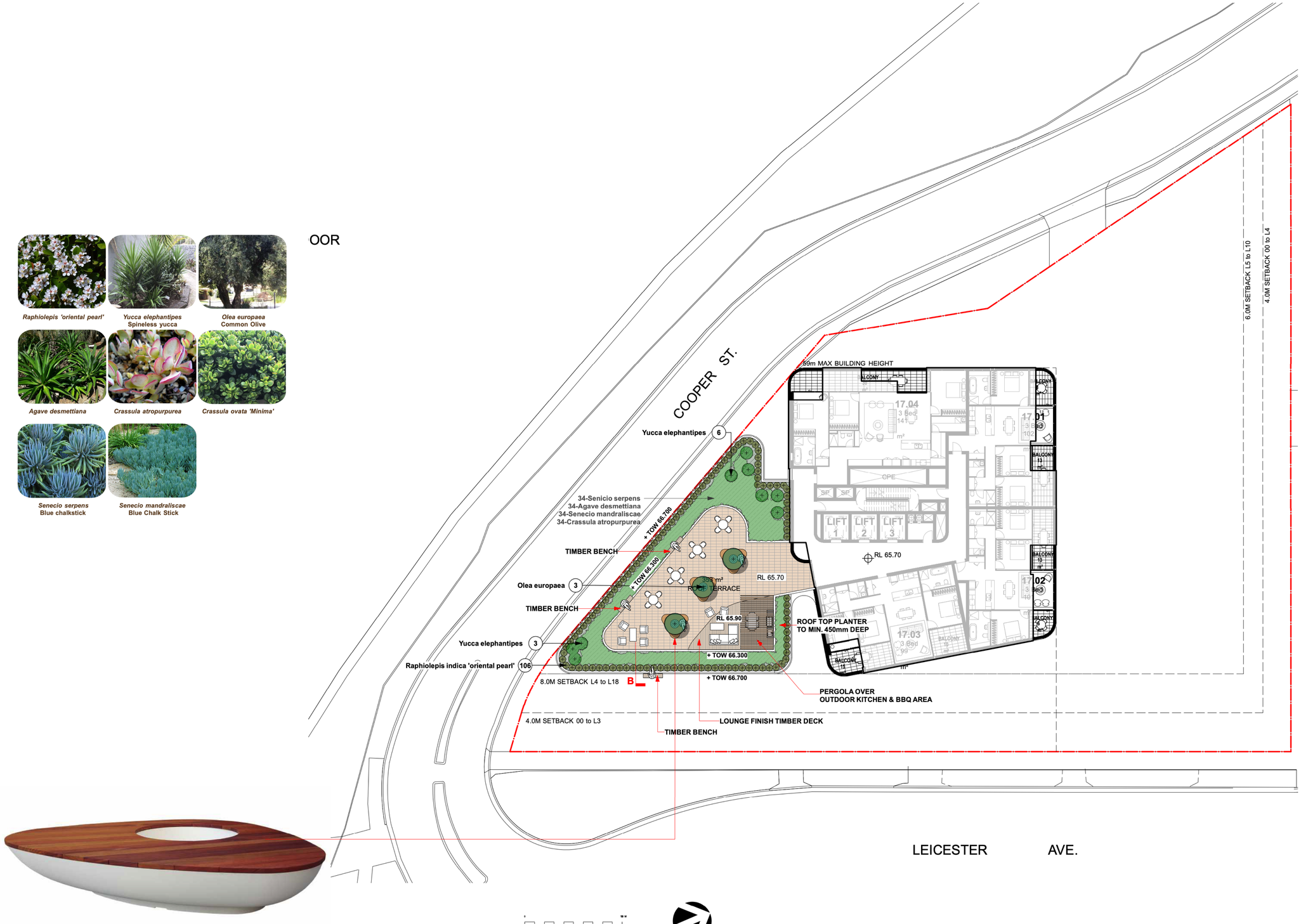
*Crassula ovata 'Minima'*



*Senecio serpens*
Blue chalkstick



*Senecio mandraliscae*
Blue Chalk Stick




## LEGEND

- DRIVEWAY TO BASEMENT
- PODIUM GARDENS
- DEEP SOIL GARDENS
- PEBBLES
- PROPOSED BUILDING
- AS SELECTED PRIVATE TERRACE TILE
- DECK AREA
- BOUNDARY
- BASEMENT LINE BELOW

EXISTING TREES TO BE REMOVED

DIAL BEFORE YOU DIG www.1100.com.au



DELTA II WITH TIMBER DECK AND 1050MM ROUND PLANTER
WWW.QUATRODESIGN.COM.AU

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

AMENDMENTS

**GENERAL NOTES**

All work to be carried out in accordance with the Building Code of Australia, all Local and State Government Ordinances, relevant Australian Standards, Local Authorities Regulations and all other relevant Authorities concerned.
All structural work and site drainage to be subject to Engineer's details or certification where required by Council. This shall include r.c. slabs and footings, r.c. and steel beams & columns, wind bracing to AS 1170
and AS4055, anchor rods or bolts, tie downs, fixings etc., driveway slabs and drainage to Council's satisfaction. All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684. All work to be carried out in a professional and workman- shiplike manner according to the plans and specification.
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference.
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design, builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction. Locate and protect all services prior to construction.
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

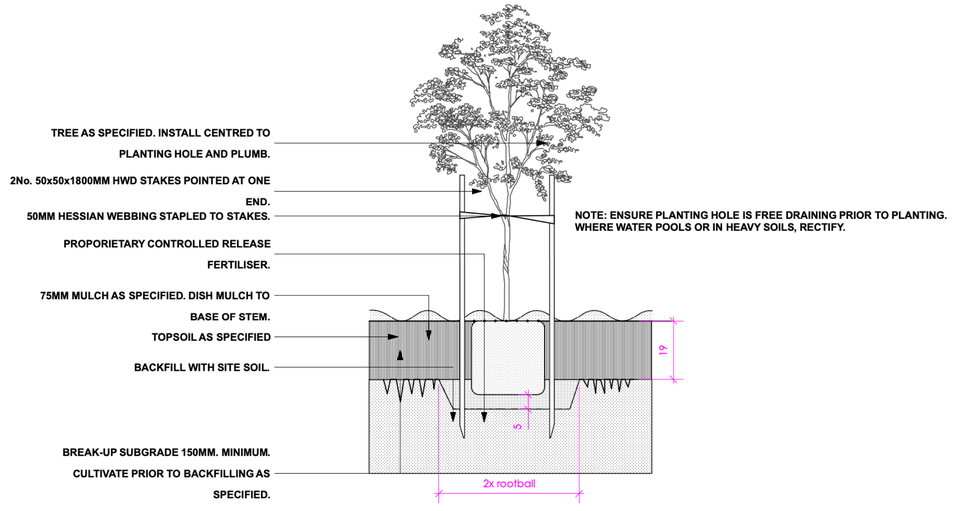
SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

| | |
|---|---|
| Project | **APARTMENT** |
| Address | **2-10 LEICESTER AVE STRATHFIELD NSW 2135** |
| Drawing Title | **LEVEL 17 LANDSCAPE PLAN** |
| Date | **19-07-2021** |
| Scale | **1:200@A1** |
| Drawing No. | **1314** |

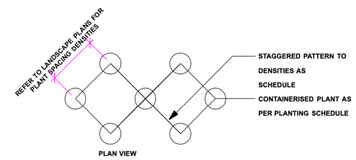
Page
**L-05**

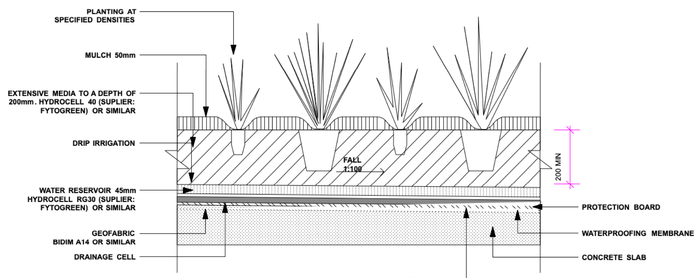
# Plant List

| ID | Botanical Name | Common Name | Scheduled Size | Mature Height | Mature Spread | Qty |
|---|---|---|---|---|---|---|
| **Trees** | | | | | | |
| Alp-exc | Alphitonia excelsa | Red Ash | 45L | 4 - 8 m | 3 - 5m | 3 |
| ACost | Angophora costata | Sydney Red Gum, Smooth-barked Apple | 45L | 15 - 20m | 6 - 10m | 3 |
| CAna | Cupaniopsis anacardioides | Tuckeroo | 45L | 10 - 15m | 3.5 - 6m | 4 |
| EE | Elaeocarpus eumundi | Smoothed leaved Quandong | 45L | 5 - 10m | 2.0 - 3.5m | 5 |
| ole-eur | Olea europaea | Olive | 45L | 2m | 2-3m | 7 |
| Syz-cas | Syzygium cascade | Brush Cherry, Scrub Cherry | 45L | 1-3m | 1-3m | 25 |
| **Shrubs** | | | | | | |
| Mur-pan | Murraya paniculata | Orange Jessamine | 200mm | 1.5 - 3m | 3.5 - 6m | 86 |
| Rap-ind-op | Raphiolepis indica 'oriental pearl' | Indian Hawthorn | 300mm | 0.45 - 0.6m | 1.2 - 2.0m | 392 |
| sen ser | Senicio serpens | Blue Chalksticks | 150mm | 0.4m | 0.6m | 1322 |
| syz-au're'-1 | Syzygium australe 'Resilience' | Lilly Pilly | 200mm | 1 - 2.5m | 1.5m | 67 |
| wes-gb | Westringia 'Grey Box' | Grey Box' Westringia | 200mm | 0.9m | 0.6m | 111 |
| yuc-el | Yucca elephantipes | Purple Pixie | 200mm | 2 m | 1.5m | 21 |
| **Ground Covers** | | | | | | |
| Aga-att | Agave attentuata | lion's tail | 300mm | 0.75 - 0.9m | 0.5 - 1.2m | 14 |
| Aga des | Agave desmettiana | Agave desmettiana | 140 mm | 0.105 - 0.155 m | 0.2 m | 355 |
| Cra atr | Crassula atropurpurea | Crassula atropurpurea | 200 mm | 0.105 - 0.155 m | 0.2 m | 206 |
| myo-pa'ya' | Myoporum parvifolium 'Yareena' | Yareena boobialla | 150mm | 0.15m | 0.8 - 1m | 122 |
| sen-ma | Senecio mandraliscae | Blue Chalk Sticks | 150mm | 0.15m | 0.5m | 299 |
| **Grasses** | | | | | | |
| cag-ap | Carex appressa | Tall Sedge | 150mm | 0.8m | 1m | 91 |
| dai 'bs' | Dianella Blue Stream | flax lily | 150mm | 0.3 ~ 0.4 metres | 0.3 ~ 0.4 metres | 604 |
| imp-cyl | Imperata cylindrica | Blady Grass | 150mm | 0.3 - 0.45m | 0.0 - 0.3m | 179 |
| Poa-esk | Poa eskdale | Tussock Grass | 150mm | 0.9 - 1.5m | 0.0 - 0.3m | 73 |
| Xan-arb | Xanthorrhoea arborea | Grass Tree | 150mm | 1m | 1m | 46 |
| **Ferns** | | | | | | |
| asp-aus | Asplenium australasicum | Birds Nest Fern | 150mm | 1m | 1.2m | 9 |
| doo-asp | Doodia aspera | Rasp Fern | 150mm | 0.3 | 1m | 930 |

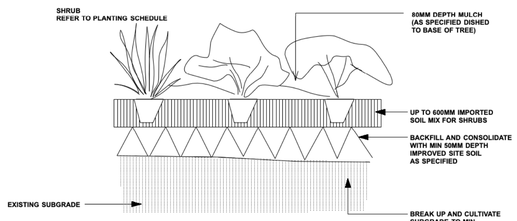



**75-100L TREE PLANTING DETAIL**
NTS




**TYPICAL PLANTING/ PODIUM DETAIL**
NTS




**TYPICAL SHRUB PLANTING DETAIL**
NTS

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

**AMENDMENTS**

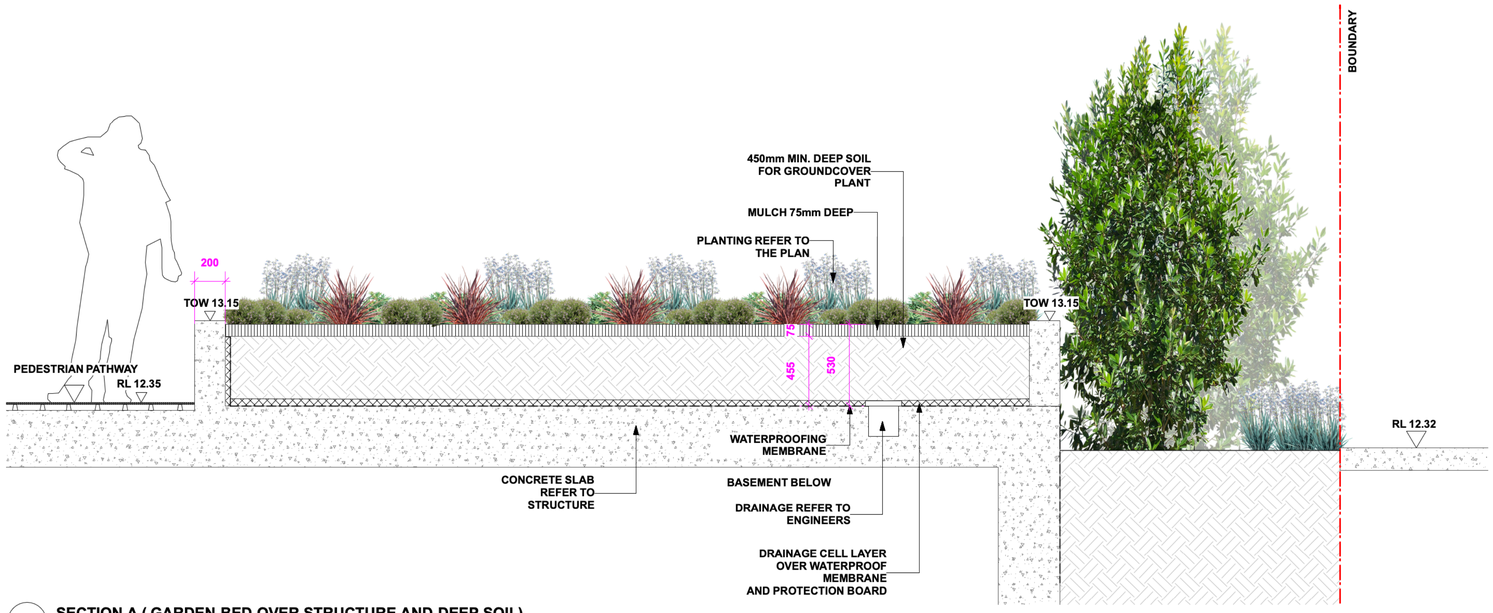
**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia, all Local and State Government Ordinances, relevant Australian Standards, Local Authorities Regulations and all other relevant Authorities concerned.
All structural work and site drainage to be subject to Engineer's details or certification where required by Council. This shall include r.c. slabs and footings, r.c. and steel beams & columns, wind bracing to AS 1170
and AS4055, anchor rods or bolts, tie downs, fixings etc., driveway slabs and drainage to Council's satisfaction. All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684. All work to be carried out in a professional and workman- shiplike manner according to the plans and specification.
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference.
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design, builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction. Locate and protect all services prior to construction.
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

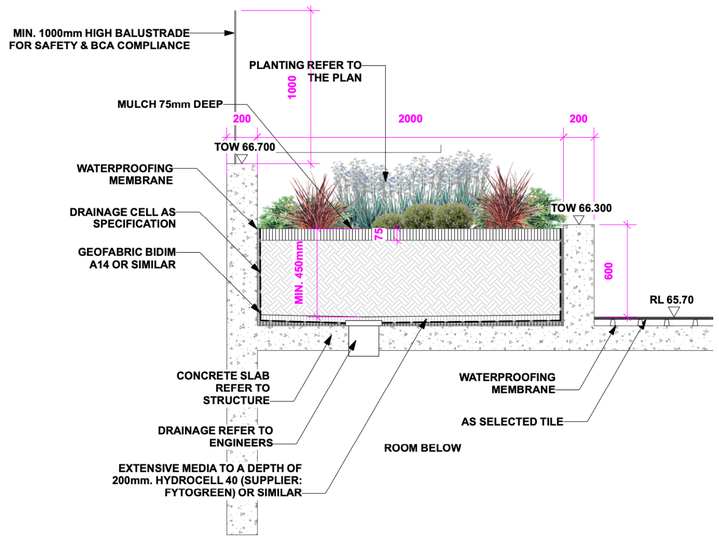
SYDNEY NORTH STUDIO
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

Project **APARTMENT**
Address **2-10 LEICESTER AVE STRATHFIELD NSW 2135** Date **19-07-2021**
Drawing Title **PLANTING SCHEDULE & DETAILS** Scale **N.T.S@A1**
Drawing No. **1314**

Page **L-06**




A **SECTION A ( GARDEN BED OVER STRUCTURE AND DEEP SOIL)**
**Scale: 1:20**




B **SECTION B ( ROOF TOP PLANTER)**
**Scale: 1:20**

| ISSUE | DATE | COMMENT |
|---|---|---|
| D | 19/07/21 | UPDATE ARCH PLAN |

**AMENDMENTS**

**GENERAL NOTES**
All work to be carried out in accordance with the Building Code of Australia , all Local and State Government Ordinances , relevant Australian Standards , Local Authorities Regulations and all other relevant Authorities concerned .
All structural work and site drainage to be subject to Engineer's details or certification where required by Council . This shall include r.c. slabs and footings , r.c. and steel beams & columns , wind bracing to AS 1170
and AS4055 , anchor rods or bolts , tie downs , fixings etc., driveway slabs and drainage to Council's satisfaction . All timbers to be in accordance with SAA Timber Structure Code AS1720 and SAA Timber Framing Code AS 1684 . All work to be carried out in a professional and workman- shiplike manner according to the plans and specification .
NOTE
Do not scale off the drawings unless otherwise stated and use figured dimensions in preference .
All dimensions are to be checked and verified on site before the commencement of any work, all dimensions and levels are subject to final survey and set-out
No responsibility will be accepted by Sitedesign for any variations in design , builder's method of construction or materials used, deviation from specification without permission or accepted work practices resulting in inferior construction . Locate and protect all services prior to construction .
COPYRIGHT CLAUSE
This drawing and design is the property of Sitedesign and should not be reproduced either in part or whole without the written consent of this firm.

SITEDESIGN +STUDIOS
*creating places to live in and enjoy*

**SYDNEY NORTH STUDIO**
PO Box 265
SEAFORTH NSW 2092
0417685846
p 1300 22 44 55
info@sdstudios.com.au
www.sdstudios.com.au

Project **APARTMENT**
Address **2-10 LEICESTER AVE STRATHFIELD NSW 2135** Date **19-07-2021**
Drawing Title **SECTION DETAILS** Scale **1:20@A1**
Drawing No. **1314**

**Page**
**L-07**

SJB Architects

# SEPP65 Design Statement

## 2-10 Leicester Avenue, Strathfield NSW

We create spaces people love.
SJB is passionate about the possibilities of architecture, interiors, urban design and planning.
Let's collaborate.

Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia
T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

**Prepared for**
Leice Pty Ltd

**Issued**
17 August 2021

# We create amazing places

At SJB we believe that the future of the city is in generating a rich urban experience through the delivery of density and activity, facilitated by land uses, at various scales, designed for everyone.

Ref: #6242
Version: 02
Prepared by: BR
Checked by: NH

Contact Details:

SJB Architects
Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia

T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

SJB Architecture (NSW) Pty Ltd
ABN 20 310 373 425
ACN 081 094 724
Adam Haddow 7188 John Pradel 7004

# Contents


**1 Design Verification Statement 4**

**2 SEPP65 Design Quality Principles 6**

2.1 Principle 1: Context and Neighbourhood Character 7

2.2 Principle 2: Built Form and Scale 9

2.3 Principle 3: Density 10

2.4 Principle 4: Sustainability 11

2.5 Principle 5: Landscape 12

2.6 Principle 6: Amenity 13

2.7 Principle 7: Safety 14

2.8 Principle 8: Housing Diversity and Social Interaction 15

2.9 Principle 9: Aesthetics 16

**3 ADG response table 17**

# Design Verification Statement

1

The purpose of this statement is to outline the design rationale and process that was adopted to prepare the application scheme.

# Design Verification Statement

## Prepared to accompany the Development Application submitted to Council

03 August 2021

Project Address:
2-10 Leicester Avenue
Strathfield NSW 2135

Prepared on behalf of:
Leice Pty Ltd

Prepared by:
SJB Architects NSW

**Verification of Qualifications**

Nick Hatzi is registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.
The registration Number is 9380

Statement of Design

Nick Hatzi has been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.

Nick Hatzi verify's that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.

**Nick Hatzi**
Director
Registered Architect NSW, No. 9380 ( registered as Nicholas Hatzianagnostou)

# SEPP65 Design Quality Principles

# 2

The following content outlines the architectural scheme against the nine Principles of Design.

## SEPP65 Design Quality Principles

### 2.1 Principle 1: Context and Neighbourhood Character

*Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character.*

*Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.*

2-10 Leicester Ave is a prominent triangular corner site between Leicester Avenue and the Sydney Trains Rail Corridor. It's immediate context is typified by 1-2 storey residential buildings east of the site and apartment buildings up to 9 storeys high to the north. An interesting feature of this site is the rail infrastructure that is found immediately west of the site.

The site has high connectivity to its immediate and surrounding context. It is located within 1300m of Strathfeild Station and Bus Interchange, while Leicester Avenue is a significant road that acts as the entry point to the M4 Motorway. The site is also located 400m from the Strathfield Town Centre and Plaza, as well as 700m from the Bakehouse Quarter in North Strathfeild.

Onsite, all previous structures have been demolished and the site currently sits empty. two 8 storey residential buildings (Buildings A and B) have already been completed. At 24 storeys, the proposal will be one of the first developments in the area of a higher density, with several other sites in the area also seeking consideration of increased heights and densities over that permitted by the current controls.

The proposed scheme will respond to the following site context conditions:

1. **Strathfeild Triangle** - The site will respond to the unique shape of the site. A wedge shaped building that will act as a landmark into the area for oncoming train commuters and pedestrians.
2. **Existing Low Density Housing** - The materiality and scale of the project's lower levels will reflect the scale of existing low density housing, adding some cohesion to this dynamic streetscape.

## SEPP65 Design Quality Principles

The site from Cooper Street

Western edge of the site - few low scale homes remain

Newer apartment developments fronting Parramatta Road seen beyond

Corner of Cooper St and Leicester Ave

Eastern perimeter of the site - Leicester Ave

Site from Leicester Ave

## SEPP65 Design Quality Principles

### 2.2 Principle 2: Built Form and Scale

*Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.*

*Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.*

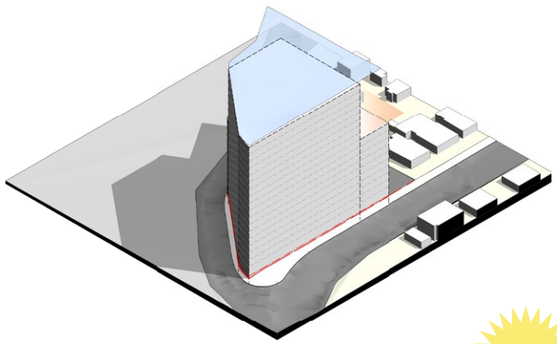
*Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.*

1: The LEP provides a 59m and 35m height limit over the site, the DCP envisages a 10 storey block edge form along the future road (to be acquired and constructed by Council) to the north, and an 18 storey block form to the south.

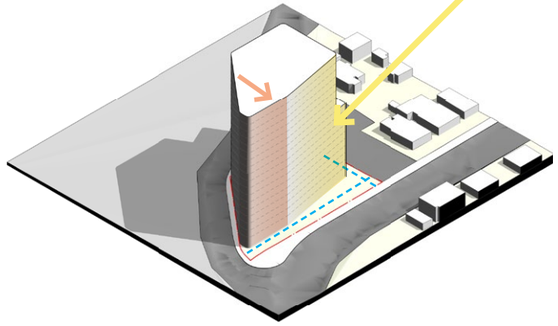
2: Reinforce the southern corner of the site, with a slender tower form as a gateway to the Strathfield Triangle Precinct. The triangular shape helps reduce the visual bulk of the tower from pedestrians and train commuters travelling north towards the site. Overall DCP setbacks are adhered to and in some areas increased for improved solar amenity and aspect to apartments. Resulting in a built form that is respectful to existing and future desired context.

3: Vertical articultion of the form breaks down the mass again. The massing creates the impression of three distinct forms across the site with varying heights and appearance.

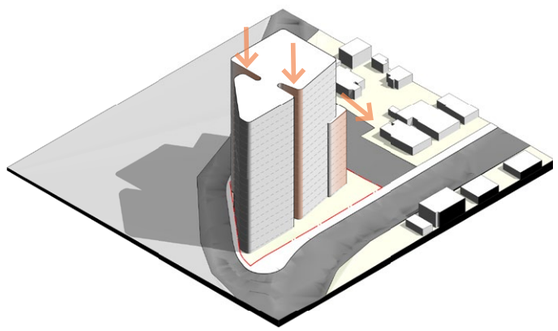
4: Communal Open Space is provided on the roof tops that sit within the LEP height planes creating opportunities for landscape roof forms to compliment the architectural tower forms.



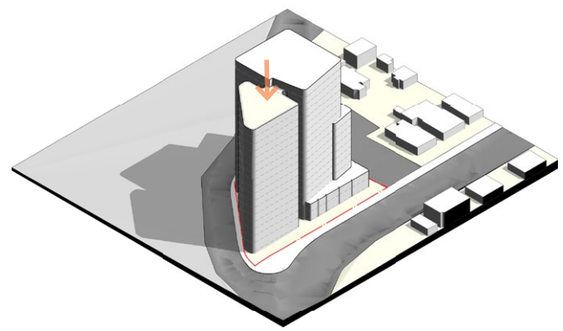
1. LEP Controls - 59m & 35m Height Control



2. Triangle - Reinforce the corner



3. Vertical Articularion - Overlaps & Slots



4. Communal Open Space

## SEPP65 Design Quality Principles

### 2.3 Principle 3: Density

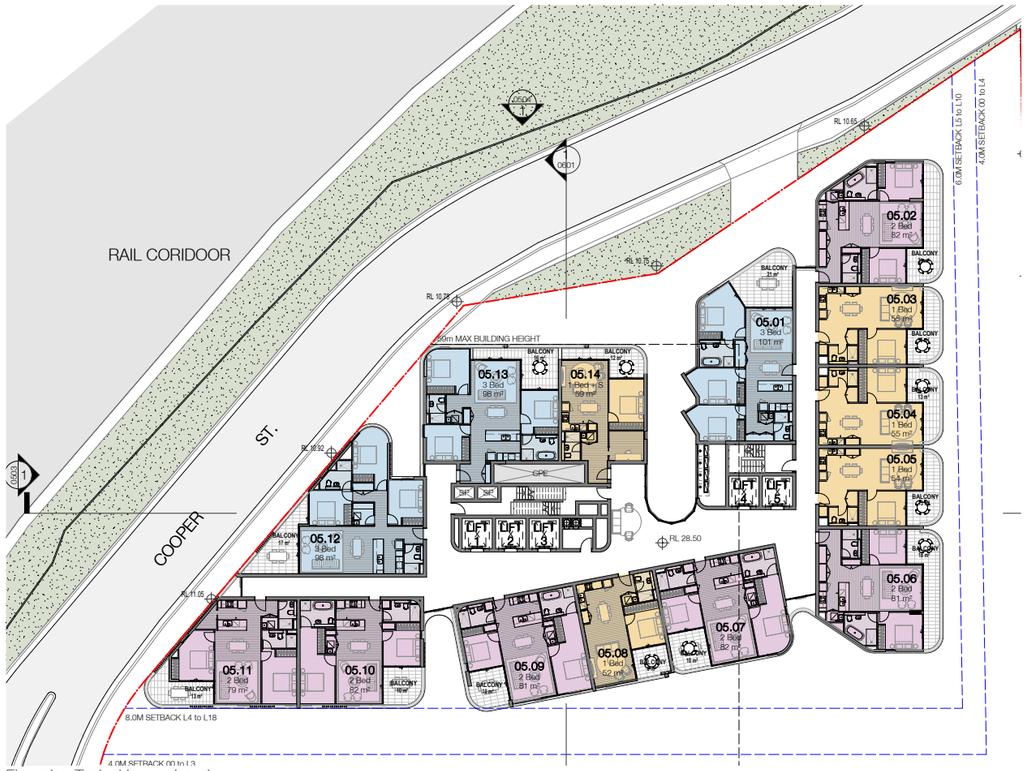
*Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.*

The number and mix of dwelling types achieves the objectives and goals of the Apartment Design Guidelines, particularly in regards to privacy, orientation, cross flow ventilation and diversity of housing choice

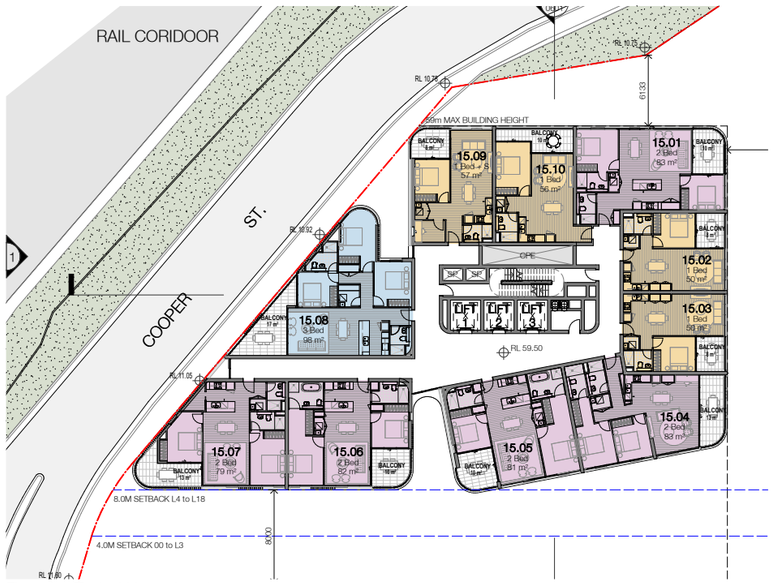
The proposal is well served by public transport, being within walking distance of Strathfeild train station, with services to both Parramatta and the CBD. It is also in close proximity to the M4, with entry ramps coming off Leicester Ave to the north of the site. The majority of apartments are provided with a carspace.

Residential Apartment mix:

- 1 Bedroom Apartments 35% 50-61m$^2$
- 2 Bedroom Apartments 45% 77-91m$^2$
- 3 Bedroom Apartments 20% 110m$^2$




Floorplan Typical Lower Level




Floorplan Typical Upper Level

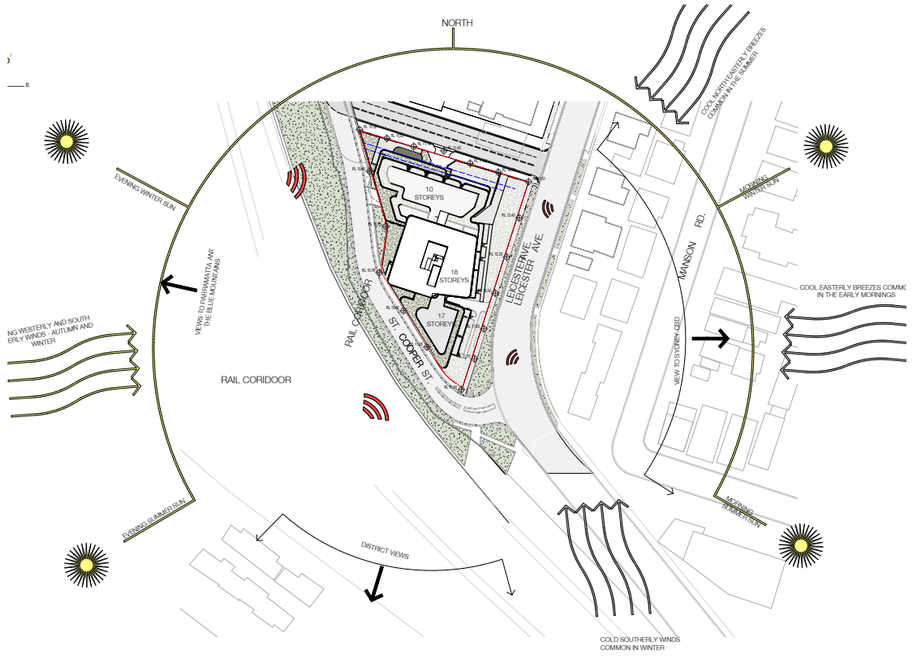
## SEPP65 Design Quality Principles

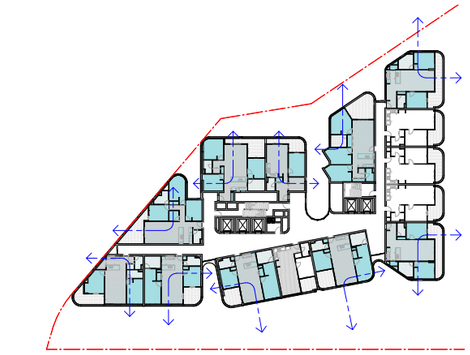
### 2.4 Principle 4: Sustainability

*Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.*

The proposal incorporates a number of principles of sustainability:

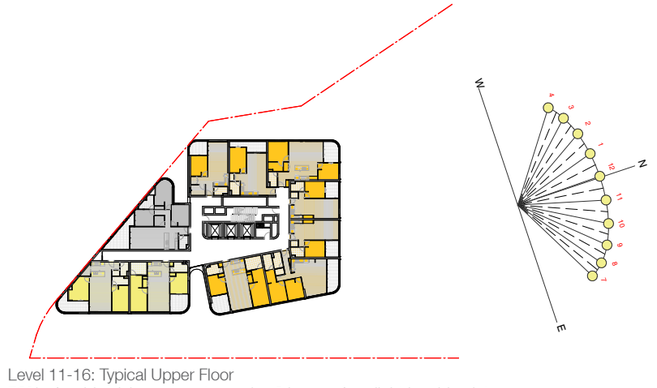
- Maximising direct sun to apartments while utilising slab overhangs to control summer heat gain (70% of residential apartments receive a minimum of 2 hours direct sunlight in mid-winter);
- Natural ventilation to the majority of apartments (69% of residential units in the first 9 levels are cross-ventilated);
- Provision of bicycle parking facilities for visitors and residents;
- A material palette that has longevity, low embodied energy and minimise maintenance;
- Waste management including seperation of household waste by general and recyclables;
- Energy and water efficient fixtures and appliances;
- Proximity to public transport and local shops;
- Compliance with BASIX requirements.



Level 3
69% of residential apartments in the first 9 levels are cross ventilated

Level 3-9: Typical Lower Floor




Level 11-16: Typical Upper Floor
70% of residential apartments receive 2 hours of sunlight in mid -winter

## 2.5 Principle 5: Landscape

*Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.*

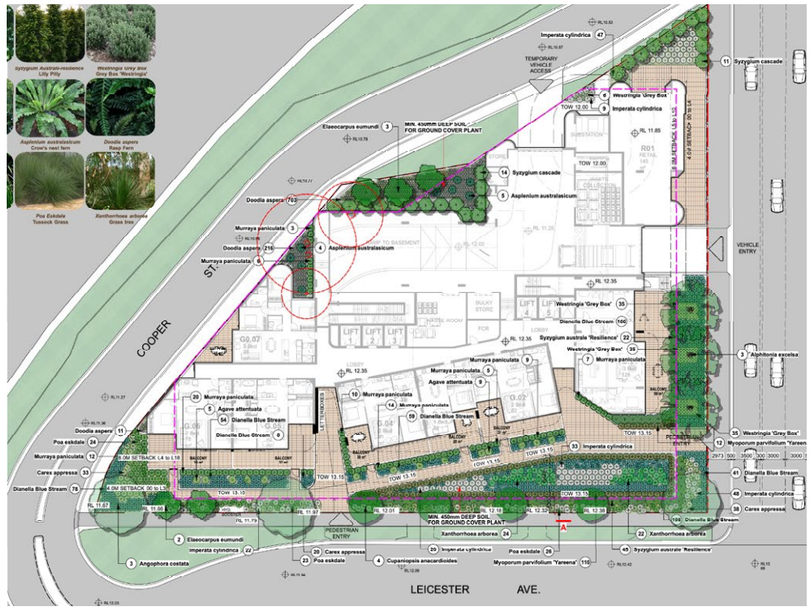
*Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.*

The proposal incorporates significant landscaping at Ground, Level 10 and Level 17. Lobbies on typical tower levels are given a landscaped outlook with double height planting.

At ground level, the public domain is enhanced by both hard and soft landscaping, extending the public domain into the site and providing a visual buffer between the building and Leicester Avenue.

On Level 10, the communal open space also consists of hard and soft landscaping that is adjacent to a community room with a kitchen and dining fascilities. Raised planter beds on the perimeter extend inwards to form alcoves, with seating and areas for communal interaction.

On Level 17, provision has been made for planting around the perimeter, forming a green edge to the roof. Views east to the Sydney CBD Skyline will provide a visual backdrop to social exchnages atop the tower.




Landscape Plan - Ground Level

Landscape Plan - Level 17

Landscape Plan - Level 10

## SEPP65 Design Quality Principles

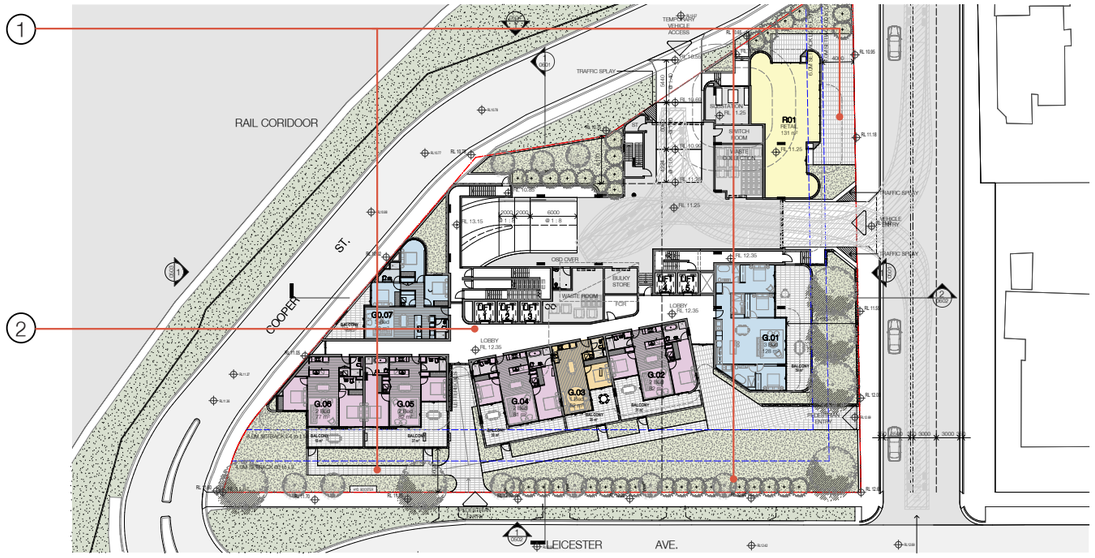
### 2.6 Principle 6: Amenity

*Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.*

*Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.*

Through the development of the scheme design the following issues have been considered:

1. The development contributes to the general public amenity at ground floor through blending the public realm with the private though landscaped transitions and retail activation.
2. Public spaces within the buildings such as common lobbies at each level are naturally lit
3. Apartment depths have been restricted to maintain reasonable access to natural daylight to all rooms.
4. Significant communal landscaped spaces and communal facilities have been provided for residents.
5. Apartments have views spanning from the Sydney CBD to Parramatta.
6. Residential levels are located on upper levels to mitigate noise and pollution from Parramatta Road and the M4




Ground Level

Levels 11-16 Upper Typical

## 2.7 Principle 7: Safety

*Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.*

*A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.*

The safety and security of residential apartment buildings is a function of both the private and public realm. In this regard principles have been established for the interfaces between the public and private domain to ensure that safe and equitables spaces are supported.

The following safety initiatives have been incorporated into the design:

1. Principle building entrances are highlighted through the use of building form and articulation of materials, well lit, and allow for passive surveillance.
2. Two storey height retail facing new street
3. Ground floor apartments with street entry courtyards encourage activity and passive surveillance.
4. The use of appropriately scaled landscaping and built form elements to ensure privacy without creating spaces to hide.
5. Car park layouts are designed to minimise opportunities for alcoves. Columns or walls do not obstruct sight lines and the car parks are generally open. Security access in the form of swipe card access will be provided.

View from Leicester Ave building entry

View from future road (to be acquired and constructed by Council), and Cooper street

## SEPP65 Design Quality Principles

### 2.8 Principle 8: Housing Diversity and Social Interaction

*Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.*

*Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.*

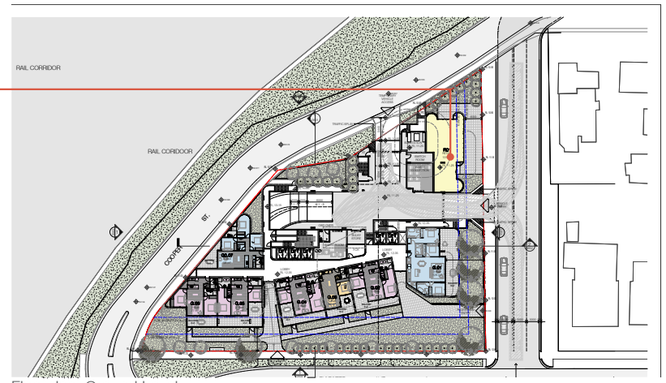
There will be a diverse range of residential product within the project, as well as facilities to catalyse social interaction and a sense of community. These include:

- Residents communal facilities on Level 10
- A landscaped communal open space
- A mix of apartment sizes and types:

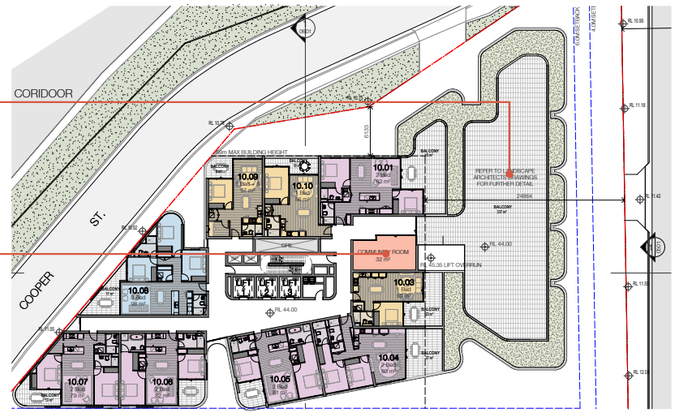
| | | |
|---|---|---|
| 1 Bedroom Apartments | 35% | 50-61m$^2$ |
| 2 Bedroom Apartments | 45% | 78-91m$^2$ |
| 3 Bedroom Apartments | 20% | 110m$^2$ |

The project will contribute in this regard within the wider Strathfield context by providing:

- Retail at ground level
- Housing within walking distance to public amenities and employment
- Bicycle parking for residents and visitors
- Adaptable housing in accordance with council's controls
- Activation of the building edges facing Ismay Reserve




Floorplan, Ground Level




Floorplan, Level 10

Floorplan, Level 11-16

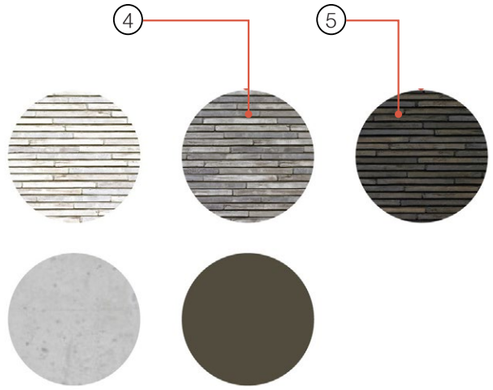
## 2.9 Principle 9: Aesthetics

*Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.*

*The visual appearance of well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.*

Massing and detailing is designed to respond to both the emerging character of the area and the existing surrounding context. The following principles have been observed in the design process:

1. A building which is scaled sensibly, incorporating careful articulation of the building form to reduce the perceived bulk of the building.
2. Variations in brick colour break down the mass of the building, giving the impression of four smaller elements with their own identity and address different conditions on the site.
   2.1 - White Brick acts as a backdrop for the smaller grey elements to seemingly wrap around and respond to the site conditions.
   2.2 - Grey Brick is used on the triangular tower elements to emphasise the slenderness of the wedge geometry and act as a point of reference for train commuters.
   2.3 - Dark Grey Brick used on the two storey units reflects the smaller scale housing on the western side of Leicester Ave.
3. Landscaping elements at ground, middle and roof levels.
4. The use of ‘natural’ and robust materials such as concrete and brick which require minimal maintenance, are long lasting and weather naturally,
5. The use of darker recessive colours so the building is not ‘shouting’ to the surrounding context




External material pallette

View from future road (to be acquired and constructed by Council), and Cooper street

# ADG response table

3

The following content outlines the architectural scheme's response to Part 3 & Part 4 of the Apartment Design Guide.

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| 3 | **SITING THE DEVELOPMENT** | | | | |
| 3A | Site Analysis | | | | |
| | **3A–1** | **Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context** | • | | |
| | | Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1) | | | |
| 3B | Orientation | | | | |
| | **3B – 1** | **Building types and layouts respond to the streetscape and site while optimising solar access within the development** | | | |
| | | Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1) | • | | |
| | | Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2) | • | | |
| | **3B–2** | **Overshadowing of neighbouring properties is minimised during midwinter** | | | |
| | | Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access | • | | No significant impact on solar access to adjacent properties. |
| | | Solar access to living rooms, balconies and private open spaces of neighbours should be considered | • | | |
| | | Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20% | | | N/A |
| | | If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy | | | N/A |
| | | Overshadowing should be minimised to the south or downhill by increased upper level setbacks | | | N/A |
| | | It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development | | | N/A |
| | | A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings | | | N/A |
| 3C | Public Domain Interface | | | | |
| | **3C–1** | **Transition between private and public domain is achieved without compromising safety and security** | | | |
| | | Terraces, balconies and courtyard apartments should have direct street entry, where appropriate | • | | |
| | | Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1) | • | | |
| | | Upper level balconies and windows should overlook the public domain | • | | |
| | | Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m | • | | |
| | | Length of solid walls should be limited along street frontages | • | | Solid Wall to Cooper St - intended to provide backdrop to future landscpaed pedestrian link when new road is built |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets | • | | Large lift lobbies with seating provide opportunities for community interaction to occur. |
| | | In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions:<br>· architectural detailing<br>· changes in materials<br>· plant species<br>· colours | • | | |
| | | Opportunities for people to be concealed should be minimised | • | | |
| | **3C–2** | **Amenity of public domain is retained and enhanced** | | | |
| | | Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking | • | | |
| | | Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided | • | | |
| | | The visual prominence of underground car park vents should be minimised and located at a low level where possible | | | |
| | | Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view | • | | |
| | | Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels | • | | |
| | | Durable, graffiti resistant and easily cleanable materials should be used | • | | |
| | | Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:<br>· Street access, pedestrian paths and building entries which are clearly defined<br>· Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space<br>· Minimal use of blank walls, fences and ground level parking | | | N/A |
| **3D** | **Communal and public open space** | | | | |
| | **3D–1** | **An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.** | | | |
| | | **Communal open space has a minimum area equal to 25% of the site** | • | | |
| | | **Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)** | • | | |
| | | Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions | • | | |
| | | Communal open space should be co-located with deep soil areas | • | | |
| | | Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies | • | | |
| | | Where communal open space cannot be provided at ground level, it should be provided on a podium or roof | • | | Level 10 and Level 17 |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:<br>· provide communal spaces elsewhere such as a landscaped roof top terrace or a common room<br>· provide larger balconies or increased private open space for apartments<br>· demonstrate good proximity to public open space and facilities and/or provide contributions to public open space | • | | |
| | 3D–2 | **Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting** | | | |
| | | Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:<br>· seating for individuals or groups<br>· barbecue areas<br>· play equipment or play areas<br>· swimming pools, gyms, tennis courts or common rooms | • | | Community Room to provide opporunities for a range of different activities for the adjacent communal open space on Level 10 |
| | | The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts | • | | |
| | | Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks | • | | |
| | 3C–3 | **Communal open space is designed to maximise safety** | | | |
| | | Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:<br>· bay windows<br>· corner windows<br>· balconies | • | | |
| | | Communal open space should be well lit | • | | |
| | | Where communal open space/facilities are provided for children and young people they are safe and contained | • | | |
| 3E | Deep soil zones | | | | |
| | 3E–1 | **Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality** | | | |
| | | **Deep soil zones are to meet the following minimum requirements.**<br>Site area: Less than 650m² — Minimum dimensions: – — Deep soil zone (% of site area): 7%<br>Site area: 650m²–1,500m² — Minimum dimensions: 3m<br>Site area: Greater than 1,500m² — Minimum dimensions: 6m<br>Site area: Greater than 1,500m² with significant existing cover — Minimum dimensions: 6m | | • | 15.6% Deep Soil provided Partially compliant due to min. width dimensions, DCP allows a min of 2m x 2m to be acceptable. |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:<br>· 10% of the site as deep soil on sites with an area of 650m² – 1,500m²<br>· 15% of the site as deep soil on sites greater than 1,500m² | | | N/A |
| | | Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:<br>· basement and sub-basement car park design that is consolidated beneath building footprints<br>· use of increased front and side setbacks<br>· adequate clearance around trees to ensure long term health<br>· co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil | | | N/A |
| | | Achieving the design criteria may not be possible on some sites including where:<br>· The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)<br>· There is 100% site coverage or non-residential uses at ground floor level<br>· Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure | | | Triangular site shape constrains deep soil. Multiple areas of planting are provided across the built structure. |
| 3F–1 | | **Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy** | | | |
| | | **Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:**<br>Building Height \| Habitable Room and Balconies \| Non Habitable<br>Up to 12m (4 storeys) \| 6m \| 3m<br>Up to 25m (5-8 storeys) \| 9m \| 4.5m<br>Over 25m (9+ storeys) \| 12m \| 6m<br>Note:<br>Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)<br>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties | | | N/A |
| | | Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance | • | | |
| | | For residential buildings next to commercial buildings, separation distances should be measured as follows:<br>· for retail, office spaces and commercial balconies use the habitable room distances<br>· for service and plant areas use the non-habitable room distances | | | N/A |
| | | New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:<br>· site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)<br>· on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4) | • | | |
| | | Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5) | | • | N/A |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Direct lines of sight should be avoided for windows and balconies across corners | • | | |
| | | No separation is required between blank walls | • | | |
| | **3F–2** | **Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space** | | | |
| | | Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include:<br>· setbacks<br>· solid or partially solid balustrades to balconies at lower levels<br>· fencing and/or trees and vegetation to separate spaces<br>· screening devices<br>· bay windows or pop out windows to provide privacy in one direction and outlook in another<br>· raising apartments/private open space above the public domain or communal open space<br>· planter boxes incorporated into walls and balustrades to increase visual separation<br>· pergolas or shading devices to limit overlooking of lower apartments or private open space<br>· on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies | • | | Landscaping and screening is provided as a buffer between private open space and communal open space on Level 10. |
| | | Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas | • | | |
| | | Balconies and private terraces should be located in front of living rooms to increase internal privacy | • | | |
| | | Windows should be offset from the windows of adjacent buildings | • | | |
| | | Recessed balconies and/or vertical fins should be used between adjacent balconies | • | | |
| **4** | **DESIGNING THE BUILDING** | | | | |
| **4A** | **Solar and daylight access** | | | | |
| | **4A–1** | **To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space** | | | |
| | | **1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas** | • | | 70% of residential apartments achieve direct sunlight to living rooms and private open space in mid winter |
| | | **2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter** | | | N/A |
| | | **3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter** | • | | All apartments achieve direct sunlight |
| **4B** | **Natural Ventilation** | | | | |
| | **4B–3** | **The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents** | | | |
| | | **1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed** | • | | 69% of residential apartments achieve cross ventilation in the first nine levels. |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | **2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line** | • | | |
| 4C | | **Ceiling heights** | | | |
| | 4C–1 | **Ceiling height achieves sufficient natural ventilation and daylight access** | | | |
| | | **Measured from finished floor level to finished ceiling level, minimum ceiling heights are:** | • | | Habitable rooms are 2.7m ceiling height and non-habitable are 2.4m |

| Minimum ceiling height for apartment and mixed use buildings | |
|---|---|
| Habitable rooms | 2.7m |
| Non-habitable rooms | 2.4m |
| For 2 storey apartments | 2.7m for main living area floor<br>2.4m for second floor, where its apartment area does not exceed 50% of the apartment area |
| Attic spaces | 1.8m at edge of room with a 30 people degree minimum ceiling slope |
| If located in mixed use areas | 3.3m for ground and first floor to promote future flexibility of use |

| | | | | | |
|---|---|---|---|---|---|
| | | **These minimums do not preclude higher ceilings if desired** | | | |
| 4D | | **Apartment size and layout** | | | |
| | 4D–1 | **The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity** | | | |
| | | **1. Apartments are required to have the following minimum internal areas:** | • | | The apartments have been designed with generous internal areas:<br>1 bedroom apartments = 51-61m$^2$<br>2 bedroom apartments = 78-91m$^2$<br>3 bedroom apartments = 110m$^2$ |

| Apartment Type | Minimum Internal Area |
|---|---|
| Studio | 35m$^2$ |
| 1 bedroom | 50m$^2$ |
| 2 bedroom | 70m$^2$ |
| 3 bedroom | 90m$^2$ |

| | | | | | |
|---|---|---|---|---|---|
| | | **The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m$^2$ each**<br>**A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m$^2$ each** | | | |
| | | **2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms** | • | | |
| | | Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space) | • | | |
| | | A window should be visible from any point in a habitable room | • | | |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits | | | N/A |
| | **4D–2** | **Environmental performance of the apartment is maximised** | | | |
| | | **1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height** | • | | |
| | | **2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window** | • | | |
| | | Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maxi-mum depths | • | | |
| | | All living areas and bedrooms should be located on the external face of the building | • | | |
| | | Where possible:<br>· bathrooms and laundries should have an external openable window<br>· main living spaces should be oriented toward the primary outlook and aspect and away from noise sources | • | | |
| | **4D–3** | **Apartment layouts are designed to accommodate a variety of household activities and needs** | | | |
| | | **1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)** | • | | |
| | | **2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)** | • | | |
| | | **3. Living rooms or combined living/dining rooms have a minimum width of:<br>3.6m for studio and 1 bedroom apartments<br>4m for 2 and 3 bedroom apartments** | • | | |
| | | **4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts** | | • | There are no cross-over or cross through apartments in the proposal. |
| | | Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas | • | | |
| | | All bedrooms allow a minimum length of 1.5m for robes | • | | |
| | | The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high | • | | |
| | | Apartment layouts allow flexibility over time, design solutions may include:<br>· dimensions that facilitate a variety of furniture arrangements and removal<br>· spaces for a range of activities and privacy levels between different spaces within the apartment<br>· dual master apartments<br>· dual key apartments<br>· Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments<br>· room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))<br>· efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms | • | | There are no dual apartment or dual key apartments in the proposal. |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| 4E | | **Private Open Space and Balconies** | | | |
| | 4E–1 | **Apartments provide appropriately sized private open space and balconies to enhance residential amenity** | | | |
| | | **All apartments are required to have primary balconies as follows:**<br>Dwelling Type / Minimum Area / Minimum Depth<br>Studio Apartments / 4m² / -<br>1 bedroom apartments / 8m² / 2m<br>2 bedroom apartments / 10m² / 2m<br>3+ bedroom apartments / 12m² / 2.4m | • | | |
| | | **The minimum balcony depth to be counted as contributing to the balcony area is 1m** | | | |
| | | **For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a bal-cony. It must have a minimum area of 15m² and a minimum depth of 3m** | • | | |
| | | Increased communal open space should be provided where the number or size of balconies are reduced | • | | |
| | | Storage areas on balconies is additional to the minimum balcony size | • | | |
| | | Balcony use may be limited in some proposals by:<br>· consistently high wind speeds at 10 storeys and above<br>· close proximity to road, rail or other noise sources<br>· exposure to significant levels of aircraft noise<br>· heritage and adaptive reuse of existing buildings<br>In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated | | | N/A |
| 4F | | **Common Circulation and Spaces** | | | |
| | 4F–1 | **Common circulation spaces achieve good amenity and properly service the number of apartments** | | | |
| | | **1. The maximum number of apartments off a circulation core on a single level is eight** | | • | |
| | | **2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40** | | • | N/A |
| | | Greater than minimum requirements for corridor widths and/or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors | • | | The entry corridors are up tp 4m wide which is greater than the minimum 2m and allows for comfortable entry. |
| | | Daylight and natural ventilation should be provided to all common circulation spaces that are above ground | • | | |
| | | Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors | • | | |
| | | Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:<br>· a series of foyer areas with windows and spaces for seating<br>· wider areas at apartment entry doors and varied ceiling heights | • | | |
| | | Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments | • | | |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:<br>· sunlight and natural cross ventilation in apartments<br>· access to ample daylight and natural ventilation in common circulation spaces<br>· common areas for seating and gathering<br>· generous corridors with greater than minimum ceiling heights<br>· other innovative design solutions that provide high levels of amenity | • | | Very generous circulation spaces have been provided up to 4m in width. Seating areas are also provided with access to cross ventilation, daylight and double height landscaping to maximise amenity. |
| | | Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level | • | | 14 apartments per level however there are connected two wings servicing two cores, having a respectively split between<br>- 8 apartments on 3 lift core<br>- 6 apartments on the 2 lift core<br><br>The upper levels serve 10 x apartments off 3 lift core. |
| | | Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully con-trolled | • | | |
| 4G | Storage | | | | |
| | 4G–1 | **Adequate, well designed storage is provided in each apartment** | | | |
| | | **In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:**<br>Dwelling type: Studio apartments — Storage size: 4m3<br>1 bedroom apart-ments — 6m3<br>2 bedroom apart-ments — 8m3<br>3 bedroom apart-ments — 10m3<br>**At least 50% of the required storage is to be located within the apartment** | • | | |
| | | Storage is accessible from either circulation or living areas | • | | |
| | | Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street | | • | No storage is provided on balconies. |
| | | Left over space such as under stairs is used for storage | • | | |
| | 4G–2 | **Additional storage is conveniently located, accessible and nominated for individual apartments** | | | |
| | | Storage not located in apartments is secure and clearly allocated | • | | |
| | | Storage is provided for larger and less frequently accessed items, where practical | • | | Storage rooms are located in the basement for larger storage items |
| | | Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible | • | | Storage will not be designed to impede the car parking spaces. |
| | | If communal storage rooms are provided they should be accessible from common circulation areas of the building | | | N/A |

## ADG response table

| Part No. | Objective No. | Objective<br>Design criteria<br>Design guidance | Complies Yes | Complies No | Notes |
|---|---|---|---|---|---|
| | | Storage not located in an apartment is integrated into the overall building design and not visible from the public domain | • | | Additional storage is located in the basement |
| 4J | Noise and Pollution | | | | |
| | **4J–1** | **In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings** | | | |
| | | To minimise impacts the following design solutions may be used:<br>· physical separation between buildings and the noise or pollution source<br>· residential uses are located perpendicular to the noise source and where possible buffered by other uses<br>· non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces<br>· Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources<br>· Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer<br>· Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4)<br>· Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry | • | | |
| | | Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:<br>· solar and daylight access<br>· private open space and balconies<br>· natural cross ventilation | • | | |
| | **4J–2** | **Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission** | | | |
| | | Design solutions to mitigate noise include:<br>· limiting the number and size of openings facing noise sources<br>· providing seals to prevent noise transfer through gaps<br>· using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens)<br>· using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits | • | | |

SJB Architects

**sjb.com.au**

We create spaces people love.
SJB is passionate about the
possibilities of architecture,
interiors, urban design
and planning.
Let's collaborate.

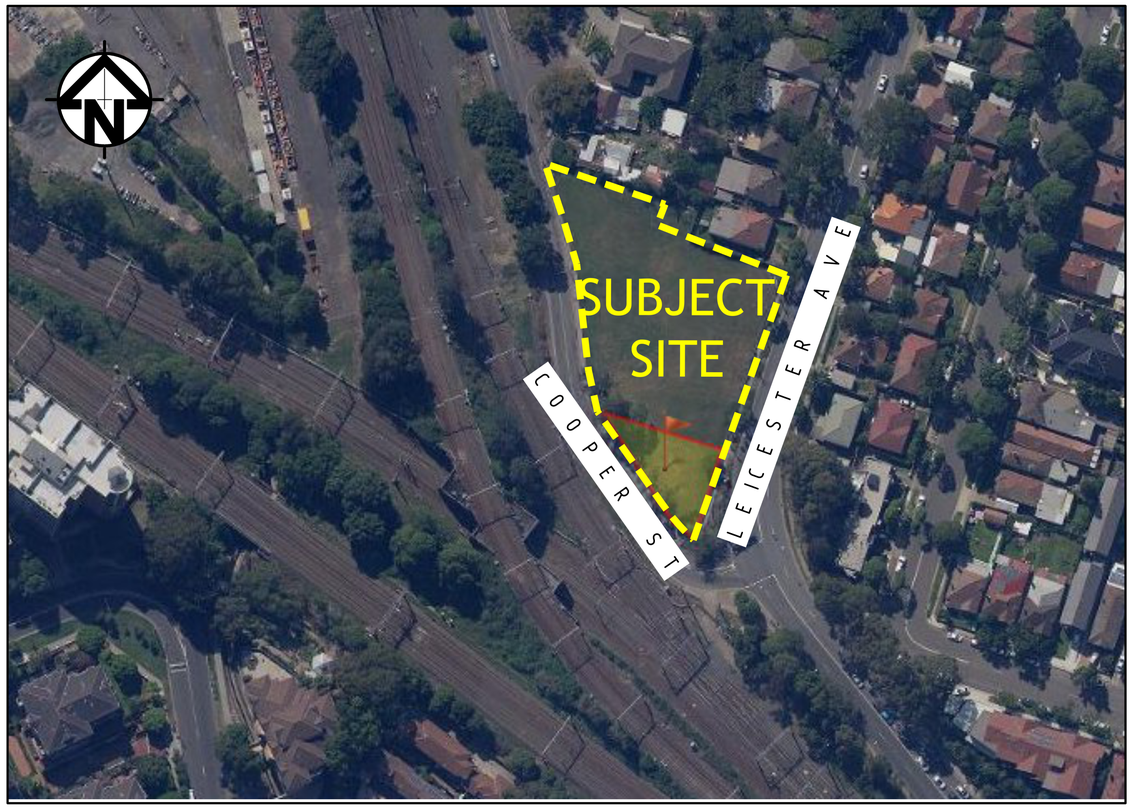
Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia
T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

A1

DATE PLOTTED: 11 August 2021 3:17 PM BY: LEADER

SGC Reference Number: 20200252

# PROPOSED RESIDENTIAL DEVELOPMENT
# 2-10 LEICESTER AVENUE, STRATHFIELD
# STORMWATER CONCEPT DESIGN




LOCALITY PLAN
NOT TO SCALE
COPYRIGHT OF GOOGLE MAPS

| DRAWINGS LIST | | | |
|---|---|---|---|
| SHEET No. | DWG No. | TITLE | REV |
| 1 | SW100 | COVER SHEET | C |
| 2 | SW200 | STORMWATER CONCEPT DESIGN - BASEMENT 4 PLAN - SHEET 1 OF 2 | C |
| 3 | SW201 | STORMWATER CONCEPT DESIGN - BASEMENT 4 PLAN - SHEET 2 OF 2 | C |
| 4 | SW202 | STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN - SHEET 1 OF 2 | C |
| 5 | SW203 | STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN - SHEET 2 OF 2 | C |
| 6 | SW204 | STORMWATER CONCEPT DESIGN - LEVEL 1 PLAN | C |
| 7 | SW205 | STORMWATER CONCEPT DESIGN - ROOF PLAN | C |
| 8 | SW300 | STORMWATER CONCEPT DESIGN - DETAILS SHEET -SHEET 1 OF 2 | C |
| 9 | SW301 | STORMWATER CONCEPT DESIGN - DETAILS SHEET -SHEET 2 OF 2 | C |
| 10 | SW400 | EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS | C |
| 11 | SW500 | STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN | C |


## PREPARED BY:

SGC Consulting Engineers
Suite 5.03, Level 5
156 Pacific Highway
St. Leonards, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au


## ARCHITECT:

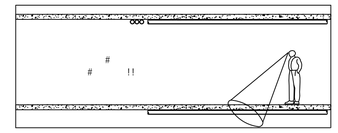
SJB
ARCHITECTS

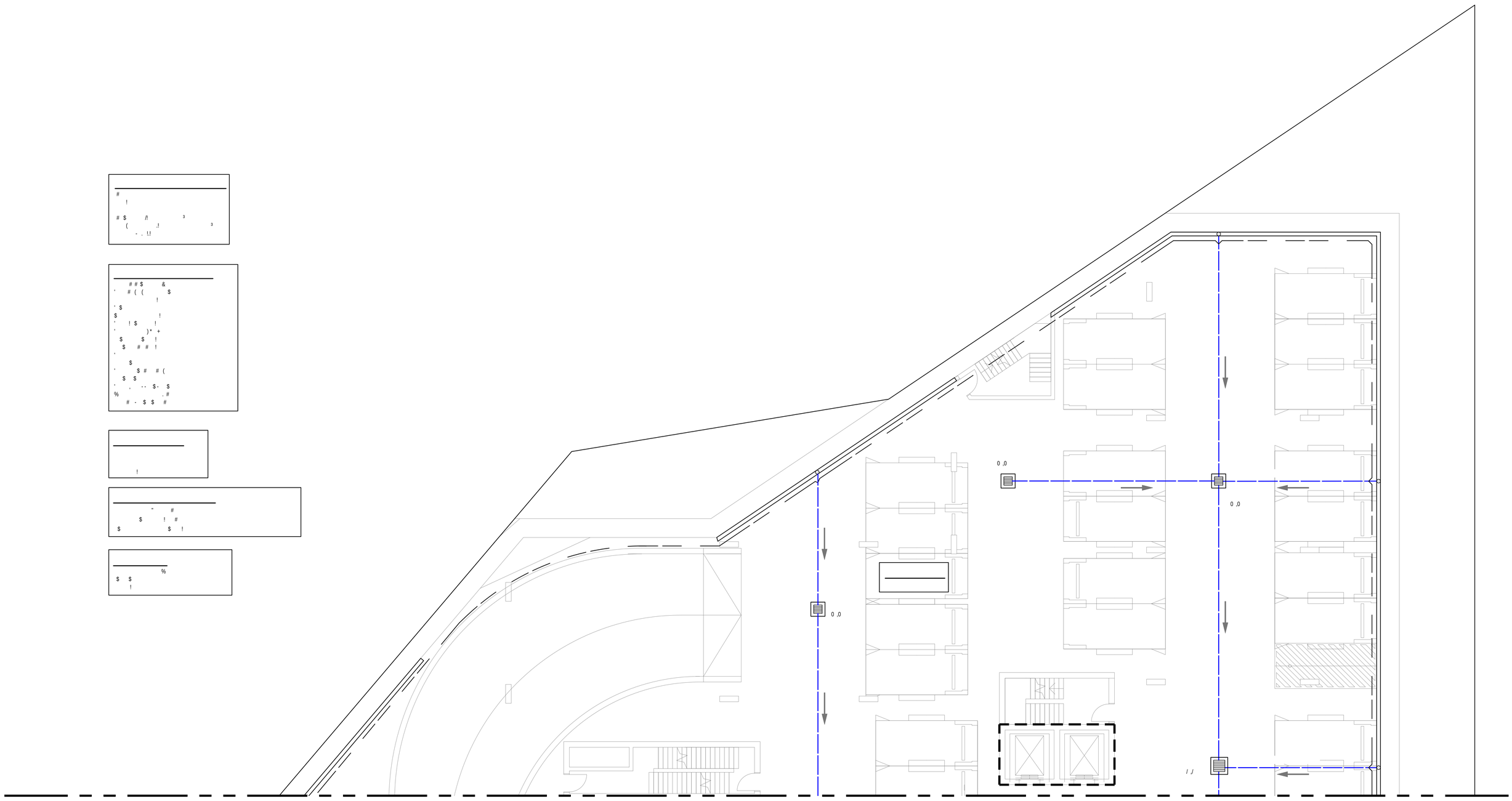
## CLIENT:

LEICE PTY LTD

Drawing Number: SW100 Revision Number: C

XREF's: C:\Production\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW100.dwg






# $ /! 3
( .! 3
- . !!

# # $ &
' # ( ( $
!
' $
$ !
' ! $ !
' )* +
$ $ !
$ # # !
'
$
' $ # # (
$ $
' , -- $- $
% .#
# - $ $ #

!

" #
$ ! #
$ $ !

%
$ $
!


Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au

A.B.N. 21 119 222 530

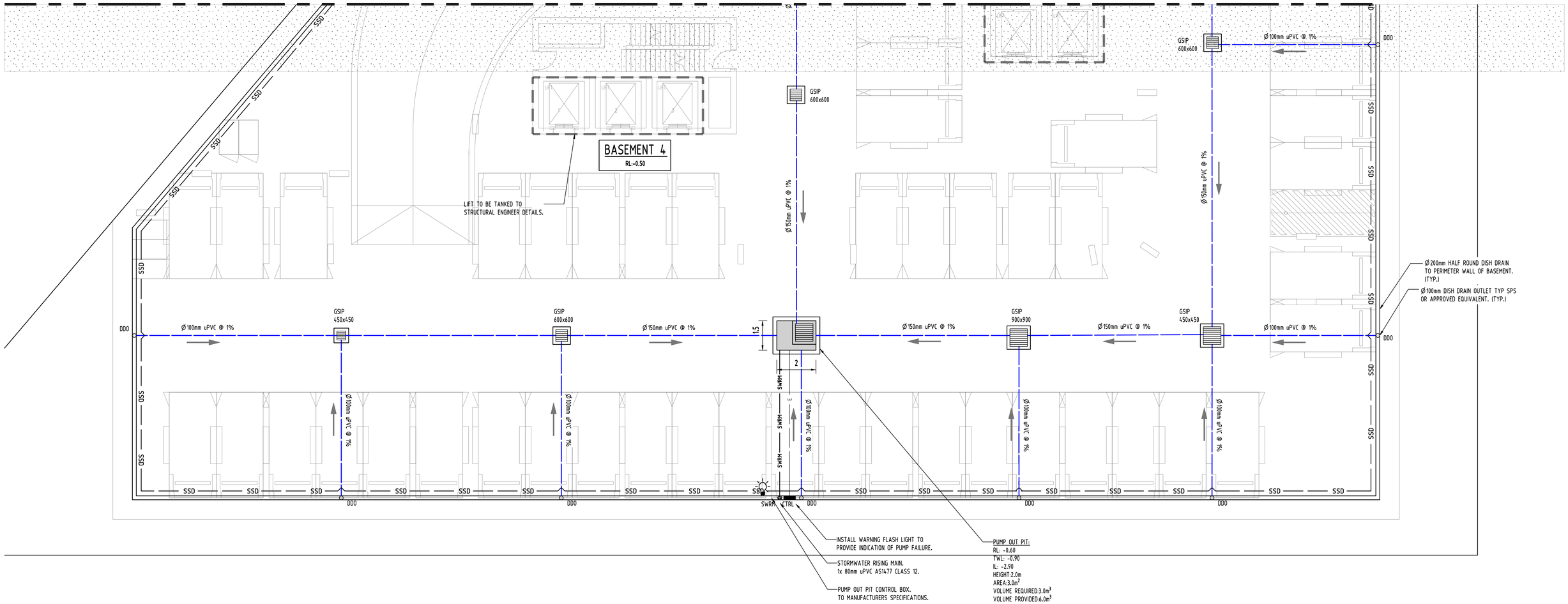

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

A1

SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O

FOR CONTINUATION REFERRING TO SW200




| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 |

Issuer internal sequence and revision history

1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales

0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 3 OF 11 | 1:100 @ A1 |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
STORMWATER CONCEPT DESIGN
BASEMENT 4 PLAN
SHEET 2 OF 2

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW201 | C |

PLOT BY: Z:\Production\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW200-SW201.dwg

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

A1

## DESIGN NOTES:

THE SITE IS LOCATED IN CANADA BAY COUNCIL.

THE SITE IS AFFECTED BY 1% AEP FLOOD.

ON- SITE DETENTION & WSUD REQUIREMENTS ARE APPLICABLE TO THE PROPOSED DEVELOPMENT.

AS THE SITE IS FLOOD AFFECTED, ON-SITE DETENTION TANK HAS BEEN LOCATED UNDER LEVEL 1 SLAB.

SITE AREA DRAINING TO THE OSD TANK = 2023m²

SSR:200 m³/ha.
PSD:180 L/s/ha.

THEREFORE, OSD VOLUME REQUIRED = (2023/10000) * 200 = 40.46m³

FOR NON-HED OSD VOLUME REQUIRED (20% EXTRA)= 48.52m³

PSD = (2023/10000) * 180 = 36.41 L/s

A 5,000L RAINWATER TANK IS PROVIDED AS PER COUNCIL'S SPECIFICATION; WHICH HAS BEEN INCORPORATED WITHIN OSD TANK.

WSUD IS REQUIRED AS PER COUNCIL WATER QUALITY REQUIREMENT TO ACHIEVE THE FOLLOWING TARGETS:
TSS: 80%
TP: 45%
TN: 45%
GP: 70%

SERVICES ON THIS DRAWING ARE SHOWN BELOW SLAB U.N.O

EXISTING Ø375mm SW RCP PIPE.
EXISTING Ø300mm SW RCP PIPE.
PROPOSED L50x300mm BOX CULVERT @0.5%.
C O O P E R S T R E E T
eKIP SL:10.4 IL:9.91
KIP SL:10.46 IL:10.00
Ø300mm
ePP
GSIP-OCEANGUARD 900x900 RL:11.00 IL:10.20
eSMH
GSIP 450x450
eHYD
DP (300 DIA)
GTD 200x200
RWO
Ø300mm uPVC @1%
Ø150mm uPVC @1%
Ø150mm uPVC @1% (MIN)
Ø100mm uPVC @1%
Ø100mm uPVC @1% (MIN)
RL 11.85
RL 11.25
RL 12.00
STORMFILTER CHAMBER:
GRATE RL: 11.05
BASE RL: 10.05
FALSE FLOOR RL: 10.15
SF WEIR RL: 10.69
INTERNAL AREA: 4.50m²
INSTALL 6x 460 PSORB STORMFILTERS CARTRIDGES FROM OCEAN PROTECT

**NOTE:**
SERVICES SHOWN ON PLAN ARE INDICATIVE. EXACT DEPTH AND LOCATION TO BE CONFIRMED ONSITE. CONTRACTOR TO CARRY OUT DIAL BEFORE YOU DIG APPLICATION AND ENGAGE A REGISTERED SURVEYOR TO PEG OUT ALL EXISTING SERVICES PRIOR TO ANY WORK COMMENCING ONSITE.

FOR CONTINUATION REFERRING TO SW203

| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 |

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 4 OF 11 | 1:100 @ A1 |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
STORMWATER CONCEPT DESIGN
GROUND FLOOR PLAN
SHEET 1 OF 2

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW202 | C |

PLOT BY: Zhi Wang
C:\Projects\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW202-SW203.dwg

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

A1

FOR CONTINUATION REFERRING TO SW202

SERVICES ON THIS DRAWING ARE SHOWN BELOW SLAB U.N.O

GROUND FLOOR
FFL:12.65

EXISTING Ø375mm SW RCP PIPE.

EXISTING Ø375mm SW RCP PIPE.

EXISTING Ø375mm SW RCP PIPE.

EXISTING Ø375mm SW RCP PIPE.

COOPER STREET

LEICESTER STREET

eKIP
RL: 11.34
IL: 10.36

eKIP
RL: 11.90
IL: 10.54

GSIP 450x450

GSIP 600x600

GSIP 900x900

GTD 200x200

RWO

PD

Ø100mm uPVC @1%

Ø150mm uPVC @1% (MIN)

Ø100mm uPVC @1% (MIN)

Ø150mm uPVC @1%

Ø100mm uPVC

ePP

eTEL

eHYD

RL 12.35

RL 12.27

RL 12.00

| | | | | | |
|---|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 | |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 | |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 | |

| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|

Issuer internal sequence and revision history

1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales

0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 5 OF 11 | 1:100 @ A1 |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
STORMWATER CONCEPT DESIGN
GROUND FLOOR PLAN
SHEET 2 OF 2

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW203 | C |

XREF: A1 C:\Production\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW202-SW203.dwg

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

A1

SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O

OSD TANK
GRATE RL: 16.00
BASE RL: 14.40-14.48
TWL: 15.37
AVERAGE DEPTH: 0.93m
AREA: 52.77m²
VOLUME REQUIRED: 48.55m³
VOLUME PROVIDED: 49.08m³
ORIFICE CL: 14.50
SITE PSD: 36.41 L/s
ORIFICE DIAMETER: 134.5mm

DENOTES 1.5m WIDE 150mm HIGH EMERGENCY OVERFLOW WEIR AT RL:15.50

OSD TANK

RWT

RAINWATER TANK
LID RL: 16.10
BASE RL: 14.40
TWL: 15.50
DEPTH: 1.1m
AREA: 5.00m²
VOLUME REQUIRED: 5.00m³
VOLUME PROVIDED: 5.50m³

LEVEL-1
FFL:16.10

RWO
DP
RDP
RW
Ø 100mm uPVC @1% (MIN)
Ø 150mm uPVC @1% (MIN)
Ø 100mm uPVC
Ø 150mm uPVC

| | | | | | |
|---|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 | |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 | |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 | |
| Issue | Last revision title | by | Date | Status | |

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

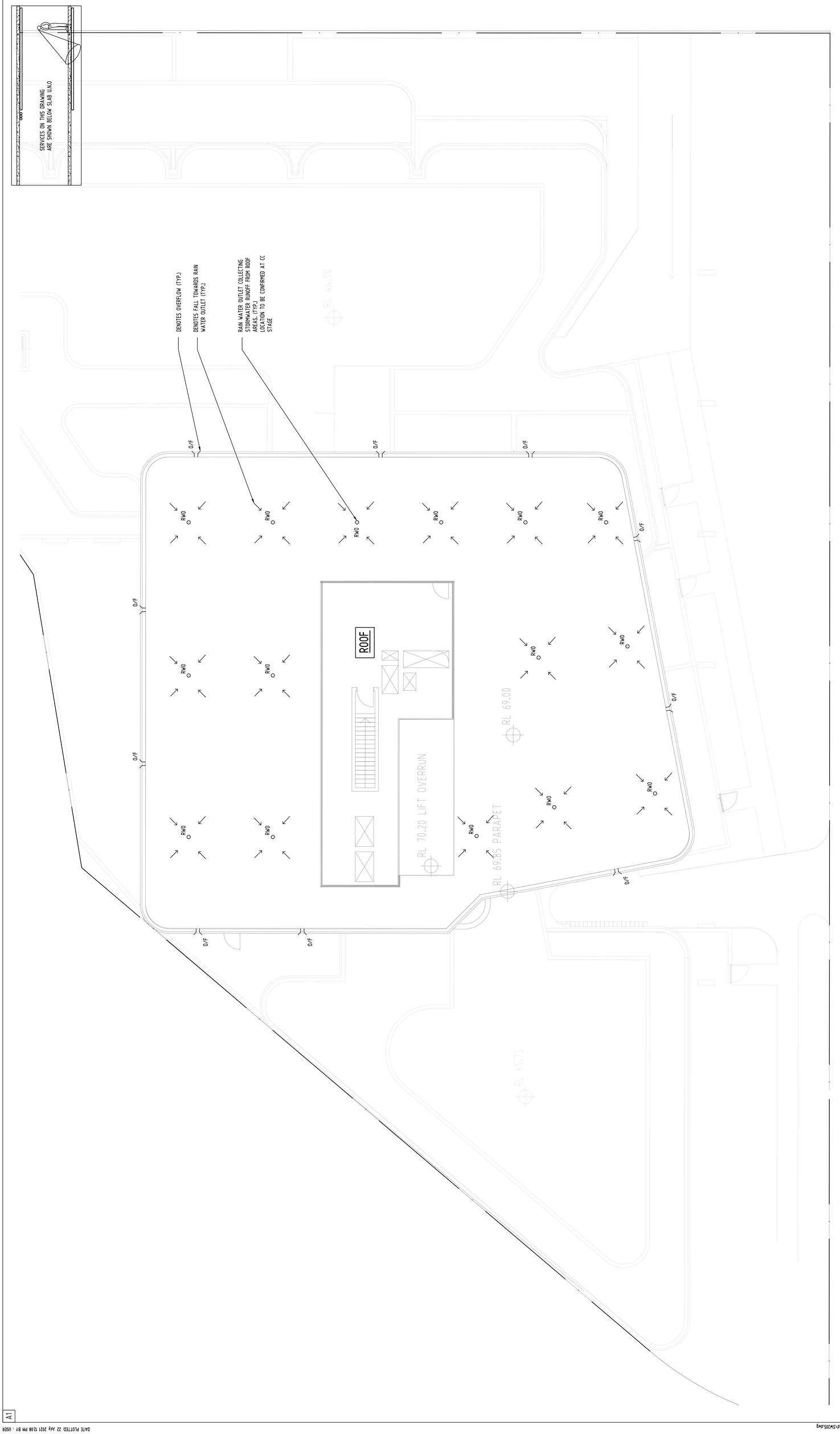
| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 6 OF 11 | 1:100 @ A1 |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
STORMWATER CONCEPT DESIGN
LEVEL 1 PLAN

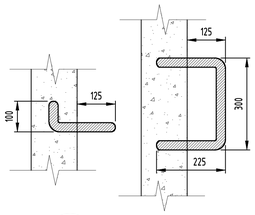
| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW204 | C |

XREF: C:\Production\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW204.dwg

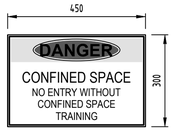

SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O
DENOTES OVERFLOW (TYP.)
DENOTES FALL TOWARDS RAIN WATER OUTLET (TYP.)
RAIN WATER OUTLET COLLECTING STORMWATER RUNOFF FROM ROOF AREAS (TYP.)
LOCATION TO BE CONFIRMED AT CC STAGE
RWO
O/F
ROOF
RL 70.20 LIFT OVERRUN
RL 69.85 PARAPET
RL 69.00
RL 65.75
RL 44.00

| | | |

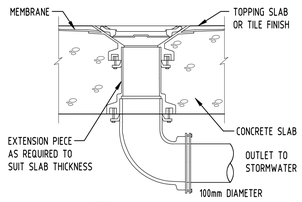
DATE PLOTTED: 22 July 2021 12:08 PM BY: USER
A1



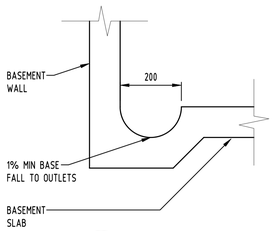

1 DETAIL
- STEP IRONS
SCALE 1:10



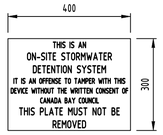

2 DETAIL
- CONFINED SPACE SIGN
SCALE 1:10



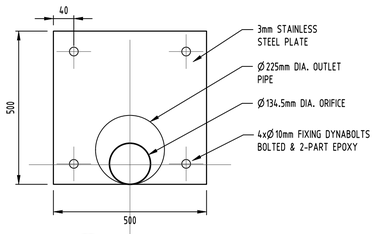

3 DETAIL
- RAINWATER OUTLET
NOT TO SCALE



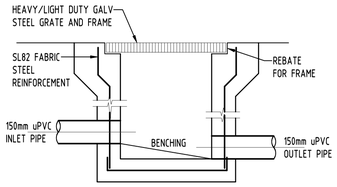

4 DETAIL
- DISH DRAIN
SCALE 1:10

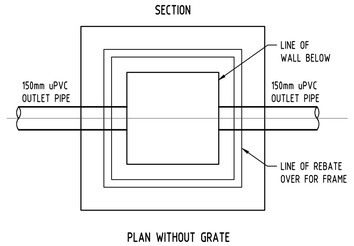



5 DETAIL
- OSD SIGN
SCALE 1:10

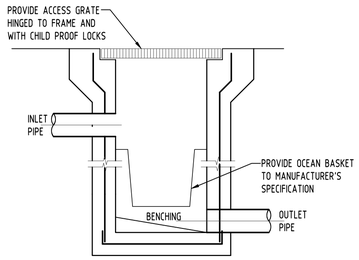



6 DETAIL
- OSD ORIFICE PLATE
NOT TO SCALE

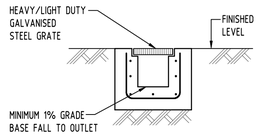



10 DETAIL
- STORMWATER PIT
SCALE 1:20



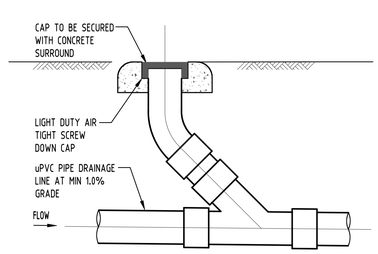

11 DETAIL
- STORMWATER PIT
WITH ENVIO POD
SCALE 1:20



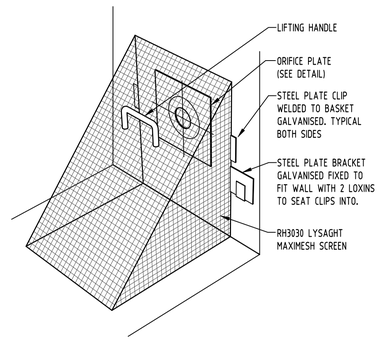

12 DETAIL
- GRATED TRENCH DRAIN
SCALE 1:20

LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND

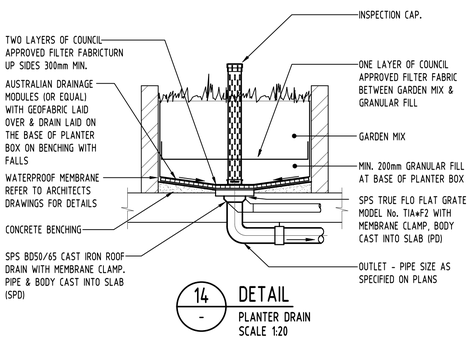
13 DETAIL
- RAINWATER SIGN
SCALE 1:20



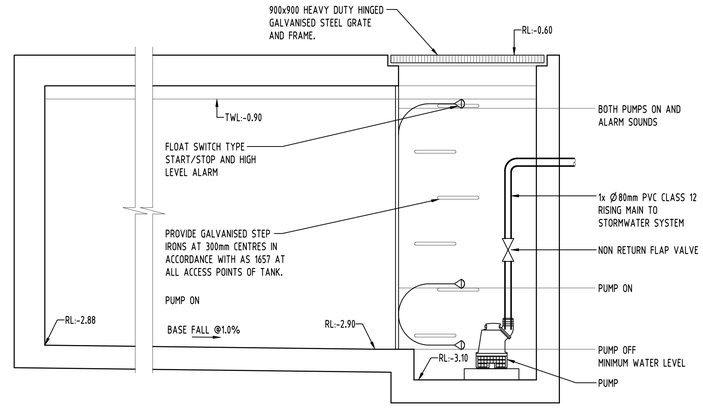

8 DETAIL
- CLEANING EYE
SCALE 1:10




9 DETAIL
- DEBRIS SCREEN
NOT TO SCALE




14 DETAIL
- PLANTER DRAIN
SCALE 1:20




15 DETAIL
- SUBSOIL PUMP OUT PIT
NOT TO SCALE

| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 |

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales
0m 0.1 0.2 0.3 0.4 0.5
SCALE 1:10 ON ORIGINAL SIZE
0m 0.2 0.4 0.6 0.8 1.0
SCALE 1:20 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 8 OF 11 | AS SHOWN |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

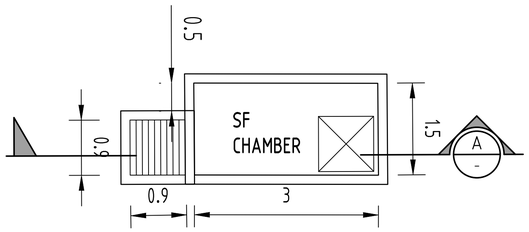
Drawing Title
STORMWATER CONCEPT DESIGN
DETAILS SHEET
SHEET 1 OF 2

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW300 | C |

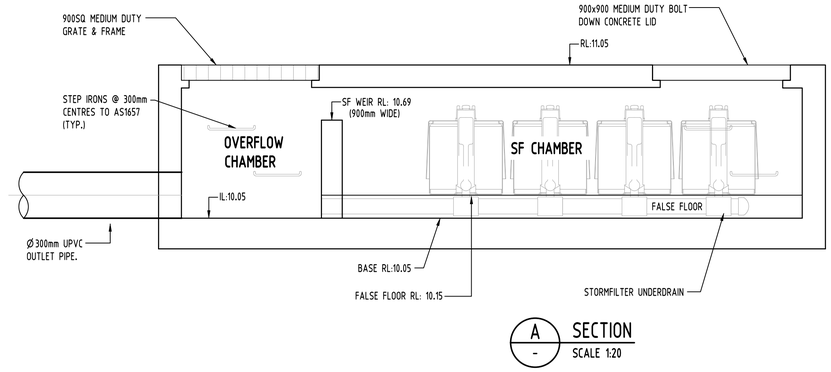
PLOT BY: Ali Z
C:\Users\Ali Z\Documents\Production\2020\20200252 - 2-8 Leicester Avenue, Strathfield\Civil\cad\SW300.dwg

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

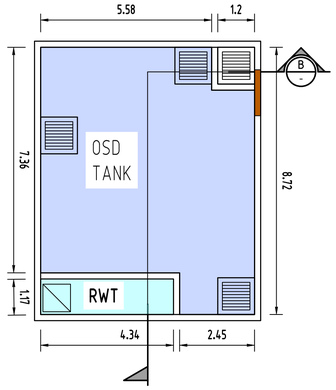
A1



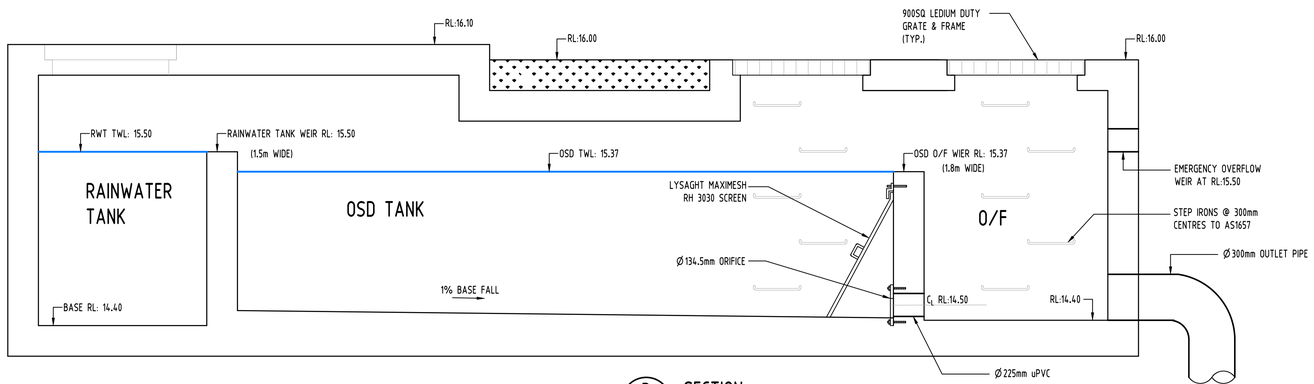

SF CHAMBER & DIMENSIONS (m)
SCALE 1:50




A - SECTION
SCALE 1:20




OSD TANK PLAN & DIMENSIONS (m)
SCALE 1:100




B - SECTION
SCALE 1:20

## LEGEND

- STORMWATER LINE
- RW — STORMWATER LINE TO RAINWATER TANK
- EXISTING STORMWATER DRAIN
- PROPOSED CONCRETE PIPE
- SSD — SUBSOIL LINE
- SWRM — STORMWATER RISING MAIN
- S — AUTHORITY SEWER LINE
- W — AUTHORITY WATER LINE
- G — G — AUTHORITY GAS LINE
- E — AUTHORITY ELECTRICITY LINE
- UE — AUTHORITY UNDERGROUND ELECTRICITY LINE
- TEL — AUTHORITY COMMS LINE
- GRATED SURFACE INLET PIT
- GRATED SURFACE INLET PIT WITH ENVIROPOD INSERT
- JUNCTION PIT
- KERB INLET PIT (ON GRADE)
- GRATED TRENCH DRAIN
- EXISTING GRATED SURFACE INLET PIT
- EXISTING JUNCTION PIT
- EXISTING KERB INLET PIT
- eTEL — EXISTING TELSTRA PIT
- eHYD — EXISTING HYDRANT
- eSV — EXISTING STOP VALVE
- eGAS — EXISTING GAS VALVE
- ePP — EXISTING POWER POLE
- eSMH — EXISTING SEWER MANHOLE
- RWO — RAINWATER OUTLET
- DDO — DISH DRAIN OUTLET
- PD — PLANTER DRAIN
- DOWNPIPE DROP
- DP — DOWNPIPE
- WARNING LIGHT

| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 |

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales
0m 0.2 0.4 0.6 0.8 1.0
SCALE 1:20 ON ORIGINAL SIZE
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 9 OF 11 | AS SHOWN |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

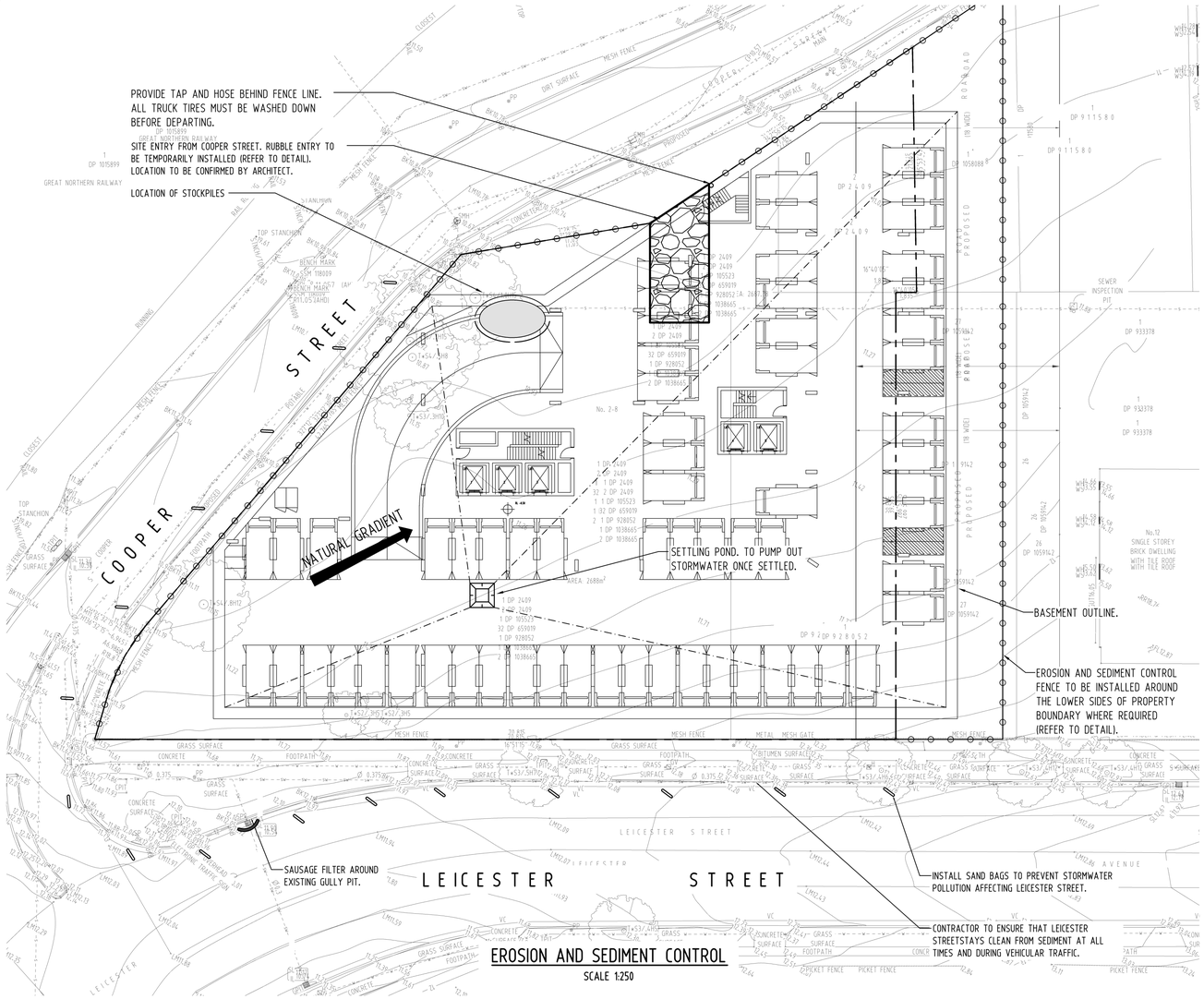
Drawing Title
STORMWATER CONCEPT DESIGN
DETAILS SHEET
SHEET 2 OF 2

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW301 | C |

Z:\Production\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW301.dwg
Jul 22, 2021 - 12:08pm

DATE PLOTTED: 11 August 2021 1:25 PM BY: LEADER

A1




## EROSION AND SEDIMENT CONTROL

SCALE 1:250

## EROSION & SEDIMENTATION CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
2. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
3. NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
4. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
5. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

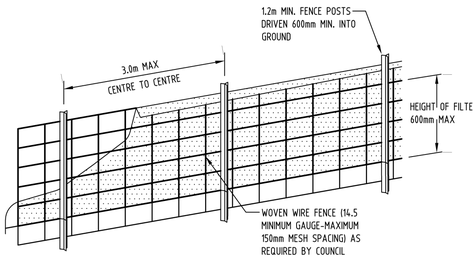
## GENERAL NOTES

1. THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
2. ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

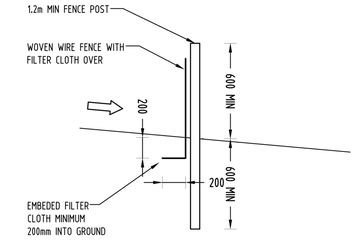
## CLAY SOILS

A SYSTEM SHALL BE INSTALLED TO EITHER:

1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL



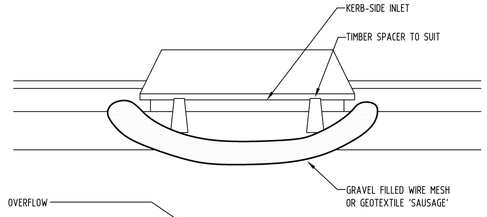

DIAGRAMMATIC VIEW

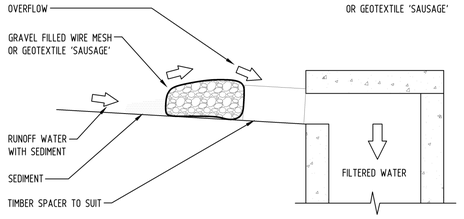



TYPICAL SECTION

## SEDIMENT FENCE

NOT TO SCALE




CONSTRUCTION NOTES:

FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAT THE LENGTH OF THE INLET PIT

FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL

FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY

MAINTAIN THE OPENING WITH SPACER BLOCKS

FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER

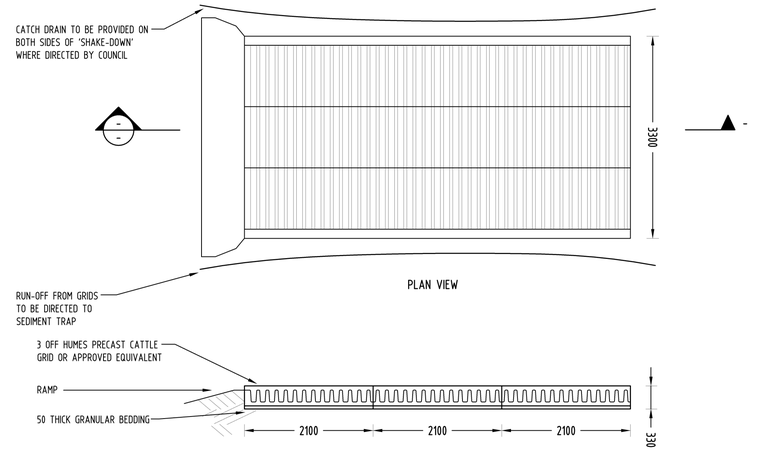
FIT TO ALL KERB INLETS AT SAG POINTS

## GRAVEL INLET FILTER (SAUSAGE)

NOT TO SCALE

## GEOTEXTILE INLET FILTER

GEOTEXTILE INLET FILTER IS PLACED IN EVERY PIT WITHIN THE SITE TO ENSURE THE RUNOFF WATER DURING CONSTUCTION NOT ENTER THE PITS.




PLAN VIEW

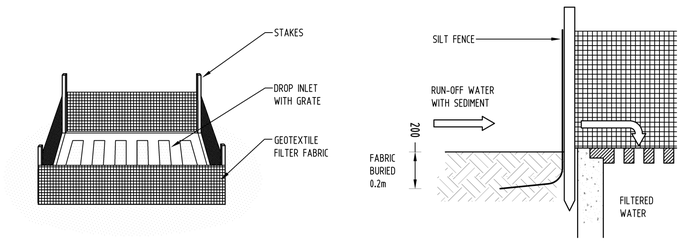
TYPICAL SECTION

## 'CATTLE GRID' ALTERNATIVE

TEMPORARY CONSTRUCTION EXIT
NOT TO SCALE

## LEGEND

- SEDIMENT FENCE
- STABILISED SITE ACCESS
- SANDBAGS
- SAUSAGE FILTER




## GEOTEXTILE INLET FILTER

NOT TO SCALE

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Reference Coordination Drawing |
| | | | | | Discipline / Drawing Title and Number / Date / Rev. |
| | | | | | ARCH |
| | | | | | ARCH |
| | | | | | STRUCT |
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 | MECH |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 | ELEC |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 | HYD |
| Issue | Last revision title | by | Date | Status | FIRE |
| | | | | | LANDS |
| | | | | | CIVIL |
| | | | | | SURVEY |

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales

0m 2.5 5 7.5 10 12.5
SCALE 1:250 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 10 OF 11 | AS SHOWN |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
EROSION AND SEDIMENT CONTROL
PLAN AND DETAILS

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW400 | C |

XREF: C:\Production\2020\20200252-2-8 Leicester Avenue, Strathfield\Civil\civil\SW400.dwg

DATE PLOTTED: 22 July 2021 12:08 PM BY: USER

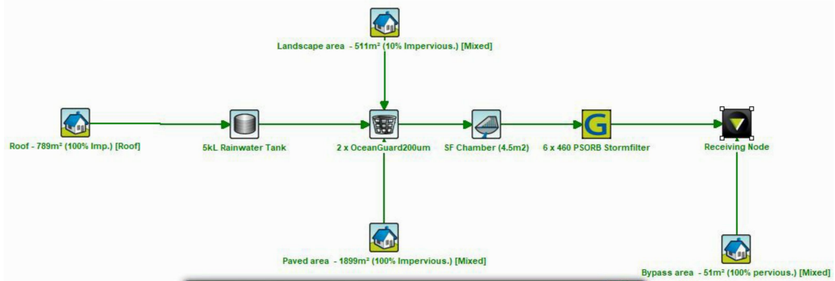
A1

ROOF AREA TO RAINWATER TANK & OC CHAMBER & SF CHAMBER (789m$^2$)

PAVED AREA TO OC CHAMBER & SF CHAMBER (1899m$^2$)

LANSCAPE AREA TO OC CHAMBER & SF CHAMBER (511m$^2$)

BYPASS AREA (51m$^2$)




Treatment Train Effectiveness - Receiving Node

| | Sources | Residual Load | % Reduction |
|---|---|---|---|
| Flow (ML/yr) | 3.47 | 3.36 | 3.2 |
| Total Suspended Solids (kg/yr) | 481 | 57.8 | 88 |
| Total Phosphorus (kg/yr) | 0.895 | 0.3 | 66.5 |
| Total Nitrogen (kg/yr) | 7.75 | 3.94 | 49.2 |
| Gross Pollutants (kg/yr) | 79.4 | 1.4 | 98.2 |

## MUSIC MODEL SITE AREA BREAKUP

SCALE 1:200

| Issue | Last revision title | by | Date | Status |
|---|---|---|---|---|
| C | ISSUE FOR APPROVAL | MS | 22.07.21 | 2 |
| B | ISSUE FOR S34 | MS | 21.07.21 | 2 |
| A | ISSUE FOR DA | ZW | 18.09.20 | 2 |

Issuer internal sequence and revision history

1-preliminary, 2-development application, 3-construction certificate, 4-tender, 5-construction, 6-other

Reference Coordination Drawing

| Discipline | Drawing Title and Number | Date | Rev. |
|---|---|---|---|
| ARCH | | | |
| ARCH | | | |
| STRUCT | | | |
| MECH | | | |
| ELEC | | | |
| HYD | | | |
| FIRE | | | |
| LANDS | | | |
| CIVIL | | | |
| SURVEY | | | |

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

QUALITY CONTROL

| | | | |
|---|---|---|---|
| DRAWN | MS | DATE | 22.07.21 |
| CHECKED | SH | DATE | 22.07.21 |
| DESIGNED | MS | DATE | 22.07.21 |
| VERIFIED | SH | DATE | 22.07.21 |
| APPROVED | SH | DATE | 22.07.21 |

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD

Scales

0m 2 4 6 8 10

SCALE 1:200 ON ORIGINAL SIZE

CLIENT
LEICE PTY LTD

ARCHITECT
SJB ARCHITECTS

SGC Engineering Value
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
PROPOSED RESIDENTIAL DEVELOPMENT
2-8 LEICESTER AVENUE,
STRATHFIELD

| Grid | Datum | Sheet | Scale (at original size) |
|---|---|---|---|
| - | A.H.D. | 11 OF 11 | 1:200 @ A1 |

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title
STORMWATER CONCEPT DESIGN
MUSIC CATCHMENT PLAN

| Project No | Drawing No | Revision No |
|---|---|---|
| 20200252 | SW500 | C |

PLOT BY: Zhi Wang
PLOT AT: 1:1
PLOT FILE: J:\Projects\2020\20200252 2-8 Leicester Avenue, Strathfield\Civil\cad\SW500.dwg

ENGINEERING VALUE

Reference: 20200252-L02_flood study [E].docx

Date: August 16, 2021

Client: Omaya
Attention: James Abraham
L23, 300 Barangaroo Avenue
SYDNEY NSW 2000

Dear Sir,

**RE: 2-10 LEICESTER AVENUE, STRATHFIELD – FLOOD IMPACT STUDY**

**INTRODUCTION**

Omaya is proposing a residential development at the above site address (DA2020/0269). The City of Canada Bay Council requires a flood study to be undertaken to determine if the proposal has any adverse impacts on the flooding regime in the vicinity of the site.

This report also addresses the comments raised by the engineering section at Council.

**REFERENCE DOCUMENTS**

The following documents have been referenced in this report:-

1. Site survey prepared by StataSurv ref. 2085DT04d2 revision D dated 13/08/2021;
2. Architectural drawings prepared by SJB Architects ref. 6242;
3. Inter Office Memo from City of Canada Bay engineer Mr Stephen Chow dated 14/5/2021;
4. The City of Canada Bay Council DCP 2020 Part C Section 7;
5. NSW Government "The Floodplain Development Manual – The management of Flood Liable Land" (2005); and
6. Engineers Australia, *Australian Rainfall & Runoff*; and

**NATURAL & BUILT ENVIRONMENT**

The site is largely a vacant block of land with three (3) existing houses, one on each lot. The site has a trapezoidal shape and is characterised by a sloping natural gradient from East to West towards Cooper Street. Cooper Street is bounded by the elevated railway corridor which obstructs the overland flows from the upstream catchment. The overland flow water ponds in Cooper Street in front of the site and also affects the site. Hence the site is marked as flood prone by the local council. Figure 1 shows the location of the site.

**Figure 1** **Locality Plan**

**PROPOSED DEVELOPMENT**

The proposed development is a residential flat building with 4 basement levels, a ground floor and 17 residential levels on top as depicted on the architectural plans by SJB. Figure 2 below shows an extract of the site/ground floor plan from the architectural drawings.

The design of the building has considered the results of this flood study as detailed in the following sections of the report.

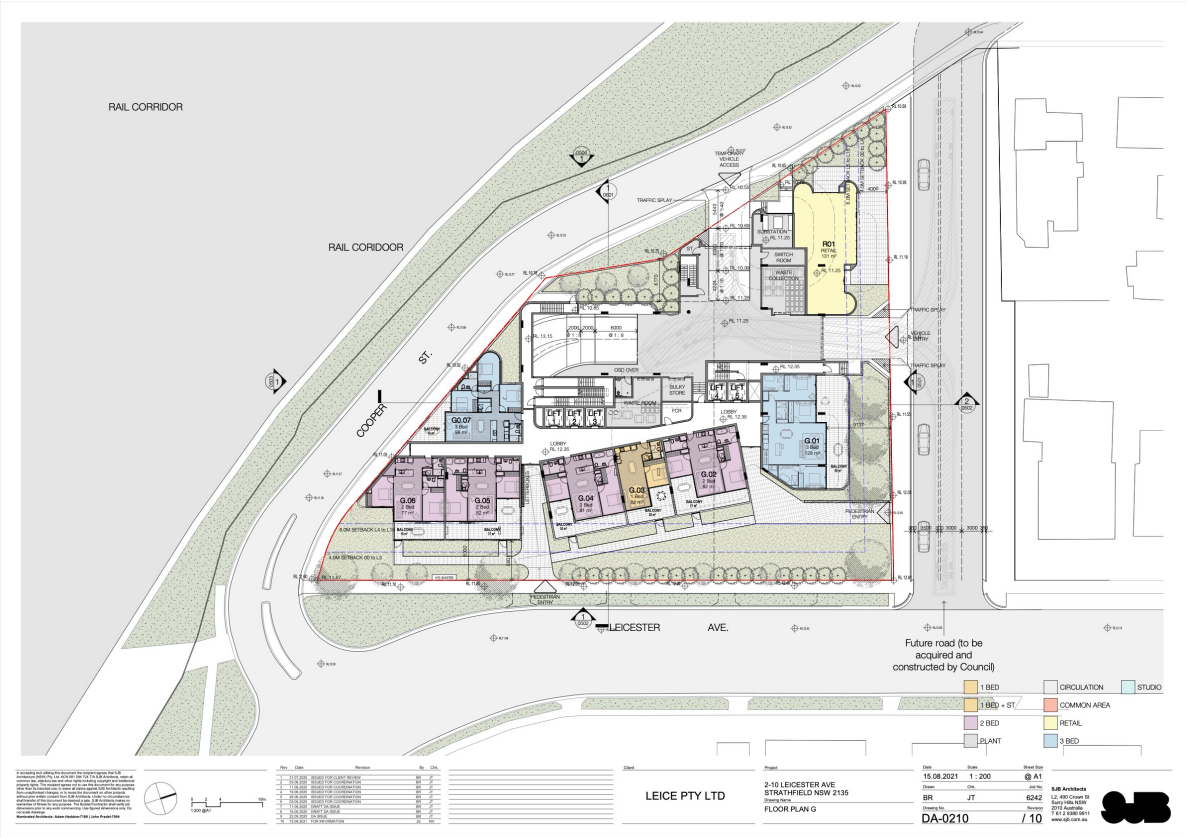



**Figure 2** **Proposed Site/Ground Floor Plan**

## FLOOD STUDY

### The City of Canada Bay Council

Council advised that a flood study is required to determine how the proposed development can be built without any adverse impact on the flood behaviour in the floodplain and specifically in the vicinity of the site.

The Council engineer quoted the Powell Creek flood study prepared by WMA Water in 2016 for Strathfield Council. The flood study model has been made available at the request of SGC and is adopted to assess the impact of the development on flooding.

The following information is requested by Council. This is extracted from the information requested for 2-10 Chapman Street and is applicable to this development.

In this regard, the applicant's engineer shall consider and demonstrate that the existing 850mm diameter pipe is able to cope with the stormwater runoff from the overall catchment at 1% Annual Exceedance Probability (AEP) and The Probable Maximum Flood (PMF) stormwater event. This is to ensure that the proposed development has sufficient protection, such as freeboard, basement protection and risk management. Also, the applicant's engineer shall demonstrate the proposed development will not cause any adverse impact to the surrounding properties, including public land, in pre and post construction scenarios in accordance with the requirement of Council's adopted Public Domain Plan for Strathfield Triangle precinct.

**Note 1**: Any electronic modelling (e.g., DRAINS, HEC-RAS etc.) utilised in the report and plans for Development Application shall be submitted to Council.

Page 3 of 8

**Note 2**: The finished floor level of the habitable floor shall be set a minimum of 500mm above the post development 1% AEP overland flow path level and basement shall be set at the PMF level, at the upstream side of the structure.

**Note 3:** Increases in stormwater depth for the post development overland flow path and adverse impact to the surrounding properties including public land is not acceptable.

**Note 4:** Council's DCP flood controls will need to be addressed. Reference shall be made to Council DCP 2020 Part C Section 7 including the Flood Risk Precincts table.

**Note 5:** Indicative public utilities services and Council's drainage pipes with contours can be obtained through Dial Before You Dig (www.1100.com.au) service.

**Figure 3 Requested Information**

**OBJECTIVES**

The purpose of this flood study is to establish the Flood Planning Levels for the proposed development. It also provides a comparison of pre vs post flood results and determines measures that need to be implemented for the development not to have any adverse impacts on the flooding characteristics.

In summary, the objectives are as follows:-

- Obtain a copy of the TUFLOW model used in the Powells Creek flood study from Strathfield Council and WMA Water;
- Define design flood levels, depths and hazards for the catchment for the existing site conditions;
- Modify the site conditions to post-development to predict the new flood levels, depths and hazards for 1% AEP;
- Determine if the proposed development has any adverse impact on flooding;
- Propose mitigation measures (if any); and
- Adopt these measures in the architectural plans and during construction.

## HYDRAULIC MODELLING

### Definition

The model used in the impact assessment is based on the Powells Creek TUFLOW model supplied by WMA Water through Strathfield Council. The model is used in its existing format to model the existing site conditions.

### Proposed Scenario

The proposed buildings on site were modelled as inactive area as they are proposed to fully block the flooding.

The buildings finish floor level to be the adopted Flood Planning Level (FPL) which equals the 1% AEP flood level plus 500mm freeboard as stated in the council advice letter.

### Design Flood Modelling Results

Design flood modelling was undertaken for the 1% AEP design flood event. The results are presented in Appendix 1 of this report.

The model results returned the flood depth, level and VD ratio for the existing and the proposed scenarios. The impact map is also included in the appendix.

## DISCUSSION

This section of the report provides a review of the results and discusses Council's requirements tabulated in the S34 conference.

1. The proposed habitable areas on ground floor are raised at or above the Flood Planning Level (FPL = 1%AEP + 0.5m). The 1% AEP flood level is RL11.7m AHD and accordingly the Flood Planning Level (FPL) is RL12.35m AHD. Reference is made to the architectural plans for details;
2. The proposed development does not have any major adverse impacts on the flooding elsewhere in the floodplain after the mitigation measures proposed by this study are implemented. This can be seen in the flood impact map (difference between post and pre site conditions) which shows that the proposed development does not increase the flood levels and hazards elsewhere in the floodplain. This indicates that there is no change in the flood conveyance and no loss in flood storage; and
3. The requirements of Council DCP 2020 Part C Section 7 are implemented as follows:
    a. There additional increase to human life caused by the increased density on the site will be mitigated with a flood risk management plan to be implemented at detailed design stage;
    b. The hydraulic category in the streets around the site are classified as LOW risk (flood fringe) and evacuation will be possible off site if needed. At this stage, a shelter in place strategy is proposed for the development;
    c. The development does not adversely increase the potential flood affectation elsewhere in the floodplain;

d. The structure will be designed to withstand the shear force of floodwaters and will be certified by the structural engineer;

e. A flood risk management plan will be prepared and implemented for the development and will detail the evacuation from the basement levels in the event of a flood that exceeds the design flood of 1% AEP;

f. The following controls are adopted from the matrix in the DCP:

   i. Floor levels raised to the FPL at RL12.35m AHD;

   ii. A flood void is proposed under part of the building as shown in the mitigation map in Appendix 1. The flood void will have a level of RL11.0m AHD;

   iii. The loading dock area and driveway are set at RL11.25m AHD and will be flooded. This is considered acceptable because the area is designated to large vehicles and the hydraulic hazard is LOW in that area;

   iv. The rest of the site except the external landscaped areas which will be at existing levels will be conventional construction that fully blocks the flows;

   v. All structures to have flood compatible building components below the PMF flood level;

   vi. A structural engineer's report will be provided at detailed design stage to certify that the structure can withstand the forces of floodwater, debris and buoyancy up to and including the FPL;

   vii. The basement car parking levels are protected from flooding up to RL12.0m AHD with a crest in the basement. Additional protection to the PMF will be in the form of a flood gate to be installed at the crest; and

   viii. Reliable access is provided on site for refuge above the PMF flood level. Adequate flood warning will be provided as part of the flood risk management and emergency response plan to allow safe and orderly evacuation from the basement levels to upper levels within the building.

**CANADA BAY COUNCIL LEP 2013**

This section of the report addresses the requirements of Section 5.21 "Flood Planning" of the LEP.

**Compatibility**

The proposed development is compatible with the flood function as the flooding on the site is considered MEDIUM risk. The hydraulic hazard across the majority of the site is LOW with small areas affected by MEDIUM hazard.

**Flood Affectation**

The proposed development will not adversely affect the flood behaviour and will not result in detrimental increases in potential flooding of other developments. This is demonstrated in the flood impact map included below which shows that the development actually decreases flood levels around the site.

The results of this flood study demonstrates that this requirement has been achieved.

**Evacuation**

The nature of the proposed development means that the occupants of the building can evacuate on site via a shelter in place strategy. The flooding in front of the site is considered flash flooding. These types of flooding do not give warning times to allow for off site evacuation and as such a shelter in place is the most appropriate evacuation solution.

The occupants will be safe at all times during because they are above the flooding and their units are not directly impacted by flooding. As such, the occupants are considered “Indirect PAR” (Persons At Risk) and their flood risk is LOW.

In the event that an off site evacuation is imminent, Leicester Street provides a safe route of evacuation to higher ground. The street is marginally affected by flooding and is within a LOW flood hazard.

**Flood Risk Management**

The development will be subject to a flood risk management plan that incorporates flood measurements to be implemented through the whole life of the development. These include a Flood Evacuation & Emergency Response Plan that addresses when and how evacuation from the site and within should occur.

**Environmental Consideration**

The site is located within an urbanised area far from a natural setting. The flooding on site and in Cooper Street is a flood storage caused by the elevated railway line. The development will not change the flooding behaviour and will not cause adverse impacts on the environment.

**CONCLUSIONS**

A detailed investigation on the flooding behaviour has been undertaken in the vicinity of the proposed development at 2-10 Leicester Avnue, Strathfield

Using the established TUFLOW model (received from Strathfield Council through WMA Water), the study determined the flood behaviour for the 1% AEP design flood. The primary flood characteristics reported for the design events considered include depths, levels and velocities. The study has also defined the Provisional Flood Hazard for flood-affected areas.

The impact of the proposed development was assessed and it was found that part of the building requires a flood void to compensate for flood storage loss and to have a NIL adverse impact in the floodplain and more specifically in the adjoining sites. The flood maps are included under Appendix 1. The study addressed Council’s requirements as per the requested information in the S34 conference.

In our opinion, the proposed building footprint does not displace the floodwaters in such a manner to impact on the flooding behaviour in terms of loss of flood storage, increase in velocity and risk. Council should allow the development in its current proposal. Should you have any further queries or questions, please do not hesitate to contact the undersigned.

Yours faithfully

**S&G Consultants Pty Limited**

**Sam Haddad**

Director (Civil)

# A1 Appendix 1

## Flood Mapping

Figure A1.1 1% AEP Flood Depth & WSL – Base Scenario

Figure A1.2 1% AEP Flood Hazard – Base Scenario

Figure A1.3 1% AEP Flood Depth & WSL – Proposed Scenario

Figure A1.4 1% AEP Flood Hazard – Proposed Scenario

Figure A1.5 1% AEP Flood Impact

Figure A1.6 Flood Mitigation

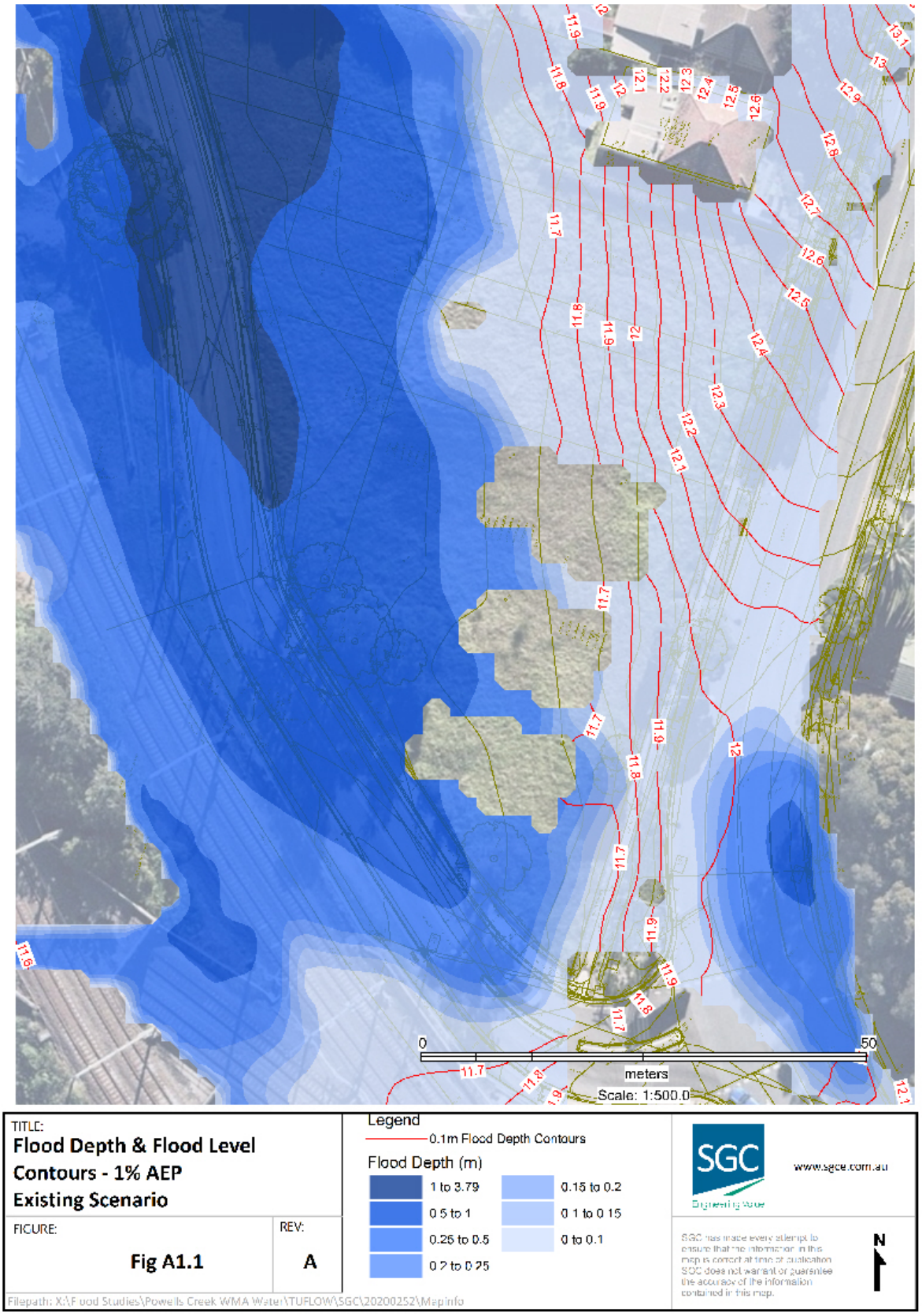



**Figure A 1.1 1% AEP ARI Flood Depth & WSL – Base Scenario**

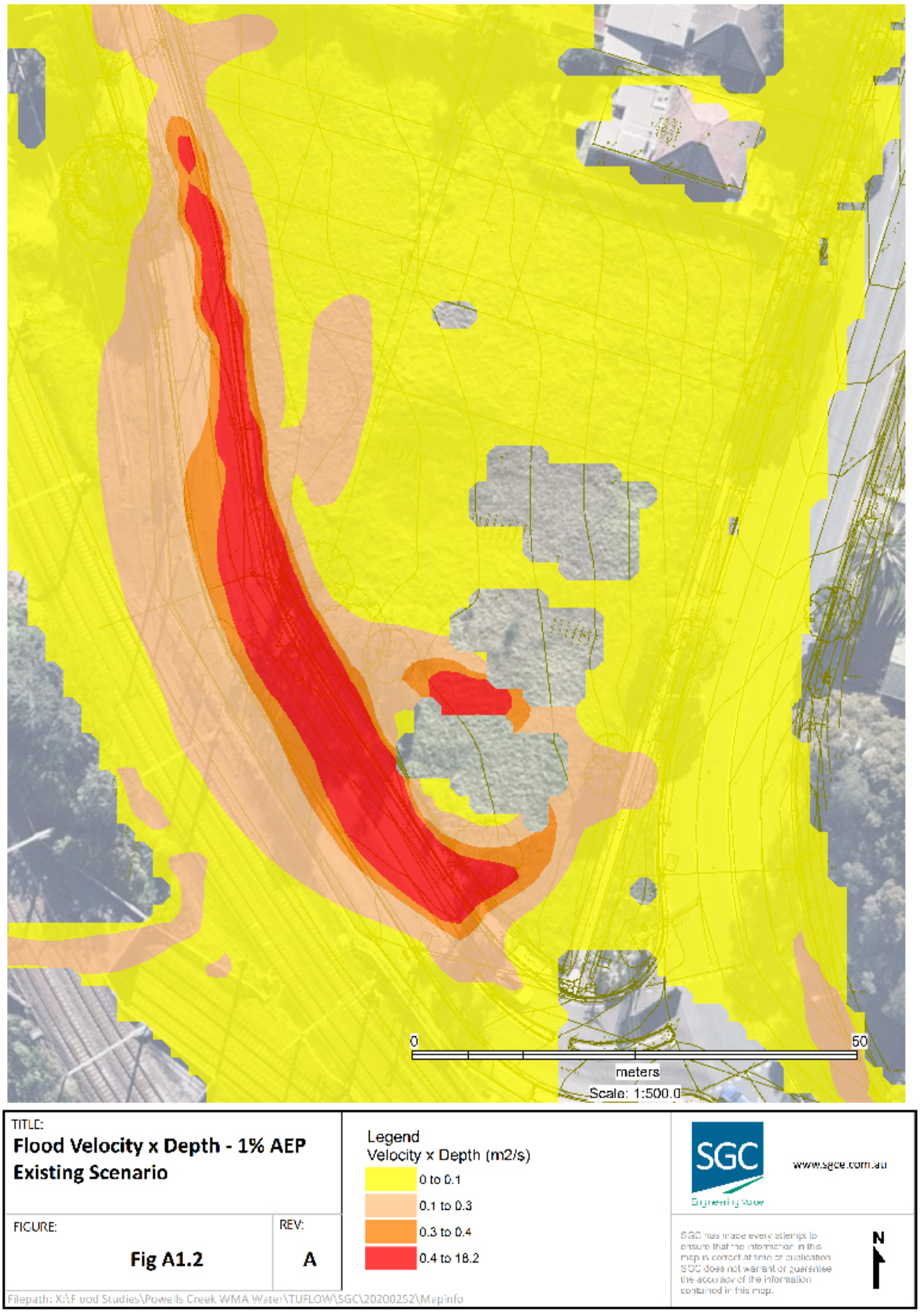



**Figure A 1.2 1% AEP ARI Flood Hazard – Base Scenario**

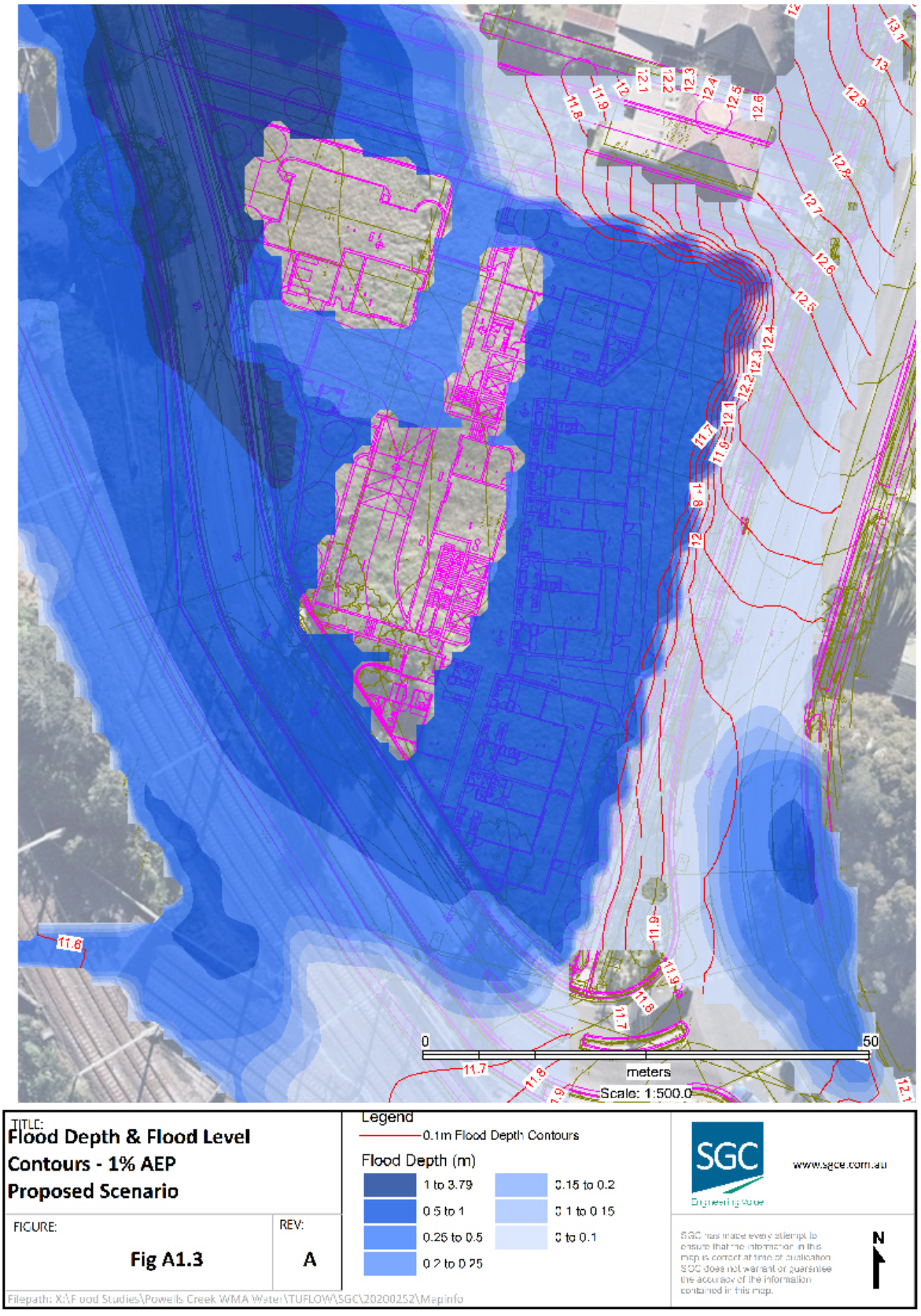



**Figure A 1.3 1% AEP ARI Flood Depth & WSL – Proposed Scenario**

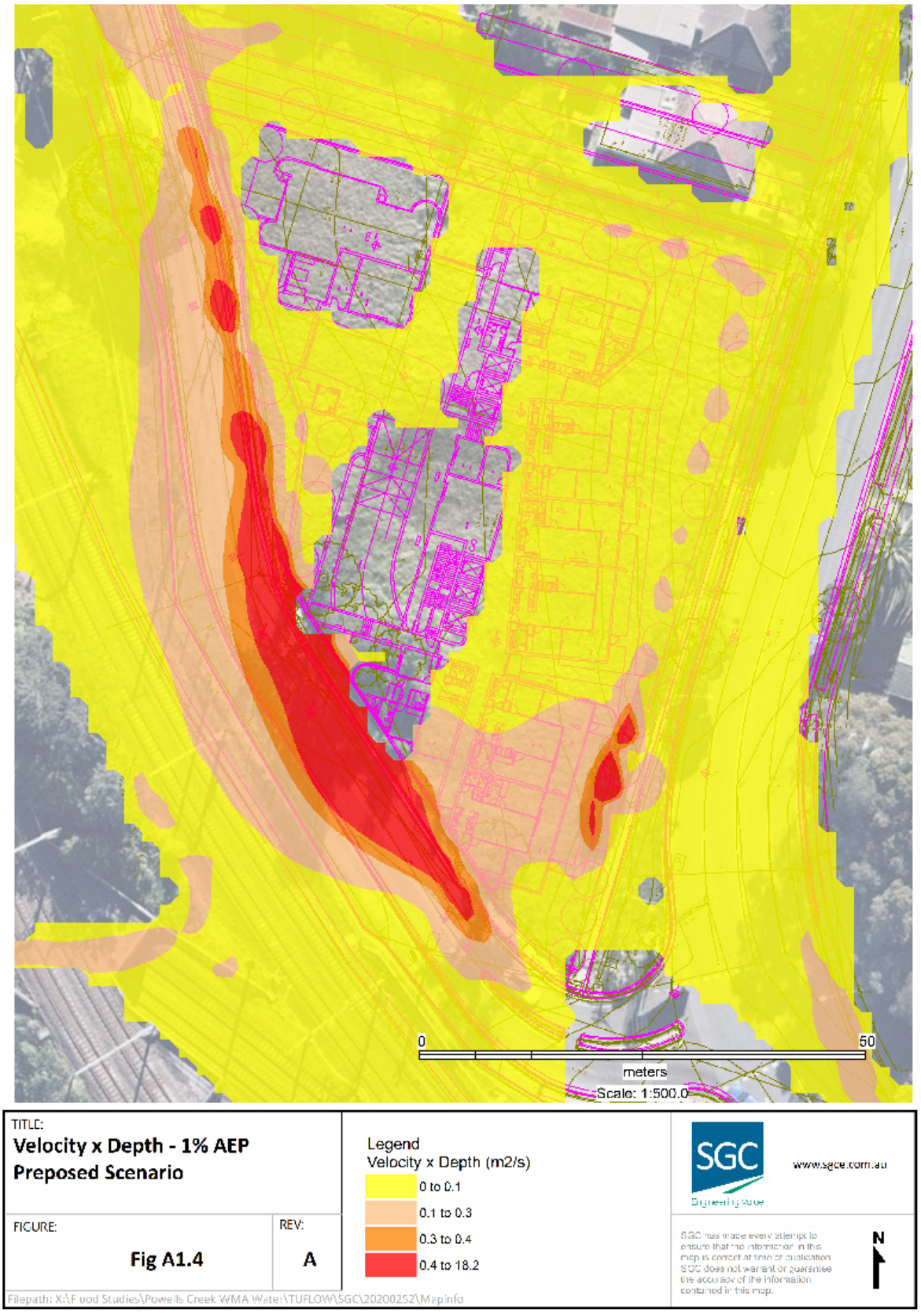



**Figure A 1.4 1% AEP ARI Flood Hazard – Proposed Scenario**

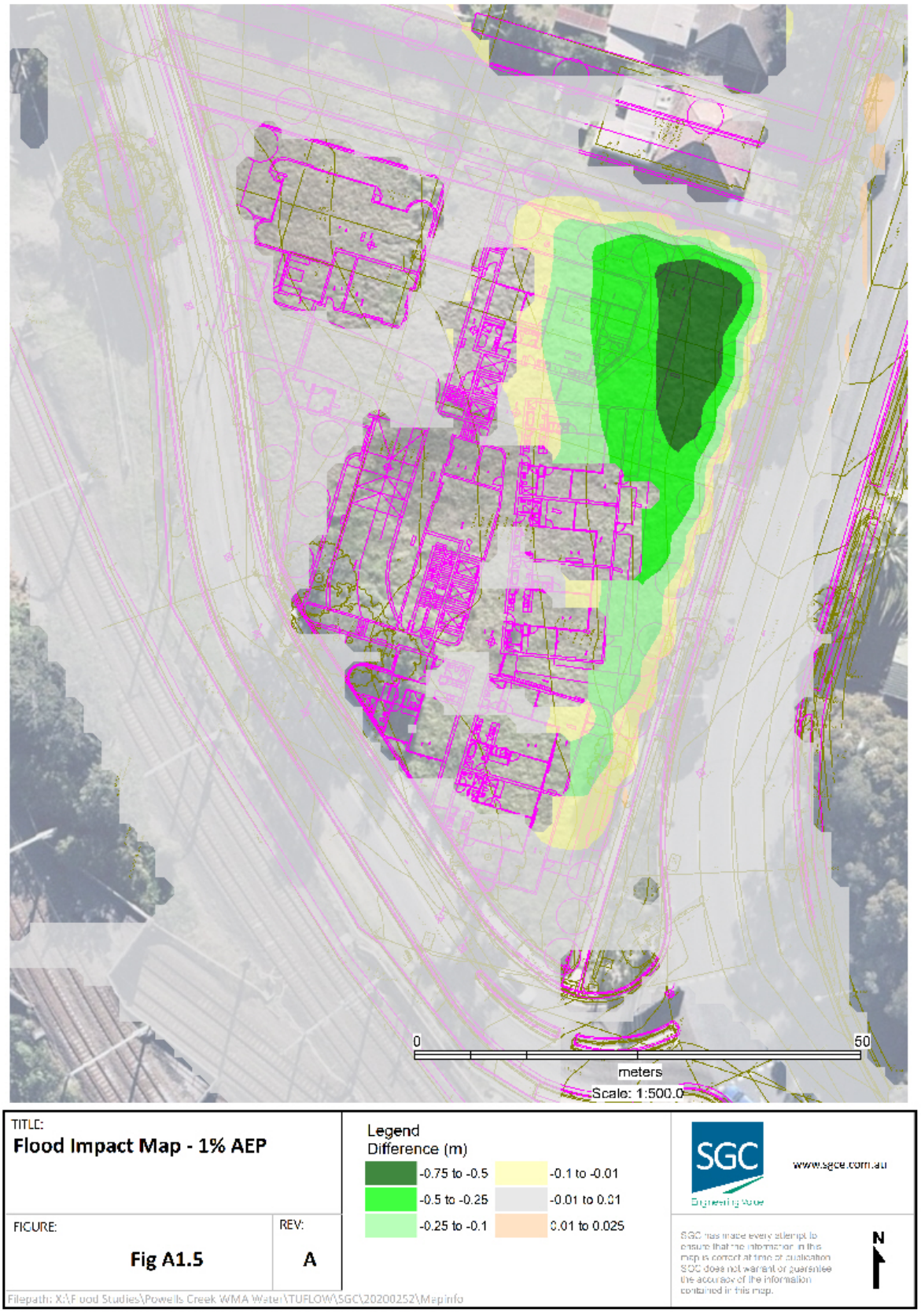



**Figure A 1.5 1% AEP ARI Flood Impact**

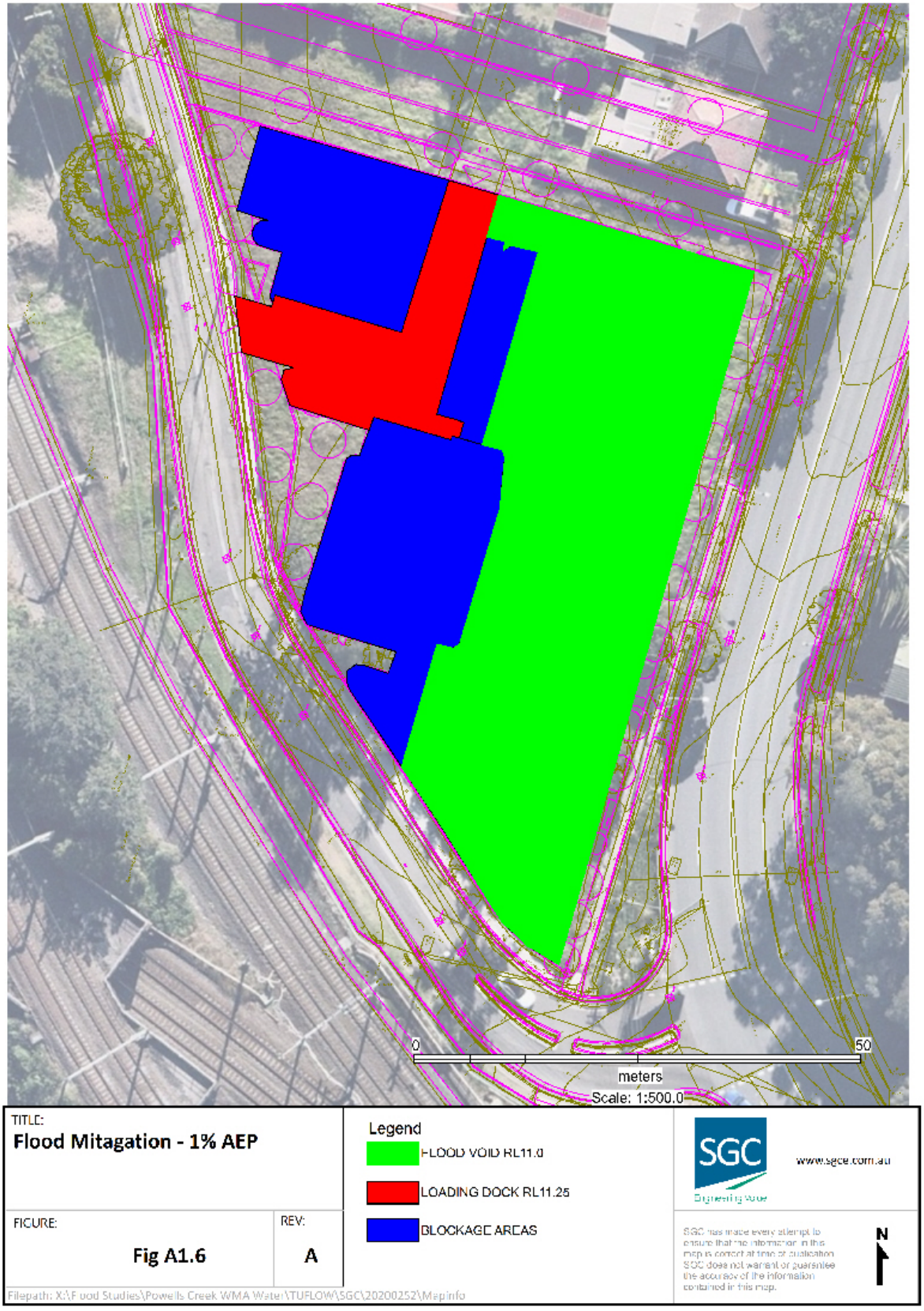



**Figure A 1.6 Flood Mitigation**

# A2 Appendix 2

## Survey Plan

Figure A2.1 Survey Plan

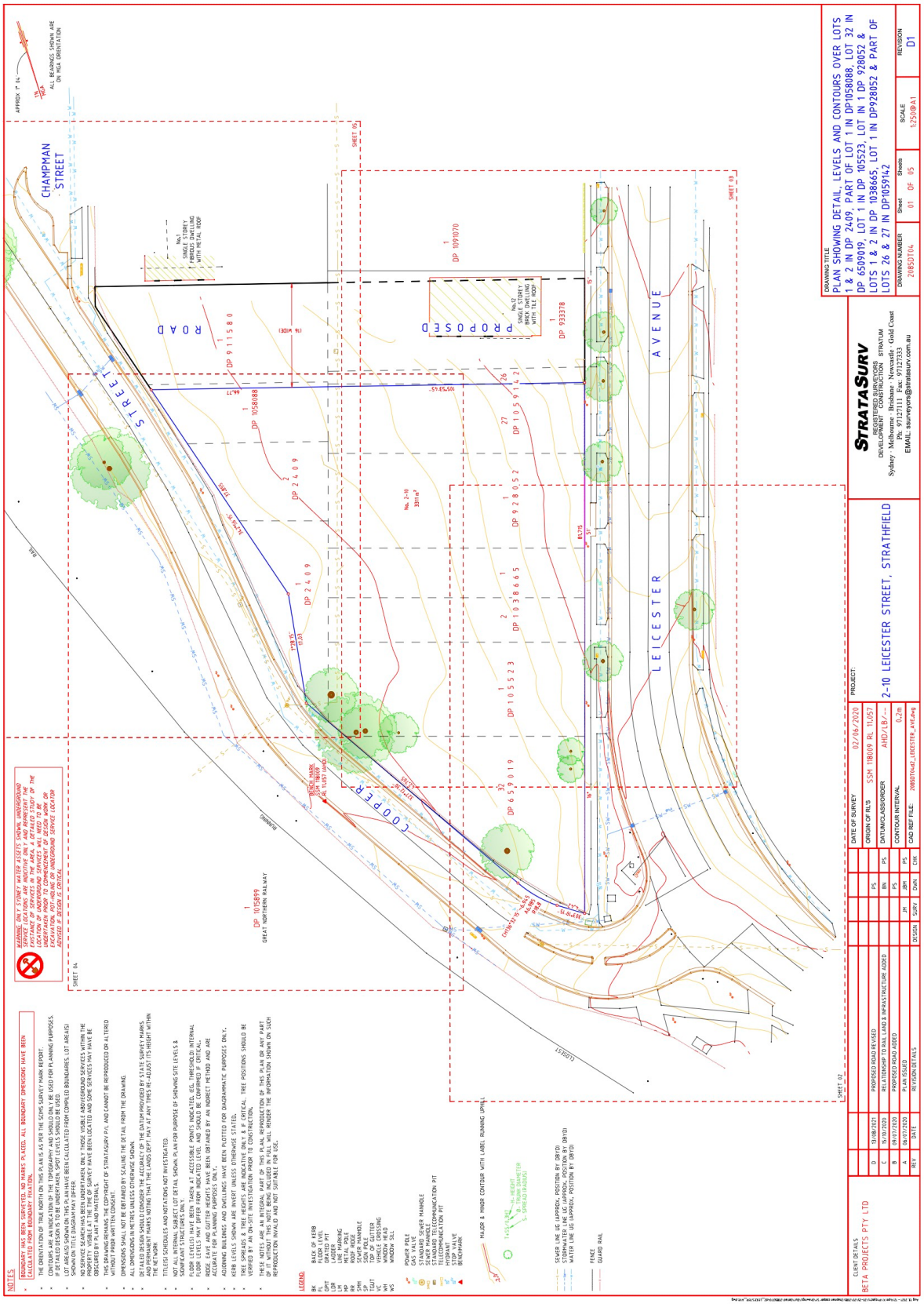



**Figure A 2.1 Survey Plan**

# A3 Appendix 3

## Architectural Plans

Figure A3.1 Ground Floor Plan

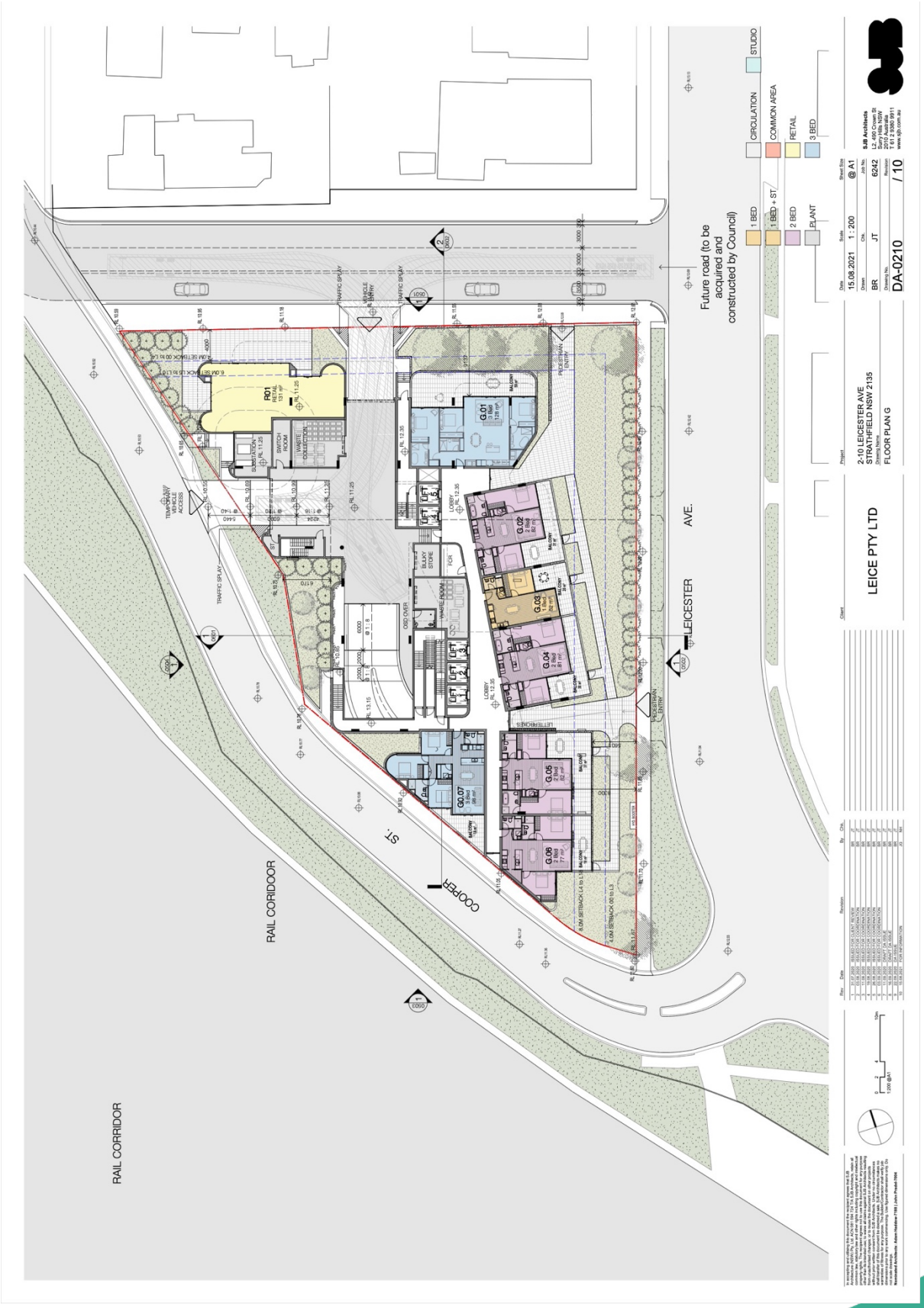



**Figure A 3.1 Ground Floor Plan**

# TRAFFIC IMPACT ASSESSMENT

**Proposed Development**
**2-10 Leicester Avenue, Strathfield**

Reference: 20.293r01v09
Date: August 2021

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt St
Surry Hills, NSW 2010

t: (02) 8324 8700
w: www.traffix.com.au

# DOCUMENT VERIFICATION

| Job Number | 20.293 | | | |
|---|---|---|---|---|
| **Project** | 2-10 Leicester Avenue, Strathfield | | | |
| **Client** | Leice Pty Ltd | | | |
| Revision | Date | Prepared By | Checked By | Signed |
| v09 | 17/08/2021 | Neil Caga | Neil Caga | |

# CONTENTS


1. Introduction 1
2. Location and Site 2
3. Existing Traffic Conditions 5
   - 3.1 Road Network 5
   - 3.2 Public Transport 7
4. Description of Proposed Development 9
5. Parking Requirements 10
   - 5.1 Car Parking 10
   - 5.2 Accessible Parking 11
   - 5.3 Bicycle Parking 11
   - 5.4 Motorcycle Parking 11
   - 5.5 Refuse Collection and Servicing 12
6. Traffic and Transport Impacts 13
   - 6.1 Development Trip Generation 13
   - 6.2 Traffic Impacts 14
7. Access and Internal Design Aspects 15
   - 7.1 Vehicular Access 15
   - 7.2 Internal Design 15
   - 7.3 Summary 16
8. Conclusions 17

Appendices

- Appendix A: Photographic Record
- Appendix B: Reduced Plans
- Appendix C: Swept Path Analysis

# 1. INTRODUCTION

TRAFFIX has been commissioned by Leice Pty Ltd to undertake a traffic impact assessment in support of a development application (DA) relating to a proposed development containing 202 dwellings and 146m$^2$ gross floor area (GFA) of retail premises at 2-10 Leicester Avenue, Strathfield. The development is located within the City of Canada Bay local government area and has been assessed under that Council's controls.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE), prepared separately.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Discusses access and internal design aspects
- Section 8: Presents the overall study conclusions

# 2. LOCATION AND SITE

The subject site at 2-10 Leicester Avenue, Strathfield is located approximately 10.8 kilometres west of Sydney CBD. More specifically, it is situated on the northwest corner of the Leicester Avenue and Cooper Street intersection and legally comprises the following areas:

- 2-10 Leicester Avenue: Lot 32 in DP659019, Lot 1 in DP105523, Lot 1 in DP1038665, Lot 2 in DP1038665, Lot 1 in DP928052 and Lot 27 in DP1059142.
- 27 Cooper Street: Lot 1 in DP2409, Lot 2 in DP2409 and Lot 1 in DP1058088.

The site is irregular in configuration and has a total site area of 3,311m$^2$. It has a northern frontage to a future local road (approved under DA617/2006) of 66.5 metres, an eastern frontage to Leicester Avenue of 80.3 metres and a south-western frontage to Cooper Street of 108.6 metres.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**. Reference should also be made to the Photographic Record presented in **Appendix A**, which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

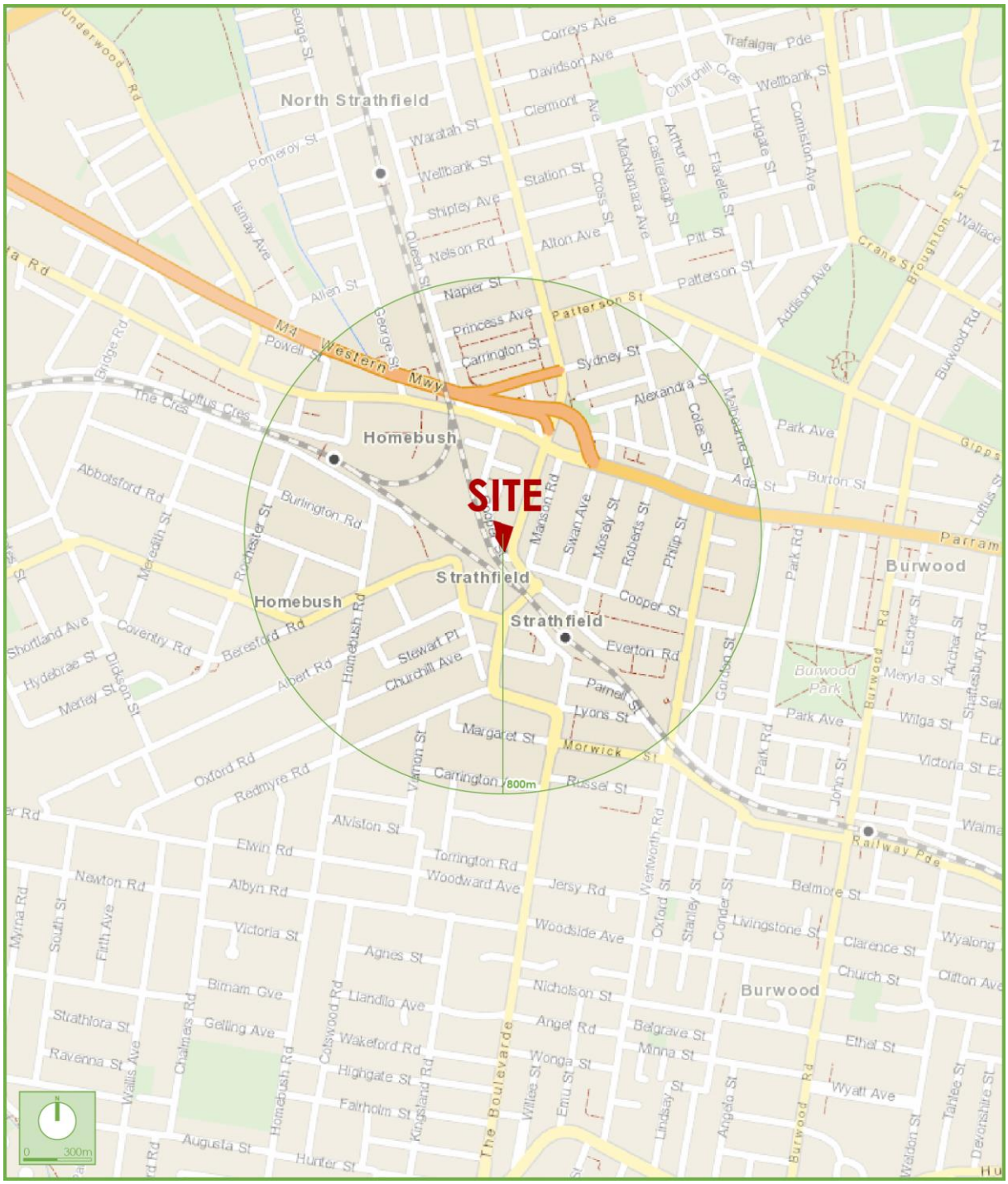



**Figure 1: Location Plan**

**Figure 2: Site Plan**

# 3. EXISTING TRAFFIC CONDITIONS

## 3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- Great Western Highway: an RMS highway (HW 5) and is also known as 'Parramatta Road' that traverses east-west between Broadway in the east and Woodville Road in the west. Within the vicinity of the site, it is subject to 60km/h speed zoning and accommodates 2-3 lanes of traffic in each direction. The Great Western Highway does not permit on-street parking.
- Leicester Avenue: forms part of an RMS Main Road (MR 668) that traverses north-south between The Great Western Highway in the north and Everton Road in the south. It is subject to 60km/h speed zoning and accommodates two (2) lanes of traffic in each direction. Leicester Avenue does not permit on-street parking.
- Cooper Street: a local road that traverses north-south between Parramatta Road in the north and Leicester Avenue in the south. It is subject to 50km/h speed zoning and accommodates a single lane of traffic in each direction. Cooper Street permits on-street parking within indented parallel parking bays near Parramatta Road.
- Unnamed Road: a local road (approved under DA617/2006) that traverses east-west between Leicester Avenue in the east and Cooper Street in the west. This unnamed road will form the northern frontage of the site and is envisaged to accommodate a single lane of traffic in each direction, as well as permit on-street parking along both sides of the road.

It can be seen from **Figure 3** that the site is conveniently located with respect to Great Western Highway (Parramatta Road), the main arterial road serving the region, with connections via Leicester Avenue and Cooper Street.

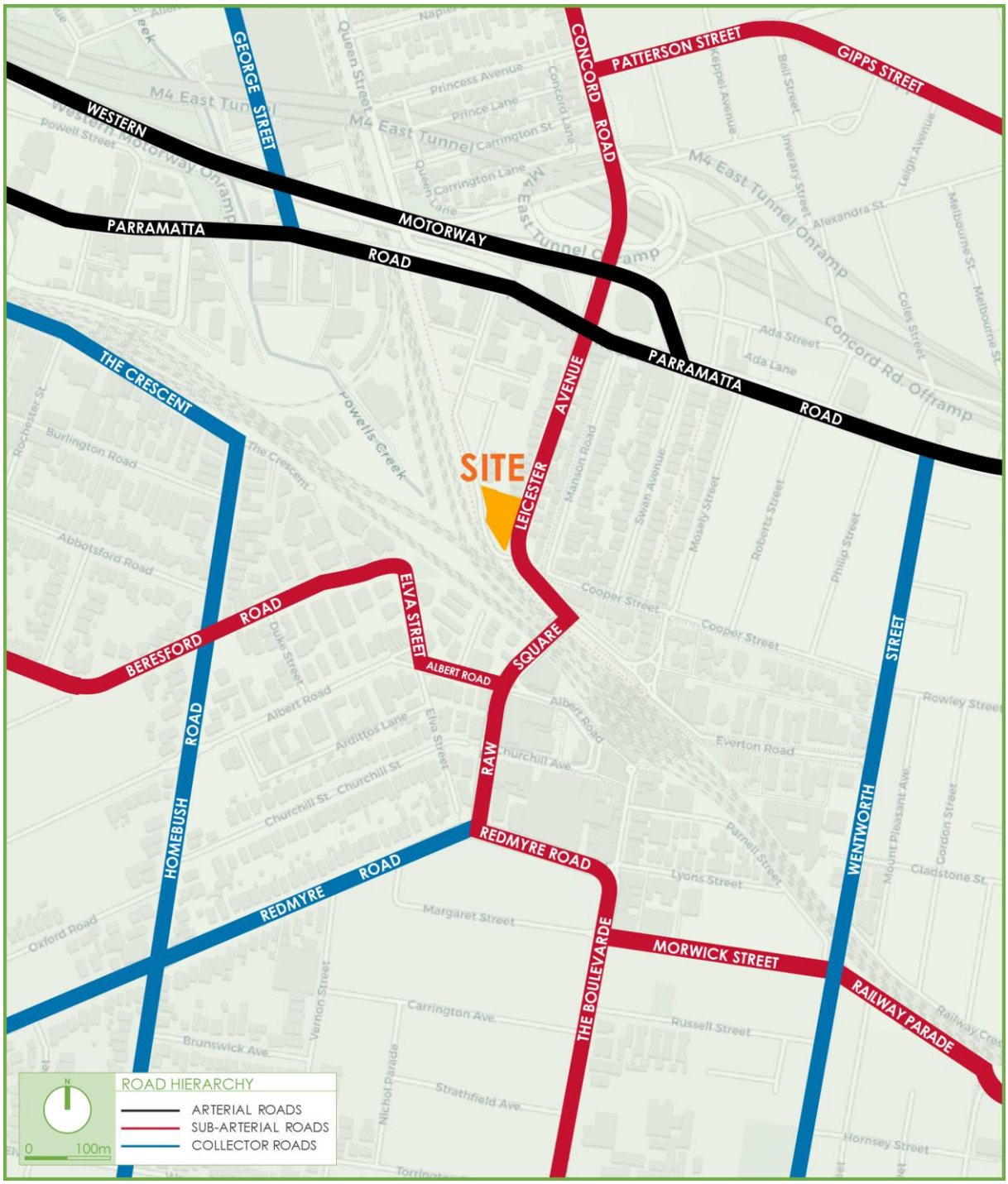



**Figure 3: Road Hierarchy**

## 3.2 Public Transport

The public transport services within the vicinity of the site are presented in **Figure 4** and summarised as follows.

### 3.2.1 Bus Services

The site is situated within optimal walking distance (400 metres) of various bus stops, with the closest being approximately 100 metres north on Leicester Avenue. These bus services and frequencies are presented in **Table 1** below.

**Table 1: Bus Services and Frequencies**

| Bus Service | Bus Routes | Service Frequency | |
|---|---|---|---|
| | | Weekdays | Weekends |
| 407 | Burwood to Strathfield | Every 30 minutes | Every 60 minutes |
| 408 | Rockwood Cemetery to Burwood via Flemington | Every 60 minutes | Every 60 minutes |
| 415 | Campsie to Chiswick | Every 30 minutes | Every 30 minutes |
| 450 | Strathfield to Hurstville | Every 15 minutes | Every 30 minutes |
| 458 | Ryde to Burwood | Every 30 minutes | Every 30-60 minutes |
| 483 | Strathfield to Central Pitt Street via South Strathfield | Every 30 minutes | Every 30-60 minutes |
| 525 | Parramatta to Burwood via Sydney Olympic Park | Every 30 minutes | Every 30 minutes |
| 526 | Burwood to Rhodes Shopping Centre | Every 30 minutes | Every 30 minutes |
| 913 | Bankstown to Strathfield | Every 60 minutes | n/a |
| 914 | Greenacre to Strathfield | Every 30 minutes | n/a |
| M90 | Liverpool to Burwood | Every 10 minutes | Every 20 minutes |

### 3.2.2 Train Services

The site is also situated approximately 370 metres and 600 metres of Strathfield and Homebush Railway Stations, respectively. These stations provide train services as outlined in **Table 2**.

**Table 2: Railway Services and Routes**

| Train Line | Routes | Train Line | Routes |
|---|---|---|---|
| T1 | North Shore, Northern and Western Line | T9 | Northern Line |
| T2 | Inner West and Leppington Line | BMT | Blue Mountains Line |
| T3 | Bankstown Line | CCN | Central Coast and Newcastle Line |
| T7 | Olympic Park Line | Regional | North West NSW and Western NSW |

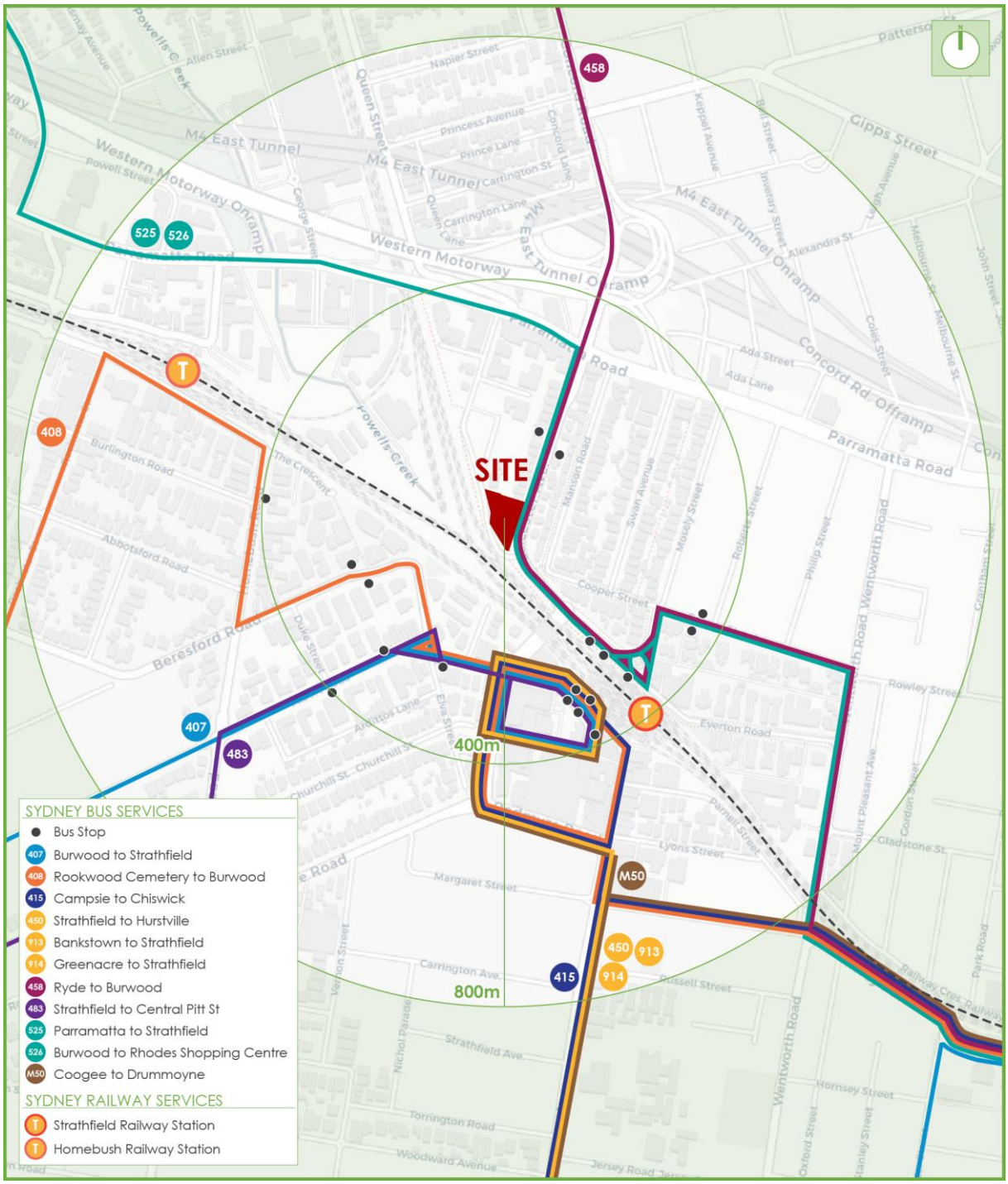



**Figure 4: Public Transport**

# 4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the SEE, prepared separately. In summary, the development for which approval is now sought comprises the following components:

- Construction of a 17-storey residential component, with a total of 202 dwellings, comprising:
  - 70 x one-bedroom dwellings;
  - 92 x two-bedroom dwellings; and
  - 40 x three-bedroom dwellings.
- Construction of a 146m$^2$ GFA of retail premises on the ground floor;
- Total provision of 221 parking spaces within basement level parking, comprising:
  - 202 x residential parking spaces, including 31 adaptable spaces;
  - 10 x visitor parking spaces, including one (1) car wash bay;
  - 4 x retail parking spaces, including one (1) accessible space;
  - 5 x service vehicle parking spaces.

The parking and traffic impacts arising from the development are discussed in **Section 5** and **Section 6**. Reference should be made to the plans submitted separately to Council, which are presented at reduced scale in **Appendix B.**

# 5. PARKING REQUIREMENTS

## 5.1 Car Parking

The parking requirements of the proposed development have been assessed in accordance with the following applicable Development Control Plans (DCPs):

- Strathfield Triangle DCP 2014, which provides precinct specific controls for the residential component of the development; and
- Canada Bay DCP 2013, which provides the car parking controls for the retail component of the development.

Accordingly, the car parking requirements of the proposed development are summarised in **Table 3** below.

**Table 3: DCP Car Parking Rates and Provisions**

| Type | No. of Dwellings / GFA | DCP Car Parking Rate | Parking Required [1] | Parking Provided |
|---|---|---|---|---|
| **Residential – Strathfield Triangle DCP** | | | | |
| One-bedroom | 70 | Average of 1 space per dwelling | 70 | 202 |
| Two-bedroom | 92 | | 92 | |
| Three-bedroom | 40 | | 40 | |
| Visitors | 202 | 1 space per 10-20 dwellings | 10.1 | 10 |
| | | *Sub-Total* | *212.1 (212)* | *212* |
| **Retail Premises – Canada Bay DCP** | | | | |
| Shops [2] | 146m² | 1 space per 40m² GLFA | 3.7 | 4 |
| | | *Sub-Total* | *3.7 (4)* | *4* |
| | | **TOTAL** | **216** | **216** |

*[1] – Rounded to the nearest whole figure, as per Canada Bay DCP.*

*[2] – For the purposes of this assessment, Gross Leasable Floor Area (GLFA) = GFA.*

It can be seen from **Table 3** that the development is nominally required to provide a total of 216 car parking spaces. In response, the development proposes a total of 216 car parking spaces, comprising 202 residential spaces (average of 1 space per dwelling), 10 residential visitor spaces and four (4) retail spaces. This provision is considered acceptable to satisfy the requirements of the DCP and will ensure all parking demands are contained within the development.

## 5.2 Accessible Parking

The Canada Bay DCP 2013 states that accessible parking be provided at the following rates:

- 1 accessible space per adaptable dwelling for the residential component of the development, as per AS4299 (1995); and
- 1 accessible space per 50 dwellings or part thereof for the retail component (Class 6) of the development, as per the Building Code of Australia (BCA).

The development proposes 31 adaptable dwellings (15.5% of total dwellings) and four (4) retail car parking spaces, thereby resulting in a requirement for 32 accessible spaces. In response, the development proposes 32 accessible spaces, comprising 31 accessible spaces for residential use and one (1) accessible space for retail use, in compliance with AS4299 (1995) and the BCA.

## 5.3 Bicycle Parking

The Canada Bay DCP 2013 provides the minimum bicycle parking provisions for the development at the following recommended rates (fractions rounded up, as per DCP):

- Residential component:
  - 1 bicycle storage facility for every dwelling; and
  - 1 bicycle parking space for every 12 dwellings.
- 1 bicycle parking facility per 500m$^2$ for the retail shop component.

Application of the above rates would result in a requirement for 220 bicycle spaces, comprising 219 residential spaces and one (1) retail space. In response, the development proposes 219 bicycle spaces within the basement 1 level, thereby compliant with the residential bicycle requirements of the DCP, noting that there is sufficient space to readily accommodate a single additional retail bicycle space.

## 5.4 Motorcycle Parking

The Canada Bay DCP 2013 and the Strathfield Triangle DCP 2014 do not specify motorcycle parking requirements for the proposed development. As such, the development proposes no motorcycle parking spaces.

## 5.5 Refuse Collection and Servicing

### 5.5.1 Refuse Collection

The development proposes an on-site loading area within the Ground Floor level that is able to accommodate Council's 10.44 metre long waste collection vehicle. This is considered appropriate given the nature and scale of the development.

### 5.5.2 Service Vehicles

The Strathfield Triangle DCP 2014 provides the service vehicle parking provisions for residential developments at the following rate:

- 1 service vehicle parking space per 50 dwellings (for the first 200 dwellings); plus
- 1 addition service vehicle parking space.

Application of the above rates would result in a requirement for five (5) service vehicle parking spaces. In response, the development proposes five (5) service vehicle parking spaces within Basement 1 that are able to accommodate B99 vehicles (vans and utes), in compliance with the DCP.

# 6. TRAFFIC AND TRANSPORT IMPACTS

## 6.1 Development Trip Generation

### 6.1.1 Residential Component

The RMS Technical Direction TDT 2013/04a provides updated traffic generation rates for various high density residential developments within the Sydney Region. In this regard, the RMS Technical Direction TDT 2013/04a provides a specific traffic generation rate for Strathfield at the following rates:

- 0.10 vehicle trips per hour for every dwelling during the morning peak period; and
- 0.06 vehicle trips per hour for every dwelling during the evening peak period.

Application of the above rates and adopting an 80/20 modal split to the proposed 202 dwellings results in the following anticipated traffic generation:

- 20 vehicle trips per hour during the morning peak period (4 in, 16 out); and
- 12 vehicle trips per hour during the evening peak period (10 in, 2 out).

### 6.1.2 Retail Component

The RMS Guide to Traffic Generating Developments 2002 provides traffic generation rates for retail speciality shops at a rate of 4.6 vehicle trips per 100m$^2$ GLFA during the evening peak period, noting that for the purposes of this assessment GLFA equals GFA. Application of this rate to the proposed 146m$^2$ GFA of retail results in the following anticipated traffic generation:

- 7 vehicle trips per hour during the evening peak period (1 in, 6 out).

### 6.1.3 Combined Traffic Generation

The combined anticipated traffic generation of the residential and retail components are summarised as follows:

- 20 vehicle trips per hour during the morning peak period (4 in, 16 out); and
- 19 vehicle trips per hour during the evening peak period (11 in, 8 out).

## 6.2 Traffic Impacts

The above anticipated traffic generation of the development thereby equates to a single vehicle approximately every three (3) minutes during the morning and evening peak periods.

Accordingly, the anticipated traffic generation of the development is considered minimal and well within typical fluctuations in background traffic volumes. As such, the development is considered supportable from a traffic planning perspective with no external improvements to the network required.

# 7. ACCESS AND INTERNAL DESIGN ASPECTS

## 7.1 Vehicular Access

### 7.1.1 Light Vehicles

The development proposes a total of 221 parking spaces (User Class 1A) with access to Cooper Street and a new future road (both local roads). It will therefore require a Category 2 driveway under AS2890.1 (2004), being a combined entry and exit width of 6.0 to 9.0 metres. In response, the development proposes the following access arrangements:

- Temporary access (Cooper Street) – 7.0 metre wide combined entry and exit access; and
- Future access (New Road) – 6.0 metre wide combined entry and exit access.

The above access arrangements are therefore sufficient to comply with the requirements of AS2890.1 (2004), hence considered acceptable.

### 7.1.2 Heavy Vehicles

The development proposes a loading area on the Ground Floor level that is able to accommodate Council's 10.44 metre long waste collection vehicle. This loading area is accessible from the proposed Cooper Street access, as well as the future access from the new road. A swept path analysis has been provided in **Appendix C** demonstrating satisfactory vehicle movements.

## 7.2 Internal Design

The basement carpark generally complies with the requirements of AS2890.1 (2004), AS2890.2 (2018) and AS2890.6 (2009), with the following characteristics noteworthy:

### 7.2.1 Parking Modules

- All standard car parking spaces have been designed in accordance with AS2890.1 (2004) User Class 1A, being a minimum width of 2.4 metres and length of 5.4 metres.
- All accessible parking spaces have been referred to the accessibility consultant for compliance.

- All spaces located adjacent to obstructions greater than 150mm in height are provided with an additional width of 300mm.
- All dead-end aisles are provided with the required 1.0m aisle extension in accordance with AS2890.1 (2004) Figure 2.3.

#### 7.2.2 Ramps

- The vehicular access ramp provides a maximum gradient of 1 in 20 (5%) for the initial 6.0 metres within the property boundary.
- All vehicular ramps are for private use which provide a maximum gradient of 1 in 4 (25%) with sag and summit transitions of 1 in 8 (12.5%) for a minimum length of 2.0 metres.

#### 7.2.3 Clear Head Heights

- A minimum clear head height of 2.2 metres is to be provided for all trafficable areas within the basement carpark, as required by AS2890.1 (2004).
- A minimum clear head height of 2.5 metres is to be provided for all accessible spaces and associated shared areas, as required under AS2890.6 (2009).
- A minimum clear head height of 4.5 metres is to be provided for all trafficable areas of the service vehicle, as required under AS2890.2 (2018).

#### 7.2.4 Other Considerations

- All columns are located outside of the parking space design envelope in accordance with AS2890.1 (2004) Figure 5.2.
- A visual splay has been provided at the vehicular access for egressing drivers in accordance with AS2890.1 (2004) Figure 3.3.

## 7.3 Summary

In summary, the internal configuration of the basement carpark has been designed in accordance with AS2890.1 (2004), AS2890.2 (2018) and AS2890.6 (2009). It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

# 8. CONCLUSIONS

In summary:

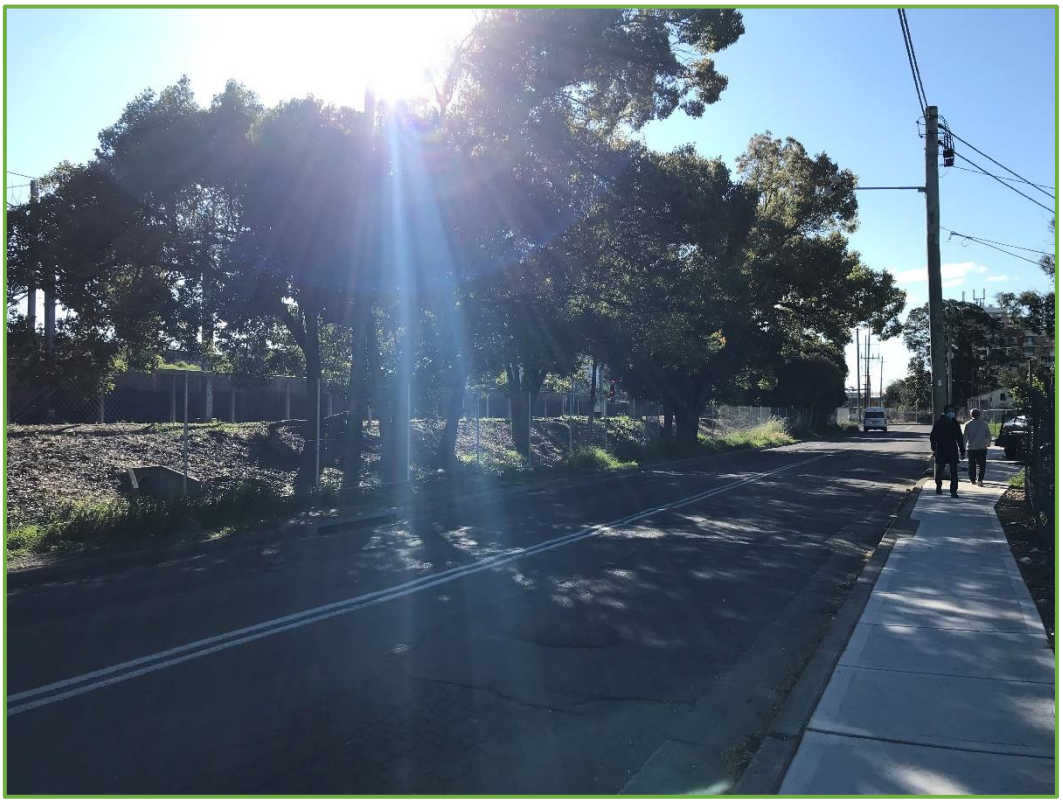
- The proposal seeks approval to construct a 17-storey development at 2-10 Leicester Avenue, Strathfield containing 202 dwellings, 146m$^2$ GFA of retail and 221 parking spaces.
- The subject site is well connected to the public transport network with reliable access to regular bus services along Leicester Avenue, as well as train services from Strathfield and Homebush railway stations.
- The proposed development provides a total of 221 car parking spaces, including 202 residential spaces, 10 residential visitor spaces, four (4) retail spaces and five (5) service vehicle spaces. As such, all parking demands will be readily accommodated on-site.
- The traffic generation arising from the development equates to an additional 20 vehicles and 19 vehicles during the morning peak and evening peak period, respectively. Accordingly, the anticipated traffic generation of the development is considered minimal and well within typical fluctuations in background traffic volumes. As such the development is considered supportable from a traffic planning perspective with no external improvements to the network required.
- The basement carpark has been assessed to comply with the requirements of AS2890.1 (2004), AS2890.2 (2018) and AS2890.6 (2009). It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds. TRAFFIX anticipates an ongoing involvement during the development approval process.

# APPENDIX A

## Photographic Record

View looking west from Leicester Avenue towards the subject site



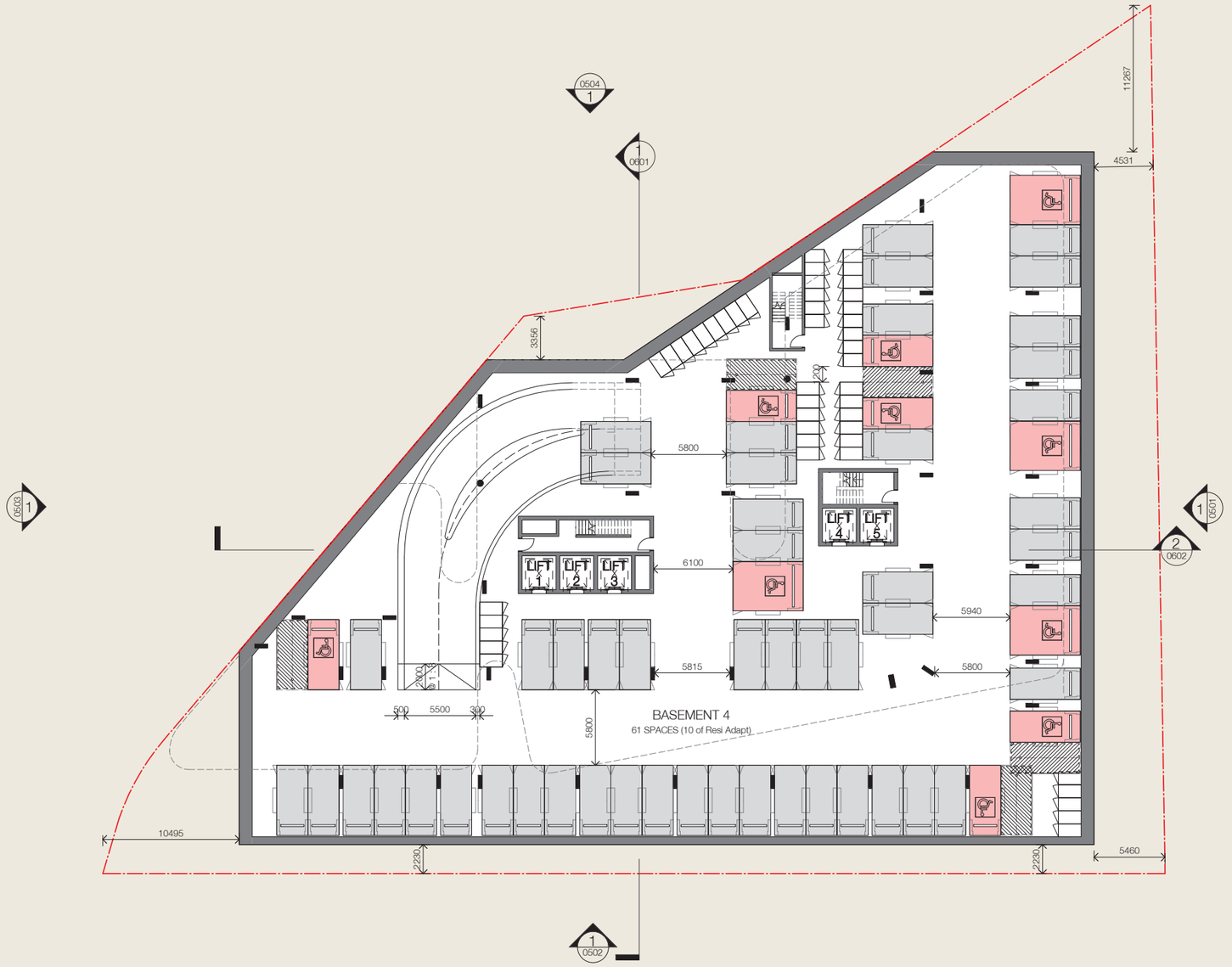
View looking north along Cooper Street

View looking north along Leicester Avenue

View looking south along Leicester Avenue

# APPENDIX B

Reduced Plans




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m

1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

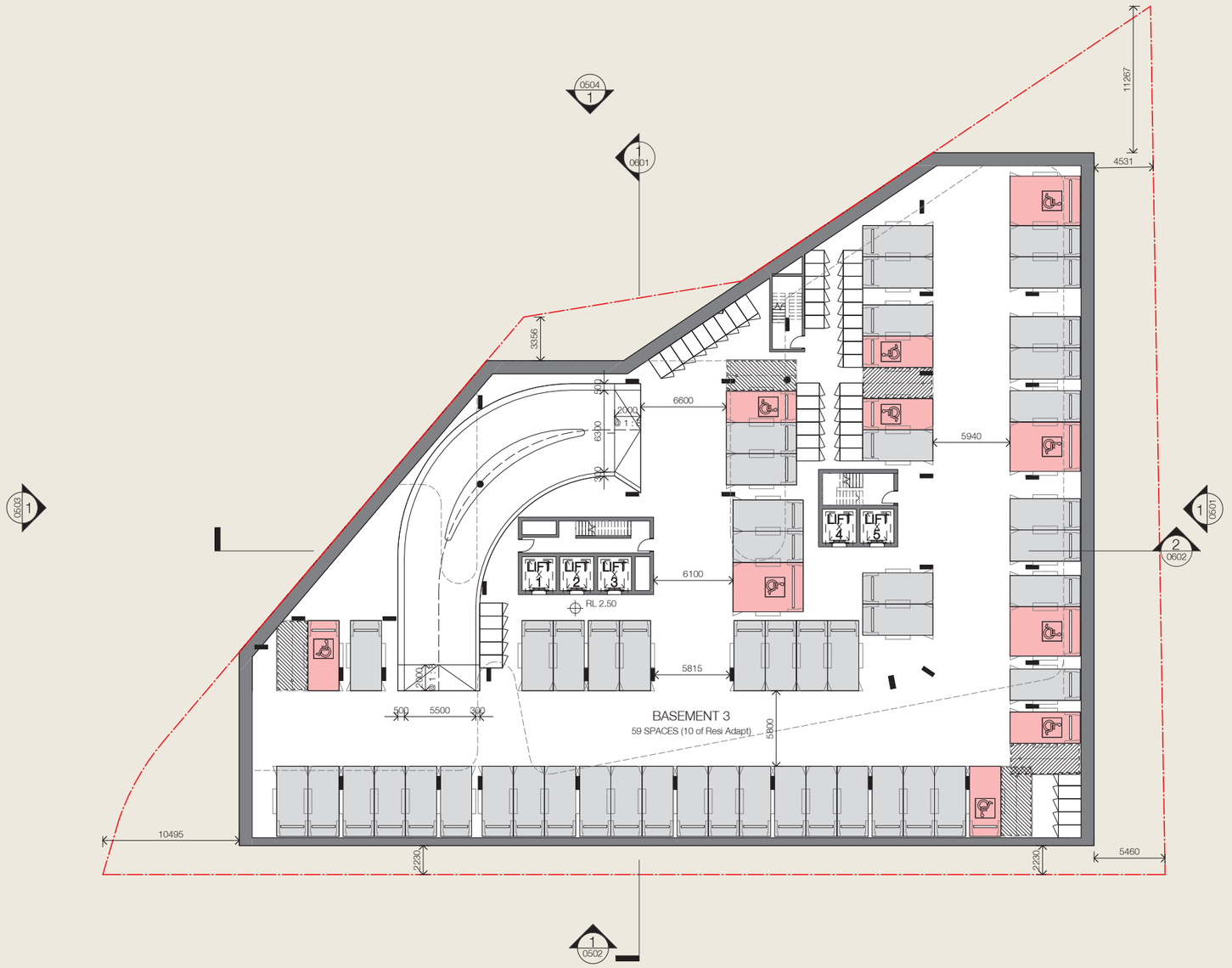
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN B4

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0206 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

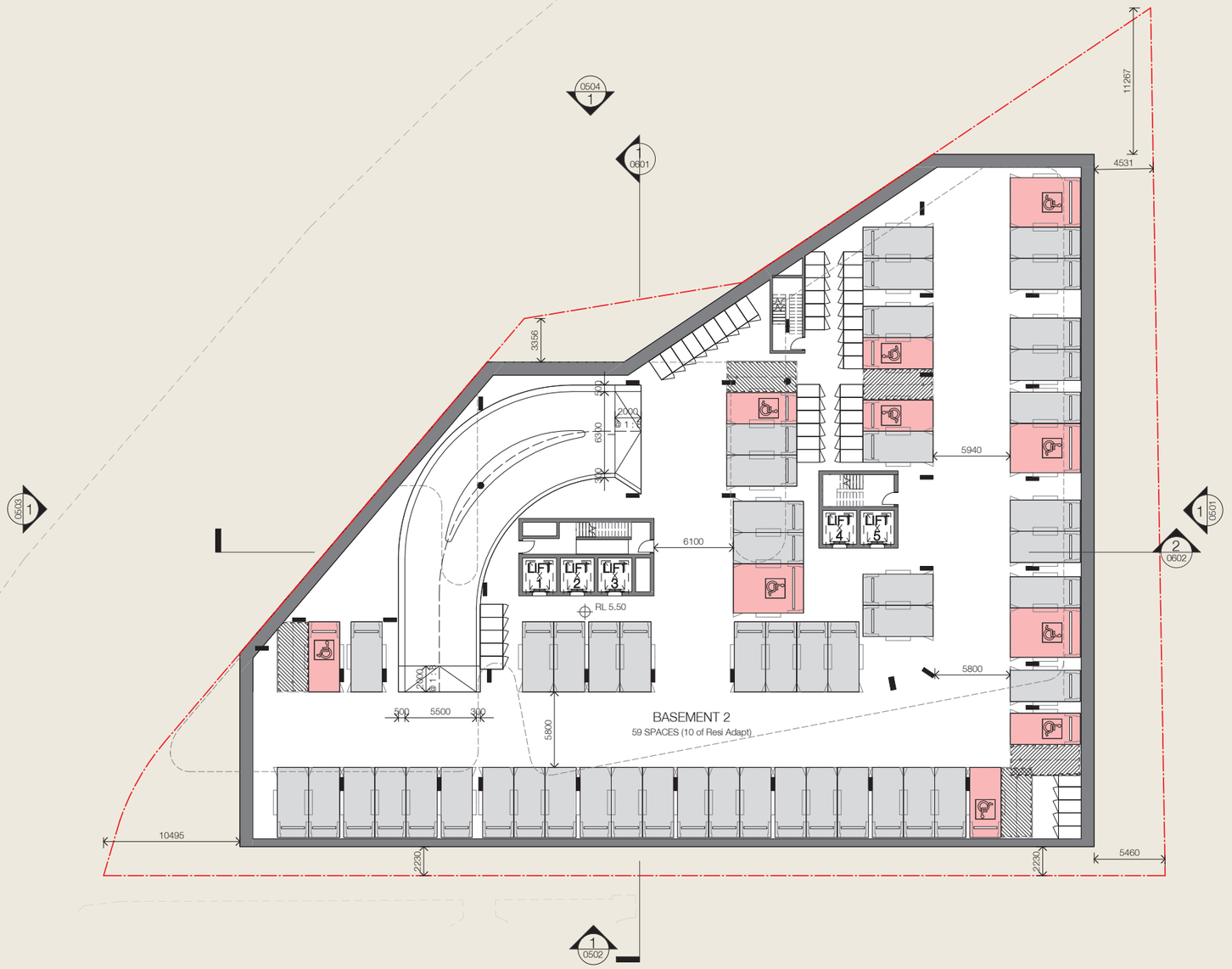
Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN B3

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0207 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 1 2 5m
1:100 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

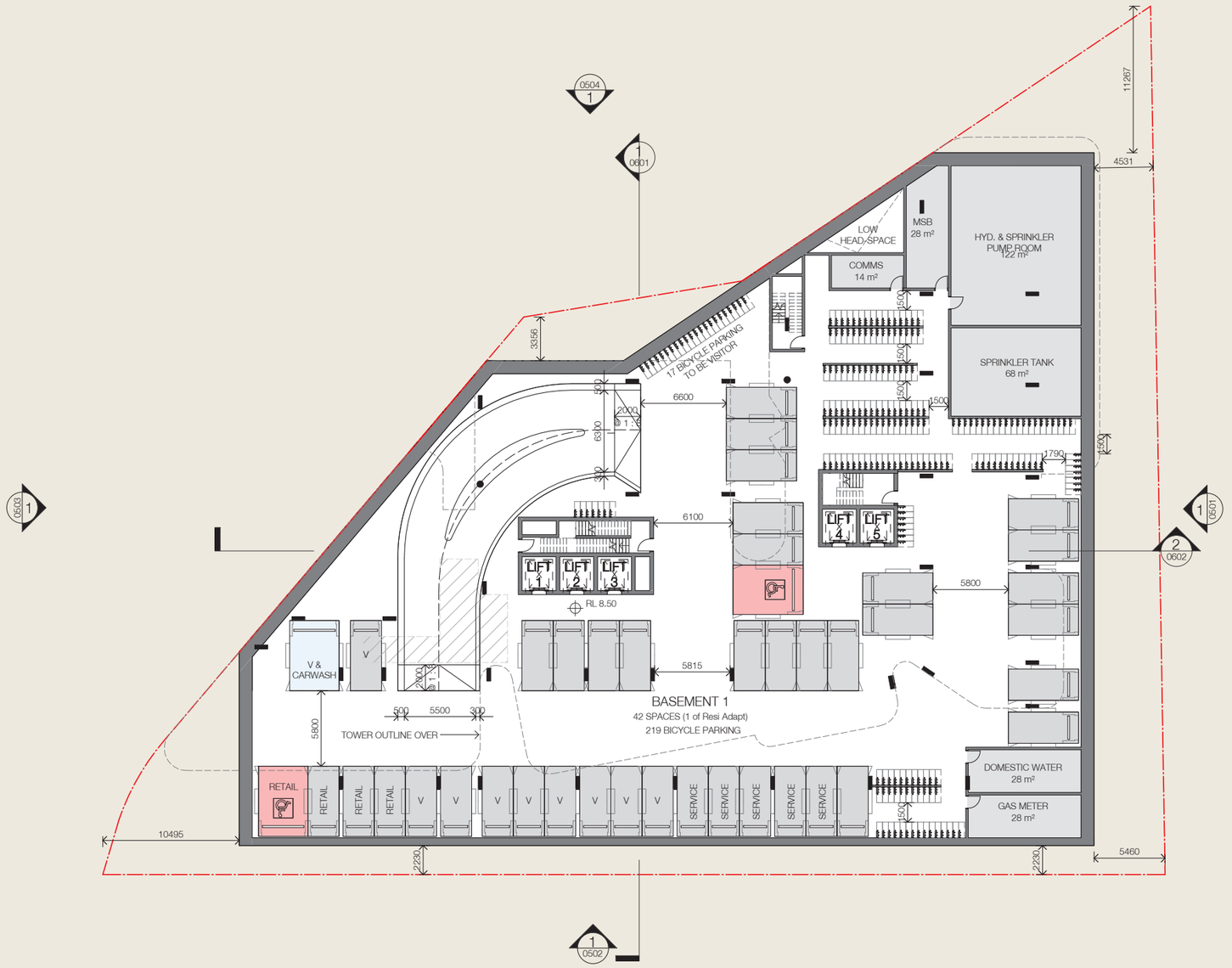
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

FLOOR PLAN B2

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0208 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au




In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.
**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m
1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client
LEICE PTY LTD

Project
2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name
FLOOR PLAN B1

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0209 | | / 10 |

**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

RAIL CORRIDOR

RAIL CORIDOOR

COOPER ST.

LEICESTER AVE.

TEMPORARY VEHICLE ACCESS

TRAFFIC SPLAY

SUBSTATION RL 11.25

SWITCH ROOM

WASTE COLLECTION

R01 RETAIL 131 m²

6.0M SETBACK L5 to L10

6.0M SETBACK 00 to L3

4000

OSD OVER

BULKY STORE

WASTE ROOM

FCR

LOBBY RL 12.35

LIFT 1 LIFT 2 LIFT 3 LIFT 4 LIFT 5

VEHICLE ENTRY

PEDESTRIAN ENTRY

HYD. BOOSTER

LETTERBOXES

4.0M SETBACK 00 to L3

8.0M SETBACK L4 to L10

G0.07 3 Bed 98 m²

G.01 3 Bed 128 m²

G.02 2 Bed 82 m²

G.03 1 Bed 52 m²

G.04 2 Bed 81 m²

G.05 2 Bed 82 m²

G.06 2 Bed 77 m²

BALCONY 18 m² | BALCONY 37 m² | BALCONY 20 m² | BALCONY 20 m² | BALCONY 31 m² | BALCONY 59 m²

2000 2000 6000 @ 1 : 8

5440 @ 1:40

6000 @ 1:20

6170

2224 @ 1:16

9137

350 3500 300 3000 3000 350

Future road (to be acquired and constructed by Council)

1 BED | 1 BED + ST | 2 BED | PLANT | CIRCULATION | COMMON AREA | RETAIL | STUDIO | 3 BED

In accepting and utilising this document the recipient agrees that SJB Architecture (NSW) Pty. Ltd. ACN 081 094 724 T/A SJB Architects, retain all common law, statutory law and other rights including copyright and intellectual property rights. The recipient agrees not to use this document for any purpose other than its intended use; to waive all claims against SJB Architects resulting from unauthorised changes; or to reuse the document on other projects without prior written consent from SJB Architects. Under no circumstances shall transfer of this document be deemed a sale. SJB Architects makes no warranties of fitness for any purpose. The Builder/Contractor shall verify job dimensions prior to any work commencing. Use figured dimensions only. Do not scale drawings.

**Nominated Architects: Adam Haddow-7188 | John Pradel-7004**

0 2 4 10m

1:200 @A1

| Rev | Date | Revision | By | Chk. |
|---|---|---|---|---|
| 1 | 31.07.2020 | ISSUED FOR CLIENT REVIEW | BR | JT |
| 2 | 03.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 3 | 11.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 4 | 19.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 5 | 26.08.2020 | ISSUED FOR COORDINATION | BR | JT |
| 6 | 03.09.2020 | ISSUED FOR COORDINATION | BR | JT |
| 7 | 11.09.2020 | DRAFT DA ISSUE | BR | JT |
| 8 | 16.09.2020 | DRAFT DA ISSUE | BR | JT |
| 9 | 22.09.2020 | DA ISSUE | BR | JT |
| 10 | 16.08.2021 | FOR INFORMATION | JG | NH |

Client

LEICE PTY LTD

Project

2-10 LEICESTER AVE
STRATHFIELD NSW 2135

Drawing Name

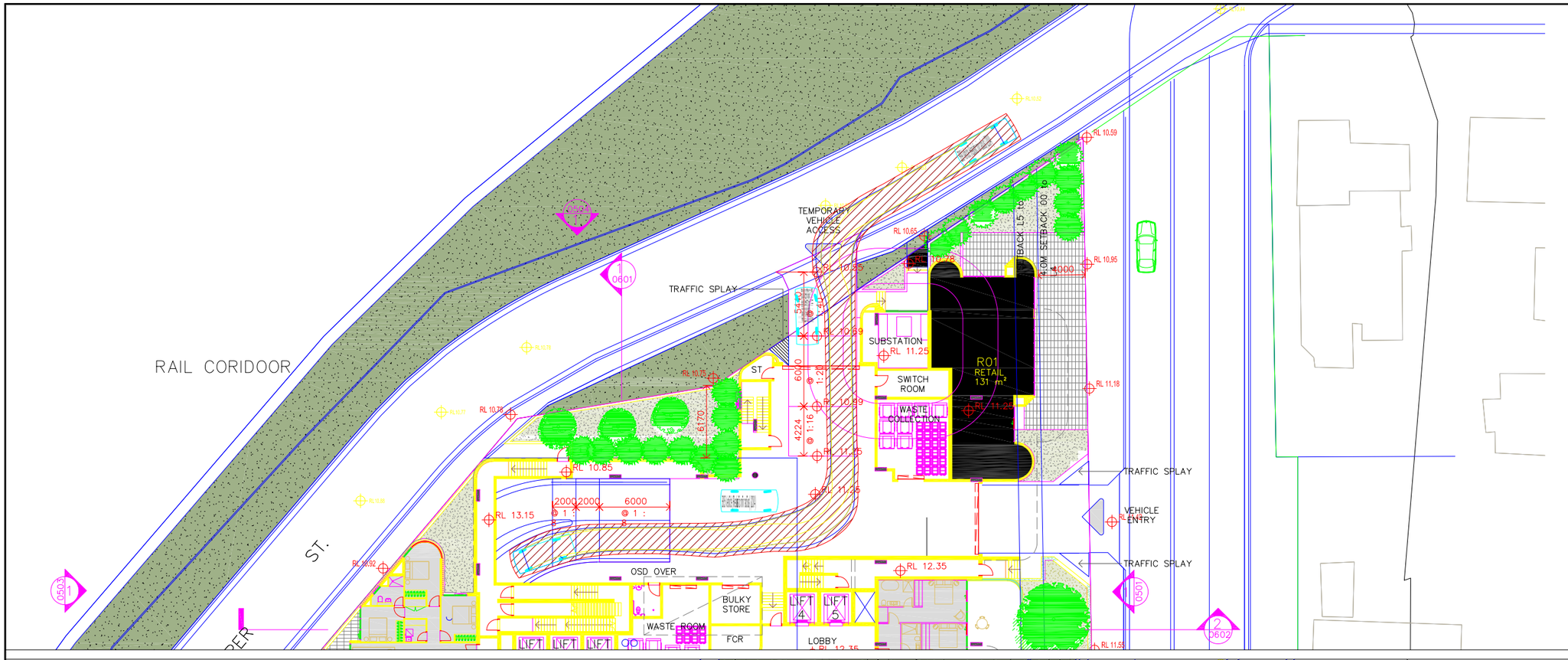
FLOOR PLAN G

| Date | Scale | Sheet Size |
|---|---|---|
| 16.08.2021 | 1 : 200 | @ A1 |
| Drawn | Chk. | Job No. |
| BR | JT | 6242 |
| Drawing No. | | Revision |
| DA-0210 | | / 10 |

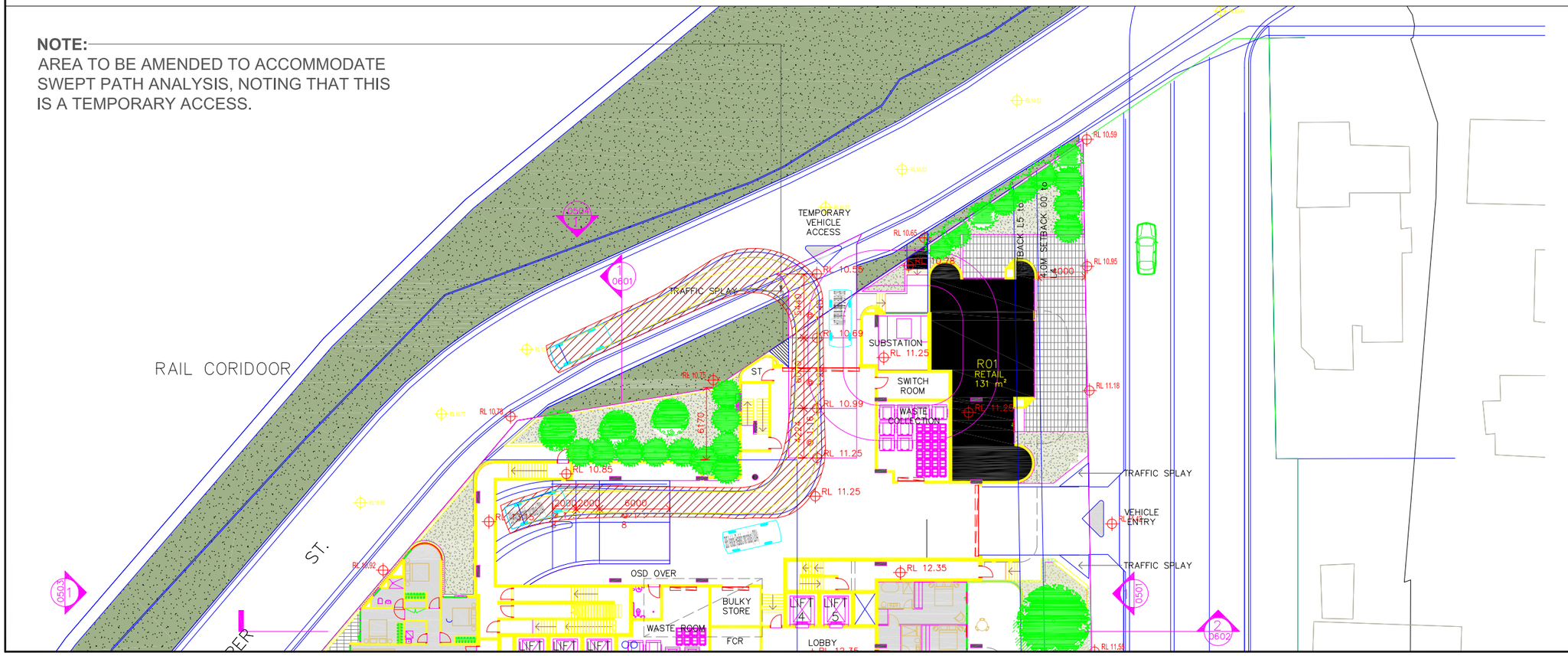
**SJB Architects**
L2, 490 Crown St
Surry Hills NSW
2010 Australia
T 61 2 9380 9911
www.sjb.com.au

# APPENDIX C

Swept Path Analysis




**NOTE:**
AREA TO BE AMENDED TO ACCOMMODATE SWEPT PATH ANALYSIS, NOTING THAT THIS IS A TEMPORARY ACCESS.




Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

| Rev. | Revision Note | By. | Date |
|---|---|---|---|
| A | Swept Path Analysis | NC | 26-07-2021 |
| B | Swept Path Analysis | NC | 03-08-2021 |
| C | Swept Path Analysis | NC | 17-08-2021 |

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
SJB Architects
Level 2, 490 Crown Street
SURRY HILLS NSW 2010

Client
Leice Pty Ltd
Tower 3, Level 23, 300 Barangaroo Avenue
BARANGAROO NSW 2000

Scale / Plan Orientation

0 4 8 12 16m
1:400 @ A3

Project Description
2-10 Leicester Avenue
STRATHFIELD NSW 2135

Drawing Prepared By

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street
Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012

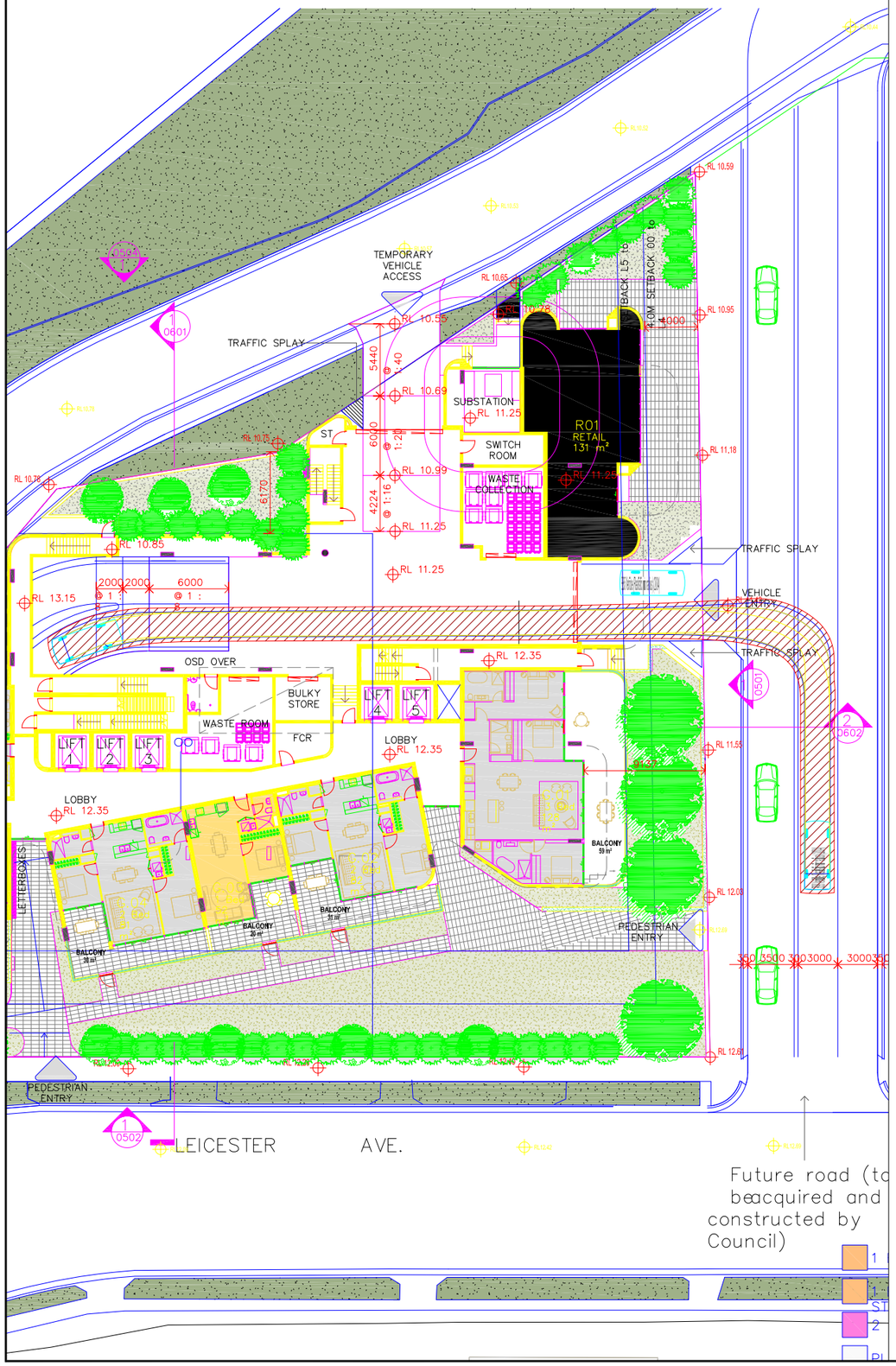
t: +61 2 8324 8700
f: +61 2 9830 4481
w: www.traffix.com.au

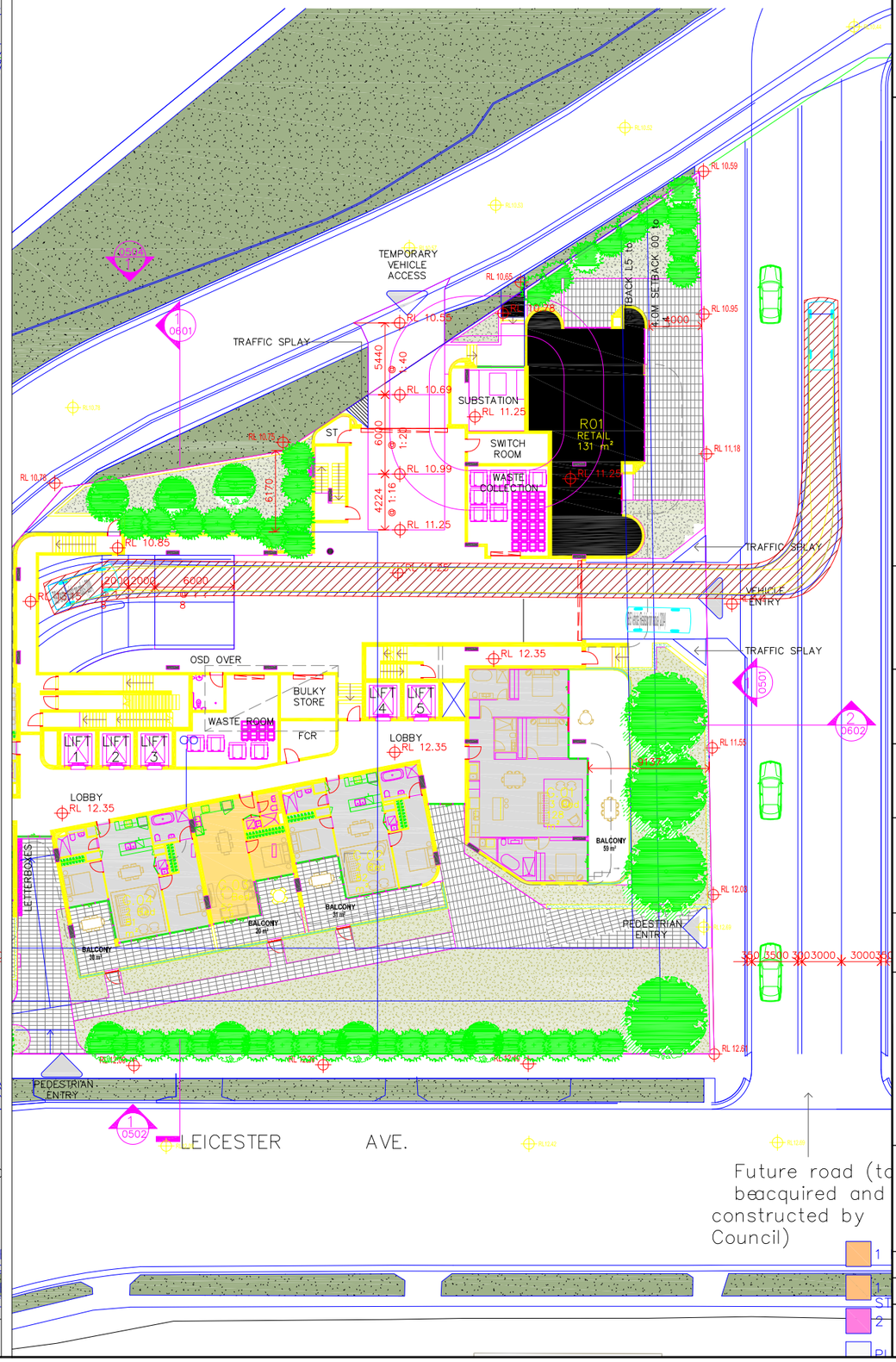
Drawing Title
Swept Path Analysis
Ground Floor - Cooper Street Access
B85 and B99 Design Vehicles
TOP: Entry Movement
BOTTOM: Egress Movement

| Drawn: | Checked: | Date: |
|---|---|---|
| NC | NC | 26-07-2021 |

20.293d12v01 TRAFFIX [2021-08-17] - Design Review.dwg

| Project No. | Drawing Phase | Drawing No. | Rev. |
|---|---|---|---|
| 20.293 | S34 | TX.01 | C |




Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

| Rev. | Revision Note | By. | Date |
|---|---|---|---|
| A | Swept Path Analysis | NC | 26-07-2021 |
| B | Swept Path Analysis | NC | 03-08-2021 |
| C | Swept Path Analysis | NC | 17-08-2021 |

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
SJB Architects
Level 2, 490 Crown Street
SURRY HILLS NSW 2010

Client
Leice Pty Ltd
Tower 3, Level 23, 300 Barangaroo Avenue
BARANGAROO NSW 2000

Scale / Plan Orientation
0 4 8 12 16m
1:400 @ A3

Project Description
2-10 Leicester Avenue
STRATHFIELD NSW 2135

Drawing Prepared By

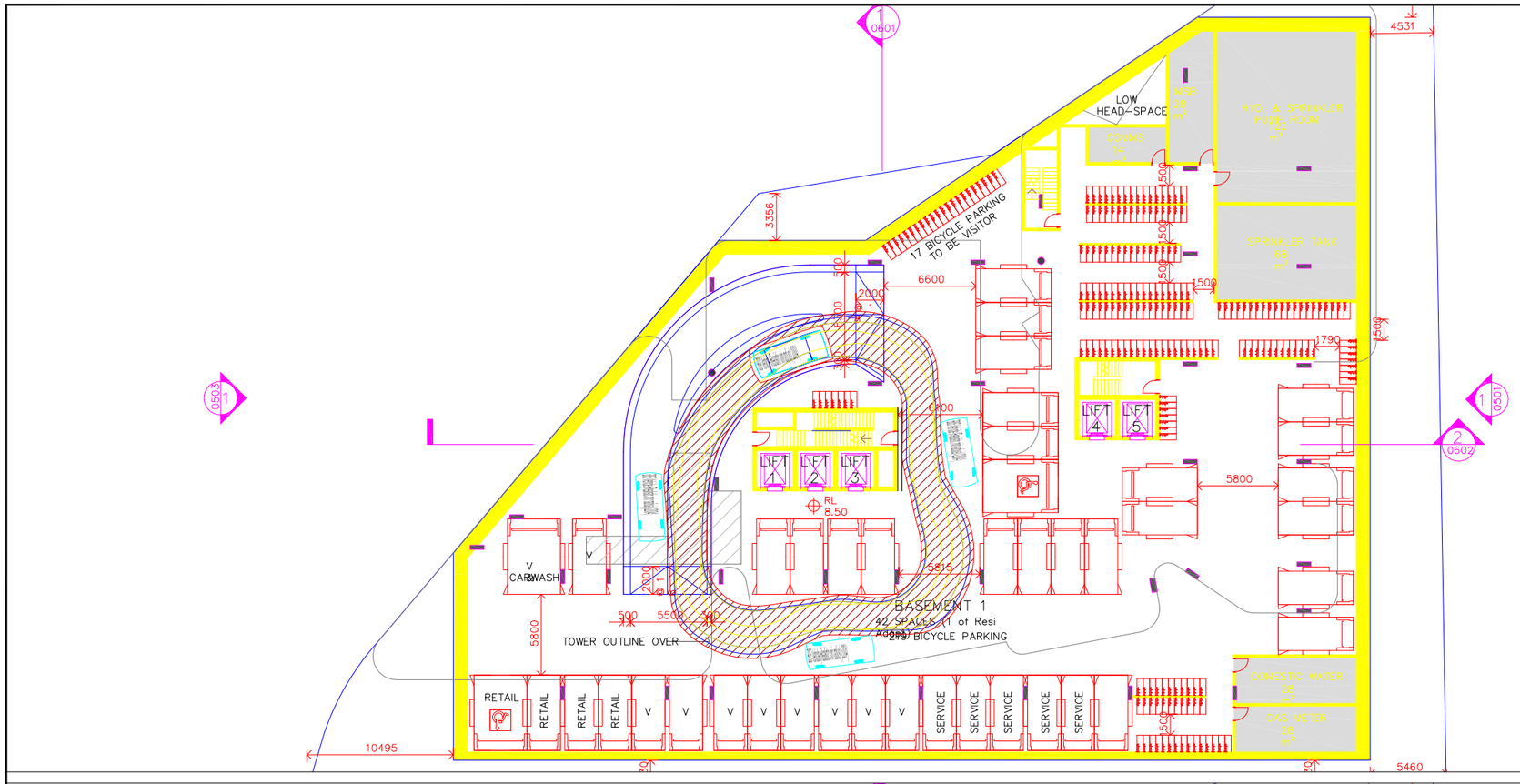
TRAFFIX
TRAFFIC & TRANSPORT PLANNERS
Suite 2.08, 50 Holt Street
Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012
t: +61 2 8324 8700
f: +61 2 9830 4481
w: www.traffix.com.au

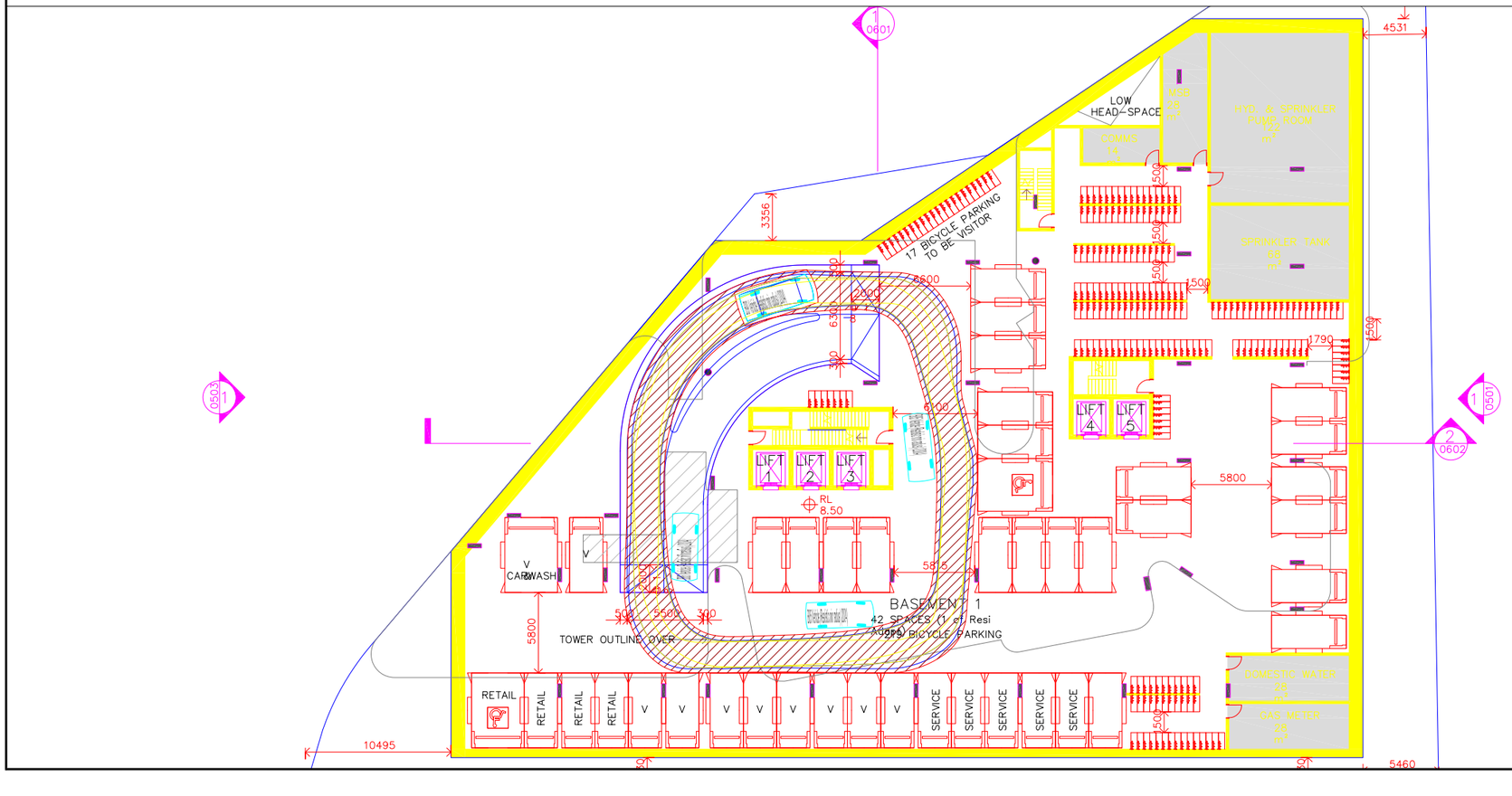
Drawing Title
Swept Path Analaysis
Ground Floor - New Road Access
B85 and B99 Design Vehicles
LEFT: Entry Movement
RIGHT: Egress Movement

| Drawn: | Checked: | Date: |
|---|---|---|
| NC | NC | 26-07-2021 |

20.293d12v01 TRAFFIX [2021-08-17] - Design Review.dwg

| Project No. | Drawing Phase | Drawing No. | Rev. |
|---|---|---|---|
| 20.293 | S34 | TX.02 | C |




Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

| Rev. | Revision Note | By. | Date |
|---|---|---|---|
| A | Swept Path Analysis | NC | 26-07-2021 |
| B | Swept Path Analysis | NC | 17-08-2021 |

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)


Architect
SJB Architects
Level 2, 490 Crown Street
SURRY HILLS NSW 2010

Client
Leice Pty Ltd
Tower 3, Level 23, 300 Barangaroo Avenue
BARANGAROO NSW 2000


Scale / Plan Orientation

0 4 8 12 16m
1:400 @ A3

Project Description
2-10 Leicester Avenue
STRATHFIELD NSW 2135


Drawing Prepared By

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street
Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012

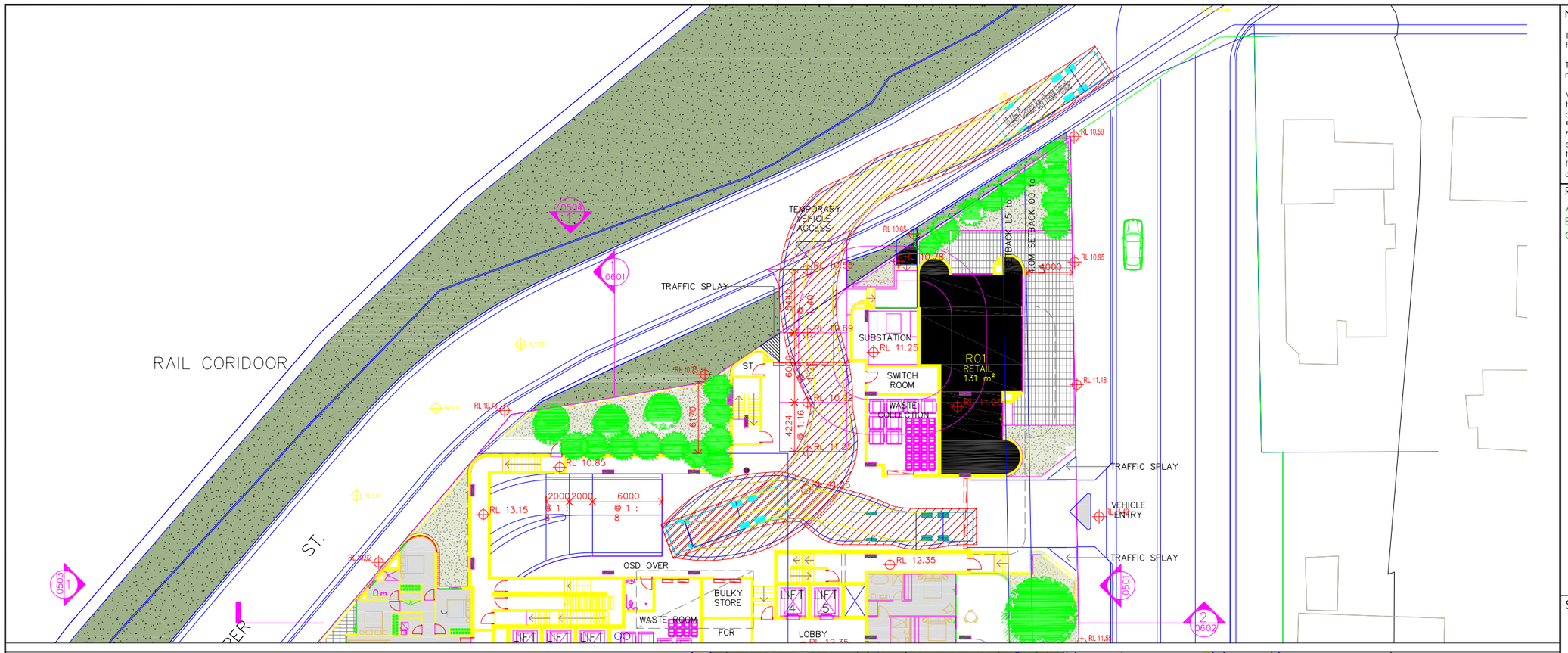
t: +61 2 8324 8700
f: +61 2 9830 4481
w: www.traffix.com.au


Drawing Title
Swept Path Analysis
General Basement Arrangement
B85 and B99 Design Vehicles
TOP: Entry Movement
BOTTOM: Egress Movement

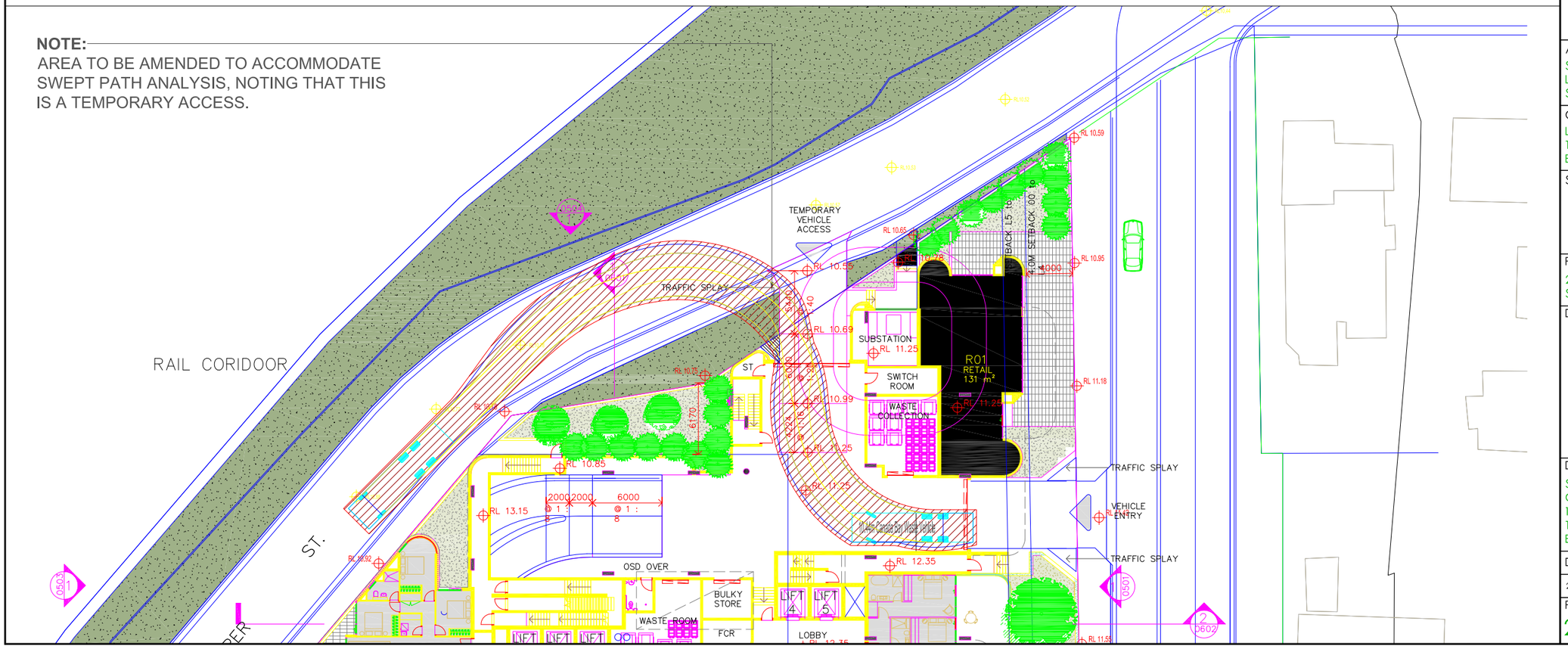
| Drawn: | Checked: | Date: |
|---|---|---|
| NC | NC | 26-07-2021 |

20.293d12v01 TRAFFIX [2021-08-17] - Design Review.dwg

| Project No. | Drawing Phase | Drawing No. | Rev. |
|---|---|---|---|
| 20.293 | S34 | TX.03 | B |




**NOTE:**
AREA TO BE AMENDED TO ACCOMMODATE SWEPT PATH ANALYSIS, NOTING THAT THIS IS A TEMPORARY ACCESS.




Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

| Rev. | Revision Note | By. | Date |
|---|---|---|---|
| A | Swept Path Analysis | NC | 26-07-2021 |
| B | Swept Path Analysis | NC | 03-08-2021 |
| C | Swept Path Analysis | NC | 17-08-2021 |

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
SJB Architects
Level 2, 490 Crown Street
SURRY HILLS NSW 2010

Client
Leice Pty Ltd
Tower 3, Level 23, 300 Barangaroo Avenue
BARANGAROO NSW 2000

Scale / Plan Orientation
0 4 8 12 16m
1:400 @ A3

Project Description
2-10 Leicester Avenue
STRATHFIELD NSW 2135

Drawing Prepared By

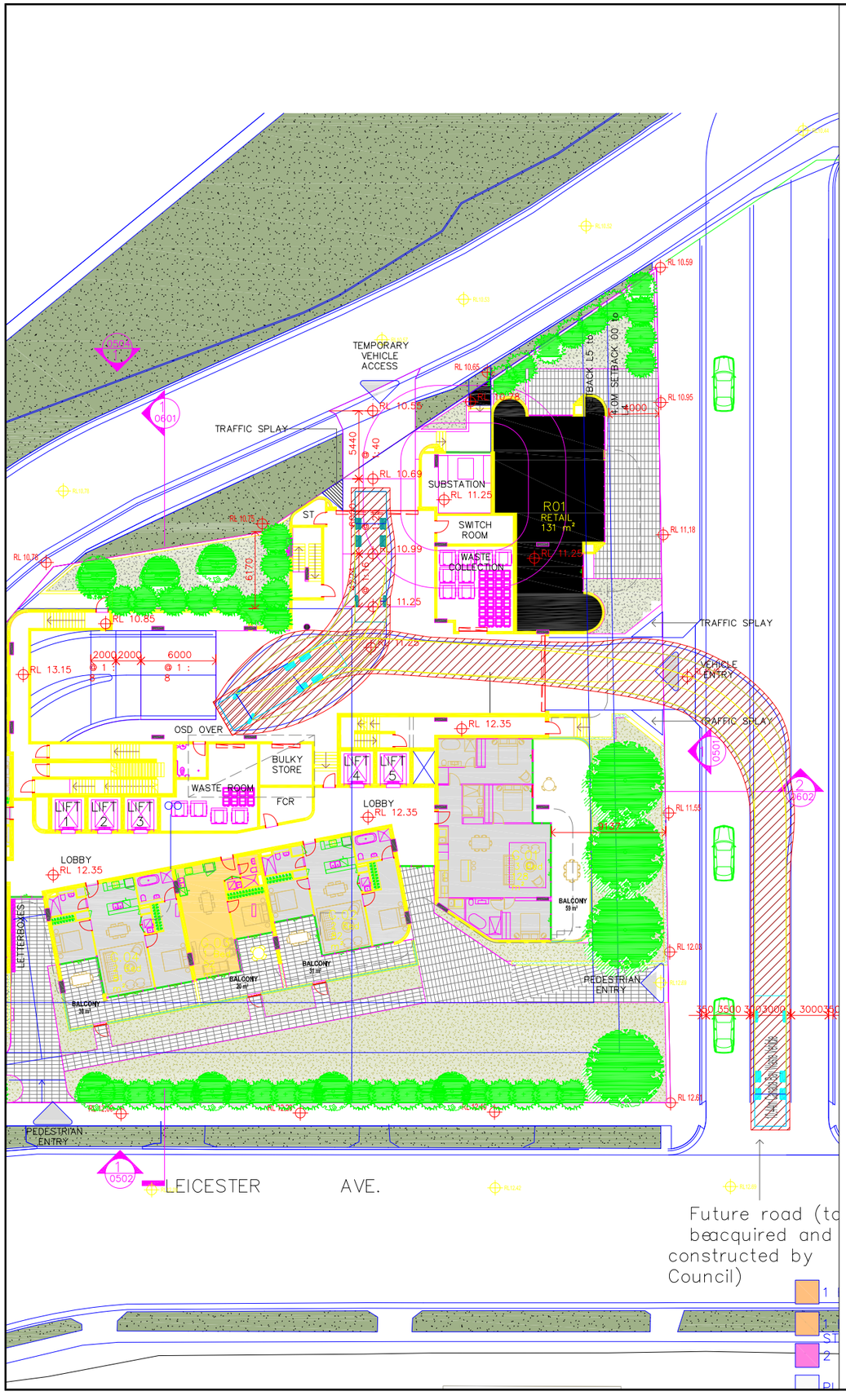
TRAFFIX
TRAFFIC & TRANSPORT PLANNERS
Suite 2.08, 50 Holt Street
Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012
t: +61 2 8324 8700
f: +61 2 9830 4481
w: www.traffix.com.au

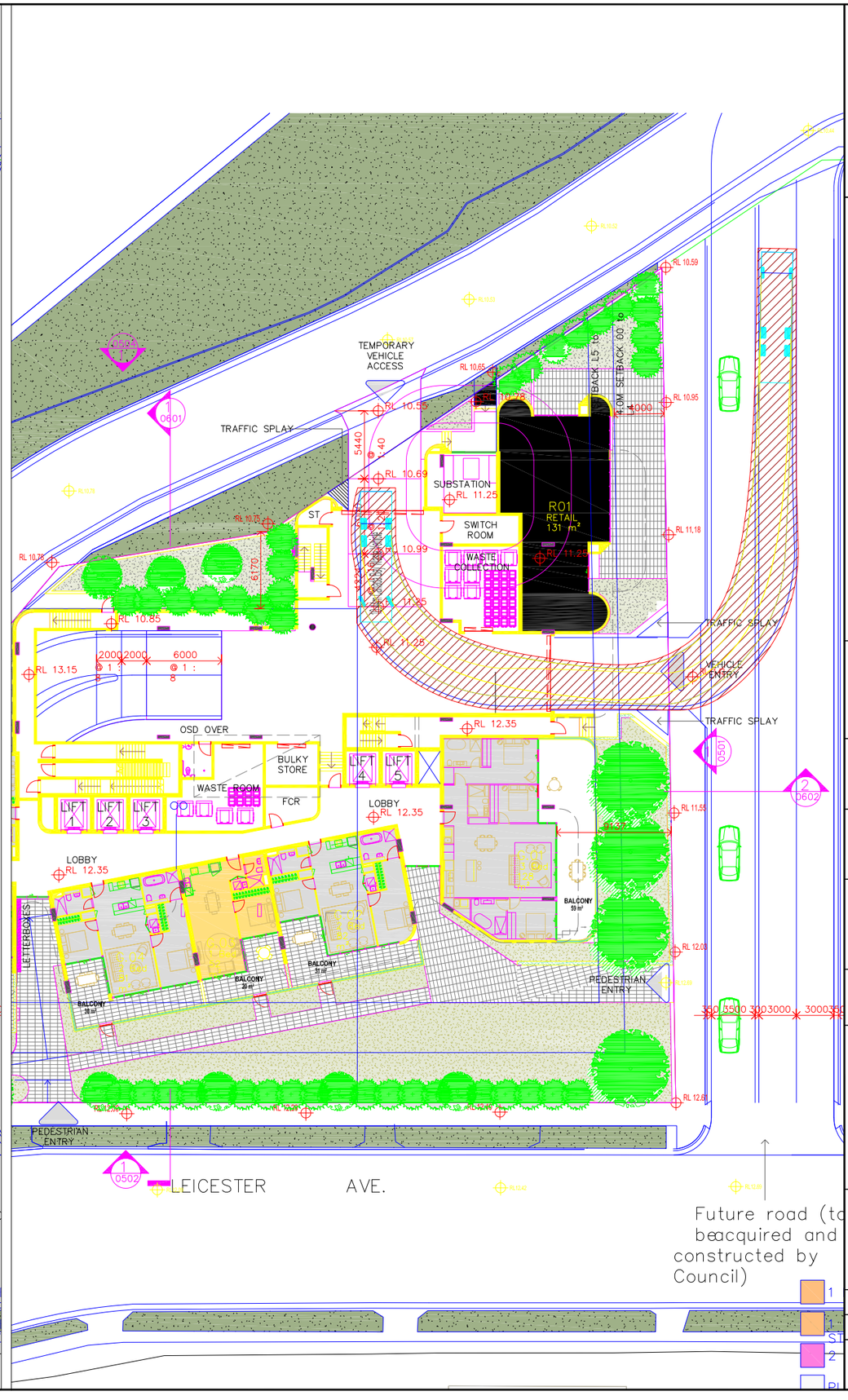
Drawing Title
Swept Path Analysis
Ground Floor - Cooper Street Access
10.44m Council Waste Vehicle
TOP: Entry Movement
BOTTOM: Egress Movement

| Drawn: | Checked: | Date: |
|---|---|---|
| NC | NC | 26-07-2021 |

20.293d12v01 TRAFFIX [2021-08-17] - Design Review.dwg

| Project No. | Drawing Phase | Drawing No. | Rev. |
|---|---|---|---|
| 20.293 | S34 | TX.04 | C |




Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

| Rev. | Revision Note | By. | Date |
|---|---|---|---|
| A | Swept Path Analysis | NC | 26-07-2021 |
| B | Swept Path Analysis | NC | 03-08-2021 |
| C | Swept Path Analysis | NC | 17-08-2021 |

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
SJB Architects
Level 2, 490 Crown Street
SURRY HILLS NSW 2010

Client
Leice Pty Ltd
Tower 3, Level 23, 300 Barangaroo Avenue
BARANGAROO NSW 2000

Scale / Plan Orientation

0 4 8 12 16m
1:400 @ A3

Project Description
2-10 Leicester Avenue
STRATHFIELD NSW 2135

Drawing Prepared By

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street
Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012

t: +61 2 8324 8700
f: +61 2 9830 4481
w: www.traffix.com.au

Drawing Title
Swept Path Analaysis
Ground Floor - New Road Access
10.44m Council Waste Vehicle
LEFT: Entry Movement
RIGHT: Egress Movement

| Drawn: | Checked: | Date: |
|---|---|---|
| NC | NC | 26-07-2021 |

20.293d12v01 TRAFFIX [2021-08-17] - Design Review.dwg

| Project No. | Drawing Phase | Drawing No. | Rev. |
|---|---|---|---|
| 20.293 | S34 | TX.05 | C |

## NOTES

- BOUNDARY HAS BEEN SURVEYED. NO MARKS PLACED. ALL BOUNDARY DIMENSIONS HAVE BEEN CALCULATED FROM BOUNDARY FIXATION.
- THE ORIENTATION OF TRUE NORTH ON THIS PLAN IS AS PER THE SCIMS SURVEY MARK REPORT.
- CONTOURS ARE AN INDICATION OF THE TOPOGRAPHY AND SHOULD ONLY BE USED FOR PLANNING PURPOSES. IF DETAILED DESIGN IS TO BE UNDERTAKEN, SPOT LEVELS SHOULD BE USED.
- LOT AREA(S) SHOWN ON THIS PLAN HAVE BEEN CALCULATED FROM COMPILED BOUNDARIES. LOT AREA(S) SHOWN ON TITLE DIAGRAM MAY DIFFER.
- NO SERVICE SEARCH HAS BEEN UNDERTAKEN. ONLY THOSE VISIBLE ABOVEGROUND SERVICES WITHIN THE PROPERTY VISIBLE AT THE TIME OF SURVEY HAVE BEEN LOCATED AND SOME SERVICES MAY HAVE BE OBSCURED BY PLANT AND MATERIALS.
- THIS DRAWING REMAINS THE COPYRIGHT OF STRATASURV P/L AND CANNOT BE REPRODUCED OR ALTERED WITHOUT PRIOR WRITTEN CONSENT.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DETAIL FROM THE DRAWING.
- ALL DIMENSIONS IN METRES UNLESS OTHERWISE SHOWN.
- DETAILED DESIGN SHOULD CONSIDER THE ACCURACY OF THE DATUM PROVIDED BY STATE SURVEY MARKS AND PERMANENT MARKS NOTING THAT THE LANDS DEPT. MAY AT ANY TIMES RE-ADJUST ITS HEIGHT WITHIN THE NETWORK
- TITLE(S) SCHEDULES AND NOTATIONS NOT INVESTIGATED.
- NOT ALL INTERNAL SUBJECT LOT DETAIL SHOWN. PLAN FOR PURPOSE OF SHOWING SITE LEVELS & SIGNIFICANT STRUCTURES ONLY.
- FLOOR LEVEL(S) HAVE BEEN TAKEN AT ACCESSIBLE POINTS INDICATED. (EG. THRESHOLD) INTERNAL FLOOR LEVELS MAY DIFFER FROM INDICATED LEVEL AND SHOULD BE CONFIRMED IF CRITICAL.
- RIDGE, EAVE AND GUTTER HEIGHTS HAVE BEEN OBTAINED BY AN INDIRECT METHOD AND ARE ACCURATE FOR PLANNING PURPOSES ONLY.
- ADJOINING BUILDINGS AND DWELLINGS HAVE BEEN PLOTTED FOR DIAGRAMMATIC PURPOSES ONLY.
- KERB LEVELS SHOWN ARE INVERT UNLESS OTHERWISE STATED.
- TREE SPREADS & TREE HEIGHTS ARE INDICATIVE ONLY & IF CRITICAL, TREE POSITIONS SHOULD BE VERIFIED BY AN ON-SITE INVESTIGATION PRIOR TO CONSTRUCTION.
- THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN. REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.

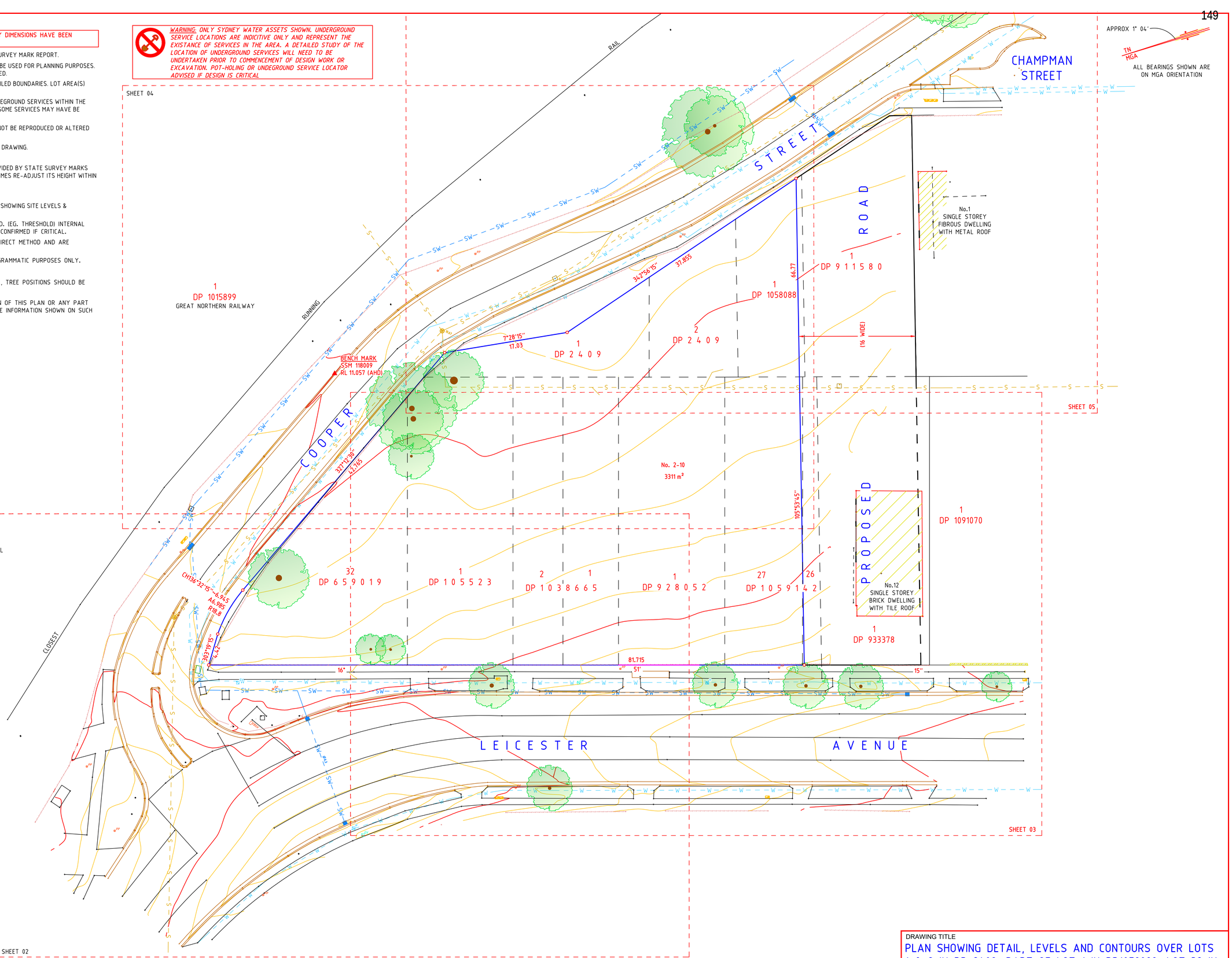
*WARNING: ONLY SYDNEY WATER ASSETS SHOWN. UNDERGROUND SERVICE LOCATIONS ARE INDICITIVE ONLY AND REPRESENT THE EXISTANCE OF SERVICES IN THE AREA. A DETAILED STUDY OF THE LOCATION OF UNDERGROUND SERVICES WILL NEED TO BE UNDERTAKEN PRIOR TO COMMENCEMENT OF DESIGN WORK OR EXCAVATION. POT-HOLING OR UNDEGROUND SERVICE LOCATOR ADVISED IF DESIGN IS CRITICAL*

### LEGEND:

| | |
|---|---|
| BK | BACK OF KERB |
| FL | FLOOR LEVEL |
| GPIT | GRATED PIT |
| LDR | LADDER |
| LM | LINE MARKING |
| MP | METAL POLE |
| RR | ROOF RIDGE |
| SMH | SEWER MANHOLE |
| SP | SIGN POLE |
| TGUT | TOP OF GUTTER |
| VC | VEHICLE CROSSING |
| WH | WINDOW HEAD |
| WS | WINDOW SILL |

- POWER POLE
- GAS VALVE
- STANDARD SEWER MANHOLE
- SEWER MANHOLE
- STANDARD TELECOMMUNICATION PIT
- TELECOMMUNICATION PIT
- HYDRANT
- STOP VALVE
- BENCHMARK

- MAJOR & MINOR CONTOUR WITH LABEL RUNNING UPHILL
- T*SS/0.3H7 — H- HEIGHT; Ø- TRUNK DIAMETER; S- SPREAD (RADIUS)
- SEWER LINE UG (APPROX. POSITION BY DBYD)
- STORMWATER LINE UG (APPROX. POSITION BY DBYD)
- WATER LINE UG (APPROX. POSITION BY DBYD)
- FENCE
- GUARD RAIL




| | | | | | | |
|---|---|---|---|---|---|---|
| D | 13/08/2021 | PROPOSED ROAD REVISED | | | PS | |
| C | 15/10/2020 | RELATIONSHIP TO RAIL LAND & INFRASTRUCTURE ADDED | | | BN | PS |
| B | 09/07/2020 | PROPOSED ROAD ADDED | | | PS | |
| A | 06/07/2020 | PLAN ISSUED | | JM | JBM | PS |
| REV | DATE | REVISION DETAILS | DESIGN | SURV | DWN | CHK |

CLIENT DETAILS
BETA PROJECTS PTY LTD

| | |
|---|---|
| DATE OF SURVEY | 02/06/2020 |
| ORIGIN OF RL'S | SSM 118009 RL 11.057 |
| DATUM/CLASS/ORDER | AHD/LB/-- |
| CONTOUR INTERVAL | 0.2m |
| CAD REF FILE: | 2085DT04d2_LEICESTER_AVE.dwg |

PROJECT:
2-10 LEICESTER STREET, STRATHFIELD

STRATASURV
REGISTERED SURVEYORS
DEVELOPMENT CONSTRUCTION STRATUM
Sydney · Melbourne · Brisbane · Newcastle · Gold Coast
Ph: 97127111 Fax: 97127333
EMAIL: ssurveyors@stratasurv.com.au

DRAWING TITLE
PLAN SHOWING DETAIL, LEVELS AND CONTOURS OVER LOTS 1 & 2 IN DP 2409, PART OF LOT 1 IN DP1058088, LOT 32 IN DP 6509019, LOT 1 IN DP 105523, LOT IN 1 DP 928052 & LOTS 1 & 2 IN DP 1038665, LOT 1 IN DP928052 & PART OF LOTS 26 & 27 IN DP1059142

| DRAWING NUMBER | Sheet | Sheets | SCALE | REVISION |
|---|---|---|---|---|
| 2085DT04 | 01 | OF 05 | 1:250@A1 | D1 |

Aug 13, 2021 - 12:54pm X:\Projects\20-25\2085 Chapman copper St\Drawings\Dwt\dwt\2085DT04d2_LEICESTER_AVE.dwg

SEE SHEET 1 FOR LEGEND AND NOTES

SEE SHEET 4 FOR CONTINUATION

SEE SHEET 3 FOR CONTINUATION

APPROX 1° 04'
TN
MGA
ALL BEARINGS SHOWN ARE ON MGA ORIENTATION

1
DP 1015899
GREAT NORTHERN RAILWAY

RAIL
CLOSEST
RUNNING
CLOSEST

32
DP 6590019
1
DP 105523
2
DP 1038665
1
DP 928052

COOPER STREET
LEICESTER STREET
S TREET

PROPOSED FOOTPATH
TOP STANCHION 19.82
TOP STANCHION 20.09
SUBSTATION
METAL MESH GATE
MESH FENCE
PICKET FENCE
ELECTRONIC TRAFFIC SIGN
TOP OF OVERHEAD

GRASS SURFACE
CONCRETE SURFACE
ROCK AND GRASS SURFACE
CONCRETE
FOOTPATH
BITUMEN SURFACE
METAL MESH GATE
VC

SL 11.34
IL 10.36
SL 11.90
IL 10.54
SL 11.17
IL 10.74

CH136°32'15"
A6.985
R18.8
6.945
30°19'15"
4.12
81.715
16°51'15"

T×S4/ BH12
T×S2/ 3H5
T×S3/ 5H7
T×S3/ 4H5

| CLIENT DETAILS | | | | | | | |
|---|---|---|---|---|---|---|---|
| BETA PROJECTS PTY LTD | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| D | 13/08/2021 | PROPOSED ROAD REVISED | | | PS | | |
| B | 09/07/2020 | PROPOSED ROAD ADDED | | | PS | | |
| A | 06/07/2020 | PLAN ISSUED | | JM | JBM | PS | |
| REV | DATE | REVISION DETAILS | DESIGN | SURV | DWN | CHK | |

| | |
|---|---|
| DATE OF SURVEY | 02/06/2020 |
| ORIGIN OF RL'S | SSM 118009 RL 11.057 |
| DATUM/CLASS/ORDER | AHD/LB/-- |
| CONTOUR INTERVAL | 0.2m |
| CAD REF FILE: | 2085DT04d2_LEICESTER_AVE.dwg |

PROJECT:
2-10 LEICESTER STREET, STRATHFIELD

STRATASURV
REGISTERED SURVEYORS
DEVELOPMENT CONSTRUCTION STRATUM
Sydney · Melbourne · Brisbane · Newcastle · Gold Coast
Ph: 97127111 Fax: 97127333
EMAIL: ssurveyors@stratasurv.com.au

DRAWING TITLE
PLAN SHOWING DETAIL, LEVELS AND CONTOURS OVER LOTS 1 & 2 IN DP 2409, PART OF LOT 1 IN DP1058088, LOT 32 IN DP 6509019, LOT 1 IN DP 105523, LOT IN 1 DP 928052 & LOTS 1 & 2 IN DP 1038665, LOT 1 IN DP928052 & PART OF LOTS 26 & 27 IN DP1059142

| DRAWING NUMBER | Sheet | Sheets | SCALE | REVISION |
|---|---|---|---|---|
| 2085DT04 | 02 OF | 05 | 1:125@A1 | D1 |

Aug 13, 2021 - 13:3pm N:\Projects\20-29\2085 Chapman cooper St\Drawings\Dwt\Dwt\2085DT04d2_LEICESTER_AVE.dwg

SEE SHEET 1 FOR LEGEND AND NOTES

SEE SHEET 4 FOR CONTINUATION

APPROX 1° 04'
TN
MGA
ALL BEARINGS SHOWN ARE ON MGA ORIENTATION

CONTINUATION FOR SHEET 2 SEE

COOPER STREET

PROPOSED ROAD (16 WIDE)

LEICESTER STREET

32 DP 659019
1 DP 105523
2 1 DP 1038665
1 DP 928052
27 26 DP 1059142
1 DP 933378
1 DP1091070

No.12 SINGLE STOREY BRICK DWELLING WITH TILE ROOF

WH14.66 WS13.55
WH14.58 WS14.12
WH15.50 WS13.62
TGUT16.05
RR18.76
FL12.87

105°53'45" 66.77
81.715 16°51'15"
327°12'30" 42.765

T×S6/ 7H15
T×S4/ 5H8
T×S3/ 3H10
T×S7/ 3H5
T×S2/ 3H5
T×S3/ 5H7
T×S3/ 4H5
T×S3/ 4H6
T×S3/ 4H12
T×S2/ 3H12

MESH FENCE
METAL MESH GATE
LOW TIMBER & MESH FENCE
BRICK WALL
PICKET FENCE
CONCRETE SURFACE
GRASS SURFACE
FOOTPATH
BITUMEN SURFACE
CONCRETE
VC
TPIT
SGPIT
SL 12.62
IL 12.19
Ø 0.375

LM11.94 LM12.09 LM12.42 LM12.69 LM13.13
LM12.07 LM12.44 LM12.86 LM13.29
LM11.80 LM11.93 LM12.43 LM12.83 LM13.28
LM11.59

| CLIENT DETAILS | | | | | | | |
|---|---|---|---|---|---|---|---|
| BETA PROJECTS PTY LTD | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| D | 13/08/2021 | PROPOSED ROAD REVISED | | | PS | | |
| B | 09/07/2020 | PROPOSED ROAD ADDED | | | PS | | |
| A | 06/07/2020 | PLAN ISSUED | | JM | JBM | PS | |
| REV | DATE | REVISION DETAILS | DESIGN | SURV | DWN | CHK | |

| | |
|---|---|
| DATE OF SURVEY | 02/06/2020 |
| ORIGIN OF RL'S | SSM 118009 RL 11.057 |
| DATUM/CLASS/ORDER | AHD/LB/-- |
| CONTOUR INTERVAL | 0.2m |
| CAD REF FILE: | 2085DT04d2_LEICESTER_AVE.dwg |

PROJECT:
2-10 LEICESTER STREET, STRATHFIELD

STRATASURV
REGISTERED SURVEYORS
DEVELOPMENT CONSTRUCTION STRATUM
Sydney · Melbourne · Brisbane · Newcastle · Gold Coast
Ph: 97127111 Fax: 97127333
EMAIL: ssurveyors@stratasurv.com.au

DRAWING TITLE
PLAN SHOWING DETAIL, LEVELS AND CONTOURS OVER LOTS 1 & 2 IN DP 2409, PART OF LOT 1 IN DP1058088, LOT 32 IN DP 6509019, LOT 1 IN DP 105523, LOT 1 IN DP 928052 & LOTS 1 & 2 IN DP 1038665, LOT 1 IN DP928052 & PART OF LOTS 26 & 27 IN DP1059142

| DRAWING NUMBER | Sheet | Sheets | SCALE | REVISION |
|---|---|---|---|---|
| 2085DT04 | 03 | OF 05 | 1:125@A1 | D1 |

Aug 13, 2021 - 12:54pm X:\Projects\20-25\2085 Chapman cooper St\Drawings\Out\Cad\2085DT04d2_LEICESTER_AVE.dwg

SEE SHEET 1 FOR LEGEND AND NOTES

SEE SHEET 5 FOR CONTINUATION

APPROX 1° 04'
TN
MGA

ALL BEARINGS SHOWN ARE ON MGA ORIENTATION

RAIL
RUNNING
CLOSEST
RAIL
RUNNING
CLOSEST

TOP STANCHION 19.68
TOP STANCHION 19.60
TOP STANCHION 11.47
TOP STANCHION 19.61
TOP STANCHION 19.82

11.50
11.53
11.80

1
DP 1015899
GREAT NORTHERN RAILWAY

DIRT SURFACE
MESH FENCE
PP
BK10.78 10.65
BK10.64 10.51
BK10.60 10.47
BK10.84 10.70
BK10.88 10.75
BK10.94 10.81
BK10.98 10.84
BK11.03 10.89
BK11.27 11.14
BK10.74 10.74
BK10.82 10.82
BK10.83 10.83
BK10.96 10.83
BK10.65 10.58
BENCH MARK
SSM 118009
RL 11.057 (AHD)
VENT
SMH S
MH
11.36
11.40
11.02
11.03

LM10.52
LM10.53
LM10.57
LM10.78
LM10.77
LM10.88

STREET MAIN
COOPER POTABLE
PROPOSED
CONCRETE
SURFACE
ROAD

SL 10.37
IL 9.91
SL 10.41
IL 9.91

T×S4/D0.4×H8 10.61
T×S4/D0.7×H10 10.69
T×S4/1.0H15 10.99
T×S6/.7H15 10.92
T×S4/.5H8 10.87
T×S3/.3H10 11.15

34°25'15" 37.855
7°28'15" 17.03
327°12'30" 42.765
105°53'45" 66.77

1
DP 1058088
2
DP 2409
1
DP 2409
32
DP 6509019
1
DP 105523
2
DP 1038665
1
DP 928052
27
DP 1059142
26

SEE SHEET 2 FOR CONTINUATION
SEE SHEET 3 FOR CONTINUATION
SEE SHEET 5 FOR CONTINUATION

Aug 13, 2021 - 10:54pm X:\Projects\20-25\2085 Chapman cooper S1\Drawings\Out\Cad\2085DT04d2_LEICESTER_AVE.dwg

CLIENT DETAILS
BETA PROJECTS PTY LTD

| REV | DATE | REVISION DETAILS | DESIGN | SURV | DWN | CHK |
|---|---|---|---|---|---|---|
| D | 13/08/2021 | PROPOSED ROAD REVISED | | | PS | |
| B | 09/07/2020 | PROPOSED ROAD ADDED | | | PS | |
| A | 06/07/2020 | PLAN ISSUED | | JM | JBM | PS |

DATE OF SURVEY 02/06/2020
ORIGIN OF RL'S SSM 118009 RL 11.057
DATUM/CLASS/ORDER AHD/LB/--
CONTOUR INTERVAL 0.2m
CAD REF FILE: 2085DT04d2_LEICESTER_AVE.dwg

PROJECT:
2-10 LEICESTER STREET, STRATHFIELD

STRATASURV
REGISTERED SURVEYORS
DEVELOPMENT CONSTRUCTION STRATUM
Sydney · Melbourne · Brisbane · Newcastle · Gold Coast
Ph: 97127111 Fax: 97127333
EMAIL: ssurveyors@stratasurv.com.au

DRAWING TITLE
PLAN SHOWING DETAIL, LEVELS AND CONTOURS OVER LOTS 1 & 2 IN DP 2409, PART OF LOT 1 IN DP1058088, LOT 32 IN DP 6509019, LOT 1 IN DP 105523, LOT IN 1 DP 928052 & LOTS 1 & 2 IN DP 1038665, LOT 1 IN DP928052 & PART OF LOTS 26 & 27 IN DP1059142

| DRAWING NUMBER | Sheet | Sheets | SCALE | REVISION |
|---|---|---|---|---|
| 2085DT04 | 04 | OF 05 | 1:125@A1 | D1 |

SEE SHEET 1 FOR LEGEND AND NOTES

APPROX 1° 04'
TN
MGA
ALL BEARINGS SHOWN ARE ON MGA ORIENTATION

GREAT NORTHERN RAILWAY
RAIL
RUNNING
CLOSEST
11.62
TOP STANCHION
20.07
TOP STANCHION
19.68
TOP STANCHION
19.60
CLOSEST
11.50
CONTINUATION FOR SHEET 4
SEE SHEET 3 FOR CONTINUATION

COOPER STREET
CHAPMAN STREET
MAIN
PROPOSED ROAD
PROPOSED
DIRT SURFACE
CONCRETE SURFACE
GRASS SURFACE
POTABLE
MESH FENCE
SW
W
S
PP
SMH
TPIT
SEWER INSPECTION PIT
11.89
LM10.51
LM10.52
LM10.53
LM10.54
LM10.57
LM10.78
SL 10.37
IL 9.91
SL 10.41
IL 9.91
T×S4/D0.4×H8
T×S6/D0.7×H10
T×S4/1.0H15
T×S6/.7H15
T×S47.5H8
T×S7/.7H8
RR16.85
RR16.84
RR16.82
RR16.87
RR16.45
RR16.40
FL 11.67
WH14.28 WS12.54
WH14.28 WS12.54
WH12.57 WS14.19
11.27
No.1 SINGLE STOREY FIBROUS DWELLING WITH METAL ROOF
(16 WIDE)
1 DP 1058088
2 DP 2409
1 DP 2409
1 DP 911580
34°56'15" 37.855
7°28'15" 17.03
105°53'45" 66.77
11.02
11.27
10.87

| REV | DATE | REVISION DETAILS | DESIGN | SURV | DWN | CHK |
|---|---|---|---|---|---|---|
| D | 13/08/2021 | PROPOSED ROAD REVISED | | | PS | |
| B | 09/07/2020 | PROPOSED ROAD ADDED | | | PS | |
| A | 06/07/2020 | PLAN ISSUED | | JM | JBM | PS |

CLIENT DETAILS
BETA PROJECTS PTY LTD

| | |
|---|---|
| DATE OF SURVEY | 02/06/2020 |
| ORIGIN OF RL'S | SSM 118009 RL 11.057 |
| DATUM/CLASS/ORDER | AHD/LB/-- |
| CONTOUR INTERVAL | 0.2m |
| CAD REF FILE: | 2085DT04d2_LEICESTER_AVE.dwg |

PROJECT:
2-10 LEICESTER STREET, STRATHFIELD

STRATASURV
REGISTERED SURVEYORS
DEVELOPMENT CONSTRUCTION STRATUM
Sydney · Melbourne · Brisbane · Newcastle · Gold Coast
Ph: 97127111 Fax: 97127333
EMAIL: ssurveyors@stratasurv.com.au

DRAWING TITLE
PLAN SHOWING DETAIL, LEVELS AND CONTOURS OVER LOTS 1 & 2 IN DP 2409, PART OF LOT 1 IN DP1058088, LOT 32 IN DP 6509019, LOT 1 IN DP 105523, LOT IN 1 DP 928052 & LOTS 1 & 2 IN DP 1038665, LOT 1 IN DP928052 & PART OF LOTS 26 & 27 IN DP1059142

| DRAWING NUMBER | Sheet | Sheets | SCALE | REVISION |
|---|---|---|---|---|
| 2085DT04 | 05 | OF 05 | 1:125@A1 | D1 |

Aug 13, 2021 - 12:15pm X:\Projects\20-25\2085 Chapman copper St\Drawings\Survey\Detail\2085DT04d2_LEICESTER_AVE.dwg

BLACKETT MAGUIRE+ GOLDSMITH

# BCA ASSESSMENT REPORT

**2-8 LEICESTER AVENUE, STRATHFIELD**

**PREPARED FOR: Leice Pty Ltd**

23 July 2021
Reference: 200318

Address
Suite 2.01,
22-36 Mountain St
Ultimo NSW 2007

Contact
Ph: 02 9211 7777
Fax: 02 9211 7774

## EXECUTIVE SUMMARY

The following comprises a summary of the key compliance issues identified under the clause-by-clause assessment in APPENDIX 1 of this report that will be addressed prior to the BCA Certification for the project.

### A. MATTERS REQUIRING REDESIGN OR ADDITIONAL INFORMATION AT CC STAGE:

| | BCA (DTS) CLAUSE | DESCRIPTION |
|---|---|---|
| 1. | **C2.14** | The residential corridors are required to be provided with smoke doors so that the corridor length does not exceed 40m without smoke separation. |
| 2. | **D1.3** | The fire isolated stairs from the basement do not continue to a level providing egress to open space |
| 3. | **D1.4** | The travel distances to exits within the building exceed the maximum 6m limit in an unacceptable fashion in the following areas:<br>+ Level 1 – 18.5m to an exit from a SOU<br>+ Level 2-9 – 18.5m and 19.5m to an exit from an SOU<br>+ Level 10 – 18.5m to an exit from a SOU<br>+ Level 10 - 51m to an exit from the terrace<br>+ Level 11-16 – 18.5m to an exit from a SOU<br>There are no exits provided from the loading dock area. Egress is back via a single exit through the residential part. |
| 4. | **D1.7** | The alternative exits from the tower discharge into the same passageway, rather than into separate/independent fire isolated passageways, or via independent access directly to open space. |
| 5. | **E1.3** | The hydrant pump room is required to be accessed from a fire isolated passageway/stair or directly from road or open space |
| 6. | **E1.8** | The fire control room is required to be accessed from the lobby and a fire isolated passageway room outside/open space |

### B. MATTERS REQUIRING FIRE SAFETY ENGINEERED PERFORMANCE SOLUTIONS:

| | BCA (DTS) CLAUSE | DESCRIPTION |
|---|---|---|
| 1. | **D1.2** | 2 exits are required to be provided to the retail tenancy |
| 2. | **D1.4** | The travel distances to exits exceed the DTS requirements within the building in the following areas and a readily justifiable via a Performance Solution:<br>+ Basement Levels – 30m to a point of choice to alternative exits<br>+ Basement Levels – 45m to an exit<br>+ Ground Level – 28m to a point of choice in the loading dock area<br>+ Ground Level – 50m to an exit in the loading dock area<br>+ Level 2-9 – 13m to an exit from an SOU<br>+ Level 2-16 – 21m to an exit or point of choice from the common areas<br>+ Level 17 – 30m to a point of choice from the roof terrace |
| 3. | **D1.5** | Travel distances between alternative exits to the residential part on ground level exceeds 45m<br>Travel distance between alternating exits from the loading dock area exceed 60m |
| 4. | **E1.5** | Sprinkler alarm valves are not permitted to be located within the hydrant pump room |

### C. OTHER MATTERS REQUIRING PERFORMANCE SOLUTIONS:

| | BCA (DTS) CLAUSE | DESCRIPTION |
|---|---|---|
| 1. | **FP1.4** | A solution is required for the external walls to confirm the assembly prevents the penetration of water that could cause unhealthy or dangerous conditions, or loss of amenity for occupants; and undue dampness or deterioration of building elements. |

## TABLE OF CONTENTS


| | | |
|---|---|---|
| **EXECUTIVE SUMMARY** | | **2** |
| A. | MATTERS REQUIRING REDESIGN OR ADDITIONAL INFORMATION AT CC STAGE: | 2 |
| B. | MATTERS REQUIRING FIRE SAFETY ENGINEERED PERFORMANCE SOLUTIONS: | 2 |
| C. | OTHER MATTERS REQUIRING PERFORMANCE SOLUTIONS: | 2 |
| **1.** | **INTRODUCTION** | **4** |
| 1.1. | PROPOSAL | 4 |
| 1.2. | AIM | 4 |
| 1.3. | PROJECT TEAM | 4 |
| 1.4. | REFERENCED DOCUMENTATION | 4 |
| 1.5. | REGULATORY FRAMEWORK | 4 |
| 1.6. | RELEVANT VERSION OF THE NCC BUILDING CODE OF AUSTRALIA | 5 |
| 1.7. | COMPLIANCE WITH THE NATIONAL CONSTRUCTION CODE | 5 |
| 1.8. | LIMITATIONS AND EXCLUSIONS | 5 |
| 1.9. | REPORT TERMINOLOGY | 6 |
| **2.** | **BUILDING CHARACTERISTICS** | **8** |
| 2.1. | PROPOSED DEVELOPMENT | 8 |
| 2.2. | FIRE COMPARTMENT FLOOR AREA LIMITATIONS | 8 |
| 2.3. | DISTANCE TO FIRE SOURCE FEATURES | 8 |
| **3.** | **CONCLUSION** | **9** |
| **APPENDIX 1 - BCA ASSESSMENT** | | **10** |
| **APPENDIX 2- FIRE SAFETY SCHEDULE** | | **49** |
| **APPENDIX 3- FRL OF BUILDING ELEMENTS – TYPE A CONSTRUCTION** | | **51** |


### REPORT STATUS

| DATE | REVISION | STATUS | AUTHOR | REVIEWED |
|---|---|---|---|---|
| 17 September 2020 | - | BCA Assessment Report for DA submission | BH | BM |
| 22 September 2020 | 1 | Updated following plan amendments | BH | BM |
| 23 July 2021 | 2 | Updated following plan amendments | BH | BM |

**Prepared by:**

Bradley Holmes
***Accredited Certifier***
***Blackett Maguire + Goldsmith***
*Accredited Certifier (NSW) – BDC No. 0184*


**Reviewed by:**

Brian Maguire
***Director***
***Blackett Maguire + Goldsmith***
*A1 Accredited Certifier (NSW) – BDC No. 0241*

# 1. INTRODUCTION

## 1.1. PROPOSAL

Blackett Maguire + Goldsmith Pty Ltd have been commissioned by Leice Pty Ltd to undertake an assessment of the proposed residential development at 2-8 Leicester Avenue, Strathfield against the relevant provisions of the Building Code of Australia 2019 (Amendment 1) (BCA).

## 1.2. AIM:

The aim of this report is to:

+ Undertake an assessment of the proposed development against the deemed-to-satisfy provisions of the BCA;
+ Identify matters that require plan amendments in order to achieve compliance with the BCA;
+ Identify matters that are to be required to be addressed by Performance Solutions;
+ Enable the certifying authority to satisfy its statutory obligations under Clause 143(1)(3) of the Environmental Planning and Assessment Regulation, 2000
+ Enable the certifying authority to satisfy its statutory obligations under Clause 145 of the Environmental Planning and Assessment Regulation, 2000.

## 1.3. PROJECT TEAM

The following BM+G Team Members have contributed to this Report:

+ Bradley Holmes – Report Preparation (Accredited Certifier) | Accredited Certifier
+ Brian Maguire – Project PCA/Peer Review (Director) | A1 Accredited Certifier

## 1.4. REFERENCED DOCUMENTATION

The following documentation has been reviewed, referenced and/or relied upon in the preparation of this report:

+ Building Code of Australia 2019 (Amendment 1) (BCA).
+ The Guide to the Building Code of Australia 2019 (Amendment 1) (BCA).
+ Architectural Plans prepared by SJB Architects numbered:

| DRAWING NO. | REVISION | DATE | DRAWING NO. | REVISION | DATE |
|---|---|---|---|---|---|
| DA-0206 | 10 | 12/07/2021 | DA-0207 | 10 | 12/07/2021 |
| DA-0208 | 10 | 12/07/2021 | DA-0209 | 10 | 12/07/2021 |
| DA-0210 | 10 | 12/07/2021 | DA-0211 | 10 | 12/07/2021 |
| DA-0212 | 10 | 12/07/2021 | DA-0213 | 9 | 22/09/2020 |
| DA-0214 | 9 | 22/09/2020 | DA-0215 | 9 | 22/09/2020 |
| DA-0216 | 9 | 22/09/2020 | DA-0217 | 9 | 22/09/2020 |
| DA-0218 | 9 | 22/09/2020 | DA-0219 | 9 | 22/09/2020 |
| DA-0220 | 10 | 12/07/2021 | DA-0221 | 9 | 22/09/2020 |
| DA-0222 | 9 | 22/09/2020 | DA-0223 | 9 | 22/09/2020 |
| DA-0224 | 9 | 22/09/2020 | DA-0225 | 9 | 22/09/2020 |
| DA-0226 | 10 | 12/07/2021 | DA-0227 | 10 | 12/07/2021 |
| DA-0228 | 10 | 12/07/2021 | | | |

## 1.5. REGULATORY FRAMEWORK

Pursuant to clause 145 of the Environmental Planning and Assessment (EPA) Regulation 2000 all new building work must comply with the current BCA however the existing features of an existing building need not comply with the BCA unless upgrade is required by other clauses of the legislation.

Clause 143(3) of the EPA Regulation 2000 prevents a certifying authority from issuing a construction certificate if the proposed new work will result in a reduction to the fire protection and structural capacity of the building.

The assessment has been undertaken in accordance with Clause 24 and 25 of the Building and Development Certifiers Act 2020.

## 1.6. Relevant Version of the NCC Building Code of Australia

Pursuant to clause 145(1)(b) of the Environmental Planning and Assessment Regulation 2000 the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time of the application for the Construction Certificate was made. The current version of the BCA is BCA 2019 (Amendment 1), with the next revision of the BCA coming into effect on 1 May 2022 (BCA 2022. For the purposes of this assessment, it has been assumed that BCA 2019 Amendment 1 will apply, as the package of documentation completing the construction certificate application will likely be received before 1 May 2022.

Re-assessment against the new BCA 2022 provisions will be required should the application not be able to be lodged in time.

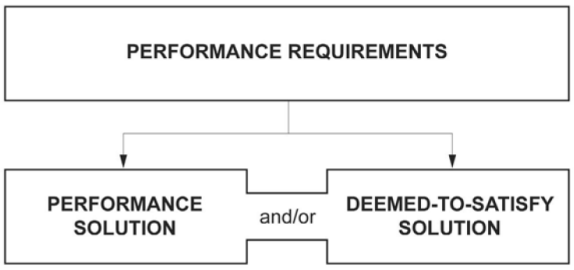
## 1.7. Compliance with the National Construction Code

Compliance with the NCC is achieved by complying with—

- the Governing Requirements of the NCC; and
- the Performance Requirements.

Performance Requirements are satisfied by one of the following, as shown in the Figure below:

- A Performance Solution.
- A Deemed-to-Satisfy Solution.
- A combination of the above two options.




## 1.8. Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- No assessment has been undertaken with respect to the Disability Discrimination Act 1992 (DDA). The building owner needs be satisfied that their obligations under the DDA have been addressed.
- Please note that whilst the BCA specifies a minimum standard of compliance with AS1428 (Parts 1-3) and Part D3 of the BCA for access and facilities for people with disabilities, compliance with such requirements may not necessarily preclude the possibility of a future complaint made under the DDA 1992. The DDA is a complaint based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the building owner should be satisfied that their obligations under the DDA have been addressed.
- No assessment has been undertaken with respect to SEPP 65 Design Quality of Residential Apartment Development / Apartment Design Guide, SEPP Affordable Rental Housing 2009 or SEPP (Housing for Seniors or People with a Disability) 2004. It is understood that suitably qualified consultants will be engaged to determine the relevance of any Council planning requirements or SEPP requirements and provided detailed assessment reports where applicable.

  Where relevant to this development, it is assumed that these assessments will be undertaken by others.
- This report does not consider BCA Part G5 (Volume 1), specifically Clause G5.2 which makes provision for construction of buildings in bushfire-prone areas, therefore no assessment has been undertaken in consideration of RFS, Planning for Bushfire Protection and AS 3959. Where Part G is applicable to the site, then it is recommended that assessment / due diligence is undertaken by a specialist consultant to verify compliance.
- This report does not constitute a detailed assessment of the architectural documentation against the requirements of Section J. It is understood that a suitably qualified consultant will be engaged to determine compliance in this regard.
- BM+G has not undertaken an assessment of any Alternative Solution Reports at the time of the preparation of this report.
- The Report does not address matters in relation to the following Local Government Act and Regulations:
  i. Work Health and Safety Act and Regulations.
  ii. Work Cover Authority requirements.
  iii. Water, drainage, gas, telecommunications and electricity supply authority requirements.
  iv. Disability Discrimination Act 1992.
- Blackett Maguire + Goldsmith Pty Ltd cannot guarantee acceptance of this report by Local Council, Fire & Rescue NSW or other approval authorities.
- No part of this document may be reproduced in any form or by any means without written permission from Blackett Maguire + Goldsmith Pty Ltd. This report is based solely on client instructions, and therefore should not be used by any third party without prior knowledge of such instructions.

## 1.9. REPORT TERMINOLOGY

***BCA Completion Certificate*** – A non-statutory certificate issued at the completion of works which confirms the building is suitable for occupation in accordance with its classification under the BCA.

***BCA Crown Certificate*** – A certificate issued against building works carried out by or on behalf of the Crown which verifies that the works comply with the requirements of the BCA prior to works commencing, subject to S6.28 of the Environmental Planning and Assessment Act 1979.

***Building Code of Australia*** - Document published on behalf of the Australian Building Codes Board. The BCA is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia and is adopted in NSW under the provisions of the Environmental Planning & Assessment Act & Regulation.

***Climatic Zone*** – Means an area defined in Figure 2 and in Table 2 (of BCA Schedule 3) for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

***Construction Certificate*** – Building Approval issued by the Certifying Authority pursuant to Part 6 of the EP&A Act 1979.

***Construction Type*** – The construction type is a measure of a buildings ability to resist a fire. The minimum type of fire-resisting construction of a building must be that specified in Table C1.1 and Specification C1.1, except as allowed for—

(i) certain Class 2, 3 or 9c buildings in C1.5; and

(ii) a Class 4 part of a building located on the top storey in C1.3(b); and

(iii) open spectator stands and indoor sports stadiums in C1.7.

Note: Type A construction is the most fire-resistant and Type C the least fire-resistant of the types of construction.

***Deemed-to-Satisfy (DTS) Provisions of the BCA*** – Means the prescriptive provisions of the BCA which are deemed to satisfy the performance requirements.

***Effective Height*** – The vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift, or other equipment, water tanks or similar service units).

***Exit*** – Any, or any combination of the following if they provide egress to a road or open space;

+ An internal or external stairway.
+ A ramp.
+ A fire-isolated passageway.
+ A doorway opening to a road or open space.

***Fire Compartment*** – The total space of the building; or when referred to in

+ The Performance Requirements – any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
+ The Deemed-to-Satisfy Provisions – any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant part.

***Fire Resistance Level (FRL)*** – The grading periods in minutes for the following criteria-

(a) structural adequacy; and

(b) integrity; and

(c) insulation,

and expressed in that order

***Fire Source Feature (FSF)*** - The far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.

***National Construction Code Series (NCC)*** – The NCC was introduced 1 May 2011 by the Council of Australian Governments (COAG). The BCA Volume One (Class 2 to 9 Buildings) is now referenced as the National Construction Code Series Volume One — BCA.

***Occupiable outdoor area*** means a space on a roof, balcony or similar part of a building—

- that is open to the sky; and
- to which access is provided, other than access only for maintenance; and
- that is not open space or directly connected with open space.

***Occupation Certificate* (OC)** – Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 6 of the EPA Act 1979.

***Open Space*** - Means a space on the allotment, or a roof or other part of the building suitably protected from fire, open to the sky and connected directly with a public road.

***Performance Requirements of the BCA*** - A Building Solution will comply with the BCA if it satisfies the Performance Requirements. A Performance requirement states the level of performance that a Building Solution must meet.

Compliance with the Performance Requirements can only be achieved by-

(a) complying with the Deemed-to-Satisfy Provisions; or

(b) formulating an Alternative Solution which-

(i) complies with the Performance Requirements; or

(ii) is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or

(c) a combination of (a) and (b).

***Professional Engineer*** *means a person who is—*

- if legislation is applicable — a registered professional engineer in the relevant discipline who has appropriate experience and competence in the relevant field; or
- if legislation is not applicable—
  - *registered in the relevant discipline on the National Engineering Register (NER) of the Institution of Engineers Australia (which trades as 'Engineers Australia'); or*
  - *eligible to become registered on the Institution of Engineers Australia's NER and has appropriate experience and competence in the relevant field.*

***Performance Solution*** – Means a method of complying with the performance requirements other than by a *Deemed-To-Satisfy Solution.*

***Rise in Storeys*** – The greatest number of storeys calculated in accordance with C1.2.

***Sole Occupancy Unit*** – means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and can include a dwelling and/or office suite

## 2. BUILDING CHARACTERISTICS

### 2.1. PROPOSED DEVELOPMENT

The proposed development consists of four (4) levels of basement carparking (with ancillary storage areas and plant) with ground level residential and retail with residential apartments located on the upper levels.

The building is classified as follows:

| | |
|---|---|
| **BCA Classification:** | Class 2 (residential)<br>Class 6 (Retail)<br>Class 7a (Carparking)<br>Class 7b (Storage) |
| **Rise in Storeys:** | Eighteen (18) |
| **Storeys Contained:** | Twenty-two (22) |
| **Type of Construction:** | Type A Construction |
| **Importance Level (Structural):** | 2 |
| **Sprinkler Protected Throughout:** | Yes |
| **Effective Height:** | RL 65.7 – RL 12.35 = 53.35m/Greater than 50m |
| **Climate Zone:** | Zone 6 |

### 2.2. FIRE COMPARTMENT FLOOR AREA LIMITATIONS

Maximum size of fire compartment / atria is:

| Classification | | Type A | Type B | Type C |
|---|---|---|---|---|
| 6 & 7 | Max. floor area | 5,000m$^2$ | 3,500m$^2$ | 2,000m$^2$ |
| | Max. volume | 30,000m$^3$ | 21,000m$^3$ | 21,000m$^3$ |

Note: Compartment sizes are not applicable to the Class 2 parts of the building.

### 2.3. DISTANCE TO FIRE SOURCE FEATURES

Based upon a review of the plans, it is noted that each elevation of the building is located within the following distances from fire source features on the site.

| Elevation | Fire Source Feature | Distance |
|---|---|---|
| North | Far side of new road | >6m |
| East | Far side of the road | >6m |
| West | Far side of the road | >6m |
| South | Far side of the road | >6m |

***Note:*** ***Fire Source Feature (FSF)*** *- The far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.*

## 3. CONCLUSION

This report contains an assessment of the referenced architectural documentation for the proposed Residential development at 2-12 Chapman Street, Strathfield against the deemed-to-satisfy provisions of the Building Code of Australia 2019 (Amendment 1) (BCA).

Arising from the assessment, key compliance issues have been identified that require further resolution, either by way of fire engineered Performance Solutions or plan amendments prior to the Construction Certificate stage.

Notwithstanding the above, it is considered that the proposed development can readily achieve compliance with the BCA subject to resolution of the matters identified in the **EXECUTIVE SUMMARY** & **APPENDIX 1** of this report.

We understand the works will be subject to a Construction Certificate and Occupation Certificate.

## APPENDIX 1 - BCA ASSESSMENT

| LEGEND: | |
|---|---|
| + **Complies**: | The referenced plans show compliance with this clause |
| + **Compliance Readily Achievable**: | The referenced plans do not show sufficient information to establish compliance with this clause. Design certification, should be submitted with the application for the Construction Certificate. |
| + **Further Information Required:** | The referenced plans do not show sufficient information to establish compliance with this clause. Further details, should be submitted with the application for the Construction Certificate. |
| + **Performance Solution:** | The referenced plans do not comply with this clause and a Performance Solution is required/proposed to demonstrate compliance with the Performance Requirements |
| + **Does Not Comply:** | The proposal does not comply with this clause and redesign is required. |
| + **Noted**: | Provisions contained within this BCA clause are provided for guidance, or are to be read in conjunction with other BCA clauses |
| + **Not applicable/ Not critical information**: | This clause is not applicable or not critical to the proposed development. These clauses have been removed from the assessment table below. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| **SECTION B** | **STRUCTURE** | |
| ***Part B1*** | ***Structural Provisions*** | |
| **B1.2**<br>Determination of Individual Actions | Structural engineering details prepared by an appropriately qualified structural engineer to be provided to demonstrate compliance with Part B1 in relation to the new structural elements of the building. | **Compliance Readily Achievable:**<br>Design Statement from a Professional Engineer to be provided confirming that the design achieves compliance with the following is required at the time of Construction Certificate application, inclusive of reference to the following Australian Standards (where relevant):<br>AS 1170.0 – 2002 General Principles<br>AS 1170.1 – 2002, including certification for balustrading (dead and live loads)<br>AS 1170.2 – 2002, Wind loads<br>AS 1170.4 – 2007, Earthquake loads<br>AS 3700 – 2018, Masonry code<br>AS 3600 – 2018, Concrete code<br>AS 4100 – 1998, Steel Structures<br>AS 4600 – 2018, Cold formed steel.<br>AS 2047 – 2014, Windows in buildings<br>AS 1288 – 2006, Glass in buildings<br><br>A compliance certificate from a Professional Engineer is required for all structural works at the completion of building works and prior to the issuance of an Occupation Certificate. |
| **B1.4**<br>Determination of Structural Resistance of Materials | Materials & Forms of Construction | **Compliance Readily Achievable:**<br>Detail and design certification to be provided at the Construction Certificate stage. |
| **B1.6**<br>Construction of Buildings Flood Hazard Areas | A Class 2 or 3 building, Class 9a health-care building, Class 9c building or Class 4 part of building, in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| **SECTION C** | **FIRE RESISTANCE** | |
| ***Part C1*** | ***Fire Resistance and Stability*** | |
| **C1.1** Type of Construction Required | The minimum type of fire-resisting construction of a building must be that specified in Table C1.1 and Specification C1.1 except as allowed for in this clause. | Type A Construction applies to the building. **Refer to Spec C1.1 & APPENDIX 3 for the table of FRL's** |
| **C1.3** Buildings of Multiple Classification | In a building of multiple classifications, the type of construction required for the building is the most fire-resisting type resulting from the application of Table C1.1 on the basis that the classification applying to the top storey applies to all storeys. | **Noted:** Higher FRL of each classification to apply or be fire separated. |
| **C1.8** Lightweight Construction | Lightweight construction must comply with Specification C1.8 if used in a wall system in accordance with sub-clauses (a) & (b). | **Compliance Readily Achievable:** Detail to be included in the design to ensure compliance with this clause. |
| **C1.9** Non-Combustible Building Elements | In a building of Type A construction, the following building elements and their components must be non-combustible.<br>+ External walls and common walls, including all components incorporated in them, including the façade covering, framing and insulation.<br>+ The flooring and floor framing of lift pits.<br>+ Non-loadbearing internal walls where they are required to be fire-resisting.<br>This clause contains provisions for combustible materials that may be used wherever a non-combustible material is required under the BCA.<br>Note: Sarking type materials that do not exceed 1mm in thickness and have a Flammability Index not greater than 5 are permitted to be installed with an external wall. | **Further Information Required:** Documentation is required to be provided as relevant to:<br>+ Any external wall claddings.<br>+ Any framing or integral formwork systems. I.e. timber framing, sacrificial formwork, etc.<br>+ Any external linings or trims. I.e. external UPVC window linings, timber window blades, etc.<br>+ Any sarking or insulation contained within the wall assembly.<br>This is not an exhaustive list, and any element incorporated within any external wall assembly must be identified and provided for review. Any departures from non-combustibility or deemed non-combustible materials under this clause (C1.9[e]) are to be advised. |

| BUILDING ELEMENT | TYPE A CONSTRUCTION |
|---|---|
| External wall | Non-combustible |
| Common wall | Non-combustible |
| Floor and floor framing of lift pit | Non-combustible |
| All loadbearing internal walls (including those of shafts) | Concrete, masonry or fire-protected timber |
| Loadbearing fire walls | Concrete, masonry or fire-protected timber |
| Non-Loadbearing Internal Walls Required to be Fire-Resistant | Non-combustible |
| Non-loadbearing lift, ventilating, pipe, garbage and the like shafts which do not discharge hot products of combustion. | Non-combustible |

| | | |
|---|---|---|
| **C1.10** Early Fire Hazard Properties | The fire hazard properties of the outlined linings, materials and assemblies in a Class 2 to 9 building must comply with Specification C1.10**.**<br>Refer below to extracts from Tables 2 and 3 of Spec C1.1 as relevant to wall, floor, and ceiling linings.<br>For additional detailed requirements relating to additional building elements, refer to the relevant clause of Spec C1.1 as outlined below:<br>+ Floor linings and coverings – Clause 3.<br>+ Wall linings and ceiling linings – Clause 4.<br>+ Air-handling ductwork – Clause 5.<br>+ Lift Cars – Clause 6. | **Further Information Required:** A schedule of all wall, floor, and ceiling linings along with associated test reports are to be provided for review to ensure compliance with the fire hazard property requirements of the BCA. Noting:<br>+ Minimum Group Numbers apply to wall and ceiling linings. AS 5637 test reports must be provided to determine compliance.<br>+ Minimum Critical Radiant Flux values apply to floor linings. AS ISO 9239.1 test reports must be provided to determine compliance. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + Fire control rooms and fire-isolated exits – Clause 7<br>+ Escalators, moving walkways, and non-required non-fire-isolated stairways and ramps – Clause 7.<br>+ Sarking-type materials – Clause 7.<br>+ Attachments to internal floors, walls, and ceilings – Clause 7.<br>+ Other materials – Clause 7 | |

**TABLE 2 OF SPECIFICATION C1.10 – CRITICAL RADIANT FLUX OF FLOOR LININGS AND FLOOR COVERINGS**

| Class of building | Building not fitted with a sprinkler system | Building fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) | Fire-isolated exits and fire control rooms |
|---|---|---|---|
| Class 2 & 7 | 2.2 kW/m2 | 1.2 kW/m2 | 2.2 kW/m2 |

**TABLE 3 OF SPECIFICATION C1.10 – WALL AND CEILING LINING MATERIALS (MATERIALS GROUPS PERMITTED)**

| Class of building | Fire-isolated exits and fire control rooms | Public corridors | Specific areas | Other areas |
|---|---|---|---|---|
| Class 2 Sprinklered<br>Excluding accommodation for the aged, people with disabilities, and children | Walls: 1<br>Ceilings: 1 | Walls: 1, 2, 3<br>Ceilings: 1, 2, 3 | Walls: 1, 2, 3<br>Ceilings: 1, 2, 3 | Walls: 1, 2, 3<br>Ceilings: 1, 2, 3 |
| Class 7 Sprinklered | Walls: 1<br>Ceilings: 1 | Walls: 1, 2, 3<br>Ceilings: 1, 2, 3 | Walls: 1, 2, 3<br>Ceilings: 1, 2, 3 | Walls: 1, 2, 3<br>Ceilings: 1 ,2, 3 |

| | | |
|---|---|---|
| **C1.14**<br>Ancillary Elements | An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following:<br>+ Gutter/downpipe/other plumbing fixture<br>+ A flashing.<br>+ A grate/grille <2m$^2$ associated with a building service.<br>+ An electrical switch/GPO/cover plate, or the like.<br>+ A light fitting.<br>+ A required sign.<br>+ A combustible non-required sign may be permitted if achieving a Group Number of 1 or 2 and not extending beyond one storey or fire compartment, and vertically separated by other signs by at least 2 storeys.<br>+ A combustible awning, sunshade, canopy, blind, or shading hood may be permitted at ground storey or a storey immediately above ground storey if complying as relevant to fire hazard properties and not affecting a required exit.<br>+ A part of a security, intercom or announcement system.<br>+ Wiring.<br>+ A paint, lacquer or a similar finish.<br>+ A gasket, caulking, sealant, or adhesive associated with the above ancillary elements. | **Further Information Required:**<br>Detail to be included in the design and verified prior to the Construction Certificate Stage. |
| ***Part C2*** | ***Fire Compartmentation and Separation*** | |
| **C2.2**<br>General Floor Area Limitations | Limitations on the area and volume of fire compartments in Class 6 & 7 buildings as required by sub-clauses (a), (b) & (c) must be adhered to unless excepted by Clause C2.3. | **Complies:**<br>Compartment sizes are not applicable to sprinkler protected carparks or Class 2 parts of buildings |
| **C2.7**<br>Separation by Fire Walls | Construction- A fire wall must be in accordance with the following:<br>+ The fire wall has the relevant FRL prescribed by Spec C1.1. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |

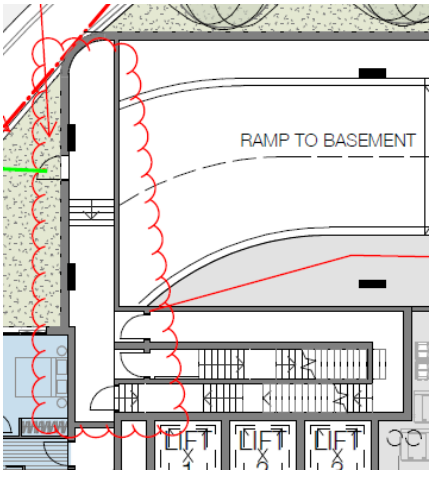
| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + Unless permitted by Part C3, must not reduce the FRL prescribed by C1.1.<br>+ Building elements (other than roof battens of 75x50 or sarking-type material) must not pass through a fire wall unless the FRL of the wall can be maintained.<br>Separation of buildings- A part of a building may be considered separate from the remainder of the building if separated by a fire wall in accordance with the following:<br>+ The fire wall extends through all storeys and is carried through to the underside of the roof covering.<br>+ Where roofs of separate buildings are at different heights, the fire wall must extend to the underside of:<br>▪ The higher roof, or >6m above the lower roof.<br>▪ The lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3m to any wall above the lower roof.<br>▪ The lower roof if its covering is non-combustible and the lower part is sprinkler protected.<br>Separation of fire compartments- A part of a building, separated from the remainder by a fire wall, may be treated as a separate fire compartment if the fire wall extends to the underside of:<br>+ A floor having an FRL required for a fire wall; or<br>+ The roof covering. | |
| **C2.8**<br>Separation of Classifications in the Same Storey | Each building element in that storey must have the higher FRL prescribed in Specification C1.1 or have those parts of the building separated by a fire wall. | **Compliance Readily Achievable:**<br>Any areas located within the building with a floor area >10% of the storey are required to be classified separately and therefore be fire separated from the remainder of the storey in accordance with the requirements of Specification C1.1 for Type A construction.<br>**Note:** Higher FRL of each classification to apply or be fire separated. |
| **C2.9**<br>Separation of Classifications in Different Storeys | Parts of different classification that are situated one above the other in adjoining storeys must be separated as follows:<br>Type A construction – The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey. | **Noted:** Higher FRL of each classification to apply or be fire separated. |
| **C2.10**<br>Separation of Lift Shafts | This clause applies to all classes of buildings and specifies the protection requirements for openings for lift shafts and lift landing doors. The requirements are set out in sub-clauses (a), (b) (c) & (d) which relate to openings in Type A construction. Also note the Deemed to Satisfy Provisions of Part C3. | **Compliance Readily Achievable:**<br>Detail to be provided at the Construction Certificate stage. |
| **C2.11**<br>Stairways and Lifts in One Shaft | A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft. | **Compliance Readily Achievable:**<br>Detail to be included in the design |
| **C2.12** Separation of Equipment | Equipment as listed below must be separated from the remainder of the building with construction that achieves an FRL of 120/120/120 (or that required by Spec C1.1, whichever is greater) and doorways being self-closing -/120/30 fire doors:<br>+ Lift motors and lift control panels; or<br>+ Emergency generators used to sustain emergency equipment operating in the emergency mode; or<br>+ Central smoke control plant; or<br>+ Boilers; or<br>+ A battery or batteries installed in the building that have a voltage exceeding 12 volts and a capacity exceeding 200kWh. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | Separation of on-site fire pumps must comply with the requirements of AS 2419.1. | |
| **C2.13** Electricity Supply System | An electrical substation located within a building or a main switch room which sustains emergency equipment, must:<br>+ Be separated from the building by construction achieving an FRL of 120/120/120; and<br>+ Have any doorway protected with a self-closing fire door achieving an FRL of -/120/30.<br>Electrical conductors within a building must be protected in accordance with sub-clause (c). | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **C2.14** Public Corridors in Class 2 Buildings | Class 2<br>A public corridor, if more than 40m in length, must be divided at intervals of not more than 40m with smoke proof walks complying with Clause 2 of Specification C2.5 | **Does Not Comply:**<br>Smoke doors are required to be provided to the residential levels so that the corridors do not exceed 40m in length without smoke separation. Detail to be included in the design. |
| ***Part C3*** | ***Protection of Openings*** | |
| **C3.1** Application of part | Openings listed in C3.1(a) need not comply with the Deemed-to-Satisfy Provisions of Part C3. | **Noted** |
| **C3.2** Protection of openings in external walls | Openings in an external wall required to have an FRL must be protected in accordance with C3.4 if the opening is less than:<br>+ 3m from a side or rear boundary; or<br>+ 6m from the far boundary of a road, river, lake or the like adjoining the allotment if not located at or near ground level; or<br>+ Less than 6m from another building on the allotment that is not Class 10. | **Complies:**<br>There are no openings in the building that are located within 3m of a fire source feature. |
| **C3.4** Acceptable methods of protection | Where protection is required, doorways, windows and other openings must be protected as follows:<br>+ Doorways –<br>▪ Internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or<br>▪ -/60/30 fire doors that are self-closing or automatic closing.<br>+ Windows –<br>▪ Internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or<br>▪ -/60/- automatic closing fire shutters.<br>+ Other openings –<br>▪ Excluding voids – internal or external wall-wetting sprinklers, as appropriate; or<br>▪ Construction having FRL not less than -/60/-. | **Compliance Readily Achievable:**<br>Detail to be included in the design documentation at the Construction Certificate stage for openings identified in clause C3.2 above. |
| **C3.5** Doorways in fire walls | Openings in fire walls, that are not part of a horizontal exit, must be protected in accordance with one of the methods set out in this clause.<br>Doorways in fire walls, that are not part of a horizontal exit, must:<br>+ In aggregate door width, not exceed ½ of the length of the fire wall.<br>+ Be protected by fire doors achieving the FRL required for the wall in accordance with Spec C1.1 for Type A Construction.<br>+ Be self-closing or automatically close on the activation of a smoke detector and applicable sprinkler system. | **Compliance Readily Achievable**:<br>Details to be included into the design where applicable. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| **C3.8** Openings in fire isolated exits | Doorways that open to fire-isolated exits (excluding those that open to a road or open space), must be protected by -/60/30 self-closing, or automatic closing fire doors.<br>A window in an external wall of a fire-isolated exit must be protected in accordance with C3.4 if it is exposed to and within 6m of another opening in wall of the same building. (excludes openings in the same fire-isolated exit) | **Compliance Readily Achievable**:<br>Detail to be included in the design where applicable. |
| **C3.9** Service penetrations in fire isolated exits | Fire isolated exits may only be penetrated by:<br>+ Electrical wiring permitted by D2.7 (e).<br>+ Ducting associated with a pressurisation system.<br>+ Water supply pipes for fire services. | **Compliance Readily Achievable**:<br>Detail to be included in the design where applicable. |
| **C3.10** Openings in fire isolated lift shafts | Doorways - Lift shafts required to be fire-isolated must be protected by -/60/- self-closing fire doors complying with AS1735.11.<br>Lift Indicator Panels – If exceeding 35,000mm$^2$, lift indicator panels must be backed by no less than FRL-/60/60 construction. | **Compliance Readily Achievable**:<br>Detail to be included in the design where applicable. |
| **C3.11** Bounding construction: Class 2, 3 and 4 parts | A doorway in a Class 2 building must be protected if it provides access from a SOU to:<br>+ A public corridor, lobby, or the like; or<br>+ A room not within a SOU; or<br>+ The landing of an internal non-fire-isolated required stairway; or<br>+ Another SOU.<br>If it provides access from a room not within a SOU to, the following doorways must be protected:<br>+ A public corridor, lobby, or the like; or<br>+ The landing of an internal non-fire-isolated required stairway. | **Does Not Comply:**<br>The residential apartments located on Level 17 do not have self-closing fire doors noted on the architectural plans. Details to be included into the design.<br><br>**Note:** this clause applies to the community room on Level 10. |
| **C3.12** Openings in Floors and Ceilings for Services | Where a service passes through:<br>+ A floor required to have an FRL (integrity and insulation), or;<br>+ A ceiling required to have a resistance to the incipient spread of fire,<br>That service must be protected:<br>+ In a building of Type A construction, by a shaft complying with Spec C1.1, and;<br>The performance of any *required* fire-protective floor covering must not be reduced by service penetrations. | **Compliance Readily Achievable:**<br>Details to be included into the design. |
| **C3.13** Openings in Shafts | In a building of Type A Construction, service shafts must be protected by:<br>+ A fire door, hopper or access panel achieving FRL -60/30.<br>+ If in a sanitary compartment - a non-combustible door and frame achieving an FRL of -/30/30.<br>+ If the shaft is a garbage shaft – a non-combustible door or hopper. | **Compliance Readily Achievable**:<br>Details to be included into the design including details of the garbage chute and associated shaft. |
| **C3.15** Openings for Service Installations | When a service penetrates a building element that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that penetration must:<br>+ Be identical to a tested prototype assembly, tested in accordance with AS4072.1 and AS1530.4.<br>+ In the case of ventilating or air-conditioning ducts/equipment, the installation must comply with AS1668.1. | **Compliance Readily Achievable**:<br>Certification to be provided at the Occupation Certificate stage. |
| **C3.16** Construction Joints | Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner | **Compliance Readily Achievable**: |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL. | Details to be included into the design. Certification to be provided at Occupation Certificate stage. |
| **C3.17** Columns Protected with Lightweight Construction to Achieve an FRL | A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire. | **Compliance Readily Achievable**: Certification to be provided at the Occupation Certificate stage. |
| ***Spec.*** | ***Part C Specifications*** | |
| **Spec C1.1** Fire-Resisting Construction | The new building works are required to comply with the requirements detailed under Table 3 of Specification C1.1 for Type A Construction. | **Compliance Readily Achievable**: Design statement to be provided at the Complying Development stage. |
| **Spec C3.4** Fire Doors and Smoke Doors | Fire doors must comply with AS1905.1 and not fail the period specified for integrity in the required FRL due to glazed parts.<br><br>Smoke doors must be constructed to prevent the free passage of smoke from one side of the doorway to the other. If they are glazed, there must be minimal danger of a person being injured by walking in to them. A smoke door must be constructed as follows-<br>+ The door must swing in direction of egress, or both directions.<br>+ The leaves are capable of resisting smoke at 200°C for 30 minutes. Solid core leaves of minimum 35mm thick satisfy.<br>+ The leaves are fitted with smoke seals.<br>+ The leaves are normally in the closed position, or the leaves are closed automatically through interface with smoke detectors present on each side of the doorway no more than 1.5m horizontal distance from the doorway. In the event of a power failure, the leaves must fail-safe to the closed position.<br>+ The leaves return to the fully closed position after each manual opening.<br>+ Any glazing part complies with AS1288. If a glazed panel may be mistake for an unobstructed exit, identification via opaque construction must be present.<br><br>A required fire shutter or fire window must be identical with a tested prototype that has met the required FRL as well as installed in the same manner. If a metallic fire shutter is not prohibited by C3.5, a required fire shutter must be a steel shutter complying with AS1905.2.\ | **Compliance Readily Achievable**: Details to be included into the design. |
| **SECTION D** | **ACCESS AND EGRESS** | |
| ***Part D1*** | ***Provisions for Escape*** | |
| **D1.2** Number of Exits Required | In addition to horizontal exits, following buildings/areas are required to be provided with two exits-<br>+ Class 2, 6 & 7: Each storey if the building has an effective height >25m.<br>+ Basements that require a vertical rise of >1.5m to egress, unless the basement comprises <50m$^2$ and the exit can be reached in <20m. | **Does Not Comply:** The number of exits provided, as shown on plan, comply with the requirements of this clause with the exception of the ground level including the retail tenancy and loading dock area. A minimum of two (2) exits are required to be provided from these parts. |
| **D1.3** When Fire Isolated Exits are Required | Class 2 Buildings – Every stairway or ramp serving as a required exit must be fire-separated unless it connects or passes by not more than:<br>+ 3 consecutive storeys in a Class 2; or | **Does Not Comply:** The fire isolated stairs do not continue to ground level or a level providing access to road or open space. The discharge is |

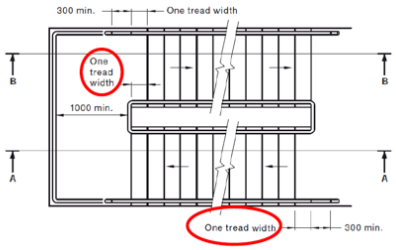
| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + 2 consecutive storeys in a Class 3.<br>One additional storey of any classification may be included if:<br>+ It is only for the accommodation of motor vehicles or for other ancillary purposes; or<br>+ The building is sprinkler protected; or<br>+ The required exit does not provided access to or egress from the additional storey, and is fire and smoke separated.<br>Class 7 Buildings – Every stairway or ramp serving as a required exit must be fire-isolated unless –<br>+ In any case except for a Class 9c – it connects or passes by not more than 2 storeys, and one additional storey of any class may be included if:<br>▪ The building has a sprinkler system; or<br>▪ The required exit does not provided access to or egress from the additional storey, and is fire and smoke separated. | required to comply with the requirements of clause D1.7 (see below) |
| **D1.4**<br>Exit Travel Distances | For Class 2 buildings:<br>+ Maximum 6m to an exit or to a point of choice between alternative exits from sole-occupancy units<br>+ 20m from a single exit to open space or road when the storey is on the same level of egress from sole-occupancy units<br>+ Maximum 20m to an exit or to a point of choice between alternative exits from any other part of the floor not in a sole-occupancy unit.<br>For Class 7 buildings:<br>+ Maximum 20m to an exit or to a point of choice between alternative exits. | **Does Not Comply:**<br>The travel distances within the building do not comply with the requirements of this clause in the following locations –<br>• Level 1 – 18.5m to an exit from a SOU<br>• Level 2-9 – 18.5m and 19.5m to an exit from an SOU<br>• Level 10 – 18.5m to an exit from a SOU<br>• Level 10 - 51m to an exit from the terrace<br>• Level 11-16 – 18.5m to an exit from a SOU<br><br>**Performance Solution:**<br>The travel distances within the building do not comply with the requirements of this clause in the following locations and will need to be addressed by the Fire Engineer as Performance Solutions –<br>• Basement Levels – 30m to a point of choice to alternative exits<br>• Basement Levels – 45m to an exit<br>• Ground Level – 28m to a point of choice in the loading dock area<br>• Ground Level – 50m to an exit in the loading dock area<br>• Level 2-9 – 13m to an exit from an SOU<br>• Level 2-16 – 21m to an exit or point of choice from the common areas<br>• Level 17 – 30m to a point of choice from the roof terrace |
| **D1.5**<br>Distances Between Alternative Exits | Exits that are required as alternative means of egress must be-<br>+ Distributed as uniformly as practical within the storey served.<br>+ Located so that unobstructed access to 2 exits is available from all points.<br>+ Not less than 9m apart<br>+ Not more than<br>a) Class 2: 45m apart<br>b) In all other cases – 60m. | **Performance Solution:**<br>The travel distances between alternative exist do not comply with the requirements of this clause in the following locations –<br>• Ground Level – Distance between alternative exits to the residential parts exceeds 45m<br>• The distance between alternative exit from the loading dock area exceeds 60m. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + Located so that alternative paths of travel do not converge <6m. | |
| **D1.6** Dimensions of Exits | The unobstructed height throughout a required exit must not be less than 2m and not less than 1980mm for a doorway.<br>For Class 2 buildings:<br>The unobstructed with of paths of travel must be not less than 1m.<br>The doorways in the building must have a minimum unobstructed clear opening as follows:<br>+ 850mm for accessible units and common doors<br>+ 750mm for other sole-occupancy unit doorways.<br><br>Sub-clause (c) outlines unobstructed width for buildings accommodating 100-200 persons, (d) outlines for more than 200 persons, (e) outlines for spectator stands accommodating more than 2000 persons.<br><br>+ The unobstructed width through other exit doorways (not indicated above or required to be accessible), the required exit width minus 250mm. | **Does Not Comply:**<br>The proposed furniture located on the residential levels currently reduces the egress path to the exits. |
| **D1.7** Travel via Fire Isolated Exits | A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from a public corridor/lobby, sole-occupancy unit occupying all of a storey or a sanitary compartment/airlock.<br>Each fire isolated stairway or ramp must provide independent egress from each storey served and must discharge to –<br>+ A road or open space; or<br>+ To a point in a space within the building that is only used for pedestrian movement or car parking that is open a minimum of 2/3 of its perimeter and from which a path of travel under 20m is available to a road or open space; or<br>+ A covered area that adjoins a road or open space, is open for a minimum of 1/3 of its perimeter, has an unobstructed height of at least 3m throughout and provides a path of travel the point of discharge to a road or open space within 6m.<br><br>Where a path of travel from the point of discharge of a fire isolated exit necessitates passing within 6m of any part of an external wall of the same building, that part of the wall must have –<br>+ an FRL of not less than 60/60/60; and<br>+ Any openings protected internally in accordance with BCA Clause C3.4,<br>+ For a distance of 3m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. | **Does Not Comply:**<br>The separate rising and descending stair flights are not permitted to discharge into a common passageway. Each exit is required to discharge directly to road or open space.<br><br>The discharge from the fire isolated stairs at ground level required occupants to pass within 6m of unprotected openings in the building.<br><br>Details of the proposed protection to the openings to be included into the design at the Construction Certificate stage.<br><br>  |
| **D1.8** External Stairways or Ramps in Lieu of Fire-Isolated Stairways | An external stairway or ramp may serve as a required exit in lieu of a fire-isolated exit serving a storey below an effective height of 25m provided that it is constructed in accordance with the following.<br>+ The external stair is to achieve a minimum FRL of 60/60/60 – when tested from the inside;<br>+ Stair to be non-combustible;<br>+ Exit doors to the stair is to be self-closing -/60/30 fire door; | **Compliance Readily Achievable**:<br>Details to be included into the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + No openings to occur in the external wall of the building within 3m for the exit.<br>If openings are within 3-6m of the exit they are to be protected in accordance with BCA Clause C3.4 (if drenchers are used, they are to be located internally). Opens are restricted from being within 0-3m of the exit. | |
| **D1.10** Discharge from Exits | The path of travel to the road from a required exit leading to open space must have an unobstructed exit width of that of the required exit, or if larger, 1m.<br>If the discharge point of the exit is at a different level from the road, a stairway or ramp achieving no more than 1:14 must be provided.<br>The discharge point of alternative exits must be located as far apart as practical and be suitably protected from vehicles potentially blocking the exit. | **Does Not Comply:**<br>A dedicated pathway from the discharge point to the road is required to be provided<br><br>Details to be included into the design. |
| **D1.13**<br>Number of Persons Accommodated | Outlines the number of persons accommodated in a storey as per Table D1.13 of BCA 2019 (amendment 1). | **Noted.**<br>The use of the retail tenancy will need to be further detailed to determine population numbers in relation to sanitary facilities that are require dot eb provided. |
| **D1.16**<br>Plant Rooms & Lift Motor Rooms Concession | A ladder may be used in lieu of a stairway to provide egress from a plant room with a floor area of not more than 100m$^2$ or all but one point of egress from a plant room or a lift machine room with a floor area not more than 200m$^2$.<br>Sub-clause (b) sets out the parameters for the ladders permitted to be used in this circumstance. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D1.17**<br>Access to Lifts Pits | Access to lift pits with a depth of under 3m must be provided through the lowest landing doors. If a lift pit exceeds 3m in depth, access must be provided in accordance with sub-clause (b). | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| ***PART D2*** | ***Construction of Exits*** | |
| **D2.1** Application of Part | With the exception of specified clauses in this part the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of sole-occupancy units of Class 2 parts of buildings. | **Noted.** |
| **D2.2**<br>Fire Isolated Stairways & Ramps | A stairway or ramp, including landings that are required to be within a fire-resisting shaft must be constructed of non-combustible materials to protect the structural integrity of the shaft. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.3**<br>Non-Fire-Isolated Stairways and Ramps | This clause requires that required non-fire-isolated stairways and ramps must be either constructed in accordance with D2.2 or the alternative options set out in D2.3 (a) to (c).<br>In a building with a rise in storeys of more than 2, required non-fire-isolated stairways and ramps must be either constructed in accordance with D2.2 or –<br>+ Reinforced or prestressed concrete; or<br>+ Steel at least 6mm thick at all points; or<br>+ Timber that has a finished thickness of at least 44mm, has an average density of at least 800 kg/m$^3$ at a moisture content of 12% and has not been joined by means of glue unless it has been laminated and glued with resorcinol/phenol formaldehyde. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.4**<br>Separation of Rising and Descending Stair Flights | In a required fire-isolated stairway there must be no direction connection between –<br>+ A flight rising from a storey below the level of access to open space; and<br>+ A flight descending from a storey above that level.<br>Any construction that separates or is common to the rising and descending flights must be non-combustible and smoke proof. | **Compliance Readily Achievable**:<br>Details to be included into the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| **D2.7** Installations in Exits and Paths of Travel | If installed in a path of travel to an exit, electrical distribution boards, communication cupboards and the like containing motors, etc. are to be enclosed with non-combustible construction, and doors are to be provided with smoke seals to the perimeter. | **Compliance Readily Achievable**: Details to be included into the design. |
| **D2.8** Enclosure of Space Under Stairs and Ramps | The space below a required fire-isolated stairway or ramp in a fire-isolated shaft must not be enclosed to form a cupboard or other enclosed space.<br>If the required stairway or ramp is non-fire-isolated, (including an external stairway) any cupboard underneath must have an FRL of 60/60/60, with a self-closing -/60/30 door. | **Complies:** There are no enclosures identified below stairs on the architectural plans. |
| **D2.9** Width of Required Stairways and Ramps | A required stairway or ramp that exceeds 2m in width is considered as having a width of only 2m unless it is divided by a handrail or barrier and each division has a width not more than 2m. | **Compliance Readily Achievable**: Details to be included into the design. |
| **D2.10** Pedestrian Ramps | A fire-isolated ramp may be substituted for a fire-isolated stairway is the enclosing structure satisfies the requirements of a fire-isolated stairway.<br>A ramp serving as an exit must have a gradient not steeper than 1.8, and where the ramp serves as an accessible ramp, be in accordance with AS 1428.1.<br>The floor surface of the ramp must have a slip-resistance classification not less than that listed in Table D2.14 of the BCA 2019 (Amendment 1). | **Compliance Readily Achievable**: Details to be included into the design. |
| **D2.11** Fire-Isolated Passageways | The enclosing construction of a fire-isolated passageway must have an FRL when tested for a fire outside the passageway in another part of the building of-<br>+ If the passageway discharges from a fire-isolated stairway or ramp – not less than that required for the stairway or ramp shaft; or<br>+ In any other case – not less than 60/60/60.<br>Notwithstanding the above, the top construction of a fire-isolated passageway need not have an FRL if the walls of the fire-isolated passageway extend to the underside of-<br>+ A non-combustible roof covering; or<br>+ A ceiling having a resistance to the incipient spread of fire of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the fire compartment. | **Compliance Readily Achievable**: Details to be included into the design. |
| **D2.13** Goings and Risers | The stairs must comply with the tread, riser and going dimensions of this clause and the nosing of the stairs must be provided with a non-slip treads and meet the provisions of AS1428.1-2009.<br>The following will apply in relation to the construction of all stairways:<br>+ Stairway must have not more than 18 and not less than 2 risers in each flight.<br>+ Goings and risers within the stair flights must be constant throughout.<br>+ Risers must be solid construction with no gaps and treads must have non slip finishes and stair nosings.<br>Goings and risers are to be in accordance with BCA Table D2.13 | **Compliance Readily Achievable**: Details to be included into the design. |

<table>
<tr><th>CLAUSE</th><th>REFERENCE</th><th>COMMENT</th></tr>
<tr><td>D2.14<br>Landings</td><td>In a stairway –<br>+ Landings must be a minimum of 750mm long, and where it involves a change of direction the length is measured 500mm from the inside edge of the landing<br>+ Have a slip resistance of the surface of the nosing strip in accordance with Table D2.14 and tested in accordance with AS 4586.<br><table><tr><th rowspan="2">Application</th><th colspan="2">Surface Conditions</th></tr><tr><th>Dry</th><th>Wet</th></tr><tr><td>Ramps steeper than 1:14</td><td>P4/R11</td><td>P5/R12</td></tr><tr><td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3/R10</td><td>P4/R11</td></tr><tr><td>Tread or landing surface</td><td>P3/R10</td><td>P4/R11</td></tr><tr><td>Nosing or landing strip</td><td>P3</td><td>P4</td></tr></table></td><td>Compliance Readily Achievable:<br>Details to be included into the design.</td></tr>
<tr><td>D2.15 Thresholds</td><td>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless –<br>+ In a building required to be accessible –<br>▪ The doorway opens to a road or open space; and<br>▪ Is provided with a threshold ramp or step ramp in accordance with AS 1428.1.<br>+ In other cases –<br>▪ the doorway opens to a road or open space, external stair landing or external balcony; and<br>▪ the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</td><td>Compliance Readily Achievable:<br>Details to be included into the design.</td></tr>
<tr><td>D2.16 Balustrades</td><td>This clause details where balustrades are required to be provided and sets out in specific detail the construction requirements. Typically, the following will apply:<br>+ Balustrades are required where the fall to the level below is more than 1m in height. The minimum height of a balustrade is 1m above the floor of the landing, walkway or the like; and 865mm above the floor of a stairway or a ramp.<br>+ For a fall of more than 4m to the surface level below, a window sill must be a minimum of 865mm in height above the height of the floor surface.<br>+ Where the floor is more than 4m above the surface beneath the balustrade any horizontal or near horizontal members between 150mm and 760mm above the floor must not facilitate climbing.<br>+ Balustrades must be constructed so as to not permit a sphere of 125mm diameter to pass through. The exception to this is within fire isolated exits within the building, or within a Class 7 or 8 building, where the rails can be positioned a maximum of 460mm apart, so long as a bottom rail is located so a sphere of 150mm cannot pass through the opening between the nosing of the stair treads and the rail or between the floor of the landing, balcony or the like.</td><td>Compliance Readily Achievable:<br>Details to be included into the design where applicable.</td></tr>
<tr><td>D2.17 Handrails</td><td>Handrails must be located along at least one side of a ramp or flight unless the width is 2m or more requiring handrails on both sides.<br>(other cases) Handrails must be fixed at a minimum height of 865mm and be continuous between stair flight landings and have no on or above them that may break the hand hold. If in a required exit serving an accessible area, must comply with AS 1428.1.<br>Handrails in a Class 2 (SOU) must –<br>+ Be located along at least one side; and</td><td>Compliance Readily Achievable:<br>Details to be included into the design and compliance to be achieved with AS 1428.1-2009.<br><br>The stairs within the fire isolated shafts are required to be offset 1 tread to aide in the handrail height remaining consistent in height at the landings and above nosing line.</td></tr>
</table>

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | + Be located along the full length, except where it is associated with a barrier; and<br>+ Have the top surface of the handrail a minimum of 865mm above the stairs or floor; and<br>+ Have no obstruction on or above that may break a handhold, except for newel posts, stanchions or the like.<br>These requirements do not apply to handrails referred to in D2.18, a stairway or ramp providing a change in elevation of less than 1m, a land or a winder where a newel post is installed to provide a handhold. |  |
| **D2.18** Fixed Platforms, Walkways Stairways and Ladders | A fixed platform, walkway, stairway, ladder, any going and riser, any balustrade or other barrier attached thereto may comply with AS1657 if it only serves a machinery or plant room or non-habitable part of a sole-occupancy unit in a Class 2 building. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.19** Doorways and Doors | A doorway forming part of a required exit must not be fitted with a revolving door and must not be fitted with a roller shutter or tilt-up door unless it serves a part with a floor area not more than 200m$^2$ and the doorway is the only required exit from the building or part; and it is held in the open position while the building or part is lawfully occupied.<br>Must not be fitted with a sliding door unless it leads directly to a road or open space; and the door is able to be opened manually under a force of not more than 110 N if fitted with a door which is power-operated it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door.<br>A power-operated door in a path of travel to a required exit must be able to be opened manually under a maximum force of 110 N if there is a malfunction. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.20** Swinging Doors | A swinging door forming part of a required exit must not encroach the required width of a required exit by way of the swing of the door, or the door itself including associated hardware whilst in the open position. Also, must not swing against the direction of egress unless permitted to do so under sub-clause (b). | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.21** Operation of Latch | A door forming part of a required exit must be readily openable via the provision of single downward lever action hardware located between 900mm and 1.1m from FFL in area required to be accessible, otherwise single pushing action hardware between 900mm and 1.2m form FFL is permitted.<br>The requirements of sub-clause (a) do not apply to the items listed under sub-clause (b) providing concessions for high-security areas, SOUs, fail-safe devices, and the like. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **D2.22** Re-entry From Fire-Isolated Exits | Doors of a fire-isolated exit must not be locked from the inside in a fire-isolated exit serving a storey above 25m effective height, throughout the exit.<br>This clause details the exceptions to the above requirements if the doors are fitted with an automatic failsafe device that automatically unlocks the door upon the activation of a fire alarm as follows:<br>+ On at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or<br>+ An intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is | **Compliance Readily Achievable**:<br>Details to be included into the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | fixed adjacent to such doors explaining its purpose and method of operation. | |
| **D2.23**<br>Signs on doors | It is a requirement that signs to alert persons that the operation of smoke doors, fire doors, and doors discharging from fire isolated exits, must not be impaired must be installed where they can be readily seen. | **Compliance Readily Achievable**:<br>Details to be included into the design. |

a) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to, a—

(i) A required fire door providing direct access to a fire-isolated exit; and

(ii) A required smoke door, on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on either the wall adjacent to the doorway or both sides of the door; and

(iii) Fire door forming part of a *horizontal exit*; and

(iv) Smoke door that swings in both directions; and

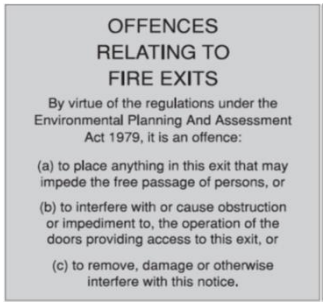
(v) Door leading from a fire isolated *exit* to a road or *open space*, on each side of the door.

b) A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state—

Any new self-closing fire and/or smoke doors leading into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

Any new automatic closing fire and/or smoke doors which are held on hold open devices that leads into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

In addition to the above, the doors which provide access to the fire isolated exits and also the Horizontal Exits must have signage provided adjacent to the entry doorway which states the following (ref Clause 183 of EP&A Reg 2000):

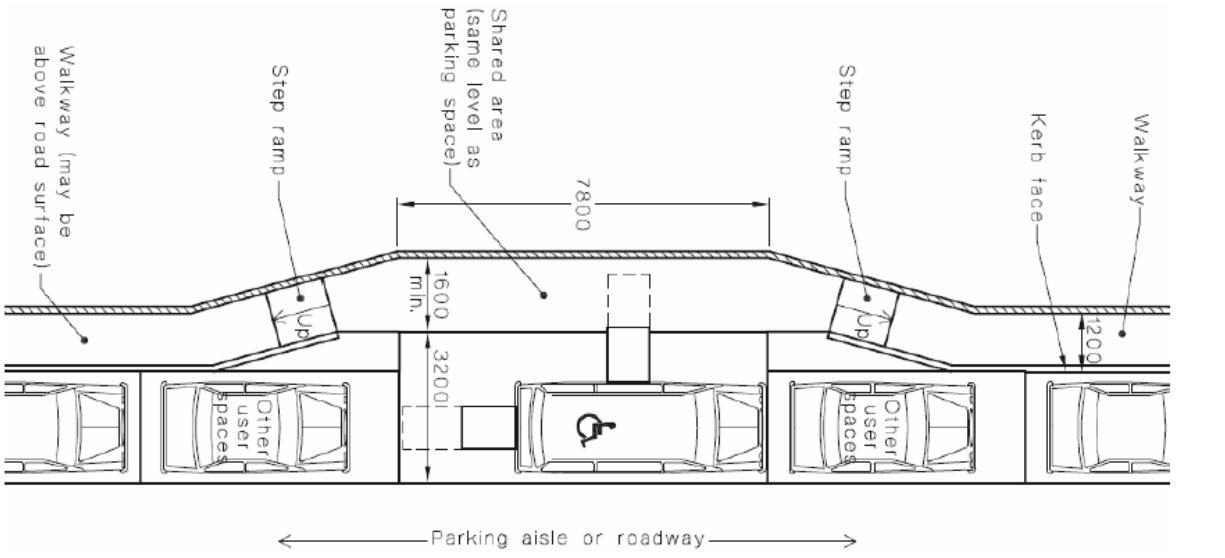



| | | |
|---|---|---|
| **D2.24**<br>Protection of Openable Windows | In a Class 2 building, a window must be provided with protection if the floor below the window is 2m or more above the surface beneath.<br>Where the lowest level of the window opening is less than 1.7m above the floor, a window opening must be protected in accordance with sub-clause (b).<br>A barrier no less than 865mm is required to an openable window when a child resistant release mechanism is required, as well as when the floor below the window is >4m above the surface beneath. | **Compliance Readily Achievable**:<br>Details to be included into the design. |

| CLAUSE | REFERENCE | COMMENT |
|---|---|---|
| | A barrier required by this part is to comply with sub-clause (d) & (e). | |
| **D2.25** Timber Stairways: Concession | Notwithstanding D2.2 (a), timber treads, risers, landings, and associated supporting framework, may be used within fire-isolated exits if permitted by this part. | **Compliance Readily Achievable**: Where timber stairs are proposed within the fire isolated stairs additional construction requirements are required to be provided including the installation of sprinklers to within the fire isolated stair shafts. |

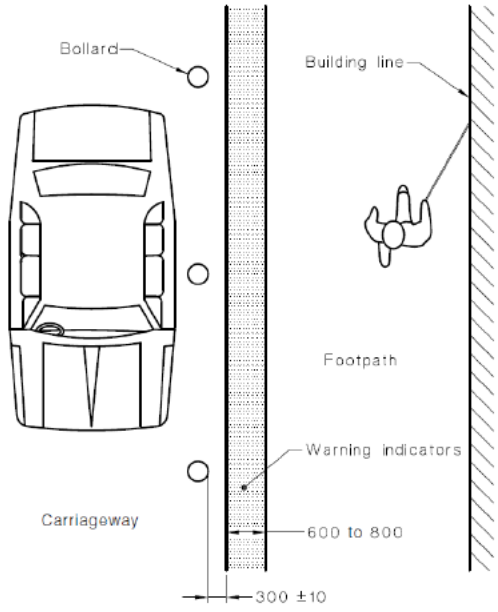
| PART D3 | Access for People with Disabilities | |
|---|---|---|
| **D3.1** General Building Access Requirements | The extent of access required depends on the classification of the building. Buildings and parts of buildings must be accessible as set out in Table D3.1 unless exempted by Clause D3.4.<br>Residential parts. Access is required to all common areas and to the doorway of each sole-occupancy unit.<br>Class 7a parts. Access is **not *required*** to the ancillary carpark part of the residential building (i.e. this being a Class 7a, which is not required in Table D3.5 to be accessible as it is ancillary to a Class 2).<br>A building, or part thereof, must comply with the requirements of BCA Part 3 if accessibility is deemed to be applicable under Table D3.1, unless otherwise exempted under Clause D3.4. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| **D3.2** Access to Buildings | Accessways must be provided to accessible buildings from the main points of pedestrian entry at the allotment boundary and any accessible car parking space or accessible associated buildings connected by a pedestrian link.<br>An accessway must be provided to a building required to be accessible-<br>+ From the main points of a pedestrian entry at the allotment boundary; and<br>+ From another accessible building connected by a pedestrian link; and<br>+ From any required accessible car parking space on the allotment.<br>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances including the principal pedestrian entry. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| Set Down Areas: | For public drop off / setdown areas, if a kerb is provided separating the drop-off area from the pavement, a compliant kerb ramp will need to be provided. The detailing of the parallel set down will need to satisfy the provisions of AS 2890.6 – 2006.<br>Where the pedestrian pathway and the driveway is at the same grade it will be necessary to achieve a 30% luminous contrast between the walkway and the driveway. Details of the materials, colour and texture will need to be provided as part of the detailed Design Development / Construction Issue Architectural Documentation. | **Compliance Readily Achievable:** |

**SET DOWN AREAS:**



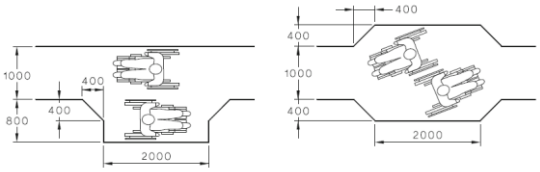
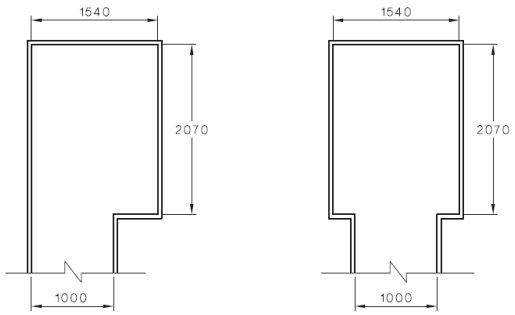

**Requirements for parallel parking**

If the set down area is level with the pavement, tactile indicators and bollards are required to be provided as required by AS 1428.4.1 – 2009.



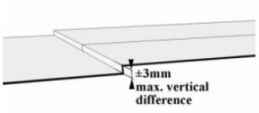

**Requirements tactiles / bollards**

| | | |
|---|---|---|
| **D3.3**<br>Parts of buildings to be accessible | Every accessway, or ramp and stairway within a fire-isolated exit, must comply with AS1438.1 unless exempted by Clause D3.4. Accessways must comprise passing spaces and turning spaces complying with sub-clause (c), (d) & (e).<br>The carpet pile height requirements of AS1428.1 do not apply, in lieu of the requirements of sub-clause (g) and (h). | **Further Information Required:**<br>All floor linings are required to be tested to AS 4586 in relation to achieving compliance with Handbooks HB 197 and HB 198.<br>If the designer is unsure of these requirements, we recommend a schedule of floor linings be provided for review as early as possible to determine compliance. |
| **D3.3**<br>Parts of buildings to be accessible | every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—<br>+ for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and<br>+ for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. Further assessment of access to the garbage chutes within the residential levels will need to be undertaken by the Access Consultant. |

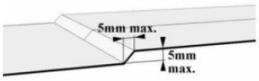
| | | | |
|---|---|---|---|
| | | + for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1.<br>Every passenger lift must comply with E3.6.<br>The carpet pile height requirements of AS1428.1 do not apply, in lieu of the requirements of sub-clause (g) and (h). | |
| | **AS1428.1 Cl. 6.4**<br>Passing Space | Accessways must have passing spaces complying with AS 1428.1 at maximum 20m intervals on those parts of an accessway where a direct line of sign is not available.<br>  <br><br>DIMENSIONS IN MILLIMETRES | **Complies:**<br>The requirements for passing space are achieved within the design. |
| | **AS1428.1 Cl. 6.5**<br>Turning Space | Turning spaces must comply with AS1428.1 and located within 2m of the end of accessways where it is not possible to continue travelling along the accessway, and at maximum 20m intervals along the accessway.<br>  <br><br>(a) Space required in corridor (b) Space required in corridor | **Complies:**<br>The requirements for turning space are achieved within the design. |
| | **AS1428.1 Cl. 6.6**<br>Visual Indicators on Glazing | Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line. The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between 900 mm and 1000 mm above the plane of the finished floor level.<br>Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side. | |
| | **AS1428.1 Cl. 7**<br>Floor Transition/s | <u>Tolerances for Abutment of Surfaces:</u><br>Transitions between floor finishes will need to comply with Clause 7.2 of AS1428.1-2009.<br><u>Recessed / Soft Floor Coverings:</u><br>+ Pile height or pile thickness shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm.<br>+ Exposed edges of floor coverings be fastened to the floor with a trim along any exposed edges.<br>+ At leading edges, carpet or other soft materials shall have a vertical face no higher than 3mm or a rounded bevelled edge no higher than 5mm. Up to 10mm is permitted at a 1:8 gradient.<br>+ Recessed matting must be no more than a 3mm vertical, or 5mm rounded, proud of the adjacent floor surface. This also applies when the matting is depressed below surface level. | |

| | | | |
|---|---|---|---|
| | | Grates:<br>Grates shall comply with the following:<br>+ Circular openings shall be not greater than 13 mm in diameter.<br>+ Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.<br>*NOTE: Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.* | |

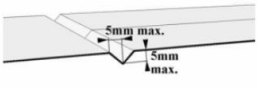
**TOLERANCES FOR ABUTMENT OF SURFACES:**



(i) Change in Level - Square Edge

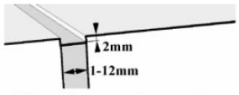


(ii) Change in Level - Bevelled Edge

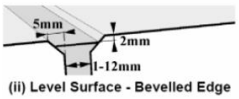


(iii) Flush Surface - Bevelled Edges

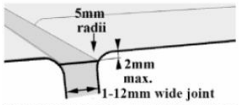
(iv) Flush Surface - Rounded Edges



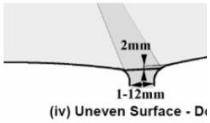
(i) Level Surface - Square Edge



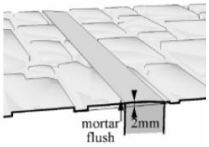
(ii) Level Surface - Bevelled Edge



(iii) Level Surface - Rounded Edges

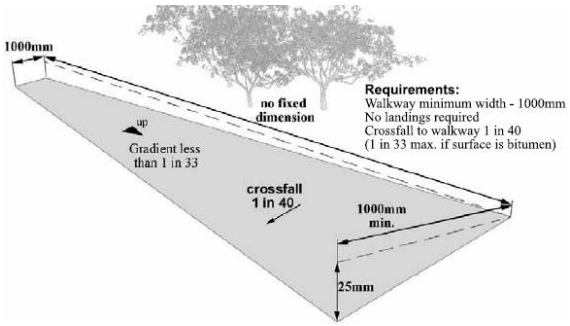


(iv) Uneven Surface - D

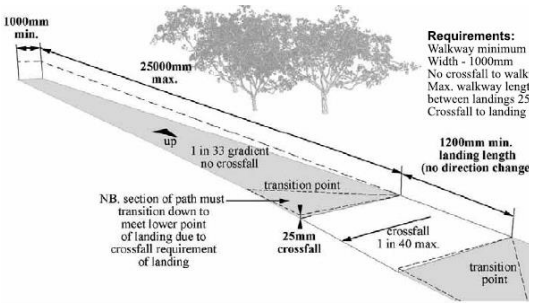


(v) Uneven Surface - Irre

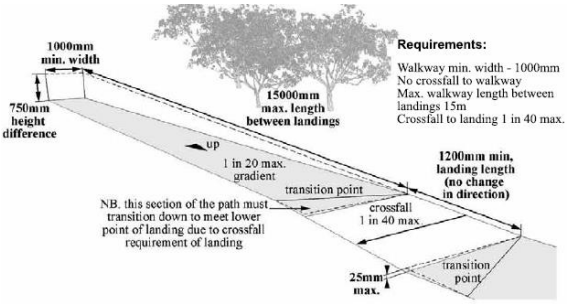
| | | | |
|---|---|---|---|
| | **AS1428.1 Cl 10.1**<br>Walkways, Ramps, and Landings - Generally | Walkways, ramps and landings that are provided on a continuous accessible path of travel shall be as follows:<br>+ Sharp transitions shall be provided between the planes of landings and ramps.<br>+ Landings shall be provided at all changes in direction in accordance with Clause 10.8.<br>+ Landing or circulation space shall be provided at every doorway, gate, or similar opening.<br>+ For walkways and landings having gradients in the direction of travel shallower than 1 in 33, a camber or crossfall shall be provided for shedding of water and shall be no steeper than 1 in 40, except that bitumen surfaces shall have a camber or crossfall no steeper than 1 in 33.<br>*NOTE: For requirements for ground surfaces, see Clause 7.* | |
| | **AS1428.1 Cl. 10.2**<br>Walkways | The requirements for walkways are as follows:<br>+ Walkways can have a gradient up to 1:20. Anything steeper is a ramp and requires kerbs or kerb rails plus handrails to both sides.<br>+ A walkway with a gradient less than 1 in 33 does not require landings but does require a crossfall of maximum 1 in 40 (maximum cross fall of 1 in 33 if the surface is bitumen).<br>+ Walkways steeper than 1 in 33 do not require a crossfall to the main walkway but do require a crossfall of 1 in 40 to landings | |



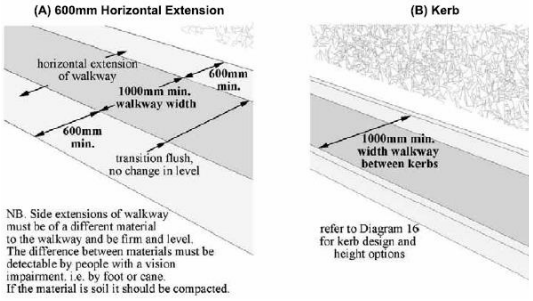

REQUIREMENTS FOR A WALKWAY WITH A GRADIENT LESS THAN 1 IN 33




REQUIREMENTS FOR A WALKWAY WITH A 1 IN 33 GRADIENT



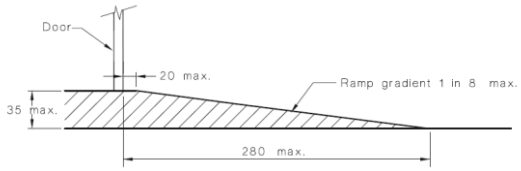

REQUIREMENTS FOR A WALKWAY WITH A 1 IN 20 GRADIENT




REQUIREMENTS FOR EDGES OF WALKWAYS

| | | |
|---|---|---|
| | **AS1428.1 Cl. 10.3**<br>Ramps | Ramps to comply with the following:<br>+ Maximum gradient of a ramp exceeding 1900mm shall be 1 in 14.<br>+ The gradient of a ramp shall be constant throughout its length.<br>+ Ramps shall be provided with landings:<br>(a) For ramp gradients of 1 in 14, at intervals not greater than 9m.<br>(b) For ramp gradients steeper than 1 in 20, at intervals not greater than 15m.<br>(c) For ramp gradients between 1 in 14 and steeper than 1 in 20, at interpolated intervals.<br>+ Handrails must be provided on either side complying with Clause 12.<br>+ TGSIs shall be installed in accordance with AS 1428.4.1.<br>+ Ramps shall be set-back at internal corridors so that handrail extensions do not protrude in to paths of travel.<br>+ Ramps and intermediate landings shall have kerbs or kerb rails on either side. |
| | **AS1428.1 Cl. 10.4**<br>Curved Walkways, Ramps, and Landings | Curved ramps, walkways, and landings shall comply with the following:<br>+ Curved walkways shall have a width not less than 1500mm.<br>+ Any cross-fall shall be towards the centre of curvature.<br>+ The gradient of curved ramps and walkways shall comply with the graph in Figure 20 within AS 1428.1 – 2009. |
| | **AS1428.1 Cl. 10.5**<br>Threshold Ramps | Threshold ramps at doorways on a continuous path of travel shall have—<br>+ a maximum rise of 35 mm;<br>+ a maximum length of 280 mm; |

+ a maximum gradient of 1:8; and
+ be located within 20 mm of the door leaf which it serves.




**AS1428.1 Cl. 10.6**

Step Ramps

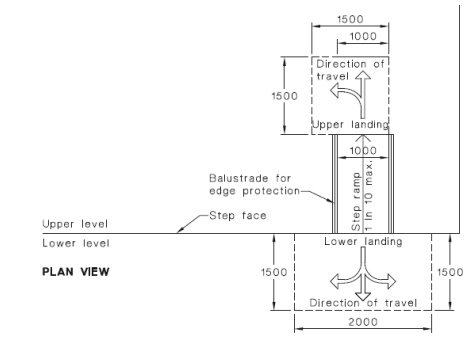
Step ramps shall have—

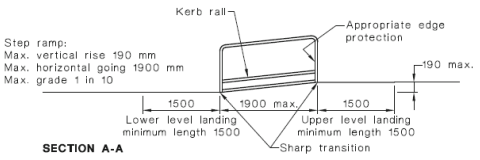
+ a maximum rise of 190 mm;
+ a length not greater than 1900 mm; and
+ a gradient not steeper than 1 in 10.

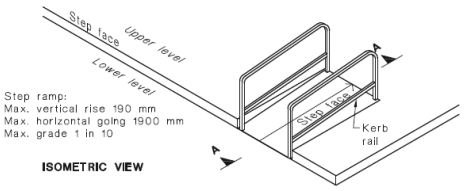
The edges of step ramp shall have a 45° splay where there is pedestrian cross traffic.

Otherwise, it shall be protected by a suitable barrier, such as—

+ a wall or suitable barrier with a minimum height of 450 mm; or
+ where an open balustrade is provided a kerb or kerb rail shall be provided.



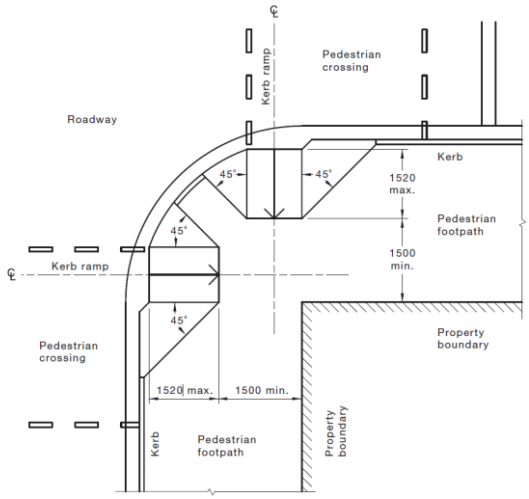

**AS1428.1 Cl. 10.7**

Kerb Ramps

Kerb ramps shall have

+ a maximum rise of 190 mm; and
+ a length not greater than 1520 mm; and
+ a gradient not steeper than 1 in 8, located within or attached to a kerb; and

be aligned in the direction of travel as shown below.




Refer to Clause 10.7 of AS 1428.1 - 2009 for the full requirements for Kerb Ramps.

**AS1428.1 Cl. 10.8**

Landings

Walkways and ramps

The length of landings at walkways (up to a gradient of 1 in 33) and ramps shall comply with one of the following:

+ Where there is no change in direction, the length shall be not less than 1200 mm, as shown in **Figure 25(A).**
+ Where there is a change of direction not exceeding 90°, the landing shall be not less than 1500 mm. The internal corner shall be truncated for a minimum of 500 mm in both directions, as shown in **Figure 25(B).**
+ For a 180° turn, the landing shall be as shown in **Figure 25(C).**

Step ramps

+ The length of landings at step ramps shall be not less than 1200 mm in the direction of travel, as shown in **Figures 22(A)** and **22(B).**
+ Where a change in direction is required, the length of step ramp landings shall be a minimum of 1500 mm, as shown in **Figure 22(A).**
+ Where doorways are at landings, the dimensions of the landings shall be in accordance with the requirements of Clause 13.3 for circulation spaces at doorways shown in **Figure 25(D).**

Kerb ramps

The length of landings at kerb ramps shall be not less than 1200 mm in the direction of travel.

Where a 'T' junction occurs, the kerb ramp landing shall be a minimum of 1500 × 2000 mm, as shown in Figure 24(B).

Where a single change in direction is required, the ramp landings shall be a minimum of 1500 mm × 1500 mm.

SEE BELOW FOR FIGURES

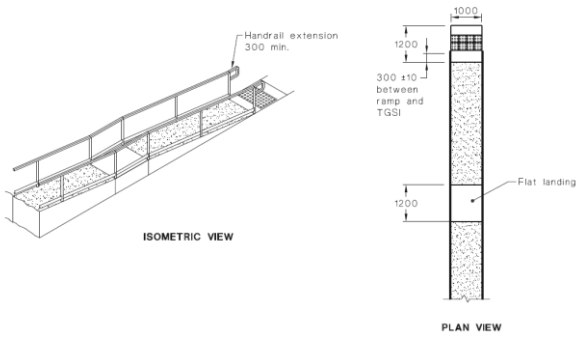



FIGURE 25A

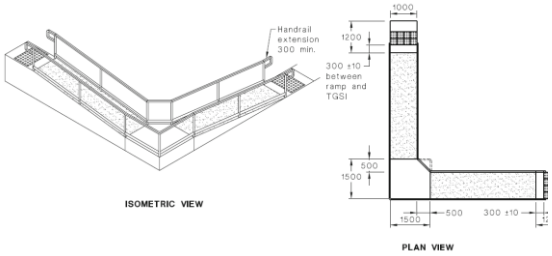



FIGURE 25B

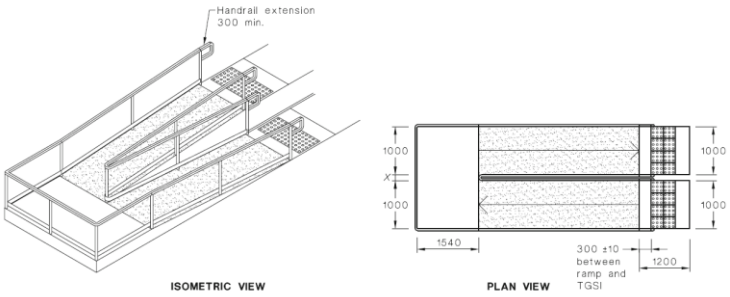
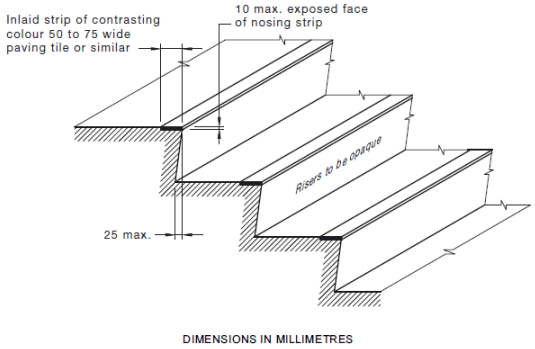



FIGURE 25C

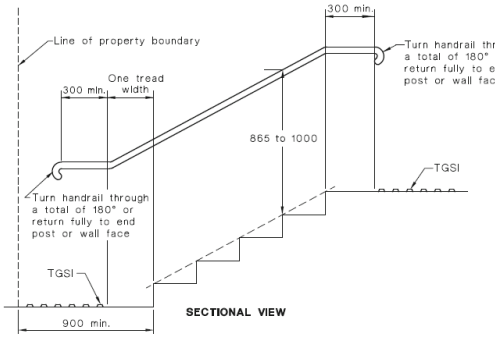
| | | | |
|---|---|---|---|
| | **AS1428.1 Cl. 14**<br>Switches and Access Controls | Switches in all rooms where there is the individual control of lighting will need to be installed between 900-1100mm AFFL and not closer than 500mm to an internal corner.<br>Switches associated with Unisex Accessible WCs are to be sensor type or large form rocker type (35x35mm plate).<br>Where push button switches are located associated with the security system of the entry doors, then the push button will need to be the mushroom type.<br>The door release button within the lobby or any other relevant room is to be mounted between 900-1100mm AFFL and not closer than 500mm of an internal corner. | |
| | **AS1428.1 Cl. 11.1**<br>Stairway Construction | + Where the intersection is at the property boundary, the stair shall be set back by a minimum of 900 mm so that the handrail (complying with Clause 12) and TGSIs do not protrude into the transverse path of travel.<br>+ Where the intersection is at an internal corridor, the stair shall be set back so that handrails or TGSIs do not protrude in to the path of travel.<br>+ Stairs shall have opaque risers.<br>+ Stair nosings shall not project beyond the face of the riser and the riser maybe vertical or have a splay backwards up to a maximum 25 mm.<br>+ Stair nosing profiles shall—<br>(i) have a sharp intersection;<br>(ii) be rounded up to 5 mm radius; or<br>(iii) be chamfered up to 5 mm × 5 mm.<br>+ At the nosing, each tread shall have a strip not less than 50 mm and not more than 75 mm deep across the full width of the path of travel. The strip may be set back a maximum of 15 mm from the front of the nosing. The strip shall have a minimum luminance contrast of 30% to the background. Where the luminous contrasting strip is affixed to the surface of | |

| | | | |
|---|---|---|---|
| | | the tread, any change in level shall comply with Clause 7.2 and Clause 7.3.<br>+ Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10 mm.<br>+ TGSIs shall be installed in accordance with AS 1428.4.1. | |




DIMENSIONS IN MILLIMETRES

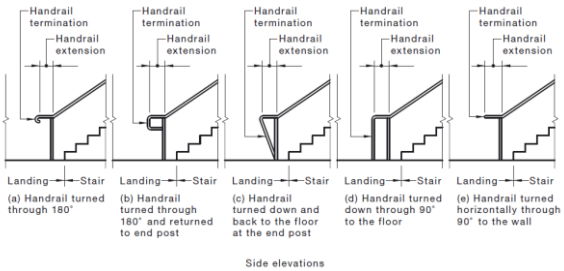
**EXAMPLE OF COMPLIANT NOSING STRIP DETAIL**



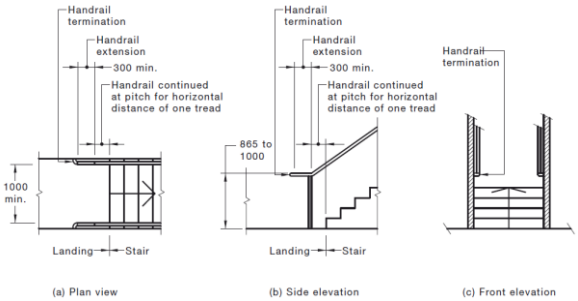

DIMENSIONS IN MILLIMETRES

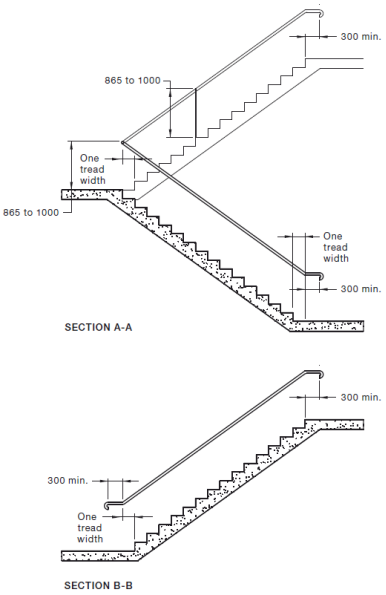
**EXAMPLE OF COMPLIANT STAIRWAY DESIGN**

| | | |
|---|---|---|
| **AS1428.1 Cl. 11.2**<br>Stairway Handrails | Handrails shall be continuous throughout the stair flight and, where practicable, around landings and have no obstruction on or above up to a height of 600 mm and as follows:<br>+ The design and construction of handrails shall comply with Clause 12 of AS 1428.1 – 2009.<br>+ Handrails shall be installed on both sides of the stairs.<br>+ Handrails shall have no vertical sections and shall follow the angle of the stairway nosings.<br>+ Where a handrail terminates at the bottom of a flight of stairs, the handrail shall extend at least one tread depth parallel to the line of nosings plus minimum of 300 mm horizontally from the last riser.<br>+ The handrail shall extend a minimum of 300 mm horizontally past the nosing on the top riser.<br>+ Where the handrail is continuous, the 300 mm extension is not required in the inner handrail at intermediate landings.<br>+ The dimensions indicating the heights of handrails shall be taken vertically from the nosing of the tread to the top of the handrail or from the landing to the top of the handrail. | |

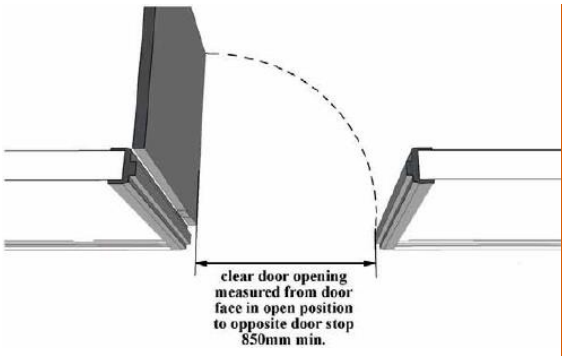



Side elevations



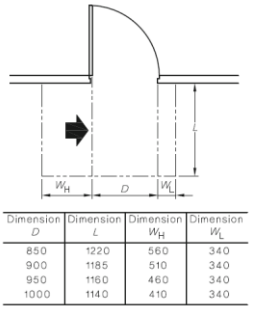




| | | | |
|---|---|---|---|
| | **AS1428.1 Cl. 12**<br>Handrails | The design and construction of handrails shall comply with the following:<br>+ The cross-section of handrails shall be circular or elliptical, between 30-50mm dia. for a width of not less than 270° around the uppermost surface.<br>+ Exposed edges shall have a radius of not less than 5mm.<br>+ The top of handrails shall be between 865-1000mm above the nosing line of a stairway, or the plane of finished floor otherwise.<br>+ The height of the top of the handrail shall be consistent through any stair, ramp, and landing.<br>+ Handrails shall be securely fixed and rigid, and their ends shall be turned through a total of 180°, or to the ground, or returned fully to end post or wall face.<br>+ The clearance between a handrail and an adjacent wall surface or other obstruction shall be not less than 50mm. | |
| | **AS1428.1 Cl. 13.1**<br>Luminance Contrast | All doorways shall have a minimum luminance contrast of 30% provided between—<br>+ door leaf and door jamb;<br>+ door leaf and adjacent wall;<br>+ architrave and wall;<br>+ door leaf and architrave; or<br>+ door jamb and adjacent wall.<br>The minimum width of the area of luminance contrast shall be 50 mm. | |
| | **AS1428.1 Cl. 13.2 / 13.3**<br>Doorways | The minimum width of an accessible doorway must have a *clear opening* width of not less than 850mm in accordance with AS1428.1. Where double doors are provided, at least one leaf must have a clear unobstructed width of 850mm. | |



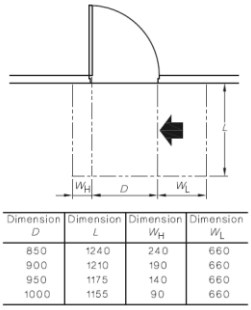

**Clear Unobstructed Width of Doorway**

Circulation space is required to all doorways throughout the building that are required to be accessible in accordance with Section 13 of AS 1428.1 – 2009 (see diagrams below). Circulation space is not required to be provided to rooms where access for a person with a disability is not required i.e. dirty utility / clean utility rooms, plant rooms, comms rooms etc. See below required doorway circulation space for swinging and sliding doors.



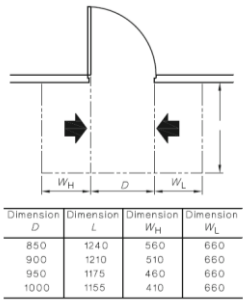
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1220 | 560 | 340 |
| 900 | 1185 | 510 | 340 |
| 950 | 1160 | 460 | 340 |
| 1000 | 1140 | 410 | 340 |

(a) Hinge-side approach, door opens away from user



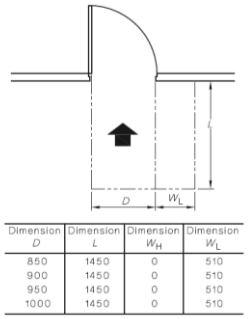
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1240 | 240 | 660 |
| 900 | 1210 | 190 | 660 |
| 950 | 1175 | 140 | 660 |
| 1000 | 1155 | 90 | 660 |

(b) Latch-side approach, door opens away from user



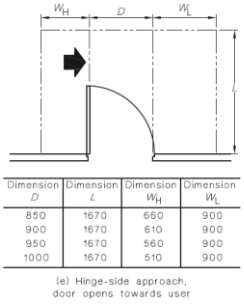
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1240 | 560 | 660 |
| 900 | 1210 | 510 | 660 |
| 950 | 1175 | 460 | 660 |
| 1000 | 1155 | 410 | 660 |

(c) Either side approach, door opens away from user



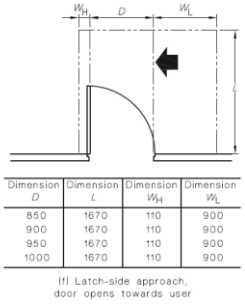
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 0 | 510 |
| 900 | 1450 | 0 | 510 |
| 950 | 1450 | 0 | 510 |
| 1000 | 1450 | 0 | 510 |

(d) Front approach, door opens away from user



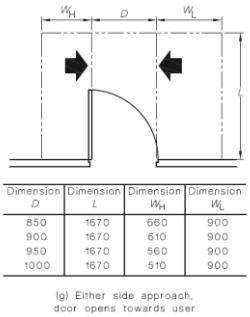
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1670 | 660 | 900 |
| 900 | 1670 | 610 | 900 |
| 950 | 1670 | 560 | 900 |
| 1000 | 1670 | 510 | 900 |

(e) Hinge-side approach, door opens towards user



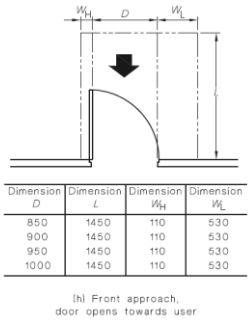
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1670 | 110 | 900 |
| 900 | 1670 | 110 | 900 |
| 950 | 1670 | 110 | 900 |
| 1000 | 1670 | 110 | 900 |

(f) Latch-side approach, door opens towards user



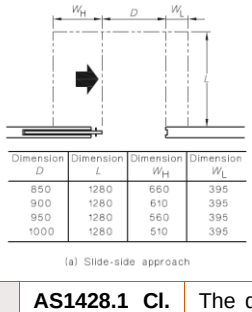
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1670 | 660 | 900 |
| 900 | 1670 | 610 | 900 |
| 950 | 1670 | 560 | 900 |
| 1000 | 1670 | 510 | 900 |

(g) Either side approach, door opens towards user



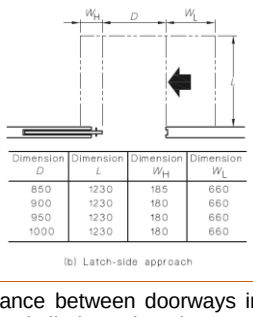
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 110 | 530 |
| 900 | 1450 | 110 | 530 |
| 950 | 1450 | 110 | 530 |
| 1000 | 1450 | 110 | 530 |

(h) Front approach, door opens towards user



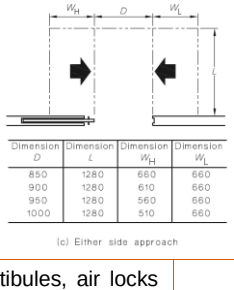
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1280 | 660 | 395 |
| 900 | 1280 | 610 | 395 |
| 950 | 1280 | 560 | 395 |
| 1000 | 1280 | 510 | 395 |

(a) Slide-side approach



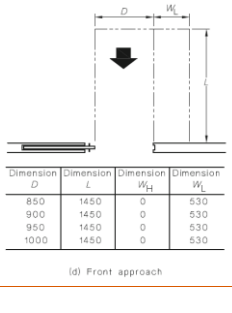
| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1230 | 185 | 660 |
| 900 | 1230 | 180 | 660 |
| 950 | 1230 | 180 | 660 |
| 1000 | 1230 | 180 | 660 |

(b) Latch-side approach



| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1280 | 660 | 660 |
| 900 | 1280 | 610 | 660 |
| 950 | 1280 | 560 | 660 |
| 1000 | 1280 | 510 | 660 |

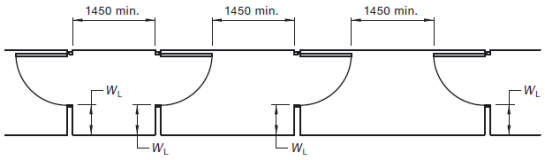
(c) Either side approach



| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 0 | 530 |
| 900 | 1450 | 0 | 530 |
| 950 | 1450 | 0 | 530 |
| 1000 | 1450 | 0 | 530 |

(d) Front approach

| | |
|---|---|
| **AS1428.1 Cl. 13.4**<br>Successive Doorways in Passages | The distance between doorways in vestibules, air locks and other similarly enclosed spaces shall be not less than 1450 mm. Where the doors encroach into space, the distance shall be not less than 1450 mm plus the door leaf width. |

| | | | |
|---|---|---|---|
| | |  (a) Continuous accessible path of travel<br>DIMENSIONS IN MILLIMETRES | |
| | **AS1428.1 Cl.13.5** Door Controls | Door handles and hardware to rooms required to be accessible must comply with the requirements of Clause 13.5 of AS 1428.1 – 2009. | |
| **D3.4** Concessions | | The following areas, and any path of travel providing access only to these areas, are not required to be accessible:<br>+ An area deemed inappropriate to access due to the areas particular use<br>+ An area that would pose a health or safety risk for people with a disability. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| **D3.5** Accessible Car Parking | | Unless otherwise exempt under sub-clause (b) & (d), accessible car parking spaces are required to be provided in accordance with Table D3.5 and AS2890.1 in a Class 7a carpark or car parking area required to be accessible. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| **D3.6** Signage | | In a building required to be accessible, braille and tactile signage must be provided to all:<br>+ Required accessible sanitary facilities<br>+ Spaces with hearing augmentation<br>+ Ambulant sanitary facilities<br>+ Non-accessible pedestrian entrances<br>+ Each door required to be provided with an exit sign<br>Braille and tactile signage is to comply with sub-clause (a) and Specification 3.6. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |

Signage Specification: -

The signage is to be: -

(a) Located between 1200-1600mm above FFL
(b) Signs with single lines of characters are to have the line of the tactile characters between 1250mm-1350mm above FFL
(c) Signage tactile characters must be raised or embossed to a height between 1mm-1.5mm
(d) Upper case letter to be between 20mm-55mm
(e) Signage is to be contrasting & is to comply with BCA Specification E3.6.

Signage Locations

The Braille & tactile egress signage is to be located adjacent or on (see above) each door that:-

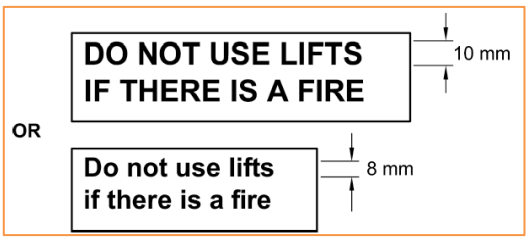
(a) Provides direct egress into a fire isolated stairway
(b) Provides direct discharge from the storey into a passageway or lobby (airlock) associated with the fire isolated stairway
(c) Provide direct discharge from a fire isolated stairway to open space (discharge door)
(d) Forms part of a horizontal exit (--/120/30 fire doors in the fire compartment walls)

The below signage is an *example* of what is required -

| | | |
|---|---|---|
| **D3.8**<br>Tactile Indicators | Tactile ground surface indicators must be provided to:<br>+ A stairway, other than a fire-isolated stairway; and<br>+ An escalator or passenger conveyor; and<br>+ A ramp other than a fire-isolated ramp; and<br>+ In the absence of a suitable barrier-<br>a) An overhead obstruction <2m above floor level; and<br>b) An accessway meeting a vehicular way adjacent to any pedestrian entrance to a building including a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| **D3.11**<br>Ramps | Ramps may be used as part of an accessway where there is a change of level and must comply with the requirements set out in AS1428.1 | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |
| **D3.12**<br>Glazing on an Accessway | This part requires the provision of a contrasting strip, chair rail, handrail or transom across all frameless or fully glazed doorways and surrounding glazing capable of being mistaken for an opening.<br>The decal must be at least 75mm thick, solid and non-transparent in a colour contrasting 30% to the background and be placed 900-1000mm above the FFL for the full width of the glazing. | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage. |

| SECTION E | SERVICES AND EQUIPMENT | |
|---|---|---|
| ***Part E1*** | ***Fire Fighting Equipment*** | |
| **E1.3**<br>Fire Hydrants | A Hydrant system is required to be installed in accordance with AS 2419.1 – 2005 given the total floor area of the building exceeding 500msq. Any required Fire Hydrant Booster assembly that is required must be affixed to the external wall and protected by a radiant heat shield that has an FRL of 90/90/90 located 2 metres either side and 3 metres above the outlets. Alternatively, the booster needs to be located at least 10m away from the building and any high voltage power supply.<br>*Note: The requirement to separate a fire hydrant booster assembly from a building does not apply where that building is protected with a sprinkler system in accordance with Spec E1.5.*<br>Any Internal Hydrants are to be located within the fire isolated exits or within 4m of the top riser of the non-fire isolated exits (external stairs in lieu of fire stairs). In addition, if floor coverage cannot be achieved supplementary fire hydrants may be provided to suit the operational requirements of the NSW Fire Brigades.<br>External attack hydrants are required to be located not less than 10 metres from the building or protected by construction having an FRL of not less than 90/90/90 and extending 2 metres each side of the hydrant outlets and extending 3 metres above ground level. In addition, Hydrants must be located not less than 10 metres from high voltage main electrical distribution equipment or liquefied petroleum gas.<br>Where required, a hydrant pump room is required to have a door opening to a road or open space, or a door opening direct into a fire isolated airlock connected to a fire stair. | **Does Not Comply:**<br>The hydrant pump room is required to be accessed from a fire isolated passageway/stair or directly from road or open space. The design is required to be amended accordingly. |
| **E1.4**<br>Fire Hose Reels | Does not apply to Class 2 parts of the building. Applicable to the basement carpark levels and the retail tenancy.<br>A fire hose reel system must be provided to serve a building where one or more internal fire hydrants are installed or in a building with a floor area greater than 500m².<br>Fire Hose Reels are to be located within 4m of an exit, or located adjacent to an internal hydrant (other than one within a fire isolated exit). Where system coverage is not achieved by the above, additional FHR may be located in paths of travel to an exit. Fire hose reels must be located internally, externally or in any combination to achieve the system coverage specified in AS 2441.<br>Fire hose reels must not pass through any fire or smoke doors except if it is a doorway referred to in BCA Clause C2.5 (a)(v), C2.12, C2.13 or C3.13.<br>Fire hose reels must only serve the storey on which they are located. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E1.5**<br>Sprinklers | A sprinkler system must be installed in a building or part of a building when required by Table E1.5 and comply with Specification E1.5.<br>Sprinkler alarm valves must be located in a secure room or enclosure which has direct egress to a road or open space.<br>Table E1.5 sets out which types of building occupancies and Classes which require having sprinkler systems installed in them. | **Performance Solution:**<br>Sprinkler alarm valves are not permitted to be located within the hydrant pump room. |
| **E1.6**<br>Portable fire extinguishers | Portable fire extinguishers must be provided as listed in Table E1.6 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444<br>In a class 2 building, portable fire extinguishers must be: | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |

| | | |
|---|---|---|
| | + An ABE type fire extinguisher; and<br>+ A minimum size of 2.5kg; and<br>+ Distributed outside a sole-occupancy unit-<br>a) to serve only the storey at which they are located; and<br>so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10m. | |
| **E1.9**<br>Fire precautions during construction | In buildings under construction at least one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to a required exit and if the building has reached an effective height of 12m the required hydrant and hose reel systems must be installed, as set out in (b)(ii) and be operational and any required booster connections must be installed | **Contactor to note.** |
| **E1.8**<br>Fire Control Room | A fire control room in accordance with Specification E1.8 must be provided for a building having an effective height of more than 50m and in a Class 6, 7, 8 or 9 building with a total floor area of more than 18,000m².<br>Specification E1.8 describes the construction and content of required fire control centres or rooms. | **Does Not Comply:**<br>The fire control room is required to be accessed from the lobby and a fire isolated passageway room outside/open space<br>The plans will be required to be amended accordingly. |
| **E1.10**<br>Provisions for Special Hazards | Suitable additional provisions must be made for fire-fighting if unique problems could arise due to;<br>+ The nature or quantity of materials stored, displayed or used in a building on the allotment; or<br>+ The location of the building in relation to a water supply for firefighting purposed. | **Noted.** |
| ***Part E2*** | ***Smoke Hazard Management*** | |
| **E2.2**<br>General Requirements for Smoke Hazard Management (including Tables E2.2a & E2.2b) | Buildings must comply with the provisions of Table E2.2a, as applicable to Class 2 to 9 buildings.<br>Class 2 building:<br>+ The mechanical ventilation systems in the building are required to be designed in accordance with AS/NZS 1668.2 (A/C systems) incorporating fire/smoke dampers where air handling ducts penetrate any building elements separating fire/smoke compartments served.<br>+ A smoke detection and alarm system is required throughout the building as per Clause 4 of Specification E2.2a of the BCA *and the relevant provisions of AS 1670.1 – 2015. Automatic Shutdown of any air handling system upon activation of the Automatic Smoke Detection System and Sprinkler System will also be required.*<br>+ *Stairway pressurisation is required in fire-isolated stairways when the building has a rise in storeys of more than 2.*<br>Class 2 building:<br>A smoke alarm system is required throughout the building as per Clause 3 of Specification E2.2a of the BCA and the relevant provisions of AS 3786 – 2014 or Clause 4 of Specification E2.2a and the relevant provisions of AS1670.1-2015 (as applicable within the SOUs).<br>Class 6 Buildings:<br>Must be provided with a zone pressurisation system between vertically separated fire compartments in accordance with AS1668.1-2015. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E2.3**<br>Provision for Special Hazards | Additional smoke hazard management measures may be necessary due to the nature of a building's special characteristic, its use, the nature of materials being stored in them and special mix of classifications. | **Noted** |

| Part E3 | Lift Installations | |
|---|---|---|
| **E3.2**<br>Stretcher Facilities in Lifts | Stretcher facilities, complying with this clause, must be provided in lifts in at least one emergency lift as required by E3.4 or in building where lifts serve any storey above an effective height of 12m.<br>A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600mm wide x 2000mmm long x 1400mm high above the floor level. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.3**<br>Warning Against Use of Lifts in Fire | Warning signs required be provided must be displayed where they can be readily seen and must comply with the details and dimensions of Figure E3.3 below.<br>  <br> | **Compliance Readily Achievable**:<br>Detail to be included in the design. |
| **E3.4**<br>Emergency Lifts | An emergency lift (complying with AS1735.2 or Appendix A of AS1735.1) must be installed in:<br>+ A building exceeds 25m in effective height; and<br>The emergency lift must be connected to a standby power supply system where installed; be contained within a fire resisting shaft; and have the following minimum internal dimensions (measured clear of all obstructions including handrails):<br>+ Depth of car – 2280mm<br>+ Width of car – 1600mm<br>+ Floor to ceiling height – 2300mm<br>+ Door height – 2100mm<br>+ Door width – 1300mm | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.5**<br>Landings | E3.5(a) The provisions of clause 12.2 –<br>“Access” of AS 1735.2 do not apply.<br>E3.5(b) The provisions of Clause A3.2 – “Access to landings” of Appendix A of AS 1735.1 do not apply.<br>E3.5(c) Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Part D. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.6**<br>Passenger Lifts | In an accessible building, every passenger lift must be one of the types identified in Table E3.6a, have accessible features in accordance with Table E3.6b and not rely on a constant pressure device for its operation if the lift car is fully enclosed. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.7**<br>Fire Service Controls | In passenger lifts designed in accordance with AS 1735 Parts 1 and 2, all lift cars serving any storey above an effective height of 12m must be provided with fire service controls. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.9**<br>Fire Service Recall Operation Switch | Each group of lifts must be provided with one fire service control switch (required by Clause E3.7 above) that activates the fire service recall operation. This clause details the switch, the labelling, the key and operation procedures for a fire service recall operation. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **E3.10**<br>Lift Car Fire Service Drive Control Switch | The lift car fire service drive control switch required by E3.7 must be activated from within the lift car. This clause details the switch, the initiation, the labelling and operation for the fire service drive control switch. | **Compliance Readily Achievable**:<br>Design statement to be provided at Occupation Certificate stage. |

| Part E4 | Emergency Lighting, Exit Signage and Warning Systems | |
|---|---|---|
| **E4.2** Emergency Lighting | This clause details when emergency lighting must be installed in Class 2 and 7a buildings. The requirements for buildings and parts of buildings are detailed in sub-clauses (a) to (i) and each sub-clause must be considered as more than one may apply to any single building. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage |
| **E4.3** Measurement of Distances | Distance, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both. | **Noted** |
| **E4.4** Design and Operation of Emergency Lighting | Every required emergency lighting system must comply with AS2293.1 - 2018 | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage |
| **E4.5** Exit Signs | An exit sign must be clearly visible to persons approaching the exit and must be installed on, above or adjacent to each door providing egress from a building. Sub-clauses (a) to (d) set out the situations where exit signs are required to be installed. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage |
| **E4.6** Direction Signs | If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage |
| **E4.8** Design and Operation of Exit Signs | Every required exit sign must comply with AS/NZS 2293.1 - 2018 and be clearly visible at all times when the building is occupied by any person having the legal right of entry into the building. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage |
| **E4.9** Emergency Warning Intercom System (EWIS) | Emergency Warning Intercom System (EWIS) complying with AS 1670.4 - 2018 must be installed—<br>+ In a building with an effective height of more than 25 m. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage. |

| SECTION F | HEALTH AND AMENITY | |
|---|---|---|
| ***Part F1*** | ***Damp & Weather Proofing*** | |
| **FP1.4** | A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause—<br>a) unhealthy or dangerous conditions, or loss of amenity for occupants; and<br>b) undue dampness or deterioration of building elements. | **Performance Solution:**<br>A Performance Solution is required to address the requirements of this Performance Requirement. Detail to be included in the design. |
| **F1.1**<br>Stormwater Drainage | Stormwater drainage must comply with AS/NZ 3500.3 - 2018 | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **F1.5**<br>Roof Coverings | This clause details the materials and appropriate standards, with which roofs must be covered with. The roofing requirements are set out in sub-clauses (a), (b), (c), (d), (e) & (f) which set out the types of materials that may be used and the adopted Australian Standards that apply to their quality and installation. | **Compliance Readily Achievable**:<br>Certification to be provided at the Construction Certificate stage. |
| **F1.6**<br>Sarking | Sarking-type materials used for weatherproofing of roofs must comply with AS/NZS 4200 parts 1 and 2 | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **F1.7** Waterproofing of Wet Areas in Buildings | This clause requires that wet areas in Class 2 to 9 buildings must be waterproofed. It prescribes the standards to which the work must be carried on the construction of rooms containing urinals and their installation. | **Compliance Readily Achievable**:<br>Certification to be provided at the Occupation Certificate stage. |
| **F1.9**<br>Damp-Proofing | Moisture from the ground must be prevented from reaching:<br>+ The lowest floor timbers and the walls above the lowest floor joists; and<br>+ The walls above the damp-proof course; and<br>+ The underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders.<br>Where a damp-proof course is provided, it must consist of:<br>+ A material that complies with AS 2904; or<br>+ Impervious sheet material in accordance with AS 3660.1. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **F1.10**<br>Damp-Proofing of Floors on the Ground | If the floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. Damp-proofing need not be provided if weatherproofing is not required or the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **F1.13**<br>Glazed Assemblies | Glazed assemblies in an external wall must comply with AS2047 - 2014 requirements for resistance to water penetration for windows, sliding doors with a frame, adjustable louvres, shop fronts and windows with one piece framing | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| ***Part F2*** | ***Sanitary & Other Facilities*** | |
| **F2.1**<br>Facilities in Residential Buildings | In a Class 2 building:<br>+ Each residential sole occupancy unit is required to be provided with a kitchen sink with facilities for cooking, a bath or shower, a closet pan and washbasin, a washtub and a space for a washing machine and drier. | **Compliance Readily Achievable**:<br>Details to be included into the design. |

| | | |
|---|---|---|
| **F2.2** Calculation of number of occupants and fixtures | This clause sets out the requirements for the calculation of the number of occupants and the number of sanitary facilities required to be installed in Class 2 to 9 buildings as per D1.13, F2.1 and F2.3 | **Noted.** |
| **F2.3** Facilities in Class 3 to 9 buildings | This clause provides the requirements for sanitary facilities to be installed in Class 3, 5, 6, 7, 8 and 9 buildings in accordance with Table F2.3.<br>When accessible sanitary facilities are provided, they account once for each sex. | **Compliance Readily Achievable:**<br>Sanitary facilities will be required to be provided to the retail tenancy in accordance with the population numbers within the tenancy. |
| **2.4** Accessible Sanitary Facilities | Accessible unisex sanitary compartments must be provided, in accordance with Table F2.4(a) and unisex showers must be provided in accordance with Table F2.4(b), in buildings or parts that are required to be accessible. The details for the provision of disable facilities and the standard, AS 1428.1, are set out in sub-clauses (a) to (i). | **Compliance Readily Achievable**:<br>Design statement and Access Report to be provided at Construction Certificate stage for sanitary facilities to be provided to the retail tenancy. |

**Unisex Accessible WCs**

| **Checklist for Accessible WCs** | |
|---|---|
| Entry Door | The detailing of the circulation at doorways shall comply with the provisions of Clause 13 of AS1428.1:2009 |
| Entry Door | The luminance contrast provisions at the doorway shall comply with the provisions of Clause 13.1 of AS1428.1:2009 |
| Force Required to Operate Door | The force required to operate the door if fitted with a door closer is a maximum of 20N. It is assumed that auto-doors will not be installed |
| Door Hardware | The position of door hardware is to be located between 900-1100mm AFFL. |
| WC Pan Circulation | 1900×2300mm |
| Hand Basin Circulation | 850×1500mm, the basin may encroach a maximum of 100 mm into the circulation space of the adjacent WC pan circulation |
| WC Pan Offset From Side Wall | 450/460 mm |
| WC Pan Offset From Rear Wall | 800±10 mm |
| WC Pan Backrest | To code requirements |
| WC Pan Toilet Seat | The toilet seat will need to be the full round type, securely fixed in position, be rated 250 KG and have a minimum limits contrast of 30% with the background pan, wall or floor against which it is viewed. |
| WC Pan Grab Rails | Grab rail to be mounted 800 mm above finish floor level, length of grab rail to be 1050 mm from rear wall, install 300mm grab rail to left-hand side of the WC pan. It is assumed that the walls to which the grab rails are fixed will have the required 1100N force rating wall reinforcement required by the standard |
| Hand Basin Mounting Height | Top of hand basin to be 800/830 mm above finish floor level |
| Hand Basin Clearances | The clearances around and under the hand basin need to comply with the provisions of clause 15.3 of AES 1428.1:2009. Specific attention is drawn to the plumbing installation where the required clearances under the hand basin necessitate special consideration of the bottle trap associated with the hand basin |
| Hand Basin Selection | The detailing of the hand basin requires the installation of a shelf unit. It may be possible to specify a hand basin that incorporates a shelf section thereby eliminating an additional component to be installed in the USAT |
| Hand Basin Mirror | The mirror is to be flush mounted on the wall above the sink the bottom of the mirror is to be no more than 900 mm above the finish floor level and the top of the mirror is to be a minimum of 1850 mm above the finish floor level |
| Hand Basin Tap | It is recommended that a lever hand basin tap be installed in lieu of the capstan type |
| Toilet Roll Holder | The position of the toilet roll holder is to be in accordance with code requirements |
| Coat Hooks | Coat hooks are to be installed 1200 to 1350 mm above finish floor level and not closer than 500 mm from an internal corner. The coat hook can be installed on the wall or on the back of the door |
| Soap Dispensers/Hand Towel | These items are to be able to be operated by one hand and shall be installed so that the tap or dispenser is not less than 900 and not more than 1100 mm above the finish floor level. |
| Braille Tactile Signage | The detailing of the Braille Tactile Signage will need to comply with the provision of NCC Clause D3.6 and NCC Specification D3.6. The location of the Braille Tactile sign is to be mounted on the latch side wall. The sign is to indicate the handing of the grabrails to the WC Pan. The following is an example of the type of information to be provided in the Braille Tactile Sign. |

| | | |
|---|---|---|
| **F2.5** Construction of Sanitary Compartments | Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend –<br>+ from floor level to the ceiling in the case of a unisex facility; or<br>+ a height of not less than 1.5m above the floor if primary school children are the principal users; or<br>+ 1.8m above the floor in all other cases.<br>The door to a fully enclosed sanitary compartment must open outwards; or slide: or be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2m, measured in accordance with Figure F2.5 between the closet pan within the sanitary compartment and the doorway. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| ***Part F3*** | ***Room Sizes*** | |
| **F3.1**<br>Height of Rooms and Other Spaces. | The ceiling heights are prescribed and should be checked for all classes and parts during assessment or the design process.<br>The ceiling minimum heights for a Class 2 building are as follows:<br>+ Kitchen, laundry or the like – 2.1m<br>+ Corridor or passageway – 2.1m<br>+ A habitable room, excluding kitchen – 2.4m<br>The minimum ceiling heights in a Class 7 building are as follows:<br>+ Generally - 2.4m.<br>+ Corridor, passageways, or the like - 2.1m.<br>+ Carparks (excluding pedestrian areas) – 2.2m<br>+ Accessible and shared parking spaces – 2.5m | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| ***Part F4*** | ***Light & Ventilation*** | |
| **F4.1**<br>Natural Lighting | Natural lighting must be provided in:<br>+ Class 2 buildings – to all habitable rooms. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **F4.2/F4.3**<br>Method and Extent of Achieving Natural Lighting | Windows or the like are to have an aggregate light transmitting area of not less than 10% of the floor area of the room. | **Compliance Readily Achievable**:<br>Details to be included in the design |
| **F4.4**<br>Artificial Lighting | Artificial lighting must be provided in required stairways, passageways, and ramps and where natural light is insufficient. The artificial lighting system must comply with AS/NZS 1680.0.<br>Windows or the like are to have an aggregate light transmitting area of not less than 10% of the floor area of the room.<br>Artificial lighting must be provided where occupants seeking egress in an emergency, in—<br>+ Class 2 buildings — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building.<br>+ Class 7 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |
| **F4.5**<br>Ventilation of Rooms | A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have natural ventilation complying with F4.6 **or** a mechanical or air-conditioning system complying with AS1668.2 and AS/NZS 3666.1. | **Compliance Readily Achievable**:<br>Design statement to be provided at Construction Certificate stage. |

| | | |
|---|---|---|
| | Note: NSW F4.5(b) a mechanical ventilation or air-conditioning system complying with AS 1668.2 – the reference to AS/NZS 2666.1 is deleted from the BCA in NSW as the need to comply with this standard is regulated under the relevant section of the Public Health Act 1991. | |
| **F4.6** Natural Ventilation | Natural ventilation must consist of openings, windows, doors or other devices which can be opened— with a ventilating area not less than 5% of the floor area of the room required to be ventilated. Additionally, open to a suitably sized space open to the sky or an adjoining room in accordance with F4.7. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage. |
| **F4.7** Ventilation Borrowed From Adjoining Rooms | Natural ventilation to a room may come through a window, opening ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within a sole-occupancy unit or the enclosed verandah is common property and be carried out in accordance with the requirements of sub-clauses (a), (b) & (c). | **Noted** |
| **F4.8** Restriction on Position of Water Closets and Urinals | A room containing a water closet pan or urinal must not open directly into a kitchen or pantry, public dining room or restaurant, a dormitory in a Class 3 building, a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand) or a workplace normally occupied by more than 1 person. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage. |
| **F4.9** Airlocks | If a room containing a closet pan or urinal is prohibited under F4.8 form opening directly into another room then the provisions of sub-clauses (a) & (b) apply relating to the requirements of airlocks and mechanical ventilation standards. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage. |
| **F4.11** Carparks | Every storey of a carpark, except an open-deck car park, must have:<br>+ A system of mechanical ventilation complying with AS 1668.2; or<br>+ A system of natural ventilation complying with Section 4 of AS 1668.4. | **Compliance Readily Achievable**: Design statement to be provided at Construction Certificate stage. |
| ***Part F5*** | ***Sound Transmission and Insulation*** | |
| **F5.3** Determination of Impact Sound Insulation Ratings | A floor must have the required value for weighted normalised impact sound pressure level with spectrum adaptation term ($L_{n,w}$) determined in accordance with AS ISO 717.2 using results from laboratory measurements, or comply with Specification F5.2.<br>For a class 9c building a wall must, for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery, or be identical with a prototype that is no less resistant to the transmission of impact sound when tested than a wall listed in Table 2 of Specification F5.2. | **Compliance Readily Achievable**: Design statement and Acoustic Report to be provided at Construction Certificate stage. |
| **F5.4** Sound Insulation Rating of Floors | A floor in a Class 2 building separating sole-occupancy units must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than 62. | **Compliance Readily Achievable**: Design statement and Acoustic Report to be provided at Construction Certificate stage. |
| **F5.5** Sound Insulation Rating of Walls | A wall must have an $R_w + C_{tr}$ (airborne) not less than 50 if it separates SOUs.<br>Where a wall is required to have sound insulation and has a floor or roof above, the wall must continue to the underside of the floor or roof above, or a ceiling that provides the sound insulation required for the wall. | **Compliance Readily Achievable**: Design statement and Acoustic Report to be provided at Construction Certificate stage. |
| **F5.6** Sound Insulation Rating of Internal Services | If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one SOU, the duct or pipe must be separated from the rooms of an SOU by construction with a $R_w + C_{tr}$ (airborne) not less than-<br>+ 40 if the adjacent room is a habitable room (other than a kitchen); or | **Compliance Readily Achievable**: Design statement and Acoustic Report to be provided at Construction Certificate stage. |

| | | |
|---|---|---|
| | + 25 if the adjacent room is a kitchen or non-habitable room.<br>If a storm water pipe passes through a SOU, it must also be separated in accordance with this clause. | |
| **F5.7**<br>Sound Isolation of Pumps | A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump. | **Compliance Readily Achievable**:<br>Design statement and Acoustic Report to be provided at Construction Certificate stage. |
| ***Part F6*** | ***Condensation Management*** | |
| **F6.1**<br>Application of Part | The *Deemed-to-Satisfy Provisions* of this Part only apply to a *sole-occupancy unit* of a Class 2 building and a Class 4 part of a building. | **Compliance Readily Achievable**:<br>Detail to be included in the design. |
| **F6.2**<br>Pliable building membrane | + Where a *pliable building membrane* is installed in an *external wall*, it must—<br>▪ comply with AS/NZS 4200.1; and<br>▪ be installed in accordance with AS 4200.2; and<br>▪ be a vapour permeable membrane for *climate zones* 6, 7 and 8; and<br>▪ be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building.<br>+ Except for single skin masonry and single skin concrete, where a *pliable building membrane* is not installed in an *external wall*, the primary *water control layer* must be separated from *water sensitive materials* by a drained cavity. | **Compliance Readily Achievable**:<br>Detail to be included in the design. |
| **F6.3**<br>Flow rate and discharge of exhaust systems | + An exhaust system installed in a kitchen, bathroom, *sanitary compartment* or laundry must have a minimum flow rate of—<br>▪ 25 L/s for a bathroom or *sanitary compartment*; and<br>▪ 40 L/s for a kitchen or laundry.<br>+ Exhaust from a kitchen must be discharged directly or via a shaft or duct to *outdoor air*.<br>+ Exhaust from a bathroom, *sanitary compartment*, or laundry must be discharged—<br>▪ directly or via a shaft or duct to outdoor air; or<br>▪ to a roof space that is ventilated in accordance with F6.4. | **Compliance Readily Achievable**:<br>Detail to be included in the design. |
| **F6.4**<br>Ventilation of Roof Space | + Where an exhaust system covered by F6.3 discharges directly or via a shaft or duct into a roof space, the roof space must be ventilated to outdoor air through evenly distributed openings.<br>+ Openings required by the above must have a total unobstructed area of 1/300 of the respective ceiling area if the roof pitch is greater than 22°, or 1/150 of the respective ceiling area if the roof pitch is less than or equal to 22°.<br>+ 30% of the total unobstructed area required by the above must be located not more than 900mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by eave vents. | **Compliance Readily Achievable**:<br>Detail to be included in the design. |

| SECTION G | ANCILLARY PROVISIONS | |
|---|---|---|
| **NSW G1.101** Provision for Cleaning of Windows | A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.<br>A building satisfies this requirement where the windows can be cleaned wholly from within the building; or provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| ***Part G2*** | ***Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues*** | |
| **G2.2** Installation of Appliance | Domestic solid-fuel burning appliances must comply with AS/NZS 2918.<br>Boilers and pressure vessels must comply with Specification G2.2. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| ***Part G6*** | ***Occupiable Outdoor Areas*** | |
| **G6.1** Application of Part | The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of the BCA.<br>The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G.<br>Except for G6.2, the Deemed-to-Satisfy Provisions of this Part do not apply to—<br>+ an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4part of a building; or<br>+ an occupiable outdoor area with an area less than 10m$^2$. | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **G6.2** Fire Hazard Properties | Subject to (b), a lining, material or assembly in an occupiable outdoor area must comply with C1.10 as for an internal<br>element.<br>(b) The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C1.10:<br>+ Average specific extinction area.<br>+ Smoke-Developed Index.<br>+ Smoke development rate<br>+ Smoke growth rate index | **Compliance Readily Achievable**:<br>Details to be included into the design. |
| **G6.3** Fire Separation | For the purposes of the Deemed-to-Satisfy Provisions of C2.7, C2.8 and C2.9, a reference to a storey includes an occupiable outdoor area, however a fire wall cannot be used to separate an occupiable outdoor area into different fire compartments. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **G6.4** Provision of Escape | For the purposes of the Deemed-to-Satisfy Provisions of Part D1, a reference to a storey or room includes an occupiable<br>outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **G6.5** Construction of Exits | For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **G6.6** Fire Fighting Equipment | Except for Clause 7(b)(i) of Specification E1.5, for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **G6.7** Lift Installations | For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |

| | | |
|---|---|---|
| **G6.8**<br>Visibility in an Emergency, Exit Signs, and Warning Signs | For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. Ensure exit and emergency lighting comply within occupiable outdoor areas as if they were internal areas. |
| **G6.9**<br>Light and Ventilation | For the purposes of the Deemed-to-Satisfy Provisions of F4.4, F4.8 and F4.9, a reference to a room includes an occupiable outdoor area. | **Compliance Readily Achievable:**<br>Detail to be included in the design. |
| **SECTION J** | **ENERGY EFFICIENCY** | |
| **JV3** | Verification using referenced building | **Compliance Readily Achievable**:<br>We understand that a JV3 report may be provided to achieve compliance in accordance with Section J. |
| **BASIX** | The majority of the requirements under this Section are not required under the NSW variations for Class 2 buildings. Alternatively, a BASIX certificate is to be provided. | **Compliance Readily Achievable**:<br>Design statement and Section J Report to be provided at Construction Certificate stage. |
| **NSW J(A)1**<br>Building Fabric | The provision of insulation of the building envelope will be required in the proposed building, in accordance with Clauses J1.0 to J1.6, and the Tables therein, including Thermal Construction General, Roof and Ceiling Construction, Roof lights, Walls, Glazing and Floors. Design details and/or certification of design will be required to be provided in this regard. | **Compliance Readily Achievable**:<br>Design statement and Section J Report to be provided at Construction Certificate stage. |
| **NSW J(A)2**<br>Building Sealing | The proposed building envelope will be required to be sealed to prevent air infiltration in accordance with the requirements of Clauses J3.0 to J3.6. Details or certification that the proposed building design complies with the requirements of Part J3 is required to be provided | **Compliance Readily Achievable**:<br>Design statement and Section J Report to be provided at Construction Certificate stage. |
| **NSW J(A)3**<br>Air-Conditioning & Ventilation Systems | Details and/or design certification which confirm that any proposed air-conditioning system or unit within the proposed building achieves compliance with the relevant requirements of Part J5 will be required to be provided from the mechanical engineer. | **Compliance Readily Achievable**:<br>Design statement and Section J Report to be provided at Construction Certificate stage. |
| **NSW J(A)4**<br>Hot Water Supply | Details and/or design certification which confirm that any proposed hot water supply system within the proposed building achieves compliance with the relevant requirements of Part J7 (Section 8 of AS 3500.4) will be required to be provided from the hydraulic engineer | **Compliance Readily Achievable**:<br>Design statement and Section J Report to be provided at Construction Certificate stage. |

## APPENDIX 2- FIRE SAFETY SCHEDULE

The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of any final Fire Safety Engineering Review.

| Statutory Fire Safety Measure | Design / Installation Standard |
|---|---|
| Access Panels, Doors & Hoppers | BCA Clause C3.13<br>AS 1530.4 – 2014 and Manufacturer's Specifications |
| Alarm Signalling Equipment | AS 1670.3 – 2018 |
| Automatic Fail Safe Devices | BCA Clause D2.21 |
| Automatic Fire Detection & Alarm System | BCA Spec. E2.2a<br>AS 1670.1 – 2018 |
| Automatic Fire Suppression Systems | BCA Spec. E1.5<br>AS 2118.1 – 2017 or AS 2118.6 – 2012 |
| Building Occupant Warning System activated by the Sprinkler System and Smoke Detection and Alarm System | BCA Spec. E1.5<br>Clause 8 and / or Clause 3.22 of AS 1670.1 – 2018 |
| Emergency Lifts | BCA Clause E3.4<br>AS 1735.2 – 2001 |
| Emergency Lighting | BCA Clause E4.2 & E4.4<br>AS 2293.1 – 2018 |
| Emergency Evacuation Plan | AS 3745 - 2010 |
| Emergency Warning Intercom System (EWIS) | BCA E4.9<br>AS1670.4 - 2018 |
| Exit Signs | BCA Clauses E4.5, NSW E4.6 & E4.8<br>AS 2293.1 – 2018 |
| Fire Control Room | BCA Spec E1.8 |
| Fire Blankets | AS 3504 – 1995 & AS2444 – 2001 |
| Fire Dampers | BCA Clause C3.15<br>AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 and Manufacturer's Specification |
| Fire Doors | BCA Clause C2.12, C2.13, C3.2, C3.4, C3.5, C3.8 & C3.11<br>AS 1905.1 – 2015 and Manufacturer's Specification |
| Fire Hose Reels | BCA Clause E1.4<br>AS 2441 – 2005 |
| Fire Hydrant Systems | BCA Clause E1.3<br>AS 2419.1 – 2005 |
| Fire Seals | BCA Clause C3.15,<br>AS 1530.4 – 2014 & AS 4072.1 – 2014 and Manufacturer's Specification |
| Fire Windows | BCA Spec C3.4 |
| Lightweight Construction | BCA Clause C1.8<br>AS 1530.4 – 2014 and Manufacturer's Specification |
| Mechanical Air Handling Systems<br>(Automatic Shutdown) | BCA Clause E2.2<br>AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012 |
| Paths of Travel | EP&A Regulation Clause 186 |
| Portable Fire Extinguishers | BCA Clause E1.6<br>AS 2444 – 2001 |
| Required Exit Doors<br>(Power Operated) | BCA Clause D2.19(b) |
| Smoke Alarms | BCA Spec E2.2a<br>AS 3786 – 2014 |
| Smoke Hazard Management Systems<br>+ Stair Pressurisation<br>+ Zone Pressurisation System | BCA Part E2<br>AS/NZS 1668.1 –2015 |

| Statutory Fire Safety Measure | Design / Installation Standard |
|---|---|
| Warning & Operational Signs | BCA Clause D2.23, D3.6, E3.3<br>AS 1905.1 – 2015 & Section 183 of the EP&A Regulation 2000 |

## APPENDIX 3- FRL OF BUILDING ELEMENTS – TYPE A CONSTRUCTION

# TYPE A

| Building Element | Class of building — FRL: (in minutes) *Structural adequacy/Integrity/Insulation* | | | |
|---|---|---|---|---|
| | **2, 3 or 4 part** | **5, 7a or 9** | **6** | **7b or 8** |
| **EXTERNAL WALL** (including any column and other building element incorporated within it) or other external building element, where the distance from any *fire-source feature* to which it is exposed is— | | | | |
| For *loadbearing* parts— | | | | |
| less than 1.5 m | 90/ 90/ 90 | 120/120/120 | 180/180/180 | 240/240/240 |
| 1.5 to less than 3 m | 90/ 60/ 60 | 120/ 90/ 90 | 180/180/120 | 240/240/180 |
| 3 m or more | 90/ 60/ 30 | 120/ 60/ 30 | 180/120/ 90 | 240/180/ 90 |
| For non-*loadbearing* parts— | | | | |
| less than 1.5 m | –/90/ 90 | –/120/120 | –/180/180 | –/240/240 |
| 1.5 to less than 3 m | –/60/ 60 | –/90/ 90 | –/180/120 | –/240/180 |
| 3 m or more | –/–/– | –/–/– | –/–/– | –/–/– |
| **EXTERNAL COLUMN** not incorporated in an *external wall*— | | | | |
| For *loadbearing* columns— | 90/–/– | 120/–/– | 180/–/– | 240/–/– |
| For non-*loadbearing* columns— | –/–/– | –/–/– | –/–/– | –/–/– |
| **COMMON WALLS and FIRE WALLS—** | 90/ 90/ 90 | 120/120/120 | 180/180/180 | 240/240/240 |
| **INTERNAL WALLS—** | | | | |
| *Fire-resisting* lift and stair *shafts*— | | | | |
| *Loadbearing* | 90/ 90/ 90 | 120/120/120 | 180/120/120 | 240/120/120 |
| Non-*loadbearing* | –/ 90/ 90 | –/120/120 | –/120/120 | –/120/120 |
| Bounding *public corridors*, public lobbies and the like— | | | | |
| *Loadbearing* | 90/90/ 90 | 120/–/– | 180/–/– | 240/–/– |
| Non-*loadbearing* | –/60/ 60 | –/–/– | –/–/– | –/–/– |
| Between or bounding *sole-occupancy units*— | | | | |
| *Loadbearing* | 90/90/ 90 | 120/–/– | 180/–/– | 240/–/– |
| Non-*loadbearing* | –/60/ 60 | –/–/– | –/–/– | –/–/– |
| Ventilating, pipe, garbage, and like *shafts* not used for the discharge of hot products of combustion— | | | | |
| *Loadbearing* | 90/90/ 90 | 120/ 90/ 90 | 180/120/120 | 240/120/120 |
| Non-*loadbearing* | –/90/90 | –/90/90 | –/120/120 | –/120/120 |
| **OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES and COLUMNS—** | 90/–/– | 120/–/– | 180/–/– | 240/–/– |
| **FLOORS** | 90/90/ 90 | 120/120/120 | 180/180/180 | 240/240/240 |
| **ROOFS** | 90/60/ 30 | 120/60/ 30 | 180/60/ 30 | 240/90/ 60 |

Notes:

1. Any lightweight construction in a fire wall or an internal wall required to have an FRL is to comply with Specification C1.8.
2. A loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from; concrete or masonry.
3. The method of attaching or installing a finish, lining, ancillary element, or service installation to a building must not reduce the fire-resistance of that element to below that required.

4. Fire rated shafts are required to be enclosed at the top and bottom by construction having an FRL of not less than what the shaft requires (in both directions)
5. The concession granted under clause C3.5 results in the roof of the building not being required to be fire rated (the building is provided throughout with sprinklers). Notwithstanding, the Atrium provisions override this general concession in BCA Specification C1.1.
6. Lift shafts are required to be enclosed at the top of the shaft with fire rated construction having an FRL of 120/120/120.
7. Fire isolated exits are to be provided with a fire rated "lid" that achieves an FRL of 120/120/120.
8. Where roof lights are proposed they are required to be located not less than 3 metres from a roof light in an adjoining fire separated part; and must not be more than 20% of the area of the roof.
9. Any loadbearing internal walls or loadbearing fire walls are to be masonry or concrete.
10. External walls must be non-combustible construction. Non-loadbearing parts of an external wall that are more than 3m from a fire source feature need not be fire rated.
11. Internal columns in this building (being less than 25m in effective height) that are in the storey immediately below the roof, can be constructed as follows:
    a. Building with a rise in storeys exceeding 3 – FRL 60/60/60
    b. *Building with a rise in storeys not exceeding 3 – no FRL*

# Accessibility Design Review Report – DA

| | |
|---|---|
| **Project Title:** | **Proposed Multi-Storey Residential Development**<br>**2-10 Leicester Ave, Strathfield** |
| **Job Number:** | **20235** |
| **Date:** | **05 August 2021** |
| **Prepared For:** | **Leice Pty Ltd** |
| **Report Version:** | **ADR-DA_20235_v1.3** |

ABE Consulting Pty Ltd | ABN 69 163 787 826
Ph: 02 8065 0400
Level 1, 280 Norton Street, Leichhardt NSW 2040
info@abeconsulting.com.au | www.abeconsulting.com.au

1.0 INTRODUCTION ....3
1.1 Project Information & Classification ....3
1.2 Purpose of the Report ....3
1.3 Report Scope ....3
1.4 Limitations of the Report ....4
2.0 ACCESSIBILITY DESIGN REVIEW ....5
BCA Part D3 – ACCESS FOR PEOPLE WITH DISABILITIES ....6
*Cl. D3.1: General building access requirements ....6*
*Cl. D3.2: Access to Buildings ....7*
*Cl. D3.3: Parts of buildings to be accessible ....7*
*Cl. D3.4: Exemptions ....8*
*Cl. D3.5: Accessible carparking ....9*
*Cl. D3.6: Signage ....9*
*Cl. D3.7: Hearing augmentation ....10*
*Cl. D3.8: Tactile indicators ....10*
*Cl. D3.9: Wheelchair seating spaces in Class 9b assembly buildings ....10*
*Cl. D3.10: Swimming pools ....10*
*Cl. D3.11: Ramps ....11*
*Cl. D3.12: Glazing on an accessway ....11*
BCA Part E3 – LIFT INSTALLATIONS ....11
*Cl. E3.6: Passenger lifts ....11*
BCA Part F2 – SANITARY AND OTHER FACILITIES ....12
*Cl. F2.4: Accessible sanitary facilities ....12*
3.0 ADAPTABLE HOUSING REVIEW ....13
Adaptable Housing Review ....14
4.0 ACCESSIBILITY COMPLIANCE STATEMENT ....19
5.0 REVIEW PROVIDED BY ....19

| Report Status | Revision | Date | Details |
|---|---|---|---|
| Draft | 1.0 | 14 September 2020 | For review and comment |
| Final | 1.1 | 22 September 2020 | For DA documentation |
| Final (Amendment) | 1.2 | 19 July 2021 | Amended design review |
| Final (Amendment) | 1.3 | 05 August 2021 | Amended design review |

# ACCESSIBILITY DESIGN REVIEW

**PROJECT:** Proposed Multi-Storey Residential Development
**LOCATION:** 2-10 Leicester Ave Strathfield

## 1.0 INTRODUCTION

This report provides an Accessibility Design Review of the proposed residential development located at the above location.

### 1.1 Project Information & Classification

The proposed development consists of an 18-storey residential building (202 apartments) over 4 levels of basement carpark.

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

| Building/Level/Part | Building Classification | Use |
|---|---|---|
| Basement 1 - 4 | Class 2 | Residential Carparking |
| Ground Floor - Level 17 | Class 2 | Residential Apartments |
| Ground Floor (northern corner) | Class 6 | Retail |

### 1.2 Purpose of the Report

Leice Pty Ltd engaged the services of ABE Consulting as Accessibility Consultants for this project to undertake an assessment of the proposed design documentation in relation to the accessibility related requirements as identified in Part 1.3 of this report for submission to the Local Council as part of the Development Application documentation.

### 1.3 Report Scope

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

- Part D3, Clause F2.4 and Clause E3.6 'deemed-to-satisfy' (DtS) requirements of the Building Code of Australia 2019 (BCA)
- The Disability (Access to Premises - Buildings) Standards 2010;
- The relevant adaptable housing provisions of the Local Council DCP being – City of Canada Bay DCP 2020 (Amendment 13).

This Accessibility Design Review is based on –

- Architectural design documentation prepared by SJB Architects, Project No. 6242, as follows –

| Dwg# | Title | Date - Rev |
|---|---|---|
| DA0206 | FLOOR PLAN B4 | 05.08.2021 - 10 |
| DA0207 | FLOOR PLAN B3 | 05.08.2021 - 10 |
| DA0208 | FLOOR PLAN B2 | 05.08.2021 - 10 |
| DA0209 | FLOOR PLAN B1 | 05.08.2021 - 10 |
| DA0210 | FLOOR PLAN G | 05.08.2021 - 10 |

| | | |
|---|---|---|
| DA0211 | FLOOR PLAN L1 | 05.08.2021 - 10 |
| DA0212 | FLOOR PLAN L2 | 05.08.2021 - 10 |
| DA0213 | FLOOR PLAN L3 | 05.08.2021 - 10 |
| DA0214 | FLOOR PLAN L4 | 05.08.2021 - 10 |
| DA0215 | FLOOR PLAN L5 | 05.08.2021 - 10 |
| DA0216 | FLOOR PLAN L6 | 05.08.2021 - 10 |
| DA0217 | FLOOR PLAN L7 | 05.08.2021 - 10 |
| DA0218 | FLOOR PLAN L8 | 05.08.2021 - 10 |
| DA0219 | FLOOR PLAN L9 | 05.08.2021 - 10 |
| DA0220 | FLOOR PLAN L10 | 05.08.2021 - 10 |
| DA0221 | FLOOR PLAN L11 | 05.08.2021 - 10 |
| DA0222 | FLOOR PLAN L12 | 05.08.2021 - 10 |
| DA0223 | FLOOR PLAN L13 | 05.08.2021 - 10 |
| DA0224 | FLOOR PLAN L14 | 05.08.2021 - 10 |
| DA0225 | FLOOR PLAN L15 | 05.08.2021 - 10 |
| DA0226 | FLOOR PLAN L16 | 05.08.2021 - 10 |
| DA0227 | FLOOR PLAN L17 | 05.08.2021 - 10 |
| DA1401 | ADAPTABLE UNIT TYPES | 05.08.2021 - 10 |

- The Building Code of Australia 2019 (BCA) prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019, prepared by the Australian Building Codes Board.
- The Disability (Access to Premises – Building) Standards 2010.
- Australian Standards AS1428.1-2009 - Design for Access and Mobility - Part 1: General requirements for access - New building work.
- Australian Standards AS1428.4.1-2009 - Design for Access and Mobility - Part 4: Means to assist the orientation of people with vision impairment— Tactile ground surface indicators.
- Australian Standards AS2890.6-2009 – Off-street parking for people with disabilities.
- Australian Standards AS4299 – Class C Adaptable Housing checklist.

## 1.4 Limitations of the Report

The Disability Discrimination Act (DDA - 1992) is a Federal Government legislation enacted in 1993 that seeks to ensure all new building infrastructure, refurbishments, services and transport projects provide functional, equitable and independent accessibility. The DDA is 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.

A key component of compliance to the DDA is the use of the Disability (Access to Premises - Buildings) Standards 2010, Part D3, Clause F2.4 and Clause E3.6 of the Building Code of Australia 2019 (BCA) and the relevant referenced standards primarily being Australian Standards Suite AS1428 and Australian Standards AS2890.6 – Off-street parking for people with disabilities. The AS 1428 series details technical requirements related to design for access and mobility.

The Building Code of Australia has adopted key accessibility and DDA legislation into the 2011 BCA. In particular adherence to the Access to Premises Standard (2010); AS1428.1 2009; AS1428.4.1 2009 and AS2890.6 2009 has become mandatory. However, compliance with these elements does not necessarily

result in compliance with the Disability Discrimination Act if the elements of equality, independence and functionality remain compromised within an environment.

This report does not include or assess the following –

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

## 2.0 ACCESSIBILITY DESIGN REVIEW

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

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

**Capable of Complying (CoC) –** Spatial allowance has been made to accommodate compliance where the specification provided has been satisfied.

**Compliance Departure (CD) –** A compliance departure with the DtS provisions of the BCA.

**Design Detail (DD) –** A detail commentary/specification is offered within the report.

**Performance Solution (PSR) –** A Performance Solution Report is being pursued to justify the compliance departures

**Not Applicable (N/A) –** Not applicable or not relevant to the project. Commentary provided.

**Informational (Info) –** Provided for informational purposes

**Interpretation Note(s) –**

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

## BCA Part D3 – ACCESS FOR PEOPLE WITH DISABILITIES

## Cl. D3.1: General building access requirements

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| Buildings and parts of the building must be accessible as required by Table D3.1, unless exempted by D3.4. Table D3.1 requires that access is provided –<br><br>**Class 2 –**<br><br>• From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.<br>• To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.<br>• Where a ramp complying with AS 1428.1 or a passenger lift is installed—<br>a) to the entrance doorway of each sole-occupancy unit; and<br>b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.<br><br>**Class 6 –**<br><br>• To and within all areas normally used by the occupants. | Doorways<br><br>Ensure all doorways along an accessway have a clear door opening width no less than 850mm clear and are provided with door circulation spaces as prescribed by AS1428.1-2009<br><br>Design Detail:<br><br>Plans indicate doorway reveals approx. 300mm thick which will increase the difficulty of accessing and operating the latch. It is recommended to centre the door leaf within the reveal. This is a technical compliance departure for surface mounted sliding doors.<br><br>Design Detail:<br><br>Access is required to bin rooms and garbage shoots provided for use by residents. Ensure doorway clearance and circulation space is provided to such rooms. Doors handles to garbage shoots shall not be located >500mm to an internal corner.<br><br> <br><br><br>Ensure access to the bin room or a garbage chute is provided on the ground floor for residents.<br><br>Design Detail:<br><br>Ensure level transitions or compliant ramps and landings are provided to common use terraces/balconies. | CoC |

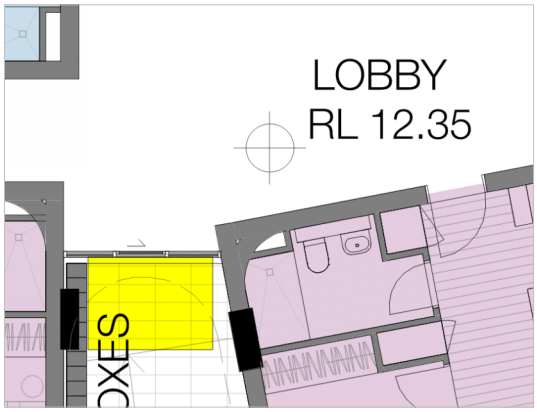
| | | |
|---|---|---|
| | Compliance is readily achievable with minor design development and/or specification to BCA & AS1428.1-2009 at the Detailed Design Stage. | |

## Cl. D3.2: Access to Buildings

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| An accessway must be provided to a building required to be accessible –<br>• from the main points of pedestrian entry at the allotment boundary; and<br>• from another accessible building connected by a pedestrian link; and<br>• from any required accessible carparking space on the allotment.<br>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –<br>• through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and<br>• in a building with a floor area more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.<br>except for pedestrian entrances serving only areas exempted by D3.4. | Access is required from the main points of pedestrian entrance at the allotment boundary, from associated accessible carparking spaces and from another accessible building connected by a pedestrian link to the subject building.<br>Refer to the D3.3 assessment for compliance departures associated with the Principal Pedestrian Entries.<br>Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. | CoC |

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

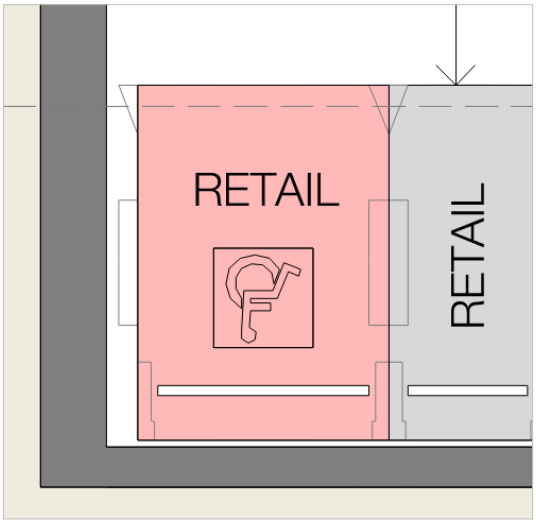
| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| In a building required to be accessible every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with – | | |
| • for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and | Design Detail:<br>Ensure one of the following forms of abutment from AS1428.1-2009 will be provided to either side of all walkways.<br>• The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the | CoC |

| | | |
|---|---|---|
| | walkway and extend horizontally for a minimum of 600mm;<br>• Kerb in accordance with Figure 18 (*AS1428.1*);<br>• Kerb rail and handrail in accordance with Figure 19; or<br>• A wall not less than 450 mm in height.<br><br>Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. | |
| • for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and | Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. | CoC |
| • for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and | *N.B. – Cl. D2.17(a)(vi) of the BCA is generally assessed by the PCA / BCA Consultant. Where assessment of this Clause is required by this office please confirm and provide detail.* | DD |
| Accessways must have—<br><br>• passing spaces complying with AS 1428.1 at maximum 20 m intervals where a direct line of sight is not available<br>• turning spaces complying with AS 1428.1 at 20m intervals or within 2m of the termination of an accessway. | Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage.<br><br>  | CoC |

## Cl. D3.4: Exemptions

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| The following areas are not required to be accessible –<br><br>• An area where access would be inappropriate because of the particular purpose for which the area is used.<br>• An area that would pose a health or safety risk for people with a disability.<br>• Any path of travel providing access only to an area exempted by (a) or (b). | Exemptions are to be reviewed on a case by case basis. We highlight that the following parts of the building have been offered an access exemption (not exhaustive) –<br><br>• Storage rooms<br>• Plant rooms<br>• Caretaker only areas | Info |

## Cl. D3.5: Accessible carparking

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| Accessible carparking spaces are to be provided in accordance with Table D3.5 of the BCA in a Class 7a building and a carparking area on the same allotment as a building required to be accessible.<br><br>Accessible carparking spaces –<br><br>• are to comply with AS2890.6-2009.<br>• 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 | <u>Class 6</u><br><br>1 x retail spaces are indicated on plan.<br><br>The space indicated does not comply with current standards and will need to be amended at the detailed design stage.<br><br>  <br><br><br>Accessible parking spaces need not be line marked as such when 5 or less spaces are provided.<br><br>Shared zone line marking and a bollard are still required.<br><br><u>Class 2</u><br><br>The BCA does not prescribe the provision of accessible carparking spaces for Class 2 buildings.<br><br>Refer to Part 3.0 of this report for residential accessible/adaptable carparking spaces requirements. | CoC |

## Cl. D3.6: Signage

| DtS Provision | Status |
|---|---|
| In a building required to be accessible signage complying with Spec. D3.6, AS1428.1-2009 and incorporating the appropriate recognised symbol (as appropriate) for persons with disability must be provided as follows —<br><br>• braille and tactile signage must identify each sanitary facility and space with hearing augmentation; | DD |

| | |
|---|---|
| • braille and tactile signage must identify each door required by E4.5 to be provided with an exit sign and state "**Exit**" and "**Level**" followed by the floor level number;<br>• signage must be provided within a room containing a hearing augmentation system identifying; the type of system, the area covered within the room and if receivers are being used and where the receivers can be obtained;<br>• signage must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use;<br>• signage to identify an ambulant accessible sanitary facility must be located on the door of the facility;<br>• directional signage where a pedestrian entrance is not accessible.<br>• directional signage where a bank of sanitary facilities are not provided with an accessible sanitary facility.<br><br>A design compliance certificate should be obtained from the signage designer/contractor to confirm compliance with the relevant provisions of the BCA and Australian Standards. | |

## Cl. D3.7: Hearing augmentation

**N/A –** No areas requiring hearing augmentation have been indicated on plan.

## Cl. D3.8: Tactile indicators

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| Tactile ground surface indicators complying with sections 1 and 2 of AS1428.4.1.-2009 must be provided to warn people who are blind or have a vision impairment that they are approaching –<br><br>• a stairway, other than a fire-isolated stairway;<br>• an escalator/moving walk;<br>• a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp;<br>• in the absence of a suitable barrier an overhead obstruction less than 2 m and where an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building. | Compliance is readily achievable with minor design development and/or specification to AS1428.4.1-2009 at the Detailed Design Stage. | CoC |

## Cl. D3.9: Wheelchair seating spaces in Class 9b assembly buildings

**N/A –** No fixed seating is proposed

## Cl. D3.10: Swimming pools

N/A - No swimming pool proposed

## Cl. D3.11: Ramps

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| On an accessway, a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and a landing for a step ramp must not overlap a landing for another step ramp or ramp. | Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. | DD |

## Cl. D3.12: Glazing on an accessway

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

# BCA Part E3 – LIFT INSTALLATIONS

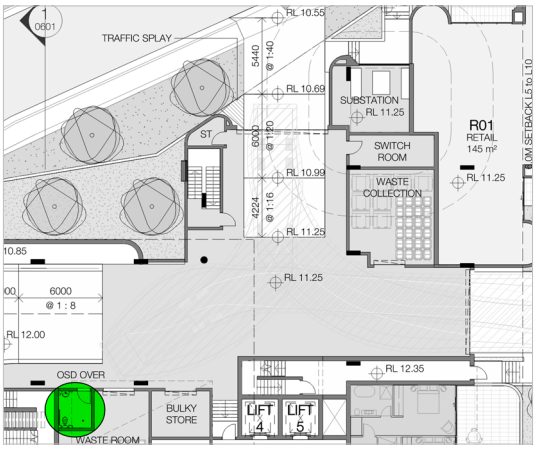
## Cl. E3.6: Passenger lifts

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| Every passenger lift must –<br>• be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and<br>• have accessible features in accordance with Table E3.6b; and<br>• not rely on a constant pressure device for its operation if the lift car is fully enclosed. | The proposed passenger lifts shall have the following features –<br>• Handrail complying with the mandatory handrail provisions of AS1735.12,<br>• Lift floor dimensions not less than 1,100mm x 1,400mm where the lift vertical travel is less than 12m,<br>• Lift floor dimensions not less than 1,400mm x 1,600mm where the lift vertical travel is more than 12m,<br>• Minimum clear door opening complying with AS1735.12,<br>• Passenger protection system complying with AS1735.12,<br>• Lift landing doors at the upper landing,<br>• Lift car and landing control buttons complying with AS1735.12,<br>• Lighting in accordance with AS1735.12,<br>• Automatic audible/visual information within the lift car and at the landings as prescribed,<br>• 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.<br>A design compliance certificate should be obtained from the lift designer to confirm | DD |

| | | |
|---|---|---|
| | compliance with the relevant provisions of the BCA and Australian Standards. | |

## BCA Part F2 – SANITARY AND OTHER FACILITIES

## Cl. F2.4: Accessible sanitary facilities

| DtS Provision | Comment(s)/Recommendation(s) | Status |
|---|---|---|
| In a building required to be accessible:<br>• Accessible unisex sanitary compartments must be provided as in accordance with Table F2.4(a),<br>• Accessible unisex showers must be provided in accordance with Table F2.4(b),<br>• At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females.<br>• An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate disposal of sanitary towels.<br>• Circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with AS1428.1.<br>• An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and<br>• Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible. | An accessible unisex sanitary compartment appears to be provided within the ground floor loading dock/waste area. Ensure an accessway is provided to this facility if it is for retail use.<br>  <br>Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. | CoC |

## 3.0 ADAPTABLE HOUSING REVIEW

The following is a summary of the 'adaptable housing' requirements prescribed by the relevant provisions of the Local Council DCP as identified in Section 1 of this report and reproduced below –

***Rates of adaptable housing units and parking spaces to be provided***

*Adaptable housing units should be constructed to meet the performance requirements and are to include the essential features as required by AS4299 at the rates specified in Table C-A for developments that include a lift. Where the total number of adaptable housing units to be provided is not a whole figure, the figure is to be rounded up to the next whole figure.*

**Table C-A Adaptable housing ratios for developments including a lift**

| Total number of dwellings | Number of adaptable dwellings to be provided |
|---|---|
| Between 0 and 7 inclusive | Nil |
| Between 8 and 14 | 1 dwelling |
| Between 15 and 21 | 2 dwellings |
| Between 21 and 29 | 3 dwellings |
| 30 or more | 15% of total dwellings |

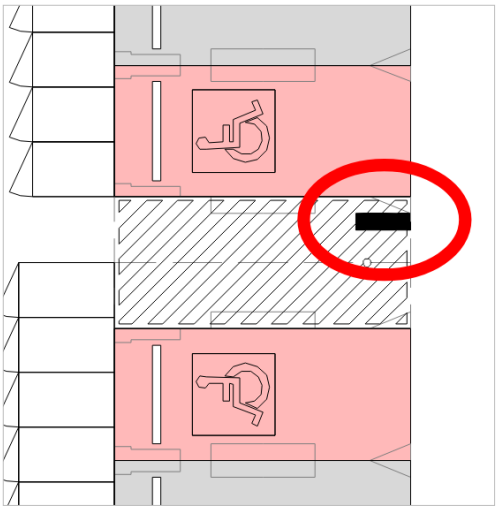
| Requirement | Comments(s) |
|---|---|
| The development is proposed with a total of 202**x** Class 2 apartments. **31x** (15%) adaptable apartment are required.<br><br>Adaptable units are required to have an associated parking space. **31x** adaptable parking spaces are required. | • **31x** Adaptable housing units are nominated on plan.<br><br>• **31x** parking spaces designed to AS2890.6 are indicated on plan for residential use. |

## Adaptable Housing Review

To comply with the requirements of AS4299, adaptable housing units must include all 'essential' features listed at Appendix A of AS4299. A dwelling that satisfies this requirement can be certified as an Adaptable House Class C - AS4299-(1995).

The following table provides a review against the required AS4299 – Class C adaptable housing units which includes all 'essential' features –

| Item No | Description | Clause No. | Comments |
|---|---|---|---|
| **DRAWINGS** | | | |
| 1 | Provision of drawings showing the housing unit in its pre-adaption and post-adaption stages along with a description of how the adaptation is to be achieved shall also be provided. | 2.3 | Pre & Post adaptation plans have been provided.<br>A passenger lift is provided for vertical transport and is to comply with BCA Cl. E3.6.<br>The adaptable process is readily capable of complying.<br>Capped services are to be provided where required in order to provide a suitable adaptation process. |
| **SITING** | | | |
| 2 | A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1 | 3.3.2 | Refer to Cl. D3.1 & D3.3 for compliance departures related to access from street frontage and vehicle parking.<br>Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. |
| **LETTERBOXES IN ESTATE DEVELOPMENTS** | | | |
| 3 | Letterboxes to be on a hard standing area connected to accessible pathway | 3.8 | Compliance is readily achievable with minor design development and/or specification to AS1428.1-2009 at the Detailed Design Stage. |
| **PRIVATE CAR ACCOMODATION** | | | |
| 4 | Carparking space or garage min. area 6.0m x 3.8m. | 3.7.2 | **31x** adaptable carparking spaces designed to either AS4299 & AS2890.6-2009 are indicated within the basement.<br>These spaces are to be allocated to the adaptable housing units and need not be |

| | | | |
|---|---|---|---|
| | | | identified with the international symbol for access (wheelchair symbol).<br><br><u>Design Detail:</u><br><br>Structural columns are indicated within the shared zones of some adaptable parking spaces. These columns will need to be relocated to the bollard position and addressed via Performance Verification report at CC or removed from the shared zones entirely.<br><br>  |
| **ACCESSIBLE ENTRY** | | | |
| 5 | Accessible entry | 4.3.1 | Complaince is readily achievable. |
| 6 | Accessible entry to be provided with a landing outside the door with a maximum fall of 1:40 with a low threshold if not protected from weather by a minimum of 1,600mm overhang. | 4.3.2 | N/A – entrance doors are internal. |
| 7 | Threshold to be low-level | 4.3.2 | Where threshold ramps are proposed to service external areas, they must comply with AS1428.1 and AS4299. |
| 8 | Landing to enable wheelchair manoeuvrability | 4.3.2 | Complaince is readily achievable. |
| 9 | Accessible entry door to have 850 mm min. clearance | 4.3.1 | Complaince is readily achievable. |
| 10 | Door lever handles and hardware to AS1428.1 clause 11.1 door to be unlocked and opened with one hand.<br><br>Where lever handles are provided, the clearance between the handle and the | 4.3.4 | To be provided. |

| | | | |
|---|---|---|---|
| | back plate or door face at the centre of the handle shall be not less than 35 mm and not more than 45 mm. | | |
| **INTERIOR: GENERAL** | | | |
| 11 | Internal doors to have 820 mm min. clearance | 4.3.3 | Dimensions of the clear opening widths of all doors are to be shown on plan. It is to be noted that AS4299 is superseded in this case by AS1428.1 which requires the appropriate **850mm** clear opening width of all accessible doors.<br>Internal doors to areas required to be adaptable are required to comply including –<br>• Adaptable bedroom<br>• Sanitary facility<br>• Kitchen<br>• Laundry<br>Complaince is readily achievable. |
| 12 | Internal corridors min. Width of 1000 mm | 4.3.7 | Complaince is readily achievable. |
| 13 | Provision for compliance with AS1428.1 for door approaches | 4.3.7 | Complaince is readily achievable. |
| **LIVING ROOM & DINING ROOM** | | | |
| 14 | Provision for circulation space of min. 2250 mm diameter | 4.7.1 | Complaince is readily achievable. |
| 15 | Telephone adjacent to GPO | 4.7.4 | To be provided. |
| 16 | Potential illumination level min. 300 lux | 4.10 | To be provided. |
| **KITCHEN** | | | |
| 17 | Minimum width 2.7 m (1,550 mm clear between benches) | 4.5.2 | Floor & wall surfaces are to extend under the cabinets with sufficient capped services to allow island benches to be removed/relocated in the future. |
| 18 | Provision for circulation at doors to comply with AS1428.1 | 4.5.1 | N/A – No kitchen door is proposed |
| 19 | Provision for benches planned to include at least one worksurface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. Refer to Figure 4.8 | 4.5.5 | Kitchen cabinets, benches and appliances are capable of being removed/relocated to achieve compliance.<br>Capped services are required where appliances, electric features or |

| | | | |
|---|---|---|---|
| | | | plumbing/electrical fixtures are to be relocated. |
| 20 | Refrigerator adjacent to work surface | 4.5.5 | As per Item 19. |
| 21 | Kitchen sink adjustable to heights from 750mm to 850mm or replaceable | 4.5.6 | As per Item 19. |
| 22 | Kitchen sink bowl max. 150mm deep | 4.5.6 | As per Item 19. |
| 23 | Tap set capstan or lever handles or lever mixer | 4.5.6(e) | As per Item 19. |
| 24 | Tap set located within 300mm of front of sink | 4.5.6(e) | As per Item 19. |
| 25 | Cooktops to include either front or side controls with raised cross bars | 4.5.7 | As per Item 19. |
| 26 | Cooktops to include isolating switch or gas stop valves which can be easily and safely operated while the cooktop is in use. | 4.5.7 | As per Item 19. |
| 27 | Worksurface min. 800 mm length adjacent to cooktop at same height. | 4.5.7 | As per Item 19. |
| 28 | Oven located adjacent to an adjustable height or replaceable work surface | 4.5.8 | As per Item 19. |
| 29 | GPOs to comply with AS1428.1. At least one double GPO within 300 mm of front of worksurface | 4.5.11 | As per Item 19. |
| 30 | GPO for refrigerator to be easily reachable when the refrigerator is in its operating position | 4.5.11 | As per Item 19. |
| 31 | Slip-resistant floor surface | 4.5.4 | To be provided. |
| **MAIN BEDROOM** | | | |
| 32 | At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS1428.2 | 4.6.1 | Compliance is readily achievable. |
| **BATHROOM** | | | |
| 33 | Provision for bathroom area to comply with AS1428.1; circulation spaces at doors and around WC pans, washbasins and showers shall be able to be provided without major plumbing changes. | 4.4.1 | Capped services and wall reinforcement are to be provided to allow future adaptation of the sanitary facility.<br>Compliance is readily achievable. |
| 34 | Slip-resistant floor surface | 4.4.2 | To be provided. |

| | | | |
|---|---|---|---|
| 35 | Shower recess-no hob. Minimum size 1160 x 1100 to comply with AS1428.1 (refer Figures 4.6 and 4.7) | 4.4.4(f) | As per Item 33. |
| 36 | Shower area waterproofed to AS3740 with floor to fall to waste | 4.4.4(f) | As per Item 33. |
| 37 | Recessed soap holder | 4.4.4(f) | Compliance is readily achievable. |
| 38 | Shower taps positioned for easy reach to access side of shower sliding track | 4.4.4(f) | As per Item 33. |
| 39 | Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision) | 4.4.4(h) | As per Item 33. |
| 40 | Provision for grabrail in shower (refer to Figure 4.7 in AS 4299) to comply with AS1428.1 | 4.4.4(h) | As per Item 33. |
| 41 | Taps sets to be capstan or lever handles with single outlet | 4.4.4(c) | As per Item 33. |
| 42 | Provision for washbasin with clearances to comply with AS1428.1 | 4.4.4(g) | As per Item 33. |
| 43 | Double GPO beside mirror | 4.4.4(d) | As per Item 33. |
| **TOILET** | | | |
| 44 | Provision of either 'visitable toilet' or accessible toilet | 4.4.3 | Complaince is readily achievable. |
| 45 | Provision to comply with AS1428.1 | 4.4.1 | Capped services are to be provided to allow for future adaptation.<br>Complaince is readily achievable. |
| 46 | Location of WC pan at correct distance from fixed walls | 4.4.3 | Capped services are to be provided to allow for future adaptation.<br>Complaince is readily achievable. |
| 47 | Provision for grabrail zone. (refer Figure 4.6) | 4.4.4(h) | Walls to be reinforced to withstand loading of grabrails. |
| 48 | Slip resistant floor surface (vitreous tiles or similar) | 4.4.2 | To be provided. |
| **LAUNDRY** | | | |
| 49 | Circulation at doors to comply with AS1428.1 | 4.8 | Compliance is readily achievable |
| 50 | Provision for adequate circulation space in front of or beside appliances (min. 1550 mm depth) | 4.8 | Compliance is readily achievable |

| | | | |
|---|---|---|---|
| 51 | Provision for automatic washing machine | 4.8(e) | To be provided. |
| 52 | Where a clothes line is provided, an accessible path of travel to this | 4.8(a) | N/A – No clothes lines proposed. |
| 53 | Double GPO | 4.8(g) | To be provided. |
| 54 | Slip-resistant floor surface | 4.9.1 | To be provided. |
| **Door Locks** | | | |
| 55 | Door hardware operable with one hand, located 900-1100 mm above floor | 4.3.4 | To be provided. |

## 4.0 ACCESSIBILITY COMPLIANCE STATEMENT

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

Furthermore, this report has provided an assessment of the proposed adaptable housing units against the AS4299-1995 Class C adaptable housing unit checklist provisions prescribed by the associated local Council DCP.

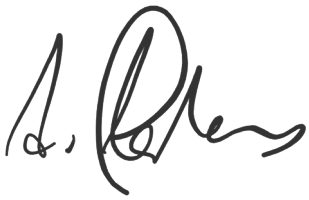
Following this review and with the adoption of the recommendations/Performance Solutions proposed, ABE Consulting are able to confirm that at the Development Application stage of design, the development can readily achieve compliance with the aforementioned BCA provisions.

## 5.0 REVIEW PROVIDED BY

**Prepared by:**

**Sam Freeman**
Accessibility Consultant

**Reviewed by:**



**Abe Strbik**
Director
Member - Association of Consultants in Access Australia # 405

**DISCLAIMER**

This document has been prepared solely for the use of our client in accordance with our current professional standards and as per our agreement for providing compliance consulting services. Although all due care has been taken in the preparation of this document, no warranty is given, nor liability accepted (except that required by law) in relation to the information contained within this document. This document represents the opinions of ABE Consulting based on the facts and matters known at the time of preparation of this document. Opinions, judgments and recommendations detailed in this document, which are based on our understanding and interpretation of current statutory and regulatory obligations and standards, should not be construed as legal opinions.

# DICKENS SOLUTIONS

# REVISED
# WASTE MANAGEMENT PLAN

## LEICE PTY LTD

## RESIDENTIAL FLAT BUILDING
## @
## 2-10LEICESTER AVENUE
## STRATHFIELD

## JULY 2021

**DISCLOSURE STATEMENT**

The information contained in this document has been produced by Dickens Solutions Pty Ltd and is solely for the use of (The Client) for the purpose for which it has been prepared. In preparing this document, Dickens Solutions Pty Ltd undertakes no duty to, nor accepts any responsibility to, any third party that may rely upon this document.

This document and the information contained in the document shall not be copied or reproduced without the consent of Dickens Solutions Pty Ltd, and, or the Client.

**Dickens Solutions Pty Ltd**
**(ABN 41 603 040 446)**
**1214 Botany Road, Botany NSW 2019**
**Telephone (Mb) 0400 388 996**
**Website:** www.dickenssolutions.com.au **E-mail:** garry@dickenssolutions.com.au

# TABLE OF CONTENTS


| PART | SUBJECT | PAGE |
|---|---|---|
| **PART 1 – OVERVIEW & PROPOSAL** | | |
| 1.1 | Introduction | 3 |
| 1.2 | History | 4 |
| 1.3 | Description of Property | 4 |
| 1.4 | Applicants Details | 4 |
| 1.5 | Proposal | 5 |
| **PART 2 – DEMOLITION** | | |
| 2.1 | Demolition | 6 |
| **PART 3 – CONSTRUCTION** | | |
| 3.1 | Construction – Generally | 7 |
| 3.2 | Construction – Recycling, Reuse and Disposal Details | 7 |
| 3.3 | Construction – On Site Storage of Materials | 12 |
| 3.4 | Construction – Excavated Material | 12 |
| **PART 4 – GARBAGE CHUTE SYSTEM** | | |
| 4.1 | Design Requirements | 13 |
| 4.2 | Chute System | 14 |
| 4.3 | Operational Requirements | 15 |
| 4.4 | On Going Use, Maintenance & Management | 16 |
| **PART 5 – ON GOING USE** | | |
| 5.1 | Objectives | 17 |
| 5.2 | Assumptions | 17 |
| 5.3 | Waste Handling & Management | 18 |
| 5.4 | Waste & Recycling – Service Requirements | 18 |
| 5.5 | Waste & Recycling – Service Arrangements | 18 |
| 5.6 | Provision of Residential Waste & Recycling Services | 20 |
| 5.7 | Bulk Waste | 22 |
| 5.8 | Commercial Waste and Recycling | 23 |
| 5.9 | On Going Operation, Use & Management of Facilities | 24 |
| **PART 6 – SUMMARY** | | |
| 6.1 | Summary | 25 |

# PART 1 – OVERVIEW AND PROPOSAL

## 1.1 INTRODUCTION

This Waste Management Plan (WMP) describes in detail the manner in which all waste and other materials resulting from the demolition, construction and on-going use of the site are to be dealt with.

This WMP is an operational plan that will address all stages of the development from demolition, construction, and on-going use.

The aims and objectives of this WMP are to:

a) Satisfy all State and Local Government regulatory controls regarding waste management and minimisation practices,
b) Promote the use of recyclable materials in the excavation, demolition, construction, and on-going operation of the building,
c) Maximise waste reduction, material separation, and resource recovery in all stages of the development,
d) Ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access, and,
e) Ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will not impact negatively on the health, safety, and convenience of all stakeholders.

This WMP is prepared in accordance with:

- Canada Bay LEP 2013,
- Canada Bay DCP 2019,
- Part 5.7.3 'Waste Minimisation, Storage and Removal' of the Canada Bay – Strathfield Triangle DCP – 2013,
- All conditions of consent issued to be issued by Council under the approved Development Consent,
- The 'Better Practice Guide for Resource Recovery in Residential Buildings, published by the NSW EPA (April 2019), and,
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be efficient, as well as promoting the principles of health, safety, and convenience.

This Waste Management Plan (WMP) has been prepared for the submission of Development Application to Canada Bay Council for the construction of an eighteen (18) residential flat building, containing 202 x 1, 2, and 3 bed room units, with one (1) retail unit on the ground floor, over four (4) basement levels, at 2-10 Leicester Avenue, Strathfield.

The WMP is dated 30 July 2021.

## 1.2 PROJECT & PROPERTY DESCRITION

This Waste Management Plan (WMP) has been specifically designed for:

| | |
|---|---|
| **DESCRIPTION** | **One (1) x eighteen (18) storey residential flat building (202 Units)** |
| **NUMBER OF UNITS** | **- 70 x 1 bedroom units,**<br>**- 92 x 2 bedroom units,**<br>**- 40 x 3 bedroom units,**<br>**- One (1) ground floor retail unit and,**<br>**- Four (4) basement levels** |
| **PROPERTY DESCRIPTION** | **The development is to be constructed over seven (7) existing allotments at Lots 1 & 2, DP 2409, Lot 1, DP 105523, Lot 32, DP 659019, Lot 1, DP 928052, and Lots 1 & 2, DP 1038665, 2-10 Leicester Avenue, Strathfield.** |
| **STREET ADDRESS** | **2-10 Leicester Avenue, Strathfield.** |
| **LGA** | **Canada Bay Council** |
| **AREA** | **2,688sqm (approx.)** |
| **ZONING** | **Zone R4 – High Density Residential** |
| **PLANNING INSTRUMENT** | **Canada Bay LEP 2013**<br>**Canada Bay DCP 2019** |

The site is situated over a large allotment on the north-western side of Leicester Avenue, Strathfield, with frontages also to Cooper Street to the south-west. Parramatta is approximately 500m north of the site and Leicester Avenue which also links the suburb of Strathfield to the north.

The site is on the north-eastern side of the main western suburban railway line approximately 1km north of the Strathfield CBD. The M4 Motorway is approximately 1km north of the site.

The land upon which the development proposed is vacant with a large amount of overgrown vegetation.

The immediate surrounding development is characterised by a mix of medium and high-density developments.

## 1.3 APPLICANTS DETAILS

| | |
|---|---|
| **APPLICANT** | **Leice Pty Ltd**<br>**C/- Mr Kekerija Krcic – Omaya** |
| **ADDRESS** | **Tower 3, Level 23, 23 Barangaroo Ave,**<br>**Barangaroo. NSW. 2000.** |
| **E-MAIL** | **ZekirijaK@omaya.com.au** |
| **TELEPHONE** | **02 9299 9900** |

## 1.4 PROPOSAL

The proposal involves the construction of a construction of an eighteen (18) storey residential flat building, containing 202 x 1, 2, and 3 bedroom units, comprising of:

- 70 x 1 bed units,
- 92 x 2 bed units,
- 40 x 3 bed units, and,
- 1 x Retail unit on the ground floor.

Four (4) basement levels will be constructed under the building providing car parking, bicycle racks, fire stairs and ancillary storage facilities in the basement.

Egress from the development is onto Leicester Avenue to the east of the site. Existing Cooper Street will be used. Provision for entry from new road has been made for possible future entry.

A garbage chute system is incorporated into the building design for the reception of waste material only. The chute outlet is to be located in Basement 1 of the building as indicated on the Architectural Drawings.

All waste and recycling services will take place from a Loading Bay on the ground floor of the building as indicated on the Architectural Drawings.

All residential waste and recycling services will be provided by Canada Bay Council.

Separate waste management arrangements will be made for the retail unit.

The land is vacant, but overgrown, as such there is no demolition component to this WMP. Accordingly, this Waste Management Plan will cover all aspects of the excavation, construction of the building as well as its on-going use.

The project consists of: -

a) The excavation of the site to construct to construct the basements,
b) The construction of the building,
c) The provision of landscaping, driveways, concrete pathways, and other elements associated with the development, and,
d) The on-going use of the building.

# PART 2 – DEMOLITION

## 2.1 DEMOLITION

There is no demolition component top the development. All issues relating to materials recovered and removed from the excavation of the site will be dealt with under Part 3 – Construction.

# PART 3 – CONSTRUCTION

## 3.1 CONSTRUCTION – GENERALLY

Upon completion of all demolition works, construction of the building will commence with the excavation of the site for the basement levels of the building. All materials sourced from these activities will be disposed of in accordance with the information provided in Part 3.2 on pages 7, 8, 9, 10, 11 and 12 of this WMP.

Additionally, all materials used in the construction of the building that are not required to be incorporated into it, shall be recycled, reused, or disposed of in accordance with these provisions, and the requirements of the Protection of the Environment Operations Act (1997). It will be the developer's overall responsibility to ensure compliance in this regard.

Mobile Bins of an appropriate size will be located on site for the collection of food scraps, beverage containers, and other waste generated on site by workers.

## 3.2 CONSTRUCTION – RECYCLING, REUSE & DISPOSAL DETAILS

The following details prescribe the manner in which all material surplus to the construction of the building will be dealt with.

The following details prescribe the manner in which all materials surplus to the construction of the building will be dealt with, and includes: -

a) An estimate of the types and volumes of waste and recyclables to be generated,
b) A site plan showing sorting and storage areas for construction waste and vehicle access to these areas (see Part 3.3 of this Plan),
c) How excavated and other materials surplus to construction will be reused or recycled and where residual wastes will be disposed (see below), and,
d) The total percentage of demolition waste that will be reused or recycled.

**1. Excavated Materials**

| | |
|---|---|
| Volume / Weight | 33,600 cubic metres / 57,120 Tonnes |
| On Site Reuse | Yes. Keep and reuse topsoil for landscaping. Shore on site. Use some for support of retaining walls (Excavated Materials are only to be used if the material is not contaminated or has been remediated in accordance with any requirements specified by any Environmental Consultancy engaged to carry out any contamination assessment of excavated material). |
| Percentage Reused or Recycled | To be determined (see above comments) |
| Off Site Destination | To an approved Agency – excavated materials may need to be assessed to determine the quality of the material to ensure that all excavated material will be acceptable to the designated receival authority. |

**2. Bricks**

| | |
|---|---|
| Volume / Weight | 15 cubic metres / 15 Tonnes |
| On Site Reuse | Clean and remove lime mortar from bricks. Re-use in new footings. Broken bricks for internal walls. Crush and reuse as drainage backfill. Crushed and used as aggregate. |
| Percentage Reused or Recycle | 75% - 90% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112<br>or,<br>Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646)<br>or,<br>Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) |

**3. Concrete**

| | |
|---|---|
| Volume / Weight | 12 cubic metres / 28.8 Tonnes |
| On Site Reuse | Existing driveway to be retained during construction. Crushed and used as aggregate, drainage backfill. |
| Percentage Reused or Recycled | 60% - 75% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112<br>or,<br>Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646)<br>or,<br>Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) |

**4. Timber**

| | |
|---|---|
| Volume / Weight | 10 cubic metres / 4 Tonnes |
| On Site Reuse | Re-use for formwork and studwork, and for landscaping |
| Percentage Reused or Recycled | 65% - 90% |
| Off Site Destination | Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) |

**5. Plasterboard & Fibro**

| | |
|---|---|
| Volume / Weight | 5 cubic metres / 2.5 Tonnes |
| On Site Reuse | Nil – All material to be disposed of and processed off-site. |
| Percentage Reused or Recycled | To be determined |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112<br>or,<br>Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646)<br>or,<br>Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) |

**6. Metals / Steel / Guttering & Downpipes**

| | |
|---|---|
| Volume / Weight | 10 cubic metres / 2.5 Tonnes |
| On Site Reuse | No |
| Percentage Reused or Recycled | 60 – 90% |
| Off Site Destination | Sydney Wide Scrap Metal, 4/18 Alfred Street, Chipping Norton (Tel 9738 9771)<br>or,<br>Boral Recycling, 3 Thackeray Street, Camelia (Tel 9529 4424)<br>or,<br>Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883)<br>or,<br>Jacobson Metaland, 62-70 Silverwater Road, Silverwater (Tel 02 9748 2487) |

**7. Tiles**

| | |
|---|---|
| Volume / Weight | 10 cubic metres / 7.5 Tonnes |
| On Site Reuse | Broken up and used as fill. |
| Percentage Reused or Recycled | 80% - 90% |
| Off Site Destination | Obsolete Tiles, 3 South Street, Rydalmere. (Tel 02 9684 6333)<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) |

**8. Plastics**

| | |
|---|---|
| Volume / Weight | 5 cubic metres / 1 Tonne |
| On Site Reuse | Nil |
| Percentage Reused or Recycled | 80% - 95% |
| Off Site Destination | Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711) |

**9. Glass, Electrical & Light Fittings, PC items**

| | |
|---|---|
| Volume / Weight | 15 cubic metres / 3 Tonne |
| On Site Reuse | No |
| Percentage Reused or Recycled | 70% - 90% |
| Off Site Destination | Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711)<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) |

**10. Fixture & Fittings (Doors Fittings, Other Fixtures, etc.)**

| | |
|---|---|
| Volume | 5 cubic metres / 1.6 Tonnes |
| On Site Reuse | Broken up and used as fill. |
| Percentage Reused or Recycle | 80% - 90% |
| Off Site Destination | Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711)<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) |

**11. Pallets**

| | |
|---|---|
| Volume / Weight | 20 cubic metres / 5 Tonne |
| On Site Reuse | No |
| Percentage Reused or Recycle | 90% - 100% |
| Off Site Destination | Returned to supplier / to an approved agency, or agencies, for reuse and resale. |

**12. Residual Waste**

| | |
|---|---|
| Volume / Weight | 3,350 cubic metres / 3,350 Tonnes |
| On Site Reuse | No |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112<br>or,<br>Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544<br>or,<br>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646)<br>or,<br>Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)<br>or,<br>other authorised facility |
| Notes on calculation of volume of residual waste | 1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that approximately 10% of it, will be residual waste.<br>2. As all of the materials vary in weight per volume, a figure of 1 cubic metre of material is equal to 1 tonne in weight has been used. |

It is noted that the quantities of materials detailed in this section (Part 3.2) are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of construction constraints, weather conditions, and any other unforeseeable activities associated with the construction of the buildings, which are beyond the control of the developer, including but not being limited to theft, accidents, and other acts of misadventure.

Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

The facilities and agencies that have been nominated to receive the materials listed above have been identified within the NSW waste industry as being a facility or agency that will accept the materials specified in each respective table. The developer understands that any costs associated with the transportation and receival of these materials will be their responsibility.

The developer is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the developers' responsibility to ensure that all materials excess to construction removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the demolition of all structures on site.

Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to construction.

## 3.3 CONSTRUCTION – ON SITE STORAGE OF MATERIALS

During the construction of the buildings, an area will be set aside on the site as a compound for the on-site storage of materials prior to their removal from the site. This compound will provide for: -

- Material sorting,
- Segregation of materials that may be hazardous and which will be required to be disposed of,
- Recovery equipment, such as concrete crushers, chippers, and skip bins,
- Material storage, and,
- Access for transport equipment.

Appropriate vehicular access will be provided on and off site, and to the compound, to enable the efficient removal of reusable, recyclables, and waste materials.

Prior to the commencement of construction works, the developer will provide Council with a 'Site Plan for the On-Site Storage of Materials at Construction'. This plan will show in detail the location of each area within the compound, set aside for the segregated storage of all materials involved in the demolition of all buildings on the site.

## 3.4 CONSTRUCTION – EXCAVATED MATERIAL

All excavated material removed from the site, as a result of any activities associated with the construction of the building, must be classified in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to removal, transportation, and disposal to an approved waste management facility.

All relevant details must be reported to the PCA.

# PART 4 – GARBAGE CHUTE SYSTEM

## 4.1 DESIGN REQUIREMENTS

A Dual Waste and Recycling Chute System, for the reception of both waste and recycling material emanating from the occupation and use of all units, will be incorporated into the building design.

Each Garbage Chute System will contain two (2) separate chutes: -

- one for the reception and transfer of waste; and,
- one for the reception and transfer of recyclables.

In accordance with the provisions of Clause C.10 of Part 5.7.3 of the Strathfield Triangle DCP, the garbage chutes will discharge into a compaction unit, that will provide compaction to a maximum ratio of 2:1.

The compaction unit will incorporate the installation of a 2 x 1100-litre Bin Linear Track Compaction System, designed, installed, and manufactured in accordance with the Manufacturers Specification and relative Australian Standards.

The compaction system will only apply to the waste chute as it is not practical to compact recycling material.

Waste and Recycling Compartments will be located on each residential floor of each core of the building for residents to deposit their waste and recycling material into the respective chute hoppers and are located on the northern side of the building. The compartments in which the chutes are installed are located off the main lobby adjacent to Lifts 1 and 2 as indicated on the Architectural Drawings.

All waste deposited into the waste chutes will discharge will discharge into a 2 x 1100-litre mobile bin linear track compaction system that will enable all waste to be compacted to a maximum ratio of 2:1.

All recyclable material deposited into the recycling chutes will discharge into 2 x 1100 -litre linear mobile bin track systems.

Each chute will be located adjacent to one another in a ‘Chute Compartment’. Chute compartments will be located on each residential floor of the building.

At a minimum each Garbage and Recycling Chute System will be designed to meet the following requirements: -

1. Chutes and service openings must be constructed of metal or other smooth faced, durable, fire resistant and impervious material of non-corrosive nature.
2. Chutes will be cylindrical in section with a minimal internal diameter of 500 mm. The diameter around each chute will be a minimum width of 750 mm to allow for infrastructure fittings, such as fixing brackets and noise insulation.
3. Chutes will be vertical without bends or “off-sets” (except for the chute outlets) and not be reduced in diameter.
4. The waste chute will terminate in Bin Room 1 located in Basement 1 and discharge all waste into an 1100-litre receptacle placed onto the 2 x 1100-litre bin splitter system.

5. The recycling chute will terminate in Bin Room 1 located in Basement 1 and discharge all recyclable material into an 1100-litre receptacle placed onto the 2 Bin Linear track system.
6. The Chute and service openings must be capable of being easily cleaned.
7. Chutes must be ventilated to ensure that air does not flow from the chute through any service opening.
8. The Garbage Chute systems must comply with the relative provisions of the Building Code of Australia, and relevant Australian Standards (e.g., AS1530.4-2005).
9. All Linear Bin Systems will be designed, manufactured and installed in accordance with relevant Australian Standards and to manufacturers specifications.

## 4.2 CHUTE SYSTEM

### 4.2.1 Waste Chute

In general each Waste and Recycling Compartment will have approximate internal dimensions of 3.0m x 3.0m, with a floor area of 9.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit their waste into the chute and all waste deposited into the Waste Chute in the northern corner of the basement will discharge into a 2 x 1100-litre mobile bin linear track compaction system that will enable all waste to be compacted to a maximum ratio of 2:1.

The compaction unit is located in the ground floor bin/chute room adjacent to the Waste Collection Area as indicated on the Architectural Drawings.

Based on Council's waste generation rates (120-litres of space per unit per week), it is anticipated that all 202 units in the building will generate 24,240-litres of waste per week, or 3,462.86-litres per day (without compaction).

At a compaction rate of 2:1, it can reasonably be assumed that upon completion of the compaction rotation, the amount of waste in both bins will be reduced by 50% to a volume of 12,120-litres per week (1,731.43-litres per bin per day).

With the capacity of the 2 x 1100-litre bin linear track compaction system, post compaction, being 2,200 litres, the compaction unit will be inspected at least one (1) time per day in order to ensure that waste receptacles will be removed when full.

Representatives of the Owners Corporation will be responsible for transferring full post compaction 1100-litre waste bins from under the chute up to the Residential Bin Holding Room on the Ground Floor for storage prior to servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

Representatives of the Owners Corporation will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

### 4.2.2 – Recycling Chute

Residents will deposit waste material into the chute inlet hopper, labelled 'Recycling Chute – Reception of Recycling Material Only'. Recycling material from the chute outlet will fall directly into a 2 x 1100-litre mobile bin linear track compaction system located in the bin/chute room as indicated on the Architectural Drawings.

Based on Council's waste generation rates (120-litres of space per unit per week), it is anticipated that all 202 units in the building will generate 24,240-litres of recycling per week, or 3,462.29-litres per day.

With the capacity of the 2 x 1100-litre bin linear track compaction system, being 2,200-litres, the unit will be inspected at least two (2) times per day in order to ensure that recycling receptacles will be removed when full.

Representatives of the Owners Corporation will be responsible for transferring full 1100-litre recycling bins from under the chute up to the Residential Bin Holding Room on the Ground Floor for storage prior to servicing. Full recycling bins removed from under the Chute outlet and replaced immediately with an empty one.

Representatives of the Owners Corporation will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

### 4.3 OPERATIONAL REQUIREMENTS

At a minimum, each Garbage Chute System will be designed to meet the following requirements: -

1. The waste compaction unit will incorporate the installation of a 2 x 1100-litre Bin Linear Track Compaction System, designed, installed, and manufactured in accordance with the Manufacturers Specification and relative Australian Standards.
2. The recycling chute will incorporate the installation of a 2 x 1100-litre Bin Linear Track System, designed, installed, and manufactured in accordance with the Manufacturers Specification and relative Australian Standards.
3. Chutes and service openings must be constructed of metal or other smooth faced, durable, fire resistant and impervious material of non-corrosive nature.
4. Chutes will be cylindrical in section with a minimal internal diameter of 500 mm. The diameter around each chute will be a minimum width of 750 mm to allow for infrastructure fittings, such as fixing brackets and noise insulation.
5. Chutes will be vertical without bends or "off-sets" (except for the chute outlets) and not be reduced in diameter.
6. The Chutes and service openings must be capable of being easily cleaned.
7. Chutes must be ventilated to ensure that air does not flow from the chute through any service opening.
8. The Garbage Chute systems must comply with the relative provisions of the Building Code of Australia, and relevant Australian Standards (e.g., AS1530.4-2005).
9. Upon the appointment of the company selected to install the chutes, and completion of the chute design, Council will be provided with a manufacturers specification of all chute systems.

10. The chute discharge points will be restricted to residents by a caged enclosure in order to prevent injury, and will be provided with suitable circulation space, in accordance with the manufacturers' specification.

Representatives of the Owners Corporation will monitor all activities associated with the use and operation of the chutes and the depositing of waste and recycling material into them and will also be responsible for transferring full waste and recycling ins from all bin/chute rooms into the Waste Collection Area/Loading Room Bin Storage Area for storage prior to servicing.

Bins will be manoeuvred though the development by an approved bin towing device.

## 4.4 ON GOING MANAGEMENT & MAINTENANCE OF CHUTE SYSTEM

### 4.4.1 Generally

The Owners Corporation will be responsible for all issues associated with the on-going management and maintenance of the Garbage Chute Systems and all activities associated with it.

These activities will include, but not be limited, to the following: -

1. Displaying signage indicating appropriate use of all waste management systems, including what is and what is not recyclable.
2. Educating residents in the correct use of the chute, and the need to keep bulky items out of the chute systems.
3. Providing regular maintenance, including cleaning and unblocking chutes.
4. Regular inspection of the Garbage Chute Compartments, the Garbage Chute Outlet Compartments, and the Bin Rooms to ensure that all waste and recyclables are managed appropriately.
5. Educating residents in the correct use of each chute, to ensure that waste material is not deposited into the recycling chute, and that recycling material is not placed into the waste chute.

### 4.4.2 Bin Room Infrastructure

In accordance with Council requirements, the following infrastructure will be incorporated into the design of all bin rooms: -

a) Suitable door access for the service of bins,
b) Where roller doors are provided, an additional service door will be provided inclusive of an Abloy key system,
c) All floors will be finished with a non-slip and smooth and even surface covered at all intersections,
d) The floor will be graded to a central drainage point connected to the sewer,
e) Rooms will be fully enclosed and roofed with a minimum internal room height in accordance with the BCA 2016,
f) Rooms are to be provided with an adequate supply of water through a centralised mixing valve with hose cock, and.
g) Incorporation of adequate light and ventilation in accordance with requirements of the BCA 2016.

# PART 5 – ON GOING USE OF BUILDING

## 5.1 OBJECTIVES

1. To ensure the storage, amenity and management of waste is sufficient to meet the needs of the development.
2. To ensure that all waste management activities are carried out efficiently, and in a manner, that promotes the principles of health, safety, and convenience.
3. To promote waste minimisation practices.

## 5.2 ASSUMPTIONS

In preparing this proposal, the following assumptions have been made:

1. The proposed development comprises of an eighteen (18) storey building of mixed commercial and residential components.
2. The Residential component consists of 202 x 1, 2 and 3 bedroom units.
3. The commercial component comprises of one (1) retail unit on the ground floor with an area of 145sqm.
4. Separate waste management arrangements will be made for both the residential and commercial areas of the building.
5. A Dual Garbage Chute System will be incorporated into the building design for the reception of both waste and recycling material.
6. There will be two (2) dual chute systems – one for each core of the building.
7. In accordance with the provisions of Clause C.10 of Part 5.7.3 of the Strathfield Triangle DCP, the garbage chute will discharge into a compaction unit, that will provide compaction at a maximum ratio of 2:1, which will reduce the volume of waste by 50%.
8. The compaction unit will incorporate the installation of a 2 x 1100-litre Bin Linear Track Compaction System, designed, installed, and manufactured in accordance with the Manufacturers Specification and relative Australian Standards.
9. Material from the recycling chute will fall directly into a 2 x 1100-litre mobile bin splitter system located in the bin/chute room for the respective core of the building in which it is installed.
10. Separate Waste and Recycling Compartments will be provided to all levels of the building.
11. Within the waste compartment will be the waste chute installed within the confines of a fire rated compartment.
12. Within the recycling compartment will be the recycling chute installed within the confines of a fire rated compartment.
13. Residents of all units will deposit their waste material into the waste chute which will discharge all waste directly into the 2 x 1100-litre mobile bin linear track compaction system positioned under the chute outlet point in the Bin/Chute Room adjacent to the Waste Collection Area on the ground floor.
14. Residents of all units will deposit their recycling material into the recycling chute which will discharge all waste directly into the 2 x 1100-litre mobile bin linear track system positioned under the chute outlet point in the Bin/Chute Room adjacent to the Waste Collection Area on the ground floor.
15. Given the compaction ratio will reduce the volume of waste in the bin by 50%, all waste material will be stored for servicing in 11 x 1100-litre mobile waste bins.

16. All recycling material will be stored for servicing in 22 x 1100-litre mobile recycling bins.
17. All green waste material will be stored for servicing in 4 x 240-litre mobile waste bins.
18. All residential waste services will be provided one (1) day per week.
19. All residential recycling services will be provided one (1) day per week.
20. All green waste services will be provided once per fortnight.
21. The number and size of bins have been calculated from information provided in the Canada Bay DCP and the Strathfield Triangle DCP 2013.
22. Canada Bay Council will provide all waste, recycling services and green waste services to the development.
23. All residential waste and recycling collections will take place from for the Loading Bay on the ground floor.
24. A separate Commercial Waste Room (CWR) will be constructed to store all waste and recycling bins associated with the use and occupation of retail unit on the ground floor.
25. A licensed private waste and recycling collection contractor will provide all waste and recycling services to the commercial ground floor unit.
26. The Owners Corporation will appoint a Building Manager/Caretaker, whose responsibilities will be to supervise all waste management activities associated with the on-going use of the building.

## 5.3 WASTE HANDLING & MANAGEMENT

A cabinet will be located within each unit so that a receptacle, or receptacles, may be stored or housed in a convenient and practical location within the unit, for the reception of waste and recyclable material.

## 5.4 WASTE, RECYCLING AND GREEN WASTE – SERVICE REQUIREMENTS

All waste and recycling materials will be stored in approved receptacles of an appropriate size. The lids of the bins shall be closed at all times to reduce litter, stormwater pollution, odour, and vermin.

The Council in general requires that colour coded receptacle lids that distinguish each service component are to be provided:

- Waste Service – Red Lidded receptacle,
- Recycling Service – Yellow Lidded receptacle, and,
- Green Waste – Green Lidded receptacle.

## 5.5 WASTE, RECYCLING AND GREEN WASTE – SERVICE ARRANGEMENTS

The table (Table 1) on page 18 specifies the criteria for waste and recycling generation rates (as specified in Councils DCP) based on:

- Waste – 120 litres of bin space per unit per week (pre-compaction); and,
- Recycling – 120 litres of bin space per unit per week.

Given Council's compaction requirements for a maximum compaction ratio of 2:1, the volume of waste generated per unit per week will be reduced to 60-litres of bins space per unit per week. Accordingly, the table below (Table 1) details all bin service requirements for the proposed development

The DCP does not specify green waste generation rates. However, as each of the units have minimal green space, it is considered that 4 x 240-litre green waste bins, serviced fortnightly would be sufficient for the development.

TABLE 1 – RESIDENTIAL WASTE, RECYCLING & GREEN WASTE GENERATION RATES

| SERVICE TYPE | UNITS | BIN SPACE PER UNIT | TOTAL SPACE REQUIRED | BINS SIZE | SERVICES PER WEEK | BINS REQUIRED | BINS PROVIDED |
|---|---|---|---|---|---|---|---|
| **Waste** | 202 | 120/2 | 12,120 | 1100 | 1 | 11.02 | 11 |
| **Recycling** | 202 | 120 | 24,240 | 1100 | 1 | 22.07 | 22 |
| **Green Waste** | N/A | | | 240 | 0.5 | 4.00 | 4 |

The following table (Table 2) specifies the proposed bin servicing requirements for the building and is based on the above waste and recycling generation rates: -

TABLE 2 – PROPOSED SERVICING ARRANGEMENTS

| WASTE | RECYCLING | GREEN WASTE |
|---|---|---|
| 11 x 110-litre bins<br>Weekly | 22 x 1100-litre bins<br>Weekly | 4 x 240 litre bins<br>Fortnightly |

## 5.6 PROVISION OF WASTE, RECYCLING AND GREEN WASTE SERVICES

Canada Bay Council will provide all waste, recycling, and green waste services to the development.

### 5.6.1 Details of Mobile Containers

In relation to the size and design of the waste and recycling mobile bins, the following technical information is provided:

| CONTAINER TYPE | HEIGHT (metres) | DEPTH (metres) | WIDTH (metres) |
|---|---|---|---|
| 240-litre mobile container | 1.080 | 0.735 | 0.585 |
| 1100-litre mobile container | 1.470 | 1.245 | 1.370 |

In addition to the 11 x 1100-litre mobile waste bins required by Council as part of their service requirements, the Owners Corporation will provide an additional number of 1100-litre mobile waste bins in order to ensure that bins are provided at all times below the Garbage Chute Outlets.

Similarly, in addition to the number of 1100-litre mobile recycling bins required by Council as part of their service requirements, the Owners Corporation will provide an additional number of 1100-litre mobile recycling bins in order to ensure that bins are provided at all times below the Garbage Chute Outlets.

### 5.6.2 Waste & Recycling Requirements

All waste, recycling and green waste services shall be provided as specified in Part 5.5 on page 19-20 of this WMP.

The 2 x 1100-litre liner waste bin track compaction unit is to be inspected twice be day and the 2 x 1100-litre linear recycling track is to be inspected one (1) time per day, and all full bins are to be removed from under the chute outlet system immediately replaced with an empty bin. Full bins are to be transferred to the respective waste and recycling bin storage areas adjacent to the collection area.

Waste and recycling requirements are provided in the table below.

| SERVICE | NUMBER OF CONTAINERS | COLLECTION FREQUENCY |
|---|---|---|
| Waste Service | 11 x 1100-litre mobile containers | One (1) Service per Week |
| Recycling Service | 22 x 1100-litre mobile containers | One (1) Service per Week |
| Green Waste | 4 x 240-litre mobile containers | One (1) Service per Fortnight |

### 5.6.3 Location, Design, and Construction of Waste Storage and Collection Areas

The Waste Storage and Collection Area is located on the ground floor of the building as indicated on the Architectural Drawings.

Within the confines of the area will be:

- A 2 x 1100-litre mobile waste bin linear track compaction system positioned under the chute outlet point in the bin/chute room,
- A 2 x 1100-litre mobile recycling bin linear track system positioned under the chute outlet point in the bin/chute room,
- Storage space for 11 x 1100-litre waste bins to be serviced by Council's waste collection team.
- Storage space for 22 x 1100-litre recycling bins to be serviced by Council's recycling collection team,

- Storage space for 4 x 240-litre recycling bins to be serviced by Council's recycling collection team, and,
- Associated infrastructure.

There a seven (7) residential units on the ground floor area that do not have access to the chute system. Accordingly a Waste Storage Area will be provided on the ground floor as indicated on the Architectural Drawings for the residents of these units to dispose of their waste and recycling material.

In accordance with Council's collection requirements, the basement has been designed to accommodate a rear loading collection vehicle, of the following design specifications,

- Overall length – 10.5 metres
- Design width – 2.8 metres
- Swept circle – 27.8 metres
- Clearance (travel height) – 4.5 metres
- Roadway/ramp grade (maximum) – 1:6.5 (15.4%)
- Rate of change of grade (maximum) – 1:16 (6.5%) in 7 metres of travel

**5.6.4 Servicing Arrangements – Waste Collections**

All waste services will be provided by Canada Bay Council.

All waste collections will take place from a dedicated Loading Bay adjacent to the bin storage areas. On each collection day, Council's waste collection operators will remove the bins from the waste bin storage area and dispose the contents of each bin into the body of the collection vehicle.

The bins will be returned to waste bin storage area once all collection activities have been completed. Representatives of the Owners will assist Council's operators in this regard.

Waste bins will be serviced one (1) day per week, on a day to be determined by the Council.

All 11 x 1100-litre mobile waste bins will be presented for servicing on each collection day.

**5.6.5 Servicing Arrangements – Recycling Collections**

All recycling services will be provided by Canada Bay Council.

All recycling collections will take place from a dedicated Loading Bay adjacent to the bin storage areas. On each collection day, Council's collection operators will remove the bins from the recycling bin storage area and dispose the contents of each bin into the body of the collection vehicle.

The bins will be returned to the recycling bin storage area once all collection activities have been completed. Representatives of the Owners will assist Council's operators in this regard.

Recycling bins will be serviced one (1) day per week, on a day to be determined by the Council.

All 22 x 1100-litre mobile recycling bins will be presented for servicing on each collection

day.

### 5.6.6 Green Waste Services

All green waste services will be provided by Canada Bay Council.

All recycling collections will take place from a dedicated Loading Bay adjacent to the bin storage areas. On each collection day, Council's collection operators will remove the bins from the recycling bin storage area and dispose the contents of each bin into the body of the collection vehicle. The bins will be returned to recycling bin storage area all collection activities have been completed. Representatives of the Owners will assist Council's operators in this regard.

Green waste bins will be serviced fortnightly, on a day to be determined by Council.

All 4 x 240-litre mobile waste bins will be presented for servicing on each collection day.

## 5.7 BULKY WASTE STORAGE

Secure storage spaces will be provided for the storage of bulky waste items that can be disposed of as part of any bulky waste clean-up service to be provided to this complex.

The Bulky Waste Storage Area is a fully enclosed rectangular structure, measuring 3.3m x 2.0m, with a floor area of approximately 6.6sqm, and is provided with a 1.5m doorway. It is located on the ground floor of the complex next to the bin storage areas.

It will be the responsibility of the Owners Corporation to arrange for the removal of all unwanted bulky waste on a regular basis.

## 5.8 COMMERCIAL WASTE & RECYCLING SERVICES

### 5.8.1 Details of Commercial Land Uses

An area of the ground floor is set aside for one (1) commercial unit with a floor area of 145sqm. However, the end use occupancies are yet to be determined.

### 5.8.2 Commercial Waste and Recycling Generation Rates

The Table below (Table 4) details the waste and recycling generation rates for the commercial land uses proposed. These rates have been obtained from the Better Practice Guide 'Waste Generation Rates for commercial developments on page 96 of that document. These are used as Council's DCP does not specify them.'

TABLE 4 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR COMMERCIAL LAND USES

| SERVICE | LAND USE | WASTE & RECYCLING GENERATION RATES |
|---|---|---|
| Waste | Office | 10.0 litres of waste per 100m2 of floor area per day |
| Waste | Retail | 50.0 litres of waste per 100m2 of floor area per day |
| Waste | Café / Takeaway | 80.0 litres of waste per 100m2 of floor area per day |
| Recycling | Office | 10.0 litres of recyclable material per 100m2 of floor area per day |
| Recycling | Retail | 50.0 litres of recyclable material per 100m2 of floor area per day |
| Recycling | Café / Takeaway | Discretionary 40.0 litres of recyclable material per 100m2 of floor area per day |

### 5.8.3 Commercial Waste Services

The commercial unit will be required to have commercial waste services in accordance with the waste generation rates as prescribed in Table 4. All commercial waste services will be provided by a licensed private waste contractor. All commercial waste bins will be removed from the WSA and conveyed to the loading bay for collection.

The Lessee of the Commercial Unit will enter into a Service Level Agreement with the contractor and will keep written evidence on site of this agreement with the contractor for the regular collection and disposal of all waste generated from these activities. A copy of this agreement will be provided to the Council.

All commercial waste services are to be undertaken in a manner that will not adversely impact on the principles of health, safety, or convenience.

### 5.8.4 Commercial Recycling Services

The commercial unit will be required to have commercial recycling services in accordance with the recycling generation rates as prescribed in Table 4. All commercial recycling services will be provided by a licensed private recycling contractor. All commercial recycling bins will be removed from the Commercial WSA and conveyed to the loading bay for collection by the contractor.

The Lessee of the Commercial Unit will enter into a Service Level Agreement with the contractor and will keep written evidence on site of this agreement with the contractor for the regular collection and disposal of all recycling material generated from these activities. A copy of this agreement will be provided to the Council.

All commercial recycling services are to be undertaken in a manner that will not adversely impact on the principles of health, safety, or convenience.

### 5.8.5 Storage of Commercial Waste and Recycling Bins

All waste and recycling bins will be stored in an appropriate location within the confines of the unit.

The Lessee of the Commercial Unit will be responsible for ensuring that all commercial waste and recycling services are undertaken in an efficient manner that will promote the principles of health, safety and convenience and not impact negatively on the amenity of the complex and its surrounds.

Appropriate signage will be erected within the complex advising all occupants that access to the Commercial Waste Storage Area is restricted to occupants of the commercial component of the building only.

## 5.9 ON GOING OPERATION, USE & MAINTENANCE OF WASTE MANAGEMENT FACILITIES

All waste management facilities will be maintained in a clean and hygienic condition that will promote the principles of health, safety, and convenience.

In order to achieve these objectives, the following facilities and devices will be required:

1. The walls and floors of both all waste areas are to be constructed of smooth faced masonry or concrete, and all walls will be painted with light coloured and washable paint.
2. The junction between all floors and walls will be coved and sealed up to 100mm above the floor level, in order to eliminate the build-up of dirt and grime.
3. A floor waste, connected to the Sydney Water drainage system in accordance with that Authority's requirements, will be provided, and the floors will be graded to drain into it.
4. Appropriate washing facilities will be provided including appropriate plumbing and drainage fixtures and fittings, and the provision of running water.
5. The areas will be washed and cleaned on a regular basis.
6. All mobile bins will be washed and cleaned on a regular basis.
7. All electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
8. Natural and mechanical ventilation will be required to be installed within each area in accordance with the relative provisions of the Building Code of Australia.
9. Appropriate signage will be displayed clearly identifying waste and recycling bins.
10. Appropriate signage will be erected providing instruction to residents on how to use waste and recycling facilities, including what is and what is not recyclable.
11. All collection and servicing activities will take place in the designated Loading Bay.
12. The Owners Corporation will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the containers provided.

# PART 6 – SUMMARY

## 6.1 SUMMARY

In summarising this proposal, the following information is provided:

1. This Waste Management Plan (WMP) has been developed and documented in accordance with the Canada Bay DCP and advice from Council staff.
2. It aims to promote the use of recyclable materials in the excavation, demolition, construction, and on-going operation of the building.
3. It aims to ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access.
4. To ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will promote the principles of health, safety, and convenience.

This is a unique development with a unique set of arrangements for its waste management activities.

The measures set out in this WMP aim to demonstrate that all such activities will be carried out efficiently and effectively, in a healthy, safe, and convenient manner, to acceptable community standards, and to the requirements of Canada Bay Council.

**Leice Pty Ltd**

# 2-10 Leicester Ave, Strathfield

# BASIX Assessment Report

ESD Synergy Pty Ltd
Contact No: +61 497 979 868
+61 413 591 688
Email: info@esdsynergy.com
Web: www.esdsynergy.com

| | |
|---|---|
| **Attention** | Zekerija Krcic |
| **Client** | Leice Pty Ltd |
| **Author** | Adriana Segovia |
| **Reviewer** | Henky Mantophani |
| **Date** | 17/08/2021 |
| **Revision** | 01 – Updated Scheme |
| **Subject** | 2-10 Leicester Ave, Strathfield – BASIX Assessment Report |

## 1. SITE APPRECIATION

The proposed development is located at 2-10 Leicester Ave, Strathfield and consists of:

- 201 new residential units
- 1 retail unit

## 2. BASIX WATER SECTION

The proposed development will meet the mandatory BASIX water target of 40% as long as the water commitments detailed in Table 1 are installed. For details of the requirements necessary to achieve this target, please refer to the BASIX Certificate No. 1133099M_05.

**Table 1: BASIX Water Commitments**

| | |
|---|---|
| ***Common Areas and Central Systems*** | |
| Area of Indigenous or low water species | • None<br>• **Please refer to Appendix B for further details** |
| Rainwater collection | • 5,000L rainwater tank<br>• Roof collection area – A minimum of 200m$^2$<br>• Rainwater to be used for Common areas landscape irrigation |
| ***Private Dwellings*** | |
| Fixtures for apartments | • 4-star (Water Rating) showerheads with a flow rate > 4.5L/min & ≤ 6L/min<br>• 4-star (Water Rating) toilets<br>• 5-star (Water Rating) kitchen taps<br>• 5-star (Water Rating) bathroom taps<br>• 4-star (Water Rating) dishwashers |

# 3. BASIX THERMAL COMFORT SECTION

The thermal performance of the development has been evaluated using BERS Pro 2nd Generation software. The BERS Pro computer simulation of residential developments forms part of the Nationwide House Energy Rating Scheme and is used to assess the potential of a residential development to have low heating and cooling energy requirements once operational.

## 3.1 MODELLING ASSUMPTIONS

The "base-case" building fabric and glazing and associated thermal performance specifications are described in Table 2 below as these assumptions are based on the nominated preferred construction materials indicated by the architect.

**Note: Table 2 must be read in conjunction with Table 3. Table 3 outlines additional thermal enhancements / treatments to meet the mandatory thermal load targets to achieve compliance.**

**Table 2: Base Case Assumptions on Construction and Fabric**

| *Element* | *Material* | *Detail* |
|---|---|---|
| External walls | Tilt concrete, lined | **Insulation: See Table 3** |
| | | Light colour: Absorptance< 0.475 |
| Internal walls | Plasterboard | |
| Party walls | Power Panel, lined | **Insulation: R1.0 both sides for fire safety** |
| | | Common corridors & Neighbour |
| | Concrete | **Insulation: None** |
| | | Fire stairs & lifts |
| Windows | **Type 1 Performance glazing** | Total Window System Properties **U-value 4.8 & SHGC 0.59 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.8 & SHGC 0.51 for bifold doors, awning & casement windows** |
| | **Type 2 Performance glazing** | Total Window System Properties **U-value 4.9 & SHGC 0.33 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.9 & SHGC 0.33 for bifold doors, awning & casement windows** |
| | **Type 3 Performance glazing** | Total Window System Properties **U-value 4.1 & SHGC 0.52 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.1 & SHGC 0.47 for bifold doors, awning & casement windows** |
| | Window Operability | Balcony windows: **45% or 60% (i.e. sliding)**<br>Bedroom windows: **10%** (BCA D2.24)<br>All other non-balcony windows: **0% (i.e. fixed)** |
| | Shading device | Balcony windows: **60% opacity**<br>Non-balcony windows: **60% opacity** |
| Skylight | None | |

| *Element* | *Material* | *Detail* |
|---|---|---|
| Roof | Concrete | **Insulation: None** |
| | | Light colour: Absorptance< 0.475 |
| Ceilings | Plasterboard | **Insulation: See Table 3** |
| Floors | Concrete | **Insulation: See Table 3** |
| | | Carpet: Bedrooms only |
| | | Tiles: Elsewhere |
| Recessed downlights assessed | | No |
| Exhaust fans (kitchens, bathrooms, laundry) | | **All assumed to be sealed** |

## 3.2 BERS PRO RESULTS (THERMAL COMFORT)

The simulated heating and cooling loads per dwelling are summarized in Table 3 below. Where the dwellings have failed to meet the thermal load targets additional thermal enhancements / treatments are provided. This is typically in the form of bulk insulation. These additional thermal treatments are required to pass the BASIX Thermal performance requirements. Please refer to BASIX Certificate No. 1133099M_05 & NatHERS Universal Certificate No. 0005227530 for details.

**Table 3: BERS Pro Thermal Loads**

| *Unit No.* | *Additional Treatments Required* | *Heating Load (MJ/m².yr)* | *Cooling Load (MJ/m².yr)* | *Stars* | *Pass/Fail* |
|---|---|---|---|---|---|
| G01 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.6 | 26.3 | 5.7 | Pass |
| G02 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 2 glazed door to have at least 75% ventilation opening, South & East Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 glazed door to have at least 75% ventilation opening | 38.6 | 29.2 | 4.9 | Pass |
| G03 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 60% ventilation opening | 41.1 | 28.9 | 4.8 | Pass |
| G04 | R2.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt2.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m2 | 42.8 | 22.8 | 5.0 | Pass |
| G05 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk External Wall Insulation with vapour barrier (total | 43.8 | 21.1 | 5.1 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| | wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 60% ventilation opening, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m2 | | | | |
| G06 | R2.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt2.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m3 | 41.7 | 20.5 | 5.2 | Pass |
| G07 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 43.4 | 27.7 | 4.7 | Pass |
| 106 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 14.3 | 11.8 | 7.9 | Pass |
| 107 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 21.2 | 28.6 | 6.1 | Pass |
| 108 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 17.4 | 25.0 | 6.7 | Pass |
| 109 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.2 | 28.5 | 5.8 | Pass |
| 110 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 27.6 | 27.5 | 5.7 | Pass |
| 111 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.6 | 21.0 | 5.7 | Pass |
| 112 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 19.1 | 27.6 | 6.4 | Pass |
| 113 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 33.3 | 22.0 | 5.7 | Pass |
| 114 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk | 45.1 | 23.4 | 4.9 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| | External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | | | | |
| 201 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.5 | 22.4 | 6.1 | Pass |
| 202 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.3 | 18.3 | 7.3 | Pass |
| 203 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.4 | 29.5 | 7.2 | Pass |
| 204 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.0 | 24.1 | 7.3 | Pass |
| 205 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.2 | 26.9 | 7.1 | Pass |
| 206 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 14.2 | 26.0 | 6.9 | Pass |
| 207 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 21.9 | 28.3 | 6.1 | Pass |
| 208 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 18.0 | 23.4 | 6.8 | Pass |
| 209 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.8 | 27.4 | 5.8 | Pass |
| 210 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 28.4 | 26.3 | 5.7 | Pass |
| 211 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.2 | 20.4 | 5.7 | Pass |
| 212 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 17.3 | 27.9 | 6.4 | Pass |
| 213 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 22.5 | 25.6 | 6.2 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 214 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.6 | 28.4 | 5.6 | Pass |
| 301 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.2 | 19.6 | 7.3 | Pass |
| 302 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.7 | 16.3 | 7.9 | Pass |
| 303 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.2 | 23.5 | 7.5 | Pass |
| 304 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.0 | 23.1 | 7.7 | Pass |
| 305 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.4 | 22.3 | 7.7 | Pass |
| 306 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.4 | 20.5 | 7.5 | Pass |
| 307 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 25.6 | 20.7 | 6.4 | Pass |
| 308 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 21.8 | 18.4 | 6.9 | Pass |
| 309 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.5 | 20.9 | 6.0 | Pass |
| 310 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.7 | 25.3 | 5.9 | Pass |
| 311 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 39.1 | 13.9 | 5.9 | Pass |
| 312 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 21.0 | 23.5 | 6.5 | Pass |
| 313 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.3 | 29.5 | 5.9 | Pass |
| 314 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 32.9 | 18.4 | 5.9 | Pass |
| 401 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.6 | 19.3 | 7.3 | Pass |
| 402 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.0 | 15.9 | 7.9 | Pass |
| 403 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.6 | 23.1 | 7.5 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 404 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.4 | 22.7 | 7.8 | Pass |
| 405 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.8 | 22.0 | 7.7 | Pass |
| 406 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.7 | 19.9 | 7.5 | Pass |
| 407 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.2 | 20.0 | 6.4 | Pass |
| 408 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.3 | 18.1 | 6.9 | Pass |
| 409 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 30.1 | 20.3 | 6.0 | Pass |
| 410 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.3 | 24.7 | 5.9 | Pass |
| 411 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 39.7 | 13.2 | 5.9 | Pass |
| 412 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 21.6 | 23.1 | 6.5 | Pass |
| 413 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.6 | 28.8 | 5.9 | Pass |
| 414 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.5 | 17.5 | 5.9 | Pass |
| 501 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.9 | 18.7 | 7.3 | Pass |
| 502 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.3 | 15.6 | 7.9 | Pass |
| 503 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.8 | 23.1 | 7.5 | Pass |
| 504 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.7 | 22.2 | 7.8 | Pass |
| 505 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.0 | 21.5 | 7.7 | Pass |
| 506 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.0 | 19.8 | 7.5 | Pass |
| 507 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.6 | 19.6 | 6.4 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 508 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.7 | 18.0 | 6.9 | Pass |
| 509 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 30.6 | 19.9 | 6.0 | Pass |
| 510 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.8 | 23.9 | 5.9 | Pass |
| 511 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 40.2 | 13.1 | 5.8 | Pass |
| 512 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 22.1 | 23.0 | 6.4 | Pass |
| 513 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.1 | 28.7 | 5.9 | Pass |
| 514 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.0 | 17.2 | 5.9 | Pass |
| 601 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.4 | 18.5 | 7.3 | Pass |
| 602 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.5 | 15.3 | 7.9 | Pass |
| 603 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.2 | 22.7 | 7.5 | Pass |
| 604 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.9 | 22.2 | 7.8 | Pass |
| 605 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.4 | 21.4 | 7.7 | Pass |
| 606 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.5 | 19.1 | 7.5 | Pass |
| 607 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.2 | 19.0 | 6.4 | Pass |
| 608 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.4 | 17.5 | 6.8 | Pass |
| 609 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.2 | 19.3 | 6.0 | Pass |
| 610 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.4 | 23.4 | 5.9 | Pass |
| 611 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 40.9 | 12.2 | 5.8 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 612 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 22.7 | 22.8 | 6.4 | Pass |
| 613 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.4 | 28.0 | 5.9 | Pass |
| 614 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.1 | 17.2 | 5.9 | Pass |
| 701 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.6 | 18.3 | 7.3 | Pass |
| 702 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.6 | 14.7 | 7.9 | Pass |
| 703 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.5 | 22.4 | 7.5 | Pass |
| 704 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.1 | 22.4 | 7.7 | Pass |
| 705 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.6 | 20.6 | 7.7 | Pass |
| 706 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.7 | 19.0 | 7.5 | Pass |
| 707 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.5 | 18.8 | 6.4 | Pass |
| 708 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.7 | 17.7 | 6.8 | Pass |
| 709 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.5 | 19.2 | 6.0 | Pass |
| 710 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.7 | 23.0 | 5.9 | Pass |
| 711 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 41.2 | 11.9 | 5.8 | Pass |
| 712 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.0 | 22.8 | 6.4 | Pass |
| 713 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.7 | 27.6 | 5.9 | Pass |
| 714 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.2 | 16.5 | 5.9 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 801 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.9 | 18.0 | 7.3 | Pass |
| 802 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.9 | 14.6 | 7.9 | Pass |
| 803 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.6 | 22.2 | 7.5 | Pass |
| 804 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.4 | 22.6 | 7.7 | Pass |
| 805 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.8 | 20.6 | 7.7 | Pass |
| 806 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.0 | 19.0 | 7.5 | Pass |
| 807 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.0 | 18.6 | 6.4 | Pass |
| 808 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.1 | 17.2 | 6.8 | Pass |
| 809 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.9 | 18.7 | 6.0 | Pass |
| 810 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.1 | 22.8 | 5.9 | Pass |
| 811 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 41.7 | 12.1 | 5.8 | Pass |
| 812 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.5 | 22.4 | 6.4 | Pass |
| 813 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.2 | 27.1 | 5.9 | Pass |
| 814 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.6 | 16.6 | 5.9 | Pass |
| 901 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt1.66) | 37.4 | 18.5 | 5.7 | Pass |
| 902 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 28.2 | 15.3 | 6.6 | Pass |
| 903 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 24.5 | 23.2 | 6.3 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 904 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 20.7 | 23.8 | 6.5 | Pass |
| 905 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 23.1 | 22.2 | 6.4 | Pass |
| 906 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 29.9 | 20.5 | 6.1 | Pass |
| 907 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 35.7 | 18.2 | 5.8 | Pass |
| 908 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.4 | 17.3 | 6.8 | Pass |
| 909 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 32.2 | 19.0 | 5.9 | Pass |
| 910 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.5 | 22.6 | 5.9 | Pass |
| 911 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 42.0 | 12.1 | 5.8 | Pass |
| 912 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.8 | 22.4 | 6.4 | Pass |
| 913 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.9 | 26.4 | 5.4 | Pass |
| 914 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof, only (total ceiling/roof system R-value Rt1.66) | 44.8 | 18.1 | 5.2 | Pass |
| 1001 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening | 20.8 | 27.4 | 6.2 | Pass |
| 1002 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 19.0 | 19.8 | 7.0 | Pass |
| 1003 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 32.1 | 29.2 | 5.3 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1004 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.3 | 17.6 | 5.9 | Pass |
| 1005 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.5 | 20.2 | 5.9 | Pass |
| 1006 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.1 | 11.4 | 5.7 | Pass |
| 1007 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.0 | 21.0 | 6.3 | Pass |
| 1008 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 42.2 | 26.8 | 4.8 | Pass |
| 1009 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.9 | 14.5 | 7.1 | Pass |
| 1101 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 34.6 | 28.5 | 5.2 | Pass |
| 1102 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.5 | 15.1 | 7.5 | Pass |
| 1103 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.1 | 21.2 | 7.3 | Pass |
| 1104 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.3 | 28.5 | 5.5 | Pass |
| 1105 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.4 | 17.5 | 5.9 | Pass |
| 1106 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.1 | 24.3 | 5.5 | Pass |
| 1107 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.7 | 13.4 | 5.4 | Pass |
| 1108 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.2 | 22.7 | 6.2 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1109 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.3 | 19.5 | 6.6 | Pass |
| 1110 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.1 | 14.8 | 7.6 | Pass |
| 1201 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 30% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.1 | 29.0 | 5.1 | Pass |
| 1202 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.9 | 15.4 | 7.8 | Pass |
| 1203 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.4 | 21.2 | 7.3 | Pass |
| 1204 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.7 | 28.5 | 5.4 | Pass |
| 1205 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.7 | 17.4 | 5.9 | Pass |
| 1206 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.4 | 24.5 | 5.5 | Pass |
| 1207 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 45.0 | 13.2 | 5.4 | Pass |
| 1208 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.4 | 22.5 | 6.2 | Pass |
| 1209 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.6 | 19.2 | 6.6 | Pass |
| 1210 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.4 | 14.9 | 7.6 | Pass |
| 1301 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge | 35.1 | 29.3 | 5.1 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| | glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 10% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | | | | |
| 1302 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.0 | 15.6 | 7.8 | Pass |
| 1303 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.5 | 21.9 | 7.3 | Pass |
| 1304 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.9 | 28.5 | 5.4 | Pass |
| 1305 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.8 | 17.5 | 5.9 | Pass |
| 1306 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.5 | 24.5 | 5.5 | Pass |
| 1307 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 45.2 | 13.2 | 5.4 | Pass |
| 1308 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.6 | 22.4 | 6.2 | Pass |
| 1309 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.7 | 18.8 | 6.6 | Pass |
| 1310 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.5 | 14.8 | 7.6 | Pass |
| 1401 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.5 | 28.8 | 5.1 | Pass |
| 1402 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.3 | 15.3 | 7.8 | Pass |
| 1403 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.7 | 21.9 | 7.2 | Pass |
| 1404 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at | 30.3 | 28.2 | 5.4 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| | least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | | | | |
| 1405 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.1 | 17.5 | 5.9 | Pass |
| 1406 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.8 | 24.0 | 5.5 | Pass |
| 1407 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows | 34.5 | 11.7 | 6.4 | Pass |
| 1408 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.9 | 22.2 | 6.2 | Pass |
| 1409 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.0 | 19.0 | 6.6 | Pass |
| 1410 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.7 | 14.8 | 7.5 | Pass |
| 1501 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.7 | 29.4 | 5.1 | Pass |
| 1502 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.4 | 15.2 | 7.8 | Pass |
| 1503 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.8 | 22.0 | 7.2 | Pass |
| 1504 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 30.5 | 28.1 | 5.4 | Pass |
| 1505 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.3 | 17.3 | 5.9 | Pass |
| 1506 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.9 | 24.2 | 5.4 | Pass |
| 1507 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows | 34.5 | 11.8 | 6.4 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1508 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 27.1 | 22.1 | 6.1 | Pass |
| 1509 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.2 | 19.4 | 6.5 | Pass |
| 1510 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.8 | 14.6 | 7.6 | Pass |
| 1601 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.9 | 29.0 | 5.1 | Pass |
| 1602 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.7 | 24.3 | 5.9 | Pass |
| 1603 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, North Lounge window to have at least 10% ventilation opening | 29.0 | 28.2 | 5.6 | Pass |
| 1604 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 41.1 | 27.8 | 4.8 | Pass |
| 1605 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.9 | 18.4 | 5.2 | Pass |
| 1606 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R2.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt2.66) | 37.0 | 22.5 | 5.4 | Pass |
| 1607 | R2.5 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R3.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.66) | 43.7 | 11.8 | 5.7 | Pass |
| 1608 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening, R2.5 Bulk Ceiling Insulation to exposed | 44.4 | 23.6 | 4.9 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| | roof only (total ceiling/roof system R-value Rt2.66) | | | | |
| 1609 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 40.0 | 22.9 | 5.2 | Pass |
| 1610 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 19.4 | 15.8 | 7.3 | Pass |
| 1701 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, All North Bedroom glazed doors to have at least 30% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 39.8 | 20.6 | 5.4 | Pass |
| 1702 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 1 glazed window to have at least 10% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 31.2 | 28.4 | 5.4 | Pass |
| 1703 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 44.8 | 25.3 | 4.8 | Pass |
| 1704 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 1 glazed window to have at least 10% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 32.6 | 24.2 | 5.6 | Pass |

## 4. BASIX ENERGY SECTION

The proposed development will meet the mandatory BASIX Energy target of 25% as long as the energy commitments detailed in Table 4 are installed.

**Table 4: BASIX Energy Commitments**

| *Component* | | *Commitment* |
|---|---|---|
| *Common Areas and Central Systems* | Hot Water System | • Centralised Gas-fired boiler with internal piping insulation of R0.6 (~38mm) |
| | Lifts | • All lifts to use Gearless traction with VVVF motor servicing all levels |
| | Ventilation | • Car Park: Ventilation (supply & exhaust) with a CO monoxide monitor & VSD fan<br>• Switch Room: Ventilation (Supply only), thermostatically controlled<br>• Garbage Rooms: Ventilation (exhaust only), continuous<br>• Community room: Airconditioned, time clock or BMS<br>• Plant/Service Rooms: Ventilation (exhaust only), thermostatically controlled<br>• Hallways & lobbies: No mechanical ventilation |
| | Lighting | • Car Park: Fluorescent lighting with time clocks and motion sensors<br>• Lift Cars: LED lighting connected to lift call button<br>• Switch Room: LED lighting with manual on/off switch<br>• Garbage Rooms: LED lighting with motion sensors<br>• Community room: LED lighting with time clocks and motion sensors<br>• Plant/Service Room: LED lighting with manual on/off switch<br>• Hallways & lobbies: LED lighting with motion sensors + time clock |
| *Private Dwellings* | Hot Water System | • See Central systems |
| | Ventilation | • Kitchen, Bathroom & Laundry Exhaust: Individual fan, ducted to roof or façade, with manual on/off switch |
| | Heating & Cooling | • Heating: Living & Beds to have individual 2-star (average zone) 1-phase air-conditioning<br>• Cooling: Living & Beds to have individual 2-star (average zone) 1-phase air-conditioning |
| | Lighting | • At least 80% of light fittings (including the main light fitting) in all hallways, laundries, bathrooms, kitchens, bedrooms and living areas to use Fluorescent or LED lights with dedicated fittings[1] |
| | Other | • Gas cook top and electric oven<br>• Install a 4-star (energy rating) dishwashers<br>• Install a 2-star (energy rating) dryers |

[1] Definition of dedicated fittings is a light fitting that is only capable of accepting fluorescent or LED (Light Emitting Diode) lamps. It will not accept incandescent, halogen or any other non-fluorescent or non-LED lamps.

## 5. CONCLUSION

The proposed development has been assessed to optimise its thermal performance (passive and fabric design) using the Nationwide House Energy Rating scheme (NatHERS) and also been assessed in terms of its ability to conserve water and minimise energy consumption through BASIX Tool.

With the commitment recommendations contained within this report the proposed development is able to meet BASIX requirements and is BASIX compliant.

For further details, please refer to the BASIX Certificate No. 1133099M_05 provided.

# APPENDIX A - ARCHITECTURAL DRAWINGS

The building sustainability performance assessment carried out in this report was based on the following architectural drawings supplied by SJB Architects received on 16th August 2021.

| Sheet No | Sheet Name | Rev |
|---|---|---|
| 0102 | SITE SURVEY | 10 |
| 0103 | SITE ANALYSIS | 10 |
| 0206 | FLOOR PLAN B4 | 10 |
| 0207 | FLOOR PLAN B3 | 10 |
| 0208 | FLOOR PLAN B2 | 10 |
| 0209 | FLOOR PLAN B1 | 10 |
| 0210 | FLOOR PLAN G | 10 |
| 0211 | FLOOR PLAN L1 | 10 |
| 0212 | FLOOR PLAN L2 | 10 |
| 0213 | FLOOR PLAN L3 | 10 |
| 0214 | FLOOR PLAN L4 | 10 |
| 0215 | FLOOR PLAN L5 | 10 |
| 0216 | FLOOR PLAN L6 | 10 |
| 0217 | FLOOR PLAN L7 | 10 |
| 0218 | FLOOR PLAN L8 | 10 |
| 0219 | FLOOR PLAN L9 | 10 |
| 0220 | FLOOR PLAN L10 | 10 |
| 0221 | FLOOR PLAN L11 | 10 |
| 0222 | FLOOR PLAN L12 | 10 |
| 0223 | FLOOR PLAN L13 | 10 |
| 0224 | FLOOR PLAN L14 | 10 |
| 0225 | FLOOR PLAN L15 | 10 |
| 0226 | FLOOR PLAN L16 | 10 |
| 0227 | FLOOR PLAN L17 | 10 |
| 0228 | FLOOR PLAN ROOF | 10 |
| 0501 | ELEVATION - NORTH | 10 |
| 0502 | ELEVATION - EAST | 10 |
| 0503 | ELEVATION - SOUTH | 10 |
| 0504 | ELEVATION - WEST | 10 |
| 0601 | SECTIONS SHEET 1 | 10 |
| 0602 | SECTIONS SHEET 2 | 10 |
| 1401 | ADAPTABLE UNIT TYPES | 10 |
| 3101 | SHADOW ANALYSIS | 10 |
| 3102 | SHADOW ANALYSIS | 10 |
| 3103 | SOLAR ANALYSIS | 10 |
| 3201 | CROSS VENTILATION ANALYSIS | 10 |
| 3301 | GFA ANALYSIS | 10 |
| 3302 | COMMUNAL OPEN & DEEP SOIL SPACE ANALYSIS | 10 |
| 3410 | HEIGHT PLANE 3D | 10 |
| 5001 | DRIVEWAY SECTION | 10 |
| 6003 | 3D ARTIST IMPRESSION SHEET 3 | 10 |
| 6004 | 3D ARTIST IMPRESSION SHEET 4 | 10 |
| 6005 | 3D ARTIST IMPRESSION SHEET 5 | 10 |
| 6006 | 3D ARTIST IMPRESSION SHEET 6 | 10 |

# APPENDIX B – Landscaping Areas

**BASIX for Multi Dwellings - Landscape Checklist**

**WATER - Central systems and common areas**

Common area landscape

Please fill out mandatory fields marked in a *

Notes for assessor

| | |
|---|---|
| Number of Unit-Buildings | 201 |
| Building Name(s) | APARTMENT Leice Pty Ltd |
| Common area of lawn (m²) * | 0 |
| Common area of garden (exlcuding lawn) (m²) * | 1089 |
| Common area of indigenous species (m²) * | 0 |

**WATER - dwellings**

Private area landscape

Notes for assessor

For *each dwelling*, gather the following information

How many units have private garden & lawn. Please list these separately below: 8

| Unit No. | Total area of Private garden (m²) | Total area of Private lawn (m²) | Area of indigenous species (m²) |
|---|---|---|---|
| 2.01 | 63 | 0 | 0 |
| 2.02 | 55 | 0 | 0 |
| 2.03 | 23 | 0 | 0 |
| 2.04 | 24 | 0 | 0 |
| 2.05 | 14 | 0 | 0 |
| 10.01 | 49 | 0 | 0 |
| 10.02 | 16 | 0 | 0 |
| 10.03 | 14 | 0 | 0 |

Completed by: Gita
Company : Site Design Studio
Date completed: 26 / 07 / 2021

# BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

## Multi Dwelling

Certificate number: 1133099M_05

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1133099M lodged with the consent authority or certifier on 25 September 2020 with application DA2020/0269.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Secretary
Date of issue: Tuesday, 17 August 2021
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT | Planning, Industry & Environment

| Project summary | |
|---|---|
| Project name | 2-8 Leicester Ave Strathfield_05 |
| Street address | 2-8 Leicester Avenue Strathfield 2135 |
| Local Government Area | Canada Bay City Council |
| Plan type and plan number | deposited 105523 |
| Lot no. | 1 |
| Section no. | - |
| No. of residential flat buildings | 1 |
| No. of units in residential flat buildings | 201 |
| No. of multi-dwelling houses | 0 |
| No. of single dwelling houses | 0 |

| Project score | | |
|---|---|---|
| Water | ✔ 41 | Target 40 |
| Thermal Comfort | ✔ Pass | Target Pass |
| Energy | ✔ 28 | Target 25 |

| Certificate Prepared by |
|---|
| Name / Company Name: ESD Synergy Pty Ltd |
| ABN (if applicable): 17165174685 |

# Description of project

| Project address | |
|---|---|
| Project name | 2-8 Leicester Ave Strathfield_05 |
| Street address | 2-8 Leicester Avenue Strathfield 2135 |
| Local Government Area | Canada Bay City Council |
| Plan type and plan number | deposited 105523 |
| Lot no. | 1 |
| Section no. | - |

| Project type | |
|---|---|
| No. of residential flat buildings | 1 |
| No. of units in residential flat buildings | 201 |
| No. of multi-dwelling houses | 0 |
| No. of single dwelling houses | 0 |

| Site details | |
|---|---|
| Site area (m²) | 3311 |
| Roof area (m²) | 2019 |
| Non-residential floor area (m²) | 145.0 |
| Residential car spaces | 202 |
| Non-residential car spaces | 19 |

| Common area landscape | |
|---|---|
| Common area lawn (m²) | 0.0 |
| Common area garden (m²) | 1089.0 |
| Area of indigenous or low water use species (m²) | 0.0 |

| Assessor details | |
|---|---|
| Assessor number | 20754 |
| Certificate number | 0005227530 |
| Climate zone | 56 |
| Ceiling fan in at least one bedroom | No |
| Ceiling fan in at least one living room or other conditioned area | No |

| Project score | | |
|---|---|---|
| Water | ✔ 41 | Target 40 |
| Thermal Comfort | ✔ Pass | Target Pass |
| Energy | ✔ 28 | Target 25 |

## Description of project

The tables below describe the dwellings and common areas within the project

### Residential flat buildings - Building1, 201 dwellings, 18 storeys above ground

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 106 | 3 | 126.1 | 0.0 | 0.0 | 0.0 |
| 111 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 202 | 2 | 81.9 | 0.0 | 55.0 | 0.0 |
| 207 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 212 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 303 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 308 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 313 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 404 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 409 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 414 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 505 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 510 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 601 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 606 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 611 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 702 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 707 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 107 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 112 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 203 | 1 | 55.5 | 0.0 | 23.0 | 0.0 |
| 208 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 213 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 304 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 309 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 314 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 405 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 410 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 501 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 506 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 511 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 602 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 607 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 612 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 703 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 708 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 108 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 113 | 3 | 99.6 | 0.0 | 0.0 | 0.0 |
| 204 | 1 | 55.2 | 0.0 | 24.0 | 0.0 |
| 209 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 214 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 305 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 310 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 401 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 406 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 411 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 502 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 507 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 512 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 603 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 608 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 613 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 704 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 709 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 109 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 114 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 205 | 1 | 55.9 | 0.0 | 14.0 | 0.0 |
| 210 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 301 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 306 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 311 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 402 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 407 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 412 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 503 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 508 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 513 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 604 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 609 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 614 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 705 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 710 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 110 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 201 | 3 | 99.9 | 0.0 | 63.0 | 0.0 |
| 206 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 211 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 302 | 3 | 81.9 | 0.0 | 0.0 | 0.0 |
| 307 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 312 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 403 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 408 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 413 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 504 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 509 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 514 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 605 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 610 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 701 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 706 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 711 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 712 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 803 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 808 | 1 | 85.6 | 0.0 | 0.0 | 0.0 |
| 813 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 904 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 909 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 914 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| G05 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1003 | 2 | 82.3 | 0.0 | 14.0 | 0.0 |
| 1008 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1104 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1109 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1204 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1209 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1304 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1309 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1404 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1409 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1504 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1509 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1604 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 1609 | 1 | 57.2 | 0.0 | 0.0 | 0.0 |
| 1704 | 3 | 139.4 | 0.0 | 0.0 | 0.0 |

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 713 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| 804 | 1 | 55.2 | 0.0 | 0.0 | 0.0 |
| 809 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 814 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 905 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 910 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| G01 | 3 | 125.6 | 0.0 | 0.0 | 0.0 |
| G06 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1004 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1009 | 1 | 57.3 | 0.0 | 0.0 | 0.0 |
| 1105 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1110 | 1 | 57.3 | 0.0 | 0.0 | 0.0 |
| 1205 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1210 | 1 | 57.9 | 0.0 | 0.0 | 0.0 |
| 1305 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1310 | 1 | 57.3 | 0.0 | 0.0 | 0.0 |
| 1405 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1410 | 1 | 57.3 | 0.0 | 0.0 | 0.0 |
| 1505 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1510 | 1 | 57.3 | 0.0 | 0.0 | 0.0 |
| 1605 | 2 | 80.5 | 0.0 | 0.0 | 0.0 |
| 1610 | 1 | 56.8 | 0.0 | 0.0 | 0.0 |

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 714 | 1 | 59.6 | 0.0 | 0.0 | 0.0 |
| 805 | 1 | 55.9 | 0.0 | 0.0 | 0.0 |
| 810 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 901 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 906 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 911 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| G02 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| G07 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1005 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1101 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1106 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1201 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1206 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1301 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1306 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1401 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1406 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1501 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1506 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1601 | 2 | 81.7 | 0.0 | 0.0 | 0.0 |
| 1606 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1701 | 3 | 100.1 | 0.0 | 0.0 | 0.0 |

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 801 | 3 | 99.9 | 0.0 | 0.0 | 0.0 |
| 806 | 2 | 82.3 | 0.0 | 0.0 | 0.0 |
| 811 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 902 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 907 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 912 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| G03 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 1001 | 2 | 81.3 | 0.0 | 49.0 | 0.0 |
| 1006 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1102 | 1 | 51.6 | 0.0 | 0.0 | 0.0 |
| 1107 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1202 | 1 | 51.6 | 0.0 | 0.0 | 0.0 |
| 1207 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1302 | 1 | 51.6 | 0.0 | 0.0 | 0.0 |
| 1307 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1402 | 1 | 51.6 | 0.0 | 0.0 | 0.0 |
| 1407 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1502 | 1 | 51.6 | 0.0 | 0.0 | 0.0 |
| 1507 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1602 | 1 | 51.3 | 0.0 | 0.0 | 0.0 |
| 1607 | 2 | 78.5 | 0.0 | 0.0 | 0.0 |
| 1702 | 3 | 99.0 | 0.0 | 0.0 | 0.0 |

| Dwelling no. | No. of bedrooms | Conditioned floor area (m²) | Unconditioned floor area (m²) | Area of garden & lawn (m²) | Indigenous species (min area m²) |
|---|---|---|---|---|---|
| 802 | 2 | 81.9 | 0.0 | 0.0 | 0.0 |
| 807 | 2 | 80.7 | 0.0 | 0.0 | 0.0 |
| 812 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 903 | 1 | 55.5 | 0.0 | 0.0 | 0.0 |
| 908 | 1 | 52.6 | 0.0 | 0.0 | 0.0 |
| 913 | 3 | 98.3 | 0.0 | 0.0 | 0.0 |
| G04 | 2 | 81.0 | 0.0 | 0.0 | 0.0 |
| 1002 | 1 | 49.9 | 0.0 | 16.0 | 0.0 |
| 1007 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1103 | 1 | 49.9 | 0.0 | 0.0 | 0.0 |
| 1108 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1203 | 1 | 49.9 | 0.0 | 0.0 | 0.0 |
| 1208 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1303 | 1 | 49.9 | 0.0 | 0.0 | 0.0 |
| 1308 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1403 | 1 | 49.9 | 0.0 | 0.0 | 0.0 |
| 1408 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1503 | 1 | 49.9 | 0.0 | 0.0 | 0.0 |
| 1508 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1603 | 1 | 49.6 | 0.0 | 0.0 | 0.0 |
| 1608 | 3 | 99.7 | 0.0 | 0.0 | 0.0 |
| 1703 | 3 | 97.8 | 0.0 | 0.0 | 0.0 |

## Description of project

The tables below describe the dwellings and common areas within the project

### Common areas of unit building - Building1

| Common area | Floor area (m²) |
|---|---|
| Car park area (No. 1) | 8922.0 |
| Lift car (No.3) | - |
| Community room (No. 1) | 32.0 |
| Hallway/lobby type (No. 1) | 3235.0 |

| Common area | Floor area (m²) |
|---|---|
| Lift car (No.1) | - |
| Switch room (No. 1) | 14.0 |
| Plant or service room (No. 1) | 276.0 |

| Common area | Floor area (m²) |
|---|---|
| Lift car (No.2) | - |
| Garbage room (No. 1) | 80.0 |
| Ground floor lobby type (No. 1) | 144.0 |

# Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1
    (a) Dwellings
        (i) Water
        (ii) Energy
        (iii) Thermal Comfort
    (b) Common areas and central systems/facilities
        (i) Water
        (ii) Energy

2. Commitments for multi-dwelling houses

3. Commitments for single dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)
        (i) Water
        (ii) Energy

# Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

## 1. Commitments for Residential flat buildings - Building1

### (a) Dwellings

| (i) Water | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below. | | | |
| (b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table). | ✔ | ✔ | |
| (c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it. | | ✔ | ✔ |
| (d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below. | | ✔ | ✔ |
| (e) The applicant must install:<br>(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and<br>(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling. | | ✔<br>✔ | ✔<br>✔ |
| (e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below. | ✔ | ✔ | |
| (f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both). | | ✔ | |
| (g) The pool or spa must be located as specified in the table. | ✔ | ✔ | |
| (h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified. | ✔ | ✔ | ✔ |

| | Fixtures | | | | | Appliances | | Individual pool | | | | Individual spa | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | All shower-heads | All toilet flushing systems | All kitchen taps | All bathroom taps | HW recirculation or diversion | All clothes washers | All dish-washers | Volume (max volume) | Pool cover | Pool location | Pool shaded | Volume (max volume) | Spa cover | Spa shaded |
| All dwellings | 4 star (> 4.5 but <= 6 L/min) | 4 star | 5 star | 5 star | no | - | 4 star | - | - | - | - | - | - | - |

| | Alternative water source | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dwelling no. | Alternative water supply systems | Size | Configuration | Landscape connection | Toilet connection (s) | Laundry connection | Pool top-up | Spa top-up |
| None | - | - | - | - | - | - | - | - |

| (ii) Energy | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below. | | | |
| (b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system. | ✔ | ✔ | ✔ |
| (c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table. | | ✔ | ✔ |
| (d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms. | | ✔ | ✔ |
| (e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting. | | ✔ | ✔ |

| (ii) Energy | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight. | ✔ | ✔ | ✔ |
| (g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: | | | |
| (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and | | ✔ | |
| (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump. | | ✔ | |
| (h) The applicant must install in the dwelling: | | | |
| (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; | | ✔ | |
| (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and | | ✔ | ✔ |
| (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table. | | ✔ | |
| (i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated". | | ✔ | |

| | Hot water | Bathroom ventilation system | | Kitchen ventilation system | | Laundry ventilation system | |
|---|---|---|---|---|---|---|---|
| Dwelling no. | Hot water system | Each bathroom | Operation control | Each kitchen | Operation control | Each laundry | Operation control |
| All dwellings | central hot water system 1 | individual fan, ducted to façade or roof | manual switch on/off | individual fan, ducted to façade or roof | manual switch on/off | individual fan, ducted to façade or roof | manual switch on/off |

| | Cooling | | Heating | | Artificial lighting | | | | | | Natural lighting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | living areas | bedroom areas | living areas | bedroom areas | No. of bedrooms &/or study | No. of living &/or dining rooms | Each kitchen | All bathrooms/ toilets | Each laundry | All hallways | No. of bathrooms &/or toilets | Main kitchen |
| 106, 112, 113, 201, 212, 213, 301, 302, 312, 313, 401, 412, 413, 501, 512, 513, 601, 612, 613, 701, 712, 713, 801, 812, 813, 901, 912, 913, G01, G07, 1007, 1108, 1208, 1308, 1408, 1508, 1608, 1701, 1702, | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 3 (dedicated) | 1 (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | 0 | no |

| | Cooling | | Heating | | Artificial lighting | | | | | | Natural lighting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | living areas | bedroom areas | living areas | bedroom areas | No. of bedrooms &/or study | No. of living &/or dining rooms | Each kitchen | All bathrooms/ toilets | Each laundry | All hallways | No. of bathrooms &/or toilets | Main kitchen |
| 1703, 1704 | | | | | | | | | | | | |

| | Cooling | | Heating | | Artificial lighting | | | | | | Natural lighting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | living areas | bedroom areas | living areas | bedroom areas | No. of bedrooms &/or study | No. of living &/or dining rooms | Each kitchen | All bathrooms/ toilets | Each laundry | All hallways | No. of bathrooms &/or toilets | Main kitchen |
| 108, 114, 203, 204, 205, 208, 214, 303, 304, 305, 308, 314, 403, 404, 405, 408, 414, 503, 504, 505, 508, 514, 603, 604, 605, 608, 614, 703, 704, 705, 708, 714, 803, 804, 805, 808, 814, 903, 904, | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1 (dedicated) | 1 (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | 0 | no |

| | Cooling | | Heating | | Artificial lighting | | | | | | Natural lighting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | living areas | bedroom areas | living areas | bedroom areas | No. of bedrooms &/or study | No. of living &/or dining rooms | Each kitchen | All bathrooms/ toilets | Each laundry | All hallways | No. of bathrooms &/or toilets | Main kitchen |
| 905, 908, 914, G03, 1002, 1008, 1009, 1102, 1103, 1109, 1110, 1202, 1203, 1209, 1210, 1302, 1303, 1309, 1310, 1402, 1403, 1409, 1410, 1502, 1503, 1509, 1510, 1602, 1603, 1609, 1610 | | | | | | | | | | | | |
| All other dwellings | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 1-phase airconditioning 2 star (average zone) | 2 (dedicated) | 1 (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | yes (dedicated) | 0 | no |

| | Individual pool | | Individual spa | | Appliances & other efficiency measures | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dwelling no. | Pool heating system | Timer | Spa heating system | Timer | Kitchen cooktop/oven | Refrigerator | Well ventilated fridge space | Dishwasher | Clothes washer | Clothes dryer | Indoor or sheltered clothes drying line | Private outdoor or unsheltered clothes drying line |
| All dwellings | - | - | - | - | gas cooktop & electric oven | - | no | 4 star | - | 2 star | no | no |

| (iii) Thermal Comfort | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development. | | | |
| (b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol. | | | |
| (c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below. | | | |
| (d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case. | ✔ | | |
| (e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications. | | ✔ | |
| (f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications. | | ✔ | ✔ |
| (g) Where there is an in-slab heating or cooling system, the applicant must:<br>(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or<br>(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab. | ✔ | ✔ | ✔ |
| (h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below. | ✔ | ✔ | ✔ |
| | | | |
| | | | |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 106 | 14.6 | 11.8 |
| 107 | 21.2 | 28.6 |
| 108 | 17.4 | 25.0 |
| 109 | 25.2 | 28.5 |
| 110 | 27.6 | 27.5 |
| 111 | 34.6 | 21.0 |
| 112 | 19.1 | 27.6 |
| 113 | 33.3 | 22.0 |
| 114 | 45.1 | 23.4 |
| 201 | 27.5 | 22.4 |
| 202 | 16.3 | 18.3 |
| 203 | 6.4 | 29.5 |
| 204 | 10.0 | 24.1 |
| 205 | 10.2 | 26.9 |
| 206 | 14.2 | 26.0 |
| 207 | 21.9 | 28.3 |
| 208 | 18.0 | 23.4 |
| 209 | 25.8 | 27.4 |
| 210 | 28.4 | 26.3 |
| 211 | 35.2 | 20.4 |
| 212 | 17.3 | 27.9 |
| 213 | 22.5 | 25.6 |
| 214 | 28.6 | 28.4 |
| 301 | 15.2 | 19.6 |
| 302 | 10.7 | 16.3 |
| 303 | 8.2 | 23.5 |
| 304 | 6.0 | 23.1 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 305 | 7.4 | 22.3 |
| 306 | 11.4 | 20.5 |
| 307 | 25.6 | 20.7 |
| 308 | 21.8 | 18.4 |
| 309 | 29.5 | 20.9 |
| 310 | 26.7 | 25.3 |
| 311 | 39.1 | 13.9 |
| 312 | 21.0 | 23.5 |
| 313 | 22.3 | 29.5 |
| 314 | 32.9 | 18.4 |
| 401 | 15.6 | 19.3 |
| 402 | 11.0 | 15.9 |
| 403 | 8.6 | 23.1 |
| 404 | 6.4 | 22.7 |
| 405 | 7.8 | 22.0 |
| 406 | 11.7 | 19.9 |
| 407 | 26.2 | 20.0 |
| 408 | 22.3 | 18.1 |
| 409 | 30.1 | 20.3 |
| 410 | 27.3 | 24.7 |
| 411 | 39.7 | 13.2 |
| 412 | 21.6 | 23.1 |
| 413 | 22.6 | 28.8 |
| 414 | 33.5 | 17.5 |
| 501 | 15.9 | 18.25 |
| 502 | 11.3 | 15.6 |
| 503 | 8.8 | 23.1 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 504 | 6.7 | 22.2 |
| 505 | 8.0 | 21.5 |
| 506 | 12.0 | 19.8 |
| 507 | 26.6 | 19.6 |
| 508 | 22.7 | 18.0 |
| 509 | 30.6 | 19.9 |
| 510 | 27.8 | 23.9 |
| 511 | 40.2 | 13.1 |
| 512 | 22.1 | 23.0 |
| 513 | 23.1 | 28.7 |
| 514 | 34.0 | 17.2 |
| 601 | 16.4 | 18.5 |
| 602 | 11.5 | 15.3 |
| 603 | 9.2 | 22.7 |
| 604 | 6.9 | 22.2 |
| 605 | 8.4 | 21.4 |
| 606 | 12.5 | 19.1 |
| 607 | 27.2 | 19.0 |
| 608 | 23.4 | 17.5 |
| 609 | 31.2 | 19.3 |
| 610 | 28.4 | 23.4 |
| 611 | 40.9 | 12.2 |
| 612 | 22.7 | 22.8 |
| 613 | 23.4 | 28.0 |
| 614 | 34.1 | 17.2 |
| 701 | 16.6 | 18.3 |
| 702 | 11.6 | 14.7 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 703 | 9.5 | 22.4 |
| 704 | 7.1 | 22.4 |
| 705 | 8.6 | 20.6 |
| 706 | 12.7 | 19.0 |
| 707 | 27.5 | 18.8 |
| 708 | 23.7 | 17.7 |
| 709 | 31.5 | 19.2 |
| 710 | 28.7 | 23.0 |
| 711 | 41.2 | 11.9 |
| 712 | 23.0 | 22.8 |
| 713 | 23.7 | 27.6 |
| 714 | 35.2 | 16.5 |
| 801 | 16.9 | 18.0 |
| 802 | 11.9 | 14.6 |
| 803 | 9.6 | 22.2 |
| 804 | 7.4 | 22.6 |
| 805 | 8.8 | 20.6 |
| 806 | 13.0 | 19.0 |
| 807 | 28.0 | 18.6 |
| 808 | 24.1 | 17.2 |
| 809 | 31.9 | 18.7 |
| 810 | 29.1 | 22.8 |
| 811 | 41.7 | 12.1 |
| 812 | 23.5 | 22.4 |
| 813 | 24.2 | 27.1 |
| 814 | 35.6 | 16.6 |
| 901 | 37.4 | 18.5 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 902 | 28.2 | 15.3 |
| 903 | 24.5 | 23.2 |
| 904 | 20.7 | 23.8 |
| 905 | 23.1 | 22.2 |
| 906 | 29.9 | 20.5 |
| 907 | 35.7 | 18.2 |
| 908 | 24.4 | 17.3 |
| 909 | 32.2 | 19.0 |
| 910 | 29.5 | 22.6 |
| 911 | 42.0 | 12.1 |
| 912 | 23.8 | 22.4 |
| 913 | 33.9 | 26.4 |
| 914 | 44.8 | 18.1 |
| G01 | 28.6 | 26.3 |
| G02 | 38.6 | 29.2 |
| G03 | 41.1 | 28.9 |
| G04 | 42.8 | 22.8 |
| G05 | 43.8 | 21.1 |
| G06 | 41.7 | 20.5 |
| G07 | 43.4 | 27.7 |
| 1001 | 20.8 | 27.4 |
| 1002 | 19.0 | 19.8 |
| 1003 | 32.1 | 29.2 |
| 1004 | 34.3 | 17.6 |
| 1005 | 31.5 | 20.2 |
| 1006 | 44.1 | 11.4 |
| 1007 | 26.0 | 21.0 |

| | Thermal loads | |
|---|---|---|
| Dwelling no. | Area adjusted heating load (in mJ/m²/yr) | Area adjusted cooling load (in mJ/m²/yr) |
| 1008 | 42.2 | 26.8 |
| 1009 | 22.9 | 14.5 |
| 1101 | 34.6 | 28.5 |
| 1102 | 16.5 | 15.1 |
| 1103 | 13.1 | 21.2 |
| 1104 | 29.3 | 28.5 |
| 1105 | 34.4 | 17.5 |
| 1106 | 33.1 | 24.3 |
| 1107 | 44.7 | 13.4 |
| 1108 | 26.2 | 22.7 |
| 1109 | 24.3 | 19.5 |
| 1110 | 16.1 | 14.8 |
| 1201 | 35.1 | 29.0 |
| 1202 | 12.9 | 15.4 |
| 1203 | 13.4 | 21.2 |
| 1204 | 29.7 | 28.5 |
| 1205 | 34.7 | 17.4 |
| 1206 | 33.4 | 24.5 |
| 1207 | 45.0 | 13.2 |
| 1208 | 26.4 | 22.5 |
| 1209 | 24.6 | 19.2 |
| 1210 | 16.4 | 14.9 |
| 1301 | 35.1 | 29.3 |
| 1302 | 13.0 | 15.6 |
| 1303 | 13.5 | 21.9 |
| 1304 | 29.9 | 28.5 |
| 1305 | 34.8 | 17.5 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 1306 | 33.5 | 24.5 |
| 1307 | 45.2 | 13.2 |
| 1308 | 26.6 | 22.4 |
| 1309 | 24.7 | 18.8 |
| 1310 | 16.5 | 14.8 |
| 1401 | 35.5 | 28.8 |
| 1402 | 13.3 | 15.3 |
| 1403 | 13.7 | 21.9 |
| 1404 | 30.3 | 28.2 |
| 1405 | 35.1 | 17.5 |
| 1406 | 33.8 | 24.0 |
| 1407 | 34.5 | 11.7 |
| 1408 | 26.9 | 22.2 |
| 1409 | 25.0 | 19.0 |
| 1410 | 16.7 | 14.8 |
| 1501 | 35.7 | 29.4 |
| 1502 | 13.4 | 15.2 |
| 1503 | 13.8 | 22.0 |
| 1504 | 30.5 | 28.1 |
| 1505 | 35.3 | 17.3 |
| 1506 | 33.9 | 24.2 |
| 1507 | 34.5 | 11.8 |
| 1508 | 27.1 | 22.1 |
| 1509 | 25.2 | 19.4 |
| 1510 | 16.8 | 14.6 |
| 1601 | 35.9 | 29.0 |
| 1602 | 27.7 | 24.3 |

| | Thermal loads | |
|---|---|---|
| **Dwelling no.** | **Area adjusted heating load (in mJ/m²/yr)** | **Area adjusted cooling load (in mJ/m²/yr)** |
| 1603 | 29.0 | 28.2 |
| 1604 | 41.1 | 27.8 |
| 1605 | 44.9 | 18.4 |
| 1606 | 37.0 | 22.5 |
| 1607 | 43.7 | 11.8 |
| 1608 | 44.4 | 23.6 |
| 1609 | 40.0 | 22.9 |
| 1610 | 19.4 | 15.8 |
| 1701 | 39.8 | 20.6 |
| 1702 | 31.2 | 28.4 |
| 1703 | 44.8 | 25.3 |
| All other dwellings | 32.6 | 24.2 |

**(b) Common areas and central systems/facilities**

| (i) Water | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table. | | ✔ | ✔ |
| (b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table. | ✔ | ✔ | ✔ |
| (c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table. | ✔ | ✔ | |
| (d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table. | | ✔ | |
| (e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table. | | ✔ | ✔ |
| (f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table. | | ✔ | ✔ |

| Common area | Showerheads rating | Toilets rating | Taps rating | Clothes washers rating |
|---|---|---|---|---|
| All common areas | no common facility | no common facility | no common facility | no common laundry facility |

| Central systems | Size | Configuration | Connection (to allow for...) |
|---|---|---|---|
| Central water tank - rainwater or stormwater (No. 1) | 5000.0 | To collect run-off from at least:<br>- 200.0 square metres of roof area of buildings in the development<br>- 0.0 square metres of impervious area in the development<br>- 0.0 square metres of garden/lawn area in the development<br>- 0.0 square metres of planter box area in the development<br>(excluding, in each case, any area which drains to, or supplies, any other alternative water supply system). | - irrigation of 1089.0 square metres of common landscaped area on the site<br>- car washing in 0 car washing bays on the site |
| Fire sprinkler system (No. 1) | - | - | - |

| (ii) Energy | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified. | | ✔ | ✔ |
| (b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified. | | ✔ | ✔ |
| (c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table. | ✔ | ✔ | ✔ |

| | Common area ventilation system | | Common area lighting | | |
|---|---|---|---|---|---|
| Common area | Ventilation system type | Ventilation efficiency measure | Primary type of artificial lighting | Lighting efficiency measure | Lighting control system/BMS |
| Car park area (No. 1) | ventilation (supply + exhaust) | carbon monoxide monitor + VSD fan | fluorescent | time clock and motion sensors | No |
| Lift car (No.1) | - | - | light-emitting diode | connected to lift call button | No |
| Lift car (No.2) | - | - | light-emitting diode | connected to lift call button | No |
| Lift car (No.3) | - | - | light-emitting diode | connected to lift call button | No |
| Switch room (No. 1) | ventilation supply only | thermostatically controlled | light-emitting diode | manual on / manual off | No |
| Garbage room (No. 1) | ventilation exhaust only | - | light-emitting diode | motion sensors | No |
| Community room (No. 1) | air conditioning system | time clock or BMS controlled | light-emitting diode | time clock and motion sensors | No |
| Plant or service room (No. 1) | ventilation exhaust only | thermostatically controlled | light-emitting diode | manual on / manual off | No |
| Ground floor lobby type (No. 1) | no mechanical ventilation | - | light-emitting diode | time clock and motion sensors | No |
| Hallway/lobby type (No. 1) | no mechanical ventilation | - | light-emitting diode | time clock and motion sensors | No |

| Central energy systems | Type | Specification |
|---|---|---|
| Central hot water system (No. 1) | gas-fired boiler | Piping insulation (ringmain & supply risers):<br>(b) Piping internal to building: R0.6 (~25 mm) |
| Lift (No. 1) | gearless traction with V V V F motor | Number of levels (including basement): 22 |
| Lift (No. 2) | gearless traction with V V V F motor | Number of levels (including basement): 22 |
| Lift (No. 3) | gearless traction with V V V F motor | Number of levels (including basement): 22 |

## 4. Commitments for common areas and central systems/facilities for the development (non-building specific)

### (b) Common areas and central systems/facilities

| (i) Water | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table. | | ✔ | ✔ |
| (b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table. | ✔ | ✔ | ✔ |
| (c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table. | ✔ | ✔ | |
| (d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table. | | ✔ | |
| (e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table. | | ✔ | ✔ |
| (f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table. | | ✔ | ✔ |

| Common area | Showerheads rating | Toilets rating | Taps rating | Clothes washers rating |
|---|---|---|---|---|
| All common areas | no common facility | no common facility | no common facility | no common laundry facility |

| (ii) Energy | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|---|---|---|
| (a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified. | | ✔ | ✔ |
| (b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified. | | ✔ | ✔ |
| (c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table. | ✔ | ✔ | ✔ |

## Notes

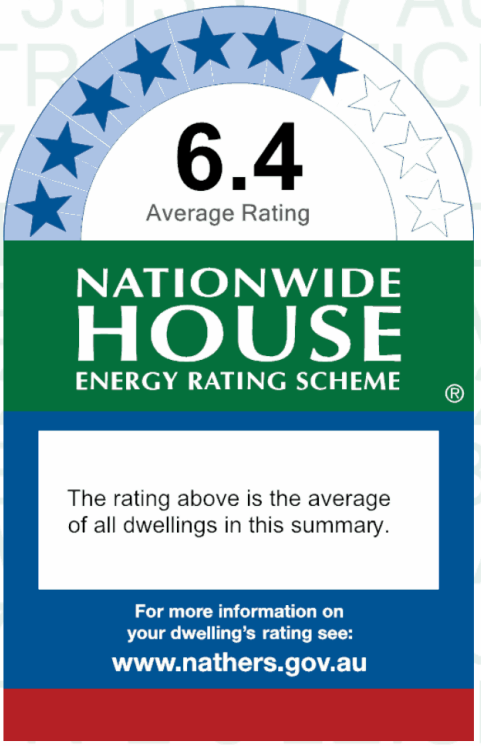
| |
|---|
| 1. In these commitments, "applicant" means the person carrying out the development. |
| 2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate. |
| 3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes. |
| 4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building). |
| 5. If a star or other rating is specified in a commitment, this is a minimum rating. |
| 6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply. |

## Legend

| |
|---|
| 1. Commitments identified with a "✔" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development). |
| 2. Commitments identified with a "✔" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development. |
| 3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled). |

# Nationwide House Energy Rating Scheme — Class 2 summary
# NatHERS Certificate No. 0005227530

**Generated on 17 Aug 2021 using BERS Pro v4.4.0.1 (3.21)**




## Property

**Address** 2-8 Leicester Ave , Strathfield , NSW , 2135

**Lot/DP** 1/105523

**NatHERS climate zone** 56

## Accredited assessor

Adriana Segovia

ESD Synergy Pty Ltd

adrianas@esdsynergy.com

0413591688

**Accreditation No.** 20754

**Assessor Accrediting Organisation** ABSA

## Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=esZUzjBXI . When using either link, ensure you are visiting hstar.com.au

## Summary of all dwellings

| Certificate number and link | Unit Number | Heating load (MJ/m$^2$/p.a.) | Cooling load (MJ/m$^2$/p.a.) | Total load (MJ/m$^2$/p.a.) | Star rating |
|---|---|---|---|---|---|
| 0005227327-01 | 106 | 14.3 | 11.8 | 26 | 7.9 |
| 0005227301-01 | 107 | 29.3 | 27.8 | 57.1 | 5.6 |
| 0006304570 | 108 | 17.4 | 25 | 42.4 | 6.7 |
| 0006304562 | 109 | 25.2 | 28.5 | 53.7 | 5.8 |
| 0006304554 | 110 | 27.6 | 27.5 | 55.1 | 5.7 |

*Continued Over*

### National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated buildings are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

## Summary of all dwellings (continued)

| Certificate number and link | Unit Number | Heating load (MJ/m$^2$/p.a.) | Cooling load (MJ/m$^2$/p.a.) | Total load (MJ/m$^2$/p.a.) | Star rating |
|---|---|---|---|---|---|
| 0006304547 | 111 | 34.6 | 21 | 55.6 | 5.7 |
| 0006304539 | 112 | 19.1 | 27.6 | 46.7 | 6.4 |
| 0006304521 | 113 | 33.3 | 22 | 55.3 | 5.7 |
| 0006304513 | 114 | 45.1 | 23.4 | 68.5 | 4.9 |
| 0005227269-01 | 201 | 27.5 | 22.4 | 49.9 | 6.1 |
| 0005227228-01 | 202 | 16.3 | 18.3 | 34.6 | 7.3 |
| 0005227210-01 | 203 | 6.4 | 29.5 | 35.9 | 7.2 |
| 0005227178-01 | 204 | 10 | 24.1 | 34.1 | 7.3 |
| 0005227152-01 | 205 | 10.2 | 26.9 | 37.1 | 7.1 |
| 0005227129-01 | 206 | 14.2 | 26 | 40.2 | 6.9 |
| 0005227095-02 | 207 | 21.9 | 28.3 | 50.2 | 6.1 |
| 0005225743-01 | 208 | 18 | 23.4 | 41.4 | 6.8 |
| 0005227061-01 | 209 | 25.8 | 27.4 | 53.3 | 5.8 |
| 0005227038-01 | 210 | 28.4 | 26.3 | 54.7 | 5.7 |
| 0005227004-01 | 211 | 35.2 | 20.4 | 55.6 | 5.7 |
| 0006304505 | 212 | 17.3 | 27.9 | 45.1 | 6.4 |
| 0006304497 | 213 | 22.5 | 25.6 | 48.1 | 6.2 |
| 0006304489 | 214 | 28.6 | 28.4 | 57 | 5.6 |
| 0005226964-01 | 301 | 15.2 | 19.6 | 34.8 | 7.3 |
| 0005226949-01 | 302 | 10.7 | 16.3 | 27 | 7.9 |
| 0005227517-01 | 303 | 8.2 | 23.5 | 31.8 | 7.5 |
| 0005227483-01 | 304 | 6 | 23.1 | 29.1 | 7.7 |
| 0005227442-01 | 305 | 7.4 | 22.3 | 29.7 | 7.7 |
| 0005227418-01 | 306 | 11.4 | 20.5 | 31.9 | 7.5 |
| 0005227392-02 | 307 | 25.6 | 20.7 | 46.3 | 6.4 |
| 0005226311-01 | 308 | 21.8 | 18.4 | 40.2 | 6.9 |
| 0005227368-01 | 309 | 29.5 | 20.9 | 50.5 | 6 |
| 0005227335-01 | 310 | 26.7 | 25.3 | 52 | 5.9 |
| 0005227293-01 | 311 | 39.1 | 13.9 | 53 | 5.9 |
| 0006304471 | 312 | 21 | 23.5 | 44.5 | 6.5 |
| 0006304463 | 313 | 22.3 | 29.5 | 51.8 | 5.9 |
| 0006304455 | 314 | 32.9 | 18.4 | 51.4 | 5.9 |
| 0005227277-01 | 401 | 15.6 | 19.3 | 34.9 | 7.3 |
| 0005227236-01 | 402 | 11 | 15.9 | 26.9 | 7.9 |
| 0005227202-01 | 403 | 8.6 | 23.1 | 31.7 | 7.5 |
| 0005227186-01 | 404 | 6.4 | 22.7 | 29 | 7.7 |
| 0005227145-01 | 405 | 7.8 | 22 | 29.7 | 7.7 |
| 0005227103-01 | 406 | 11.7 | 19.9 | 31.6 | 7.5 |
| 0005227079-02 | 407 | 26.2 | 20 | 46.2 | 6.4 |
| 0005226287-01 | 408 | 22.3 | 18.1 | 40.4 | 6.9 |

| Certificate number and link | Unit Number | Heating load (MJ/m /p.a.) | Cooling load (MJ/m /p.a.) | Total load (MJ/m /p.a.) | Star rating |
|---|---|---|---|---|---|
| 0005227046-01 | 409 | 30.1 | 20.3 | 50.5 | 6 |
| 0005227012-01 | 410 | 27.3 | 24.7 | 52 | 5.9 |
| 0005226980-01 | 411 | 39.7 | 13.2 | 52.9 | 5.9 |
| 0006304448 | 412 | 21.6 | 23.1 | 44.7 | 6.5 |
| 0006304430 | 413 | 22.6 | 28.8 | 51.4 | 5.9 |
| 0006304422 | 414 | 33.5 | 17.5 | 51 | 5.9 |
| 0005226956-01 | 501 | 15.9 | 18.7 | 34.6 | 7.3 |
| 0005226923-01 | 502 | 11.3 | 15.6 | 27 | 7.9 |
| 0005227509-01 | 503 | 8.8 | 23.1 | 31.9 | 7.5 |
| 0005227475-01 | 504 | 6.7 | 22.2 | 28.8 | 7.8 |
| 0005227459-01 | 505 | 8 | 21.5 | 29.5 | 7.7 |
| 0005227426-01 | 506 | 12 | 19.8 | 31.8 | 7.5 |
| 0005227384-02 | 507 | 26.6 | 19.6 | 46.2 | 6.4 |
| 0005226253-01 | 508 | 22.7 | 18 | 40.7 | 6.9 |
| 0005227343-01 | 509 | 30.6 | 19.9 | 50.5 | 6 |
| 0005227319-01 | 510 | 27.8 | 23.9 | 51.7 | 5.9 |
| 0005227285-01 | 511 | 40.2 | 13.1 | 53.3 | 5.8 |
| 0006304414 | 512 | 22.1 | 23 | 45.1 | 6.4 |
| 0006304406 | 513 | 23.1 | 28.7 | 51.8 | 5.9 |
| 0006304398 | 514 | 34 | 17.2 | 51.3 | 5.9 |
| 0005227251-01 | 601 | 16.4 | 18.5 | 34.9 | 7.3 |
| 0005227244-01 | 602 | 11.5 | 15.3 | 26.9 | 7.9 |
| 0005227194-01 | 603 | 9.2 | 22.7 | 31.9 | 7.5 |
| 0005227160-01 | 604 | 6.9 | 22.2 | 29 | 7.7 |
| 0005227137-01 | 605 | 8.4 | 21.4 | 29.8 | 7.7 |
| 0005227111-01 | 606 | 12.5 | 19.1 | 31.6 | 7.5 |
| 0005227087-02 | 607 | 27.2 | 19 | 46.2 | 6.4 |
| 0005226220-01 | 608 | 23.4 | 17.5 | 40.9 | 6.8 |
| 0005227053-01 | 609 | 31.2 | 19.3 | 50.4 | 6 |
| 0005227020-01 | 610 | 28.4 | 23.4 | 51.8 | 5.9 |
| 0005226998-01 | 611 | 40.9 | 12.2 | 53.1 | 5.8 |
| 0006304380 | 612 | 22.7 | 22.8 | 45.5 | 6.4 |
| 0006304372 | 613 | 23.4 | 28 | 51.5 | 5.9 |
| 0006304364 | 614 | 34.1 | 17.2 | 51.3 | 5.9 |
| 0005226972-01 | 701 | 16.6 | 18.3 | 34.9 | 7.3 |
| 0005226931-01 | 702 | 11.6 | 14.7 | 26.3 | 7.9 |
| 0005226899-01 | 703 | 9.5 | 22.4 | 31.9 | 7.5 |
| 0005226865-01 | 704 | 7.1 | 22.4 | 29.4 | 7.7 |
| 0005226832-01 | 705 | 8.6 | 20.6 | 29.2 | 7.7 |
| 0005226808-01 | 706 | 12.7 | 19 | 31.7 | 7.5 |
| 0005226774-02 | 707 | 27.5 | 18.8 | 46.3 | 6.4 |
| 0005226196-01 | 708 | 23.7 | 17.7 | 41.4 | 6.8 |

| Certificate number and link | Unit Number | Heating load (MJ/m /p.a.) | Cooling load (MJ/m /p.a.) | Total load (MJ/m /p.a.) | Star rating |
|---|---|---|---|---|---|
| 0005226741-01 | 709 | 31.5 | 19.2 | 50.7 | 6 |
| 0005226717-01 | 710 | 28.7 | 23 | 51.7 | 5.9 |
| 0005226683-01 | 711 | 41.2 | 11.9 | 53.1 | 5.8 |
| 0006304356 | 712 | 23 | 22.8 | 45.9 | 6.4 |
| 0006304349 | 713 | 23.7 | 27.6 | 51.4 | 5.9 |
| 0006304331-01 | 714 | 35.2 | 16.5 | 51.8 | 5.9 |
| 0005226659-01 | 801 | 16.9 | 18 | 34.9 | 7.3 |
| 0005226626-01 | 802 | 11.9 | 14.6 | 26.6 | 7.9 |
| 0005226592-01 | 803 | 9.6 | 22.2 | 31.8 | 7.5 |
| 0005226568-01 | 804 | 7.4 | 22.6 | 29.9 | 7.7 |
| 0005226535-01 | 805 | 8.8 | 20.6 | 29.5 | 7.7 |
| 0005226501-01 | 806 | 13 | 19 | 32 | 7.5 |
| 0005226477-02 | 807 | 28 | 18.6 | 46.6 | 6.4 |
| 0005226162-01 | 808 | 24.1 | 17.2 | 41.3 | 6.8 |
| 0005226469-01 | 809 | 31.9 | 18.7 | 50.6 | 6 |
| 0005226436-01 | 810 | 29.1 | 22.8 | 51.9 | 5.9 |
| 0005226394-01 | 811 | 41.7 | 12.1 | 53.7 | 5.8 |
| 0006304323 | 812 | 23.5 | 22.4 | 45.9 | 6.4 |
| 0006304315 | 813 | 24.2 | 27.1 | 51.2 | 5.9 |
| 0006304307 | 814 | 35.6 | 16.6 | 52.3 | 5.9 |
| 0005226378-01 | 901 | 37.4 | 18.5 | 55.8 | 5.7 |
| 0005226329-01 | 902 | 28.2 | 15.3 | 43.5 | 6.6 |
| 0005226907-01 | 903 | 24.5 | 23.2 | 47.7 | 6.3 |
| 0005226873-01 | 904 | 20.7 | 23.8 | 44.6 | 6.5 |
| 0005226840-01 | 905 | 23.1 | 22.2 | 45.3 | 6.4 |
| 0005226816-01 | 906 | 29.9 | 20.5 | 50.4 | 6.1 |
| 0005226782-03 | 907 | 35.7 | 18.2 | 53.9 | 5.8 |
| 0005226139-01 | 908 | 24.4 | 17.3 | 41.7 | 6.8 |
| 0005226758-01 | 909 | 32.2 | 19 | 51.2 | 5.9 |
| 0005226725-01 | 910 | 29.5 | 22.6 | 52.1 | 5.9 |
| 0005226709-01 | 911 | 42 | 12.1 | 54 | 5.8 |
| 0006304299 | 912 | 23.8 | 22.4 | 46.3 | 6.4 |
| 0006304281 | 913 | 33.9 | 26.4 | 60.3 | 5.4 |
| 0006304273 | 914 | 44.8 | 18.1 | 62.9 | 5.2 |
| 0005226667-01 | 1001 | 20.8 | 27.4 | 48.2 | 6.2 |
| 0005226642-01 | 1002 | 19 | 19.8 | 38.8 | 7 |
| 0005226600-01 | 1003 | 32.1 | 29.2 | 61.3 | 5.3 |
| 0005226584-01 | 1004 | 34.3 | 17.6 | 51.9 | 5.9 |
| 0005226550-01 | 1005 | 31.5 | 20.2 | 51.7 | 5.9 |
| 0005226105-01 | 1006 | 44.1 | 11.4 | 55.5 | 5.7 |
| 0005226519-01 | 1007 | 26 | 21 | 46.9 | 6.3 |
| 0005226485-01 | 1008 | 42.2 | 26.8 | 69 | 4.8 |

| Certificate number and link | Unit Number | Heating load (MJ/m /p.a.) | Cooling load (MJ/m /p.a.) | Total load (MJ/m /p.a.) | Star rating |
|---|---|---|---|---|---|
| 0005226451-01 | 1009 | 22.9 | 14.5 | 37.4 | 7.1 |
| 0005226428-01 | 1101 | 34.6 | 28.5 | 63 | 5.2 |
| 0005226402-01 | 1102 | 16.5 | 15.1 | 31.6 | 7.5 |
| 0005226360-01 | 1103 | 13.1 | 21.2 | 34.4 | 7.3 |
| 0005226345-01 | 1104 | 29.3 | 28.5 | 57.8 | 5.5 |
| 0005226915-01 | 1105 | 34.4 | 17.5 | 51.9 | 5.9 |
| 0005226881-01 | 1106 | 33.1 | 24.3 | 57.4 | 5.5 |
| 0005226071-01 | 1107 | 44.7 | 13.4 | 58.1 | 5.4 |
| 0005226857-01 | 1108 | 26.2 | 22.7 | 48.9 | 6.2 |
| 0005226824-01 | 1109 | 24.3 | 19.5 | 43.8 | 6.6 |
| 0005226790-01 | 1110 | 16.1 | 14.8 | 30.9 | 7.6 |
| 0005226766-01 | 1201 | 35.1 | 29 | 64.1 | 5.1 |
| 0005226733-01 | 1202 | 12.9 | 15.4 | 28.3 | 7.8 |
| 0005226691-01 | 1203 | 13.4 | 21.2 | 34.6 | 7.3 |
| 0005226675-01 | 1204 | 29.7 | 28.5 | 58.2 | 5.4 |
| 0005226634-01 | 1205 | 34.7 | 17.4 | 52.1 | 5.9 |
| 0005226618-01 | 1206 | 33.4 | 24.5 | 57.9 | 5.5 |
| 0005226048-01 | 1207 | 45 | 13.2 | 58.2 | 5.4 |
| 0005226576-01 | 1208 | 26.4 | 22.5 | 49 | 6.2 |
| 0005226543-01 | 1209 | 24.6 | 19.2 | 43.7 | 6.6 |
| 0005226527-01 | 1210 | 16.4 | 14.9 | 31.3 | 7.6 |
| 0005226493-01 | 1301 | 35.1 | 29.3 | 64.4 | 5.1 |
| 0005226444-01 | 1302 | 13 | 15.6 | 28.6 | 7.8 |
| 0005226410-01 | 1303 | 13.5 | 21.9 | 35.4 | 7.3 |
| 0005226386-01 | 1304 | 29.9 | 28.5 | 58.4 | 5.4 |
| 0005226352-01 | 1305 | 34.8 | 17.5 | 52.3 | 5.9 |
| 0005226337-01 | 1306 | 33.5 | 24.5 | 58 | 5.5 |
| 0005226014-01 | 1307 | 45.2 | 13.2 | 58.4 | 5.4 |
| 0005226303-01 | 1308 | 26.6 | 22.4 | 49 | 6.2 |
| 0005226261-01 | 1309 | 24.7 | 18.8 | 43.5 | 6.6 |
| 0005226246-01 | 1310 | 16.5 | 14.8 | 31.3 | 7.6 |
| 0005226204-01 | 1401 | 35.5 | 28.8 | 64.3 | 5.1 |
| 0005226188-01 | 1402 | 13.3 | 15.3 | 28.6 | 7.8 |
| 0005226154-01 | 1403 | 13.7 | 21.9 | 35.6 | 7.2 |
| 0005226121-01 | 1404 | 30.3 | 28.2 | 58.5 | 5.4 |
| 0005226097-01 | 1405 | 35.1 | 17.5 | 52.6 | 5.9 |
| 0005226063-01 | 1406 | 33.8 | 24 | 57.7 | 5.5 |
| 0005225982-01 | 1407 | 34.5 | 11.7 | 46.3 | 6.4 |
| 0005226022-01 | 1408 | 26.9 | 22.2 | 49.1 | 6.2 |
| 0005225990-01 | 1409 | 25 | 19 | 44.1 | 6.6 |
| 0005225966-01 | 1410 | 16.7 | 14.8 | 31.5 | 7.5 |
| 0005225933-01 | 1501 | 35.7 | 29.4 | 65.1 | 5.1 |

| Certificate number and link | Unit Number | Heating load (MJ/m /p.a.) | Cooling load (MJ/m /p.a.) | Total load (MJ/m /p.a.) | Star rating |
|---|---|---|---|---|---|
| 0005225909-01 | 1502 | 13.4 | 15.2 | 28.6 | 7.8 |
| 0005225875-01 | 1503 | 13.8 | 22 | 35.8 | 7.2 |
| 0005225859-01 | 1504 | 30.5 | 28.1 | 58.6 | 5.4 |
| 0005225818-01 | 1505 | 35.3 | 17.3 | 52.6 | 5.9 |
| 0005225784-01 | 1506 | 33.9 | 24.2 | 58.1 | 5.4 |
| 0005225958-01 | 1507 | 34.5 | 11.8 | 46.3 | 6.4 |
| 0005225776-01 | 1508 | 27.1 | 22.1 | 49.2 | 6.1 |
| 0005225727-01 | 1509 | 25.2 | 19.4 | 44.6 | 6.5 |
| 0005226295-01 | 1510 | 16.8 | 14.6 | 31.4 | 7.6 |
| 0005226279-01 | 1601 | 35.9 | 29 | 64.9 | 5.1 |
| 0005226238-01 | 1602 | 27.7 | 24.3 | 51.9 | 5.9 |
| 0005226212-01 | 1603 | 29 | 28.2 | 57.2 | 5.6 |
| 0005226170-01 | 1604 | 41.1 | 27.8 | 68.9 | 4.8 |
| 0005226147-01 | 1605 | 44.9 | 18.4 | 63.3 | 5.2 |
| 0005226113-01 | 1606 | 37 | 22.5 | 59.5 | 5.4 |
| 0005225925-01 | 1607 | 43.7 | 11.8 | 55.5 | 5.7 |
| 0005226089-01 | 1608 | 44.4 | 23.6 | 68 | 4.9 |
| 0005226055-01 | 1609 | 40 | 22.9 | 62.9 | 5.2 |
| 0005226030-01 | 1610 | 19.4 | 15.8 | 35.2 | 7.3 |
| 0005226006-01 | 1701 | 39.8 | 20.6 | 60.4 | 5.4 |
| 0005225974-01 | 1702 | 31.2 | 28.4 | 59.6 | 5.4 |
| 0005225941-01 | 1703 | 44.8 | 25.3 | 70.1 | 4.8 |
| 0005225917-01 | 1704 | 32.6 | 24.2 | 56.9 | 5.6 |
| 0005225891-01 | G01 | 28.6 | 26.3 | 54.8 | 5.7 |
| 0005225735-01 | G02 | 38.6 | 29.2 | 67.8 | 4.9 |
| 0005225867-01 | G03 | 41.1 | 28.9 | 70 | 4.8 |
| 0005225826-01 | G04 | 42.8 | 22.8 | 65.6 | 5 |
| 0005225792-01 | G05 | 43.8 | 21.1 | 64.9 | 5.1 |
| 0005225750-01 | G06 | 41.7 | 20.5 | 62.2 | 5.2 |
| 0005227467-01 | G07 | 43.4 | 27.7 | 71.1 | 4.7 |
| Average | | 25.50 | 21.18 | 46.67 | 6.37 |

# Explanatory Notes

### About this report

This summary rating is the average rating of all NCC Class 2 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

### Accredited Assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

## Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content, input and creation of the NatHERS Certificate is by the assessor. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

0005227530 17 Aug 2021
Assessor Adriana Segovia
Accreditation No. 20754
Address
2-8 Leicester Ave , Strathfield , NSW , 2135
6.4 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
hstar.com.au

# BASIX THERMAL COMFORT COMMITMENTS

***Note: Table 1 must be read in conjunction with Table 2. Table 2 outlines additional thermal enhancements / treatments to meet the mandatory thermal load targets to achieve compliance.***

**Table 1: Base Case Assumptions on Construction and Fabric**

| *Element* | *Material* | *Detail* |
|---|---|---|
| External walls | Tilt concrete, lined | **Insulation: See Table 3** |
| | | Light colour: Absorptance< 0.475 |
| Internal walls | Plasterboard | |
| Party walls | Power Panel, lined | **Insulation: R1.0 both sides for fire safety** |
| | | Common corridors & Neighbour |
| | Concrete | **Insulation: None** |
| | | Fire stairs & lifts |
| Windows | **Type 1 Performance glazing** | Total Window System Properties **U-value 4.8 & SHGC 0.59 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.8 & SHGC 0.51 for bifold doors, awning & casement windows** |
| | **Type 2 Performance glazing** | Total Window System Properties **U-value 4.9 & SHGC 0.33 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.9 & SHGC 0.33 for bifold doors, awning & casement windows** |
| | **Type 3 Performance glazing** | Total Window System Properties **U-value 4.1 & SHGC 0.52 for sliding doors, sliding & fixed windows**<br>**And**<br>Total Window System Properties **U-value 4.1 & SHGC 0.47 for bifold doors, awning & casement windows** |
| | Window Operability | Balcony windows: **45% or 60% (i.e. sliding)**<br>Bedroom windows: **10%** (BCA D2.24)<br>All other non-balcony windows: **0% (i.e. fixed)** |
| | Shading device | Balcony windows: **60% opacity**<br>Non-balcony windows: **60% opacity** |
| Skylight | None | |
| Roof | Concrete | **Insulation: None** |
| | | Light colour: Absorptance< 0.475 |
| Ceilings | Plasterboard | **Insulation: See Table 3** |
| Floors | Concrete | **Insulation: See Table 3** |
| | | Carpet: Bedrooms only |
| | | Tiles: Elsewhere |
| Recessed downlights assessed | | No |
| Exhaust fans (kitchens, bathrooms, laundry) | | **All assumed to be sealed** |

**Table 2: BERS Pro Thermal Loads**

| *Unit No.* | *Additional Treatments Required* | *Heating Load (MJ/m².yr)* | *Cooling Load (MJ/m².yr)* | *Stars* | *Pass/Fail* |
|---|---|---|---|---|---|
| G01 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.6 | 26.3 | 5.7 | Pass |
| G02 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 2 glazed door to have at least 75% ventilation opening, South & East Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 glazed door to have at least 75% ventilation opening | 38.6 | 29.2 | 4.9 | Pass |
| G03 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 60% ventilation opening | 41.1 | 28.9 | 4.8 | Pass |
| G04 | R2.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt2.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m2 | 42.8 | 22.8 | 5.0 | Pass |
| G05 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, East Bedroom glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 60% ventilation opening, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m2 | 43.8 | 21.1 | 5.1 | Pass |
| G06 | R2.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt2.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Lounge windows to have a maximum glazed area of 7.2m2, East Bedroom 1 window to have a maximum glazed area of 5.4m3 | 41.7 | 20.5 | 5.2 | Pass |
| G07 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 43.4 | 27.7 | 4.7 | Pass |
| 106 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 14.3 | 11.8 | 7.9 | Pass |
| 107 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 21.2 | 28.6 | 6.1 | Pass |
| 108 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 17.4 | 25.0 | 6.7 | Pass |
| 109 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.2 | 28.5 | 5.8 | Pass |
| 110 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 27.6 | 27.5 | 5.7 | Pass |
| 111 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.6 | 21.0 | 5.7 | Pass |
| 112 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 19.1 | 27.6 | 6.4 | Pass |
| 113 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.11), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 33.3 | 22.0 | 5.7 | Pass |
| 114 | R1.5 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.61), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 45.1 | 23.4 | 4.9 | Pass |
| 201 | R1.0 Bulk Floor Insulation adjacent to carpark only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.5 | 22.4 | 6.1 | Pass |
| 202 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.3 | 18.3 | 7.3 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 203 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.4 | 29.5 | 7.2 | Pass |
| 204 | R1.0 Bulk Floor Insulation adjacent to carpark & exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.0 | 24.1 | 7.3 | Pass |
| 205 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.2 | 26.9 | 7.1 | Pass |
| 206 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 14.2 | 26.0 | 6.9 | Pass |
| 207 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 21.9 | 28.3 | 6.1 | Pass |
| 208 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 18.0 | 23.4 | 6.8 | Pass |
| 209 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, East Bedroom 2 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.8 | 27.4 | 5.8 | Pass |
| 210 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 28.4 | 26.3 | 5.7 | Pass |
| 211 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.2 | 20.4 | 5.7 | Pass |
| 212 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 17.3 | 27.9 | 6.4 | Pass |
| 213 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 22.5 | 25.6 | 6.2 | Pass |
| 214 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.6 | 28.4 | 5.6 | Pass |
| 301 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.2 | 19.6 | 7.3 | Pass |
| 302 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 10.7 | 16.3 | 7.9 | Pass |
| 303 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.2 | 23.5 | 7.5 | Pass |
| 304 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.0 | 23.1 | 7.7 | Pass |
| 305 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.4 | 22.3 | 7.7 | Pass |
| 306 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.4 | 20.5 | 7.5 | Pass |
| 307 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 25.6 | 20.7 | 6.4 | Pass |
| 308 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 21.8 | 18.4 | 6.9 | Pass |
| 309 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.5 | 20.9 | 6.0 | Pass |
| 310 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.7 | 25.3 | 5.9 | Pass |
| 311 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 39.1 | 13.9 | 5.9 | Pass |
| 312 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 21.0 | 23.5 | 6.5 | Pass |
| 313 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.3 | 29.5 | 5.9 | Pass |
| 314 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 32.9 | 18.4 | 5.9 | Pass |
| 401 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.6 | 19.3 | 7.3 | Pass |
| 402 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.0 | 15.9 | 7.9 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling (MJ/m | | |
|---|---|---|---|---|---|
| 403 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.6 | 23.1 | | |
| 404 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.4 | 22.7 | 7.8 | Pass |
| 405 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.8 | 22.0 | 7.7 | Pass |
| 406 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.7 | 19.9 | 7.5 | Pass |
| 407 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.2 | 20.0 | 6.4 | Pass |
| 408 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.3 | 18.1 | 6.9 | Pass |
| 409 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 30.1 | 20.3 | 6.0 | Pass |
| 410 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.3 | 24.7 | 5.9 | Pass |
| 411 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 39.7 | 13.2 | 5.9 | Pass |
| 412 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 21.6 | 23.1 | 6.5 | Pass |
| 413 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.6 | 28.8 | 5.9 | Pass |
| 414 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.5 | 17.5 | 5.9 | Pass |
| 501 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 15.9 | 18.7 | 7.3 | Pass |
| 502 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.3 | 15.6 | 7.9 | Pass |
| 503 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.8 | 23.1 | 7.5 | Pass |
| 504 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.7 | 22.2 | 7.8 | Pass |
| 505 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.0 | 21.5 | 7.7 | Pass |
| 506 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.0 | 19.8 | 7.5 | Pass |
| 507 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 26.6 | 19.6 | 6.4 | Pass |
| 508 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.7 | 18.0 | 6.9 | Pass |
| 509 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 30.6 | 19.9 | 6.0 | Pass |
| 510 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.8 | 23.9 | 5.9 | Pass |
| 511 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 40.2 | 13.1 | 5.8 | Pass |
| 512 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 22.1 | 23.0 | 6.4 | Pass |
| 513 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.1 | 28.7 | 5.9 | Pass |
| 514 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.0 | 17.2 | 5.9 | Pass |
| 601 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.4 | 18.5 | 7.3 | Pass |
| 602 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.5 | 15.3 | 7.9 | Pass |
| 603 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.2 | 22.7 | 7.5 | Pass |
| 604 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 6.9 | 22.2 | 7.8 | Pass |
| 605 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.4 | 21.4 | 7.7 | Pass |

0005227530 17 Aug 2021
6.4 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
Assessor Adriana Segovia
Accreditation No. 20754
Address
2-8 Leicester Ave , Strathfield , NSW , 2135
hstar.com.au

0005227530 17 Aug 2021
Assessor Adriana Segovia
Accreditation No. 20754
Address
2-8 Leicester Ave , Strathfield , NSW , 2135
6.4 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
hstar.com.au

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 606 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.5 | 19.1 | 7.5 | Pass |
| 607 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.2 | 19.0 | 6.4 | Pass |
| 608 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.4 | 17.5 | 6.8 | Pass |
| 609 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.2 | 19.3 | 6.0 | Pass |
| 610 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.4 | 23.4 | 5.9 | Pass |
| 611 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 40.9 | 12.2 | 5.8 | Pass |
| 612 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 22.7 | 22.8 | 6.4 | Pass |
| 613 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.4 | 28.0 | 5.9 | Pass |
| 614 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.1 | 17.2 | 5.9 | Pass |
| 701 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.6 | 18.3 | 7.3 | Pass |
| 702 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.6 | 14.7 | 7.9 | Pass |
| 703 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.5 | 22.4 | 7.5 | Pass |
| 704 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.1 | 22.4 | 7.7 | Pass |
| 705 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.6 | 20.6 | 7.7 | Pass |
| 706 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.7 | 19.0 | 7.5 | Pass |
| 707 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.5 | 18.8 | 6.4 | Pass |
| 708 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.7 | 17.7 | 6.8 | Pass |
| 709 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.5 | 19.2 | 6.0 | Pass |
| 710 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.7 | 23.0 | 5.9 | Pass |
| 711 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 41.2 | 11.9 | 5.8 | Pass |
| 712 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.0 | 22.8 | 6.4 | Pass |
| 713 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 23.7 | 27.6 | 5.9 | Pass |
| 714 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.2 | 16.5 | 5.9 | Pass |
| 801 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.9 | 18.0 | 7.3 | Pass |
| 802 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 11.9 | 14.6 | 7.9 | Pass |
| 803 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 9.6 | 22.2 | 7.5 | Pass |
| 804 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 7.4 | 22.6 | 7.7 | Pass |
| 805 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 8.8 | 20.6 | 7.7 | Pass |
| 806 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.0 | 19.0 | 7.5 | Pass |
| 807 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 28.0 | 18.6 | 6.4 | Pass |
| 808 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.1 | 17.2 | 6.8 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling ($MJ/m$ | | |
|---|---|---|---|---|---|
| 809 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.9 | 18.7 | | |
| 810 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.1 | 22.8 | 5.9 | Pass |
| 811 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 41.7 | 12.1 | 5.8 | Pass |
| 812 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.5 | 22.4 | 6.4 | Pass |
| 813 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.2 | 27.1 | 5.9 | Pass |
| 814 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.6 | 16.6 | 5.9 | Pass |
| 901 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt1.66) | 37.4 | 18.5 | 5.7 | Pass |
| 902 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 28.2 | 15.3 | 6.6 | Pass |
| 903 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 24.5 | 23.2 | 6.3 | Pass |
| 904 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 20.7 | 23.8 | 6.5 | Pass |
| 905 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 23.1 | 22.2 | 6.4 | Pass |
| 906 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 29.9 | 20.5 | 6.1 | Pass |
| 907 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R1.5 Bulk Ceiling Insulation to exposed roof (total ceiling/roof system R-value Rt1.66) | 35.7 | 18.2 | 5.8 | Pass |
| 908 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 24.4 | 17.3 | 6.8 | Pass |
| 909 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 32.2 | 19.0 | 5.9 | Pass |
| 910 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 29.5 | 22.6 | 5.9 | Pass |
| 911 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 42.0 | 12.1 | 5.8 | Pass |
| 912 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 23.8 | 22.4 | 6.4 | Pass |
| 913 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.9 | 26.4 | 5.4 | Pass |
| 914 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, R1.5 Bulk Ceiling Insulation to exposed roof, only (total ceiling/roof system R-value Rt1.66) | 44.8 | 18.1 | 5.2 | Pass |
| 1001 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening | 20.8 | 27.4 | 6.2 | Pass |
| 1002 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 19.0 | 19.8 | 7.0 | Pass |
| 1003 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 32.1 | 29.2 | 5.3 | Pass |
| 1004 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.3 | 17.6 | 5.9 | Pass |
| 1005 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 31.5 | 20.2 | 5.9 | Pass |

0005227530 17 Aug 2021
6.4 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
Assessor Adriana Segovia
Accreditation No. 20754
Address
2-8 Leicester Ave , Strathfield , NSW , 2135
hstar.com.au

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling Load (MJ/m².yr) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1006 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.1 | 11.4 | 5.7 | Pass |
| 1007 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.0 | 21.0 | 6.3 | Pass |
| 1008 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows | 42.2 | 26.8 | 4.8 | Pass |
| 1009 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 22.9 | 14.5 | 7.1 | Pass |
| 1101 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 34.6 | 28.5 | 5.2 | Pass |
| 1102 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.5 | 15.1 | 7.5 | Pass |
| 1103 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.1 | 21.2 | 7.3 | Pass |
| 1104 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.3 | 28.5 | 5.5 | Pass |
| 1105 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.4 | 17.5 | 5.9 | Pass |
| 1106 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.1 | 24.3 | 5.5 | Pass |
| 1107 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.7 | 13.4 | 5.4 | Pass |
| 1108 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.2 | 22.7 | 6.2 | Pass |
| 1109 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.3 | 19.5 | 6.6 | Pass |
| 1110 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.1 | 14.8 | 7.6 | Pass |
| 1201 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 30% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.1 | 29.0 | 5.1 | Pass |
| 1202 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 12.9 | 15.4 | 7.8 | Pass |
| 1203 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.4 | 21.2 | 7.3 | Pass |
| 1204 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.7 | 28.5 | 5.4 | Pass |
| 1205 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.7 | 17.4 | 5.9 | Pass |
| 1206 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.4 | 24.5 | 5.5 | Pass |
| 1207 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 45.0 | 13.2 | 5.4 | Pass |
| 1208 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.4 | 22.5 | 6.2 | Pass |

| Unit No. | Additional Treatments Required | Heating Load (MJ/m².yr) | Cooling (MJ/m | | |
|---|---|---|---|---|---|
| 1209 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.6 | 19.7 | | |
| 1210 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.4 | 14.9 | 7.6 | Pass |
| 1301 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 10% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.1 | 29.3 | 5.1 | Pass |
| 1302 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.0 | 15.6 | 7.8 | Pass |
| 1303 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.5 | 21.9 | 7.3 | Pass |
| 1304 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 29.9 | 28.5 | 5.4 | Pass |
| 1305 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 34.8 | 17.5 | 5.9 | Pass |
| 1306 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.5 | 24.5 | 5.5 | Pass |
| 1307 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 45.2 | 13.2 | 5.4 | Pass |
| 1308 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.6 | 22.4 | 6.2 | Pass |
| 1309 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 24.7 | 18.8 | 6.6 | Pass |
| 1310 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.5 | 14.8 | 7.6 | Pass |
| 1401 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.5 | 28.8 | 5.1 | Pass |
| 1402 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.3 | 15.3 | 7.8 | Pass |
| 1403 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.7 | 21.9 | 7.2 | Pass |
| 1404 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 30.3 | 28.2 | 5.4 | Pass |
| 1405 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.1 | 17.5 | 5.9 | Pass |
| 1406 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.8 | 24.0 | 5.5 | Pass |
| 1407 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows | 34.5 | 11.7 | 6.4 | Pass |
| 1408 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 26.9 | 22.2 | 6.2 | Pass |
| 1409 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.0 | 19.0 | 6.6 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1410 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.7 | 14.8 | 7.5 | Pass |
| 1501 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.7 | 29.4 | 5.1 | Pass |
| 1502 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.4 | 15.2 | 7.8 | Pass |
| 1503 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 13.8 | 22.0 | 7.2 | Pass |
| 1504 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 30.5 | 28.1 | 5.4 | Pass |
| 1505 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 35.3 | 17.3 | 5.9 | Pass |
| 1506 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 33.9 | 24.2 | 5.4 | Pass |
| 1507 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows | 34.5 | 11.8 | 6.4 | Pass |
| 1508 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening | 27.1 | 22.1 | 6.1 | Pass |
| 1509 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 25.2 | 19.4 | 6.5 | Pass |
| 1510 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 16.8 | 14.6 | 7.6 | Pass |
| 1601 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, West Bedroom 2 glazed door to have at least 60% ventilation opening, North Lounge glazed door to have at least 75% ventilation opening, West Lounge fixed window to have at least 20% ventilation opening, West Bedroom windows to have at least 10& ventilation opening | 35.9 | 29.0 | 5.1 | Pass |
| 1602 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 27.7 | 24.3 | 5.9 | Pass |
| 1603 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows, North Lounge window to have at least 10% ventilation opening | 29.0 | 28.2 | 5.6 | Pass |
| 1604 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, North Lounge glazed door to have at least 75% ventilation opening, East Bedroom 1 window to have at least 10% ventilation opening, East Lounge fixed window to have at least 10% ventilation opening | 41.1 | 27.8 | 4.8 | Pass |
| 1605 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 44.9 | 18.4 | 5.2 | Pass |
| 1606 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R2.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt2.66) | 37.0 | 22.5 | 5.4 | Pass |
| 1607 | R2.5 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R3.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.66) | 43.7 | 11.8 | 5.7 | Pass |
| 1608 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 2 windows, South Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 75% ventilation opening, R2.5 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt2.66) | 44.4 | 23.6 | 4.9 | Pass |
| 1609 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, West Bedroom 1 glazed door to have at least 60% ventilation opening, South Lounge glazed door to have at least 60% ventilation opening | 40.0 | 22.9 | 5.2 | Pass |

| Unit No. | Additional Treatments Required | Heating Load ($MJ/m^2.yr$) | Cooling Load ($MJ/m^2.yr$) | Stars | Pass/Fail |
|---|---|---|---|---|---|
| 1610 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 1 windows | 19.4 | 15.8 | 7.3 | Pass |
| 1701 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, All North Bedroom glazed doors to have at least 30% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 39.8 | 20.6 | 5.4 | Pass |
| 1702 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 1 glazed window to have at least 10% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 31.2 | 28.4 | 5.4 | Pass |
| 1703 | R1.0 Bulk Floor Insulation adjacent to exposed floors only (total floor system R-value Rt1.1), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 44.8 | 25.3 | 4.8 | Pass |
| 1704 | R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value Rt2.13), Type 3 windows, East Bedroom 1 glazed window to have at least 10% ventilation opening, R3.0 Bulk Ceiling Insulation to exposed roof only (total ceiling/roof system R-value Rt3.16) | 32.6 | 24.2 | 5.6 | Pass |

## Kalinda Doyle

**From:** Mark Cottom <MCottom@pvlaw.com.au>
**Sent:** Tuesday, 17 August 2021 3:39 PM
**To:** Kalinda Doyle
**Cc:** Amelia Stojevski; Tom Ward
**Subject:** RE: Short service | Leice Pty Ltd v Canada Bay Council (3512894) (PVL:210160)

Dear Kalinda,

I am instructed to oppose the application for short service. Having regard to differences to the orders sought in the previous motion, the extent of the material in the Exhibit, the number of documents that post-date the last motion and the failure to update the schedule of amendments, it is Council's position that it cannot sensibly come to a position on the motion prior to this coming Thursday (or indeed in any less time than that which is usually provided under the rules).

Kind regards,

**Mark Cottom** | Partner | Accredited Specialist – Local Government & Planning Law

**Pikes & Verekers Lawyers**
**t** 9262 6188 | **m** 0401 019 669 | **f** 9262 6175 | **e** mcottom@pvlaw.com.au
Level 2, 50 King Street, Sydney, NSW, 2000 | DX 521 Sydney
www.pvlaw.com.au

This email is intended only for the individual or entity named above and may contain information that is confidential and privileged. If you are not the intended recipient you must not use, distribute or copy this email. If you have received this email in error, please notify us immediately by telephone and delete the email.

Liability limited by a scheme approved under Professional Standards Legislation

**WARNING – CYBER SECURITY NOTICE:** Please do not act on any email instructions providing any bank or trust account details or purporting to change same unless you have verbally confirmed the details or changes with us by telephoning our office and speaking with one of our staff members to verify the account details prior to transferring any funds and/or payments.

---

**From:** Kalinda Doyle
**Sent:** Tuesday, 17 August 2021 3:02 PM
**To:** Mark Cottom
**Cc:** Amelia Stojevski; Tom Ward
**Subject:** RE: Short service | Leice Pty Ltd v Canada Bay Council (3512894) (PVL:210160)

Hi Mark

We appreciate the timing and your attempt to obtain instructions prior to our filing of the motion.

Kind regards,

**Kalinda Doyle** | Senior Associate | Planning & Environment

**MILLS OAKLEY**

MELBOURNE | SYDNEY | BRISBANE | CANBERRA | PERTH

+61 2 8035 7918 **Direct**
+61 2 9247 1315 **Fax**
kdoyle@millsoakley.com.au
Level 7, 151 Clarence Street, Sydney NSW 2000

**From:** Mark Cottom <MCottom@pvlaw.com.au>
**Sent:** Tuesday, 17 August 2021 2:55 PM
**To:** Kalinda Doyle <kdoyle@millsoakley.com.au>
**Cc:** Amelia Stojevski <astojevski@millsoakley.com.au>; Tom Ward <TWard@pvlaw.com.au>
**Subject:** RE: Short service | Leice Pty Ltd v Canada Bay Council (3512894) (PVL:210160)

Dear Kalinda,

The time you have given our client to consider your proposed application for short service is, with respect, manifestly inadequate in the circumstances of this case. I will take instructions as soon as possible and respond appropriately thereafter.

Kind regards,

**Mark Cottom** | Partner | Accredited Specialist – Local Government & Planning Law

**Pikes & Verekers Lawyers**
**t** 9262 6188 | **m** 0401 019 669 | **f** 9262 6175 | **e** mcottom@pvlaw.com.au
Level 2, 50 King Street, Sydney, NSW, 2000 | DX 521 Sydney
www.pvlaw.com.au

This email is intended only for the individual or entity named above and may contain information that is confidential and privileged. If you are not the intended recipient you must not use, distribute or copy this email. If you have received this email in error, please notify us immediately by telephone and delete the email.

Liability limited by a scheme approved under Professional Standards Legislation

**WARNING – CYBER SECURITY NOTICE:** Please do not act on any email instructions providing any bank or trust account details or purporting to change same unless you have verbally confirmed the details or changes with us by telephoning our office and speaking with one of our staff members to verify the account details prior to transferring any funds and/or payments.

**From:** Kalinda Doyle
**Sent:** Tuesday, 17 August 2021 2:46 PM
**To:** Mark Cottom
**Cc:** Amelia Stojevski; Tom Ward
**Subject:** Short service | Leice Pty Ltd v Canada Bay Council (3512894)
**Importance:** High

Dear Mark

Please be advised that our clients intend to file a motion to amend its application.

A draft of motion is attached to this email and the amended material referred to in the schedule is provided in the link below:

Links expire 2021-09-16

Exhibit KD-2.pdf

In consideration of the upcoming hearing dates, our client will be seeking short service, such that the notice of motion is listed on 19 August 2021.

Can you please confirm whether you consent to short service of the motion? The Applicant intends to file the notice of motion by 4pm today. Accordingly, your prompt response would be much appreciated.

Kind regards,

**Kalinda Doyle** | Senior Associate | Planning & Environment

**MILLS OAKLEY**

MELBOURNE | SYDNEY | BRISBANE | CANBERRA | PERTH

+61 2 8035 7918 **Direct**
+61 2 9247 1315 **Fax**
kdoyle@millsoakley.com.au
Level 7, 151 Clarence Street, Sydney NSW 2000

This email message and any attachments are confidential and may contain legally privileged information. You should not read, copy, use or disclose it without authorisation. If received in error, please contact us at once by return email and then delete all emails and attachments. You should check this email for viruses or defects. Our liability is limited to resupplying any affected message and attachments. Any personal information in this email must be handled in accordance with the Privacy Act 1988 (Cth). Please note that criminals use sophisticated techniques to elicit fraudulent payments. Please be vigilant in reviewing emails purporting to be from Mills Oakley. If our bank account or payment details change, we will inform you via telephone or post. We accept no responsibility for any loss or damage arising from any electronic transfers or deposits that are not paid into the intended bank account.