

# Central Coast

## Local Planning Panel

Central Coast  
Local Planning Panel Meeting  
Business Paper  
**20 June 2024**





# Meeting Notice

**The Local Planning Panel Meeting  
of Central Coast  
will be held remotely - online,  
Thursday 20 June 2024 at 2.00 pm,  
for the transaction of the business listed below:**

## **1 Procedural Items**

1.1 Disclosures of Interest.....3

## **2 Confirmation of Minutes of Previous Meetings**

2.1 Confirmation of Minutes of Previous Meeting.....4

## **3 Planning Reports**

3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces .....19

## **4 Planning Reports- Outside of Public Meeting**

4.1 Request to prepare a Planning Proposal for 126 Somersby Falls Road, Somersby.....436  
4.2 DA/4110/2022 - 120 Riviera Ave, TERRIGAL - Dual Occupancy ..... 521

Kara Krason  
**Chairperson**

**Item No:** 1.1  
**Title:** Disclosures of Interest  
**Department:** Governance

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20 June 2024 Local Planning Panel Meeting

Reference: F2020/02502 - D14205789

The NSW Local Planning Panel Code of Conduct states that all panel members must sign a declaration of interest in relation to each matter on the agenda before or at the beginning of each meeting.

### **Recommendation**

***That Panel Members now confirm that they have signed a declaration of interest in relation to each matter on the agenda for this meeting and will take any management measures identified.***

**Item No:** 2.1  
**Title:** Confirmation of Minutes of Previous Meeting  
**Department:** Corporate Services

**Central Coast**  
Local Planning Panel

20 June 2024 Local Planning Panel Meeting

Reference: F2020/02502 - D16244061

Author: Lisa Martin, Civic Support Officer Civic Support

### Summary





*The Minutes of the following Meeting of the Local Planning Panel, which have been endorsed by the Chair of that meeting, are submitted for noting:*

- ***Local Planning Panel Meeting held on 16 May 2024***
- ***Local Planning Panel Meeting held on 6 June 2024***

### Recommendation

***That the minutes of the previous two Local Planning Panel Meeting held on 16 May 2024 and 6 June 2024, which were endorsed by the Chair of that meeting, are submitted for noting.***

### Attachments

- |   |  |           |
|---|--|-----------|
| 1   | MINUTES - Local Planning Panel - 16 May 2024 | D16227857 |
| 2   | MINUTES - Local Planning Panel - 6 June 2024 | D16244840 |



**Local Planning Panel**

**Minutes of the**  
**Local Planning Panel Meeting**  
**Held Remotely - Online**  
**on 16 May 2024**

**Panel Members**

Chairperson	Kara Krason
Panel Experts	Michael File Michael Ryan
Community Representative/s	Mark Elsley

**Central Coast Council Staff Attendance**

Andrew Roach	Unit Manager Development Assessment
Emily Goodworth	Section Manager, Employment and Urban Release
Robert Eyre	Principal Development Planner, Residential Assessments
Katrina O'Malley	Development Planner, Employment and Urban Release
Jenny Tattam	Senior Development Planner, Employment and Urban Release
John Noakes	Section Manager, Development Engineering
Nathan Burr	Senior Development Planner, Employment and Urban Release
Lisa Martin	Civic Support Officer
Briony Stiles	Civic Support Officer

The Chairperson, Kara Krason declared the meeting open at 2:03pm and advised in accordance with the Code of Meeting Practice that the meeting is being recorded.

The Chair read an acknowledgement of Country statement.

**Apologies**

***The Panel noted that no apologies had been received.***

**Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd**

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**Public Forum**

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The following people registered to address the Panel:

**Item 3.1 – DA/42661/2012/E - 69 Avoca Drive, Avoca Beach - Alterations & Additions to existing Theatre**

- 1 Karen Davis – FOR
- 2 Norman Hunter – Owner of Avoca Beach Theatre  
Caine King – CKDS Principal Architect  
Adam Crampton – ADW Town Planner  
Daniel Holland – Northrop Civil Engineer  
Braden Johnson – Johnson Projects CEO  
Karen Zeuschner – Johnson Projects Project Manager  
Dr Phillip Pollard – View Consultant – FOR

The registered speakers for **Item 3.1 – DA/42661/2012/E** were briefed by the Chair, that this matter would need to be rescheduled to another panel meeting due to procedural issues and will be re-scheduled – see Item 3.1.

The Chair explained that the main reasons for deferring consideration of this matter to a future public meeting included:

- Lack of certainty that reasonable notice had been given by Council to submitters of the public meeting as required by the Local Planning Panels Direction – Operational Procedures and that the notification requirements of Central Coast Local Planning Panel Operational Guideline had been met, which requires all people who have made written submissions to be notified of the Panel meeting the week prior to the meeting.
- The business papers inadvertently did not include a copy of the current set of proposed plans which the Panel was advised had not been notified. A set of plans were provided to the Panel on the day of the Panel meeting, however there was no opportunity for the Panel to review such late material ahead of the meeting; and
- Uncertainty whether the current plans were available to the public on Council's website notwithstanding they were not attached to the business paper and had not previously been notified.

Accordingly, to ensure procedural fairness and compliance with the relevant direction and guidelines are achieved, the Panel postponed hearing from speakers and considering this matter until all such matters had been satisfactorily met.

The Local Planning Panel public meeting closed at 2:27pm.

The Panel moved into deliberation from 2:33pm.

Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

PROCEDURAL ITEMS

1.1 Disclosures of Interest

*The Panel Members confirmed that they had each signed a declaration of interest form in relation to each matter on the agenda.*

*The Chair, declared an Insignificant Non Pecuniary Reasonably Perceived Conflict of Interest in Item 4.1 and stepped out of the meeting as it was discussed and determined. Item 4.1 was chaired by Michael File.*

CONFIRMATION OF MINUTES OF PREVIOUS MEETINGS

2.1 Confirmation of Minutes of Previous Meeting

*The Panel noted the minutes of the previous Local Planning Panel Meeting held on 11 April 2024, which were endorsed by the Chair of that meeting.*

PLANNING REPORTS

3.1 DA/42661/2012/E - 69 Avoca Drive, Avoca Beach - Alterations & Additions to existing Theatre

Site Orientation	Yes
Relevant Considerations	As per Council assessment report
Material Considered	<ul style="list-style-type: none"><li>• Documentation with application</li><li>• Council assessment report</li><li>• Submissions</li><li>• Memo dated 15 May 2024</li></ul>
Council Recommendation	Approval
Panel Decision	Deferred
Reasons	<i>The Local Planning Panel deferred consideration of this matter to a future public meeting in order for Council to address the following matters detailed below:</i>

Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

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- *A full set of the final proposed plans and the original court approved plans with the business papers.*
- *Provide the Panel with copies of all supporting documentation related to and referenced in the assessment report and draft conditions. This should include a copy of the original conditions issued by the Land and Environment Court and reasons given by the Court for granting consent pursuant to S. 4.56(1A).*
- *Provide a detailed assessment of the application against the original approval as required by Section 4.56 of the Environmental Planning and Assessment Act 1979. This should include but not be limited to key matters of building height, FSR, car parking, view loss, urban design and architectural quality.*
- *The Panel noted that Council's Architect had significant concerns with the proposed modified design and that the matter has not been before a design review panel. In the absence of a design review panel and noting the matters not supported by Council's architect compared to the originally approved scheme, the Panel suggests Council consider obtaining an independent design review of the proposed modified scheme against the originally approved development as part of its detailed assessment against the provisions of Section 4.56 of the Act.*
- *Confirm that the updated view impact assessment is based on an assessment of view impacts from all previously identified view impacted residences against the current set of proposed plans. Further, given the proposed increase in height provide confirmation that no additional properties would be significantly impacted by the proposed modification, beyond those previously considered acceptable by the Court approval.*
- *Provide more detailed assessment in relation to Section 7.18(3) and (5) of CCLEP 2022.*
- *Correct all reporting errors throughout the report in relation to proposed FSR and Height numerical figures and percentages and associated commentary regarding compliance and non-compliance.*

Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

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- *Clarify whether a VPA applies to the site given inconsistencies in reporting between the consultant documentation, Council's assessment report and the briefing.*
- *Confirmation whether the proposed modification plans require re-notification having due regard to the public interest in the matter and whether people who lodged a submission (either for or against) are also renotified in accordance with Council's notification policy.*
- *Once an updated business paper that addresses all of the above matters is prepared, a copy is to be issued to the planning panel at least a week prior to the public meeting date in accordance with the Operational Guidelines.*
- *Council is to ensure that all people who lodged a submission receive notice of the date and time of the public meeting at least the week prior to the meeting as per Council's Local Planning Panel Operational Guidelines.*
- *Confirm that the proposed plans and all documentation submitted following the initial notification of the modification application have been uploaded to Council's website and are available for public viewing.*

*Once the above matters have been addressed, a public Local Planning Panel determination meeting will be held.*

**Votes**                      The decision was unanimous

**PLANNING REPORTS- OUTSIDE OF PUBLIC MEETING**

**4.1                      DA/723/2021 - Temporary use of Land for Outdoor Entertainment Events at Shelly Beach Golf Club - 86 Bonnieview Street, SHELLY BEACH**

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<b>Site Orientation</b>	Yes
<b>Relevant Considerations</b>	As per Council assessment report
<b>Material Considered</b>	<ul style="list-style-type: none"><li>• Documentation with application</li><li>• Council assessment report</li><li>• Submissions</li></ul>



Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

<b>Council Recommendation</b>	Approval
<b>Panel Decision</b>	<b>1</b> <b><i>That the Panel grant consent to DA/723/2021 for the Temporary use of land for Outdoor Entertainment Events at Shelly Beach Golf Club at 86 Bonnieview Street and 87CR Oaks Avenue, Shelly Beach, subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.</i></b>
<b>Reasons</b>	<p>The Panel is happy to support the application for the reasons contained in the Council assessment report and:</p> <ol style="list-style-type: none"><li>1. The proposal is satisfactory having regard for the relevant environmental planning instruments, plans and policies.</li><li>2. The proposed development satisfies the provisions of <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> having regard for Chapter 2 Coastal Management, Section 2.10 – Development on land within the coastal environment area and Section 2.11 – Development on land within the coastal use area and Section 4.6 of Chapter 4 Remediation of Land.</li><li>3. The proposal has been considered against the permitted uses and objectives of the RE1 Public Recreation and RE2 Private Recreation zones. The proposal is permissible with development consent by virtue of the provisions of clause 2.8-Temporary Use of Land and considered satisfactory in terms of the objectives of the zones.</li><li>4. The proposal is satisfactory in terms of the precursor requirements of clauses 7.1 and 7.9 of <i>Wyong Local Environmental Plan 2013</i>.</li><li>5. The proposal is considered satisfactory in relation to the parking requirements of <i>Wyong Development Control Plan 2013</i>, Chapter 2.11 Access, and Parking.</li><li>6. There are no significant issues or impacts identified with the proposal under s. 4.15 of <i>Environmental Planning and Assessment Act 1979</i>.</li></ol>
<b>Votes</b>	The decision was unanimous (noting Kara Krason did not participate due to COI declaration)

Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

4.2 DA/31/2024 - 8 Rankens Court, Wyong - Demolition of Heritage Structure

<b>Site Orientation</b>	Yes
<b>Relevant Considerations</b>	As per Council assessment report
<b>Material Considered</b>	<ul style="list-style-type: none"> <li>• Documentation with application</li> <li>• Council assessment report</li> <li>• Memo – Supplementary Information</li> <li>• Submissions</li> </ul>
<b>Council Recommendation</b>	Approval
<b>Panel Decision</b>	<p><b>1 The Panel grant consent to DA/3/2024 – 8 Rankens Court, Wyong subject to the conditions detailed in the schedule attached to the report including one additional condition and an amendment to condition 7 as outlined in the Supplementary memo dated 16/05/2024 and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.</b></p> <p><b>2 That Council advise those who made written submissions of the Panel's decision.</b></p>
<b>Reasons</b>	<ol style="list-style-type: none"> <li>1. The proposal is satisfactory having regard for the relevant environmental planning instruments, plans and policies.</li> <li>2. There are no significant issues or impacts identified with the proposal under Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i>.</li> <li>3. The proposal is satisfactory with regard to Clause 2.7, 5.10, 7.1 and 7.6 of the <i>Central Coast Local Environmental Plan 2022</i>.</li> <li>4. An additional condition was added to ensure reasonable notice is provided to users of the Wyong Community Centre ahead of works commencing.</li> </ol>
<b>Votes</b>	The decision was unanimous

Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd

REPORTS

- 5.1 DA/982/2023 - Various demolition, remediation and repair works including the replacement of a retaining wall at Peat Island, Mooney Mooney - 60 Pacific Highway, Peat Island Road and Pacific Highway, Mooney Mooney

Site Orientation Yes

Relevant Considerations As per Council assessment report

Material Considered

- Documentation with application
- Council assessment report
- Submissions

Council Recommendation Approval

Panel Decision *The Panel deferred consideration of this matter to allow time for the following to occur:*

1. *Council to review and if necessary redraft the proposed conditions to correct anomalies in relation to ecological requirements; ensure the wording and timing of conditions is drafted as appropriate for Crown development approvals and post approval certification processes, in particular to what actions and documentation is required prior to demolition occurring; and ensure that references within the assessment report such as those contained in the Heritage and Archaeological Impact Statement are particularised in the draft conditions of consent.*
2. *Council to issue a copy of its draft conditions to the Crown for approval of Council's recommended conditions.*
3. *Council to provide a supplementary assessment report to the panel including a set of the final draft conditions and written confirmation of the Crown's approval of the draft conditions, at its earliest convenience.*

*The supplementary report may be provided to all panel members for determination via email correspondence.*

**Minutes of the Local Planning Panel Meeting 16 May 2024 cont'd**

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**Reasons**

The Panel agreed to defer the determination of the matter to enable a set of draft conditions to be finalised with some anomalies and corrections to be made and to provide time for Council to obtain the required written approval of the conditions given this is a Crown development application.

The Panel understands that these matters will be addressed within the coming days with a report to follow shortly thereafter.

**Votes**

The decision was unanimous

**Local Planning Panel**

**Minutes of the**

**Local Planning Panel Meeting**

**Held Remotely - Online**

**on 06 June 2024**

## Panel Members

Chairperson	Donna Rygate
Panel Experts	Grant Christmas Sue Francis
Community Representative/s	Stephen Glen

### Central Coast Council Staff Attendance

Lisa Martin Civic Support Officer

The Chairperson, Donna Rygate declared the meeting open at 2.03pm.

The Chair read an acknowledgement of country statement.

## Apologies

***The Panel noted that no apologies had been received.***

Minutes of the Local Planning Panel Meeting 06 June 2024 cont'd

PROCEDURAL ITEMS

1.1 Disclosures of Interest

*The Panel Members confirmed that they had each signed a declaration of interest form in relation to each matter on the agenda. No conflicts of interest were identified.*

CONFIRMATION OF MINUTES OF PREVIOUS MEETINGS

2.1 Confirmation of Minutes of Previous Meeting

*The Panel was unable to view the minutes of the previous Local Planning Panel Meeting held on 16 May 2024, therefore the minutes will be referred for confirmation to the next meeting on 20 June 2024.*

PLANNING REPORTS

3.1 DA/1968/2023 - 9/20 Terrigal Esplanade Terrigal - Alterations and additions to Residential Flat Building

Site Orientation Yes

Relevant Considerations As per Council assessment report

Material Considered

- Documentation with application
- Council assessment report

Council Recommendation Approval

Panel Decision

1. *The Panel accepts that the Applicant's Clause 4.6 written request demonstrates that compliance with the Height of Buildings and floor space ratio development standards would be unreasonable in the circumstances of this application because the Height of Buildings and floor space standards are already exceeded by the existing residential flat building. The proposed additions do not increase the overall height of the building – in fact the proposal reduces the existing exceedance; nor does the proposal have any impact on the already exceeded floor*

Minutes of the Local Planning Panel Meeting 06 June 2024 cont'd

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*space ratio controls; and nor does it have an unreasonable impact on the surrounding development.*

*Further, the Panel considers that the proposed development will be in the public interest because it is consistent with the objectives of the development standard and the objectives for development within the R1 General Residential zone in which the development is proposed to be carried out.*

2. *The Panel assumes the concurrence of the Secretary of the Department of Planning to permit the non-compliance with the development standards under clause 4.6 of the Central Coast Local Environmental Plan 2022, in accordance with the provisions of clause 55 of the Environmental Planning and Assessment Regulation 2021.*
3. *The Panel grants consent to DA/1968/2023- 9/20 Terrigal Esplanade Terrigal for alterations and additions to an existing residential flat building subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.*

3.2      **DA/59347/2020/B - New Dwelling House Additions & Alterations Keeping Current Form of Existing Ground Floor Cottage (Amended Application) - 2C Amethyst Avenue, PEARL BEACH NSW 2256**

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<b>Site Orientation</b>	Yes
<b>Relevant Considerations</b>	As per Council assessment report
<b>Material Considered</b>	<ul style="list-style-type: none"><li>• Documentation with application</li><li>• Council assessment report</li><li>• Submission</li></ul>
<b>Council Recommendation</b>	Approval
<b>Panel Decision</b>	<b>1. That the Local Planning Panel grants consent to DA/59347/2020/B – Lot 2 DP 838892, 2C Amethyst</b>

Minutes of the Local Planning Panel Meeting 06 June 2024 cont'd

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***Avenue, PEARL BEACH NSW 2256 - New Dwelling House Additions & Alterations Keeping Current Form of Existing Ground Floor Cottage (Modification Application) subject to the conditions detailed in the schedule attached to the report and having regard to the provisions regarding modification of development consent detailed in Section 4.55(2) and the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.***

***The Development Consent DA/59347/2020/A be modified as follows:***

***i) Amendment of Condition 1.1 to reflect the amended approved plans and supporting documentation.***

***ii) Deletion of Condition 2.6a.***

**Reasons**

This application has been assessed under the heads of consideration of Sections 4.55(2) and 4.15 of the *Environmental Planning and Assessment Act 1979* and all relevant instruments and policies. Following a thorough assessment of the relevant planning controls and the key issues identified in Council's report which have been resolved satisfactorily through amendments to the proposal, it is considered that the application can be supported, noting that:

1. The Panel is satisfied that the provisions of the following State Environmental Planning Policies have been considered and satisfied:
  - i. State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
  - ii. Chapter 2 and Chapter 4, section 4.6(4) of the *State Environmental Planning Policy (Resilience and Hazards) 2021*.
2. The Panel is satisfied that the provisions of clause 7.1 Acid Sulfate Soils and 7.6 Essential Services of *Central Coast Local Environmental Plan 2022* have been considered and satisfied
3. The Panel is satisfied that the relevant provisions of the environmental planning instruments, plans and policies that apply to the development have been considered in the assessment of the application.
4. The Panel is satisfied that the proposed development is



**Minutes of the Local Planning Panel Meeting 06 June 2024 cont'd**

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substantially the same development as previously approved and is consistent with the provisions of Section 4.55(2) having regard to the matters for consideration provided in Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

5. The proposed development is not expected to have any adverse social or economic impact.

**Votes** The decision was unanimous

**PLANNING REPORTS- OUTSIDE OF PUBLIC MEETING**

**4.1 Planning Proposal 2 Woongarra Road Woongarra to rezone MU1 and E1 zoned land to R1 General Residential**

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<b>Site Orientation</b>	Yes
<b>Relevant Considerations</b>	As per Council report
<b>Material Considered</b>	<ul style="list-style-type: none"><li>• Council assessment report</li></ul>
<b>Council Recommendation</b>	<p><b>1. That the Panel consider the Planning Proposal in relation to Lot 1 DP 1275060, 2 Woongarra Road, Woongarra to amend the Central Coast Local Environmental Plan 2022 (see Attachment 1) and draft Council Report (attachment 2).</b></p> <p><b>2. That the Panel provide independent advice on the Planning Proposal for consideration by Council.</b></p>
<b>Panel's Advice</b>	The Panel supports the staff recommendation and considers the Planning Proposal has merit.

**Item No:** 3.1

**Title:** DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces

**Central Coast**  
Local Planning Panel

**Department:** Environment and Planning

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20 June 2024 Local Planning Panel Meeting

Reference: DA/3915/2022 - D16215549

Author: Sian Holmes, Development Planner Consultant

Section Manager: Ailsa Prendergast, Section Manager. Residential Assessments

Executive: Andrew Roach, Unit Manager. Development Assessment

### Summary

An application has been received for the demolition of existing structures and the construction of 4 storey residential flat building containing:

- 8 x 2-bedroom units (including 4 affordable housing units)
- 8 car parking spaces
- 1 motorcycle space
- 6 bicycle spaces

The application has been examined having regard to the matters for consideration detailed in Section 4.15 of the *Environmental Planning and Assessment Act 1979* and other statutory requirements with the issues requiring attention and consideration being addressed in this report.

The application is required to be referred to the Local Planning Panel in accordance with the Minister's LPP Direction dated 6 March 2024 as:

- it is sensitive development being a residential flat building to which Chapter 4 of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) applies.
- the application seeks a variation greater than 10% to the maximum permissible height limit (12m) under clause 5.25 of the *State Environmental Planning Policy (Precincts—Regional) 2021* (Precincts – Regional SEPP) and
- the number of objections received exceeds the threshold of 10 unique submissions.

A total of nineteen (19) distinct public submissions were received during two notification periods.

The application is recommended for approval subject to conditions.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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<b>Applicant</b>	Fuse Architecture Pty Ltd
<b>Owner</b>	Zeytouneh 10452 Pty Ltd
<b>Application No</b>	DA/3915/2022
<b>Description of Land</b>	13 / - / DP17440 6 Auburn Street, Point Frederick 2250
<b>Proposed Development</b>	Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2-bedroom units (including 4 affordable housing units) with 8 car (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces.
<b>Site Area</b>	676.6m <sup>2</sup> (by DP) 682.2m <sup>2</sup> (by calculation)
<b>Zoning</b>	R1: General Residential - State Environmental Planning Policy (Precincts—Regional) 2021
<b>Existing Use</b>	Residential Dwellings
<b>Employment Generating</b>	No
<b>Estimated Value</b>	\$3,057,821.00

***Recommendation***

- 1 That the Local Planning Panel grant consent to DA/3915/2022 at 6 Auburn Street, Point Frederick 2250 (Lot 13 DP17440) subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.***
- 2 The Panel agrees that the applicant's clause 5.28 of the State Environmental Planning Policy (Precincts – Regional) 2021 written request demonstrates that compliance with the height development standard is unnecessary in the circumstances of the case, that compliance with the height standard would be unreasonable in the circumstances of the case and that there are sufficient environmental planning grounds to justify contravening that development standard.***  
***Further, the Panel considers that the proposed development will be in the public interest because it is consistent with the objectives of the development standard and the objectives for development within the R1 General Residential zone in which the development is proposed to be carried out.***
- 3 That Council advises those who made written submissions of the Panel's decision.***

**Key Issues**

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- Height, bulk and scale
- View impacts
- Privacy and noise impact as a result of proposed rooftop communal open space
  - Overshadowing
  - Setbacks and building separation, and
  - Traffic and parking impacts.

*State Environmental Planning Policy (Precincts—Regional) 2021* (Precincts – Regional SEPP) contains the primary planning controls applying to the subject site. The proposal also seeks to utilise the provisions of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) to increase the permissible floor space ratio (in accordance with Clause 17) as it includes the provision of 4 affordable housing dwellings which comprises 50% of the total number of dwellings on site. The Housing SEPP was amended on 14 December 2022 including amendments to Clause 17 however this application is subject to saving provisions under Schedule 7A(2) of the SEPP and as such must be determined as if amendments had not commenced. The Gosford City Centre Development Control Plan 2018 (GDCP 2018) also applies to the site.

The application proposes to vary the maximum building height development standard under the Precincts – Regional SEPP. The variation relates to part of the proposed fourth storey, the rooftop communal open space area and the lift overrun. Following a detailed assessment, it is considered that the variation to allow for the increase in height for the fourth level of the building is acceptable and will not result in any significant adverse privacy, view, or shadow impacts over and above that which would result from a complying scheme. The application has submitted a suitable variation request which is adequate, and which establishes that strict application of the development standard is unnecessary and unreasonable in the circumstance of the case and suitable environmental planning ground to justify the request.

The proposal does not comply with the requirement for visitor car parking providing 8 car parking spaces for the residential units and nil visitor parking provided. A minimum of 7 residential parking spaces are required and one visitor space having regard to the applicable controls. A condition is recommended to require the dedication of 1 x visitor space. In addition to standard conditions of consent, bespoke conditions are recommended in respect of:

- Increased sill height to side boundary facing windows to protect the privacy of neighbouring dwellings.
- Restriction to use of proposed Affordable housing units for 15 years
- Amended landscape plan to delete paving in rear deep soil zone.
- Limit use of rooftop communal open space area to daylight hours to protect the amenity of neighbouring residents, and
- Updated BASIX Certificate.

Subject to the above conditions, the proposal is considered to provide an appropriate built form with a high degree of residential amenity for future occupants. The proposal will have

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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limited impacts on adjoining properties being generally consistent with the scale of surrounding development notwithstanding the height non-compliance. This report therefore recommends the application is approved.

**Precis:**

<b>Proposed Development</b>	Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2-bedroom units (including 4 affordable housing units) with 8 car parking spaces, 1 motorcycle space and 6 bicycle spaces.
<b>Permissibility and Zoning</b>	The site is zoned <i>R1 General Residential</i> under <i>State Environmental Planning Policy (Precincts—Regional) 2021</i> .
<b>Relevant Legislation</b>	<ul style="list-style-type: none"> <li>• <i>Environmental Planning and Assessment Act 1997 (EP&amp;A Act 1997)</i></li> <li>• <i>State Environmental Planning Policy (Precincts—Regional) 2021</i></li> <li>• <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i></li> <li>• <i>State Environmental Planning Policy (Housing) 2021</i></li> <li>• <i>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</i></li> <li>• <i>Gosford City Centre Development Control Plan 2018</i></li> </ul>
<b>Current Use</b>	Detached residential dwelling with swimming pool
<b>Integrated Development</b>	No
<b>Submissions</b>	<p>Notification period 1 – nil submissions</p> <p>Notification period 2 - 19 submissions were received objecting to the proposed development. Key issues raised include height non-compliance, privacy and noise impacts from rooftop communal open space, view impacts, overshadowing and loss of natural light, traffic and parking impacts, setbacks, lack of open space and landscaping, access issues for garbage trucks and large vehicles.</p>

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**Variations to Policies (Numerical)**

<b>Clause</b>	5.25
<b>Standard</b>	Height of Buildings – maximum 12m
<b>EPI</b>	State Environmental Planning Policy (Precincts – Regional) 2021
<b>Departure basis</b>	15.81m proposed 31.8% variation Clause 5.28 variation request (equivalent to a clause 4.6 variation request) submitted

<b>Clause</b>	3F-1
<b>Standard</b>	Visual Privacy
<b>EPI</b>	Apartment Design Guide
<b>Departure basis</b>	Condition required to increase sill heights on a number of windows to 1.6m to protect privacy

<b>Clause</b>	3J-1
<b>Standard</b>	Bicycle and car parking
<b>LEP / DCP</b>	Apartment Design Guide
<b>Departure basis</b>	Condition required to allocate 1 x visitor car parking space

<b>Clause</b>	4K
<b>Standard</b>	Apartment Mix
<b>EPI</b>	Apartment Design Guide
<b>Departure basis</b>	Apartment mix proposed 100% - 2 bedroom units where mix required

<b>Clause</b>	18(2)(d)
<b>Standard</b>	Deep soil area
<b>EPI</b>	State Environmental Planning Policy (Housing) 2021
<b>Departure basis</b>	102.3m <sup>2</sup> (15%) required, 99m <sup>2</sup> (14.5%) proposed. 3.33m <sup>2</sup> (3.26%) variation

<b>Clause</b>	5.2.14
<b>Standard</b>	Deep soil area
<b>EPI</b>	Gosford City Centre DCP 2018
<b>Departure basis</b>	102.3m <sup>2</sup> (15%) required, 99m <sup>2</sup> (14.5%) proposed. 3.33m <sup>2</sup> (3.25%) variation

<b>Clause</b>	5.2.15
<b>Standard</b>	Front fence
<b>EPI</b>	Gosford City Centre DCP 2018
<b>Departure basis</b>	Max height 1.4m, 2.0m proposed (42.86% variation)

<b>Clause</b>	9.1
<b>Standard</b>	Housing mix
<b>EPI</b>	Gosford City Centre DCP 2018
<b>Departure basis</b>	Apartment mix proposed 100% - 2-bedroom units where max. 75% allowed

A clause 5.28 variation request has been submitted in respect of the maximum height of building provision (clause 5.25) of the Precincts – Regional SEPP. Following an assessment, it is considered that the proposed height variation is justified and should be supported.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**Background**

The subject land and surrounding area, prior to October 2018, was zoned under Gosford LEP 2014 which provided a maximum height limit of 12m plus a development incentive provision bonus of 30% (taking the maximum height to 15.6m).

Land to the immediate west and north of the subject site (179 Albany St, 8 Duke St and 4 Auburn St) was developed in accordance with these provisions, generally providing for development of 5 storeys in height. In October 2018 *State Environmental Planning Policy (Gosford City Centre) 2018* (Gosford City Centre SEPP) was gazetted and repealed the Gosford City Centre development incentive provision. In March 2022 the *Precincts – Regional SEPP* was made which incorporated the provisions of the Gosford City Centre SEPP. The Precincts – Regional SEPP now forms the primary planning instrument applying to the subject site.

Development on 179 Albany St, 8 Duke St and 4 Auburn St was approved by the Hunter and Central Coast Regional Panel in May 2017 under DA/49564/2016. The development adjoins the subject site on two sides and forms a significant part of the site context. A two storey multi dwelling housing development adjoins the site immediately to the west. The assessment report for the 179 Albany St, 8 Duke St and 4 Auburn St notes that the issue of site isolation in respect of 6 Auburn Street was considered by Council and the Panel in determining the application. The report notes that a recently built single dwelling house was located on the site of 6 Auburn Street and that the developer had attempted to amalgamate the site. The owner had advised the developer that they were not interested in selling and ultimately the Panel was satisfied that the site was not isolated by the proposed development. Conditions were imposed to protect the privacy of the rear private open space area of 6 Auburn Street including a requirement that the north facing balconies of Building B (8 Duke Street) and southwest facing balconies of Building C (4 Auburn Street) be screened to prevent overlooking of the rear of 6 Auburn Street as follows:

*2.10 (c) The provision of privacy screens on the balconies of levels 1 and above, on the northern side of building B, and units on the south western side of building C. The screens are to be designed to prevent overlooking of the rear of 6 Auburn Street while maintaining sunlight to the balconies.*

The condition was to be satisfied prior to issue of the construction certificate and with plans to be submitted to the accredited certifier. However, a site inspection revealed that the balconies are not screened and there is significant overlooking of the rear of 6 Auburn Street because of the development. The current situation means that no privacy is afforded to the residents of 6 Auburn Street in the private open space area (rear garden and swimming pool).

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**The Site and Surrounding Development**

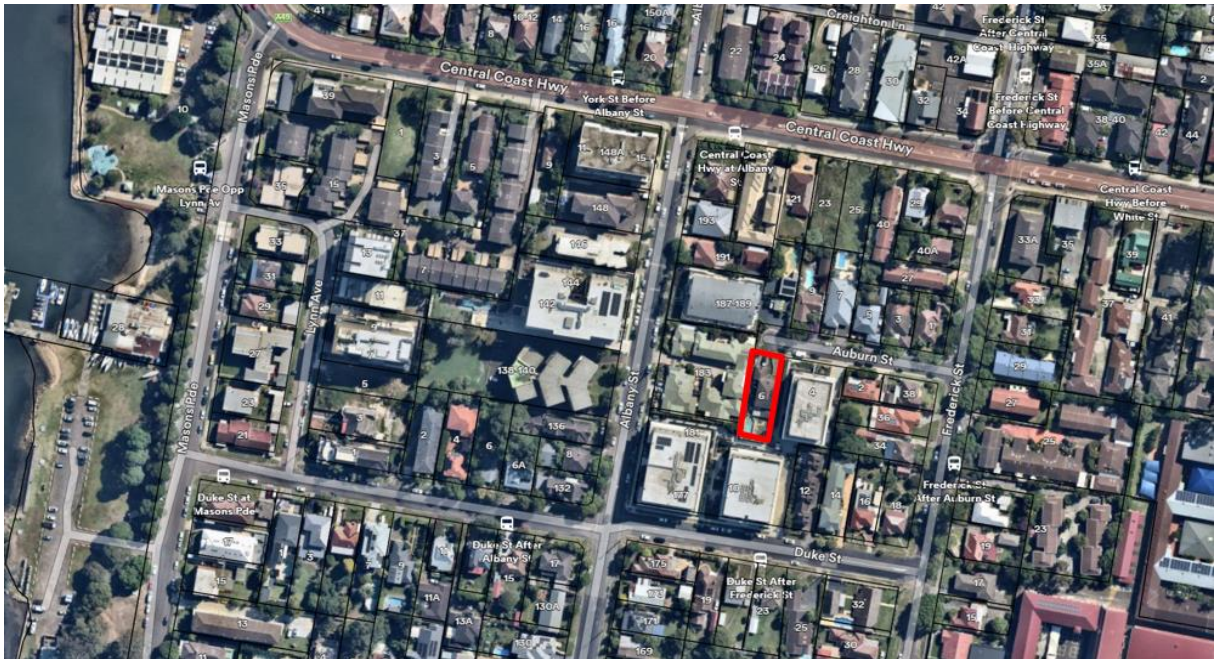
The Site is located on Auburn Street, Point Frederick which is a cul-de-sac located within the Gosford City Centre area. It has an area of 682.2m<sup>2</sup> (by measured survey) and is regular in shape with fall of approximately 2.38m from the rear to the street (south to north) (RL 1951 to RL17.16). The site currently accommodates a single two storey brick dwelling house, with garage and inground swimming pool in the rear yard. The site is zoned R1 General Residential.

The land immediately surrounding the site is also zoned *R1 General Residential* under the provisions of the *State Environmental Planning Policy (Precincts—Regional) 2021*. Surrounding development contains a mix of multi storey residential flat buildings, one and two storey multi-dwelling house development and single and two storey dwellings. As discussed above the recently completed RFB development adjoining the site on its eastern and southern boundaries comprising three (3) x 5 storey RFBs fronting Auburn Street (to the east at 4 Auburn Street), Duke Street (to the south at 8 Duke Street) and Albany Street to the south-west (179 Albany Street). Immediately to the west the site is adjoined by a one and two storey multi dwelling housing development which fronts Albany Street (185 Albany Street). To the northwest is a three (3) storey RFB at 189 Albany Street and generally across Auburn Street to the north development comprises single storey detached dwellings. Photos of the site and surrounds are provided below.

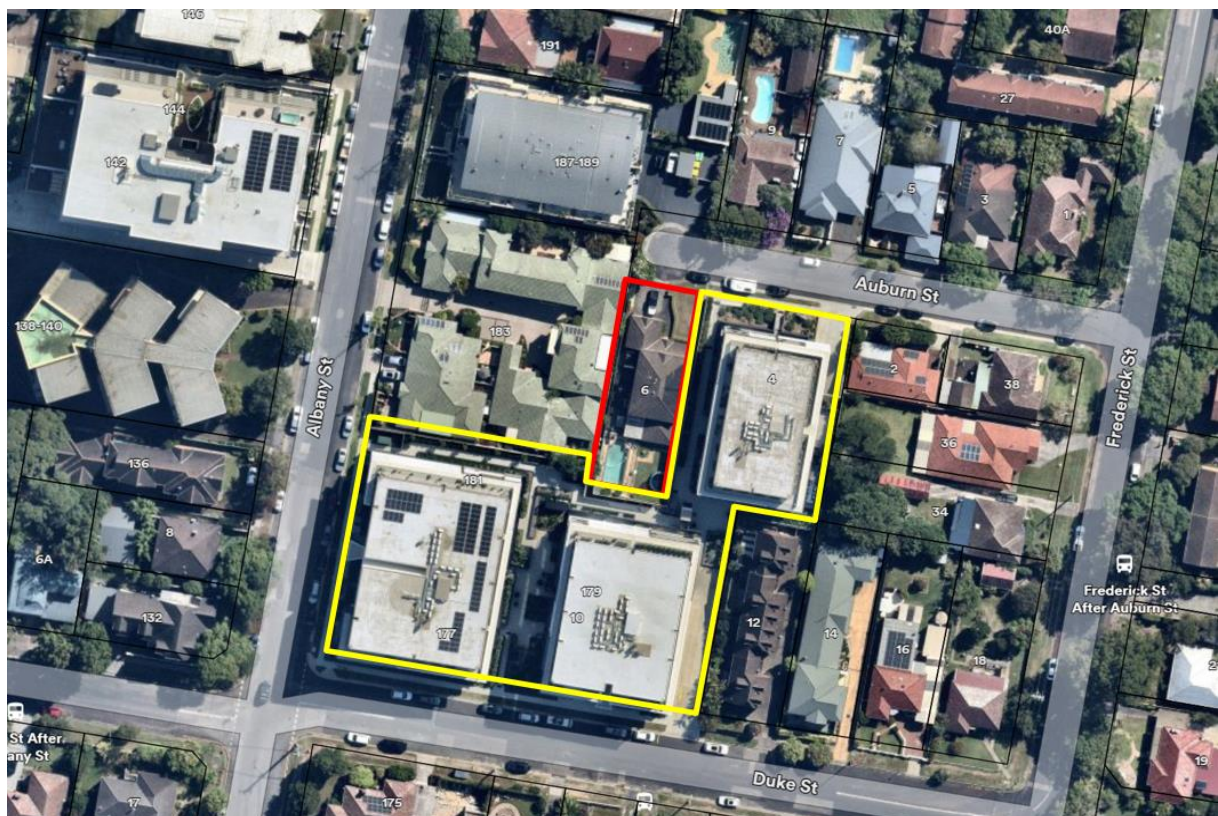
The site is on the periphery of the Gosford City Centre area and has a maximum height limit of 12m although as noted above the land previously had a potential maximum height limit of 15.6m under Gosford LEP 2014 in accordance with the Gosford City Centre development incentive provisions. The adjacent development immediately to the east and south has been developed in accordance with these incentive provisions to a height of 5 storeys and this development establishes the predominant context for the site. Land to the west closer to the foreshore is zoned *B4 – Mixed Use* and has a 15m height limit.



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 1 - The site and surrounds**



**Figure 2 - The site (red border) and immediate neighbours (Note: adjacent development at Albany, Duke and Auburn Streets bordered yellow)**



- 3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**
- 



***Figure 3 – Auburn Street site frontage (4 Auburn Street to left)***



***Figure 4 – 4 Auburn Street to east***



- 3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**
- 



***Figure 5 – Interface with 4 Auburn Street to east (through site link)***



- 3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)
- 



***Figure 6 – 6 Duke Street immediately to the south***



***Figure 7 – Rear of 6 Auburn Street from ground level walkway at rear of 6 Duke Street***



- 3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)
- 



***Figure 8 – Interface to the west looking south west showing multi dwelling housing at 185 Albany St***



***Figure 9 – Looking north west across head of cul-de-sac (rear of 189 Albany St RFB)***



- 3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**
- 



***Figure 10 – Auburn Street looking east***

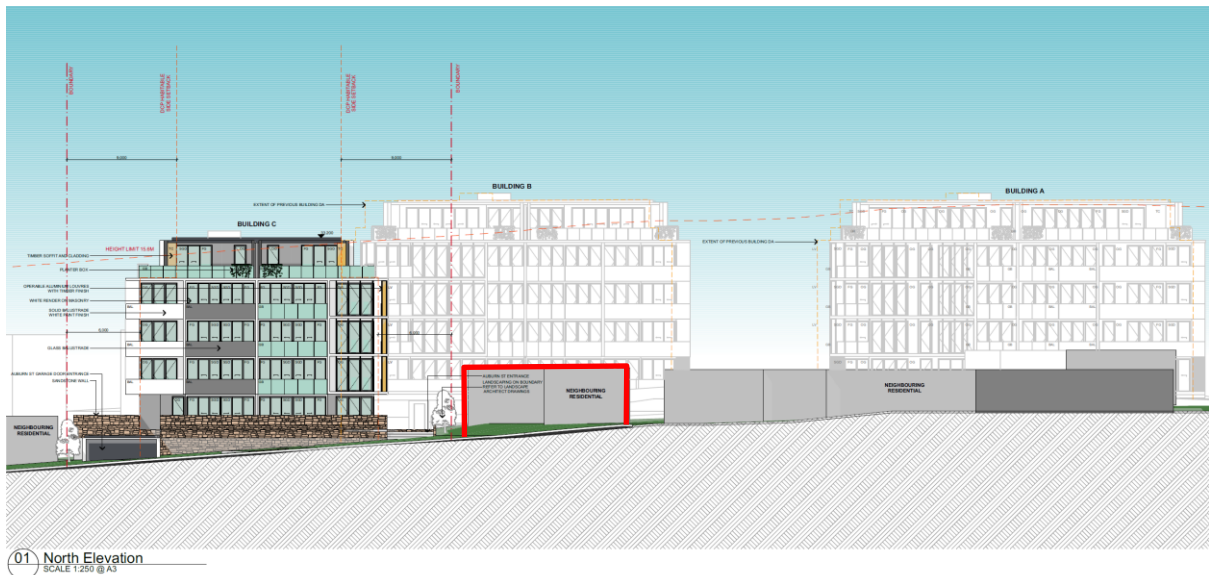


***Figure 11 – Auburn Street looking west toward site***

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 12 – Approved development at 179 Albany St, 8 Duke St and 4 Auburn St DA/49564/2016 (subject site shown with black border)**



**Figure 13 – Approved development at 179 Albany St, 8 Duke St and 4 Auburn St DA/49564/2016 (existing dwelling shown in foreground as 'neighbouring development'- red border)**



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

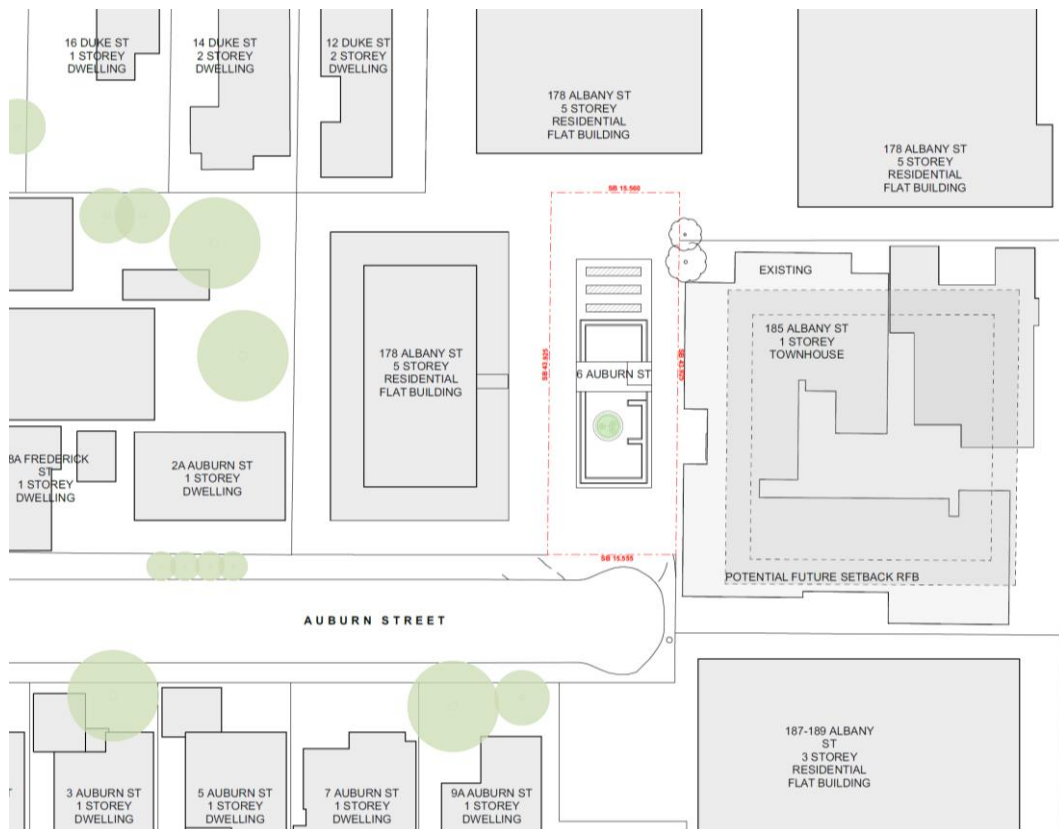
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**The Proposed Development**

The proposed development is for demolition of existing structures and the construction of a 4-storey residential flat building containing:

- 8 x 2-bedroom units (including 4 affordable housing units)
- 8 car parking spaces (including 2 x accessible space),
- 1 x motorcycle space and
- 6 x bicycle spaces contained within a basement level,
- rooftop communal open space,
- landscaping and
- associated works.

A selection of key plans of the proposed development are provided below:



**Figure 14 – Site Plan**



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 15 – Basement and upper ground floor plan**

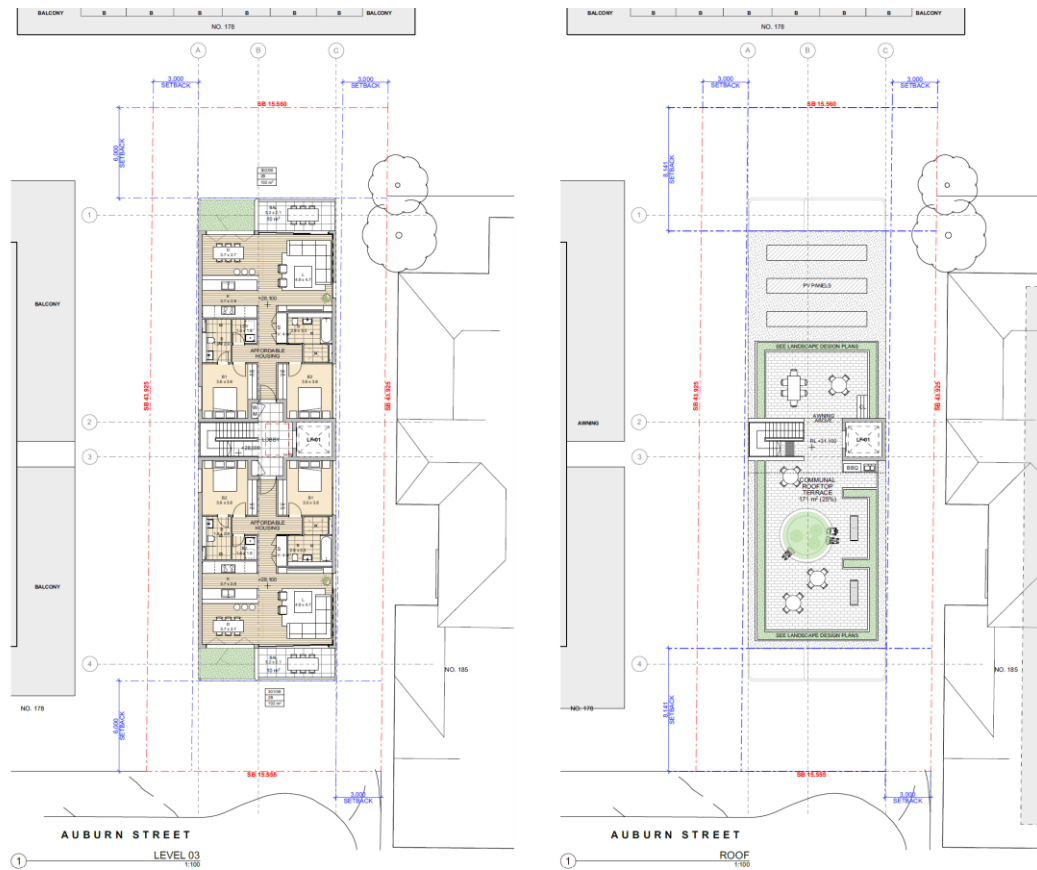
### 3.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 16 – Level 1 and 2 plan**

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

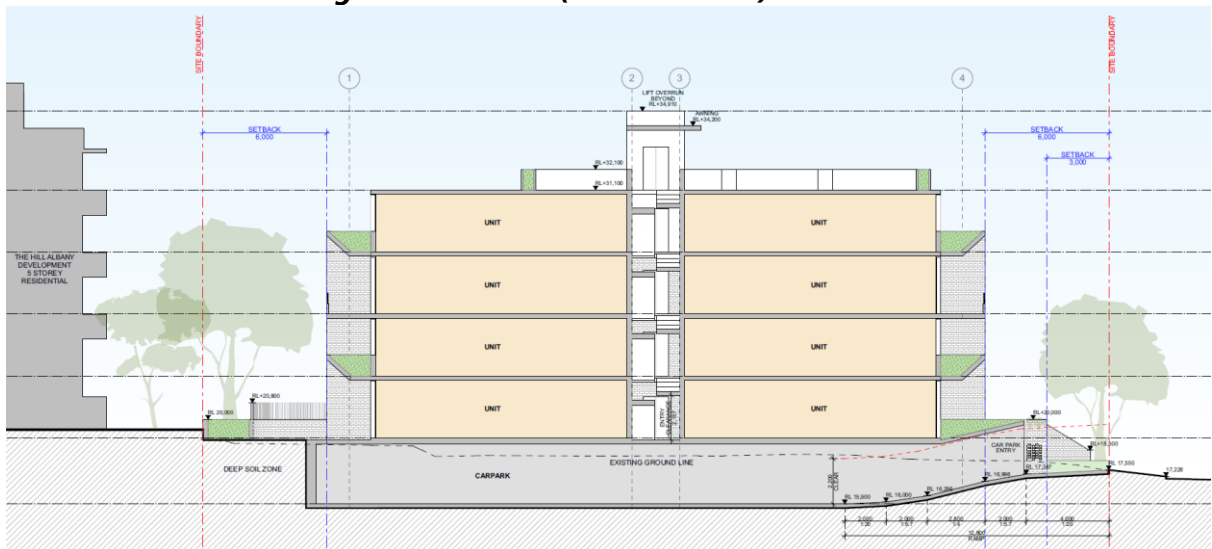


**Figure 17 – Level 3 and rooftop plan**

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 18 – North (Auburn Street) Elevation**



**Figure 19 – North south Section**

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 16 – Architectural render (Auburn Street frontage)**

### Planning History

The approval history for the site is as outlined in the Table below. Notably the existing dwelling house on site was approved in December 1997 and the swimming pool approved in April 1998.

#### Applications

Number	Status	Lodgement Date	Decision Date	Description
DA/6538/1997	Approved	24th November 1997	22nd December 1997	Building Application: DWELLING-HOUSE
DA/7677/1998	Approved	23rd March 1998	28th April 1998	Building Application: SWIMMING POOL IN-GROUND
BC/370/1998	Approved	12th October 1998	19th October 1998	6538/98 DWELLING 7677/98 POOL
CDP/10842/2001	Approved	1st February 2001	22nd January 2001	New Building PERGOLAPERGOLAPERGOLA
CDP/10842/2001	Approved	1st February 2001	22nd January 2001	New Building PERGOLAPERGOLAPERGOLA
SPCC/11144/2018	Approved	17th April 2018	10th May 2018	S22D Swimming Pool Compliance Certificate

### RFI Request and DA Amendments

The subject application was originally submitted to the planning portal on 01 November 2022.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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RFI No. 1 – Following review of the application the Applicant was advised on 12 December 2022 that additional information in the form of a Social Impact Assessment and additional waste detailed were required prior to the application being lodged. Information to respond to this request was submitted on 9 January 2023.

RFI No. 2 – On 19 January 2023 a further letter was sent to the Applicant advising that the application would not be formally lodged until further information was provided in the form of a waste management plan, waste servicing plan and design verification statement. Information to respond to this request was submitted on 3 February 2023.

The application was formally accepted and lodged on **14 February 2023**.

RFI No. 3 - Following a preliminary review of the DA documentation a further RFI letter was sent to the Applicant on 31 August 2023 advising that the application was not supported in its current form. The reasons that the application was not supported were identified as:

- Non-compliance with ADG requirements in respect of:
  - setbacks to habitable rooms noting that the side setback was proposed at 3m where 6m is required.
  - communal open space – no communal open space was proposed.
  - solar access requirements – proposal did not comply with minimum of 3 hours sunlight to 70% of living rooms and private open space areas.
- Non-compliance with maximum building height and height of ground level given above ground basement.
- Lack of detailed landscape plan
- Lack of visitor parking
- Incorrect GFA calculations
- Does not address requirements of Gosford City Centre DCP 2018 which is the prevailing DCP.
- Detailed stormwater and sewer servicing issues, and
- Waste management issues.

The above comments included issues identified by Council's independent architect and urban design experts.

A meeting was held with the Applicant on 8 September 2023 to discuss potential amendments to address the issues raised. Amended plans were then submitted on 20 December 2023 together with a clause 5.28 (equivalent to clause 4.6) variation request. The amended plans included the following amendments:



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- Amendments to the side boundary facing windows which are setback 3m from the boundary (where a setback of 6m is required under the ADG) to provide a non-habitable interface via the inclusion of 'Oriel' angled windows, highlight windows or deletion of windows entirely.
- Reduction in side boundary walls from previous height of up to 3.2m to maximum of 1.75m and inclusion of palisade fencing behind landscape planters instead of solid walls to improve the boundary and street interface.
- Inclusion of communal open space on the rooftop with an area of 25% of the site area (Note: this resulted in an increase in the height noncompliance with the inclusion of a lift overrun to provide access to the roof level, fire stair and connecting pergola and inclusion of balustrades – refer detailed assessment below). An amended clause 5.28 variation request was also submitted.
- Car park level (and accordingly all levels in the building) has been lowered by 750mm and a stepped planter provided at the street frontage.
- Solar access requirement of ADG achieved through reconfiguration of windows and inclusion of skylights on the roof of the southern end of the building.
- Detailed landscape plan provided.
- GFA calculation corrected, and
- Updated stormwater and sewer details provided.

Issues that were not addressed in the submission include:

- Lack of visitor parking – Applicant claims visitor parking not required in accordance with Housing SEPP non-discretionary development standards.
- Assessment against Gosford City Centre DCP 2018, and
- Waste management issues.

Relevant matters are addressed in the assessment below.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**ASSESSMENT:**

Having regard for the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979 and other statutory requirements, Council's policies and Section 10.7 Certificate details, the assessment has identified the following key issues, which are elaborated upon for Council's information. Any tables relating to plans or policies are provided as an attachment.

***State Environmental Planning Policy (Precincts—Regional) 2021***

*State Environmental Planning Policy (Precincts—Regional) 2021* came into force on 1 March 2022 and replaces / consolidates *State Environmental Planning Policy (Gosford City Centre) 2018 (SEPP GCC)* along with other SEPP's.

Chapter 5 applies to Gosford City Centre in which the subject site is located.

***Clause 5.5 Consent Authority***

Clause 5.5 of the Precincts – Regional SEPP states that Council is the consent authority for development that has a capital investment value of less than \$10 million. Notwithstanding in accordance with the Minister's Direction of 6 March 2024 in the Central Coast LGA the Local Planning Panel is to determine development applications for contentious development (that is where more than 10 submissions received).

The development was supported by a Quantity Surveyors report which defined both Cost of works as per Section 25 J of the *EP&A Regulation* and the Capital Investment Value in accordance with NSW Planning Circular PS 10-008. The Capital Investment Value of the project is \$3,057,821 and therefore the Council with the LPP acting on its behalf is the consent authority for the subject application.

***Clause 5.11 – Zoning and Permissibility***

The subject site is zoned *R1 General Residential* under the Precincts – Regional SEPP.

The proposed development is defined as residential flat building which is permissible in the zone with consent.

***residential flat building*** means a building containing 3 or more dwellings but does not include an attached dwelling or multi dwelling housing.



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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***Clause 5.13 – Zone objectives***

Having regard for clause 5.13 of the Precincts – Regional SEPP, the R1 – *General Residential* zone objectives read as follows:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To ensure that development is compatible with the desired future character of the zone.*
- *To promote best practice in the design of multi dwelling housing and other similar types of development.*
- *To ensure that non-residential uses do not adversely affect residential amenity or place demands on services beyond the level reasonably required for multi dwelling housing or other similar types of development.*

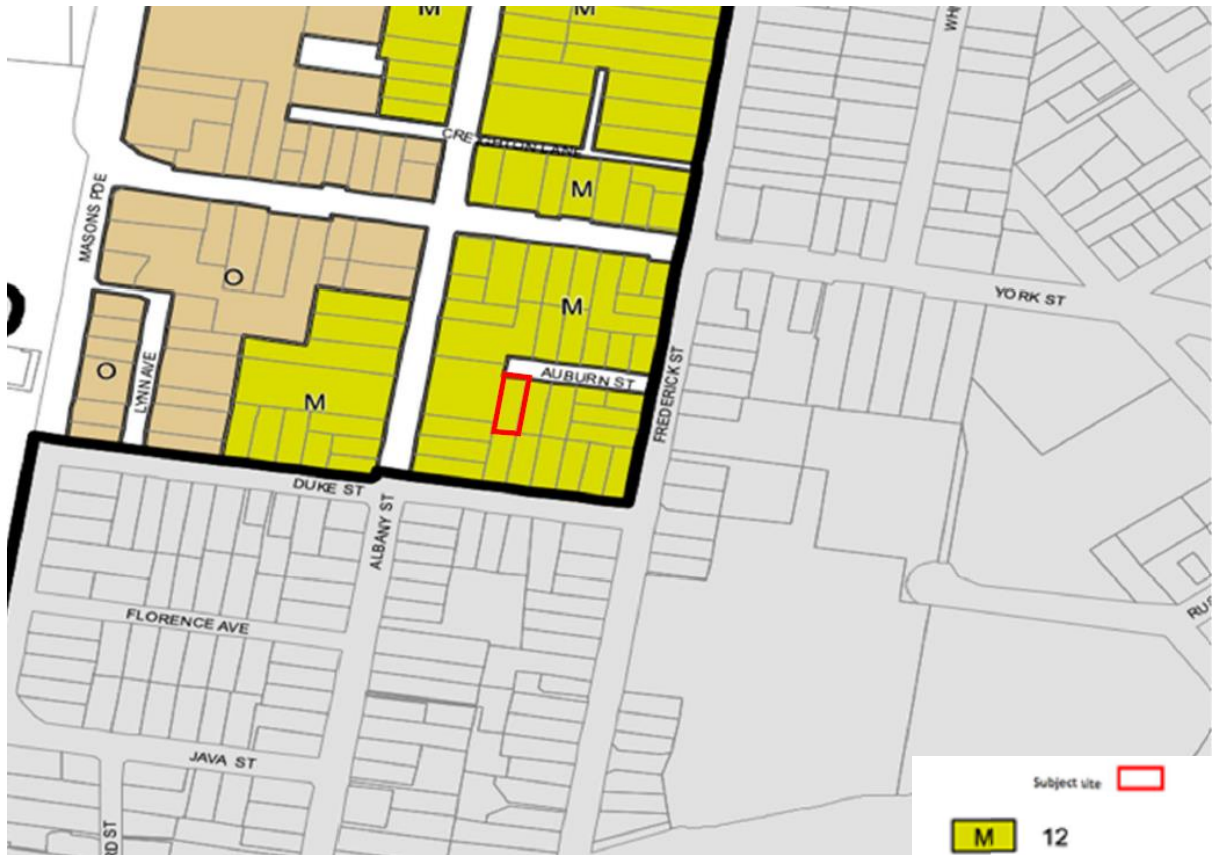
The proposal assists in meeting the housing needs of the community within a medium density residential environment providing 4 x 2-bedroom units and 4 x 2-bedroom affordable housing units for a period of 15 years within easy access of the Gosford City Centre.

The proposal is consistent with the desired and emerging future character of the surrounding locality and provides good amenity outcomes for the future residents.

***Clause 5.25 - Height of Buildings***

Clause 5.25 provides that the maximum building height applying to land is as shown on the Height of Building map. The maximum permissible height for the subject land is 12m in accordance with the map as shown below.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 16 – Precincts – Regional SEPP Height of Buildings map**

The proposed development has a maximum height of 15.81m (RL34.190) to the top of the lift overrun with the height variation varying from an exceedance of 350mm (in the south eastern corner of the site) to 3.81m (to the top of the lift overrun). The proposal does not therefore comply with this clause and accordingly a clause 5.28 variation request has been submitted seeking to vary the subject development standard (refer below)

**Clause 5.26 - Floor Space Ratio and Clause 5.55(3) Floor space ratio in Zone R1**

Clause 5.26 provides that the maximum Floor Space Ratio applying to the subject land is as shown on the FSR map. The maximum permissible FSR shown on the map for the subject site is 1.5:1.

However, as per clause 5.55(3) additional FSR provisions relate to land zoned R1, including the subject site. Clause 5.55(3) provides that:

*(3) If a building for which the maximum floor space ratio on the Floor Space Ratio Map is as specified in Column 1 of the Table to this subsection—*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- (a) is on a site area of less than 1,000 square metres, or  
(b) Has no street frontage greater than 24metres,

*The maximum floor space ratio for the building is the ratio specified opposite that ratio in Column 2 of that Table.*

<b>Column 1</b>	<b>Column 2</b>
2:1 or less	0.75:1
>2:1	1:1

The subject site has a frontage of 15.55m and an area of 682.2m<sup>2</sup> therefore a floor space ratio of 0.75:1 applies. However, clause 17 of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) allows that where the maximum permissible FSR is less than 2.5:1, if a development provides that at least 50% of the gross floor area of the building will be used for affordable housing an additional FSR of 0.5:1 applies. The proposed development provides for 50% of the GFA in the form of affordable housing units therefore a maximum FSR of 1.25:1 applies.

The proposed development will have an FSR of 1.22:1 (832 m<sup>2</sup> GFA) which is below the maximum FSR permissible. The proposal therefore complies with the maximum FSR that applies to the site.

**Clause 5.28 – Exceptions to Development Standards**

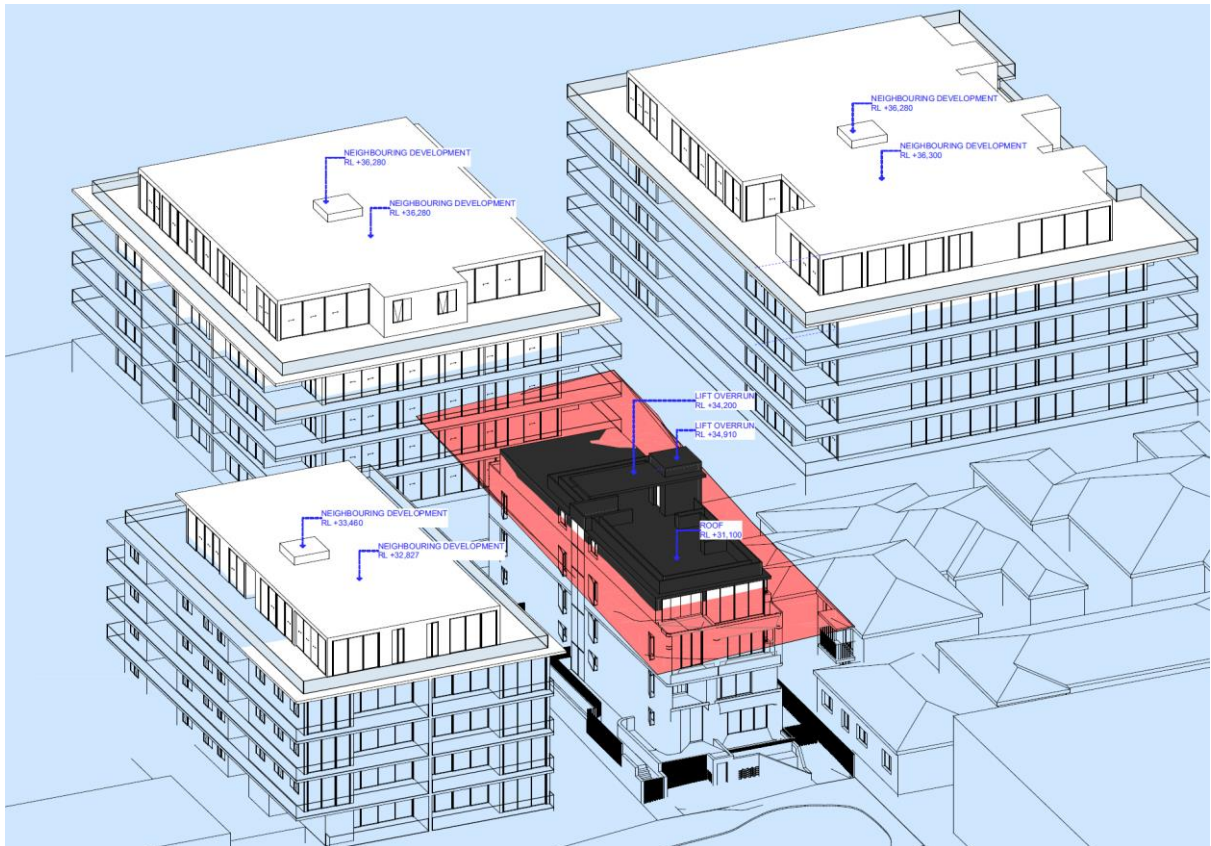
A maximum building height of 12m applies to the site in accordance with the clause 5.25 of the SEPP. The proposed development has a maximum height of 15.81m (RL34.190) to the top of the lift overrun with the height variation varying from an exceedance of 350mm (in the south-eastern corner of the site) to 3.81m (to the top of the lift overrun. The proposal does not therefore comply with this clause and accordingly a clause 5.28 variation request prepared by BMA Urban has been submitted seeking to vary the subject development standard.

Clause	Clause 5.25 Maximum Building Height
Standard	12m
Proposed	15.81m which equates to a 31.8% breach
Instrument	Precincts – Regional SEPP

The height departure encompasses part of the fourth floor, rooftop communal open space, lift core and pergola as shown in Figure 17 below.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**Figure 17: Building height plane**

Clause 5.28 of the Precincts – Regional SEPP: Exception to a Development Standard states:

- (1) *The objectives of this section are as follows—*
  - (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
  - (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
- (2) *Development consent may, subject to this section, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this section does not apply to a development standard that is expressly excluded from the operation of this section.*
- (3) *Development consent must not be granted to development that contravenes a development standard unless the consent authority is satisfied the applicant for development consent has demonstrated that—*
  - (a) *compliance with the development standard is unreasonable or unnecessary in the circumstances, and*
  - (b) *there are sufficient environmental planning grounds to justify the contravention of the development standard.*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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Case law relevant to a clause 4.6 variation similarly applies to a variation in accordance with clause 5.28 (similarly constructed). In *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118, Preston CJ summarised the matters in Clause 4.6 (4) that must be addressed before consent can be granted to a development that contravenes a development standard as set out below.

1. *The applicant's written request has adequately demonstrated that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case*

Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 reinforces his previous decision in *Wehbe v Pittwater Council* [2007] NSWLEC 827 where he identified five commonly invoked ways of establishing that compliance with a development standard is unreasonable or unnecessary in the circumstances of the case. The most common is to demonstrate that the objectives of the development standard are achieved notwithstanding non-compliance with the standard.

2. *The applicant's written request has adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the development standard.*

Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 reinforces the previous decision in *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 90 regarding how to determine whether 'the applicant's written request has adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the development standard'.

The grounds relied on by the applicant in their written request must be "environmental planning grounds" by their nature. Chief Justice Preston at [23] notes the adjectival phrase "environmental planning" is not defined but would refer to grounds that relate to the subject matter, scope and purpose of the EPA Act, including the objects in s1.3 of the EPA Act.

Chief Justice Preston at [24] notes that there are two respects in which the written request needs to be "sufficient".

1. The written request must focus on the aspect or element of the development that contravenes the development standard, not the development as a whole (i.e. The written request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole); and
2. The written request must demonstrate that there are sufficient environmental planning grounds to justify contravening the development standard. In *Four2Five*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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*Pty Ltd v Ashfield Council [2015] NSWLEC 90* at [31] Judge Pain confirmed that the term 'sufficient' did not suggest a low bar, rather on the contrary, the written report must address sufficient environmental planning grounds to satisfy the consent authority.

3. *The proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out.*

Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 at [27] notes that the matter in cl 4.6(4)(a)(ii), with which the consent authority must be satisfied, is not merely that the proposed development will be in the public interest but that it will be in the public interest because it is consistent with the objectives of the development standard and the objectives for development of the zone in which the development is proposed to be carried out.

It is the proposed development's consistency with the objectives of the development standard and the objectives of the zone that make the proposed development in the public interest.

If the proposed development is inconsistent with either the objectives of the development standard or the objectives of the zone or both, the consent authority, cannot be satisfied that the development will be in the public interest for the purposes of cl 4.6(4)(a)(ii).

4. *The concurrence of the Secretary has been obtained.*

Chief Justice Preston in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 at [28] notes that the other precondition in cl 4.6(4) that must be satisfied before consent can be granted is whether the concurrence of the Secretary has been obtained (cl 4.6(4)(b)).

In accordance with Clause 4.6 (5), in deciding whether to grant concurrence, the Secretary must consider:

- (a) whether contravention of the development standard raises any matter of significance for state or regional environmental planning, and
- (b) the public benefit of maintaining the development standard

Under the Environmental Planning and Assessment Regulation 2021, the Secretary has given written notice dated 21 February 2018, attached to the Planning Circular PS 18-003 issued on 21 February 2018, to each consent authority, that it may assume the Secretary's

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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concurrence for exceptions to development standards in respect of applications made under cl 4.6 (subject to the conditions in the table in the notice).

The approach to determining a clause 4.6 request as summarised by Preston CJ in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118, has been used in the following assessment of whether the matters in Clause 5.28(3) have been satisfied for contravention of the height of building development standard.

Note: the public interest test and requirement for concurrence have since been repealed however did form part of Clause 5.28 of the Precincts – Regional SEPP at the lodgement date and therefore continue to be relevant.

**Exception to the Building Height development standard (Clause 5.25)**

The applicant's written justification for the departure from the height of buildings standard is contained in full in the attachments. The below is an assessment against the matters that the Court has determined are necessary to be satisfactorily addressed to be satisfied that the request is justified.

**1 Has the applicant's written request adequately demonstrated that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case?**

The Applicant's written request seeks to justify the contravention of the Building Height development standard by demonstrating that compliance is unreasonable or unnecessary in the circumstances of the case because the proposed height would be consistent with the adjoining development and that the relevant objectives of the standard are still achieved.

The objectives of the Building Height development standard are set out in Clause 5.25 of Precincts – Regional SEPP. The applicant has addressed each of the objectives as follows:

- (a) to establish maximum height limits for buildings

*The underlying purpose of this objective is to ensure that any future development is designed in a manner whereby any resulting building height will appropriately respond to both the existing and future context in a controlled manner.*

*The proposed development is consistent with those objectives on the basis that the proposed height is not incompatible with the existing scale of development within the visual catchment of the site.*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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*Furthermore, the proposed height will allow for the provision of affordable housing within the building and that in order to achieve the allowable FSR prescribed to the land (by way of the Housing SEPP), some level of height breach should be anticipated.*

*The development is still deemed to suitably respond to the objective, despite the variation.*

(b) to permit building heights that encourage high quality urban form,

*The height limit sought by this development will establish high quality urban form, which is further detailed by the following;*

***Communal Open Space – located on Roof***

*The communal open space (COS) has been located on the roof, which provides a high-quality urban form and is consistent with other developments in the Central Coast Council catchment.*

*The benefits of locating a COS on the roof provides the following;*

- Helps and maintains a sense of belonging and cohesion for residents and can help improve social problems.*
- Provides a decorative benefit of an otherwise bland roof space.*
- Will extend the roof life by protecting waterproofing layers from weather and temperature change.*
- Roof plantings will provide temperature control by improving solar panel efficiency.*

*For this reason, the building height breaches are contained across the uppermost level of the building inclusive of the lift overrun.*

*To reduce the visual impacts of the breach as a result of the POS, the following has been adopted;*

- This uppermost level has been recessed inwards into the built form envelope across all elevation.*
- Darker tone of building materiality is proposed across this upper floor for the purpose of limiting any perceptible volume arising out of the numerical dispensation.*

***Adjoining developments***

*Due to placing the COS on the roof, the lift shaft will further extend beyond the permissible height limit of 12m.*



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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*However, it is pertinent to note that even with this breach, this development will still be compatible with the existing developments within the visual catchment of the site. In particular, please note the following comparisons;*

*8 Duke St & 179 Albany St, Point Fredrick:*

- The neighbouring properties at 8 Duke St and 179 Albany St directly adjoin the site via the South and West boundaries.*
- These two properties have been constructed within the last 12 months.*
- The Height RL for these two buildings is both 36.28 and 36.3 respectively.*
- The proposed development at 6 Auburn St has a Height RL of 34.91.*
- Therefore, even with the increase in height limit, the development at 6 Auburn St, will be 1.37m lower than the height limit of the newly developed buildings at 8 Duke and 179 Albany.*

*Auburn St, Point Fredrick*

- The neighbouring property at 4 Auburn St, directly adjoins the site via the East boundary.*
- This property was newly constructed within the last 12 months.*
- The Height RL for 4 Auburn St is 33.46.*
- The proposed development at 6 Auburn would sit 1.45m above 4 Auburn St.*
- However, the topography of the site at 4 Auburn St, sits over 3.0m lower than that of 6 Auburn St.*
- Therefore, the RL Height of the building at 6 Auburn St, is technically 1.55m (approx.) lower than the building Height RL at 4 Auburn St*

*Other developments within [proximity of] 6 Auburn St:*

- There are several new developments which are either recently completed, or currently under construction that have received Height Limit concessions from Central Coast Council.*
- These other developments are located within close proximity of 6 Auburn St and should be considered as part of the site's local urban context.*
- These sites' locations, Height Limit permissibility controls and approved heights are as follow;*

<i>Site</i>	<i>Permissible HL</i>	<i>Actual</i>
<i>142 Albany St</i>	<i>12m</i>	<i>7 level RFB</i>
<i>148 Albany St</i>	<i>15m</i>	<i>6 level RFB</i>
<i>179 Albany St (Note: duplication as this development is</i>	<i>12m</i>	<i>6 level RFB</i>

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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also referred to above)		
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***Affordable Housing benefit***

*There is an inherent public benefit in providing Affordable Housing in both the Point Fredrick and broader Central Coast locality. The development of affordable housing usually becomes non-feasible without the benefits of incentives. Such incentives include the bonus FSR allowances afforded through the Housing SEPP.*

*This proposed development has sought the bonus FSR and will nominate 50% of the units (4) as Affordable. To achieve the FSR allowances, the proposed development will require a breach of the height limit. However, the benefit of providing this height limit dispensation, would include;*

- The supply of affordable housing in a well serviced locations, located in proximity to a variety of public transport options, expanses of public open space and services facilities.*
- Provide affordable housing within a development density congruent with that envisaged to be achieved by way of the SEPP Housing 2021 prescribed provisions.*

***Summary***

*Based on the surrounding neighbours, if the site at 6 Auburn St is restricted to its numerical compliance, it would inadvertently result in the provision of a built form that would present as discordant with the current and future transitional development context.*

*Given the siting/scale of the elements that breach the height limit and their relationship to neighbouring properties and the adjacent public domain in Auburn Street, the development is deemed to visually integrate with that of neighbouring buildings (both existing/anticipated) serving as an affirmation of the objective and not that of a building that abandons height controls.*

- (c) to ensure that buildings and public areas continue to receive satisfactory exposure to sky and sunlight.

*The visual impact of the non-compliant height element is deemed not significant in terms of sky exposure, nor is it deemed to result in the causation of an unreasonable level of shadowing across neighbouring properties. This is affirmed in the shadowing analysis prepared by Fuse Architects ... The extent of impact is less pronounced on December 21 ...*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- (d) to nominate heights that will provide an appropriate transition in built form and land use intensity.

*The height breaching elements will not visually impede upon future built form relationships with respect to spatial distribution and or siting of development forms. The height breach serves to provide for a more orderly built form relationship with that of the transitioning development context. Furthermore, the recessed nature of the breaching elements inclusive of the darker tone materiality utilised across this uppermost level, will serve to minimise the perceivable volume of the building where in contravention of the height standard.*

- (e) to ensure that taller buildings are located appropriately in relation to view corridors and view impacts and in a manner that is complementary to the natural topography of the area.

*The proposed building, despite the breach in height, is sited in a manner that will present as a considered design response noting the topography of the land and relationship with neighbouring properties. Having specific regard to the scale and nature of development directly adjoining the subject site and the anticipation that remaining development will overtime be redeveloped for the purpose of realising their maximum height and gross floor area potential, the proposed breach will in no way hinder the developments ongoing ability in remaining consistent with this objective.*

- (f) To protect public open space from excessive overshadowing and to allow views to identify natural topographical features.

*The height breach will not result in an adverse increase to the extent of shadowing cast over the public domain along Auburn Street nor will it the result in an unreasonable imposition to the extent or quality of view afforded across both private and public land.*

In summary the Applicant's written justification argues that the objectives of the development standard are achieved, notwithstanding the non-compliance with the standard in the circumstances.

**Assessing officer's comment:**

The proposed development seeks to vary the maximum height limit applicable to the site to allow for a 4-storey residential flat building with rooftop communal open space and lift overrun. It provides for a maximum height limit of 15.81 (RL 34.910) to the upper most point on the lift overrun however the predominant building height will read as approximately 13.1m (RL 31.10) being to the main roof level. A recessed balustrade of 1m in height is proposed above this level (RL32.10) with the lift overrun extending to RL34.910. The extent

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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of the proposed variation is therefore between 350mm in the south-western corner of the site and 3.81m to the highest point on the lift overrun.

The height of the proposed building is considered to be consistent with the scale of surrounding development and demonstrates a high-quality built form. While it exceeds the maximum building height limit under the planning controls it is considered to be appropriate in its context. This context is dominated by three recently constructed 5 storey residential flat buildings that were developed with the same 12m height limit however under previous planning controls which allowed for a 30% uplift in height (maximum 15.6m).

The proposal is consistent with the objective of the development standard and will result in a building that is suited to its context and will not impact on sky or solar access to any significantly greater degree than a complying development (refer shadow and view assessment below).

On this basis, compliance with the height of buildings development standard is considered to be unreasonable and unnecessary in the circumstances of the case as the height of the proposed development is responsive to the surrounding locality and will not result in any unreasonable impacts. The extent of the variation is largely a result of the site topography (2.38m cross fall), and the provision of communal open space on the roof (and access to this space via lift).

**2. Has the applicant's written request adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the development standard?**

The applicant's written request seeks to demonstrate that there are sufficient environmental planning grounds to justify contravening the Building Height development standard as follows:

*There is an absence of environmental harm arising from the contravention and positive planning benefits arising from the proposed development as outlined in detail above. These include:*

- The proposal is consistent with the objectives of the development standard and objectives of the R1 zone.*
- The proposal is compliant with the maximum FSR that applies to the site as afforded by way of the SEPP (Housing) 2021 provisions made available to Affordable Housing development. Therefore, the height variation does not seek to provide any additional density or gross floor area (GFA).*
- Despite the numerical non-compliance with the height development standard, the development provides a scale and form of development that is compatible with surrounding developments and the emerging character. A notable number of*

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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*developments across the defining context present a four (4) storey scale or greater and therefore, the proposed development will not be out of character with this scale.*

- The proposal will integrate a Communal Open Space area on the building's rooftop. The benefits of providing the COS on the roof will negate the minimal effect of the lift shaft extending past the height limit.*
- The perception of building height across all levels has been mitigated by appropriate levels of building modulation and massing whereby the various portions of the building and relative setbacks from the viewing perspectives are formed in a manner that continue to enable the visual identification of a built form that remains appropriate for the site and commensurate with both existing and envisaged development likely to occur on neighbouring undeveloped sites. At a high level, the proposed building successfully mitigates environmental impacts such as overshadowing, privacy and visual impact.*
- The location and design of the height breaching elements have been organised such that they do not present as visually jarring to the streetscape.*
- The proposed height variation enables the provision of two (2) affordable apartments on Level 3. Therefore, without the subject variation, the proposed development would limit the extent of affordable housing on the site. Clearly, there is an inherent public benefit in providing affordable housing on the site. This public benefit is a direct result of the height non-compliance.*
- The slope of the site being a cross fall of approximately 2.38m from the south-western corner of the site down towards the north-eastern corner, has been a determinative factor with regards to the extent of height variation observed across the building.*

The Applicant concludes that "based on the above, it has been demonstrated that there are sufficient environmental planning grounds to justify the proposed non-compliance to the maximum height of buildings in this instance".

**Assessing officer's comment:**

As discussed above, the proposed height is largely a result of the topography of the site and the provision of a rooftop communal open space area and access thereto. The proposal is limited to a partial non-compliance of the upper part of Level 4 and the rooftop communal space and services above. The height non-compliance of the main built form is greatest toward the street frontage where the site slopes downward and thus away from neighbouring residents. Further the communal open space is set toward the street frontage to ensure maximum distance from neighbouring properties being located a distance of 16m from the neighbouring site boundary to the south and 20m from the north facing balconies. The lift overrun is also set to the western side of the building to minimise any potential resulting impacts.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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An assessment of the impact of the proposed noncompliance from a number of units in 8 Dune Street and 4 Auburn Street has been undertaken and is provided below. In summary it is considered that the impact of the non-compliant elements of the building is not significantly greater than would result from a compliant scheme.

The noncompliance will allow for the construction of a 4-storey residential flat building including eight (8) 2 bedroom units four (4) of which are proposed to be affordable housing dwellings for a period of 15 years. If the project was limited to the maximum height limit of 12m only, a development of 3 storeys and 6 units only would be able to be accommodated on site. Accordingly, the non-compliance results in a significant public benefit in both the delivery of additional housing in close proximity to Gosford City Centre and the provision of 4 x affordable housing dwellings.

In addition, it is considered that the proposed rooftop communal open space will provide a significant improvement to the amenity of the future occupants of the building including the proposed affordable housing units. The units individually are provided with adequate private open space however the inclusion of communal open space will enable community interaction and enhanced recreational opportunities within the building.

In light of the above, it is considered that the applicant's written request has adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the development standard in this instance.

**3. Will the proposed development be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out?**

To determine whether the proposal will be in the public interest, consideration is given to the objectives of the Building Height standard and R1 zone. As discussed above the proposal is considered to be consistent with the objectives of the R1 zone, and the objectives of clause 5.25 Height of Buildings and therefore it is considered that the development will be in the public interest.

**4. Has the concurrence of the Secretary been obtained?**

In assuming the concurrence of the Secretary of the Department of Planning and Environment the matters in Clause 5.28(5) have been considered:

*Does contravention of the development standard raise any matter of significance for state or regional environmental planning?*

The proposed development and variation from the development standard does not raise any matters of significance for state or regional environmental planning.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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*Is there public benefit from maintaining the development standard?*

Variation of the maximum height standard will allow for the orderly use of the site and there is no public benefit in maintaining the development standard in this instance.

**Conclusion**

Based on the above assessment, it is considered that the requirements of Clause 5.28 have been satisfied and that development consent may be granted for development that contravenes the height of buildings development standard.

***Clause 5.36 – Heritage Conservation***

The subject site is not a heritage item, within a heritage conservation area or located in the vicinity of any heritage items.

***Clause 5.39 - Acid Sulphate Soils***

The site is mapped as containing Class 5 acid sulfate soils (ASS) and is located greater than 350m from Class 2 acid sulfate soils. The development is unlikely to lower the water table below 1m AHD with no works being undertaken below 5m AHD, therefore an acid sulfate soil management plan is not required.

***Clause 5.45 Design Excellence***

The provisions of clause 5.45 provide that consent is not to be granted in the Gosford City Centre area unless the consent authority considers that the proposed development exhibits design excellence. In determining whether a proposal demonstrates design excellence the consent authority is to give consideration to the matters outlined in clause 5.45(4) as addressed below:

- a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved.*

It is considered the proposed design achieves a built form and scale appropriate to the R1 General Residential zone and the surrounding locality. The external appearance of the building is well considered and reasonably articulated. The composition has a variety of building elements both vertical and horizontal with the façade demonstrating recessed and protruding elements that successfully break down the scale of the building and create visual interest in the building. The design provides a contemporary architectural aesthetic, high quality materials and finishes and a sympathetic response to the existing future character of the precinct.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- b) whether the form and external appearance of the development will improve the quality and amenity of the public domain*

The appearance of the building is considered to define and positively contribute to the public domain and streetscape, which is undergoing renewal. The building integrates with its context and the public domain by incorporating an appropriate street setback and tiered landscaping which softens the street frontage. Two 'tuckeroos' (mature height of 6m) are proposed along the street frontage with one within the site and one in the road reserve. These will also positively contribute to the quality and amenity of the public domain.

- c) whether the development is consistent with the objectives of clauses 5.52 and 5.53,*

Clauses 5.52 and 5.53 refer to and require consideration of solar access to key public open spaces and key vistas and view corridors. The proposed development will not impact on solar access to any public spaces. The proposed site it is not located in any identified view corridor and is not considered likely to unreasonably impact on any significant views.

- d) Any relevant requirements of applicable development control plans*

Gosford City Centre DCP 2018 has been considered within this Assessment Report (refer below). Having regard to this assessment it is considered that the proposal is generally appropriate and worthy of support notwithstanding some minor non-compliances. Conditions of consent are recommended to improve compliance.

- e) how the proposed development addresses the following matters:*
- i. the suitability of the land for development,*
  - ii. existing and proposed uses and use mix,*
  - iii. heritage issues and streetscape constraints,*
  - iv. the relationship of the development with other development (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity, and urban form,*
  - v. bulk, massing, and modulation of buildings,*
  - vi. street frontage heights,*
  - vii. environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
  - viii. the achievement of the principles of ecologically sustainable development,*
  - ix. pedestrian, cycle, vehicular and service access, circulation and requirements,*
  - x. the impact on, and any proposed improvements to, the public domain.*

The development is consistent with the zoning and the Gosford City Centre locality and is considered suitable for the site which is well located and serviced for a residential flat



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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development. The proposal will contribute to housing supply and choice in the locality and notably provides 4 x affordable housing dwellings for a period of 15 years. This is considered to be a significant benefit of the scheme.

Notwithstanding the above the subject site is small and highly constrained. Its context is dominated by the recent adjacent development at 179 Albany St, 8 Duke St and 4 Auburn St which comprises 3 x 5 storey residential flat buildings. This development was approved with bonus height under the former planning controls notwithstanding that the mapped height limit is consistent with the 12m of the subject site. Ideally the subject site would have been developed as part of the larger development however this did not occur. Following development of the adjacent sites the amenity of the existing dwelling on site has been substantially compromised via overlooking. Accordingly, it is considered that redevelopment is a positive outcome.

The proposed development is generally considered to be consistent with the scale of development on neighbouring sites and with the future desired character of the Gosford City Centre. It has been designed (as amended) to have defensive facades adjacent to the side boundaries to prevent privacy impacts. Living rooms and private space areas have been oriented to the north (street) and south (rear) to addresses privacy concerns. The shadow impacts of the proposal are also considered acceptable ensuring that neighbouring dwellings continue to receive adequate solar access to living rooms and POS as far as practicable while still providing for redevelopment. This is considered appropriate. Further the proposed new dwellings will receive adequate solar access and natural ventilation in compliance with ADG requirements. The development will positively contribute to the streetscape and includes an appropriate street setback and landscaping. Further the modern built form and materials and finishes will be a positive element in the streetscape.

The proposal provides for parking for 8 vehicles (including 2 x accessible spaces), 1 x motorcycle space and 6 bicycle spaces in a lower ground level. The proposed parking complies with relevant requirements with the exception of visitor parking. In this regard it is recommended that a condition be imposed requiring that one of the car parking spaces be dedicated as a visitor space (refer discussion below)

An independent review was requested under Council's Urban Design Panel Process and comments were provided on the original plan set by 2 x independent urban designer / architects on 31 March 2023 (Note: incorrectly dated 2022) and 23 July 2023. These assessments are provided in the attachments and discussed in detail later in this report. In summary the advice concluded that the proposal generally demonstrated design excellence subject to a number of identified issues / non-compliances.

The Applicant submitted amended plans seeking to address identified non-compliances on 20 December 2023. As outlined above the main design amendments were:

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- Amendments to the side boundary facing windows which are setback 3m from the boundary (where a setback of 6m is required under the ADG) to provide a non-habitable interface via the inclusion of 'Oriel' angled windows, highlight windows or deletion of windows entirely.
- Reduction in side boundary walls from previous height of up to 3.2m to maximum of 1.75m and inclusion of palisade fencing behind landscape planters instead of solid walls to improve the boundary and street interface.
- Inclusion of communal open space on the rooftop with an area of 25% of the site area (Note: this resulted in an increase in the height non-compliance with the inclusion of a lift overrun to provide access to the roof level, fire stair and connecting pergola and inclusion of balustrades – refer detailed assessment below). An amended clause 5.28 variation request was also submitted.
- Car park level (and accordingly all levels in the building) has been lowered by 750mm and a stepped planter provided at the street frontage.
- Solar access requirement of ADG achieved through reconfiguration of windows and inclusion of skylights on the roof of the southern end of the building, and
- Detailed landscape plan provided.

The amended plans were not referred back to the architects / urban designers for comment however it is considered that the amended plans adequately address the identified non-compliance. Discussion of the proposed communal open space area is however provided below.

**SEPP No.65 (Design Quality of Residential Apartment Development) and the Apartment Design Guide (ADG)**

The development is subject to the requirements of *State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development* (SEPP 65).

Note: SEPP 65 was repealed on 14 December 2023 by *State Environmental Planning Policy Amendment (Housing) 2023*. The subject application was lodged on 14 February 2023, that is prior to the commencement of the SEPP amendment which included savings provisions as outlined in Schedule 7A. Accordingly as the application had been lodged but not finally determined by the commencement date (in accordance with the savings provision) the subject application is to be determined as if the amendment had not occurred.

SEPP 65 prescribes nine design quality principles to guide the design of residential apartment development and to assist in assessing such developments. The principles relate to key design issues including context and neighbourhood character, built form and scale, density, sustainability, landscape, amenity, safety, housing diversity and social interaction, and aesthetics.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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As required a statement was submitted with the application verifying that the proposal has been designed or the design directed by a qualified Architect. A SEPP 65 Design Statement has also been provided which outlines how the design quality principles are achieved within the development and demonstrates, in terms of the Apartment Design Guide (ADG), how the objectives in Parts 3 and 4 of the ADG have been achieved. It is considered that the development is acceptable having regard to the nine design quality principles.

As outlined an above independent review of the original plans was requested under Council's Urban Design Panel Process and comments were provided by 2 x independent urban designer / architects on 31 March 2023 (Note: incorrectly dated 2022) and 23 July 2023. These assessments are provided in the attachments and discussed in detail later in this report. The reviews concluded that the original proposal was generally compliant with the Design Quality Principles and ADG requirements and provides a contemporary architectural aesthetic and a sympathetic response to the future character of the precinct. Notwithstanding some issues were raised in relation to windows facing the side boundaries, lack of communal open space and boundary interface issues. Amended plans were submitted to address these issues.

The Apartment Design Guide (ADG) contains objectives, design criteria and design guidelines for residential apartment development. In accordance with Clause 6A of the SEPP, certain requirements contained within Gosford City DCP 2018 do not apply. In this regard the objectives, design criteria and design guidelines set out in Parts 3 and 4 of the ADG prevail.

A detailed assessment of the proposal of against the Apartment Design Guide (ADG) is provided below:

<b>Design Criteria</b>	<b>Required</b>	<b>Proposed</b>	<b>Compliance</b>
<b>3D-1 Communal Open Space</b>	Minimum communal open space area 25% of the site  Minimum dimension of 3m  50% direct sunlight to principal usable part for min 2 hrs between 9am and 3pm mid-winter	Rooftop communal open space (171m <sup>2</sup> / 25% of the site) proposed in amended plans in response to preliminary assessment which noted original plans contained no communal open space.	Yes
<b>3E-1 Deep Soil Zone</b>	Minimum <b>7%</b> of the site, with minimum dimension 3m for a site 650 – 1500smq	99m <sup>2</sup> / 14.6% with a 3m dimension	Yes
<b>3F-1 Visual Privacy</b>	Separation from boundaries and buildings	3m side setback proposed with habitable rooms facing boundary on all levels however windows are angled (oriel) style or highlight with sill height of 1.6m to prevent visual privacy. This is considered appropriate	Yes – subject to conditions of consent re privacy treatments.

## 3.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

Design Criteria	Required	Proposed	Compliance
	up to 12m / 4 storeys – 6m to habitable rooms and balconies and 3m to non-habitable	however conditions are required to ensure no privacy impacts (refer west facing living room on Level 2, west facing bedroom 2 in southern unit on Level 3, and west facing bedroom 1 in north facing unit on Level 3. Windows shown to living area on Level 2 are also to have minimum sill heights of 1.6m.)  6m rear setback	Yes
<b>3J-1 Bicycle and Car Parking</b>	On land within 400m of the B4 zone in a nominated regional centre (including Gosford) car parking requirement as per the Guide to Traffic generating Developments  Metropolitan Sub Regional Areas: 0.6 spaces per 1 bed 0.9 spaces per 2 bed 1.4 spaces per 3 bed 1 space per 5 units (visitor parking).	1 spaces per 2 bedroom unit proposed. Total 7.2 spaces required. 8 spaces including 2 accessible spaces proposed.  No visitor spaces proposed however condition recommended to require 1 x visitor space (refer below)	Yes  Yes - condition
	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	6 cycle parking spaces are provided within the basement	Yes
<b>4A-1 Solar and Daylight Access</b>	Living rooms and private open space of at least 70% of apartments receive a minimum of 3hrs sun between 9am and 3pm mid-winter	6/8 - 75% of apartments achieve 3 hours of sunlight to both living rooms and POS (all north facing units and south facing units on Levels 2 and 3)	Yes
	Maximum of 15% of apartments receive no direct sun between 9am and 3pm mid-winter	No units do not receive any direct sun between 9am and 3pm in midwinter	Yes
<b>4B-3 Natural Ventilation</b>	Min 60% of apartments cross ventilated in the first 9 storeys of the building	8/8 units comply / 100%	Yes
<b>4C-1 Ceiling Heights</b>	Minimum 2.7m	3.0m floor to floor heights provided which will allow for 2.7m floor to ceiling.	Yes
<b>4D-1 Apartment Size</b>	Studio: 35sqm 1 bedroom: 50sqm 2 bedroom: 70sqm 3 bedroom: 90sqm  (5sqm per additional bathroom)	Complies – 8 x 2-bedroom units 101m <sup>2</sup> GFA per unit	Yes

## 3.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

Design Criteria	Required	Proposed	Compliance
	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	All habitable rooms have a window within an external wall.	Yes
<b>4D-2 Room depths</b>	Habitable room depths and maximum 8m depth for open plan layouts.	Complies	Yes
<b>4D – 3 Layout</b>	Bedroom and living room sizes – 9 & 10sqm bedrooms with min 3m width, 3.6m-4m width living rooms	Complies	Yes
<b>4E-1 Balconies</b>	1 bedroom: 8sqm, min 2m depth 2 bedroom: 10sqm, min 2m depth 3 bedroom: 12sqm, min 2.4m depth	Complies – 2 x 2-bedroom units with 10m <sup>2</sup> or greater POS with minimum dimension 2m	Yes
	Podium/ground level private open space minimum 15sqm, minimum depth 3m	Complies	Yes
<b>4F-1 Common Circulation</b>	Maximum of 8 apartments off a circulation core (although design guidance allows up to 12 apartments)	Maximum 2 apartments off one core	Yes
<b>4G-1 Storage</b>	1 bedroom: 6m <sup>3</sup> 2 bedroom: 8m <sup>3</sup> 3 bedroom: 10m <sup>3</sup>  Note: Minimum 50% within unit	4m <sup>2</sup> storage provided in each unit plus 6 x 5m <sup>2</sup> storage provided in garage area plus over bonnet storage.	Yes
<b>4H Acoustic Privacy</b>	Noise transfer is limited through the siting of the buildings and building layout	The design of the development has been sited to avoid noise transfer with a single unit front and back off a central core.	Yes
<b>4J Noise and Pollution</b>	The impact of external noise transfer and pollution are minimised through the siting and layout of the building.	Design is generally complaint.	Yes
<b>4K Apartment Mix</b>	A range of apartment types are provided to cater for different household types, and distributed throughout the building.	8 x 2-bedroom units provided including 50% affordable units	No – acceptable given small site, site layout and proposed affordable housing units
<b>4L Ground Floor Apartments</b>	Maximise street frontage activation and amenity.  Design of ground floor apartments delivers amenity and safety	The design provides for a high level of streetscape activation with units facing the street	Yes
<b>4M Facades</b>	Provide visual interest whilst respecting the character of the area.	The external appearance of the building is well considered and articulated.	Yes

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

Design Criteria	Required	Proposed	Compliance
<b>4N Roof Design</b>	Roof features are incorporated in the roof design, respond to the street and provide sustainability features.	The roof design is considered acceptable. Photovoltaics provided on the roof.	Yes
<b>4O Landscape Design</b>	Landscape design is viable, sustainable, contributes to the streetscape and amenity.	The Landscape Plan includes an appropriate mix of plantings, details of planter boxes, and irrigation have been provided. 2 x trees (tuckeroos) are also proposed on the street frontage (one on site and one within the road reserve).	Yes
<b>4P Planting on Structures</b>	Appropriate soil depths are provided	Planter box details indicate the required soil depths	Yes
<b>4V Water</b>	Water Management and Conservation is achieved.	A BASIX certificate has been provided which demonstrates compliance.	Yes
<b>4W Waste</b>	Waste storage facilities are provided to minimise impacts on the streetscape, building entry an amenity of residents.	Waste collection is proposed on the street frontage using Council streetside collection. 4 x 240L garbage and 4 x 240L recycle bins can be accommodated within the street frontage as shown in the waste management plan.	Yes

**State Environmental Planning Policy (Housing) 2021**

Chapter 2 Part 2 Division 1 In-fill Affordable Housing of State Environmental Planning Policy (Housing) 2021 (Housing SEPP) applies to the subject site being within an accessible area in the Greater Sydney region.

Note: The Housing SEPP has been amended since the subject application was lodged on 14 February 2023 however the savings provisions (Schedule 7A section 2(1)(a)) provide that the amendments do not apply to a development application made but not determined on or before the commencement date. Accordingly, the following assessment is based on the SEPP as it applied at the lodgement date.

As noted above the application seeks to rely on clause 17 of the Housing SEPP which allows that where the maximum permissible FSR (under another EPI) is less than 2.5:1, if a development provides that at least 50% of the gross floor area of the building will be used for affordable housing an additional FSR of 0.5:1 applies. The proposed development provides for 50% of the GFA in the form of affordable housing (i.e., 4 x 2 bedroom units) and has a maximum FSR of 0.75:1 under the Precincts – Regional SEPP therefore a combined maximum FSR of 1.25:1 applies.

Clause 18 sets out non-discretionary development standards for in-fill affordable housing that, if complied with, cannot be used as reasons for refusal. Compliance with these standards is set out below:

Clause	Control	Proposal	Complies
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**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>18(2)(a) Minimum site area</b>	450m <sup>2</sup>	682.2m <sup>2</sup>	Yes
<b>18(2)(c) Landscape area by a social housing provider</b>	Minimum landscape area of 35m <sup>2</sup> per dwelling	N/A	N/A
<b>18(2)(c) Landscape area not by social housing provider</b>	Minimum landscape area of 30% of site area	220m <sup>2</sup> of landscape area proposed (32.2%)	Yes
<b>18(2)(d) Deep soil area</b>	15% of site area where minimum dimension 3m and, if practicable, as least 65% of deep soil zone is located at rear of the site	Deep soil area at rear of site of 78m <sup>2</sup> (79%) plus 21m <sup>2</sup> (21%) at front totals 99m <sup>2</sup> (14.5%). Remaining areas identified do not meet 3m minimum dimension.	No - minor non-compliance - acceptable  >65% at rear - complies
<b>18(2)(e) Solar access</b>	70% of dwellings receive at least 3 hours of direct solar access to living rooms and private open space between 9am and 3pm in mid-winter	6/8 - 75% of apartments achieve 3 hours of sunlight to both living rooms and POS (all north facing units and south facing units on Levels 2 and 3)	Yes
<b>18(2)(f) Parking (by social housing provider) in an accessible area</b>	At least: 0.4 spaces / 1 bedroom 0.5 spaces / 2 bedroom 1 space / 3+ bedroom	Application not by a social housing provider however 4 x 2-bedroom affordable housing units proposed. Minimum 2 spaces required for 4 units.	Yes
<b>18(2)(g) Parking (not by social housing provider) in an accessible area</b>	At least: 0.5 spaces / 1 bedroom 1.0 spaces / 2 bedroom 1.5 space / 3 bedroom	8 spaces proposed for 8 x 2-bedroom units – 1 space / 2-bedroom unit. Consider applies to 4 x 2-bedroom units (non-affordable housing units)– Accordingly minimum 4 spaces required.	Yes
<b>18(2)(h) For RFBs minimum internal area at per ADG for each type of apartment</b>	Minimum internal area: Studio – 35m <sup>2</sup> 1 bedroom – 50m <sup>2</sup> 2 bedroom – 70m <sup>2</sup> 3 bedroom – 90m <sup>2</sup>	8 x 2-bedroom apartments – area 101m <sup>2</sup>	Yes
<b>18(2)(i) For dual occupancies, manor houses or multi dwelling housing</b>	Minimum floor area as specified in Low Rise Housing Diversity Design Guide	N/A	N/A
<b>If paragraphs (h) and (i) do not apply</b>	Minimum floor area of: 1 bedroom – 65m <sup>2</sup> 2 bedroom – 90m <sup>2</sup> 3 bedroom – 115m <sup>2</sup> plus 12m <sup>2</sup> for each bedroom in addition to 3 bedrooms	N/A	N/A

Clause 19 provides that development consent shall not be granted unless the consent authority has considered whether the design of the residential development is compatible with the desirable elements of the character of the local area or for precincts undergoing transition the desired further character. It is considered that the proposal is consistent with the character of the area.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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Clause 20 provides that SEPP 65 continues to apply to residential development to which the Division applies (refer above for assessment).

Clause 21 requires that a consent issued for affordable housing under the Division must be used for affordable housing for not less than 15 years and must be managed by a registered community housing provider. Relevant conditions of consent would be applied in this regard.

Clause 22 provides that subdivision is permissible with consent. Subdivision does not form part of the subject application.

***State Environmental Planning Policy (Resilience and Hazards) 2021***

Section 4.16 (1) of the *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP) requires that the consent authority not consent to the carrying out of any development on land unless:

*"(a) it has considered whether the land is contaminated, and*

*(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*

*(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose."*

The existing dwelling on the land is considered unlikely to contain asbestos or other hazardous materials given its age and brick construction. Known previous and current land uses are residential; therefore, the soils are unlikely to be contaminated. Further Council's environmental health officer has advised that:

*The site and its surrounds have been used for residential purposes for a long time and there are no hazardous industries in close proximity to the proposed development. The site is also not listed on the NSW EPA contaminated lands register. Therefore, I consider it very unlikely that the site would be subject to any soil or water contamination. The existing dwelling to be demolished is a modern build and would not contain any asbestos material. Standard contamination conditions (i.e., unexpected finds protocol) will be imposed.*

Given the above it is considered that the site is suitable for the proposed residential use and is consistent with the requirements of the Resilience and Hazards SEPP.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

A valid BASIX certificate for the development was submitted with the application. The proposal complies with the requirement for the proposed dwellings to meet the NSW Government's requirements for sustainability in residential buildings in terms of meeting water and energy efficiency targets. An amended certificate will be required via condition of consent for the amended plans.

**Gosford City Centre Development Control Plan 2018**

GCC DCP 2018 is the applicable DCP that applies to land within the Gosford City Centre. In addition, the DCP adopts by reference the following provisions of Gosford DCP 2013 (as amended). Relevant provisions are addressed below:

Section	Control	Proposal	Complies
<b>Chapter 3.1 Character areas and 3.5 Other areas</b>	The site is located in the residential area:  <i>The residential areas within the city fringe will provide for a diverse range of housing to accommodate an additional 10,000 residents over the next 25 years. New development will consist of medium to high density residential apartments to encourage increased housing within walking distance of the city centre.</i>	The proposal for a residential flat building contained 8 new dwellings including 4 affordable housing units aligns with the area's future desired character providing medium to high density residential accommodation within walking distance to the city centre.	Yes
<b>4.4 Views and vistas</b>	This section identifies key view and vistas to be protected by development. It also refers to compliance with Chapter 5 provisions in relation to the development of slender towers to protect key views and vistas	The subject site is identified as being subject to height and topography. No specific provisions apply.	N/A
<b>Chapter 5 Built form</b>			
<b>5.1 Site sizes and design excellence</b>	Refer to Gosford City Centre SEPP	Assessment against Precincts – Regional SEPP provided above (Note: this SEPP replaced Gosford City Centre SEPP)	Refer above

### 3.1

## DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)

5.2 Built form provisions			
<b>5.2.1 Street setbacks and rear setbacks</b>	This section requires: <ul style="list-style-type: none"> <li>• 3-4m front street setbacks</li> <li>• 3m side setbacks</li> <li>• 6m rear setbacks</li> <li>• Balconies may project up to 600mm into building setbacks,</li> </ul> Building separation and visual privacy requirements of SEPP 65 and ADG also apply.	A minimum 6m front setback is proposed with an 8m setback to the front building wall. This is considered to be appropriate given the streetscape context. A side setback of 3m is proposed and rear setback of 6m.	Yes
		The proposed separation distances do not comply with the ADG on east and west boundaries however are considered appropriate given privacy treatments and site circumstances (refer ADG assessment above)	No
<b>5.2.2 Street wall heights and upper podium</b>	Comply with heights shown on Figure 8	Not applicable to subject site	N/A
<b>5.2.3 Active street frontages and street address</b>	Applies to sites labelled primary active frontage' or 'active laneway' on Figure 8  All locations are to provide street address and direct pedestrian access off the primary street frontage	Not applicable to subject site	N/A
		Direct street access provided	Yes
<b>5.2.4 Building setbacks and separation</b>	Minimum side setbacks up to street wall height apply to sites shown on Figure 8  Setbacks for residential uses should be compliance with ADG regarding visual privacy  Above street wall height building facades to be well articulated in all views. Blank wall not permitted.	Not applicable	N/A
		The proposed separation distances do not comply with the ADG on east and west boundaries however are considered appropriate given privacy treatments and site circumstances (refer ADG assessment above)	No
		Proposal is well articulated	Yes
<b>5.2.11 Internal amenity</b>	This section requires that development applications demonstrate compliance with the ADG including in respect of amenity including communal open space and sun access.	Proposal provides rooftop communal open space and sun access in compliance with the ADG requirements.	Yes
<b>5.2.13 Landscape design</b>	This section requires the submission of landscape plan and requires development to minimise the impact on significant trees on site, street trees and trees on adjoining land.	A landscape plan has been provided. The landscaping is considered generally acceptable however it is noted that part of the deep soil area is proposed to be paved. A condition is proposed to require an amended landscape plan which provides for deep soil area to be planted.	Yes - condition
<b>5.2.14 Site cover and deep soil zones</b>	This section requires a maximum site coverage of 50% and a deep soil zone of 15% of the site area. The deep soil zones must accommodate existing mature trees as well as allowing for the planting of trees/shrubs that will grow to be mature plants	The proposed site coverage is approximately 251m <sup>2</sup> (37%) of the site area.	Yes
		Deep soil area 14.5% of site area	No - acceptable
		As noted above notwithstanding the architectural plans the landscape plan shows	No - condition

3.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

		part of the identified deep soil area as being paved. Accordingly, a condition is proposed to require an amended landscape plan which provides for the entire deep soil area to be planted.	
<b>5.2.15 Front Fences</b>	This section requires front fences to allow for passive surveillance of the street, to clearly define the interface between the public and private domain and to contribute to the character. The maximum height of front fences must not exceed 1.4m and must be at least 50% visually permeable over 1m.	A 2.0m high wall is proposed setback between 860 mm – 3000mm (splayed) adjacent to the front boundary. The landscaping in this setback is tiered to reduce the impact of the raised upper ground floor level. This is necessary to provide adequate height for and ramping to the lower ground parking level. Although not consistent with the control appropriate passive surveillance is provided.	No acceptable
<b>5.2.16 Safety and Security</b>	The objectives of this section are to ensure developments are safe and secure for pedestrians, reduce opportunities for crime through environmental design, contribute to the safety of the public domain and encourage a sense of ownership over public and communal open spaces	The proposed development is considered to have adequate regard to the crime prevention principles of surveillance, access control, territorial reinforcement, and space management. Balconies provide natural surveillance of public area and the basement car park and building entrances will have access controls. Adequate passive surveillance of the street is provided with balconies fronting the street and the public and private realms are clearly defined.	Yes
<b>5.2.17 Building Exteriors</b>	<p>The objectives of this section are to ensure developments contribute positively to the streetscape and public domain by means of high-quality architecture and robust selection of materials and finishes and present appropriate design responses to nearby development that complement the streetscape.</p> <p>Adjoining buildings are to be considered in the design of new buildings in terms of:</p> <ul style="list-style-type: none"> <li>• appropriate alignment and street frontage heights</li> <li>• setbacks above street frontage heights</li> <li>• appropriate materials and finishes selection</li> <li>• facade proportions including horizontal or vertical emphasis</li> </ul>	<p>The proposed development will generally complement the streetscape and is consistent with the street frontage and alignment of surrounding developments.</p> <p>The façade provides horizontal and vertical design features using a mix of materials and finishes to add visual interest.</p> <p>As noted above the amended plans reduce the height of the proposed front wall to 2m and provide for a tiered landscape treatment on the street frontage. This is considered appropriate in the circumstance.</p>	Yes

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>Chapter 7 Access and parking</b>			
<b>7.2 Pedestrian access and mobility</b>	<p>The objectives of this section are to new development must be designed to ensure that safe and equitable access is provided to all, including people with mobility problems and disabilities. Requirements include:</p> <ul style="list-style-type: none"> <li>• Main entry is to be clearly visible from the street</li> <li>• Design of facilities to comply with AS1428</li> <li>• Barrier free access to not less than 20% of dwellings and common area</li> <li>• At least one main pedestrian entry that is barrier free to the ground floor</li> <li>• Continuous path of travel from public road</li> <li>• And unimpeded internal access</li> <li>• Appropriate durable slip resistance materials.</li> </ul>	Accessible entry provided to the west of the building from the street and throughout the building via the lift. Entry clearly visible from the street.	Yes
<b>7.3 Vehicular driveways and manoeuvring areas</b>	<p>The objectives of this section are to minimise the impact of vehicle access on the public domain, pedestrian safety and streetscape amenity. Requirements include:</p> <ul style="list-style-type: none"> <li>• Driveways setback 1.5m from relevant side boundary</li> <li>• Vehicular access to be integrated into design to be recessive</li> <li>• Vehicles to enter and exit in forward direction</li> <li>• Driveway crossings in accordance with Council requirements and widths / grades etc. in accordance with Australian Standards</li> <li>• Vehicular ramps less than 20m long maximum grade of 1 in 8. Widths in accordance with AS2890.2.</li> <li>• Driveways sited to minimise noise</li> <li>• Use semi-pervious materials for mall uncovered parts of driveways and parking areas to assist with stormwater filtration</li> <li>• Building entries, building services etc to be treated with high quality materials (including 3m turn in of materials)</li> </ul>	Driveway setback minimum of 2m from the side boundary, integrated into the design and allows for entry and exit in a forward direction. Council's traffic engineer has advised that the proposal is appropriate and complies with relevant requirements	Yes

## 3.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>7.4 On-site parking</b>	<p><b>Resident car parking:</b> 1 Bedroom dwelling - 1 car space/dwelling 2 Bedroom dwelling - 1.2 car spaces/dwelling 3 or more bedroom dwellings - 1.5 car spaces/dwelling</p> <p><b>Visitor car parking:</b> 0.2 spaces/dwelling, provided on site and clearly marked for use by visitors only</p> <p><b>Disability accessible car parking:</b> Not less than 10% of the required resident and visitor spaces</p> <p><b>Motorcycle parking:</b> 1 space/15 dwellings (or part thereof)</p> <p><b>Bicycle parking:</b> 1 resident's space/3 dwellings + 1 visitor space/12 dwellings (or part thereof)</p>	<p>Car parking requirements for affordable housing units in accordance with Housing SEPP.</p> <p>5 spaces for 4 x 2-bedroom units - complies 1 visitor space to required via condition</p>	Yes – condition visitor space
<b>7.5 Site facilities and services</b>	Controls in this section relate to site facilities and services adequate for the proposed development. Requirement included for mailboxes, communication structures, waste, loading/unloading etc.	Satisfactory referrals have been received subject to recommended conditions.	Yes
<b>Chapter 8 Environmental management</b>			
<b>8.2 Energy efficiency and conservation</b>	For residential development comply with BASIX	Complies – new certificate for amended plans required - condition	Yes
<b>8.3 Water conservation</b>	For residential development comply with BASIX	Complies – new certificate for amended plans required - condition	Yes
<b>8.6 Waste and recycling</b>	<p>Provide for storage of waste bins on site as follows:</p> <ul style="list-style-type: none"> <li>General waste – 140l / dwelling weekly</li> <li>Recycling – 120l / dwelling fortnightly</li> <li>Garden organics – 240l shared fortnightly</li> </ul>	Proposal provides for 4 x 240l garbage, 4 x 240l recycle bins for be collected weekly, and 2 x 240l Garden organics bins to be collected as required. Proposal also illustrates space in front of building to provide for street side collection.	Yes
<b>8.7 Noise and vibration</b>	This section provides controls to ensure effective management of noise and vibration. Controls include design of buildings to minimise noise and vibration impacts.	Subject site not exposed to noise impacting activities. Rooftop communal open space has the potential to result in adverse noise impacts on adjoining residents. Accordingly a condition of consent it recommended limiting use to daylight hours..	Yes
<b>Chapter 9 Residential development controls</b>			
<b>9.1 Housing choice and mix</b>	<ul style="list-style-type: none"> <li>Mix of housing types required including not more than 75% x 2-bedroom units.</li> <li>Minimum of 15% units designed to be adaptable (where possible located on ground level).</li> <li>Certification that dwellings able to adapted required.</li> <li>Car parking for adaptable dwellings to meet AS,</li> </ul>	<p>Proposal provides for 100% x 2-bedroom units however this is considered appropriate given particular site circumstances.</p> <p>3 x adaptable apartments (37.5%) proposed (G02, 102 and 202).</p> <p>2 x accessible parking spaces provided</p>	<p>No – acceptable</p> <p>Yes</p> <p>Yes</p>
<b>9.2 Storage</b>	<ul style="list-style-type: none"> <li>8m<sup>2</sup> of storage required per 2 x bedroom unit (min. 50% in unit)</li> </ul>	4m <sup>2</sup> storage provided in each unit plus 6 x 5m <sup>2</sup> storage in garage and over bonnet storage cages.	Yes



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>Gosford DCP 2013 Adopted Provisions</b>			
<b>Part 3 Specific controls and development types</b>	Chapter 3.3 Residential Flat Buildings – does not apply to sites in Gosford City Centre as defined under Gosford LEP 2014.	Subject site is in Gosford City Centre	N/A
<b>Part 4.4 Gosford Waterfront</b>	Not applicable	N/A	N/A
<b>Part 6 Environmental controls</b>			
<b>6.1 Acid Sulfate Soils</b>	The site is mapped as containing Class 5 acid sulfate soils (ASS) and is located greater than 350m from Class 2 acid sulfate soils.	The development is unlikely to lower the water table below 1m AHD with no works being undertaken below 5m AHD, therefore an acid sulfate soil management plan is not required.	Yes
<b>6.3 Erosion Sedimentation Control</b>	An erosion and sedimentation plan is required.	An erosion and sediment controls plan was submitted with the application and has been reviewed by Council's engineer. Appropriate conditions of consent are recommended	Yes
<b>6.6 Preservation of Trees or vegetation</b>	The controls require the protection of trees on privately owned land that contribute positively to the amenity, scenic landscape characteristics and ecological values of the Central Coast LGA.	Not applicable – no significant vegetation is located on site	N/A
<b>6.7 Water cycle Management</b>	These provisions seek to minimise the impact of development on the natural predevelopment watercycle	A Stormwater Management Plan prepared by Pyramid Engineering Consultants was submitted with the application. Council's Development Engineer has reviewed the details and has determined proposal is satisfactory subject to recommended conditions.	Yes
<b>Part 7 General controls</b>			
<b>7.1 Car parking</b>	Clause 7.1.3 Subsection E provides Car Parking Requirements for residential flat buildings which as follows: <ul style="list-style-type: none"> <li>1.5 car spaces per dwelling</li> <li>Visitor spaces, 0.2 spaces per dwelling</li> </ul>	These provisions are superseded by Gosford City Centre DCP 2018 (refer above)	N/A
<b>7.2 Waste Management</b>	This sections sets out the requirements for waste management to facilitate sustainable waste management within the Gosford Local Government Area in a manner consistent with the principles of ESD.	A suitable Waste Management Plan has been submitted with the proposal.	Yes

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**Likely Impacts of the Development:**

Section 4.15 (1)(b) of the *Environmental Planning and Assessment Act 1979* requires consideration of the likely impacts of the development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality. The likely impacts of the development are addressed below:

***Built Environment***

The subject site is zoned *R1 General Residential* under SEPP (Precincts—Regional) 2021 and is surrounded by residential developments of similar scale notwithstanding the proposed height non-compliance. The proposed development is not considered to have significant adverse amenity impacts to adjoining development from overshadowing, privacy, noise generating activities and views as outlined below.

A thorough assessment of the impacts of the proposed development on the built environment has been undertaken in terms of SEPP 65 and the ADG, the Gosford City Centre Controls under *SEPP (Precincts—Regional) 2021* and the GCC DCP 2018. The potential impacts are considered acceptable in the circumstances and given the positive benefits of the proposal including the provision of additional housing within close proximity of the Gosford City Centre and the provision of 4 x affordable housing units for 15 years.

**Building Height, Bulk and Scale**

The proposal does not comply with the maximum height limit of 12m provided in the Precincts – Regional SEPP as outlined above. The original plans had a height noncompliance of 1.94m (13.94m) however following a preliminary assessment the plans were amended to include communal open space on the roof level. In addition, the basement level (and levels above) was reduced by 750mm to provide an improved interface between the upper ground floor and the street level and site boundaries. It is understood that this was the maximum that the upper ground level could be reduced while still allowing for acceptable ramping to the car park lower ground level. The extent of the proposed height variation relative to the height of adjacent development is shown in the isometric at Figure 17 above.

The amended plans were notified, and 19 objections received.

Note: no submissions were received in relation to the original plans however neighbouring residents advised that they were not aware of the original notification albeit that Council's records indicate that the strata body was correctly notified.
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**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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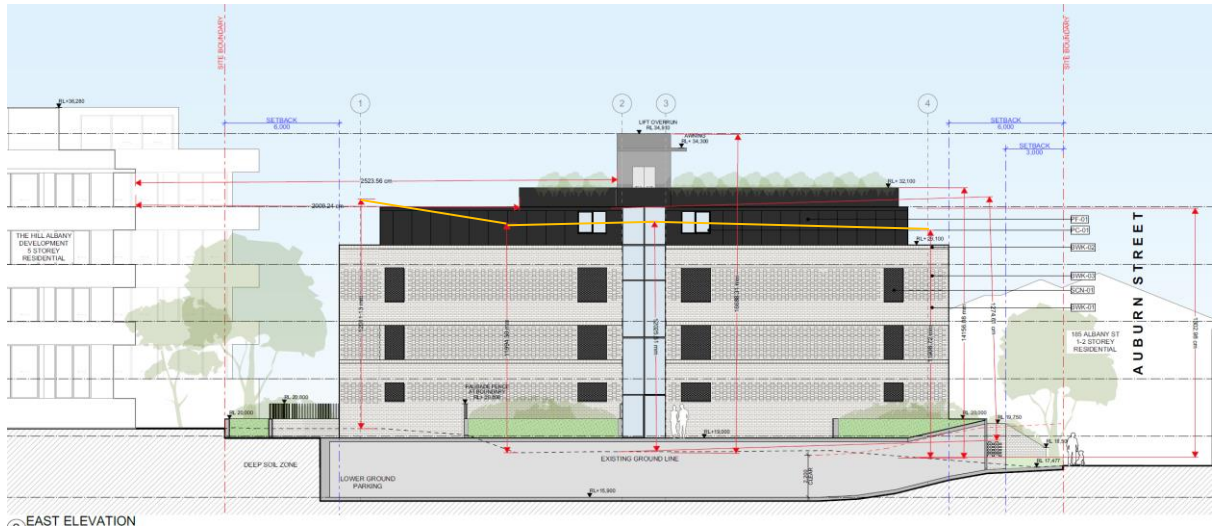
The majority of the submissions received raised concerns in relation to the rooftop communal open space and height non-compliance. Concerns were primarily in respect of view and privacy (both visual and aural) impacts.

As assessment of the view impacts has been undertaken from a number of units that made submissions. The units inspected, most affected by the height non-compliance, were units on Levels 3 (Unit 302) and 4 (Unit 401) of the RFB to the south at 8 Duke Street in the north-west corner of the building. The proposal provides for a maximum height of 15.81 (RL 34.910) to the upper most point on the proposed lift overrun however the predominant building height will read as RL 31.10 being to the main roof level. A recessed balustrade of 1m in height is proposed above this level (RL32.10) with the lift overrun extending to RL34.910. The extent of the proposed variation is therefore between 350mm in the south-western corner of the site and 3.81m to the highest point on the lift overrun. The extent of non-compliance is shown in Figure 17 above. Figure 18 below shows the location of Units 302 and 401 directly to the south of the proposal. Notable the rear wall of the proposed building is located approximately 12m from 6 Duke Street and the communal rooftop open space 20m from the affected balconies. The lift overrun is approximately 25m from the building alignment. The relationship is shown in Figure 19 below with the height non-compliance shown with an orange line.



**Figure 18: Units 401 and 302, 8 Duke Street**

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 19: Relationship between proposal and 8 Duke Street (Note: approx. 12m max height limit also shown with orange line)**

As shown in Figure 18 above Unit 302 has a small balcony off the living area in the north western corner with a privacy screen to protect overlooking to the north east. The balcony also extends to the west in front of a bedroom window. In the images below the yellow dotted line shows the approximate 12m height limit while the red dotted line shows the proposed main building height (top of balustrade).

Note: The photo annotations of estimated view loss below have been estimated based on key surrounding datums and best available information. They do not however form a verified view impact assessment.

Further the height of the lift overrun (additional height of 2.710m for width of approx. 2.9m) is not illustrated and would extend above the red line to the left.

The below images estimate that Unit 302 will lose some view and aspect as a result of the proposed development however the impact would primarily be from the bedroom window (as the balcony is screened) and would not vary significantly as a result of the non-complying element. The distant view of the upper level of the hill to the north (Rumbalara Reserve) would remain while the foreground view would be lost. In respect of the living room and principal private open space minimal impact will occur with these areas being oriented to north west and screened to the north across the site.



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



View from Unit 302 living room standing showing balcony with privacy screen



View from Unit 302 bedroom balcony standing

Unit 401 (as shown in Figure 18 above) on the upper level of 8 Dune Street has a large balcony that wraps around the unit on all sides with no privacy screens (notwithstanding that it is noted that the DA was approved subject to screening to prevent overlooking of 6 Auburn St). Currently it, and many other units, look directly into the rear yard and private open space of 6 Auburn Street. The existing views from the balcony are expansive and look over the subject site as shown below. As above in the images below the yellow dotted line shows the approximate 12m height limit while the red dotted line shows the proposed main building height (including balustrade). Note: the height of the lift overrun is not illustrated and would extend above the red line to the left (additional height of 2.710m for width of approx. 2.9m).



View from Unit 401 balcony standing looking north



View from Unit 401 living room looking north standing



View from Unit 401 balcony standing looking north west



View from Unit 401 balcony overlooking 6 Auburn St

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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The images show that some of the foreground view of Unit 401 will be lost as a result of the proposed development but that significant views will remain including views over the subject site and to the northwest. The impact of a compliant scheme compared to the proposed scheme is not considered to be significant as illustrated albeit that the proposed lift overrun would project above the red dotted line for part of the view.

An assessment of view / aspect was also carried out for Units within 4 Auburn Street immediately to the east. Unit 403 comprising the southern portion of the 4th storey of 4 Auburn Street raised concerns regarding views as well as privacy impacts. An inspection determined that the Unit has expansive water views to the south-east (away from the subject site) and that the living and POS areas are oriented in this direction. Bedrooms front the western boundary behind a narrow balcony. While this, and other units could potentially be impacted by noise from the communal private open space this could be controlled via a condition limiting use to daylight hours.



Unit 403, 4 Auburn Street western balcony looking south



View from Unit 403 narrow balcony off bedrooms looking directly west over subject site

Unit 201, 4 Auburn Street was also assessed. This unit is centrally located within 4 Auburn Street and has a west facing façade. The amenity of this unit (and potentially the similarly located lower Units 101 and G01) will be adversely affected by the proposal. It is considered that this would occur with any development of the subject site and that the resulting impact is not any greater than that of a height compliant scheme.



Unit 201, 4 Auburn Street view from west facing



Unit 201, 4 Auburn Street view from living room

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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The above assessment has been undertaken having regard to the Land and Environment Court Planning Principle for view sharing established by *Tenacity Consulting v Warringah [2004] NSWLEC 140* which establishes a four (4) step assessment of view sharing as outlined below.

**1. The assessment of the views affected**

*The first step is the assessment of views to be affected. Water views are valued more highly than land views. Iconic views (e.g., of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons. Whole views are valued more highly than partial views, e.g., a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.*

Comment: no iconic or water views are affected by the proposed development. Distant views to Rumbalara Reserve will however generally be retained for upper-level units in 8 Duke Street to the south generally with foreground (non-significant) views lost.

**2. From what part of the property are views obtained?**

*The second step is to consider from what part of the property the views are obtained. For example, the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries. In addition, whether the view is enjoyed from a standing or sitting position may also be relevant. Sitting views are more difficult to protect than standing views. The expectation to retain side views and sitting views is often unrealistic.*

Comment: The views impact from the proposal are across the subject property from the rear or from the east with views assessed from a standing position. Accordingly existing views would be very difficult to protect with any development of the subject land.

**3. What is the extent of the impact?**

*The third step is to assess the extent of the impact. This should be done for the whole of the property, not just for the view that is affected. The impact on views from living areas is more significant than from bedrooms or service areas (though views from kitchens are highly valued because people spend so much time in them). The impact may be assessed quantitatively, but in many cases this can be meaningless. For example, it is unhelpful to say that the view loss is 20% if it includes one of the sails of the Opera House. It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating.*

Comment: The extent of impact is as shown above. It is considered to be minor to moderate noting that the difference between retained views from a compliant scheme and the current proposal is relatively small. Most importantly while foreground views will be lost distant views to Rumbalara Reserve will be generally retained from upper-level units.



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**4. What is the reasonableness of the proposal that is causing the impact?**

*The fourth step is to assess the reasonableness of the proposal that is causing the impact. A development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable. With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable.*

Comment: Although the proposed development does not comply with the applicable height limit following an assessment of impacts it is considered that the impact is reasonable. The proposed design is skilful and will provide for the development of 8 units (including 4 affordable housing units) within close proximity of the Gosford City Centre. Further it is considered that notwithstanding the height non-compliance the proposed rooftop communal space with landscape planters will provide a better outlook for neighbouring units than a standard rooftop.

In summary the Court poses two (2) questions in *Tenacity Consulting v Warringah Council [2004] NSWLEC 140* at paragraphs 23-33. The first question relates to whether a non-compliance with one or more planning controls results in view loss. The second question posed by the Court relates to whether a more skilful design could provide the same development potential whilst reducing the impact on views.

The following comments are made with regard to the reasonableness of the proposal:

- The proposal will have a minor – moderate impact on views obtained from units within 8 Duke Street and 4 Auburn Street. The proposal is likely to result in a loss of foreground views from a standing position on the upper levels of 8 Duke Street. Views of the top of the hill to the north (Rumbalara Reserve) will however be retained. View impacts will also occur to the topmost level of 4 Auburn Street however units in this building do not currently have water views to the west and have their living areas and POS oriented to the north and south. Views from lower-level units across the subject site would not be able to be retained in any development of the subject land and is not a realistic expectation.
- The proposal presents as a four (4) storey RFB with part of the 4<sup>th</sup> storey and rooftop communal open space breaching the 12m building height development standard. Generally, the building presents as having a predominant height of 13.1m with an addition 1m height proposed in the form of a lightweight recessed balustrade to the rooftop communal open space area. The lift overrun extends above this for part of the site. The

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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site slopes to the street with the greatest height non-compliance being located closest to the street frontage and away from adjacent RFBs. Notwithstanding the scale of the development is comparable to adjacent development which is generally 5 storeys (15.6m) in height with the exception of land to the west where a 2 storey multi dwelling house development is located. This may or may not be subject to future redevelopment however the proposed interface does not preclude this provided a defensive façade treatment.

- As shown in the above view photos, the view loss that will result from the non-compliant building elements is not significant when compared to that which would result from a compliant scheme.
- The bulk and scale of the proposed built form is considered to be reasonable in the context of the surrounding streetscape, height and massing.
- Strict compliance with the building height control would not provide for a significant improvement in view sharing outcomes to neighbouring properties.
- It is not considered that a more skilful design could reduce view impacts without compromising the intent of the redevelopment of the site and reducing development yield including the loss of affordable housing units.

Having regard to the above it is considered that the proposal satisfies the aims and objectives for view sharing consistent with the case law established by *Tenacity Consulting v Warringah* [2004] NSWLEC 140.

### **Building Separation and Visual Privacy**

As noted above the subject site is constrained with a frontage of only 15.55 - 15.6m. To accommodate a residential flat building side setbacks of 3m are proposed notwithstanding that windows are proposed facing the side boundaries (6m setback required under the ADG for habitable-to-habitable rooms interface). The original plans submitted resulted in significant privacy issues with no window screening or increased sill heights proposed. The independent urban design referral identified that compliance with ADG separation distances would effectively render the site undevelopable. Changes were suggested to provide a defensive façade treatment to ensure a non-habitable to habitable interface (4.5m setback or 9m separation required). The amended plans addressed this comment through the provision of oriel (angled) windows, increased sill heights (1.6m) and the deletion of a number of windows facing the boundary. While the proposal still does not comply with the ADG distance separation of 9m the resulting separation of 8m (to balconies) and 9m (to windows) in the adjacent RFB to the east (4 Auburn Street) is considered acceptable given that the interface is habitable to non-habitable. Further it is noted that the balconies to the east have sliding privacy screens.

Existing setbacks to the 2 storey multi-dwelling houses to the west are generally approximately 1.5m to a range of windows including lounge, bedrooms, bathrooms etc. and 3.45m to the first-floor balcony which fronts the boundary. Accordingly, windows on the western façade

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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have also generally been proposed as oriel or highlight windows however a number of west facing windows have been shown on the plans without privacy treatments. These are:

- west facing living room windows on Level 2
- west facing bedroom 2 window in the southern unit on Level 3
- west facing bedroom 1 window in north facing unit on Level 3.

To protect the privacy of the existing (and potentially future) dwellings to the west a condition is proposed to require that these windows also have a sill height of 1.6m.

The west elevation also shows large windows to the living rooms (x2) on Level 3 however these are not shown on the plans. While the sill height of these windows is shown as 1.6m amended plans are required to show the proposed windows on the Level 3 plan (Note: the view from the sun plans also show these windows therefore it is assumed that the elevation rather than plan is correct). No privacy issues result given the proposed sill heights therefore no objection is made to the proposed windows which will improve the amenity of the units.

Having regard to the above it is considered that the proposed building separation and side setbacks is appropriate under the circumstances.

**Solar access and overshadowing**

The sun eye view plans submitted with the application indicate that at least 6 of the proposed 8 units will receive at least 3 hours of sunlight to the living rooms and private open space of units in midwinter (northern units in the am and southern units in the pm). The proposal therefore complies with the ADG requirement (70%) in this regard and will provide good amenity for the future residents.

In terms of overshadowing the shadow plans illustrate that the proposed development will result in some shadow impacts on the multi dwelling housing at 185 Albany Street to the west in the morning in midwinter but that affected windows are high sill height windows with a minimal (1.5m) setback from the boundary. Accordingly, any development of the subject site would impact these windows. Fencing and trees are also currently located on this boundary which would currently overshadow the affected windows.

To the east the proposed building will cast shadows on 4 Auburn Street in the afternoon however the shadows cast by the proposal are not discernibly different from those caused by a complying envelope (refer Figure 20 below). Sunlight will continue to access the western façade of 4 Auburn Street in the middle of the day in mid-winter with the below showing the worst-case situation.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**



**Figure 20: Shadow diagrams June** (Source: Fuse Architects)

Having regard to the above it is considered that the shadow impacts of the proposal are acceptable notwithstanding the height non-compliance.

### **Apartment Mix**

As noted above the proposal provide for 8 x 2-bedroom units (including 4 x affordable housing dwellings) and does not therefore provide a mix of units sizes and types. Given the site size and configuration it is considered that the site lends itself to a central core with a single unit front and back on each level. Accordingly, it is considered that proposed apartment mix is appropriate in the particular circumstances of the case.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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***Natural Environment***

The proposed development is not considered to have any adverse impacts on the scenic quality or streetscape of Auburn Street. The redevelopment of the site will result in a development consistent with the surrounding context and with the desired future character of the location on the fringe of the Gosford City Centre.

The submitted Erosion and Sediment Control Plan, Stormwater Drainage Plans, Water Quality Report, Waste Management Plan, and Landscape Plan will ensure that potential environmental impacts are managed and mitigated throughout construction and operation. Further standard conditions of consent are recommended.

There will be no significant impact upon the natural environment as a result of the proposal subject to recommended conditions of consent.

***Economic and Social Impacts***

The proposed development will have beneficial social and economic impacts. The proposal is considered to meet the aims of the *Central Coast Structure Plan 2036* and facilitates economic development that will lead to more local employment opportunities on the Central Coast and reduce the percentage of employed persons who travel outside the region each day for work. Further it will provide 4 x affordable housing dwellings for a period of 15 years and includes 3 x adaptable dwellings. This will give rise to significant public and social benefits. No unreasonable social impacts are anticipated to arise from the approval of this residential development.

***Parking and access***

A number of submissions raised concerns in respect of the impact of the proposal on parking (including lack of off-street parking and impact on on-street parking), traffic congestion and access arrangements. Particular concerns were raised regarding the narrowness of Auburn Street querying the ability for the site to be serviced for waste collection.

The proposal provides for 8 resident parking spaces in the lower ground level in accordance with the requirements of the ADG and Gosford City Centre DCP 2018 however does not provide any visitor parking spaces. The applicant has argued that the proposal; complies with the applicable non-discretionary parking requirements of the Housing SEPP 2021 for infill affordable housing and that visitor parking is not required as it is not identified by the SEPP.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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Clause 18 of Housing SEPP 2021 states as follows:

*(2) The following are non-discretionary development standards in relation to the residential development to which this Division applies—*

*.....*

*(f) for a development application made by a social housing provider for development on land in an accessible area—*

*(i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces,*

*(ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces,*

*(iii) for each dwelling containing at least 3 bedrooms—at least 1 parking space,*

*(g) if paragraph (f) does not apply—*

*(i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces, or*

*(ii) for each dwelling containing 2 bedrooms—at least 1 parking space, or*

*(iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces,*

While it is noted that the subject application is not made by a social housing provider, it does propose 4 x affordable housing units. Accordingly, it is considered reasonable to apply the provisions of (2)(f) to those units. In accordance with this provision for the proposed 4 x 2-bedroom affordable housing dwellings a minimum of 2 resident parking spaces are required.

For the remaining 4 x 2-bedroom apartments Gosford City Centre DCP 2018 requires:

1.2 spaces per 2 x bedroom dwelling

0.2 visitor spaces per dwelling

Not less than 10% of the spaces to be disabled accessible spaces.

Accordingly, the minimum parking requirement is calculated as follows:

	<b>Parking Rate</b>	<b>Total</b>
Affordable housing (4x 2-bedroom dwellings)	0.5	2
Non-affordable housing (4x 2-bedroom dwellings)	1.2	4.8 (round to 5)
Visitor Parking	0.2/dwelling (excluding affordable housing)	0.8 (round to 1)
<b>Total</b>		<b>7.6 (round to 8)</b>

Accordingly, a condition of consent is recommended requiring that 1 parking space be allocated to visitor parking. This will assist to alleviate pressure on on-street parking. In respect

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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of other traffic and access issues Council's traffic engineer has advised that the application is satisfactory.

**Suitability of the Site for the Development:**

Section 4.15 (1)(c) of the *Environmental Planning and Assessment Act 1979* requires consideration of whether the site is suitable for the proposed development.

The site is accessible to public transport and facilities and the proposed development provides a quality residential flat building comprising 8 residential units (including 4 affordable housing units) which is a permissible use in the R1 zone.

The building form is considered compatible with the existing and future character of R1 zoned land, particularly in the context of being within the Gosford City Centre. The architectural design and treatment of the building will present well on all facades subject to recommended conditions of consent. The height of the proposal is considered appropriate having regard to the existing site context which is dominated by 3 x recently developed 5 storey residential flat buildings surrounding the site.

The design of the proposed development is in an appropriate form and layout that suitably balances the opportunities and constraints of the site. There are no significant site constraints or hazards that would render the location of the development as unsuitable.

**Any Submission made in Accordance with this Act or Regulations**

Section 4.15 (1)(d) of the *Environmental Planning and Assessment Act 1979* requires consideration of any submissions received during notification of the proposal.

The original application was notified from 3 March to 24 March 2023. No submissions were received.

Following a preliminary assessment and discussions with the applicant amended architectural plans and information was received on 20 December 2023. The amended plans were re-notified from 8 March to 3 April 2024. Nineteen (19) submissions were received objecting to the proposal. Issues raised in submissions in order of frequency are summarised below.

Submission	No of submissions raised	Comment
Height, bulk and scale including	17 (89%)	Detailed assessment of height, bulk and scale including non-compliance with height limit included in this report. Height non-compliance supported in this



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>Submission</b>	<b>No of submissions raised</b>	<b>Comment</b>
noncompliance with 12m height limit		instance considering the site context and in particular the height and scale of recent 3 x 5 storey residential flat buildings immediately adjoining the site. The proposed height and scale is considered to be compatible with the site context notwithstanding the non-compliance.
Rooftop noise and overlooking	15 (79%)	The proposed rooftop communal open space has been designed to prevent overlooking of neighbouring apartments setback from the building edge with landscape planters surrounding to hold back users from the edge thus preventing overlooking. Further it is located 20m from the neighbouring building to the south and 9m from the building to the east. Accordingly, it is considered that privacy impacts are not likely to be a significant issue rather the proposal will result in a significant improvement on the existing privacy situation where the private open space of the existing dwelling on site is substantially overlooked by apartments on 3 sides. It is however considered that the space has the potential to result in noise impacts therefore it is recommended that a condition be imposed limiting its use to daylight hours. Subject to this limitation it is considered that it is unlikely to result in noise impacts any greater than generally anticipated in a residential environment.
View impacts	10 (53%)	A detailed review of view impacts has been undertaken (refer above). In summary it is considered that the proposal will result in some minor - moderate impacts but that these impacts would not be significantly greater than that which would result from a compliant scheme. Existing views from neighbouring properties are obtained across the subject property therefore any development in accordance with the applicable planning controls would result in a loss of views.
Parking impact on street parking/ lack of visitor parking	7 (37%)	The proposal complies with the onsite parking requirement subject to a condition of consent requiring that one visitor space be dedicated in lieu of

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>Submission</b>	<b>No of submissions raised</b>	<b>Comment</b>
		a resident space. Council's traffic referral has advised that the proposed parking arrangement are satisfactory subject to conditions of consent.
Loss of solar access	5 (26%)	The shadow plans submitted with the application illustrate that the proposed development will result in some shadow impacts on the multi dwelling housing at 185 Albany Street to the west in the morning in midwinter but that the affected windows are high sill height windows (likely service rooms) and currently affected by shadows. To the east the proposed building will cast shadows on 4 Auburn Street in the afternoon however the shadows cast by the proposal are not discernibly different from those cast by a complying envelope (refer above for further detail).
Loss of Privacy - aural and visual	4 (21%)	The amended plans provide a defensive non habitable to habitable interface across the east and west boundaries thus protecting from visual privacy impacts. In relation aural privacy as noted above a condition is recommended to limit use of the rooftop communal open space to daylight hours to protect neighbours from adverse noise impacts.
Access issues related to Auburn Street including for waste vehicles, general access, and traffic congestion	3 (16%)	Council's traffic engineer has not raised any concern with respect of the proposed development.
Natural light impacts	3 (16%)	As outlined above, the sun / light impacts of the proposal is limited to impacts to centrally located units fronting the western boundary of 4 Auburn Street. Given the site orientation the impact of the proposed development on these units is considered to be substantially the same as a compliant scheme. From the shadow plans it is evident that access to sunlight will remain in the middle of the day throughout the year.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

<b>Submission</b>	<b>No of submissions raised</b>	<b>Comment</b>
Construction impacts	3 (16%)	Construction impacts will be addressed via standard conditions of consent
Lack of / inadequate parking on site	2 (11%)	The proposal complies with the parking requirements subject to a condition recommending that one visitor space be dedicated in lieu of a resident space.
No open space	2 (11%)	The amended plans include rooftop communal open space for the use of residents as well private open space area in the form of balconies for each unit. Areas proposed comply with relevant requirements.
Pollution from BBQ	1 (5%)	This matter is not a relevant planning issue.
Inadequate landscape area	1 (5%)	The proposal complies with the landscape requirements
Roof elements do not comply	1 (5%)	As noted above the rooftop communal open space, lift overrun, exit stair and pergola are all above the 12m applicable maximum height. A detailed assessment of height is included in this report.
Setbacks non-compliant	1 (5%)	The proposed setbacks comply with the minimum 3m setback specified by GDCP 2018. A detailed assessment of compliance with ADG separation distances is included in this report.
Unit mix not suitable for families rather for investors	1 (5%)	8 x 2-bedroom units are proposed. It is noted that this is not consistent with requirements in relation to unit mix however given the size and configuration of the site it is considered that this is appropriate in the circumstance. The site lends itself to a central core with a single unit front and back on each level.
Noncompliance with specified DCP controls	1 (5%)	Assessment against all applicable controls is included in this report.

The above issues have been further assessed in detail throughout this report.

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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**Internal Consultation**

Traffic Engineer	No objection
Development Engineer	Supported subject to recommended conditions
Environmental Health (acoustic, contamination, acid sulfate soils)	Supported subject to recommended conditions
Water and Sewer	Supported subject to recommended conditions

**External Consultation**

An independent review was requested under Council's Urban Design Panel Process and comments were provided by the independent urban designer / architect (Ken Dwyer) by on 31 March 2022 and is included in the Attachments. The review concluded that the external appearance of the building is well considered and reasonably articulated on the street and rear elevations. The composition has a variety of building elements defining both vertical and horizontal elements. The façade has recessing and protruding elements that varies the scale and creates interest in the building.

However, it also noted that the west and east façade are not articulated and do not have recessing and protruding elements. These facades have large, unprotected glass areas which are not consistent with good passive design. These facades also do not comply with setback and building separation requirements, thus compounding overlooking, privacy and amenity issues. Further it noted that the proposal in seeking to use the bonus FSR to increase the yield and increased density of the site which appear to have compounded the non-compliances in setbacks, building separation, visual privacy, overlooking and lack of common external area.

In addition, a further architect referral was provided by Mt Wasson (Architect) on 23 July 2023. The assessment concluded that an RFB is appropriate in this location and is supported in principle however raised significant concern in respect of:

- the high front boundary wall and high side walls (up to 3.9m above the floor level of the ground floor unit on the adjoining site to the east) are inconsistent with the existing and likely future context.
- ADG non-compliance which requires a 6m side setback to habitable rooms including balconies up to 4 storeys. The application proposes 3m or 50% non-compliance. This problem is exacerbated by the tall walls on side boundaries (3m above existing ground level on the east and up to 3.2m on the west and the lack of deep soil zones on side boundaries. It is understood that this is a small site, but this is a site constraint, not a justification for such major non-compliance.
- Landscape – generally OK but landscape necessary to screen non-complying height and side setbacks is all located on the structural slab. Units on levels 1 and 3 have large

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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integrated planters up to 900mm deep. While this is an innovative approach and is supported in principle, they are located beneath the level above and the proposed low succulent planting does not make best use of the available soil volume.

- ADG requires 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. The application achieves only 50% of units. It is acknowledged that large side windows to rear living areas do achieve some solar access however these have non-complying side setbacks and therefore have a detrimental impact on privacy.

Though the application as originally submitted was not supported, the architect considered that lowering the carpark and the building by approximately 2m would address many of Councils concerns and assist in achieving the objectives of the ADG. This would result in complying height, reduce the overpowering height of the side boundary walls and reduce the blank brick wall on the street front. Further he recommended the use of some form of angled oriel windows on side elevations to reduce privacy impacts and improve solar access and concluded that the implementation of both of these may compensate for the non-complying side setbacks.

Accordingly, an RFI letter including the above matters was issued on 31 August 2023. Amended plans which sought to address the issues raised were then submitted by the Applicant and are the subject of this assessment. While a re-referral was not undertaken it is considered that the matters raised by the architects / urban designers have been addressed in the amended plans and / or this report.

### **Ecologically Sustainable Development Principles**

The proposal has been assessed having regard to ecologically sustainable development principles and is considered to be consistent with these principles.

The proposed development is considered to incorporate satisfactory stormwater, drainage and erosion control and is unlikely to have any significant adverse impacts on the environment and will not decrease environmental quality for future generations. The proposal does not result in the disturbance of any endangered flora or fauna habitats and is unlikely to significantly affect fluvial environments.

### **Climate Change**

The potential impacts of climate change on the proposed development have been considered by Council as part of the assessment of the application.

This assessment has included consideration of such matters as potential rise in sea level; potential for more intense and/or frequent extreme weather conditions including storm events,

**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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bushfires, drought, flood, and coastal erosion; as well as how the proposed development may cope, combat, withstand these potential impacts. The proposed development is considered satisfactory in relation to climate change.

**The Public Interest**

Section 4.15 (1)(e) of the *Environmental Planning and Assessment Act 1979* requires consideration as to whether the proposal is in the public interest.

The proposal will not have any adverse impact on the natural environment and will not unreasonably impact the amenity of neighbouring properties. Accordingly, the approval of the application is considered to be in the public interest.

**Political Donations**

During assessment of the application no political donations were declared by the applicant, applicant's consultant, owner, objectors and/or residents.

**Other Matters for Consideration:**

The *Gosford City Centre Special Infrastructure Contribution (SIC)* determination came into effect on Friday 12 October 2018. A SIC levy of two per cent of the cost of development is required for new development within the Gosford City Centre. This applies to development located on residential and business zoned land that has a cost of development of \$1 million and over.

Section 7.12 contributions for the Gosford City Centre also applies; the contribution levy has been reduced from 4% to 1%. A condition is recommended requiring the development contribution to be paid prior to the issue of any Construction Certificate.

**Planning Agreements**

The proposed development is not subject to a planning agreement / draft planning agreement.

**Conclusion:**

This application has been assessed under the heads of consideration of Section 4.15 of the *Environmental Planning and Assessment Act 1979* and all relevant instruments and policies. Subject to the imposition of appropriate conditions, the proposed development is not expected to have any adverse social or economic impact.

**The Panel can be satisfied that:**














### 3.1 **DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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- The proposal is satisfactory having regard for the relevant environmental planning instruments, plans and policies.
- The clause 5.28 variation request seeking to vary the maximum height of building development standard is considered to be justified, and
- There are no significant issues or impacts identified with the proposal under Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

Accordingly, the application is recommended for approval pursuant to Section 4.16 of the *Environmental Planning and Assessment Act 1979*.







#### **Attachments**

<a href="#"> 1</a>	Draft conditions/reasons - 6 Auburn Street, POINT FREDERICK NSW 2250 - DA/3915/2022 - Fuse Architecture Pty Ltd	D16227636
<a href="#"> 2</a>	PUBLIC Amended Stormwater Drainage Plan - 6 Auburn St POINT FREDERICK - PAN-282430 - DA/3915/2022	D16086361
<a href="#"> 3</a>	PUBLIC Amended Landscape Plan - 6 Auburn St POINT FREDERICK - PAN-282430 - DA/3915/2022	D16086348
<a href="#"> 4</a>	PUBLIC Redacted Additional Traffic Engineering Letter - 6 Auburn St POINT FREDERICK - PAN-282430 - DA/3915/2022	D16086235
<a href="#"> 5</a>	AMENDED Architectural Plans (Rev B & C) - 6 Auburn St POINT FREDERICK - PAN-282430 - DA/3915/2022	D16004008
<a href="#"> 6</a>	Revised Lower Ground and Upper Ground Floor Plans (Added to D160040080) - DA/3915/2022 - 6 Auburn Street POINT FEDERICK	D16081789
<a href="#"> 7</a>	PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022	D16040537
<a href="#"> 8</a>	PUBLIC Access report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building	D15556346
<a href="#"> 9</a>	PUBLIC Traffic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building	D15556345
<a href="#"> 10</a>	PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building	D15556344
<a href="#"> 11</a>	PUBLIC Acoustic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building	D15556343
<a href="#"> 12</a>	DESIGN VERIFICATION AI-756978 PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250	D15529337
<a href="#"> 13</a>	PUBLIC SEPP 65 Statement - 6 Auburn St POINT FREDERICK - DA/3915/2022	D15506920



**3.1 DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces (cont'd)**

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<b>14</b>		PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St	D15496845
		POINT FREDERICK - DA/3915/2022	
<b>15</b>		PUBLIC ADG Compliance Statement - PAN-282430 - DA/3915/2022 -	D15447993
		6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building	
<b>16</b>		PUBLIC - BASIX - PAN-282430 - DA/3915/2022 - 6 Auburn Street,	D15447992
		POINT FREDERICK NSW 2250 - Residential Flat Building	

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 1**

**Draft conditions/reasons - 6 Auburn Street, POINT FREDERICK NSW 2250 - DA/3915/2022 - Fuse Architecture Pty Ltd**

**Date:** 30 May 2024  
**Responsible Officer:** Sian Holmes  
**Location:** 6 Auburn Street, POINT FREDERICK NSW 2250  
 Lot 13 DP 17440  
**Owner:** Zeytouneh 10452 Pty Ltd  
**Applicant:** Fuse Architecture Pty Ltd  
**Date of Application:** 24 November 2022  
**Application No:** DA/3915/2022  
**Proposed Development:** Residential Flat Building (LPP)  
**Land Area:** 676.60  
**Existing Use:** XXXX

**PROPOSED CONDITIONS**

The development taking place in accordance with the approved development plans reference number DA/3915/2022 except as modified by any conditions of this consent, and any amendments in red.

**1.PARAMETERS OF THIS CONSENT**

**Approved Plans and Supporting Documentation**

- 1.1 Development must be carried out in accordance with the following approved plans and supporting documentation (stamped by Council), except where the conditions of this consent expressly require otherwise.

Architectural Plans by Fuse Architects, reference 2208

Plan No.	Revision No.	Plan Title	Drawn By	Dated
DA 006	B	SITE PLAN	CW	19/12/2023
DA 007	B	DEMOLITION PLAN	CW	19/12/2023
DA 101	C	LOWER GROUND + UPPER GROUND PLAN	CW	24/01/2024
DA 102	B	LEVEL 01 + LEVEL 02 PLAN	CW	19/12/2023
DA 103	B	LEVEL 03 + ROOF PLAN	CW	19/12/2023
DA 201	B	NORTH + SOUTH ELEVATION	CW	19/12/2023
DA 202	B	EAST ELEVATION	CW	19/12/2023
DA 203	B	WEST ELEVATION	CW	19/12/2023
DA 204	B	SECTION A +B	CW	19/12/2023
DA 301	B	ADAPTABLE UNIT TYPE	CW	19/12/2023
DA 601	B	MATERIALS AND FINISHES SCHEDULE		

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 1**

**Draft conditions/reasons - 6 Auburn Street, POINT FREDERICK NSW 2250 - DA/3915/2022 - Fuse Architecture Pty Ltd**

Landscape Plans by Zenith Landscape Designs, reference 22-4744

Plan No.	Revision No.	Plan Title	Drawn By	Dated
LO 1	A	LANDSCAPE PLAN	MAG	21/11/2023
LO 2	A	LANDSCAPE PLAN	MAG	21/11/2023
LO 3	A	LANDSCAPE PLAN	MAG	21/11/2023

Stormwater Plans by Pyramid Engineering Consult, reference P2243

Plan No.	Revision No.	Plan Title	Drawn By	Dated
S0	E	GENERAL NOTES	KK	12/12/2023
S1	E	SEDIMENT AND EROSION CONTROL PLAN	KK	12/12/2023
S2	E	LOWER GROUND FLOOR DRAINAGE PLAN	KK	12/12/2023
S3	E	GROUND FLOOR DRAINAGE PLAN		12/12/2023
S4	E	STORMWATER SECTIONS & DETAILS		12/12/2023
S5	E	WATER QUALITY REPORT		12/12/2023
S6	E	STORMWATER SECTIONS & DETAILS		12/12/2023

Document Title	Version No.	Prepared by	Dated
Access Report	22216	Vista Access Architects	20/06/2022
BCA Assessment Report	116373-BCA-r2	BCA Logic	02/11/2022
Noise Impact Assessment	220378	Pulse White Noise Acoustics	01/09/2022
Waste Management Plan	V2	MRA Consulting Group	31/01/2023
BASIX Certificate	1339542M	EPS	09/11/2022

In the event of any inconsistency between the approved plans and the supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a condition of this consent, the condition prevails.

**Note:** an inconsistency occurs between an approved plan and supporting documentation or between an approved plan and a condition when it is not possible to comply with both at the relevant time.

- 1.1. Carry out all building works in accordance with the National Construction Code Series, Building Code of Australia, Volume 1 and 2 as appropriate.
- 1.2. Comply with all commitments listed in the BASIX Certificate for the development as required under Clause 97A of the *Environmental Planning and Assessment Regulation 2000*

## 2. PRIOR TO ISSUE OF ANY CONSTRUCTION CERTIFICATE

- 2.1. All conditions under this section must be met prior to the issue of any Construction Certificate.
- 2.2. Obtain a Roads Act Works Approval by submitting an application to Council for a Section 138 Roads Act Works Approval for all works required within the road reserve. The application is to be lodged using an *Application for Subdivision Works Certificate or Construction Certificate, Roads Act Works Approval and other Development related Civil Works* form.

The application is to be accompanied by detailed design drawings, reports and other documentation prepared by a suitably experienced qualified professional in accordance with Council's *Civil Works Specifications*.

Fees, in accordance with Council's Fees and Charges, will be invoiced to the applicant following lodgement of the application. Fees must be paid prior to Council commencing assessment of the application.

Design drawings, reports and documentation will be required to address the following works within the road reserve:

- a) Reconstruction of the kerb & gutter across the site frontage to conform with Council's current SA kerb profile. Construction to include transitions to existing SA kerb in front of the neighbouring property (No 179 Albany Street, formerly the frontage of No 4 Auburn Street), and to the existing kerb formation at the end of Auburn Street.
- b) Construction of concrete footpath for the full street frontage of the development in Auburn Street.
- c) Construction of the road verge/footway formation graded at +2% from the top of kerb to the property boundary, across the full frontage of the site in Auburn Street. Construction to include transitions to existing formation either side of the site if required.
- d) Construction of a residential vehicle access crossing that has a width of 4.0 metres at the road gutter crossing and 3.6 metres at the property boundary including construction of a gutter crossing and road pavement adjacent to the gutter crossing.
- e) Removal of all redundant vehicle gutter crossings / laybacks and replacement with kerb.
- f) Removal of all redundant vehicular access crossings. The road verge/footway formation is to be reinstated and stabilised with topsoil and turf from top of kerb to property boundary. Concrete path to be constructed if required.
- g) Construction of any works required to transition new works into existing infrastructure and the surrounding land formation.
- h) Construction of a storm water drainage connection from the development site to Council's storm water drainage system within the road reserve.

The section 138 Roads Act Works Approval must be issued by Council and all conditions of that approval must be addressed prior to occupying and commencing any works in the road reserve.

- 2.3. Submit to Council a dilapidation report detailing the condition of all Council assets within the vicinity of the development. The report must document and provide photographs that clearly depict any existing damage to the road, kerb, gutter, footpath, driveways, street trees, street signs, street lights or any other Council assets in the vicinity of the development. The dilapidation report will be required to be submitted to Council prior to the issue of the Section 138 Roads Act Works approval or the issue of any construction certificate for works on the site. The dilapidation report may be updated with the approval of Council prior to the commencement of works. The report will be used by Council to establish damage to Council's assets resulting from the development works.
  
- 2.4. Submit to the Registered Certifier responsible for issuing the construction certificate for works within the development site detailed design drawings and design reports for the following engineering works:
  - a) Construction of driveways, ramps and car parking areas in accordance with the requirements of the current edition Australian Standard AS/NZS 2890: Parking Facilities and other applicable Australian Standards.
  - b) Construction of a stormwater detention system. The design shall be in accordance with Chapter 3.1 of the Central Coast Development Control Plan 2022 and Council's *Civil Works Specifications*. The stormwater detention system must limit post development peak flows from the proposed development to less than or equal to predevelopment peak flows for all storms events up to and including the 1% Annual Exceedance Probability (AEP) storm event. A runoff routing model/method must be used. An on-site stormwater detention report including an operation and maintenance plan must accompany the design. On-site stormwater detention is not permitted within private courtyards, drainage easements, and / or secondary flow paths. The design shall be generally in accordance with the Stormwater Management Plans prepared by Pyramid Engineering Consult (Ref Job No: P2243, Drawing No's S01-S06 Rev E dated 12-12-23).
  - c) Construction of nutrient and pollution control measures. The design shall be in accordance with Chapter 3.1 of the Central Coast Development Control Plan 2022. A nutrient and pollution control report including an operation and maintenance plan must accompany the design. The design shall be generally in accordance with the Stormwater Management Plans prepared by Pyramid Engineering Consult (Ref Job No: P2243, Drawing No's S01-S06 Rev E dated 12-12-23).
  - d) Construction of on-site stormwater retention measures. The design shall be in accordance with Chapter 3.1 of the Central Coast Development Control Plan 2022. A report detailing the method of stormwater harvesting, sizing of retention tanks for re-use on the site and an operation and maintenance plan must accompany the design. The design shall be generally in accordance with the Stormwater Management Plans prepared by Pyramid Engineering Consult (Ref Job No: P2243, Drawing No's S01-S06 Rev E dated 12-12-23). The final design of the slow release system is to be certified by

the designing engineer that will be free draining with outflows connecting to the internal drainage system prior to discharging to the Council kerb.

- e) Construction stormwater drainage collection and piping of all stormwater runoff from areas within the site via an on-site stormwater detention facility to the approved connection with Council's drainage system located in Auburn Street.
- f) Construction of retaining walls where indicated on development approval documentation. Retaining wall design must not conflict with existing or proposed services or utilities. Retaining walls designs for wall greater than 600mm in height must be certified by a registered practising Civil or Structural engineer as being in accordance with Australian Standards.

Detailed design drawings and design reports acceptable to the Registered Certifier must be included in the Construction Certificate documentation.

- 2.5. Submit an application to Council under section 305 of the Water Management Act 2000 for a section 306 Requirements Letter. The Application form can be found on Council's website [centralcoast.nsw.gov.au](http://centralcoast.nsw.gov.au). Early application is recommended.

The section 305 application will result in a section 306 letter of requirements which must be obtained prior to the issue of any Construction Certificate. The requirements letter will outline which requirements must be met prior to each development milestone e.g. prior to construction certificate, subdivision works certificate, occupation certificate and/or subdivision certificate.

- 2.6. All conditions under this section must be met prior to the issue of any Construction Certificate.
- 2.7. No activity is to be carried out on-site until the Construction Certificate has been issued, other than:
  - a) Site investigation for the preparation of the construction, and / or
  - b) Implementation of environmental protection measures, such as erosion control and the like that are required by this consent
  - c) Demolition.

- 2.8. Before the issue of a construction certificate, the applicant is to ensure that a waste management plan is prepared in accordance with the EPA's Waste Classification Guidelines and the following requirements before it is provided to and approved by the certifier that details the following: the contact details of the person(s) removing the waste
  - an estimate of the waste (type and quantity) and whether the waste is expected to be reused, recycled or go to landfill
  - the address of the disposal location(s) where the waste is to be taken.

The applicant must ensure the waste management plan is referred to in the construction site management plan and kept on-site at all times during construction.

1. Prior to the issue of a Construction Certificate amended architectural plans are to be submitted to the satisfaction of Council's Manager Development Assessment which are to:
    - (a) increase the sill height of the following windows to a minimum of 1.6m:
      - west facing living room windows on Level 2
      - west facing bedroom 2 window in the southern unit on Level 3
      - west facing bedroom 1 window in north facing unit on Level 3.
    - (b) shown on the Level 3 plans proposed west facing windows to living rooms (x2) with a minimum sill height of 1.6m consistent with the submitted elevations and sun eye plans
  1. Prior to the issue of a Construction Certificate amended landscape plans are to be submitted to the satisfaction of Council's Manager Development Assessment which remove the proposal paving in the rear deep soil zone and provide for landscape planting consistent with the architectural plans.
  1. Prior to the issue of a Construction Certificate an updated BSIX Certificate is to be submitted to the satisfaction of Council's Manager Development Assessment
  - 2.9. Before the issue of a construction certificate, the applicant is to ensure that the person liable pays the long service levy to the Long Service Corporation or Council under section 34 of the *Building and Construction Industry Long Service Payments Act 1986* and provides proof of this payment to the certifier.
  - 2.10. Before the issue of a Construction Certificate, pursuant to Section 7.12 of the Environmental Planning & Assessment Act, the applicant must pay to Council a contribution in the amount of \$33,497.35 as calculated at the date of this consent, in accordance with the Central Coast Section 7.12 Local Infrastructure Contribution Plan 2023.
- The total amount payable may be adjusted at the time the payment is made, in accordance with the provisions of the Central Coast Section 7.12 Local Infrastructure Contribution Plan 2023. Contributions under the Central Coast Section 7.12 Local Infrastructure Contribution Plan 2023 are subject to quarterly indexation by CPI.

A copy of the Contributions Plan is available for inspection at 2 Hely St, Wyong or on Council's website: <https://www.centralcoast.nsw.gov.au/plan-and-build/development-contributions-plans-and-planning-agreements>.

#### 4. PRIOR TO COMMENCEMENT OF ANY WORKS

- 4.1. All conditions under this section must be met prior to the commencement of any works.
- 4.2. Erect a temporary hoarding or temporary construction site fence between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works, if the works:

- a) could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic, or
- b) could cause damage to adjoining lands by falling objects, or
- c) involve the enclosure of a public place or part of a public place.

**Note 1:** A structure on public land or on or over a public road requires the prior approval of the relevant authority under the *Local Government Act 1993* or the *Roads Act 1993*, respectively.

**Note 2:** The *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2011* contain provisions relating to scaffolds, hoardings and other temporary structures.

- 4.3. Prepare a Construction Traffic and Pedestrian Management Plan (CTPMP) for all activities related to works within the site. The plan must be prepared and implemented only by persons with Roads and Maritime Service accreditation for preparing and implementing traffic management plans at work sites.

The CTPMP must describe the proposed construction works, the traffic impacts on the local area and how these impacts will be addressed.

The CTPMP must address, but not be limited to, the following matters:

- Ingress and egress of construction related vehicles to the development site.
- Details of the various vehicle lengths that will be used during construction and the frequency of these movement.
- Use of swept path diagrams to demonstrate how heavy vehicles enter, circulate and exit the site or Works Zone in a forward direction.
- Deliveries to the site, including loading / unloading materials and requirements for work zones along the road frontage to the development site. A Plan is to be included that shows where vehicles stand to load and unload, where construction plant will stand, location of storage areas for equipment, materials and waste, locations of Work Zones (if required) and location of cranes (if required).
- Works Zones if heavy vehicles cannot enter or exit the site in a forward direction.
- Control of pedestrian and vehicular traffic where pre-construction routes are affected.
- Temporary Road Closures.

Where the plan identifies that the travel paths of pedestrians and vehicular traffic are proposed to be interrupted or diverted for any construction activity related to works inside the development site an application must be made to Council for a Road Occupancy Licence. Implementation of traffic management plans that address interruption or diversion of pedestrian and/or vehicular traffic must only take place following receipt of a Road Occupancy Licence from Council or the Roads and Maritime Service where on a classified road.

Where a dedicated delivery vehicle loading and unloading zone is required along the road frontage of the development site a Works Zone Application must be lodged and



approved by Council. A minimum of 3 months is required to allow Traffic Committee endorsement and Council approval.

The Construction Traffic and Pedestrian Management Plan must be reviewed and updated during construction of the development to address any changing site conditions.

A copy of the Construction Traffic and Pedestrian Management Plan must be held on site at all times and be made available to Council upon request.

4.4. Appoint a Principal Certifier for the building work:

- a) The Principal Certifier (if not Council) is to notify Council of their appointment and notify the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work no later than two (2) days before the building work commences.
- b) Submit to Council a Notice of Commencement of Building Work form giving at least two (2) days' notice of the intention to commence building work. The forms can be found on Council's website: [www.centralcoast.nsw.gov.au](http://www.centralcoast.nsw.gov.au)

4.5. Erect a sign in a prominent position on any work site on which building, subdivision or demolition work is being carried out. The sign must indicate:

- a) The name, address and telephone number of the Principal Certifier for the work; and
- b) The name of the principal contractor and a telephone number at which that person can be contacted outside of working hours; and
- c) That unauthorised entry to the work site is prohibited.
- d) Remove the sign when the work has been completed.

4.6. The Frangipani tree located on the road reserve is to be retained and to be protected by fencing and other accepted protection measures in accordance with Australian Standard AS 4970-2009: Protection of Trees on Development Sites. Tree protection measures are to be maintained for the duration of construction works.

## 5.DURING WORKS

5.1. All conditions under this section must be met during works.

5.2. Connect downpipes and the associated stormwater disposal system to the site stormwater connection point immediately after the roof materials are positioned in order to prevent erosion of the site from roof water run-off. The Principal Certifier for the development must not issue a mandatory critical stage Compliance Certificate for framing unless connection of the site stormwater (or temporary system) has occurred.

5.3. Immediately notify Council of any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination and remediation.

- 5.4. Implement all erosion and sediment control measures and undertake works in accordance with the approved Erosion and Sediment Control Plan prepared by author dated date. Update the plan as required during all stages of the construction or in accordance with the 'Blue Book' (*Managing Urban Stormwater: Soils and Construction, Landcom, 2004*).
- 5.5. No soils to be imported to the subject site except for Virgin Excavated Natural Material (VENM) as defined in Schedule 1 of the *Protection of the Environment Operations Act 1997*.
- 5.6. Implement dust suppression measures on-site during bulk earthworks to suppress dust generated by vehicles and equipment. Dust must also be suppressed at all other stages of construction in order to comply with the *Protection of the Environment Operations Act 1997*.
- 5.7. Classify all excavated material removed from the site in accordance with NSW EPA (1999) *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* prior to disposal. All excavated material must be disposed of to an approved waste management facility, and receipts of the disposal must be kept on-site.
- 5.8. All conditions under this section must be met during works.
- 5.9. The principal certifier must ensure that building work, demolition or vegetation removal is only carried out between:

7.00 am and 5.00 pm on Monday to Saturday.

The principal certifier must ensure building work, demolition or vegetation removal is not carried out on Sundays and public holidays, except where there is an emergency.

Unless otherwise approved within a construction site management plan, construction vehicles, machinery, goods or materials must not be delivered to the site outside the approved hours of site works.

Note: Any variation to the hours of work requires Council's approval.

- 5.10. While demolition or building work is being carried out, all such works must cease immediately if a relic or Aboriginal object is unexpectedly discovered. The applicant must notify the Heritage Council of NSW in respect of a relic and notify the Secretary of the Department of Planning, Industry and Environment and the Heritage Council of NSW in respect of an Aboriginal object. Building work may recommence at a time confirmed by either the Heritage Council of NSW or the Secretary of the Department of Planning, Industry and Environment.

In this condition:

"relic" means any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance; and

"Aboriginal object" means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains. To ensure the protection of objects of potential significance

- 5.11. Implement and maintain all erosion and sediment control measures at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.
- 5.12. Keep a copy of the stamped approved plans on-site for the duration of site works and make the plans available upon request to either the Principal Certifier or an officer of Council.
- 5.13. Place all building materials, plant and equipment on the site of the development during the construction phase of the development so as to ensure that pedestrian and vehicular access within adjoining public roads, footpaths and reserve areas, is not restricted and to prevent damage to public infrastructure. Further, no construction work is permitted to be carried out within the road reserve unless the works are associated with a separate approval issued under the provisions of the *Roads Act 1993*.
- 5.14. While building work is being carried out, the applicant must undertake the development strictly in accordance with the commitments listed in the BASIX certificate(s) approved by this consent, for the development to which the consent applies.
- 5.15. While building work is being carried out and where no noise and vibration management plan is approved under this consent, the applicant is to ensure that any noise caused by demolition, vegetation removal or construction does not exceed an LAeq (15 min) of 5dB(A) above background noise, when measured at any lot boundary of the property where the construction is being carried out.

#### **6. PRIOR TO ISSUE OF ANY OCCUPATION CERTIFICATE**

- 6.1. All conditions under this section must be met prior to the issue of any Occupation Certificate.
- 6.2. Construct any additional civil works, where required by Council, to ensure satisfactory transitions to existing site formations and pavements where designs contained in the Roads Act Works Approval do not adequately address transition works.
- 6.3. Complete construction of the stormwater management system in accordance with the Stormwater Management Plan and Australian Standard AS 3500.3-*Stormwater drainage systems*. Certification of the construction by a suitably qualified consultant must be provided to the Principal Certifier.

- 6.4. Complete construction of all works within the road reserve in accordance with the Roads Act Works Approval. Completion of works includes the submission and acceptance by Council of all work as executed drawings plus other construction compliance documentation and payment of a maintenance/defects bond to Council in accordance with Council's Fees and Charges.
- 6.5. Repair any damage to Council's infrastructure and road reserve as agreed with Council. Damage not shown in the dilapidation report submitted to Council before the development works had commenced will be assumed to have been caused by the development works unless the Developer can prove otherwise.
- 6.6. Complete the civil engineering works within the development site in accordance with the detailed design drawings and design reports plans within the construction certificate.
- 6.7. Amend the Deposited Plan (DP) for lot 13 DP 17440 to:
  - 1) Include an Instrument under the *Conveyancing Act 1919* for the following restrictive covenants; with Council having the benefit of these covenants and having sole authority to release and modify. Wherever possible, the extent of land affected by these covenants must be defined by bearings and distances shown on the plan. The plan and instrument must:
    - Create a 'Restriction on the use of Land' over all lots containing an on-site stormwater detention system and / or a nutrient / pollution facility and / or a stormwater retention system restricting any alteration to such facility or the erection of any structure over the facility or the placement of any obstruction over the facility.
  - 2) Include an instrument under the *Conveyancing Act 1919* for the following positive covenants; with Council having the benefit of these covenants and having sole authority to release and modify. Covenant(s) required:
    - a) To ensure on any lot containing on-site stormwater detention system and / or a nutrient / pollution facility and/or a stormwater retention system that:
      - i. the facility will remain in place and fully operational.
      - ii. the facility is maintained in accordance with the operational and maintenance plan so that it operates in a safe and efficient manner.
      - iii. Council's officers are permitted to enter the land to inspect and repair the facility at the owner's cost.
      - iv. Council is indemnified against all claims of compensation caused by the facility.

Note: Standard wording, acceptable to Council, for covenants can be obtained by contacting Council Subdivision Certificate Officer.

Submit to the Principal Certifier copies of registered title documents showing the restrictive and positive covenants.

- 6.8. Complete construction of driveways, ramps, and car parking areas in accordance with the requirements of the current edition Australian Standard AS/NZS 2890: *Parking Facilities*, other applicable Australian Standards and the detailed designs and design reports within the construction certificate. Certification by a suitably qualified person that construction is complete is to be provided to the Principal Certifier.
- 6.9. Obtain the Section 307 Certificate of Compliance under the *Water Management Act 2000* for water and sewer requirements for the development from Central Coast Council as the Water Supply Authority, prior to issue of the Occupation Certificate.
- 6.10. Provide to the Principal Certifier a design verification statement from a qualified designer, being a statement in which the qualified designer verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications in respect of which the Construction Certificate was issued, having regard to the Design Quality Principles set out in Part 2 of *State Environmental Planning Policy No 65 - Design Quality of Residential Flat Development*.
- 6.11. Provide 7 off-street car parking for residents of the building and 1 space for the sole use of visitors to the building.

Provide 1 motorcycle parking space

Provide 6 bicycle spaces

- 6.12. Execute a section 88E instrument under the *Conveyancing Act 1919* to establish the following positive covenants; with Council having the benefit of these covenants and having sole authority to release and modify.
  - a) The positive covenant(s) must ensure that for a period of 15 years from the date of the issue of the Occupation Certificate.
    - (i) units G02, 102, 201, and 202 must be used for the purposes of affordable housing as defined by the provisions of *State Environmental Planning Policy (Affordable Rental Housing) 2009*, and
    - (ii) all accommodation that is used for affordable housing must be managed by a registered community housing provider; and
    - (iii) the rent of units, G02, 102, 201, and 202, is not to exceed the formula for Affordable Housing as defined in Clause 6 of *State Environmental Planning Policy (Affordable Rental Housing) 2009*; and
    - (iv) use for in-fill development under Division 1 of *State Environmental Planning Policy (Affordable Rental Housing) 2009*.
- 6.13. Appropriate measures are to be implemented in the development to limit the use of the rooftop communal open space area to daylight hours only to protect the amenity of surrounding neighbours. Evidence to this effect is to be submitted to the satisfaction of Council's Manager Development Assessment prior to the issue of any Occupation Certificate.

## 9.ONGOING

- 9.1. Maintain the external finishes of the building(s), structures, walls and fences for the life of the development and remove any graffiti within seven (7) days.

## 10.PENALTIES

Failure to comply with this development consent and any condition of this consent may be a **criminal offence**. Failure to comply with other environmental laws may also be a **criminal offence**.

Where there is any breach Council may without any further warning:

- Issue Penalty Infringement Notices (On-the-spot fines);
- Issue notices and orders;
- Prosecute any person breaching this consent, and/or
- Seek injunctions/orders before the courts to retain and remedy any breach.

### Warnings as to Potential Maximum Penalties

Maximum Penalties under NSW Environmental Laws include fines up to \$1.1 Million and/or custodial sentences for serious offences.

## ADVISORY NOTES

- Carry out all work under this Consent in accordance with SafeWork NSW requirements including the *Workplace Health and Safety Act 2011 No 10* and subordinate regulations, codes of practice and guidelines that control and regulate the development industry
- Dial Before You Dig  
Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at [www.1100.com.au](http://www.1100.com.au) or telephone on 1100 before excavating or erecting structures. (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial Before You Dig service in advance of any construction or planning activities.
- Telecommunications Act 1997 (Commonwealth)  
Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the *Criminal Code Act*

1995 (Cth) and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact: Telstra's Network Integrity Team on phone number 1800 810 443.

The staff responsible for the preparation of the report, recommendation or advice to any person with delegated authority to deal with the application have no pecuniary interest to disclose in respect of the application.

Sian Holmes  
Reporting Officer

XXXXX  
Reviewing Officer

The staff authorised to determine the application have no pecuniary interest to disclose in respect of the application. The report is endorsed and the recommendation contained therein.

Approved/Refused:

Date:



# STORMWATER MANAGEMENT PLANS

## 6 AUBURN STREET, POINT FREDERICK, NSW 2250

### GENERAL NOTES

- ALL LINES ARE TO BE Ø100 uPVC @ MIN 1% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWER GRADE & SEALED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
- ALL PIPES TO HAVE MINIMUM 150mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN LANDSCAPE AREAS TO BE 450 x 450 PLASTIC UNO. AND ALL PITS IN DRIVEWAYS TO BE 450 x 450 CONCRETE UNO. PITS LESS THAN 600 DEEP MAY BE BRICK, PRECAST OR CONCRETE UNO.
- ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL EXTERNAL SLABS TO BE WATERPROOFED.
- ALL GRATES TO HAVE CHILD PROOF LOCKS.
- ALL DRAINAGE WORKS TO AVOID TREE ROOT ZONE.
- ALL DP'S TO HAVE LEAF GUARDS.
- ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
- ALL WORKS WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
- COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- ALL WORKS SHALL BE IN ACCORDANCE WITH BCA AND AS3500.3.
- EXISTING STORMWATER PIPE LOCATIONS HAVE BEEN ASSUMED. PLUMBER TO INSPECT PRIOR TO WORKS AND UPGRADE PIPES AS NECESSARY.

### PLAN NOTES

- ROOF DRAINAGE NOTE:** AS 3500 ROOF DRAINAGE REQUIRES EAVES GUTTERS TO BE SIZED FOR 20 YEAR 5 MIN. STORM = 205mm/hr. FOR EAVES GUTTERS, AS 3500.3:2018 THEN HAS THE FOLLOWING REQUIREMENTS:
  - FOR TYPICAL STANDARD QUAD GUTTER WITH Ae = 6000 mm<sup>2</sup> AND GUTTER SLOPE 1:500 AND STEEPER, THIS REQUIRES ONE DOWNPIPE PER 30m<sup>2</sup> ROOF AREA.
  - DOWNPIPES TO BE MINIMUM 90mm DIA. OR 100 x 50mm FOR GUTTERS SLOPE 1:500 AND STEEPER.
  - OVERFLOW METHOD TO FIGURE G1 OF AS 3500.3:2018 IT IS THE RESPONSIBILITY OF THE PLUMBER AND/OR BUILDER TO COMPLY WITH THIS. THIS DRAWING SHOWS PRELIMINARY LOCATIONS / NUMBERS OF DOWNPIPES ONLY WHICH ARE TO BE VERIFIED BY BUILDER / PLUMBER.
- TREE PRESERVATION:** IT IS RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PRIOR APPROVAL REQUIRED FROM COUNCIL WITH RESPECT TO POTENTIAL IMPACT ON TREES FOR ANY WORKS SHOWN ON THIS DRAWING PRIOR TO THE COMMENCEMENT OF THOSE WORKS.
- ALL ROOF GUTTERS TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS 3500.3:2018 AND SECTIONS 3.5, 3.7.7 AND APPENDIX G OF AS 3500.3:2018
- THIS DRAWING IS NOT TO BE USED FOR SET-OUT PURPOSES - REFER TO ARCHITECTURAL DRAWINGS
- LOCATION OF SURFACE STORMWATER GRATED INLET PITS MAY BE VARIED OR NEW PITS INSTALLED AT THE CONSTRUCTION STAGE PROVIDED DESIGN INTENT OF THIS DRAWING IS MAINTAINED.

### PIT SIZES AND DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)
UP TO 450mm	450 x 450
450mm TO 600mm	600 x 600 U.N.O
600mm TO 900mm	600 x 900 U.N.O
FROM 900mm	900 x 900 (WITH STEP IRON)

### MINIMUM PIPE COVER SHALL BE AS FOLLOWS

LOCATION	MINIMUM COVER
NO SUBJECT TO VEHICLE LOADING	100mm SINGLE RESIDENTIAL
SUBJECT TO VEHICLE LOADING	450mm WHERE NOT IN A ROAD
UNDER A SEALED ROAD	600mm
UNSEALED ROAD	750mm
PAVED DRIVEWAY	100mm PLUS DEPTH OF CONCRETE

SEE AS2032 INSTALLATION OF UPVC PIPES FOR FURTHER INFORMATION.

CONCRETE PIPE COVER SHALL BE IN ACCORDANCE WITH AS3725-1989 LOADS ON BURIED CONCRETE PIPES, HOWEVER A MINIMUM COVER OF 450mm WILL APPLY.

WHERE INSUFFICIENT COVER IS PROVIDED, THE PIPE SHALL BE COVERED AT LEAST 50mm THICK OVERLAY AND SHALL BE PAVED WITH AT LEAST:

- 150mm REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICLE TRAFFIC
- 75mm THICKNESS OF BRICK OR 100mm OF CONCRETE PAVING WHERE SUBJECT TO LIGHT VEHICLE TRAFFIC, OR
- 50mm THICK BRICK OR CONCRETE PAVING WHERE NOT SUBJECT TO VEHICLE TRAFFIC.

### DRAINAGE NOTES

- ALL DRAINAGE OUTLET LEVELS SHALL BE CONFIRMED ON SITE, PRIOR TO CONSTRUCTION COMMENCING.
- ALL PIPES WITHIN THE PROPERTY TO BE MIN. 100 DIA UPVC @ 1% MIN. GRADE. UNO.
- ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOK" OR APPROVED EQUIVALENT GRATES:
  - LIGHT DUTY FOR LANDSCAPED AREAS
  - HEAVY DUTY WHERE SUBJECTED TO VEHICULAR TRAFFIC
- PITS WITHIN THE PROPERTY MAY BE CONSTRUCTED AS:
  - PRECAST STORMWATER PITS
  - CAST INSITU MASS CONCRETE
  - CEMENT RENDERED 230mm BRICKWORKSUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
- ENSURE ALL GRATES TO PITS ARE SET BELOW FINISHED SURFACE LEVEL WITHIN THE PROPERTY. TOP OF PIT RL'S ARE APPROXIMATE ONLY AND MAY BE VARIED SUBJECT TO APPROVAL OF THE ENGINEER. ALL INVERT LEVELS ARE TO BE ACHIEVED.
- ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
- ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE.
- PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.
- TRENCH BACK FILL IN ROADWAYS SHALL COMPRISE SHARP, CLEAN GRANULAR BACK FILL IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION TO NON-TRAFFICABLE AREAS TO BE COMPACTED BY RODDING AND TAMPING USING A FLAT PLATE VIBRATOR.
- WHERE A HIGH EARLY DISCHARGE (HED) PIT IS PROVIDED ALL PIPES ARE TO BE CONNECTED TO THE HED PIT, UNO.
- DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100x100 COLORBOND/ZINCALUME STEEL UNO.
- COLORBOND OR ZINCALUME STEEL BOX GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.
- EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL UNO.
- SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.

### WATER CYCLE MANAGEMENT

AS PER CENTRAL COAST DCP 2022 CHAPTER 3.1

Table 1		Development Control Targets Matrix							
Development Control Targets	People & Spas	Development Types							
		Alterations & Additions in excess of 50m <sup>2</sup>	Single Dwellings & Dual Occupancy	Medium and High Density Residential Development	Group homes, seniors housing, emergency facilities	Commercial, Industrial	Subdivisions (Urban & Rural)		
Water Conservation		Covered by BASIX							x
Retention	x	x	x	x	x	x	x	x	
Stormwater Quality	x	x	x	x	x	x	x	x	
Onsite Detention	x	x	x	x	x	x	x	x	
Local Overland Drainage	x	x	x	x	x	x	x	x	
Flooding	x	x	x	x	x	x	x	x	

### ON-SITE RETENTION USING SECTION 3.1.11.2.4 DEEMED TO COMPLY

#### DEVELOPMENT PARAMETER

Total Site Area = 682.20 m<sup>2</sup>  
Total Impervious Area = 562.87 m<sup>2</sup> (82.5%)  
Total Grassed Area = 119.33 m<sup>2</sup> (17.5%)  
Total Roof Area = 291.47 m<sup>2</sup>

$$V = 0.01A(0.02F)^2$$

$$V = 0.01 \times 682.20 \times (0.02 \times 82.5)^2$$
$$= 18.57 \text{ m}^3$$

- WATER CONSERVATION: BASIX - NO ALTERNATE RAINWATER TANKS**
- ON-SITE RETENTION**
  - REQUIRED VOLUME = 18,570 LITRES AS PER TABLE 2
  - RAINWATER CONSUMPTION PER WEEK = 11,200 LITRES
  - RETENTION PROVIDED IN RWT = 12,000 LITRES
  - REMAINING VOLUME REQUIRED FOR INFILTRATION-CUM-SLOW RELEASE = 18,570 - 12,000 = 6,570 LITRES
  - ADOPTED INFILTRATION VOLUME = 7,340 LITRES IN AUSTRALIAN MODULE 2
- STORMWATER QUALITY - OCEAN GUARD OCEANPROTECT INSERTS
- ON-SITE DETENTION - 9.0 CUBIC METRES UNDERGROUND TANK (REFER TO DRAINS MODEL DESIGN SUMMARY IN DRAWING S6)
- LOCAL OVERLAND DRAINAGE - FLOOR LEVELS ARE RAISED ABOVE THE SURROUNDING GROUND LEVELS & DRAINAGE PROVIDED AT THE LOW AND TRAPPED POINTS
- FLOODING:**
  - FLOODING EXPOSURE OF THE SITE DURING THE 1% AEP EVENT IS LIMITED TO TRAPPED LOW POINT WITHIN THE BUILDING COURTYARDS AND LANDSCAPING AREA. THE PATCHES OF FLOOD AFFECTATION SHOWN IN COUNCIL'S FLOOD EXTENT MAPPING IS DUE TO THE RAIN-ON-GRID FLOOD MODELING METHODOLOGY ADOPTED. COUNCIL SHOULD WAIVE THE FLOOD CONTROL REQUIREMENTS FOR THIS SITE AS THE NATURE OF FLOODING IS NUISANCE FLOODING ONLY THAT CAN BE EASILY MANAGED BY INTERNAL DRAINAGE SYSTEM.

### LOCALITY PLAN



### LEGENDS


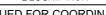
DESCRIPTION	
	STORMWATER PIPE
	SUB SOIL PIPE/ AGG LINE
	SEDIMENT FENCE
	DOWNPIPE
	RAINWATER OUTLET
	FLOOR DRAIN
	DISH DRAIN OUTLET
	PLANTER DRAIN OUTLET
	GRATED SURFACE INLET PIT
	JUNCTION PIT WITH SEALED LID
	INSPECTION OPENING WITH SCREW DOWN LID AT FINISH SURFACE LEVEL
	CLEANING EYE
	CHARGED LINE MAINTENANCE PIT
	NON RETURN / REFLUX VALVE
	KERB INLET PIT
	KERB INLET PIT EXISTING
	GRATED DRAIN
	OVERLAND FLOWPATH
	OVERFLOW OUTLET
	WALL PENETRATION
	DOWNPIPE SPREADER TO ROOF BELOW

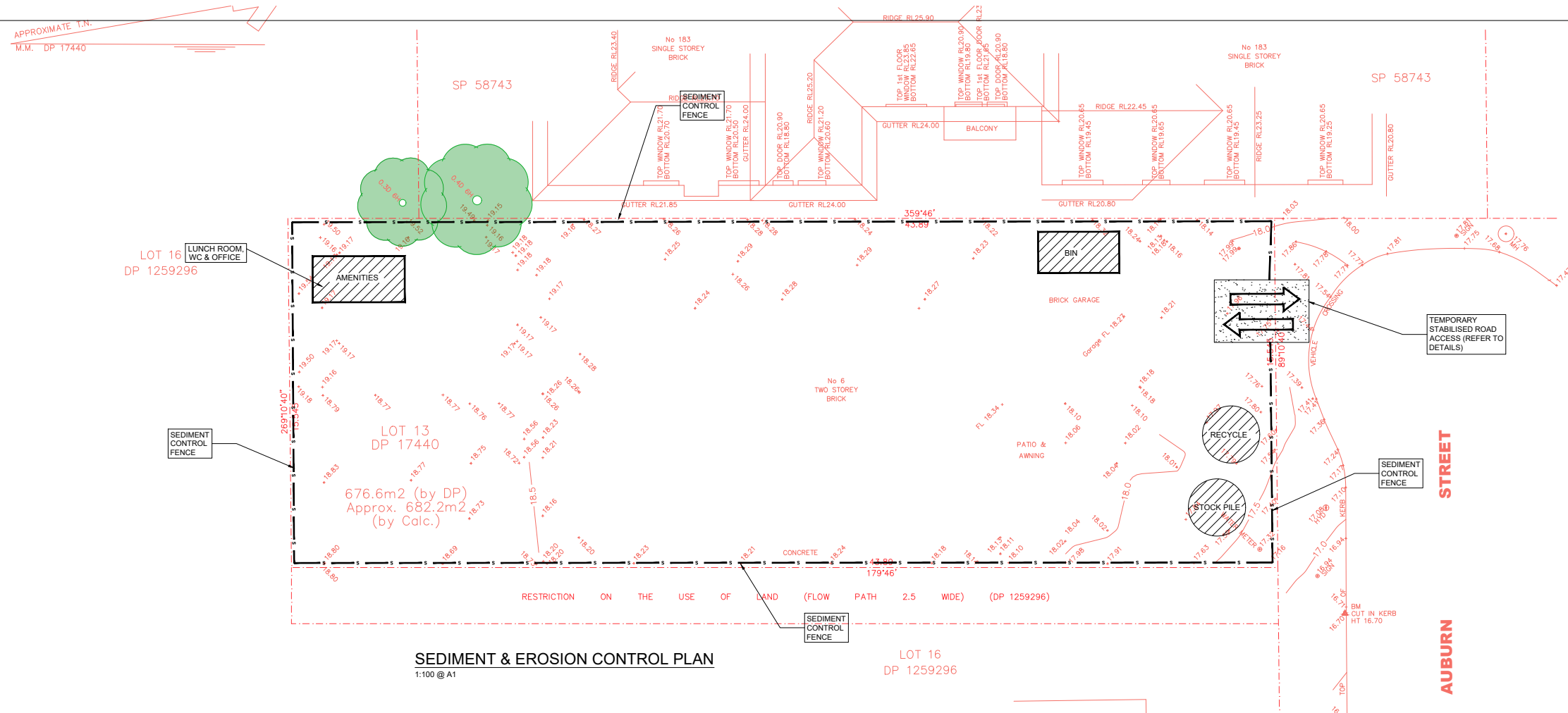
### SCHEDULE OF DRAWINGS

SHEET No	DESCRIPTION
S0	GENERAL NOTES
S1	SEDIMENT AND EROSION CONTROL PLAN
S2	LOWER GROUND FLOOR DRAINAGE PLAN
S3	GROUND FLOOR DRAINAGE PLAN
S4	STORMWATER SECTIONS & DETAILS
S5	WATER QUALITY REPORT
S6	STORMWATER SECTIONS & DETAILS

www.dialbeforeyoudig.com.au



 PYRAMID ENGINEERING CONSULT pyramidengineeringconsult@gmail.com	PYRAMID ENGINEERING CONSULT ABN 5464 1177 826 29/73 Sovereign Cct, GLENFIELD NSW 2167 0403 362 125 pyramidengineeringconsult@gmail.com	GENERAL NOTES		CLIENT / ARCHITECT	DRAWING TITLE		APPROX TRUE NORTH	DRAWN	APPROVED	REVISION	DESCRIPTION	DATE	SCALE - SIZE	JOB NUMBER				
		ALL DIMENSIONS SHOWN IN DRAWINGS ARE TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF WORKS. DO NOT SCALE OFF DRAWINGS. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURE PLANS. ALL EXISTING SERVICES & TREES ARE APPROXIMATE ONLY. TO BE VERIFIED ON-SITE BY BUILDER. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH: a) ALL RELEVANT & CURRENT BUILDING CODES, ACTS & REGULATIONS b) ALL CURRENT AUSTRALIAN STANDARDS c) ALL LOCAL REGULATIONS AS WELL AS ALL DCP & LEP POLICIES. COPYRIGHT INFORMATION: THIS DRAWING IS THE COPYRIGHT OF PYRAMID ENGINEERING CONSULT. COPYING OR USING THIS DRAWING IN WHOLE OR PART WITHOUT WRITTEN CONSENT INFRINGES COPYRIGHT.		<div>FUSE-ARCHITECTS</div> <div>ARCHITECTURE   URBAN DESIGN   INTERIOR DESIGN</div>	GENERAL NOTES			KK	KP	A	ISSUED FOR COORDINATION	19-09-2022	ISSUED FOR DA APPROVAL	AS NOTED - A1	P2243			
		SITE ADDRESS			KK	KP					B	ISSUED FOR FINAL COORDINATION				09-11-2022	DRAWING NUMBER	REVISION
		6 AUBURN STREET, POINT FREDERICK			KK	KP					C	ISSUED FOR DA APPROVAL				15-11-2022		
		KK	KP	D	ISSUED FOR COORDINATION ONLY	24-11-2023	S0	E										
						KK	KP	E	ISSUED FOR DA APPROVAL	12-12-2023								



**SEDIMENT & EROSION CONTROL PLAN**  
1:100 @ A1

**SEDIMENT AND EROSION CONTROL NOTES**

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILIZED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION.

ACCESS TO THE SITE WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF CONSTRUCTION.

THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCROACHES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.

THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING SURFACE WATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLETS AND DRAINAGE TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.

SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STRIP PICKETS ARE USED) PLASTIC SAFETY CAPS WHICH WILL BE COLORED AT 200M INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.

ALL TOPSOIL STRIPPED FROM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE RELOCATED TO THE CORRESPONDING SOIL STORAGE AREA. EXCESSIVE MATERIAL AND SCREENED BY PERVIOUS MEMBRANE.

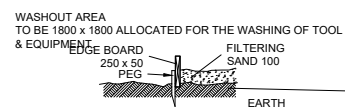
**SOIL CONSERVATION NOTE:**

PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE' 'SEDIMENT TRAP' AND 'VEGETATION AREA' TO PREVENT EROSION OF WATER BORNE MATERIAL GENERATED FROM THE SITE.

MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION. AND CLEAR THE 'SEDIMENT TRAP' AFTER EACH STORM.

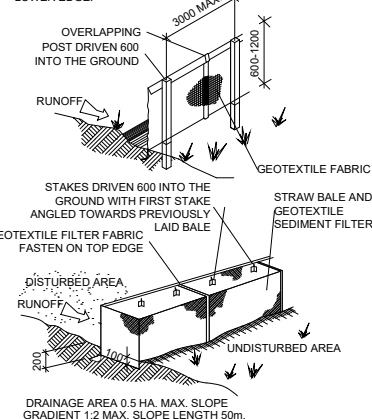
**SEDIMENT TRAP**

1000 x 1000 mm 500 DEEP TRIP LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.



## SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN. FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.



DRAINAGE AREA 0.5 HA. MAX. SLOPE  
GRADIENT 1:2 MAX. SLOPE LENGTH 50m

### VEHICLE ACCESS TO SITE

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.

## GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE).

NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

(UNDER CONSTRUCTION)

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE

GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

## STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.



ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

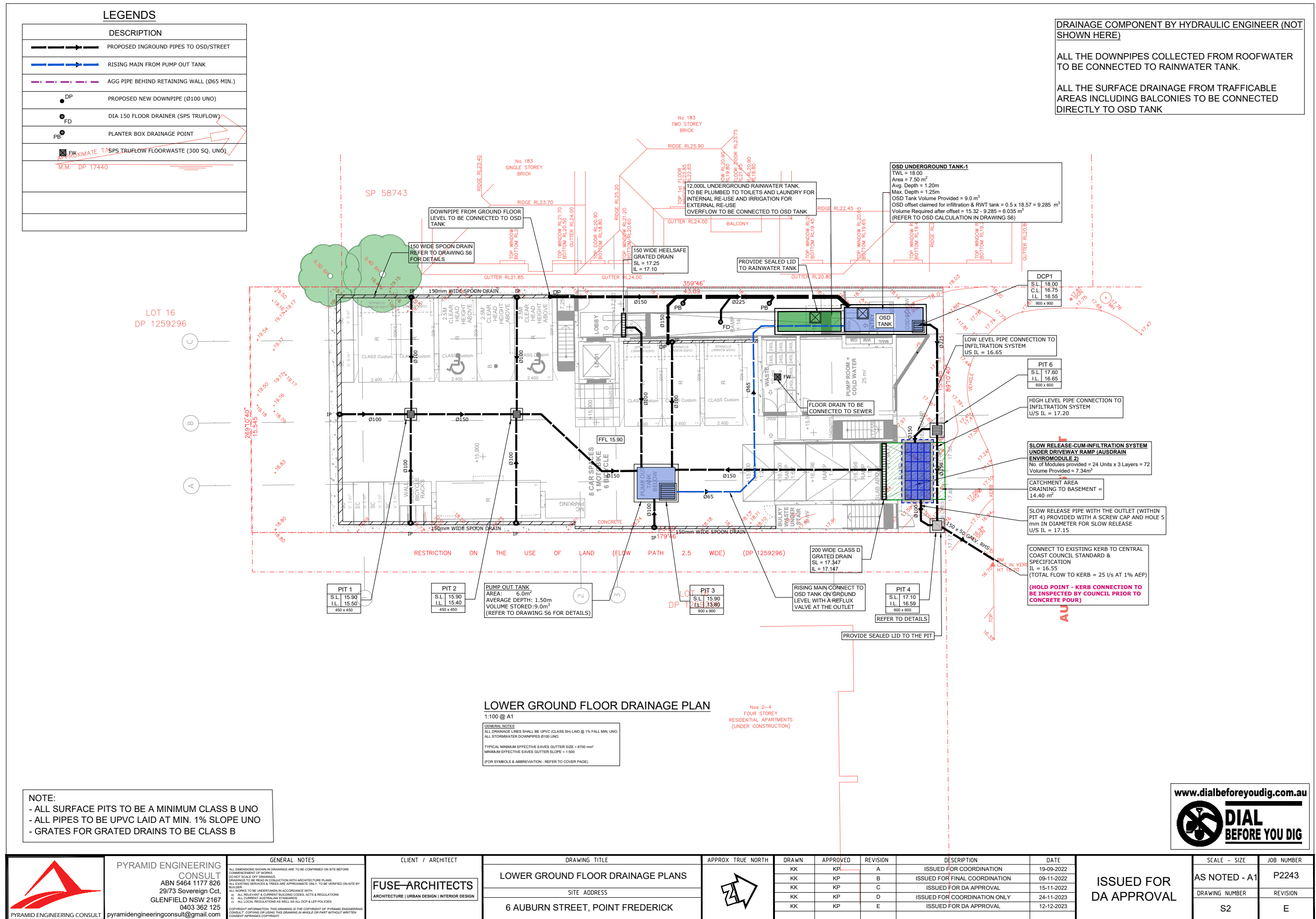
DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

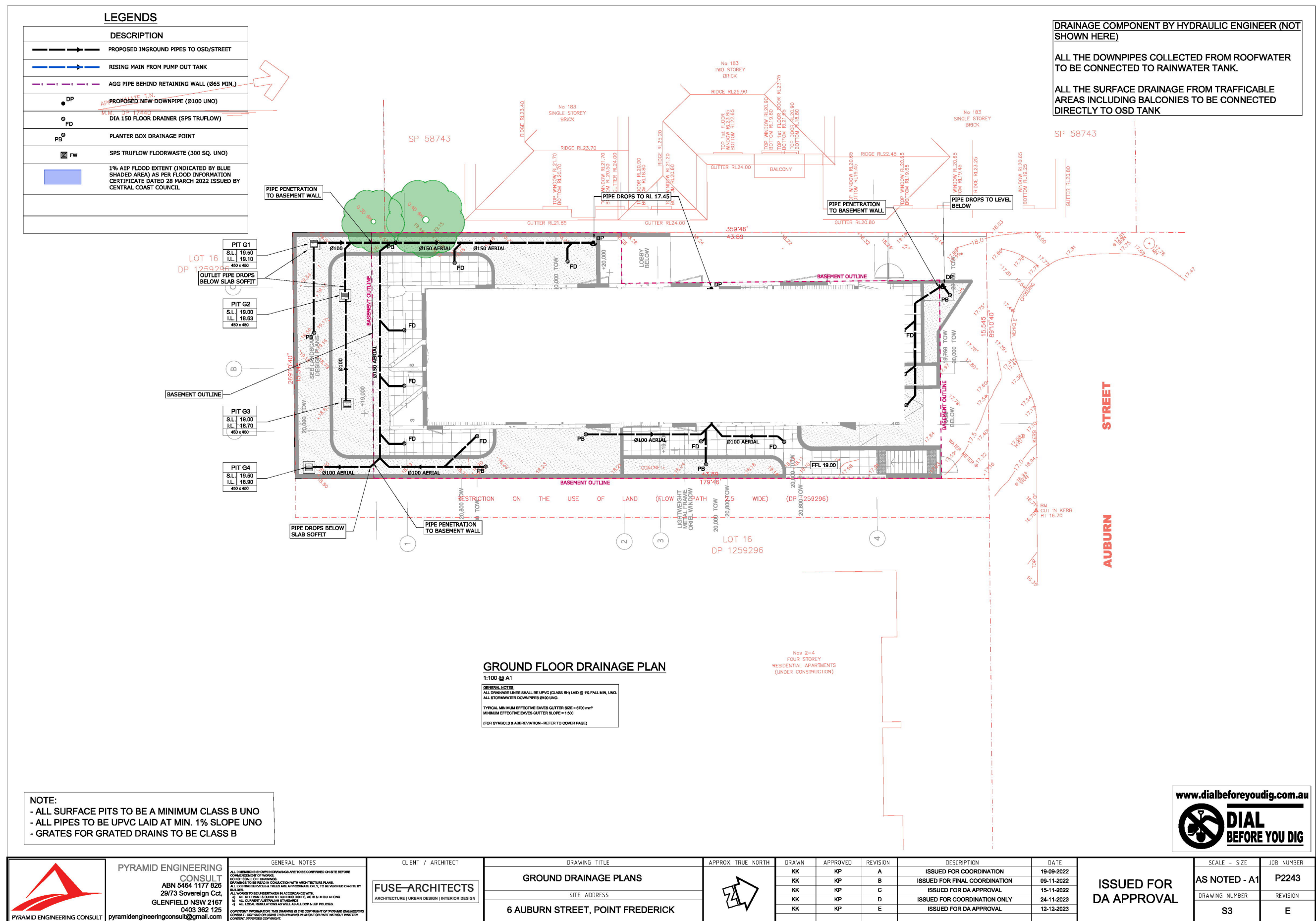
EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

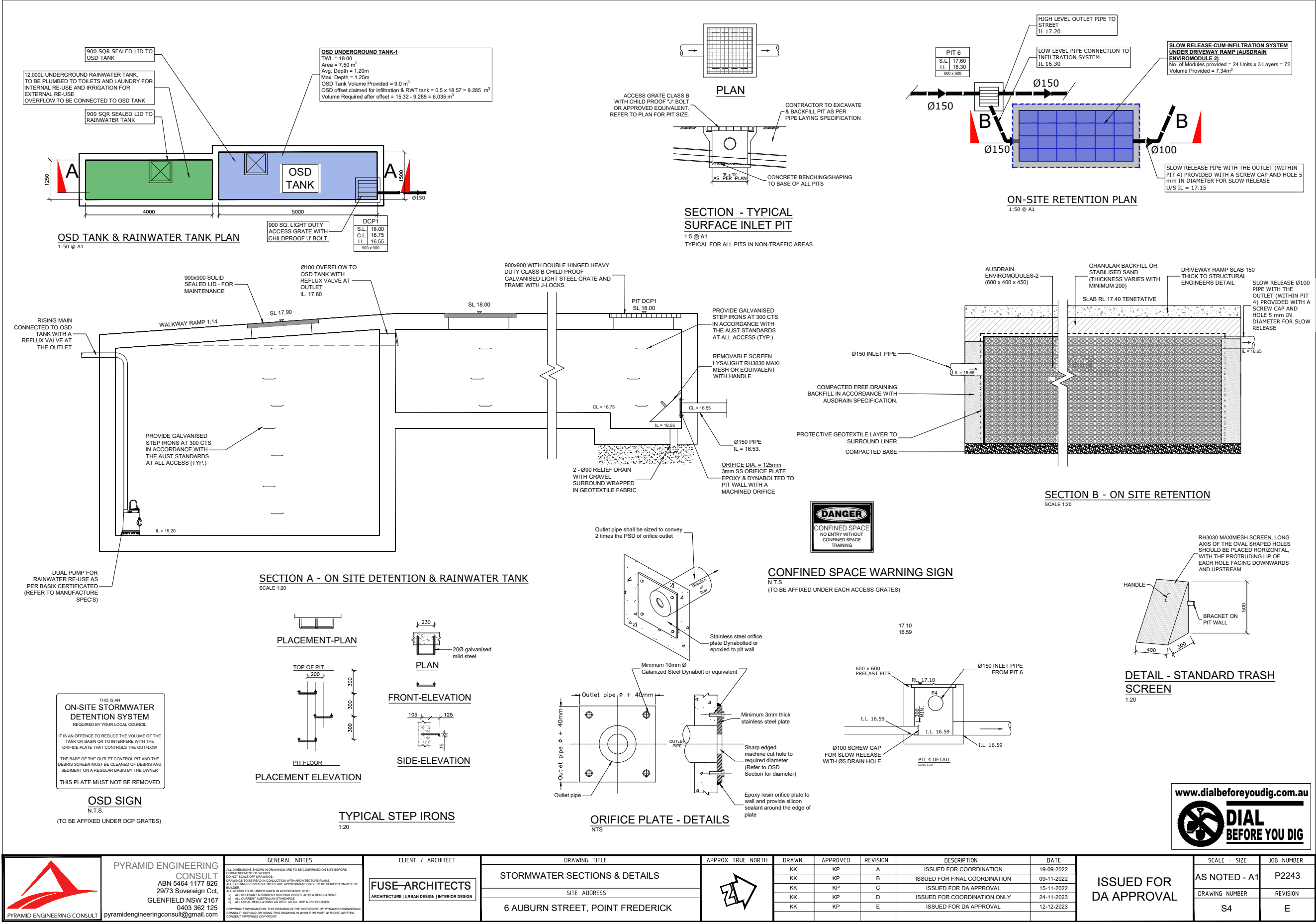
SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

 PYRAMID ENGINEERING CONSULT	PYRAMID ENGINEERING CONSULT ABN 5464 1177 826 29/73 Sovereign Cct, GLENFIELD NSW 2167 0403 362 125 pyramidengineeringconsult@gmail.com	<p>GENERAL NOTES</p> <p>ALL DIMENSIONS SHOWN IN DRAWINGS ARE TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF WORKS.</p> <p>DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURE PLANS.</p> <p>ALL EXISTING SERVICES &amp; TREES ARE APPROXIMATE ONLY, TO BE VERIFIED ON-SITE BY THE BUILDER.</p> <p>ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH:</p> <ul style="list-style-type: none"><li>(a) ALL RELEVANT &amp; CURRENT BUILDING CODES, ACTS &amp; REGULATIONS</li><li>(b) ALL CURRENT AUSTRALIAN STANDARDS</li><li>(c) ALL CURRENT AUSTRALIAN STANDARDS</li></ul> <p><b>COPYRIGHT INFORMATION:</b> THIS DRAWING IS THE COPYRIGHT OF PYRAMID ENGINEERING CONSULT. COPYING OR USING THIS DRAWING IN WHOLE OR PART WITHOUT WRITTEN CONSENT INFRINGES COPYRIGHT.</p>	<p>CLIENT / ARCHITECT</p> <p><b>FUSE-ARCHITECTS</b></p> <p>ARCHITECTURE   URBAN DESIGN   INTERIOR DESIGN</p>	DRAWING TITLE		APPROX TRUE NORTH	DRAWN	APPROVED	REVISION	DESCRIPTION	DATE	ISSUED FOR DA APPROVAL	SCALE - SIZE	JOB NUMBER
				SEDIMENT & EROSION CONTROL PLAN			KK	KP	A	ISSUED FOR COORDINATION	19-09-2022		AS NOTED - A1	P2243
				SITE ADDRESS			KK	KP	B	ISSUED FOR FINAL COORDINATION	09-11-2022		DRAWING NUMBER	REVISION
				6 AUBURN STREET, POINT FREDERICK			KK	KP	C	ISSUED FOR DA APPROVAL	15-11-2022		S1	E
							KK	KP	D	ISSUED FOR COORDINATION ONLY	24-11-2023			
			KK	KP	E	ISSUED FOR DA APPROVAL	12-12-2023							











WATER QUALITY MANAGEMENT  
AS PER CENTRAL COAST DCP 2022 CHAPTER 3.1.

1. WATER QUALITY TARGETS

POLLUTANT	% RETENTION TARGET OF THE ANNUAL AVERAGE LOAD (kg/ha/yr)
TOTAL SUSPENDED SOLIDS (TSS)	90%
GROSS POLLUTANTS	80%
TOTAL NITROGEN (TN)	45%
TOTAL PHOSPHOROUS (TP)	45%

2. ON-SITE RETENTION TARGET

- 2.1. REQUIRED VOLUME = 18,570 LITRES AS PER TABLE 2
- 2.2. RETENTION IN RWT = 12,000 LITRES
- 2.3. REMAINING VOLUME REQUIRED FOR RETENTION AFTER CONSUMPTION = 6,570 LITRES
- 2.4. ADOPTED RETENTION VOLUME = 7,340 LITRES IN AUSDRAIN MODULE 2

3. CHOICE OF MODEL

MUSIC MODEL DEVELOPED BY Ewater HAS BEEN UTILISED IN ORDER TO ANALYSE THE WATER QUALITY PERFORMANCE OF THE DEVELOPMENT AND TO ASSESS THE EFFECTIVENESS OF THE PROPOSED WATER QUALITY IMPROVEMENT DEVICES.

4. DATA UTILISED

- 4.1. USE OF MUSIC LINK PROVIDED BY CENTRAL COAST COUNCIL THAT IS BUNDLED WITH AN EXISTING RAINFALL AND EVAPO-TRANSPARATION DATA FOR THE LOCALITY OF THE SITE
- 4.2. LAND USE DATA IS CALCULATED BASED ON THE PROPOSED LANDSCAPING
- 4.3. RAINFALL DATA AT SYDNEY OBSERVATORY HILL WITHIN THE PERIOD OF 1974 TILL 1994 WAS UTILISED WITHIN THE COUNCIL'S MUSIC LINK. NO EXTRA RAINFALL DATA WAS COLLECTED FOR THIS STUDY BESIDE THE ONE PROVIDED IN MUSIC LINK.
- 4.4. TIMESTEP OF 6 MINUTES WAS UTILISED FOR THE RAINFALL SIMULATIONS
- 4.5. POTENTIAL EVAPOTRANSPIRATION DATA (PET) WAS ALSO OBTAINED IN MUSIC LINK FOR EACH MONTH

5. POST DEVELOPMENT SUB-CATCHMENT DEFINITION

- 5.1. POST DEVELOPMENT SITE AREA HAS BEEN DIVIDED INTO ROOF AREAS (DRAINING TO RAINWATER TANK) AND DRIVEWAY & OTHER AREAS DRAINING TO INFILTRATION SYSTEM AS SHOWN BELOW

WATER QUALITY REPORT

A. MODEL ASSUMPTIONS

A.1. RAINFALL - RUNOFF PARAMETERS USED IN MUSIC MODEL

PARAMETER	VALUE
IMPERVIOUS AREA PROPERTIES	
RAINFALL THRESHOLD (mm/Day)	1%
PERVIOUS AREA PROPERTIES	
SOIL STORAGE CAPACITY (mm)	250%
SOIL INITIAL STORAGE (% OF CAPACITY)	30%
FIELD CAPACITY (mm)	100%
INFILTRATION CAPACITY COEFFICIENT - a	200%
INFILTRATION CAPACITY EXPONENT -b	1%
GROUND WATER PROPERTIES	
INITIAL DEPTH (mm)	10
DAILY RECHARGE RATE (%)	4
DAILY BASEFLOW RATE (%)	2
DAILY SEEPAGE RATE (%)	0

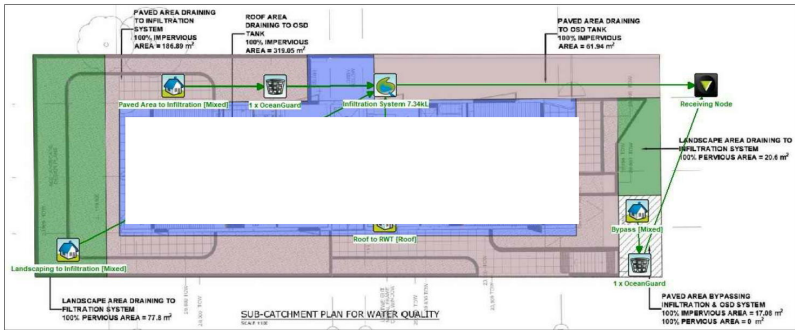
B. ADOPTED WATER QUALITY STRATEGY

- B.1. RETENTION IN RAINWATER TANK = 12,000 LITRES (TOTAL FOR THE BUILDING)
- B.2. RETENTION IN INFILTRATION SSYTEM = 7,340 LITRES
- B.3. USE OF OCEAN-PROTECT OCEAN GUARD ON PITS WITHIN PAVED AREAS
- B.4. USE OF OCEAN-PROTECT OCEAN GUARD ON PIT ON BYPASS AREA

C. NODAL PARAMETERS

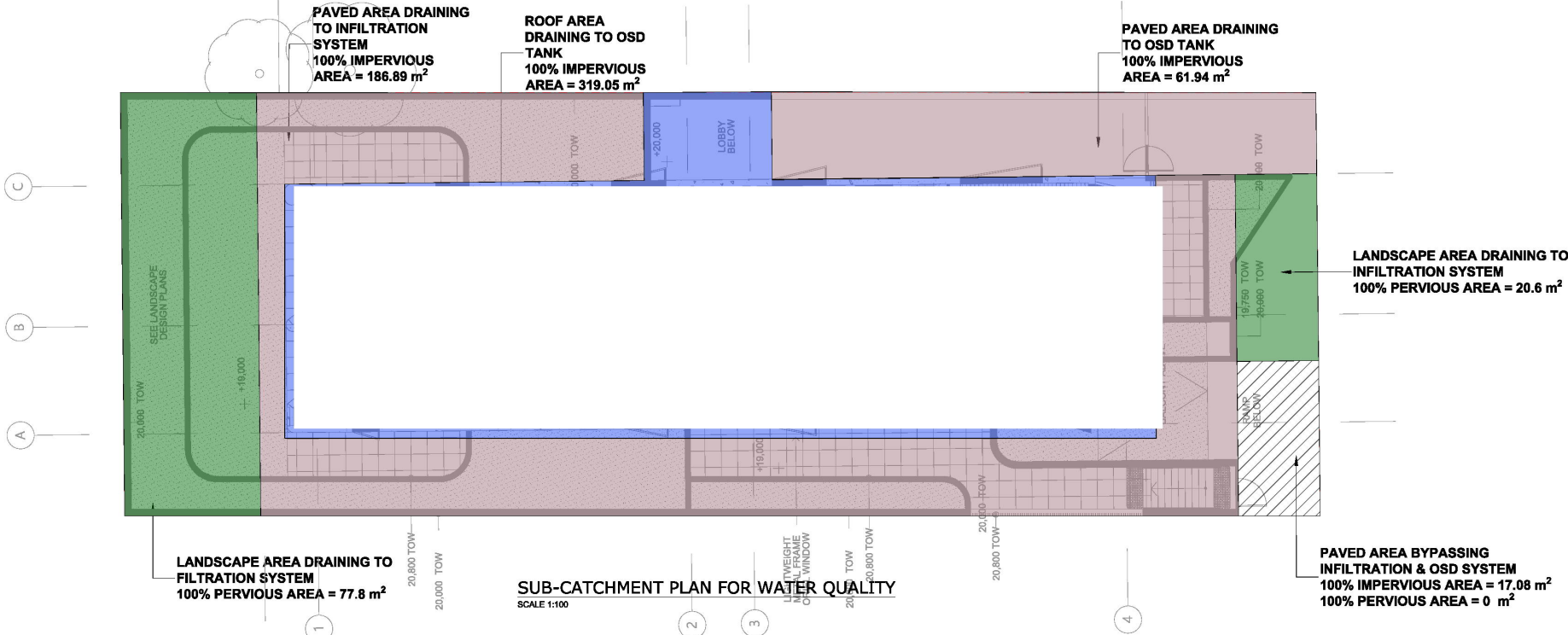
- C.1. RAINWATER NODE - AS SHOWN
- C.2. INFILTRATION SYSTEM NODE - AS SHOWN



D. MUSIC MODEL SETUP

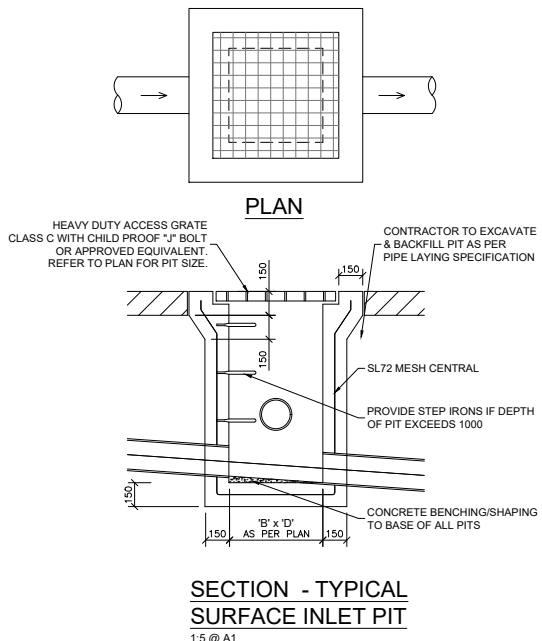


D. TREATMENT TRAIN EFFECTIVENESS (MUSIC MODEL RESULT)

POLLUTANT	% REDUCTION IN THE ANNUAL AVERAGE LOAD	TARGET ACHIEVEMENT
TOTAL SUSPENDED SOLIDS (TSS)	93%	YES
GROSS POLLUTANTS	100%	YES
TOTAL NITROGEN (TN)	86%	YES
TOTAL PHOSPHOROUS (TP)	86%	YES



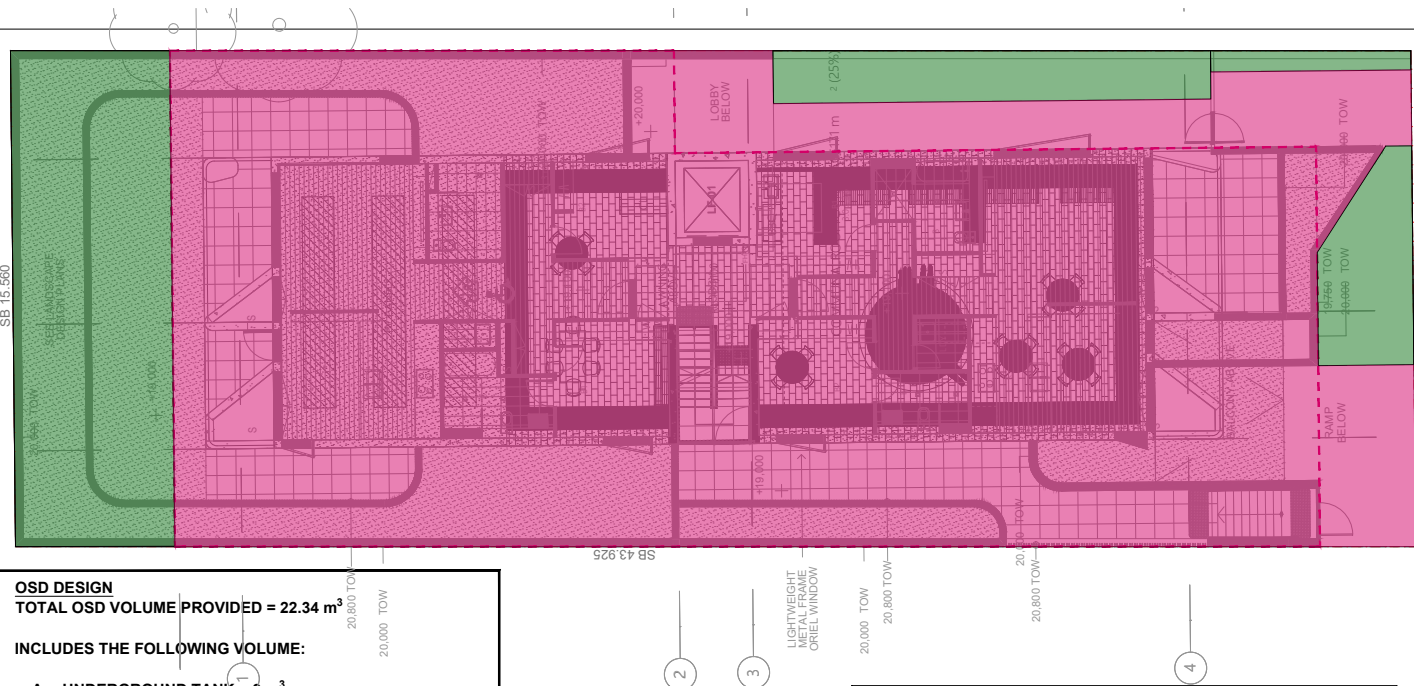
 PYRAMID ENGINEERING CONSULT ABN 5464 1177 826 29/73 Sovereign Cct, GLENFIELD NSW 2167 0403 362 125 pyramidengineeringconsult@gmail.com	<b>PYRAMID ENGINEERING CONSULT</b>  ALL DIMENSIONS SHOWN IN DRAWINGS ARE TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF WORK. DO NOT SCALE OFF DIMENSIONS. ALL DIMENSIONS TO BE USED IN CONSTRUCTION WITH ARCHITECTURE PLANS. ALL EXISTING SERVICES & TREES ARE APPROXIMATE ONLY, TO BE VERIFIED ON-SITE BY ALLIANCE. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH: a) ALL RELEVANT & CURRENT BUILDING CODES, ACTS & REGULATIONS b) ALL CURRENT AUSTRALIAN STANDARDS c) ALL LOCAL REGULATIONS AS WELL AS ALL DCP & LEP POLICIES. COPYRIGHT INFORMATION: THIS DRAWING IS THE COPYRIGHT OF PYRAMID ENGINEERING CONSULT. COPIES OR USING THIS DRAWING IN WHOLE OR PART WITHOUT WRITTEN CONSENT INFRINGES COPYRIGHT.	<b>CLIENT / ARCHITECT</b>  <b>FUSE-ARCHITECTS</b> ARCHITECTURE   URBAN DESIGN   INTERIOR DESIGN	<b>DRAWING TITLE</b>			<b>APPROX TRUE NORTH</b>	<b>DRAWN</b>	<b>APPROVED</b>	<b>REVISION</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>ISSUED FOR DA APPROVAL</b>	<b>SCALE - SIZE</b>	<b>JOB NUMBER</b>		
			<b>WATER QUALITY REPORT</b>				KK	KP	A	ISSUED FOR COORDINATION	19-09-2022		<b>AS NOTED - A1</b>	<b>P2243</b>		
			<b>SITE ADDRESS</b> <b>6 AUBURN STREET, POINT FREDERICK</b>				KK	KP	B	ISSUED FOR FINAL COORDINATION	09-11-2022				<b>DRAWING NUMBER</b>	<b>REVISION</b>
							KK	KP	C	ISSUED FOR DA APPROVAL	15-11-2022					
			KK	KP	D	ISSUED FOR COORDINATION ONLY	24-11-2023						<b>S5</b>	<b>E</b>		
			KK	KP	E	ISSUED FOR DA APPROVAL	12-12-2023									



PROPOSED IMPERVIOUS AREA FOR OSD CALCULATION  
SCALE 1:100

**PAVED AREA**  
100% IMPERVIOUS AREA = 562.87 m<sup>2</sup> (82.50% OF SITE)

**LANDSCAPING AREA**  
100% PERVIOUS AREA = 119.33 m<sup>2</sup> (17.50% OF SITE)



DESIGN SUMMARY - DRAINS MODEL

TOTAL SITE AREA = 682.20 m<sup>2</sup>  
DRAINS MODEL HAS BEEN PREPARED FOR CALCULATION OF PRE & POST DEVELOPMENT FLOWS, USING ILSAX METHOD

**PRE - DEVELOPMENT**  
EXISTING IMPERVIOUS AREA = 0.00 m<sup>2</sup> (ASSUMED 0% IN DCP)  
EXISTING PERVIOUS AREA = 879.80 m<sup>2</sup> (100%)

**POST - DEVELOPMENT**  
POST - DEVELOPMENT IMPERVIOUS = 562.87 m<sup>2</sup> (82.5%)  
POST - DEVELOPMENT PERVIOUS = 119.33 m<sup>2</sup> (17.50%)

OSD DESIGN

TOTAL OSD VOLUME PROVIDED = 22.34 m<sup>3</sup>

INCLUDES THE FOLLOWING VOLUME:

A. UNDERGROUND TANK = 9 m<sup>3</sup>  
B. STORAGE WITHIN SLOW RELEASE SYSTEM = 7.34 m<sup>3</sup>  
C. OFFSET CLAIMED FROM RAINWATER = 50% x 12 = 6 m<sup>3</sup>

OSD ORIFICE DIA = 130mm (DISCHARGE CONTROL FOR 5% AEP)

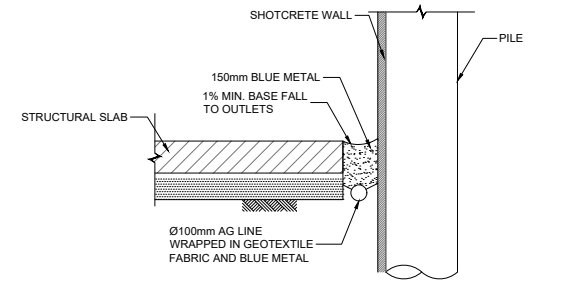
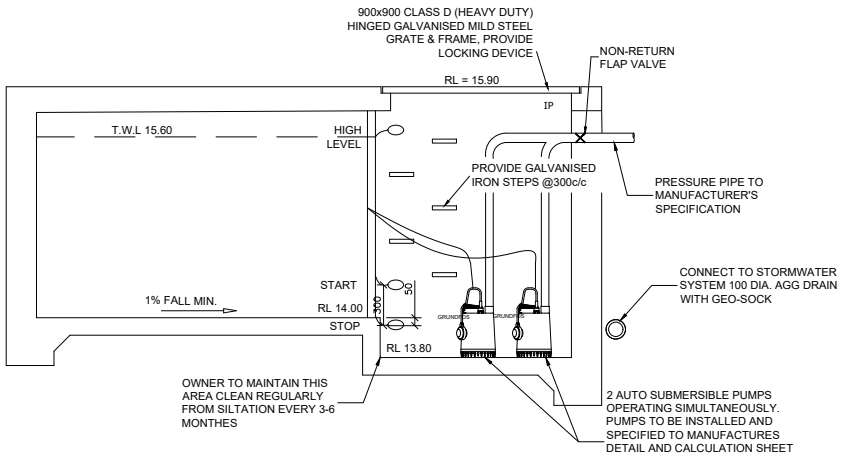
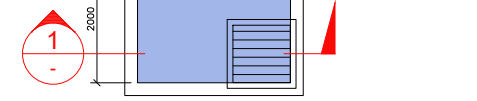
SUMMARY OF CALCULATION					
	PRE-DEVELOPMENT FLOW (L/S)	POST-DEVELOPMENT FLOW (L/S)			OSD VOLUME REQUIRED (m3)
		OSD	BYPASS	TOTAL	
AEP STORM					
20% (~5YR ARI)	22.00	12.00	0.00	12.00	12.90
10% (~10YR ARI)	28.00	15.00	0.00	15.00	14.67
5% (~20YR ARI)	34.00	17.00	0.00	17.00	16.63
1% (~100YR ARI)	50.00	25.00	0.00	25.00	23.29

STANDARD PUMP OUT DESIGN NOTES

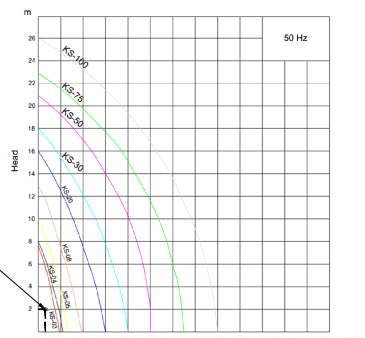
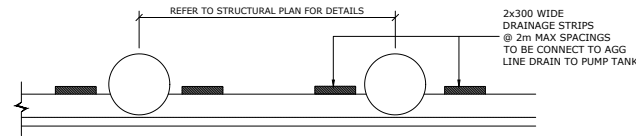
THE PUMP OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED IN THE FOLLOWING MANNER:-

- > THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
- > A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
- > A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.
- > A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
- > AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

BASEMENT PUMP OUT TANK PLAN



SPOON DRAIN DETAILS



PUMP DESIGN SUMMARY

CATCHMENT AREA = 33.60 m<sup>2</sup> (DRIVEWAY & WALKWAY RAMP)  
100 YEAR ARI 12 HOUR STORM = 19.1 mm/hr  
TOTAL WATER = 12 x 19.1 mm = 229.2 mm  
TOTAL STORAGE VOLUME REQUIRED = 0.2292 x 33.60 = 7.70m<sup>3</sup>

SEEPAGE = 2.5ML/YEAR/Ha = 6.85 m<sup>3</sup>/Ha (ASSUMED)  
SEEPAGE = AREA x 6.85m<sup>3</sup> = 0.1085 x 6.85 = 0.75 m<sup>3</sup>

TOTAL PUMP-OUT TANK REQUIRED = 7.70 + 0.75 = 8.45 m<sup>3</sup>  
PUMP OUT TANK VOLUME PROVIDED = 4.20 m<sup>3</sup> (MINIMUM)


PUMP HEAD = 1.8 m  
RAINFALL INTENSITY FOR CALCULATIONS = 100 YEAR ARI  
STORM DURATION 5 MINUTE = 307 mm/h  
PUMP RATE REQUIRED = 307 x 14.40 / 3600 = 1.228 l/s = 73.68 l/min

2 x SABRE KS-03 SUBMERSIBLE PUMPS (OR APPROVED EQUIVALENT) PUMPS TO BE USED

MODEL NO.	OUTPUT	DISCHARGE			RATED		MAXIMUM		WEIGHT	DIMENSION
		HP	KW	mm	INCH	HEAD	CAPACITY	HEAD		
KS-03	1/3	0.25	40	1 1/2"	3	150	8	180	9	168 x 141 x 305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	200 x 140 x 399
KS-05	1/2	0.4	50	2"	5	160	8	230	12	230 x 150 x 359
KS-10	1	0.75	50 (80)	2 1/2"	6	240	13	380	21	290 x 180 x 425
KS-20	2	1.5	80	3"	10	300	16	600	31	278 x 182 x 475
KS-30	3	2.2	80	3"	10	500	18	800	42	390 x 250 x 450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450 x 240 x 530
KS-75	7.5	5.6	100	4"	15	800	23	1300	60	550 x 310 x 590
KS-100	10	7.5	150	6"	18	900	26	1600	70	550 x 310 x 610

SABRE PUMP GRAPH & SPECIFICATION





**PYRAMID ENGINEERING CONSULT**  
ABN 5464 1177 826  
29/73 Sovereign Cct,  
GLENFIELD NSW 2167  
0403 362 125  
pyramidengineeringconsult@gmail.com

GENERAL NOTES

ALL DIMENSIONS SHOWN IN DRAWINGS ARE TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF WORKS.

DO NOT SCALE OFF DRAWINGS.

DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURE PLANS.

ALL EXISTING SERVICES & TREES ARE APPROXIMATE ONLY. TO BE VERIFIED ON-SITE BY THE CLIENT.

ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH:

- 1) ALL RELEVANT & CURRENT BUILDING CODES, ACTS & REGULATIONS
- 2) ALL CURRENT AUSTRALIAN STANDARDS
- 3) ALL LOCAL REGULATIONS AS WELL AS ALL DCP & LEP POLICIES

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CLIENT / ARCHITECT

**FUSE-ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN


DRAWING TITLE

STORMWATER SECTIONS & DETAILS

SITE ADDRESS

6 AUBURN STREET, POINT FREDERICK

APPROX TRUE NORTH

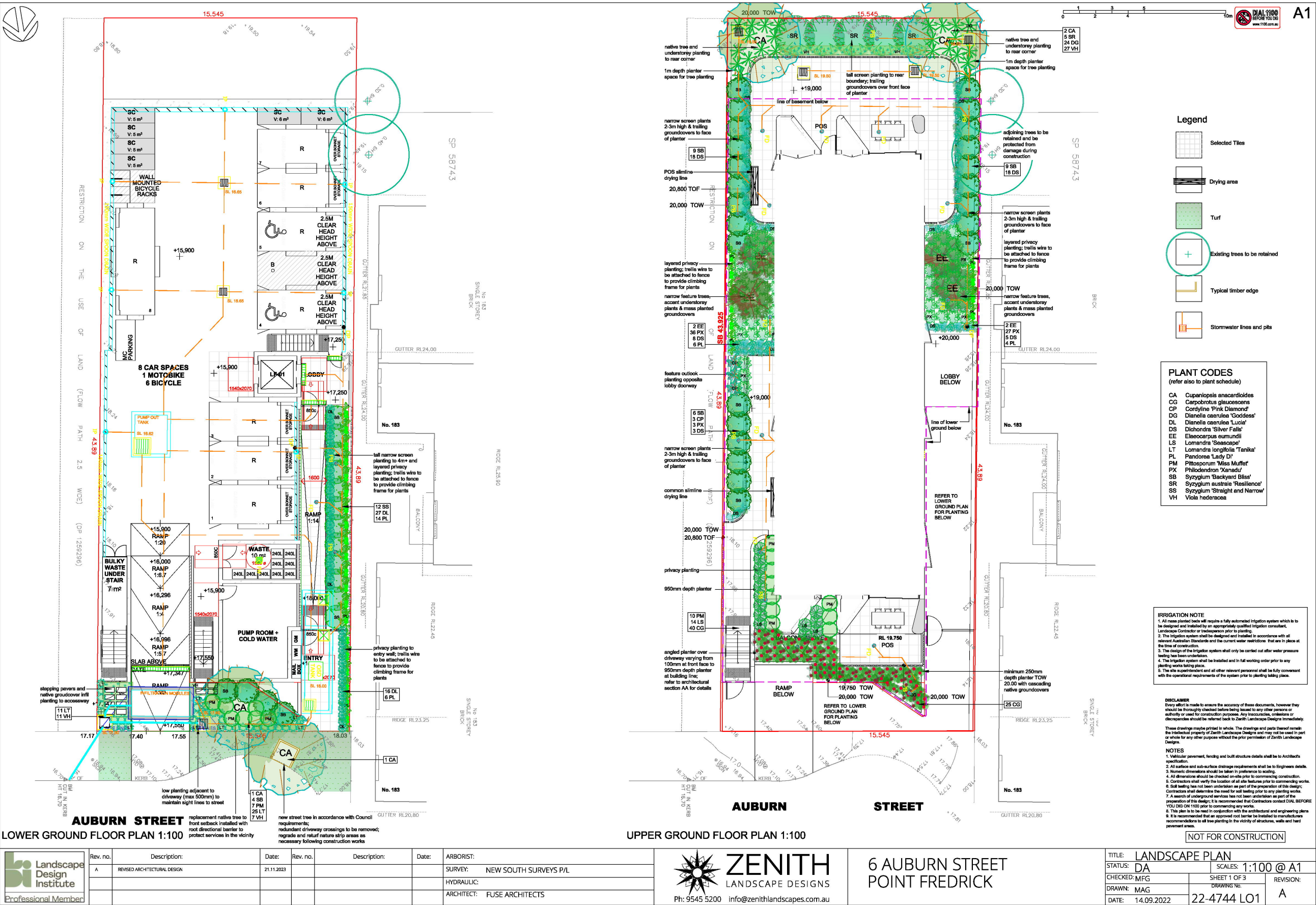


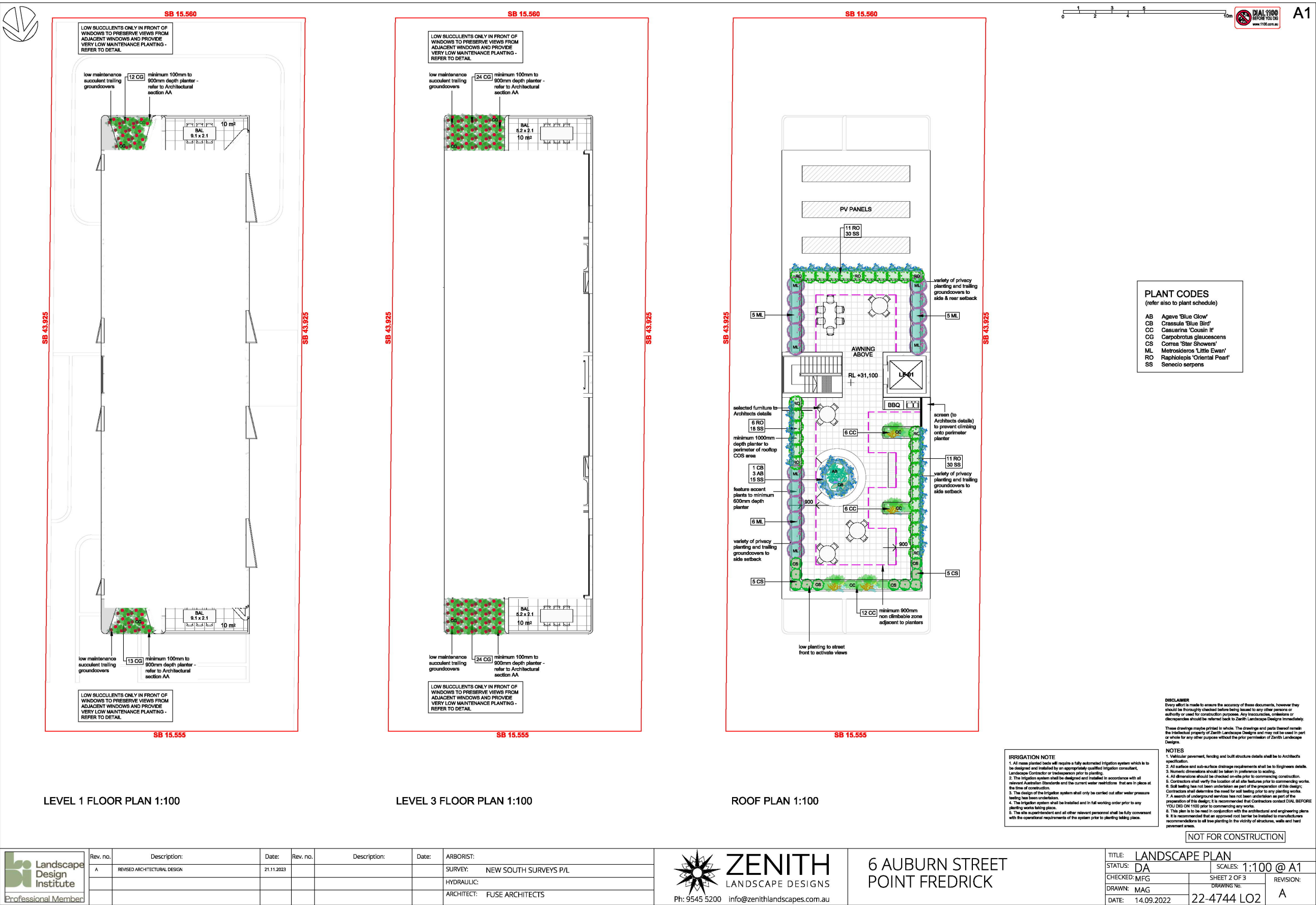
DRAWN	APPROVED	REVISION	DESCRIPTION	DATE
KK	KP	A	ISSUED FOR COORDINATION	19-09-2022
KK	KP	B	ISSUED FOR FINAL COORDINATION	09-11-2022
KK	KP	C	ISSUED FOR DA APPROVAL	15-11-2022
KK	KP	D	ISSUED FOR COORDINATION ONLY	24-11-2023
KK	KP	E	ISSUED FOR DA APPROVAL	12-12-2023

ISSUED FOR DA APPROVAL

SCALE - SIZE	JOB NUMBER
AS NOTED - A1	P2243
DRAWING NUMBER	REVISION
S6	E











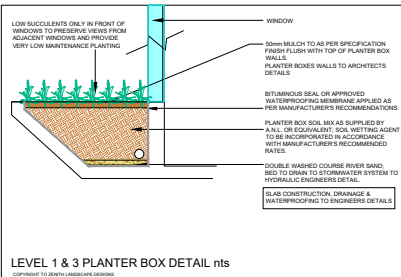
A1

## PLANT SCHEDULE- LOWER and UPPER GROUND FLOOR

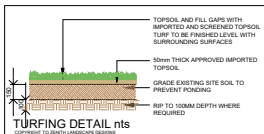
SYMBOL	SPECIES	No.	Pot Size	Mat. Hgt.	Stake	COMMON NAME
CA	Cupaniopsis anacardioides	4	100ltr	6m+	yes	Tuckeroo
EC	Elaeocarpus eumundii	4	75ltr	6m+	no	Quandong
SR	Syzygium australe 'Resilience'	5	25ltr	5m	no	Brush Cherry
SS	Syzygium 'Straight and Narrow' (hedged)	12	25ltr	4m+	no	Straight and Narrow
SB	Syzygium 'Backyard Bliss'	28	5ltr	2-3m	no	Magenta Cherry
CP	Cordylone 'Pink Diamond'	3	5ltr	2m	no	Pink Diamond
PM	Pittosporum 'Miss Muffet'	17	150mm	1m	no	Dwarf Pittosporum
DG	Dianella caerulea 'Goddess'	24	150mm	0.9m	no	Flax Lily
PX	Philodendron 'Xanadu'	66	5ltr	0.8m	no	Dwarf Philodendron
LS	Lomandra 'Seascape'	14	150mm	0.75m	no	Cascading Mat Rush
LT	Lomandra longifolia 'Tanika'	36	150mm	0.5m	no	Dwarf Mat Rush
DL	Dianella caerulea 'Lucia'	43	150mm	0.45m	no	Spreading Flax Lily
CG	Carpobrotus glaucescens	65	150mm	g/cover	no	Native Pigface
DS	Dichondra 'Silver Falls'	52	150mm	g/cover	no	Silver Dichondra
VH	Viola hederacea	45	150mm	g/cover	no	Native Violet
PL	Pandorea 'Lady Di'	30	5ltr	climber	trellis	White Bower Vine
	Sapphire Buffalo Turf					

## PLANT SCHEDULE- LEVELS 1,3 and ROOF

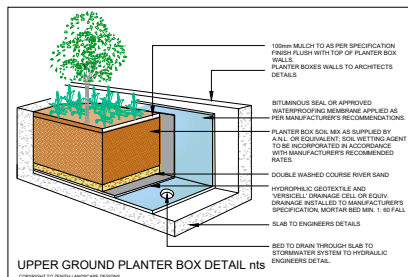
SYMBOL	SPECIES	No.	Pot Size	Mat. Hgt.	Stake	COMMON NAME
CB	Crassula 'Blue Bird'	1	150mm	1m	no	Bluebird Jade
ML	Metrosideros 'Little Ewan'	16	150mm	1m	no	Dwarf Metrosideros
RO	Raphiolepis 'Oriental Pearl'	28	150mm	1m	no	White Hawthorn
AB	Agave 'Blue Glow'	3	150mm	0.6m	no	Blue Glow
CS	Correa 'Star Showers'	10	150mm	0.3m	no	Prostrate Coastal Correa
CC	Casuarina 'Cousin It'	24	150mm	g/cover	no	Prostrate She-oak
SS	Senecio serpens	93	150mm	g/cover	no	Blue Chalk Sticks
CG	Carpobrotus glaucescens	73	150mm	g/cover	no	Native Pigface



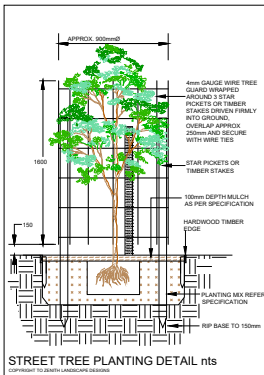
LEVEL 1 &amp; 3 PLANTER BOX DETAIL nts



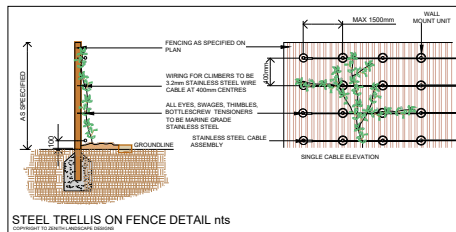
TURFING DETAIL nts



UPPER GROUND PLANTER BOX DETAIL nts



STREET TREE PLANTING DETAIL nts



STEEL TRELLIS ON FENCE DETAIL nts

## LANDSCAPE GUIDELINES

## 1. GENERAL

- 1.1 The Contractor shall familiarise themselves with the site prior to tender.
- 1.2 The Contractor will be held responsible for any damage to utility services, pipes, building structures, paving surfaces, footways, kerbs, roads and existing plant material.
- 1.3 The site is to be left in a clean and tidy condition at the completion of works to the satisfaction of the Superintendent.
- 1.4 No work involving an extra shall be undertaken unless approval is first obtained from the Superintendent.
- 1.5 No substitute of material shall be made unless approval is given by the Superintendent.
- 1.6 The Contractor shall continuously maintain all areas of the Contract during progress of the works specified.

## 2. SITE PREPARATION

- 2.1 Prepared sub-grade is to be free of stones larger than 100mm diameter, cement, rubbish and any other foreign matter that could hinder plant growth.
- 2.2 Once clear of weed growth, grass and debris, sub-grade should be cultivated to a minimum depth of 150mm incorporating Dynamic Lifter or equivalent at the manufacturer's recommended rates.
- 2.3 Weeds shall be controlled by a combination of chemical and hand removal techniques.

## 3. MASS PLANTED AREAS

- 3.1 All plant material is to be hardened off, disease and insect free and true to species, type and variety. Plants are to be well grown but not root bound and shall comply with Natagene, "Guide to Purchasing Landscape Trees".
- 3.2 All plants are to be removed from their containers prior to planting with as little disturbance to the root system as possible.
- 3.3 Planting shall not be carried out in dry soil or extreme weather conditions.
- 3.4 Plants should be planted at the same depth as the plants were in the containers and allow for a shallow saucer of soil to be formed around the plant to aid the penetration of water.
- 3.5 All plant material should be watered thoroughly immediately after planting.
- 3.6 The Contractor shall be responsible for the failure of plants during construction, except for acts of vandalism.
- 3.7 Labels shall be removed entirely from the plants.

## 4. STAKING

- 4.1 This should be firmly attached to the stakes, in a way to avoid damage to the stem while allowing a small degree of movement.

## 5. TURF AREAS

- 5.1 Turf areas should be cultivated before turving by ripping or harrowing.
- 5.2 At the completion of turving the whole area shall be thoroughly soaked and kept moist till the completion of landscape works.

## 6. MULCH

- 6.1 Mulch for all general mass planted beds shall be "Droughtmaster" mulch as supplied by A.N.L. or similar.

## 7. SOIL MIXES

- 7.1 Soil mix for mass planted areas shall be 3 parts site soil to 1 part "Organic Garden Mix" as supplied by A.N.L. or equivalent.
- 7.2 Soil mix for street tree planting shall be 1 part site soil to 1 part "Organic Garden Mix" as supplied by A.N.L. or equivalent.
- 7.3 Soil mix for planter boxes and planting over slab shall be "Planter Box Mix" as supplied by A.N.L. or equivalent.

## MAINTENANCE

1. These works shall be in addition to the construction contract.
2. The Contractor shall commence and fully implement the short term maintenance after Practical Completion has been confirmed by the Superintendent.
3. The Contractor shall carry out maintenance works for a minimum period of 26 weeks.
4. Maintenance works shall include the following works:

- a. Mow lawns and trim edges each 10 days in summer and each 14 days in winter.
- b. Water all planting and lawn areas in order to ensure adequate soil moisture at all times.
- c. Remove any weed growth from all planting areas.
- d. Spray and control pests and diseases as required.
- e. Replace plants which fail with plants of similar size and quality as originally planted.
- f. Adjust ties to trees as necessary.
- g. Make good any erosion or soil subsidence which may occur.
- h. Maintain all mulched areas in a clean and tidy condition to the depth as originally specified.
- i. Make good any defects or faults arising from defective workmanship.

Note: The Contractor is not to be held responsible for the theft or vandalism of any plants during the maintenance period.

5. Advanced trees shall be individually inspected at least once a month in order to determine their health and vigor. Should the trees exhibit any signs of disease, pest infestation or poor growth then a qualified arborist shall be consulted within 14 days in order to determine the most appropriate course of action. Recommended treatment shall then be commenced within 7 days and shall continue until the problem is eliminated.
6. When the maintenance period is completed the Contractor shall notify the Superintendent. The site shall then be inspected and if to the satisfaction of the Superintendent the responsibility will be handed over to the Client for on-going maintenance.

**DISCLAIMER**  
Every effort is made to ensure the accuracy of these documents, however they should be thoroughly checked before being issued to any other persons or authority or used for construction purposes. Any inaccuracies, omissions or discrepancies should be referred back to Zenith Landscape Designs immediately.

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## NOTES

1. Vehicular pavement, fencing and built structure details shall be to Architect's specification.
2. All surface and sub-surface drainage requirements shall be to Engineers details.
3. All dimensions should be checked on-site prior to commencing construction.
4. All dimensions should be checked on-site prior to commencing construction.
5. Contractors shall verify the location of all site features prior to commencing works.
6. Soil testing has not been undertaken as part of the preparation of this design. Contractors shall determine the need for soil testing prior to any planting works.
7. A search of underground services has not been undertaken as part of the preparation of this design. It is recommended that Contractors contact DIAL BEFORE YOU DIG ON 1100 prior to commencing any works.
8. This plan is to be read in conjunction with the architectural and engineering plans.
9. It is recommended that an approved root barrier be installed to manufacturers recommendations to all tree planting in the vicinity of structures, walls and hard pavement areas.

NOT FOR CONSTRUCTION



Rev. no.	Description:	Date:	Rev. no.	Description:	Date:
A	REVISED ARCHITECTURAL DESIGN	21.11.2023			

ARBORIST:	
SURVEY:	NEW SOUTH SURVEYS P/L
HYDRAULIC:	
ARCHITECT:	FUSE ARCHITECTS

6 AUBURN STREET  
POINT FREDRICK

TITLE:	LANDSCAPE PLAN
STATUS:	DA
CHECKED:	MFG
DRAWN:	MAG
DATE:	14.09.2022
SCALES:	AS SPEC @ A1
SHEET 3 OF 3	
DRAWING NO:	22-4744 LO3
REVISION:	A

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 4**

**PUBLIC Redacted Additional Traffic Engineering Letter - 6 Auburn St POINT**



CONSULTING  
ENGINEERS

27 November 2023

Ref: 22091

Central Coast Council

PO Box 20

WYONG NSW 2259

Attn: Sian Holmes

Dear Sian,

**DA/3915/2022  
6 Auburn Street, Point Frederick  
Proposed In-Fill Affordable Housing Development  
Vehicular Access & Visitor Parking Matters**

I refer to Council's letter to the project architect, Fuse Architecture, dated 31 August 2023, requesting additional information in respect of the abovementioned development proposal. Please see attached revised architectural plans along with the following advice in respect of the matters raised under Items 3 & 6 of your letter.

**Council comment**

**3. *Non-compliance with Maximum Building Height and boundary interface issues –***

The building as currently proposed does not comply with the maximum height of building control (13.95m proposed where 12m allowed) and proposes a high front boundary wall and high side walls (up to 3.9m above the floor level of the ground floor unit on the adjoining site to the east) which is inconsistent with the existing and likely future context. Consideration should be given to lowering the carpark and the building by approximately 2m to ensure the building relates to its context and to assist in achieving the objectives of the ADG. Further this would result in a complying height, reduce the overpowering height of the side boundary walls and reduce the blank brick wall on the street frontage which provides a poor streetscape presentation.

**CJP response**

In order to address the building height non-compliance as much as possible, we explored to what extent the basement RL could be lowered by, and in turn, what that did to the ramp design.

In this regard, the basement RL of the submitted scheme was RL16.650, whereas the proposed amended basement RL has been lowered to RL15.900 – i.e. a lowering of 750mm. This was achieved by reducing the top 1:20 ramp section from 6m in length down to 4m in length, as well as introducing a 1:4 section with transitions.

Whilst the shortening of the 1:20 ramp section to 4m is a departure from AS2890.1:2004 requirements, the 4m length still achieves the objectives of the 6m which is to ensure that vehicles are on a near-level surface as they exit a property and cross over the boundary into the public domain. Drivers are therefore better placed to observe pedestrians on the frontage footpath if the car is on a near-level surface.

It is pertinent to note, however, that the front overhang and wheelbase of a B99 design vehicle has a length of 3.85m, such that with a 4m @ 1:20 top ramp section, an exiting B99 is entirely on the 1:20 section prior to exiting the property – i.e. whether the 1:20 top ramp section is 4m long, 6m long or 14m long, the vehicle is on the same plane.

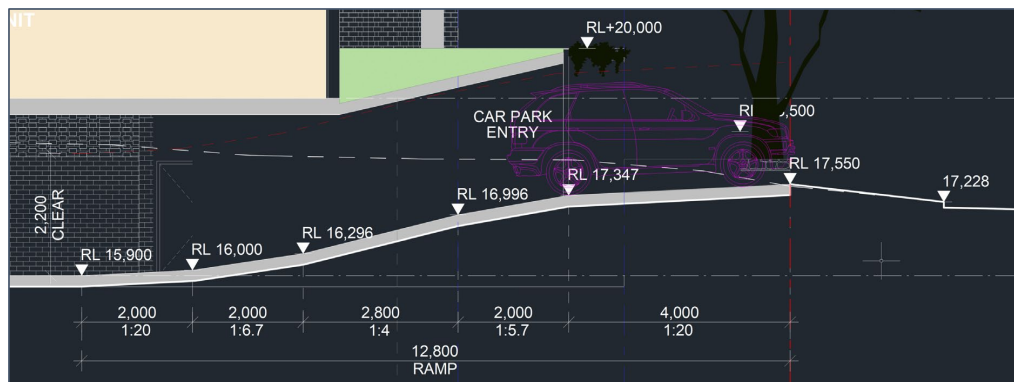


Figure 1 – Proposed vehicular access ramp with exiting vehicle

The proposed adjustments to the vehicular ramp has resulted in its overall length increasing to 2m beyond the ramp walls, albeit it at a mild gradient of 1:20 – i.e. a 100mm fall. It is recommended that this 100mm is locally “feathered” on both sides of the bottom 2m of the ramp to match the finished slab level.

Other than the length of the abovementioned 1:20 ramp section, the proposed basement parking layout remains fully compliant with the AS2890 series requirements. Given the modest scale of the proposed development, the amended vehicular access design is considered acceptable in this instance, particularly as it assists in lowering the height of the building.

#### Council comment

##### 6. Visitor car parking –

The proposal does not provide any visitor car parking notwithstanding that the ADG requires provision at a rate of 1 space per 5 units (i.e. 2 spaces would be required) with parking to be provided at a rate of 0.9 spaces /2 bedroom unit. It is noted that on street parking in the vicinity of the site is difficult therefore further consideration should be given to the provision of visitor parking.

#### CJP response

As noted in the Traffic & Parking Assessment Report (TPAR) that accompanied the DA, the proposal is an in-fill affordable housing development. The planning instrument that outlines the off-street car parking rates applicable to the proposal are contained in the SEPP (Housing) 2021, Chapter 2, Part 2, Division 18, Clause 18. This clause is a “non-discretionary” development standard under the Act – i.e. if complied with, the consent authority cannot request more onerous standards for the matters.



CONSULTING  
ENGINEERS

It is pertinent to note that the SEPP does not specify a parking rate for visitors for in-fill affordable housing developments, such that no visitor parking is proposed.

Based on the parking rates specified in the SEPP, the proposed development requires the minimum provision of 8 residential car parking spaces, of which 8 residential spaces are proposed.

Accordingly, based on the SEPP's non-discretionary standards, the consent authority cannot request visitor parking, given the relevant section of the SEPP does not specify a requirement to provide any.

I trust the above addresses Council's relevant comments. Please do not hesitate to contact me on the number below should you have any queries.

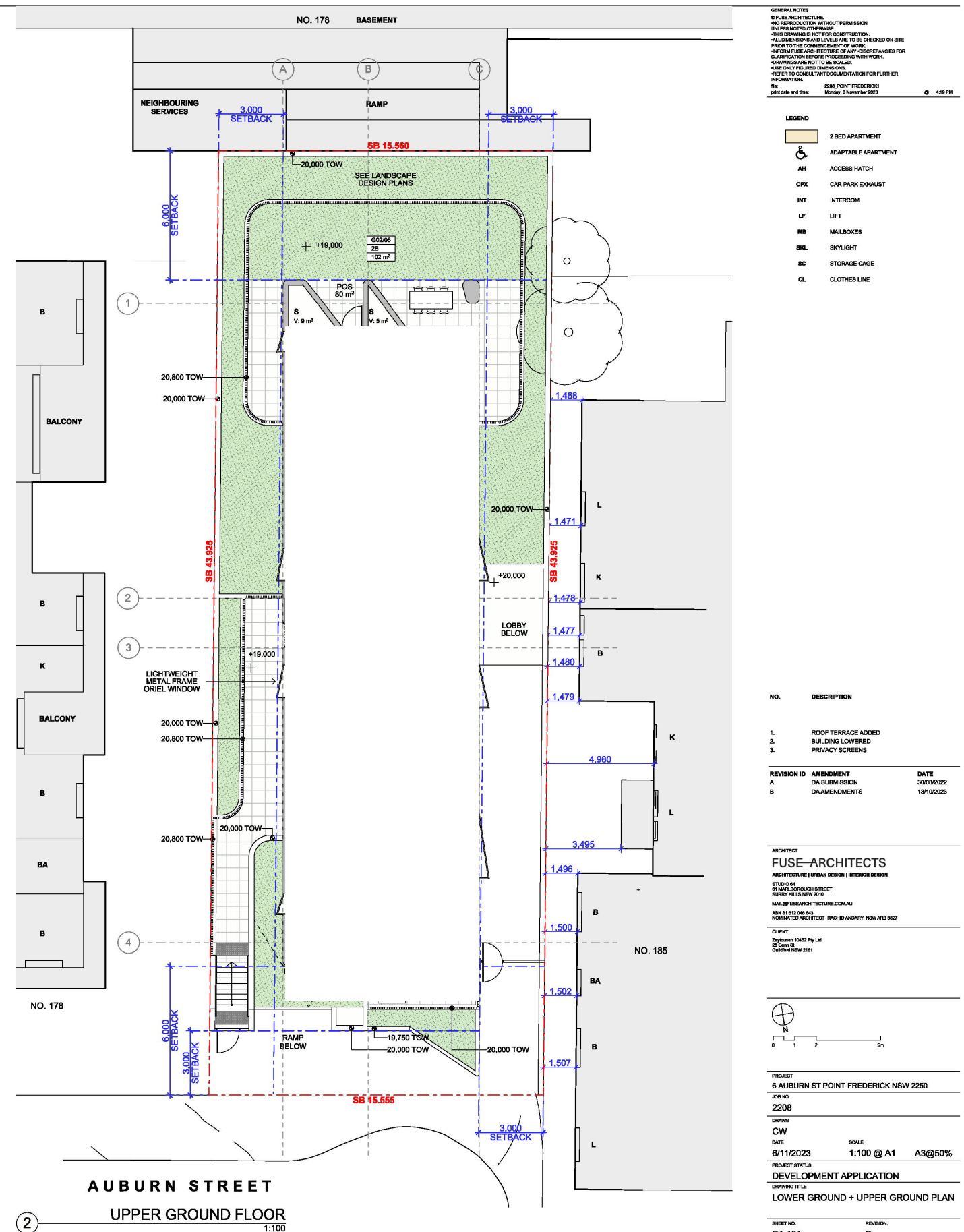
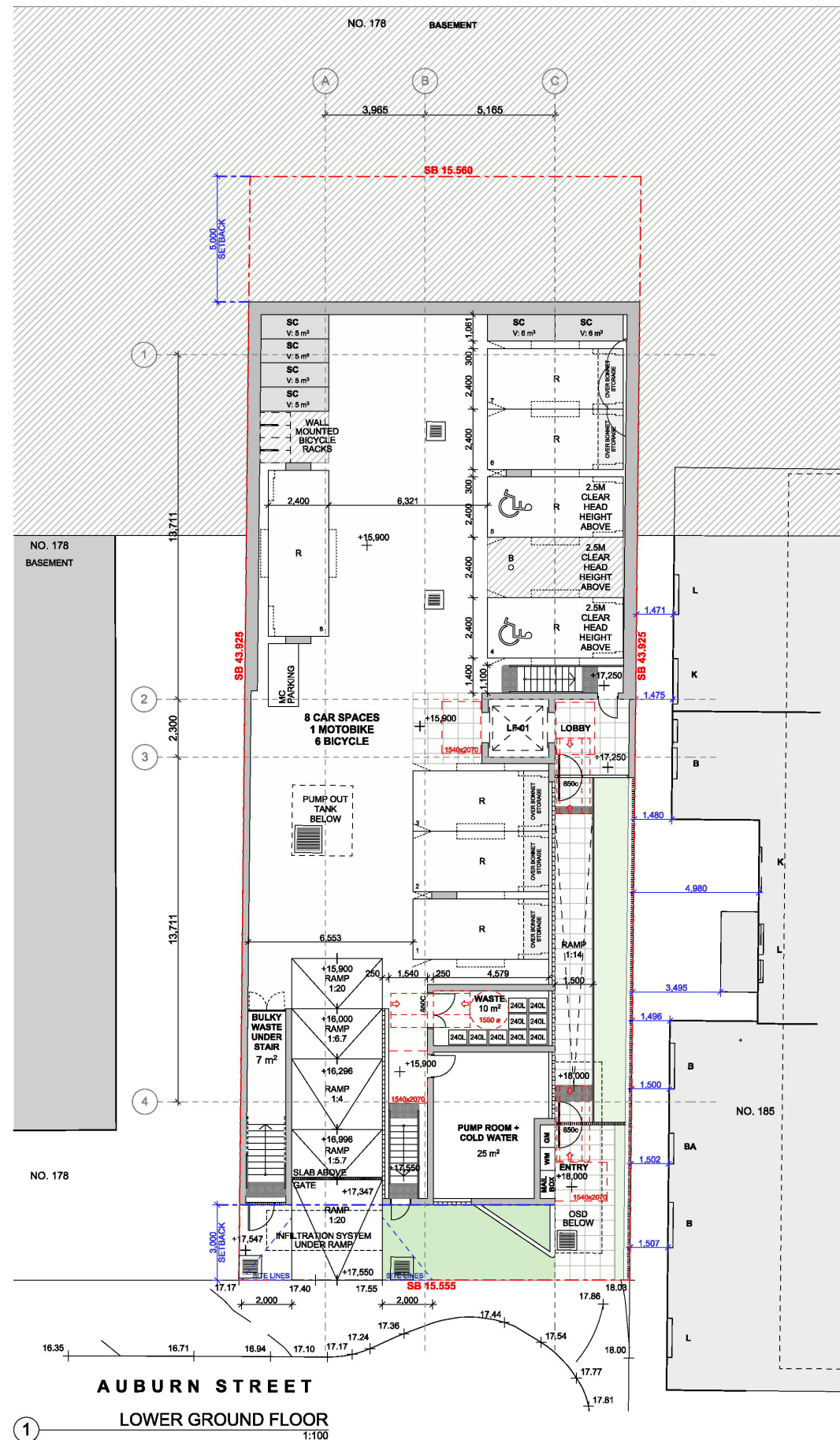
Kind regards

Chris Palmer  
Director  
B.Eng (Civil), MAITPM

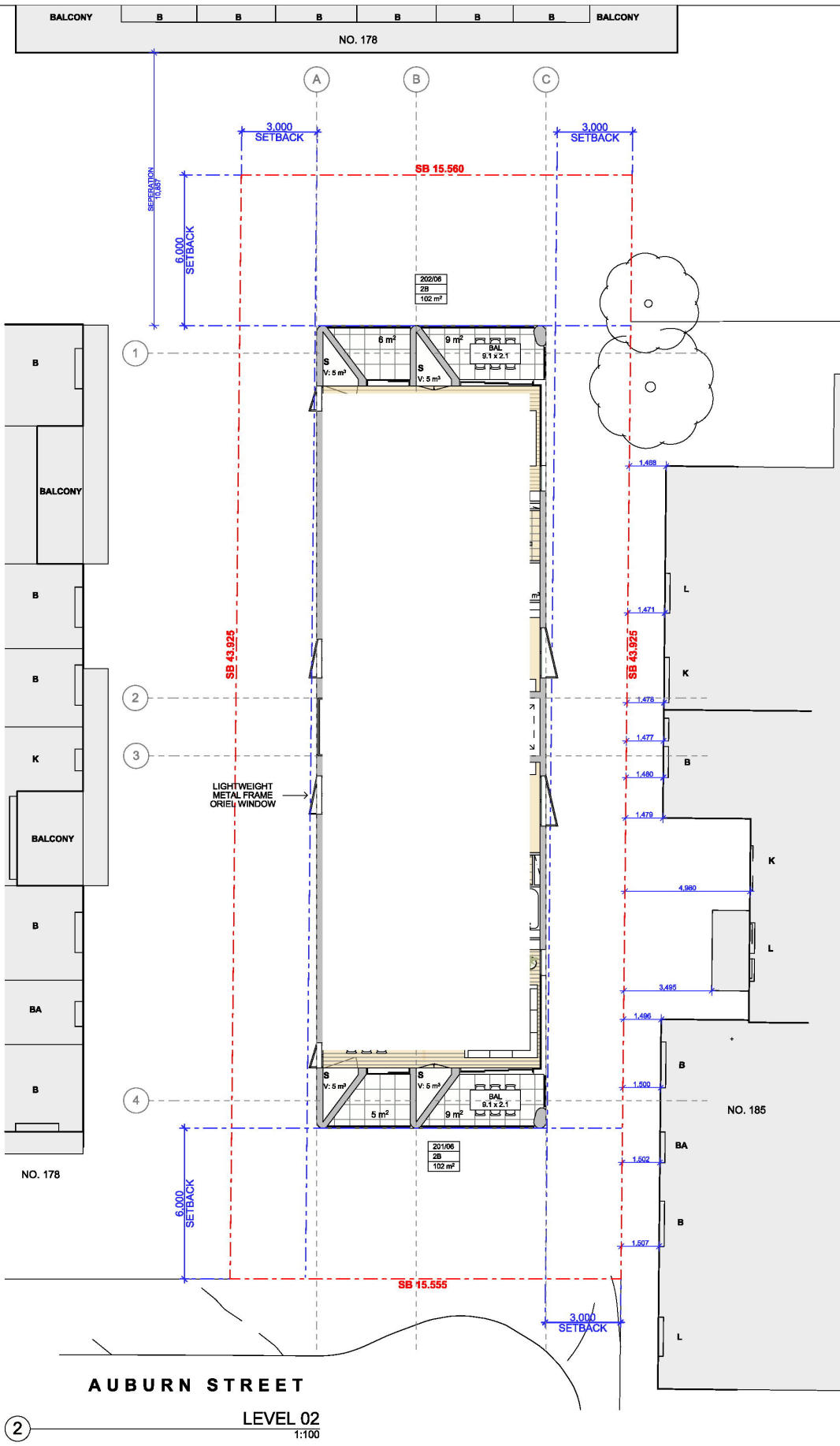
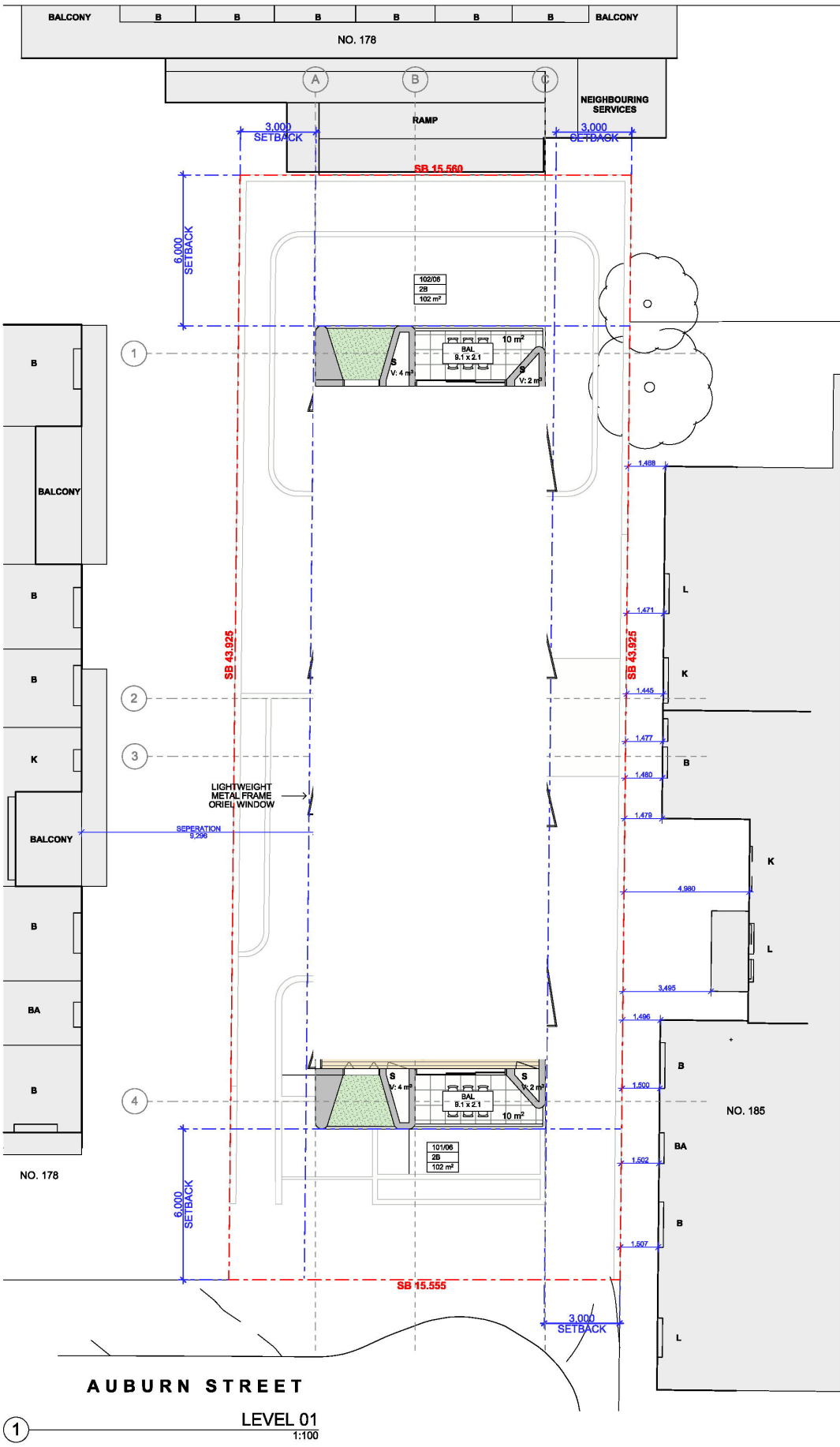
Attachments

1. Revised architectural plans









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DATE: 30/09/2022  
DRAWN BY: DA/3915/2022  
REVISED BY: DA/3915/2022

LEGEND

- 2 BED APARTMENT
- ADAPTABLE APARTMENT
- ACCESS HATCH
- CAR PARK EXHAUST
- INTERCOM
- LIFT
- MAILBOXES
- SKYLIGHT
- STORAGE CAGE
- CLOTHES LINE

NO. DESCRIPTION

NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID AMENDMENT DATE

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/09/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT

FUSE ARCHITECTS

ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO: 81 MAULBROUGH STREET, SUITE 111, NEWCASTLE NSW 2300

MAIL: @FUSEARCHITECTURE.COM.AU

ARCHITECT: RACHID ANDARY, NEW AND BEST

CLIENT:

Zeynephan, 104/2 Pyl LM

25 Crows Nest NSW 2151

PROJECT

6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO

2208

DRAWN

CW

DATE

6/11/2023

SCALE

1:100 @ A1 A3@50%

PROJECT STATUS

DEVELOPMENT APPLICATION

DRAWING TITLE

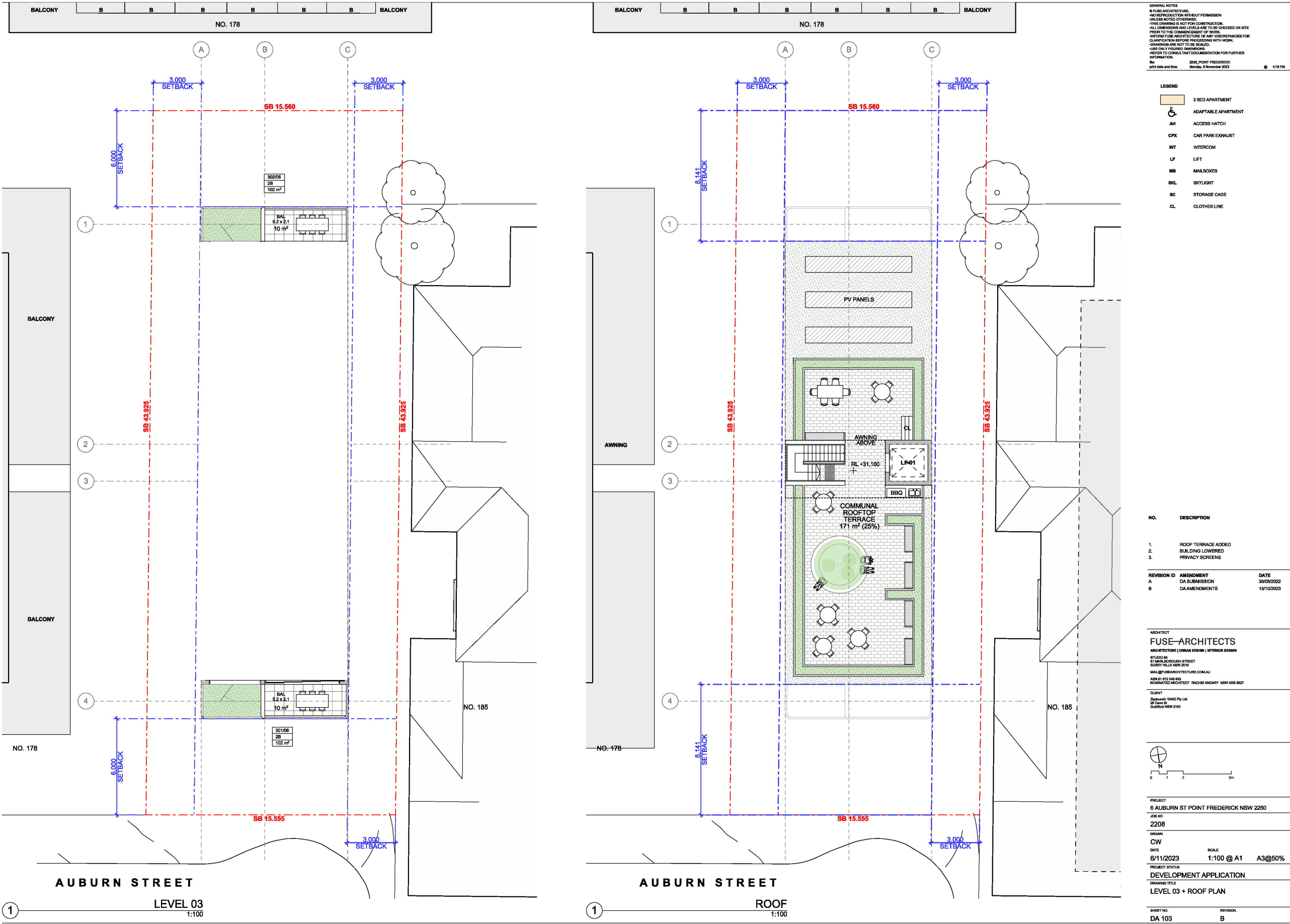
LEVEL 01 + LEVEL 02 PLAN

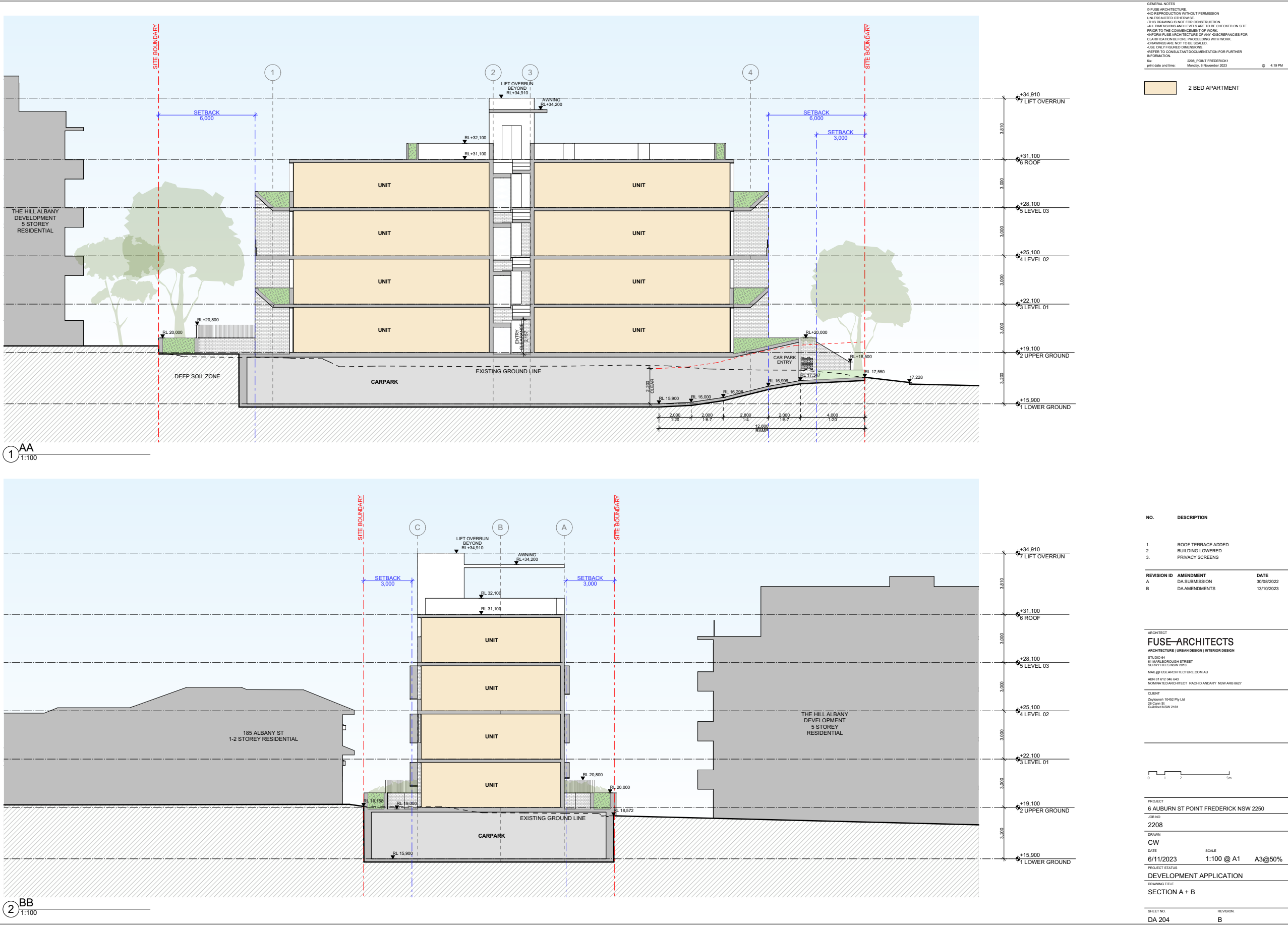
SHEET NO.

DA 102

REVISION

B







6 AUBURN ST POINT FREDERICK NSW 2250  
DEVELOPMENT APPLICATION



DA Drawings List			
DA 0 PLANS			
DA 000	COVER SHEET	B	
DA 001	DEVELOPMENT SUMMARY	B	
DA 002	CONTEXT ANALYSIS PLAN	B	1:3000
DA 003	SITE ANALYSIS	B	1:200
DA 004	DESIGN CONCEPT 1	B	
DA 005	DESIGN CONCEPT 2	B	
DA 006	SITE PLAN	B	1:200
DA 007	DEMOLITION PLAN	B	1:200
DA 1 PLANS			
DA 101	LOWER GROUND + UPPER GROUND PLAN	B	1:100
DA 102	LEVEL 01 + LEVEL 02 PLAN	B	1:100
DA 103	LEVEL 03 + ROOF PLAN	B	1:100
DA 2 ELEVATIONS + SECTIONS			
DA 201	NORTH + SOUTH ELEVATION	B	1:100
DA 202	EAST ELEVATION	B	1:100
DA 203	WEST ELEVATION	B	1:100
DA 204	SECTION A + B	B	1:100
DA 3 UNIT TYPES			
DA 301	ADAPTABLE UNIT TYPE	B	1:50
DA 4 SHADOW DIAGRAMS			
DA 401	SHADOW DIAGRAMS - JUNE	B	1:500
DA 402	SHADOW DIAGRAMS - SEPTEMBER	B	1:500
DA 403	SHADOW DIAGRAMS - DECEMBER	B	1:500
DA 404	SHADOW DIAGRAMS - TOWNHOUSE IMPACT	B	1:150
DA 405	SUN EYE VIEW DIAGRAM	B	1:300
DA 5 DIAGRAMS			
DA 501	SEPP 65 DIAGRAMS	B	1:150
DA 502	AREA DIAGRAMS	B	1:150
DA 503	LEP HEIGHT PLANE DIAGRAM	B	1:150
DA 6 MATERIALS AND FINISHES			
DA 601	MATERIALS AND FINISHES SCHEDULE	B	
DA 7 PERSPECTIVES			
DA 701	PHOTOMONAGE	B	

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INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS  
file: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SUNSHINE HILLS NSW 2510  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
28 Cavan NSW 2161  
Gundah NSW 2161

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
COVER SHEET

SHEET NO.	REVISION
DA 000	B

ARCHITECTURAL LEGEND

A ALIGN	GA GREASE ARRESTOR
AA ACoustic	GB GAS MASONRY
AC AIR CONDITIONING	GBC GABRIEL CHUTE
ACC ACCESSIBLE	GBR GABRIEL ROOM
ACS ACCESS CONTROL SYSTEM	GC GLASS CLEAR
AD ACCESS DECK	GD GLASS DECORATIVE
ADJ ADJUSTABLE	GDR GRATED DRAIN
ADP ADAPTIVE	GE GROOVED EDGE
AH ACCESS HATCH	GHR GARAGE HOLDING ROOM
AHD AUSTRALIAN HEIGHT DATUM	GL GLASS TYPE
AL ALUMINIUM	GLR MECHANICAL GRILLE
AMB AMBULANT	GM GAS METER
AP ACCESS PANEL	GP GLASS PANEL
ASL FIXED VERTICAL LADDER	GPO GENERAL POWER POINT
ASP ANTI-SLIP PLATE	GPT GROSS POLLUTANT TRAP
AWN AWNING	GR GRAB RAIL
	GRL GROUND LINE
	GS GLAZING SUITE
	GT GLASS, TRANSLUCENT
B BATHROOM	
BD BEDROOM	
BS BOX GUTTER	
BGS BOOM GATE SYSTEM	
BH BULKHEAD	
BJ BUTT JOINT	
BKP BICYCLE PARKING	
BKR BICYCLE RACK	
BKS BICYCLE STORAGE	
BL BALLUSTRADE	
BLK BLOCK WALL	
BOL BOLLARD	
BSN BASIN	
BSP BATH SPOUT	
BST BALLAST	
BT BENCHTOP	
BTB BATHTUB	
BTN ALUMINIUM BATTEN	
BTP BOTTLE TRAP	
BTB BOUNDARY TRAP	
BWK BRICK (FACE BRICK)	
BWU BRICK (GLAZED FEATURE BRICK)	
BY BALCONY	
C COMMERCIAL	
CAP CAPPING	
CBC CURBICLE SYSTEM	
CBF CONCRETE BROOM FINISH	
CEA CONCRETE EXPOSED AGGREGATE FINISH	
CF CRITICAL FACE	
CFC COMPRESSED FIBRE CEMENT	
CFF CONCRETE FLOAT FINISH	
CGF CONCRETE GROOVE FINISH	
CH CEILING HEIGHT	
CHE CHAMFERED EDGE	
CHS CIRCULAR HOLLOW SECTION	
CI CAST IN	
CIS CISTER	
CJ CONTROL JOINT	
CKT COOK TOP	
CL CENTRE LINE	
CLD CLADDING	
CLK CLOCK ROOM	
CLM CLEANER STORE	
CMR CEMENT RENDER/ ACRYLIC	
COR CORNER	
COF CONCRETE OFF-FORM FINISH	
COL COLUMN	
COM COMMERCIAL	
COMS COMMUNICATIONS SERVICES	
CONC CONCRETE FINISH	
COS CHECK ON SITE	
CP CAR PARK SPACE	
CPC CONCRETE PRECAST	
CPD CURBOARD	
CPE CAR PARK EXHAUST	
CPL COVER PLATE	
CPT CARPARK SUPPLY	
CPT CARPET	
CS CEILING FINISH	
CSF CEMENTITIOUS SCREED FINISH	
CSK COUNTERSINK	
CSK CLEANERS SINK	
CST CONCRETE STEEL TROWEL FINISH	
CTF CERAMIC TILE FLOOR FINISH	
CTW CERAMIC TILE WALL FINISH	
CJ CONDENSER UNIT	
CJ COVERED JOINT	
CW COLD WATER	
CWB CAR WASH BAY	
CWS COLD WATER SUPPLY	
CY COURTYARD	
D DINING	
DG DRIP GROOVE	
DGPO DOUBLE WEATHERPROOF POWER POINT	
DJ DUMMY JOINT	
DM DOOR MAT	
DP DOWN PIPE	
DPC DAMP PROOF COURSE	
DRW DRAWER	
DRY DRYER	
DW DISHWASHER	
E ENTRY	
EA EQUAL ANGLE	
EDB ELECTRICAL DISTRIBUTION BOARD	
EFF EPOXY FLOOR FINISH	
EJ EXPANSION JOINT SYSTEM	
ELEC ELECTRICAL SERVICE	
EM ENTRY MAT	
EN ENSUITE	
EP EDGE PROTECTION	
EPO EPOXY FLOOR FINISH WITH COVERED	
(EX) EXISTING	
EXH EXHAUST	
EXJ EXPRESS JOINT	
(EXP) EXPOSED	
F FIRE SERVICES	
FB FLUSH BUTTON (CISTERN)	
FBV FIRE BOOSTER VALVE	
FC FIRE CEMENT	
FCO FIRE CONTROL CENTRE	
FCL FINISH CEILING LEVEL	
FCR FIRE CONTROL CENTRE	
FCU FAN COIL UNIT (AC)	
FFP FIRE EGRESS PASSAGE	
FES FLOOR EDGE STRIP	
FEF FIRE EXTINGUISHER	
FFL FINISH FLOOR LEVEL	
FG FIXED GLASS	
FGL FINISHED GROUND LEVEL	
FH FIRE HYDRANT	
FHB FIRE HYDRANT BOOSTER	
FHR FIRE HOSE REEL	
FIP FIRE ALARM CONTROL PANEL	
FLS FLASHING	
FMP FIRE MIMIC PANEL	
FN FURNITURE	
FNC FENCE	
FR FIRE RATED	
FRL FIRE RESISTANCE LEVEL	
FS FIRE STAIR	
FW FLOOR WASTE	
FX FIXED	

G	S
GA GREASE ARRESTOR	SA STORAGE
GB GAS MASONRY	SAP SUPPLY AIR
GBC GABRIEL CHUTE	SBS SPLASH BACK
GBR GABRIEL ROOM	SBT SEWER BOUNDARY TRAP
GC GLASS CLEAR	SC STORAGE CAGE WITH GATE
GD GLASS DECORATIVE	SCN SCREEN
GDR GRATED DRAIN	SCOL STEEL COLUMN
GE GROOVED EDGE	SD SLIDING DOOR
GHR GARAGE HOLDING ROOM	SDH SOAP DISH HOLDER
GL GLASS TYPE	SDO SPOON DRAIN OUTLET
GLR MECHANICAL GRILLE	SDSP SOAP DISPENSER
GM GAS METER	SEC SECURITY SERVICES
GP GLASS PANEL	SFF STONE FLOOR FINISH
GPO GENERAL POWER POINT	SGN SIGNAGE
GPT GROSS POLLUTANT TRAP	SHC SHAVING CABINET
GR GRAB RAIL	SHR SPEED HUMP
GRL GROUND LINE	SHR SHOWER
GS GLAZING SUITE	SHRR SHOWER ROSE
GT GLASS, TRANSLUCENT	SHS SQUARE HOLLOW SECTION
	SIM SIMILAR
	SJ SILICON JOINT
	SK SARKING
	SKL SKYLIGHT
	SKT SKIRTING
	SLR SEALANT
	SN SAFETY HAZARD
	SNK SINK
	SO STRUCTURAL OPENING
	SOP SET OUT POINT
	SP STAIR PRESSURISATION
	SPR STAIR PRESSURISATION RELIEF
	SPT SPOUT
	SSE SQUARE EDGE
	SSM SEMI RECESSED
	SS STAINLESS STEEL
	SSD SUB-SURFACE DRAINAGE SYSTEM
	SSL STRUCTURAL SLAB LEVEL
	SSN SHOWER SCREEN
	ST STAIR
	STL STEEL
	STN STAIR NOSING
	STY STUD
	SW STORM WATER
	SWD STORMWATER DRAIN
	SWF STONE WALL FINISH
	SWP STORMWATER PIT
	T
	(T) THERMAL
	T TIMBER
	TCE TERRACE
	TD TOWER DECK
	TDP TOWEL DISPENSER UNIT
	TE TOOLED EDGE
	TF TIMBER FLOOR
	TFB TIMBER FLOOR FINISH
	TFW TRADE FLOOR WASTE
	TGS TACTILE INDICATORS
	TGSI TACTILE GROUND SURFACE INDICATOR
	TH THRESHOLD
	TND TUNDISH
	TOH TOP OF HOE
	TOS TOP OF SCREEN
	TOW TOP OF WALL
	TAPSET TAPSET
	TR TOWER RAIL
	TRA TENANT RETURN AIR
	TRH TIRE ROLL HOLDER
	TSB TENANT SUPPLY AIR
	TV TYPICAL
	U
	UG UNDERGROUND
	US UNDERSIDE
	UA UNEQUAL ANGLE
	UCT UNDER CUT
	UG UPPER GROUND
	UNO UNLESS NOTED OTHERWISE
	UR URINAL
	US UTILITY SPACE
	UT UNIT TYPE
	V
	V VOID
	VIS VISITOR
	VN VINYL
	VP VENT PIPE
	W
	WC WALK IN ROBE
	WM WASHING MACHINE
	WP WEATHER PROOF
	WPM WATERPROOF MEMBRANE SYSTEM
	WST WHEEL STOP
	WTM WATERMETER

DEVELOPMENT SUMMARY

SITE INFO			
ADDRESS	6 Auburn St, Point Frederick, NSW 2250		
DP	Lot 13 DP 17440		
SITE AREA	682.2 sqm		
PROPOSAL SUMMARY			
NO. OF UNITS	8 UNITS 2 BED = 8 (100%)		
LEP CONTROLS			
	CONTROLS	PROPOSED	
LAND USE	R1		
BUILDING HEIGHT	12 m	Refer to DA 503	
FSR	1.25:1 (0.5:1 SEPP Bonus)	1.22:1	
GFA	852.8 sqm	832 sqm	
DCP + SEPP CONTROLS			
	CONTROLS	PROPOSED	COMPLIANCE
SETBACKS	(DCP) 3.3.3.2.2  c. For the exterior walls of any third storey (including a mezzanine): i. An additional setback of at least 2.5m measured from the face of the lower storey walls immediately below.  b. Setbacks to exterior walls that are up to two storeys high: i. From side boundaries: an average of 4m with a minimum of 3.5m; ii. From the front boundary: a minimum of 6m; iii. From the rear boundary: a minimum of 6m.	Front Setback: 6m Side Setback: 3m (min) Rear Setback: 6m	✓
LANDSCAPE	(SEPP) Section 18—the Act, s 4.15  b) for a development application made by a social housing provider—at least 35m of landscaped area per dwelling,  (c) if paragraph (b) does not apply—at least 30% of the site area is landscaped area,  (d) a deep soil zone on at least 15% of the site area, where— (i) each deep soil zone has minimum dimensions of 3m, and (ii) if practicable, at least 65% of the deep soil zone is located at the rear of the site,	Not a social housing provider reference to (c) Landscaped Area = 30%  (d) Deep Soil Zone = 16%	✓
CAR PARKING	(SEPP) 1-space/2-bed (8 units) = 8 Spaces  Total: Residential 8 spaces  (DCP) 10% of units = 0.8 spaces  (DCP) Motorcycle parking – 1 space per 15 units = 1 spaces required  (DCP) Bicycle Parking Residents – 1 space per 12 dwellings = 1 spaces Bicycle Parking Visitors – 1 visitor space per 5 dwellings = 1.6 spaces Total = 2.6 spaces	2-Bed Units (8 units) = 8 Spaces  Total: 8 Spaces  Accessible Parking = 2 Spaces  Motorcycle Parking = 1 Spaces  Bicycle Parking Residents = 4 Spaces	✓   ✓ ✓ ✓
ADG CONTROLS			
	CONTROLS	PROPOSED	COMPLIANCE
COMMUNAL OPEN SPACE	25% of the site area (682.2 sqm x 0.25 = 170 sqm)	25% of the site area	✓
DEEP SOIL	6m minimum dimension 7% of the site area (682.2 sqm x 0.07 = 47.75 sqm)	Deep soil with 6m minimum dimension = 16% of the site area	✓

GENERAL NOTES  
6 FUSE ARCHITECTURE  
NO REPRODUCTION WITHOUT PERMISSION  
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THIS DRAWING IS NOT FOR CONSTRUCTION  
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE  
PRIOR TO THE COMMENCEMENT OF WORK  
INFORM FUSE ARCHITECTURE OF ANY DISCREPANCIES FOR  
CLARIFICATION BEFORE PROCEEDING WITH WORK  
DRAWINGS ARE NOT TO BE SCALED  
USE ONLY DIMENSIONED DIMENSIONS  
REFER TO CONSULTANT DOCUMENTATION FOR FURTHER  
INFORMATION  
NO STRUCTURAL AND BUILDING SERVICES HAVE BEEN  
INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS  
Rn: 2008\_POINT\_FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

NO.	DESCRIPTION
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2.	BUILDING LOWERED
3.	PRIVACY SCREENS

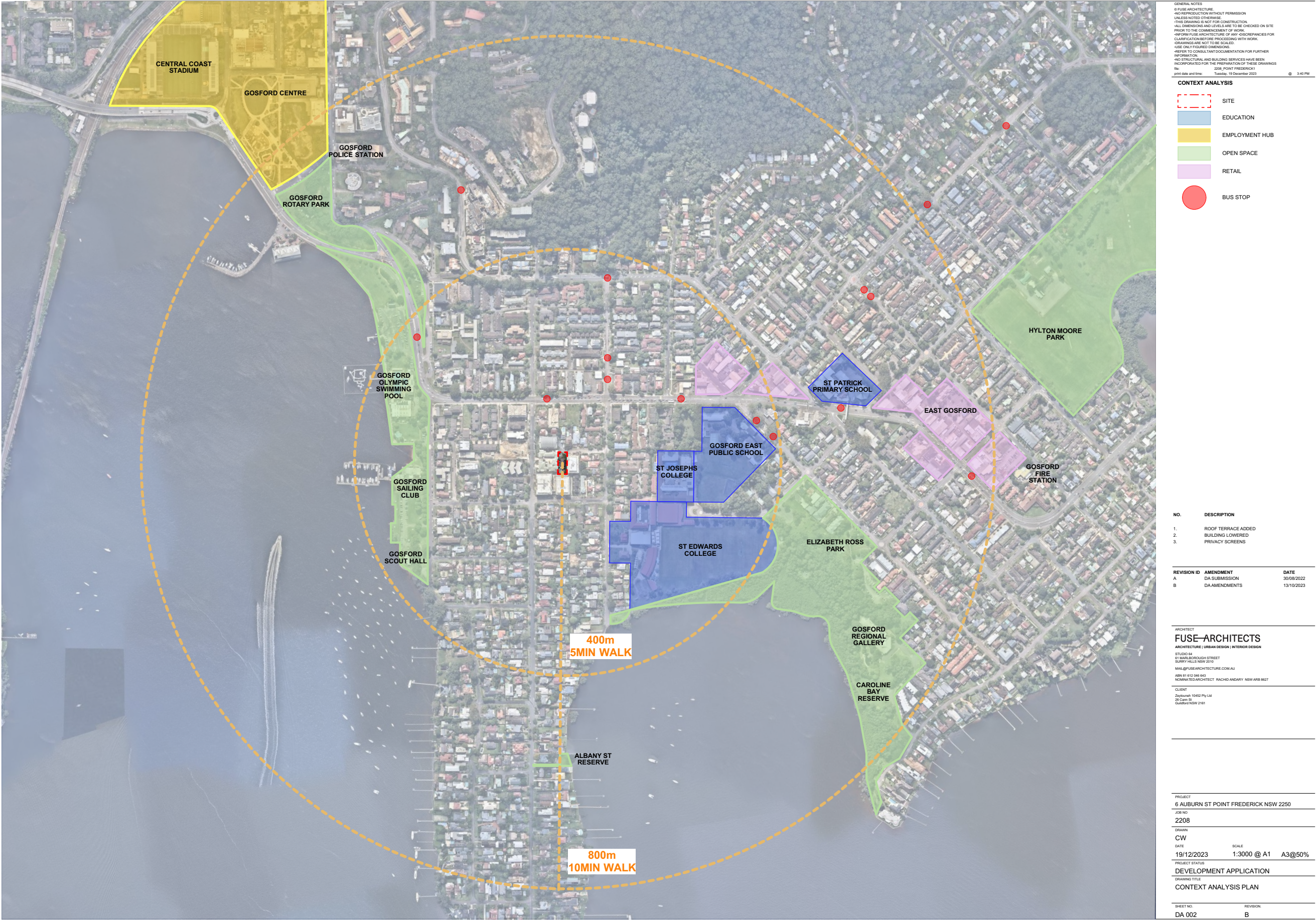
REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/09/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
FUSE—ARCHITECTS  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SUNSHINE VIC 3048  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDRAY NSW ARB 8627  
CLIENT  
Zephyrus, 10402 Pty Ltd  
26 Cam Rd  
Queensland NSW 2161

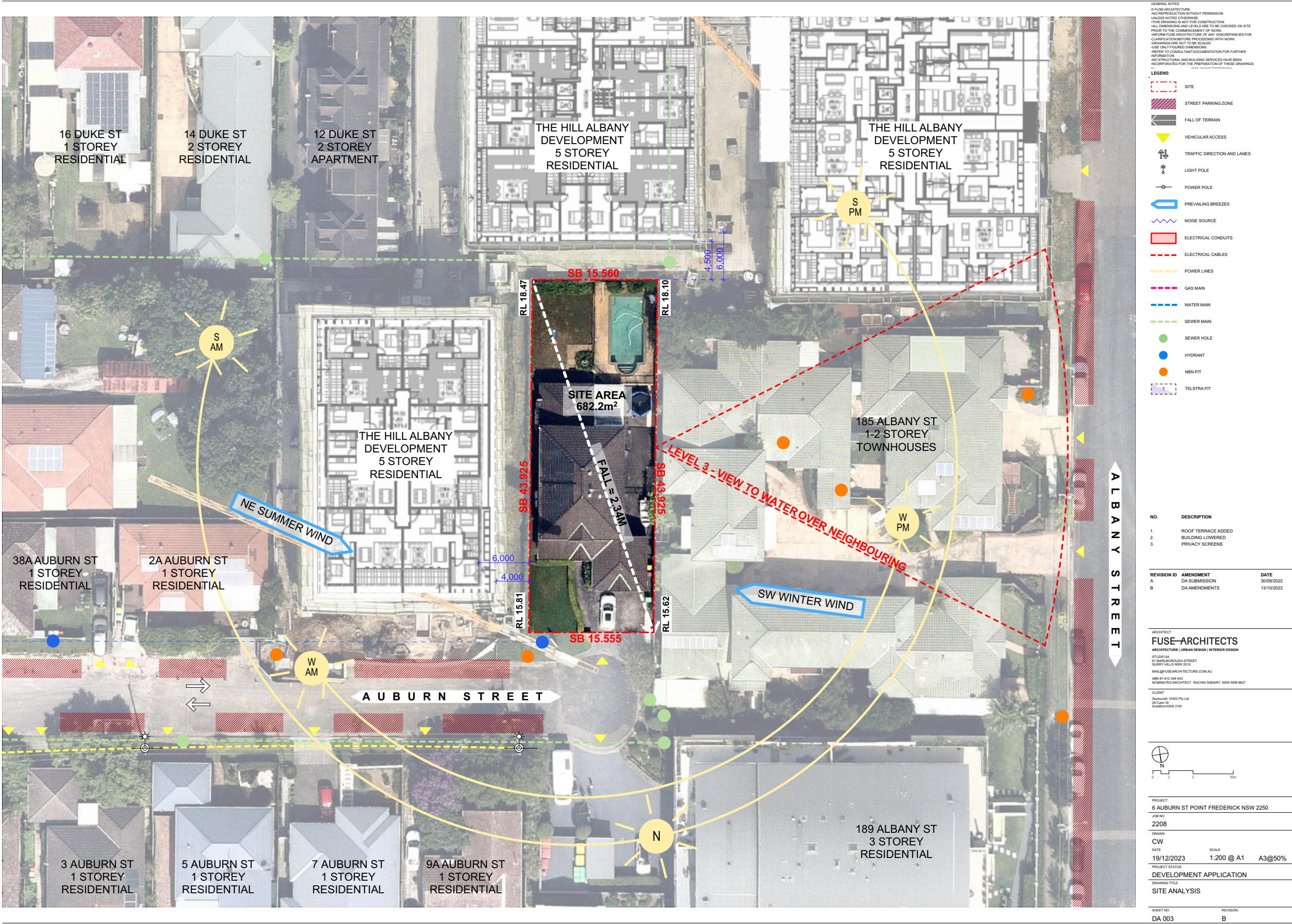
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
DEVELOPMENT SUMMARY

SHEET NO.	REVISION
DA 001	B

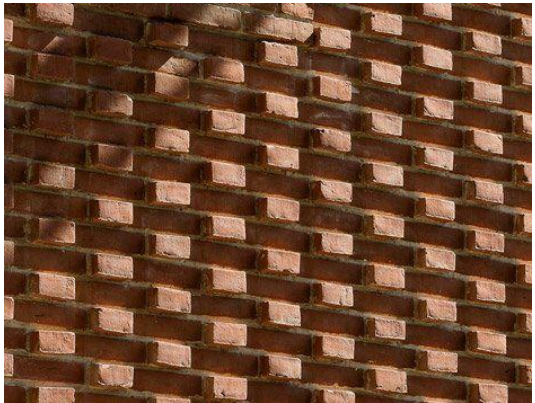








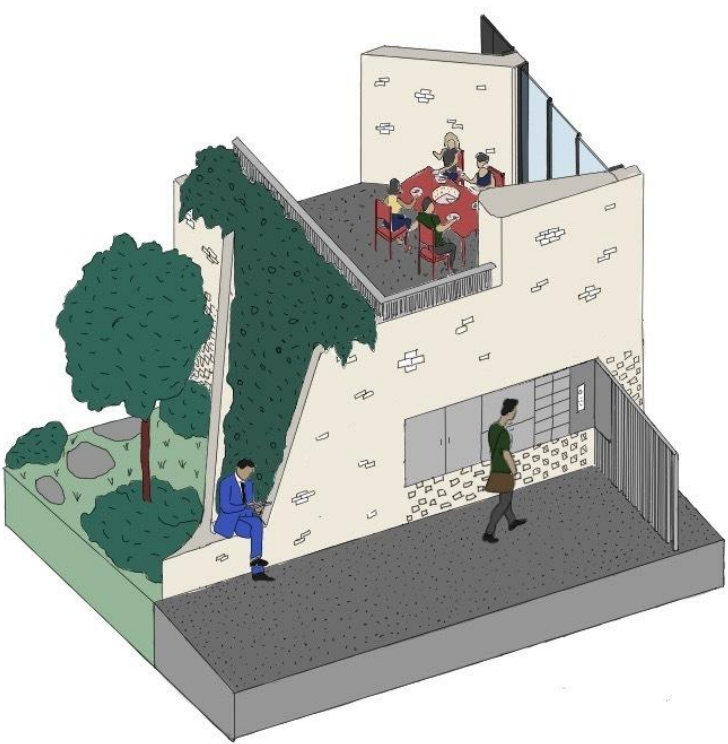




INTEGRATED LIGHT WEIGHT ROOF + UPPER LEVELS ON A BRICK PODIUM BASE. PLAYFUL USE OF BRICKS ADD DEPTH + DETAIL TO THE BUILDING AND RESPOND TO SITE CONDITIONS/CONSTRAINTS

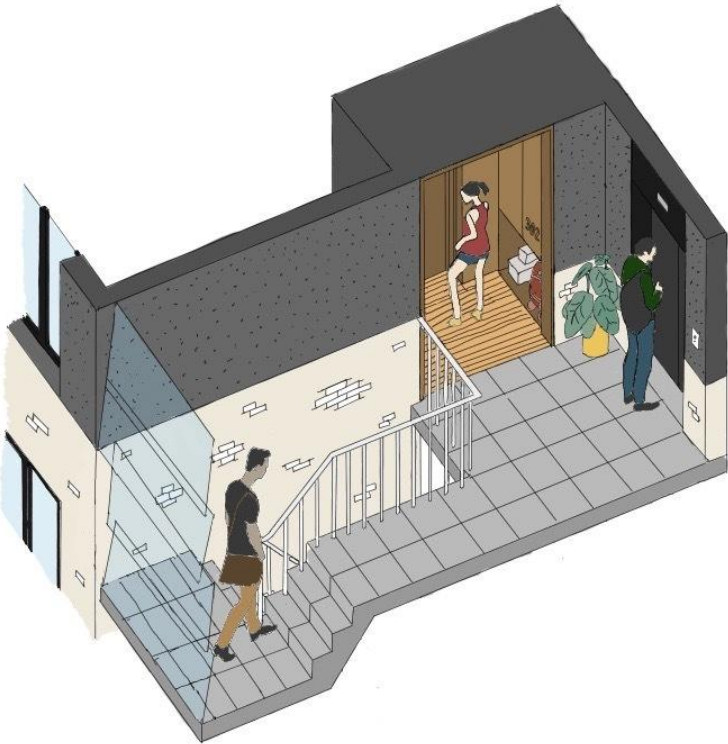


BRICK BASE AND PODIUM OPENS AT EACH END AND DEFINED BY VERTICAL CURVED BLADES



THE LANDSCAPE DESIGN STRATEGY SEEKS TO PROVIDE RESIDENTS WITH A DIVERSITY OF SPACES AND ACTIVITIES FOR LEISURE. THE PLANTING PALETTE WILL BE VIBRANT AND LUSH REFLECTING THE CHARACTER OF THE AREA WITH FOCUS ON NATIVE AND FLORAL SPECIES

COMMON AREAS INCLUDING SITTING AREAS AND WIDE PATHS TO ACCOMMODATE SOCIAL INTERACTIONS WITH PLANTING TO PROVIDE SCREENING



POINT FREDERICK IS CHARACTERIZED BY ITS SOCIAL AND ECONOMIC DIVERSITY. THE OBJECTIVE OF THE DESIGN IS TO ADD QUALITY DWELLINGS OF HIGH AMENITY THAT REFLECT THE BROADER LOCALES MIX OF PEOPLE AND FACILITATE SOCIAL INTERACTIONS AND CHANCE ENCOUNTERS

GENERAL NOTES  
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INFORMATION  
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Rev: 2008\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
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3.	PRIVACY SCREENS

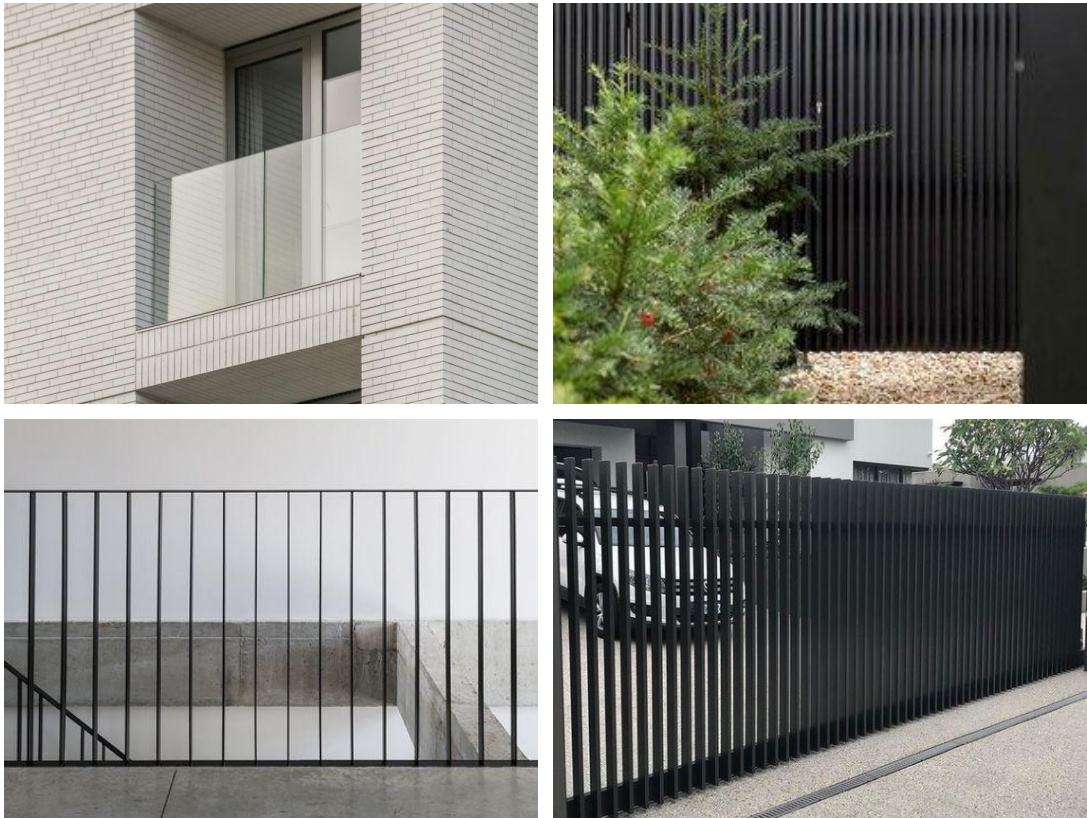
REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOROUGH STREET  
SURREY HILLS NSW 2159  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO JANDARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
26 Cavan NSW 2161  
Queensland NSW 2161

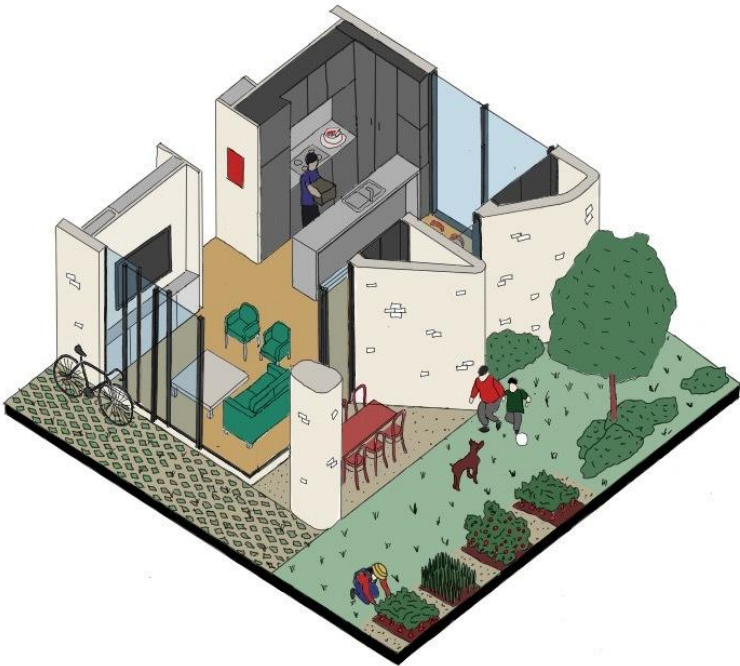
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
@ A1  
A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
DESIGN CONCEPT 1

SHEET NO.	REVISION
DA 004	B





GLASS BALUSTRADES HELP TO PRESERVE VIEWS FROM BALCONY AND OUTDOOR SPACES AND ACCOMODATE BOTH STANDING AND SITTING POSITIONS. METAL RECTANGULAR FENCING, GATES AND BALUSTRADES AT THE PODIUM AND LOWER LEVELS PROVIDE ELEGANT DETAILS THAT INTEGRATE INTO BOTH THE BUILDING AND LANDSCAPE DESIGN.

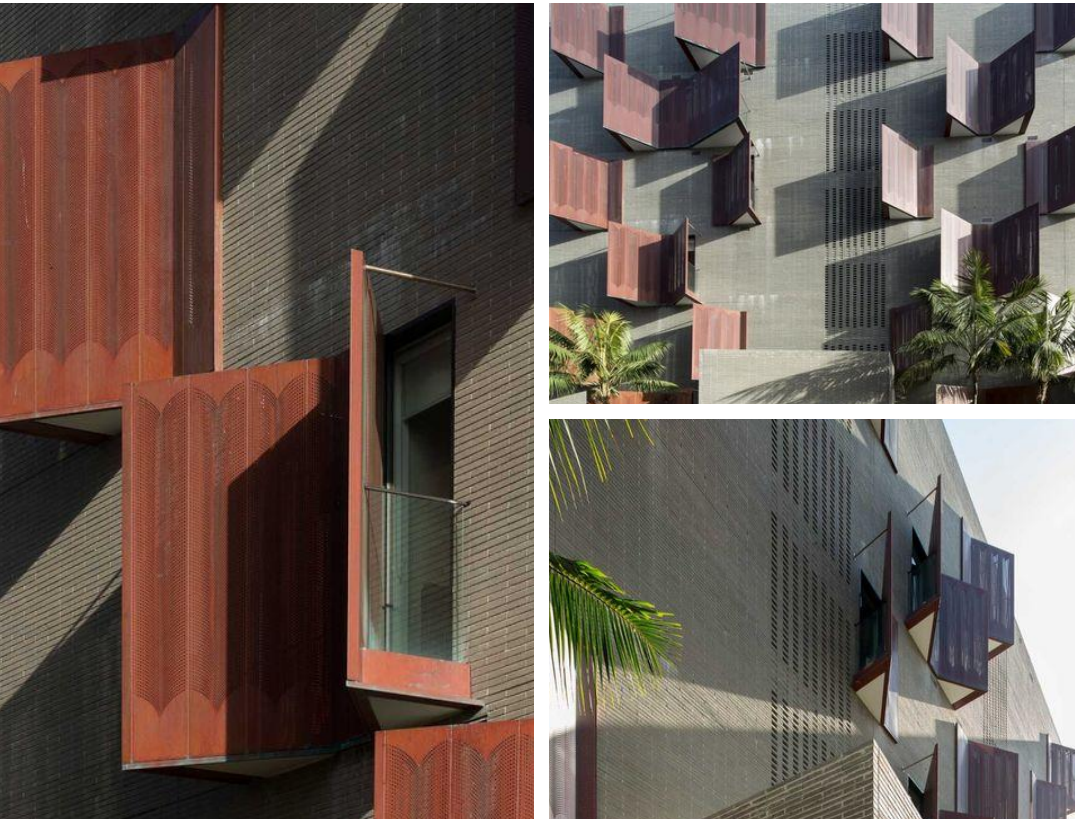


DESIGN TO PROVIDE GENEROUS APARTMENTS AND OPEN SPACES WITH A HIGH DEGREE OF AMENITY. WHERE POSSIBLE PRIVATE OUTDOOR SPACES WILL FAR EXCEED MINIMUM REQUIRMENTS TO PROMOTE DIVERSE LIFESTYLES.

GENERAL NOTES  
6 FUSE ARCHITECTURE  
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REFER TO CONSULTANT DOCUMENTATION FOR FURTHER  
INFORMATION  
NO STRUCTURAL AND BUILDING SERVICES HAVE BEEN  
INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS  
By: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM



LANDSCAPE USED TO SOFTEN BUILDING, SCREEN SERVICES AREAS AND PROVIDE PRIVACY FROM NEIGHBOURING DEVELOPMENTS



ORIEL WINDOWS TO BOUNDARY WALLS PROVIDE PRIVACY SCREENING WHILST RETAINING SOLAR AND NATURAL VENT. LIGHT WEIGHT METAL STRUCTURE WITH PERFORATED PANELING

NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

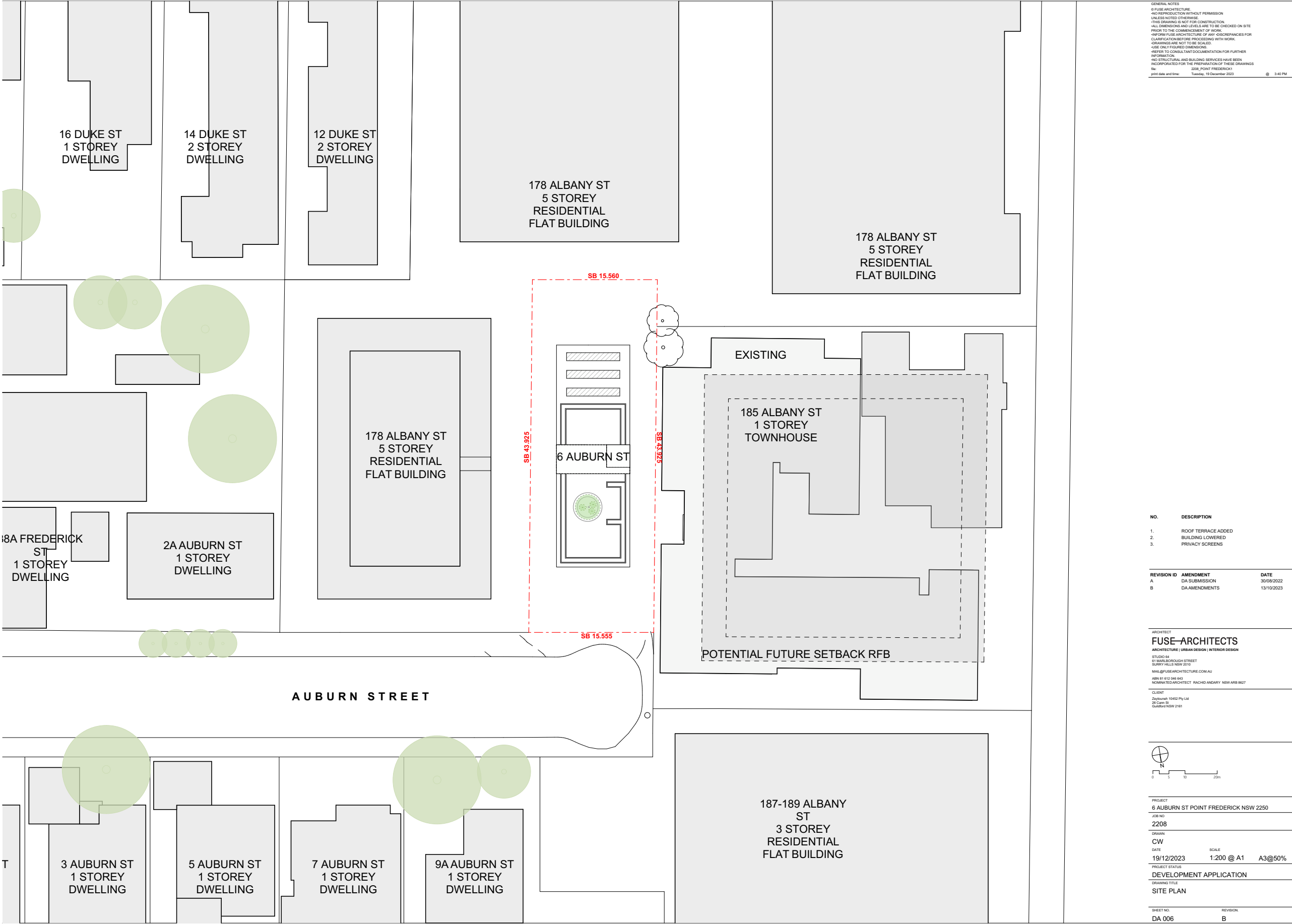
ARCHITECT  
**FUSE-ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SUNSHINE VIC 3088  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO JAGARY NSW ARB 8627

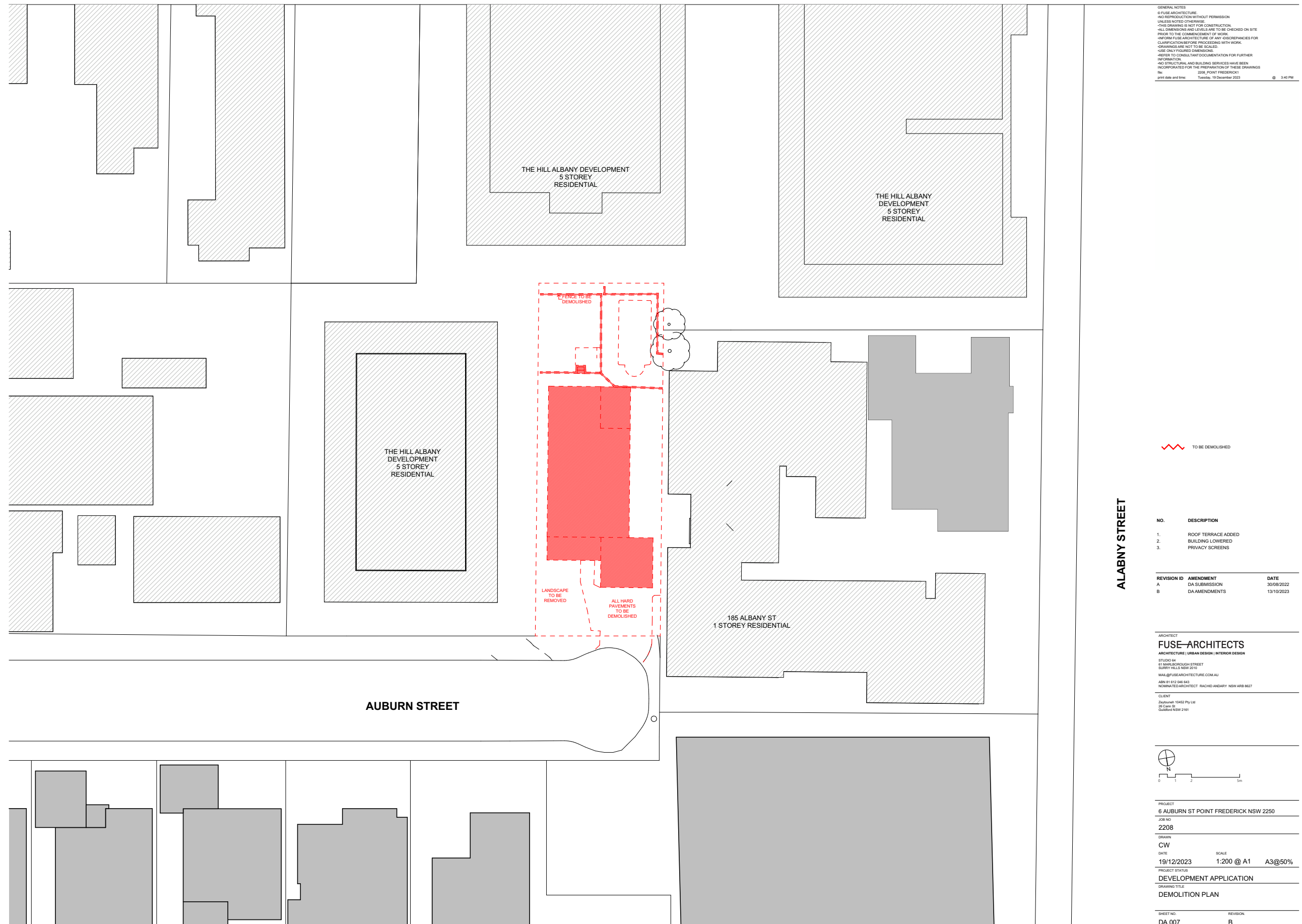
CLIENT  
Zephyrus, 10452 Pty Ltd  
28 Cam Rd  
Gundah NSW 2161

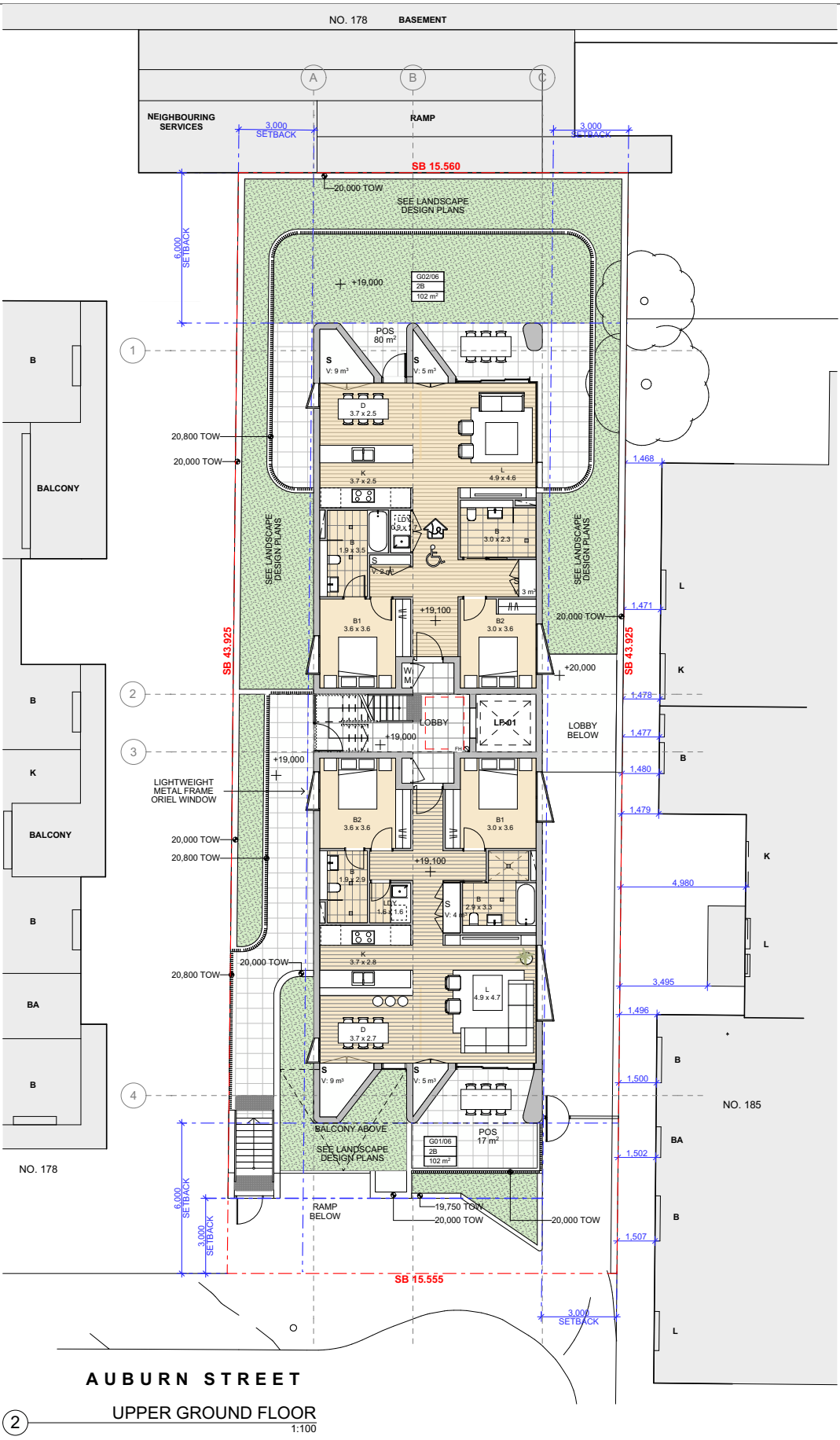
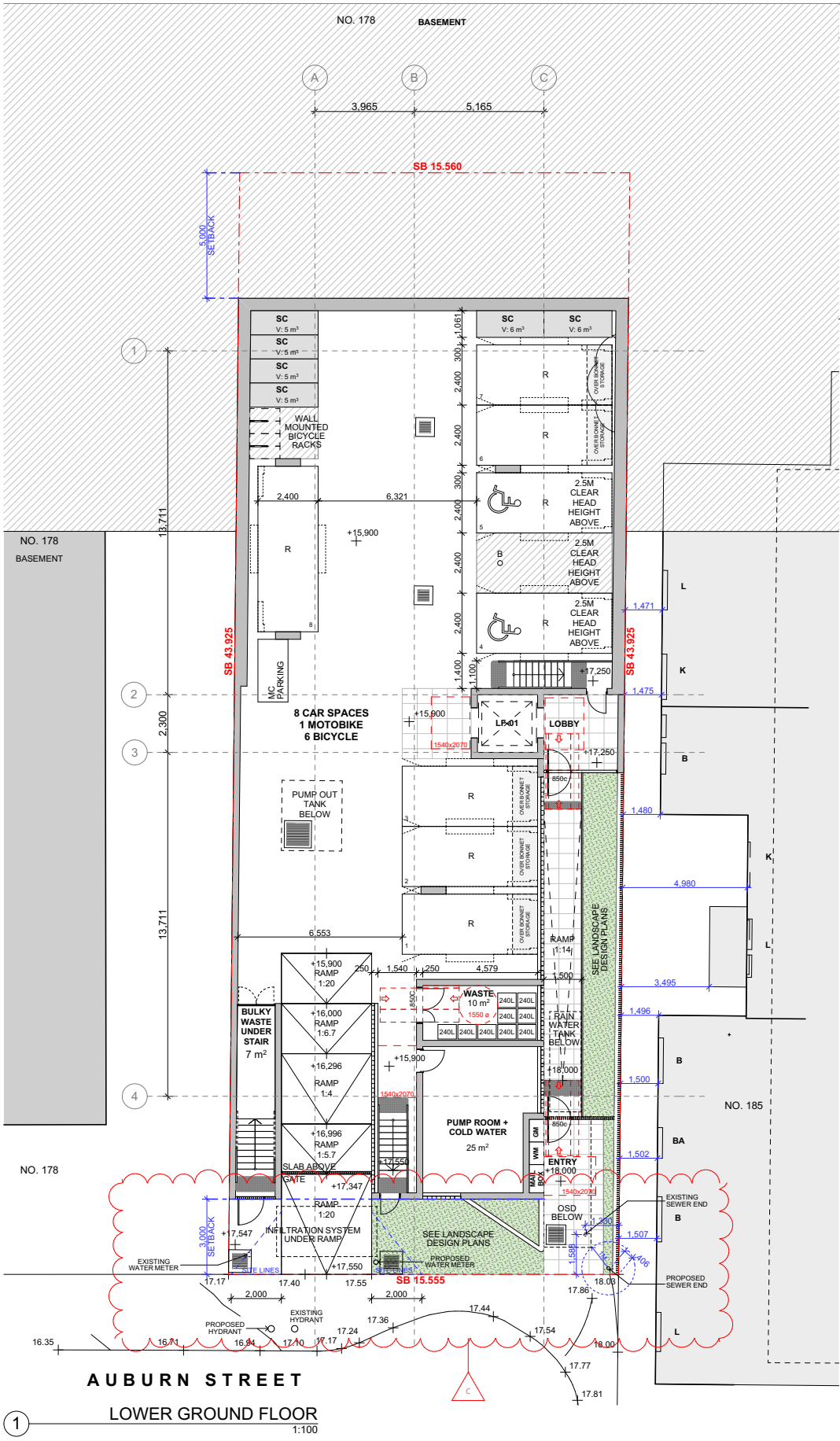
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
@ A1  
A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
DESIGN CONCEPT 2

SHEET NO.	REVISION
DA 005	B









GENERAL NOTES

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NO STRUCTURAL AND BUILDING SERVICES HAVE BEEN  
INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS

Rev: 2028\_POINT FREDERICK1  
print date and time: Wednesday, 24 January 2024 @ 4:36 PM

LEGEND

2 BED APARTMENT

ADAPTABLE APARTMENT

AH ACCESS HATCH

CPX CAR PARK EXHAUST

INT INTERCOM

LF LIFT

MB MAILBOXES

SKL SKYLIGHT

SC STORAGE CAGE

CL CLOTHES LINE

NO. DESCRIPTION

1. ADDITION OF SEWER ASSETS

REVISION ID AMENDMENT DATE

A DA SUBMISSION 30/08/2022

B DA AMENDMENTS 13/10/2023

C DA AMENDMENTS 24/01/2024

ARCHITECT

FUSE ARCHITECTS

ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 14  
81 MARLBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT

Zyngene 10452 Pty Ltd  
36 Cavan St  
Queensland NSW 2161

PROJECT

6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO

2208

DRAWN

CW

DATE

24/01/2024

SCALE

1:100 @ A1 A3@50%

PROJECT STATUS

DEVELOPMENT APPLICATION

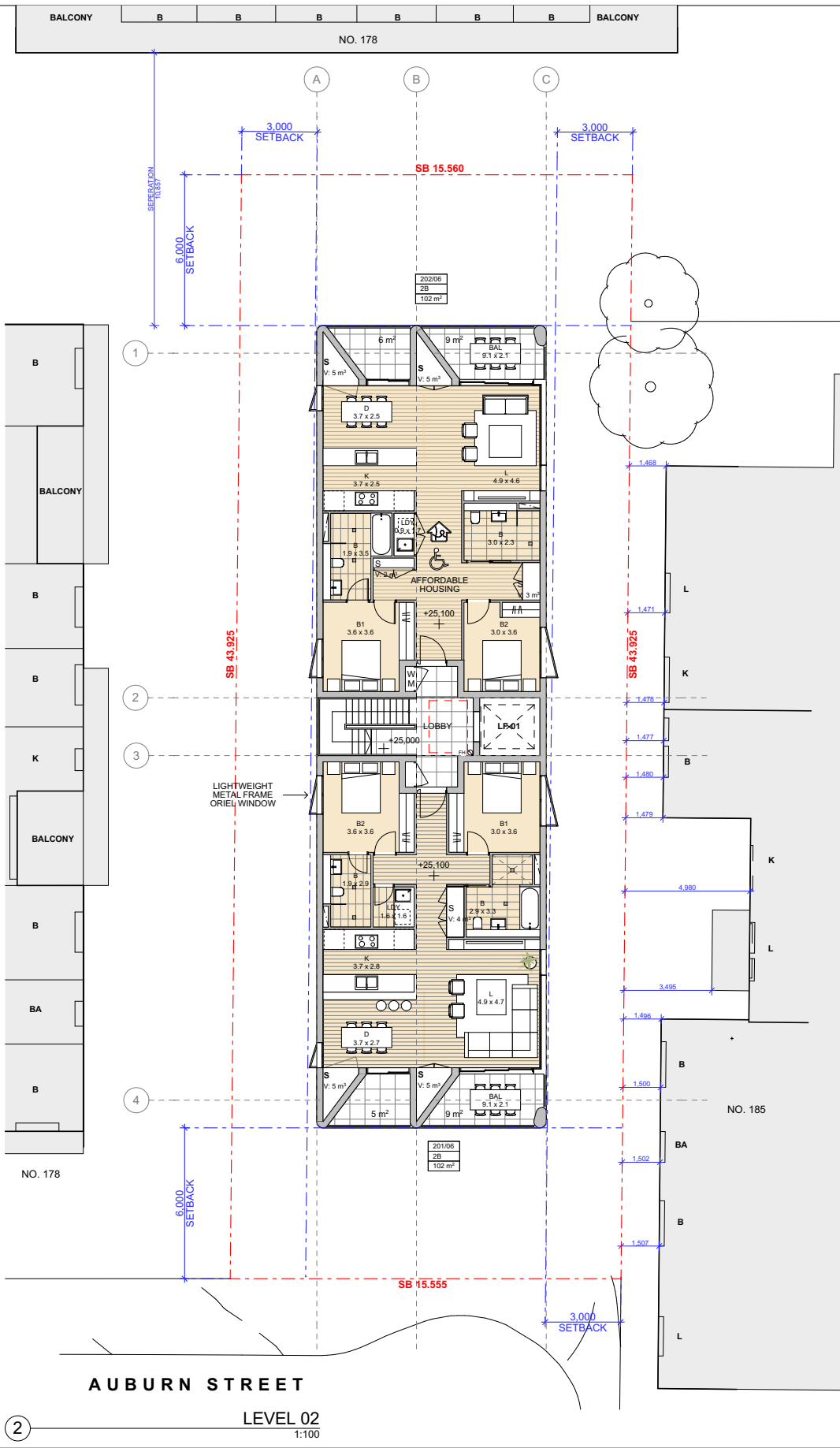
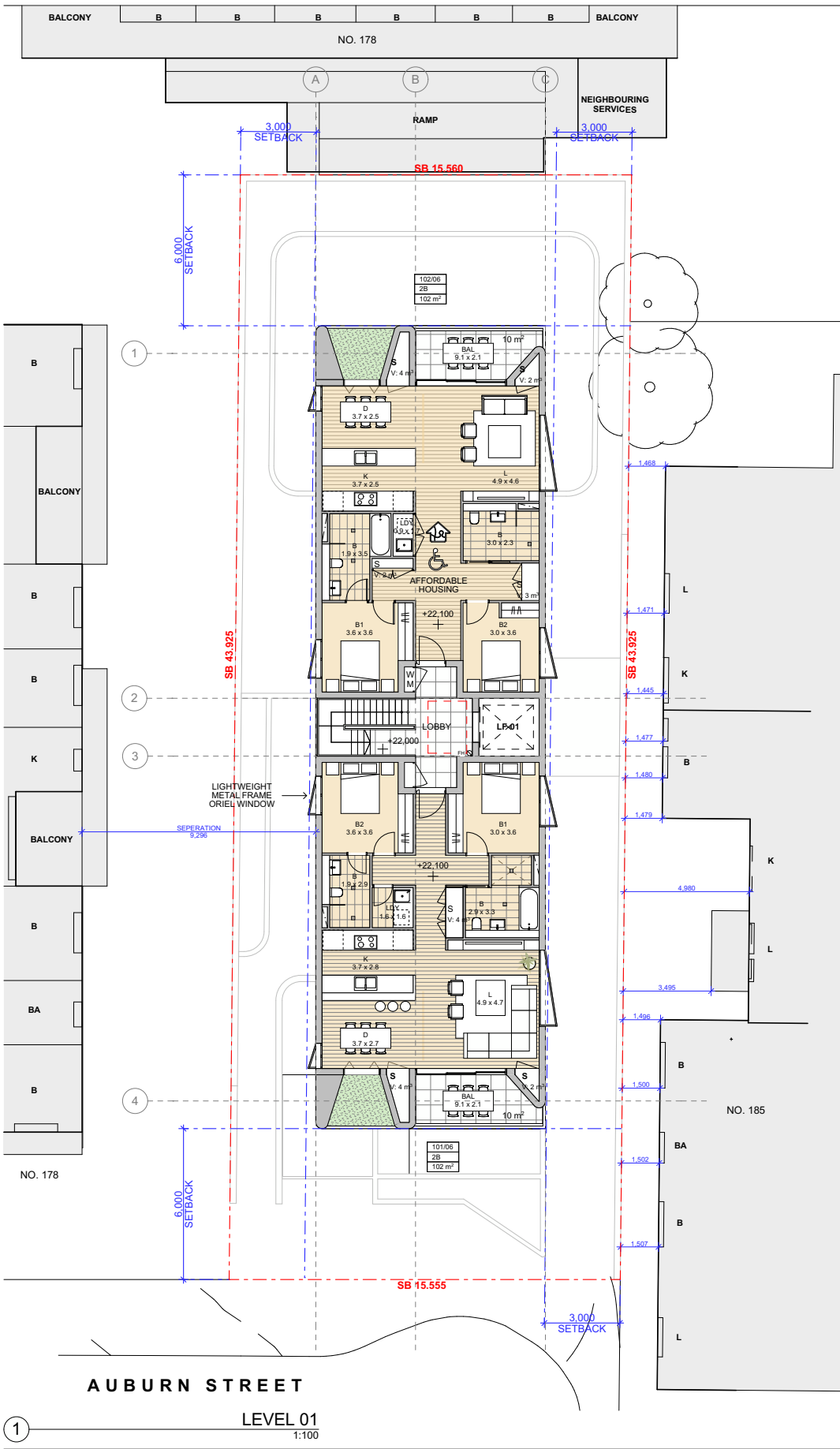
DRAWING TITLE

LOWER GROUND + UPPER GROUND PLAN

SHEET NO. REVISION

DA 101 C





GENERAL NOTES

- 6 FUSE ARCHITECTURE
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- DRAWINGS ARE NOT TO BE SCALED
- USE ONLY DIMENSIONED DIMENSIONS
- REFER TO CONSULTANT DOCUMENTATION FOR FURTHER
- INFORMATION
- NO STRUCTURAL AND BUILDING SERVICES HAVE BEEN
- INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS
- File: 2208\_POINT FREDERICK1
- print date and time: Tuesday, 19 December 2023 @ 3:40 PM

LEGEND

- 2 BED APARTMENT
- ADAPTABLE APARTMENT
- ACCESS HATCH
- CAR PARK EXHAUST
- INTERCOM
- LIFT
- MAILBOXES
- SKYLIGHT
- STORAGE CAGE
- CLOTHES LINE

NO. DESCRIPTION

- ROOF TERRACE ADDED
- BUILDING LOWERED
- PRIVACY SCREENS

REVISION ID AMENDMENT DATE

A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT

**FUSE ARCHITECTS**

ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 44  
81 MARLBOROUGH STREET  
SURRY HILLS NSW 2159  
MAIL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT

Zyngineer 10452 Pty Ltd  
26 Cam Rd  
Gundah NSW 2161

PROJECT

6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO

2208

DRAWN

CW

DATE

19/12/2023

SCALE

1:100 @ A1 A3@50%

PROJECT STATUS

DEVELOPMENT APPLICATION

DRAWING TITLE

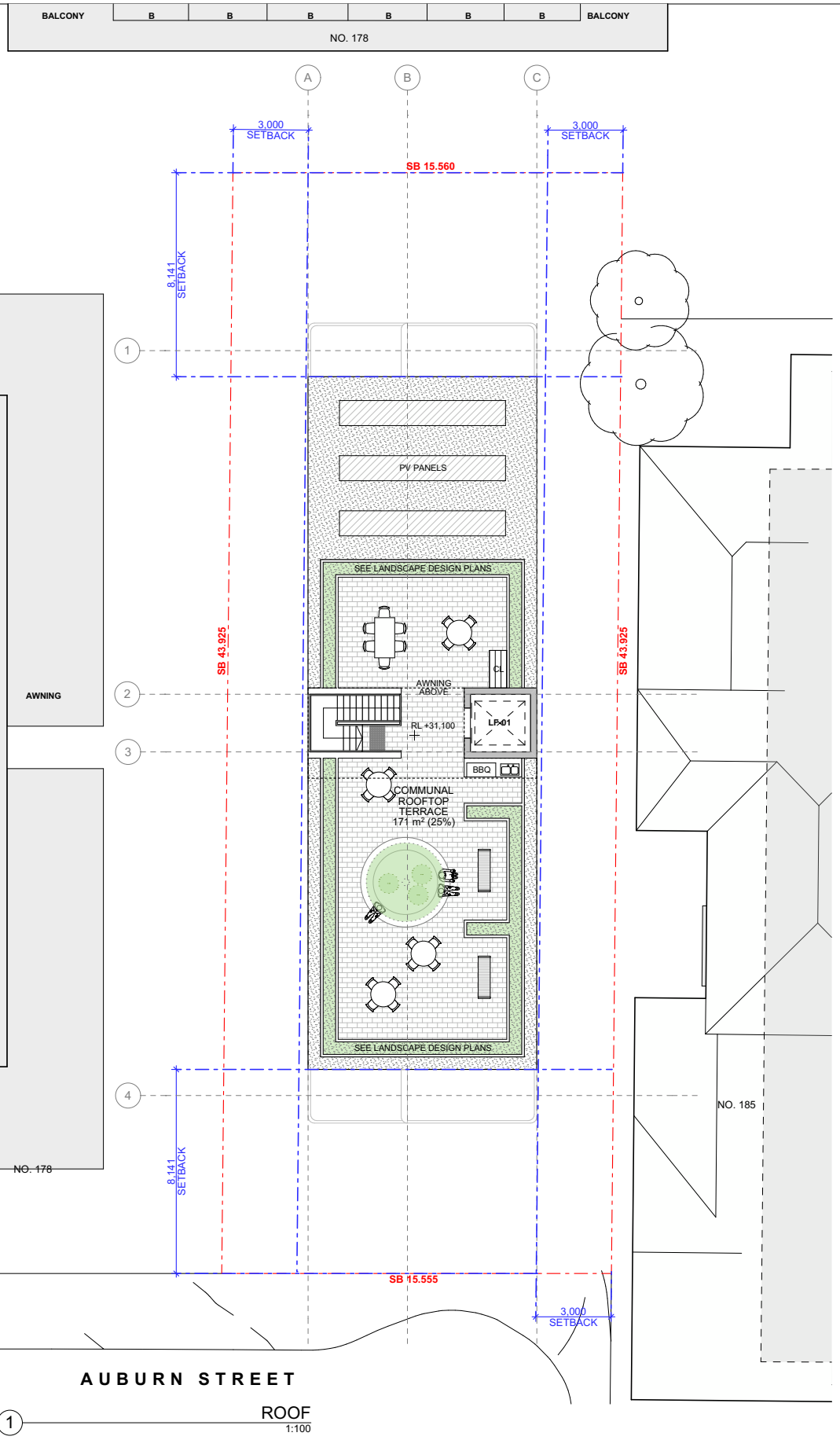
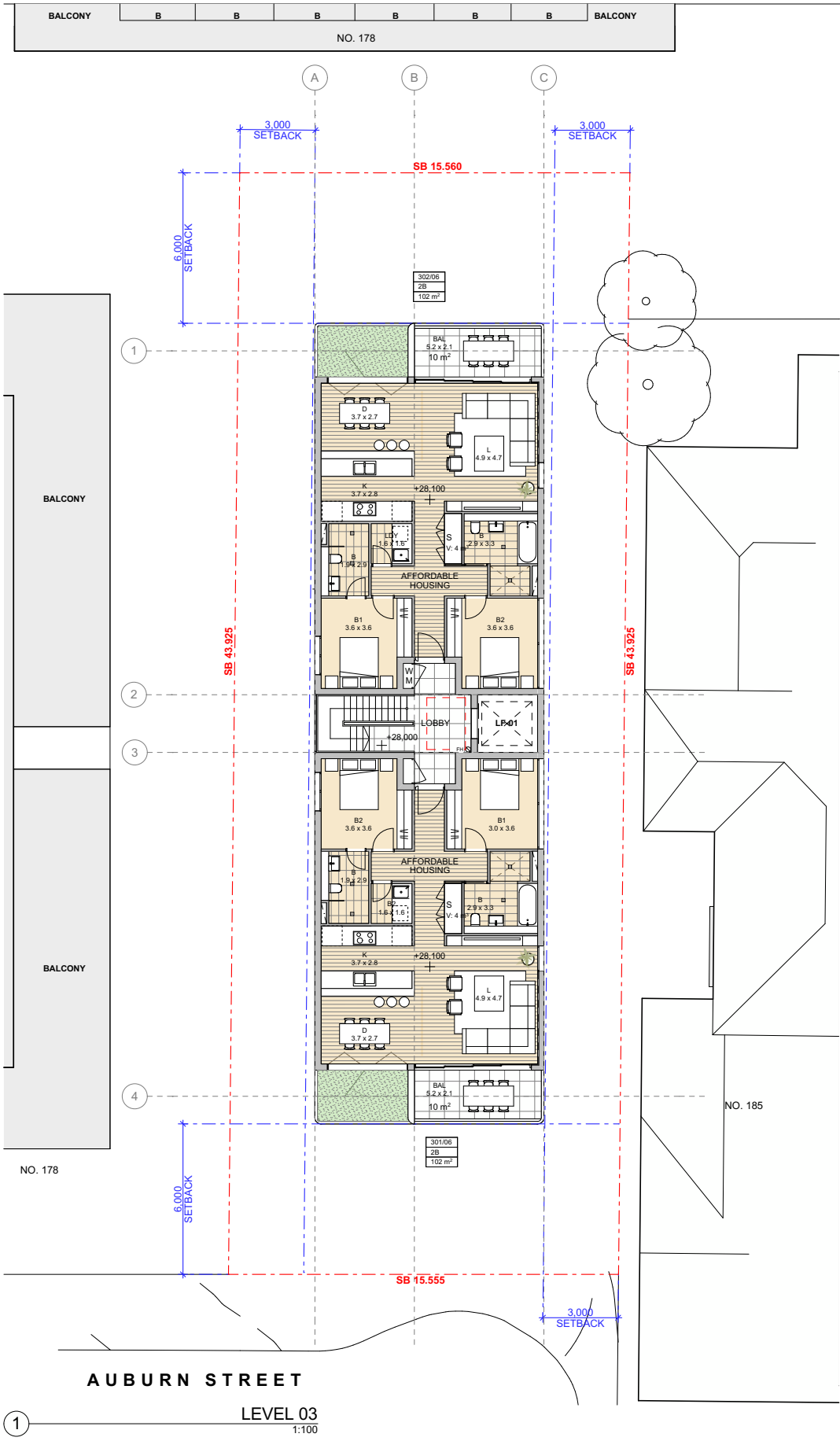
LEVEL 01 + LEVEL 02 PLAN

SHEET NO.

DA 102

REVISION

B



GENERAL NOTES

6 FUSE ARCHITECTURE  
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Rev: 2028, POINT FREDERICK  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

LEGEND

2 BED APARTMENT  
ADAPTABLE APARTMENT  
ACCESS HATCH  
ACCESS HATCH  
CAR PARK EXHAUST  
INTERCOM  
LIFT  
MAILBOXES  
SKYLIGHT  
STORAGE CAGE  
CLOTHES LINE

NO. DESCRIPTION

1. ROOF TERRACE ADDED  
2. BUILDING LOWERED  
3. PRIVACY SCREENS

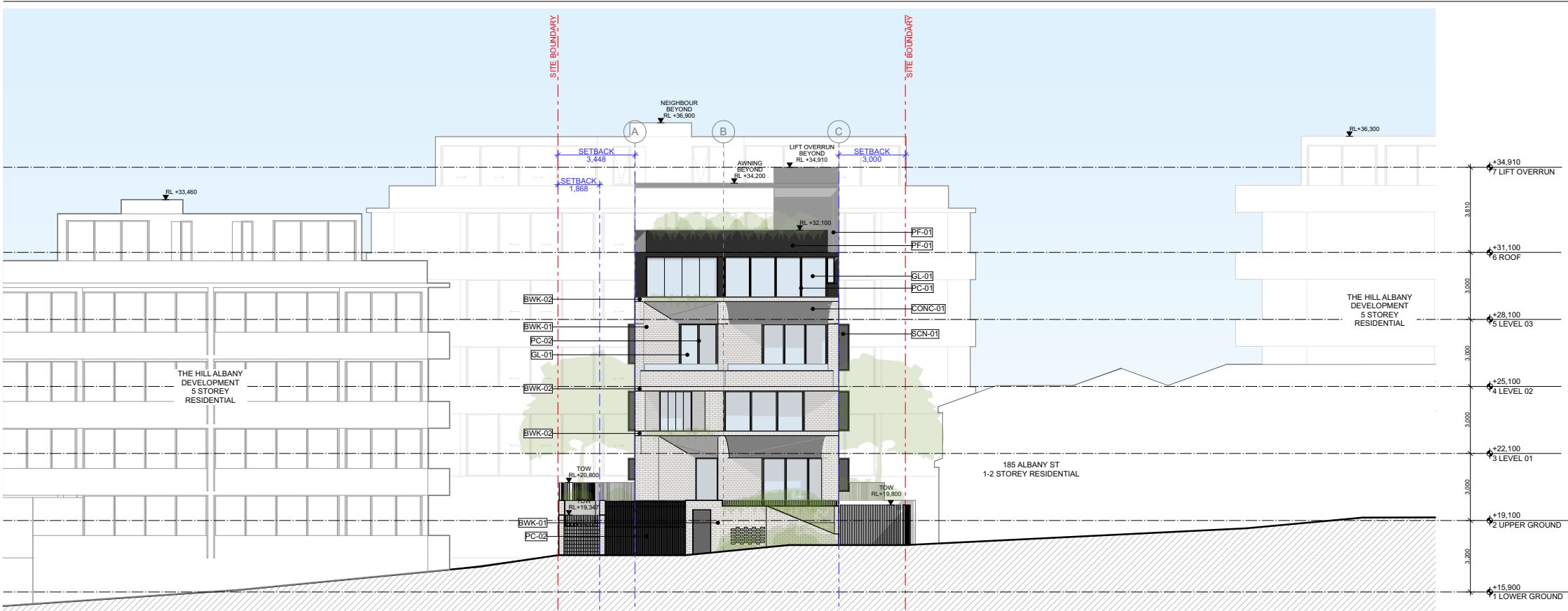
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A DA SUBMISSION 30/08/2022  
B DA AMENDMENTS 13/10/2023

ARCHITECT  
FUSE ARCHITECTS  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARLBOROUGH STREET  
SUNSHINE HILLS NSW 2510  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zyphoria 10452 Pty Ltd  
26 Cavan NSW 2161  
Quebec NSW 2161

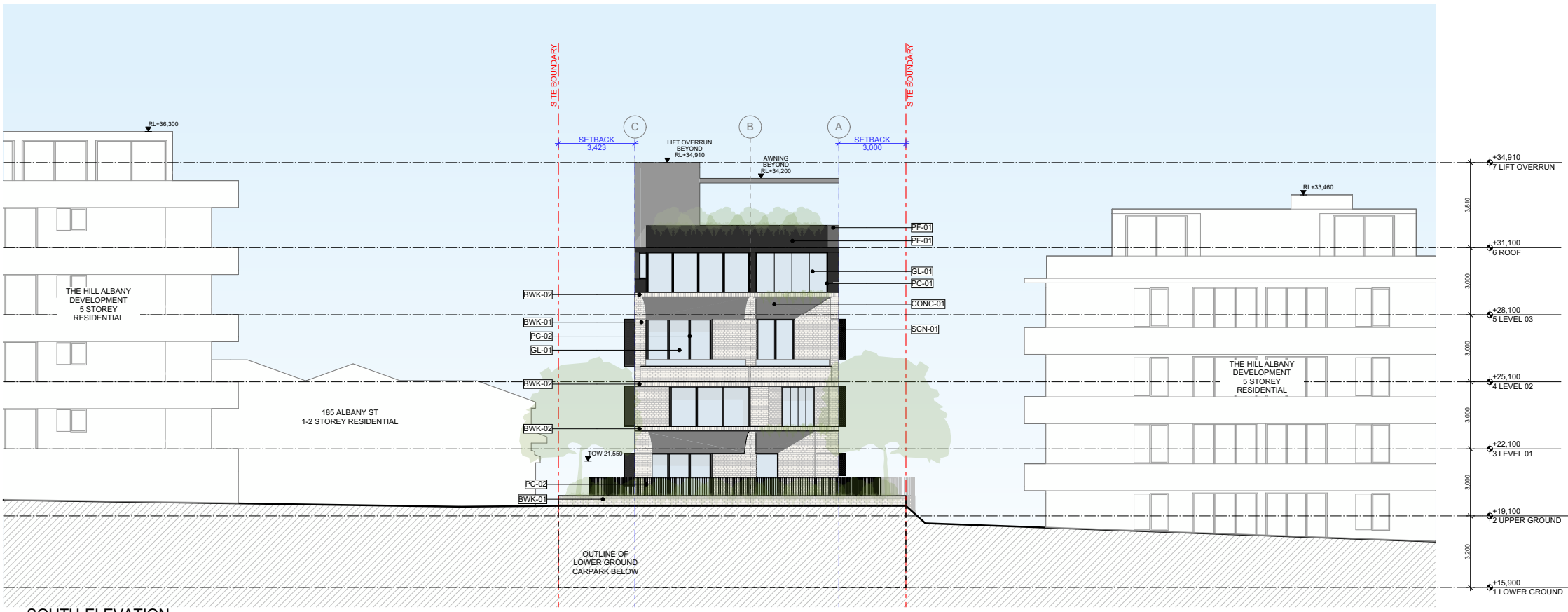
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE 19/12/2023 SCALE 1:100 @ A1 A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
LEVEL 03 + ROOF PLAN

SHEET NO. REVISION  
DA 103 B



GENERAL NOTES  
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INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS  
Bn: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

LEGEND  
BWK-01 HORIZONTAL OFF WHITE BRICK  
BWK-02 VERTICAL OFF WHITE BRICK  
BWK-03 ARTICULATED BRICK VARIATIONS  
CONC-01 CONCRETE  
GL-01 CLEAR GLASS  
PC-01 POWDER COAT DARK GREY  
PC-02 POWDER COAT GREY  
PF-01 PAINT DARK GREY  
PF-02 PAINT GREY  
SCN-01 PERFORATED LIGHT WEIGHT METAL  
SCREEN REFER TO MATERIALS SCHEDULE



NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SUNSHINE HILLS NSW 2110  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zephyrus 10452 Pty Ltd  
28 Cavan NSW 2161  
Queensland NSW 2161

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO  
2208

DRAWN  
CW

DATE  
19/12/2023

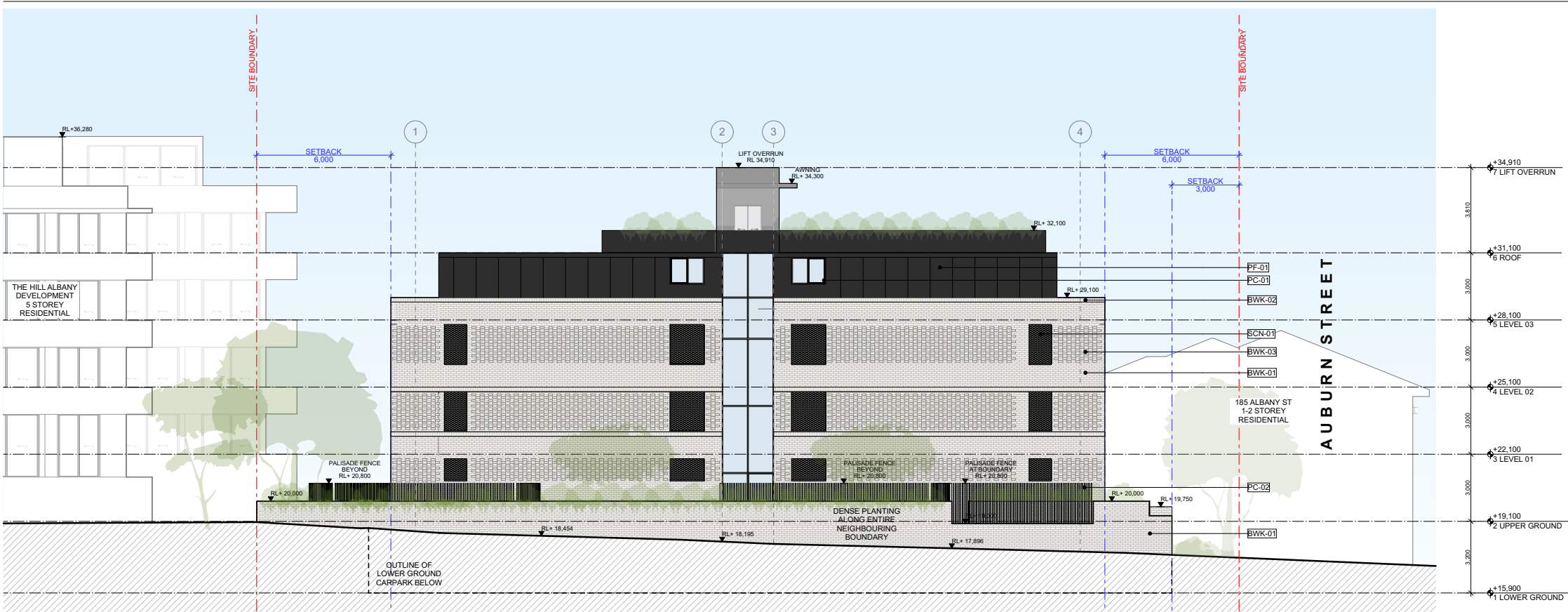
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PROJECT STATUS  
DEVELOPMENT APPLICATION

DRAWING TITLE  
NORTH + SOUTH ELEVATION

SHEET NO.	REVISION
DA 201	B





GENERAL NOTES  
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Bn: 2008\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:40 PM

LEGEND  
BWK-01 HORIZONTAL OFF WHITE BRICK  
BWK-02 VERTICAL OFF WHITE BRICK  
BWK-03 ARTICULATED BRICK VARIATIONS  
CONG-01 CONCRETE  
GL-01 CLEAR GLASS  
PC-01 POWDER COAT DARK GREY  
PC-02 POWDER COAT GREY  
PF-01 PAINT DARK GREY  
PF-02 PAINT GREY  
SCN-01 PERFORATED LIGHT WEIGHT METAL  
SCREEN REFER TO MATERIALS SCHEDULE



NO. DESCRIPTION  
1. ROOF TERRACE ADDED  
2. BUILDING LOWERED  
3. PRIVACY SCREENS

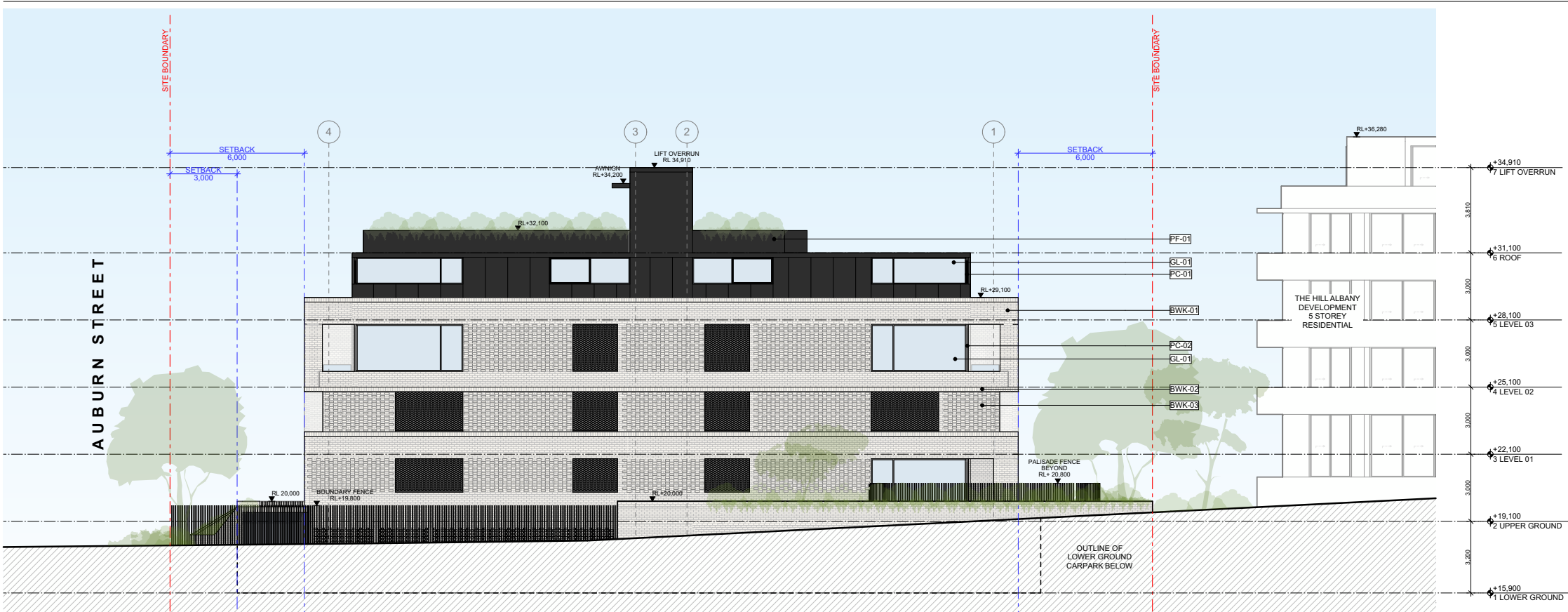
REVISION ID AMENDMENT DATE  
A DA SUBMISSION 30/08/2022  
B DA AMENDMENTS 13/10/2023

ARCHITECT  
FUSE ARCHITECTS  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARLBOROUGH STREET  
SURREY HILLS NSW 2155  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zephyrus 10452 Pty Ltd  
26 Cavan NSW 2161  
Quarterm NSW 2161

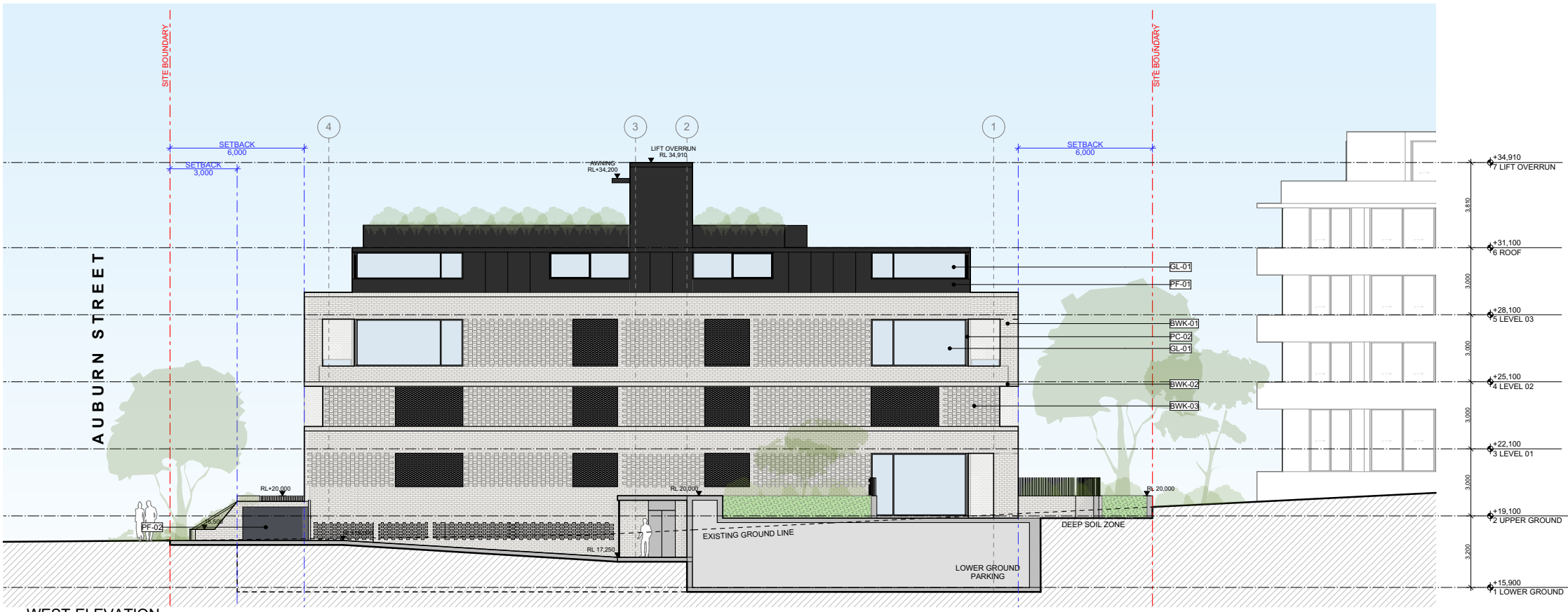
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
1:100 @ A1 A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
EAST ELEVATION

SHEET NO. REVISION  
DA 202 B



GENERAL NOTES  
6 FUSE ARCHITECTURE  
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INFORMATION  
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INCORPORATED FOR THE PREPARATION OF THESE DRAWINGS  
Bk: 2208, POINT FREDERICK  
plan date and time: Tuesday, 19 December 2023 @ 3:41 PM

LEGEND  
BWK-01 HORIZONTAL OFF WHITE BRICK  
BWK-02 VERTICAL OFF WHITE BRICK  
BWK-03 ARTICULATED BRICK VARIATIONS  
CONC-01 CONCRETE  
GL-01 CLEAR GLASS  
PC-01 POWDER COAT DARK GREY  
PC-02 POWDER COAT GREY  
PF-01 PAINT DARK GREY  
PF-02 PAINT GREY  
SCN-01 PERFORATED LIGHT WEIGHT METAL  
SCREEN REFER TO MATERIALS SCHEDULE



NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
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ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SURREY HILLS NSW 2159  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zephyrus 10452 Pty Ltd  
28 Cam Rd  
Queensland NSW 2161

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO  
2208

DRAWN  
CW

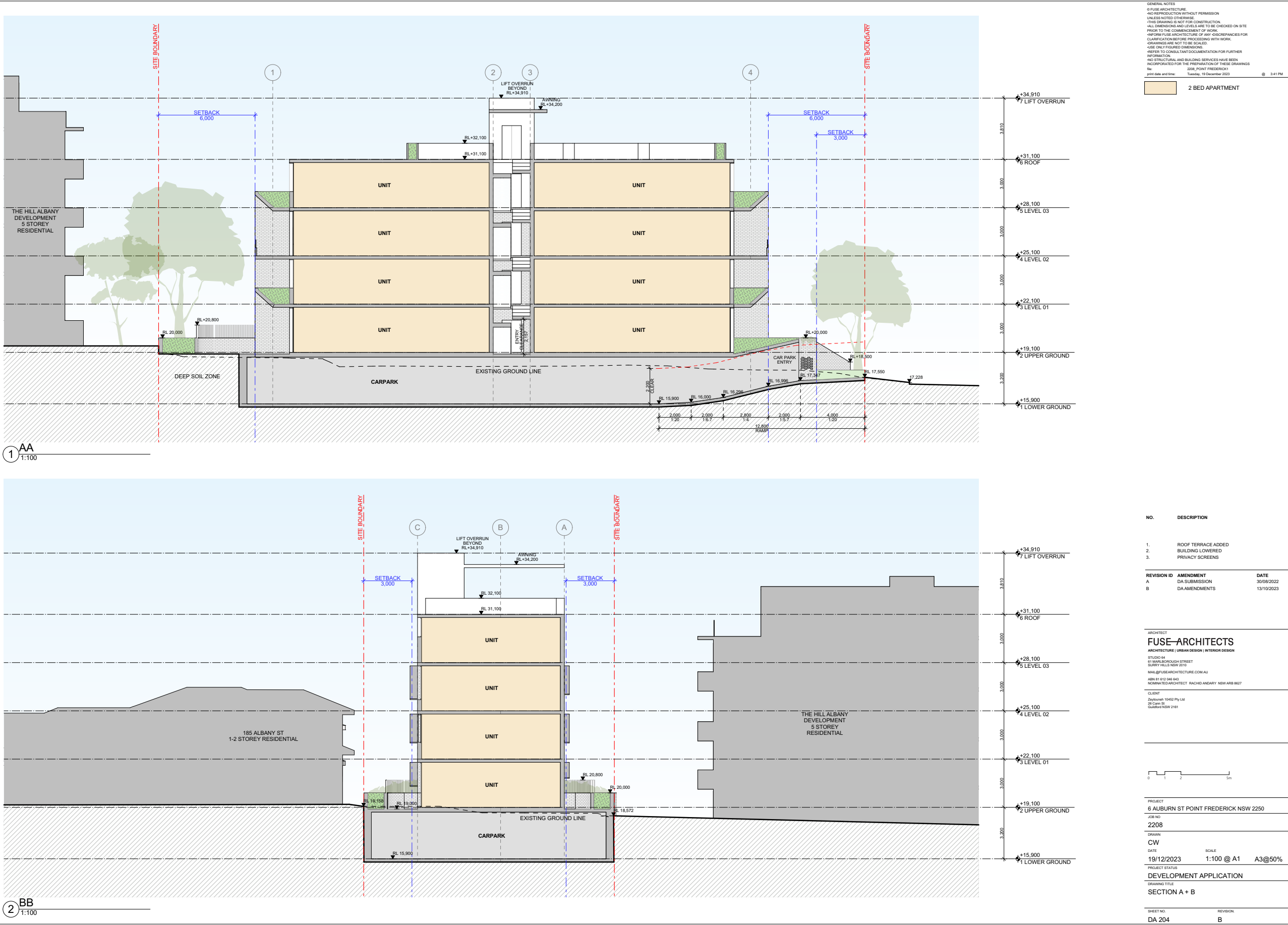
DATE  
19/12/2023

PROJECT STATUS  
DEVELOPMENT APPLICATION

DRAWING TITLE  
WEST ELEVATION

SHEET NO.	REVISION
DA 203	B





GENERAL NOTES

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2008, POINT FREDERICK1

print date and time: Thursday, 19 December 2013 3:41 PM

<b>B#</b>	BEDROOM NO.
<b>B</b>	BATHROOM
<b>ENS</b>	ENSUITE
<b>K</b>	KITCHEN
<b>L/D</b>	LIVING / DINING
<b>LDY</b>	LAUNDRY
<b>S</b>	STORAGE

NO.	DESCRIPTION
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1. ROOF TERRACE ADDED
2. BUILDING LOWERED
3. PRIVACY SCREENS

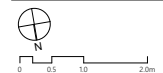
REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE—ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 64  
61 MARLBOROUGH STREET  
SURRY HILLS NSW 2010  
MAL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 643  
NOMINATED ARCHITECT RACHID ANDARY NSW ARB 8627

CLIENT  
Zeytouneh 10452 Pty Ltd  
28 Cann St  
Guildford NSW 2161



PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO  
2208

CW

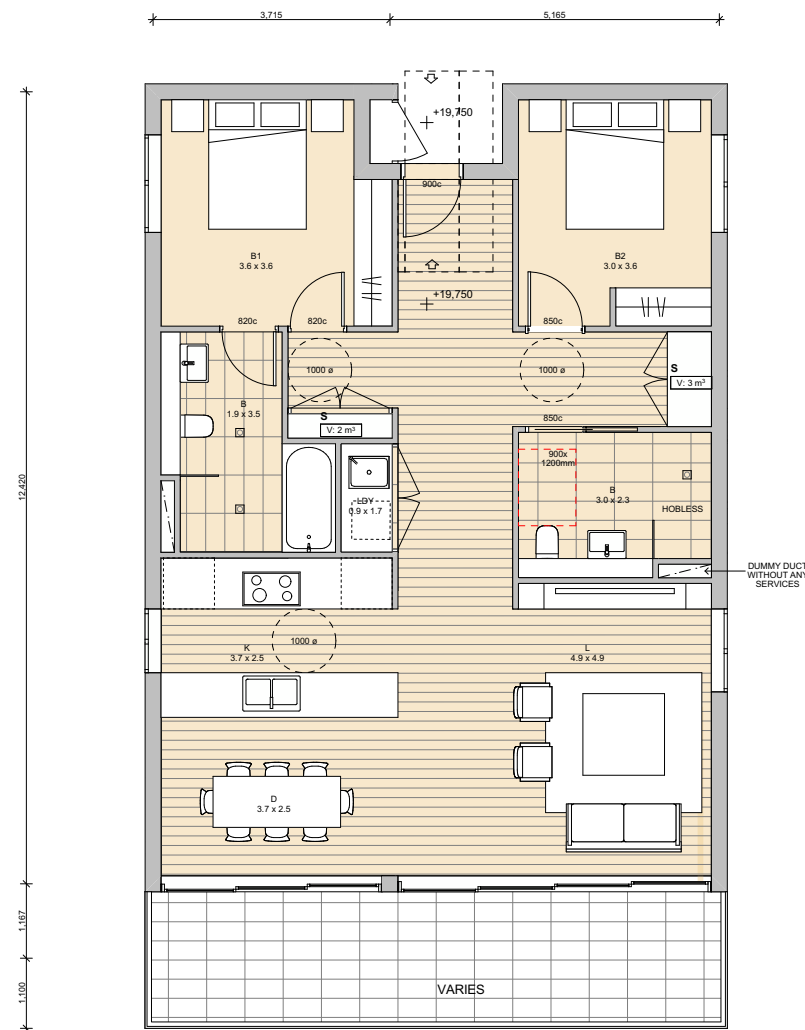
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PROJECT STATUS  
DEVELOPMENT APPLICATION

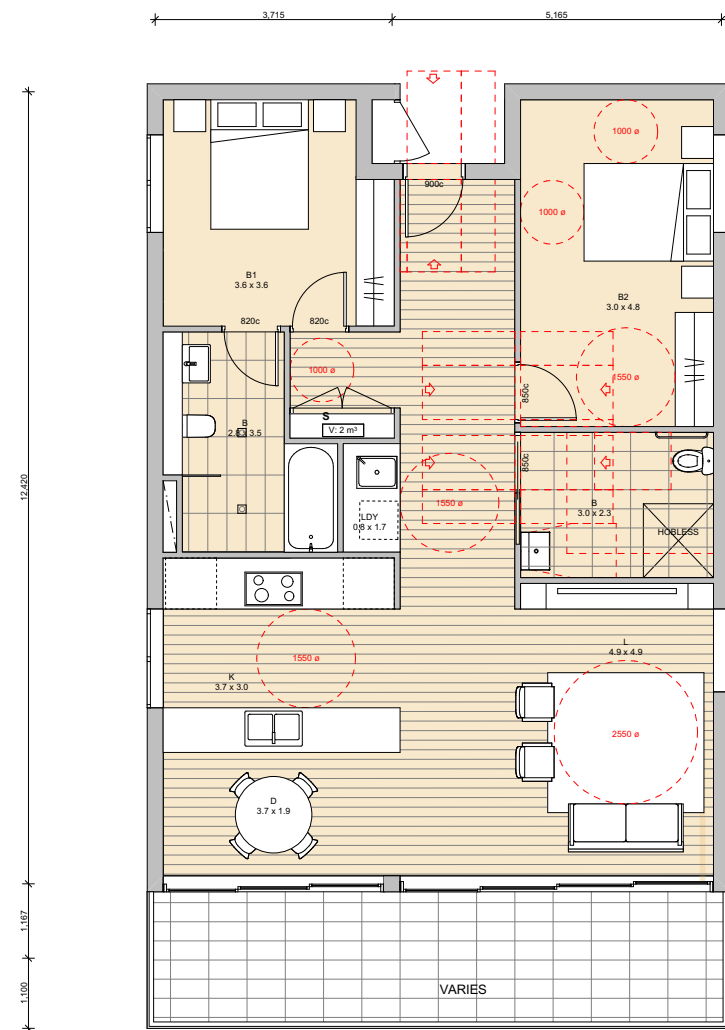
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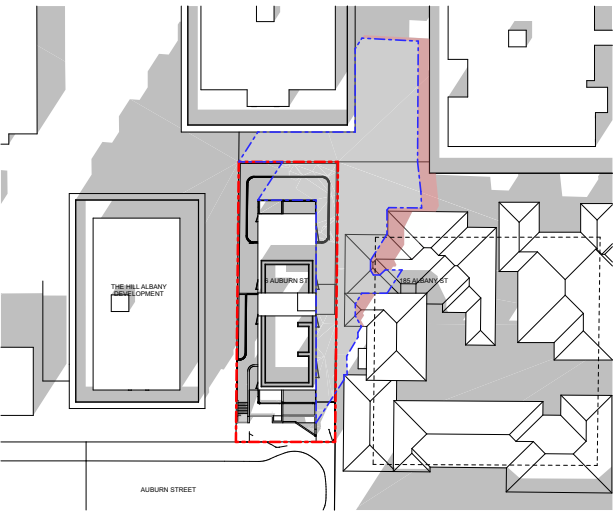
SHEET NO.	REVISION
DA 301	B



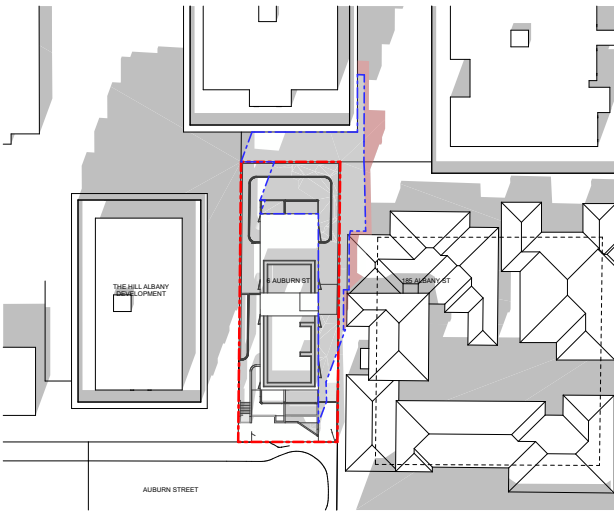
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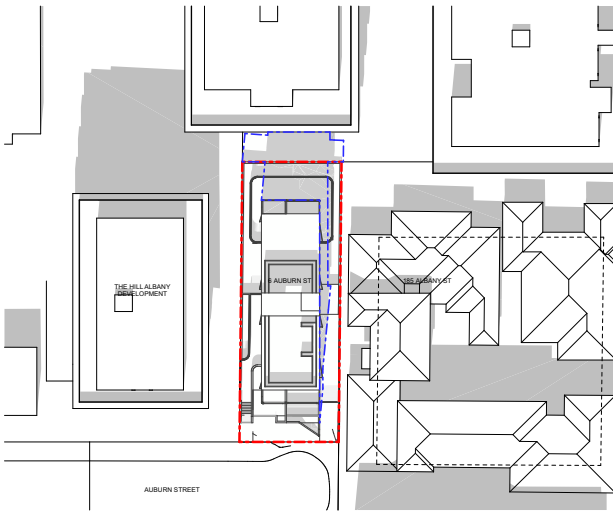
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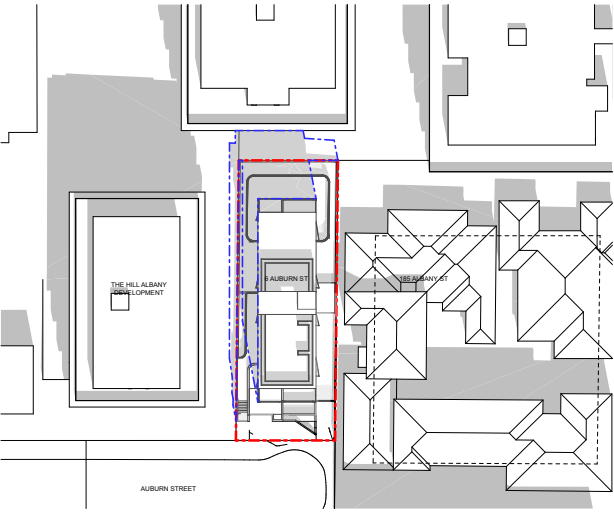
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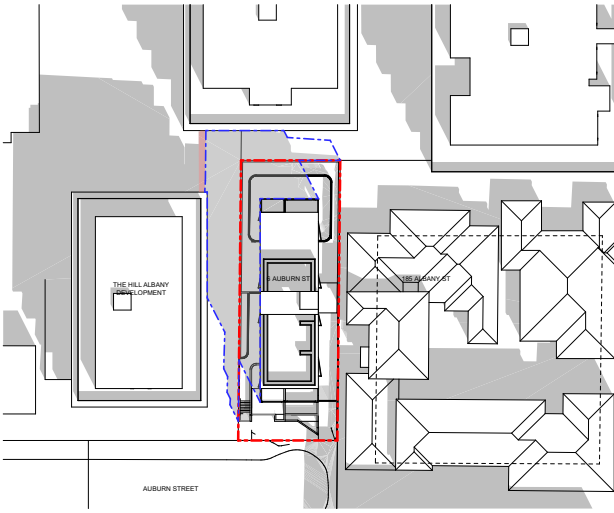
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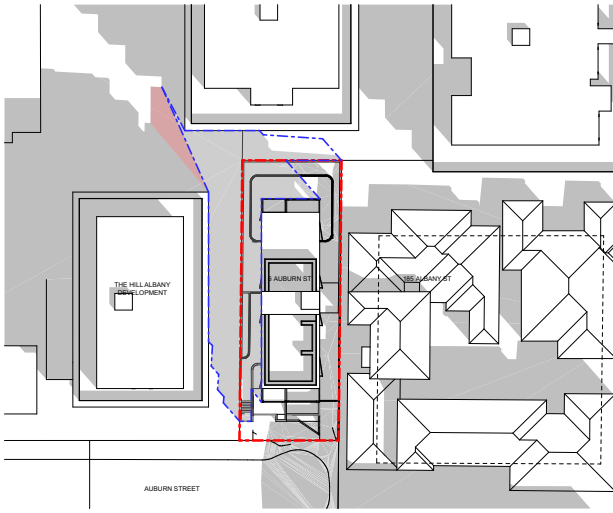
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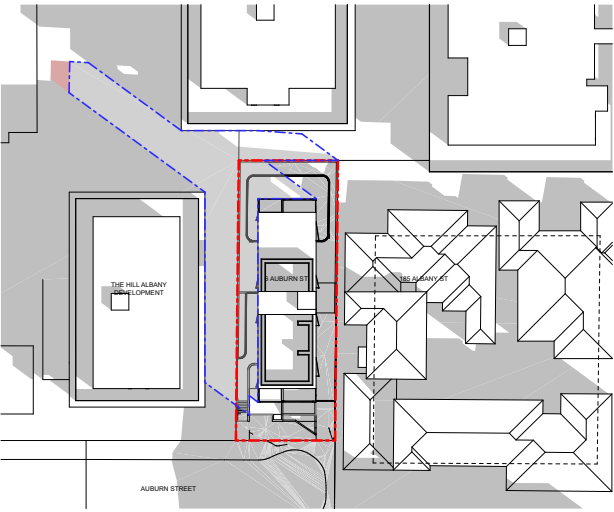
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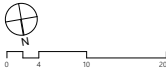
GENERAL NOTES  
6 FUSE ARCHITECTURE  
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By: 2208\_POINT\_FREDERICK1  
Date: Tuesday, 19 December 2023 @ 3:41 PM

- SITE BOUNDARY
- DCP COMPLIANT BUILDING ENVELOPE
- NEIGHBOUR POTENTIAL FUTURE DEVELOPMENT ENVELOPE
- SHADOWS CAST FROM PROPOSED BUILDING
- SHADOWS CAST FROM EXISTING BUILDINGS
- SHADOWS CAST FROM HEIGHT LIMIT BREACH

NO.	DESCRIPTION
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2.	BUILDING LOWERED
3.	PRIVACY SCREENS

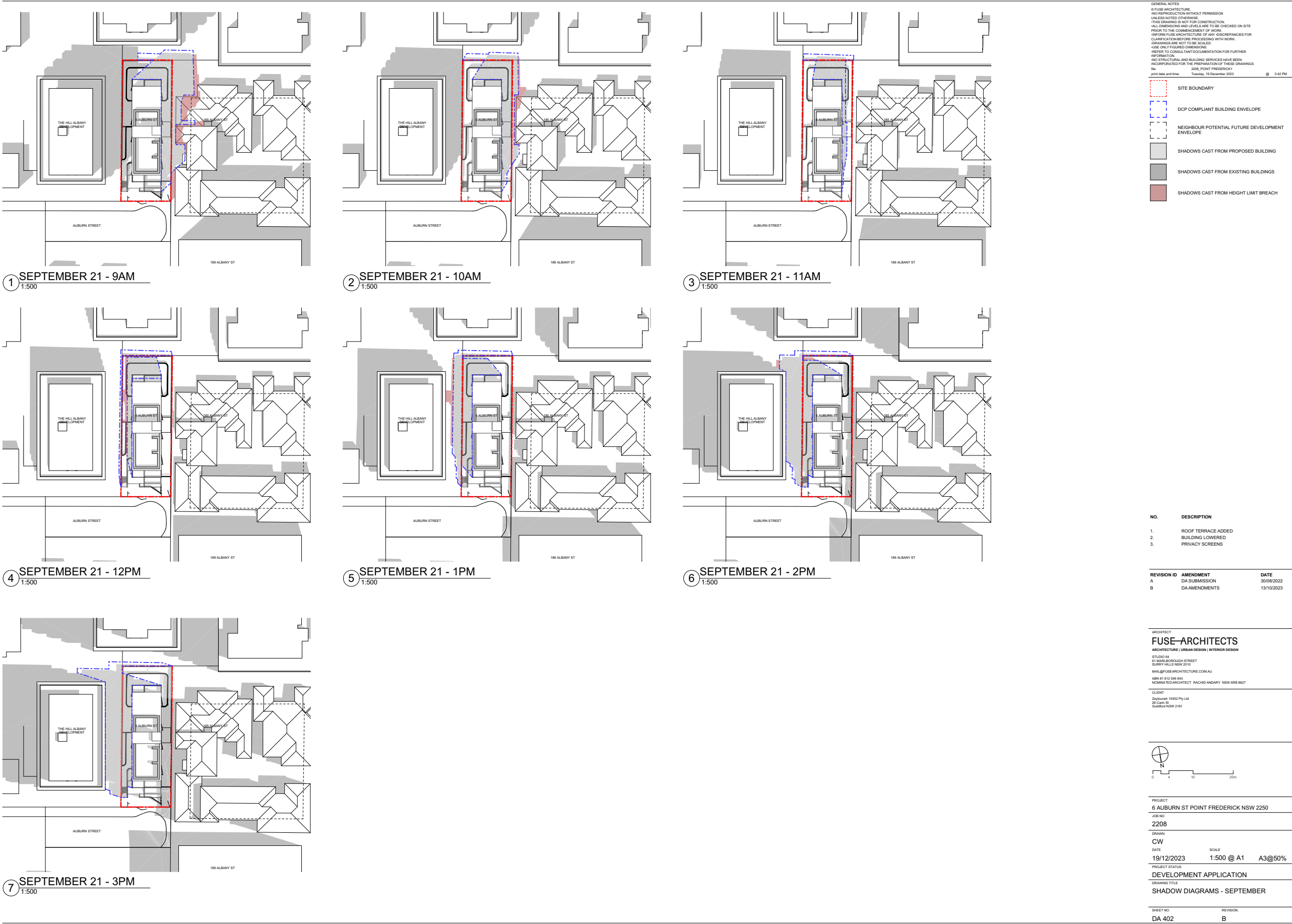
REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

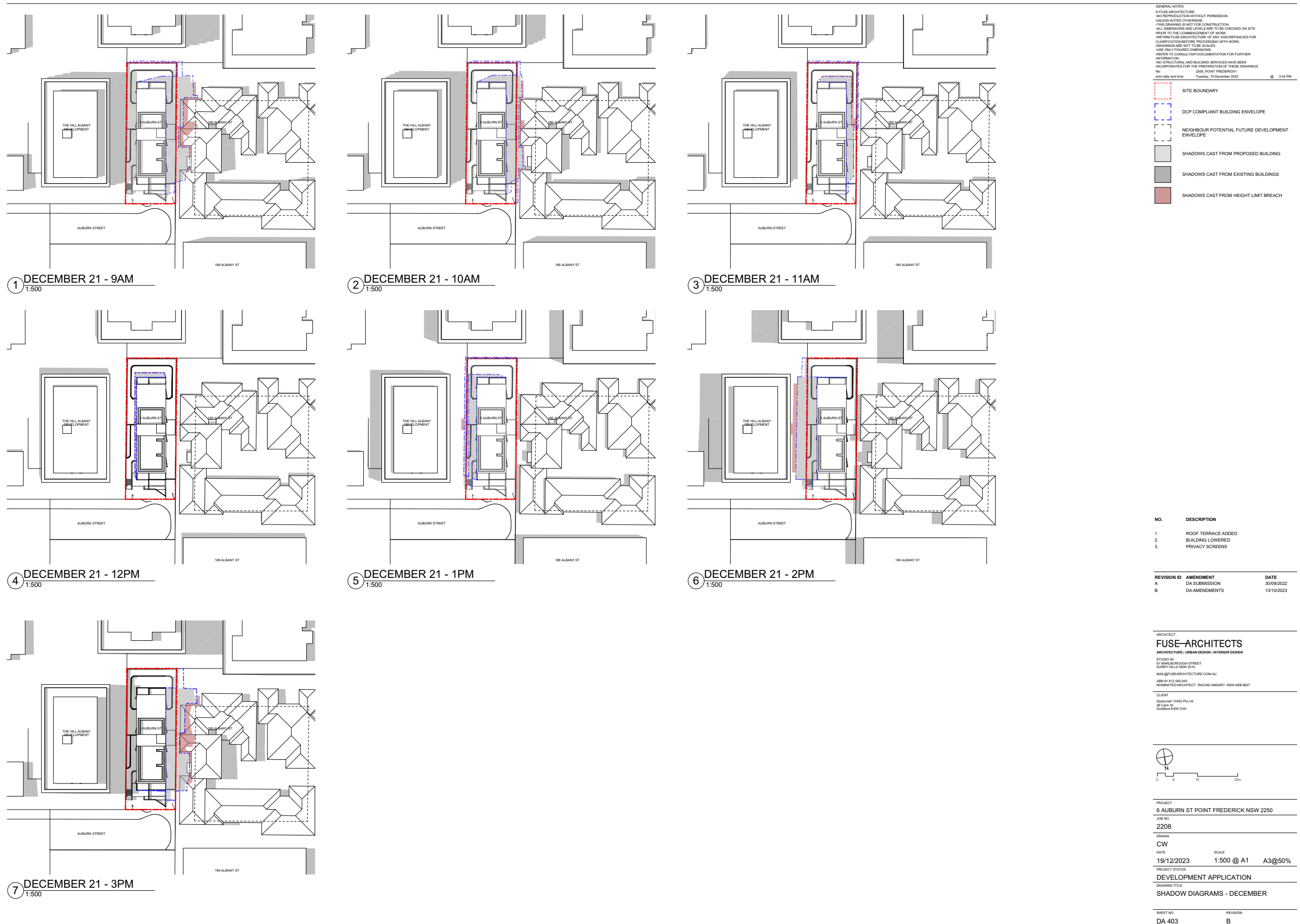
ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SURREY HILLS NSW 2159  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
26 Cavan NSW 2161  
Queensland NSW 2161



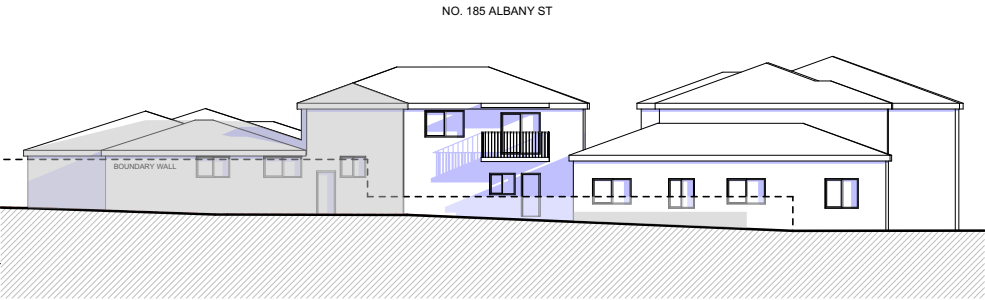
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
1:500 @ A1  
A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
SHADOW DIAGRAMS - JUNE

SHEET NO.	REVISION
DA 401	B

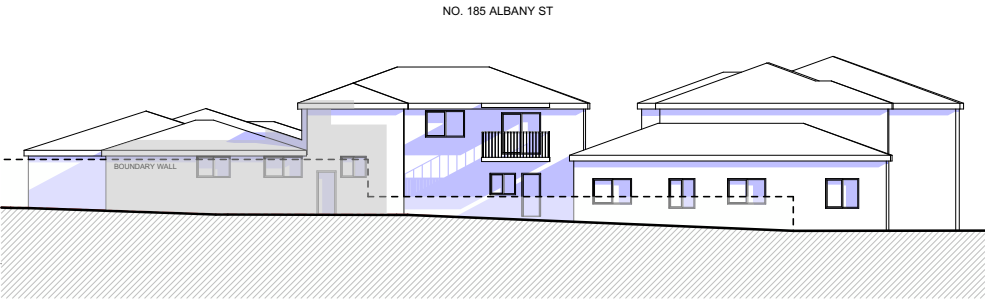




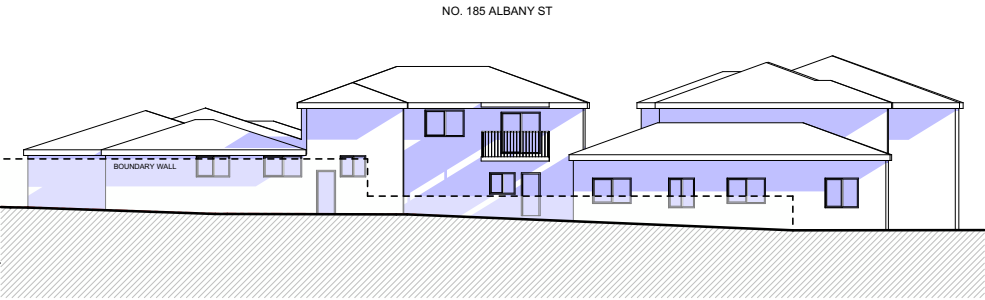




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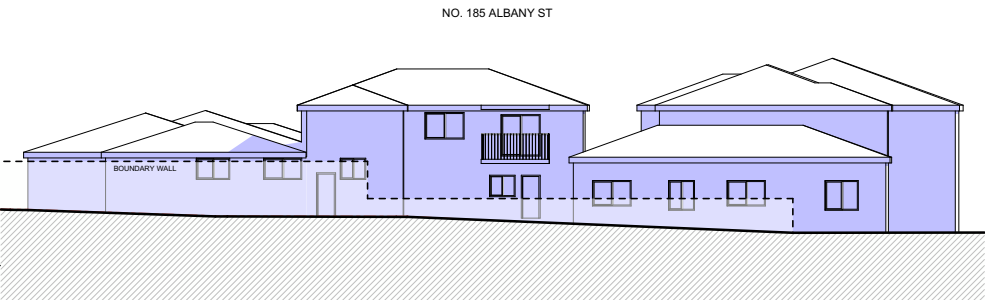
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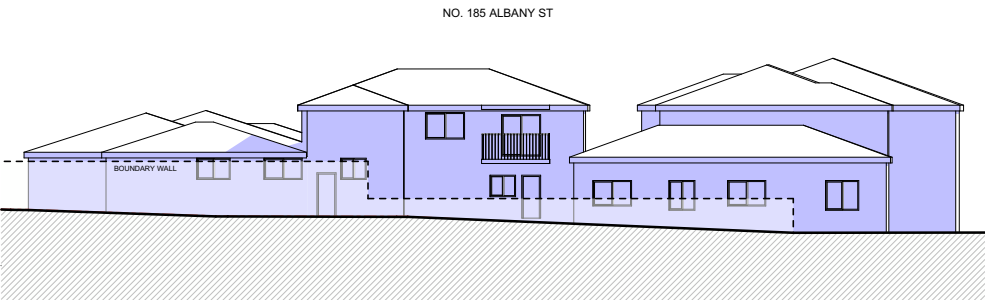
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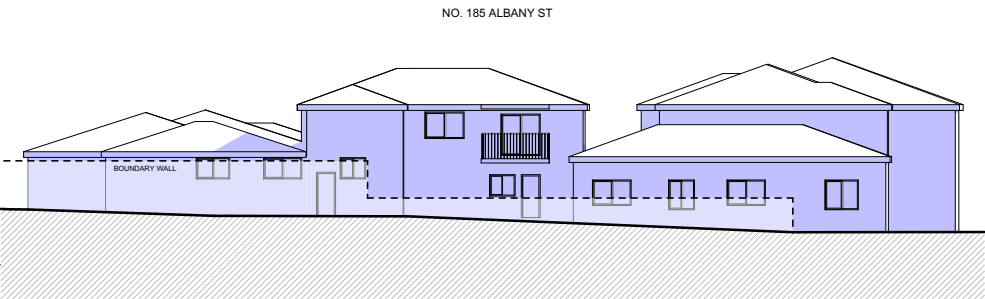
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6 JUNE 21 2PM  
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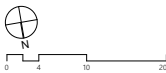
GENERAL NOTES  
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File: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:42 PM

SHADOW CAST BY PROPOSAL  
SHADOW CAST BY BUILDING ON ITSELF

- | NO. | DESCRIPTION        |
|-----|--------------------|
| 1.  | ROOF TERRACE ADDED |
| 2.  | BUILDING LOWERED   |
| 3.  | PRIVACY SCREENS    |

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

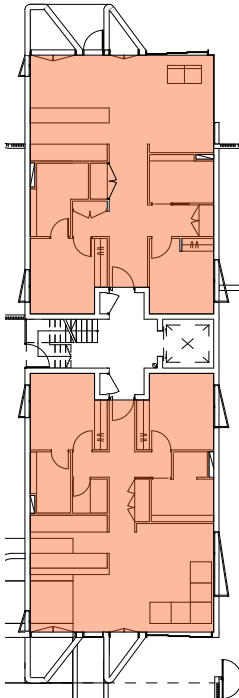
ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 04  
81 MARLBOROUGH STREET  
SURREY HILLS NSW 2155  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
26 Cam Rd  
Gundah NSW 2161



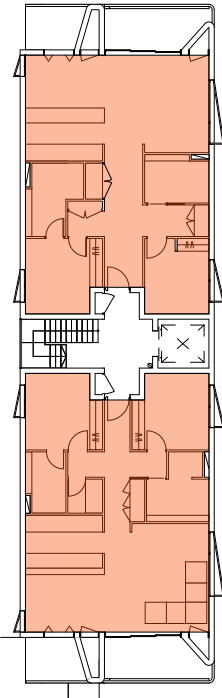
PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
1:150 @ A1  
A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
SHADOW DIAGRAMS - TOWNHOUSE IMPACT

SHEET NO.	REVISION
DA 404	B

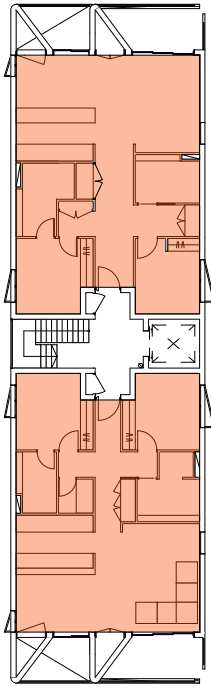




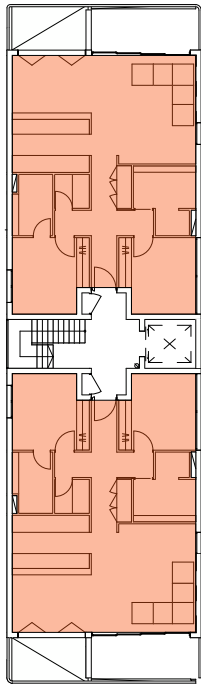
1 DAYLIGHT - UPPER GROUND



2 DAYLIGHT - LEVEL 01



3 DAYLIGHT - LEVEL 02



4 DAYLIGHT - LEVEL 03

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Rev: 2208\_POINT FREDERICK1  
Date: 19 December 2023  
Time: 3:42 PM  
NO. OF UNITS 8

SUNLIGHT ACCESS

APARTMENTS ACHIEVING SOLAR ACCESS

LEVEL	DAYLIGHT ACCESS
UPPER GROUND	2
LEVEL 01	2
LEVEL 02	2
LEVEL 03	2
	8

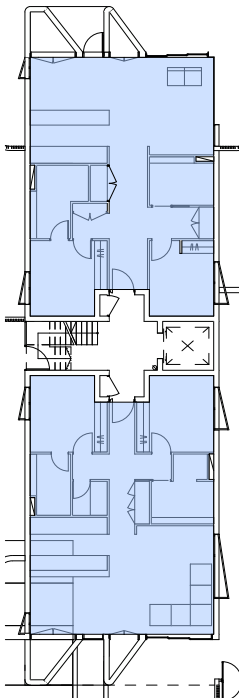
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SUNLIGHT ACCESS 8 100%  
MINIMUM REQUIREMENT 70%

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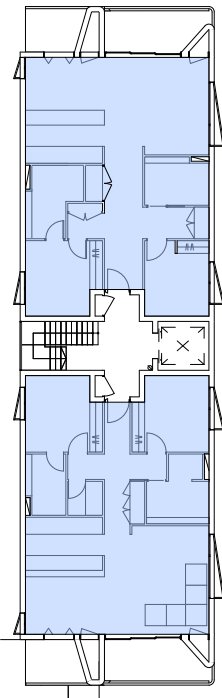
APARTMENTS ACHIEVING NATURAL VENTILATION

LEVEL	NATURAL VENTILATION
UPPER GROUND	2
LEVEL 01	2
LEVEL 02	2
LEVEL 03	2
	8

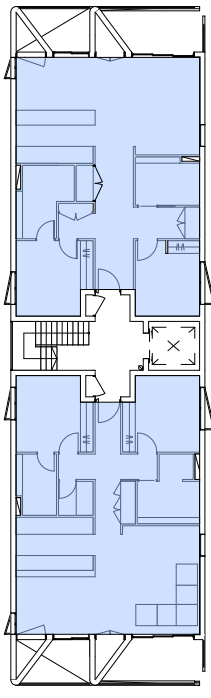
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NATURAL VENTILATION 8 100%  
MINIMUM REQUIREMENT 60%



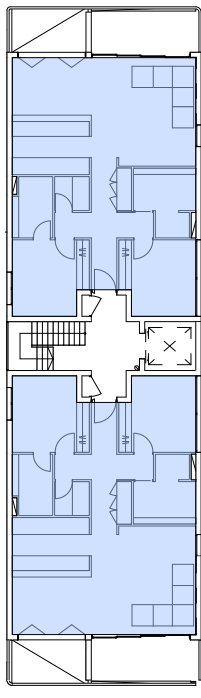
5 VENTILATION - UPPER GROUND



6 VENTILATION - LEVEL 01



7 VENTILATION - LEVEL 02



8 VENTILATION - LEVEL 03

NO. DESCRIPTION

1. ROOF TERRACE ADDED
2. BUILDING LOWERED
3. PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT

FUSE ARCHITECTS

ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 04

81 MARK BOURGESS STREET

SURRY HILLS NSW 2159

MAIL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 843

NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT

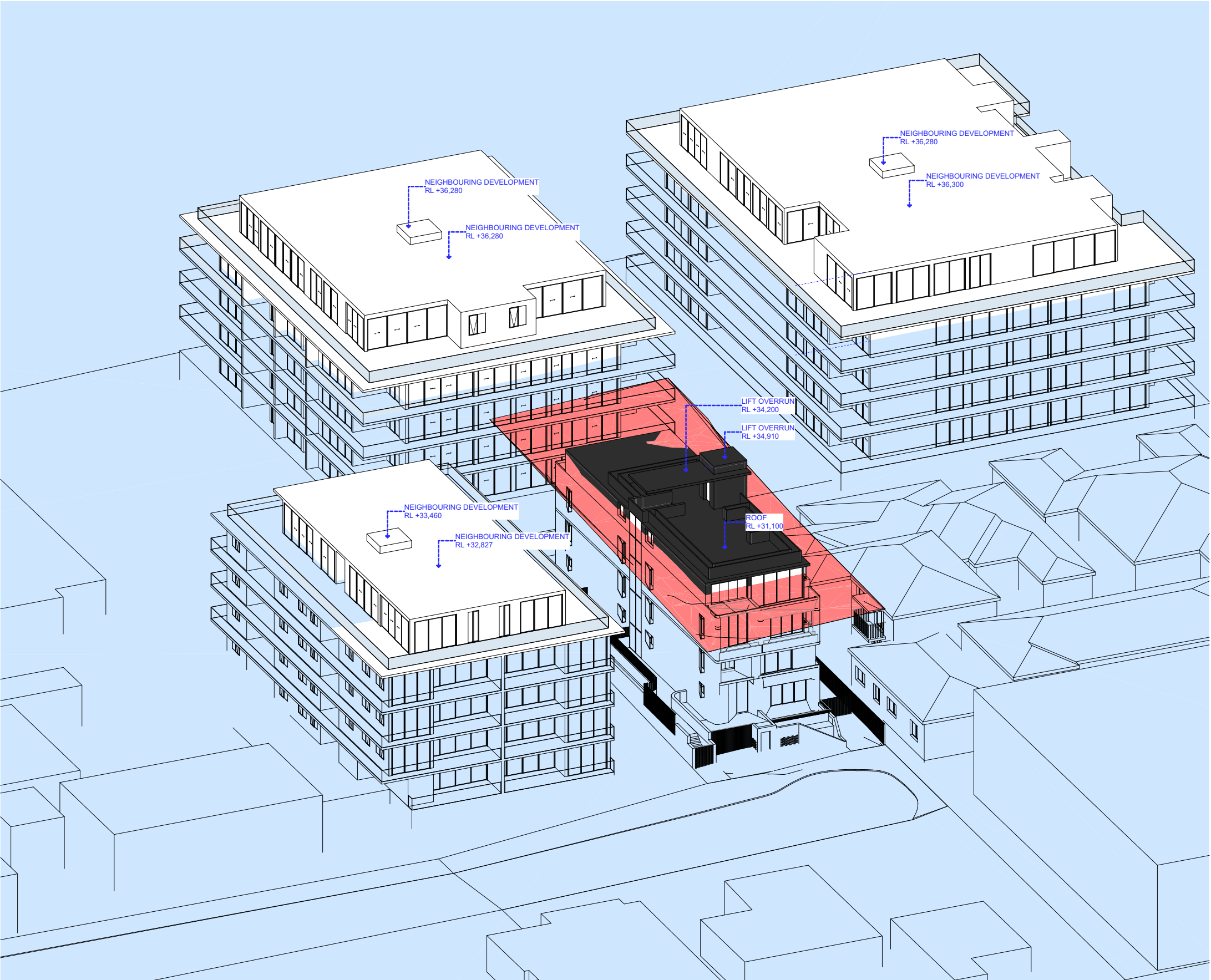
Zeynephan 10452 Pty Ltd

26 Cavan NSW 2161

Quarantine NSW 2161





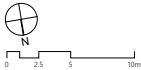


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By: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:42 PM

NO.	DESCRIPTION
1.	ROOF TERRACE ADDED
2.	BUILDING LOWERED
3.	PRIVACY SCREENS

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 04  
81 MARK BOURGESS STREET  
SUNSHINE NSW 3100  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
38 Cavan NSW 2161  
Gardens NSW 2161



PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE  
19/12/2023  
SCALE  
1:150 @ A1  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
LEP HEIGHT PLANE DIAGRAM

SHEET NO.	REVISION
DA 503	B





01	02
03	04
	05
06	07

- 01 | OPENINGS / ALUMINIUM POWDER COAT FINISH / DARK GREY OR SIMILAR
- 02 | SCREENS, FENCES, GATES / POWDER COAT FINISH OR SIMILAR / DARK GREY OR SIMILAR
- 03 | WALLS / METAL PANELS / DARK GREY OR SIMILAR
- 04 | WALLS / BRICKWORK / HIT AND MISS PATTERN / OFF WHITE OR SIMILAR
- 05 | WALLS / BRICKWORK / EXTRUDED PATTERN / OFF WHITE OR SIMILAR
- 06 | SOFFITS / CONCRETE / FINE TEXTURED PAINT FINISH / GREY PAINT FINISH
- 07 | WALLS / BRICKWORK / VARIED BRICK PROFILES / OFF WHITE OR SIMILAR

MATERIALS AND FINISHES SCHEDULE  
6 AUBURN ST POINT FREDERICK NSW 2250

FUSE-ARCHITECTS

FUSE ARCHITECTS  
T +612 8278 7159  
STUDIO 64—61 MARLBOROUGH STREET  
SURRY HILLS 2010 AUSTRALIA  
MAIL@FUSEARCHITECTS.COM.AU  
FUSEARCHITECTS.COM.AU





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By: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 19 December 2023 @ 3:42 PM

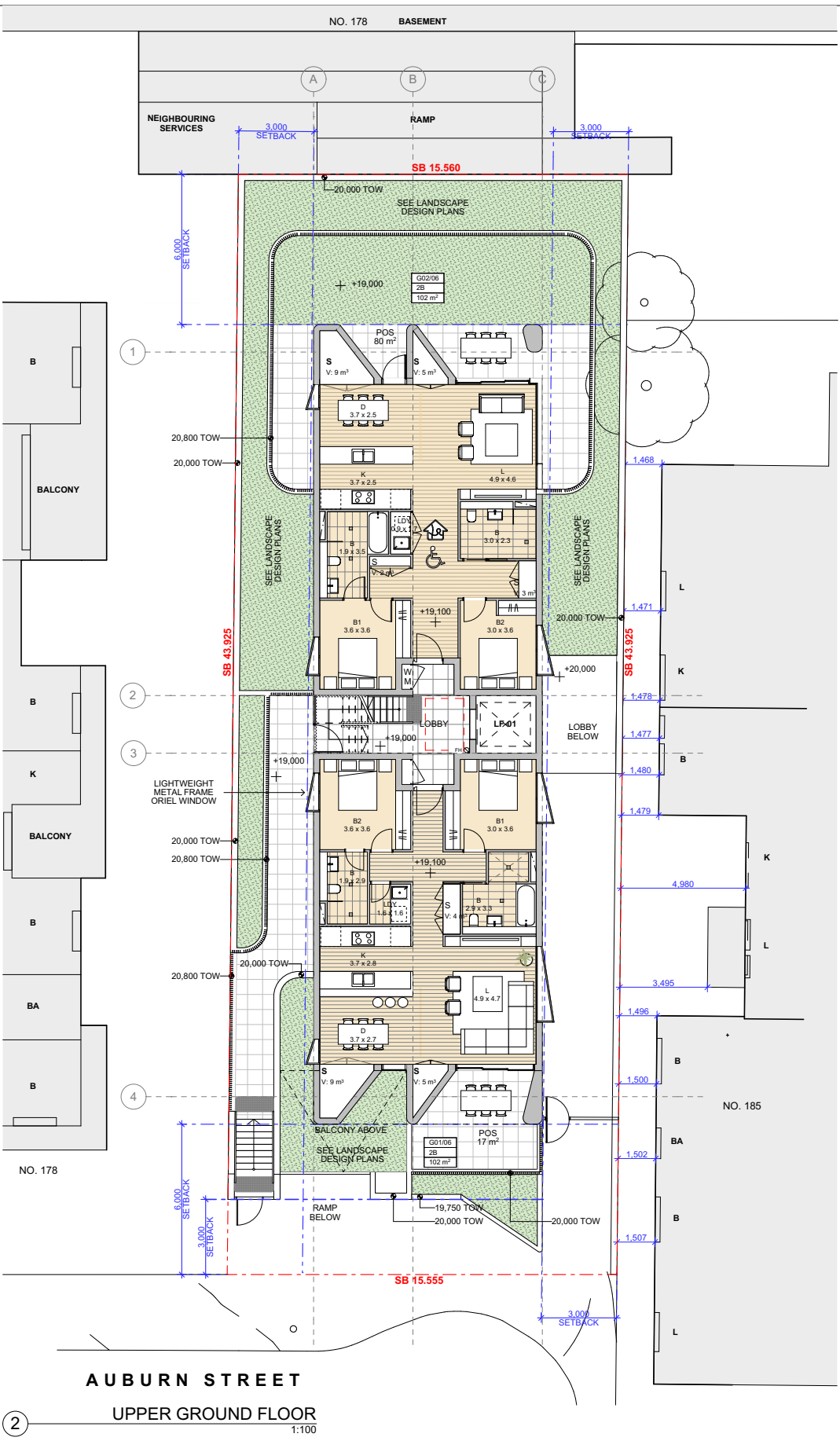
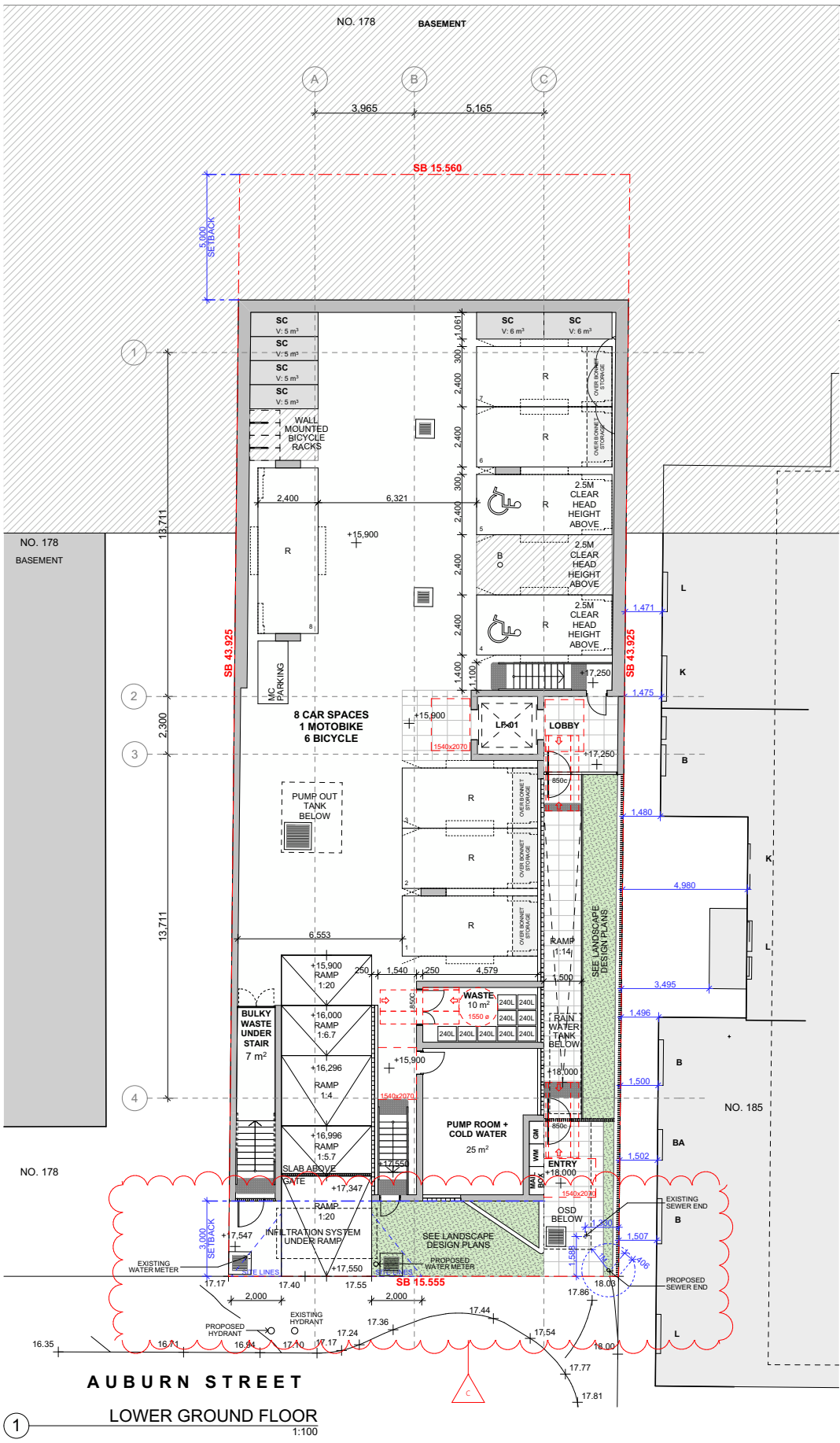
REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022
B	DA AMENDMENTS	13/10/2023

ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARK BOURGESS STREET  
SUNSHINE VIC 3048  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO JAGARY NSW ARB 8627  
CLIENT  
Zephyrus 10452 Pty Ltd  
38 Cam Rd  
Queensland NSW 2161



PROJECT	6 AUBURN ST POINT FREDERICK NSW 2250
JOB NO	2208
DRAWN	CW
DATE	19/12/2023
SCALE	@ A1
PROJECT STATUS	DEVELOPMENT APPLICATION
DRAWING TITLE	PHOTOMONAGE
SHEET NO.	DA 701
REVISION	B





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File: 2208\_POINT\_FREDERICK1  
print date and time: Wednesday, 24 January 2024 @ 4:36 PM

LEGEND

2 BED APARTMENT

ADAPTABLE APARTMENT

ACCESS HATCH

ACCESS HATCH

CAR PARK EXHAUST

INTERCOM

LIFT

MAILBOXES

SKYLIGHT

STORAGE CAGE

CLOTHES LINE

NO. DESCRIPTION

1. ADDITION OF SEWER ASSETS

REVISION ID AMENDMENT DATE

A DA SUBMISSION 30/08/2022

B DA AMENDMENTS 13/10/2023

C DA AMENDMENTS 24/01/2024

ARCHITECT

FUSE ARCHITECTS

ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 44  
81 MARLBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT

Zyngene 10452 Pty Ltd  
36 Cammeray NSW 2161  
Queensland NSW 2161

PROJECT

6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO

2208

DRAWN

CW

DATE

24/01/2024

SCALE

1:100 @ A1 A3@50%

PROJECT STATUS

DEVELOPMENT APPLICATION

DRAWING TITLE

LOWER GROUND + UPPER GROUND PLAN

SHEET NO. REVISION

DA 101 C

## Clause 5.28 – Exception to Development Standards

6 Auburn Street, Point Frederick

January 2024



## 1. INTRODUCTION

This Clause 5.28 Exceptions to Development Standards request has been prepared by BMA Urban on behalf of Fuse Architects. It is submitted in support of a development Application (DA) for the redevelopment of the site at 6 Auburn Street, Point Frederick.

This request seeks approval to vary the height of buildings development standard in clause 5.25 of the (Precincts-Regional) SEPP 2021. For the avoidance of doubt, the development standard is not specifically excluded from the operation of Clause 5.28 of the SEPP.

Clause 5.25 prescribes a numerical building height limit of 12m over the subject site. The proposed building height departs from this standard as demonstrated in **Part 2** of this variation request.

Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021 enables consent for development to be granted even though it contravenes a development standard. The clause aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

As the following request demonstrates, flexibility may be afforded by Clause 5.28 because compliance with the height of buildings development standard is unreasonable or unnecessary in the circumstances of the case and there are sufficient environmental planning grounds to justify contravening the standard. This request also demonstrates that the proposal will be in the public interest, as the proposed development will be consistent with the objectives of the development standard and the zoning of the site.

The following sections of the report provide an assessment of the request to vary the development standards relating to **“height of buildings”** in accordance with Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021.

Consideration has been given to the following matters within this assessment:

- *Varying development standards: A Guide*, prepared by the Department of Planning and Infrastructure dated August 2011.
- Relevant planning principles and judgments issued by the Land and Environment Court. The *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 court judgment is the most relevant of recent case law.

Chief Justice Preston of the Land and Environment Court confirmed (in the above judgment):

The consent authority must, primarily, be satisfied the applicant’s written request adequately addresses the ‘unreasonable or unnecessary’ and ‘sufficient environmental planning grounds’ tests:

*“that the applicant’s written request ... has adequately addressed the matters required to be demonstrated by cl 4.6(3). These matters are twofold: first, that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case ... and, secondly, that there are sufficient environmental planning grounds to justify contravening the development standard ...”* [15]

On the ‘Five Part Test’ established under *Wehbe v Pittwater Council* [2007] NSWLEC 827:

*“The five ways are not exhaustive of the ways in which an applicant might demonstrate that compliance with a development standard is unreasonable or unnecessary; they are merely the most commonly invoked ways. An applicant does not need to establish all of the ways. It may be sufficient to establish only one way...”* [22]



That, in establishing 'sufficient environmental planning grounds', the focus must be on the contravention and not the development as a whole:

*"The environmental planning grounds advanced in the written request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole" [26]*

This clause 5.28 (4.6) does not directly or indirectly establish a test that the non-compliant development should have a neutral or beneficial effect relative to a compliant development:

*"Clause 4.6 does not directly or indirectly establish this test. The requirement in cl 4.6(3)(b) is that there are sufficient environmental planning grounds to justify contravening the development standard, not that the development that contravenes the development standard will have a better environmental planning outcome than a development that complies with the development standard." [88]*

This variation has specifically responded to the matters outlined above and demonstrates that the request meets the relevant tests with regard to recent case law.

In accordance with Clause 5.28 requirements, this variation request:

- identifies the development standard to be varied (**Part 2**);
- identifies the variation sought (**Part 2**);
- Summarises relevant case law (**Part 3**);
- establishes that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case (**Part 4**);
- demonstrates there are sufficient environmental planning grounds to justify the contravention (**Part 4**); and
- Provides a conclusion summarising the preceding parts (**Part 5**).

This request should be read in conjunction with the architectural plan detail prepared by Fuse Architects.

## 2. VARIATION OF HEIGHT OF BUILDINGS STANDARD

### 2.1 DEVELOPMENT STANDARD

Clause 5.25 (2) of the SEPP sets out the maximum building height for development as shown on the Height of Buildings Map. The site is subject to a maximum building height of 12 metres as illustrated in **Figure 2**.

The objectives of clause 5.25 as set out in clause 5.25(1) of the SEPP (Precincts-Regional) 2021 are:

- (a) to establish maximum height limits for buildings,
- (b) to permit building heights that encourage high quality urban form,
- (c) to ensure that buildings and public areas continue to receive satisfactory exposure to sky and sunlight,
- (d) to nominate heights that will provide an appropriate transition in built form and land use intensity,
- (e) to ensure that taller buildings are located appropriately in relation to view corridors and view impacts and in a manner that is complementary to the natural topography of the area,
- (f) to protect public open space from excessive overshadowing and to allow views to identify natural topographical features.

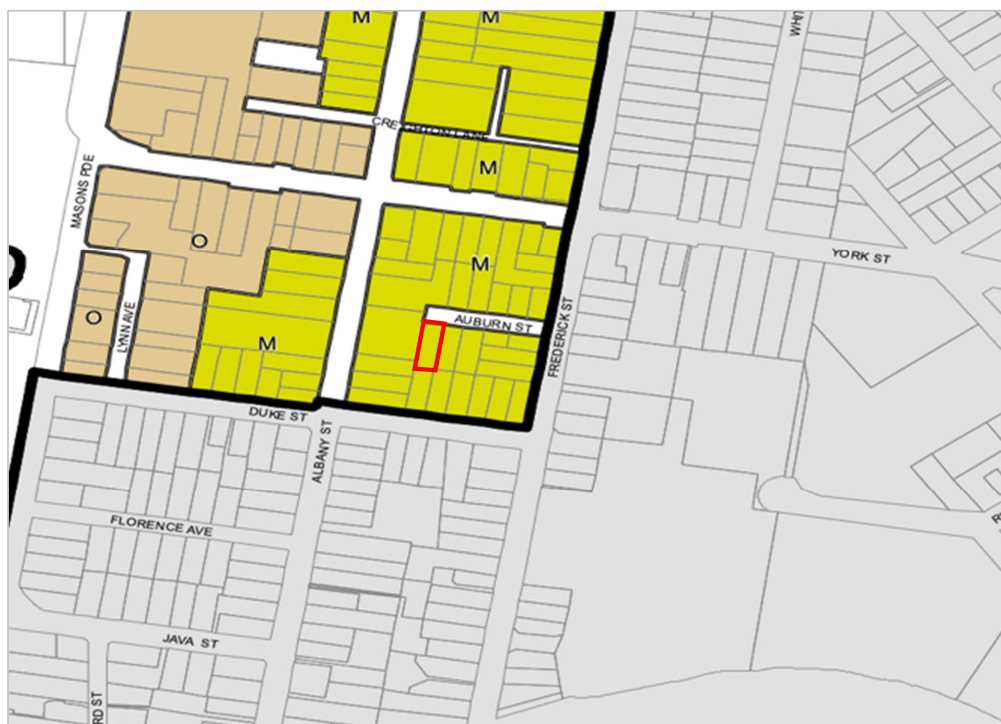


Figure1: Height of Buildings Map  
(Source: SEPP (Precincts Regional 2021))

Subject site

M 12

## 2.2 VARIATION TO HEIGHT OF BUILDING STANDARD

The proposed height departure across the building ranges from 350mm to 3.81m. The extent of contravention from the prescribed height is best demonstrated in **Figure 2** below.

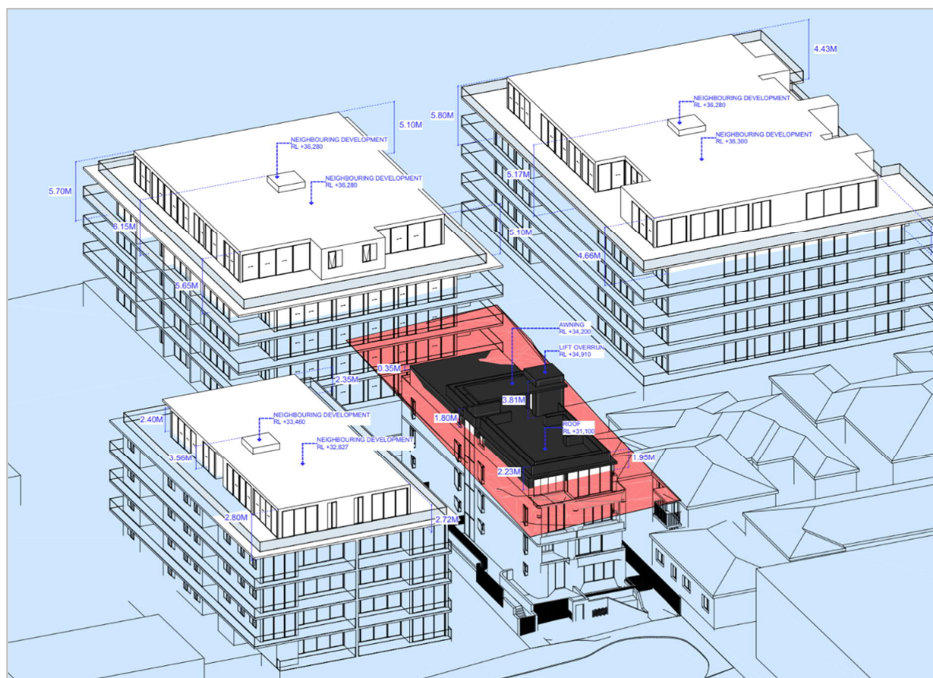


Figure 2: Height Breach Overlay  
Source: Fuse Architects

### 3. RELEVANT ASSESSMENT FRAMEWORK

Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021 enables consent for development to be granted even though it contravenes a development standard. The objectives of clause 5.28 of the SEPP are:

1. (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
2. (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

Clause 5.28 provides flexibility in the application of planning provisions by allowing the consent authority to approve a DA that does not comply with certain development standards, where it can be shown that flexibility in the particular circumstances of the case would achieve better outcomes for and from the development.

In determining whether to grant consent for development that contravenes a development standard, clause 5.28 (3) requires that the consent authority to consider a written request from the applicant that seeks to justify the contravention of the development by demonstrating:

1. (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
2. (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Clause 5.28(4) requires the consent authority keep a record of its assessment.

This clause 5.28 request demonstrates that compliance with the height of building prescribed for the site in Clause 5.25 of SEPP (Precincts-Regional) 2021 is unreasonable and that there are sufficient environmental planning grounds to justify the requested variation.

In accordance with clause 5.28(3), the applicant requests that the height of building standard be varied.



## 4. ASSESSMENT OF THE CLAUSE 5.25 VARIATION

The following sections of the report provide a comprehensive assessment of the request to vary the development standards relating to the height of buildings standard in accordance with Clause 5.25 of SEPP (Precincts-Regional) 2021.

Detailed consideration has been given to the following matters within this assessment:

- Varying development standards: A Guide, prepared by the Department of Planning and Infrastructure dated August 2011.
- Relevant planning principles and judgements issued by the NSW Land and Environment Court. The following sections of the report provide detailed responses to the key questions required to be addressed within the above documents and clause 5.28 of the SEPP.

### 4.1. ABILITY TO VARY THE STANDARD

The height of building standard prescribed by Clause 5.25 of SEPP (Precincts-Regional) 2021, is a development standard capable of being varied under clause 5.28(2) of the SEPP. The proposed variation is not excluded from the operation of clause 5.28(2) as it does not comprise any of the matters listed within clause 5.28(6) or clause 5.28(8) of the SEPP.

### 4.2 CONSIDERATION

#### 4.2.1 Clause 5.28 (3)(a) – Is Compliance with the Development Standard Unreasonable or Unnecessary in the Circumstances of the Case?

Historically, the most common way to establish a development standard was unreasonable or unnecessary was by satisfying the first method set out in *Wehbe v Pittwater Council* [2007] NSWLEC 827. This method requires the objectives of the standard are achieved despite the non-compliance with the standard.

This was recently re-affirmed by the Chief Judge in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 at [16]-[17]. Similarly, in *Randwick City Council v Micaul Holdings Pty Ltd* [2016] NSWLEC 7 at [34] the Chief Judge held that “establishing that the development would not cause environmental harm and is consistent with the objectives of the development standards is an established means of demonstrating that compliance with the development standard is unreasonable or unnecessary”.

This Request addresses the first method outlined in *Wehbe v Pittwater Council* [2007] NSWLEC 827. This method alone is sufficient to satisfy the ‘unreasonable or unnecessary’ requirement.

The Request also addresses the third method, that the underlying objective or purpose of the development standard would be undermined, defeated or thwarted if compliance was required with the consequence that compliance is unreasonable (*Initial Action* at [19] and *Linfield Developments Pty Ltd v Cumberland Council* [2019] NSWLEC 131 at [24]).

- **The objectives of the standard are achieved notwithstanding non-compliance with the standard** (the first method in *Wehbe v Pittwater Council* [2007] NSWLEC 827 [42]-[43])

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 7

## PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022



Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

The specific objectives of the height of buildings development standard as specified in clause 5.25 of the SEPP (Precincts Regional) 2021 are detailed in the **Table** below. An assessment of the consistency of the proposed development with each of the objectives is also provided.

Objectives	Assessment
(a) to establish maximum height limits for buildings,	<p>The underlying purpose of this objective is to ensure that any future development is designed in a manner whereby any resulting building height will appropriately respond to both the existing and future context in a controlled manner.</p> <p>The proposed development is consistent with those objectives on the basis that the proposed heights is not incompatible with the existing scale of development within the visual catchment of the site.</p> <p>Furthermore, the proposed height will allow for the provision of affordable housing within the building. In order to achieve the allowable FSR prescribed to the land (by way of the Housing SEPP), some level of height breach should be anticipated.</p> <p>The development is still deemed to suitably respond to the objective, despite the variation.</p>
(b) to permit building heights that encourage high quality urban form,	<p>The height limit sought by this development will establish high quality urban form, which is further detailed by the following:</p> <p><b>Communal Open Space – located on Roof</b></p> <p>The communal open space (COS) has been located on the roof, which provides a high quality urban form and is consistent with other developments in the Central Coast Council catchment.</p> <p>The benefits of locating a COS on the roof provides the following:</p> <ul style="list-style-type: none"> <li>Helps and maintains a sense of belonging and cohesion for residents and can help improve social problems.</li> <li>Provides a decorative benefit of an otherwise bland roof space.</li> <li>Will extend the roof life by protecting waterproofing layers from weather and temperature change.</li> <li>Roof plantings will provide temperature control by improving solar panel efficiency.</li> </ul> <p>For this reason, the building height breaches are contained across the uppermost level of the building inclusive of the lift overrun.</p>

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 7

## PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022

BMAURBAN

Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

	<p>To reduce the visual impacts of the breach as a result of the POS, the following has been adopted;</p> <ul style="list-style-type: none"> <li>▪ This uppermost level has been recessed inwards into the built form envelope across all elevation.</li> <li>▪ Darker tone of building materiality is proposed across this upper floor for the purpose of limiting any perceptible volume arising out of the numerical dispensation.</li> </ul> <p><b>Adjoining developments</b></p> <p>Due to placing the COS on the roof, the lift shaft will further extend beyond the permissible height limit of 12m.</p> <p>However, it is pertinent to note that even with this breach, this development will still be compatible with the existing developments within the visual catchment of the site. In particular, please note the following comparisons;</p> <p><u>8 Duke St &amp; 179 Albany St, Point Fredrick:</u></p> <ul style="list-style-type: none"> <li>▪ The neighbouring properties at 8 Duke St and 179 Albany St directly adjoin the site via the South and West boundaries.</li> <li>▪ These two properties have been constructed within the last 12 months.</li> <li>▪ The Height RL for these two buildings is both 36.28 and 36.3 respectively.</li> <li>▪ The proposed development at 6 Auburn St has a Height RL of 34.91.</li> <li>▪ Therefore, even with the increase in height limit, the development at 6 Auburn St, will be 1.37m lower than the height limit of the newly developed buildings at 8 Duke and 179 Albany.</li> </ul> <p><u>4 Auburn St, Point Fredrick</u></p> <ul style="list-style-type: none"> <li>▪ The neighbouring property at 4 Auburn St, directly adjoins the site via the East boundary.</li> <li>▪ This property was newly constructed within the last 12 months.</li> <li>▪ The Height RL for 4 Auburn St is 33.46.</li> <li>▪ The proposed development at 6 Auburn would sit 1.45m above 4 Auburn St.</li> <li>▪ However, the topography of the site at 4 Auburn St, sits over 3.0m lower than that of 6 Auburn St.</li> <li>▪ Therefore, the RL Height of the building at 6 Auburn St, is technically 1.55m (approx.) lower than the building Height RL at 4 Auburn St</li> </ul>
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**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

Other developments within 6 Auburn St:

- There are several new developments which are either recently completed, or currently under construction that have received Height Limit concessions from Central Coast Council.
- These other developments are located within close proximity of 6 Auburn St and should be considered as part of the sites local urban context.
- These sites locations, Height Limit permissibility controls and approved heights are as follow;

Site	Permissible HL	Actual
142 Albany St	12m	7 level RFB
148 Albany St	15m	6 level RFB
179 Albany St	12m	6 level RFB

**Affordable Housing benefit**

There is an inherent public benefit in providing Affordable Housing in both the Point Fredrick and broader Central Coast locality. The development of affordable housing usually becomes non-feasible without the benefits of incentives. Such incentives include the bonus FSR allowances afforded through the Housing SEPP.

This proposed development has sought the bonus FSR and will nominate 50% of the units (4) as Affordable. To achieve the FSR allowances, the proposed development will require a breach of the height limit. However, the benefit of providing this height limit dispensation, would include;

- The supply of affordable housing in a well serviced locations, located in proximity to a variety of public transport options, expanses of public open space and services facilities.
- Provide affordable housing within a development density congruent with that envisaged to be achieved by way of the SEPP Housing 2021 prescribed provisions.

**Summary**

Based on the surrounding neighbours, if the site at 6 Auburn St is restricted to its numerical compliance, it would inadvertently result in the provision of a built form that would present as discordant with the current and future transitional development context.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 7

## PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022

BMAURBAN

Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

	Given the siting/scale of the elements that breach the height limit and their relationship to neighbouring properties and the adjacent public domain in Auburn Street, the development is deemed to visually integrate with that of neighbouring buildings (both existing/anticipated) serving as an affirmation of the objective and not that of a building that abandons height controls.
<i>(c) to ensure that buildings and public areas continue to receive satisfactory exposure to sky and sunlight,</i>	The visual impact of the non-compliant height element is deemed not significant in terms of sky exposure nor is it deemed to result in the causation of an unreasonable level of shadowing across neighbouring properties. This is affirmed in the shadowing analysis prepared by Fuse Architects reproduced in <b>Figure 3</b> below. The extent of impact is less pronounced on December 21 ( <b>Figure 4</b> ).
<i>(d) to nominate heights that will provide an appropriate transition in built form and land use intensity,</i>	The height breaching elements will not visually impede upon future built form relationships with respect to spatial distribution and or siting of development forms. The height breach serves to provide for a more orderly built form relationship with that of the transitioning development context. Furthermore, the recessed nature of the breaching elements inclusive of the darker tone materiality utilised across this uppermost level, will serve to minimise the perceivable volume of the building where in contravention of the height standard.
<i>(e) to ensure that taller buildings are located appropriately in relation to view corridors and view impacts and in a manner that is complementary to the natural topography of the area,</i>	The proposed building, despite the breach in height, is sited in a manner that will present as a considered design response noting the topography of the land and relationship with neighbouring properties. Having specific regard to the scale and nature of development directly adjoining the subject site and the anticipation that remaining development will overtime be redeveloped for the purpose of realising their maximum height and gross floor area potential, the proposed breach will in no way hinder the developments ongoing ability in remaining consistent with this objective.
<i>(f) to protect public open space from excessive overshadowing and to allow views to identify natural topographical features.</i>	The height breach will not result in an adverse increase to the extent of shadowing cast over the public domain along Auburn Street nor will it the result in an unreasonable imposition to the extent or quality of view afforded across both private and public land.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 7**

**PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022**

BMAURBAN

Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

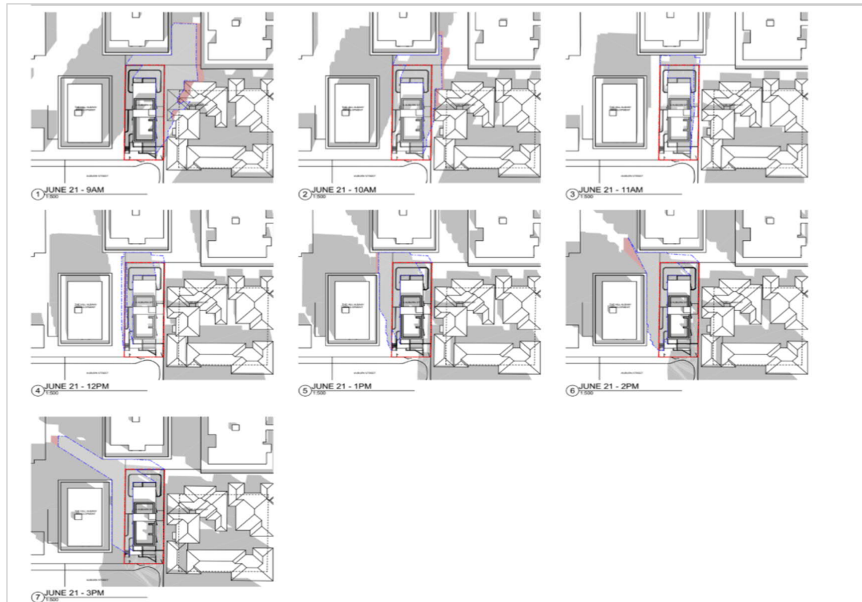


Figure 3: June 21 Shadow Analysis  
Source: Fuse Architects

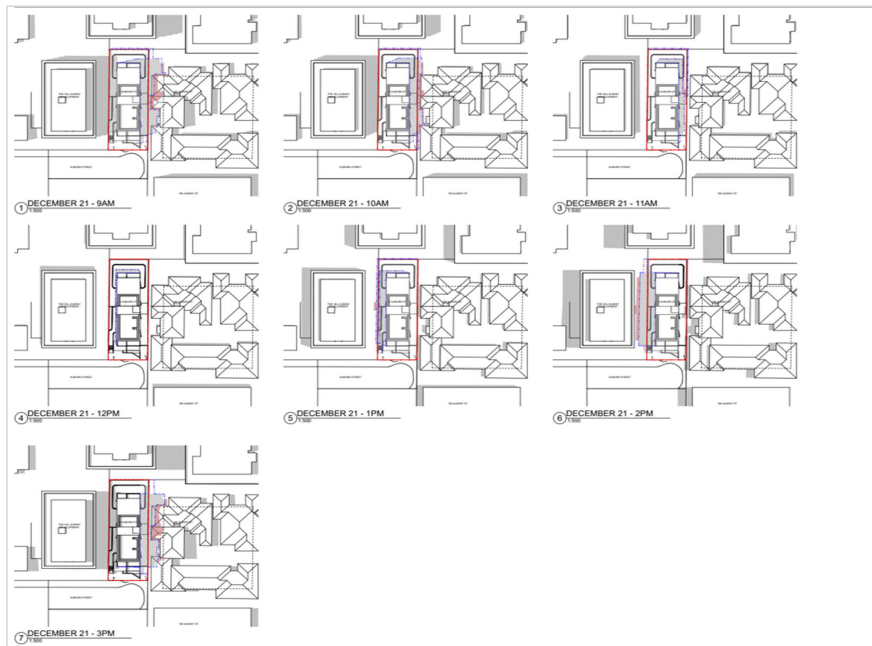


Figure 4: December 21 Shadow Analysis  
Source: Fuse Architects

The objectives of the development standard are achieved, notwithstanding the non-compliance with the standard in the circumstances described in this variation report.

#### **4.2.2 Clause 5.28 (3)(b) – Are there Sufficient Environmental Planning Grounds to Justify Contravening the Development Standard?**

Clause 5.28(3)(b) of the SEPP (Precincts-Regional) 2021, requires the consent authority to be satisfied that the applicant's written request has adequately addressed clause 5.28(3)(b), by demonstrating:

*"That there are sufficient environmental planning grounds to justify contravening the development standard".*

The environmental planning grounds relied on in the written request under Clause 5.28 must be sufficient to justify contravening the development standard. The focus is on the aspect of the development that contravenes the development standard, not the development as a whole. Therefore, the environmental planning grounds advanced in the written request must justify the contravention of the development standard and not simply promote the benefits of carrying out the development as summarised in (*Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118).

There is an absence of environmental harm arising from the contravention and positive planning benefits arising from the proposed development as outlined in detail above. These include:

- The proposal is consistent with the objectives of the development standard and objectives of the R1 zone.
- The proposal is compliant with the maximum FSR that applies to the site as afforded by way of the SEPP (Housing) 2021 provisions made available to Affordable Housing development. Therefore, the height variation does not seek to provide any additional density or gross floor area (GFA).
- Despite the numerical non-compliance with the height development standard, the development provides a scale and form of development that is compatible with surrounding developments and the emerging character. A notable number of developments across the defining context present a four (4) storey scale or greater and therefore, the proposed development will not be out of character with this scale.
- The proposal will integrate a Communal Open Space area on the building's rooftop. The benefits of providing the COS on the roof will negate the minimal effect of the lift shaft extending past the height limit.
- The perception of building height across all levels has been mitigated by appropriate levels of building modulation and massing whereby the various portions of the building and relative setbacks from the viewing perspectives are formed in a manner that continue to enable the visual identification of a built form that remains appropriate for the site and commensurate with both existing and envisaged development likely to occur on neighboring undeveloped sites. At a high level, the proposed building successfully mitigates environmental impacts such as overshadowing, privacy and visual impact.
- The location and design of the height breaching elements have been organised such that they do not present as visually jarring to the streetscape.
- The proposed height variation enables the provision of two (2) affordable apartments on Level 3. Therefore, without the subject variation, the proposed development would limit the extent of

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 7**

**PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022**

**BMAURBAN**

Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

affordable housing on the site. Clearly, there is an inherent public benefit in providing affordable housing on the site. This public benefit is a direct result of the height non-compliance.

- The slope of the site being a cross fall of approximately 2.38m from the south-western corner of the site down towards the north-eastern corner, has been a determinative factor with regards to the extent of height variation observed across the building.

Based on the above, it has been demonstrated that there are sufficient environmental planning grounds to justify the proposed non-compliance to the maximum height of buildings in this instance.

The Objects of the Act under S1.3 are also relevant to whether grounds exist to warrant a variation. While this does not necessarily require that the proposed development should be consistent with the objects of the Act, nevertheless, in **the table below** we consider whether the proposed development is consistent with each object.

*The objects of this Act and how this proposal responds to the object are as follows:*

Object	Comment
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	This building will in part harvest of the identified resources given it is location proximate to numerous parklands. The breach will therefore provide future residents of the top floor (in part breach) with access to those resources and encourage their renewal and use.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal will facilitate an ecologically sustainable development given that no negative impact on environmental and social considerations will arise. This in turn will serve to offer the ongoing sustainment of the economic health of the area.
(c) to promote the orderly and economic use and development of land,	The proposed development will promote the orderly and economic use of the land by way of providing a land use intensity consistent with that envisaged by Council.
(d) to promote the delivery and maintenance of affordable housing,	The development will provide (4) affordable residential apartments, (2) of which are located on the top floor which is in part breach of the height standard.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	Given the nature and character of the urban setting the proposed development is located within, no impact on threatened species or ecological communities is likely to result.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	This object is not relevant to this development



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 7****PUBLIC Clause 5.28 - 6 Auburn St, Point Fredrick - DA/3915/2022**


Clause 5.28 Variation Request  
6 Auburn Street, Point Frederick  
Project No # 111/22

(g) to promote good design and amenity of the built environment,	The proposed development promotes good design in that it serves to provide a built form and massing arrangement that serves to positively influence the future amenity of the dwelling occupants while adopting an architectural form and language, with an overall silhouette, height and land use intensity compatible with both the established and emerging development and housing typology.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposed development will comply with all relevant BCA codes and will promote the health and safety of occupants.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	This object is not relevant to this development
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The proposed development will be publicly notified in accordance with Council's DCP requirements.

Based on the above, the consent authority can be satisfied that there the proposed development remains consistent with the Objects of the Act despite the height non-compliance.

**4.2.4. Clause 5.28 (4)- The consent authority must keep a record of its assessment carried out under subclause (3).**

Central Coast Council has a current Clause 4.6 register. Any record of this development and its address of subclause (3) will be required to be uploaded on this register.

## 5. CONCLUSION

For the reasons set out in this written request, strict compliance with the height of buildings development standard contained within clause 5.25 of the SEPP (Precincts General) 2021 is unreasonable and unnecessary in the circumstances of the case. Further, there are sufficient environmental planning grounds to justify the proposed variation and it is in the public interest to do so.

It is reasonable and appropriate to vary the height of buildings development standard to the extent proposed for the reasons detailed within this submission and as summarised below:

- Compliance with the height of building development standard is unreasonable in the circumstances of the proposed development.
- The proposal, notwithstanding the non-compliance, is consistent with the objectives of the height of building standard.
- There are sufficient environmental planning grounds to justify the contravention, which results in a better planning outcome than a strictly compliant development in the circumstances of this particular case.
- There is an absence of any environmental impacts arising from the proposed variation.

For the reasons outlined above, the clause 5.28 request is well-founded. The development standard is unnecessary and unreasonable in the circumstances, and there are sufficient environmental planning grounds that warrant contravention of the standard. In the circumstances of this case, flexibility in the application of the height of buildings development standard should be applied.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**



## Development Application **ACCESS REPORT**

**Reference Number:** 22216

**Client:** Zeytouneh 10452 Pty Ltd

**Site Address:** 6 Auburn Rd, Point Fredrick, NSW



**Vista Access Architects Pty. Ltd.**

www.accessarchitects.com.au  
admin@accessarchitects.com.au  
PO Box 353, Kingswood NSW 2747  
ABN: 82124411614

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Executive Summary and Design Compliance Statement

This Access Compliance Report is to accompany a Development Application (DA) for the development proposed at **6 Auburn Rd, Point Fredrick, NSW**

The development is within Central Coast Council LGA and proposes a **New Building**. The Council requires 10% of total as Adaptable units to a **Class C** level= 2 adaptable units required. The development proposes the following:

Residential units	8
Adaptable units	1
Livable Housing Units	2
Accessible parking spaces	2 x AS2890.6

The development has building classification as detailed below:

- Class 2 (building containing more than 2 SOUs i.e., sole-occupancy units)
- Class 7a (car park)

This report is based on the relevant components of:

- Building Code of Australia (BCA) 2019, Volume 1- Performance requirements of DP1, DP2, DP8, DP9, EP3.4, FP2.1 and Parts D2, D3, E3 and F2 (where applicable)
- Disability (Access to Premises-Building) Standards 2010 (henceforth referred to as APS)
- AS1428.1-2009 Part 1: General requirements for access, including any amendments
- AS1428.4.1-2009 Part 4.1: TGSIs (Tactile ground surface indicators), including any amendments
- AS2890.6-2009 Part 6: Off-street parking for people with disabilities.
- AS4299-1995 Adaptable Housing
- AS1735-1999 Lift types included in the BCA including Part 12: Facilities for persons with disabilities
- State Environmental Planning Policy 65 (SEPP 65), Objective 4Q1, relating to requirements of the provision of Livable Housing Australia's Silver Level Apartments
- Livable Housing Australia's Livable Housing Design Guidelines- Fourth Edition

The assessment of the proposed development has been undertaken to the extent necessary to issue DA consent under the Environmental Planning and Assessment Act. The proposal achieves the spatial requirements to provide access for people with a disability and it is assumed that assessment of the detailed requirements such as assessment of internal fit-out, details of stairs, ramps and other features will occur at CC (Construction Certificate) stage.

By compliance with the recommendation in this report, the development complies with the requirements of Access Code of Disability (Access to Premises-Building) Standards 2010, the Disability Access relevant sections of Building Code of Australia 2019, the essential criteria of AS4299-Adaptable Housing and the requirements of SEPP 65 related to Objective 4Q1 - Livable Housing.

The information contained in this statement is true and accurate to the best of our knowledge. Our qualifications and accreditations are listed below.

### Assessed by

**Jenny Desai**

Accredited Access Consultant and LHA Assessor  
ACAA Accredited Membership number 572  
Qualified- Certificate IV in Access Consulting  
LHA Assessor Licence number 20242

**Vista Access Architects Pty. Ltd.**

### Peer reviewed by

**Farah Madon**

Accredited Access Consultant and LHA Assessor  
ACAA Accredited Membership number 281  
Qualified- Diploma in Access Consulting  
LHA Assessor Licence number 10032

### Relevant Dates:

Fee proposal, number FP-22486 dated **12-06-2022**. Fee proposal was accepted by Client on **20-06-2022**

### Assessed Drawings:

The following drawings by Fuse Architects have been assessed for compliance.

Drawing no	Issue	Date	Details
DA101	A	30-08-2022	Lower Ground + Upper Ground plan
DA102	A	30-08-2022	Level 01 + Level 02 plan
DA103	A	30-08-2022	Level 03 + Level 04 plan
DA301	A	30-08-2022	Adaptable unit type



### Document Issue:

Issue	Date	Details
Draft 1	30-06-2022	Issued for Architect's review
A	11-09-2022	Issued for DA
B	04-11-2022	Issued for DA
C	04-11-2022	Issued for DA

### Limitations and Copyright information:

This report is based on discussions with the project architect and a review of drawings and other relevant documentation provided to us. No site visit was undertaken for the purposes of this report.

This assessment is based on the provided drawings and not based on constructed works; hence the assessment will provide assurance of compliance only if all the recommendations as listed in this report are complied with and constructed in accordance with the requirements of the current BCA, AS1428.1, AS2890.6 and other latest, relevant standards and regulations applicable at the time of construction.

Assessment is based on classification/use of the building. If the class of the building changes to any other building class, this access report will have to be updated accordingly.

**Unless stated otherwise, all dimensions mentioned in the report are net (CLEAR) dimensions and are not to be reduced by projecting skirting, kerbs, handrails, lights, fire safety equipment, door handles less than 900mm above FFL (finished floor level) or any other fixtures/fit out elements. When we check drawings, we assume that the dimensions noted are CLEAR dimensions and therefore the Architect / Builder shall allow for construction tolerances.**

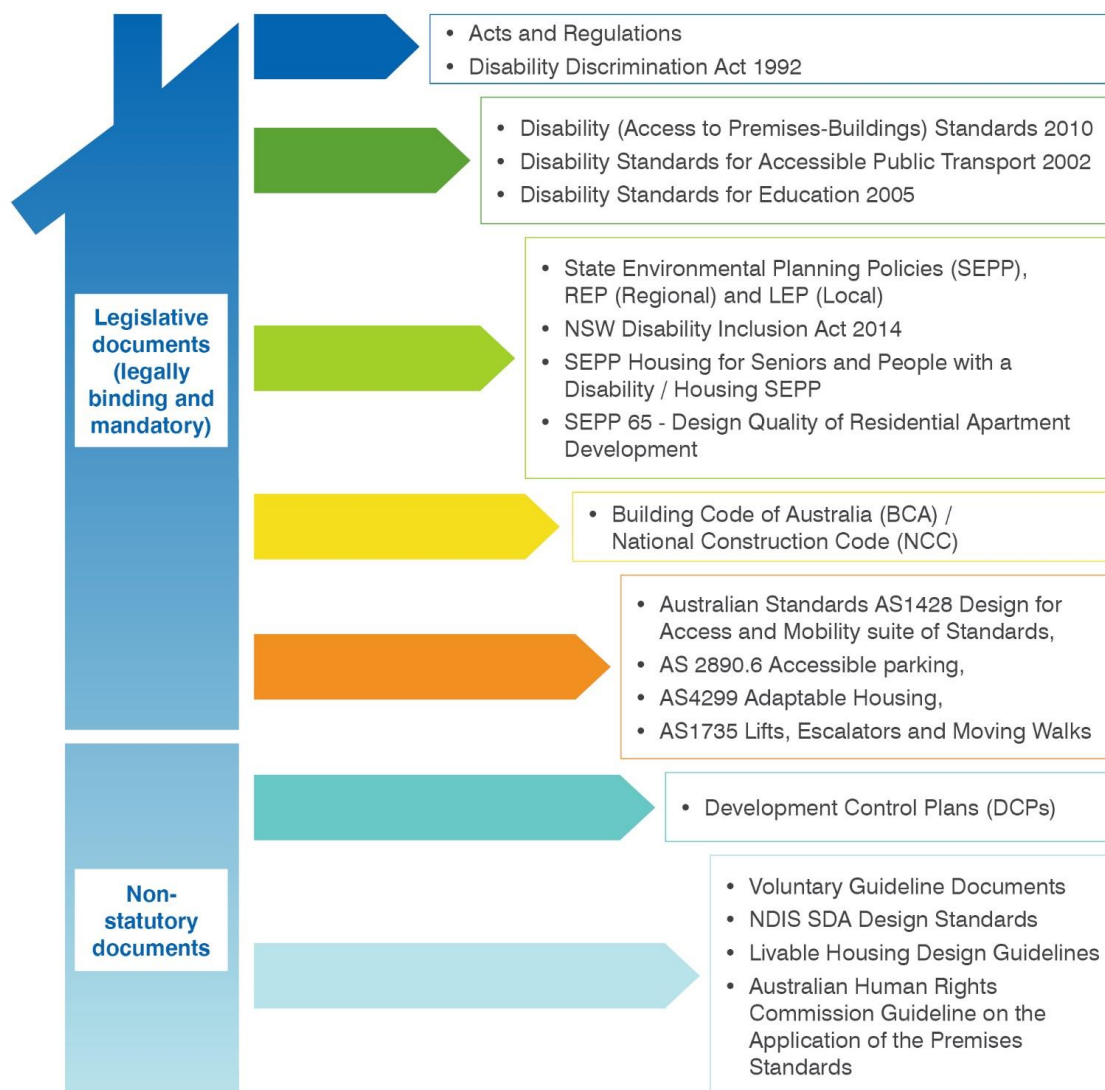
Only some numerical requirements from relevant AS (Australian Standards) have been noted in the report and for further details and for construction purposes refer to the latest relevant AS.

This report and all its contents including diagrams are a copyright of Vista Access Architects Pty Ltd (VAA) and can only be used for the purposes of this specific project. Copy-pasting diagrams from this report to Architectural plans will constitute copyright infringement.

**This report does not assess compliance matters related to WHS, Structural design, Services design, Parts of DDA other than those related to APS or Parts of BCA or Parts of AS other than those directly referenced in this report. VAA gives no warranty or guarantee that this report is correct or complete and will not be liable for any loss arising from the use of this report. We will use our best judgement regarding LHA assessments. However, we are not to be held responsible if another licenced LHA assessor comes to a different conclusion about compliance, certification, or allocation of a particular Quality mark to us as several items in LHA are subject to interpretation.**

We have no ability to check for slip resistance of surfaces. All wet areas, parking areas, pavement markings shall have the appropriate slip resistance for the location. We also have no ability to check for wall reinforcements once the walls have already been constructed. The builder shall take full responsibility that the requirements listed in this report are met and the construction and slip resistance shall be as per requirements of AS1428.1/ AS4299 / AS2890.6/ AS3661/ AS4586/ HB197/ HB198 and any other applicable regulation and Australian Standard

## Hierarchy of Access-related Legislation and Standards



The Federal Disability Discrimination Act 1992 (DDA) provides protection for everyone in Australia against discrimination based on disability. Section 32 of the DDA focuses on the provision of equitable and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities.

Disability discrimination happens when people with a disability and their relatives, friends, carers, co-workers or associates are treated less fairly than people without a disability.

Compliance with Access to Premises Standards give certainty to building certifiers, building developers and building managers that, if access to (new parts) of buildings is provided in accordance with these Standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the DDA. This however applies only to the new building or new parts of an existing building and its affected part. All areas outside the scope of these areas are still subject to the DDA. We cannot guarantee or certify for DDA compliance because DDA compliance can only be assessed by the Courts.

Scope of DDA extends beyond the building fabric and also includes furniture and fittings.

## Compliance assessment with Access related requirements of BCA and Disability (Access to Premises-Building) Standards 2010 (APS)

Development consists of new building/s and therefore compliance is required to full development

### BCA Part D3 Access for People with a Disability BCA D3.1 General building Access requirements

SOU refers to a Sole Occupancy Unit

#### Requirement

**Class 2** - building containing more than 2 SOUs i.e. sole-occupancy units  
For residential use components, access is required:

- From a required accessible pedestrian entrance to at least 1 floor with SOUs and till the entry of door of each SOU on that level.
- To and within 1 of each type of room or space in common use.
- Where floor is accessed by an AS1428.1 ramp or lift, access is required to the entry doorway of each SOU on that level and to and within all common use areas on that level.

#### Compliance

Complies

#### Comments

- Access has been provided from the main pedestrian entry doorway to the entry doors of all SOUs on all levels by means of accessible pathways and lifts.
- Since access has been provided to the entry level, lift access is not required to the upper floor levels
- Access has been provided to at least 1 of each common use areas
- Where common use areas are on a floor that is accessible by means of a ramp or lift (Upper Ground floor level in this case), access has been provided to the same.
- Access has been provided to common use garbage storage rooms on Lower Ground level.
- Access is required to common use letterbox area with min 1540x2070mm flat circulation space in front of the letterboxes.
- As a minimum 1550mm clear space is required in front of any common use kitchen benchtops / BBQ areas provided in the development
- All common use accessway widths are to be a minimum of 1M clear measured from skirting to skirting (increases to comply with door circulation spaces where doorways provided) with vertical clearance of at least 2M

Details to be verified at CC stage of works.

#### Requirement

**Class 7a** - Covered car park.

- To and within any level containing accessible carparking spaces.

#### Compliance

Complies

#### Comments

Access has been provided to basement level containing Accessible carparking spaces.  
All Accessway widths are to be a minimum of 1M clear (measured from skirting to skirting) with vertical clearance of at least 2M  
Details to be verified at CC stage of works.

## BCA Part D3.2 Access to buildings

### Requirement

#### Accessway is required from:

- Main pedestrian entry at the site boundary for new buildings.
- Any other accessible building connected by a pedestrian link.
- Accessible car parking spaces.

### Compliance

Complies

### Comments

- Level Access has been provided from the main pedestrian entry at the site boundary.
- Access has been provided from accessible car parking spaces by means of lifts.

Details to be verified at the CC stage of works.

### Requirement

#### Common use External Walkway / Pedestrian access requirements as per AS1428-2009:

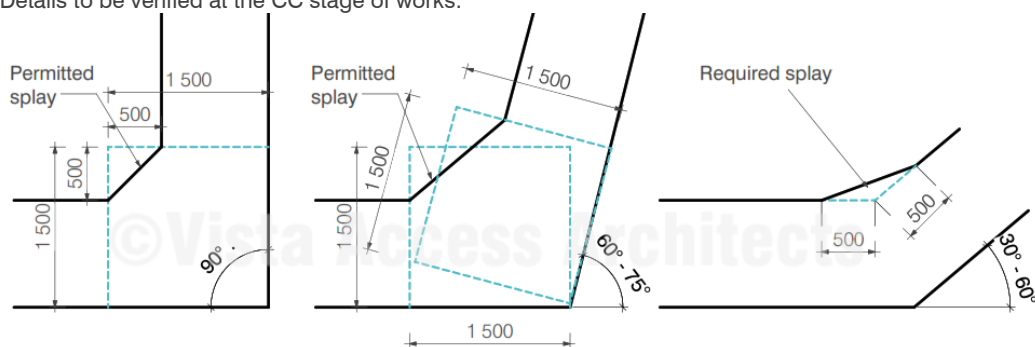
- Accessible path of travel to have a gradient no steeper than 1 in 20 and a cross fall no steeper than 1:40 (1:33 for bitumen).
- For 1:20 grade walkways, landings are required every 15M.
- The floor surface abutting the sides of the walkway to be provided with a firm and level surface (of a different material) at the same level and grade of the walkway and extend horizontally for a minimum of 600mm unless one of the following is provided: kerb, kerb-rail and handrail or wall of minimum 450mm height.
- Curved walkways to be min 1500mm width with crossfall towards the centre of curvature.
- At 90-degree bends in pathways provide a 1500mmx1500mm space with maximum 500mm splay permitted at internal corner.

### Compliance

Complies with spatial requirements

### Comments

Details to be verified at the CC stage of works.



[Image description: Spatial requirements of walkways with bends as per AS1428.1]

#### Requirement

##### Common use floor or ground surfaces

- Use slip-resistant surfaces
- The texture of the surface is to be traversable by people who use a wheelchair and those with an ambulant or sensory disability.
- Abutment of surfaces is to have a smooth transition.
- Construction tolerances to be +/- 3mm vertical or +/-5mm, provided the edges have a bevelled or rounded edge (See diagrams below)

##### Grates if used in the accessible path of travel are required to comply with the following:

- Circular openings maximum of 13 mm in diameter
- Slotted openings maximum of 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel

Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel

#### Compliance

Capable of compliance

#### Comments

Details to be verified at the CC stage of works.

#### Requirement

##### Accessway is required through:

- Principal pedestrian entry; and
- Not less than 50% of all pedestrian entrances; and
- In building with floor area over 500m<sup>2</sup>, a non-accessible entry must not be located more than 50M from an accessible entry.

#### Compliance

Complies

#### Comments

50% of the pedestrian entries, including the main entry have been designed to be accessible with a non-accessible entry not more than 50M from an accessible entry.

#### Requirement

##### All common use doorways and doorways to and within Adaptable units to comply with AS1428.1.

Where accessible pedestrian entry has Multiple doorways:

- At least 1 to be accessible if 3 provided
- At least 50% to be accessible, if more than 3 provided
- Where doorway has multiple leaves, at least 1 leaf is to have clear opening of 850mm (excluding automatic doors)

##### Doorway requirements

- All common use doorways in the development within accessible path of travel (other than non-accessible sanitary facilities) to have a clear opening of at least 850mm with appropriate door circulation spaces in accordance with AS1428.1. In case of multiple leaf doorways, at least 1 operable leaf is required to provide a clear opening of 850mm with the door circulations spaces as per AS1428.1.
- Ambulant toilet cubicle door to have a clear door opening of 700mm.
- Space required for door circulation spaces to have a maximum floor grade of 1:40 (doorway threshold ramps are permitted within the circulation space).



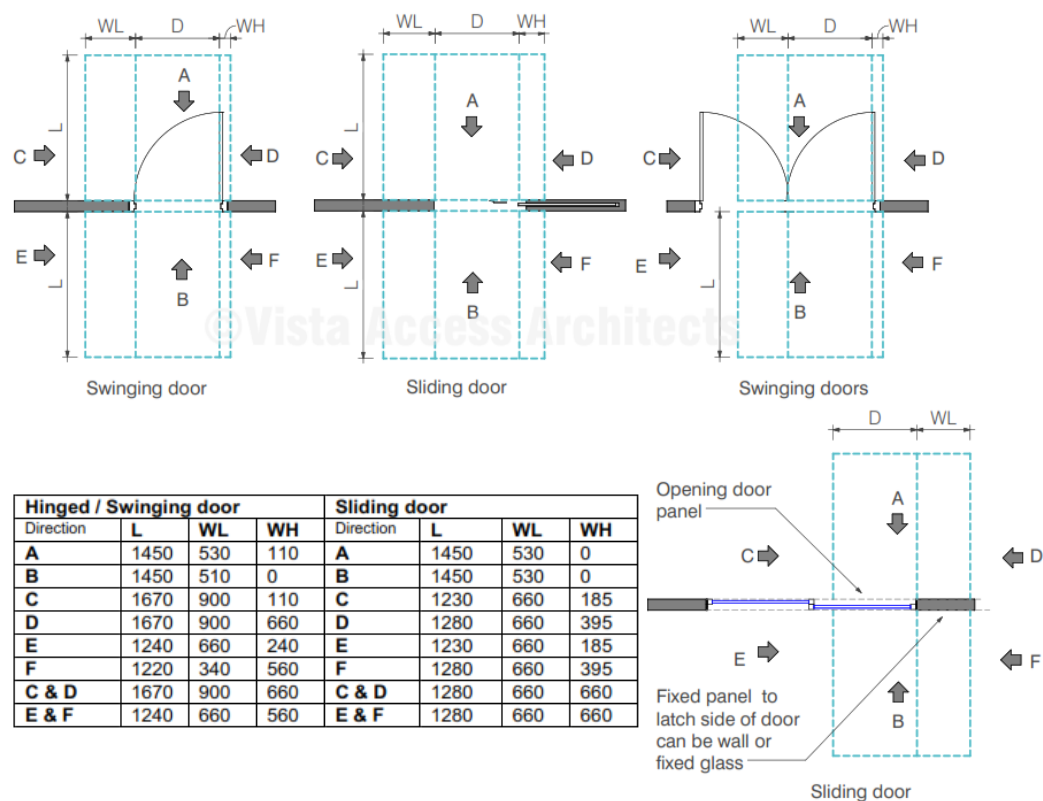
- Door thresholds are to be level, or they can incorporate a doorway threshold ramp with a maximum grade of 1:8, for maximum rise of 35mm and a maximum length of 280mm and located within 20mm of the door leaf, with edges to be tapered or splayed at a minimum of 45° where it does not abut a wall.
- Sliding doorways to be provided with recessed floor tracks to enable flush transition from the inside of the building.
- Distance between successive doorways in airlocks to be 1450mm which is measured when the door is in open position in case of swinging doors.
- Door hardware including door handles, door closers and the in-use indicators / snibs in accessible and ambulant toilets are required to comply with requirements of AS1428.1.
- Luminance contrast requirements to doorways and other glazed areas to comply with AS1428.1

**Compliance**

Complies with spatial requirements

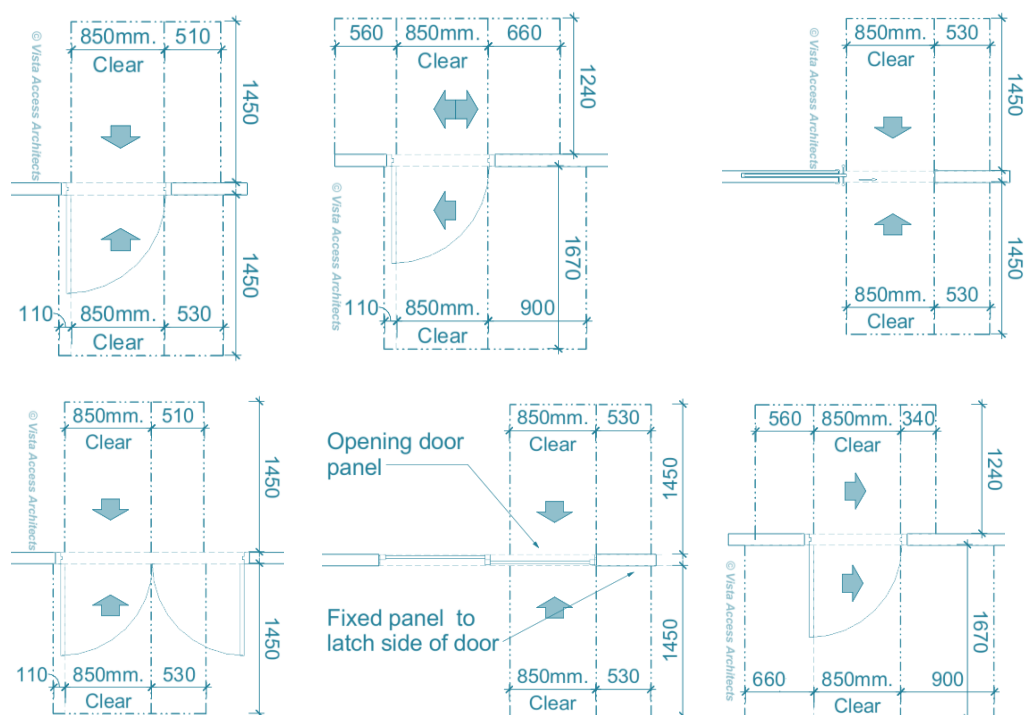
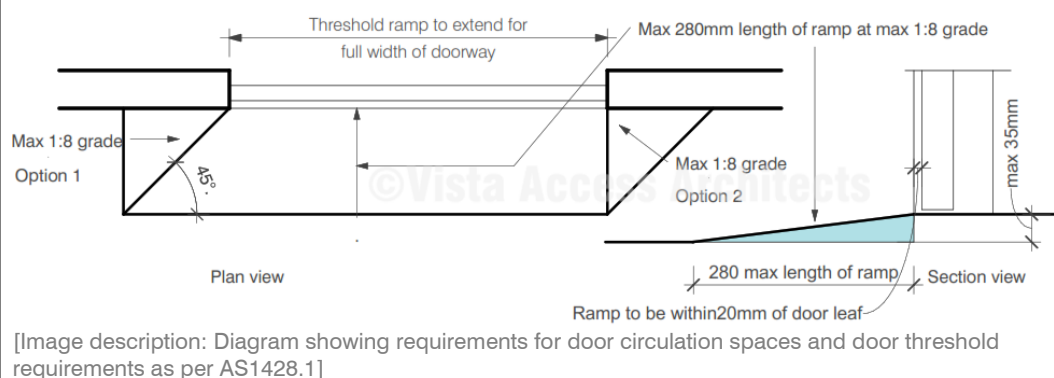
**Comments**

Details to be verified at the CC stage of works.



[Image description: Diagram showing requirements for door circulation spaces and door threshold requirements as per AS1428.1 for clear opening (D)=850mm]

For surface mounted sliding doors, circulation space on the opposite side of the door face will increase by the value of the wall thickness to the face of the door.



[Image description: Typical door circulation spaces]

## BCA Part D3.3 Parts of buildings required to be accessible

### Requirement

Every common use **Ramp** with grades steeper than 1:20 and less than or equal to 1:14 (excluding fire-isolated ramp) is to be compliant with Clause 10 of AS1428.1

## Compliance

N/A

## Comments

No 1:14 ramps have been identified in the development.

#### Requirement

**Step ramp** if provided in common use areas is to be compliant with AS1428.1-2009 and NCC/BCA

**Compliance** N/A

#### Comments

No step ramps have been identified in the development.

#### Requirement

**Kerb ramp** if provided in common use areas is to be compliant with AS1428.1-2009

**Compliance** N/A

#### Comments

No kerb ramps have been identified in the development.

#### Requirement

Every **Stairway** in common use areas (excluding fire-isolated stairway) is to be compliant with:

- Clause 11 of AS1428.1-2009 (including but not limited to opaque risers, handrails on both sides including appropriate handrail extensions between 1M clear width and compliant nosing strips).
- Diameter of handrails to be between 30mm-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc.
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

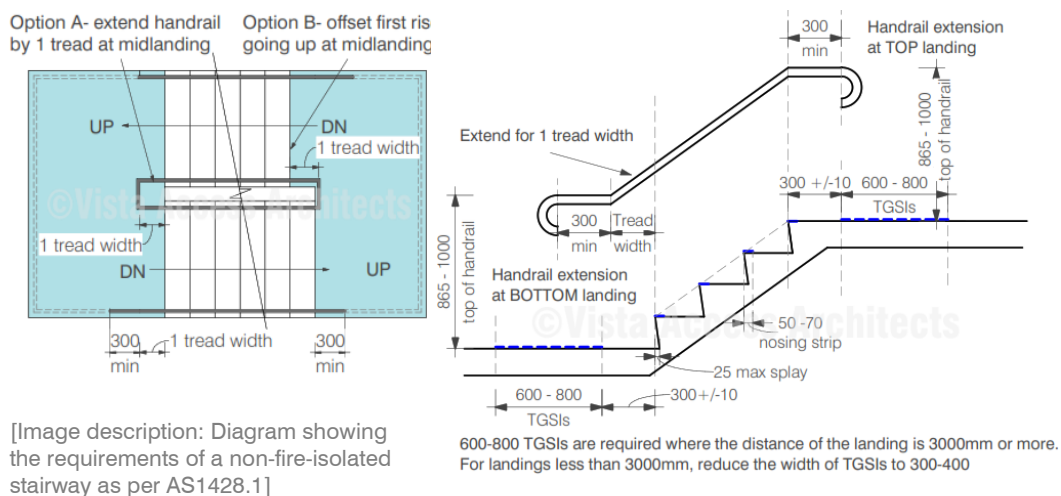
**Compliance** Capable of compliance

#### Comments

Where non-fire-isolated stairways have been provided, the features of the stairway will be assessed with the requirements of AS1428.1-2009 at the CC stage of works

**Note:** In some cases, the stairway from the basement to the ground floor level is considered to be non-fire-isolated, in which case full compliance will be required as per AS1428.1-2009. Verify with the BCA consultant if this is the case.

**Note:** For stairways with 90° to 180° turns at landings, in order for the handrails to comply with the consistent height requirement, the risers have to be offset at the mid-landings so that no vertical sections are created in the handrails. This applies to both non- fire-isolated and fire-isolated stairways.



### Requirement

Every **Fire-isolated Stairway** is to be compliant with AS1428.1-2009 in the following aspects:

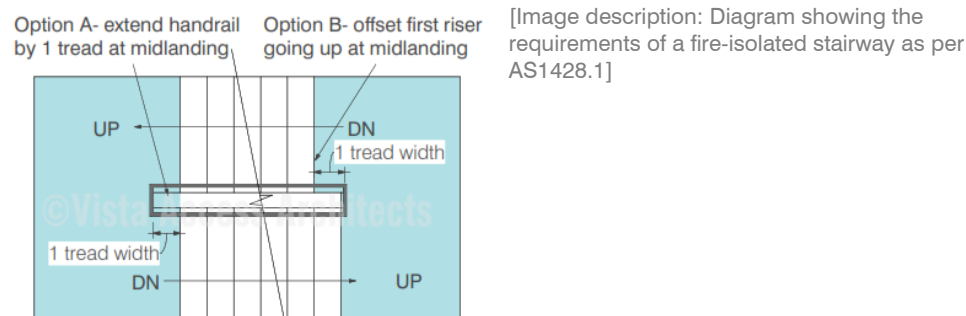
- Handrail on one side (requirement under D2.17) with 1M clear space. Handrail extensions are not required however since the handrails cannot have any vertical sections and since handrail is required to be at a consistent height throughout the stairway including at landings, it may be essential to either provide handrail extensions or offset first riser going up at mid landings to achieve this at 90° to 180° turns. Handrails to both sides of the stairway are required if the total width of the stairway is 2M or more.
- Diameter of handrails to be between 30mm-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc.
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

### Compliance

Complies with spatial requirements

### Comments

Where fire-isolated stairways have been provided, the features of the stairway will be assessed with the requirements of AS1428.1-2009 at the CC stage of works  
Handrails to both sides are not required, however the internal handrail is to be continuous and to comply with all requirements of non-fire-isolated stairways.



#### Requirement

**Nosing** for common use fire-isolated and non-fire-isolated stairways require the following:

- Each tread to have a nosing strip between 50mm-75mm depth (of any one colour) for the full width of the stair, which can be setback for a maximum of 15mm from the front of the nosing.
- Multiple strips making up the 50mm-75mm depth is NOT permitted.
- This strip is to have a minimum luminance contrast of 30% to the background and to comply with any change in level requirements if attached on the treads.
- Where the nosing 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 10mm
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

#### Compliance

Capable of compliance

#### Comments

Detailed features of the nosing strips will be assessed with the requirements of AS1428.1 at the CC stage of works.

#### Requirement

##### Slip resistance requirements as per BCA

BCA Table D2.14 Slip –resistance requirements when tested in accordance with AS4586:

Application	Surface conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

##### Slip resistance requirements as per AS4299

AS4299 has slip resistance requirements based on requirements of AS3661 (Slip resistance of pedestrian surfaces) for the following areas:

- Floor surfaces in sanitary facilities including all toilets and bathrooms (essential feature).
- Floor surfaces in the kitchens and Laundries (essential feature).
- Pathways / walkways within the site, within landscaped areas, balconies and other external paved areas (desirable feature for Class A or B developments).
- AS3661.1-1993 is an old Australian standard which has been superseded with AS4586:2013 (Slip resistance classification of new pedestrian surface materials).

**HB 197/ HB198** An introductory guide to the slip resistance of pedestrian surface materials provides guidelines for the selection of slip-resistant pedestrian surfaces

#### Compliance

Capable of compliance

#### Comments

For Slip resistance of surfaces the builder is required to provide a Certificate stating that the Slip resistance of the surfaces comply with the above listed requirements when tested as per AS4586 at CC stage of works.

#### Requirement

Every **Passenger lift** is to comply with the requirements of BCA E3.6.

#### Compliance

Complies with spatial requirements



#### Comments

This has been assessed further in the report in the Lifts section. Refer to Lifts section.

#### Requirement

##### Passing spaces requirement

It is a requirement to provide passing spaces in common use accessways complying with AS1428.1 at maximum 20 M intervals, where a direct line of sight is not available. Space required is 1800x2800mm (in the direction of travel). Chamfer of 400x400mm is permitted at corners.

**Compliance** N/A

#### Comments

There are no accessways over 20M lengths in the development where a direct line of sight is not available.

#### Requirement

##### Turning spaces requirement

It is a requirement to provide turning spaces in common use accessways complying with AS1428.1-2009 within 2M of the end of accessways where it is not possible to continue travelling and at every 20M intervals. CLEAR Space required is 1540mmx2070mm in the direction of travel (measured from skirting to skirting).

**Compliance** Complies with spatial requirements

#### Comments

- Adequate turning spaces have been provided with minimum common use passageway widths being 1540mm clear or alternatively a space of 1540mmx2070mm provided at or within 2M of the end of the passageway.
- A space of 1540mmx2070mm is also required / provided in front of all passenger lift doors.

Details to be verified at CC stage of works.

#### Requirement

##### Carpet specifications

Carpet if used in areas required to be accessible are to be provided with pile height or thickness not more than 11mm and carpet backing not more than 4mm bringing the total height to a maximum of 15mm.

**Compliance** N/A

#### Comments

Use of carpets have not been identified in the development. To be verified at CC stage of works.

### BCA Part D3.4 Exemption

#### Requirement

Access is not required to be provided in the following areas:

- Where access would be inappropriate because of the use of the area
- Where area would pose a health and safety risk
- Any path which exclusively provides access to an exempted area

#### Compliance

For information only

#### Comments

Areas such as lift machine rooms, fire services room, commercial kitchens etc. in the development are exempted from providing access under this clause due to WHS concerns.

Where a caretaker is provided in the development, the toilet provided exclusively for use by the caretaker can be excluded from providing access based on the provisions in this clause.

### BCA Part D3.5 Accessible Carparking

#### Requirement

##### Class 2

There are no Accessible carparking requirements for a Class 2 under the BCA.

If adaptable housing has been mandated by the Council, then carparking spaces for Adaptable units will be required under the requirements of AS4299- Adaptable housing.

#### Compliance

Complies

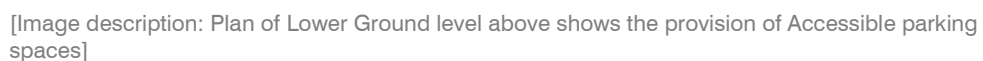
#### Comments

Central Coast Council requires provision of 10% adaptable units i.e. 1 adaptable unit in the development.

One accessible parking space is required to be allocated to the Adaptable unit

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**PUBLIC Access report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT  
FREDERICK NSW 2250 - Residential Flat Building**



### AS2890.6-2009 requirements for Accessible car parking space

#### Requirement

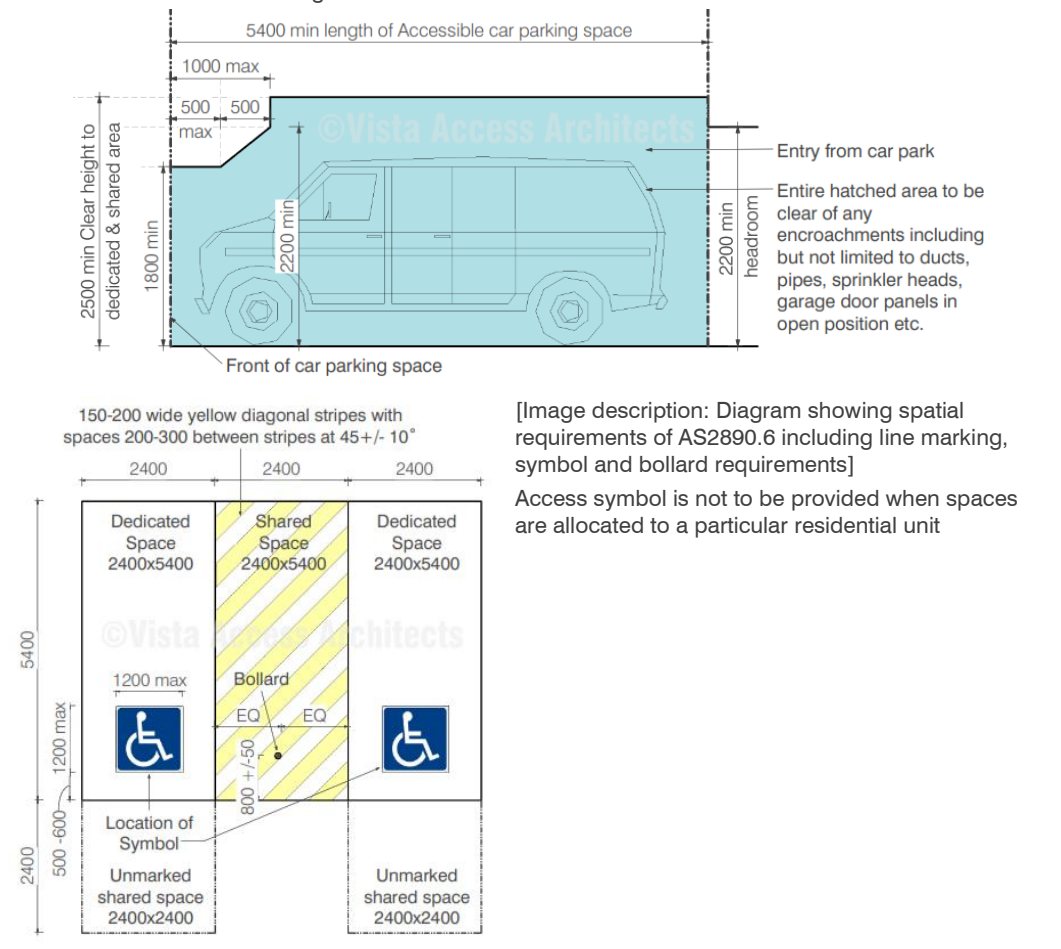
- Dedicated space 2.4Mx5.4M, Shared space 2.4Mx5.4M at the same level
- Slip resistant flooring surface with maximum fall 1:40 in any direction or maximum 1:33 if bituminous and outdoors.
- Central Bollard in shared space at 800+/-50mm from entry point.
- Pavement marking in dedicated space by means of access symbol between 800mm-1000mm high placed on a blue rectangle of maximum 1200mm and between 500mm-600mm from its entry point (marking not required where allocated to an Adaptable unit).
- Minimum headroom of 2.2M at entrances and 2.5M is required over shared space as well as dedicated spaces.
- Non-trafficked area of the shared space to have marking strips at 45°, 150-200mm wide at 200mm-300mm spaces (not required where driveways are used as shared spaces)
- The pavement marking shall have the appropriate slip resistance for the location. This requirement is to be added to the project specifications to ensure compliance.

#### Compliance

Complies with spatial requirements

#### Comments

Details to be verified at CC stage of works.



### BCA Part D3.6 Signage

#### Requirement

Braille and Tactile signage are required to identify Accessible Sanitary facilities

#### Compliance

N/A

#### Comments

No common use sanitary facilities have been identified in the development.

#### Requirement

Braille and Tactile signage are required to identify Ambulant Sanitary facilities

#### Compliance

N/A

#### Comments

No ambulant sanitary facilities have been identified in the development.

#### Requirement

Braille and Tactile signage is required to identify Hearing Augmentation

#### Compliance

N/A

#### Comments

Hearing augmentation is not provided since there is no inbuilt amplification system identified in the development.

#### Requirement

**Braille and Tactile signage is required to identify a Fire exit door** required by E4.5 by stating the 'Exit' and 'Level', followed by either the floor level number or floor level descriptor or a combination of both of the above and located on the side that faces a person seeking egress

**Exit Level ?**

[Image description: Image of Signage The "?" shown in image is to be replaced with the floor level where the door is located]

#### Compliance

Capable of compliance

#### Comments

Signage selections generally take place at CC stage of works. Selection and location of signage as specified above will lead to compliance. Details of selected signage to be verified at CC stage of works.



**Requirement**

Signage is required to a non-accessible pedestrian entrance

**Compliance**

Capable of compliance

**Comments**

Signage selections generally take place at CC stage of works. Selection and location of signage to the base of the stairway at the main site entry will lead to compliance. Details of selected signage to be verified at CC stage of works.

**Requirement**

Signage is required where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility.

**Compliance**

N/A

**Comments****Requirement**

**Signage is required to be as per Specification D3.6 Braille and Tactile Signs**

This includes location of signage, specifications in regard to braille and tactile characters, luminance contrast and lighting.

**Compliance**

Capable of compliance

**Comments**

Signage selections generally take place at CC stage of works. Selection and location of signage as specified above will lead to compliance. Details of selected signage to be verified at CC stage of works.

## BCA Part D3.7 Hearing Augmentation

**Requirement**

**Hearing Augmentation** is only required where an inbuilt amplification system (other than emergency) is installed in a Class 9b building, or in an auditorium, conference / meeting room or a reception area where a screen is used.

**Compliance**

N/A

**Comments**

No areas with provision of inbuilt amplification have been identified on plans and hence no hearing augmentation requirements apply to this development.

### BCA Part D3.8 Tactile indicators (TGSIs)

#### Requirement

##### TGSIs are required when approaching:

- Stairways other than fire-isolated stairways.
- Escalators / passenger conveyor / moving walk.
- Ramp (other than fire-isolated ramps, kerb ramps, step ramps or swimming pool ramps).
- Under an overhead obstruction of <2M if no barrier is provided.
- When accessway meets a vehicular way adjacent to a pedestrian entry (if no kerb / kerb ramp provided at the location).

Compliance is required with AS1428.4.1 including Luminance contrast and slip resistance requirements for all TGSIs. TGSIs to extend for full width i.e., handrail to handrail.

#### Compliance

Capable of compliance

#### Comments

TGSI selections generally take place at CC stage of works. Selection of TGSIs as specified will lead to compliance and these selection details are to be verified at CC stage of works.

### BCA Part D3.11 Limitations on Ramps

#### Requirement

##### On an accessway:

- A series of connected ramps must not have a combined vertical rise of more than 3.6M;
- And a landing for a step ramp must not overlap a landing for another step ramp or ramp.

#### Compliance

N/A

#### Comments

No ramps have been identified in the development

### BCA Part D3.12 Glazing on Accessways

#### Requirement

##### Glazing requirements:

- 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 are required to have a glazing strip
- The marking should be for the full width with a solid and non-transparent 75mm wide, contrasting line located 900-1000mm above FFL and provide a minimum luminance contrast of 30% when viewed against the floor surface within 2M of the glazing on the opposite end. Graphical representation or cut-outs are not permitted.

#### Compliance

Capable of compliance

#### Comments

Glazing strips are required to be provided to full height glazed areas (doors and windows) used in common use areas such as lift lobbies and common passageways

Glazing strip selections generally take place at CC stage of works. Selection of glazing strips as specified above will lead to compliance and details are to be verified at CC stage of works.

## BCA Part F Accessible Sanitary Facilities

### BCA F2.4 Accessible Sanitary facilities

#### Requirement

**Accessible unisex toilet** is to be provided in accessible part of building such that;

- It can be entered without crossing an area reserved for 1 sex only
- Where male and female sanitary facilities are provided at different locations, Accessible unisex toilet is only required at one of the locations
- Even distribution of LH and RH facilities
- An accessible facility is not required on a level with no lift / ramp access.

**Compliance** N/A

#### Comments

No common use sanitary facilities have been identified on the plans

### BCA F2.4(a) Accessible unisex sanitary compartments

#### Requirement

##### Class 2

At least 1 unisex Accessible toilet when sanitary compartments are provided in common areas.

**Compliance** N/A

#### Comments

No common use sanitary facilities have been identified on the plans

### BCA F2.4(b) Requirements for Accessible unisex showers

#### Requirement

##### Class 2

At least 1 unisex Accessible shower when showers are provided in common areas.

**Compliance** N/A

#### Comments

No common use sanitary facilities have been identified on the plans

#### Requirement

**Accessible unisex toilet** is to be designed in accordance with AS1428.1-2009

**Compliance** N/A

#### Comments

No common use sanitary facilities have been identified on the plans

**Requirement**

Showers for Accessible use are to be designed in accordance with AS1428.1

**Compliance** N/A

**Comments**

No common use sanitary facilities have been identified on the plans

**Requirement**

**Ambulant use male / female toilets** are to be provided if an additional toilet to the Accessible unisex toilet is provided

**Compliance** N/A

**Comments**

No common use sanitary facilities have been identified on the plans

## BCA Part E Lift Installations

### BCA E3.2 Stretcher facility in lifts

**Requirement**

A **Stretcher lift** is to be provided if a passenger lift is installed to serve any storey with an effective height of 12M. The space requirement is 600mm wide x 2000mm deep x 1400mm high above the floor level. Confirm this requirement with your BCA consultant.

**Compliance** For information only

**Comments**

Contact BCA consultant in regard to applicable requirements.

### BCA E3.6 Passenger lift

**Requirement**

In an accessible building, **Every Passenger Lift** (excluding electric passenger lift, electrohydraulic passenger lift, inclined lift) must be subject to limitations on use and must comply with **Tables E3.6a and E3.6b**

**Compliance** Capable of compliance

**Comments**

**A certificate of compliance from the lift supplier**, stating that the proposed lift complies with the requirements of BCA Part E3- Lift installations will be required at the CC stage of works

### BCA E3.6 Table E3.6a Limitations on use of types of passenger lifts

<b>Requirement</b>	
Limitations on use of Stairway platform lifts, Low-rise platform lift, Low-rise, low-speed constant pressure lift and small sized, low-speed automatic lift	
<b>Compliance</b>	N/A
<b>Comments</b>	
Not identified in the development.	

### BCA E3.6 Table E3.6b -Application of features to passenger lifts

<b>Requirement</b>
<p><b>Handrail requirements for passenger lifts.</b> Apart from stairway platform lift and low-rise lifts, a handrail is required as per AS1735.12:</p> <ul style="list-style-type: none"> <li>600mm minimum handrail not more than 500mm from control panel</li> <li>Top of handrail between 850-950mm above FFL</li> <li>Diameter of handrails to be between 30-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc</li> </ul> <p><b>Lift floor dimensions</b> (excluding stairway platform lift)</p> <ul style="list-style-type: none"> <li>Lifts traveling <b>12M</b> or under, floor size, <b>1100mm wide x 1400mm deep</b></li> <li>Lifts travelling <b>more than 12M</b>, floor size <b>1400mm wide x 1600mm deep</b></li> </ul> <p>Minimum <b>Door opening size</b> complying with AS1735.12, not less than 900mm clear (excluding stairway platform lift).</p> <p>All lifts with a power operated door are required to have a <b>Passenger protection system</b> complying with AS1735.12.</p> <p><b>Lift landing doors</b> to be provided at upper landing (excluding stairway platform lift).</p> <p><b>Lift car and landing control buttons complying with AS1735.12</b> Some of the requirements listed below. Refer to AS1735.12 for further details.</p> <p><b>For internal control panel:</b></p> <ul style="list-style-type: none"> <li>If width or depth of car is less than 1400mm, 2 control panels to be provided, one to the left and one to the right of the person entering the car</li> <li>Tactile symbol and Braille equivalent to be provided</li> <li>Buttons to be located between 900-1100mm above FFL</li> <li>All buttons to be 300mm from corner (near entry) and 400mm of all other corners</li> </ul> <p><b>For external control panel:</b> To be located between 900-1100mm above FFL and not less than 500mm from internal corners unless otherwise permitted by AS1735.12</p> <p><b>Lighting</b> (for all enclosed lift cars) to be provided in accordance with AS1735.12 and AS1680. Minimum illuminance of 100 lx is required at the level of the car floor and average of 50 lx is required on the control panel surface.</p> <p><b>To all lifts serving more than 2 levels</b></p> <ul style="list-style-type: none"> <li>Automatic audible information to identify level when car stops</li> </ul>



- Audible and visual indication at landing to indicate arrival of lift car  
Audible information and indication to be provided between 20-80 dB(A) at a maximum frequency of 1500Hz

**Emergency hands free communication** (excluding stairway platform lift) – provide a button that alerts a call centre and a light that the call has been received.

#### Compliance

Capable of compliance

#### Comments

**A certificate of compliance from the lift supplier**, stating that the proposed lift complies with the requirements of BCA Part E3- Lift installations will be required at the CC stage of works

## **AS4299.1995- Adaptable Housing**

Appendix A of AS4299 schedule is a list of features to be incorporated into a housing unit for it to be termed an 'Adaptable House'.

**There are 3 Classification levels for Adaptable Housing**

**Adaptable Class C** in which all essential features are to be incorporated.

**Adaptable Class B** in which all Class C and 50% of 64 available desirable features are to be incorporated

**Adaptable Class A** in which all 119 essential and all desirable features are to be incorporated.

1 Adaptable unit is required by the Council's DCP to a **Class C** level.

The unit designated as adaptable is Unit G02

**Pre-adaptation layout**

**Post-adaptation layout**

- Note that ALL internal passageways are required to be 1M clear when measured from skirting to skirting so allow for the same.

By incorporating the essential requirements listed Checklist below in the Specifications, the nominated Adaptable units can achieve full compliance with Adaptable House Class C

### AS4299.1995 - Class C – Essential requirements

R☑ = Required;

C☑ = Capable of compliance at **by adding the requirement to the project specifications** or in some cases capable of compliance at post adaptation stage (where noted in comments).

	Clause No	Requirements as per AS4299	R	C	Comments
<b>Drawings</b>					
1	2.3	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	☑	☑	
<b>Siting</b>					
3	3.3.2	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS 1428.1	☑	☑	Access is provided from street by means of an AS1428.1 compliant ramp / walkway and from accessible parking space by means of a lift. Details to be verified at the CC stage
<b>Letter boxes</b>					
11	3.8	Letterboxes to be on hard standing area connected to accessible pathway	☑	☑	Letterboxes for all Adaptable units to be between 900mm to 1100mm above FFL and min 500mm from any internal corner. Details to be verified at the CC stage
<b>Parking</b>					
14	3.7.2	Car parking space or garage min. area 6.0Mx 3.8M or a hard surfaced level outside of 5.4Mx3.8M is provided as a sheltered car park or can be provided in the future	☑	☑	Can also be provided as per AS2890.6, which is permissible. Details to be verified at the CC stage
<b>Accessible Entry</b>					
20	4.3.1	Accessible entry	☑	☑	Refer to door circulation requirements noted earlier in the report. Details to be verified at the CC stage
22	4.3.2	Accessible entry to be level (i.e. maximum of 1:40 slope)	☑	☑	
23	4.3.2	Threshold to be low-level	☑	☑	
24	4.3.2	Landing to enable wheelchair manoeuvrability	☑	☑	
25	4.3.1	Accessible entry door to have 850mm min. clearance	☑	☑	Usually achieved by 920mm door leaf. Door circulation spaces to be as per AS1428.1

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 8**

**PUBLIC Access report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

	Clause No	Requirements as per AS4299	R	C	Comments
27	4.3.4	Door lever handles and hardware to AS1428.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage
<b>Interior: General</b>					
32	4.3.3	Internal doors to have 820mm minimum clearance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide an 850mm clear opening door to the adaptable bathroom and 1 main bedroom. Rest to have 820mm clear opening.
33	4.3.7	Internal corridors min. width of 1000mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
34	4.3.7	Provision for compliance with AS1428.1 for door approaches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adapt, with easily removable cabinetry.
<b>Living room and dining room</b>					
36	4.7.1	Circulation space of min. 2250mm diameter.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
38	4.7.4	Telephone adjacent to GPO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage
41	4.10	Potential illumination level minimum 300 lux	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage
<b>Kitchen</b>					
42	4.5.2	Minimum width 2.7M, (1550mm clear between benches)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
43	4.5.1	Provision for circulation at doors to comply with AS1428.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A, No door provided to kitchen.
44	4.5.5	Provision for benches to include at least one work surface of 800mm length, adjustable in height from 750mm to 850mm or replaceable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
45	4.5.5	Refrigerator adjacent to work surface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
46	4.5.6	Kitchen sink adjustable to heights from 750mm to 850 mm or replaceable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
47	4.5.6	Kitchen sink bowl maximum 150mm deep	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
48	4.5.6 e	Tap set capstan or lever handles or lever mixer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
49	4.5.6 e	Tap set located within 300mm of front of sink	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
51	4.5.7	Cooktops to include either front or side controls with raised cross bars.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
52	4.5.7	Cooktops to include isolating switch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.
53	4.5.7	Work surface minimum 800 mm length, adjacent to cook top at same height	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can be compliant post adaptation.

	Clause No	Requirements as per AS4299	R	C	Comments
54	4.5.8	Oven located adjacent to an adjustable height or replaceable work surface. It is recommended that a side door opening wall oven is provided with the clear work surface to be on the opposite side of the hinge.	✓	✓	Can be compliant post adaptation.
59	4.5.11	GPOs to comply with AS1428.1. At least one double GPO within 300mm of front of work surface.	✓	✓	Can be compliant post adaptation.
60	4.5.11	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position.	✓	✓	Can be compliant post adaptation.
61	4.5.4	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage.
<b>Main bedroom</b>					
		<p>[Image description: Diagram showing circulation spaces around a queen bed as per AS4299]</p>			
62	4.6.1	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS1428.2	✓	✓	A space of 1.54Mx2.07M at the base or one side of the bed is considered to be compliant.
<b>Main Adaptable bathroom</b>					
75	4.4.1	Provision for bathroom area to comply with AS1428.1	✓	✓	A bathroom with minimum space of 2Mx 2.95M or 2.3Mx2.7M or 2.4Mx2.45M is required.
		<p>[Image description: Diagram shows Post Adaptation bathroom layout and location of wall reinforcements in pre-adaptation locations with reference to post adaptation layout] Noted dimensions on the above diagrams are approximate and depend on selected features such as size of the basin.</p>			



	Clause No	Requirements as per AS4299	R	C	Comments
76	4.4.2	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage
77	4.4.4 f	Shower recess - no hob. Minimum size 1160x1100mm to comply with AS1428.1	✓	✓	Details to be verified at the CC stage
78	4.4.4 f	Shower area waterproofed to AS3740 with floor to fall to waste	✓	✓	Details to be verified at the CC stage
79	4.4.4 f	Recessed soap holder	✓	✓	If recessed is not provided a heavy duty load bearing soap holder will be required.
80	4.4.4 f	Shower taps positioned for easy reach to access side of shower sliding track.	✓	✓	Details to be verified at the CC stage
82	4.4.4 h	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook plumbing and wall-strengthening provision (unless brick walls provided)	✓	✓	Reinforcement to wall to take the grabrails has to be provided as per requirements of AS4299
83	4.4.4 h	Provision for grabrail in shower to comply with AS1428.1	✓	✓	Details to be verified at the CC stage
<p>[Image description: Diagram showing wall reinforcement requirements for the Adaptable unit for WC and Shower, in post adaptive position]</p>					
86	4.4.4 c	Tap sets to be capstan or lever handles with single outlet	✓	✓	Details to be verified at the CC stage.
88	4.4.4 g	Provision for washbasin with clearances to comply with AS1428.1	✓	✓	Min of 425mm is required from the side wall to the centre line of the basin. Basin is required to be at least 300mm away from door swing.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 8**

**PUBLIC Access report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

	Clause No	Requirements as per AS4299	R	C	Comments
90	4.4.4 d	Double GPO bedside mirror	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
<b>Toilet</b>					
92	4.4.3	Provision of either 'visitable toilet' or accessible toilet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Visitable is provided. Accessible can be provided post-adaptation.
93	4.4.1	Provision to comply with AS 1428.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
94	4.4.3	Location of WC pan at correct distance from fixed walls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	450mm – 460mm is required from the side wall to the centre line of the WC pan. Details to be verified at the CC stage.
95	4.4.4 h	Provision for grabrail zone.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Reinforcement to wall to take the grabrails has to be provided as per requirements of AS4299 unless brick walls have been provided. Details to be verified at the CC stage.
96	4.4.2	Slip-resistant floor surface as per AS3661 and AS 4586	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
<b>Laundry</b>					
98	4.8	Circulation at doors to comply with AS1428.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A cupboard style laundry is proposed.
99	4.8	Provision for adequate circulation space in front of or besides appliances (minimum 1550mm depth)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
100	4.8 e	Provision for automatic washing machine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
102	4.8 a	Where clothes line is provided, an accessible path of travel to this	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
105	4.8 g	Double GPO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
108	4.9.1	Slip-resistant floor surface as per AS3661 and AS 4586	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.
<b>Door locks</b>					
110	4.3.4	Door hardware operable with one hand, located 900-1100mm above floor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Details to be verified at the CC stage.

**Requirement**

- Where the location of fixtures such as WC pans, wash basins, sinks, laundry fixtures and any other fixtures are to be relocated post-adaptation to comply with AS1428.1, then the service pipes (waste and water supply pipes) have to be laid in the correct AS1428.1 specified position at pre-adaptation itself and the services to be capped off for future use.

**General recommendations** (Advisory only / not mandatory)

- It is recommended that where balconies / outdoor areas have been provided to Adaptable units, provide the sliding doors such that the floor tracks are recessed, so level access can be provided to the balcony / outdoor areas from inside the unit.
  - Sliding doors in the living areas leading to outdoor areas are to be such that opening of the door is able to provide a clear opening space of 850mm with a latch side space of 530mm.
  - If the balcony is to be brought up to the same level as the unit at post-adaptation by means of decking etc. then ensure that the minimum handrail height requirements required under the BCA are complied with, considering the raised height of the balcony.
  - Consideration to be given to recess the slab to the wet areas so that there is no level difference once the floor finishes are applied (i.e. flush transition from carpeted area to tiles area).
-

## SEPP 65 – Part 4Q1 of Apartment Design Guide

### Compliance assessment with Objective 4Q-1 Universal Design

Objectives	Design guidance
<b>Objective 4Q-1</b> Universal design features are included in apartment design to promote flexible housing for all community members	Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features

Total number of residential units in the development = 20% of 8 = 1.6 = 2 required Livable units.

Since 1 of the units (G02) already comply with the Adaptable unit requirements, these unit is also capable of satisfying the intent of Silver level of Livable Housing Guidelines as noted in the table below.

In addition Unit 102 is also designed to comply with Silver level

- Note that ALL internal passageways are required to be 1M clear when measured from skirting to skirting so allow for the same.
- Note that the wet areas are to be such that flush transition is available. One way of achieving this is to recess the floor slab.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 8**

**PUBLIC Access report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

By incorporating the requirements of the below Checklist in the Specifications of the project, the nominated Livable units can achieve full compliance with Livable Housing Guidelines- Silver Level

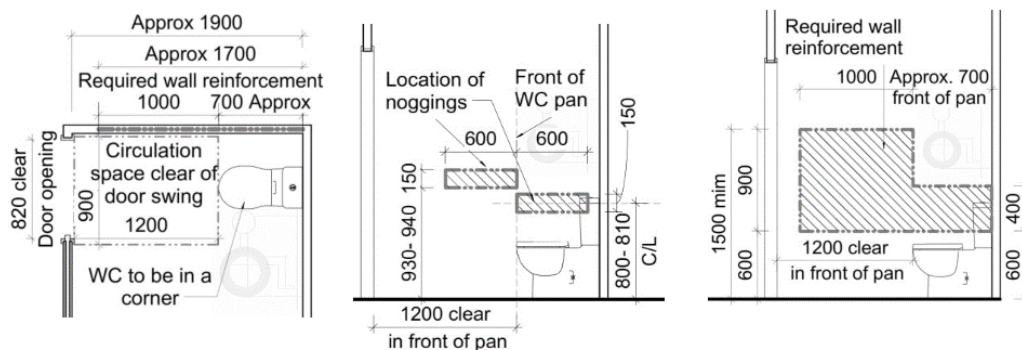
Note that in this case the adaptable units are also be counted as Livable / LHA Silver level unit in which case the below requirements apply in addition to the AS4299 requirements.

**All details to be verified at the CC stage**

Design Element	Requirements (All dimensions noted are required to be clear of finishes as required under AS1428.1)	Compliance / Comments
<b>1</b> <b>Dwelling Access</b>	<ul style="list-style-type: none"> <li>a. Provide a safe and continuous 1M clear width pathway from front site boundary to an entry door to the dwelling.</li> <li>b. Path including any ramps and walkways to have no steps, even firm, slip-resistant surface, max 1:40 crossfall, max slope of 1:14 with landings of 1.2M every 9M and landings every 15M for 1:20 walkways. 1M clear width of ramps are required.</li> <li>c. Pathway may be provided via an associated car parking in which case the car parking space to be               <ul style="list-style-type: none"> <li>▪ 3200 (width) x5400 (length),</li> <li>▪ even, firm and slip resistant, level surface of 1:40 max grade and 1:33 max grade for bitumen</li> </ul> </li> <li>d. Step ramp may be provided at an entrance doorway. The step ramp to be max 190mm height, max 1:10 grade, max 1900mm length.</li> <li>e. Level landings of 1200mm are required exclusive of the swing of the door or gate and to be provided at the head and foot of the ramp.</li> </ul>	<p>Complies. Details to be verified at CC stage of works</p> <p>N/A Access is provided from the site boundary.</p> <p>N/A</p> <p>N/A</p>
<b>2</b> <b>Dwelling entry</b>	<ul style="list-style-type: none"> <li>a. Dwelling Entry should provide an entrance door with               <ul style="list-style-type: none"> <li>i. min clear opening width of door to be 820mm</li> <li>ii. Step free threshold of max 5mm with rounded or beveled lip</li> <li>iii. reasonable shelter from the weather</li> </ul> </li> <li>b. Level landing of 1200x1200mm at step-free entrance door on the arrival / external side of the entrance door.</li> <li>c. Max permissible threshold is less than 56mm where provided with a 1:8 grade threshold ramp.</li> <li>d. Entrance to be connected to a pathway (specified under Element 1) Note: The entrance to incorporate waterproofing and termite management requirements as specified in the NCC</li> </ul>	<p>Complies. Details to be verified at CC stage of works</p> <p>Complies. Details to be verified at CC stage of works</p> <p>N/A</p> <p>Complies. Details to be verified at CC stage of works Waterproofing compliance by others.</p>
<b>3</b> <b>Internal doors and corridors</b>	<ul style="list-style-type: none"> <li>a. Doors to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartments to be               <ul style="list-style-type: none"> <li>i. 820mm clear opening and</li> </ul> </li> </ul>	<p>Complies. Details to be verified at CC stage of works</p>

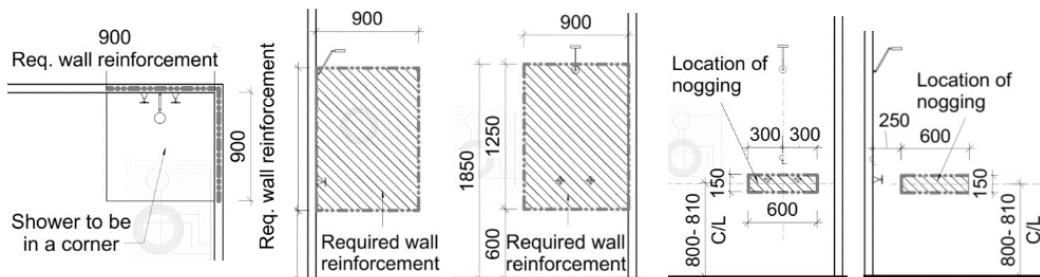


	<ul style="list-style-type: none"> <li>ii. provided with a level threshold of max 5mm between abutting surfaces with rounded or beveled lip</li> </ul>	
	<ul style="list-style-type: none"> <li>b. Internal corridors and passageways to doorway to be min 1M clear (measured from skirting to skirting)</li> </ul>	Complies. Details to be verified at CC stage of works
<b>4</b> Toilet	<ul style="list-style-type: none"> <li>a. One Toilet to be provided on the ground or entry level that provides,               <ul style="list-style-type: none"> <li>i. Min 900mm between walls or amenities</li> <li>ii. Min 1200mm clear space in forward of the WC pan exclusive of door swing.</li> <li>iii. The toilet pan to be positioned in the corner of a room to enable handrails</li> </ul> </li> </ul>	Complies. Details to be verified at CC stage of works
<b>5</b> Shower	<ul style="list-style-type: none"> <li>a. One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date.</li> <li>b. The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.</li> </ul> <p>For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6</p>	Complies. Details to be verified at CC stage of works
<b>6</b> Reinforcement of bathroom & toilet walls	<ul style="list-style-type: none"> <li>a. Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.</li> </ul> <p>(b), (c) and (d) the walls around toilet, bath and shower to be via:</p> <ul style="list-style-type: none"> <li>i. Noggins with a thickness of at least 25mm</li> <li>ii. Sheeting with a thickness of at least 12mm</li> </ul> <p>Refer to diagrams provided in the Livable Housing Guideline document.</p>	Complies. Details to be verified at CC stage of works

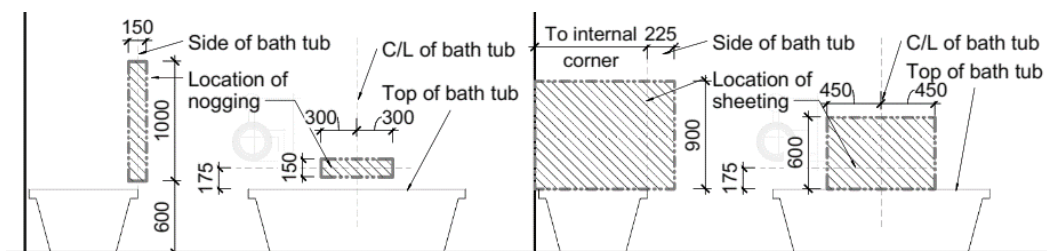


[Image description: Diagram shows wall reinforcements options of noggings or sheeting for a toilet]

**Note:** In a standalone toilet, the wall reinforcements are required to both sides. Any door openings/ door frames are required to be clear of the required wall reinforcements. If wall with cavity slider is used for wall reinforcements, then allow for additional thickness for the wall.



[Image description: Diagram shows wall reinforcements options of noggings or sheeting for a shower]



[Image description: Diagram shows wall reinforcements options of noggings or sheeting for a bathtub]

## 7 Internal Stairways

Stairways in dwellings must feature:

- a continuous handrail on one side of the stairway where there is a rise of more than 1 m. a minimum clear width of 1000mm

N/A  
No internal stairway in units.

## Statement of Experience

Vista Access Architects specialises in access consultancy services, including, Access requirements and Access Performance Solutions under the NCC, NDIS SDA Certifications, Livable Housing Certifications and Changing Places Certifications.



**Farah Madon - Director**

**ACAA Accredited Access Consultant**  
**NDIS Accredited SDA Assessor**  
**Livable Housing Assessor**  
**Changing Places Assessor**

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 281
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00001
- Architect registered with the NSW Architect's Registration Board - Registration 6940
- Member of Australian Institute of Architects (RAIA), A+ Practice Member 49397
- Registered Assessor of Livable Housing Australia - Registration 10032
- Global Alliance on Accessible Technologies and Environments (GAATES) - BE-02-021-20
- Registered Assessor of Changing Places Australia - Registration CP006

### Farah's Educational Profile and Qualifications include:

- Bachelor of Architecture Degree with Honours (B.Arch.)
- International Certification of Accessibility Consultants – Built Environment (ICAC-BE) Program, Level 2 Advanced Accessibility Consultant
- Diploma of Access Consulting

Farah has 20 years of experience of working in the field of Architecture and Access.

Farah is the lead author of the NDIS SDA Design Standard. She has been invited on multiple occasions as an expert witness for Access related matters in the NSW Land and Environment Court.

### Farah currently participates on the following key committees concerning access for people with disabilities, on an honorary basis:

- Member of Standards Australia's ME-064 Committee responsible for the AS4299 and AS1428 suite of standards.
- Vice President of Association of Consultants in Access Australia (ACAA)
- Community Representative Member of the Penrith City Council's Access Committee
- Member of Australian Institute of Architect's National Enabling Architecture Committee (NEAC)
- Management Committee member of NSW Network of Access Consultants
- Director of Livable Housing Australia (LHA)
- Member of Changing Places Australia Technical Advisory Team

### Some Recent Awards presented to Farah include:

- 2021 Australian Access Awards Winner for the Educational App of the Year - SDA Tools
- 2021 Excellence in Inclusion - Altitude Awards - Winner
- 2021 Western Sydney Executive Woman of the Year - Finalist
- 2019 Penrith Citizen of the Year
- 2019 Access Inclusion Award
- 2019 Australian Access Awards Educational App of the Year - LRV Contrast App - Finalist



**vista access architects**

Access | Specialist Disability Accommodation | Livable Housing Certification

www.accessarchitects.com.au  
 PO Box 353, Kingswood NSW 2747  
 ARN 6940, ACAA 281, ABN 82124411614

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**Vanessa Griffin**

ACAA Accredited Access Consultant  
NDIS Accredited SDA Assessor  
Livable Housing Assessor  
Changing Places Assessor

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 500
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00009
- Registered Assessor of Livable Housing Australia - Registration 20035
- Registered Assessor of Changing Places Australia Registration CP010

**Vanessa's Educational Profile and Qualifications include:**

- Diploma of Surveying and Diploma of Health and Building Surveying, Sydney Institute of Technology
- Certificate IV in Access Consulting



**Jenny Desai**

ACAA Accredited Access Consultant  
NDIS Accredited SDA Assessor  
Livable Housing Assessor

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 572
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00043
- Registered Assessor of Livable Housing Australia - Registration 20242

**Jenny's Educational Profile and Qualifications include:**

- Master of Design (M.Des) from University of Technology, Sydney
- Certificate IV in Access Consulting



**Art Phonsawat**

ACAA Associate Access Consultant

- Associate member of the Association of Consultants in Access Australia (ACAA) - 695

**Art's Educational Profile and Qualifications include:**

- Advanced Diploma in Interior design, Sydney
- Certificate IV in Access Consulting





**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**



## **Traffic & Parking Assessment Report**

6 Auburn Street, Point Frederick

Proposed In-Fill Affordable Housing Development

Ref 22091

4<sup>th</sup> November 2022



CONSULTING  
ENGINEERS



### Document Control

<b>Project Number</b>	22091			
<b>Project Address</b>	6 Auburn Street, Point Frederick			
<b>Revision</b>	<b>Date</b>	<b>Details</b>	<b>Author</b>	<b>Approved By</b>
Draft	25.10.22	First draft	C. Palmer	C. Palmer
Final	04.11.22	Final for submission	C. Palmer	C. Palmer

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## Table of Contents

<b>1. Introduction.....</b>	<b>1</b>
1.1 Project Summary.....	1
1.2 Assessment Tasks.....	1
1.3 Relevant Planning Controls.....	2
1.4 Traffic, Transport & Parking Guidelines & Standards.....	2
<b>2. Existing Conditions.....</b>	<b>3</b>
2.1 Site Location & Description.....	3
2.2 Gosford City Centre .....	5
2.3 Road Network.....	7
2.4 Public Transport.....	8
2.5 Active Transport.....	9
2.6 Existing Surrounding Traffic Controls .....	10
2.7 Existing Surrounding Parking Restrictions.....	10
<b>3. Proposed Development.....</b>	<b>11</b>
3.1 Development Description.....	11
3.2 Parking Arrangements.....	11
3.3 Waste Collection .....	11
3.4 Vehicular Access.....	11
<b>4. Traffic Impact Assessment.....</b>	<b>12</b>
4.1 Existing Development Traffic Generation .....	12
4.2 Proposed Development Traffic Generation.....	12
4.3 Traffic Impact.....	12
<b>5. Access, Parking &amp; Servicing Assessment.....</b>	<b>14</b>
5.1 Applicable Car Parking Rates.....	14
5.2 Car Parking Requirements.....	15
5.3 Accessible Parking.....	15
5.4 Proposed Car Parking Provision.....	15
5.5 Bicycle Parking.....	15
<b>6. Design Assessment.....</b>	<b>17</b>
6.1 Applicable Design Standards.....	17
6.2 Vehicular Access & Circulation Design.....	17
6.3 Parking Design.....	18
<b>7. Conclusion.....</b>	<b>19</b>
<b>Appendix A: Architectural Plans</b>	
<b>Appendix B: Swept Turn Paths</b>	

## 1. Introduction

### 1.1 Project Summary

CJP has been engaged by Zeytouneh 10452 Pty Ltd to prepare a Traffic & Parking Assessment Report (TPAR) in support of a Development Application (DA) to Central Coast Council, involving a new residential development to be located at 6 Auburn Street, Point Frederick.

In summary, the DA involves the demolition of the existing dwelling house on the site and the construction of a new residential apartment building, comprising a total of 8 units, including 4 in-fill affordable housing units.

Off-street parking is proposed for 8 cars, 4 bicycles and 1 motorcycle within a new single-level basement parking area, accessed via Auburn Street. Plans of the proposed development have been prepared by Fuse Architects and are reproduced in Appendix A.

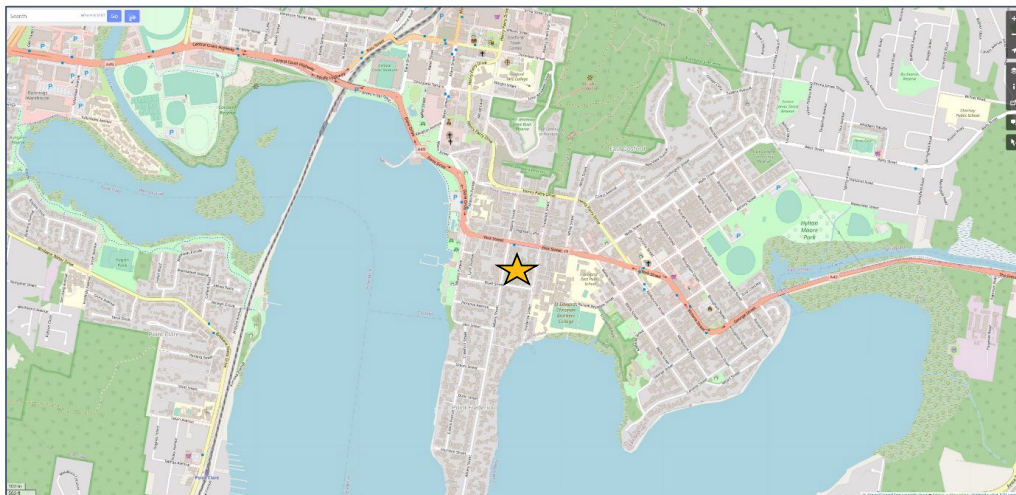


Figure 1.1 – Site Location (Source: Open Street Map)

Based on State Environmental Policy (Transport & Infrastructure) 2021, Schedule 3 – Traffic Generating Development, referral to Transport for NSW is not required.

### 1.2 Assessment Tasks

The purpose of this TPAR is to assess the traffic, parking, access, transport and servicing characteristics of the DA, and the associated impacts of the proposal on the surrounding road network, parking and transport environment. This can be briefly summarised below:

- Description of the existing site and its location
- Existing traffic conditions
- Public and active transport infrastructure
- Traffic generation potential of the proposal and its impacts on the surrounding road network
- Off-street parking/loading/access requirements and provisions
- Design of access driveway and parking area layout

### 1.3 Relevant Planning Controls

The site lies within the Canada Bay Council (Council) Local Government Area (LGA), such that the relevant Council planning controls and strategies referenced in this TPAR include:

- Central Coast Council Local Environmental Plan 2022 (CCLEP 2022)
- Central Coast Development Control Plan 2022 (CCDCP 2022)
- Gosford City Centre Development Control Plan 2018 (GCCDCP 2018) - Repealed

### 1.4 Traffic, Transport & Parking Guidelines & Standards

In preparing this TPAR, references are also made to the following site access, traffic and parking guidelines:

- Roads & Maritime Service's Guide to Traffic Generating Developments 2002 (RMS Guide)
- Roads & Maritime Service's Technical Direction Updated Traffic Surveys 2013 (TDT)
- State Environmental Planning Policy (Transport & Infrastructure) 2021
- State Environmental Planning Policy (Housing) 2021
- State Environmental Planning Policy 65: Design Quality of Residential Apartment Development (SEPP 65)
- Apartment Design Guide 2015 (ADG)
- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.3:2015 – Bicycle Parking (AS2890.3)
- Australian Standards 2890.6:2009 – Off-Street Parking for People with Disabilities (AS2890.6)
- NSW Government's Planning Guidelines for Walking & Cycling (December 2004)

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**PUBLIC Traffic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT  
FREDERICK NSV Flat Building**

## 2. Existing Conditions

## 2.1 Site Location & Description

The development site is located on the southern side of Auburn Street, at the far western end of the cul-de-sac. The site has a street frontage of approximately 15.6m m in length to Auburn Street and occupies an area of approximately 660m<sup>2</sup>. A copy of the survey plan, prepared by New South Surveys Pty Ltd, is reproduced below.

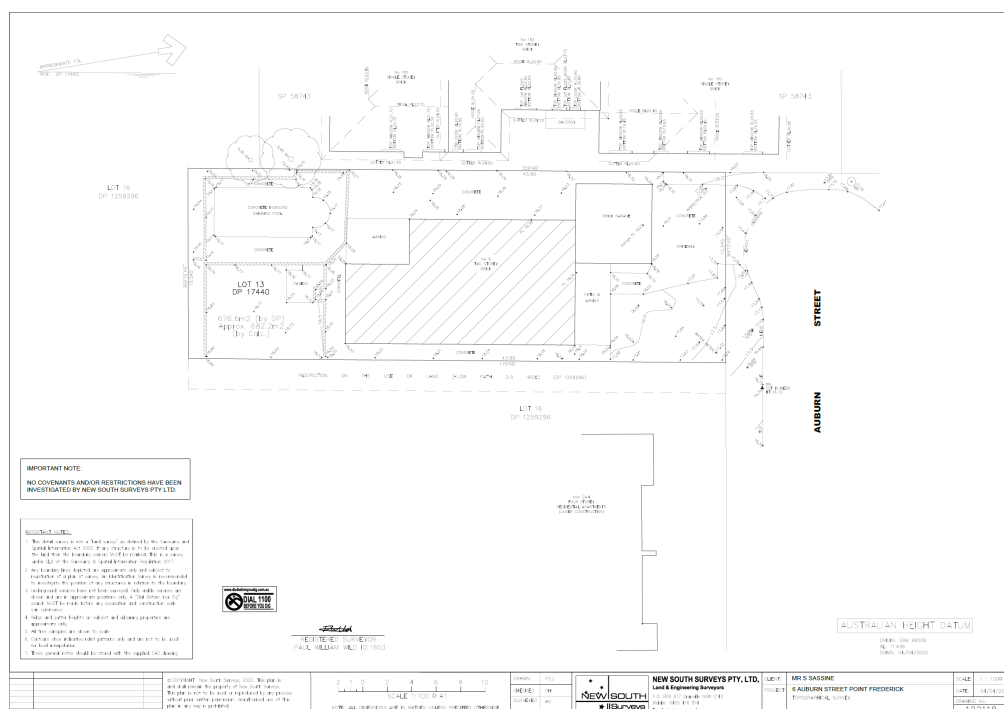


Figure 2.1 – Survey plan (Source: New South Surveys Pty Ltd)

The site is currently occupied by a two-storey dwelling house. Off-street parking is currently provided for 2 cars within a double garage, with vehicular access provided via a driveway located off Auburn Street.

A recent aerial image of the site and its surroundings is reproduced on the following page, along with a series of Streetview images.

As can be seen in the aerial image, the site is isolated, with a townhouse complex adjoining its western boundary, and residential apartment buildings adjoining its eastern and southern boundaries. As such, there is no available option for amalgamation.





Figure 2.2 – Aerial map (Source: Nearmap)



Figure 2.3 – Streetview image of Auburn Street cul-de-sac, looking west (Source: Google Maps)



Figure 2.4 – Streetview image of Auburn Street, looking east (Source: Google Maps)  
22091 | 6 Auburn Street, Point Frederick | 04.11.22

The site is zoned R1 General Residential under CCLEP 2022 whilst the maximum height of building is 12m, as indicated in the maps below. The proposed residential apartment development is permissible in the zone, subject to development consent.

As can be seen in the zoning map below, the site lies within 400m of the B4 Mixed Use area within Gosford City Centre, which is of relevance when it comes to SEPP (Housing) 2021 and car parking requirements discussed in Chapter 5 of this report.

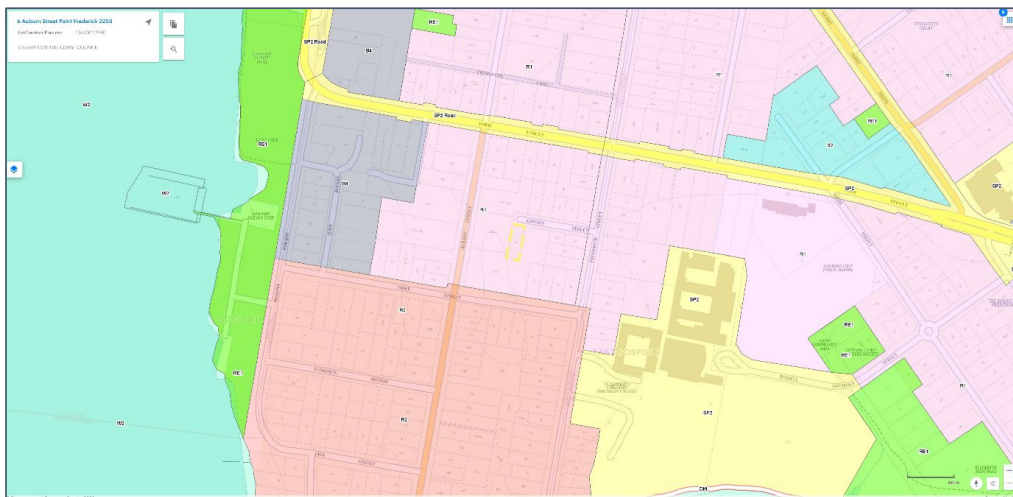


Figure 2.5 – Zoning map (Source: ePlanning Spatial Viewer)



Figure 2.6 – Height of Building Map (Source: ePlanning Spatial Viewer)

## 2.2 Gosford City Centre

Prior to the adoption of the Central Coast Council DCP 2022 on 1 August 2022, the site lied within the south-eastern corner of the Gosford City Centre, as defined in the Gosford City Centre DCP 2018 (GCCDCP 2018) and indicated in Figure 2.7 on the following page. The approach to preparing the GCCDCP 2018 and for how it was to be determined can be summarised as follows:



- provided new controls for protecting views from the public domain to the ridgeline
- protect and enhance the quality of Kibble Park, Leagues Club Field, and Mann Street
- parks within walking distance of every home
- provided desired future character statements that informed the design excellence process
- ensured that new residential development achieves the Apartment Design Guide requirements
- tailored controls for small, medium and large sites
- a focus on six key sites due to their size, potential to provide new public domain or their relationship with existing important places

### 3.1 Character areas

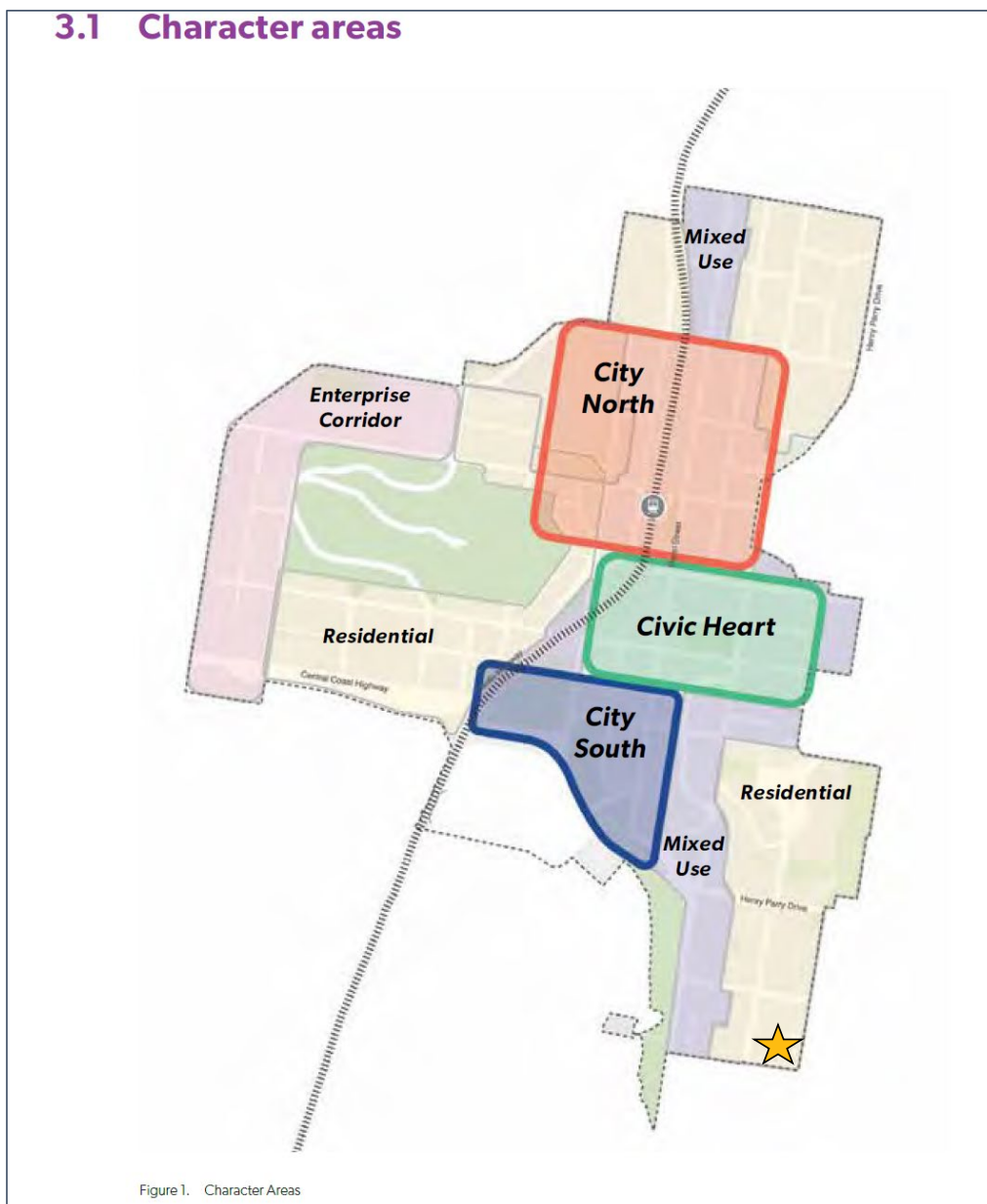


Figure 2.7 – Gosford City Centre boundary (Source: Gosford City Centre DCP 2018)

## 2.3 Road Network

The Transport for NSW (TfNSW) road hierarchy comprises the following road classifications:

- State Roads: Freeways, Motorways and Primary Arterial Roads (TfNSW managed)
- Regional Roads: Secondary or Sub-Arterial (Council managed, partly funded by the State)
- Local Roads: Collector and Local Access Roads (Council managed)

The road hierarchy in the vicinity of the site is shown in the figure below, whilst the key roads and intersections are summarised as follows:

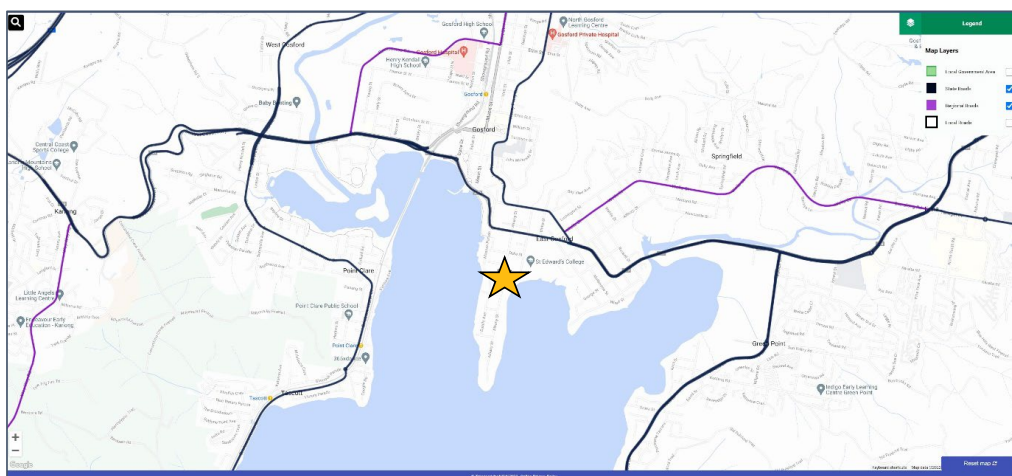


Figure 2.7 – Road Hierarchy (Source: Transport for NSW)

- Central Coast Highway (A49) is classified as a State Road and provides major road link in the Central area, linking the Pacific Motorway at Somersby to the Pacific Highway at Doyalson. It is known as York Street in the vicinity of the site and carries two traffic lanes in each direction, with turning lanes provided at key intersections.
- Avoca Drive is also classified as a State Road which provides another key road link through the Central Coast area, linking the Central Coast Highway at Erina to Avoca Beach. It carries two traffic lanes in each direction in the vicinity of the site, opposing traffic flow separated by a central median island. Kerbside parking is not permitted.
- Henry Parry Drive is also classified as a State Road which provides a key road link through the Gosford area, linking York Street (Central Coast Highway) at East Gosford to the Pacific Highway at North Gosford. It carries one traffic lane in each direction, with turning lanes provided at key locations.
- Auburn Steet is a local cul-de-sac road which provides access to frontage properties. It has a carriageway width of 9m and a cul-de-sac turning head diameter of 12m. Kerbside parking is permitted along both sides of the road.

## 2.4 Public Transport

The nearby public transport services are shown in the figure on the following page. The nearest bus stop is located approximately 140m walking distance south-east of the site, which is serviced by the 42 service. The 42 service operates a loop service 7 days per week between Gosford and Point Frederick.

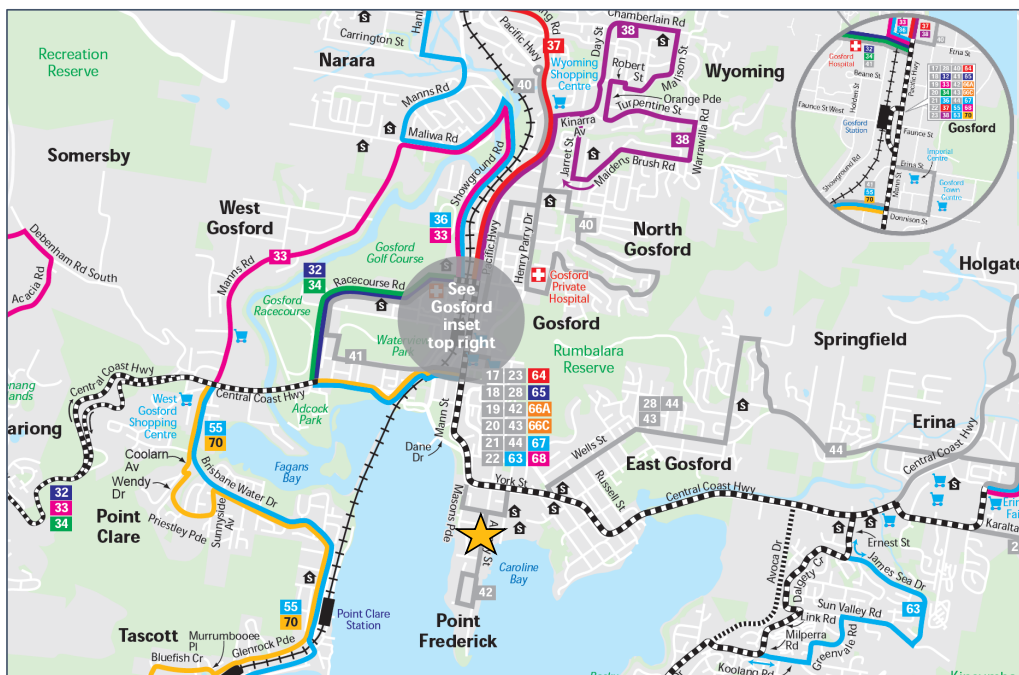


Figure 2.8 – Existing Public Transport Map (Source: Transport for NSW)

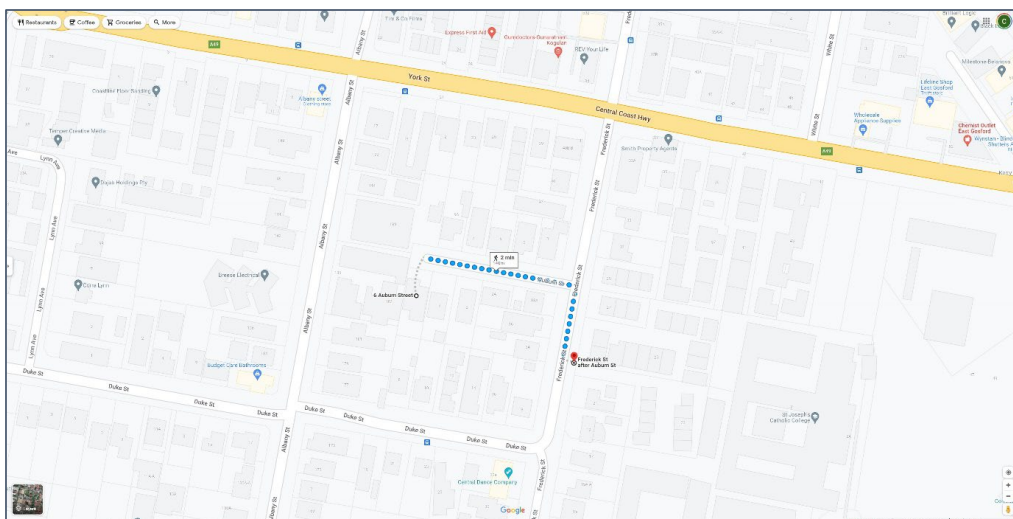


Figure 2.9 – Walking distance to/from nearest bus stop on Frederick Street (Source: Transport for NSW)



In addition, there is also a bus stop on York Street (Central Coast Highway) which is located approximately 280m walking distance north-east of the site. It is serviced daily by the 17, 18, 19, 20, 21, 22, 23, 28, 43, 44, 63, 64, 65, 66A, 66C, 67 & 68 services, many of which provide connection to Gosford railway station.

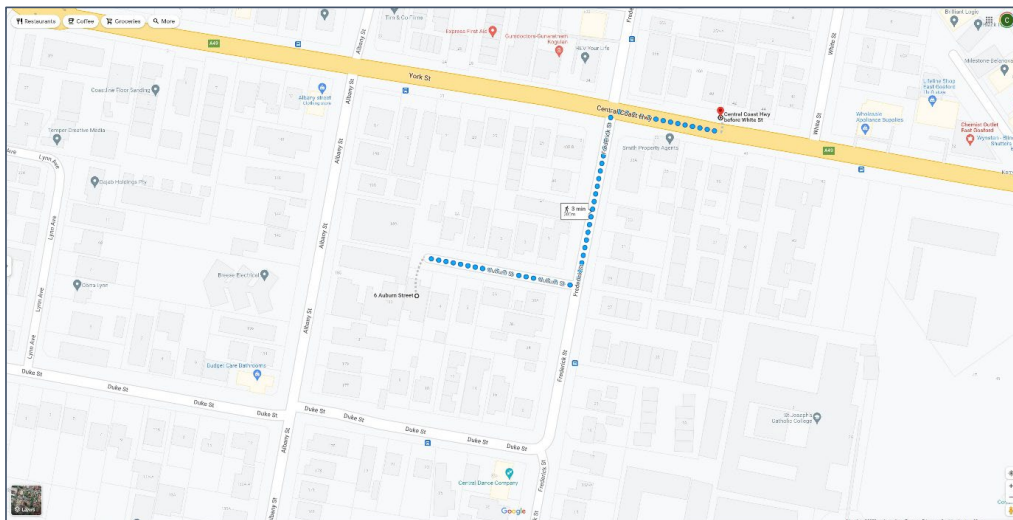


Figure 2.10 – Walking distance to/from York Street bus stop (Source: Transport for NSW)

Research suggests that proximity to bus services influence the travel mode choice for areas within 400m walking distance (approximately 5 minutes) of a bus stop or ferry wharf. As such, the proposed development has potential for future residents to utilise bus/ferry for their commute to/from work.

Additional bus services also operate along Blackwall Point Road, with those bus stops located approximately 800m walking distance to/from the site.

The proposed development is therefore located within an “accessible area”, as defined in the SEPP (Housing) 2021, meaning land within:

- 400m walking distance of a bus stop used by a regular bus service, within the meaning of the *Passenger Transport Act 1990*, that has at least 1 bus per hour servicing the bus stop between –
  - 6am and 9pm each day from Monday to Friday, both inclusive, and
  - 8am and 6pm on each Saturday and Sunday

## 2.5 Active Transport

In addition to the public transport services available in the vicinity of the site, there is also a good level of pedestrian connectivity, including safe and convenient footpaths to the abovementioned bus stops and ferry wharf. All existing footpaths in the surrounding area are of good quality, with appropriate widths and pram ramps provided at most intersections.

The existing bicycle network in the vicinity of the site is reproduced in the figure on the following page which shows there are a number of formal and informal cycle routes throughout the surrounding area, connecting to key points of interest.

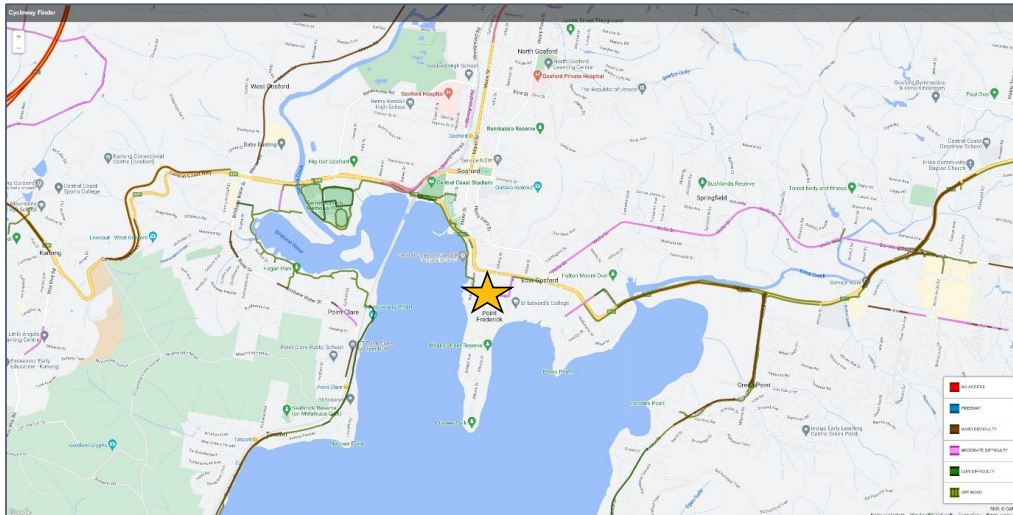


Figure 2.11 – Cycle Map (Source: Transport for NSW)

The *Planning Guidelines for Walking and Cycling* identify a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

## 2.6 Existing Surrounding Traffic Controls

The existing traffic controls in the surrounding area comprise:

- a 60km/h speed limit along York Street
- a 50km/h speed limit along all surrounding local roads
- traffic signals at the York Street & Frederick Street intersection
- a right-turn holding bay for eastbound traffic on York Street turning into Frederick Street at the abovementioned traffic signals

## 2.7 Existing Surrounding Parking Restrictions

The existing on-street parking restrictions in the surrounding area comprise:

- Unrestricted parking along both sides of Auburn Street
- Bus zones located in Frederick Street, Duke Street and Albany Street

### **3. Proposed Development**

#### **3.1 Development Description**

The proposed development involves the demolition of the existing dwelling house on the site and the construction of a new residential apartment building, comprising a total of 8 x two bedroom units, including 4 in-fill affordable housing units.

#### **3.2 Parking Arrangements**

Off-street parking is proposed for 8 cars (including 2 accessible spaces) within a new single-level basement parking area, in accordance with SEPP (Housing) 2021 requirements.

In addition, 1 motorcycle space and 4 bicycle spaces are also proposed within the basement parking area.

#### **3.3 Waste Collection**

Waste collection is to be undertaken by Council's contractor from the kerbside area outside the Auburn Street site frontage, with bins to be lined up along the kerb on "bin night" for collection the following day. Once emptied, bins will be moved back to the bin storage room within the basement as soon as possible.

#### **3.4 Vehicular Access**

Vehicular access to the basement parking area is proposed to be provided via a new 3.6m wide single-lane entry/exit driveway located at eastern end of the Auburn Street site frontage. The proposed ramp is straight with relatively mild gradients, and good visibility between ends.

#### 4. Traffic Impact Assessment

The traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing and/or approved uses, and its impact on the operational performance of the surrounding road network, particularly during the weekday morning and afternoon road network peak periods.

An indication of the traffic generation potential of the existing and proposed uses on the site is provided by reference to the following documents:

- RMS Guide to Traffic Generating Developments 2002 (RMS Guide)
- RMS Technical Direction 2013/04a (TDT)

##### 4.1 Existing Development Traffic Generation

The existing development on the site is defined by the RMS Guide as a “dwelling house”.

The site is currently occupied by a single dwelling house, therefore based on the RMS trip generation rate, the existing development on the site has a traffic generation potential of 1 vehicle trip during the weekday morning and afternoon peak hour (vph).

##### 4.2 Proposed Development Traffic Generation

The proposed development on the site is defined by the RMS Guide as a “medium density” residential development, that is, “a building containing at least 2 but less than 20 dwellings”.

The proposal involves the construction of a new residential apartment building on the site. Based on the RMS trip generation rates, the proposed development has a traffic generation potential of 4 vehicle trips during the weekday morning and afternoon peak hour, as set out in the table below.

Table 4.1 – Proposed Peak Traffic Generation

Land Use	Period	Vehicle Trip Rate	No. of Units	Proposed Peak Trips*
2 bedroom unit	AM & PM Peak Hour	0.5 trips/unit	8	4.0 peak trips
<b>Total</b>				<b>4.0 peak trips</b>

\* entry/exit combined

##### 4.3 Traffic Impact

As noted above, the traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing and/or approved uses.

Based on the RMS trip generation rates and the above tables, the proposed development is expected to result in a *nett increase* of approximately 3 trips during the weekday AM & PM peak periods, as set out in the table below.

Table 4.2 – Nett Peak Traffic Generation

Period	Proposed Peak Trips	Existing Peak Trips	Nett Peak Trips
AM & PM Peak Hour	4.0 vph	0.9 vph	+3.1 vph

These peak period traffic volumes are *statistically insignificant* and fall within typical daily fluctuations of the local road network. This will have minimal impacts on the surrounding road network. Furthermore, the proposal is consistent with Council's FSR and height controls set out in CCLEP 2022.

Accordingly, the road network operation is expected to remain at the same level of service and therefore the proposal is supportable on traffic grounds.



## 5. Access, Parking & Servicing Assessment

### 5.1 Applicable Car Parking Rates

The off-street car parking rates applicable to the development proposal are specified in the SEPP (Housing) 2021, Chapter 2, Part 2, Division 1, Clause 18, as set out below.

#### 18 Non-discretionary development standards—the Act, s 4.15

- (1) The object of this section is to identify development standards for particular matters relating to development for the purposes of in-fill affordable housing that, if complied with, prevent the consent authority from requiring more onerous standards for the matters.
- (2) The following are non-discretionary development standards in relation to the carrying out of development to which this Division applies—
  - (a) a minimum site area of 450m<sup>2</sup>,
  - (b) for a development application made by a social housing provider—at least 35m<sup>2</sup> of landscaped area per dwelling,
  - (c) if paragraph (b) does not apply—at least 30% of the site area is landscaped area,
  - (d) a deep soil zone on at least 15% of the site area, where—
    - (i) each deep soil zone has minimum dimensions of 3m, and
    - (ii) if practicable, at least 65% of the deep soil zone is located at the rear of the site,
  - (e) living rooms and private open spaces in at least 70% of the dwellings receive at least 3 hours of direct solar access between 9am and 3pm at mid-winter,
  - (f) for a development application made by a social housing provider for development on land in an accessible area—
    - (i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces, or
    - (ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces, or
    - (iii) for each dwelling containing at least 3 bedrooms—at least 1 parking space,
  - (g) if paragraph (f) does not apply—
    - (i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces, or
    - (ii) for each dwelling containing 2 bedrooms—at least 1 parking space, or
    - (iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces,
  - (h) for development for the purposes of residential flat buildings—the minimum internal area specified in the Apartment Design Guide for each type of apartment,
  - (i) for development for the purposes of dual occupancies, manor houses or multi dwelling housing (terraces)—the minimum floor area specified in the Low Rise Housing Diversity Design Guide,
  - (j) if paragraphs (h) and (i) do not apply, the following minimum floor areas—
    - (i) for each dwelling containing 1 bedroom—65m<sup>2</sup>, or
    - (ii) for each dwelling containing 2 bedrooms—90m<sup>2</sup>, or
    - (iii) for each dwelling containing at least 3 bedrooms—115m<sup>2</sup> plus 12m<sup>2</sup> for each bedroom in addition to 3 bedrooms.

(Source: SEPP (Housing) 2021, Chapter 2, Part 2, Division 1)

## 5.2 Car Parking Requirements

Based on the proposal for 8 x two-bedroom apartments, the proposed development requires the provision of 8 residential car parking spaces, as set out in Table 5.1 below.

*Table 5.1 – Off-Street Car Parking Requirement*

SEPP (Housing) 2021			
Use	Rate	Quantity	Requirement
2 bedroom	1 space/unit	8	8.0 spaces
Visitors	N/A	-	0.0 spaces
<b>Total</b>			<b>8.0 spaces</b>

## 5.3 Accessible Parking

Residential accessible parking is required for each adaptable apartment. The required number of adaptable apartments in a residential development is provided in Section 2.3.12.1 of Council's CCDCP 2022, as set out in the table below.

- b 10% of units in residential flat developments shall be designed as suitable for adaptation for occupation by disabled / aged persons, as outlined in *AS 4299: Adaptable Housing*. A higher rate of adaptable housing of 15% is encouraged.

(Source: Central Coast DCP 2022, Chapter 2.3, Section 2.3.12.1)

Based on the proposal for 8 apartments, the proposed development requires the provision of 1 adaptable apartment, which in turn, requires an accessible car parking space.

That requirement is satisfied by the proposed provision of 2 accessible car parking spaces within the basement parking area, in close proximity to the lift.

## 5.4 Proposed Car Parking Provisions

The proposed development makes provision for a total of 8 off-street car parking spaces within the basement, thereby satisfying the SEPP (Housing) 2021 requirements. It is also worth noting:

- the site is constrained, with the adjoining sites already redeveloped
- the site lies within the former Gosford City Centre, such that there is excellent accessibility to public transport services
- there is sufficient kerbside parking available in the surrounding streets

## 5.5 Bicycle Parking

The SEPP does not specify an off-street bicycle parking rate for in-fill affordable housing developments, therefore reference is made to the Central Coast DCP 2022, Chapter 2.13 – Transport & Parking document and its bicycle parking rates, as set out below.

Part 2 Development Provisions  
Chapter 2.13 Transport and Parking

#### 2.13.3.8.1 Bicycle Parking Rates – Short Term

Land Use	Bicycles – Short Stay
a Multi Dwelling housing and Residential Flat Buildings	1 space per 12 dwellings

Part 2 Development Provisions  
Chapter 2.13 Transport and Parking

#### 2.13.3.8.2 Bicycle Parking Rates – Long Term

Land Use	Bicycles - Long Stay
a Multi Dwelling housing and Residential Flat Buildings	1 space per 5 dwellings

(Source: Central Coast DCP 2022, Chapter 2.13, Section 2.13.3.8.1)

Accordingly, based on the proposal for 8 apartments, the proposed development requires the provision of 2 residential bicycle spaces and 1 visitor bicycle space.

That requirement is satisfied by the proposed provision of 4 bicycle spaces within the basement parking area in, thereby satisfying Council's CCDCP 2022 requirements.

## 6. Design Assessment

### 6.1 Applicable Design Standards

The following design standards have been used as the basis for compliance with respect to the vehicular access and parking requirements:

- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.3:2015 – Bicycle Parking (AS2890.3)
- Australian Standards 2890.6:2009 – Off-Street Parking for People with Disabilities (AS2890.6)

Whilst the vehicular access and parking area has been designed in accordance with the above Australian Standards, it is expected that a condition of consent would be imposed requiring reconfirmation of compliance at the Construction Certificate stage (CC). Any minor amendments required to the current DA design can therefore be addressed at the CC stage.

### 6.2 Vehicular Access & Circulation Design

The following key compliances are noted with respect to the vehicular access design and circulation system:

- 3.6m wide single-lane two-way driveway in accordance with “Category 1” requirements
- driveway located outside of the 6m “prohibited” tangent points of an intersection
- first 6m of the ramp within the property boundary @ 5% (1:20)
- remaining ramp gradient @ 12.5% (1:8)
- 2.5m x 2.0m pedestrian sight triangles on both sides of the driveway at the top of the ramp
- minimum 6.3m wide aisle
- minimum 1m “aisle extension” at the end of the dead-end parking aisle
- minimum 2.2m overhead clearance provided throughout the vehicular circulation system

Further to the above, the vehicular access arrangements have been designed to accommodate the swept turning path requirements of the B99 design vehicle as specified in AS2890.1, allowing them to enter and exit the site in a forward direction at all times without difficulty. Furthermore, the car parking layout has been designed to allow the B85 design vehicle to enter and exit the spaces with minimal manoeuvres required. Swept turning path diagrams are reproduced in Appendix B.

It should also be emphasised that the proposed development is estimated to have a modest traffic generation potential of approximately 4 vehicles per hour, and that most vehicles will be travelling in the same direction during peak periods: i.e. outbound in the morning and inbound in the evening. As such, the likelihood of 2 vehicles travelling in opposite directions simultaneously is expected to be absolutely minimal. Notwithstanding, the car parking area has been designed to allow two cars to pass within the parking aisle.

### 6.3 Parking Design

The following key compliances are noted with respect to the parking area design:

- 5.4m long x 2.4m wide residential parking spaces in accordance with User Class 1A requirements
- 5.4m long x 2.4m wide car parking spaces *plus* 5.4m long x 2.4m wide “shared area” for accessible spaces, in accordance with AS2890.6
- additional 300mm width for parking spaces located against walls
- minimum 2.5m overhead clearance provided above accessible parking spaces and adjacent shared area
- minimum 2.2m overhead clearance provided above all other parking spaces
- columns in parking areas generally located ~750mm back from the edge of the parking aisle
- no obstructions within the “design envelope” of any car parking spaces
- bicycle parking areas designed in accordance with AS2890.3
- all vehicles are able to enter and exit the site in a forward direction at all times



## 7. Conclusion

In summary, the proposed development involves the demolition of the existing dwelling house on the site and the construction of a new residential apartment development, comprising a total of 8 x two bedroom units, including 4 in-fill affordable housing units.

Off-street car, motorcycle and bicycle parking is proposed within a new single-level basement parking area, in accordance with SEPP (Housing) 2021 requirements.

Based on the findings contained within this report, the following conclusions are made:

- the site is located within 400m walking distance to a large number of bus services, many of which provide connection to Gosford railway station
- the proposed development is expected to result in a *nett increase* of just 3 vehicle trips during the weekday morning and afternoon peak periods
- the proposed *nett increase* in traffic is minimal will clearly not result in any unacceptable traffic or environmental capacity implications to the surrounding road network
- the proposed development makes provision for 8 car parking spaces, in accordance with SEPP (Housing) 2021 requirements
- the proposed development also makes provision for 1 motorcycle space and 4 bicycle spaces within the basement, in accordance with Council's CCDCP 2022 requirements
- the proposed vehicular access and parking area design complies with the relevant requirements of the AS2890 series

In light of the foregoing assessment, it is therefore concluded that the proposed development is supportable on vehicular access, traffic, parking and servicing grounds and will not result in any unacceptable implications.

3.1

***DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces***

***Attachment 9***

***PUBLIC Traffic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building***

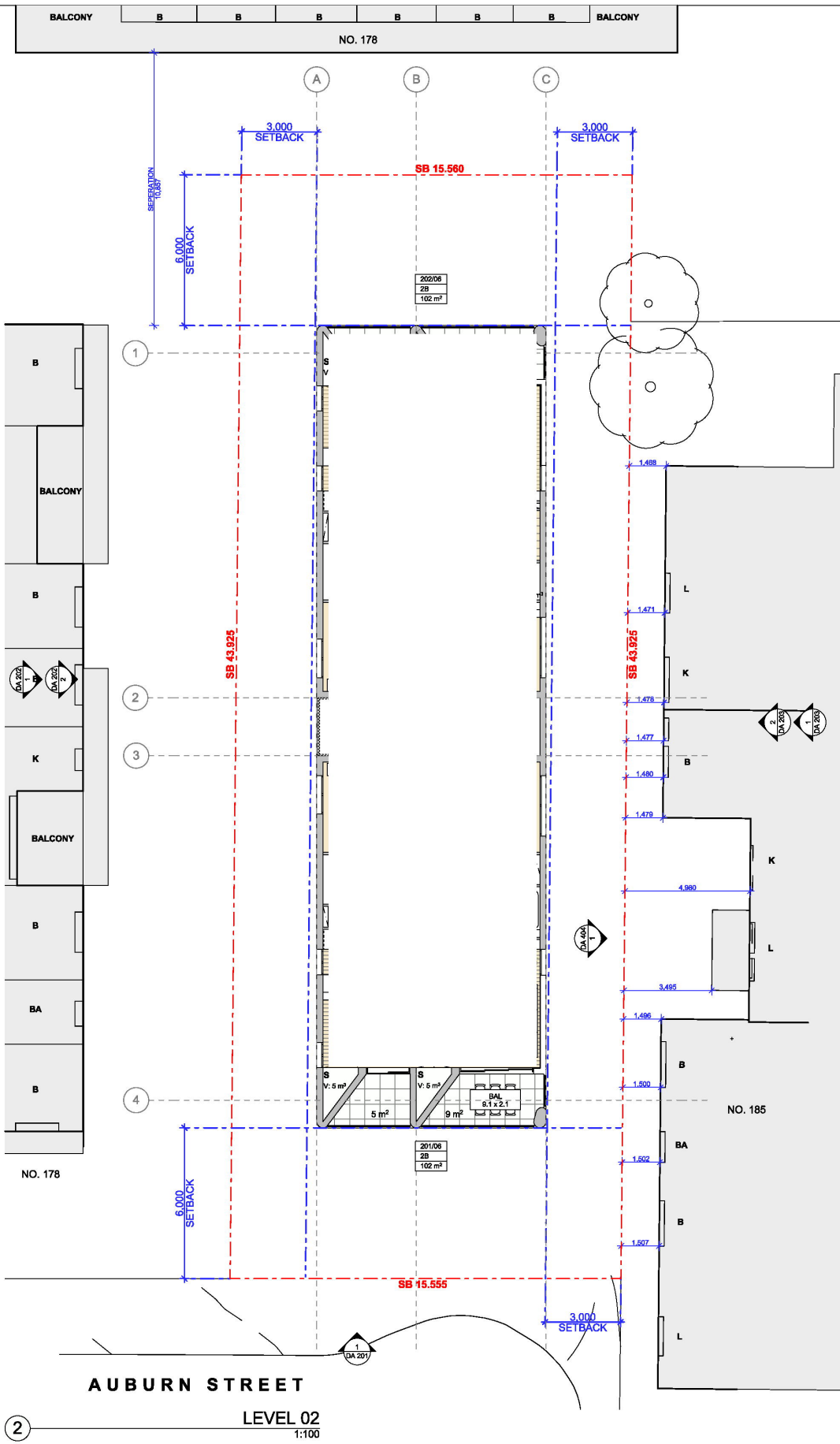
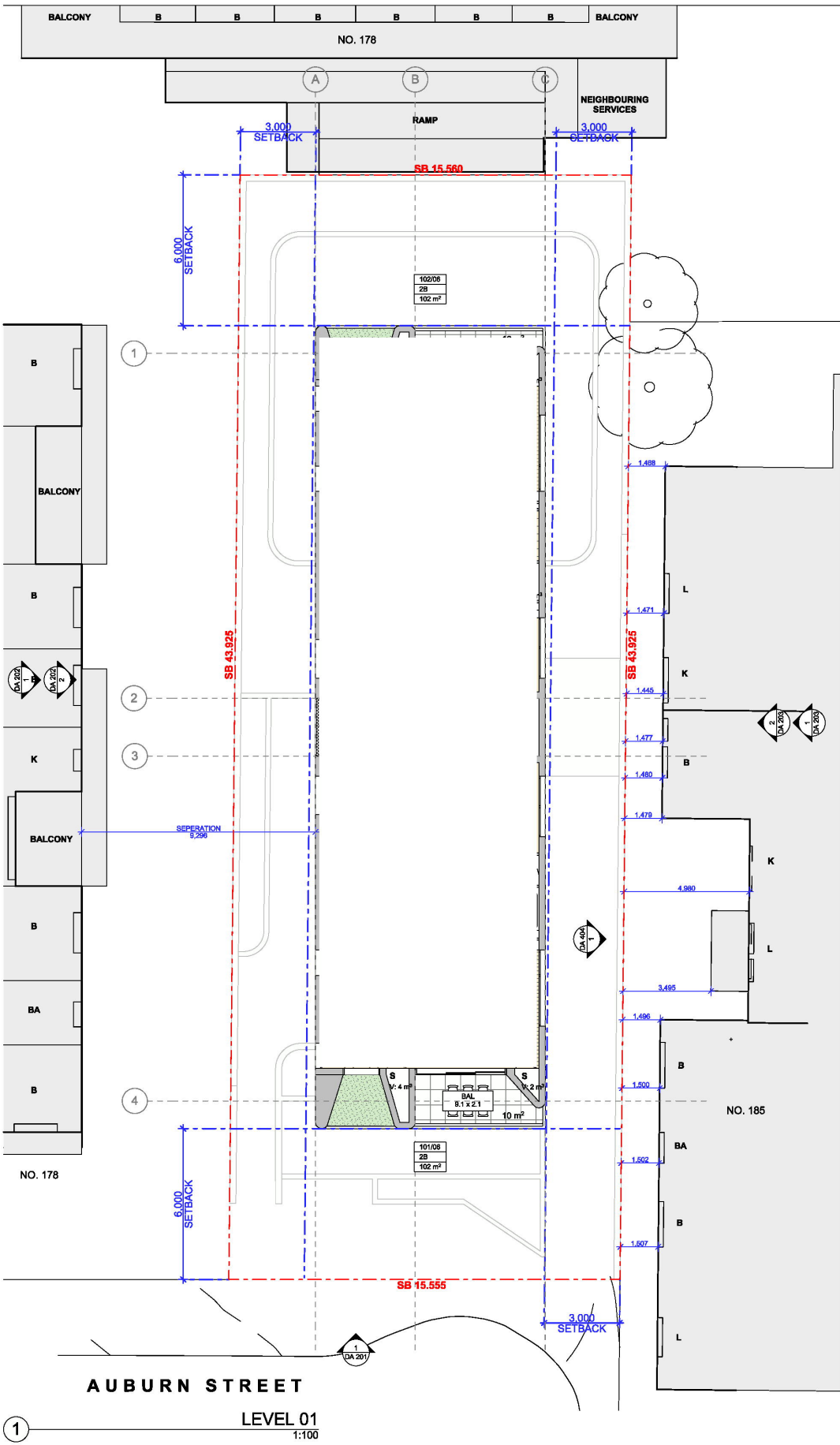
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## **Appendix A**

### **Proposed Architectural Plans**





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DATE: 24/09/2022  
DRAWN BY: DA 102  
CHECKED BY: DA 102

LEGEND

- 2 BED APARTMENT
- ADAPTABLE APARTMENT
- ACCESS HATCH
- CAR PARK EXHAUST
- INTERCOM
- LIFT
- MAILBOXES
- SKYLIGHT
- STORAGE CAGE

REVISION ID AMENDMENT DATE

P1	FOR INFORMATION	24/09/2022
P2	FOR INFORMATION	17/10/2022
A	DA SUBMISSION	30/08/2022

ARCHITECT  
FUSE ARCHITECTS  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
87/88-89  
81 MAULBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 048 843  
REGISTERED ARCHITECT RACHEL ANDARY NSW AND REG

CLIENT  
Zyngene, 104/2 Pty Ltd  
25 Crown Way  
Quindby NSW 2161

**PRELIMINARY**

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO  
2208

DRAWN  
CW

DATE  
25/10/2022

SCALE  
1:100 @ A1 A3@50%

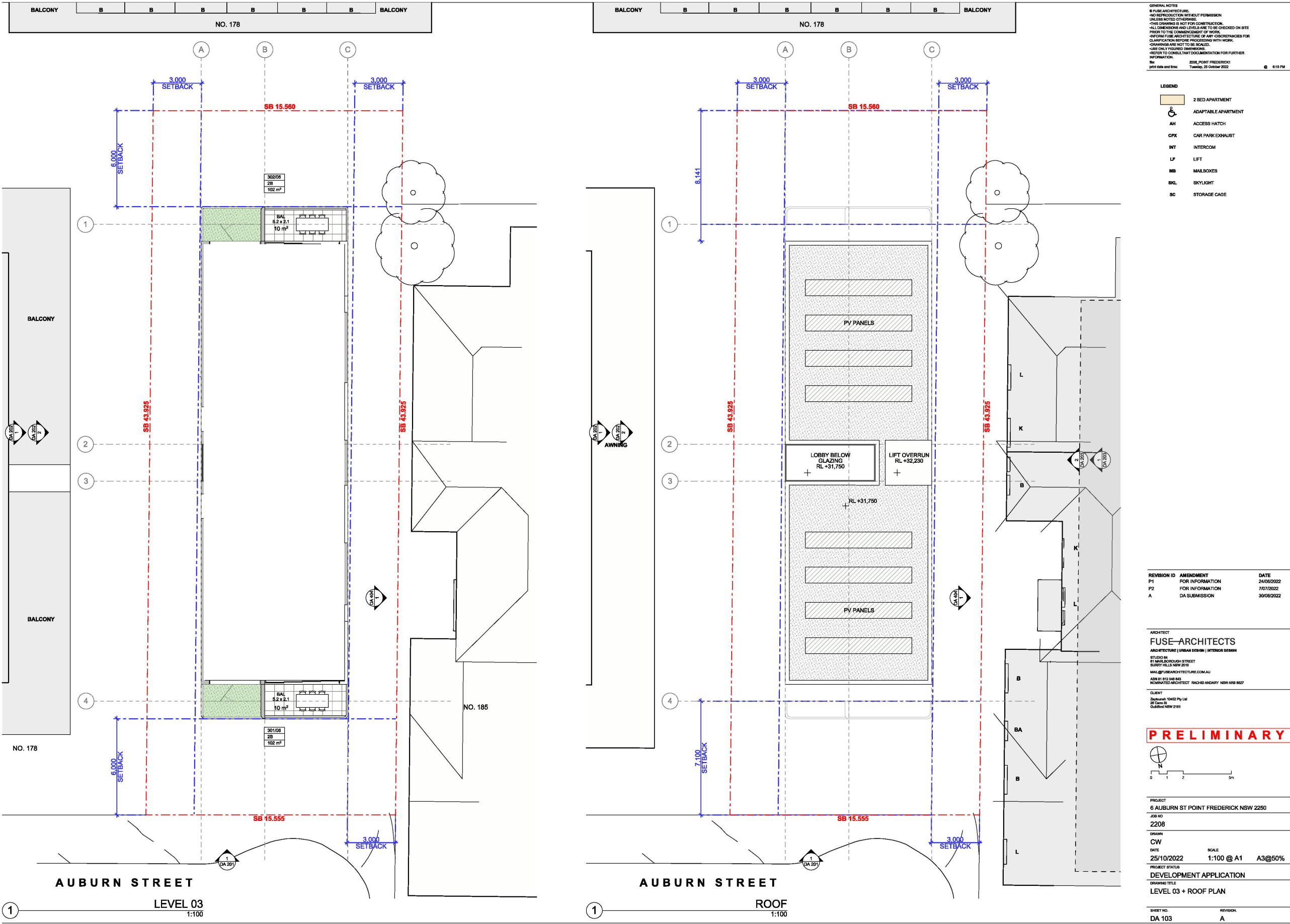
PROJECT STATUS  
DEVELOPMENT APPLICATION

DRAWING TITLE  
LEVEL 01 + LEVEL 02 PLAN

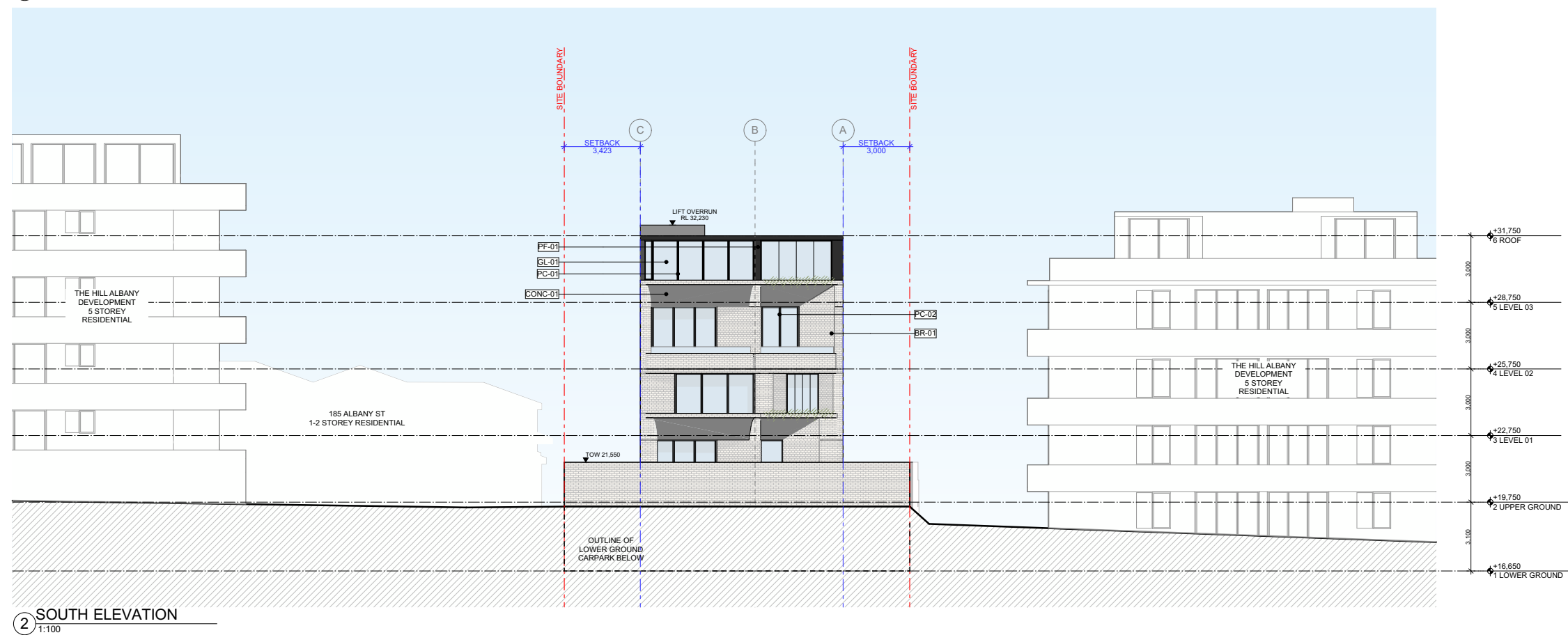
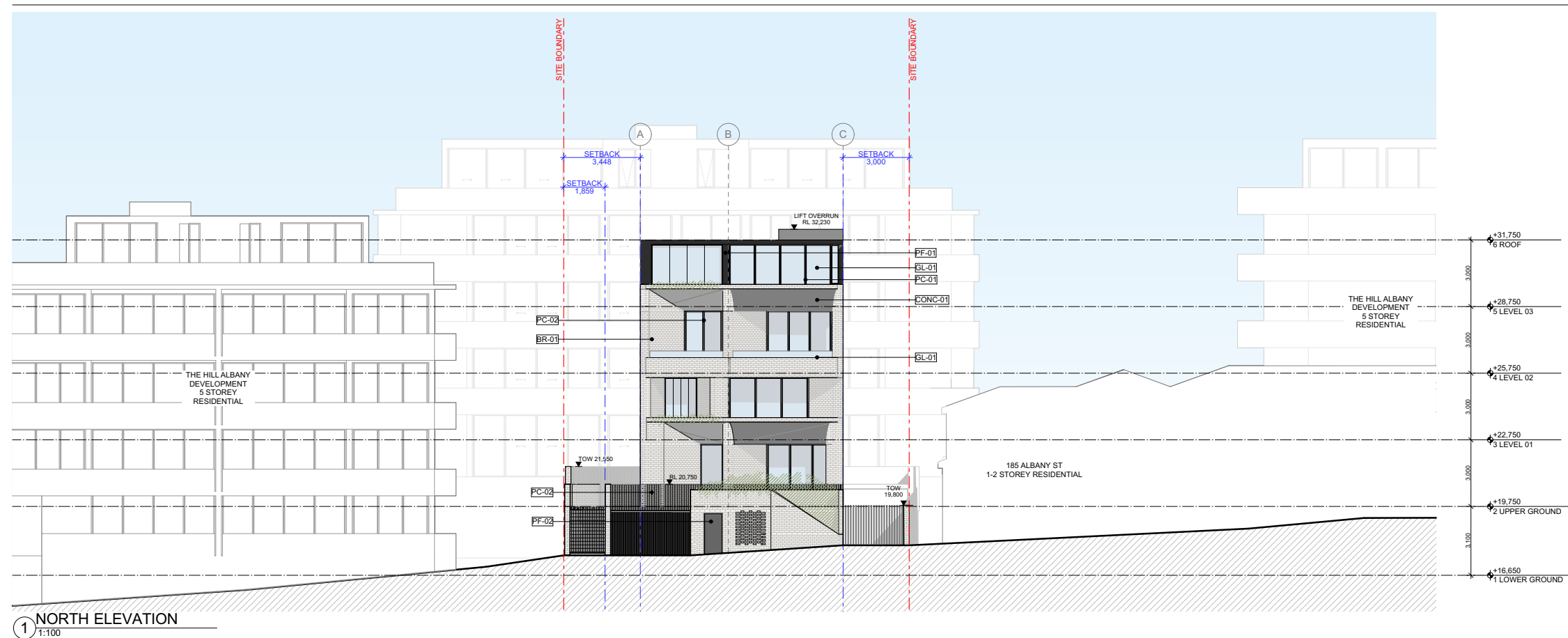
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REVISION  
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file: 2208, POINT FREDERICK  
print date and time: Tuesday, 25 October 2022 6:16 PM

ABBREVIATION:	DESCRIPTION
SURFACE	Various Off White Brick
BWK-01	Concrete
CONC-01	Glass
GL-01	Powder Coat Dark Gray
PC-01	Powder Coat Gray
PF-02	Paint Dark Gray
PF-01	Paint Gray
PF-02	

CHANGE	DESCRIPTION
--------	-------------

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022

ARCHITECT

**FUSE—ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 64  
61 MARLBOROUGH STREET  
NEW YORK, NY 10012-1098  
TEL: (212) 691-1000 FAX: (212) 691-1001

SURRY HILLS NSW 2010  
MAL@FUSEARCHITECTURE.COM.AU

ABN 81 612 046 643  
NOMINATED ARCHITECT RACHID ANDARY NSW ARB 8627

CLIENT

Zeytouneh 10452 Pty Ltd  
26 Cann St

Guildford NSW 2161

**P P E I**

PREL



	0	1	2
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PROJECT

6 AUBURN ST POIN

2208

DRAWN

CW

DATE  
05/10/2000

25/10/2022

DEVELOPMENT

DRAWING TITLE

NORTH + SOUTH

---

SHEET NO.

DA 004

DA 201



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INFORMATION

Rev: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 25 October 2022 @ 6:16 PM

ABBREVIATION:

SURFACE	DESCRIPTION
BR-01	Vertical Off White Brick
CONC-01	Concrete
GL-01	Glaze
PC-01	Portland Cement Dark Grey
PC-02	Portland Cement Grey
PF-01	Paint Dark Grey
PF-02	Paint Grey



CHANGE	DESCRIPTION

REVISION ID	AMENDMENT	DATE
A	DA SUBMISSION	30/08/2022

ARCHITECT

**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN

STUDIO 14  
81 MARLBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 048 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zephyrus 10452 Pty Ltd  
38 Cammeray NSW 2161  
Quarantine NSW 2161

**PRELIMINARY**

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO  
2208

DRAWN  
CW

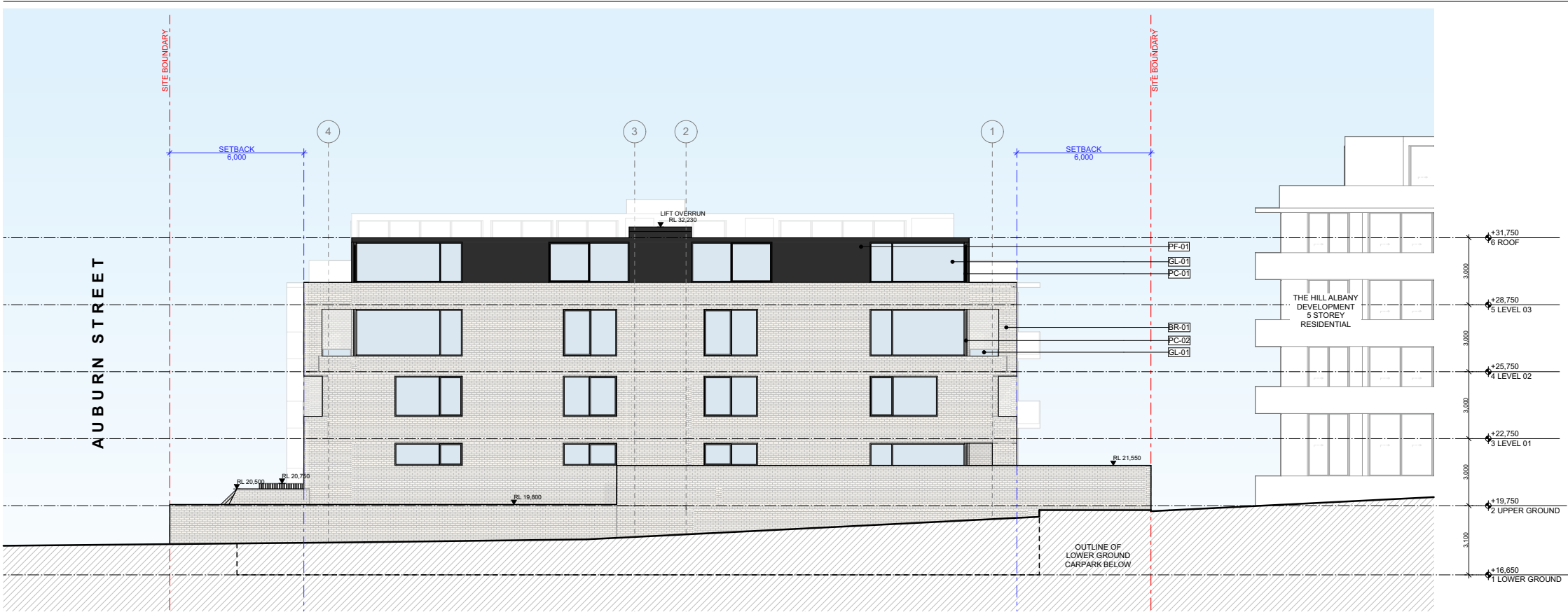
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25/10/2022

SCALE  
1:100 @ A1 A3@50%

PROJECT STATUS  
DEVELOPMENT APPLICATION

DRAWING TITLE  
EAST ELEVATION

SHEET NO.	REVISION
DA 202	A

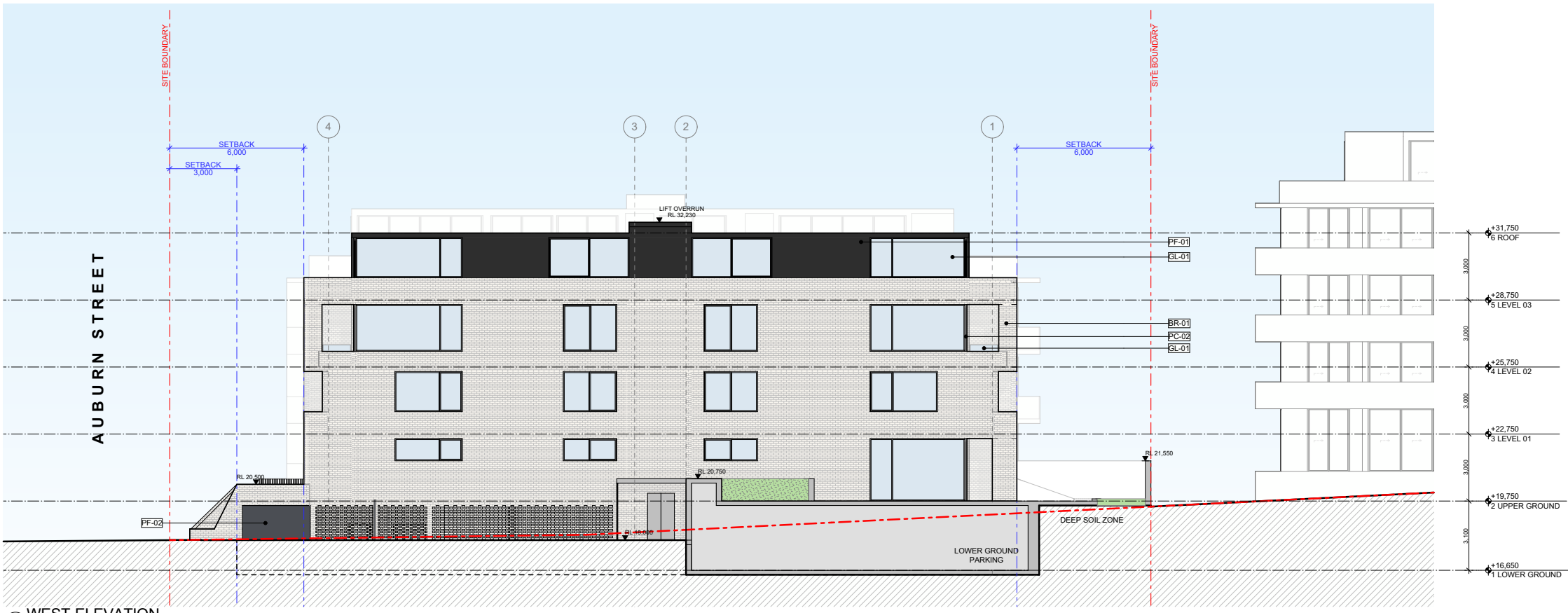


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INFORMATION

Rev: 2208\_POINT FREDERICK1  
print date and time: Tuesday, 25 October 2022 @ 6:16 PM

ABBREVIATION: DESCRIPTION  
SURF-01 Surface of Finish Work  
CONC-01 Concrete  
CL-01 Cladding  
PC-02 Powder Coat Dark Grey  
PF-01 Paint Dark Grey  
PF-02 Paint Grey



CHANGE DESCRIPTION

REVISION ID AMENDMENT DATE  
A DA SUBMISSION 30/08/2022

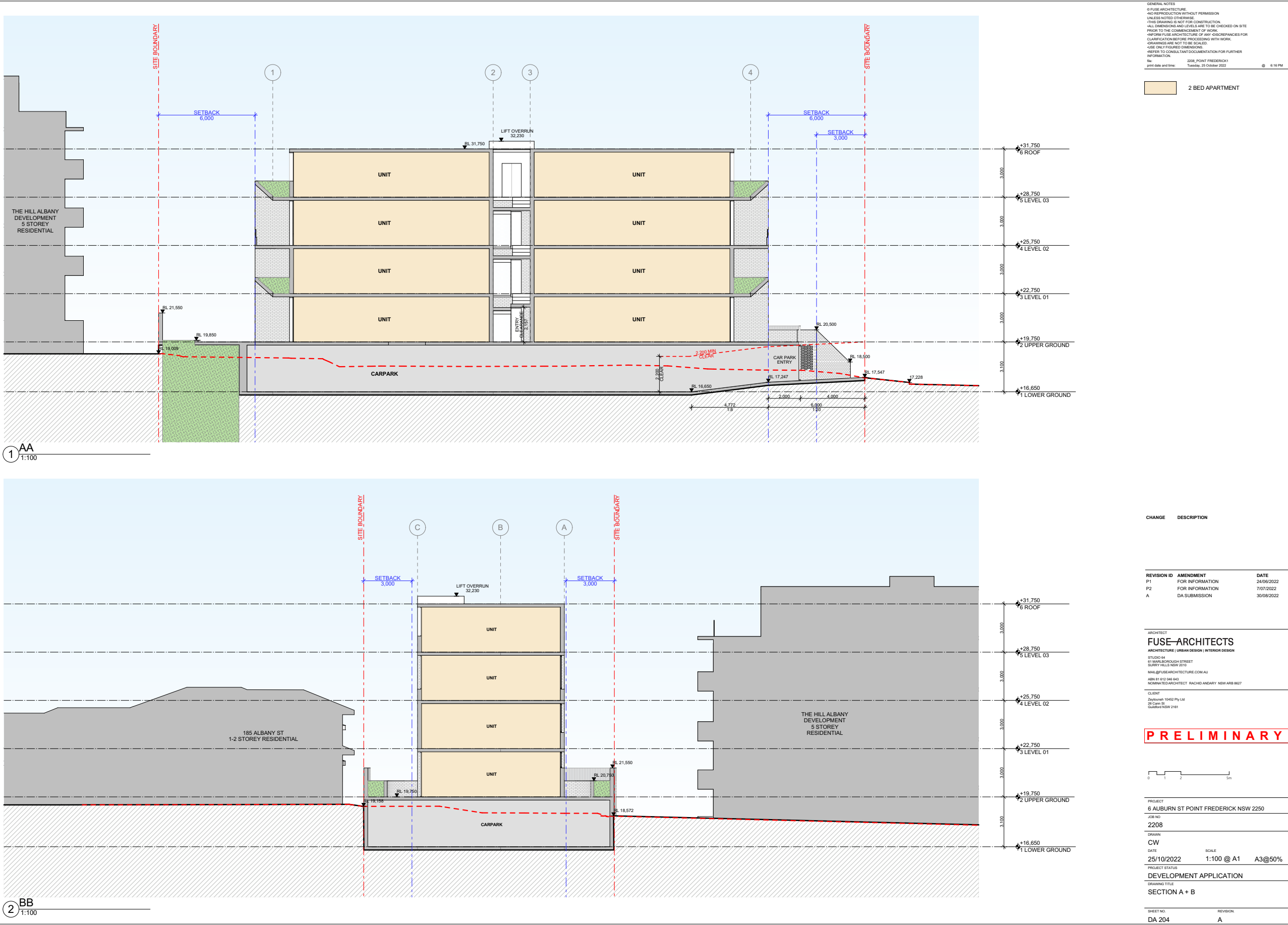
ARCHITECT  
**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARLBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 048 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT  
Zephyrus 10452 Pty Ltd  
38 Cammeray Road  
Cammeray NSW 2151

**PRELIMINARY**

PROJECT  
6 AUBURN ST POINT FREDERICK NSW 2250  
JOB NO  
2208  
DRAWN  
CW  
DATE 25/10/2022 SCALE 1:100 @ A1 A3@50%  
PROJECT STATUS  
DEVELOPMENT APPLICATION  
DRAWING TITLE  
WEST ELEVATION

SHEET NO. REVISION  
DA 203 A



CHANGE DESCRIPTION

REVISION ID	AMENDMENT	DATE
P1	FOR INFORMATION	24/09/2022
P2	FOR INFORMATION	17/07/2022
A	DA SUBMISSION	30/08/2022

ARCHITECT

**FUSE ARCHITECTS**  
ARCHITECTURE | URBAN DESIGN | INTERIOR DESIGN  
STUDIO 14  
81 MARLBOROUGH STREET  
SYDNEY NSW 2010  
MAIL@FUSEARCHITECTURE.COM.AU  
ABN 81 612 046 843  
NOMINATED ARCHITECT RACHO ANDARY NSW ARB 8627

CLIENT

Zephyrus 10452 Pty Ltd  
26 Cam NSW 2161  
Queensland NSW 2161

**PRELIMINARY**

PROJECT

6 AUBURN ST POINT FREDERICK NSW 2250

JOB NO

2208

DRAWN

CW

DATE

25/10/2022

SCALE

1:100 @ A1 A3@50%

PROJECT STATUS

DEVELOPMENT APPLICATION

DRAWING TITLE

SECTION A + B

SHEET NO.

DA 204

REVISION

A

3.1

***DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces***

***Attachment 9***

***PUBLIC Traffic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building***

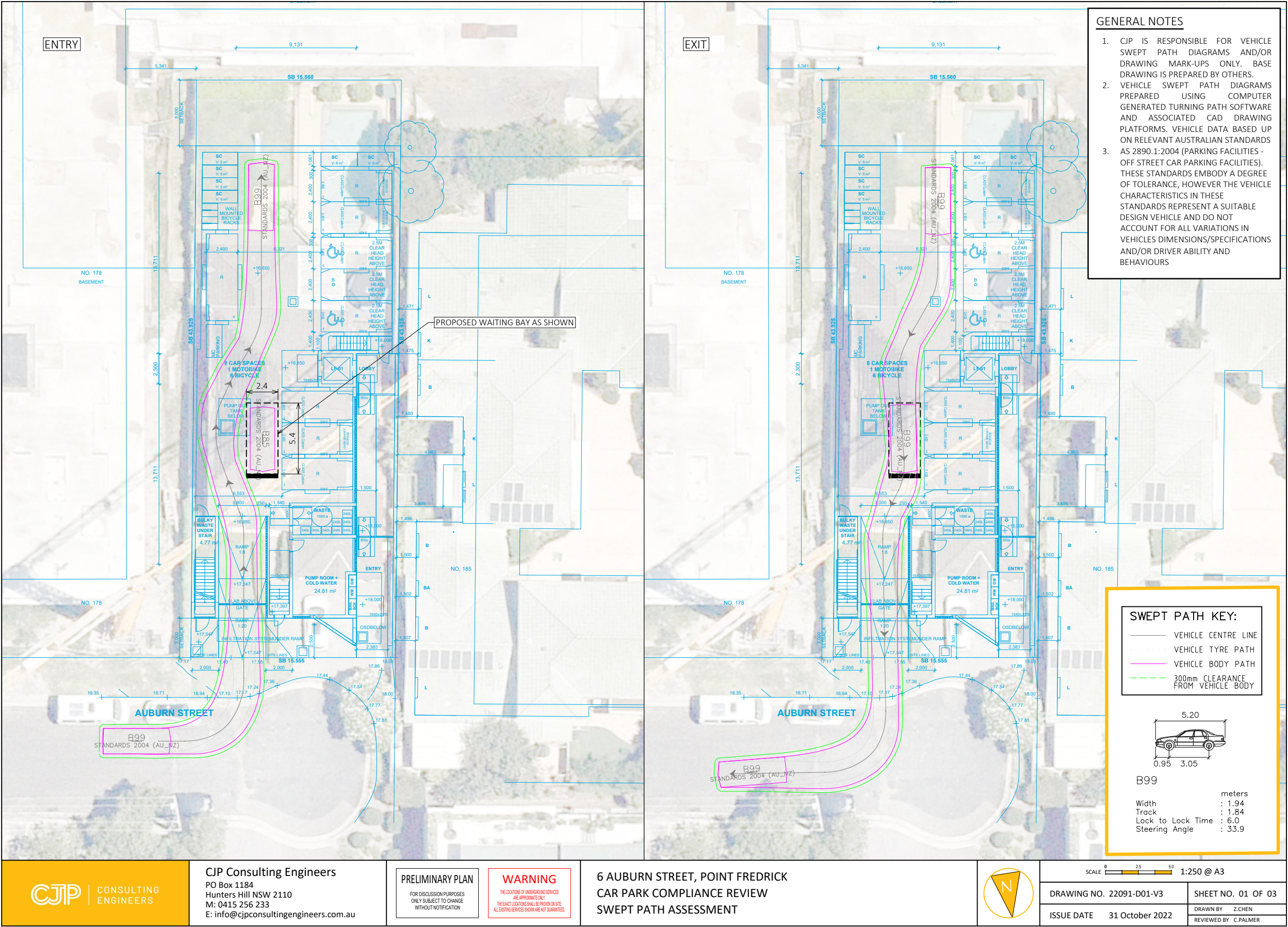
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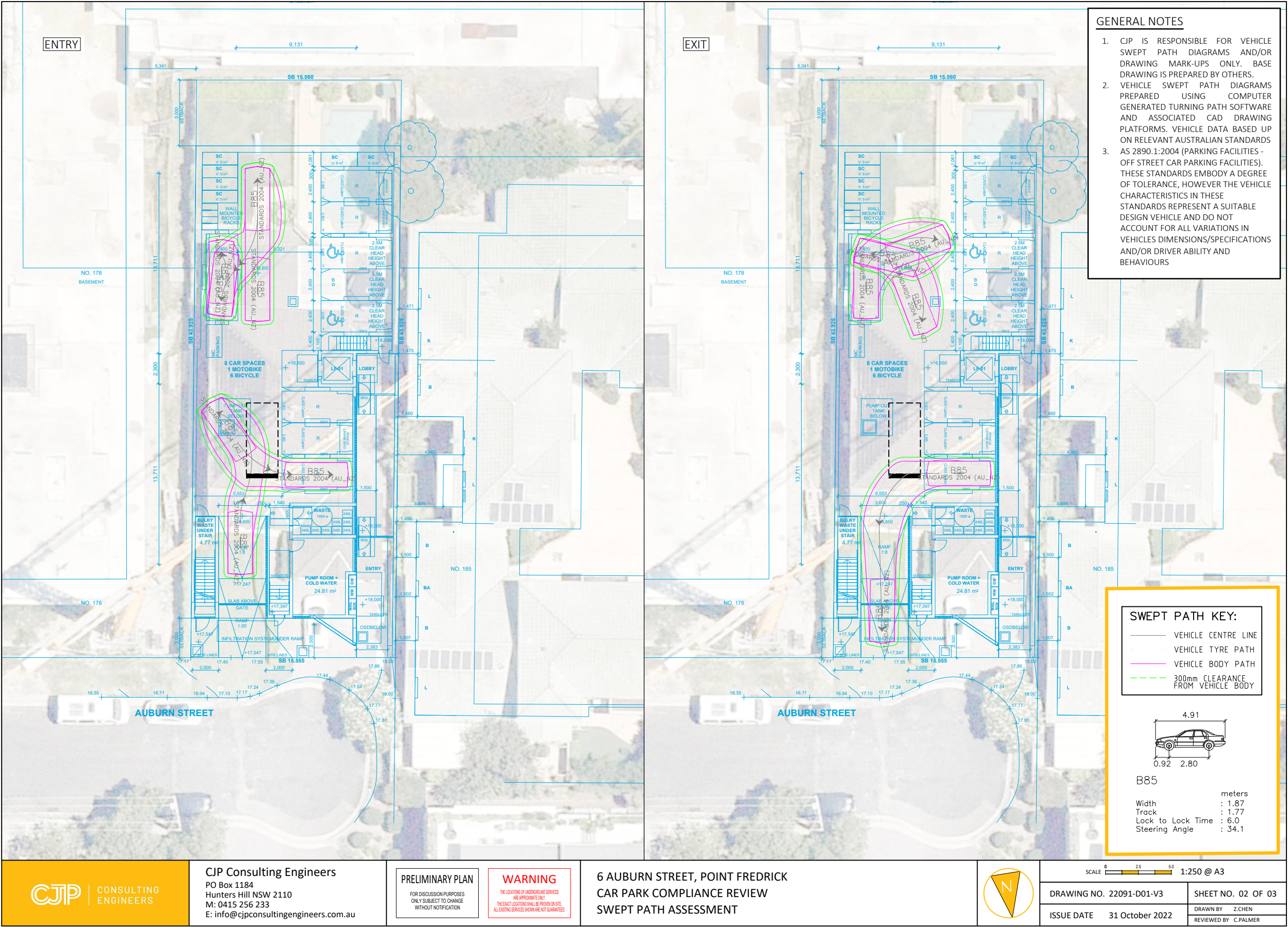
## **Appendix B**

Swept Turn Paths

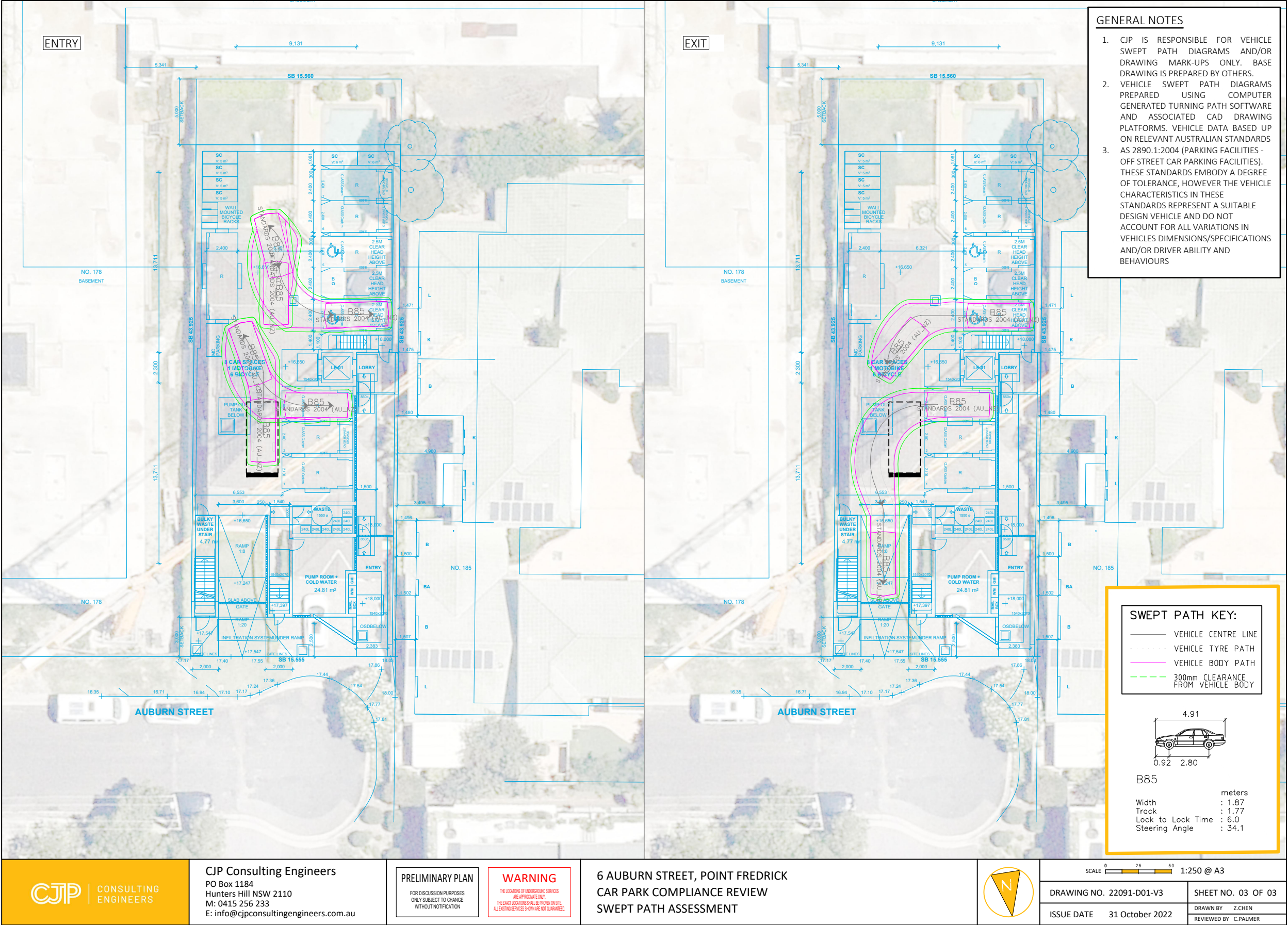
















## BCA Assessment Report

6 Auburn Street Point Frederick



<b>Project:</b>	6 Auburn Street Point Frederick
<b>Reference No:</b>	116373-BCA-r2
<b>Date:</b>	2 November 2022
<b>Client:</b>	Zeytouneh 10452 Pty Ltd
<b>Client Contact:</b>	Anthony Nakhoul
<b>Email:</b>	anahoul@hotmail.com
<b>BCA Logic Contact:</b>	Alex Newberry
<b>Direct:</b>	0466 811 720
<b>Email:</b>	Alex.Newberry@jensenhughes.com

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Suite 302, Level 3, 151 Castlereagh St, Sydney NSW 2000 | **Postal Address** PO Box Q1440, Queen Victoria Building NSW 1230

**Document Control**

Revision	Date	Description	
116373-BCA-r1	07.09.2022	BCA Assessment Report – Draft	
116373-BCA-r2	02.11.2022	BCA Assessment Report – DA Submission	
		Prepared by	Verified by
		Alex Newberry	Ben Long
		Senior Building Regulations Consultant	Registered Certifier No. BDC 3380  Senior Building Regulations Consultant



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures  
and construction of 4 storey residential flat building containing 8 x 2 bedroom units  
(including 4 affordable housing units) with 8 car spaces (including 2 x accessible  
spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 -**  
 Ref: 116373-BCA-r2 **6 Auburn Street, POINT FREDERICK NSW 2250 Residential Flat Building**

### Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>1 Adoption of BCA 2022 .....</b>	<b>6</b>
1.1. Proposed Introduction .....	6
1.2. Major Changes known to date .....	6
1.3. September 2022 changes .....	7
1.4. Summary of Major Changes .....	8
<b>2 BASIS OF ASSESSMENT .....</b>	<b>9</b>
2.1. Location and Description .....	9
2.2. Purpose .....	9
2.3. Building Code of Australia .....	9
2.4. Limitations .....	9
2.5. Design Documentation .....	10
<b>3 BUILDING DESCRIPTION .....</b>	<b>11</b>
3.1. Rise in Storeys (Clause C1.2) .....	11
3.2. Classification (Clause A6.0) .....	11
3.3. Effective Height (Clause A1.0) .....	11
3.4. Type of Construction Required (Table C1.1) .....	11
3.5. Floor Area and Volume Limitations (Table C2.2) .....	11
3.6. Fire Compartments .....	11
3.7. Exits .....	12
3.8. Climate Zone (Clause A1.0) .....	12
3.9. Location of Fire-source features .....	12
<b>4 BCA ASSESSMENT .....</b>	<b>13</b>
4.1. Introduction .....	13
4.2. Relationship to the Design and Building practitioners Act .....	13
4.3. Fire Resistance and Stability – Part C1 & Specification C1.1 .....	13
4.4. Compartmentation and Separation – Part C2 .....	13
4.5.1. Openings in external walls .....	14
4.5.2. Bounding Construction .....	14
4.5.3. Openings in Floors for Services and Service Installations .....	14
4.6. Occupant Access and Egress – Section D .....	14
4.6.1. Egress from the building .....	14
4.6.2. Access for people with disabilities .....	15
4.7. Services and equipment- Parts E1, E2 and E4 .....	15
4.8. Lift Installations – Part E3 .....	15
4.9. Facilities in Residential Buildings – Part F2 .....	15
4.10. Room Heights – Part F3 .....	16
4.11. Light and Ventilation – Part F4 .....	16

<b>6 STATEMENT OF COMPLIANCE.....</b>	<b>16</b>
ANNEXURE A DESIGN DOCUMENTATION.....	17
ANNEXURE B ESSENTIAL SERVICES .....	19
ANNEXURE C FIRE RESISTANCE LEVELS .....	23
ANNEXURE D.....	25
ANNEXURE E DEFINITIONS.....	25
ANNEXURE F BCA COMPLIANCE SPECIFICATION .....	29

#### Tables

Table 1. Building Classification.....	11
Table 3. Architectural Plans.....	18
Table 4. Essential Fire Safety Measures.....	20
Table 5. Type A Construction .....	24

## EXECUTIVE SUMMARY

This document provides an assessment of the architectural design drawings for the proposed residential development at 6 Auburn Street Point Frederick, against the Deemed-to-Satisfy provisions of the Building Code of Australia (BCA) 2019, Volume 1 Amendment 1.

The plans assessed were developed to a standard suitable for submission as a development application and do not contain all the details necessary to allow a CC to be issued. As such, this assessment is limited to the major items of the BCA with the view of identifying any items that may result in a modified development consent being required, or additional key items that need to be included in the design.

The architectural design documentation as referred to in report has been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation complies or is capable of complying with that Code.

The below Table outlines the identified BCA compliance issues that require further information or consideration and/or assessment as Performance Solutions. Any Performance Solution will need to be detailed in a separate report and must clearly indicate methodologies for achieving compliance with the relevant BCA Performance Requirements at CC stage.

Item	Description	BCA Provision
<b>Performance Solutions Required</b>		
1.	Hydrant pump room is not provided with a doorway with direct egress to open space	E1.3
2.	The construction of external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	No DtS Provisions – FP1.4 Performance Provisions Only

## 1 ADOPTION OF BCA 2022

### 1.1. Proposed Introduction

It is proposed to introduce the National Construction Code (NCC), Volume One, Building Code of Australia (BCA) 2022 on 1 May 2023. BCA2022 is proposing some major changes to Condensation Management, Energy Efficiency and the introduction of Livable Housing Design.

At present there is a draft available including the changes to condensation management and energy efficiency which have been released on 1 September 2022. The proposed timeline is summarised below:



Figure 1- Source: [www.abcb.gov.au](http://www.abcb.gov.au)

### 1.2. Major Changes known to date

Below is a summary of the proposed changes which were released in the May draft preview. We have also provided a table below for quick reference. Your project has not been assessed against the proposed changes.

#### Livable housing

**Note:** ABCB have advised that the livable housing provisions **will not be adopted** at this time as a result of the impact of the pandemic, rising interest rates and stability of the current housing market. Livable housing Part G7 will have a transition period thereby not be adopted until 1 October 2023.

Volumes One and Two contain new livable housing requirements for Class 1a buildings (houses and townhouses) and Class 2 sole-occupancy units (individual apartments). This puts in place features based on the Livable Housing Design Guidelines silver standard, with a voluntary gold standard also available for features over and above silver.

#### Consistent volume structure

BCA2022 uses a new structure and clause referencing system to create better consistency across all volumes. While the new Section-Part-Type-Clause system makes the NCC look different at first, it's intended to improve user experience and make it more web accessible.

The new structure results in a reorganisation of specifications and parts, some of which are contained in the table below.

#### **Fire safety of external walls**

Volume One contains a number of amendments to the fire safety of external walls. This clarifies interpretation of concessions from non-combustibility requirements. Also included is a new provision that prevents fixing of certain bonded laminated cladding panels by adhesive only.

#### **Waterproofing**

There are new DTS Provisions in Volume Two for waterproofing of wet areas, not previously covered by an acceptable construction practice or manual.

Waterproofing in Volume One is restructured into three parts to enhance readability and accommodate future changes.

#### **Weatherproofing**

Volume One contains additional DTS Provisions, providing new solutions for weatherproofing of external walls. These include references to weatherproofing provisions in Australian Standards for masonry, autoclaved aerated concrete and metal wall sheeting.

#### **Falls for floor wastes**

Volumes One and Two are amended to require bathrooms and laundries where a floor waste is installed, to have a fall of the floor in order to help drain the surface. This also applies to floor wastes included voluntarily.

#### **Number of exits**

Some minor amendments to the required number of exits are in Volume One. This includes a new concession allowing a single exit for a part of a storey in some circumstances, where previously at least two exits were required.

### **1.3. September 2022 changes**

The September draft of BCA2022 includes significant changes to condensation management in external walls and changes to all parts of Section J Energy Efficiency.

The condensation management in external walls items and changes to all parts of Section J Energy Efficiency will have a transition period thereby not be adopted until 1 October 2023.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 -**

Ref: 116373-BCA-r2

**6 Auburn Street, POINT FREDERICK NSW 2250 Residential Flat Building**

**1.4. Summary of Major Changes**

Summary of Major Changes		
Clause Reference		Description of proposed changes
BCA 2019	BCA2022	
C1.9	C2D10	<b>Non-combustible building elements</b> Further exemptions to the non-combustible requirements of external walls added. Larger list of materials that can be used where non-combustible materials are required.
-	C2D15	<b>Fixing of Bonded Laminated Cladding panels</b>
C2.5	C3D6	Fire separation of <b>early childhood centres</b> and requirement for 2 fire compartments per storey.
D1.2	D2D3	<b>Number of Exits</b> <ul style="list-style-type: none"> <li>Ground floor can be provided with a single exit in lieu of 2</li> <li>2 exits required from each storey and each fire compartment of an <b>early childhood centre</b></li> </ul>
D1.6	D2D7 D2D11	<b>Dimensions of Exits</b> Clause split into multiple clauses
D1.11	D2D16	<b>Horizontal Exits</b> – New provisions relating to early childhood centres
D2.16	D3D17 D3D21	<b>Barrier</b> clause split into multiple clauses
E1.5	E1D4 E1D13	<b>Sprinkler</b> requirements split into separate clauses for each building class.
E2.2	E2D3 E2D21	General Requirements – <b>Smoke Hazard Management</b> Tables removed and replaced with clauses for each building class
F1.7	Part F2	<b>Wet Area and Overflow Prevention</b>
F1.11	F2D4	<b>Floor wastes</b> – floor must be graded with a minimum fall of 1:80
FP1.4	Part F3	<b>Roof and Wall Cladding</b> Introduces DTS provisions for walls and roofs in lieu of the previous BCA requiring performance solutions for all weatherproofing
-	G7	<b>Livable housing design</b>
H1.1	Part I1	<b>Class 9b Building</b>
H2.1	Part I2	<b>Public Transport Buildings</b>
H3.1	Part I3	<b>Farm Buildings and Farm Sheds</b>

## 2 BASIS OF ASSESSMENT

### 2.1. Location and Description

The building development, the subject of this report, is located at 6 Auburn Street Point Frederick. The site is a long narrow block running South to North with residential development on three sides. The southern boundary is with Auburn Street with vehicular access into the building. The residential development consists of the following:

- Lower Ground floor has the vehicular entry to the car parking and the pedestrian entry along the western boundary to the lobby with lift access to all levels.
- Upper Ground Floor and Level 1-3 have residential SOUs.

### 2.2. Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy Provisions of BCA 2019, Amendment 1, and to clearly outline those areas (if any) where compliance is not achieved, where areas may warrant redesign to achieve strict BCA compliance or where areas may be able to be assessed against the relevant performance criteria of BCA 2019. Such assessment against relevant performance criteria will need to be addressed by means of a separate Performance Based Fire Safety Engineered Assessment Report to be prepared under separate cover.

### 2.3. Building Code of Australia

This report is based on the Deemed-to-Satisfy Provisions of the National Construction Code Series Volume 1 – Building Code of Australia, 2019, Amendment 1 (BCA2019 herein) incorporating the State variations where applicable. Please note that the version of the BCA applicable to new building works is the version applicable at the time of the lodgement of the Construction Certificate application to the Accredited Certifying Authority. The BCA is updated generally on a three-yearly cycle, starting from the 1st of May 2016.

### 2.4. Limitations

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

- (a) the structural adequacy or design of the building;
- (b) the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
- (c) the design basis and/or operating capabilities of any proposed electrical, mechanical or hydraulic fire protection services.

This report does not include, or imply compliance with:

- (a) the National Construction Code – Plumbing Code of Australia Volume 3
- (b) the Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010;
- (c) Part D3 and F2.4 of BCA2019;
- (d) Section J of BCA2019;
- (e) Demolition Standards not referred to by the BCA;
- (f) Work Health and Safety Act 2011;
- (g) Requirements of Australian Standards unless specifically referred to;
- (h) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work

Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like; and

- (i) Conditions of Development Consent issued by the Local Consent Authority.

## 2.5. Design Documentation

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.

### 3 BUILDING DESCRIPTION

For the purposes of the Building Code of Australia (BCA) the development may be described as follows.

#### 3.1. Rise in Storeys (Clause C1.2)

The building has a rise in storeys of five (5).

#### 3.2. Classification (Clause A6.0)

The building has been classified as follows.

Table 1. Building Classification

Class	Level	Description
7a	Lower Ground Floor	Car park
2	Upper Ground Floor, Level 1-3	Residential SOUs

Note: Lower Ground Floor – the residential storage cages total less than 10% of the floor area of the storey therefore the whole storey is classified Class 7a car park in accordance with Clause A6.0 (Exemption 1).

#### 3.3. Effective Height (Clause A1.0)

The building has an *effective height* of less than 25 metres and more than 12 metres.

Effective Height: Level 3 RL 28.75 – Lower Ground RL 16.65 = 12.10m

#### 3.4. Type of Construction Required (Table C1.1)

The building is required to be of Type A Construction.

#### 3.5. Floor Area and Volume Limitations (Table C2.2)

The building is subject to maximum floor area and volume limits of:-

Class 7a	Maximum Floor Area	5,000m <sup>2</sup>
OR	Maximum Volume	30,000m <sup>3</sup>
Class 7a	The carpark is to be provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 and as such there are no maximum floor area or volume limitations for this area.	
Class 2	The Class 2 portions of the building are not subject to floor area and volume limitations of C2.2 as Table 3 of Specifications C1.1 and Clause C3.11 of the BCA regulates the compartmentation and separation provisions applicable to buildings, or building portions, of Class 2 classifications.	

#### 3.6. Fire Compartments

The following *fire compartments* have been assumed:

- Lower Ground floor is a separate fire compartment.
- Upper Ground Floor to Level 3 is one fire compartment connected by a non-fire isolated stair.

### 3.7. Exits

The following points in the building have been considered as the exits: assumed:

- (a) Lower Ground floor has an exit door adjacent the lift and exit door in the northern (front) facade.
- (b) Upper Ground Floor has the lobby exit door
- (c) Level 1-3 are served by a non-fire isolated stair.

### 3.8. Climate Zone (Clause A1.0)

The building is located within Climate Zone 5.

### 3.9. Location of Fire-source features

The fire source features for the subject development are:

North: The far boundary of Auburn Street.

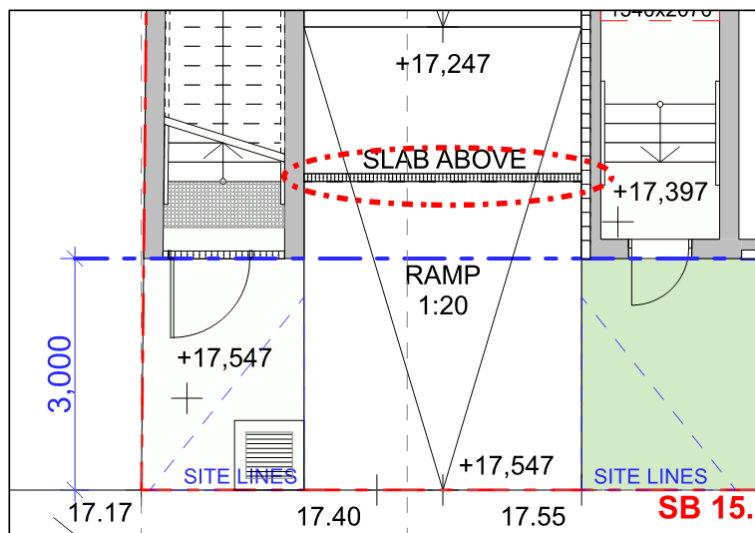
South: The allotment boundary. The Lower Ground floor is built to the boundary.

East: The allotment boundary. The Lower Ground floor is built to the boundary.

West: The allotment boundary. The Lower Ground floor is built to the boundary.

In accordance with Clause 2.1 of Specification C1.1, a part of a building element is exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that—

- (a) has an FRL of not less than 30/-/-; and
  - (b) is neither transparent nor translucent.
- The opening formed at the perimeter of the building line for the vehicular entry is not exposed to the eastern boundary as the concrete/masonry blade wall of the stair prevents exposure within 3m of the boundary.





## 4 BCA ASSESSMENT

### 4.1. Introduction

The assessment undertaken is in relation to the plans prepared for the development consent application. The technical details required for a development consent are far less than that required for a construction certificate and as such, this assessment is designed to address a higher level assessment of the building against the provisions of the BCA.

The main purpose of this report is to address any major design changes required to the building, services required to be installed, and the fundamentals of design required by sections C, D, E, F, G and H (where applicable) of the BCA. This report does not address the design requirements for the structure of the building (Section B), or for the detailed design of services (Section E).

The summary below is to be read in conjunction with the BCA specification contained in Annexure F of the report.

### 4.2. Relationship to the Design and Building practitioners Act

The Design and Building practitioners Act requires certain specified design to be certified by a Registered Practitioner and the issuing of a Design Compliance Declaration (DCD). The declared designs include:

- > Structure
- > Building Enclosure (eg Façade);
- > Fire Safety Systems (eg services, egress and FRL's)
- > Waterproofing
- > Fire Safety performance solutions

This report contains an assessment of the plans and specifications available, which are not sufficient in detail to allow any DCD to be issued by others. This report is not to be construed as, or used to support to a DCD at CC stage as it is based on development application drawings only.

### 4.3. Fire Resistance and Stability – Part C1 & Specification C1.1

The required fire resistance levels for the building elements are outlined in **Annexure C** of this report.

The external walls and all components of the wall, in a building of Type A construction, are required to be non-combustible. The plans do not indicate the materials of the external wall and further details will be required to be submitted at CC stage for assessment, however compliance is readily achievable by a number of common wall types.

Glazed skylight above the stairway is greater than 3m to the boundary in compliance with Specification C1.1 Clause 3.6.

Subject to the required FRL's being provided, the proposed building is capable of complying with the requirements of the BCA with respect to fire resistance

### 4.4. Compartmentation and Separation – Part C2

Under the provisions of clause C2.2 of the BCA, the residential portion of the building is not the subject to any floor area and volume limitations.

The building and carpark are required to have a sprinkler system, however the type of system has not been proposed yet. Therefore, the carpark may be subject to the floor area and volume limitations under the provision of clause C2.2 of the BCA and compliance is achieved.

The building is 4 storeys or more and therefore is required to have a sprinkler system throughout. The client has proposed a FPAA101H sprinkler system. As such, spandrel panels are required under the provisions of Clause C2.6 of the BCA to protect opening on different storeys of the building.

Clause C2.6 of the BCA requires suitable vertical and/or horizontal spandrel separation between the openings in the external walls on different storeys. The plans indicate suitable spandrels are provided by the horizontal / balcony slab projections on the northern and southern elevations.

Elevations have been reviewed and suitable spandrels have been provided beneath the windows which are required to be a minimum of 900mm high with a minimum 600mm above the floor slab, and the external walls will require an FRL of 60/60/60. No specific details of the spandrel walls have been provided to allow assessment however compliance is readily achievable. Note spandrel compliance is not required to the glazed façade of the non-fire isolated stair.

If the main switchboard is required service emergency equipment required to operate in an emergency, the switch room is to have an FRL of 120/120/120. The design of the switch room will be reviewed at CC stage.

Compliance with Part C2 of the BCA can be readily achieved by the proposal.

#### **4.5. Protection of Openings – Part C3**

##### **4.5.1. Openings in external walls**

For the residential units the external walls are proposed to be located more than 3m from any boundary. As such there is no requirement to protect any openings within the external walls on these levels.

The Lower Ground lobby glazed façade is within 3m of the boundary and will require protection. Protection can be provided by fixed glazing and self-closing doorway with external sprinklers. Details are to be provided with the Construction Certificate to outline how compliance will be achieved.

##### **4.5.2. Bounding Construction**

The walls between the SOU's and public corridor / non-fire isolated stair are internal walls that require and FRL. Also the walls to the lift require an FRL. As such, the doors to the sole occupancy units and fire stairs are required to be self-closing FRL --/60/30 fire doors in accordance with clause C3.11 of the BCA. The doors to the lift are required to have an FRL of -/60/-.

##### **4.5.3. Openings in Floors for Services and Service Installations**

Where electrical, plumbing, mechanical or other services pass through an element of construction that is required to achieve a fire resistance level (FRL), the service installation shall not compromise the fire resistance level of the element. A such, the service installation must be fire sealed with a compliant system such as fire collar on PVC pipes or fire rated mastic on electrical cables.

#### **4.6. Occupant Access and Egress – Section D**

##### **4.6.1. Egress from the building**

Egress from the Lower Ground carpark is to ensure that no point on the floor is more than 20m from and exit, or a point of choice of two exits, in which case the distance to one of those exits is not more than 40m, as required by clause D1.4 of the BCA. The distance between alternative exits is required by clause D1.5 of the BCA to be no closer than 9m and no further apart than 60m when measured through the point of choice. The travel distances and distances between exits comply with the above requirements.

In the residential portion of the building, the distance to an exit on all floors is to be no more than 12m for a sprinkler protected building, as required by Clause D1.4 of the BCA. The travel distances on all storeys comply with Clause D1.4.

In the residential portion of the building, the total travel distance from Level 3 to roof as open space via a non-fire isolated stair complies with Clause D1.9 of the BCA.

The non-fire isolated stair discharges onto Upper Ground Floor storey which shall be provided with a roof slab above Lower Ground storey with FRL 120/120/120 as exits discharge onto the roof, in accordance with Clause D2.12 of the BCA. Roof as open space is connected directly with the public road via the external stairway which forms part of the roof slab with FRL 120/120/120, therefore satisfies the definition of 'open space' under BCA 2019.

In the residential portion of the building, the non-fire isolated stair connects 4 storeys therefore under the provisions of clause D1.3 of the BCA, the building is required to have either A FPAA101H or AS 2118.1 sprinkler system to permit the stair to connect 4 storeys.

Where the egress discharges to open space on the property, a continuous pathway from the point of discharge to the street is required. The plans do indicate such a pathway and as such the provisions of Clause D1.10 of the BCA are readily satisfied.

Details of treads and risers, landings, thresholds, balustrades and handrails have not been provided however compliance is readily achievable. The design of these elements can be assessed at the CC stage.

Electrical distribution cupboards are to be provided with smoke separation to satisfy the requirements of BCA D2.7. The doors are to be lined internally with fire grade plasterboard or metal backing sheets and smoke seals provided to all four sides, including drop down seals on the bottom. All penetrations from the enclosure are to be suitable sealed against smoke spread by sealing with fire mastic.

#### **4.6.2. Access for people with disabilities**

Not part of this Report.

#### **4.7. Services and equipment- Parts E1, E2 and E4**

The building is required to be provided with the services and equipment set out in Annexure B of this report. The annexure also outlines the standard of performance to be achieved by the services and equipment.

In the residential portion of the building, the non-fire isolated stair connects 4 storeys therefore under the provisions of clause D1.3 of the BCA, the building is required to have a FPAA101H sprinkler system to permit the stair to connect 4 storeys. The client has confirmed the provision of FPAA101H sprinkler system for the building.

#### **4.8. Lift Installations – Part E3**

Lifts are provided to the building and are located in their own shaft and are serviced by a common lobby. The lifts do require a stretcher facility as the building is over 12m in effective height and the dimensions of the shaft are sufficient to allow compliance.

#### **4.9. Facilities in Residential Buildings – Part F2**

Clause F2.1 of the BCA requires the following facilities within a Class 2 building:

- > Kitchen sink;
- > Bath or shower;
- > Closet pan;
- > Washbasin
- > Laundry facilities

The plans indicate that each of these facilities are provided within each sole occupancy unit and therefore compliance is achieved with Clause F2.1 of the BCA.

#### 4.10. Room Heights – Part F3

The ceiling heights have been assessed in accordance with Part F3 of the BCA which has indicated that compliance is readily achievable within all habitable spaces, corridors and the like.

Upper Ground Lobby requires the occupants to pass under the stair to exit the lobby. Architect has confirmed a minimum clear height of 2.1m will be achieved below the stair which is compliant for a lobby.

#### 4.11. Light and Ventilation – Part F4

Natural light and ventilation are required to all habitable rooms within a Class 2 building. The floor plans have been assessed which reveals all habitable spaces are serviced by windows or glazed doors. The area of the doors and windows are to be confirmed by the Architect to be sufficient in size to provide the required minimum natural light and ventilation to all habitable rooms.

The carpark is required to be provided with a system of mechanical ventilation where required by clause F4.11 of the BCA.

## 6 STATEMENT OF COMPLIANCE

The plans assessed were developed to a standard suitable for submission as a development application and do not contain all the details necessary to allow a CC to be issued. As such, this assessment was limited to the major items of the BCA with the view of identifying any items that may result in a modified development consent being required, or additional key items that need to be included in the design.

The architectural design documentation as referred to in report has been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation complies or is capable of complying with that Code.

<b>3.1</b>	<b><i>DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces</i></b>
<b>Attachment 10</b>	<b><i>PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 -Residential Flat Building</i></b>

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## **ANNEXURE A   DESIGN DOCUMENTATION**



### Annexure A – Design Documentation

This report has been based on the following design documentation.

Table 3. Architectural Plans

Architectural Plans Prepared by			
Drawing Number	Revision	Date	Title
DA101	A	30.08.2022	Lower Ground & Upper Ground Plan
DA102	A	30.08.2022	Level 01 & Level 02 Plan
DA103	A	30.08.2022	Level 03 & Roof Plan
DA201	A	30.08.2022	North & South Elevation
DA202	A	30.08.2022	East Elevation
DA203	A	30.08.2022	West Elevation
DA204	A	30.08.2022	Section A&B

<b>3.1</b>	<b><i>DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces</i></b>
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## **ANNEXURE B   ESSENTIAL SERVICES**

### Annexure B - Essential Services

The following fire safety measures are required to be installed in the building. The following table may be required to be updated as the design develops and options for compliance are confirmed.

Table 4. Essential Fire Safety Measures

Item	Essential Fire and Other Safety Measures	Standard of Performance
<b>Fire Resistance (Floors – Walls – Doors – Shafts)</b>		
1.	Access Panels & doors/hoppers (fire rated)	<b>BCA2019 C3.13</b> (Openings in Shafts) <b>BCA2019 Spec C3.4</b> AS 1905.1:2015 (Fire Resistant Doorsets)
2.	Construction Joints	<b>BCA2019 C1.1, Spec C1.1</b> <b>BCA2019 C3.16</b> AS 1530.4:2014 & AS 4072.1:2005
3.	Fire doors	<b>BCA2019 C2.12</b> (Separation of Equipment) <b>BCA2019 C2.13</b> (Electricity Supply Systems) <b>BCA2019 C3.4</b> (Acceptable methods of Protection) <b>BCA2019 C3.11</b> (Bounding Construction) Spec C3.4 & AS1905.1: 2015 <b>BCA2019 C3.10</b> (Opening in Fire Isolated Lift Shafts) & AS1735.11- 1986
4.	Fire seals protecting openings in fire resisting components of the building	<b>BCA2019 C3.15 &amp; Spec C3.15</b> AS1530.4:2014 & AS4072.1-2005
5.	Lightweight construction	<b>BCA2019 C1.1, Spec. C1.1</b> <b>BCA2019 C1.8, Spec C1.8</b> AS1530.4:2014
<b>General</b>		
6.	Portable fire extinguishers	<b>BCA2019 E1.6</b> AS 2444–2001
<b>Lifts</b>		
7.	Stretcher Lifts including <ul style="list-style-type: none"> <li>&gt; Fire Service Controls</li> <li>&gt; Recall Operation</li> <li>&gt; Drive control switch</li> </ul>	<b>BCA2019 E3.2</b> <b>BCA2019 E3.7</b> (Fire Service Controls) <b>BCA2019 E3.9</b> (Fire Service Recall Operation Switch) <b>BCA2019 E3.10</b> (Lift Car Fire Service control switch)
<b>Electrical Services</b>		
8.	Automatic fail safe devices	<b>BCA2019 D2.21</b> (Operation of Latches)

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - Ref: 116373-BCA-r2 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

Item	Essential Fire and Other Safety Measures	Standard of Performance
		AS1670.1:2018 (Fire)
9.	Automatic fire detection & alarm: <ul style="list-style-type: none"> <li>&gt; Clause 3 – AS 3786:2014 Smoke Alarm systems powered from consumer mains to all residential SOU's</li> <li>&gt; Clause 4 – AS 1670.1:2018 system to the public corridors</li> </ul>	<b>BCA2019 E2.2</b> , NSW Table E2.2a <b>Spec E2.2a</b> - Clause 3 (Smoke alarm system) <b>Spec E2.2a</b> - Clause 4 (Smoke detection system) <b>Spec E2.2a</b> - Clause 5 (Combined smoke alarm and smoke detection system) <b>Spec E2.2a</b> - Clause 7 (BOWS) AS 3786:2014 (Amdt 1-4) AS 1670.1:2018 AS 1670.3:2018 (Fire Alarm Monitoring)
10.	Emergency lighting	<b>BCA2019 E4.2, E4.4</b> AS/NZS 2293.1:2018
11.	Exit signs	<b>BCA2019 E4.5, E4.6 &amp; E4.8</b> AS/NZS 2293.1:2018
12.	Standby power systems	<b>BCA2019 Spec G3.8</b> AS 4509.3:1999
13.	System Monitoring <ul style="list-style-type: none"> <li>&gt; Any Sprinkler System</li> </ul>	<b>BCA2019 E2.2 , Table E2.2a, Spec E2.2a</b> AS 1670.3:2018
<b>Hydraulic Services</b>		
14.	Automatic fire suppression systems	<b>BCA2019 E1.5, Spec E1.5 &amp; Spec E1.5a</b> FPAA101H
15.	Fire hydrant systems <ul style="list-style-type: none"> <li>&gt; NSW Storz Couplings</li> </ul>	<b>BCA2019 E1.3</b> <b>BCA2019 C2.12 (Separation of Equipment)</b> AS 2419.1:2005 FRNSW Technical Sheet D15/45534.V9 issued 10.01.19, 'Compatible Hose Connections'
16.	Hose reel systems – Car Park level	<b>BCA2019 E1.4</b> AS 2441:2005
17.	Wall-wetting sprinklers <ul style="list-style-type: none"> <li>&gt; Lobby glazed facade</li> </ul>	<b>BCA2019 C3.2 &amp; C3.4</b> FPAA101H
<b>Mechanical Services</b>		
18.	Fire dampers	<b>BCA2019 C3.15</b> AS 1668.1:2015 (Amdt 1) AS 1682.1:2015 & AS 1682.2:2015

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

Ref: 116373-BCA-r2

Item	Essential Fire and Other Safety Measures	Standard of Performance
19.	<p>Mechanical air handling systems</p> <p>1. Mechanical ventilation to carpark.</p>	<p><b>BCA2019 E2.2, Table E2.2a</b></p> <p>AS 1668.1:2015 (Amdt 1)</p> <p><b>Note: 5.5.3 Override control</b></p> <p>To enable manual control by attending emergency services personnel, fans that are not required to shut down on initiation of fire mode in the car park shall be provided with a control switch at the designated building entry point.</p> <p><b>Note:</b> Signage should be located at the car park entry indicating the location of the control switches.</p>
<p>Notes: Clause E2.2(b)&amp;(c):</p> <p>(b) An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a or Table E2.2b and which recycles air from one <i>fire compartment</i> to another <i>fire compartment</i> or operates in a manner that may unduly contribute to the spread of smoke from one <i>fire compartment</i> to another <i>fire compartment</i> must—</p> <p>(i) ((be designed and installed to operate as a smoke control system in accordance with AS 1668.1:2015; or</p> <p>(ii)</p> <p>(A) incorporate smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</p> <p>(B) be arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1:2018; and</p> <p>for the purposes of this provision, each <i>sole-occupancy unit</i> in a Class 2 or 3 building is treated as a separate <i>fire compartment</i>.</p> <p>(c) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1:2015 serving more than one <i>fire compartment</i> (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with that Section of the Standard.</p>		
20.	<p><b>Performance Solutions:</b></p> <p>*Fire Engineering Report (FER) to be prepared at CC stage</p>	



<b>3.1</b>	<b><i>DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces</i></b>
<b>Attachment 10</b>	<b><i>PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 -Residential Flat Building</i></b>

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## **ANNEXURE C FIRE RESISTANCE LEVELS**

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 -**

Ref: 116373-BCA-r2 **6 Auburn Street, POINT FREDERICK NSW 2250 Residential Flat Building**

### Annexure C - Fire Resistance Levels

The following fire resistance levels (FRL's) are required for the various building elements, with a fire source feature being the far boundary of a road adjoining the allotment, a side or rear boundary or an external wall of another building on the allotment except a Class 10 structure.

#### Type A Construction

Table 5. Type A Construction

Item	Class 2	Class7a
Loadbearing External Walls (including columns and other building elements incorporated therein)		
- Less than 1.5m to a <i>fire-source feature</i>	90/90/90	120/120/120
- 1.5 – less than 3m from a <i>fire-source feature</i>	90/60/60	120/90/90
- 3m or more from a <i>fire source feature</i>	90/60/30	120/60/30
Non-Loadbearing External Walls		
- Less than 1.5m to a <i>fire-source feature</i>	-/90/90	-/120/120
- 1.5 – less than 3m from a <i>fire-source feature</i>	-/60/60	-/90/90
- 3m or more from a <i>fire-source feature</i>	-/-/-	-/-/-
External Columns		
- Loadbearing	90/-/-	120/-/-
- Non-loadbearing	-/-/-	-/-/-
Common Walls & Fire Walls	90/90/90	120/120/120
Stair and Lift Shafts required to be fire-resisting		
- Loadbearing	90/90/90	120/120/120
- Non-loadbearing	-/90/90	-/120/120
Internal walls bounding sole occupancy units		
- Loadbearing	90/90/90	120/-/-
- Non-loadbearing	-/60/60	-/-/-
Internal walls bounding public corridors, public lobbies and the like:		
- Loadbearing	90/90/90	120/-/-
- Non-loadbearing	-/60/60	-/-/-
Ventilating, pipe, garbage and like shafts:		
- Loadbearing	90/90/90	120/90/90
- Non-loadbearing	-/90/90	-/90/90
Other loadbearing internal walls, beams trusses and columns	90/-/-	120/-/-
Floors	90/90/90	120/120/120
Roofs <sup>1</sup>	90/60/30	120/60/30

N.B.<sup>1</sup> The Class 2 roof need not comply with an FRL due to the fact it is a Class 2 building. Roof of Lower Ground is roof as open space and shall have FRL 120/120/120.

<b>3.1</b>	<b><i>DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces</i></b>
<b>Attachment 10</b>	<b><i>PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 -Residential Flat Building</i></b>

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## **ANNEXURE E    DEFINITIONS**

## Annexure E - Definitions

### Average specific extinction area

Average specific extinction area means the average specific extinction area for smoke as determined by AS 5637.1:2015.

### Critical radiant flux

Critical radiant flux (CRF) means the critical heat flux at extinguishment (CHF in kW/m<sup>2</sup>) as determined by AS ISO 9239.1:2003.

### Effective height

Effective height means the vertical distance between the floor of the lowest storey included in a determination 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).

### Envelope

Envelope, for the purposes of Section J in Volume One, means the parts of a building's fabric that separate a conditioned space or habitable room from—

- (a) the exterior of the building; or
- (b) a non-conditioned space including—
  - (i) the floor of a rooftop plant room, lift-machine room or the like; and
  - (ii) the floor above a carpark or warehouse; and
  - (iii) the common wall with a carpark, warehouse or the like.

### Exit

Exit means –

- (a) Any, or any combination of the following if they provide egress to a road or open space—
  - (i) An internal or external stairway.
  - (ii) A ramp.
  - (iii) A fire-isolated passageway.
  - (iv) A doorway opening to a road or open space.
  - (v) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

### Fire compartment

Fire compartment means –

- (a) the total space of a building; or
- (b) when referred to in—
  - (i) 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
  - (ii) 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)

Fire-resistance level (FRL) means the grading periods in minutes determined in accordance with Specification A2.3, for the following criteria—

- (a) structural adequacy; and
- (b) integrity; and
- (c) insulation,

and expressed in that order.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - Ref: 116373-BCA-r2 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

Note: A dash means that there is no requirement for that criterion. For example, 90/—/— means there is no requirement for an FRL for integrity and insulation, and —/—/— means there is no requirement for an FRL.

Fire-source feature

- (a) the far boundary of a road, river, lake or the like adjoining the allotment; or
- (b) a side or rear boundary of the allotment; or
- (c) an external wall of another building on the allotment which is not a Class 10 building

Flammability index

Flammability Index means the index number as determined by AS 1530.2:1993.

Group number

Group number means the number of one of 4 groups of materials used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining, or attachment to a wall or ceiling.

Loadbearing

Intended to resist vertical forces additional to those due to its own weight.

Non-combustible

Non-combustible means—

- (a) applied to a material — not deemed combustible as determined by AS 1530.1:1994 — Combustibility Tests for Materials; and
- (b) applied to construction or part of a building — constructed wholly of materials that are not deemed combustible

Occupiable outdoor area

Occupiable outdoor area means a space on a roof, balcony or similar part of a building—

- (a) that is open to the sky; and
- (b) to which access is provided, other than access only for maintenance; and
- (c) that is not open space or directly connected with open space.

Open space

Open space means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Performance Requirement

Performance Requirement means a requirement which states the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet.

Performance Solution

Performance Solution means a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.

Sarking-type material

Sarking-type material means a material such as a reflective insulation or other flexible membrane of a type normally used for a purpose such as waterproofing, vapour management or thermal reflectance.

Smoke developed index

Smoke developed index means the index number for smoke as determined by AS/NZS 1530.3.

Smoke development rate

Smoke development rate means the development rate for smoke as determined by testing flooring materials in accordance with AS ISO 9239.1.

Smoke growth rate index



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 -**

Ref: 116373-BCA-r2 **6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

Smoke growth rate index (SMOGRA RC) means the index number for smoke used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining or attachment to a wall or ceiling.

Sole-occupancy unit

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 includes—

- (a) a dwelling; or
- (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or
- (c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or
- (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

<b>3.1</b>	<b><i>DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces</i></b>
<b>Attachment 10</b>	<b><i>PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 -Residential Flat Building</i></b>

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## **ANNEXURE F   BCA COMPLIANCE SPECIFICATION**

### Annexure F – BCA Compliance Specification

The following BCA matters are to be addressed by specific BCA Design Certificate to be issued by the relevant architectural, services and engineering consultants at the Construction Certificate Stage. This schedule should be forwarded to all consultants to obtain verification that these items have and will be included in the design documentation / specifications:

#### Architectural Design Certification

1. The FRL's of building elements for the proposed works have been designed in accordance with Table 3 of Specification C1.1 of BCA2019 for a building of Type A Construction.
2. Lightweight construction used to achieve required fire resistance levels will comply with Specification C1.8 of BCA2019.
3. Building elements, including external walls and their components, must be non-combustible in accordance with C1.9 of BCA2019.
4. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works will comply with the fire hazard properties of Clause C1.10 and Specification C1.10 of BCA2019.
5. Any ancillary elements fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible will comply with Clause C1.14 of BCA2019.
6. Vertical separation will be provided to the new openings in the external walls in accordance with Clause C2.6 of BCA2019. It is noted that no spandrel separation is required in the stairway or to a void.
7. Floors separating storeys of different classifications will comply with BCA Clause C2.9 of BCA2019.
8. Equipment will be separated in accordance with Clause C2.12 of BCA2019.
9. The main switch board / cupboard sustaining emergency equipment required to operate in emergency mode, will be separated from the remaining building with construction having an FRL 120/120/120 and provided with self-closing -/120/130 fire doors in accordance with Clause C2.13 of BCA2019.
10. Openings in the external walls that are required to have an FRL will be in located in accordance with Clause C3.2 of BCA2019 or protected in accordance with Clause C3.4 of BCA2019.
11. Services penetrating elements required to possess an FRL including the floor slabs, walls, shafts, etc. will be protected in accordance with Clause C3.12, C3.13 and C3.15 and Specification C3.15 of BCA2019.
12. Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation will be protected in accordance with BCA Clause C3.16.
13. The lift doors will be --/60/- fire doors complying with AS 1735.11:1986 in accordance Clause C3.10 of BCA2019.
14. Doorways and other opening in internal walls required to have an FRL will be protected in accordance with Clause C3.11 of BCA2019.
15. A lintel will have the FRL required for the part of the building in which it is situated, unless it does not contribute to the support of a fire door, fire window or fire shutter, and it spans an opening in masonry which is not more than 150 mm thick and is not more than 3m wide if the masonry is non-loadbearing; or not more than 1.8m wide if the masonry is loadbearing and part of a solid wall or one of the leaves of a cavity wall, or it spans an opening in a non-loadbearing wall of the Class 2 or 3 building, in accordance with Specification C1.1 Clause 2.3 BCA2019.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - Ref: 116373-BCA-r2 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

16. The top and bottom of the riser shafts will achieve an FRL not less than the FRL required for the walls of the shaft in accordance with Clause 2.7 of Specification C1.1 of BCA2019.
17. Fire doors will comply with AS 1905.1:2015 and Specification C3.4 of BCA2019.
18. Travel distances to exits will be in accordance with Clause D1.4 & D1.5 of BCA2019.
19. The dimensions of exits and paths of travel to exits will be provided in accordance with Clause D1.6 of BCA2019.
20. Discharge from exits will be in accordance with Clause D1.10 of BCA2019.
21. Access to the lift pit will be in accordance with Clause D1.17 of BCA2019.
22. The non-fire isolated stairs will be constructed in accordance with Clause D2.3 of BCA2019.
23. The construction of EDB's and telecommunications distribution boards will be in accordance with Clause D2.7 of BCA2019 with the enclosure bounded by non-combustible construction or fire protective covering and smoke seals provided around the perimeter of the non-combustible doors and any openings sealed with non-combustible mastic to prevent smoke spreading from the enclosure.
24. New pedestrian ramps will comply with AS 1428.1:2009, Clause D2.10 and Part D3 of BCA2019. The floor surface of a ramp must have a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.
25. The roof of the building where the exit discharges (Lower Ground Roof) will have an FRL of 120/120/120, and will not have roof lights or openings within 3m of the path of travel in accordance with Clause D2.12 of BCA2019.
26. Stair geometry to the new stairways will be in accordance with Clause D2.13 of BCA2019. Stair treads are to have a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013.
27. Landings and door thresholds throughout the development will be provided in accordance with Clause D2.14 and D2.15 of BCA2019. Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013 where the edge ledge to a flight below.
28. The handrails and balustrades to all stairs and throughout the building will be in accordance with Clause D2.16, and D2.17 of BCA2019.
29. The fixed platform, walkway, stairway and ladder and any associated going and riser, landing handrail, balustrade, located within the machinery room, boiler house, lift-machine room, plant-room, or non-habitable attic/storeroom within the sole occupancy unit will comply with AS 1657:2013 or Part D2 of BCA2019.
30. The doorways and doors will be in accordance with Clause D2.19 and D2.20 of BCA2019.
31. Door latching mechanisms will be in accordance with Clause D2.21 of BCA2019
32. The openable portion of a window in a bedroom of a Class 2 building will be protected with a restricting device or secure screen that does not allow a 125mm sphere to pass through the opening or screen and resist an outward horizontal action of 250N in accordance with Clause D2.24 of BCA2019. In addition to window protection, and for other openable windows 4 meters or more above the ground below, a barrier with a height not less than 865mm above the floor will be installed to the openable window.
33. Fire precautions whilst the building is under construction fire precautions will be in accordance with Clause E1.9 of BCA2019.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 10 PUBLIC BCA Performance Requirements Compliance - PAN-282430 - DA/3915/2022 - Ref: 116373-BCA-r2 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

34. External above ground waterproofing membranes will comply with Clause F1.4 of BCA2019 and AS 4654 Parts 1 & 2:2012.
35. The new roof covering will be in accordance with Clause F1.5 of BCA2019.
36. Any sarking proposed will be installed in accordance with Clause F1.6 of BCA2019.
37. Waterproofing of all wet areas to the building will be carried out in accordance with Clause F1.7 of BCA2019 and AS 3740:2010.
38. Damp proofing of the proposed structure will be carried out in accordance with Clause F1.9 and F1.10 of BCA2019.
39. Floor wastes will be installed to bathrooms and laundries above sole occupancy units or public space in accordance with Clause F1.11 of BCA2019.
40. All new glazing to be installed throughout the development will be in accordance with Clause F1.13 of BCA2019 and AS 1288:2006 / AS 2047:2014.
41. Sanitary facilities will be provided in the building in accordance with Clause F2.1 & Table F2.1 of BCA2019.
42. The construction of the sanitary facilities will be in accordance with Clause F2.5 of BCA2019.
43. Ceiling heights to the new areas will be in accordance with Clause F3.1 of BCA2019.
44. Natural light will be provided in accordance with Clause F4.1, F4.2, and F4.3 of BCA2019.
45. Natural ventilation will be provided in accordance with Clause F4.5, F4.6 and F4.7 of BCA2019.
46. Water closets and urinals will be located in accordance with Clause F4.8 of BCA2019.
47. Pliable building membranes installed in external walls will comply with Clause F6.2 of BCA2019 and where a pliable building membrane is not installed in an external wall, the primary water control layer will be separated from water sensitive materials by a drained cavity.
48. Every storey of the carpark will be provided with an adequate system of permanent natural or mechanical ventilation in accordance with Clause F4.11 of BCA2019.
49. A safe manner for cleaning of windows located 3 or more storeys above ground level will be provided in accordance with the Work Health & Safety Act 2011 and regulations made under that Act in accordance with NSW G1.101 of BCA2019.
50. The construction of the residential portions of the development will be undertaken in accordance with the relevant BASIX commitments that form part of the Development Consent approval.
51. Essential fire or other safety measures must be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.
52. Building Fabric and Thermal Construction will be in accordance with Part J1 of BCA2019.
53. Building sealing will be in accordance with Part J3 of BCA2019.
54. Facilities for Energy Monitoring will be provided in accordance with Clause J8.3 of BCA2019.

**Electrical Services Design Certification:**

55. A smoke detection and alarm system will be installed throughout the building in accordance with Table E2.2a and Specification E2.2a of BCA2019.
56. Emergency lighting will be installed throughout the development in accordance with Clause E4.2, E4.4 of BCA2019 and AS/NZS 2293.1:2018.
57. Exit signage will be installed in accordance with Clause E4.5, E4.7, and E4.8 of BCA2019 and AS/NZS 2293.1:2018.



58. Artificial lighting will be installed throughout the development in accordance Clause F4.4 of BCA2019 and AS/NZS 1680.0:2009.
59. Lighting power and controls will be installed in accordance with Part J6 of BCA2019.
60. Electrical conductors located within the building that supply a main switchboard that sustains emergency equipment will comply with Clause C2.13 of BCA2019.

**Hydraulic Services Design Certification:**

61. Storm water drainage will be provided in accordance with Clause F1.1 of BCA2019 and AS/NZS 3500.3:2018
62. Fire hydrant system will be installed in accordance with Clause E1.3 of BCA2019 and AS 2419.1:2005 as required.
63. Fire hose reels will be installed in accordance with Clause E1.4 of BCA2019 and AS 2441:2005.
64. A sprinkler system will be installed in accordance with Clause E1.5 of BCA2019, Specification E1.5 and Specification E1.5a. The building is proposed to have a FPAA101H system.
65. Portable fire extinguishers will be installed in accordance with Clause E1.6 of BCA2019 and AS 2444:2001.
66. The heated water supply systems will be designed and installed to NCC Volume 3 – Plumbing code and Clause J7.2 of BCA2019.

**Mechanical Services Design Certification:**

67. An air-handling system which does not form part of a smoke hazard management system will be installed in accordance with Clause E2.2 of BCA2019 and AS 1668.1:2015.
68. Where not naturally ventilated the building will be mechanically ventilated in accordance with Clause F4.5 of BCA2019 and AS 1668.2:2012.
69. Every storey of the car park will be ventilated in accordance with Clause F4.11 of BCA2019 and where not naturally ventilated it will be mechanically ventilated in accordance with AS 1668.2:2012 as applicable.
70. Exhaust systems installed in a kitchen, bathroom, sanitary compartment or laundry of a Class 2 or 4 *sole-occupancy unit* will have a minimum flow rate and discharge location in accordance with Clause F6.3 of BCA2019.
71. The air-conditioning and ventilations systems will be designed and installed in accordance with Part J5 of BCA2019
72. Rigid and flexible ductwork will comply with the fire hazard properties set out in AS 4254 Parts 1 and 2.

**Structural Engineers Design Certification:**

73. The material and forms of construction for the proposed works will be in accordance with Clause B1.2, B1.4 and B1.6 of BCA2019 as follows:
  - Dead and Live Loads – AS/NZS 1170.1:2002
  - Wind Loads – AS/NZS 1170.2:2011
  - Earthquake actions – AS 1170.4:2007
  - Masonry – AS 3700:2018
  - Concrete Construction – AS 3600:2018
  - Steel Construction AS 4100:1998

- Aluminium Construction – AS/NZS 1664.1 or 2:1997
  - Timber Construction – AS 1720.1:2010
  - ABCB Standard for Construction of Buildings in Flood Hazard Areas.
74. The FRL's of the structural elements for the proposed works have been designed in accordance with Specification C1.1 of BCA2019, including Table 3 for a building of Type A Construction.
75. The lift shaft will have an FRL in accordance with Clause C2.10 and Specification C1.1 of BCA2019.
76. The construction joints to the structure will be in accordance with Clause C3.16 of BCA2019 to reinstate the FRL of the element concerned.

**Lift Services Design Certification:**

77. The lift in the development will be provided with stretcher facilities in accordance with Clause E3.2 of BCA2019 and will be capable of accommodating a stretcher with a patient lying horizontally by providing a clear space not less than 600mm wide x 2000mm long x 1400mm high above the floor level.
78. Warning signage in accordance with Clause E3.3 of BCA2019 will be provided to the lifts to advise not to use the lifts in a fire.
79. A fire service recall control switch is to be installed on a landing at a location nominated by the appropriate authority in accordance with Clause E3.9.
80. A lift car fire service drive control switch is to be installed within the lift car in accordance with Clause E3.10.
81. The type of lifts will also be suitable to accommodate persons with a disability in accordance with Clause E3.6, Table E3.6a, and will have accessible features in accordance with Table E3.6b of BCA2019.
82. The lifts will comply with AS 1735.12:1999 in accordance with Clause E3.6 of BCA2019.
83. All electric passenger lifts and electrohydraulic passenger lifts shall comply with Specification E3.1 of BCA2019.

**Acoustic Services Design Certification:**

84. The sound transmission and insulation of the residential portions of the development will comply with Part F5 of BCA2019.



# 6 Auburn Street, Point Fredrick

## Noise Impact Assessment

**Zeytouneh 10452 Pty Ltd**

Report number: 220379-6 Auburn St, Point Fredrick-Noise Impact Assessment-R1  
Date: 1 September 2022  
Version: For Information

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 11**

**PUBLIC Acoustic Report - PAN-282430 - DA/3915/2022 - 6 Auburn Street, POINT FREDERICK NSW 2250 - Residential Flat Building**

Zeytouneh 10452 Pty Ltd



**DOCUMENT CONTROL**

<b>Project Name</b>	6 Auburn Street, Point Fredrick
<b>Project Number</b>	220378
<b>Report Reference</b>	220379-6 Auburn St, Point Fredrick-Noise Impact Assessment-R0
<b>Client:</b>	Zeytouneh 10452 Pty Ltd

Revision	Description	Reference	Date	Prepared	Checked	Authorised
0	For Information	220379-6 Auburn St, Point Fredrick-Noise Impact Assessment-R0	18 July 2022	Ben White	Matt Furlong	Ben White
1	For Information	220379-6 Auburn St, Point Fredrick-Noise Impact Assessment-R1	1 September 2022	Ben White	Matt Furlong	Ben White

PREPARED BY:

Pulse White Noise Acoustics Pty Ltd  
 ABN 95 642 886 306  
 Level 5, 73 Walker Street, North Sydney, 2060  
 1800 4 PULSE

This report has been prepared by Pulse White Noise Acoustics Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Client. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Zeytouneh 10452 Pty Ltd  
 No warranties or guarantees are expressed or should be inferred by any third parties.  
 This report may not be relied upon by other parties without written consent from Pulse White Noise Acoustics.  
 This report remains the property of Pulse White Noise Acoustics Pty Ltd until paid for in full by the client, Zeytouneh 10452 Pty Ltd.

**Pulse White Noise Acoustics disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.**



## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
<b>2</b>	<b>PROJECT DETAILS.....</b>	<b>5</b>
<b>3</b>	<b>EXISTING ACOUSTIC ENVIRONMENT .....</b>	<b>6</b>
3.1	Noise Descriptors and Terminology .....	7
3.2	Noise Survey Results .....	7
3.2.1	Unattended Acoustic Monitoring.....	7
3.2.2	Attended Noise Measurements.....	8
<b>4</b>	<b>INTERNAL NOISE LEVEL ASSESSMENT .....</b>	<b>9</b>
4.1	General Environmental Noise.....	9
<b>5</b>	<b>ENVIRONMENTAL NOISE INTRUSION ASSESSMENT .....</b>	<b>10</b>
5.1.1	External Glass Elements .....	10
5.2	External Building Elements .....	10
5.3	External Roof.....	10
5.4	External Opening and Penetrations .....	11
<b>6</b>	<b>EXTERNAL NOISE EMISSION ASSESSMENT.....</b>	<b>12</b>
6.1	NSW Noise Policy for Industry .....	12
6.1.1	Intrusive Noise Impacts (Residential Receivers).....	12
6.1.2	Protecting Noise Amenity (All Receivers).....	12
6.1.3	Area Classification .....	13
6.1.4	Project Trigger Noise Levels .....	14
<b>7</b>	<b>OPERATIONAL ACOUSTIC ASSESSMENT.....</b>	<b>15</b>
7.1	Mechanical Services Equipment .....	15
7.2	Waste and Garbage Collections.....	15
<b>8</b>	<b>CONCLUSION .....</b>	<b>16</b>
<b>9</b>	<b>APPENDIX A: ACOUSTIC TERMINOLOGY .....</b>	<b>17</b>
<b>10</b>	<b>APPENDIX B: UNATTENDED NOISE LOGGING .....</b>	<b>19</b>

## TABLES

Table 3-1	Measured ambient noise levels in accordance with the NSW NPI .....	8
Table 3-2	Measured ambient noise levels in accordance with the NSW NPI .....	8
Table 4-1	Project Internal Environmental Noise Level Criteria .....	9
Table 5-1	External Glass Acoustic Requirements.....	10
Table 6-1	NSW NPI – Recommended LAeq Noise Levels from Industrial Noise Sources.....	13
Table 6-2	External noise level criteria in accordance with the NSW NPI .....	14

## FIGURES

Figure 2-1	Site location and Noise Measurement Locations.....	5
Figure 3-1	Site Location of Map 12 of the RTA's <i>Traffic Volume Maps for Noise Assessment for Buildings on Land Adjacent to Busy Roads</i> .....	6



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## **1 INTRODUCTION**

Pulse White Noise Acoustics Consultancy Pty Ltd (Pulse White Noise Acoustics) has been engaged to undertake an acoustic assessment for the proposed residential development to be located at 6 Auburn Street, Point Frederick.

The proposed project includes the following:

1. A 3 story residential building include basement level of car parking.

This assessment includes the acoustic investigation into the potential for noise impacts from the operation of the completed project as well as potential noise and impacts from existing noise sources within the vicinity of the site which predominantly includes traffic noise from surrounding roadways.



## 2 PROJECT DETAILS

The 6 Auburn Street, Point Frederick site is located to the on the land to the south of Auburn Street and is located within a suburban area of the Central Coast Council local government area.

The proposed development is detailed in the Fuse Architects architectural drawings with project number 2208 and dated August 2022.

The site location is detailed in Figure 2-1 below.

**Figure 2-1 Site location and Noise Measurement Locations**





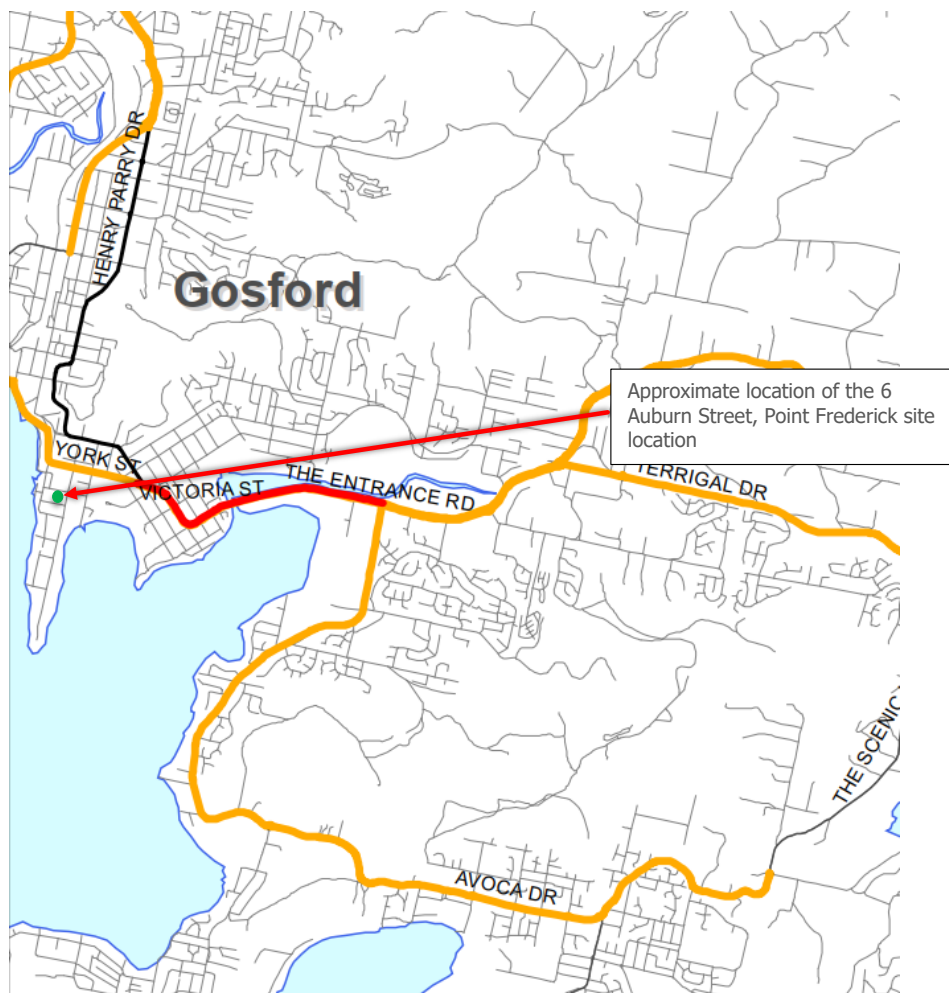
### 3 EXISTING ACOUSTIC ENVIRONMENT

The 6 Auburn Street, Point Frederick site is located with an area which is classified as Suburban residential area as defined by the NSW EPA *Noise Policy for Industry*. The exiting noise levels at the site are predominantly as a result from traffic noise within the vicinity of the site on surrounding roadways and environmental noise sources.

The site is located on Wain Street, which is not defined as a busy road carrying over 200,000 Annual Average Daily Traffic (AADT) number as defined in Map 8 of the RTA's *Traffic Volume Maps for Noise Assessment for Buildings on Land Adjacent to Busy Roads*.

See the Figure below which includes the site location included on Map 8 of the RTA.

**Figure 3-1 Site Location of Map 8 of the RTA's *Traffic Volume Maps for Noise Assessment for Buildings on Land Adjacent to Busy Roads***





### 3.1 Noise Descriptors and Terminology

Environmental noise constantly varies in level with time. Therefore, it is necessary to measure noise in terms of quantifiable time periods with statistical descriptors. Typically environmental noise is measured over 15 minute periods and relevant statistical descriptors of the fluctuating noise are determined to quantify the measured level.

Noise (or sound) consists of minute fluctuations in atmospheric pressure capable of detection by human hearing. Noise levels are expressed in terms of decibels, abbreviated as dB or dBA, the "A" indicating that the noise levels have been frequency weighted to approximate the characteristics of normal human hearing. Because noise is measured using a logarithmic scale, 'normal' linear arithmetic does not apply, e.g. adding two sound sources of equal values result in an increase of 3 dB (i.e. 60 dBA plus 60 dBA results in 63 dBA). A change of 1 dB or 2 dB in the sound level is difficult for most people to detect, whilst a 3 dB – 5 dB change corresponds to a small but noticeable change in loudness. A 10 dB change roughly corresponds to a doubling or halving in loudness.

The most relevant environmental noise descriptors are the LAeq, LA1, LA10 and LA90 noise levels. The LAeq noise level represents the "equivalent energy average noise level". This parameter is derived by integrating the noise level measured over the measurement period. It represents the level that the fluctuating noise with the same acoustic energy would be if it were constant over the measured time period.

The LA1, LA10 and LA90 levels are the levels exceeded for 1%, 10% and 90% of the sample period. These levels can be considered as the maximum noise level, the average repeatable maximum and average repeatable minimum noise levels, respectively.

Specific acoustic terminology is used in this assessment report. An explanation of common acoustic terms is included in Appendix A.

### 3.2 Noise Survey Results

As part of this assessment an acoustic survey has been undertaken at the site which include both long term unattended noise monitoring as well as short term attended measurements. The details of the noise survey conducted at the site are detailed in this section of the report.

#### 3.2.1 Unattended Acoustic Monitoring

To determine the background noise levels at nearby receivers, long term unattended noise monitoring was conducted at the site. The location of the noise monitoring is detailed in Figure 2-1 above. As per Table A1 of the Noise Policy for Industry, the noise logger was placed in the vicinity of the reasonably most or potentially most affected residence for the purpose of assessing representative background noise levels.

##### 3.2.1.1 Monitoring Instrumentation

Instrumentation used for the noise survey comprised a Rion NL-42 sound level meters / analysers fitted with a microphone windshield. Calibration of the loggers was checked prior to and following the measurements. Drift in calibration did not exceed  $\pm 0.5$  dBA. All equipment carried appropriate and current NATA (or manufacturer) calibration certificates.

Charts presenting summaries of the measured daily noise data are attached in Appendix B. These charts, representing each 24 hour period, show the LA10, LAeq and LA90 noise levels measured over 15 minute time periods.

Noise logging was conducted continuously between the 18<sup>th</sup> to the 25<sup>th</sup> July 2022 at the location detailed in Figure 2-1 above. The measurements results have been filtered to remove data affected by adverse weather conditions, such as excessively windy or rainy time periods, as recorded by the nearest Bureau of Meteorology for Gosford weather station. Detailed noise logging results are shown in Appendix B.

The measured background noise data of the logger was processed in accordance with the recommendations contained in the NSW Environment Protection Authority's (EPA) *Noise Policy for Industry* (NPI).

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The Rating Background Noise Level (RBL) is the background noise level used for assessment purposes at the nearest potentially affected receiver. It is the 90<sup>th</sup> percentile of the daily background noise levels during each assessment period, being day, evening and the night. The RBL LA90 (15minute) and LAeq noise levels are presented in Table 3-1 for the unattended logging. The measured noise levels are considered to be representative of the levels to be expected at the nearest and most affected residence to the proposed development.

**Table 3-1 Measured ambient noise levels in accordance with the NSW NPI**

Measurement Location	Daytime <sup>1</sup> 7:00 am to 6:00 pm		Evening <sup>1</sup> 6:00 pm to 10:00 pm		Night-time <sup>1</sup> 10:00 pm to 7:00 am	
	LA90 <sup>2</sup>	LAeq <sup>3</sup>	LA90 <sup>2</sup>	LAeq <sup>3</sup>	LA90 <sup>2</sup>	LAeq <sup>3</sup>
<b>6 Auburn Street, Point Frederick</b>	43	56	43	56	36	54
<p><i>Note 1: For Monday to Saturday, Daytime 7:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 8:00 am</i></p> <p><i>Note 2: The LA90 noise level is representative of the "average minimum background sound level" (in the absence of the source under consideration), or simply the background level.</i></p> <p><i>Note 3: The LAeq is the energy average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.</i></p>						

### 3.2.2 Attended Noise Measurements

Attended noise testing was conducted at the site to supplement the noise logging completed at the site and detailed in the sections above. Attended noise level testing was undertaken using a Bruel and Kjaer 2236C type meter. The meter was calibrated before and after testing and no significant drift was recorded.

The attended and unattended noise locations were selected to obtain suitable noise levels for the assessment of background noise levels ( $L_{90(t)}$ ) as well as the impact from traffic movements ( $L_{eq(t)}$ ).

Attended noise level measurements were undertaken at the site on the 18<sup>th</sup> July 2022 during the afternoon period of 4.30pm to 5.30pm. The results of the attended noise level measurements are detailed in the table below.

**Table 3-2 Measured ambient noise levels in accordance with the NSW NPI**

Measurement Location	Time of measurement	Measured LAeq, 15min dB(A)	Measured LA90, 15min dB(A)	Comments
<b>Attended noise measurement</b>	4.30pm to 4.45pm	59	45	Noise levels resulting from natural noise sources and traffic noise from roadways within vicinity of the site and environmental noise sources
	5.00pm to 5.15pm	56	44	





## 4 INTERNAL NOISE LEVEL ASSESSMENT

Internal noise levels within the future residential occupancies have been based on the relevant noise levels as detailed within the Australian Standard AS2107:2000 *Acoustics - Recommended design sound levels and reverberation times for building interiors* and Australian Standard AS2021:2015 *Acoustics - Aircraft noise intrusion - Building siting and construction*.

### 4.1 General Environmental Noise

The *recommended* levels for various areas of the project are detailed in the following table. The recommended noise levels for residential dwellings near major roadways detailed within AS2107:2016 have been used as the basis of this assessment.

The recommended levels for various areas of the project are detailed in the following table. The recommended noise levels for residential dwellings near major roadways detailed within AS2107:2016 have been used as the basis of this assessment.

**Table 4-1 Project Internal Environmental Noise Level Criteria**

Type of Occupancy/Activity	Design sound level maximum ( $L_{Aeq,t}$ )
Common areas (e.g. foyer, lift lobby)	55 $L_{Aeq}$ 24 min
Residential <sup>1</sup> - Living areas	40 $L_{Aeq}$ 24 hour
Residential <sup>1</sup> - Sleeping areas (night time)	35 $L_{Aeq}$ 9 hour <sup>1</sup>
Toilets	55 $L_{Aeq}$ 24 min
Note 1: The criteria for residential dwellings included within the Australian Standard have been used for the assessment of the proposed boarding house development.	



## 5 ENVIRONMENTAL NOISE INTRUSION ASSESSMENT

This section of the report details the assessment of environmental noise intrusion into the proposed development and the recommended acoustic treatments to ensure the recommended internal noise levels detailed in the Sections above (including environmental noise and aircraft noise intrusion) are achieved.

Internal noise levels within the future areas of the development will result from the noise intrusion into the building through the external façade including glass, masonry and other façade elements. Typically, the acoustic performance of building elements including the relatively light weight elements of the building façade, including glass and/or plasterboard constructions, will be the determining factors in the resulting internal noise levels.

Calculations of internal noise levels have been undertaken based on the measured traffic and calculated environmental noise levels at the site and the characteristics of the building, including window openings, buildings constructions and the like.

### 5.1.1 External Glass Elements

The recommended acoustic constructions to the buildings external façade glass elements are detailed in the table below to ensure the recommended internal noise levels detailed above are achieved, with the façade building openings closed.

**Table 5-1 External Glass Acoustic Requirements**

Façade Orientation	Room Type	Recommended Glass Construction	Minimum Façade Acoustic Performance <sup>1</sup>
<b>All façade orientations</b>	Bedrooms	6.38mm Laminated	Rw 30
	Living Rooms	6.38mm Laminated	Rw 30
	Wet areas	6mm Float/Toughened	Rw 26
	Common Areas	6mm Float/Toughened	Rw 26
<i>Note 1: The acoustic performance of the external façade includes the installed glazing and frame including (but not limited to) the façade systems seals and frame. All external glazing systems are required to be installed using acoustic bulb seals.</i>			

The recommended glass constructions detailed in the table above include those required to ensure the acoustic requirements of the project are achieved. Thicker glazing may be required to achieve other project requirements such as structural, thermal, safety or other requirements and is to be advised by others.

### 5.2 External Building Elements

The proposed external building elements including masonry or concrete external walls and roof are acoustically acceptable without additional acoustic treatment.

Any lightweight external plasterboard walls should be constructed from a construction with a minimum acoustic performance of Rw 45.

### 5.3 External Roof

The required external roof and ceiling constructions for the project are required to include the following:

- Concrete external roof construction – no additional acoustic treatments required.
- Metal Deck or tiled room construction – no additional acoustic treatments to standard construction required.

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#### **5.4 External Opening and Penetrations**

All openings and penetrations are required to be acoustically treated such that the performance of the building construction is not compromised. This may require lining of duct work behind mechanical service openings/grills, treatments to ventilation opening and the like.



## 6 EXTERNAL NOISE EMISSION ASSESSMENT

This section of the report details the relevant noise level criteria for noise emissions generated on the site once completed.

The relevant authority which provides the required noise level criteria for noise levels generated on the site includes the NSW Environmental Protection Authority's (EPA) Noise Policy for Industry (NPI).

This section contains noise criteria on the operational criteria, construction criteria and vibration criteria.

The following criteria are relevant for the assessment of noise and vibration emissions from the proposed training centre:

- For the assessment of the predicted operational noise emissions by the training facility: The criteria have been derived in accordance with the *Noise Policy for Industry* (EPA, 2017), details are included in the following sections of this report.

### 6.1 NSW Noise Policy for Industry

In NSW, the control of noise emissions is the responsibility of Local Government and the NSW Environment Protection Authority (NSW EPA). In October 2017, the NSW EPA released the *Noise Policy for Industry* (NSW NPI). The purpose of the policy is to ensure that noise impacts associated with particular industrial developments are evaluated and managed in a consistent and transparent manner. The policy aims to ensure that noise is kept to acceptable levels in balance with the social and economic value of industry in NSW.

The NSW NPI criteria for industrial noise sources have two components:

- Controlling the intrusive noise impacts for residential receivers in the short-term; and
- Maintaining noise level amenity of particular land uses for residents and sensitive receivers in other land uses.

The project noise trigger level is derived from the more stringent value out of the project intrusiveness noise level and the project amenity noise level.

#### 6.1.1 Intrusive Noise Impacts (Residential Receivers)

The NSW NPI states that the noise from any single source should not intrude greatly above the prevailing background noise level. Industrial noises are generally considered acceptable if the equivalent continuous (energy-average) A-weighted level of noise from the source (LAeq), measured over a 15 minute period, does not exceed the background noise level measured in the absence of the source by more than 5 dB(A). This is often termed the Intrusiveness Criterion.

The 'Rating Background Level' (RBL) is the background noise level to be used for assessment purposes and is determined by the methods given in the NSW NPI. Using the rating background noise level approach results in the intrusiveness criterion being met for 90% of the time. Adjustments are to be applied to the level of noise produced by the source that is received at the assessment point where the noise source contains annoying characteristics such as tonality or impulsiveness.

#### 6.1.2 Protecting Noise Amenity (All Receivers)

To limit continuing increases in noise levels, the maximum ambient noise level within an area from industrial noise sources should not normally exceed the acceptable noise levels specified in Table 2.2 of the NSW NPI. That is, the ambient LAeq noise level should not exceed the level appropriate for the particular locality and land use. This is often termed the 'Background Creep' or Amenity Criterion.

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The amenity assessment is based on noise criteria specified for a particular land use and corresponding sensitivity to noise. The cumulative effect of noise from industrial sources needs to be considered in assessing the impact. These criteria relate only to other continuous industrial-type noise and do not include road, rail or community noise. If the existing (measured) industrial-type noise level approaches the criterion value, then the NSW NPI sets maximum noise emission levels from new sources with the objective of ensuring that the cumulative levels do not significantly exceed the criterion.

### 6.1.3 Area Classification

The NSW NPI characterises the "Suburban Residential" as an area that has local traffic with characteristically intermittent traffic flows or with some limited commerce or industry. This area often has the following characteristic: evening ambient noise levels defined by the natural environment and human activity.

For the considered receptors in the rural area, the recommended amenity noise level is shown in Table 6-1 below. When the existing noise level from industrial noise sources is close to the recommended "Amenity Noise Level" (ANL) given above, noise from the new source must be controlled to preserve the amenity of the area in line with the requirements of the NSW NPI.

**Table 6-1 NSW NPI – Recommended LAeq Noise Levels from Industrial Noise Sources**

Type of Receiver	Indicative Noise Amenity Area	Time of Day <sup>1</sup>	Recommended Amenity Noise Level (L <sub>Aeq</sub> , period) <sup>2</sup>
Residence	Suburban	Day	55
		Evening	45
		Night	40
<i>Note 1: For Monday to Saturday, Daytime 7:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 8:00 am</i>			
<i>Note 2: The L<sub>Aeq</sub> is the energy average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.</i>			





#### 6.1.4 Project Trigger Noise Levels

The intrusive and amenity criteria for industrial noise emissions derived from the measured data are presented in Table 6-2. The amenity and intrusive criterion are nominated for the purpose of determining the operational noise limits for noise sources associated with the development which can potentially affect noise sensitive receivers.

For each assessment period, the project trigger noise levels are the lower (i.e. the more stringent) of the amenity or intrusive criteria. The project trigger noise levels are shown in bold text in Table 6-2.

**Table 6-2 External noise level criteria in accordance with the NSW NPI**

Location	Time of Day	Project Amenity Noise Level, LAeq, period <sup>1</sup> (dBA)	Representative Background Noise level LA90, 15 min (RBL) <sup>2</sup> (dBA)	Measured LAeq, period Noise Level (dBA)	Intrusive LAeq, 15 min Criterion for New Sources (dBA) <sup>3</sup>	Amenity LAeq, 15 min Criterion for New Sources (dBA) <sup>3, 4</sup>
<b>Residence (Suburban)</b>	Day	50	43	56	<b>48</b>	53
	Evening	40	43	56	48	<b>43</b>
	Night	35	36	54	41	<b>38</b>
<p><i>Note 1: Project Amenity Noise Levels corresponding to "suburban" areas, equivalent to the Recommended Amenity Noise Levels minus 5 dBA</i></p> <p><i>Note 2: LA90 Background Noise or Rating Background Level, including LA90 Background Noise or Rating Background Level based on the assumed minimum rating of the EPA NPfI.</i></p> <p><i>Note 3: Project Noise Trigger Levels are shown in bold</i></p> <p><i>Note 4: According to Section 2.2 of the NSW NPI, the LAeq, 15 minutes is equal to the LAeq, period + 3 dB</i></p>						



## 7 OPERATIONAL ACOUSTIC ASSESSMENT

This section of the report details the assessment of potential noise generated as part of the proposed development.

The assessment of potential noise impacts from various sources of noise on the site are detailed in the following sections.

### 7.1 Mechanical Services Equipment

Detailed selections of the proposed mechanical plant and equipment to be used on the site are not available at this time. All future plant and equipment are to be acoustically treated to ensure the noise levels at all surrounding receivers comply with noise emission criteria detailed within this report. Experience with similar projects indicated that it is both possible and practical to treat all mechanical equipment such that the relevant noise levels are achieved. Examples of the possible acoustic treatments to mechanical equipment includes the following:

- Supply and Exhaust Fans – general exhaust and supply fans such as toilet, kitchen, lobby and other small mechanical fans can be acoustically treated using acoustic flex ducting or internal lined ducting. location of fans included the associated acoustic treatments will be provided once detailed selections can be made available.
- Condenser equipment – The proposed development will include condenser equipment associated with the residential air conditioning equipment. location of fans included the associated acoustic treatments will be provided once detailed selections can be made available.

Details of the required mechanical services equipment and acoustic treatments to ensure the relevant noise level criteria is achieved will be provided as part of the CC submission of the project.

Experience with similar projects indicates that the acoustic treatment of the proposed mechanical equipment to be installed on the project is both possible and practical.

### 7.2 Waste and Garbage Collections

Noise resulting from the removal of waste and garbage from the site, including garbage trucks and the like will be undertaken in accordance with council's waste management requirements.

Noise resulting from the collection of waste from the site will include intermittent collection using approved waste collection vehicles. The resulting noise impact resulting from the site will be similar to noise levels currently experienced by exiting receivers from exiting waste collection services, train noise and vehicle movements on surrounding roadways.

The recommended acoustic treatments to the building facade detailed in this report include those required to ensure internal noise levels within the future dwellings of the project from the collection of waste will be acoustically acceptable and compliant with the recommended internal noise levels.

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## 8 CONCLUSION

Pulse White Noise Acoustics Consultancy Pty Ltd (Pulse White Noise Acoustics) has been engaged to undertake the Noise Impact Assessment of the proposed 6 Auburn Street, Point Frederick residential development.

This report details the required acoustic constructions of the building's façade, including external windows, to ensure that the future internal noise levels comply with the relevant noise levels of the Australian Standard AS2107:2016 for environmental noise. Providing the recommended constructions detailed in this report are included in the construction of the project the required internal noise levels will be achieved.

External noise emissions from the site have been assessed and detailed in accordance with the NSW Environmental Protection Authorities *Noise Policy for Industry*. The future design and treatment of all building services associated with the project can be acoustically treated to ensure all noise emissions from the site comply with the EPA NPfI criteria including the following:

1. Operation of mechanical services on the site.

Regards

Ben White  
Director

Pulse White Noise Acoustics



## 9 APPENDIX A: ACOUSTIC TERMINOLOGY

The following is a brief description of the acoustic terminology used in this report.

<i>Sound power level</i>	The total sound emitted by a source
<i>Sound pressure level</i>	The amount of sound at a specified point
<i>Decibel [dB]</i>	The measurement unit of sound
<i>A Weighted decibels [dB(A)]</i>	The A weighting is a frequency filter applied to measured noise levels to represent how humans hear sounds. The A-weighting filter emphasises frequencies in the speech range (between 1kHz and 4 kHz) which the human ear is most sensitive to, and places less emphasis on low frequencies at which the human ear is not so sensitive. When an overall sound level is A-weighted it is expressed in units of dB(A).
<i>Decibel scale</i>	The decibel scale is logarithmic in order to produce a better representation of the response of the human ear. A 3 dB increase in the sound pressure level corresponds to a doubling in the sound energy. A 10 dB increase in the sound pressure level corresponds to a perceived doubling in volume. Examples of decibel levels of common sounds are as follows: <div> <div>0dB(A)</div> <div>Threshold of human hearing</div> </div> <div> <div>30dB(A)</div> <div>A quiet country park</div> </div> <div> <div>40dB(A)</div> <div>Whisper in a library</div> </div> <div> <div>50dB(A)</div> <div>Open office space</div> </div> <div> <div>70dB(A)</div> <div>Inside a car on a freeway</div> </div> <div> <div>80dB(A)</div> <div>Outboard motor</div> </div> <div> <div>90dB(A)</div> <div>Heavy truck pass-by</div> </div> <div> <div>100dB(A)</div> <div>Jackhammer/Subway train</div> </div> <div> <div>110 dB(A)</div> <div>Rock Concert</div> </div> <div> <div>115dB(A)</div> <div>Limit of sound permitted in industry</div> </div> <div> <div>120dB(A)</div> <div>747 take off at 250 metres</div> </div>
<i>Frequency [f]</i>	The repetition rate of the cycle measured in Hertz (Hz). The frequency corresponds to the pitch of the sound. A high frequency corresponds to a high pitched sound and a low frequency to a low pitched sound.
<i>Ambient sound</i>	The all-encompassing sound at a point composed of sound from all sources near and far.
<i>Equivalent continuous sound level [L<sub>eq</sub>]</i>	The constant sound level which, when occurring over the same period of time, would result in the receiver experiencing the same amount of sound energy.
<i>Reverberation</i>	The persistence of sound in a space after the source of that sound has been stopped (the reverberation time is the time taken for a reverberant sound field to decrease by 60 dB)
<i>Air-borne sound</i>	The sound emitted directly from a source into the surrounding air, such as speech, television or music
<i>Impact sound</i>	The sound emitted from force of one object hitting another such as footfalls and slamming cupboards.
<i>Air-borne sound isolation</i>	The reduction of airborne sound between two rooms.
<i>Sound Reduction Index [R] (Sound Transmission Loss)</i>	The ratio the sound incident on a partition to the sound transmitted by the partition.
<i>Weighted sound reduction index [R<sub>w</sub>]</i>	A single figure representation of the air-borne sound insulation of a partition based upon the R values for each frequency measured in a laboratory environment.
<i>Level difference [D]</i>	The difference in sound pressure level between two rooms.

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<i>Normalised level difference</i> [ $D_n$ ]	The difference in sound pressure level between two rooms normalised for the absorption area of the receiving room.
<i>Standardised level difference</i> [ $D_{nT}$ ]	The difference in sound pressure level between two rooms normalised for the reverberation time of the receiving room.
<i>Weighted standardised level difference</i> [ $D_{nT,w}$ ]	A single figure representation of the air-borne sound insulation of a partition based upon the level difference. Generally used to present the performance of a partition when measured in situ on site.
$C_{tr}$	A value added to an $R_w$ or $D_{nT,w}$ value to account for variations in the spectrum.
<i>Impact sound isolation</i>	The resistance of a floor or wall to transmit impact sound.
<i>Impact sound pressure level</i> [ $L_i$ ]	The sound pressure level in the receiving room produced by impacts subjected to the adjacent floor or wall by a tapping machine.
<i>Normalised impact sound pressure level</i> [ $L_n$ ]	The impact sound pressure level normalised for the absorption area of the receiving room.
<i>Weighted normalised impact sound pressure level</i> [ $L_{n,w}$ ]	A single figure representation of the impact sound insulation of a floor or wall based upon the impact sound pressure level measured in a laboratory.
<i>Weighted standardised impact sound pressure level</i> [ $L'_{nT,w}$ ]	A single figure representation of the impact sound insulation of a floor or wall based upon the impact sound pressure level measured in situ on site.
$C_i$	A value added to an $L_{nW}$ or $L'_{nT,w}$ value to account for variations in the spectrum.
<i>Energy Equivalent Sound Pressure Level</i> [ $L_{A,eq,T}$ ]	'A' weighted, energy averaged sound pressure level over the measurement period T.
<i>Percentile Sound Pressure Level</i> [ $L_{Ax,T}$ ]	'A' weighted, sound pressure that is exceeded for percentile x of the measurement period T.

\*Definitions of a number of terms have been adapted from Australian Standard AS1633:1985 "Acoustics – Glossary of terms and related symbols"





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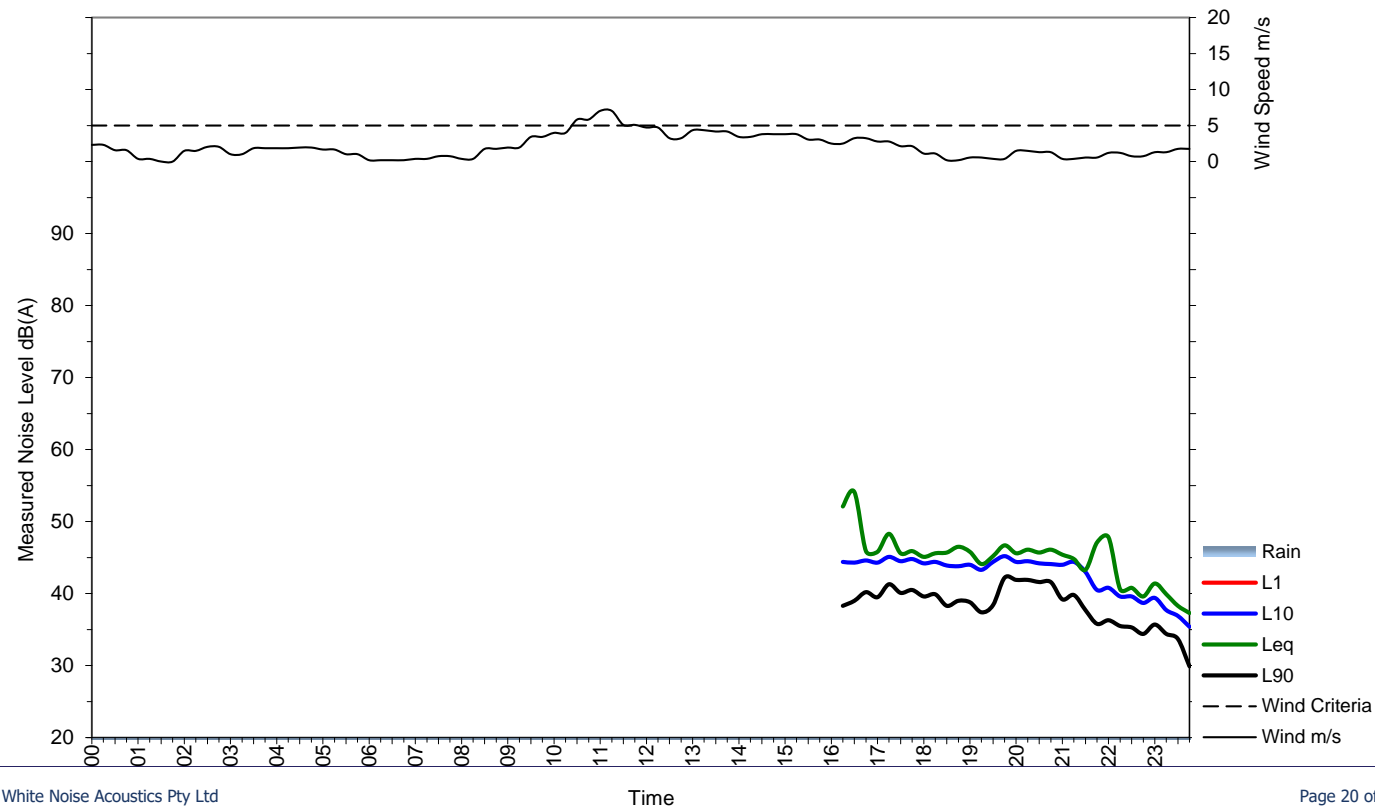
## **10 APPENDIX B: UNATTENDED NOISE LOGGING**

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## 6 Auburn Street, Point Fredrick

Monday 18 July 2022

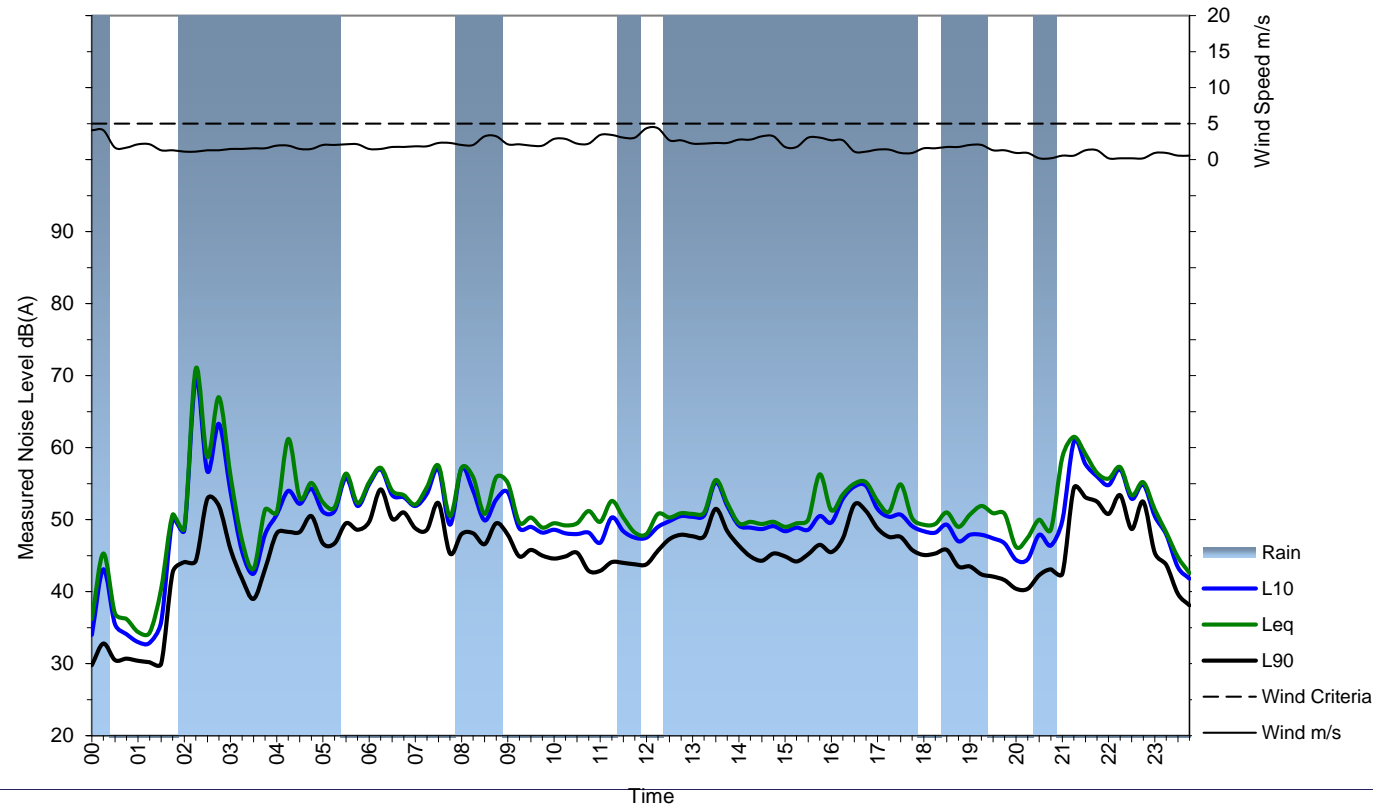


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## 6 Auburn Street, Point Fredrick

Tuesday 19 July 2022



Pulse White Noise Acoustics Pty Ltd

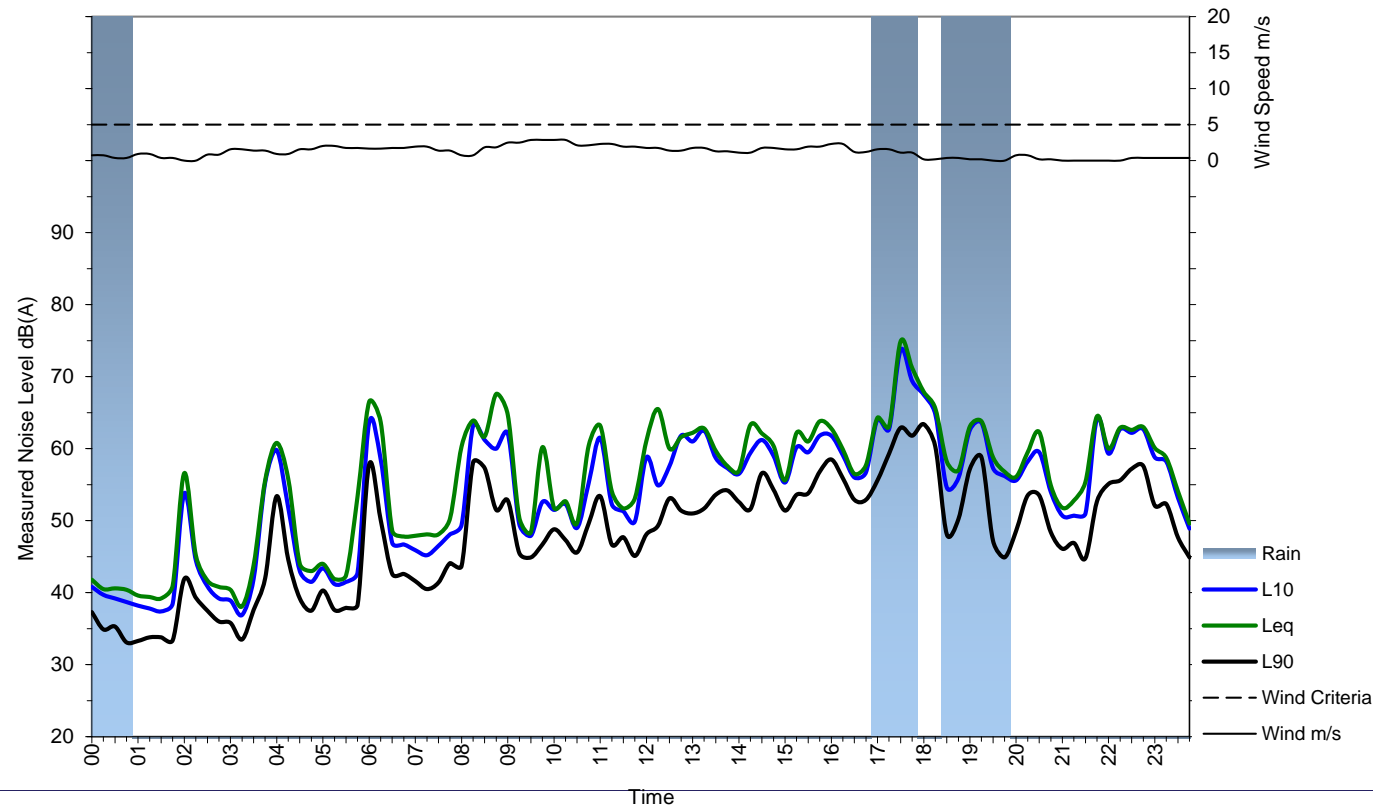
Page 21 of 27

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6 Auburn Street, Point Fredrick

Wednesday 20 July 2022



Pulse White Noise Acoustics Pty Ltd

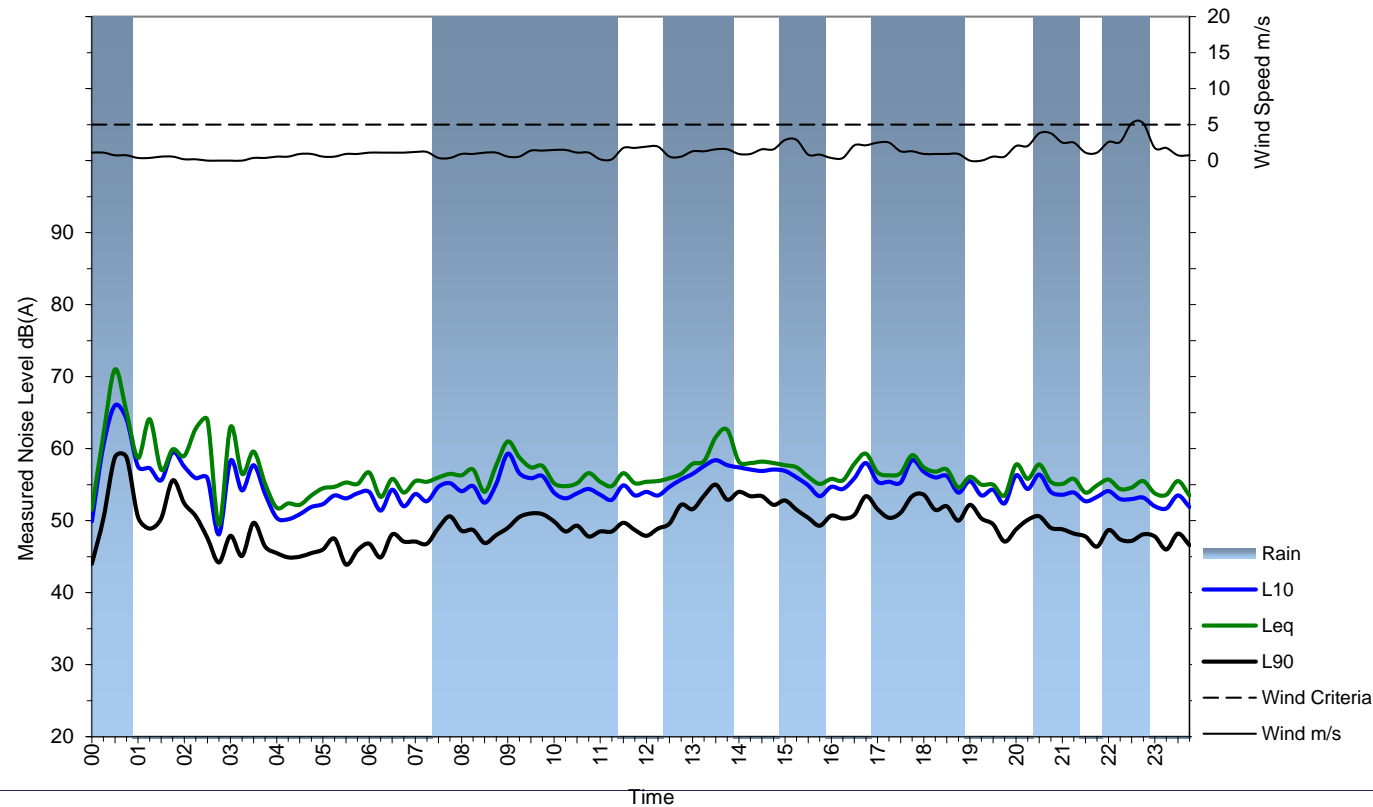
Page 22 of 27

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## 6 Auburn Street, Point Fredrick

Thursday 21 July 2022



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Page 23 of 27

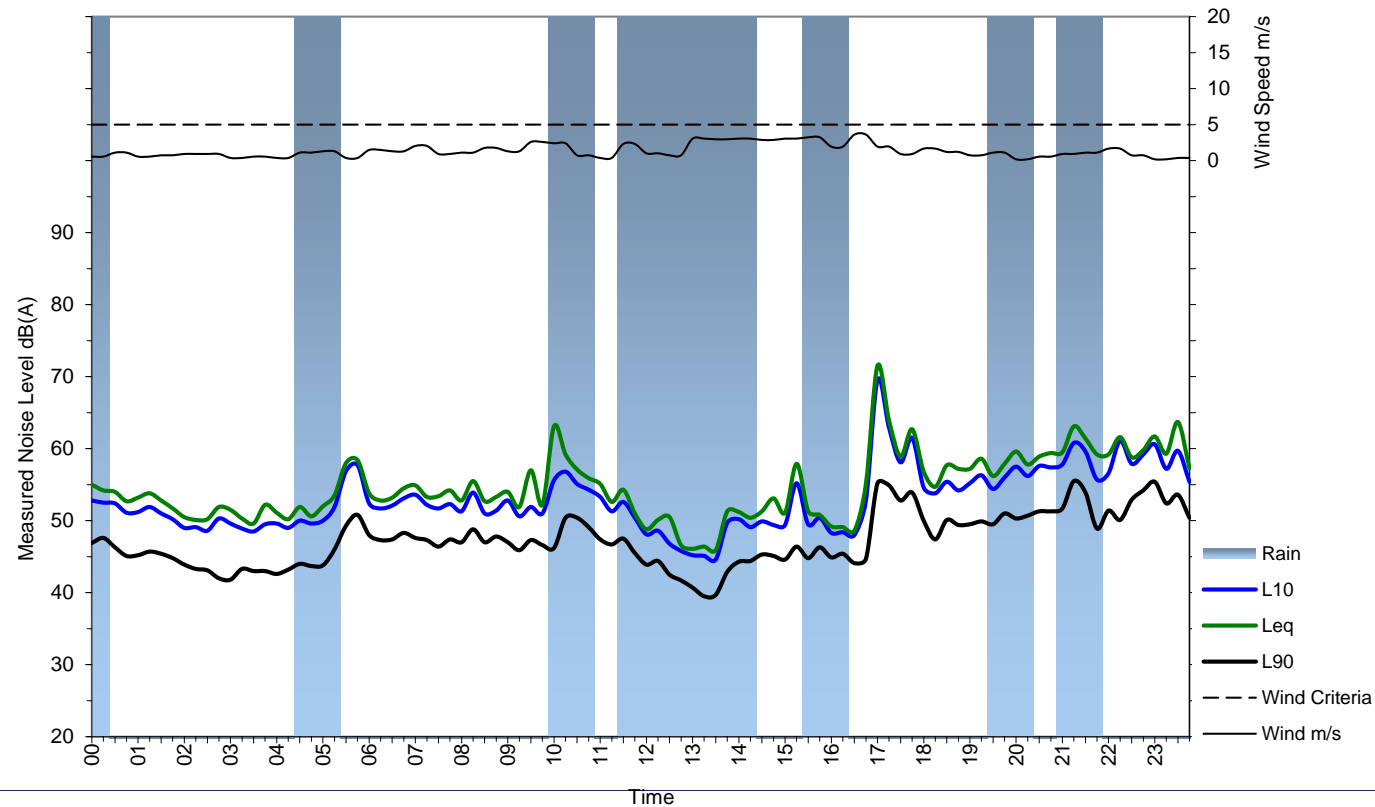


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## 6 Auburn Street, Point Fredrick

Friday 22 July 2022



Pulse White Noise Acoustics Pty Ltd

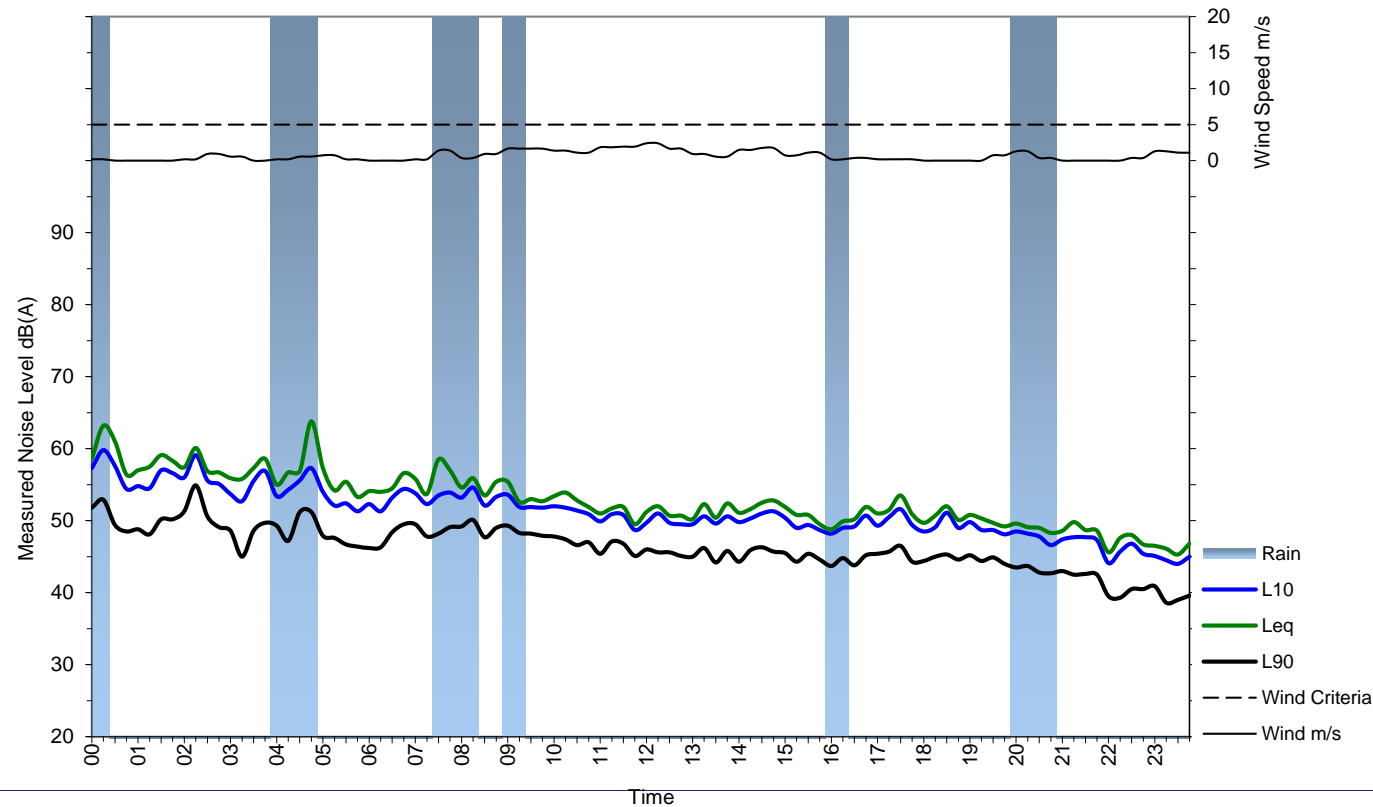
Page 24 of 27

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## 6 Auburn Street, Point Fredrick

Saturday 23 July 2022



Pulse White Noise Acoustics Pty Ltd

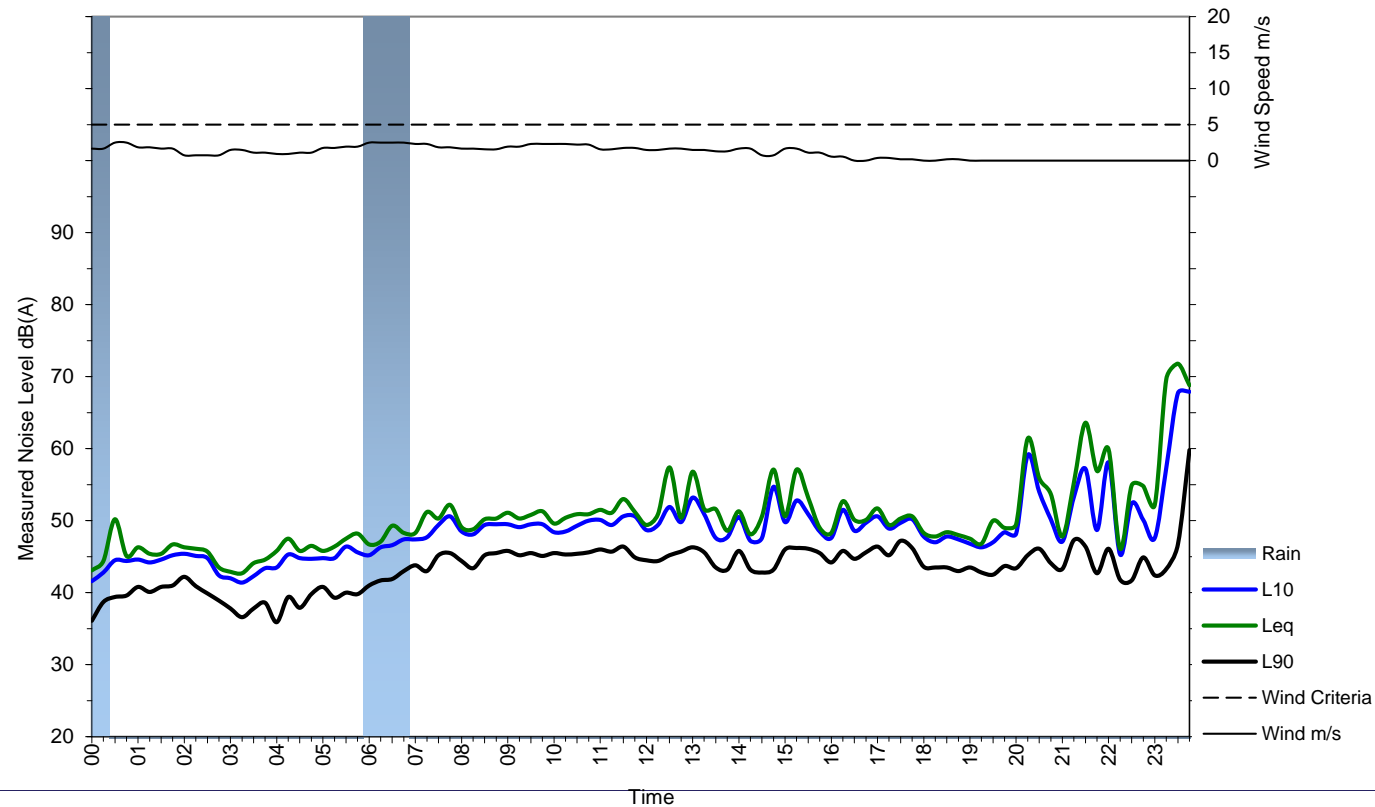
Page 25 of 27

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6 Auburn Street, Point Fredrick

Sunday 24 July 2022



Pulse White Noise Acoustics Pty Ltd

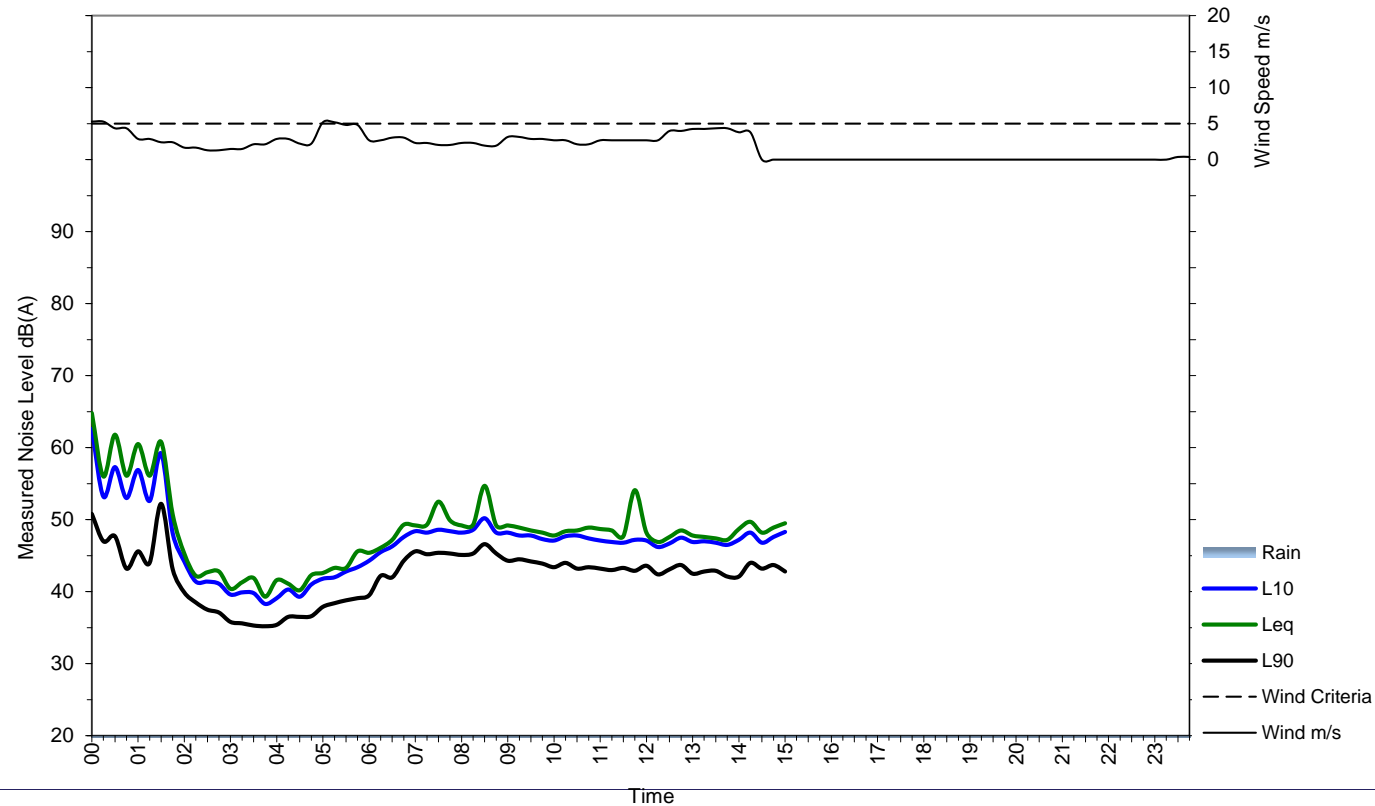
Page 26 of 27

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6 Auburn Street, Point Fredrick

Monday 25 July 2022



Pulse White Noise Acoustics Pty Ltd

Page 27 of 27

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

FUSE ARCHITECTS  
ABN 81 612 046 643  
STUDIO 64  
61 MARLBOROUGH STREET  
SURRY HILLS NSW 2010  
T+612 8278 7156  
MAIL@FUSEARCHITECTS.COM.AU  
FUSEARCHITECTS.COM.AU

15 December 2022

**SEPP65 Design Verification Statement**  
**Residential Flat Building**  
**6 Auburn Street, Point Frederick**

In accordance with Clause 50(1A) of the Environmental Planning and Assessment Regulations 2000, I, Rachid Andary am a qualified architect for the purposes of State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development.

I verify that the Residential Flat Building, as stated above was designed under my instruction with regard to Parts 3 and 4 of the State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development.

Reference:

- Architectural Plans DA000-DA601
- Apartment Design Guide Compliance Table
- Sepp65 Principles Statement



Rachid Andary  
NSW Registered Architect 8627

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## **SEPP65 Principles Statement**

6 Auburn Street, Point Frederick

August 2022

Version 01

**FUSE** ————— **ARCHITECTS**

STUDIO 64---61  
MARLBOROUGH STREET  
SURRY HILLS 2010  
MAIL@FUSEARCHITECTS.COM.AU  
FUSEARCHITECTS.COM.AU

FUSE ——— ARCHITECTS

## FUSE—ARCHITECTS

### Introduction

The proposal for 6 Auburn Street, Point Frederick is a response to a rich and diverse urban and commercial fabric in an area undergoing rapid change.

Exploration started with a questioning of the idea of “design excellence” and the challenge to prioritise and balance the broad ambitions set out as criteria for said excellence.

The project, as we saw it, was to find a meaningful way to overlay these ideals over economical imperatives, whilst ultimately delivering quality homes for future occupants and contributing positively to the public domain.

Our design process involved a detailed survey and analysis of the existing context and desired future character and a review of how recently approved developments of a comparable scale were working to either support or challenge those two realities. From what was working and not working we sought to embrace the idea of building as a catalyst to transform context through a lateral interpretation of planning controls, to tease out the best ways to satisfy key objectives.

The design is for a boutique residential flat building that will deliver 8 new homes, including affordable housing. It is a bespoke response that meets key SEPP 65 and ADG requirements with a simple and elegant form appropriate for it's time, it's purpose and it's context.

## FUSE—ARCHITECTS

### 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.*

- The site is located at 6 Auburn St, which is in the suburb of Point Frederick and lies within the south-eastern corner of the Gosford Centre. The site is generally bounded by the Central Coast Highway to the north, Frederick St to the east, Albany St to the west and Duke St to the south. Located within the Central Coast Council Local Government Area (LGA)
- The regularly shaped parcel of land is provided with a direct access single frontage to Auburn Street.
- The site is approximately 140m from the nearby bus station on Frederick Street. This stop services trips between Point Frederick to Gosford Train Station
- The site is comprised of one (1) lot with an area of 682m<sup>2</sup>, legally defined as Lot 13 within Deposited Plan 17440.
- The site presents a gentle slope from the south-western corner of the site down towards the north-eastern corner of the site of approximately 2.39m
- The site is located within an established residential area zoned *R1 General Residential*. The current locality is characterized by older three-four story building envelopes down to single story cottages.
- Within a short walk exists a nearby *B1 Neighbourhood Centre* offering small scale retail and essential services and public recreation space.
- The site is affected primarily by south-westerly winter winds, and north-easterly summer winds.
- The proposal is for a boutique residential development with a semi-recessed basement level, and 6 residential apartments at upper levels. In summary, the proposal involves:
  - the demolition of existing improvements on site comprised of a single story cottage and attached garage;
  - excavation to create 1 level of basement car parking with direct street access via the existing cross-over.
  - Eight (8) residential apartments above with 2-bedroom units; and
  - associated landscaping.



## FUSE—ARCHITECTS

### 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.*

- The site is within the R1 zone. The building's massing, height and building alignment appropriately reflect a transition between the existing character and the trend of new developments within the same zone.
- The built form and scale are consistent with council's built form development planning controls.
- The building's facades, massing and depth are well articulated and create an interesting and strong form.
- The building will use a combination of contemporary materials to provide for visually interesting façades that respond to both the existing and emerging the future built form character
- Amenity of surrounding buildings is maintained with adequate separation provided
- Landscaping within the front setback area contributes to and enhances the streetscape
- The landscape design strategy seeks to provide residents with a diversity of spaces and activities for their leisure that are both attractive and with a focus on native and floral species





## FUSE—ARCHITECTS

### 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 proposed density of the development and associated floor space yield is appropriate for the site and its location.
- The total site area is 682.2m<sup>2</sup>. The development proposes a total gross floor area of 808m<sup>2</sup> generating an FSR of 1.18:1 which results in a built form that is consistent with precinct specific DCP built form controls.
- The site is approximately 140m from the nearby bus station on Frederick Street. This stop services trips between Point Frederick to Gosford Train Station.
- The site is well serviced by basic retail and essential services and public recreation space a short walk away on York Street.
- The density proposed does not give rise to any significant impacts on the adjoining properties (current or future) in terms of overshadowing, loss of privacy or visual impact.
- Surrounding land will be (and already has been) acquired and amalgamated and existing low density within the precincts will be demolished. In its place, a high-density format residential/mixed use development will emerge, this fundamentally altering the character of the area
- A generous level of separation exists between proposed apartments and from surrounding developments.
- A high level of amenity is provided for future residents of the development with generously proportioned internal and external space

## FUSE—ARCHITECTS

### 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 development is designed to embrace ESD principles where possible and provides 100% of apartments with cross ventilation.
- The common circulation areas provide natural ventilation and daylight to minimize power use during the day
- Communal landscaping features deep soil zones.
- The development meets and exceeds the energy and water reduction benchmarks as set out in the Building and Sustainability Index (BASIX).
- Proximity to existing transport hubs encourages the use of public transport for daily commutes.
- The building is constructed of low-maintenance, long lifecycle, recyclable and reusable materials.
- Efficient basement design minimizes excavation to meet parking needs.
- The construction and ongoing operational use of the development will need to be mindful of incorporating sustainable and renewable materials to limit its impact on the environment. This includes the use of sustainable building materials, the considered storage, treatment and recycling of waste and water, as well as the use of energy efficient appliances to conserve electricity

## FUSE—ARCHITECTS

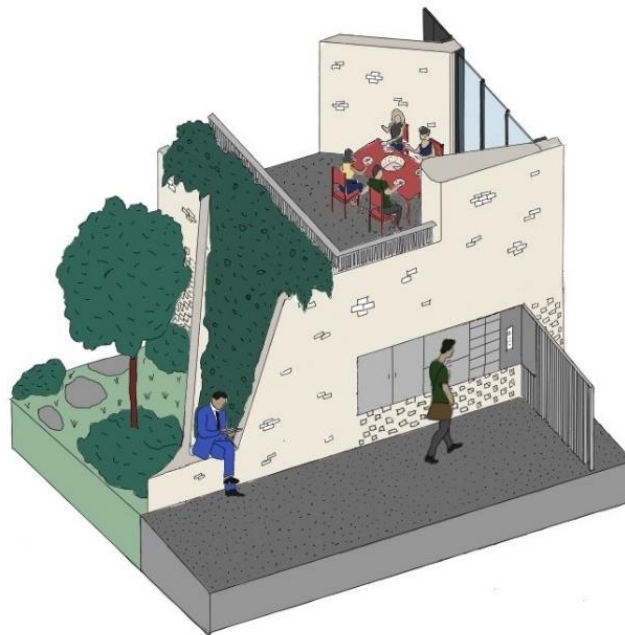
### Principle 5: Landscape

*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 useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long-term management.*

- The landscape has been designed as integral to the architecture, resulting in greater aesthetic quality and amenity for both residents and the general community.
- The landscape design strategy seeks to provide residents with a diversity of spaces and activities for their leisure that are both attractive and functional. The planting palette will be vibrant and lush, reflecting the character of the area with a focus on native and floral species
- The generous open space is layered with landscaping at every opportunity.
- Deep soil planting within the front setback enhances the streetscape adding greenspace to the public domain.
- This common areas such as the entry incorporates deep soil planting and sitting areas to accommodate informal social interaction and recreational activities.
- Plant selection to the common and private open spaces have been carefully considered maximizing potential for amenity while ensuring resident privacy and minimizing water usage.
- All hard and soft treatments on the ground plane are carefully designed to ensure the site will create a positive and compatible contribution to the public domain.



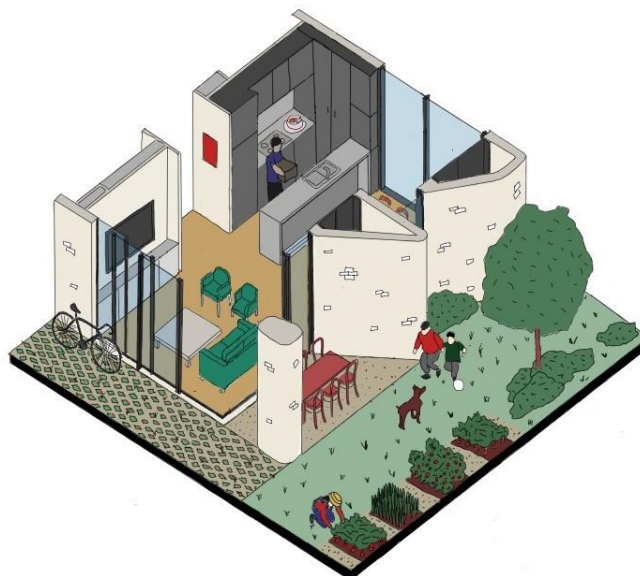
## FUSE—ARCHITECTS

### 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 wellbeing.*

*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.*

- Careful orientation of the building has afforded a high degree of amenity to all apartments and open spaces.
- The communal open space is a wide, level space with equitable access.
- The accommodation consists of 8 dwellings suited to a variety of lifestyles. 2 bedrooms + study (2 bath) 102m<sup>2</sup>
- The mix is in accordance with the DCP requirements to consider population trends, market demands and location in relation to public transport, public facilities, employment areas, schools, and retail centers.
- 37% of the total apartments (3/8) incorporate the Livable Housing Guideline's silver level universal design features.
- Each dwelling has access to a private open space, such as a balcony or terrace, with a minimum area for the balconies of 10m<sup>2</sup> for 2 beds in accordance with the minimum areas in the ADG.
- The dwellings have minimum balcony depths in accordance with the ADG.
- The minimum ceiling height of habitable rooms is 2700mm and the floor-to-floor height is generally 3000mm.
- Storage has been provided within units with the remainder, a maximum of 50% of the minimum requirement, provided in basement storage cages. Storage is in accordance with the minimum areas in the ADG of 6m<sup>3</sup> for 1 beds, 8m<sup>3</sup> for 2 beds and 10m<sup>3</sup> for 3 beds.
- All apartments have an outlook to either the public domain or common areas.
- 100% (8/8) of dwellings receive 2 hours of solar access between 9am and 3pm in mid-winter.
- 100% of apartments are naturally cross or corner ventilated.
- A total of 8 covered car parking spaces are provided in the basement. Proximity to public transport links will encourage use of public transport and car sharing. As such, the car parking provided is more than adequate for the development.



## FUSE—ARCHITECTS

### 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 design of the building optimizes safety and security, of both the development and the public domain. Safety and security have also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement, and space management.
- The street-level entrances provide secure access with direct sight lines into the communal circulation spaces.
- Passive surveillance is provided through a significant increase in 'eyes on the street' to Auburn St
- Balcony openings and ground level private open spaces are elevation to promote passive surveillance of the public domain
- Access control is achieved through secure entry (smart key entry) to the residential lobbies, lift and basement
- The development seeks the provision of a clearly identifiable pedestrian entry, separated from the vehicular entrance into the development
- Territorial reinforcement is provided through landscaping and public domain treatments to delineate public and private spaces within the development with appropriate maintenance and management policies
- Space management will be achieved through selection of appropriate materials/finishes and routine maintenance of the building and landscaped areas to ensure a positive contribution to the public realm and to resist graffiti and anti-social behavior. Low planting will be provided along walls and garden paths to maintain good visibility
- Sightlines are largely unobstructed throughout communal spaces minimizing opportunities for concealment.
- Well-lit internal and external communal open spaces reinforce passive safety principles



## FUSE—ARCHITECTS

### 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 and providing opportunities for social interaction among residents*

- Point Frederick is characterized by its social and economic diversity, which is reflected in the uplift of density seen in the area. The objective of this development is to add quality dwellings of high amenity across a range of configurations at different price points. The proposed apartment mix is intended to reflect the broader locale's demand of apartment types, in particular offering efficient and affordable apartments.
- The 2-bedroom apartments are given an open utility space or "family hub" that can be adapted to suit the needs of residents in their various life stages regardless of the household composition. The space could variously be a playroom, study or storeroom at different stages in a household's life. The space is based on international best practice requirements for accommodating families and children in high rise accommodation.
- Recently designed residential developments in the vicinity have attracted residents from a wide range of backgrounds and age groups and the expectation is the proposal will be no different. Current analysis and data have shown that typically, in developments of this nature, the majority of new residents come from nearby suburbs meaning that developments are an enhancement of existing communities.
- The proposed development offers sound amenity to those with impaired mobility with 33% of apartments incorporating the Livable Housing Guideline's silver level universal design features.
- The development will provide affordable residential apartments



## FUSE—ARCHITECTS

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

- We believe the success of the aesthetic character of any given design is not derived from its conformance to or response to planning objectives, but in the integrity and legibility of its intent.
- The proposed form exhibits both familiar and unconventional elements with a mix of traditional and modern finishes.
- The use of face-brick acknowledges the history and current uses of surrounding developments, whilst contrasting metal detailed elements cut and define the forms with modern gestures.
- The proposed design, whilst contemporary in nature, is both sympathetic to the existing context as well as the desired future character of the area.
- The choice of material, colour and texture has been carefully considered with respect to the surrounding natural and built environment. The materials proposed for use throughout the project have been selected to withstand the elements whilst maintaining their fit within the broader architectural design of the project
- The building facades incorporate an appropriate degree of articulation in the form of splayed walls, projecting and inset balconies, architectural features, and material combinations. A palette of both traditional and contemporary materials will be employed to the proposal considered complementary to the tactility of the build forms within the streetscape
- The upper most building level differs in terms of form, materiality, and expression from the preceding levels below. This design outcome creates a clear distinction between the building base and recessed upper most level in line with the prescribed control, while influencing the extent of the perceptible built form noting the buildings' transitional location between high and medium density land



## **Development Application**

### **Statement of Environmental Effects**

6 Auburn Street, Point Frederick



Submitted to: Central Coast Council  
On behalf of: Zeytouneh 10452 Pty Ltd  
Date: November 2022

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

**BMAURBAN**

~~Statement of Environmental Effects~~

6 Auburn Street, Point Frederick  
Project No # 111/22

**BMA URBAN STAFF RESPONSIBLE FOR THIS REPORT WERE:**

Managing Director	Bernard Moroz
Associate Director	-----
Project Planner	-----
Project Code	Aub-111/22
Report Number	Final - 23/12/22

**CONTACT DETAILS:**

**BMA URBAN**

THREE INTERNATIONAL TOWERS  
Suite 5, Level 24 300 Barangaroo Avenue  
Sydney, NSW 2000

enquires@bmaurban.com  
BMAURBAN.com

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**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures  
and construction of 4 storey residential flat building containing 8 x 2 bedroom units  
(including 4 affordable housing units) with 8 car spaces (including 2 x accessible  
spaces), 1 x motorcycle and 6 bicycle parking spaces**

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**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT  
FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

## TABLE OF CONTENTS

<b>1. INTRODUCTION.....</b>	<b>5</b>
1.1 Report Structure.....	6
1.2 Supporting Documentation .....	6
<b>2. SITE ANALYSIS AND CONTEXT .....</b>	<b>7</b>
2.1 The Subject Site.....	7
2.2 Site Description.....	8
2.3 Site Surrounds .....	11
<b>3. THE PROPOSAL .....</b>	<b>12</b>
3.1 Building Overview .....	12
<b>4. NUMERICAL OVERVIEW .....</b>	<b>13</b>
4.1 Urban Design Outcomes.....	13
4.2 Site Planning and Layout.....	13
4.3 Landscaping.....	14
4.4 Water Management .....	14
4.5 Waste Management.....	15
4.6 External Materials and Finishes.....	15
4.7 Access and Parking .....	16
<b>5. STATUTORY PLANNING CONSIDERATIONS.....</b>	<b>17</b>
5.1 Overview .....	17
5.2 Environmental Planning and Assessment Act 1979 .....	17
5.3 Environmental Planning and Assessment Regulations 2021 .....	19
5.4 State Environmental Planning Policies .....	19
5.6 The Provisions of any exhibited Draft Environmental Planning Instruments .....	32
5.7 Development Control Plans .....	32
<b>6. ENVIRONMENTAL IMPACT ASSESSMENT .....</b>	<b>46</b>
6.1 Built Environment.....	46
6.2 Public Amenity .....	46
6.3 Natural Environment .....	48
6.4 Environmentally Sensitive Design .....	51
6.6 Movement and Access.....	53
6.6 Social and Economic Impacts.....	54
6.8 The Public Interest .....	55
<b>7. CONCLUSION .....</b>	<b>56</b>



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures  
and construction of 4 storey residential flat building containing 8 x 2 bedroom units  
(including 4 affordable housing units) with 8 car spaces (including 2 x accessible  
spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT  
FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

**FIGURES**

Figure 1: Site Plan (Base Map) .....	7
Figure 2: Survey Plan .....	8
Figure 3: The existing dwelling on the subject site as it presents along Auburn Street .....	9
Figure 4: As previous .....	9
Figure 5: Rear façade of the existing dwelling as it presents on site .....	9
Figure 6: Existing pool as it presents along the rear of the site .....	9
Figure 7: Vehicle route to Gosford station .....	10
Figure 8: Proximate bus services .....	11
Figure 9: Development Render .....	12
Figure 10: Site plan .....	14
Figure 11: Material Schedule .....	15
Figure 12: Zoning Map .....	20
Figure 13: Height of Building's Map .....	20
Figure 14: FSR Map .....	21
Figure 15: ASS Map .....	21
Figure 16: Lower ground floor landscaping resolution .....	49
Figure 17: Ground floor landscaping resolution .....	49

**TABLES**

Table 1: Technical and design documentation .....	6
Table 2: Numeric Overview of the proposed development .....	13
Table 3: Section 4.15 of the EP&A Act 1979 .....	18
Table 4: ADG core compliance summary .....	32

**APPENDICES**

Appendix A: Clause 5.28 Variation .....	56
Appendix B: Social Impact Assessment .....	74

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

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Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

## 1. INTRODUCTION

This Statement of Environmental Effects (SEE) has been prepared by BMA Urban in support of a Detailed Development Application (DA) to Central Coast Council, prepared in accordance with Section 4.12 of the Environmental Planning and Assessment Act, 1979 and Clause 50 of the Environmental Planning and Assessment Regulation, 2021. The proposed development seeks consent for demolition of the existing dwelling and subsequent construction of a 'residential flat building' development reliant on the Affordable Housing 2021 – Division 1 (in-fill affordable housing) provisions.

The subject site at 6 Auburn Street, Point Frederick comprises a total site area of 682.2m<sup>2</sup>.

The Proposal seeks approval for eight (8) residential apartments, consistent with the R1- General Residential Zoning objectives under the State Environmental Planning Policy (Precincts-Regional).

A number of significant benefits will arise from the proposed development which include:

- the delivery of eight (8) new high quality residential apartments in a highly accessible and sustainable location.
- increased levels of housing supply of various size units in a location with proximity to the Gosford Town Centre which will facilitate ongoing support for the Centre as a catalyst for urban transformation, opening up new economic benefits for the LGA;
- an excellent design outcome for the setting taking into account the prescribed standards and supplementary controls pertaining to this form of land development notwithstanding the isolated nature of the land;
- provision of equitable accommodation by the addition of adaptable units in an appropriate location to meet the demand of a diverse population;
- provision of a high degree of residential amenity achieved through the siting, scale and building form interrelationship/s;
- the delivery of modulated built forms with a variety of building heights, alignments and orientations which will serve to create visual interest; and
- delivery of a development which supports ESD principles including energy efficiency, water conservation and waste minimisation.

The SEE includes an assessment of the proposed works in terms of the matters for consideration as listed under Section 4.15 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and should be read in conjunction with the information accompanying this report. This SEE demonstrates that the proposed development is consistent with Section 4.15 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and is a suitable development for the site.

In light of the merits of the proposed development and in the absence of any significant environmental impacts, it is without hesitation that we respectfully recommend this application for development consent.

## 1.1 Report Structure

This SEE is structure in the following manner:

- **Section 1** – Introduction;
- **Section 2** - Analysis of site and surrounding context;
- **Section 3** – Description of the Development
- **Section 4** – Numerical Overview
- **Section 5** - Assessment of the proposal's compliance with relevant planning instruments and policies;
- **Section 6** - Impact assessment and consideration of key planning issues as required by Section 4.15 of the EP&A Act; and
- **Section 7** – Conclusion.

## 1.2 Supporting Documentation

The technical and design documents that have been prepared to accompany this DA are identified in **Table 1** and are as follows;

Document:	Prepared by:	Dated:
Architectural Plans	Fuse Architects	30 August 2022
Landscape Plans	Zenith Landscape Design	14 September 2022
Access Report	Vista Access Architects	4 November 2022
Acoustic	PWNA	1 September 2022
Traffic and Parking	CJP	4 November 2022
BCA Report	BCA Logic	2 November 2022
Waste	MRA Consulting Group	2 November 2022
Stormwater Plans	Pyramid Engineering	November 2022
Basix	EPS	9 November 2022
Survey	New South Surveys	4 April 2022
QS Report	RICQS	26 October 2022

Table 1: Technical and design documentation

## 2. SITE ANALYSIS AND CONTEXT

### 2.1 The Subject Site

The subject site is located within the Local Government Area (LGA) of Central Coast. **Figure 1** below provides a base view identifying the location of the site within its defining context.

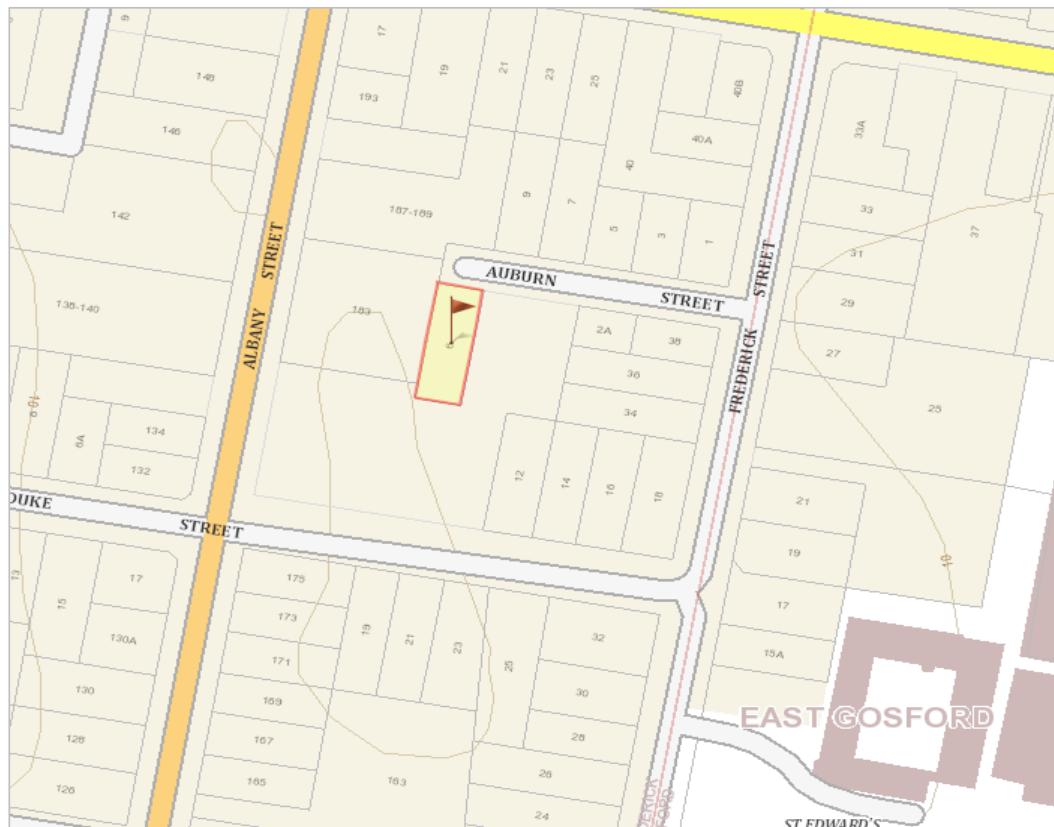



Figure 1: Site Plan (Base Map)  
Source: Six Maps

Subject site 

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

## 2.2 Site Description

### 2.2.1 Dimensions and Locational Characteristics

The site is located at 6 Auburn Street, Point Frederick, is comprised of a single lot, legally defined as Lot 13 in D.P. 17440. The regularly shaped parcel of land is provided with a direct access frontage to Auburn Street, comprising of a total land area of 682.2m<sup>2</sup>.

The site observes a frontage width to Auburn Street of 15.545m, respective and equidistant eastern and western boundary lengths of 43.89m and rear boundary width of 15.545m that square off the site. A detailed Land Survey prepared by New South Surveys indicating boundary lengths, site area and the location of existing structures on the allotments is reproduced in **Figure 2** below.

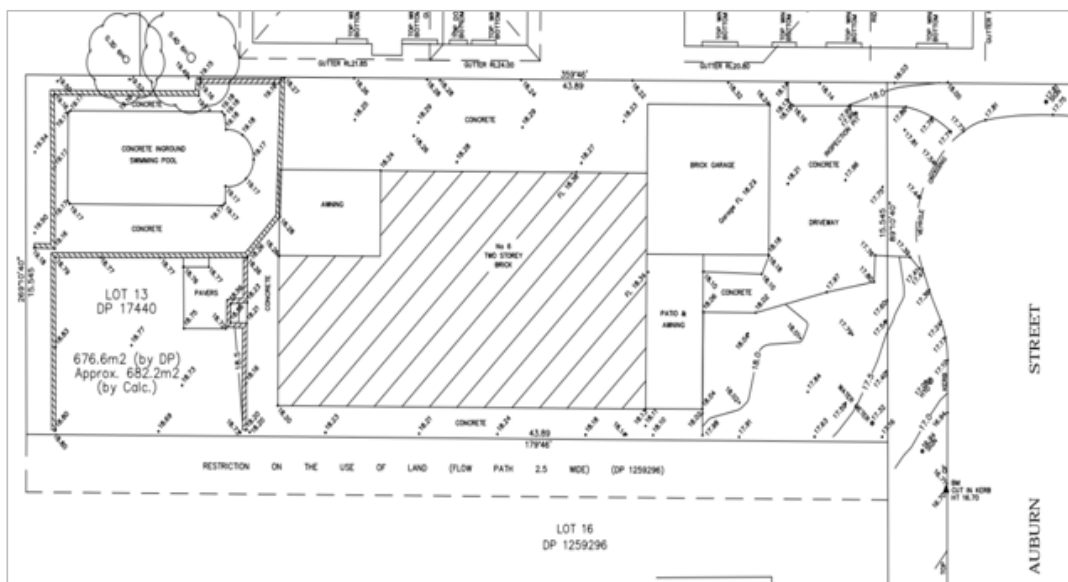


Figure 2: Survey Plan  
Source: New South Surveys

### 2.2.2 Existing Improvements

Address	Lot/SP	Description
No. 6 Auburn Street	Lot 13 D.P 17440	A two storey brick dwelling with pitched tiled roof and inground concrete swimming pool

Figures 3 through to 6 below provide a clearer appreciation of the site and its current built form characteristics.





Figure 3: The existing dwelling on the subject site as it presents along Auburn Street



Figure 4: As previous



Figure 5: Rear façade of the existing dwelling as it presents on site



Figure 6: Existing pool as it presents along the rear of the site

### 2.2.3 Topography

The site presents a gentle slope from the south-western corner of the site RL 19.54 down towards the north-eastern corner of the site RL 17.16 of approximately 2.38m.

### 2.2.4 Heritage

The site is not identified as containing any items of heritage significance, nor are they located near any known item of Indigenous or European heritage significance.

### 2.2.4 Vegetation

Existing vegetation occupying the site and its surrounds consists of a mixture of introduced (planted) exotic and native planted low-lying vegetation. The herbaceous or grass vegetation consists of a mixture of introduced pastoral grasses/weed species due to the site's location within a residential precinct.

### 2.2.5 Site Access

Vehicular access to the site is currently provided by way of a concrete driveway located within the north-western corner of the site accessed off Auburn Street which is identified as a local suburban road.

The site is located 2.1km south-east from the Gosford Station **Figure 7**. Gosford Station is serviced by NSW TrainLink Central Coast & Newcastle Line services travelling from Sydney Central to Newcastle.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

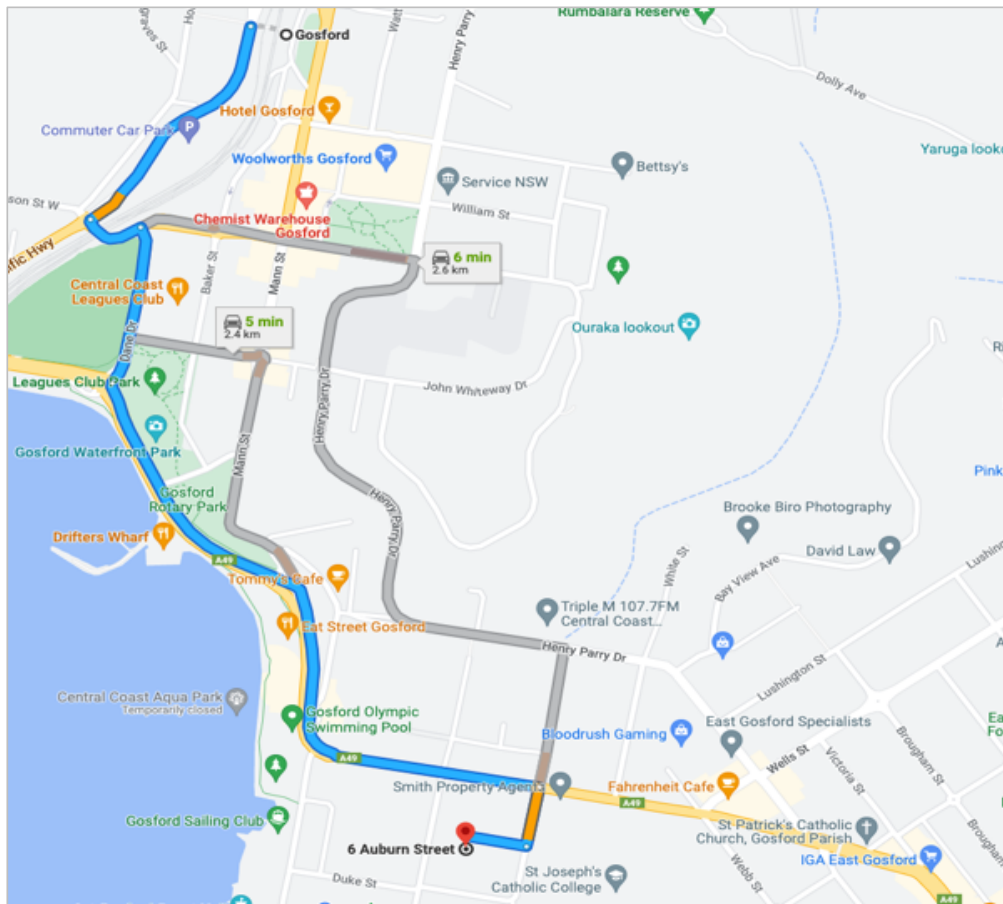


Figure 7: Vehicle route to Gosford station

Source: Google Maps

Bus stops are located in proximity to the site along York, Frederick and Duke Streets, the closest of which is a 3 minute (140m) walk from the site. **Figure 8** illustrates the bus routes for the local area.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

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Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22



Figure 8: Proximate bus services  
Source: Busways

## 2.3 Site Surrounds

The site lies within the south-eastern corner of the Gosford Centre, generally bounded by The Central Coast Highway to the north, Frederick Street to the east, Albany Street to the west and Duke Street to the south.

Land will be (and already has been) acquired and amalgamated and existing low density within the Precinct will be demolished. In its place, a high-density format residential/mixed use development will emerge, thus fundamentally altering the character of the area. This is made evident upon the recently completed development located to the east /south of the site, the scale of which is made evident in **Figure 3** of this document.

## 3. THE PROPOSAL

### 3.1 Building Overview

This DA seeks consent for:

- Demolition of all existing site structures;
- Earthworks and excavation for the purpose of accommodating semi-inground parking;
- Construction of a 'residential flat building' (In-fill Affordable) development designed in response to the characteristics of the land and defining visual context;
- The development proposes a total gross floor area of 808m<sup>2</sup> generating an FSR of 1.18:1;
- Provision of eight (8) apartments, four (4) of which are nominated as affordable;
- Semi-inground parking provision providing for eight (8) residential vehicles, inclusive of two (2) accessible spaces, six (6) bicycle space and a single motorcycle space;
- Waste room, including independent storage for bulky waste; and
- Street tree verge treatment and site landscaping as identified in the Landscape Plan prepared by Zenith Landscape Design.

A visual render of the development is provided as **Figure 9**.



Figure 9: Development Render  
Source: Fuse Architects

## 4. NUMERICAL OVERVIEW

The key numerical aspects of the proposed development are outlined in **Table 2** and described in further detail in the following sections.

Parameter	Proposal
Site Area	682.2m <sup>2</sup>
Total GFA	808m <sup>2</sup>
Total Floor Space Ratio (FSR)	1.18:1
Building Height (maximum)	13.95m
Apartment Mix	
Two (2) bedroom	<ul style="list-style-type: none"> <li>Eight (8) in total, Four (4) Affordable</li> </ul>
Parking Provision	<ul style="list-style-type: none"> <li>Resident - 8 spaces (2 adaptable)</li> <li>Bicycle - 6 space</li> <li>Motorcycle - 1 space</li> </ul>
Deep Soil Area	114m <sup>2</sup> or 16.7%

Table 2: Numeric Overview of the proposed development

### 4.1 Urban Design Outcomes

The planning and design principles adopted for the proposed development of the site are as follows:

- Delivery of a contemporary development that strives to set a new standard for high amenity residential development;
- To ensure an interesting built-form that responds to the scale and character of the contextual setting;
- Deliver a modulated building form in order to create a higher degree of visual interest; and
- Improved amenity for residents through realignment of building forms to increase solar access and enhance view corridors;

### 4.2 Site Planning and Layout

The proposed development comprises a single building that predominately aligns north/south axis off Auburn Street.

A site analysis plan identifying the current context is included at **Figure 10 below**.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects  
6 Auburn Street, Point Frederick  
Project No # 111/22



Figure 10: Site plan  
Source: Fuse Architects

### 4.3 Landscaping

Landscape Plans prepared by Zenith Landscape Design accompany this development application.

The landscape design strategy seeks to provide residents with a diversity of spaces and activities for their leisure that are both attractive and functional. The planting palette will be vibrant and lush, reflecting the character of the area and with a focus on native and floral species.

With regards to streetscape, the landscape design strategy seeks to introduce street tree planting along the Auburn Street frontage which will supplement the existing retained vegetation.

### 4.4 Water Management

In accordance with Council's guidelines for stormwater and water cycle management, Pyramid Engineering Consult have developed a stormwater management plan incorporating on-site detention and discharge to the public drainage network via new stormwater infrastructure proposed across the site which feeds into the inlet structures. The inlet structures have been designed to adequately convey the surface runoff into the in-ground drainage network. The runoff will then be conveyed through a pit and pipe system to on site detention tanks. From the detention tanks stormwater is then conveyed to the legal point of discharge using gravity and the geometric falls of the pipe system.

## 4.5 Waste Management

An Operational Waste Management Plan prepared by and is separately submitted with this application. The Operational Waste Management Plan outlines the strategy for managing ongoing operational waste from the residential development.

The Construction Waste Management Plan also prepared by MRA Consulting Group outlines the procedures for waste and materials that are to be implemented during the demolition and construction phase of the development.

## 4.6 External Materials and Finishes

Details of the proposed materials of the development are included as part of the Architectural Drawings and are also reproduced for reference in **Figure 11** below. The building will use a combination of contemporary materials to provide for visually interesting facades that respond to both the existing and emerging the future built form character.



Figure 11: Material Schedule  
Source: Fuse Architects

## **4.7 Access and Parking**

### **4.7.1 Pedestrian Access**

Entry into the building is provided from within the north-western corner of the site along an accessible path that leads into an entry lobby serviced by way of a single lift. A secondary entry is provided from within the north-eastern corner of the site which directs residents and or their guests up a set of stairs then onto a landscaped pathway which provides an alternate entry into the building at the upper ground level.

### **4.7.2 Vehicular Access**

Vehicular access to the site will be provided via a single width ramped driveway located within the north-eastern corner of the site along Auburn Street. All vehicles/motorcycle will access and leave the site in a forward direction which has been affirmed in the swept path assessment prepared by CJP Consulting Engineers.

### **4.7.3 Car Parking**

A total of eight (8) car parking spaces are provided across the semi-basement parking level which will be allocated to residents. The proposed parking scheme also accommodates two (2) adaptable parking spaces.

### **4.7.4 Motorcycle/Bicycle Parking**

One (1) motorcycle space is nominated while bicycle parking is provided alongside six (6) bicycle spaces.

## 5. STATUTORY PLANNING CONSIDERATIONS

### 5.1 Overview

The relevant statutory framework considered in the preparation of this report comprises:

- Environmental Planning and Assessment Act, 1979;
- Environmental Planning and Assessment Regulation 2021;
- State Environmental Planning Policy (Biodiversity and Conservation) 2021;
- State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- State Environmental Planning Policy (Resilience and Hazards) 2021;
- State Environmental Planning Policy (Transport and Infrastructure) 2021;
- State Environmental Planning Policy (Precincts-Regional) 2021;
- State Environmental Planning Policy (Housing) 2021; and
- Central Coast Development Control Plan 2022.

The relevant provisions and controls of the above Instruments and Plans are summarised in the following sections of this SEE.

### 5.2 Environmental Planning and Assessment Act 1979

#### 5.2.1 Section 1.3 – Objects

The Environmental Planning and Assessment Act, 1979 (the Act) is the principle planning and development legislation in New South Wales. In accordance with Section 1.3, the objectives of the Act are:

- a) *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*
- b) *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
- c) *to promote the orderly and economic use and development of land,*
- d) *to promote the delivery and maintenance of affordable housing,*
- e) *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
- f) *to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
- g) *to promote good design and amenity of the built environment*
- h) *to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*
- i) *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,*
- j) *to provide increased opportunity for community participation in environmental planning and assessment.*

For the reasons set out below, it is considered that the proposed development satisfies the above stated objects of the Act:

- The proposal renews outdated building stock. The new stock increases employment opportunities and delivers a residential form of accommodation in a well serviced area;
- The subject site does not pose any risk to human health, or none that cannot be remediated;
- Creation of additional jobs during the construction phase;
- Provision and maintenance of four (4) affordable apartments;

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

**BMAURBAN**

Statement of Environmental Effects  
6 Auburn Street, Point Frederick  
Project No # 111/22

- The proposal will result in the orderly and economic use and development of land;
- The proposed building promotes a high standard of environmental performance, incorporating the principles of ecologically sustainable development, while responding to the context and enhancing the qualities of the area; and
- Appropriate utility services are provided.

**5.2.2 Section 4.15 of the EP&A Act 1979**

Section 4.15(1) of the Act as amended specifies the matters which a consent authority must consider when determining a development application. The relevant matters for consideration under Section 4.15 of the Act are addressed in the Table below.

Section	Comment
Section 4.15(1)(a)(i) Any environmental planning instrument	Consideration of relevant instruments is discussed in Section 5
Section 4.15(1)(a)(ii) Any draft environmental planning instrument	The provision of any draft State Environmental Planning Policy is discussed at Section 5.6
Section 4.15(1)(a)(iii) Any development control plan	Consideration of relevant the development control plan is discussed in Section 5.7.
Section 4.15(1)(a)(iiia) Any planning agreement	Not relevant to this application.
Section 4.15(1)(a)(iv) Matters prescribed by the regulations	Refer to Section 5.3
Section 4.15(1)(b)	The likely impacts of the proposed development have been discussed throughout this Report, particularly Section 6 of this SEE.
Section 4.15(1)(c) The suitability of the site	The suitability of the site has been discussed throughout this Report, particularly within Section 6.8 of this SEE.
Section 4.15(1)(d) Any submissions	It is understood that the DA for the proposed development will be publicly notified as is statutorily required. Any submissions that are received during the notification period will need to be considered by Council and addressed within their assessment of the proposed development.
Section 4.15(1)(e) The public interest	The proposed development will increase housing choice by providing eight (8) residential apartments that will contribute to meeting the housing targets within the Gosford City Centre Precinct. The proposed development is located in proximity to public transport, as well as existing supportive services and facilities without resulting in significant environmental impacts.  The proposed development is therefore in the public interest.

Table 3: Section 4.15 of the EP&A Act 1979



### 5.2.3 Section 4.46 – Integrated Development

This section of the Act defines integrated development as matters which require consent from Council and one or more approvals under related legislation. In these circumstances, prior to granting consent Council must obtain from each relevant approval body their General Terms of Approval (GTA) in relation to the development.

The proposal does not trigger any matters relating to GTA's and therefore, is not deemed to constitute as an Integrated Development.

## 5.3 Environmental Planning and Assessment Regulations 2021

### 5.3.1. Section 61 – Additional matters that consent authority must consider

Section 61 of the EP&A Reg prescribes those additional matters that are to be taken into consideration by a consent authority in assessing and determining a DA for the purposes of Section 4.15(1)(a)(iv) of the EP&A Act. All demolition works will undertaken in accordance with the Australian Standard AS 2601—2001: *The Demolition of Structures*.

### 5.3.2. Section 69 – Compliance with Building Code of Australia and insurance requirements under the Home Building Act 1989

Any building work must be carried out in accordance with the requirements of the Building Code of Australia (BCA), pursuant to Section 61 of the EP&A Reg and can be conditioned as part of any development consent granted for the DA. A BCA report prepared by BCA Logic and Access report prepared by vista access architects accompanies this application.

## 5.4 State Environmental Planning Policies

### 5.4.1 State Environmental Planning Policy (Precincts-Regional) 2021

#### 5.4.1.1 Zoning and Permissibility (cl 5.13)

The State Environmental Planning Policy (Precincts—Regional) 2021 applies to the subject site which is identified as being within Zone R1 – General Residential Zone. The proposed development is best characterised as a 'residential flat building' which is a permissible form of development within the zone.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

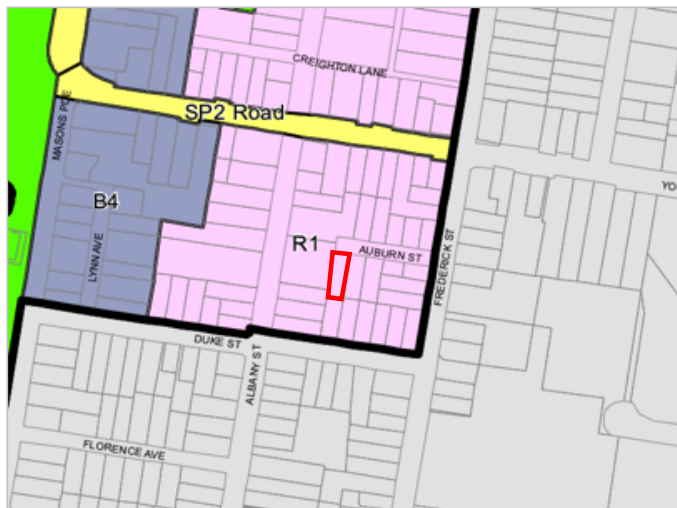


Figure 12: Zoning Map  
Source: SEPP (Precincts-Regional) 2021

Subject site   
 R1 General Residential

#### 5.4.1.2 Demolition requires development consent (cl. 5.17)

The proposal seeks the demolition of the existing dwelling and ancillary structures as detailed on the

#### 5.4.1.3 Height of Building's (cl. 5.25)

The maximum building height allowed under the relevant EPI, that being the Precincts-Regional SEPP. As shown on the extract from Height of Building map from the SEPP provided as **Figure 13** below, the subject site has a maximum height limit of 12 metres. The proposal seeks the provision of a maximum building height of 13.95m that departs from this standard. A 5.28 variation request accompanies this submission (Appendix A).

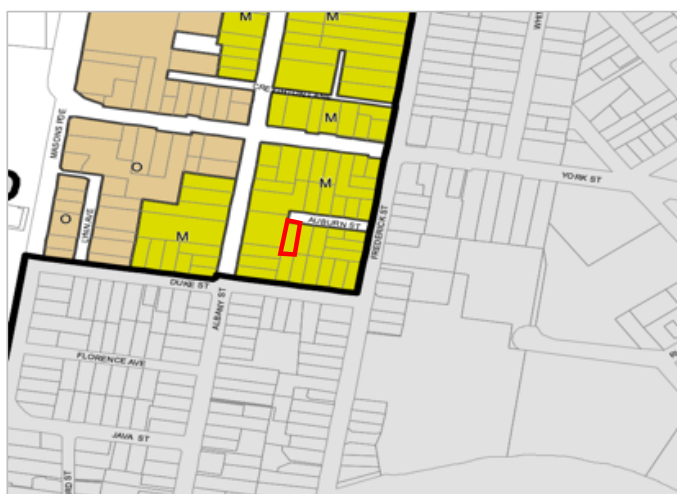




Figure 13: Height of Building's Map  
Source: SEPP (Precincts-Regional) 2021

Subject site   
 M 12

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

**5.4.1.3 Floor Space Ratio (cl. 5.26)**

The maximum FSR allowed under the relevant EPI, that being the Precincts-Regional SEPP. As shown on the extract from the FSR map from the SEPP provided as **Figure 14** below, the subject site has a maximum base FSR of 1.5:1. Notwithstanding the base FSR, the provisions of cl. 5.55 (3) of the SEPP prevail. This is discussed under the relevant succeeding section below.

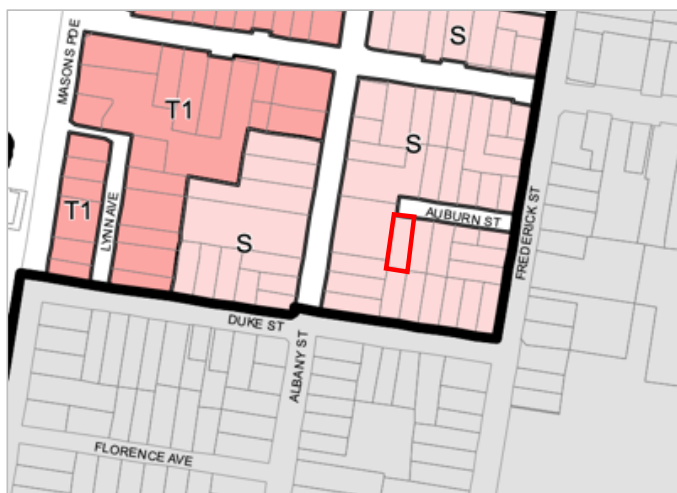
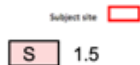


Figure 14: FSR Map  
Source: SEPP (Precincts-Regional) 2021



**5.4.1.3 Acid Sulfate Soils (cl. 5.39)**

The subject site is identified as being on land classified as (5) on the ASS planning map. This is demonstrated in **Figure 15** below being an extract from the SEPP.

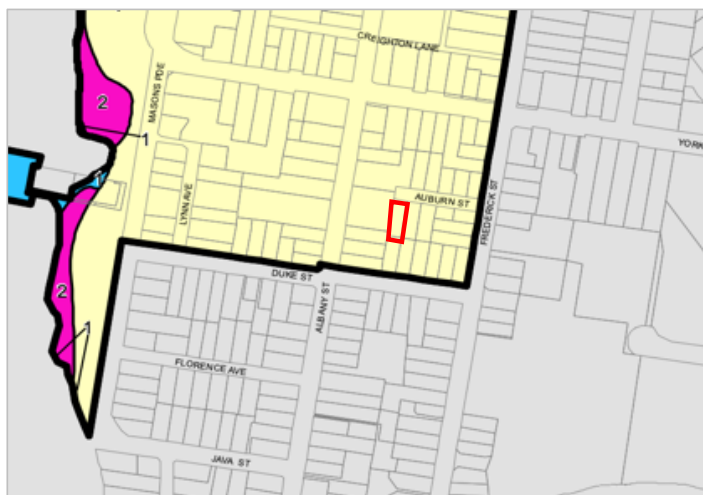


Figure 15: ASS Map  
Source: SEPP (Precincts-Regional) 2021



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Works pertaining to this development will involve excavation works to an RL.16.450 well above RL 5 (AHD) where these works would have the potential to lower the watertable below 1m AHD on adjacent Class 1, 2, 3 or 4 land.

In this regard, the proposal does not warrant the provision of an Acid Sulfate Soils preliminary assessment.

**5.4.1.4 Flood Planning (cl. 5.40)**

The subject site is not identified as being burdened by any form of flood affectation.

**5.4.1.5 Design Excellence (cl. 5.45)**

In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters—

- (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,
- (b) whether the form and external appearance of the development will improve the quality and amenity of the public domain,
- (c) whether the development is consistent with the objectives of sections 5.52 and 5.53,
- (d) any relevant requirements of applicable development control plans,
- (e) *how the development addresses the following matters—*
  - (i) *the suitability of the land for development,*
  - (ii) *existing and proposed uses and use mix,*
  - (iii) *heritage issues and streetscape constraints,*
  - (iv) *the relationship of the development with other development (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
  - (v) *bulk, massing and modulation of buildings,*
  - (vi) *street frontage heights,*
  - (vii) *environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
  - (viii) *the achievement of the principles of ecologically sustainable development,*
  - (ix) *pedestrian, cycle, vehicular and service access, circulation and requirements,*
  - (x) *the impact on, and any proposed improvements to, the public domain.*

**Response**

The subject site is zoned R1-Genral Residential Zone where residential flat building's are a contemplated form of development. The proposal seeks to replace a single detached dwelling with a high quality infill affordable residential flat building designed in response to the transitioning contextual character as observed across both the immediate and broader context.

The land does not contain any impediments which preclude the ability for this development to be carried out while there are no proximate heritage items whose value could be compromised as a result of the proposal.

The site is best described as isolated, confined between a large scale residential flat building nearing completion to the east and multi-dwelling housing development to the west.

The siting, scale and setbacks of the development is strongly reflective of the transitional built form character while the height breach is necessitated by the need to provide for greater levels of affordable housing in a well serviced accessible location. The building will provide for vertical and horizontal articulation, balcony design and fenestration

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

all of which will work in conjunction so as to ensure the building identifies as appropriately scaled, and a desired 'fit' for the locality.

The development successfully mitigates the potential for unreasonable amenity impacts to arise across neighbouring properties noting that a number of neighbouring properties will also over time, be demolished and redeveloped to a scale envisaged by the zoning and more generally, the precinct.

Accompanying this application are detailed plans/reports/analysis relevant to overshadowing and cross ventilation while the Basix certificate also provide as part of the DA package affirms the developments ability in achieving the required targets. The building has been designed in response to the isolated nature of the site, landform characteristics and transitional built form character.

The proposal seeks the provision of vehicular access/egress from the site directly from Auburn Street which as described in the accompanying traffic impact assessment prepared by CJP Traffic Consultants, will adhere to the RMS guidelines and Australian Standards.

A primary pedestrian entry point is provided from within the north-western corner of the site which directs occupants/visitors along a ramped path which returns into the central core of the building and into an appropriately sized lobby.

The provision of high quality landscaping is proposed across the site but most importantly, along the private/public domain street interface. A detailed landscaping plan prepared by *Zentih Landscape Design* accompanies the application. In brief, the landscape resolution for the site will comprise of trees, shrubs and grasses all of which will soften the built form and improve the landscaped character of the streetscape. A contiguous relationship at ground level is proposed between the landscaping treatments and private/common spaces which will in turn, will afford future residents and their visitors with a high level of user amenity.

#### **5.4.1.6 Key vistas and view corridors (cl. 5.53)**

The objective of this section is to protect and enhance key vistas and view corridors in Gosford City Centre while development consent must not be granted to development unless the consent authority is satisfied that the development is consistent with the objectives of this section.

From the observations made in relation to this matter, reliant on the site survey, our on-site inspection and architectural detailed information accompanying this application, it is not envisaged that the proposed development will result in an unreasonable level of view impact to neighbouring properties. Consideration was given to spatial built form relationships both current and envisaged, proximity and orientation of any noteworthy view and transitional built form character.

#### **5.4.1.7 Floor Space Ratio in Zone R1 (cl. 5.55)**

This section applies to land in Zone R1 General Residential.

(3) If a building for which the maximum floor space ratio on the Floor Space Ratio Map is as specified in Column 1 of the Table to this subsection—

- (a) is on a site area of less than 1,000 square metres, or  
(b) has no street frontage greater than 24 metres,  
the maximum floor space ratio for the building is the ratio specified opposite that ratio in Column 2 of that Table.

Column 1	Column 2
2:1 or less	0.75:1



The proposal seeks the provision of a gross floor area of 808m<sup>2</sup>, generating an FSR of 1.18:1 which demonstrates compliance with the FSR provisions prescribed in Division 1, Clause 17 of the Housing SEPP 2021.

#### **5.4.2 State Environmental Planning Policy (Resilience and Hazards) 2021**

##### **Chapter 4 – Remediation of Land**

Chapter 4 of this state policy applies to the whole of the State. The object of this chapter is to provide for a Statewide planning approach to the remediation of contaminated land. In accordance with the provisions of clause 4.6(1) of this state policy, Council must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, and if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.

Due to the existing long term residential land uses across the site, there is nothing to indicate that the site would be affected by soil contamination pertaining to its own use. Furthermore, a review of the EPA register of contaminated lands has not identified the site as being potentially impacted by any form of land contamination.

On this basis it is considered unlikely that a contamination risk is present on the site. The site is considered suitable for the proposed residential development.

#### **5.4.3 State Environmental Planning Policy (BASIX) 2004**

In accordance with the provisions of the State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004, a BASIX Certificate has been provided. The proposed development satisfies the requirements of the Certificate in terms of water, thermal comfort and energy efficiency.

#### **5.4.4 State Environmental Planning Policy (Biodiversity and Conservation) 2021**

##### **Chapter 2 – Vegetation in non-rural areas**

Chapter 2 of this state policy applies to the non-rural areas of the State inclusive of the subject local government area and aims to:

- (a) protect the biodiversity values of trees and other vegetation in non-rural areas of the State and*
- (b) preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.*

The proposal does not seek the removal of any trees from the site. Site planting is proposed in accordance with the landscape plan prepared by Zenith Landscape Design.

#### **5.4.5 State Environmental Planning Policy (Housing) 2021**

The Housing SEPP 2021 came into force on 26 November 2021 and in accordance with Clause 16 of the SEPP, In-Fill Affordable Housing is deemed a permissible form of development on the land.

Clause 17 of the SEPP sets out the maximum floor space taking into account the prescribed bonus while Clause 18 provides non-refusal discretionary standards. Clause 19 provides for a number of design requirements while Clause 20 identifies the ongoing application of SEPP 65 to applicable development. Clauses 21 and 22 relate to the use duration for affordable housing purposes and subdivision.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

The table below details how the development satisfies the relevant provisions pertaining to 'In-Fill' affordable' housing development.

SEPP Provisions	Complies/Comments ✓/x
<p><b>Clause 16 Development to which this Division Applies</b></p> <p>(1) This Division applies to development if—</p> <p>(a) the development concerned is permitted with consent under another environmental planning instrument, and</p> <p>(b) at least 20% of the gross floor area of the building resulting from the development will be used for the purposes of affordable housing.</p> <p>(c) for development on land in the Greater Sydney region, Newcastle region or Wollongong region—all or part of the development is within an accessible area, and</p> <p><b>accessible area means land that is within:</b></p> <p>(a) 800 metres walking distance of a public entrance to a railway station or a wharf from which a Sydney Ferries ferry service operates, or</p> <p>(b) 400 metres walking distance of a public entrance to a light rail station or, in the case of a light rail station with no entrance, 400 metres walking distance of a platform of the light rail station, or (c) 400 metres walking distance of a bus stop used by a regular bus service (within the meaning of the <a href="#">Passenger Transport Act 1990</a>) that has at least one bus per hour servicing the bus stop between 06.00 and 21.00 each day from Monday to Friday (both days inclusive) and between 08.00 and 18.00 on each Saturday and Sunday.</p>	<p align="center">✓</p> <p>Residential Flat Buildings are a permitted form of development in the R1 – General Residential Zone.</p> <p>Four (4) of the eight (8) dwellings are nominated as affordable equating to 50%.</p> <p>The site is located in an accessible area as it is located approximately 140m walking distance south-east of the site, which is serviced by the 42 service. The 42 service operates a loop service 7 days per week between Gosford and Point Frederick.</p> <p>In addition, there is also a bus stop on York Street (Central Coast Highway) which is located approximately 280m walking distance north-east of the site. It is serviced daily by the 17, 18, 19, 20, 21, 22, 23, 28, 43, 44, 63, 64, 65, 66A, 66C, 67 &amp; 68 services, many of which provide connection to Gosford railway station.</p>
<p><b>Clause 17 Floor Space Ratios</b></p> <p>(1) The maximum floor space ratio for development to which this Division applies is the maximum permissible floor space ratio for residential accommodation on the land plus an <b>additional floor space ratio</b> of—</p> <p>(a) if the maximum permissible floor space ratio is 2.5:1 or less—</p>	<p align="center">✓</p> <p>Four (4) dwellings have been allocated as affordable housing. The volume of GFA allocated to these units is 404m<sup>2</sup>, which equates to 50% of the GFA of the overall development relevant to dwelling provision across the building.</p>

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

	<p>(i) if at least 50% of the gross floor area of the building resulting from the development will be used for affordable housing—0.5:1, or</p> <p>(ii) if less than 50% of the gross floor area of the building will be used for affordable housing—Y:1, where—</p> <p><b>AH</b> is the percentage of the gross floor area of the building that is used for affordable housing.</p> <p><b>Y</b> = <math>AH \div 100</math></p>	<p>In this regard, a Floor Space Ratio of 1.25:1 is applicable to the site taking into account the base FSR rate of 0.75:1 and the 0.5:1 bonus afforded by the provisions of this clause.</p> <p>The proposal complies with the maximum FSR prescribed to the land in that an FSR of 1.18:1 is provided to the development.</p>
<b>Clause 18 STANDARDS THAT CANNOT BE USED TO REFUSE CONSENT</b>		
<b>Site Area</b>	If the site area on which it is proposed to carry out the development is at least 450 square metres,	✓  The site comprises of an area of 682.2m <sup>2</sup>
<b>Landscape Area</b>	<p>if—</p> <p>(i) in the case of a development application made by a social housing provider—at least 35 square metres of landscaped area per dwelling is provided, or</p> <p>(ii) in any other case—at least 30 per cent of the site area is to be landscaped,</p>	✓  205m <sup>2</sup> of the site or 30% is nominated as landscaped area.
<b>Deep Soil Zones</b>	<p>(d) a deep soil zone on at least 15% of the site area, where—</p> <p>(i) each deep soil zone has minimum dimensions of 3m, and</p> <p>(ii) if practicable, at least 65% of the deep soil zone is located at the rear of the site,</p>	✓  114m <sup>2</sup> or 16.7% of the site area is of a soil depth sufficient to support the growth of trees and shrubs. This area comprises of predominant dimension of 3m.
<b>Solar Access</b>	if living rooms and private open spaces for a minimum of 70 per cent of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.	✓  The accompanying solar access diagrams prepared by Fuse Architects demonstrate that the requisite amount of solar access will be met across the development.
<b>Parking</b>	<p>(g) if paragraph (f) does not apply—</p> <p>(i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces, or</p> <p>(ii) for each dwelling containing 2 bedrooms—at least 1 parking space, or</p>	✓  The proposed development will not be made by a social housing provided and therefore, one (1) space is required for every two (2) bedroom apartment, totalling eight (8) spaces. The proposal provides for a total of eight (8) residential spaces.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

	(iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces,	
<b>Residential Flat Building's</b>	(h) for development for the purposes of residential flat buildings—the minimum internal area specified in the Apartment Design Guide for each type of apartment,	<p align="center">✓</p> <p>Each apartment will comprise of minimum areas as applicable to two (2) bedroom dwellings being 101m<sup>2</sup>, which exceeds the 75m<sup>2</sup> as prescribed by the ADG.</p>
<b>CI.19– DESIGN REQUIREMENTS</b>		
<p>(1) Development consent must not be granted to development to which this Division applies unless the consent authority has considered the following, to the extent to which they are not inconsistent with this Policy—</p> <p>(a) the <i>Seniors Living Policy: Urban Design Guidelines for Infill Development</i> published by the Department of Infrastructure, Planning and Natural Resources in March 2004,</p> <p>(b) for development for the purposes of dual occupancies, manor houses or multi dwelling housing (terraces)—the Low Rise Housing Diversity Design Guide.</p>		<p align="center">✓</p> <p>Clause 19 (Design Requirements) of the Housing SEPP provides that the consent authority must not consent to development for in-fill affordable housing unless it has taken into consideration the provisions of the Seniors Living Policy: Urban Design Guidelines for Infill Development published by the Department of Infrastructure, Planning and Natural Resources in March 2004.</p> <p>Whilst the overall intent of the SEPP is to promote development for the purpose of affordable housing, Clause 19 is a safeguard to ensure that such developments are compatible with their surroundings, provide a satisfactory level of internal amenity, and respect the privacy and amenity enjoyed by neighbouring properties.</p> <p>This design scheme provides a building with a bulk equivalent to an FSR of 1.18:1 and height of 13.95m. The resulting height marginally exceeds the maximum 12m prescribed to the land however, a number of environmental planning grounds have been identified in the accompanying 5.28 variation (Appendix A) which serve to justify the breach.</p> <p>Additionally, the building noting its isolated and therefore constrained nature, observes acceptable levels of building setback across all building peripheries.</p> <p>The siting and scale of the development responds to the sites opportunities while appropriately mitigating any unreasonable level of amenity impact potentially incurred by neighbouring properties. The proposal provides a front setback arrangement that is not discordant with the setting while the visual dominance of car parking on the streetscape has been minimised through the provision of all required carparking within a subterranean basement.</p>

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

	<p>Impacts on neighbours have been as far as practicable minimised while the extent of deep soil provided along the critical site peripheries will facilitate for the provision of a generous level of planting. This design outcome will serve to create an appropriate balance between built form and landscaped elements as they will be observed from both neighbouring properties and the public domain.</p> <p>The building facilitates the provision of a high quality living environment that will effectively manage impacts on both the built and natural environments. The development provides a good quality design, which is satisfactory with regard to the provisions of the <i>Seniors Living Policy: Urban Design Guidelines for Infill Development</i>.</p>
<b>CL20 – CONTINUED APPLICATION OF SEPP 65</b>	
Nothing in this Policy affects the application of State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development to residential development to which this Division applies.	✓  The proposal has been designed in response to the Design Quality Principles of SEPP 65. This is affirmed in the Verification Statement prepared by Fuse Architects accompanying this application.
<b>CI 21 – MUST BE USED FOR AFFORDABLE HOUSING FOR 15 YEARS</b>	
<p>(1) Development consent must not be granted under this Division unless the consent authority is satisfied that for a period of at least 15 years commencing on the day an occupation certificate is issued—</p> <p>(a) the affordable housing component of the residential development will be used for affordable housing, and</p> <p>(b) the affordable housing component will be managed by a registered community housing provider.</p> <p>(2) Subsection (1) does not apply to development on land owned by a relevant authority or to a development application made by, or on behalf of, a public authority.</p> <p>(3) In this section—</p> <p><b>affordable housing component</b>, in relation to development to which this Division applies, means the dwellings used for the purposes of affordable housing in accordance with section 16(1)(b).</p>	✓  A consent condition may be imposed to reflect this requirement.
<b>CI 22 Subdivision permitted with consent</b>	
Land on which development has been carried out under this Division may be subdivided with development consent.	N/A  The proposal does not seek any form of land subdivision.



#### 5.4.6 State Environmental Planning Policy (Design Quality of Residential Apartments)

##### Clause 4 – Application of Policy

This Policy aims to improve the design quality of residential flat development to:

- *Ensure such buildings contribute to sustainable development.*
- *Provide sustainable housing in social and environmental terms.*
- *Achieve better built form and aesthetics of buildings, streetscapes and the public spaces they define.*
- *Better satisfy the increasing demand, changing social and demographic profile of the community*
- *Maximise amenity, safety and security for the benefit of occupants and the wider community.*
- *Minimise the consumption of energy from non-renewable resources.*

To support these aims the SEPP introduces nine (9) design quality principles. These principles do not generate design solutions but provide a guide to achieving good design and the means of evaluating the merit of proposed solutions. An assessment of the proposed development, against these design principles and the Apartment Design Guide (ADG) criteria is contained in the SEPP 65 Design Verification Statement prepared by Fuse Architects which has been separately submitted and forms part of this development application.

In summary, the proposed development provides a positive contribution to its locality in terms of its design quality, the internal and external amenity it provides and an increase in housing choice and stock in the area.

Furthermore, the proposed development is consistent with the aims and relevant provisions of the ADG.

In terms of how the proposal responds to the relevant design criteria specified in the Apartment Design guide, this has also been prepared by Fuse Architects and accompanies the SEPP 65 Design Verification Statement (Separately submitted). Overall, the proposed development achieves an acceptable level of compliance with the critical provisions of the Apartment Design Guide as detailed in **Table 4 below**.

ADG	Objective	Design Criteria	Achieves Design Criteria
3D: Communal and public open space	Communal open space to enhance residential amenity, encourage a range of activities, be visually appealing and to provide opportunities for landscaping. Communal open space should be designed to maximise safety.	25% of site area (minimum)  Minimum of 50% direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June (mid- winter)	<b>Merit</b>  While the extent of communal open space proposed to the development fails to meet the 25% prescribed by the ADG, it does so in an inconsequential manner.  The ADG informs that the provision of the requisite amount of COS is not always achievable, most relevantly, on small lots. The ADG provides additional criteria for development that cannot achieve the

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

			<p>minimum area, so as to offset any COS dispensation. One such criteria is the demonstration of the proximity of public open space from the development.</p> <p>The site enjoys proximate access to an area of public open space in the form of Lions Park and the Gosford Olympic Swimming Pool, located a mere 600m walking distance from the site to the north-west.</p> <p>In this regard, the purely numerical shortfall in terms of communal open space provision is supportable on merit grounds.</p>												
3E: Deep soil zones	To provide areas on the site that allow for and support healthy plant and tree growth.	<table><tr><td>Less than 650m<sup>2</sup></td><td>-</td><td>7%</td></tr><tr><td>650m<sup>2</sup> – 1,500m<sup>2</sup></td><td>3m</td><td></td></tr><tr><td>Greater than 1,500m<sup>2</sup></td><td>6m</td><td></td></tr><tr><td>Greater than 1,500m<sup>2</sup> with significant existing tree cover</td><td>6m</td><td></td></tr></table>	Less than 650m <sup>2</sup>	-	7%	650m <sup>2</sup> – 1,500m <sup>2</sup>	3m		Greater than 1,500m <sup>2</sup>	6m		Greater than 1,500m <sup>2</sup> with significant existing tree cover	6m		<p><b>Yes</b></p> <p>The development seeks the provision of 114m<sup>2</sup> of deep soil, equating to 16.7% of the site, noting that the provisions of the Housing SEPP override the ADG requirement.</p>
Less than 650m <sup>2</sup>	-	7%													
650m <sup>2</sup> – 1,500m <sup>2</sup>	3m														
Greater than 1,500m <sup>2</sup>	6m														
Greater than 1,500m <sup>2</sup> with significant existing tree cover	6m														
3F-1 Visual Privacy	"Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and visual privacy".	<table><tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>Up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table>	Up to 12m (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	<p><b>Merit</b></p> <p>Refer to the discussion in Part 6.2.5 of the SEE.</p>			
Up to 12m (4 storeys)	6m	3m													
Up to 25m (5-8 storeys)	9m	4.5m													
Over 25m (9+ storeys)	12m	6m													

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

4A: Solar Access	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	70% of total apartments (minimum)  A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter  A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.		<b>Yes</b>  8 of the 8 apartments will receive a minimum of two (2) hours of solar access equating to 100%.											
4B: Natural Ventilation	To maximise natural cross ventilation for comfortable indoor environments	60% of total apartments (minimum)		<b>Yes.</b>  All 8 of the apartments or 100% are capable of being naturally cross ventilated											
4C: Ceiling Height	Improve internal dwelling amenity.	<table><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>If located in mixed use areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr><tr><td colspan="2">These minimums do not preclude higher ceilings if desired.</td></tr></table>	Habitable rooms	2.7m	Non-habitable	2.4m	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 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.		<b>Yes</b>  All proposed apartments will comprise of areas that comply with the ADG Part 4C requirements.
Habitable rooms	2.7m														
Non-habitable	2.4m														
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area														
Attic spaces	1.8m at edge of room with a 30 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	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.	<table><tr><td>Studio</td><td>35m<sup>2</sup></td></tr><tr><td>1 bedroom</td><td>50m<sup>2</sup></td></tr><tr><td>2 bedroom</td><td>70m<sup>2</sup></td></tr><tr><td>3 bedroom</td><td>90m<sup>2</sup></td></tr></table>	Studio	35m <sup>2</sup>	1 bedroom	50m <sup>2</sup>	2 bedroom	70m <sup>2</sup>	3 bedroom	90m <sup>2</sup>	<b>Yes</b>  All proposed apartments will comprise of areas that comply with the ADG Part 4D requirements.				
Studio	35m <sup>2</sup>														
1 bedroom	50m <sup>2</sup>														
2 bedroom	70m <sup>2</sup>														
3 bedroom	90m <sup>2</sup>														
4E: Private Open Space and Balconies	Apartments provide appropriately sized private open space and balconies to enhance residential amenity.	<table><tr><td>Studio apartment</td><td>4m<sup>2</sup></td><td>-</td></tr><tr><td>1 bedroom apartment</td><td>8m<sup>2</sup></td><td>2m</td></tr><tr><td>2 bedroom apartment</td><td>10m<sup>2</sup></td><td>2m</td></tr><tr><td>3+ bedroom apartment</td><td>12m<sup>2</sup></td><td>2.4m</td></tr></table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m.</p>	Studio apartment	4m <sup>2</sup>	-	1 bedroom apartment	8m <sup>2</sup>	2m	2 bedroom apartment	10m <sup>2</sup>	2m	3+ bedroom apartment	12m <sup>2</sup>	2.4m	<b>Yes</b>  The ADG objectives for Apartment size are achieved in the proposal.  All apartments comply with the minimum primary area criteria while a number of the apartments have private open space areas that comply with the minimum area requirement.
Studio apartment	4m <sup>2</sup>	-													
1 bedroom apartment	8m <sup>2</sup>	2m													
2 bedroom apartment	10m <sup>2</sup>	2m													
3+ bedroom apartment	12m <sup>2</sup>	2.4m													
4G: Storage	Adequate, well designed storage is to be provided in each apartment	<table><tr><td>Studio apartment</td><td>4m<sup>2</sup></td></tr><tr><td>1 bedroom apartment</td><td>6m<sup>2</sup></td></tr><tr><td>2 bedroom apartment</td><td>8m<sup>2</sup></td></tr><tr><td>3+ bedroom apartment</td><td>10m<sup>2</sup></td></tr></table>	Studio apartment	4m <sup>2</sup>	1 bedroom apartment	6m <sup>2</sup>	2 bedroom apartment	8m <sup>2</sup>	3+ bedroom apartment	10m <sup>2</sup>	<b>Yes</b>  All proposed apartments will comprise of storage areas that comply with				
Studio apartment	4m <sup>2</sup>														
1 bedroom apartment	6m <sup>2</sup>														
2 bedroom apartment	8m <sup>2</sup>														
3+ bedroom apartment	10m <sup>2</sup>														

			the ADG Part 4G requirements.
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Table 4: ADG core compliance summary

## 5.6 The Provisions of any exhibited Draft Environmental Planning Instruments

### 5.6.1 Draft Environment SEPP

The planning provisions for waterways, catchments, world heritage and urban bushland are currently contained in seven State Environmental Planning Policies (SEPPs), the Standard Instrument – Principal Local Environmental Plan (Standard Instrument), and in Ministerial Directions for plan making issued under the Environmental Planning and Assessment Act 1979.

An Explanation of Intended Effect for the SEPP (Environment) was publicly notified between 31 October 2017 to 31 January 2018. The SEPP (Environment) will integrate provisions from seven existing SEPPs relating to catchments, waterways, urban bushland and world heritage, and to reduce the complexity and streamline the planning system.

The proposed SEPP (Environment) will:

- *Encourage the proper management, development and conservation of natural resources and the protection of the environment, in line with the objectives of the Act*
- *Enable growth that maintains and enhances the health and integrity of our natural and cultural heritage for the benefit and enjoyment of the present community and for future generations*
- *Streamline development assessment by identifying and considering environmental values and constraints at the earliest possible stage in the development decision making process, using evidenced based planning methods*
- *Promote ecologically sustainable development that supports a balanced approach to the use of land and natural resources, and provides for long term environmental, economic and social wellbeing*
- *Adopt a risk based approach to minimise cumulative negative impacts of development on both the immediate site and on a surrounding area or region*
- *The proposed SEPP fits within a range of plans and strategies including A Plan for Growing Sydney, draft District Plans, Regional Plans, local environmental plans, Ministerial Directions, and development control plans*

Based on the information of the Explanation of Intended Effect of the SEPP (Environment), it is considered that the proposal is consistent with the draft planning instrument being, the proposed SEPP (Environment).

## 5.7 Development Control Plans

### 5.7.1 Central Coast Development Control Plan 2022

The Central Coast DCP 2022 is the relevant document pertaining to this development. The manner in which the proposal responds to the relevant requirements of the DCP are detailed in the table below.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects  
6 Auburn Street, Point Fredrick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
<b>Chapter 2.3 – RESIDENTIAL FLAT BUILDING'S</b>			
<b>2.3.2 Site and Context Analysis</b>	A Site Analysis Plan shall be submitted with any Development Application in accordance with Appendix A – Submission Information	A site analysis plan has been prepared by fuse architects accompanying this application.	✓
<b>2.3.3 BUILDING SCALE AND DENSITY</b>			
<b>2.3.3.1 Building Height</b>	Central Coast LEP 2022 contains a Height of Building Map for areas within the Local Government Area (LGA) where residential flat development consisting of three or more storeys in height can be built and provides the relevant considerations.	The proposal marginally exceeds the prescribed allowable height for the development. A variation request is provided as Appendix A which details that there are a number of site specific environmental planning grounds specific to the development and therefore, justify the variation.	Merit
<b>2.3.3.2 Density – Floor Space Ratio</b>	Central Coast LEP 2022 contains a Floor Space Ratio map and the relevant considerations for certain areas within the Central Coast LGA.	The proposal complies with the maximum FSR standard prescribed by way of the Housing SEPP provisions. This was addressed in part 5.4.5 of this statement.	✓
<b>2.3.3.3 Natural Landscape Area</b>	A minimum 25% of site area at ground level shall be 'soft' landscaping, excluding all hardstand areas. Open space areas and setback areas may be included in this calculation only where these do not include hardstand surfaces.	205m <sup>2</sup> of the site or 30% is nominated as landscaped area, designed in response to the Housing SEPP provisions pertaining to this form of development.	✓
<b>2.3.4 BUILDING LINES</b>			
<b>2.3.4.1 Setbacks for Residential Flat Buildings – 3 Storeys or more</b>	Front Setback  6 metres applies to all aspects of the development, with the exception of a portico, or an approved structure required for a waste collection area.	A 6m front set back is proposed as measured to the external face of the building.	✓



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
	<p>Side and rear setbacks</p> <p>i First to fourth Storey: 6.0 m</p> <p>ii Fifth to eighth Storey: 9.0 m</p> <p>iii Ninth storey &amp; above: 12.0 m</p> <p><i>Note: No more than 4 consecutive storeys of the building shall be at the same setback.</i></p>	<p>As a result of the isolated and constrained nature of the site, the imposition of 6 metre side setbacks would sterilise the development potential of this site for the purposes of this form of development.</p> <p>Notwithstanding the numerical dispensation being sought, the development maintains an appropriate response to the 3F visual privacy provisions of the ADG. This is discussed in more detail in the later stages of this document.</p> <p>Furthermore, the siting, scale and spatial proportions of the proposed development will continue to present as visually cohesive and as an orderly response to the setting taking into consideration both existing transitional built forms.</p>	✓
2.3.4.3 Setbacks – General Considerations	Setbacks are to be considered with the Visual Privacy Design Criteria listed under Objective 3F-1 of the ADG. Where only non-habitable rooms front an external boundary Council may consider a reduction in the setback requirements in accordance with the ADG visual privacy provisions.	An analysis that provides a detailed consideration with respect to the proposals ability in adhering to the design objectives in part 3F (Visual Privacy) of the ADG, is provided in section 6.2.5 of this SEE.	✓
	Setback areas shall be suitably landscaped to enhance the appearance of the development and soften hardstand areas of the site	Notwithstanding the constrained nature of the site, the front setback offers to provide a suitable balance between built form and landscape elements. A 21m <sup>2</sup> deep soil a landscaped area is provided within the north-western corner of the site where a direct relationship with the Auburn Street public domain is observed.	✓
2.3.5 BUILT FORM AND ARTICULATION			

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
<b>2.3.5.1 Facades &amp; Articulation</b>	<p>Facades are to be articulated in length and height. Monotonous and unbroken lengths of wall exceeding 10 metres in length and 3 metres in height shall not be permitted. In development of two or more storeys, physical design elements shall be used to provide visual interest to the building. These elements may include roof, wall and eave projections and indentations roofed decks, pergolas, awnings and other permanent shading structures, etc. A mixture of building materials including masonry, timber and glass is encouraged.</p>	<p>The building facades incorporate an appropriate degree of articulation in the form of splayed walls, projecting and inset balconies, architectural features and material combinations. A palette of both traditional and contemporary materials will be employed to the proposal considered complementary to the tactility of the built forms within the streetscape.</p>	✓
<b>2.3.5.2 Roof Elements</b>	<p>Roof design is to respond to the orientation of the site. For example by using eaves and skillion roofs to respond to solar access.</p>	<p>The uppermost building level differs in terms of form, materiality and expression from the preceding levels below. This design outcome creates a clear distinction between the building base and recessed uppermost level in line with the prescribed control, while influencing the extent of perceptible built form noting the building's transitional location between high and medium density land.</p> <p>Services are predominately contained within the curtilage of the building and do not present as adverse or identifiable features.</p> <p>The building includes a low profile parapet roof which serves to mitigate the extent of built form expression across this highest point. Whilst development in the vicinity of the site mainly present with a hip or gable ended tile roof presentation to the street, more recent development in the wider locality have low profile and or flat/parapet roofs in a similar vein to the proposal. It is also noted that the hip and gable ended roof forms in the vicinity of the site vary considerably in terms of colour, shape and pitch. Given that there is no consistent rhythm of roof forms in the streetscape, the proposed roof form is deemed reasonable.</p>	✓

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022																			
Ref	Design Solution	Proposed	✓/x																
<b>2.3.6 RESIDENTIAL AMENITY</b>																			
<b>2.3.6.1 Views</b>	New development shall be designed to minimise loss of views from adjoining and adjacent properties identified in the site analysis process, while still providing opportunities for views from the proposed development.	<p>The proposal demonstrates optimum capacity of the site to accommodate a built form that minimises the loss of views from neighbouring buildings, particularly within the context of the area being in transition to higher density development, as well as in consideration with the planning controls applicable to the subject site, to those sites which permit a much greater scale in built form.</p> <p>The proposed development achieves good balance between minimising views and benefitting from the planning controls applicable to the site, providing a high quality built form which respects established views.</p> <p>Accordingly, in our opinion, the proposal is appropriate in respect of views.</p>	✓																
<b>2.3.6.2 Visual Privacy</b>	Direct overlooking of internal living areas and private open space to surrounding dwellings shall be minimised by building layout, location and design of windows and balconies and screening devices.	<p>Window orientation ensures privacy of neighbours is not unduly compromised. The design limits the number of windows oriented towards neighbouring properties; however, sufficient openings for ventilation and daylight access remain.</p> <p>Furthermore, the development has been designed to incorporate the strategic placement of balconies, windows and primary area of private open space in order to maximise visual privacy and prevent unreasonable opportunities for overlooking into adjoining properties.</p>	✓																
	Building separation distances are identified within Table 3 below:	Refer to the discussion in Part 6.2.5 of the SEE.	✓																
	<table border="1"> <thead> <tr> <th>Building Height</th><th>Between Habitable Rooms</th><th>Between Habitable Room and Non-Habitable Room</th><th>Between Non-Habitable Rooms</th></tr> </thead> <tbody> <tr> <td>Up to 4 storeys</td><td>12 metres</td><td>9 metres</td><td>6 metres</td></tr> <tr> <td>5 to 8 storeys</td><td>18 metres</td><td>13 metres</td><td>9 metres</td></tr> <tr> <td>9 storeys +</td><td>24 metres</td><td>18 metres</td><td>12 metres</td></tr> </tbody> </table>	Building Height	Between Habitable Rooms	Between Habitable Room and Non-Habitable Room	Between Non-Habitable Rooms	Up to 4 storeys	12 metres	9 metres	6 metres	5 to 8 storeys	18 metres	13 metres	9 metres	9 storeys +	24 metres	18 metres	12 metres		
Building Height	Between Habitable Rooms	Between Habitable Room and Non-Habitable Room	Between Non-Habitable Rooms																
Up to 4 storeys	12 metres	9 metres	6 metres																
5 to 8 storeys	18 metres	13 metres	9 metres																
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**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Fredrick  
Project No # 111/22

Central Coast Development Control Plan 2022																					
Ref	Design Solution	Proposed	✓/x																		
2.3.6.3 Acoustic Privacy	Site layout should separate active recreational areas, parking areas, vehicle accessways and service equipment areas from bedroom areas of dwellings.	The development has been designed to orient any noise sensitive equipment in such manner that will not result in any unreasonable impact to the acoustic privacy of adjoining properties and will in turn afford acoustic privacy to the occupants of the development.  This is further affirmed in the Acoustic report prepared by PWNA accompanying this application.	✓																		
	Development adjacent to potential external noise sources shall minimise the entry of that noise through building design and external wall treatment. Measures can include sensitive window and balcony placement and offsets, window screening, room orientation and thoughtful location.	The subject site is not located in proximity to a potentially problematic noise source.	✓																		
	Details regarding plant and equipment room locations, air conditioning arrangements and waste collection arrangements are to be provided and shall address potential noise impacts.	These requirements may be formalised by way of consent conditions.	✓																		
2.3.6.4 Private Open Space and Balconies	All apartments are required to have primary balconies as follows: <table><tr><th>Building Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>1. Studio</td><td>40m<sup>2</sup></td><td></td></tr><tr><td>2. 1 bedroom</td><td>40m<sup>2</sup></td><td>2m</td></tr><tr><td>3. 2 bedroom</td><td>50m<sup>2</sup></td><td>2m</td></tr><tr><td>4. 3 or more bedrooms</td><td>60m<sup>2</sup></td><td>2.4m</td></tr><tr><td>5. Ground level or podium</td><td>100m<sup>2</sup></td><td>3m</td></tr></table>	Building Type	Minimum Area	Minimum Depth	1. Studio	40m <sup>2</sup>		2. 1 bedroom	40m <sup>2</sup>	2m	3. 2 bedroom	50m <sup>2</sup>	2m	4. 3 or more bedrooms	60m <sup>2</sup>	2.4m	5. Ground level or podium	100m <sup>2</sup>	3m	All proposed balconies comply with the ADG prescribed requirements for balcony spaces.	✓
	Building Type	Minimum Area	Minimum Depth																		
	1. Studio	40m <sup>2</sup>																			
2. 1 bedroom	40m <sup>2</sup>	2m																			
3. 2 bedroom	50m <sup>2</sup>	2m																			
4. 3 or more bedrooms	60m <sup>2</sup>	2.4m																			
5. Ground level or podium	100m <sup>2</sup>	3m																			
	Courtyards shall not exceed a maximum grade of 1:14 to optimise useability for residents.	The proposal complies with this requirement.	✓																		
	Private open space areas are to be directly accessible from a living area within the dwelling.	All proposed balcony spaces are directly accessible from each respective living space.	✓																		

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
<b>2.3.6.5 Sunlight Access</b>	Living rooms and private open spaces for 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.	8 of the 8 apartments will receive a minimum of two (2) hours of solar access equating to 100%. Sun Eye diagrams depicting solar access within the proposed development at hourly intervals between 9am-3pm at the Winter Solstice also accompany the DA.	✓
	New development shall have due regard for maintaining solar access to adjoining properties and not cause excessive overshadowing. At least 50% of required private open space areas on adjoining lands shall receive at least three hours unobstructed sunlight between the hours of 9 am and 3 pm on June 21 (winter solstice).	The shadow diagrams submitted with the DA indicate that shadows cast by the proposed development will not compromise existing levels of solar access to the main living area windows and main private open spaces associated with the existing dwellings adjoining the site.	✓
	A weather protected entrance shall be provided to each dwelling.	All dwellings are accessed via an internal lobby therefore affording the future occupants with desirable levels of weather protection.	✓
	Consideration should be given to the provision of natural light and ventilation for excavated car parking areas	The proposed carpark is semi-inground so will therefore, facilitate for the provision of a degree of natural light and ventilation.	✓
<b>2.3.6.6 Communal (and public) Open Space</b>	Communal open spaces is to be provided for developments with more than ten dwellings	The proposal provides for a total of eight (8) dwelling's.	N/A
	Minimum 25% of the site area at ground level shall be soft landscaping (planted areas).	214m <sup>2</sup> of the site or 30% is nominated as landscaped area in accordance with the provisions set out by the Housing SEPP 2021.	✓
	Communal open space areas shall be landscaped and include the provision of facilities such as barbecues, outdoor seating, tennis court, playground equipment or a swimming pool, as appropriate to the scale of the development. Details are to be included in the development application.	Not applicable	N/A



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022													
Ref	Design Solution	Proposed	✓/x										
	The required communal open space area shall not be provided within the front building setback area. Front setback areas are to be generally reserved for landscaping works.	Not applicable	N/A										
	Roof-top communal open space may be considered for residential flat developments only where proposed in addition to the required communal open space at ground level. The implications of rooftop open space areas on the overall design of the development, and on privacy and view sharing shall be addressed in the development application.	Not applicable	N/A										
2.3.6.7 Storage	<p>Internal design of dwellings shall incorporate adequate storage space relative to the number of bedrooms within the dwelling, to cater for the needs of occupants. This may be provided in the form of an internal cupboard, or alternatively as a designated area within the garage (refer Table 5):</p> <table><tr><th>Dwelling Type</th><th>Required internal area</th></tr><tr><td>i Studio</td><td>35m<sup>2</sup></td></tr><tr><td>ii 1 bedroom</td><td>50m<sup>2</sup></td></tr><tr><td>iii 2 bedroom</td><td>70m<sup>2</sup></td></tr><tr><td>iv 3 bedroom or more</td><td>90m<sup>2</sup> and an additional 12 m<sup>2</sup> for each additional bedroom (greater than 3)</td></tr></table>	Dwelling Type	Required internal area	i Studio	35m <sup>2</sup>	ii 1 bedroom	50m <sup>2</sup>	iii 2 bedroom	70m <sup>2</sup>	iv 3 bedroom or more	90m <sup>2</sup> and an additional 12 m <sup>2</sup> for each additional bedroom (greater than 3)	The proposal provides for storage areas designed in response to the ADG requirements. Designated areas within the basement garage are provided and take the form of either over bonnet storage and or independent storage rooms.	✓
Dwelling Type	Required internal area												
i Studio	35m <sup>2</sup>												
ii 1 bedroom	50m <sup>2</sup>												
iii 2 bedroom	70m <sup>2</sup>												
iv 3 bedroom or more	90m <sup>2</sup> and an additional 12 m <sup>2</sup> for each additional bedroom (greater than 3)												
2.3.6.8 Common Circulation and Spaces	The maximum number of dwellings off a circulation core on a single level should generally not be greater than eight.	A maximum of two dwellings are provided of each circulation core.	✓										
2.3.6.9 Apartment Size and Layout	<p>Apartments are required to have the following minimum internal areas:</p> <table><tr><th>Dwelling Type</th><th>Required internal area</th></tr><tr><td>i Studio</td><td>35m<sup>2</sup></td></tr><tr><td>ii 1 bedroom</td><td>50m<sup>2</sup></td></tr><tr><td>iii 2 bedroom</td><td>70m<sup>2</sup></td></tr><tr><td>iv 3 bedroom or more</td><td>90m<sup>2</sup> and an additional 12 m<sup>2</sup> for each additional bedroom (greater than 3)</td></tr></table>	Dwelling Type	Required internal area	i Studio	35m <sup>2</sup>	ii 1 bedroom	50m <sup>2</sup>	iii 2 bedroom	70m <sup>2</sup>	iv 3 bedroom or more	90m <sup>2</sup> and an additional 12 m <sup>2</sup> for each additional bedroom (greater than 3)	All apartments have been designed so as to meet the minimum internal size requirement pertaining to two bedroom dwellings.	✓
Dwelling Type	Required internal area												
i Studio	35m <sup>2</sup>												
ii 1 bedroom	50m <sup>2</sup>												
iii 2 bedroom	70m <sup>2</sup>												
iv 3 bedroom or more	90m <sup>2</sup> and an additional 12 m <sup>2</sup> for each additional bedroom (greater than 3)												
2.3.6.10 Ceiling Heights	Apartments are required to have the following ceiling heights:	All apartments comprise of internal floor to ceiling heights that are compliant with the provisions of the ADG.	✓										

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022															
Ref	Design Solution	Proposed	✓/x												
	<table><tr><th>Dwelling Type</th><th>Height</th></tr><tr><td>i. Habitable rooms</td><td>2.7m</td></tr><tr><td>ii. Non-habitable</td><td>2.4m</td></tr><tr><td>iii. 2 storey apartments</td><td>2.7m for main living area floor and 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>iv. Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>v. Where located in mixed used areas</td><td>3.3m for ground and first floor above to promote future flexibility of use</td></tr></table>	Dwelling Type	Height	i. Habitable rooms	2.7m	ii. Non-habitable	2.4m	iii. 2 storey apartments	2.7m for main living area floor and 2.4m for second floor, where its area does not exceed 50% of the apartment area	iv. Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope	v. Where located in mixed used areas	3.3m for ground and first floor above to promote future flexibility of use		
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v. Where located in mixed used areas	3.3m for ground and first floor above to promote future flexibility of use														
2.3.6.11 Natural Ventilation	At least 60% of apartments are naturally cross ventilated	All apartments are capable of being naturally cross ventilated.	✓												
2.3.7 PARKING AND ACCESS															
2.3.7.1 Resident and Visitor Parking	Car parking is to be provided in accordance with the parking rates identified in Chapter 2.13 Transport and Parking	<p>The proposal provides for car parking in accordance with the rates prescribed for this form of development under the provisions of the Housing SEPP 2021.</p> <p>This was discussed in more detail in address of Part 5.4.5 of this document.</p>	✓												
2.3.7.3 Basement Car Parking	<p>Preference is to be given to underground parking wherever possible. Design considerations include:</p> <p>i retaining and optimising consolidated areas and deep soil zones on the site;</p> <p>ii facilitating natural ventilation to basement and sub-basement car parking areas where possible;</p> <p>iii integrating ventilation grills or screening devices of car park openings into the façade design and landscape design;</p> <p>iv providing safe and secure access for building users.</p>	<p>The proposal seeks the provision of all car parking within a semi inground basement level.</p> <p>This arrangement enables the provision of deep soil landscaped areas across the critical site peripheries alongside the provision of natural ventilation.</p>	✓												

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
	Driveways shall be designed to minimise adverse visual impacts on the streetscape and shall be complemented by the landscape design for the site.	The proposed parking access driveway has been located within the north-eastern corner of the site where it is offered a clear level of demarcation with that of the pedestrian entry.  Hardstand features across the front setback are offset by the extent of landscaping provided which will in turn, afford the development as a whole with a fine-grained balance between landscape and built form features.	✓
	Basement car parking is to be suitably set back from site boundaries so as not to interfere with the provision of deep soil planting zones at ground level.	Given the constrained nature of the site, generous levels of basement setback cannot be provided across all peripheries. Irrespective of these constraints, deep soil planting will continue to be provided across generous spaces within the front and rear setbacks.  These landscaped areas also return along the eastern and western boundaries where again, they will positively influence built form amenity.	✓
	Basement access driveways shall be designed in accordance with AS/NZS 2890.1.	Refer to the accompanying traffic report prepared by CJP traffic engineers.	✓
<b>2.3.7.4 Vehicular Access Design</b>	Ensure adequate and safe separation distances between vehicular entries and street intersections.	Refer to the accompanying traffic report prepared by CJP traffic engineers.	✓

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
	<p>Improve the appearance of car parking and service vehicle entries, for example by:</p> <p>i screening garbage collection, loading and servicing areas visually away from the street;</p> <p>ii setback or recess car park entries from the main façade line;</p> <p>iii avoid 'black holes' in the façade by providing security doors to car park entries;</p> <p>iv where doors are not provided, ensure that the visible interior of the car park is incorporated into the façade design and material selection and that building services, pipes and ducts are concealed;</p> <p>v return the façade material into the car park entry recess for the extent visible from the street as a minimum.</p>	<p>The proposed waste storage area has been sited within the semi inground basement where it will not be perceptible from the public domain and or neighbouring properties. A single entry ramp is provided within the north-eastern corner of the site which will observe a minimum width that complies with the relevant standards. The car park entry has been visually integrated into the built form envelope where it will not present as an ad-hoc contribution to the street setting.</p>	✓
	Use of plain concrete for driveways and open car parking areas is not supported by Council. Details of the proposed treatment shall be provided in the development application.	A consent condition may be imposed formalising this requirement.	✓
<b>2.3.8 EARTHWORKS</b>			
	The amount of cut and / or fill required on a site shall be minimised. This may be achieved by stepping buildings down a site, and by locating the finished ground floor level as close to natural ground level as practicable.	<p>The extent of cut and fill across the site is necessitated by the need to provide the requisite amount of parking within a semi inground basement parking level.</p> <p>Dilapidation and geotechnical investigations will be carried out as part of any construction certificate documentation.</p>	✓
	Details of any proposed retaining walls, including construction details, height and location on the site shall	These details have been provided across both the architectural and landscape plans accompanying this development application.	✓

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Fredrick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
	be provided with the development application.		
<b>2.3.9 LANDSCAPING</b>			
<b>2.3.9.1 Landscape Design</b>	A suitably qualified landscape professional is to be engaged to undertake the design and construction of landscaping.	Accompanying this development application are detailed landscape plans prepared by Zenith Landscape Design.	✓
<b>2.3.9.3 Street Trees</b>	All development shall incorporate street tree plantings at a rate of at least two semi-advanced trees per 15 metres of frontage. Details of the proposed street tree planting including species and locations shall be submitted with the development application and included as part of the landscape plan. Street trees are to be maintained and nurtured until established.	The landscape plans nominate the provision of a new street tree located within the public domain along the Auburn Street frontage.	✓
	A street tree planting plan shall be included as part of the landscape design report and is to include the location of any services within the footpath area.	A consent condition may be imposed formalising this requirement.	✓
<b>2.3.9.3 Deep Soil</b>	A minimum 50% of the required soft landscaped area of the site at ground level shall be a deep soil zone. This may be achieved by optimising the retention provision of consolidated deep soil zones within a site by:  i the design of basement and sub-basement car parking, so as not to fully cover the site;  ii the use of front and side setbacks for deep soil planting.	The development provides deep soil areas across the site that comply with the prescribed provisions of the Housing SEPP 2021.	✓
<b>2.3.9.4 Fencing</b>	Details of the material, height, type and extent of all proposed fencing shall be shown on the development application plans.	The proposal seeks the provision of composite masonry and aluminium palisade fencing across the public/private domain interface.	✓



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
<b>2.3.10.2 Stormwater Management</b>	All proposed development is to comply with Council's Civil Works Specification	Stormwater plans prepared by Pyramid Engineering and accompany this application. We have been informed that these plans have been designed in response to Council's Civil Works specifications.	✓
<b>2.3.10.3 Garbage and Waste Services</b>	All proposed development is to comply with the requirements of the Chapter 2.14 Site Waste Management.	The waste bin storage room is located such that it is conveniently accessible to residents for the purpose of waste disposal, as well as the adjacent road kerb in Auburn Street for the purpose of waste collection. The bin room has also been located and designed such that it is integrated into the built form of the apartment building, at semi-basement level, and will therefore not present as an imposition to the street setting.	✓
<b>2.3.11. SAFETY AND SECURITY</b>			
<b>2.3.11.1 Crime Prevention</b>	Crime Prevention Through Environmental Design (CPTED) is a situational crime prevention strategy that focuses on planning, design and place management. It seeks to influence the design of buildings and places to reduce the opportunities for crime. Development shall be designed in accordance with the CPTED principles (surveillance, access control, territorial reinforcement and space management), as provided in Appendix B.	<p>The proposed development implements key principles of Crime Prevention through Environmental Design (CPTED) for surveillance, access control, territorial reinforcement and space management. Key design considerations are as follows:</p> <ul style="list-style-type: none"> <li>• Passive surveillance is provided through a significant increase in 'eyes on the street' to Auburn Street.</li> <li>• Balcony openings and ground level private open spaces are elevated to promote passive surveillance of the public domain.</li> <li>• Access control is achieved through secure entry (smart key entry) to the residential lobbies, lifts and basement;</li> <li>• The development seeks the provision of a clearly identifiable pedestrian entry, separated from the vehicular entrance into the development;</li> <li>• Territorial reinforcement is provided through landscaping and public domain treatments to delineate</li> </ul>	✓

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Fredrick  
Project No # 111/22

Central Coast Development Control Plan 2022			
Ref	Design Solution	Proposed	✓/x
		<p>public and private spaces within the development with appropriate maintenance and management policies; and</p> <ul style="list-style-type: none"> <li>Space management will be achieved through selection of appropriate materials/finishes and routine maintenance of the building and landscaped areas to ensure a positive contribution to the public realm and to resist graffiti and anti-social behaviour. Low planting will be provided along walls and garden paths to maintain good visibility.</li> </ul>	
	A formal Crime Risk Assessment (Safer by Design evaluation) involving the NSW Police may be required for larger developments (i.e. over 20 dwellings), which in Council's opinion could create a crime risk. Proponents of development which may create a crime risk are advised to refer to the NSW Government's publication <i>'Crime Prevention and the Assessment of Development Applications'</i> .	This provision is not applicable to the development as only eight apartments are proposed.	✓
<b>2.3.12. SOCIAL DIMENSIONS</b>			
<b>2.3.12.1 Housing Choice</b>	<p>A variety of dwelling types is encouraged between one, two, three and four bedroom apartments; particularly in large residential flat developments and on the ground floor.</p> <p>10% of units in residential flat developments shall be designed as suitable for adaptation for occupation by disabled / aged persons, as outlined in AS 4299: <i>Adaptable Housing</i>. A higher rate of adaptable housing of 15% is encouraged.</p>	<p>As the control suggests, the application of this control is more relevant to large scale development. With only eight (8) apartments proposed, four (4) of which are nominated as affordable, the strict imposition of this control is deemed unreasonable with respect to the proposed development.</p> <p>Furthermore, two (2) dwellings are nominated as accessible equating to 25%.</p>	N/A

Table 6: Central Coast Development Control Plan 2022 Compliance Table

## 6. ENVIRONMENTAL IMPACT ASSESSMENT

This chapter includes an assessment of the environmental effects of the proposed development as described in the preceding sections of this report. The assessment includes those matters under section 4.15(1) of the EP&A Act that are relevant to the proposal.

### 6.1 Built Environment

#### 6.1.1 Height, Bulk and Scale

The building demonstrates a high degree of compliance with the key standards pertaining to this form of development noting the incentivised In-Fill affordable housing FSR bonus and height departure which affords the provisions of two (2) affordable dwellings.

The proposal is also generally consistent with the site-specific built form controls pertaining to the redevelopment of land for this form of development which is governed by the standards prescribed by the Housing SEPP 2021, SEPP (Precincts-Regional) 2021, and finer grain controls as prescribed in the Central Coast DCP 2022.

Potential adverse impacts from building bulk have been controlled through the use of juxtaposing vertical and horizontal design elements, modulation, varied materials, finishes and colours and other unique façade features.

The development has utilised façade indentations and extrusions for the purpose of providing visual depth and in conjunction with vertical/horizontal elements, balcony articulation and fenestration, provides for a greater degree of visual interest. Alongside the above, the development will integrate framed elements which will serve to accentuate the contemporary built form while the range in building materiality will also be reflective of the architectural precedence already set within the transitioning context

The proposal displays a hierarchy of built forms based on site analysis principles resulting in a scale and volume that promotes connectedness and permeability throughout the site and surrounds. Furthermore, the proposal establishes a high-quality precedent of built form for this emerging precinct and one which embodies the vision, character and principles developed by Council in the DCP and as important, responds to the objectives of the Housing SEPP in the provision of affordable dwelling's within a highly accessible location.

### 6.2 Public Amenity

#### 6.2.1 Views and Visual Impact

The proposal demonstrates optimum capacity of the site to accommodate a built form that minimises the loss of views from neighbouring buildings, particularly within the context of the area being in transition to higher density forms of development. The proposed development achieves good balance between minimising views and benefitting from the planning controls applicable to the site, providing a high quality built form which bears no impact on distant views and or view corridors.

Accordingly, in our opinion, the proposal is appropriate in respect of views.

With regards to visual impact, the built form incorporates a mixture of architectural elements which are supplemented by a diverse mix in building materiality designed to reflect more subtle neutral and or naturalistic colours and tones. The building acknowledges the desired human scale relationship with the

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

introduction of a distinguished building outcome, differentiated into a number of varying components, all of which serve to strengthen the form of the building while reducing the extent of its perceivable scale across all levels.

### 6.2.2 Overshadowing

Overshadowing diagrams have been prepared by Fuse Architects in support of this DA. These diagrams identify the anticipated shadow impact of the proposed development on itself, the surrounding public domain and surrounding properties.

Overshadowing impacts within the development site are inevitable and unavoidable, but the proposal has been designed and laid out to ensure maximum solar penetration is achieved.

The overshadowing impacts to adjoining and surrounding properties is again inevitable. Again referencing the shadowing diagrams prepared by Fuse Architects, modelling has shown that adjoining properties will not be restricted from achieving reasonable solar access outcomes, owing mainly to the broader orientation of sites in the precinct and spatial relief provided by intersecting roadways. As such, the overshadowing impacts are considered acceptable given the anticipated density of the setting and controls for the area.

### 6.2.3 Building and Construction

The ability for the proposed development to comply with the BCA has been demonstrated in the BCA Assessment prepared by BCA Logic.

A final Construction Management Plan will be prepared by the appointed contractor, once the terms of any approval granted by Council are known. Accordingly, it is anticipated that Council will include appropriate conditions within any consent notice requiring the preparation and approval of a CMP prior to works commencing.

### 6.2.4 Aural Privacy

The design and layout of the proposal has been designed to maximise aural and visual privacy for residents of neighbouring sites. Acoustic privacy is about preventing sound transmission between external and internal spaces, between apartments and communal areas, and apartments and external spaces. The building has been designed to orient private and communal open spaces and noise sensitive rooms in such manner that will not result in an unreasonable impact to the acoustic privacy of adjoining properties and will in turn afford acoustic privacy to the occupants of the building.

### 6.2.5 Building Separation and Visual Privacy

As detailed in the body of this SEE, the development seeks to provide a front setback designed in response to Council's DCP provisions where it will serve to offer a positive built form transition with neighbouring established development.

As discussed in the preceding sections of this SEE, the proposed development adopts a setback arrangement that given the isolated and in turn, constrained nature of the land, does seek a higher level of dispensation in the application of these controls. Of note, the strict application of the separation controls as detailed within the table below, would render the site undevelopable for its intended purposes. The ADG nominates separation distances between windows and balconies to side and rear boundaries as follows.

**Table 3 ADG Building Separation Requirements**

Building height	Habitable rooms and balconies	Non-habitable rooms
Up to 12m (4 storeys)	6m	3m
Up to 25m (5-8 storeys)	9m	4.5m
Over 25m (9+ storeys)	12m	6m

In this regard, shortfalls are observed across the building elevations. Notwithstanding the variations, it is considered that the side setback visual privacy / building separation distances outlined in the ADG are appropriate for the following reasons:

- the proposal is consistent with the SEPP 65 design quality principles which is the key determinative matter;
- the building floor plates have been both sited and orientated in a manner that limits the direct orientation of habitable rooms and spaces directly onto opposing building areas as they currently exist on neighbouring properties;
- Privacy screening across the building has been where appropriate, utilised;
- Primary living spaces are primarily orientated to either the street front or the rear of the site where a compliant 6m setback is observed;
- the proposal achieves the objective of the visual privacy / building separation criteria and allows for reasonable levels of privacy to be maintained.

Planning Circular PS17-001 identifies that *“the ADG is not intended to be and should not be applied as a set of strict development standards”*. Rather, the ADG provides objectives, design criteria and design guidance on how residential development proposals can meet the SEPP 65 principles through good design and planning practice. The proposal is consistent with the SEPP 65 design quality principles, as outlined in the SEPP 65 Design Statement prepared by Fuse Architects.

In this case, adequate building separation distances will be shared equitably between the subject and neighbouring buildings and therefore, reasonable levels of external and internal visual privacy will be achieved. The layout and design of the proposed apartments is such that it will ensure the visual privacy of neighbouring development is reasonably maintained and a reciprocal visual privacy relationship facilitated.

## 6.3 Natural Environment

### 6.3.1 Tree Removal/Landscaping

The proposal does not seek the removal of any trees from across the site.

Landscaping is proposed in accordance with the accompanying landscape plans prepared by Zenith Landscape Architects. **Figures 16 and 17** below demonstrate the landscaping outcomes proposed across the ground and first floor podium level.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

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Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

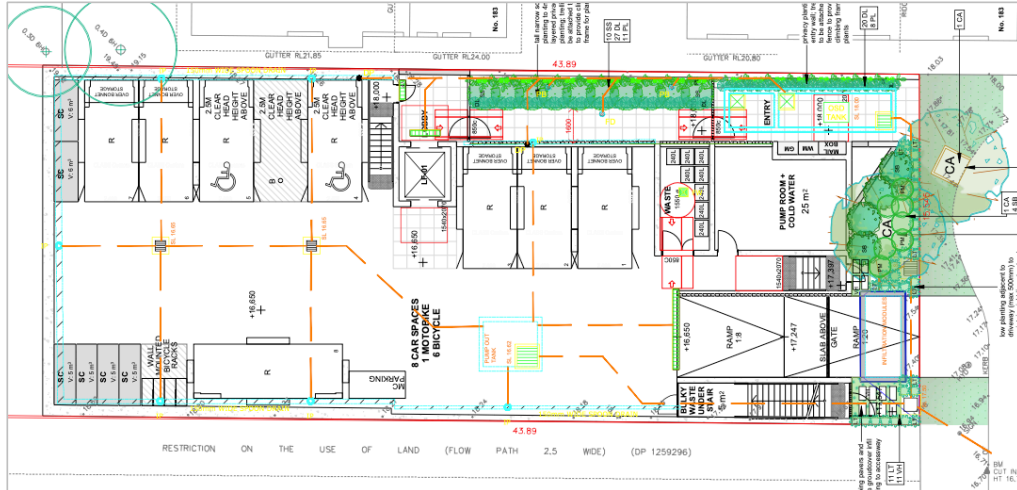


Figure 16: Lower ground floor landscaping resolution  
Source: Zenith

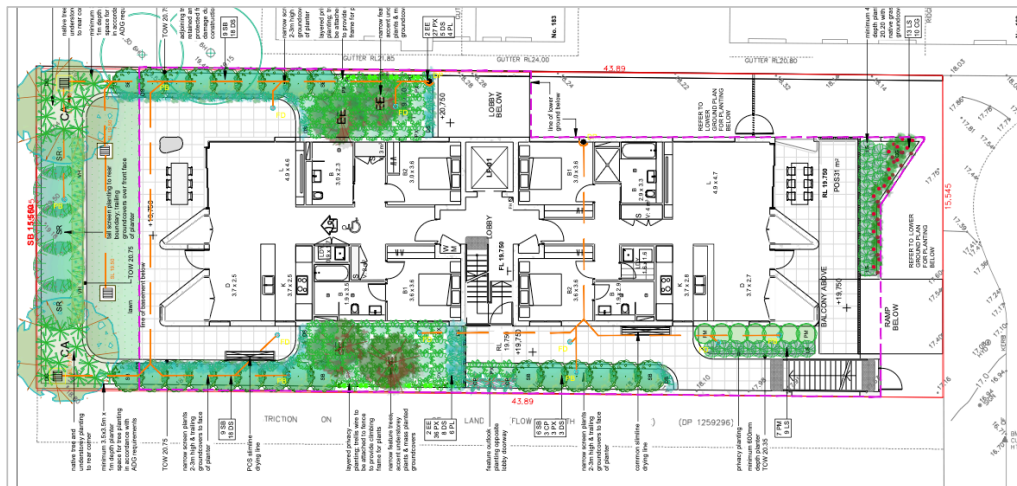


Figure 17: Ground floor landscaping resolution  
Source: Zenith

### 6.3.2 Water Management

Existing drainage conditions, proposed design and relevant impacts associated with development are contained in the Stormwater Plans prepared by Pyramid Engineers. In summary the proposed drainage for the development is as follows:

- Water collected from the roof and on the building will be drained to the proposed On-site Detention System (OSD) tank;
- Basements drain to a tank and pump out system which connect to the OSD; and
- Stormwater from the OSD will be discharged to Council's existing stormwater pit to council's requirements.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

**6.3.3 Demolition and Construction Waste Management**

The proposed demolition, excavation and construction works will generate moderate quantities over the life of works program. The most substantial waste output will be the soil material to be excavated and transported from the site. The destination of the material will depend upon whether it can be certified as clean material and utilised on other development sites. Material that can't be certified as ENM will be disposed of at the nearest licensed facility.

Demolition and construction waste generated will include bricks, timber, tiles, hardstand concrete surfaces, glass, plastics and sheet metal. Estimates around the quantity of these materials is provided in APP's supporting WMP with identified processes for management, re-use and methods of removal from site and locations of disposal.

**6.3.4 Air and Microclimate**

Some dust is anticipated during the construction period. This impact can be managed through measures such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto public roadways, covering loads on all departing trucks and working to weather conditions. The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

A final CMP will be provided by the builder, once appointed, prior to the issue of the Construction Certificate.

The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

**6.3.5 Waste Management**

A Waste Management Plan for the site has been prepared by MRA Consulting Group (submitted separately). This plan details the proposed management practices and procedures for waste generated by the development.

Key waste management features proposed include:

- Residents will be supplied with a collection area within each unit for the daily storage of waste and recycling;
- Residents will be responsible for the disposal of their waste in the allocated single waste chutes on all residential levels of the building;
- The building manager or cleaner is responsible for monitoring the capacity of recycling bins and exchanging, emptying or storing them in the main bin storage room located when required; and
- Full garbage and recycling bins will be transferred to the street edge (to wait for servicing).

**6.3.6 Soil and Erosion Control**

The works have the potential to create adverse impacts to water quality, vegetation and result in erosion and sedimentation. These include:

1. Stormwater Drainage Infrastructure Inlets
2. Construction Exit Protection
3. Downstream Site Boundaries
4. Sediment Runoff

The following mitigation measures are proposed to minimise adverse environmental impacts:

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

- Sandbag protection to be installed surrounding existing stormwater drainage infrastructure inlets to prevent sediment entering the system.
- Shaker grid and wash down facility will be installed at all exists from the construction site.
- All vehicles leaving the site will have wheels washed down and pass over the shaker grid to remove any spoil collected.
- Installation of sediment fences on all downstream boundaries to collect sediment and prevent it from discharging onto downstream properties.

Additionally, impacts from earthworks will be managed in accordance with a Construction Management Plan to be developed by the contractor prior to the issue of a Construction Certificate. The plan is likely to contain the following mitigation procedures to manage sedimentation and impacts from soil disturbance:

- Bunding of sediment basins and siltation fencing to be installed;
- Stockpiles of soil to be bunded, covered and wet-down to limit impacts from dust;
- Works to be not occur during times of high wind events or prior to major storms;
- Excess cut material is to be transported from site as soon as practicable after completion and
- All excavation works should be undertaken in accordance with an approved staging / scheduling plan which is regularly updated by the site manager; and
- Site fencing is to be maintained around the perimeters to restrict access to the general public.

## 6.4 Environmentally Sensitive Design

The NSW Land and Environment Court has established six principles for Ecologically Sustainable Development (ESD):

1. *The principle of sustainable use;*
2. *The principle of integration;*
3. *The precautionary principle;*
4. *Inter-generational and intra-generational equity*
5. *Conservation of biological diversity and ecological integrity*
6. *Internalisation of external environmental costs*

The proposals consistency with the principles of ESD is provided below:

### **Sustainable Use**

The construction and ongoing operational use of the development will need to be mindful of incorporating sustainable and renewable materials so as to limit its impact on the environment. This includes the use of sustainable building materials, the considered storage, treatment and recycling of waste and water, as well as the use of energy efficient appliances to conserve electricity.

### **Integration**

The principle of integration is founded in properly considering and balancing the economic and environmental outcomes of development. In other words, the economic drivers behind a development should not compromise the achievement of environmental outcomes. The Applicant is an established developer. Whilst the proposed development will be underpinned by the achievement of certain economic outcomes, the proponent is committed to ensuring environmental efficiencies throughout the construction and operational phases. These include (but are not limited to):

- Utilising sustainable building materials; • Utilising recyclable materials in operations;

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT FREDERICK - DA/3915/2022**

BMAURBAN

Statement of Environmental Effects

6 Auburn Street, Point Frederick  
Project No # 111/22

- Incorporating resilient landscaping, water and building materials;
- Delivering design outcomes that decrease reliance on power for heating and cooling; and
- Managing waste such that materials can be efficiently recycled and re-used.

***Precautionary Principle***

The proposal is unlikely to cause any serious, irreversible or damaging impacts to the natural environment. This application has suitably demonstrated principles and methods of ensuring impacts are avoided and instilling a level of confidence that the building can developed in a considered way. Any damaging impacts will be identified with clear mitigation measures to reduce impacts if needed.

***Inter and Intra Generational Equality***

This principle requires that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. In the first instance, the development proposed is of significant benefit to the current and future generations in that it delivers high quality residential apartments and commercial spaces. The development will be undertaken having consideration for the highest standards and procedures for building and land use currently available. The use of new technologies, services and infrastructure has been and will continue to be investigated to ensure the longevity of the building and proposed uses within.

***Conservation of biological diversity and ecological integrity***

The Applicant is committed to sourcing and utilising sustainable materials, particularly those that are naturally sourced and are renewable.

***Internalisation of external environmental costs***

This principle requires the consideration of environmental costs in the short- and long-term operation of the development and services. The Construction and Operational Management Plans to be provided at the Construction Certificate and Occupation Certificate stages respectively, will include environmental goals to limit impacts and costs to the environment. These goals will need to be regularly assessed and solutions to improve reductions to environmental impacts should continually be revised and updated.

***Conservation of biological diversity and ecological integrity***

The Applicant is committed to sourcing and utilising sustainable materials, particularly those that are naturally sourced and are renewable.

***Internalisation of external environmental costs***

This principle requires the consideration of environmental costs in the short- and long-term operation of the development and services. The Construction and Operational Management Plans to be provided at the Construction Certificate and Occupation Certificate stages respectively, will include environmental goals to limit impacts and costs to the environment. These goals will need to be regularly assessed and solutions to improve reductions to environmental impacts should continually be revised and updated.

## 6.6 Movement and Access

A transport and parking study has been undertaken by CJP. The key findings of the report are summarised below.

### 6.5.1 Access/Road Network

#### Road Network

- Central Coast Highway (A49) is classified as a State Road and provides major road link in the Central area, linking the Pacific Motorway at Somersby to the Pacific Highway at Doyalson. It is known as York Street in the vicinity of the site and carries two traffic lanes in each direction, with turning lanes provided at key intersections.
- Avoca Drive is also classified as a State Road which provides another key road link through the Central Coast area, linking the Central Coast Highway at Erina to Avoca Beach. It carries two traffic lanes in each direction in the vicinity of the site, opposing traffic flow separated by a central median island. Kerbside parking is not permitted.
- Henry Parry Drive is also classified as a State Road which provides a key road link through the Gosford area, linking York Street (Central Coast Highway) at East Gosford to the Pacific Highway at North Gosford. It carries one traffic lane in each direction, with turning lanes provided at key locations.
- Auburn Steet is a local cul-de-sac road which provides access to frontage properties. It has a carriageway width of 9m and a cul-de-sac turning head diameter of 12m. Kerbside parking is permitted along both sides of the road.

#### Access

Vehicular access to the basement parking area is proposed to be provided via a new 3.6m wide single-lane entry/exit driveway located at eastern end of the Auburn Street site frontage. The proposed ramp is straight with relatively mild gradients, and good visibility between ends.

### 6.5.2 Public and Active Transport

The nearby public transport services are shown in the figure on the following page. The nearest bus stop is located approximately 140m walking distance south-east of the site, which is serviced by the 42 service. The 42 service operates a loop service 7 days per week between Gosford and Point Frederick.

In addition, there is also a bus stop on York Street (Central Coast Highway) which is located approximately 280m walking distance north-east of the site. It is serviced daily by the 17, 18, 19, 20, 21, 22, 23, 28, 43, 44, 63, 64, 65, 66A, 66C, 67 & 68 services, many of which provide connection to Gosford railway station.

Research suggests that proximity to bus services influence the travel mode choice for areas within 400m walking distance (approximately 5 minutes) of a bus stop or ferry wharf. As such, the proposed development has potential for future residents to utilise bus/ferry for their commute to/from work.

Additional bus services also operate along Blackwall Point Road, with those bus stops located approximately 800m walking distance to/from the site.

The *Planning Guidelines for Walking and Cycling* identify a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.



In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

### 6.5.3 Parking/Traffic

Off-street parking is proposed for 8 cars (including 2 accessible spaces) within a new single-level basement parking area, in accordance with SEPP (Housing) 2021 requirements.

In addition, 1 motorcycle space and 4 bicycle spaces are also proposed within the basement parking area.

The proposed development on the site is defined by the RMS Guide as a “medium density” residential development, that is, “a building containing at least 2 but less than 20 dwellings”.

The proposal involves the construction of a new residential apartment building on the site. Based on the RMS trip generation rates, the proposed development has a traffic generation potential of 3 vehicle trips during the weekday morning and afternoon peak hour.

These peak period traffic volumes are *statistically insignificant* and fall within typical daily fluctuations of the local road network. This will have minimal impacts on the surrounding road network.

## 6.6 Social and Economic Impacts

- Provides a mix of apartments types be it standard and affordable to suit a range of people close to high frequency public transport infrastructure;
- Promotes local and state government initiatives in relation to urban growth and densification by increasing the density of residential housing in close proximity to services and facilities;
- Achieves high environmental performance (water and energy) targets;
- Offers an improved urban design and architectural outcome for the site;
- The proposal will have a positive social and economic impact on the LGA.
- Successful approach to a comprehensive landscape-led design will mitigate impacts of the urban heat island and deliver comfortable private open space.
- Establishes a high precedence for surrounding future projects and reinforces the objectives and vision for the precinct developed by Council.
- Creation of short-medium term jobs in construction of the project. The proposed ground level neighbourhood shops will also provide employment opportunities longer term for workers.
- The population supported by this project is estimated at circa 16 residents.

***DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces***

## **6.8 The Public Interest**

The development will increase the supply and choice of housing in the locality and will result in an overall improvement in the residential dwelling stock in the locality. Furthermore, the amenity of the adjoining properties will not be detrimentally impacted upon by the proposed development, through various design measures to mitigate overlooking and view impacts. Further, the proposal will provide housing supply in a highly accessible location that is well served by public transport. For these reasons the development is considered consistent with the public interest.

## 7. CONCLUSION

The proposal is generally consistent with the relevant environmental planning instruments applying to the site. A detailed assessment of the environmental impacts has been detailed in accordance with Section 4.15 of the *EP&A, Act, 1979* and the proposal is found to be suitable for the site.

The proposed development is consistent with the zoning objectives under the R1- General Residential Zone of the SEPP (Precincts Regional) 2021. Furthermore, a number of significant benefits will arise from the proposed development which include:

- the delivery of 8 new high quality residential apartments, 4 of which are nominated as affordable dwellings, in a highly accessible and sustainable location;
- provision of equitable accommodation by the addition of adaptable units in an appropriate location to meet the demand of aging population;
- the delivery of modulated built forms with a variety of built form presentations and orientations;
- supporting business and growth of a new town centre around the station; and
- delivery of a development which supports ESD principles including energy efficiency, water conservation and waste minimisation.

In light of the merits of the proposed development and in the absence of any significant environmental impacts, it is without hesitation that we respectfully recommend this application for development consent.



## Appendix A:

Clause 5.28 – Exception to Development Standards

Clause 5.25 SEPP (Precincts- Regional) 2021



## 1. INTRODUCTION

This Clause 5.28 Exceptions to Development Standards request has been prepared by BMA Urban on behalf of Fuse Architects. It is submitted in support of a development Application (DA) for the redevelopment of the site at 6 Auburn Street, Point Frederick.

This request seeks approval to vary the height of buildings development standard in clause 5.25 of the (Precincts-Regional) SEPP 2021. For the avoidance of doubt, the development standard is not specifically excluded from the operation of Clause 5.28 of the SEPP.

Clause 5.25 prescribes a numerical building height limit of 12m over the subject site. The proposed building height departs from this standard as demonstrated in **Part 2** of this variation request.

Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021 enables consent for development to be granted even though it contravenes a development standard. The clause aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

As the following request demonstrates, flexibility may be afforded by Clause 5.28 because compliance with the height of buildings development standard is unreasonable or unnecessary in the circumstances of the case and there are sufficient environmental planning grounds to justify contravening the standard. This request also demonstrates that the proposal will be in the public interest, as the proposed development will be consistent with the objectives of the development standard and the zoning of the site.

The following sections of the report provide an assessment of the request to vary the development standards relating to “**height of buildings**” in accordance with Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021.

Consideration has been given to the following matters within this assessment:

- *Varying development standards: A Guide*, prepared by the Department of Planning and Infrastructure dated August 2011.
- Relevant planning principles and judgments issued by the Land and Environment Court. The *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 court judgment is the most relevant of recent case law.

Chief Justice Preston of the Land and Environment Court confirmed (in the above judgment):

The consent authority must, primarily, be satisfied the applicant's written request adequately addresses the 'unreasonable or unnecessary' and 'sufficient environmental planning grounds' tests:

*“that the applicant's written request ... has adequately addressed the matters required to be demonstrated by cl 4.6(3). These matters are twofold: first, that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case ... and, secondly, that there are sufficient environmental planning grounds to justify contravening the development standard ...”* [15]

On the 'Five Part Test' established under *Wehbe v Pittwater Council* [2007] NSWLEC 827:

*“The five ways are not exhaustive of the ways in which an applicant might demonstrate that compliance with a development standard is unreasonable or unnecessary; they are merely the most commonly invoked ways. An applicant does not need to establish all of the ways. It may be sufficient to establish only one way...”* [22]

That, in establishing 'sufficient environmental planning grounds', the focus must be on the contravention and not the development as a whole:



*"The environmental planning grounds advanced in the written request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole"*  
[26]

This clause 5.28 (4.6) does not directly or indirectly establish a test that the non-compliant development should have a neutral or beneficial effect relative to a compliant development:

*"Clause 4.6 does not directly or indirectly establish this test. The requirement in cl 4.6(3)(b) is that there are sufficient environmental planning grounds to justify contravening the development standard, not that the development that contravenes the development standard will have a better environmental planning outcome than a development that complies with the development standard."*  
[88]

This variation has specifically responded to the matters outlined above and demonstrates that the request meets the relevant tests with regard to recent case law.

In accordance with Clause 5.28 requirements, this variation request:

- identifies the development standard to be varied (**Part 2**);
- identifies the variation sought (**Part 2**);
- Summarises relevant case law (**Part 3**);
- establishes that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case (**Part 4**);
- demonstrates there are sufficient environmental planning grounds to justify the contravention (**Part 4**);
- demonstrates that the proposed variation is in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out (**Part 4**);
- provides an assessment of the matters the secretary is required to consider before providing concurrence (**Part 4**); and
- Provides a conclusion summarising the preceding parts (**Part 5**).

This request should be read in conjunction with the architectural plan detail prepared by Fuse Architects.

## 2. VARIATION OF HEIGHT OF BUILDINGS STANDARD

### 2.1 DEVELOPMENT STANDARD

Clause 5.25 (2) of the SEPP sets out the maximum building height for development as shown on the Height of Buildings Map. The site is subject to a maximum building height of 12 metres as illustrated in **Figure 2**.

The objectives of clause 5.25 as set out in clause 5.25(1) of the SEPP (Precincts-Regional) 2021 are:

- (a) to establish maximum height limits for buildings,
- (b) to permit building heights that encourage high quality urban form,
- (c) to ensure that buildings and public areas continue to receive satisfactory exposure to sky and sunlight,
- (d) to nominate heights that will provide an appropriate transition in built form and land use intensity,
- (e) to ensure that taller buildings are located appropriately in relation to view corridors and view impacts and in a manner that is complementary to the natural topography of the area,
- (f) to protect public open space from excessive overshadowing and to allow views to identify natural topographical features.

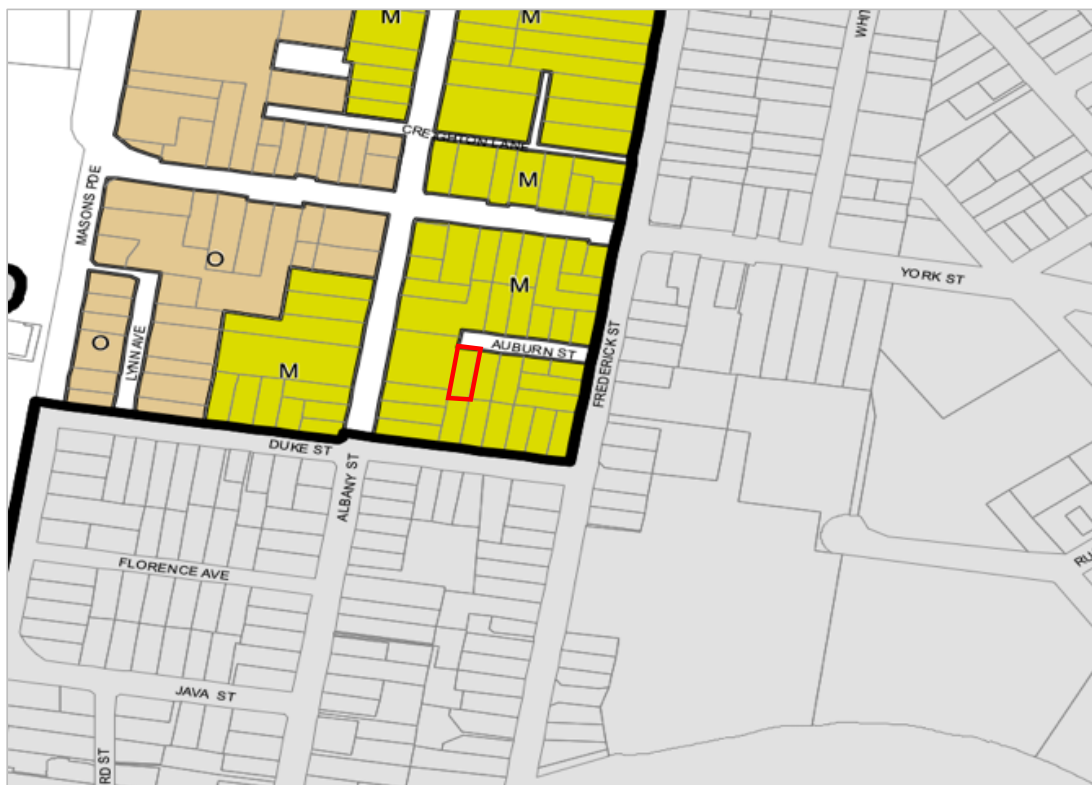


Figure1: Height of Buildings Map  
(Source: SEPP (Precincts Regional 2021))

Subject site   
 M 12

## 2.2 VARIATION TO HEIGHT OF BUILDING STANDARD

The proposed height departure across the building ranges from 600mm to 1.95m. The extent of contravention from the prescribed height is best demonstrated in **Figure 2** below.

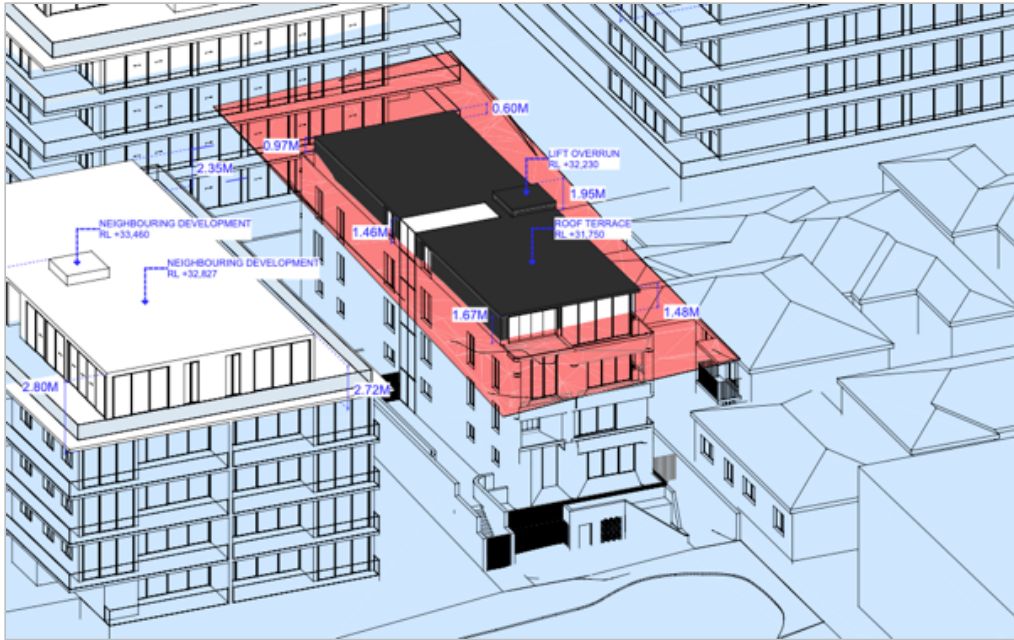


Figure 2: Height Breach Overlay  
Source: Fuse Architects

### 3. RELEVANT ASSESSMENT FRAMEWORK

Clause 5.28 of the State Environmental Planning Policy (Precincts—Regional) 2021 enables consent for development to be granted even though it contravenes a development standard. The objectives of clause 5.28 of the SEPP are:

1. (a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,
2. (b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

Clause 5.28 provides flexibility in the application of planning provisions by allowing the consent authority to approve a DA that does not comply with certain development standards, where it can be shown that flexibility in the particular circumstances of the case would achieve better outcomes for and from the development.

In determining whether to grant consent for development that contravenes a development standard, clause 5.28 (3) requires that the consent authority to consider a written request from the applicant that seeks to justify the contravention of the development by demonstrating:

1. (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
2. (b) that there are sufficient environmental planning grounds to justify contravening the development standard.

Clause 5.28(4)(a) requires the consent authority to be satisfied that the applicant's written request adequately addresses each of the matters listed in clause 5.28(3). The consent authority should also be satisfied that the proposed development will be in the public interest because it is consistent with the objectives of the standard and the objectives for development within the zone in which it is proposed to be carried out.

Clause 5.28(4)(b) requires the concurrence of the Secretary to have been obtained. In deciding whether to grant concurrence, subclause (5) requires that the Secretary consider:

(c) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and

1. (d) the public benefit of maintaining the development standard, and
2. (e) any other matters required to be taken into consideration by the Secretary before granting concurrence.

The concurrence of the Secretary can be assumed to have been granted for the purpose of this variation request in accordance with the Department of Planning Circular PS 18-003 'Variations to development standards', dated 21 February 2018. This circular is a notice under section 64(1) of the Environmental Planning and Assessment Regulation 2000 and provides for assumed concurrence. A consent granted by a consent authority that has assumed concurrence is as valid and effective as if concurrence had been given.

The Secretary can be assumed to have given concurrence if the matter is determined by an independent hearing and assessment panel or a Sydney district or regional planning panel in accordance with the Planning Circular.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT**

**BMA URBAN**

**6 Auburn Street, Point Fredrick, FREDERICK - DA/3915/2022**

Project No # 111/22

This clause 5.28 request demonstrates that compliance with the height of building prescribed for the site in Clause 5.25 of SEPP (Precincts-Regional) 2021 is unreasonable and unnecessary, that there are sufficient environmental planning grounds to justify the requested variation and that the approval of the variation is in the public interest because it is consistent with the development standard and zone objectives.

In accordance with clause 5.28(3), the applicant requests that the height of building standard be varied.



## 4. ASSESSMENT OF THE CLAUSE 5.25 VARIATION

The following sections of the report provide a comprehensive assessment of the request to vary the development standards relating to the height of buildings standard in accordance with Clause 5.25 of SEPP (Precincts-Regional) 2021.

Detailed consideration has been given to the following matters within this assessment:

- Varying development standards: A Guide, prepared by the Department of Planning and Infrastructure dated August 2011.
- Relevant planning principles and judgements issued by the NSW Land and Environment Court. The following sections of the report provide detailed responses to the key questions required to be addressed within the above documents and clause 5.28 of the SEPP.

### 4.1. ABILITY TO VARY THE STANDARD

The height of building standard prescribed by Clause 5.25 of SEPP (Precincts-Regional) 2021, is a development standard capable of being varied under clause 5.28(2) of the SEPP. The proposed variation is not excluded from the operation of clause 5.28(2) as it does not comprise any of the matters listed within clause 5.28(6) or clause 5.28(8) of the SEPP.

### 4.2 CONSIDERATION

#### 4.2.1 Clause 5.28 (3)(a) – Is Compliance with the Development Standard Unreasonable or Unnecessary in the Circumstances of the Case?

Historically, the most common way to establish a development standard was unreasonable or unnecessary was by satisfying the first method set out in *Wehbe v Pittwater Council* [2007] NSWLEC 827. This method requires the objectives of the standard are achieved despite the non-compliance with the standard.

This was recently re-affirmed by the Chief Judge in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 at [16]-[17]. Similarly, in *Randwick City Council v Micaul Holdings Pty Ltd* [2016] NSWLEC 7 at [34] the Chief Judge held that “establishing that the development would not cause environmental harm and is consistent with the objectives of the development standards is an established means of demonstrating that compliance with the development standard is unreasonable or unnecessary”.

This Request addresses the first method outlined in *Wehbe v Pittwater Council* [2007] NSWLEC 827. This method alone is sufficient to satisfy the ‘unreasonable and unnecessary’ requirement.

The Request also addresses the third method, that the underlying objective or purpose of the development standard would be undermined, defeated or thwarted if compliance was required with the consequence that compliance is unreasonable (*Initial Action* at [19] and *Linfield Developments Pty Ltd v Cumberland Council* [2019] NSWLEC 131 at [24]).

- **The objectives of the standard are achieved notwithstanding non-compliance with the standard** (the first method in *Wehbe v Pittwater Council* [2007] NSWLEC 827 [42]-[43])

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

The specific objectives of the height of buildings development standard as specified in clause 5.25 of the SEPP (Precincts Regional) 2021 are detailed in the **Table** below. An assessment of the consistency of the proposed development with each of the objectives is also provided.

Objectives	Assessment
<i>(a) to establish maximum height limits for buildings,</i>	<p>The underlying purpose of this objective is to ensure that any future development is designed in a manner whereby any resulting building height will appropriately respond to both the existing and future context in a controlled manner. The proposed development is consistent with those objectives on the basis that the proposed heights is not incompatible with the existing scale of development within the visual catchment of the site and as important, will facilitate for the provision of affordable housing across the building.</p> <p>In order to achieve the allowable FSR prescribed to the land by way of the Housing SEPP, some level of height breach should be anticipated.</p> <p>The development is still deemed to suitably respond to the objective, despite the variation.</p>
<i>(b) to permit building heights that encourage high quality urban form,</i>	<p>The building height breaches are contained across the uppermost level of the building inclusive of the lift overrun. This uppermost level has been recessed inwards into the built form envelope across the northern front and southern rear while a darker tone of building materiality is also proposed across this upper floor for the purpose of limiting any perceptible volume arising out of the numerical dispensation.</p> <p>It is pertinent to note that development directly adjoining the site to the South and the East had the benefit of an FSR bonus in addition to a height dispensation. The removal of the upper level of this building for the purpose of achieving numerical compliance, would inadvertently result in the provision of a bill form that would present as discordant with the transitional development context.</p> <p>Given the siting/scale of the elements that breach the height limit and their relationship to neighbouring properties and the adjacent public domain in Auburn Street, the development is deemed to visually integrate with that of neighbouring buildings (both existing/anticipated) serving as an affirmation of the objective and not that of a building that abandons height controls.</p>
<i>(c) to ensure that buildings and public areas continue to receive satisfactory exposure to sky and sunlight,</i>	<p>The visual impact of the non-compliant height element is deemed not significant in terms of sky exposure nor is it deemed to result in the causation of an unreasonable level of shadowing across neighbouring properties. This is affirmed in the shadowing analysis prepared by Fuse Architects reproduced in <b>Figure 3</b> below. The extent of impact is less pronounced on December 21 (<b>Figure 4</b>).</p>

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT**

**RMA URBAN**

6 Auburn Street, Point Fredrick

**FREDERICK - DA/3915/2022**

Project No # 111/22

<p>(d) to nominate heights that will provide an appropriate transition in built form and land use intensity,</p>	<p>The height breaching elements will not visually impede upon future built form relationships with respect to spatial distribution and or siting of development forms. The height breach serves to provide for a more orderly built form relationship with that of the transitioning development context. Furthermore, the recessed nature of the breaching elements inclusive of the darker tone materiality utilised across this uppermost level, will serve to minimise the perceivable volume of the building where in contravention of the height standard.</p>
<p>(e) to ensure that taller buildings are located appropriately in relation to view corridors and view impacts and in a manner that is complementary to the natural topography of the area,</p>	<p>The proposed building, despite the breach in height, is sited in a manner that will present as a considered design response noting the topography of the land and relationship with neighbouring properties. Having specific regard to the scale and nature of development directly adjoining the subject site and the anticipation that remaining development will overtime be redeveloped for the purpose of realising their maximum height and gross floor area potential, the proposed breach will in no way hinder the developments ongoing ability in remaining consistent with this objective.</p>
<p>(f) to protect public open space from excessive overshadowing and to allow views to identify natural topographical features.</p>	<p>The height breach will not result in an adverse increase to the extent of shadowing cast over the public domain along Auburn Street nor will it the result in an unreasonable imposition to the extent or quality of view afforded across both private and public land.</p>

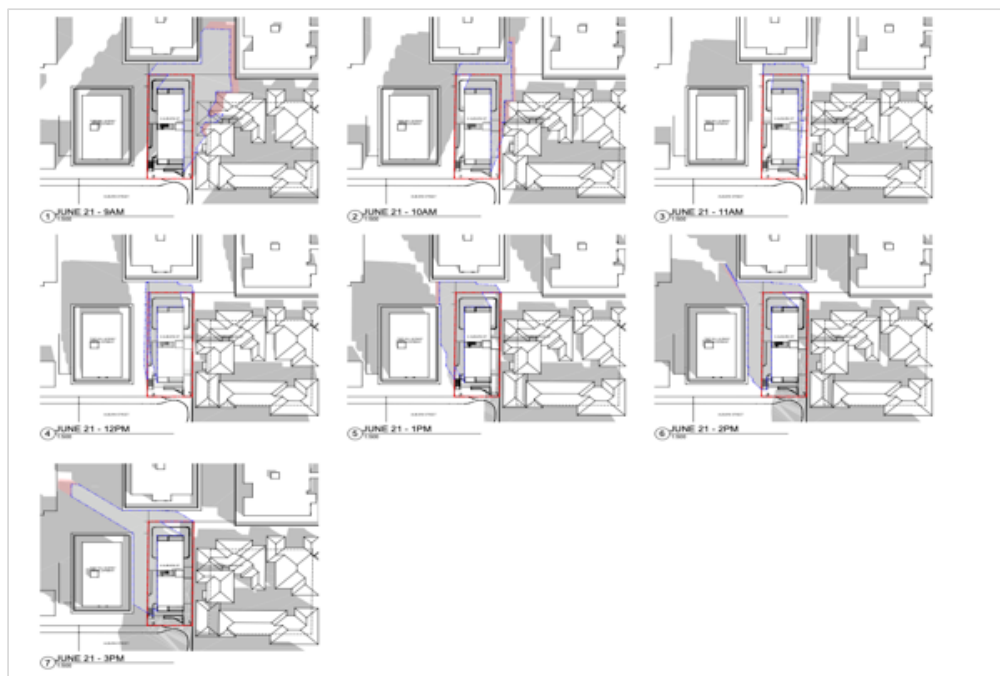


Figure 3: June 21 Shadow Analysis

Source: Fuse Architects

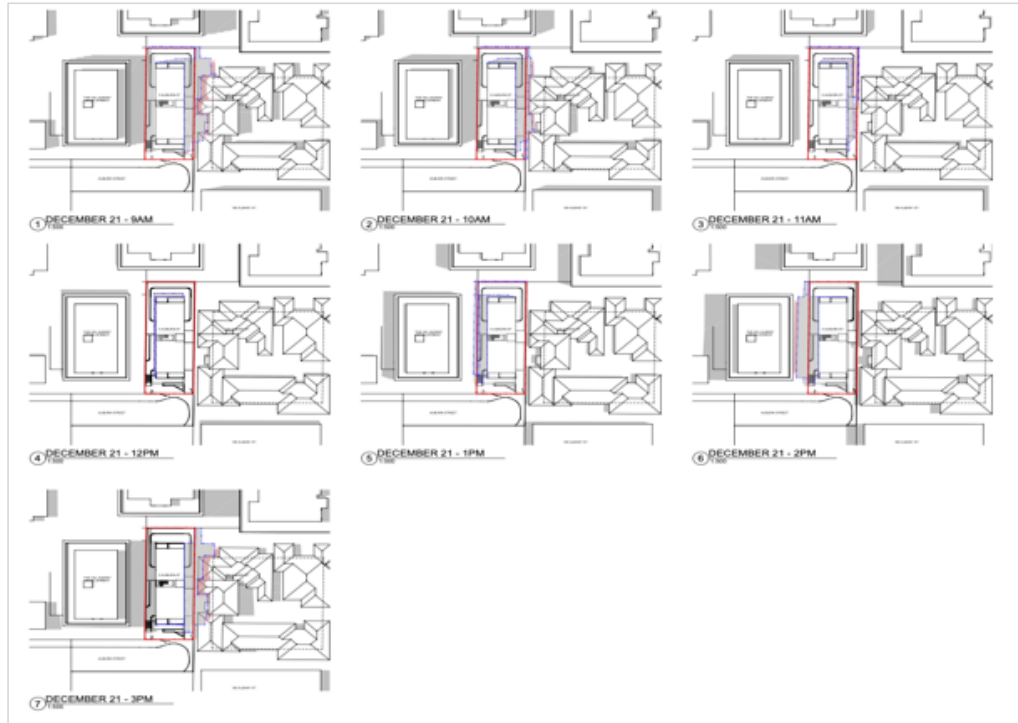


Figure 4: December 21 Shadow Analysis  
Source: Fuse Architects

The objectives of the development standard are achieved, notwithstanding the non-compliance with the standard in the circumstances described in this variation report.

#### 4.2.2 Clause 5.28 (3)(b) – Are there Sufficient Environmental Planning Grounds to Justify Contravening the Development Standard?

Clause 5.28(3)(b) of the SEPP (Precincts-Regional) 2021, requires the consent authority to be satisfied that the applicant's written request has adequately addressed clause 5.28(3)(b), by demonstrating:

*"That there are sufficient environmental planning grounds to justify contravening the development standard".*

The environmental planning grounds relied on in the written request under Clause 5.28 must be sufficient to justify contravening the development standard. The focus is on the aspect of the development that contravenes the development standard, not the development as a whole. Therefore, the environmental planning grounds advanced in the written request must justify the contravention of the development standard and not simply promote the benefits of carrying out the development as summarised in (*Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118).

There is an absence of environmental harm arising from the contravention and positive planning benefits arising from the proposed development as outlined in detail above. These include:

- The proposal is consistent with the objectives of the development standard and objectives of the R1 zone.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Frederick, DA/3915/2022

Project No # 111/22

- The proposal is compliant with the maximum FSR that applies to the site as afforded by way of the SEPP (Housing) 2021 provisions made available to Co-Living Housing development. Therefore, the height variation does not seek to provide any additional density or gross floor area (GFA).
- The perception of building height across all levels has been mitigated by appropriate levels of building modulation and massing whereby the various portions of the building and relative setbacks from the viewing perspectives are formed in a manner that continue to enable the visual identification of a built form that remains appropriate for the site and commensurate with both existing and envisaged development likely to occur on neighbouring undeveloped sites. At a high level, the proposed building successfully mitigates environmental impacts such as overshadowing, privacy and visual impact.
- The location and design of the height breaching elements have been organised such that they do not present as visually jarring to the streetscape.
- The proposed height variation enables the provision of two (2) affordable apartments on Level 3. Therefore, without the subject variation, the proposed development would limit the extent of affordable housing on the site. Clearly, there is an inherent public benefit in providing affordable housing on the site. This public benefit is a direct result of the height non-compliance.
- Despite the numerical non-compliance with the height development standard, the development provides a scale and form of development that is compatible with surrounding developments and the emerging character. A notable number of developments across the defining context present a four (4) storey scale or greater and therefore, the proposed development will not be out of character with this scale.
- The slope of the site being a cross fall of approximately 2.38m from the south-western corner of the site down towards the north-eastern corner, has been a determinative factor with regards to the extent of height variation observed across the building.

Based on the above, it has been demonstrated that there are sufficient environmental planning grounds to justify the proposed non-compliance to the maximum height of buildings in this instance.

The Objects of the Act under S1.3 are also relevant to whether grounds exist to warrant a variation. While this does not necessarily require that the proposed development should be consistent with the objects of the Act, nevertheless, in **the table below** we consider whether the proposed development is consistent with each object.

*The objects of this Act and how this proposal responds to the object are as follows:*

Object	Comment
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	This building will in part harvest of the identified resources given it is location proximate to numerous parklands. The breach will therefore provide future residents of the top floor (in part breach) with access to those resources and encourage their renewal and use.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal will facilitate an ecologically sustainable development given that no negative impact on environmental and social considerations will arise. This in turn will serve to offer the ongoing sustenance of the economic health of the area.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

(c) to promote the orderly and economic use and development of land,	The proposed development will promote the orderly and economic use of the land by way of providing a land use intensity consistent with that envisaged by Council.
(d) to promote the delivery and maintenance of affordable housing,	The development will provide (4) affordable residential apartments, (2) of which are located on the top floor which is in part breach of the height standard.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	Given the nature and character of the urban setting the proposed development is located within, no impact on threatened species or ecological communities is likely to result.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	This object is not relevant to this development
(g) to promote good design and amenity of the built environment,	The proposed development promotes good design in that it serves to provide a built form and massing arrangement that serves to positively influence the future amenity of the dwelling occupants while adopting an architectural form and language, with an overall silhouette, height and land use intensity compatible with both the established and emerging development and housing typology.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposed development will comply with all relevant BCA codes and will promote the health and safety of occupants.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	This object is not relevant to this development
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The proposed development will be publicly notified in accordance with Council's DCP requirements.

Based on the above, the consent authority can be satisfied that there the proposed development remains consistent with the Objects of the Act despite the height non-compliance.

#### **4.2.3. Clause 5.28 (4)(a)(i) - Has the Written Request adequately Addressed the Matters in Sub-Clause (3)?**

Clause 5.28(4)(a)(i) states that development consent must not be granted for development that contravenes a development standard unless the consent authority is satisfied that the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3).

Each of the sub-clause (3) matters are comprehensively addressed in this written request, including detailed consideration of whether compliance with a development standard is unreasonable or unnecessary in the circumstances of the case. The written request also provides sufficient environmental planning grounds, including matters specific to the proposal and the site, to justify the proposed variation to the development standard.

#### 4.2.4. Clause 5.28 (4)(a)(ii) - Will the Proposed Development be in the Public Interest Because it is Consistent with the Objectives of the Particular Standard and Objectives for Development within the Zone in Which the Development is Proposed to be Carried Out?

Clause 5.28(4)(a)(ii) provides that development consent must not be granted for development that contravenes a development standard unless the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out.

In Part 4.1.1 of this request, it was demonstrated that the proposal is consistent with the objectives of the development standard. The proposal, inclusive of the non-compliance, is also consistent with the objectives of the R1 General Residential Zone:

##### Zone R1 – General Residential Zone

Objective	Comment
To provide for the housing needs of the community.	The proposal provides for eight (8) apartments, four (4) of which are nominated as affordable in a well serviced location, located in proximity to a variety of public transport options, expanses of public open space and services facilities.
To provide for a variety of housing types and densities.	The proposal provides for eight (8) apartments, four (4) of which are nominated as affordable alongside a development density congruent with that envisaged to be achieved by way of the SEPP Housing 2021 prescribed provisions.
To enable other land uses that provide facilities or services to meet the day to day needs of the residents	The proposal does not offer the provision of other land uses.  Notwithstanding, access to services are located within proximity to the site.
To ensure that development is compatible with the desired future character of the zone.	The contemporary designed building will improve the appearance of the subject site from Auburn Arthur Street, noting the current visual disparity resulting from the redevelopment of directly adjoining sites. The proposal employs a clear architectural composition combined with the diverse yet subtle materiality, which also serves to reduce the visual appreciation of the development along its peripheries. Balcony blades serve to accentuate the vertical breakup of the dwellings while small recesses on either end of the balcony also reduce the extent of any unadorned horizontal span.  The proposed development form is therefore deemed complementary, to the desired future character of the zone
To promote best practice in the design of multi dwelling housing and other similar types of development.	the proposal has been designed having regard to the design principles of SEPP 65 and therefore, will promote best practise.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMAURBAN

6 Auburn Street, Point Fredrick

FREDERICK - DA/3915/2022

Project No # 111/22

To ensure that non-residential uses do not adversely affect residential amenity or place demands on services beyond the level reasonably required for multi dwelling housing or other similar types of development.	This objective is not relevant to the development.
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The objectives of the zones as demonstrated above, as well as the objectives for the standard, have been adequately satisfied. Therefore, the proposal is considered to be in the public interest.

#### **4.2.5. Clause 5.28 (5)(a) – Would Non-Compliance Raise any Matter of Significance for State or Regional Planning?**

The proposed non-compliance with the height of buildings development standard will not raise any matter of significance for State or regional environmental planning. It has been demonstrated that the proposed variation is appropriate based on the specific circumstances of the case and would be unlikely to result in an unacceptable precedent for the assessment of other development proposals.

#### **4.2.6. Clause 5.28 (5)(b) – Is There a Public Benefit of Maintaining the Planning Control Standard?**

The proposed development achieves the objectives of the building height development standard and the land use zoning objectives. As such, there is no public benefit in maintaining the development standard given the substantial activation throughout the development.

#### **4.2.7. Clause 5.28 (5)(c) – Are there any other matters required to be taken into consideration by the Secretary before granting concurrence?**

There are no known additional matters that need to be considered within the assessment of the clause 5.28 Request and prior to granting concurrence, should it be required.

## 5. CONCLUSION

For the reasons set out in this written request, strict compliance with the height of buildings development standard contained within clause 5.25 of the SEPP (Precincts General) 2021 is unreasonable and unnecessary in the circumstances of the case. Further, there are sufficient environmental planning grounds to justify the proposed variation and it is in the public interest to do so.

It is reasonable and appropriate to vary the height of buildings development standard to the extent proposed for the reasons detailed within this submission and as summarised below:

- Compliance with the height of building development standard is unreasonable and unnecessary in the circumstances of the proposed development.
- The proposal, notwithstanding the non-compliance, is consistent with the objectives of the height of building standard and the R1 General Residential Zone.
- There are sufficient environmental planning grounds to justify the contravention, which results in a better planning outcome than a strictly compliant development in the circumstances of this particular case.
- There is an absence of any environmental impacts arising from the proposed variation.
- The proposed non-compliance with the height of building standard will not result in any matter of significance for State or regional environmental planning

For the reasons outlined above, the clause 5.28 request is well-founded. The development standard is unnecessary and unreasonable in the circumstances, and there are sufficient environmental planning grounds that warrant contravention of the standard. In the circumstances of this case, flexibility in the application of the height of buildings development standard should be applied.



**Appendix B:**  
Social Impact Assessment  
6 Auburn Street, Point Frederick



## 1. EXECUTIVE SUMMARY

This Social Impact Assessment (SIA) has been prepared by BMA Urban in support of a Detailed Development Application (DA) to Central Coast Council, prepared in accordance with Section 4.12 of the Environmental Planning and Assessment Act, 1979 and Clause 50 of the Environmental Planning and Assessment Regulation, 2021. The proposed development seeks consent for demolition of the existing dwelling and subsequent construction of a "residential flat building (RFB)" development reliant on the Affordable Housing 2021 – Division 1 (in-fill affordable housing) provisions.

Data from the Australian Bureau of Statistics (ABS), Census of Population and Housing and from Council's online demographic resources has been used in the preparation of this report. The 2021 population data provides a demographic profile of the subject locality as well as the broader Gosford metropolitan area. It identifies trends such as population growth, household structure, household income, and number and type of existing dwellings.

A description of the proposal is provided at **Section 3**.

An analysis of the proposal has been undertaken, as well as its immediate and broader geographic context. This includes the identification of land uses, existing demographic profile and the like. Potential positive and/or adverse social impacts are also documented, including recommended mitigation measures to address the identified potential adverse social impacts.

The most notable positive social impact arising from the proposal is the provision of increased housing opportunities for the population in an accessible location near a wide range of local services and facilities. The proposal will also provide an increase in affordable housing diversity catering for the changing housing needs of both the existing and incoming population. There is likely to be some negative impacts arising from the proposal during the construction phase. These impacts however can be managed and will be temporary.

It is recognised that consulting the community is a vital part of the DA assessment process and that Council will invite nearby and adjoining land owners and occupiers to review and comment on the proposal. The applicant would also welcome the opportunity to respond to any legitimate concerns raised.

Overall the social impact analysis concludes that whilst the proposal has potential to result in some negative impacts, the overwhelming majority of social impacts are positive. As such, this assessment concludes that the proposal's potential social impacts are acceptable, and importantly, consistent with the outcomes anticipated by the HSEPP and both Council and the NSW State Government in terms of increasing the availability of affordable rental housing in accessible locations.

## 2. SITE ANALYSIS AND CONTEXT

### 2.1 The Subject Site

The subject site is located within the Local Government Area (LGA) of Central Coast. Figure 1 below provides a base view identifying the location of the site within its defining context.

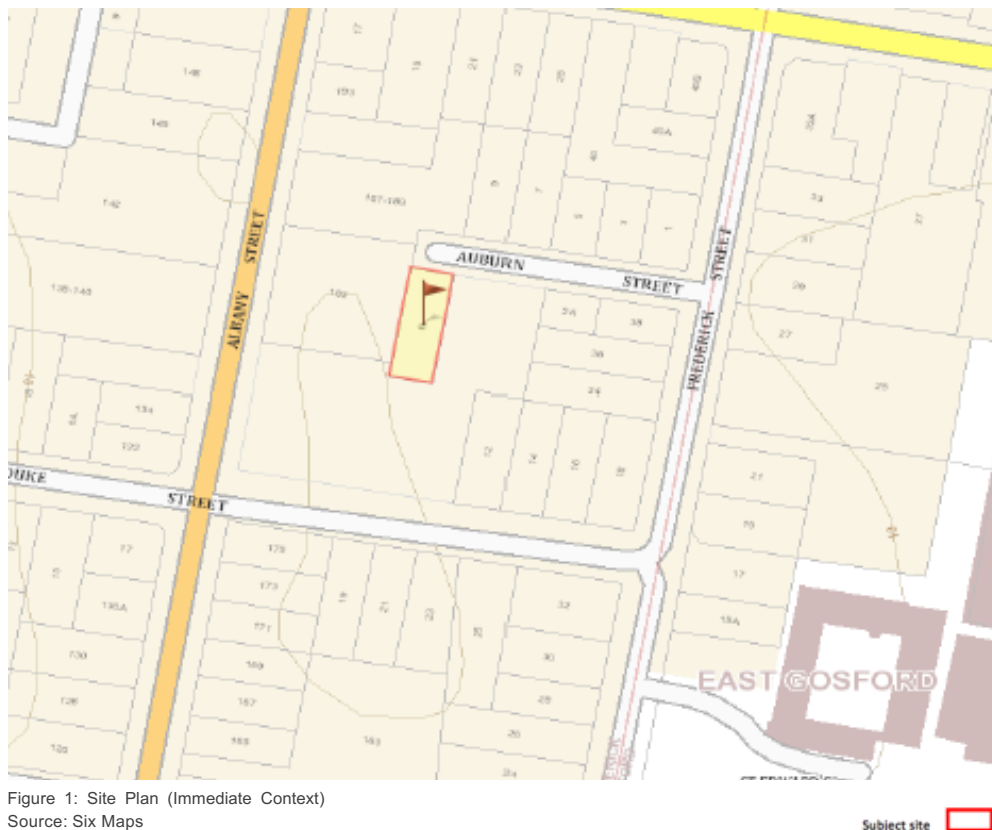


Figure 1: Site Plan (Immediate Context)  
Source: Six Maps

### 2.2 Site Context

The subject site is located within an area that is characterised by a number of various residential land uses, including single dwelling houses, multi-dwelling houses and residential flat buildings up to 5 storeys.

The site lies within the south-eastern corner of the Gosford Centre, generally bounded by The Central Coast Highway to the north, Frederick Street to the east, Albany Street to the west and Duke Street to the south.

Land will be (and already has been) acquired and amalgamated and existing low density within the Precinct will be demolished. In its place, a high-density format residential/mixed use development will emerge, thus fundamentally altering the character of the area. This is made evident upon the recently completed development located to the east /south of the site, the scale of which is made evident in this development applications SEE.

### 3. DEVELOPMENT DESCRIPTION

The proposed development seeks consent for:

- Demolition of the existing building;
- Earthworks and excavation for the purpose of accommodating semi-inground parking;
- Construction of a "residential flat building - with an In-fill Affordable housing component" development designed in response to the characteristics of the land and defining visual context;
- The development proposes a total gross floor area of 808m<sup>2</sup> generating an FSR of 1.18:1;
- Provision of eight (8) apartments, four (4) of which are nominated as affordable;
- Semi-inground parking provision providing for eight (8) residential vehicles, inclusive of two (2) accessible spaces, six (6) bicycle space and a single motorcycle space;
- Waste room, including independent storage for bulky waste; and
- Street tree verge treatment and site landscaping as identified in the Landscape Plan prepared by Zenith Landscape Design.

Architectural Drawings prepared by Fuse Architects, including a schedule of materials and finishes, form part of the architectural plan detail set.

A visual render of the development is provided as Figure 2.



Figure 2: Development Render  
Source: Fuse Architects

## 4. STATUTORY CONSIDERATIONS

### 4.1 State Environmental Planning Policy (Affordable Rental Housing) 2009

The State Environmental Planning Policy (Housing) (HSEPP) was introduced on 26 November 2021 to increase the supply and diversity of affordable rental and social housing throughout NSW. The HSEPP allows for the development of In-fill Affordable houses in residential zones. The HSEPP helps create In-fill Affordable accommodation by:

- Providing floor space incentives to encourage investment in In-fill Affordable housing.
- Setting clear standards for the design and construction of In-fill Affordable housing.

The aims of HSEPP are:

- to provide a consistent planning regime for the provision of affordable rental housing,
- to facilitate the effective delivery of new affordable rental housing by providing incentives by way of expanded zoning permissibility, floor space ratio bonuses and non-discretionary development standards,
- to facilitate the retention and mitigate the loss of existing affordable rental housing,
- to employ a balanced approach between obligations for retaining and mitigating the loss of existing
- affordable rental housing, and incentives for the development of new affordable rental housing,
- to facilitate an expanded role for not-for-profit-providers of affordable rental housing,
- to support local business centres by providing affordable rental housing for workers close to places of work,
- to facilitate the development of housing for the homeless and other disadvantaged people who may require support services, including group homes and supportive accommodation.

### 4.2 Zoning and Permissibility

The State Environmental Planning Policy (Precincts—Regional) 2021 applies to the subject site which is identified as being within Zone R1 – General Residential Zone. The proposed development is best characterised as a 'residential flat building' which is a permissible form of development within the zone.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT**

**BMA URBAN**

6 Auburn Street, Point Fredrick

**FREDERICK - DA/3915/2022**

Project No # 111/22

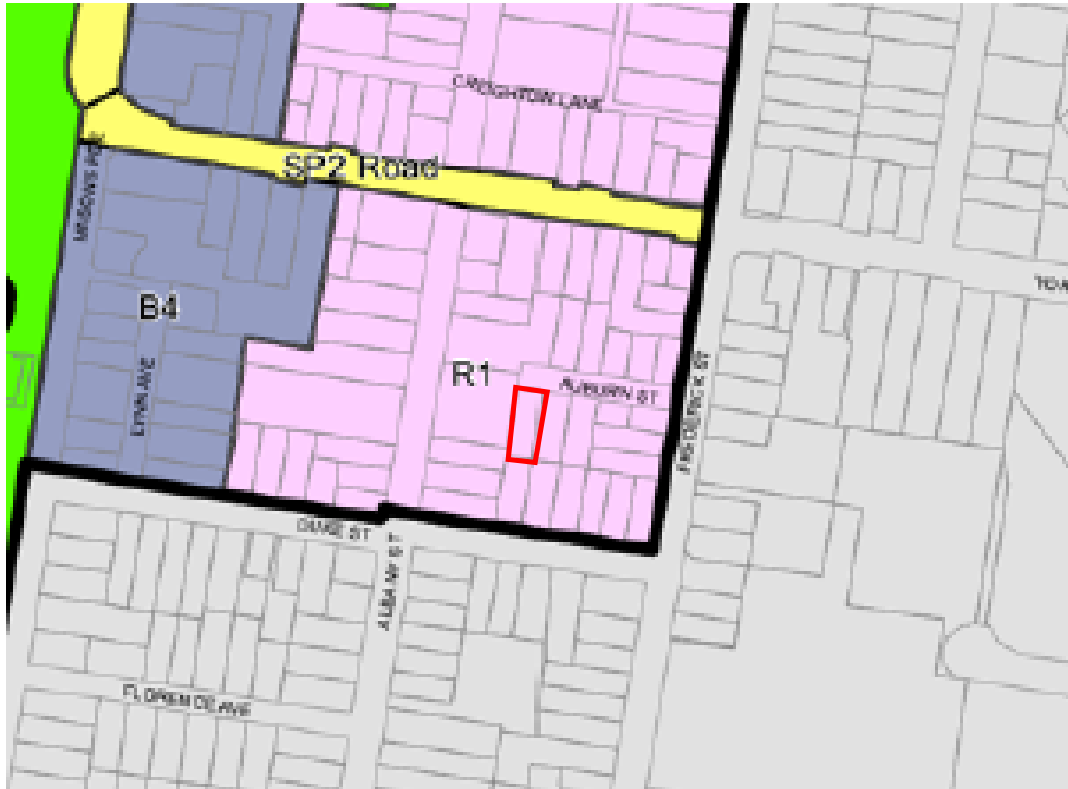


Figure 3: Zoning Map

Subject site



## 5. SOCIAL IMPACT ASSESSMENT

Social Impact Assessment refers to the assessment of the social consequences of a proposed decision or action on affected groups of people. It is recognised that some forms of development are considered more likely to have a social impact than others. These developments are required to be supported by a Social Impact Assessment (SIA).

Social impacts refer to the ways in which individuals or communities might be affected by new development in respect of:

- Health and wellbeing
- Access to facilities, amenities and services (including transport, health, education, retail, etc.);
- Cultural cohesion, identity, safety and security;
- Socio-economic outcomes; and
- Equitable, inclusive and sustainable opportunities in relation to the above.

It is recognised that a rigorous assessment is required to identify the full range of impacts. The assessment must ensure that the social impacts of the proposed development are identified, and that appropriate processes and procedures are put in place to manage those impacts.

The primary aims of this SIA are to ensure that the potential impact of the development on existing development and local communities is acknowledged, actioned and monitored, and that a socially acceptable outcome is achieved through appropriate management strategies.

## 6. DEMOGRAPHIC PROFILE

This section of the report provides an up-to-date socio-demographic profile of Greater Gosford, however, includes a more detailed analysis of the projected population and demographic characteristics of the suburb of Point Fredrick in which the proposed development is located.

The information is based on data from the *Australian Bureau of Statistics (ABS) 2016 Censuses of Population and Housing*. This assessment relies on the ABS's statistical boundaries for Gosford, which is shown in black on the map at **Figure 4**



Figure 4: ABS statistical boundary for Gosford

LGA Source: Australian Bureau of Statistics

A summary of the Greater Gosford Area profile:

- In the 2016 Census, there were 178,427 people in the Gosford Area. Of these 48.4% were male and 51.6% were female. Aboriginal and/or Torres Strait Islander people made up 3.5% of the population.
- The median age of people in the Gosford Area was 44 years. Children aged 0 - 14 years made up 17.5% of the population and people aged 60 years and over made up 29.5% of the population.
- Of people in Gosford Area, 46.5% were married.
- In the Gosford Area, 28.2% of the population were attending primary school, 22.6% of the population were attending secondary institutions, and 21.4% were learning at a tertiary level,
- The size of Gosford's labour force in 2021 was 83,454, of which 42,096 were employed full time workers.
- The most common occupations in the Gosford Area included Professionals 24.2%,

Managers 13.8%, Technicians and Trade Workers 13.6%.

- In 2021, a total of 89.4% of the dwellings in Gosford were occupied on Census night, compared to 90.6% in NSW. The proportion of unoccupied dwellings was 10.6%,

The proposed development is located within the suburb of Point Fredrick. The boundaries of the suburb of Point Fredrick are shown at **Figure 5**.

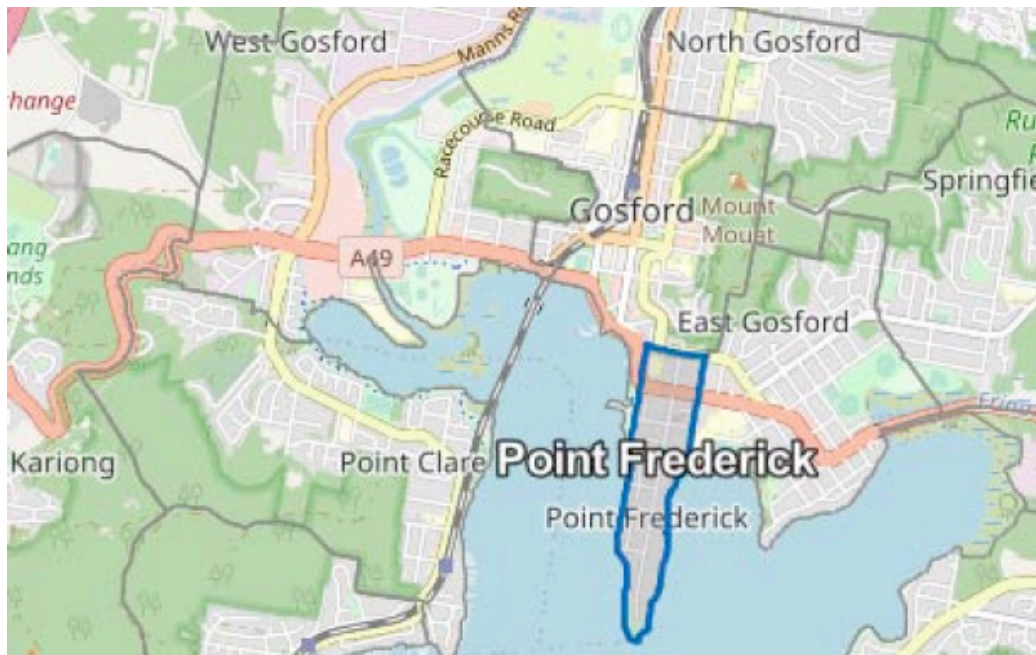


Figure 5: ABS statistical boundary for Point Fredrick. Source: Australian Bureau of Statistics

Subject site

## 6.1 Point Fredrick Area Profile

The following demographic data relates to the suburb of Point Fredrick.

### 6.1.1 Population

- According to the 2021 Census data the usual resident population of Point Fredrick was 2,043.
- In 2021 the population of Point Fredrick were living in 1,103 dwellings with an average household size of 2.
- The Aboriginal and Torres Strait Islander Census population of Point Fredrick in 2021 was 57 or 3.2% of the total population.
- In 2021, 31.4% of people living in the suburb of Point Fredrick were born overseas.
- 16.9% of people living in the suburb of Point Fredrick spoke a language other than English at home in 2021.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

## 6.1.2 Age

The service age groups of Point Fredrick in 2021 compared to Greater Gosford shows that there was a lower proportion of people in the younger age groups (0 to 14 years) as well as a higher proportion of people in the older age groups (60+ years).

The major differences between the age structure of Point Fredrick and Greater Gosford:

- A lower percentage of "younger age groups 0-14" (11.9% compared to 17.5%)
- A larger percentage of 'Seniors 60+' (34.1% compared to 29.2%)

The following tables indicating the age structure of Point Fredrick and the Greater Gosford population is provided.

Age	Point Fredrick	%
<b>All people</b>		
Median age	48	N/A
0-4 years	80	3.9
5-9 years	77	3.8
10-14 years	85	4.2
15-19 years	84	4.1
20-24 years	125	6.1
25-29 years	127	6.2
30-34 years	121	5.9
35-39 years	119	5.8
40-44 years	120	5.9
45-49 years	124	6.1
50-54 years	131	6.4
55-59 years	152	7.5
60-64 years	165	8.1
65-69 years	156	7.7
70-74 years	136	6.7
75-79 years	92	4.5
80-84 years	71	3.5
85 years and over	74	3.6

More information on [Age \(AGEP\)](#)

Table based on place of usual residence

Table 1: Age - Point Fredrick.

Source: Australian Bureau of Statistics

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

FREDERICK - DA/3915/2022

6 Auburn Street, Point Fredrick

Project No # 111/22

BMA URBAN

Age All people	Gosford	%
Median age	44	N/A
0-4 years	9,406	5.3
5-9 years	10,662	6.0
10-14 years	11,120	6.2
15-19 years	10,231	5.7
20-24 years	9,075	5.1
25-29 years	8,681	4.9
30-34 years	9,626	5.4
35-39 years	10,746	6.0
40-44 years	10,987	6.2
45-49 years	11,640	6.5
50-54 years	11,703	6.6
55-59 years	11,830	6.6
60-64 years	11,875	6.7
65-69 years	10,886	6.1
70-74 years	10,580	5.9
75-79 years	8,088	4.5
80-84 years	5,516	3.1
85 years and over	5,769	3.2

More information on [Age \(AGEP\)](#)

Table based on place of usual residence

Table 2: Age - Gosford.

Source: Australian Bureau of Statistics

### 6.1.3 Education and Employment

- Analysis of the Analysis of the qualifications of the population in Point Fredrick in 2021 compared to Greater Gosford shows that there was a higher proportion of people holding formal qualifications (Bachelor or higher degree; Advanced Diploma or Diploma; or Vocational qualifications).
- Overall, 43.2% of the population in Point Fredrick held educational qualifications (Diploma and above), compared with Greater Gosford at 33%.
- Overall, 9.7% of the population in Point Fredrick left school at Year 10, compared with Greater Gosford at 12.6%

The major differences between qualifications held by the population of Point Fredrick and Greater Gosford were:

- A *larger* percentage of persons with qualifications diploma and above.
- A *smaller* percentage of persons left school at Year 10.



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

Level of highest educational attainment People aged 15 years and over	Point Frederick	%
Bachelor Degree level and above	560	31.2
Advanced Diploma and Diploma level	215	12.0
Certificate level IV	56	3.1
Certificate level III	165	9.2
Year 12	248	13.8
Year 11	50	2.8
Year 10	174	9.7
Certificate level II	0	0.0
Certificate level I	0	0.0
Year 9 or below	100	5.6
Inadequately described	62	3.5
No educational attainment	5	0.3
Not stated	154	8.6

Table 3: Education - Point Fredrick.

Source: Australian Bureau of Statistics

Level of highest educational attainment People aged 15 years and over	Gosford	%
Bachelor Degree level and above	33,009	22.4
Advanced Diploma and Diploma level	15,629	10.6
Certificate level IV	6,193	4.2
Certificate level III	21,643	14.7
Year 12	19,674	13.4
Year 11	4,886	3.3
Year 10	18,525	12.6
Certificate level II	105	0.1
Certificate level I	13	0.0
Year 9 or below	10,387	7.1
Inadequately described	5,079	3.4
No educational attainment	392	0.3
Not stated	11,639	7.9

Table 4: Education - Gosford

Source: Australian Bureau of Statistics

- The size of Point Fredricks labour force in 2021 was 1,023 (56.9%) of which 528 were full time workers.
- The size of Greater Gosford's labour force in 2021 was 83,454 (56.7%) of which 42,096 were full time workers.
- Analysis of the employment status (as a percentage of the labour force) in Point Fredrick in 2021 compared to Greater Gosford shows that there was a higher proportion in employment.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMAURBAN

6 Auburn Street, Point Fredrick

FREDERICK DA/3915/2022

Project No # 111/22

Participation in the labour force	Point Frederick	%
<i>People aged 15 years and over</i>		
In the labour force	1,023	56.9
Not in the labour force	668	37.2
Not stated	107	6.0

**Note 1:** Calculated percentages represent a proportion of people aged 15 and over in the area.

**Note 2:** The ABS Labour Force Survey provides the official estimates of Australia's labour force. More information is provided in [Comparing 2021 Census and Labour Force](#).

More information on [Labour force status \(LFS\)](#).

Table based on place of usual residence

Employment status	Point Frederick	%
<i>People who reported being in the labour force, aged 15 years and over</i>		
Worked full-time	528	51.6
Worked part-time	331	32.4
Away from work (a)	105	10.3
Unemployed	56	5.5

Table 5: Labour - Point Fredrick.

Source: Australian Bureau of Statistics

Participation in the labour force	Gosford	%
<i>People aged 15 years and over</i>		
In the labour force	83,454	56.7
Not in the labour force	56,055	38.1
Not stated	7,726	5.2

**Note 1:** Calculated percentages represent a proportion of people aged 15 and over in the area.

**Note 2:** The ABS Labour Force Survey provides the official estimates of Australia's labour force. More information is provided in [Comparing 2021 Census and Labour Force S](#).

More information on [Labour force status \(LFS\)](#).

Table based on place of usual residence

Employment status	Gosford	%
<i>People who reported being in the labour force, aged 15 years and over</i>		
Worked full-time	42,096	50.4
Worked part-time	28,453	34.1
Away from work (a)	9,325	11.2
Unemployed	3,578	4.3

Table 6: Labour - Gosford

Source: Australian Bureau of Statistics

## 6.1.4 Income

- Analysis of individual income levels in Point Fredrick in 2021 were higher for individuals when compared to Greater Gosford. However, the income of family households was higher in Greater Gosford.

Median weekly incomes (a)	Point Frederick	%
<i>People aged 15 years and over</i>		
Personal (b)	\$882	N/A
Family (c)	\$2,074	N/A
Household (d)	\$1,631	N/A

Table 7: Income - Point Fredrick.

Source: Australian Bureau of Statistics

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

Median weekly incomes (a) People aged 15 years and over	Gosford	%
Personal (b)	\$762	N/A
Family (c)	\$2,103	N/A
Household (d)	\$1,615	N/A

Table 8: Income - Gosford

Source: Australian Bureau of Statistics

## 6.1.5 Total and Type of Dwellings and Households

- In Point Fredrick, 28.3% of households were made up of couples with children in 2021, compared with 41.2% in Greater Gosford.
- In Point Fredrick, 49.6% of households were made up of couples with no children in 2021, compared with 40.6% in Greater Gosford.

Family composition All families	Point Frederick	%
Couple family without children	287	49.6
Couple family with children	164	28.3
One parent family	117	20.2
Other family	7	1.2

Table 9: Family – Point Fredrick

Source: Australian Bureau of Statistics

Family composition All families	Gosford	%
Couple family without children	19,880	40.6
Couple family with children	20,157	41.2
One parent family	8,354	17.1
Other family	574	1.2

Table 10: Family - Gosford

Source: Australian Bureau of Statistics

- Analysis of the types of dwellings in Point Fredrick in 2021 shows that 33.7% of all dwellings were separate houses; 12% were medium density dwellings, and 53.5% were in high density dwellings, compared with 74%, 13.9%, and 10.9% in the Greater Gosford respectively.
- Analysis of the number of bedrooms in dwellings in Point Fredrick in 2021 compared to Greater Gosford shows that there was a higher proportion of dwellings with 2 bedrooms.
- Overall, 39.6% of households were in dwellings with 2 bedrooms, compared with 20.2% for Greater Gosford respectively.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

## Attachment 14

## PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT

BMA URBAN

6 Auburn Street, Point Fredrick, DA/3915/2022

Project No # 111/22

<b>Dwelling structure</b>	<b>Point Fredrick</b>	<b>%</b>
<i>Occupied private dwellings (excl. visitor only and other non-classifiable households)</i>		
Separate house	321	33.7
Semi-detached, row or terrace house, townhouse etc	114	12.0
Flat or apartment	510	53.5
Other dwelling	0	0.0

More information on [Dwelling structure \(STRD\)](#)

Table based on place of enumeration

<b>Number of bedrooms</b>	<b>Point Fredrick</b>	<b>%</b>
<i>Occupied private dwellings (excl. visitor only and other non-classifiable households)</i>		
None (includes studio apartments or bedsitters)	15	1.6
1 bedroom	75	7.9
2 bedrooms	376	39.6
3 bedrooms	266	28.0
4 or more bedrooms	202	21.3
Number of bedrooms not stated	16	1.7
Average number of bedrooms per dwelling	2.7	N/A
Average number of people per household	2	N/A

Table 11: Dwelling Structure – Point Fredrick

Source: Australian Bureau of Statistics

<b>Dwelling structure</b>	<b>Gosford</b>	<b>%</b>
<i>Occupied private dwellings (excl. visitor only and other non-classifiable households)</i>		
Separate house	50,761	74.0
Semi-detached, row or terrace house, townhouse etc	9,553	13.9
Flat or apartment	7,509	10.9
Other dwelling	587	0.9

More information on [Dwelling structure \(STRD\)](#)

Table based on place of enumeration

<b>Number of bedrooms</b>	<b>Gosford</b>	<b>%</b>
<i>Occupied private dwellings (excl. visitor only and other non-classifiable households)</i>		
None (includes studio apartments or bedsitters)	331	0.5
1 bedroom	2,654	3.9
2 bedrooms	13,878	20.2
3 bedrooms	26,363	38.4
4 or more bedrooms	24,391	35.6
Number of bedrooms not stated	965	1.4

Table 12: Dwelling Structure – Gosford

Source: Australian Bureau of Statistics

### 6.1.6 Cost of Housing

- Analysis of the monthly housing loan repayments of households in Point Fredrick and Greater Gosford shows that there was a larger proportion of households paying low mortgage repayments, i.e. <30% of household income.

<b>Mortgage monthly repayments</b> <i>Occupied private dwellings (excl. visitor only and other non-classifiable households) owned with a mortgage or purchased under a shared equity scheme</i>	<b>Point Fredrick</b>	<b>%</b>
Median mortgage repayments	1,947	N/A
Owner with mortgage households where mortgage repayments are less than or equal to 30% of household income (a)	132	67.3
Owner with mortgage households with mortgage repayments greater than 30% of household income (a)	48	24.5
Unable to determine (b)	12	6.1

Table 13: Cost of Housing – Point Fredrick

Source: Australian Bureau of Statistics

<b>Mortgage monthly repayments</b> <i>Occupied private dwellings (excl. visitor only and other non-classifiable households) owned with a mortgage or purchased under a shared equity scheme</i>	<b>Gosford</b>	<b>%</b>
Median mortgage repayments	2,150	N/A
Owner with mortgage households where mortgage repayments are less than or equal to 30% of household income (a)	17,352	74.7
Owner with mortgage households with mortgage repayments greater than 30% of household income (a)	3,416	14.7
Unable to determine (b)	2,458	10.6

Table 14: Cost of Housing – Gosford

Source: Australian Bureau of Statistics

## 6.2 Target Group

Housing affordability is often linked to the relationship between housing costs (prices, mortgage payments or rents) and household incomes. Housing stress occurs when households have to pay an unacceptable share of their income towards housing, either as rent or mortgage payment. The high cost of housing means many households are unable to meet basic living costs. Housing stress generally occurs when a household is paying more than 30% of their income in housing costs and is also in the bottom 40% of household incomes in a given city.

National research undertaken on this subject confirms that there are specific groups of people who are most impacted by the rising cost of housing and most susceptible to housing stress as follows:

- One parent household
- Couples with young children
- Single person households.
- Key workers
- Students.
- Low to moderate income earners.
- People who are experiencing housing stress.
- People at risk of being displaced from their communities (e.g. they have resided or worked in the area for a number of years).

The HSEPP encourages affordable housing which provide a new affordable housing in well-located areas to meet the needs of a wide range of households on very low to moderate incomes.



## 7. IDENTIFICATION OF POTENTIAL SOCIAL IMPACTS

The potential impacts, being neutral, negative and/or positive impacts, associated with the proposed development are identified below. This includes social impacts that may arise as a result of the proposal or impacts the proposal and its potential occupants/patrons may experience due to existing surrounding conditions.

### 7.1 Anti-Social behaviour and Crime Prevention

The proposed Residential Flat Building (RFB) has been designed to provide accommodation for all various types of demographics employed in the local area. The RFB is ideally located for residents and facilitates the use of public transport services which provides access to a broader range of services and facilities.

The external communal open space is provided on the Ground floor level, will assist in providing a sense of community within the development. Residents are likely to feel a sense of ownership over these spaces, which increase safety and security within the development.

The proposed landscaping within the development will not provide any areas of concealment and will promote safety within the common areas.

The proposal is of high architectural quality and has been designed to limit any impact to the streetscape or the adjoining developments.

The potential impact is considered neutral.

### 7.2 Access and Mobility

The proposed site is located at 6 Auburn St, Point Fredrick is within an "accessible area". Under the HSEPP an accessible area means land that is within:

- 800 metres walking distance of a public entrance to a railway station or a wharf from which a Sydney Ferries ferry service operates, or
- 400 metres walking distance of a public entrance to a light rail station or, in the case of a light rail station with no entrance, 400 metres walking distance of a platform of the light rail station, or
- 400 metres walking distance of a bus stop used by a regular bus service (within the meaning of the *Passenger Transport Act 1990* that has at least one bus per hour servicing the bus stop between 06.00 and 21.00 each day from Monday to Friday (both days inclusive) and between 08.00 and 18.00 on each Saturday and Sunday.

The nearby public transport services are shown in the following figures. The nearest bus stop is located approximately 140m walking distance south-east of the site, which is serviced by the 42 service. The 42 service operates a loop service 7 days per week between Gosford and Point Frederick. Shown in **Figure 6 and 7**

The site is therefore located in an accessible area, offering residents ease of access to a wide range of community facilities and services both in the locality and within the wider Gosford area if required.

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

**Attachment 14**

**PUBLIC AMENDED Statement of Environmental Effects - 6 Auburn St POINT**

**RMA URBAN**

6 Auburn Street, Point Fredrick

**FREDERICK - DA/3915/2022**

Project No # 111/22

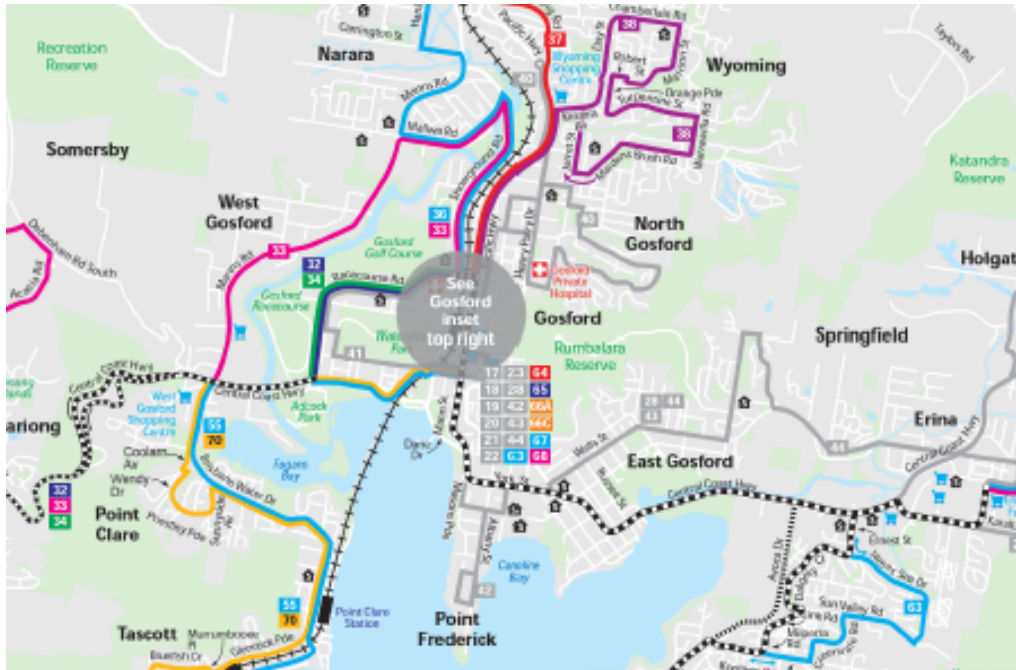


Figure 6 – Existing Public Transport Map  
(Source: Transport for NSW)

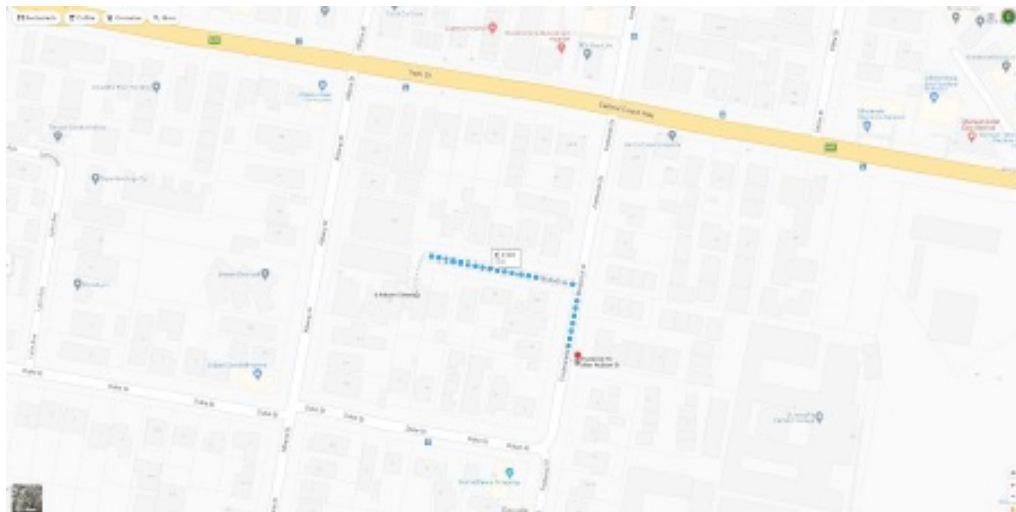


Figure 7 – Walking distance to/from nearest bus stop on Frederick Street  
(Source: Transport for NSW)

The proposal has also been designed to provide equity in access. The proposed lift provides access to all levels of the building which includes the common open space at Ground Floor. The boarding house also proposes a number of accessible rooms.

An accessible pathway has been provided in compliance with AS1428.1, to allow suitable access between the front entrance of the building and the street for visitors and disabled users. Access to all required communal areas for persons with a disability in accordance with the premises standard will be provided.

The potential impact is considered positive.

## 7.3 Culture and Community Values

The In-fill Affordable Housing component of the RFB will cater for professional people, families, and students who might otherwise not be able to afford to live in the area, thus increasing the diversity of residents in the locality.

The proposed development would also allow members of the community, who might otherwise be displaced due to housing stress, to remain in the locality and thus maintain neighborhood amenity through diversification.

The proposal will encourage the acceptance of diverse cultures and multiculturalism and enhance the cultural life of the community.

The potential impact is considered positive.

## 7.4 Economic Advantage

The proposal has been designed to target young professionals, teachers, health care workers, student and the like and to provide opportunities for sustainable employment to enhance the economic and social community of Point Fredrick.

The Department of Planning and Environment has stated:

"In-fill affordable housing provides opportunities for the delivery of new affordable housing in well-located areas to meet the needs of a wide range of households on very low to moderate incomes".

A growing section of Australia's population do not live in nuclear families, and the housing stock is shifting alongside this. There is a need for more diverse housing choices for people who are seeking convenient access to employment and transport, while continue to enjoy the amenity and services available in suburban neighborhoods.

The potential impact is considered positive

## 7.5 Housing Mix

The proposal will contribute to the diverse mix of housing styles and levels of affordable housing and will provide low-moderate rental housing in the area. The current mix of apartments and non-apartments in the area is almost a 50/50 split. The current proposal of 8 x apartments will not adversely affect this ratio.

Furthermore, the RFB will only consist of 2 x bedroom configurations. This apartment size, is appropriate to house a couple without children (49.6%) or couples with children (28.3%).

The potential impact is considered positive.

## 7.6 Quality of Life

The proposal will provide a satisfactory quality of life for prospective residents without any significant effect on the quality of life enjoyed by surrounding residents.

Sustainable design principles, including the provision of landscaping and strategically located windows have been incorporated into the design of the building. All common areas will receive an appropriate level of solar access and natural ventilation.

The proposed development would also assist in the maintenance of the general health of the community through the provision of affordable rental housing, which in turn would decrease health impacts associated with housing stress. The proposal is in an accessible area which means that all services associated with health management are within close proximity or can be access via public transport.

This proposal promotes social inclusion and also encourage the acceptance of diverse cultures and multiculturalism and enhance the culture life of the community.

The potential impact is considered positive.

## 7.7 Participation and Inclusion

The proposal provides affordable housing in an area which is conveniently located in a well serviced and accessible location. High frequency public transport services are located in close proximity to the site as described in address of Part 8.2 of the SIA. The location of the RFB will enhance opportunities for people to both participate and interact in community life.

The proposed RFB will provide opportunities for people of all social and economic levels to have access to desirable and affordable accommodation. The proposal would encourage the acceptance of diverse cultures and multiculturalism and enhance the culture life of the community.

The potential impact is considered positive.

## 7.8 Contributing to the Existing Environment

The In-fill Affordable component of the RFB would cater for young professionals, students, single people and the like who might otherwise not be able to afford to live in the area, thus increasing both the diversity of residents in the locality and the existing social environment.

The proposed development will positively contribute to the existing environment given that it seeks to revitalise the land by way of providing a high level design outcome and compatible built form character. The proposal will not have any effect on the natural environment in this locality and will be consistent with the future built form character of other development located within the sites defining context.

The proposal will not have any effect on any Aboriginal archaeological items or sites and does not affect any heritage items.

The proposed development will also assist in meeting the objectives of both Council and the NSW State Government to increase the availability of affordable rental housing for people who might otherwise be unable to stay within the locality.

## 7.9 Safety and Security

The proposed RFB has been designed to provide accommodation for young professionals and key workers employed in the local area. The site is ideally located for residents to use public transport and is in easy walking distance of local shops, services and facilities.

The proposed development implements key principles of Crime Prevention through Environmental Design (CPTED) for surveillance, access control, territorial reinforcement and space management. Key design considerations are as follows:

- Passive surveillance is provided through a significant increase in 'eyes on the street' to Auburn Street.
- Balcony openings and ground level private open spaces are elevated to promote passive surveillance of

the public domain.

- Access control is achieved through secure entry (smart key entry) to the residential lobbies, lifts and basement;
- The development seeks the provision of a clearly identifiable pedestrian entry, separated from the vehicular entrance into the development;
- Territorial reinforcement is provided through landscaping and public domain treatments to delineate public and private spaces within the development with appropriate maintenance and management policies; and
- Space management will be achieved through selection of appropriate materials/finishes and routine maintenance of the building and landscaped areas to ensure a positive contribution to the public realm and to resist graffiti and anti-social behaviour. Low planting will be provided along walls and garden paths to maintain good visibility.

The potential impact is considered neutral.

## 7.10 Transportation

The proposal is located in an area which is well serviced and provided with high-frequency/high-volume public transport services.

The provision of In-fill Affordable housing in this context will also promote the use of public transport, walking and cycling and therefore, reduce reliance on cars as the principal means of private transport.

The potential impact is considered positive.

## 7.11 Community Risk Perception

The proposal to provide a mixture of In-fill Affordable housing and non-infill within the RFB is designed to overcome community perceptions concerning affordable housing developments. The In-fill Affordable apartments will be subject to formal occupancy agreements with Community Housing Groups.

The potential impact is considered neutral.

## 7.12 Construction Impacts

There will be an increase in traffic, noise and dust during the construction phase. Construction vehicles will include construction and delivery trucks and potentially a crane for lifting construction materials and equipment into position. A Construction Management Environmental Plan (CEMP), outlining methods to minimise and manage the potential impacts of the construction works on the amenity of neighbouring properties will be required prior to commencement of any building works occurring.

The plan will need to specifically address traffic, noise and dust during construction including cumulative impacts from any surrounding development sites. While the potential exists for there to be some negative impacts on the neighbour's amenity, it is recognised that these impacts will be temporary.



## 8. PUBLIC PERCEPTION AND CONSULTATION

As part of the assessment of the development application, Section 4.15(1)(d) requires the consent authority to take into account any submissions made during the formal exhibition period. It is recognised that the DA will be publicly exhibited, at which time the developer may be given an opportunity to respond to any legitimate concerns raised.

In the past, many objectors have had misconceptions about prospective affordable housing tenants. The generalised portrayal of affordable housing tenants.

As detailed by the Department of Planning and Environment, affordable housing are formulated to attract a clientele which is largely based on professionals, health care workers, police and other emergency service staff, students and the like who require affordable housing close to work or public transport.

A growing section of Australia's population don't live in nuclear families, and the housing stock is shifting alongside this. High-density built forms are part of this shift. But there is need for more diverse choices for people who want to continue to enjoy the amenity of suburban neighbourhoods and keep their existing social networks there.

The design has also incorporated CPTED principles to ensure the safety and security of the community and residents within the development. Surveillance CCTV systems and passive surveillance of common areas are incorporated into the design, respond to resident concerns about security and safety, and will mitigate any potential adverse impacts.

Opposition often stems from the perceived impact of affordable housing, such as additional noise or traffic, however, these impacts come with people, not housing stock. In many instances, a purposely designed and managed RFB will be better equipped to minimize any community impacts.

## 9. CONCLUSION

This report has assessed the potential social impacts and potential benefits, arising from the development of 6 Auburn St, Point Fredrick for the purposes of an eight 8 apartment RFB development that includes a component of "in-fill affordable housing".

It is considered that the proposed development would have a positive social impact in that it would:

1. Increase the availability of Affordable Rental Housing in the suburb of Point Fredrick,
2. Increase the housing stock, and provide desirable and affordable accommodation, in an accessible area as defined in the HSEPP.
3. Provide housing choice for local and future residents.
4. Promote the use of public transport, walking and cycling and reduce reliance on cars as the principal means of private transport.
5. Provide additional affordable housing for lower income people in close proximity to public transport and a wide range of services, amenities, health services and recreational facilities.
6. Allow social groups and members of the community, who might otherwise be displaced due to housing stress, to remain in the locality and thus maintain neighbourhood amenity through diversification.
7. Cater for single people, couples, students and the like who might otherwise not be able to afford to live in the area, thus increasing the diversity of residents in the locality.
8. Cater for professional people, health care workers, police and other emergency service staff, students and other people who do not necessarily require permanent rental accommodation to live in the Point Fredrick area and add to the social mix of the population.
9. Assist in meeting the objectives of both Council and the NSW State Government to increase the availability of affordable rental housing for people who might otherwise be unable to stay within the locality.

The key social impact potentially arising from the development relates to:

- Negative amenity impacts to adjoining residents during construction including traffic, noise, dust and the like.

As discussed in **Section 8** above, the potential impacts on neighbour resident's amenity can be controlled through appropriate measures. The construction phases are also temporary and therefore is not likely to result in a major impact to the subject locality.

It has been demonstrated in the supporting Statement of Environmental Effects that the proposal would have no adverse impact on the environment to warrant refusal of the development.

Overall it is considered that the redevelopment of the site for a "new generation" boarding house will have a significant net community benefit.

## DISCLAIMER

This report incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of BMA Urban Pty Ltd opinion in this report. BMA Urban prepared this report on the instructions, and for the benefit only, Zeytouneh 10452 Pty Ltd (**Instructing Party**) for the purpose of the Statement of Environmental Effects and Cl 5.28 Variation Request (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, BMA Urban expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, BMA Urban was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to BMA Urban at the date of this report, and upon which BMA Urban relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which BMA Urban has no control.

Whilst BMA Urban has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. BMA Urban (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which BMA Urban relies, provided that such errors or omissions are not made by BMA Urban recklessly or in bad faith.

This report has been prepared with due care and diligence by BMA Urban and the statements and opinions given by BMA Urban in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

## FUSE—ARCHITECTS

APARTMENT DESIGN GUIDELINE			
ref	item description	notes	compliance
<b>PART 3</b>	<b>SITING THE DEVELOPMENT</b>		
<b>3A</b>	<b>SITE ANALYSIS</b>		
3A-1	<b>Objective:</b> Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	Small infill site takes into consideration neighbouring properties and further surrounding public amenities and town centres.	✓
	<b>Design Guidance</b>		<b>Considered</b>
	Each element in the Site Analysis Checklist should be addressed (see Appendix 1)	Each item in the site analysis checklist has been considered	YES
<b>3B</b>	<b>ORIENTATION</b>		
3B-1	<b>Objective:</b> Building types and layouts respond to the streetscape and site while optimising solar access within the development	The building alignment respects the existing development pattern and directly addresses the street and future developments. Generous pedestrian access is provided from the street.	✓
	<b>Design Guidance</b>		<b>Considered</b>
	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	The building alignment respects the existing development pattern and directly addresses the street and future developments. Generous pedestrian access is provided from the street.	YES
	Where the street frontage is to the east or west, rear buildings should be orientated to the north	Street frontage is to the north-east	YES
	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)	The street frontage is to the north-east with minimal shadows cast to the larger development to the south.	YES
3B-2	<b>Objective:</b> Overshadowing of neighbouring properties is minimised during mid winter		✓
	<b>Design Guidance</b>		<b>Considered</b>
	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	Living areas, private open space and communal open space have been oriented to receive solar access.	YES
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered	Refer to Shadow Diagrams.	YES
	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%	Refer to Shadow Diagrams	YES
	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy	Refer to Shadow Diagrams	YES
	Overshadowing should be minimised to the south or down hill by increased upper level setbacks	Most of the building is to be setback 6m from the southern boundary.	YES
	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	Development is oriented at 90 degrees to the boundary with neighbouring properties.	YES
	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	No solar collectors on the neighbouring properties.	YES
<b>3C</b>	<b>PUBLIC DOMAIN INTERFACES</b>		
3C-1	<b>Objective:</b> Transition between private and public domain is achieved without compromising safety and security		✓
	<b>Design Guidance</b>		<b>Considered</b>

Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	No street-facing apartments have POS on grade.	YES
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)	Private terraces enjoy a good level of visual privacy while allowing for passive surveillance of the public domain.	YES
Upper level balconies and windows should overlook the public domain	Upper-level balconies and windows overlook the public domain.	YES
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	Fences and Gates at pedestrian and vehicle entries are visually permeable. Solid walls are used to enclose the sub-floor storage and rooms – this will be screened with landscaping.	YES
Length of solid walls should be limited along street frontages	Gates at pedestrian and vehicle entries are visually permeable. Solid walls are used to enclose the sub-floor storage and rooms – this will be screened with landscaping.	YES
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.	At the upper-ground level, a private terrace faces the public domain.	YES
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: - architectural detailing - changes in materials - plant species - colours	The 2 separate building entries are distinguished by clearly defined entrance gates on both front corners of the site.	YES
Opportunities for people to be concealed should be minimised	Sightlines into public and communal spaces are maintained throughout. The transition from the public domain into the residential lobbies have clear sightlines. Recesses to the ground floor plan into the common areas are securely enclosed. Communal open areas are overlooked by private balconies.	YES
<b>3C-2</b>	<b>Objective:</b> Amenity of the public domain is retained and enhanced	✓
	<b>Design Guidance</b>	<b>Considered</b>
Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	Solid walls are used to enclose the sub-floor storage and rooms – this will be visually softened with landscaping.	YES
Mailboxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	Mailboxes are to be integrated into the structure adjacent the main pedestrian entry perpendicular to the street alignment.	YES
The visual prominence of underground car park vents should be minimised and located at a low level where possible	The underground carp park will be naturally ventilated via openings at ground level.	YES
Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	Garbage storage and the like are to be located within the basement away from public view.	YES
Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels	No ramping at building entry. Path is on grade.	YES
Durable, graffiti resistant and easily cleanable materials should be used	Durable materials such as masonry are to be used. The largest solid walls facing the public domain are to be set behind a deep landscape zone making them less attractive targets for vandals.	YES
Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: - street access, pedestrian paths and building entries which are clearly defined	There are no adjoining parks or open spaces, site is enclosed by existing neighbouring developments	YES

## FUSE—ARCHITECTS

	<ul style="list-style-type: none"> <li>- paths, low fences, and planting that clearly delineate between communal/private open space and the adjoining public open space</li> <li>- minimal use of blank walls, fences, and ground level parking</li> </ul>		
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	Underground car parking is set into the slope of the site with minimal ramping. Protrusion above ground is to be visually softened with landscaping.	YES
<b>3D</b>	<b>COMMUNAL AND PUBLIC OPEN SPACE</b>		
3D-1	<b>Objective:</b> An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping		✓
	<b>Design criteria</b>		
	1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)	While the extent of communal open space proposed to the development fails to meet the 25% prescribed by the ADG, it does so in an inconsequential manner.  The ADG informs that the provision of the requisite amount of COS is not always achievable, most relevantly, on small lots. The ADG provides additional criteria for development that cannot achieve the minimum area, so as to offset any COS dispensation. One such criteria is the demonstration of the proximity of public open space from the development.  The site enjoys proximate access to an area of public open space in the form of Lions Park and the Gosford Olympic Swimming Pool, located a mere 600m walking distance from the site to the northwest.	✓
	2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours	Refer above	
	<b>Design Guidance</b>	<b>Considered</b>	
	Communal open space should be consolidated into a well designed, easily identified and usable area	Refer to above	YES
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	Refer to above	YES
	Communal open space should be co-located with deep soil areas	Refer to above	YES
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Refer to above	YES
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	Refer to above	YES
	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: <ul style="list-style-type: none"> <li>- provide communal spaces elsewhere such as a landscaped roof top terrace or a common room</li> <li>- provide larger balconies or increased private open space for apartments</li> <li>- demonstrate good proximity to public open space and facilities and/or provide contributions to public open space</li> </ul>	Refer to above	YES
3D-2	<b>Objective:</b> Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Given the small size of the development with only 8 units, and the provision of generously sized private open space and proximity to external public open space/facilities. Benches, seating, and generous space to shared spaces on site provide opportunities for social interactions between residents that offset the need for further communal and public space.	✓

	<b>Design Guidance</b>	<b>Considered</b>	
	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: <ul style="list-style-type: none"> <li>- seating for individuals or groups</li> <li>- barbecue areas</li> <li>- play equipment or play areas</li> <li>- swimming pools, gyms, tennis courts or common rooms</li> </ul>	Benches located at the entry and ample space in common areas to facilitate social interactions and activities. Generous private outdoor spaces provide space and storage for barbecues, clothes lines, and equipment.	YES
	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	Refer to above. These facilities are designed to be integrated into the building form and existing site condition with consideration of climactic conditions.	YES
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	Services are concealed entirely within the basement.	YES
3D-3	<b>Objective:</b> Communal open space is designed to maximise safety		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	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: <ul style="list-style-type: none"> <li>- bay windows</li> <li>- corner windows</li> <li>- balconies</li> </ul>	The public domain and communal open space are visible from private balconies and windows.	YES
	Communal open space should be well lit	The communal open space will be lit at night.	YES
	Where communal open space/facilities are provided for children and young people they are safe and contained	The communal open space will be enclosed and safe for use by children.	YES
3D-4	<b>Objective:</b> Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	Given the small size of the development with only 8 units, and the provision of generously sized private open space and proximity to external public open space/facilities. Benches, seating, and generous space to shared spaces on site provide opportunities for social interactions between residents that offset the need for further communal and public space.	✓
	<b>Design Guidance</b>	<b>Considered</b>	
	The public open space should be well connected with public streets along at least one edge	Refer to above	YES
	The public open space should be connected with nearby parks and other landscape elements	Refer to above	YES
	Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	Refer to above	YES
	Solar access should be provided year round along with protection from strong winds	Refer to above	YES
	Opportunities for a range of recreational activities should be provided for people of all ages	Refer to above	YES
	A positive address and active frontages should be provided adjacent to public open space	Refer to above	YES
	Boundaries should be clearly defined between public open space and private areas	Refer to above	YES
<b>3E</b>	<b>DEEP SOIL ZONES</b>		
3E-1	<b>Objective:</b> Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality	The development seeks the provision of 114m2 of deep soil, equating to 16.7% of the site, noting that the provisions of the Housing SEPP override the ADG requirement.	✓
	<b>Design criteria</b>		✓



## FUSE—ARCHITECTS

1. Deep soil zones are to meet the following minimum requirements:			The development seeks the provision of 114m2 of deep soil, equating to 16.7% of the site, noting that the provisions of the Housing SEPP override the ADG requirement.
Site area	Minimum dimensions	Deep soil zone (% of site area)	
less than 650m2	-	7%	
650m2 - 1,500m2	3m		
greater than 1,500m2	6m		
greater than 1,500m2 with significant existing tree cover	6m		
<b>Design Guidance</b>			<b>Considered</b>
On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:			
- 10% of the site as deep soil on sites with an area of 650m2 - 1,500m2			16.7% of the site provided for deep soil to satisfy requirements of the ADG + Housing Sepp
- 15% of the site as deep soil on sites greater than 1,500m2			YES
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:			
- basement and sub-basement car park design that is consolidated beneath building footprints			Existing significant trees retained to allow for development of healthy root systems. Sufficient set back to the north and south to provide deep soil zones for planting.
- use of increased front and side setbacks			YES
- adequate clearance around trees to ensure long term health			
- co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil			
Achieving the design criteria may not be possible on some sites including where:			Site satisfies requirements for Deep Soil Zones
- 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)			YES
- there is 100% site coverage or non-residential uses at ground floor level			
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			
<b>3F</b>	<b>VISUAL PRIVACY</b>		
3F-1	<b>Objective:</b> Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy		
	<b>Design criteria</b>		
	1. 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:		
	Building height	Habitable rooms and balconies	Non-habitable rooms
	up to 12m (4 storeys)	6m	3m
	up to 25m (5-8 storeys)	9m	4.5m
	over 25m (9+ storeys)	12m	6m
	Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)		

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties		
<b>Design Guidance</b>		<b>Considered</b>
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	One step in the built form is proposed at the top-most storey.	YES
For residential buildings next to commercial buildings, separation distances should be measured as follows:	No neighbouring commercial buildings	YES
- for retail, office spaces and commercial balconies use the habitable room distances		
- for service and plant areas use the non habitable room distances		
New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:	The building is set away from neighbouring buildings. The orientation is appropriate for the shape of the site.	YES
- site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)		
- 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)	No neighbouring/adjacent zones different to the site	YES
Direct lines of sight should be avoided for windows and balconies across corners	Direct lines of sight are avoided. There are no views across corners between apartments.	YES
No separation is required between blank walls		YES
<b>3F-2</b>	<b>Objective:</b> 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	
<b>Design Guidance</b>		<b>Considered</b>
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:	Apartment windows generally face away from communal areas. Partially solid balustrades and masonry screens are used where there is some interface between common and private areas.	YES
- setbacks		
- solid or partially solid balustrades to balconies at lower levels		
- fencing and/or trees and vegetation to separate spaces		
- screening devices		
- bay windows or pop out windows to provide privacy in one direction and outlook in another		
- raising apartments/private open space above the public domain or communal open space		
- planter boxes incorporated into walls and balustrades to increase visual separation		
- pergolas or shading devices to limit overlooking of lower apartments or private open space		
- on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies		
Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	Small development with 2 units per level. Wall composition to parti walls at cc stage to be adequate to NCC standards for noise insulation etc.	YES
Balconies and private terraces should be located in front of living rooms to increase internal privacy	All units have balconies in front of living spaces.	YES
Windows should be offset from the windows of adjacent buildings	Windows are adequately separated from adjacent buildings as noted in 3F-1.	YES
Recessed balconies and/or vertical fins should be used between adjacent balconies	There are no adjacent balconies.	YES
<b>3G</b>	<b>PEDESTRIAN ACCESS AND ENTRIES</b>	



## FUSE—ARCHITECTS

3G-1	<b>Objective:</b> Building entries and pedestrian access connects to and addresses the public domain		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	2 distinct street entries into the site are provided with paths leading to the building entries acting as an extension of the public domain.	YES
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network	Entry to the development is clearly accessible from the pedestrian footpath.	YES
	Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries	The common building entries lead into distinct communal lobbies. Private entries may only be accessed from within the communal lobbies.	YES
	Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	There is only one building on the site.	YES
3G-2	<b>Objective:</b> Access, entries and pathways are accessible and easy to identify		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	2 distinct street entries into the site are provided with paths leading to the building entries acting as an extension of the public domain.	YES
	The design of ground floors and underground car parks minimise level changes along pathways and entries	The existing levels along the street alignment and pedestrian pathway are to be generally maintained.	YES
	Steps and ramps should be integrated into the overall building and landscape design	Ramps to the habitable level do not dominate the design, but gently wing the building.	YES
	For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	Small development with 8 units. Not applicable.	YES
	For large developments electronic access and audio/video intercom should be provided to manage access	Audio/video intercom will be provided adjacent to the building entry points.	YES
3G-3	<b>Objective:</b> Large sites provide pedestrian links for access to streets and connection to destinations		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	Small infill development with 8 units total. Site is located close to nearby public transport systems, main streets and centres.	YES
	Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate		YES
3H	<b>VEHICLE ACCESS</b>		
3H-1	<b>Objective:</b> Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Car park access should be integrated with the building's overall facade. Design solutions may include: - the materials and colour palette to minimise visibility from the street - security doors or gates at entries that minimise voids in the facade - where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	The car park entry is recessed under the main building façade.	YES

	Car park entries should be located behind the building line	The car park entry is recessed under the main building façade, well behind the front massing.	YES
	Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	The vehicle entry is at the lowest point of the site, with minimal ramping required.	YES
	Car park entry and access should be located on secondary streets or lanes where available	Site adjacent to a single street.	YES
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	No vehicle standing areas are proposed.	YES
	Access point locations should avoid headlight glare to habitable rooms	Headlight glare will be limited to below the upper-ground apartment level	YES
	Adequate separation distances should be provided between vehicle entries and street intersections	Not applicable	YES
	Visual impact of long driveways should be minimised through changing alignments and screen planting	No long driveways are proposed.	YES
	The width and number of vehicle access points should be limited to the minimum	Only 1 vehicle access point is proposed.	YES
	The need for large vehicles to enter or turn around within the site should be avoided	Not applicable	YES
	Garbage collection, loading and servicing areas are screened	Garbage collection is kerbside as is standard for this street. Loading and servicing areas are completely screened from public view.	YES
	Clear sight lines should be provided at pedestrian and vehicle crossings	3x2m sightlines have been provided either side of the driveway in compliance with Australian Standards.	YES
	Traffic calming devices such as changes in paving material or textures should be used where appropriate	Appropriate material/texture changes from the public space into the site paths and driveway.	YES
	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: - changes in surface materials - level changes - the use of landscaping for separation	The driveway intersects the pedestrian path on Auburn Street and is clearly distinguished from the pedestrian zones with a kerb and gutter. Pedestrian access is via separated paths.	YES
3J	<b>BICYCLE AND CAR PARKING</b>		
3J-1	<b>Objective:</b> Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas		✓
	<b>Design criteria</b>		
	1. For development in the following locations: - on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or - on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.	The site is served by a bus stop 140m away on Frederick Street.	✓
	The car parking needs for a development must be provided off street	Proximity to public transport links will encourage use of public transport and car sharing. As such, the car parking provided is adequate for the development.	
	<b>Design Guidance</b>	<b>Considered</b>	
	Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	Small infill development with 8 units total. Site is located close to nearby public transport systems, main streets and centres which provide sufficient parking for car share schemes.	YES
	Where less car parking is provided in a development, council should not provide on street resident parking permits	Development satisfies requirements from the Housing Sepp and the DCP	YES

## FUSE—ARCHITECTS

3J-2	<b>Objective:</b> Parking and facilities are provided for other modes of transport	✓
	<b>Design Guidance</b>	<b>Considered</b>
	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	The proposed development makes provisions for motorbikes and scooters YES
	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	The proposed development makes provisions for bicycle storage. YES
	Conveniently located charging stations are provided for electric vehicles, where desirable	YES
3J-3	<b>Objective:</b> Car park design and access is safe and secure	✓
	<b>Design Guidance</b>	<b>Considered</b>
	Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	Supporting facilities accessible without crossing car parking spaces. YES
	Direct, clearly visible and well lit access should be provided into common circulation areas	YES
	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	Lobbies are provided directly adjacent to the lift and stairs and are clearly visible at the points of building entry. YES
	For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	Not applicable YES
3J-4	<b>Objective:</b> Visual and environmental impacts of underground car parking are minimised	✓
	<b>Design Guidance</b>	<b>Considered</b>
	Excavation should be minimised through efficient car park layouts and ramp design	The parking basement is cut into the natural slope with minimal ramping required. YES
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	YES
	Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	The parking basement is cut into the natural slope with the front-facing portion less than 1m above natural ground level. YES
	Natural ventilation should be provided to basement and sub basement car parking areas	The basement is to be naturally ventilated. YES
	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	The basement is to be naturally ventilated with vent openings integrated into the façade design. YES
3J-5	<b>Objective:</b> Visual and environmental impacts of on-grade car parking are minimised	✓
	<b>Design Guidance</b>	<b>Considered</b>
	On-grade car parking should be avoided	No on-grade parking is proposed. YES
	Where on-grade car parking is unavoidable, the following design solutions are used: - parking is located on the side or rear of the lot away from the primary street frontage - cars are screened from view of streets, buildings, communal and private open space areas - safe and direct access to building entry points is provided - parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space - stormwater run-off is managed appropriately from car parking surfaces - bio-swailes, rain gardens or on site detention tanks are provided, where appropriate - light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving	No on-grade parking is proposed. YES

3J-6	<b>Objective:</b> Visual and environmental impacts of above ground enclosed car parking are minimised	✓
	<b>Design Guidance</b>	<b>Considered</b>
	Exposed parking should not be located along primary street frontages	The parking basement is cut into the natural slope with the front-facing portion less than 1m above natural ground level where landscape screening is provided YES
	Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: - car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) - car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)	No above ground parking is proposed YES
	Positive street address and active frontages should be provided at ground level	Street address and signage provided clearly at the street frontage by the entry points to the building on ground level YES

<b>PART 4</b>	<b>DESIGNING THE BUILDING</b>
<b>4A</b>	<b>SOLAR AND DAYLIGHT ACCESS</b>
4A-1	<b>Objective:</b> To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space
	<b>Design criteria</b>
	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
	8 of the 8 apartments will receive a minimum of two (2) hours of solar access equating to 100%. Sun Eye diagrams depicting solar access within the proposed development at hourly intervals between 9am-3pm at the Winter Solstice also accompany the DA.
	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
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter
	<b>Design Guidance</b>
	The design maximises north aspect and the number of single aspect south facing apartments is minimised
	All units have 3 open facades. YES
	Single aspect, single storey apartments should have a northerly or easterly aspect
	All apartments have multiple aspects. YES

## FUSE—ARCHITECTS

	Living areas are best located to the north and service areas to the south and west of apartments	YES	
	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: - dual aspect apartments - shallow apartment layouts - two storey and mezzanine level apartments - bay windows	All units have multiple aspects with access to sufficient sunlight YES	
	To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m <sup>2</sup> of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	All units have multiple aspects with access to sufficient sunlight YES	
	Achieving the design criteria may not be possible on some sites. This includes: - where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source - on south facing sloping sites - where significant views are oriented away from the desired aspect for direct sunlight	YES	
	Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria	YES	
4A-2	<b>Objective:</b> Daylight access is maximised where sunlight is limited		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	YES	
	Where courtyards are used : - use is restricted to kitchens, bathrooms and service areas - building services are concealed with appropriate detailing and materials to visible walls - courtyards are fully open to the sky - access is provided to the light well from a communal area for cleaning and maintenance - acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved	YES	
	Opportunities for reflected light into apartments are optimised through: - reflective exterior surfaces on buildings opposite south facing windows - positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light - integrating light shelves into the design - light coloured internal finishes	YES	
4A-3	<b>Objective:</b> Design incorporates shading and glare control, particularly for warmer months		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	A number of the following design features are used: - balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas - shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting - horizontal shading to north facing windows - vertical shading to east and particularly west facing windows - operable shading to allow adjustment and choice - high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)	Balconies provide deep shade in warmer months and allow light and warmth to penetrate private open space in cooler months. YES	
4B	<b>NATURAL VENTILATION</b>		
4B-1	<b>Objective:</b> All habitable rooms are naturally ventilated		✓
	<b>Design Guidance</b>	<b>Considered</b>	

	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	100% of apartments are naturally cross ventilated	YES
	Depths of habitable rooms support natural ventilation	Refer to above	YES
	The area of unobstructed window openings should be equal to at least 5% of the floor area served	Refer to above	YES
	Light wells are not the primary air source for habitable rooms	Refer to above	YES
	Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: - adjustable windows with large effective openable areas - a variety of window types that provide safety and flexibility such as awnings and louvres - windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors	100% of apartments are naturally cross ventilated and include operable sliding doors and windows to promote further ventilation.	YES
4B -2	<b>Objective:</b> The layout and design of single aspect apartments maximises natural ventilation		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	Apartment depths are kept to the minimum depth possible to comfortably accommodate a lounge, dining and kitchen in a single living module.	YES
	Natural ventilation to single aspect apartments is achieved with the following design solutions: - primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) - stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries - courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells		YES
4B-3	<b>Objective:</b> The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents		✓
	<b>Design criteria</b>		
	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	100% of apartments are naturally cross ventilated	✓
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	The maximum apartment depth is 12.4m.	✓
	<b>Design Guidance</b>	<b>Considered</b>	
	The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths		YES
	In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)		YES
	Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow		YES
	Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow		YES
4C	<b>CEILING HEIGHTS</b>		
4C-1	<b>Objective:</b> Ceiling height achieves sufficient natural ventilation and daylight access		✓

## FUSE—ARCHITECTS

	<b>Design criteria</b> 1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	Ceiling height to living rooms and bedrooms is 2.7m minimum.	✓
	Minimum ceiling height for apartment and mixed use buildings	Ceiling heights to bathrooms are 2.4m minimum.	
	Habitable rooms	2.7m	
	Non-habitable	2.4m	
	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	
	Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope	
	If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use	
	These minimums do not preclude higher ceilings if desired		
	<b>Design Guidance</b>	<b>Considered</b>	
	Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	YES	
4C-2	<b>Objective:</b> Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	A number of the following design solutions can be used: - the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces - well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings - ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	YES	
4C-3	<b>Objective:</b> Ceiling heights contribute to the flexibility of building use over the life of the building		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)	YES	
<b>4D</b>	<b>APARTMENT SIZE AND LAYOUT</b>		
4D-1	<b>Objective:</b> The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity		✓
	<b>Design criteria</b>		
	1. Apartments are required to have the following minimum internal areas:	All proposed apartments provide an internal area of 102m <sup>2</sup> that complies with the ADG part 4D requirements	✓
	Apartment type	Minimum internal area	
	Studio	35m <sup>2</sup>	
	1 bedroom	50m <sup>2</sup>	
	2 bedroom	70m <sup>2</sup>	
	3 bedroom	90m <sup>2</sup>	
	The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m <sup>2</sup> each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m <sup>2</sup> 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		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	Kitchens are separated from the main circulation space	YES
	A window should be visible from any point in a habitable room	Windows are visible from any point in a habitable room	YES
	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	All habitable rooms meet minimum room dimensions and areas. Refer to unit type drawings	YES
4D-2	<b>Objective:</b> Environmental performance of the apartment is maximised		✓
	<b>Design criteria</b>		
	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	Habitable room depths are less than 8m from a window.	✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths		NA
	All living areas and bedrooms should be located on the external face of the building	All living areas and bedrooms are located on the external face of the building	YES
	Where possible: - bathrooms and laundries should have an external openable window - main living spaces should be oriented toward the primary outlook and aspect and away from noise sources		YES
4D-3	<b>Objective:</b> Apartment layouts are designed to accommodate a variety of household activities and needs		✓
	<b>Design criteria</b>		
	1. Master bedrooms have a minimum area of 10m <sup>2</sup> and other bedrooms 9m <sup>2</sup> (excluding wardrobe space)	2 Bedroom apartments - Master bedrooms = 13m <sup>2</sup> - Bedroom 2 = 10.8m <sup>2</sup>	✓
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	3m minimum width is provided to all bedrooms.	✓
	3. Living rooms or combined living/dining rooms have a minimum width of: - 3.6m for studio and 1 bedroom apartments - 4m for 2 and 3 bedroom apartments	1 bed combined living/dining is a minimum of 3.6m wide, 2 bed apartments are 4m wide.	✓
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	Minimum apartment width in 6m internally.	✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas		YES
	All bedrooms allow a minimum length of 1.5m for robes	All bedrooms are provided with wardrobes of 2.3m long or greater.	YES
	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	All bedrooms are provided with wardrobes of 2.3m long or greater.	YES
	Apartment layouts allow flexibility over time, design solutions may include:	Internal apartment layouts have been planned with careful consideration of furnishing.	YES



## FUSE—ARCHITECTS

	<ul style="list-style-type: none"><li>- dimensions that facilitate a variety of furniture arrangements and removal</li><li>- spaces for a range of activities and privacy levels between different spaces within the apartment</li><li>- dual master apartments</li><li>- dual key apartments</li><li>- room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))</li><li>- efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms</li></ul>	Living areas are rectangular spaces and internal corridors and circulation have been minimised.																
4E	PRIVATE OPEN SPACE AND BALCONIES																	
4E-1	<b>Objective:</b> Apartments provide appropriately sized private open space and balconies to enhance residential amenity		✓															
<b>Design criteria</b>																		
1. All apartments are required to have primary balconies as follows:		The ADG objectives for apartment size are achieved in the proposal.	✓															
<table><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr><tr><td>Studio apartments</td><td>4m2</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m2</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m2</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m2</td><td>2.4m</td></tr></table>		Dwelling type	Minimum area	Minimum depth	Studio apartments	4m2	-	1 bedroom apartments	8m2	2m	2 bedroom apartments	10m2	2m	3+ bedroom apartments	12m2	2.4m	All apartments comply with the minimum primary area criteria while a number of the apartments have private open space areas that comply and exceed the minimum area requirement	
Dwelling type	Minimum area	Minimum depth																
Studio apartments	4m2	-																
1 bedroom apartments	8m2	2m																
2 bedroom apartments	10m2	2m																
3+ bedroom apartments	12m2	2.4m																
The minimum balcony depth to be counted as contributing to the balcony area is 1m																		
2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m		The upper-ground level apartment over the front-facing podium is provided with a generous private terrace of 34 m <sup>2</sup>	✓															
<b>Design Guidance</b>			<b>Considered</b>															
Increased communal open space should be provided where the number or size of balconies are reduced		The number and size of balconies are not reduced.	YES															
Storage areas on balconies is additional to the minimum balcony size		Storage areas are not proposed on balconies	YES															
Balcony use may be limited in some proposals by: <ul style="list-style-type: none"><li>- consistently high wind speeds at 10 storeys and above</li><li>- close proximity to road, rail or other noise sources</li><li>- exposure to significant levels of aircraft noise</li><li>- heritage and adaptive reuse of existing buildings</li></ul> 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			NA															
4E-2	<b>Objective:</b> Primary private open space and balconies are appropriately located to enhance liveability for residents		✓															
<b>Design Guidance</b>			<b>Considered</b>															
Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space		The Private Open Space and balconies of all units are positioned directly in front of the living spaces. All balconies and terraces are conceived of as an external extension of the internal living spaces.	YES															
Private open spaces and balconies predominantly face north, east or west		Balconies face NE and SW.	YES															
Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms		Balconies are oriented with the longer side oriented outwards to capture light.	YES															
4E-3	<b>Objective:</b> Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building		✓															

	<b>Design Guidance</b>	<b>Considered</b>	
	Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	Balcony balustrades are a mix of solid, partially solid, and transparent to allow passive outlook to the public domain whilst maintaining visual and acoustic privacy.  Glass balustrades face the public domain and face the rear to capture the sun.	YES
	Full width full height glass balustrades alone are generally not desirable	Private open space balustrades are mix of solid and permeable posts to allow passive outlook to the public domain whilst maintaining privacy and flexibility to apartments occupants.	YES
	Projecting balconies should be integrated into the building design and the design of soffits considered	Balconies are integrated into the building facade and are fundamental to the expression and articulation of the building form.	YES
	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind		NA
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue		NA
	Downpipes and balcony drainage are integrated with the overall facade and building design		YES
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	Air-conditioning condensers for each apartment are to be concealed behind solid balustrades hiding them from public view.	YES
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	Air-conditioning condensers for each apartment are to be concealed behind solid balustrades hiding them from public view.	YES
	Ceilings of apartments below terraces should be insulated to avoid heat loss		NA
	Water and gas outlets should be provided for primary balconies and private open space	Water and gas outlets will be provided for open space on terraces only.	YES
4E-4	<b>Objective:</b> Private open space and balcony design maximises safety		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Changes in ground levels or landscaping are minimised	Landscaped communal open space is to be level.	YES
	Design and detailing of balconies avoids opportunities for climbing and falls	Designed to comply with BCA requirements	YES
<b>4F</b>	<b>COMMON CIRCULATION AND SPACES</b>		
4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments		✓
	<b>Design criteria</b>		
	1. The maximum number of apartments off a circulation core on a single level is eight	2 apartments are accessed from the circulation core on each level.	✓
	2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	One lift is provided for 8 apartments	✓
	<b>Design Guidance</b>	<b>Considered</b>	
	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 circulation spaces are generous and open to natural light and air. The area provided in front of the lift is 2-2.5m deep.	YES
	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	The gallery has been designed as a covered open space with a high level of amenity. The space has access to natural ventilation and daylight.	YES
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	Complies	YES

## FUSE—ARCHITECTS

	Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: - a series of foyer areas with windows and spaces for seating wider areas at apartment entry doors and varied ceiling heights	There are no long corridors. The common areas are a series of foyers linked by the common stair.	YES										
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	The common circulation zone separates the building into 2 wings allowing apartments on either end to enjoy multiple aspects.	YES										
	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: - sunlight and natural cross ventilation in apartments - access to ample daylight and natural ventilation in common circulation spaces - common areas for seating and gathering - generous corridors with greater than minimum ceiling heights other innovative design solutions that provide high levels of amenity	Complies	YES										
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	Complies	YES										
	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 controlled	No primary living spaces or bedrooms open onto common circulation spaces.	YES										
4F-2	<b>Objective:</b> Common circulation spaces promote safety and provide for social interaction between residents		✓										
	<b>Design Guidance</b>		<b>Considered</b>										
	Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	Clear sight lines exist between all circulation points and apartment entries.	YES										
	Tight corners and spaces are avoided	All circulation spaces are a minimum of 2.3m wide with no tight corners.	YES										
	Circulation spaces should be well lit at night	The circulation gallery will be well lit.	YES										
	Legible signage should be provided for apartment numbers, common areas and general wayfinding		YES										
	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	Common areas provide generous spaces to promote chance encounters and interactions between residents. An integrated bench is provided at the entry to the building.	YES										
	In larger developments, community rooms for activities such as owners corporation meetings for resident use should be provided and are ideally co-located with communal open space		NA										
	Where external galleries are provided, they are more open than closed above the balustrade along their length		NA										
4G	<b>STORAGE</b>												
4G-1	<b>Objective:</b> Adequate, well designed storage is provided in each apartment		✓										
	<b>Design criteria</b> 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	Storage areas to all apartments comply with minimum volumes.  Additionally, storage cages are provided within the basement car parking area.											
	<table><tr><td>Dwelling type</td><td>Storage size volume</td></tr><tr><td>Studio apartments</td><td>4m3</td></tr><tr><td>1 bedroom apartments</td><td>6m3</td></tr><tr><td>2 bedroom apartments</td><td>8m3</td></tr><tr><td>3+ bedroom apartments</td><td>10m3</td></tr></table>	Dwelling type	Storage size volume	Studio apartments	4m3	1 bedroom apartments	6m3	2 bedroom apartments	8m3	3+ bedroom apartments	10m3		
Dwelling type	Storage size volume												
Studio apartments	4m3												
1 bedroom apartments	6m3												
2 bedroom apartments	8m3												
3+ bedroom apartments	10m3												

	At least 50% of the required storage is to be located within the apartment		
	<b>Design Guidance</b>	<b>Considered</b>	
	Storage is accessible from either circulation or living areas	All storage areas within the apartment are accessible from either circulation or living areas.	YES
	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		YES
	Left over space such as under stairs is used for storage		YES
4G-2	<b>Objective:</b> Additional storage is conveniently located, accessible and nominated for individual apartments		✓
	Storage not located in apartments is secure and clearly allocated to specific apartments	Secure mesh storage cages in the basement are to be clearly allocated to specific apartments.	YES
	Storage is provided for larger and less frequently accessed items	Storage cages in the basement are at least 2.1m high and on slab to ensure large items can be easily stored and accessed.	YES
	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	Allocated storage cages are located in a dedicated storeroom and adjacent to car spaces.	YES
	If communal storage rooms are provided they should be accessible from common circulation areas of the building		NA
	Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain	No more than 50% of the required storage is provided in clearly allocated chain wire storage cages in the basement and is not visible from the public domain.	YES
4H	<b>ACOUSTIC PRIVACY</b>		
4H-1	<b>Objective:</b> Noise transfer is minimised through the siting of buildings and building layout		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)	Refer to Section 3F. The building is sited so that all apartments have adequate separation from opposing developments and likely noise sources.	YES
	Window and door openings are generally orientated away from noise sources	The site is in a conventional medium-high density residential setting without any sources of excessive noise.	YES
	Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas	The circulation gallery is stacked on each level and apartment layouts are generally positioned vertically to allow similar uses to also stack above each other.	YES
	Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources	Primary living spaces are generally set away from apartment with non-habitable spaces used as a buffer.	YES
	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	There are no party walls.	YES
	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms	Noise-generating services are concealed on ground level within the basement away from bedrooms. All bedrooms are positioned away from communal areas.	YES
4H-2	<b>Objective:</b> Noise impacts are mitigated within apartments through layout and acoustic treatments		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: - rooms with similar noise requirements are grouped together - doors separate different use zones	Noisy spaces are separated from quiet spaces. Noisier spaces are grouped together.	YES



## FUSE—ARCHITECTS

	- wardrobes in bedrooms are co-located to act as sound buffers		
	Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions:	NA	
	- double or acoustic glazing		
	- acoustic seals		
	- use of materials with low noise penetration properties		
	- continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements		
<b>4J</b>	<b>NOISE AND POLLUTION</b>		
4J-1	<b>Objective:</b> In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	To minimise impacts the following design solutions may be used:	The site is in a conventional medium-high density residential setting without any sources of excessive noise.	YES
	- physical separation between buildings and the noise or pollution source		
	- residential uses are located perpendicular to the noise source and where possible buffered by other uses		
	- 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		
	- 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		
	- buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer		
	- 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)		
	- 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:	NA	
	- solar and daylight access		
	- private open space and balconies		
	- natural cross ventilation		
4J-2	<b>Objective:</b> Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Design solutions to mitigate noise include:	The site is in a conventional medium-high density residential setting without any sources of excessive noise.	YES
	- limiting the number and size of openings facing noise sources		
	- providing seals to prevent noise transfer through gaps		
	- using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens)		
	- using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits		
<b>4K</b>	<b>APARTMENT MIX</b>		
4K-1	<b>Objective:</b> A range of apartment types and sizes is provided to cater for different household types now and into the future		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	A variety of apartment types is provided	Given the small size of the development one apartment type is proposed which meet and exceed the minimum internal areas. Proposed areas: 2 Bedroom (2 bath) – 105m <sup>2</sup>	YES
	The apartment mix is appropriate, taking into consideration:	The development is situated in a quiet residential area and enjoys proximate access to nearby transport, education and employment centres.	YES
	- the distance to public transport, employment, and education centres		

	- the current market demands and projected future demographic trends	The development will also include a provision of units for affordable housing	
	- the demand for social and affordable housing		
	- different cultural and socioeconomic groups		
	Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	8 out of 8 of the apartments feature flexible rooms augmenting the living spaces.	YES
4K-2	<b>Objective:</b> The apartment mix is distributed to suitable locations within the building		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)	Apartment footprints are stacked vertically creating a balanced façade composition and allow equitable solar access between units.	YES
	Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available		YES
<b>4L</b>	<b>GROUND FLOOR APARTMENTS</b>		
4L-1	<b>Objective:</b> Street frontage activity is maximised where ground floor apartments are located		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Direct street access should be provided to ground floor apartments		YES
	Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:	The front-facing, upper-ground apartment directly addresses the street. It's private terrace also addresses the street from behind the common landscaped zone.	YES
	- both street, foyer and other common internal circulation entrances to ground floor apartments		
	- private open space is next to the street		
	- doors and windows face the street		
	Retail or home office spaces should be located along street frontages		NA
	Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion		YES
4L-2	<b>Objective:</b> Design of ground floor apartments delivers amenity and safety for residents		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include:	The front-facing, upper-ground apartment's private terrace is elevated above street level and addresses the street from behind the common landscaped zone.	YES
	- elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)		
	- landscaping and private courtyards		
	- window sill heights that minimise sight lines into apartments		
	- integrating balustrades, safety bars or screens with the exterior design		
	Solar access should be maximised through:		YES
	- high ceilings and tall windows		
	- trees and shrubs that allow solar access in winter and shade in summer		
<b>4M</b>	<b>FACADES</b>		
4M-1	<b>Objective:</b> Building facades provide visual interest along the street while respecting the character of the local area		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Design solutions for front building facades may include:	The building expression responds to the site conditions and location.	YES
	- a composition of varied building elements		
	- a defined base, middle and top of buildings		
	- revealing and concealing certain elements		
	- changes in texture, material, detail and colour to modify the prominence of elements	The building expresses solid and voids and a composition of mixed materials and finishes.	

## FUSE—ARCHITECTS

		The building has a solid base which is softened with landscaping, a middle that expresses the uses within, and a lighter, recessed top which allows the building height to express the transition from the R4 zone down to the adjacent R3 zone.	
	Building services should be integrated within the overall facade	YES	
	Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: - well composed horizontal and vertical elements - variation in floor heights to enhance the human scale - elements that are proportional and arranged in patterns - public artwork or treatments to exterior blank walls grouping of floors or elements such as balconies and windows on taller buildings	Refer to above YES	
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	YES	
		The development is sited in a manner that will present as a considered design response noting the topography of the land and relationship with neighboring properties.	
	Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals	YES	
4M-2	<b>Objective:</b> Building functions are expressed by the facade		
	<b>Design Guidance</b>	<b>Considered</b>	
	Building entries should be clearly defined	Pedestrian pathways flank the building leading to well-defined building entries.	YES
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height		YES
	The apartment layout should be expressed externally through facade features such as party walls and floor slabs		YES
4N	<b>ROOF DESIGN</b>		
4N-1	<b>Objective:</b> Roof treatments are integrated into the building design and positively respond to the street		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Roof design relates to the street. Design solutions may include: - special roof features and strong corners - use of skillion or very low pitch hipped roofs - breaking down the massing of the roof by using smaller elements to avoid bulk - using materials or a pitched form complementary to adjacent buildings	YES	
	Roof treatments should be integrated with the building design. Design solutions may include: - roof design proportionate to the overall building size, scale and form - roof materials compliment the building - service elements are integrated	YES	
4N-2	<b>Objective:</b> Opportunities to use roof space for residential accommodation and open space are maximised		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	<b>Design guidance</b>	YES	

	Habitable roof space should be provided with good levels of amenity. Design solutions may include: <ul style="list-style-type: none"><li>- penthouse apartments</li><li>- dormer or clerestory windows</li><li>- openable skylights</li></ul>										
	Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	YES									
4N-3	<b>Objective:</b> Roof design incorporates sustainability features										
	<b>Design Guidance</b>	<b>Considered</b>									
	Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"><li>- the roof lifts to the north</li><li>- eaves and overhangs shade walls and windows from summer sun</li></ul>	YES									
	Skylights and ventilation systems should be integrated into the roof design	NA									
4O	<b>LANDSCAPE DESIGN</b>										
4O-1	<b>Objective:</b> Landscape design is viable and sustainable		✓								
	<b>Design Guidance</b>	<b>Considered</b>									
	Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"><li>- diverse and appropriate planting</li><li>- bio-filtration gardens</li><li>- appropriately planted shading trees</li><li>- areas for residents to plant vegetables and herbs</li><li>- composting</li><li>- green roofs or walls</li></ul>	Extensive landscaping to the front, side, and rear of the site.  Refer to Landscape plans	YES								
	Ongoing maintenance plans should be prepared		YES								
	Microclimate is enhanced by: <ul style="list-style-type: none"><li>- appropriately scaled trees near the eastern and western elevations for shade</li><li>- a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter</li><li>- shade structures such as pergolas for balconies and courtyards</li></ul>	Refer to Landscape plans	YES								
	Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)	Refer to Landscape plans	YES								
	<table><tr><th>Site Area (m<sup>2</sup>)</th><th>Recommended Tree Planting</th></tr><tr><td>Up to 850</td><td>1 medium tree per 50m<sup>2</sup> of deep soil zone</td></tr><tr><td>850 - 1,500</td><td>1 large tree or 2 medium trees per 90m<sup>2</sup> of deep soil zone</td></tr><tr><td>Greater than 1,500</td><td>1 large tree or 2 medium trees per 80m<sup>2</sup> of deep soil zone</td></tr></table>	Site Area (m <sup>2</sup> )	Recommended Tree Planting	Up to 850	1 medium tree per 50m <sup>2</sup> of deep soil zone	850 - 1,500	1 large tree or 2 medium trees per 90m <sup>2</sup> of deep soil zone	Greater than 1,500	1 large tree or 2 medium trees per 80m <sup>2</sup> of deep soil zone		
Site Area (m <sup>2</sup> )	Recommended Tree Planting										
Up to 850	1 medium tree per 50m <sup>2</sup> of deep soil zone										
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Greater than 1,500	1 large tree or 2 medium trees per 80m <sup>2</sup> of deep soil zone										
4O-2	<b>Objective:</b> Landscape design contributes to the streetscape and amenity		✓								
	<b>Design Guidance</b>	<b>Considered</b>									
	Landscape design responds to the existing site conditions including: <ul style="list-style-type: none"><li>- changes of levels</li><li>- views</li><li>- significant landscape features including trees and rock outcrops</li></ul>	Refer to Landscape plans	YES								
	Significant landscape features should be protected by: <ul style="list-style-type: none"><li>- tree protection zones (see figure 4O.5)</li><li>- appropriate signage and fencing during construction</li></ul>	Refer to Landscape plans	YES								

## FUSE—ARCHITECTS

	Plants selected should be endemic to the region and reflect the local ecology	Refer to Landscape plans	YES	
<b>4P</b>	<b>PLANTING ON STRUCTURE</b>			
4P-1	<b>Objective:</b> Appropriate soil profiles are provided			✓
	<b>Design Guidance</b>		<b>Considered</b>	
	Structures are reinforced for additional saturated soil weight	Refer to Landscape plans	YES	
	Soil volume is appropriate for plant growth, considerations include: - modifying depths and widths according to the planting mix and irrigation frequency - free draining and long soil life span tree anchorage	Refer to Landscape plans	YES	
	Minimum soil standards for plant sizes should be provided in accordance with Table 5	Refer to Landscape plans	YES	
4P-2	<b>Objective:</b> Plant growth is optimised with appropriate selection and maintenance			✓
	<b>Design Guidance</b>		<b>Considered</b>	
	Plants are suited to site conditions, considerations include: - drought and wind tolerance - seasonal changes in solar access - modified substrate depths for a diverse range of plants - plant longevity	Refer to Landscape plans	YES	
	A landscape maintenance plan is prepared	Refer to Landscape plans	YES	
	Irrigation and drainage systems respond to: - changing site conditions - soil profile and the planting regime - whether rainwater, stormwater or recycled grey water is used	Refer to Landscape and Stormwater plans	YES	
4P-3	<b>Objective:</b> Planting on structures contributes to the quality and amenity of communal and public open spaces			✓
	<b>Design Guidance</b>		<b>Considered</b>	
	Building design incorporates opportunities for planting on structures. Design solutions may include: - green walls with specialised lighting for indoor green walls - wall design that incorporates planting - green roofs, particularly where roofs are visible from the public domain - planter boxes  Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time	Planting on structure is provided on the perimeter of the upper ground level as well as planter boxes outside several living areas.	YES	
<b>4Q</b>	<b>UNIVERSAL DESIGN</b>			
4Q-1	<b>Objective:</b> Universal design features are included in apartment design to promote flexible housing for all community members			✓
	<b>Design Guidance</b>		<b>Considered</b>	
	Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guideline's silver level universal design features	37% of the total apartments (3/8) incorporate the Liveable Housing Guideline's silver level universal design features.	YES	
4Q-2	<b>Objective:</b> A variety of apartments with adaptable designs are provided			✓
	<b>Design Guidance</b>		<b>Considered</b>	
	Adaptable housing should be provided in accordance with the relevant council policy	Development provides appropriate allocation of adaptable units.	YES	

	Design solutions for adaptable apartments include: - convenient access to communal and public areas - high level of solar access - minimal structural change and residential amenity loss when adapted - larger car parking spaces for accessibility - parking titled separately from apartments or shared car parking arrangements	YES	
4Q-3	<b>Objective:</b> Apartment layouts are flexible and accommodate a range of lifestyle needs		✓
	<b>Design Guidance</b>	<b>Considered</b>	
	Apartment design incorporates flexible design solutions which may include: - rooms with multiple functions - dual master bedroom apartments with separate bathrooms - larger apartments with various living space options - open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	YES	
<b>4R</b>	<b>ADAPTIVE REUSE</b>		
4R-1	<b>Objective:</b> New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place		NA
	<b>Design Guidance</b>	<b>Considered</b>	
	Design solutions may include: - new elements to align with the existing building - additions that complement the existing character, siting, scale, proportion, pattern, form and detailing - use of contemporary and complementary materials, finishes, textures and colours  Additions to heritage items should be clearly identifiable from the original building  New additions allow for the interpretation and future evolution of the building	NA	
4R-2	<b>Objective:</b> Adapted buildings provide residential amenity while not precluding future adaptive reuse		NA
	<b>Design Guidance</b>	<b>Considered</b>	
	Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: - generously sized voids in deeper buildings - alternative apartment types when orientation is poor - using additions to expand the existing building envelope  Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: - where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) - alternatives to providing deep soil where less than the minimum requirement is currently available on the site - building and visual separation – subject to demonstrating alternative design approaches to achieving privacy - common circulation - car parking - alternative approaches to private open space and balconies	NA	
<b>4S</b>	<b>MIXED USE</b>		
4S-1	<b>Objective:</b> Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement		NA
	<b>Design Guidance</b>	<b>Considered</b>	

## FUSE—ARCHITECTS

	Mixed use development should be concentrated around public transport and centres Mixed use developments positively contribute to the public domain. Design solutions may include: - development addresses the street - active frontages are provided - diverse activities and uses - avoiding blank walls at the ground level - live/work apartments on the ground floor level, rather than commercial	NA
4S-2	<b>Objective:</b> Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	NA
	<b>Design Guidance</b>	Considered
	Residential circulation areas should be clearly defined. Design solutions may include: - residential entries are separated from commercial entries and directly accessible from the street - commercial service areas are separated from residential components - residential car parking and communal facilities are separated or secured - security at entries and safe pedestrian routes are provided - concealment opportunities are avoided  Landscaped communal open space should be provided at podium or roof levels	NA
4T	<b>AWNINGS AND SIGNAGE</b>	
4T-1	<b>Objective:</b> Awnings are well located and complement and integrate with the building design	✓
	<b>Design Guidance</b>	Considered
	Awnings should be located along streets with high pedestrian activity and active frontages	YES
	A number of the following design solutions are used: - continuous awnings are maintained and provided in areas with an existing pattern - height, depth, material and form complements the existing street character - protection from the sun and rain is provided - awnings are wrapped around the secondary frontages of corner sites - awnings are retractable in areas without an established pattern	YES
	Awnings should be located over building entries for building address and public domain amenity	YES
	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	YES
	Gutters and down pipes should be integrated and concealed	YES
	Lighting under awnings should be provided for pedestrian safety	NA
4T-2	<b>Objective:</b> Signage responds to the context and desired streetscape character	✓
	<b>Design Guidance</b>	Considered
	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	YES
	Legible and discrete way finding should be provided for larger developments	YES
	Signage is limited to being on and below awnings and a single facade sign on the primary street frontage	YES
U	<b>ENERGY EFFICIENCY</b>	

4U-1	<b>Objective:</b> Development incorporates passive environmental design	✓
	<b>Design Guidance</b>	Considered
	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	YES
	Well located, screened outdoor areas should be provided for clothes drying	Outdoor areas provide sufficient space for hanging and drying of clothes for each unit YES
4U-2	<b>Objective:</b> Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	✓
	<b>Design Guidance</b>	Considered
	A number of the following design solutions are used: - the use of smart glass or other technologies on north and west elevations - thermal mass in the floors and walls of north facing rooms is maximised - polished concrete floors, tiles or timber rather than carpet - insulated roofs, walls and floors and seals on window and door openings - overhangs and shading devices such as awnings, blinds and screens	YES
	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	YES
4U-3	<b>Objective:</b> Adequate natural ventilation minimises the need for mechanical ventilation	✓
	<b>Design Guidance</b>	Considered
	A number of the following design solutions are used: - rooms with similar usage are grouped together - natural cross ventilation for apartments is optimised - natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	YES
4V	<b>WATER MANAGEMENT AND CONVERSATION</b>	
4V-1	<b>Objective:</b> Potable water use is minimised	BASIX assessment and stormwater plans in accordance with Central Coast DCP requirements have been provided. ✓
	<b>Design Guidance</b>	Considered
	Water efficient fittings, appliances and wastewater reuse should be incorporated	YES
	Apartments should be individually metered	YES
	Rainwater should be collected, stored and reused on site	YES
	Drought tolerant, low water use plants should be used within landscaped areas	YES
4V-2	<b>Objective:</b> Urban stormwater is treated on site before being discharged to receiving waters	Stormwater plans in accordance with Central Coast DCP requirements have been provided. ✓
	<b>Design Guidance</b>	Considered
	Water sensitive urban design systems are designed by a suitably qualified professional	YES
	A number of the following design solutions are used: - runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation - porous and open paving materials is maximised - on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	YES
4V-3	<b>Objective:</b> Flood management systems are integrated into site design	Stormwater plans in accordance with Central Coast DCP requirements have been provided. The site is not flood affected. ✓

## FUSE—ARCHITECTS

	Design Guidance	Considered
	Detention tanks should be located under paved areas, driveways or in basement car parks	Refer to stormwater management plan YES
	On large sites parks or open spaces are designed to provide temporary on site detention basins	NA
<b>4W</b>	<b>WASTE MANAGEMENT</b>	
4W-1	<b>Objective:</b> Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	✓
	Design Guidance	Considered
	Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	A waste room is located in the lower ground parking level, completely concealed from view. YES
	Waste and recycling storage areas should be well ventilated Circulation design allows bins to be easily manoeuvred between storage and collection points	The room is naturally ventilated and located adjacent to the driveway for ease of manoeuvring to the street kerb. YES
	Temporary storage should be provided for large bulk items such as mattresses	10m3 bulky waste storage is provided on the lower ground floor. YES
	A waste management plan should be prepared	YES
4W-2	<b>Objective:</b> Domestic waste is minimised by providing safe and convenient source separation and recycling	✓
	Design Guidance	Considered
	All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling	Refer to waste management plan. Complies. YES
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	Refer to waste management plan. The waste room is easily accessible. YES
	For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	NA
	Alternative waste disposal methods such as composting should be provided	NA
<b>4X</b>	<b>BUILDING MAINTENANCE</b>	
4X-1	<b>Objective:</b> Building design detail provides protection from weathering	✓
	Design Guidance	Considered
	A number of the following design solutions are used: - roof overhangs to protect walls - hoods over windows and doors to protect openings - detailing horizontal edges with drip lines to avoid staining of surfaces - methods to eliminate or reduce planter box leaching - appropriate design and material selection for hostile locations	YES
4X-2	<b>Objective:</b> Systems and access enable ease of maintenance	✓
	Design Guidance	Considered
	Window design enables cleaning from the inside of the building	YES
	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade	YES
	Design solutions do not require external scaffolding for maintenance access	YES
	Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	YES
	Centralised maintenance, services and storage should be provided for communal open space areas within the building	YES
4X-3	<b>Objective:</b> Material selection reduces ongoing maintenance costs	✓

Design Guidance	Considered
A number of the following design solutions are used: - sensors to control artificial lighting in common circulation and spaces - natural materials that weather well and improve with time such as face brickwork - easily cleaned surfaces that are graffiti resistant - robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors	YES



# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Multi Dwelling

Certificate number: 1339542M

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](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Wednesday, 09 November 2022

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning,  
Industry &  
Environment

### Project summary

Project name	Development @ 6 Auburn St Point Frederick
Street address	6 Auburn Street Frederick 2250
Local Government Area	Central Coast Council
Plan type and plan number	deposited 17440
Lot no.	13
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	8
No. of multi-dwelling houses	0
No. of single dwelling houses	0

### Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 45	Target 40

### Certificate Prepared by

Name / Company Name: EPS

ABN (if applicable): 16645179013



## Description of project

### Project address

Project name	Development @ 6 Auburn St Point Frederick
Street address	6 Auburn Street Frederick 2250
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Plan type and plan number	deposited 17440
Lot no.	13
Section no.	-

### Project type

No. of residential flat buildings	1
No. of units in residential flat buildings	8
No. of multi-dwelling houses	0
No. of single dwelling houses	0

### Site details

Site area (m <sup>2</sup> )	676.6
Roof area (m <sup>2</sup> )	285
Non-residential floor area (m <sup>2</sup> )	0.0
Residential car spaces	11
Non-residential car spaces	0

### Common area landscape

Common area lawn (m <sup>2</sup> )	0.0
Common area garden (m <sup>2</sup> )	0.0
Area of indigenous or low water use species (m <sup>2</sup> )	0.0

### Assessor details

Assessor number	10194
Certificate number	0006180036
Climate zone	15
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	✓ 45	Target 40

## Description of project

The tables below describe the dwellings and common areas within the project

### Residential flat buildings - Building1, 8 dwellings, 3 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
101	3	105.0	0.0	0.0	0.0
302	3	105.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
102	3	105.0	0.0	0.0	0.0
G01	3	105.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
201	3	105.0	0.0	0.0	0.0
G02	3	105.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
202	3	105.0	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
301	3	105.0	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)
Lower Ground floor park area	450.0
Plant or service room	20.0
Hallway/lobby_Level-2	12.0

Common area	Floor area (m²)
Lift car (No.1)	-
Upper Ground floor lobby	19.0
Hallway/lobby_Level-3	12.0

Common area	Floor area (m²)
Garbage room	10.0
Hallway/lobby_Level-1	12.0

## 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: (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 (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.		✓ ✓	✓ ✓
(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.	✓	✓	✓



**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

Dwelling no.	Fixtures					Appliances		Individual pool				Individual spa		
	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 (> 6 but <= 7.5 L/min)	5 star	5 star	5 star	-	-	5 star	-	-	-	-	-	-	-

Dwelling no.	Alternative water source							
	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	gas instantaneous 6 star	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

**DA/3915/2022 - 6 Auburn Street, Point Fredrick - Demolition of existing structures and construction of 4 storey residential flat building containing 8 x 2 bedroom units (including 4 affordable housing units) with 8 car spaces (including 2 x accessible spaces), 1 x motorcycle and 6 bicycle parking spaces**

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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
All dwellings	1-phase airconditioning 3 star (average zone) (zoned)	1-phase airconditioning 3 star (average zone) (zoned)	1-phase airconditioning 3 star (average zone) (zoned)	1-phase airconditioning 3 star (average zone) (zoned)	3 (dedicated)	3 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	yes	4 star	-	4 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.		✓	

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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:  (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (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.	✓	✓	✓

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
301	42.0	35.0
302	51.0	33.0
G01	41.0	36.0
G02	40.0	28.0
101, 201	44.0	22.0
All other dwellings	43.0	20.0

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	no common facility	no common facility	no common facility	no common laundry facility

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(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	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lower Ground floor park area	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Lift car (No.1)	-	-	compact fluorescent	connected to lift call button	No
Garbage room	no mechanical ventilation	-	compact fluorescent	motion sensors	No
Plant or service room	no mechanical ventilation	-	compact fluorescent	motion sensors	No
Upper Ground floor lobby	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Hallway/lobby_Level-1	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Hallway/lobby_Level-2	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Hallway/lobby_Level-3	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No

Central energy systems	Type	Specification
Lift (No. 1)	permanent magnet synchronous motor (PMSM) and regenerative drive	Number of levels (including basement): 5



#### 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).

**Item No:** 4.1  
**Title:** Request to prepare a Planning Proposal for 126 Somersby Falls Road, Somersby  
**Department:** Environment and Planning

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**Central Coast**  
Local Planning Panel

#### 20 June 2024 Local Planning Panel Meeting

Reference: F2020/00039 - D16172962  
Author: Bruce Ronan, Strategic Planner Local Planning and Policy  
Scott Duncan, Section Manager. Local Planning and Policy  
Manager: Shannon Turkington, Unit Manager Strategic Planning  
Executive: Luke Sulkowski, Director Environment and Planning (Acting)

#### Recommendation

***That the Local Planning Panel review the Planning Proposal and provide their advice in preparation for reporting this matter to Council.***

#### Summary


This report relates to a request to prepare a Planning Proposal for Lot 1 DP 712505, 126 Somersby Falls Road, Somersby which will be considered by Council on 23 July 2024. This request is referred to the Local Planning Panel (LPP) for advice prior to the reporting of the matter to Council.

The request seeks to rezone the site from RU1 Primary Production to E4 General Industrial and amend the minimum lot size from 20 Ha to 4,000m<sup>2</sup> under the *Central Coast Local Environmental Plan* (CCLEP).

Please refer to Attachment 1 (Draft Planning Proposal) "Request to Prepare a Planning Proposal for 126 Somersby Falls Road, Somersby", in order to review and comment on the Planning Proposal in satisfaction of Ministerial Direction s.9.1, so that the Local Planning Panel comments may be included as an attachment to the Council report on 23 July 2024.

If the Council decision is to forward the Planning Proposal for a Gateway Determination, then the Panel's advice shall also be forwarded to the Minister.

#### Attachments

1  Draft Planning Proposal for 126 Somersby Falls Road D16211565



Central Coast Council

Planning Proposal

Lot 1 DP 712505

126 Somersby Falls Road

Somersby

File No: RZ/1/2024; PP-2024-555

July 24



Planning Proposal  
Lot 1 DP 712505  
126 Somersby Falls Road  
Somersby

File No: RZ/1/2024; PP-2024-555

Date: July 24

Version: Gateway

Central Coast Council

**Wyong Office:** 2 Hely St / PO Box 20 Wyong NSW 2259 | **P 02 4306 7900**

**E** ask@centralcoast.nsw.gov.au |

**W** www.centralcoast.nsw.gov.au |

ABN 73 149 644 003

Lot 1 DP 712505  
126 Somersby Falls Road  
Somersby

File No: RZ/1/2024; PP-2024-555

<b>Background &amp; Locality Context</b>	<b>1</b>
<b>Part 1 Objectives or Intended Outcomes</b>	<b>4</b>
<b>Part 2 Explanation of Provisions</b>	<b>5</b>
<b>Part 3 Justification</b>	<b>6</b>
<i>Section A – Need for the Planning Proposal</i>	<i>6</i>
<i>Section B – Relationship to strategic planning framework</i>	<i>7</i>
<i>Section C – Environmental, Social and Economic Impact</i>	<i>18</i>
<i>Section D – State and Commonwealth Interests</i>	<i>20</i>
<b>Part 4 Mapping</b>	<b>21</b>
<b>Part 5 Community Consultation</b>	<b>22</b>
<b>Part 6 Project Timeline</b>	<b>23</b>
<b>Supporting Documentation</b>	<b>24</b>



## Background & Locality Context

The subject site, Lot 1 DP 712505, 126 Somersby Falls Road, Somersby, is located within the Somersby Business Park precinct, although it is not zoned for industrial uses.

The site is triangular in shape with an area of 1.064 Ha and a slope of 7%. It accommodates a dwelling-house and various other buildings. It adjoins land zoned for industrial uses which have been, or are being, developed for such uses (Figure 1).



**Figure 1** Contextual Locality Plan

The site is zoned RU1 Primary Production under the Central Coast Local Environmental Plan 2022. As is evident in Figure 2, the site is surrounded by land zoned E4 General Industrial.



**Figure 2:** Existing Zoning

In 1981 the land to the north and east of the site was zoned to 4(a1) General Industrial under Gosford LEP No 22 which was assigned the equivalent zone of IN1 General Industrial under Gosford LEP 2014.

In 2014 the land on the opposite side of Somersby Falls Road was zoned IN1 General Industrial under Gosford LEP 2014 (Amendment No 2).

In 2016 the former Gosford City Council initiated a Planning Proposal to zone the subject lot and other miscellaneous land on the periphery of Somersby Business Park to General Industrial. In 2018 the Central Coast Council discontinued this Planning Proposal, in part, because not all the landowners wanted to fund the additional studies required. The justification for zoning the subject lot has only intensified since the time the 2016 Planning Proposal was initiated as industrial development has been, and is being, undertaken on adjoining land.

In 2022 the Gosford LEP 2014 and Wyong LEP 2013 were incorporated into the Central Coast LEP 2022.

In April 2023 new Employment zones came into effect and, in this case, the IN1 General Industrial zone was renamed E4 General Industrial.

Should the land be zoned E4 General Industrial under the CCLEP, the only other applicable mapping layer, minimum lot size, would also require amendment. The existing minimum lot size is 20 Ha (Figure 3) and it is proposed to be changed to 4,000m<sup>2</sup> as per the adjoining Industrial land.

Under Gosford LEP 22 subdivision of industrial land fronting Wisemans Ferry Road was required to have a minimum lot size of 2 Ha and all other industrial land in the Somersby Business Park, a minimum lot size of 4,000m<sup>2</sup>.

In 2014 the land on the western side of Somersby Falls Road was zoned IN1 General Industrial under Gosford LEP 2014 (Amendment No 2) with a minimum lot size of 4,000m<sup>2</sup>. The minimum lot sizes for Somersby Business Park have been brought over into the CCLEP 2022.



**Figure 3:** Existing Lot Size

## Part 1 Objectives or Intended Outcomes

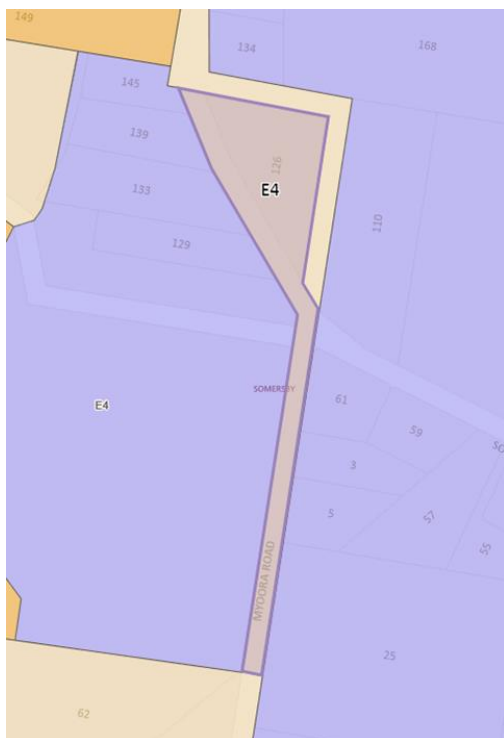
The subject land, Lot 1 DP 712505, 126 Somersby Falls Road, Somersby, is zoned RU1 Primary Production with a minimum lot size of 20 Ha under the Central Coast Local Environmental Plan 2022 (CCLEP).

The objective of the Planning Proposal is to rezone the lot to E4 General Industrial with a minimum lot size of 4,000m<sup>2</sup> under the CCLEP.

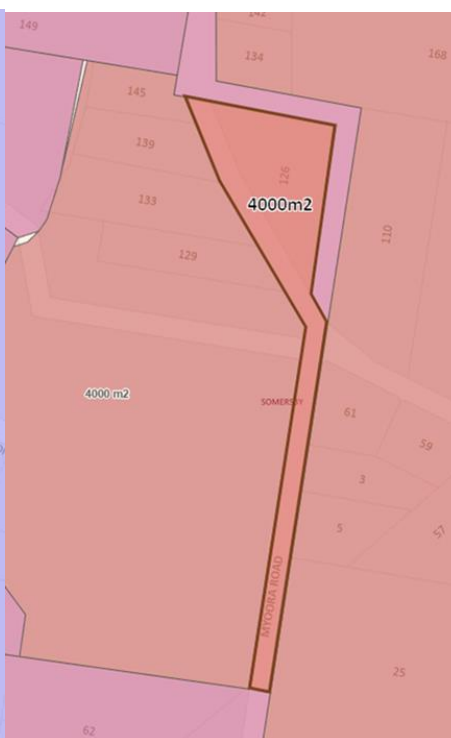
The existing RU1 Primary Production zone is now incompatible with the surrounding E4 General Industrial zone and resultant industrial activities. The intended outcome of the proposal is to rezone the site to E4 General Industrial to be consistent with the adjoining land and thus permit similar industrial development.

With the land proposed to be zoned E4 General Industrial under the CCLEP, the only other applicable mapping layer, minimum lot size, would also require amendment. The existing minimum lot size is 20 Ha and it is proposed to be changed to 4,000m<sup>2</sup> as per the adjoining Industrial land within the Somersby Business Park.

In addition to the subject lot, are adjoining and nearby roads which are zoned RU1 Primary Production but are abutted on both sides by E4 General Industrial land and used to service the industries in the locality. This anomaly is proposed to be addressed in this Planning Proposal by also including these roads in the E4 General Industrial zone (Figure 4) and the 4,000m<sup>2</sup> minimum lot size (Figure 5).



**Figure 4:** Proposed Zoning



**Figure 5:** Proposed Lot Size



## Part 2 Explanation of Provisions

The outcome will be facilitated by an amendment to the CCLEP which involves the mapping changes set out in the table below.

Mapping Layer	Existing Provision	Proposed Amendment
Land Zoning Map	RU1 Primary Production	E4 General Industrial
Minimum Lot Size Map	20 Hectares	4,000m <sup>2</sup>

**Table 1:** Explanation of Map Amendments

## **Part 3 Justification**

### **Section A – Need for the Planning Proposal**

**1. *Is the Planning Proposal a result of any Strategic Study or report?***

A previous Planning Proposal was initiated by the former Gosford Council in 2016 to zone the subject lot and other miscellaneous lots on the periphery of Somersby Business Park to General Industrial. However, in 2018 the Central Coast Council discontinued this Planning Proposal, in part, because not all the landowners wanted to fund their share of the additional studies required.

This situation has left it up to the individual landowners to pursue a rezoning should they wish to. In this case the owner of 126 Somersby Falls Road has decided to pursue a Planning Proposal for the land.

**2. *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?***

The Planning Proposal is the only means by which the land use zone can be changed to permit future industrial development on the site.



## Section B – Relationship to strategic planning framework

3. *Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?*

### Central Coast Regional Plan 2041

The Central Coast Regional Plan 2041 (CCRP) applies to the Central Coast local government area. The CCRP provides the basis of planning by the local government and sets out a number of strategies and priorities. Tables 12 and 13 in Supporting Documentation demonstrates that the Planning Proposal is generally consistent with the relevant strategies and priorities identified in the CCRP.

### Interim Local Strategic Planning Statement

The interim Central Coast Local Strategic Planning Statement (LSPS) sets a clear vision for the future and a proactive framework for delivering a growing and sustainable Region with a strong network of Centres and thriving and connected communities.

One of the four Urban Management Strategies applicable to this proposal is:

- 3 *Define the Urban Edge – will define where urban development should stop, and environmental protection starts.*

All land surrounding this site (immediately to the north, east and south-west) is currently developed or being developed for industrial uses, leaving the generally cleared subject site as an isolated pocket of RU1 Primary Production zoned land. The zoning of this rural remnant to E4 General Industrial represents an infill site and a rationalisation of the Industrial zone and will not alter the established urban edge.

The following priorities outlined in the LSPS are applicable to this Planning Proposal.

Interim Local Strategic Planning Statement	
Planning Priority & Action	Assessment/Comment
<b>3 - Grow the Regional Economic Corridors to support a strong local economy</b>  <i>Actions</i> <ul style="list-style-type: none"> <li>- Adopt the Somersby to Erina Growth Corridor Strategy and the Tuggerah to Wyong Growth Corridor Strategy as key locations for economic growth, investment and sustainable transport</li> <li>- Develop a Precinct Plan for Somersby Business Park and surrounds to create a Regional employment gateway with access to the Sydney and Hunter regions</li> </ul>	<p>The Somersby to Erina Growth Corridor Strategy has been adopted. The rezoning of this isolated remnant of RU1 zoned land to E4 is consistent with this Planning Priority to support economic growth.</p>
<b>11 - Facilitate Emerging Logistics, Warehousing, Manufacturing and Innovative and Green Economy Enterprises</b>  <i>Actions</i>	<p>The Planning Proposal to rezone the subject site to E4 will enable uses consistent with the zone to operate from the site. Such uses may entail small-scale warehousing, logistics and manufacturing.</p>

Interim Local Strategic Planning Statement	
<ul style="list-style-type: none"> <li>- Develop the Central Coast's Somersby to Erina Corridor Strategy, to provide an important connection from the regional gateway of Somersby to Gosford City Centre and beyond.</li> <li>- Investigate and support potential growth in warehousing and logistics on existing and planned industrially zoned land within the Regional Gateways of Somersby and Warnervale.</li> </ul>	
<p><b>14 - Facilitate economic development to increase local employment opportunities for the community</b></p> <p>Actions</p> <ul style="list-style-type: none"> <li>- Prepare an Employment Lands Study and Strategy for the Central Coast to ensure appropriately zoned and serviced land is available to support future projected demand.</li> </ul>	<p>An Employment Lands Study and Strategy is currently being prepared. The rezoning of this site to E4 is appropriate as it is surrounded by other E4 zoned land and is serviced. When rezoned the site will be available to support future demand for industrial activities.</p>

Table 2: LSPS Assessment

4. Is the planning proposal consistent a local Council's local strategy or other local strategic plan?

**Community Strategic Plan**

The Central Coast Community Strategic Plan (CSP) outlines a set of guiding principles, aspirations and values for the community. These reflect on social, economic, environmental and governance aspects for now and the future. The proposal is consistent with the relevant themes of the Community Strategic Plan. An assessment of the proposal against the Community Strategic Plan is located in the Table below.

Theme - Smart		
Focus Area – A Growing and Competitive Region		
Strategies		Assessment
C1	Target economic development in growth areas and major centres and provide incentives to attract businesses to the Central Coast	The site is located in the Somersby Business Park which forms part of the Somersby to Erina Growth Corridor.
C3	Facilitate economic development to increase local employment opportunities and provide a range of jobs for all residents	The proposed zoning of the site to E4 General Industrial will lead to an increase in employment opportunities.
Theme - Green		
Focus Area – Cherished and Protected Natural Beauty		
Strategies		Assessment
F1	Protect our rich environmental heritage by conserving beaches, waterways, bushland, wildlife corridors and inland areas and the diversity of local native species	The site is generally cleared so does not represent a site of environmental significance.
Theme - Responsible		
Focus Area – Good Governance and Great Partnerships		
Strategies		Assessment
G3	Engage with the community in meaningful dialogue and demonstrate how community participation is being used to inform decisions	The Planning Proposal will be placed on public exhibition, with community comments invited, which will inform Council's final decision.
Focus Area – Balanced and Sustainable Development		
I1	Preserve local character and protect our drinking water catchments, heritage and rural areas by concentrating development along transport corridors and town centres east of the M1	The preservation of the local character of the area will be preserved as the subject site, even though zoned Rural, is surrounded by land currently zoned E4 General Industrial. The site is located with good access to the M1 being the major transport corridor.
I3	Ensure land use planning and development is sustainable and environmentally sound and considers the importance of local habitat, green corridors, energy efficiency and stormwater management	The site is generally cleared so future development is environmentally sound, especially as the site is already within an Industrial precinct.

**Table 3:** Community Strategic Plan Assessment

### Somersby to Erina Corridor Strategy

The Somersby to Erina Corridor Strategy (SECS) has been prepared to guide the growth and investment in the six centres of Somersby, Karing/Mt Penang, West Gosford, Gosford City Centre, East Gosford and Erina which benefits the whole region.

An assessment of the proposal against the strategy and relevant directions and actions for the Somersby locality is set out below.

Somersby to Erina Corridor Strategy	
Somersby Strategy	
Directions & Action	Assessment/Comment
<b>6 – Ensure the long-term success of Somersby Employment Area</b>  <i>Actions</i> 6.1 Employment Lands Strategy (LGA wide)	Council is currently preparing the Central Coast Employment Lands Strategy. The rezoning of the subject lot will not impact the overall strategic planning outcomes for employment lands as it is only 1 Ha in area. It is, however, an infill site so the proposed E4 zoning will rationalise the industrial urban edge in the locality
<b>7 – Protect Somersby Employment Area's history and landscape</b>  <i>Actions</i> 7.1 Support the continued implementation of the Somersby Plan of Management.  7.2 Somersby Public Domain Strategy	The Somersby Plan of Management identifies areas with ecological significance and having aboriginal cultural heritage. The subject land does not contain and significant vegetation or aboriginal heritage items. The development of the site will not affect future works within the public domain.

**Table 4:** Somersby to Erina Corridor Strategy Assessment

### Biodiversity Strategy

The Biodiversity Strategy provides a framework and guide for the management of biodiversity on the Central Coast that is consistent with regional, state and national strategies, plans and policies. The following Theme in the Biodiversity Strategy is applicable to the Planning Proposal:

Biodiversity Strategy	
Theme 4 Protecting biodiversity through land use planning and information management	
Goals and Actions	Assessment
<b>Goal 4.1</b> <b>High biodiversity value areas are appropriately identified, protected and restored as part of future land use planning investigation</b>	Council has adequate resources to review ecology consent for all developments and planning proposals. The site is generally cleared and does not have high biodiversity value. The Strategic Environmental Planner has raised no objection

Action 4.1.6 Ensure developer compliance with Council's Flora and Fauna Survey Guidelines, vegetation management plans and conditions.	to this Planning Proposal. Council's Flora and Fauna Survey Guidelines will need to be addressed at the DA stage.
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**Table 5 – Biodiversity Strategy Assessment**

#### **Somersby Industrial Park (SIP) Service Contribution Agreement**

Most of the existing land zoned General Industrial in the Somersby Business Park (previously the Somersby Industrial Park) is subject to a Service Contribution Agreement between the State Government, Council and the landowners. The Agreement came into effect when the industrial area was zoned under Gosford LEP No 22 and outlines responsibilities of each party regarding the provision of the following infrastructure:

- water supply,
- sewerage service,
- drainage, and
- roads.

There is no provision in the Agreement that prevents the making of a subsequent LEP to zone other land for industrial purposes. Water and sewer charges can be levied and paid under the *Water Management Act* and matters directly relevant to future development such as roads and drainage can be addressed at the Development Application stage. This is the same process that occurred with the development resulting from the 2014 General Industrial rezoning of land on the western side of Somersby Falls Road.

#### **Somersby Industrial Park Plan of Management**

In 2005 Somersby Plan of Management (PoM) was adopted after lengthy environmental investigations and liaison between landowners and various government agencies. The PoM identified areas within the Somersby Business Park that contained archaeological sites and ecologically endangered communities (per *Threatened Species Conservation Act*) that should be preserved.

The LEP was amended to reflect these constraints and affected lands were designated and mapped as 'ecologically significant and Aboriginal heritage lands', however they remain zoned for industrial purposes. This designation affords protection to these sensitive lands and development is unlikely to occur in these areas in the future.

The PoM does not apply to all industrially zoned land in Somersby Business Park, e.g. the industrial zoned land in Kangoo Road and the western side of Somersby Falls Road. Any industrial zoned land resulting from this planning proposal would not be subject to the PoM.

5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

The proposal has been considered against the relevant State Environmental Planning Policies (SEPP). The full assessment is contained within the supporting documentation of this proposal (see Appendix 1).

SEPP	Applicable	Consistent
<b>State Environmental Planning Policy (Biodiversity and Conservation) 2021.</b>		
<b>Chapter 2 – Vegetation in Non-Rural Areas</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 3 – Koala habitat protection 2020</b>	N	Not applicable to the Central Coast
<b>Chapter 4 – Koala Habitat Protection 2021</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 5 – River Murray lands</b>	N	Not applicable to the Central Coast
<b>Chapter 6 – Water Catchment</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 7 – 12 (Repealed)</b>		
<b>Chapter 13 – Strategic Conservation Planning</b>	N	Not applicable to the Central Coast
<b>SEPP (Design and Place) 2021 (Not Active)</b>		
<b>State Environmental Planning Policy (Housing) 2021</b>		
<b>Chapter 2 – Affordable Housing</b>	N	Not applicable to the planning proposal
<b>Chapter 3 – Diverse Housing</b>	N	Not applicable to the planning proposal
Part 1: Secondary Dwellings	N	Not applicable to the planning proposal
Part 2: Group Homes	N	Not applicable to the planning proposal
Part 3: Co-living Housing	N	Not applicable to the planning proposal
Part 4: Built-to-rent Housing	N	Not applicable to the planning proposal
Part 5: Seniors Housing	N	Not applicable to the planning proposal
Part 6: Short-term Rental Accommodation	N	Not applicable to the planning proposal
Part 7: Conversion of Certain Serviced Apartments	N	Not applicable to the planning proposal
Part 8: Manufactured Home Estates	N	Not applicable to the planning proposal
Part 9: Caravan Parks	N	Not applicable to the planning proposal
<b>Chapter 4 – Design of Residential Apartment Development</b>	N	Not applicable to the planning proposal
<b>Chapter 5 – Transport Orientated Development</b>	N	Not applicable to the planning proposal
<b>State Environmental Planning Policy (Industry and Employment) 2021.</b>		
<b>Chapter 2 – Western Sydney Employment Area</b>	N	Not applicable to the Central Coast
<b>Chapter 3 – Advertising and Signage</b>	Y	Consistent with the provisions of the Chapter
<b>State Environmental Planning Policy (Planning Systems) 2021</b>		
<b>Chapter 2 – State and Regional Development</b>	N	Not applicable to this planning proposal



SEPP	Applicable	Consistent
<b>Chapter 3 – Aboriginal Land</b>	N	Not applicable to the subject site
<b>Chapter 4 – Concurrences and Consents</b>	N	Not applicable to this Planning Proposals
<b>State Environmental Planning Policy (Precincts—Regional) 2021</b>		
<b>Chapter 2 -State Significant Precincts</b>	N	Not applicable to the Central Coast
<b>Chapter 3 – Activation Precincts</b>	N	Not applicable to the Central Coast
<b>Chapter 4 - Kosciuszko Alpine Region</b>	N	Not Applicable to the Central Coast
<b>Chapter 5 – Gosford City Centre</b>	N	Not applicable to the subject site
<b>State Environmental Planning Policy (Primary Production) 2021.</b>		
<b>Chapter 2 - Primary Production and Rural Development</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 3 - Central Coast Plateau Areas</b>	Y	Consistent with the provisions of the Chapter
<b>State Environmental Planning Policy (Resilience and Hazards) 2021.</b>		
<b>Chapter 2 - Coastal Management</b>	N	Not applicable to the subject site
<b>Chapter 3 – Hazardous and Offensive Development</b>	N	Not applicable to the planning proposal
<b>Chapter 4 - Remediation of Land</b>	Y	Consistent with the provisions of the Chapter
<b>State Environmental Planning Policy (Resources and Energy) 2021.</b>		
<b>Chapter 2 – Mining, Petroleum Production and Extractive Industries</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 3 – Extractive Industries in Sydney Area</b>	N	Not applicable to the subject site
<b>State Environmental Planning Policy (Transport and Infrastructure) 2021</b>		
<b>Chapter 2 – Infrastructure</b>	Y	Consistent with the provisions of the Chapter
<b>Chapter 3 – Educational Establishments and Childcare Facilities</b>	N	Not applicable to the planning proposal
<b>Chapter 4 – Major Infrastructure Corridors</b>	N	Not applicable to the Central Coast
<b>Chapter 5 – Three Ports – Port Botany, Port Kembla and Port of Newcastle</b>	N	Not applicable to the Central Coast
<b>Chapter 6 – Moorebank Intermodal Precinct</b>	N	Not applicable to the Central Coast
<b>State Environmental Planning Policy (Sustainable Buildings) 2022</b>		
<b>Chapter 2 – Standards for residential development - BASIX</b>	N	Not applicable to the planning proposal
<b>Chapter 3 – Standards for non-residential development</b>	N	Not applicable to the planning proposal

SEPP	Applicable	Consistent
<b>Chapter 4 - Miscellaneous</b>	N	Not applicable to the planning proposal

**Table 6:** SEPP Compliance

**6. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?**

The proposal has been considered against the relevant Ministerial Section 9.1 Directions as summarised below. The full assessment of the applicable Directions is contained within the supporting documentation of this proposal.

No.	Direction	Applicable	Consistent
<b>Planning Systems</b>			
1.1	Implementation of Regional Plans	Y	Y
1.2	Development of Aboriginal Land Council Land	N	N/A to the subject site
1.3	Approval and Referral Requirements	Y	Y
1.4	Site Specific Provisions	Y	Y
1.4A	Exclusion of Development Standards from Variation	N	N/A to the planning proposal
1.5	Parramatta Road Corridor Urban Transformation Strategy	N	N/A to the Central Coast
1.6	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N	N/A to the Central Coast
1.7	Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N	N/A to the Central Coast
1.8	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N	N/A to the Central Coast
1.9	Implementation of Glenfield to Macarthur Urban Renewal Corridor	N	N/A to the Central Coast
1.10	Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan	N	N/A to the Central Coast
1.11	Implementation of Bayside West Precincts 2036 Plan	N	N/A to the Central Coast
1.12	Implementation of Planning Principles for the Cooks Cove Precinct	N	N/A to the Central Coast
1.13	Implementation of St Leonards and Crows Nest 2036 Plan	N	N/A to the Central Coast
1.14	Implementation of Greater Macarthur 2040	N	N/A to the Central Coast
1.15	Implementation of the Pyrmont Peninsula Place Strategy	N	N/A to the Central Coast

No.	Direction	Applicable	Consistent
1.16	North West Rail Link Corridor Strategy	N	N/A to the Central Coast
1.17	Implementation of Bayside West Place Strategy	N	N/A to the Central Coast
1.18	Implementation of the Macquarie Park Innovation Precinct	N	N/A to the Central Coast
1.19	Implementation of Westmead Place Strategy	N	N/A to the Central Coast
1.20	Implementation of the Camellia-Rosehill Place Strategy	N	N/A to the Central Coast
1.21	Implementation of the South West Growth Area Structure Plan	N	N/A to the Central Coast
1.22	Implementation of the Cherrybrook Station Place Strategy	N	N/A to the Central Coast
<b>Design &amp; Place (Not Active)</b>			
<b>Biodiversity &amp; Conservation</b>			
3.1	Conservation Zones	N	N/A to the subject site
3.2	Heritage Conservation	Y	Y
3.3	Sydney Drinking Water Catchments	N	N/A to the Central Coast
3.4	Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs	N	N/A to the Central Coast
3.5	Recreational Vehicle Areas	N	N/A to the planning proposal
3.6	Strategic Conservation Planning	N	N/A to the Central Coast
3.7	Public Bushland	N	N/A to the planning proposal
3.10	Water Catchment Protection	Y	Y
<b>Resilience &amp; Hazards</b>			
4.1	Flooding	N	N/A to the subject site
4.2	Coastal Management	N	N/A to the subject site
4.3	Planning for Bushfire Protection	Y	TBD
4.4	Remediation of Contaminated Lands	Y	Y
4.5	Acid Sulfate Soils	N	N/A to the subject site
4.6	Mine Subsidence & Unstable Land	N	N/A to the subject site

No.	Direction	Applicable	Consistent
<b>Transport &amp; Infrastructure</b>			
5.1	Integrating Land Use & Transport	Y	Y
5.2	Reserving Land for Public Purposes	N	N/A to the planning proposal
5.3	Development Near Regulated Airports and Defence Airfields	N	N/A to the subject site
5.4	Shooting Ranges	N	N/A to the subject site
<b>Housing</b>			
6.1	Residential Zones	N	N/A to the planning proposal
6.2	Caravan Parks and Manufactured Home Estates	N	N/A to the planning proposal
<b>Industry &amp; Employment</b>			
7.1	Employment Zones	Y	Y
7.2	Reduction in non-hosted short-term rental accommodation period	N	N/A to the planning proposal
7.3	Commercial and Retail Development along the Pacific Highway, North Coast	N	N/A to the Central Coast
<b>Resources &amp; Energy</b>			
8.1	Mining, Petroleum Production and Extractive Industries	N	N/A to the subject site
<b>Primary Production</b>			
9.1	Rural Zones	Y	Y
9.2	Rural Lands	Y	Y
9.3	Oyster Aquaculture	N	N/A to the subject site
9.4	Farmland of State and Regional Significance on the NSW Far North Coast	N	N/A to the Central Coast

**Table 7:** S.9.1 Ministerial Direction Compliance

### **Section C – Environmental, Social and Economic Impact**

**7. *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?***

The land adjoining the subject lot to the north and east comprises a vegetated road reserve. Hollow bearing trees on the northern boundary overhang the subject property and may provide nesting opportunities for fauna. These native trees do not form part of this Planning Proposal and are to be retained.

It is likely that amphibians and microbats use the dam on the southern part of the property and surrounding land for habitat and foraging. It is recommended that the dam and surrounding habitat be surveyed at the DA stage.

**8. *Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?***

#### **Ecology**

The property has minimal constraints due to historic clearing and ongoing maintenance of exotic lawns and garden beds.

The dam and surrounding land may provide habitat for threatened amphibians and foraging for bats. It would need to be surveyed according to appropriate Central Coast Flora and Fauna Guidelines at the DA stage.

The land surrounding the subject lot contains a vegetated road reserve along the northern and eastern boundaries. This native vegetation provides connectivity and a habitat corridor. Hollow-bearing trees in the northern road reserve overhang the property. They may provide nesting opportunities for fauna. These native trees that overhang the northern boundary of the property need to be retained.

#### **Indigenous and Non-Indigenous Cultural Heritage Items**

The site does not accommodate any Heritage Items listed in CCLEP 2022.

The Due Diligence Assessment report found that no Aboriginal objects or places were identified on the site. All on-site personnel are to be made aware of their obligations under the National Parks and Wildlife Act 1974 and the processes to be followed should any archaeological material be uncovered during construction.

#### **Contaminated Land and Acid Sulfate Soils**

The Preliminary Site Investigation ('PSI') has been reviewed and it has been generally prepared in accordance with the NSW EPAs Guidelines. The PSI concludes that the site is suitable for residential land use therefore it is considered suitable for industrial land use. Recommendations include the preparation of an Unexpected Finds Protocol, Hazardous Buildings Materials Survey, Asbestos Clearance Certificate and Waste Classification which can all be addressed at the DA stage.



*Flooding and Drainage*

No flooding and drainage issues relating to the site.

*Has the planning proposal adequately addressed any social and economic impacts?*

*Social Issues*

The proposal will provide additional employment opportunities in a locality with good access to major transport routes.

*Economic Impacts*

The zoning of the site to E4 General Industrial and future development of the site will add to the area of land available for employment generating activities within the existing extent of the Somersby Business Park.

## Section D – State and Commonwealth Interests

### 9. Is there adequate public infrastructure for the planning proposal?

#### Traffic

Somersby Fall Road has been recently upgraded to a full width sealed road with kerb and gutter for the full frontage of the property.

#### Water and Sewer

Water and sewer are available to the land. Future development will be required to lodge a S305 application under *Water Management Act* and obtain a S307 Compliance Certificate prior to issue of Occupation/Subdivision Certificate.

### 10. What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

Consultation with the following agencies is proposed, based on the identified triggers and site constraints:

Agency	Trigger/Constraint
Department of Environment, Climate Change and Water	- Vegetation and biodiversity matters
NSW Rural Fire Service	- Bushfire matters
Transport for NSW	- Transport capacity matters
Darkinjung Local Aboriginal Land Council	- Aboriginal heritage matters

**Table 8 – Public Agencies to be Consulted**

\* NOTE: Section 3.25 of the EP&A Act requires the RPA to consult with the Chief Executive of the Office of Environment and Heritage (OEHS) if, in the opinion of the RPA, critical habitat or threatened species, populations or ecological communities, or their habitats may be adversely affected by the proposed instrument.

- The consultation is to commence after a Gateway Determination is issued unless the Regulations specify otherwise.
- The period for consultation is 21 days unless agreed differently between the RPA & the DG or by the Regulations.

## Part 4 Mapping

Map	Map Title
A.	Locality Plan
<b>Existing Provisions</b>	
B.	Land Zoning Map
C.	Minimum Lot Size Map
<b>Proposed Provisions</b>	
D.	Land Zoning Map
E.	Minimum Lot Size Map

**Table 9:** Existing and Proposed Provisions

## **Part 5 Community Consultation**

The proposal will be made available for **28** days for community/agency consultation and undertaken in accordance with any determinations made by the Gateway.

It is expected that the proposal will be made available at the following locations:

- Council Administration Building - 2 Hely Street, Wyong;
- Council's website - [www.yourvoiceourcoast.com](http://www.yourvoiceourcoast.com)

Additionally, notification of the exhibition of the proposal will be provided to adjoining landholders prior to its commencement.

## Part 6 Project Timeline

Action	Period	Start Date	End Date
Anticipated commencement date (date of Gateway Determination)	12 months	September 2024	September 2025
Anticipated timeframe for the completion of required technical information	completed		
Timeframe for government agency consultation (as required by Gateway determination)	21 days	October 2024	November 2024
Commencement and completion dates for public exhibition	28 days	January 2025	February 2025
Timeframe for consideration of submissions	2 months	February 2025	April 2025
Timeframe for consideration of a proposal post exhibition	1 day	April 2025	April 2025
Date of submission to the Department to finalise LEP	2 weeks	May 2025	May 2025
Anticipated date RPA will make the plan (if delegated)	2 weeks	July 2025	July 2025
Anticipated date RPA will forward to the Department for notification	1 month	July 2025	August 2025

**Table 10:** Key Project Timeframes

## Supporting Documentation

No.	Document
<b>01 Strategic Assessment</b>	
A.	Central Coast Regional Plan 2041 Assessment
B.	State Environmental Planning Policy Assessment
C.	Section 9.1 Ministerial Direction Assessment
<b>02 Land Use Provisions</b>	
A.	Land Use Tables
<b>03 Mapping</b>	
A.	Locality Plan
<b>Existing Provisions</b>	
B.	Land Zoning Map
C.	Minimum Lot Size Map
<b>Proposed Provisions</b>	
D.	Land Zoning Map
E.	Minimum Lot Size Map

**Table 11:** Supporting Documentation to the Planning Proposal



# 01

## Strategic Assessment

## A Central Coast Regional Plan 2041 Assessment

Direction	Applicable	Assessment/Comment
<b>Objective 1:</b> A prosperous Central Coast with more jobs close to home	Yes	The proposal will result in additional land zoned for employment purposes in an established Industrial area.
<b>Strategy 1.1</b> Following completion of the Hunter-Central Coast REZ, local strategic planning should consider: <ul style="list-style-type: none"> <li>opportunities to leverage new employment in energy intensive industries that benefit from proximity to the energy infrastructure within the renewable energy zone</li> <li>the proximity of sensitive land uses and ensure they do not encroach upon these areas.</li> </ul>	No	The site is not located in the indicative geographical area of the Hunter-Central Coast renewable energy zone. The site is also not in close proximity to existing electricity stations.
<b>Strategy 1.2</b> Planning proposals for new employment lands will demonstrate they: <ul style="list-style-type: none"> <li>are located in areas which will not result in land use conflict</li> <li>can be adequately serviced and any biodiversity impacts are manageable</li> <li>respond to the employment land needs identified for that local government area.</li> </ul>	Yes	The proposal is for new employment land which is an infill site, being surrounded by existing General Industrial zoned land. Without the rezoning the residents will experience increasing land use conflict with the surrounding industrial uses and resultant noise and traffic. The site is serviced and as it is generally cleared there are no biodiversity issues.
<b>Strategy 1.3</b> Local strategic planning should consider: <ul style="list-style-type: none"> <li>how existing employment land areas, including those that provide urban services, will be retained unless opportunities for urban renewal arise through the relocation of industry</li> <li>if there is sufficient supply of vacant, serviced employment land providing capacity for a range of different sized employment enterprises</li> <li>the employment land needs for the local government area and identify flexible planning and development control frameworks to support their growth</li> <li>opportunities to facilitate growth in logistics, circular economy, new</li> </ul>	Yes	The proposal is for new employment land which is an infill site, being surrounded by existing General Industrial zoned land. The site is serviced by road, water and sewer.

Direction	Applicable	Assessment/Comment
<p>economic enterprises and industries and their supply chains</p> <ul style="list-style-type: none"> <li>the suitability of transport interchanges and bypasses for employment lands in consultation with Transport for NSW</li> <li>lands around the interchanges of the M1 Pacific Motorway should be used for employment activities that benefit from easy access to key markets such as manufacturing, logistics and warehousing</li> <li>lands around the interchanges of the M1 Pacific Motorway should be used for employment activities that benefit from easy access to key markets such as manufacturing, logistics and warehousing</li> <li>the proximity of sensitive land uses and ensure they do not encroach upon these interchanges.</li> </ul>		
<p><b>Strategy 1.4</b> Local strategic planning should consider:</p> <ul style="list-style-type: none"> <li>alignment with the NSW Waste and Sustainable Materials Strategy 2041 and the seven circular economy principles identified in this plan</li> <li>opportunities to support the circular flow of materials by enabling new remanufacturing, resource recovery, re-use and recycling facilities and the expansion of existing circular economy facilities</li> <li>the location of circular economy facilities and existing waste management centres, and ensure sensitive land uses do not encroach on these areas or limit their future expansion</li> <li>opportunities to promote circular economy outcomes through local policy guidance and development controls relating to building design, materials, construction, and waste management.</li> </ul>	Yes	The proposal is for zoning a 1.064 Ha site to E4 General Industrial. The zone permits recycling facilities and the like but due to its size is unlikely to be used for a circular economy development.
<p><b>Strategy 1.5</b> Planning proposals for power station sites identified as regionally significant growth areas will be supported by a place</p>	No	The proposal does not relate to a power station site.

Direction	Applicable	Assessment/Comment
<p>strategy which demonstrates how land use outcomes:</p> <ul style="list-style-type: none"> <li>• maximise employment generation or will attract visitors to the region</li> <li>• make use of voids and/ or site infrastructure such as rail loops, hard stand areas, power, water and road access</li> <li>• supports the growth of adjoining industrial areas or settlement areas</li> <li>• enhance corridors within the landscape such as biodiversity corridors or disused infrastructure corridors</li> <li>• complement areas with special amenity value such as critical industry clusters, open space, villages and residential areas</li> <li>• have considered the existing and likely future uses of adjoining land and will avoid land use conflict</li> <li>• align with any specific guidance in the district planning priorities section of this plan.</li> </ul>		
<p><b>Objective 2:</b> Support the right of Aboriginal residents to economic self-determination</p>	No	The proposal is not on land owned by the Darkinjung Local Aboriginal Land Council.
<p><b>Strategy 2.1</b> Local strategic planning will align with the Aboriginal land planning outcomes identified in any development delivery plan within the LGA to:</p> <ul style="list-style-type: none"> <li>• account for local Aboriginal community interests and aspirations in strategic planning decision-making</li> <li>• further partnerships with the Aboriginal community and build the delivery capacity of Darkinjung LALC</li> <li>• maximise the flow of economic, social and cultural benefits generated by land ownership to Aboriginal residents</li> <li>• streamline assessment processes for Darkinjung LALC.</li> </ul>	No	The proposal is not on land owned by the Darkinjung Local Aboriginal Land Council.
<p><b>Objective 3:</b> Create 15-minute neighbourhoods to support mixed, multi-modal, inclusive and vibrant communities</p>	No	The proposal is located in an industrial zoned area. The 15-minute neighbourhood policy is not applicable to the Industrial zoned localities.
<p><b>Strategy 3.1</b></p>	No	The site is located in an industrial area.

Direction	Applicable	Assessment/Comment
Local strategic planning will identify the location of urban core, general urban, inner suburban and general suburban contexts that apply to the LGA and consider strategies to achieve 15-minute neighbourhoods in the various urban and suburban areas.		
<b>Strategy 3.2</b> Planning proposals that propose a residential, local centre or commercial centre zone will not prohibit the following land uses within urban core, general urban, inner suburban and general suburban contexts: <ul style="list-style-type: none"> <li>• business premises</li> <li>• restaurants or cafes</li> <li>• take-away food and drink premises</li> <li>• neighbourhood shops and supermarkets</li> <li>• educational establishments</li> <li>• early education and care facilities</li> <li>• health services facilities</li> <li>• markets</li> <li>• community facilities</li> <li>• recreation areas.</li> </ul>	No	The proposal does not include residential, local centre or commercial centre zone.
<b>Strategy 3.3</b> Planning proposals will incorporate: <ul style="list-style-type: none"> <li>• a small neighbourhood centre if the proposed residential yield exceeds 1,500 dwellings or</li> <li>• a large neighbourhood centre if the proposed residential yield exceeds 4,000 dwellings.</li> </ul> The neighbourhood centre will: <ul style="list-style-type: none"> <li>• support a floor area informed by a local retail demand analysis</li> <li>• have enough developable area to accommodate the uses over one level with at grade parking to reduce costs</li> <li>• be located to maximise its convenience for the vast majority of residents of which it serves</li> <li>• be located in a high profile location (i.e. main arterial road or precinct with strong pedestrian traffic)</li> <li>• be supported by a walkable catchment and pedestrian friendly environment.</li> </ul>	No	The proposal does not relate to a residential zone.

Direction	Applicable	Assessment/Comment
<b>Strategy 3.4</b> Local strategic planning should consider developing local infrastructure and street design guidelines and controls to achieve safe, accessible and attractive streets for all modes of transportation, as well as trails, parks and public spaces that will encourage active living, community interaction and opportunities to integrate nature in neighbourhoods.	No	The proposal will result in an infill site being zoned General Industrial where local infrastructure is already in existence.
<b>Strategy 3.5</b> Local strategic planning will propose goals and strategies to make a cooler region by greening urban areas, buildings, transport corridors and open spaces to enhance the urban forest.	No	The proposal will result in an infill site being zoned General Industrial and would not contribute to the urban heat island effect.
<b>Strategy 3.6</b> Local strategic planning should consider strategies to ensure 90% of houses are within a 10-minute walk of open space, recreation areas or waterways.	No	The proposal does not relate to servicing residents with open space and recreation areas.
<b>Objective 4:</b> An interconnected Central Coast without car-dependent communities	Yes	The Somersby Business Park is located 2km from the nearest residential suburb of Kariong so the SBP is car-dependent. The SBP is adjacent to the M1 which provides excellent vehicular access for employees and to required services and markets.
<b>Strategy 4.1</b> Local strategic planning will consider aligning active transport strategies (within and across LGA boundaries) with future growth areas and local infrastructure contribution plans to ensure development supports movement through walking and cycling.  Councils may consider minimum bicycle parking standards to reflect the aspirations of 15-minute neighbourhoods in the urban core, general urban, inner suburban and general suburban contexts.	Yes	The proposal is an infill development so will not result in the physical expansion of the SBP and associated infrastructure. Active transport and associated infrastructure are not a viable option in this location.
<b>Strategy 4.2</b> Local strategic planning will consider transport initiatives to complement increased diversity of land uses and housing typologies in neighbourhoods by: <ul style="list-style-type: none"> <li>rolling out low-speed zones supported by physical changes to the road environment</li> </ul>	Yes	The proposal is located within an existing industrial area with Somersby Falls Road providing access to the property having been recently upgraded to service nearby industrial development.



Direction	Applicable	Assessment/Comment
<ul style="list-style-type: none"> <li>upgrading existing paths and streets, with more crossing opportunities, and better landscaping, shading and lighting</li> <li>planting trees along streets and paths</li> <li>re-allocating vehicle lanes to other public space within and around key destinations</li> <li>prioritising pedestrian movements in and around key destinations, including at traffic signals</li> <li>using low-cost and/or temporary infrastructure to trial or test local initiatives</li> <li>streamlining processes for community or council led local walking, cycling and place making initiatives</li> <li>using technology to improve places and movements.</li> </ul>		
<b>Strategy 4.3</b> Local strategic planning will consider opportunities to: <ul style="list-style-type: none"> <li>connect existing coastal walkways and cycleways to enhance the user experience and link coastal towns and villages</li> <li>integrate walking and cycling networks into the design of new communities</li> <li>prioritise walking and cycling in areas around schools, health services, aged care facilities, sporting, cultural and recreational facilities</li> <li>explore ideas from the Streets as Shared Spaces program</li> </ul>	No	The site is located in an Industrial area and does not relate to the development of a new community.
<b>Strategy 4.4</b> Local strategic planning should consider maximum parking limits in neighbourhoods and centres well served by walking, cycling and public transport and consider opportunities for park and ride, carpooling, car sharing and other initiatives that can help to reduce car dependency.	Yes	The site is located in an existing industrial area and not within a local residential neighbourhood or centre. Where possible future employees would have the opportunity for car-pooling.
<b>Strategy 4.5</b> Local strategic planning will spatially identify key activity destinations and key	Yes	The site is located in an established Industrial area adjacent to key transit corridors such as the M1 and Central Coast Highway.

Direction	Applicable	Assessment/Comment
transit corridors and consider strategies to integrate land use and transport planning in collaboration with Transport for NSW.		
<b>Strategy 4.6</b> Local strategic planning should be integrated with transport planning to ensure: <ul style="list-style-type: none"> <li>places maximise sustainable transport opportunities, including active and public transport that supports the creation of a compact urban area</li> <li>ease of use and connection across the network, including mobility, accessibility, parking and how people get to and from transport</li> <li>inclusive and accessible systems for people of all ages and abilities.</li> </ul>	Yes	The planning proposal for the zoning of an infill site to General Industrial which will result is a more compact Industrial area. The SBP is serviced by a bus route from Gosford Railway Station via West Gosford Industrial Area on weekdays. Given that the SBP is remote from the other urban areas of the Central Coast it is likely that most future employees on the subject site will use private vehicles to travel to and from work
<b>Strategy 4.7</b> Local strategic planning will ensure land enables the long-term fast rail vision by preventing incompatible development occurring near alignments once corridors are identified.	No	The proposal is located in an existing Industrial area so would not be impacted by a proposed fast rail corridor alignment.
<b>Strategy 4.8</b> Local strategic planning will consider opportunities to: <ul style="list-style-type: none"> <li>protect, maintain and improve the existing and approved freight transport networks</li> <li>balance the need to minimise negative impacts of freight movements on urban amenity with the need to support efficient freight movements and deliveries</li> <li>limit incompatible uses in areas expected to have intense freight activity</li> <li>limit incompatible freight uses in and near residential areas.</li> </ul>	Yes	The proposal is located in close proximity to the Central Coast Highway and M1 interchange. The proposed General Industrial zone is compatible with the existing freight transport links.
<b>Objective 5:</b> Plan for 'nimble neighbourhoods', diverse housing and sequenced development	No	The proposal does not involve development for housing.
<b>Strategy 5.1</b> Local strategic planning should consider the following benchmarks as a guiding principle:	No	The site is located in the Narara District but does not propose any residential development.

Direction			Applicable	Assessment/Comment
District	Infill	Greenfield		
Central Lakes	60%	40%		
Narara district	80%	20%		
Tuggerah district	80%	20%		
<b>Strategy 5.2</b> Local strategic planning will consider amendments to planning and development controls that reflect the desired density targets for the urban core, general urban, inner suburban and general suburban contexts.			No	There are no dwellings proposed as part of this Planning Proposal.
<b>Strategy 5.3</b> Planning proposals will not prohibit the following housing typologies within residential zones that apply to urban core, general urban, inner suburban and general suburban contexts: <ul style="list-style-type: none"> <li>• attached dwellings</li> <li>• boarding houses</li> <li>• dual occupancies</li> <li>• group homes</li> <li>• multi dwelling housing</li> <li>• secondary dwellings</li> <li>• semi-detached dwellings</li> </ul>			No	The Planning Proposal is not located within, or does not propose, a residential zone.
<b>Strategy 5.4</b> Local strategic planning will consider opportunities to support community driven innovative housing solutions, such as prefabricated and manufactured housing, 3-D printed housing, and tiny houses, where they are well designed and appropriately located.			No	The Planning Proposal will not result in any housing outcomes.
<b>Strategy 5.5</b> Local strategic planning will consider: <ul style="list-style-type: none"> <li>• the proportion and availability of housing for Aboriginal people and whether this is increasing, stable or decreasing relative to need</li> <li>• co-led planning and development initiatives with Darkinjung LALC that leverage its social housing program.</li> </ul>			No	The proposal is not on land owned by the Darkinjung Local Aboriginal Land Council nor is it for housing.
<b>Strategy 5.6</b> Local strategic planning should consider preparing an affordable housing			No	The proposal does not include an affordable housing scheme.

Direction	Applicable	Assessment/Comment
contributions scheme with the support of the department.		
<b>Strategy 5.7</b> Local strategic planning should consider opportunities to work with affordable housing providers and identify sites that may be suitable for supported and specialist accommodation taking account of: <ul style="list-style-type: none"> <li>local housing needs</li> <li>sites with access to relevant facilities, social infrastructure and health care, and public transport</li> <li>the increasing need for accommodation suitable for people with health conditions.</li> </ul>	No	The proposal is located in an industrial area and does not entail development of affordable housing.
<b>Strategy 5.8</b> Local strategic planning should consider planning for appropriate locations for lifestyle villages, such as locations within 800m of local and strategic centres or key transit corridors.  Where lifestyle villages are proposed outside these locations, the village or community should be on unconstrained sites and have: <ul style="list-style-type: none"> <li>reticulated water and sewer</li> <li>indoor and outdoor recreation facilities adequate for the number of proposed residents such as bowling greens, tennis courts, golf course, swimming pool, or off leash dog park</li> <li>community facilities that promote gathering and social connections such as a restaurant, community hall, or community garden</li> <li>access to bus services providing frequent trips to local centres and shops</li> </ul>	No	The proposal is located in an industrial area and does not entail development for lifestyle villages.
<b>Strategy 5.9</b> Local strategic planning should consider the demand for hotels, motels and short-term rental accommodation.	No	Hotel, motel and short-term rental accommodation would be incompatible with the existing Industrial character of the locality.
<b>Objective 6:</b> Conserve heritage, landscapes, environmentally sensitive areas, waterways and drinking water catchments	Yes	The site does not contain heritage items, environmentally sensitive landscapes, waterways nor is it within a drinking water catchment.

Direction	Applicable	Assessment/Comment
<b>Strategy 6.1</b> Local strategic planning will protect important environmental assets by: <ul style="list-style-type: none"> <li>• seeking advice from local Aboriginal knowledge holders to find common approaches that will support the health and wellbeing of Country</li> <li>• maintaining and enhancing areas of high environmental value</li> <li>• recognising areas of high environmental value in local environmental plans</li> <li>• considering opportunities for biodiversity offsetting in areas of high environmental value</li> <li>• minimising potential development impacts on areas of high environmental value and biodiversity corridors by implementing the 'avoid, minimise and offset' hierarchy</li> <li>• improving the quality of, and access to, information relating to areas of high environmental value</li> <li>• implementing appropriate measures to conserve areas of high environmental value</li> <li>• identify, map and avoid, where possible, areas of high environmental value that occur within urban growth 'investigation' areas of this regional plan and local strategic plans</li> </ul>	Yes	The site is generally cleared and is surrounded by Industrial zoned land which is in the process of being developed. The site has not been identified as having environmental significance nor contain aboriginal heritage items.
<b>Strategy 6.2</b> Local strategic planning will: <ul style="list-style-type: none"> <li>• identify regionally and locally significant biodiversity corridors and a framework for where conservation priorities and opportunities can be secured. The level of protection afforded to biodiversity corridors should be commensurate with the contribution they make to the wider ecological network</li> <li>• consider the location and function of biodiversity corridors when determining future urban growth areas.</li> </ul>	Yes	The road reserve on the northern boundary of the site is identified as a wildlife corridor and adjoining land to the north-east is identified as core habitat. The Planning Proposal does not propose to rezone this road reserve.

Direction	Applicable	Assessment/Comment
<b>Strategy 6.3</b> Local strategic planning should consider opportunities to strengthen the Coastal Open Space System by expanding its links and extending new corridors to balance growth in the north of the region and protect the network of natural areas across the region.	No	The zoning of the site to E4 does not present an opportunity to strengthen the COSS.
<b>Strategy 6.4</b> Planning proposals must ensure the biodiversity network is protected within an appropriate conservation zone unless an alternate zone is justified following application of the avoid, minimise, offset hierarchy.	No	The site is generally cleared and does not contain land of significant biodiversity attributes which would require a conservation zone.
<b>Strategy 6.5</b> Planning proposals should promote enterprises, housing and other uses that complement the biodiversity, scenic and water quality outcomes of biodiversity corridors. Particularly, where they can help safeguard and care for natural areas on privately owned land.	No	The site is generally cleared and does not contain land of significant biodiversity attributes which would require a conservation zone.
<b>Strategy 6.6</b> Local strategic planning will ensure all known places, precincts, landscapes and buildings of historic, scientific, cultural, social, archaeological, architectural and aesthetic significance to the region are identified and protected in planning instruments.	No	The proposal is not located on or near a heritage listed item.
<b>Strategy 6.7</b> Local strategic planning will consider Aboriginal cultural and community values in future planning and management decisions.	Yes	An aboriginal due diligence assessment has been undertaken for the subject land which found no aboriginal sites.
<b>Strategy 6.8</b> Local strategic planning will identify and protect drinking water catchments and storages ensuring that incompatible land uses will not compromise future water security.	No	The site is not within a drinking water catchment.
<b>Strategy 6.9</b> Local strategic planning should identify opportunities to rehabilitate critical waterways in partnership with Local Land Services.	No	There is no waterway located on the site.
<b>Strategy 6.10</b> Local strategic planning will ensure identification of future urban growth areas	No	The site is not within a drinking water catchment.



Direction	Applicable	Assessment/Comment
has considered water infrastructure needs within drinking water catchments.		
<b>Strategy 6.11</b> Local strategic planning will support the sustainable growth of recreation and tourist facilities in inland and coastal lakes and encourage non-polluting passive enjoyment where possible whilst maintaining a natural shoreline.	No	The proposal does not relate to recreation and tourist facilities.
<b>Strategy 6.12</b> Planning proposals will demonstrate that development within a drinking water catchment or sensitive receiving water catchment will achieve a neutral or beneficial effect on water quality.	No	The site is not within a drinking water catchment.
<b>Objective 7:</b> Reach net zero and increase resilience and sustainable infrastructure	No	Opportunities to increase resilience and sustainable infrastructure could be explored at the DA stage.
<b>Strategy 7.1</b> Local strategic planning will: <ul style="list-style-type: none"> <li>• identify opportunities to increase active transport choices</li> <li>• establish minimum electric vehicle parking requirements in new development</li> <li>• consider opportunities to deliver micro-mobility transport infrastructure in areas of the region where topography, distance or climate makes walking and cycling challenging.</li> </ul>	No	The proposal seeks to facilitate industrial development within an existing Industrial estate. Due to the site's distance from residential areas active transport options and micro-mobility transport and associated infrastructure is not a viable option in this location.
<b>Strategy 7.2</b> Local strategic planning should support the rollout of electric vehicle charging infrastructure by identifying potential sites for charging stations, including council-owned land, and how these locations can be activated as places.	No	The Planning Proposal relates to zoning of land to permit industrial development. Electric vehicle charging stations does not form part of this proposal.
<b>Strategy 7.3</b> Local strategic planning must protect and enhance the region's carbon sinks.	No	The Planning Proposal relates to generally cleared land which is not considered to be a carbon sink.
<b>Strategy 7.4</b> Local strategic planning should ensure that air quality considerations are integrated into decision making at the earliest stage of planning processes.	No	The site is only 1.064 Ha in area so a large industry will be unable to be located on it. Future uses are likely to be small-scale industrial units which are unlikely to impact air quality.
<b>Strategy 7.5</b> Planning proposals must protect sensitive land uses from sources of air pollution, such as major roads, railway lines and	No	The site is located within an industrial area so any future uses would be compatible with the surrounding existing uses. Such

Direction	Applicable	Assessment/Comment
designated freight routes, using appropriate planning and development controls and design solutions to prevent and mitigate exposure and detrimental impacts on human health and wellbeing.		industrial uses are not considered to be sensitive in nature.
<b>Strategy 7.6</b> Local strategic planning will consider pathways to build resilience, reduce vulnerabilities, and support initiatives that can transform the region.	Yes	The Planning Proposal reduces vulnerabilities by rezoning a site used for rural residential activities but becoming increasingly impacted by the surrounding industrial uses.
<b>Strategy 7.7</b> Local strategic planning will demonstrate alignment with the NSW Government's natural hazard management and risk mitigation policy framework including: <ul style="list-style-type: none"> <li>Planning for Bushfire Protection 2019</li> <li>NSW Coastal Management Framework</li> <li>Floodplain Development Manual and the Flood Prone Land Policy</li> <li>Planning for a more resilient NSW: A strategic guide to planning for natural hazards and</li> <li>any other natural hazards guidance that is released.</li> </ul>	Yes	The site is not affected by flooding nor coastal processes. It is however subject to bushfire hazard. The Planning Proposal will be referred to the RFS for comment should a Gateway Determination be issued.
<b>Strategy 7.8</b> Local strategic planning will ensure future residential areas are not planned in areas where: <ul style="list-style-type: none"> <li>residents are exposed to a high risk from bush fire, flood and/or coastal hazards, considerate of how these may be impacted by climate change</li> <li>evacuation is likely to be difficult during a bush fire or flood due to its siting in the landscape, access limitations, hazard event history and/or size and scale</li> <li>any existing residential areas may be placed at increased risk and</li> <li>increased development may cause evacuation issues for both existing or new occupants.</li> </ul>	No	The planning proposal does not propose to create a residential area.
<b>Strategy 7.9</b> Local strategic planning will: <ul style="list-style-type: none"> <li>map areas that are projected to be affected by sea level rise and other coastal hazards to limit the potential</li> </ul>	No	The site is not located in a coastal area.

Direction	Applicable	Assessment/Comment
<p>exposure of new development to these hazards</p> <ul style="list-style-type: none"> <li>be consistent with any relevant coastal management program adopted and certified for that area</li> <li>consider opportunities to adapt existing settlements at risk of exposure to sea level rise and coastal hazards in accordance with the NSW Coastal Management Framework, such as: <ul style="list-style-type: none"> <li>raising houses and roads</li> <li>relocating or adapting infrastructure to manage coastal hazard risks, such as ingress of tidal water into stormwater systems and/or</li> <li>undertaking beach nourishment</li> </ul> </li> <li>consider opportunities to maintain natural coastal defences against sea level rise, such as: <ul style="list-style-type: none"> <li>maintaining or expanding coastal and riparian buffer zones</li> <li>replanting and protecting coastal dune systems</li> <li>fencing creeks and rivers to keep livestock out, limit erosion and protect water quality</li> <li>controlling invasive species and/or</li> <li>protecting and restoring mangroves and salt marsh areas to limit flooding, inundation and erosion.</li> </ul> </li> </ul>		
<p><b>Objective 8:</b> Plan for businesses and services at the heart of healthy, prosperous and innovative communities</p>	Yes	Employment generating businesses are the proposed outcome of this Planning Proposal.
<p><b>Strategy 8.1</b> Local strategic planning should consider:</p> <ul style="list-style-type: none"> <li>encouraging resilient, accessible and inclusive hubs with a range of uses including town centre uses, night-time activities and civic, community, social and residential uses</li> <li>focussing commercial and retail activity in existing commercial centres</li> <li>identifying locations for mixed use and/or housing-led intensification in</li> </ul>	No	The Planning Proposal is not within a town centre, nor does it propose any commercial or retail uses.

Direction	Applicable	Assessment/Comment
<p>and around centres and main streets to strengthen and support existing uses while enhancing local character and heritage assets</p> <ul style="list-style-type: none"> <li>• accessibility and attractive active and public transport access from adjoining neighbourhoods both within and to centres and main streets</li> <li>• activating centres and main streets through active street frontages, restaurant/café seating, digital connectivity, outdoor entertainment, community gardens, place-making initiatives and events</li> <li>• ensuring centres and main streets are the primary locations for commercial activity and contributors to the local as well as district-wide economy and that new areas complement the function of existing centres and main streets</li> <li>• managing parking to encourage active streets and public spaces and reinforce compact centres</li> <li>• providing well-designed built and natural shade for comfort and protection against overexposure to UV radiation</li> <li>• enabling a diverse range of tourism accommodation and attractions in centres and particularly main streets.</li> </ul>		
<p><b>Strategy 8.2</b> Planning proposals will accommodate new commercial activity in existing centres and main streets unless it forms part of a proposed new community or is an activity that supports a 15-minute neighbourhood.</p>	No	The site is not located in a centre and does not propose new commercial activity.
<p><b>Strategy 8.3</b> Local strategic planning should consider:</p> <ul style="list-style-type: none"> <li>• opportunities to promote the night-time economy in suitable centres and main streets, particularly where night-time public transport options are available</li> <li>• how to improve access, inclusion and safety, and make public areas welcoming for consumers and workers</li> </ul>	No	The Planning Proposal is for an E4 zone to allow industrial development and does not promote a night-time economy.

Direction	Applicable	Assessment/Comment
<ul style="list-style-type: none"> <li>diversifying the range of night-time activities including extending opening hours for shops, cafes, libraries, galleries and museums</li> <li>addressing the cumulative impact of high concentrations of licensed premises and other noise generating activities to manage land use conflict in these areas</li> <li>fostering the relationships between the creative industries, live performance and the night-time economy.</li> </ul>		
<b>Strategy 8.4</b> Local strategic planning should consider: <ul style="list-style-type: none"> <li>identifying knowledge and innovation clusters and specialist industries in the local government area</li> <li>opportunities to consolidate their growth and allow them to intensify and specialise over time</li> <li>supporting the co-location of mutually supportive and value-adding activities that do not compromise the primary function of the cluster</li> <li>emerging industries and technologies and opportunities to support their growth.</li> </ul>	Yes	The site is not located within an identified 'knowledge cluster.' However such uses may be able to be located in the E4 General Industrial zone if the use is permitted.
<b>Strategy 8.5</b> Local strategic planning should consider: <ul style="list-style-type: none"> <li>identifying towns and villages which have a strong tourism presence and/or serve as gateways to visitor experiences in surrounding areas</li> <li>supporting a diverse range of tourism development in these areas, including events and place-making initiatives which celebrate the local community, heritage and Country</li> <li>implementing planning and development controls which support nature-based and agri-based tourism while maintaining scenic views and amenity, environmental or cultural values, or primary production activities of that locality</li> <li>identifying opportunities to leverage digital technology and infrastructure</li> </ul>	No	The proposed E4 zone does not permit the use of tourist and visitor accommodation.

Direction	Applicable	Assessment/Comment
<p>to enhance the visitor experience; and</p> <ul style="list-style-type: none"> <li>identifying strategies to grow active transport connections both within tourism gateways and their surrounding landscape.</li> <li>serviced apartments should be promoted in town centres and regionally significant growth areas where they are well-connected by public transport.</li> </ul>		
<p><b>Strategy 8.6</b> Planning proposals to facilitate tourism activities will:</p> <ul style="list-style-type: none"> <li>demonstrate that the scale and type of tourism land use proposed can be supported by the transport network and complements the landscape setting</li> <li>be compatible with the characteristics of the site and existing and likely future land uses in the vicinity of the site</li> <li>demonstrate that the tourism land use would support the function of nearby tourism gateways or nodes</li> <li>be supported by an assessment prepared in accordance with the Department of Primary Industries' Land Use Conflict Risk Assessment Guide if the use is proposed on or in the vicinity of rural zoned lands.</li> </ul>	No	As noted above, the proposal is not for tourism development.
<p><b>Objective 9:</b> Sustain and balance productive rural landscapes</p>	Yes	The land, although zoned RU1, is 1 Ha in area and not used for primary production uses. As the site is surrounded by the E4 zone and industrial uses the character of the area no longer represents a Rural landscape.
<p><b>Strategy 9.1</b> Planning proposals will consider the location of mineral and energy resources, mines and quarries and ensure sensitive land uses would not encroach on those operations. A noise study may be required to demonstrate impacts on the operations can be avoided or mitigated.</p>	No	The site is not located within a mine subsidence area nor within a transition area of an existing extractive industry.
<p><b>Strategy 9.2</b> Local strategic planning should consider:</p> <ul style="list-style-type: none"> <li>protecting important agricultural lands, rural industries, processing</li> </ul>	No	The site does not border any commercial agricultural operations thus will not lead to any increased land use conflicts.



Direction	Applicable	Assessment/Comment
<p>facilities and supply chains from land uses which may result in land use conflict or fragmentation</p> <ul style="list-style-type: none"> <li>opportunities to promote the diversification and innovation of agricultural activities and ways to facilitate the upscaling of productivity without acquiring more land</li> <li>supporting activities to value-add and provide additional income streams for farmers</li> <li>ensuring the impacts of development on aquatic habitats in aquacultural estuaries are minimised to support aquaculture.</li> </ul>		
<p><b>Strategy 9.3</b> When identifying expansion opportunities for rural towns and villages (including rural-residential), local strategic planning should consider the location of primary production and conservation lands and determine appropriate rural town and village growth boundaries to limit the encroachment of development into areas that have important agricultural, ecological, scenic or heritage value.</p>	No	The planning proposal does not relate to the expansion of a rural village.
<p><b>Strategy 9.4</b> Planning proposals to expand rural town and village growth boundaries will be supported by an assessment prepared in accordance with the Department of Primary Industries' Land Use Conflict Risk Assessment Guide to limit or avoid conflicts between residential uses and agricultural activities.</p>	No	The planning proposal does not relate to the expansion of a rural village.

Table 12: Central Coast Regional Plan 2041 Assessment – Strategies

### Central Coast Regional Plan 2041 Assessment – Planning Priorities

The site is located in the 'Narara District' and therefore the following planning priorities are of relevance to the proposal.

Planning Priorities – Narara District	Applicable	Assessment/Comment
1. Focus economic development in the Somersby to Erina Growth Corridor	Yes	The land subject to the Planning Proposal is located in the Somersby Business Park which forms part of the Somersby to Erina Growth Corridor. It is consistent with this Priority.
2. Build resilience on the Woy Woy Peninsula by limiting development in hazard areas and revitalising centres through public domain improvements	N/A	The land subject to the Planning Proposal is not located on the Woy Woy Peninsula. .
3. Invest in green and active transport connections to reduce car dependency	N/A	The Planning Proposal is not related to the investment in active and green transport.
4. Protect vegetated ridgelines and enhance the enjoyment of conservation areas for passive recreation activities compatible with the natural environment	N/A	The land the subject of the Planning Proposal is not located on a vegetated ridgeline.
5. Identify appropriate urban expansion opportunities to ensure a sufficient supply of safe, diverse and affordable housing	N/A	The Planning Proposal does not relate to the supply of housing.

**Table 13:** Central Coast Regional Plan 2041 Assessment – Planning Priorities

## B State and Environmental Planning Policy Assessment

State Environmental Planning Policy (Biodiversity and Conservation) 2021.	Assessment/Comment
<b>Chapter 2 – Vegetation in Non-Rural Areas</b>	
<p>The aims of this Chapter are—</p> <p>(a) to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and</p> <p>(b) to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.</p> <p>This Chapter applies to the following areas of the State (the non-rural areas of the State)—</p> <p>(b) land within the following zones under an environmental planning instrument—</p> <p>RU5 Village, R1 General Residential, R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential, R5 Large Lot Residential, B1 Neighbourhood Centre, B2 Local Centre, B3 Commercial Core, B4 Mixed Use, B5 Business Development, B6 Enterprise Corridor, B7 Business Park, B8 Metropolitan Centre, IN1 General Industrial, IN2 Light Industrial, IN3 Heavy Industrial, IN4 Working Waterfront, SP1 Special Activities, SP2 Infrastructure, SP3 Tourist, RE1 Public Recreation, RE2 Private Recreation, C2 Environmental Conservation, C3 Environmental Management, C4 Environmental Living or W3 Working Waterways.</p>	<p><b>Applicable and Consistent</b></p> <p>Even though the subject site is currently zoned RU1 Primary Production, meaning this Chapter does not apply, the proposed zone is E4 General Industrial which is applicable.</p> <p>The subject site is generally cleared and is surrounded by land already zoned E4 General Industrial. The site does not exhibit biodiversity values warranting the preservation of the scattered trees on-site.</p>

State Environmental Planning Policy (Biodiversity and Conservation) 2021.	Assessment/Comment
<b>Chapter 4 – Koala Habitat Protection 2021</b>	
<p><i>This Chapter aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.</i></p> <p><i>This Chapter does not apply to—</i></p> <ul style="list-style-type: none"> <li><i>(a) land dedicated or reserved under the National Parks and Wildlife Act 1974, or acquired under Part 11 of that Act, or</i></li> <li><i>(b) land dedicated under the Forestry Act 2012 as a State forest or a flora reserve, or</i></li> <li><i>(c) land on which biodiversity certification has been conferred, and is in force, under Part 8 of the Biodiversity Conservation Act 2016, or</i></li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The site does not contain congruous coverage of native vegetation that would provide habitat for a permanent free-living koala population.</p>
<b>Chapter 6 – Water Catchments</b>	
<p><i>This Chapter applies to land in the following catchments—</i></p> <ul style="list-style-type: none"> <li><i>(a) the Sydney Drinking Water Catchment,</i></li> <li><i>(b) the Sydney Harbour Catchment,</i></li> <li><i>(c) the Georges River Catchment,</i></li> <li><i>(d) the Hawkesbury-Nepean Catchment.</i></li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The site is within upper reaches of the Hawkesbury-Nepean River Catchment.</p> <p>This Chapter seeks to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. Most controls on development apply to the Riverine Scenic Areas along the River. As the subject land is in the upper reaches of the River catchment area and not along the riverfront, most of the development controls are not applicable.</p> <p>Given that this is an infill site within an established Industrial area there is strategic planning merit to the proposal. Issues such as management of runoff is a matter to be addressed at the Development Application stage.</p>

State Environmental Planning Policy (Housing) 2021	Assessment/Comment
<b>Chapter 3 – Diverse Housing</b>	
<p><b>Part 8: Manufactured Home Estates</b></p> <p><i>The aims of this Part are—</i></p> <ul style="list-style-type: none"> <li><i>(a) to facilitate the establishment of manufactured home estates as a contemporary form of medium density residential development that provides an alternative to traditional housing arrangements, and</i></li> <li><i>(b) to provide immediate development opportunities for manufactured home estates on the commencement of this Part, and</i></li> <li><i>(c) to encourage the provision of affordable housing in well-designed estates, and</i></li> <li><i>(d) to ensure that manufactured home estates are situated only in suitable locations and not on land having important resources or having landscape, scenic or ecological qualities that should be preserved, and</i></li> <li><i>(e) to ensure that manufactured home estates are adequately serviced and have access to essential community facilities and services, and</i></li> <li><i>(f) to protect the environment surrounding manufactured home estates, and</i></li> <li><i>(g) to provide measures which will facilitate security of tenure for residents of manufactured home estates.</i></li> </ul>	<p><b>Not Applicable</b></p> <p>The defined use of Caravan Park, which includes manufactured home estates, is not permitted in the current RU1 zone and is not a permitted use in the proposed E4 zone.</p>
<p><b>Part 9: Caravan Parks</b></p> <p><i>The aim of this Part is to encourage—</i></p> <ul style="list-style-type: none"> <li><i>(a) the orderly and economic use and development of land used or intended to be used as a caravan park catering exclusively or predominantly for short-term residents (such as tourists) or for long-term residents, or catering for both, and</i></li> <li><i>(b) the proper management and development of land so used, for the purpose of promoting the social and economic welfare of the community, and</i></li> <li><i>(c) the provision of community facilities for land so used, and</i></li> <li><i>(d) the protection of the environment of, and in the vicinity of, land so used.</i></li> </ul>	<p><b>Not Applicable</b></p> <p>The defined use of Caravan Park is not permitted in the current RU1 zone and is not a permitted use in the proposed E4 zone.</p>

State Environmental Planning Policy (Industry and Employment) 2021.	Assessment/Comment
<b>Chapter 3 – Advertising and Signage</b>	
<p>1. This Chapter aims—</p> <ul style="list-style-type: none"> <li>(a) to ensure that signage (including advertising)— <ul style="list-style-type: none"> <li>i is compatible with the desired amenity and visual character of an area, and</li> <li>ii provides effective communication in suitable locations, and</li> <li>iii is of high-quality design and finish, and</li> </ul> </li> <li>(b) to regulate signage (but not content) under Part 4 of the Act, and</li> <li>(c) to provide time-limited consents for the display of certain advertisements, and</li> <li>(d) to regulate the display of advertisements in transport corridors, and</li> <li>(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.</li> </ul> <p>This Chapter does not regulate the content of signage and does not require consent for a change in the content of signage.</p>	<p><b>Applicable and Consistent</b></p> <p>The Planning Proposal does relate to land uses that would require advertising signage. However if a future DA is submitted for a use requiring signage an assessment would be undertaken regarding any effect on amenity and character of the locality.</p>

State Environmental Planning Policy (Planning Systems) 2021	Assessment/Comment
<b>Chapter 2 – State and Regional Development</b>	
<p>The aims of this Chapter are as follows—</p> <ul style="list-style-type: none"> <li>(a) to identify development that is State significant development,</li> <li>(b) to identify development that is State significant infrastructure and critical State significant infrastructure,</li> <li>(c) to identify development that is regionally significant development.</li> </ul> <p>This chapter applies to Warnervale Town Centre as well as general categories of state significant development.</p>	<p><b>Not Applicable</b></p> <p>The Planning Proposal does not relate to State or Regional Significant Development.</p>
<b>Chapter 3 – Aboriginal Land</b>	
<p>The aims of this Chapter are—</p> <ul style="list-style-type: none"> <li>(a) to provide for development delivery plans for areas of land owned by Local Aboriginal Land Councils to be considered when development applications are considered, and</li> </ul>	<p><b>Not Applicable</b></p> <p>There are four sites within the Central Coast LGA which are subject to the SEPP. The</p>



State Environmental Planning Policy (Planning Systems) 2021	Assessment/Comment
<p>(b) to declare specified development carried out on land owned by Local Aboriginal Land Councils to be regionally significant development.</p> <p>This Chapter applies to the land specified on the Land Application Map.</p>	Planning Proposal does not apply to any of these sites.

State Environmental Planning Policy (Precincts—Regional) 2021	Assessment/Comment
<b>Chapter 5 – Gosford City Centre</b>	
<p>The aims of this Chapter are as follows—</p> <p>(a) to promote the economic and social revitalisation of Gosford City Centre,</p> <p>(b) to strengthen the regional position of Gosford City Centre as a multi-functional and innovative centre for commerce, education, health care, culture and the arts, while creating a highly liveable urban space with design excellence in all elements of its built and natural environments,</p> <p>(c) to protect and enhance the vitality, identity and diversity of Gosford City Centre,</p> <p>(d) to promote employment, residential, recreational and tourism opportunities in Gosford City Centre,</p> <p>(e) to encourage responsible management, development and conservation of natural and man-made resources and to ensure that Gosford City Centre achieves sustainable social, economic and environmental outcomes,</p> <p>(f) to protect and enhance the environmentally sensitive areas and natural and cultural heritage of Gosford City Centre for the benefit of present and future generations,</p> <p>(g) to help create a mixed use place, with activity during the day and throughout the evening, so that Gosford City Centre is safe, attractive and efficient for, and inclusive of, its local population and visitors alike,</p> <p>(h) to preserve and enhance solar access to key public open spaces,</p> <p>(i) to provide direct, convenient and safe pedestrian links between Gosford City Centre and the Gosford waterfront,</p> <p>(j) to ensure that development exhibits design excellence to deliver the highest standard of architectural and urban</p>	<p><b>Not Applicable</b></p> <p>The land subject to the Planning Proposal is not within the area comprising the Gosford City Centre, as defined by this Chapter.</p>

State Environmental Planning Policy (Precincts—Regional) 2021	Assessment/Comment
<i>design in Gosford City Centre.</i>	

State Environmental Planning Policy (Primary Production) 2021.	Assessment/Comment
<b>Chapter 2 - Primary Production and Rural Development</b>	
<p><i>The aims of this Chapter are as follows—</i></p> <ul style="list-style-type: none"> <li><i>(a) to facilitate the orderly economic use and development of lands for primary production,</i></li> <li><i>(b) to reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,</i></li> <li><i>(c) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,</i></li> <li><i>(d) to simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,</i></li> <li><i>(e) to encourage sustainable agriculture, including sustainable aquaculture,</i></li> <li><i>(f) to require consideration of the effects of all proposed development in the State on oyster aquaculture,</i></li> <li><i>(g) to identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.</i></li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The site, although zoned RU1, is 1 Ha in area and not used for primary production uses. The rural residential scale and nature of the existing development on the site is inconsistent with adjacent industrial development which surrounds the site.</p> <p>The proposed rezoning of the site to E4 will reduce any land use conflict that will increasingly occur in future if the Planning Proposal does not proceed.</p>
<b>Chapter 3 - Central Coast Plateau Areas</b>	
<p><i>The general aims of this Chapter are—</i></p> <ul style="list-style-type: none"> <li><i>(a) to provide for the environmental protection of the Central Coast plateau areas and to provide a basis for evaluating competing land uses,</i></li> <li><i>(b) to encourage the use of land having a high agricultural capability for that purpose and, as much as possible, to direct development for non-agricultural purposes to land of lesser agricultural capability,</i></li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The subject land is located within the area covered by this Chapter. Land to the west of the site was zoned General Industrial approximately 10 years ago and is still identified as being affected by this SEPP Chapter.</p> <p>The site is not being used for agricultural uses, is not identified as “prime agricultural land” and</p>

State Environmental Planning Policy (Primary Production) 2021.	Assessment/Comment
<p>(c) to protect regionally significant mining resources and extractive materials from sterilization,</p> <p>(d) to enable development for the purposes of extractive industries in specified locations,</p> <p>(e) to protect the natural ecosystems of the region, and</p> <p>(f) to maintain opportunities for wildlife movement across the region, and</p> <p>(g) to discourage the preparation of draft local environmental plans designed to permit rural residential development, and</p> <p>(h) to encourage the preparation of draft local environmental plans based on merits.</p>	<p>is of an area (1 Ha) on which agricultural uses would be unviable. Furthermore, the site is cut off from other RU1 Primary Production zoned land and instead is surrounded by E4 General Industrial land.</p>

State Environmental Planning Policy (Resilience and Hazards) 2021.	Assessment/Comment
<b>Chapter 2 - Coastal Management</b>	
<p>The aim of this Chapter is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area, by—</p> <p>(a) managing development in the coastal zone and protecting the environmental assets of the coast, and</p> <p>(b) establishing a framework for land use planning to guide decision-making in the coastal zone, and</p> <p>(c) mapping the 4 coastal management areas that comprise the NSW coastal zone for the purpose of the definitions in the Coastal Management Act 2016.</p>	<p><b>Not Applicable</b></p> <p>The subject site is not within the Coastal Zone</p>
<b>Chapter 3 – Hazardous and Offensive Development</b>	
<p>This Chapter aims—</p> <p>(a) to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and</p> <p>(b) to render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the ground that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Chapter, and</p> <p>(c) to require development consent for hazardous or</p>	<p><b>Not Applicable</b></p> <p>The Planning Proposal proposes to zone the land to E4 General Industrial which does not permit heavy industry (which includes hazardous industry and offensive industry).</p>

State Environmental Planning Policy (Resilience and Hazards) 2021.	Assessment/Comment
<p><i>offensive development proposed to be carried out in the Western Division, and</i></p> <p>(d) <i>to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and</i></p> <p>(e) <i>to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and</i></p> <p>(f) <i>to require the advertising of applications to carry out any such development.</i></p>	
<b>Chapter 4 - Remediation of Land</b>	
<p>1. <i>The object of this Chapter is to provide for a Statewide planning approach to the remediation of contaminated land.</i></p> <p>2. <i>In particular, this Chapter aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment—</i></p> <p>(a) <i>by specifying when consent is required, and when it is not required, for a remediation work, and</i></p> <p>(b) <i>by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and</i></p> <p>(c) <i>by requiring that a remediation work meet certain standards and notification requirements.</i></p>	<p><b>Applicable and Consistent</b></p> <p>The Preliminary Site Investigation Report concludes that the site is suitable for residential land use therefore it is considered suitable for industrial land use.</p>

State Environmental Planning Policy (Resources and Energy) 2021.	Assessment/Comment
<b>Chapter 2 – Mining, Petroleum Production and Extractive Industries</b>	
<p><i>The aims of this Chapter are, in recognition of the importance to New South Wales of mining, petroleum production and extractive industries—</i></p> <p>(a) <i>to provide for the proper management and development of mineral, petroleum and extractive material resources</i></p>	<p><b>Applicable and Consistent</b></p> <p>This Chapter permits mining and extractive industries with consent wherever an LEP permits agriculture or industry. The current RU1 Primary Production zone permits</p>

State Environmental Planning Policy (Resources and Energy) 2021.	Assessment/Comment
<p><i>for the purpose of promoting the social and economic welfare of the State, and</i></p> <p><i>(b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and</i></p> <p><i>(c) to promote the development of significant mineral resources, and</i></p> <p><i>(d) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and</i></p> <p><i>(e) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development—</i></p> <p><i>i to recognise the importance of agricultural resources, and</i></p> <p><i>ii to ensure protection of strategic agricultural land and water resources, and</i></p> <p><i>iii to ensure a balanced use of land by potentially competing industries, and</i></p> <p><i>iv to provide for the sustainable growth of mining, petroleum and agricultural industries.</i></p>	<p>extensive agriculture without consent and other rural uses with consent.</p> <p>The proposed E4 zone will also permit extractive industries so the rezoning will not alter the applicability of this Chapter. However, the site is surrounded by land already developed for General Industrial uses so any development of this small 1 Ha site for an extractive industry would be improbable.</p>
Chapter 3 – Extractive Industries in Sydney Area	
<p><i>This Chapter aims—</i></p> <p><i>(a) to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance, and</i></p> <p><i>(b) to permit, with the consent of the council, development for the purpose of extractive industries on land described in Schedule 3 or 4, and</i></p> <p><i>(c) to ensure consideration is given to the impact of encroaching development on the ability of extractive industries to realise their full potential, and</i></p> <p><i>(d) to promote the carrying out of development for the purpose of extractive industries in an environmentally acceptable manner, and</i></p> <p><i>(e) to prohibit development for the purpose of extractive industry on the land described in Schedule 5 in the Macdonald, Colo, Hawkesbury and Nepean Rivers, being land which is environmentally sensitive.</i></p> <p><i>This chapter applies to land in former Gosford and former Wyong LGAs.</i></p>	<p><b>Not Applicable</b></p> <p>The subject site is not identified as an existing or future resource nor is the site located within proximity of an identified extractive material resource.</p>

State Environmental Planning Policy (Transport and Infrastructure) 2021	Assessment/Comment
<b>Chapter 2 – Infrastructure</b>	
<p>The aim of this Chapter is to facilitate the effective delivery of infrastructure across the State by—</p> <ul style="list-style-type: none"> <li>(a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and</li> <li>(b) providing greater flexibility in the location of infrastructure and service facilities, and</li> <li>(c) allowing for the efficient development, redevelopment or disposal of surplus government owned land, and</li> <li>(d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and</li> <li>(e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and</li> <li>(f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and</li> <li>(g) providing opportunities for infrastructure to demonstrate good design outcomes.</li> </ul>	<p><b>Applicable and Consistent</b></p> <p>There is nothing in the Planning Proposal that will impede the effective delivery of infrastructure in the locality.</p>
<b>Chapter 3 – Educational Establishments and Childcare Facilities</b>	
<p>The aim of this Chapter is to facilitate the effective delivery of educational establishments and early education and care facilities across the State by—</p> <ul style="list-style-type: none"> <li>(a) improving regulatory certainty and efficiency through a consistent planning regime for educational establishments and early education and care facilities, and</li> <li>(b) simplifying and standardising planning approval pathways for educational establishments and early education and care facilities (including identifying certain development of minimal environmental impact as exempt development), and</li> <li>(c) establishing consistent State-wide assessment requirements and design considerations for educational establishments and early education and care facilities to improve the quality of infrastructure delivered and to</li> </ul>	<p><b>Not Applicable</b></p> <p>The Planning Proposal does not relate to the provision of educational establishments, nor does the proposed E4 zone permit educational establishments.</p>



State Environmental Planning Policy (Transport and Infrastructure) 2021	Assessment/Comment
<p><i>minimise impacts on surrounding areas, and</i></p> <p><i>(d) allowing for the efficient development, redevelopment or use of surplus government-owned land (including providing for consultation with communities regarding educational establishments in their local area), and</i></p> <p><i>(e) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and</i></p> <p><i>(f) aligning the NSW planning framework with the National Quality Framework that regulates early education and care services, and</i></p> <p><i>(g) ensuring that proponents of new developments or modified premises meet the applicable requirements of the National Quality Framework for early education and care services, and of the corresponding regime for State regulated education and care services, as part of the planning approval and development process, and</i></p> <p><i>(h) encouraging proponents of new developments or modified premises and consent authorities to facilitate the joint and shared use of the facilities of educational establishments with the community through appropriate design.</i></p>	

Table 14: SEPP Assessment

## C Section 9.1 Ministerial Directions

Planning Systems	Comments
<b>1.1 Implementation of Regional Plans</b>	
1. <i>Planning proposals must be consistent with a Regional Plan released by the Minister for Planning and Public Spaces.</i>	<b>Applicable and Consistent</b> The Planning Proposal is consistent with this Direction. A full assessment against the strategies in the Central Coast Regional Plan 2041 is set out at the beginning of Appendix 01.
<b>1.2 Development of Aboriginal Land Council Land</b>	
1. <i>When preparing a planning proposal to which this direction applies, the planning proposal authority must take into account:</i> (a) <i>any applicable development delivery plan made under the chapter 3 of the State Environmental Planning Policy (Planning Systems) 2021; or</i> (b) <i>if no applicable development delivery plan has been published, the interim development delivery plan published on the Department's website on the making of this direction.</i>	<b>Not Applicable</b> The Planning Proposal does not apply to land to which this Direction applies.
<b>1.3 Approval and Referral Requirements</b>	
1. <i>A planning proposal to which this direction applies must:</i> (a) <i>minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and</i> (b) <i>not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of:</i> i. <i>the appropriate Minister or public authority, and</i> ii. <i>the Planning Secretary (or an officer of the Department nominated by the Secretary), prior to undertaking community consultation in satisfaction of Schedule 1 to the EP&amp;A Act, and</i> (c) <i>not identify development as designated development unless the relevant planning authority:</i> i. <i>can satisfy the Planning Secretary (or an officer of the Department nominated by the Secretary) that the class of development is likely to have a significant impact on the environment, and</i>	<b>Applicable and Consistent</b> The Planning Proposal does not include provisions that require concurrence, consultation or referral of development applications to public authorities or a Minister.

Planning Systems	Comments
<p>ii. <i>has obtained the approval of the Planning Secretary (or an officer of the Department nominated by the Secretary) prior to undertaking community consultation in satisfaction of Schedule 1 to the EP&amp;A Act.</i></p>	
<b>1.4 Site Specific Provisions</b>	
<p>1. <i>A planning proposal that will amend another environmental planning instrument in order to allow particular development to be carried out must either:</i></p> <p>(a) <i>allow that land use to be carried out in the zone the land is situated on, or</i></p> <p>(b) <i>rezone the site to an existing zone already in the environmental planning instrument that allows that land use without imposing any development standards or requirements in addition to those already contained in that zone, or</i></p> <p>(c) <i>allow that land use on the relevant land without imposing any development standards or requirements in addition to those already contained in the principal environmental planning instrument being amended.</i></p> <p>2. <i>A planning proposal must not contain or refer to drawings that show details of the proposed development.</i></p>	<p><b>Applicable and Consistent</b></p> <p>The Planning Proposal proposes to rezone the site to zones that are already in the CCLEP 2022. No new development standards are proposed.</p>

Biodiversity & Conservation	Comments
<b>3.1 Conservation Zones</b>	
<p>1. <i>A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas.</i></p> <p>2. <i>A planning proposal that applies to land within a conservation zone or land otherwise identified for environment conservation/protection purposes in a LEP must not reduce the conservation standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with Direction 9.3 (2) of "Rural Lands".</i></p>	<p><b>Not Applicable</b></p> <p>The Planning Proposal does not relate to a Conservation zone. The site is not an environmentally sensitive area.</p>
<b>3.2 Heritage Conservation</b>	
<p>1. <i>A planning proposal must contain provisions that facilitate the conservation of:</i></p> <p>(a) <i>items, places, buildings, works, relics, moveable objects or precincts of environmental heritage</i></p>	<p><b>Applicable and Consistent</b></p> <p>The site does not accommodate any Heritage Items listed in CCLEP 2022.</p>

Biodiversity & Conservation	Comments
<p><i>significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area,</i></p> <p>(b) <i>Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and</i></p> <p>(c) <i>Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.</i></p>	<p>The Due Diligence Assessment report found that no Aboriginal objects or places were identified on the site. All on-site personnel are to be made aware of their obligations under the National Parks and Wildlife Act 1974 and the processes to be followed should any archaeological material be uncovered during construction.</p>
<b>3.5 Recreational Vehicle Areas</b>	
<p>1. <i>A planning proposal must not enable land to be developed for the purpose of a recreation vehicle area (within the meaning of the Recreation Vehicles Act 1983):</i></p> <p>(a) <i>where the land is within a conservation zone,</i></p> <p>(b) <i>where the land comprises a beach or a dune adjacent to or adjoining a beach,</i></p> <p>(c) <i>where the land is not within an area or zone referred to in paragraphs (a) or (b) unless the relevant planning authority has taken into consideration:</i></p> <p>i. <i>the provisions of the guidelines entitled Guidelines for Selection, Establishment and Maintenance of Recreation Vehicle Areas, Soil Conservation Service of New South Wales, September, 1985, and</i></p> <p>ii. <i>the provisions of the guidelines entitled Recreation Vehicles Act 1983, Guidelines for Selection, Design, and Operation of Recreation Vehicle Areas, State Pollution Control Commission, September 1985.</i></p>	<p><b>Not Applicable</b></p> <p>The Planning Proposal does not seek to enable the subject site to be developed for the purpose of a recreation vehicle area.</p>
<b>3.7 Public Bushland</b>	
<p><i>The objective of this direction is to protect bushland in urban areas, including rehabilitated areas, and ensure the ecological viability of the bushland, by:</i></p> <p>(a) <i>preserving:</i></p> <p>i <i>biodiversity and habitat corridors,</i></p> <p>ii <i>links between public bushland and other nearby bushland,</i></p> <p>iii <i>bushland as a natural stabiliser of the soil surface,</i></p>	<p><b>Not Applicable</b></p> <p>The subject site is not public land.</p>

Biodiversity & Conservation	Comments
<p>iv existing hydrological landforms, processes and functions, including natural drainage lines, watercourses, wetlands and foreshores,</p> <p>v the recreational, educational, scientific, aesthetic, environmental, ecological and cultural values and potential of the land, and</p> <p>(b) mitigating disturbance caused by development,</p> <p>(c) giving priority to retaining public bushland.</p>	
<b>3.10 Water Catchment Protection</b>	
<p>The objectives of this direction are to:</p> <p>(a) maintain and improve the water quality (including ground water) and flows of natural waterbodies, and reduce urban run-off and stormwater pollution</p> <p>(b) protect and improve the hydrological, ecological and geomorphological processes of natural waterbodies and their connectivity</p> <p>(c) protect and enhance the environmental quality of water catchments by managing them in an ecologically sustainable manner, for the benefit of all users</p> <p>(d) protect, maintain and rehabilitate watercourses, wetlands, riparian lands and their vegetation and ecological connectivity.</p>	<p><b>Applicable and Consistent</b></p> <p>The site is serviced with water and sewer. Future development will have to comply with the DCP Chapter on Water Cycle Management which requires no increase in runoff from pre-development flows.</p> <p>The water catchment does not flow into another LGA.</p>

Resilience & Hazards	Comments
<b>4.1 Flooding</b>	
<p>1. A planning proposal must include provisions that give effect to and are consistent with:</p> <p>(a) the NSW Flood Prone Land Policy,</p> <p>(b) the principles of the Floodplain Development Manual 2005,</p> <p>(c) the Considering flooding in land use planning guideline 2021, and</p> <p>(d) any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.</p> <p>2. A planning proposal must not rezone land within the flood planning area from Recreation, Rural, Special Purpose or Conservation Zones to a Residential, Business, Industrial or Special Purpose Zones.</p> <p>3. A planning proposal must not contain provisions that apply to the flood planning area which:</p> <p>(a) permit development in floodway areas,</p>	<p><b>Not Applicable</b></p> <p>The site is not affected by flooding.</p>

Resilience & Hazards	Comments
<p>(b) permit development that will result in significant flood impacts to other properties,</p> <p>(c) permit development for the purposes of residential accommodation in high hazard areas,</p> <p>(d) permit a significant increase in the development and/or dwelling density of that land,</p> <p>(e) permit development for the purpose of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,</p> <p>(f) permit development to be carried out without development consent except for the purposes of exempt development or agriculture. Dams, drainage canals, levees, still require development consent,</p> <p>(g) are likely to result in a significantly increased requirement for government spending on emergency management services, flood mitigation and emergency response measures, which can include but are not limited to the provision of road infrastructure, flood mitigation infrastructure and utilities, or</p> <p>(h) permit hazardous industries or hazardous storage establishments where hazardous materials cannot be effectively contained during the occurrence of a flood event.</p> <p>4. A planning proposal must not contain provisions that apply to areas between the flood planning area and probable maximum flood to which Special Flood Considerations apply which:</p> <p>(a) permit development in floodway areas,</p> <p>(b) permit development that will result in significant flood impacts to other properties,</p> <p>(c) permit a significant increase in the dwelling density of that land,</p> <p>(d) permit the development of centre-based childcare facilities, hostels, boarding houses, group homes, hospitals, residential care facilities, respite day care centres and seniors housing in areas where the occupants of the development cannot effectively evacuate,</p> <p>(e) are likely to affect the safe occupation of and efficient evacuation of the lot, or</p> <p>(f) are likely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures, which can include but not limited to road infrastructure, flood mitigation infrastructure and utilities.</p>	



Resilience & Hazards	Comments
5. For the purposes of preparing a planning proposal, the flood planning area must be consistent with the principles of the Floodplain Development Manual 2005 or as otherwise determined by a Floodplain Risk Management Study or Plan adopted by the relevant council.	
<b>4.2 Coastal Management</b>	
<p>1. A planning proposal must include provisions that give effect to and are consistent with:</p> <ul style="list-style-type: none"> <li>(a) the objects of the Coastal Management Act 2016 and the objectives of the relevant coastal management areas;</li> <li>(b) the NSW Coastal Management Manual and associated Toolkit;</li> <li>(c) NSW Coastal Design Guidelines 2003; and</li> <li>(d) any relevant Coastal Management Program that has been certified by the Minister, or any Coastal Zone Management Plan under the Coastal Protection Act 1979 that continues to have effect under clause 4 of Schedule 3 to the Coastal Management Act 2016, that applies to the land.</li> </ul> <p>2. A planning proposal must not rezone land which would enable increased development or more intensive land-use on land:</p> <ul style="list-style-type: none"> <li>(a) within a coastal vulnerability area identified by the State Environmental Planning Policy (Coastal Management) 2018; or</li> <li>(b) that has been identified as land affected by a current or future coastal hazard in a local environmental plan or development control plan, or a study or assessment undertaken: <ul style="list-style-type: none"> <li>i. by or on behalf of the relevant planning authority and the planning proposal authority, or</li> <li>ii. by or on behalf of a public authority and provided to the relevant planning authority and the planning proposal authority.</li> </ul> </li> </ul> <p>3. A planning proposal must not rezone land which would enable increased development or more intensive land-use on land within a coastal wetlands and littoral rainforests area identified by chapter 3 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021.</p> <p>4. A planning proposal for a local environmental plan may propose to amend the following maps, including increasing or decreasing the land within these maps, under the State Environmental Planning Policy (Coastal Management) 2018:</p> <ul style="list-style-type: none"> <li>(a) Coastal wetlands and littoral rainforests area map;</li> </ul>	<p><b>Not Applicable</b></p> <p>The subject site is not within the Coastal Zone.</p>

Resilience & Hazards	Comments
<p>(b) Coastal vulnerability area map; (c) Coastal environment area map; and (d) Coastal use area map.</p> <p>Such a planning proposal must be supported by evidence in a relevant Coastal Management Program that has been certified by the Minister, or by a Coastal Zone Management Plan under the Coastal Protection Act 1979 that continues to have effect under clause 4 of Schedule 3 to the Coastal Management Act 2016.</p>	
<b>4.3 Planning for Bushfire Protection</b>	
<p>1. In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of clause 4, Schedule 1 to the EP&amp;A Act, and take into account any comments so made.</p> <p>2. A planning proposal must:</p> <p>(a) have regard to Planning for Bushfire Protection 2019,</p> <p>(b) introduce controls that avoid placing inappropriate developments in hazardous areas, and</p> <p>(c) ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ).</p> <p>3. A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:</p> <p>(a) provide an Asset Protection Zone (APZ) incorporating at a minimum:</p> <p>i. an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and</p> <p>ii. an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,</p> <p>(b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with,</p> <p>(c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,</p>	<p><b>Applicable</b></p> <p>The subject site is identified as accommodating Vegetation Categories 1 and 3.</p> <p>The Planning Proposal will be formally referred to NSW RFS for comment post-gateway.</p>

Resilience & Hazards	Comments
<p>(d) contain provisions for adequate water supply for firefighting purposes,</p> <p>(e) minimise the perimeter of the area of land interfacing the hazard which may be developed,</p> <p>(f) introduce controls on the placement of combustible materials in the Inner Protection Area.</p>	
<b>4.4 Remediation of Contaminated Lands</b>	
<p>1. A planning proposal authority must not include in a particular zone (within the meaning of the local environmental plan) any land to which this direction applies if the inclusion of the land in that zone would permit a change of use of the land, unless:</p> <p>(a) the planning proposal authority has considered whether the land is contaminated, and</p> <p>(b) if the land is contaminated, the planning proposal authority is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes for which land in the zone concerned is permitted to be used, and</p> <p>(c) if the land requires remediation to be made suitable for any purpose for which land in that zone is permitted to be used, the planning proposal authority is satisfied that the land will be so remediated before the land is used for that purpose.</p> <p>In order to satisfy itself as to paragraph 1(c), the planning proposal authority may need to include certain provisions in the local environmental plan.</p> <p>2. Before including any land to which this direction applies in a particular zone, the planning proposal authority is to obtain and have regard to a report specifying the findings of a preliminary investigation of the land carried out in accordance with the contaminated land planning guidelines.</p>	<p><b>Applicable and Consistent</b></p> <p>The Preliminary Site Investigation Report concludes that the site is suitable for residential land use therefore it is considered suitable for industrial land use.</p>
<b>4.5 Acid Sulfate Soils</b>	
<p>1. The relevant planning authority must consider the Acid Sulfate Soils Planning Guidelines adopted by the Planning Secretary when preparing a planning proposal that applies to any land identified on the Acid Sulfate Soils Planning Maps as having a probability of acid sulfate soils being present.</p> <p>2. When a relevant planning authority is preparing a planning proposal to introduce provisions to regulate works in acid sulfate soils, those provisions must be consistent with:</p>	<p><b>Not Applicable</b></p> <p>The land is mapped as Acid Sulfate Soils Class 5. There is no known occurrence of acid sulfate soils, therefore no further consideration is required.</p>

Resilience & Hazards	Comments
<p>(a) the Acid Sulfate Soils Model LEP in the Acid Sulfate Soils Planning Guidelines adopted by the Planning Secretary, or</p> <p>(b) other such provisions provided by the Planning Secretary that are consistent with the Acid Sulfate Soils Planning Guidelines.</p> <p>3. A relevant planning authority must not prepare a planning proposal that proposes an intensification of land uses on land identified as having a probability of containing acid sulfate soils on the Acid Sulfate Soils Planning Maps unless the relevant planning authority has considered an acid sulfate soils study assessing the appropriateness of the change of land use given the presence of acid sulfate soils. The relevant planning authority must provide a copy of any such study to the Planning Secretary prior to undertaking community consultation in satisfaction of clause 4 of Schedule 1 to the Act.</p> <p>4. Where provisions referred to under 2(a) and 2(b) above of this direction have not been introduced and the relevant planning authority is preparing a planning proposal that proposes an intensification of land uses on land identified as having a probability of acid sulfate soils on the Acid Sulfate Soils Planning Maps, the planning proposal must contain provisions consistent with 2(a) and 2(b).</p>	
<b>4.6 Mine Subsidence &amp; Unstable Land</b>	
<p>1. When preparing a planning proposal that would permit development on land that is within a declared mine subsidence district, a relevant planning authority must:</p> <p>(a) consult Subsidence Advisory NSW to ascertain:</p> <ol style="list-style-type: none"> <li>if Subsidence Advisory NSW has any objection to the draft local environmental plan, and the reason for such an objection, and</li> <li>the scale, density and type of development that is appropriate for the potential level of subsidence, and</li> </ol> <p>(b) Incorporate provisions into the draft Local Environmental Plan that are consistent with the recommended scale, density and type of development recommended under 1(a)(ii), and</p> <p>(c) include a copy of any information received from Subsidence Advisory NSW with the statement to the Planning Secretary (or an officer of the Department nominated by the Secretary prior to undertaking community consultation in satisfaction of Schedule 1 to the Act.</p>	<p><b>Not Applicable</b></p> <p>The subject land is not located within a mine subsidence area.</p>

Resilience & Hazards	Comments
2. A planning proposal must not permit development on land.	

Transport & Infrastructure	Comments
<b>5.1 Integrating Land Use &amp; Transport</b>	
<p>1. A planning proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of:</p> <p>(a) Improving Transport Choice – Guidelines for planning and development (DUAP 2001), and</p> <p>(b) The Right Place for Business and Services – Planning Policy (DUAP 2001).</p>	<p><b>Applicable and Consistent</b></p> <p>The Planning Proposal is proposing to zone the site to an urban zone.</p> <p>The site is an infill site so the proposed E4 zone will be the same as that of adjoining land which is already serviced by an established and upgraded road network.</p> <p>The Somersby Business Park is serviced by a bus service that that runs to and from Gosford.</p>
<b>5.2 Reserving Land for Public Purposes</b>	
<p>1. A planning proposal must not create, alter or reduce existing zonings or reservations of land for public purposes without the approval of the relevant public authority and the Planning Secretary (or an officer of the Department nominated by the Secretary).</p> <p>2. When a Minister or public authority requests a relevant planning authority to reserve land for a public purpose in a planning proposal and the land would be required to be acquired under Division 3 of Part 2 of the Land Acquisition (Just Terms Compensation) Act 1991, the relevant planning authority must:</p> <p>(a) reserve the land in accordance with the request, and</p> <p>(b) include the land in a zone appropriate to its intended future use or a zone advised by the Planning Secretary (or an officer of the Department nominated by the Secretary), and</p> <p>(c) identify the relevant acquiring authority for the land.</p> <p>3. When a Minister or public authority requests a relevant planning authority to include provisions in a planning proposal relating to the use of any land reserved for a public purpose before that land is acquired, the relevant planning authority must:</p> <p>(a) include the requested provisions, or</p> <p>(b) take such other action as advised by the Planning Secretary (or an officer of the Department nominated by the Secretary) with respect to the use of the land before it is acquired.</p> <p>4. When a Minister or public authority requests a relevant planning authority to include provisions in a planning</p>	<p><b>Not Applicable</b></p> <p>The subject site does not currently accommodate zonings for public purposes and the Planning Proposal does not propose to create new zonings for public purposes.</p>

Transport & Infrastructure	Comments
<i>proposal to rezone and/or remove a reservation of any land that is reserved for public purposes because the land is no longer designated by that public authority for acquisition, the relevant planning authority must rezone and/or remove the relevant reservation in accordance with the request.</i>	
<b>5.3 Development Near Regulated Airports and Defence Airfields</b>	
<p>1. In the preparation of a planning proposal that sets controls for development of land near a regulated airport, the relevant planning authority must:</p> <ul style="list-style-type: none"> <li>(a) consult with the lessee/operator of that airport;</li> <li>(b) take into consideration the operational airspace and any advice from the lessee/operator of that airport;</li> <li>(c) for land affected by the operational airspace, prepare appropriate development standards, such as height controls.</li> <li>(d) not allow development types that are incompatible with the current and future operation of that airport.</li> </ul> <p>2. In the preparation of a planning proposal that sets controls for development of land near a core regulated airport, the relevant planning authority must:</p> <ul style="list-style-type: none"> <li>(a) consult with the Department of the Commonwealth responsible for airports and the lessee/operator of that airport;</li> <li>(b) for land affected by the prescribed airspace (as defined in clause 6(1) of the Airports (Protection of Airspace) Regulation 1996, prepare appropriate development standards, such as height controls.</li> <li>(c) not allow development types that are incompatible with the current and future operation of that airport.</li> <li>(d) obtain permission from that Department of the Commonwealth, or their delegate, where a planning proposal seeks to allow, as permissible with consent, development that would constitute a controlled activity as defined in section 182 of the Airports Act 1996. This permission must be obtained prior to undertaking community consultation in satisfaction of Schedule 1 to the EP&amp;A Act.</li> </ul> <p>3. In the preparation of a planning proposal that sets controls for the development of land near a defence airfield, the relevant planning authority must:</p> <ul style="list-style-type: none"> <li>(a) consult with the Department of Defence if: <ul style="list-style-type: none"> <li>i. the planning proposal seeks to exceed the height provisions contained in the Defence Regulations 2016 – Defence Aviation Areas for that airfield; or</li> <li>ii. no height provisions exist in the Defence Regulations 2016 – Defence Aviation Areas for</li> </ul> </li> </ul>	<p><b>Not Applicable</b></p> <p>The site is not near a regulated airport or a defence airfield.</p>



Transport & Infrastructure	Comments
<p>the airfield and the proposal is within 15km of the airfield.</p> <p>(b) for land affected by the operational airspace, prepare appropriate development standards, such as height controls.</p> <p>(c) not allow development types that are incompatible with the current and future operation of that airfield.</p> <p>4. A planning proposal must include a provision to ensure that development meets Australian Standard 2021 – 2015, Acoustic-Aircraft Noise Intrusion – Building siting and construction with respect to interior noise levels, if the proposal seeks to rezone land:</p> <p>(a) for residential purposes or to increase residential densities in areas where the Australian Noise Exposure Forecast (ANEF) is between 20 and 25; or</p> <p>(b) for hotels, motels, offices or public buildings where the ANEF is between 25 and 30; or</p> <p>(c) for commercial or industrial purposes where the ANEF is above 30.</p> <p>5. A planning proposal must not contain provisions for residential development or to increase residential densities within the 20 Australian Noise Exposure Concept (ANEC)/ANEF contour for Western Sydney Airport.</p>	
<b>5.4 Shooting Ranges</b>	
<p>1. A planning proposal must not seek to rezone land adjacent to and/or adjoining an existing shooting range that has the effect of:</p> <p>(a) permitting more intensive land uses than those which are permitted under the existing zone; or</p> <p>(b) permitting land uses that are incompatible with the noise emitted by the existing shooting range.</p>	<p><b>Not Applicable</b></p> <p>The subject site is not adjacent to an existing shooting range.</p>

Housing	Comments
<b>6.1 Residential Zones</b>	
<p>1. A planning proposal must include provisions that encourage the provision of housing that will:</p> <p>(a) broaden the choice of building types and locations available in the housing market, and</p> <p>(b) make more efficient use of existing infrastructure and services, and</p> <p>(c) reduce the consumption of land for housing and associated urban development on the urban fringe, and</p>	<p><b>Not Applicable</b></p> <p>The Planning Proposal does not propose to zone the land to a residential zone.</p>

Housing	Comments
<p>(d) be of good design.</p> <p>2. A planning proposal must, in relation to land to which this direction applies:</p> <p>(a) contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it), and</p> <p>(b) not contain provisions which will reduce the permissible residential density of land.</p>	
<b>6.2 Caravan Parks and Manufactured Home Estates</b>	
<p>1. In identifying suitable zones, locations and provisions for caravan parks in a planning proposal, the relevant planning authority must:</p> <p>(a) retain provisions that permit development for the purposes of a caravan park to be carried out on land, and</p> <p>(b) retain the zonings of existing caravan parks, or in the case of a new principal LEP zone the land in accordance with an appropriate zone under the Standard Instrument (Local Environmental Plans) Order 2006 that would facilitate the retention of the existing caravan park.</p> <p>2. In identifying suitable zones, locations and provisions for manufactured home estates (MHEs) in a planning proposal, the relevant planning authority must:</p> <p>(a) take into account the categories of land set out in Schedule 6 of State Environmental Planning Policy (Housing) as to where MHEs should not be located,</p> <p>(b) take into account the principles listed in clause 9 Schedule 5 of State Environmental Planning Policy (Housing)(which relevant planning authorities are required to consider when assessing and determining the development and subdivision proposals), and</p> <p>(c) include provisions that the subdivision of MHEs by long term lease of up to 20 years or under the Community Land Development Act 1989 be permissible with consent..</p>	<p><b>Not Applicable</b></p> <p>The current RU1 zone does not permit caravan parks and the proposed E4 zone does not permit caravan parks so there are no provisions regarding this use to be retained.</p>

Industry & Employment	Comments
<b>7.1 Employment Zones</b>	
<p>1. A planning proposal must:</p> <p>(a) give effect to the objectives of this direction,</p>	<p><b>Applicable and Consistent</b></p> <p>The proposed E4 zone is an Employment zone.</p>

Industry & Employment	Comments
<ul style="list-style-type: none"> <li>(b) retain the areas and locations of existing business and industrial zones,</li> <li>(c) not reduce the total potential floor space area for employment uses and related public services in business zones,</li> <li>(d) not reduce the total potential floor space area for industrial uses in industrial zones, and</li> <li>(e) ensure that proposed new employment areas are in accordance with a strategy that is approved by the Planning Secretary.</li> </ul>	<p>The planning proposal to expand the E4 zone via an infill rezoning will give effect to an objective of the Direction which is to encourage employment growth in suitable locations. The Somersby Business Park is an established employment precinct so this zoning will, to a small degree, increase the industrial floor space within the SBP.</p>

Resources & Energy	Comments
<b>8.1 Mining, Petroleum Production and Extractive Industries</b>	
<ol style="list-style-type: none"> <li>1. In the preparation of a planning proposal affected by this direction, the relevant planning authority must: <ul style="list-style-type: none"> <li>(a) consult the Secretary of the Department of Primary Industries (DPI) to identify any: <ul style="list-style-type: none"> <li>i. resources of coal, other minerals, petroleum or extractive material that are of either State or regional significance, and</li> <li>ii. existing mines, petroleum production operations or extractive industries occurring in the area subject to the planning proposal, and</li> </ul> </li> <li>(b) seek advice from the Secretary of DPI on the development potential of resources identified under (1)(a)(i), and</li> <li>(c) identify and take into consideration issues likely to lead to land use conflict between other land uses and: <ul style="list-style-type: none"> <li>i. development of resources identified under (1)(a)(i), or</li> <li>ii. existing development identified under (1)(a)(ii).</li> </ul> </li> </ul> </li> <li>2. Where a planning proposal prohibits or restricts development of resources identified under (1)(a)(i), or proposes land uses that may create land use conflicts identified under (1)(c), the relevant planning authority must: <ul style="list-style-type: none"> <li>(a) provide the Secretary of DPI with a copy of the planning proposal and notification of the relevant provisions,</li> <li>(b) allow the Secretary of DPI a period of 40 days from the date of notification to provide in writing any objections to the terms of the planning proposal, and</li> <li>(c) include a copy of any objection and supporting information received from the Secretary of DPI with the statement to the Planning Secretary (or an</li> </ul> </li> </ol>	<p><b>Not Applicable</b></p> <p>The subject site is not identified as being underlain with coal seams nor is it identified as an existing or future extractive material resource nor is it located within proximity of an identified extractive material resource.</p> <p>Also the site is surrounded by land already developed for General Industrial uses so any development of this small 1 Ha site for an extractive industry would be improbable.</p>

Resources & Energy	Comments
<i>officer of the Department nominated by the Secretary before undertaking community consultation in satisfaction of Schedule 1 to the Act.</i>	

Primary Production	Comments
<b>9.1 Rural Zones</b>	
<p>1. A planning proposal must:</p> <ul style="list-style-type: none"> <li>(a) not rezone land from a rural zone to a residential, business, industrial, village or tourist zone.</li> <li>(b) not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village).</li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The Planning Proposal proposes to rezone 1 Ha of RU1 Primary Production to E4 General Industrial.</p> <p>The site, however, is not used for primary production uses and is isolated from other RU1 zoned land. The rural residential scale and nature of the existing development on the site is inconsistent with adjacent industrial development which surrounds the site.</p> <p>The proposed rezoning of the site to E4 will reduce any land use conflict that will increasingly occur in future if the Planning Proposal does not proceed.</p>
<b>9.2 Rural Lands</b>	
<p>1. A planning proposal must:</p> <ul style="list-style-type: none"> <li>(a) be consistent with any applicable strategic plan, including regional and district plans endorsed by the Planning Secretary, and any applicable local strategic planning statement</li> <li>(b) consider the significance of agriculture and primary production to the State and rural communities</li> <li>(c) identify and protect environmental values, including but not limited to, maintaining biodiversity, the protection of native vegetation, cultural heritage, and the importance of water resources</li> <li>(d) consider the natural and physical constraints of the land, including but not limited to, topography, size, location, water availability and ground and soil conditions</li> <li>(e) promote opportunities for investment in productive, diversified, innovative and sustainable rural economic activities</li> <li>(f) support farmers in exercising their right to farm</li> <li>(g) prioritise efforts and consider measures to minimise the fragmentation of rural land and reduce the risk of land use conflict, particularly between residential land uses and other rural land use</li> <li>(h) consider State significant agricultural land identified in chapter 2 of the State Environmental Planning</li> </ul>	<p><b>Applicable and Consistent</b></p> <p>The land, although zoned RU1, is not used for primary production uses. It is isolated from other RU1 zoned land and is currently used for rural-residential purposes.</p> <p>The site is surrounded by land zoned E4 and being developed for industrial uses which is increasingly leading to land use conflict. The zoning of the site to E4 will remove any land use conflict issue and rationalise the E4 zone in the locality.</p> <p>The scale and nature of any future development on the site would be consistent with adjacent industrial development.</p>

Primary Production	Comments
<p><i>Policy (Primary Production) 2021 for the purpose of ensuring the ongoing viability of this land</i></p> <p>(i) <i>consider the social, economic and environmental interests of the community.</i></p> <p>2. <i>A planning proposal that changes the existing minimum lot size on land within a rural or conservation zone must demonstrate that it:</i></p> <p>(a) <i>is consistent with the priority of minimising rural land fragmentation and land use conflict, particularly between residential and other rural land uses</i></p> <p>(b) <i>will not adversely affect the operation and viability of existing and future rural land uses and related enterprises, including supporting infrastructure and facilities that are essential to rural industries or supply chains</i></p> <p>(c) <i>where it is for rural residential purposes:</i></p> <p>i. <i>is appropriately located taking account of the availability of human services, utility infrastructure, transport and proximity to existing centres</i></p> <p>ii. <i>is necessary taking account of existing and future demand and supply of rural residential land.</i></p>	
<b>9.3 Oyster Aquaculture</b>	
<p>1. <i>In the preparation of a planning proposal the relevant planning authority must:</i></p> <p>(a) <i>identify any 'Priority Oyster Aquaculture Areas' and oyster aquaculture leases outside such an area, as shown the maps to the Strategy, to which the planning proposal would apply,</i></p> <p>(b) <i>identify any proposed land uses which could result in any adverse impact on a 'Priority Oyster Aquaculture Area' or oyster aquaculture leases outside such an area,</i></p> <p>(c) <i>identify and take into consideration any issues likely to lead to an incompatible use of land between oyster aquaculture and other land uses and identify and evaluate measures to avoid or minimise such land use in compatibility,</i></p> <p>(d) <i>consult with the Secretary of the Department of Primary Industries (DPI) of the proposed changes in the preparation of the planning proposal, and</i></p> <p>(e) <i>ensure the planning proposal is consistent with the Strategy.</i></p> <p>2. <i>Where a planning proposal proposes land uses that may result in adverse impacts identified under (1)(b) and (1)(c), relevant planning authority must:</i></p>	<p><b>Not Applicable</b></p> <p>There are no Priority Oyster Aquaculture Areas near the site.</p>

Primary Production	Comments
<p>(a) provide the Secretary of DPI with a copy of the planning proposal and notification of the relevant provisions,</p> <p>(b) allow the Secretary of DPI a period of 40 days from the date of notification to provide in writing any objections to the terms of the planning proposal, and</p> <p>(c) include a copy of any objection and supporting information received from the Secretary of DPI with the statement to the Planning Secretary before undertaking community consultation in satisfaction of Schedule 1 to the EP&amp;A Act.</p>	

**Table 15:** S9.1 Assessment



# 02

## Land Use Provisions

## **Land Use Table for Existing RU1 Primary Production Zone under CCLEP 2022**

### **Zone RU1 Primary Production**

#### **1 Objectives of zone**

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To protect high quality and productive agricultural land, water catchment areas and land comprising high ecological or biodiversity value from inappropriate development and land management practices.
- To provide for non-agricultural land uses that support the primary production purposes of the zone.

#### **2 Permitted without consent**

Extensive agriculture; Home occupations

#### **3 Permitted with consent**

Agriculture; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Boat launching ramps; Building identification signs; Business identification signs; Cellar door premises; Community facilities; Dual occupancies; Dwelling houses; Environmental facilities; Environmental protection works; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Helipads; Home-based child care; Home businesses; Home industries; Home occupations (sex services); Information and education facilities; Intensive livestock agriculture; Intensive plant agriculture; Landscaping material supplies; Open cut mining; Plant nurseries; Recreation areas; Recreation facilities (outdoor); Roads; Roadside stalls; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Sewage reticulation systems; Veterinary hospitals; Water recreation structures; Water recycling facilities; Water supply systems

#### **4 Prohibited**

Any development not specified in item 2 or 3

## **Land Use Table for Proposed E4 General Industrial Zone under CCLEP 2022**

### **Zone E4 General Industrial**

#### **1 Objectives of zone**

- To provide a range of industrial, warehouse, logistics and related land uses.
- To ensure the efficient and viable use of land for industrial uses.
- To minimise any adverse effect of industry on other land uses.
- To encourage employment opportunities.
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.
- To ensure that retail, commercial or service land uses in industrial areas are of an ancillary nature.
- To support and protect industrial land for industrial uses.

#### **2 Permitted without consent**

Recreation areas

#### **3 Permitted with consent**

Depots; Food and drink premises; Freight transport facilities; Garden centres; General industries; Goods repair and reuse premises; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Liquid fuel depots; Local distribution premises; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Rural supplies; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

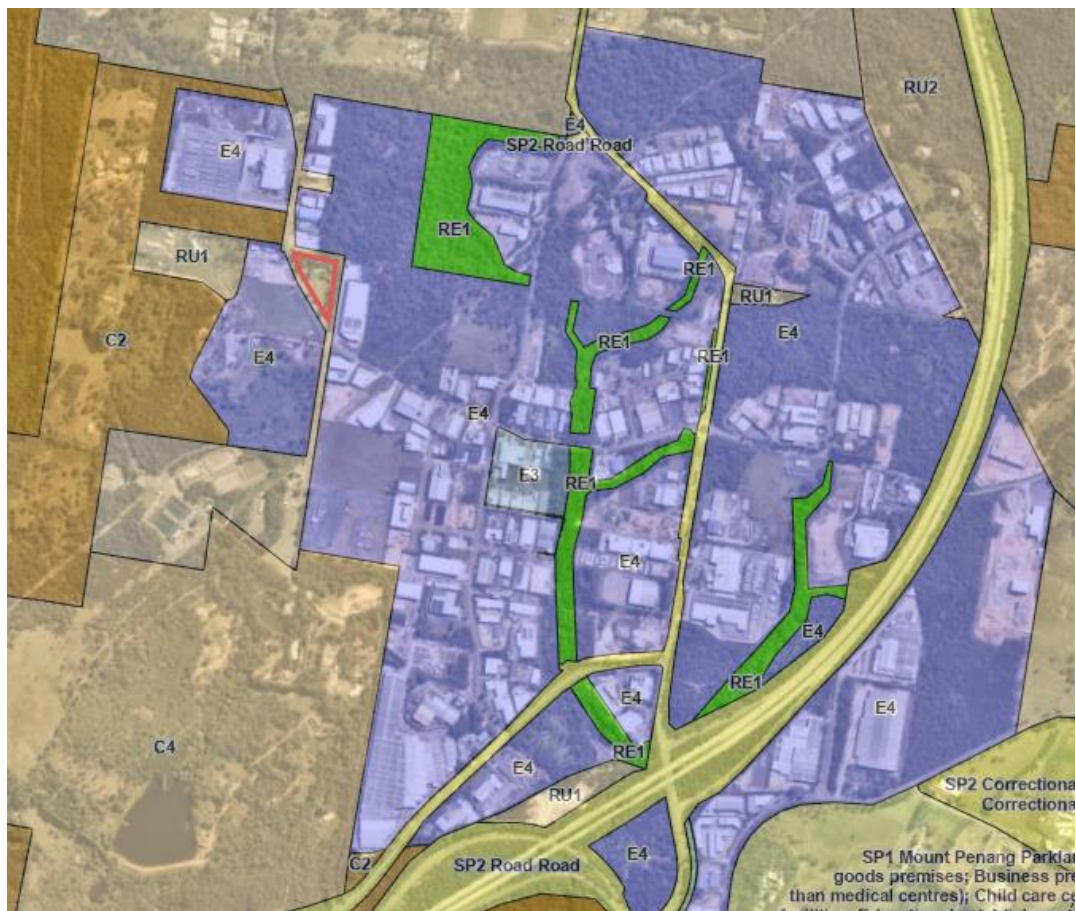
#### **4 Prohibited**

Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Eco-tourist facilities; Educational establishments; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Heavy industrial storage establishments; Heavy industries; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Hospitals; Information and education facilities; Marinas; Mooring pens; Moorings; Open cut mining; Public administration buildings; Residential accommodation; Tourist and visitor accommodation; Water recreation structures

# 03

## Mapping

## Locality Plan



**Figure 6:** The site in relation to Somersby Business Park

**Existing Land Use Zoning under CCLEP 2022**



**Figure 7:** Existing Land Use Zone

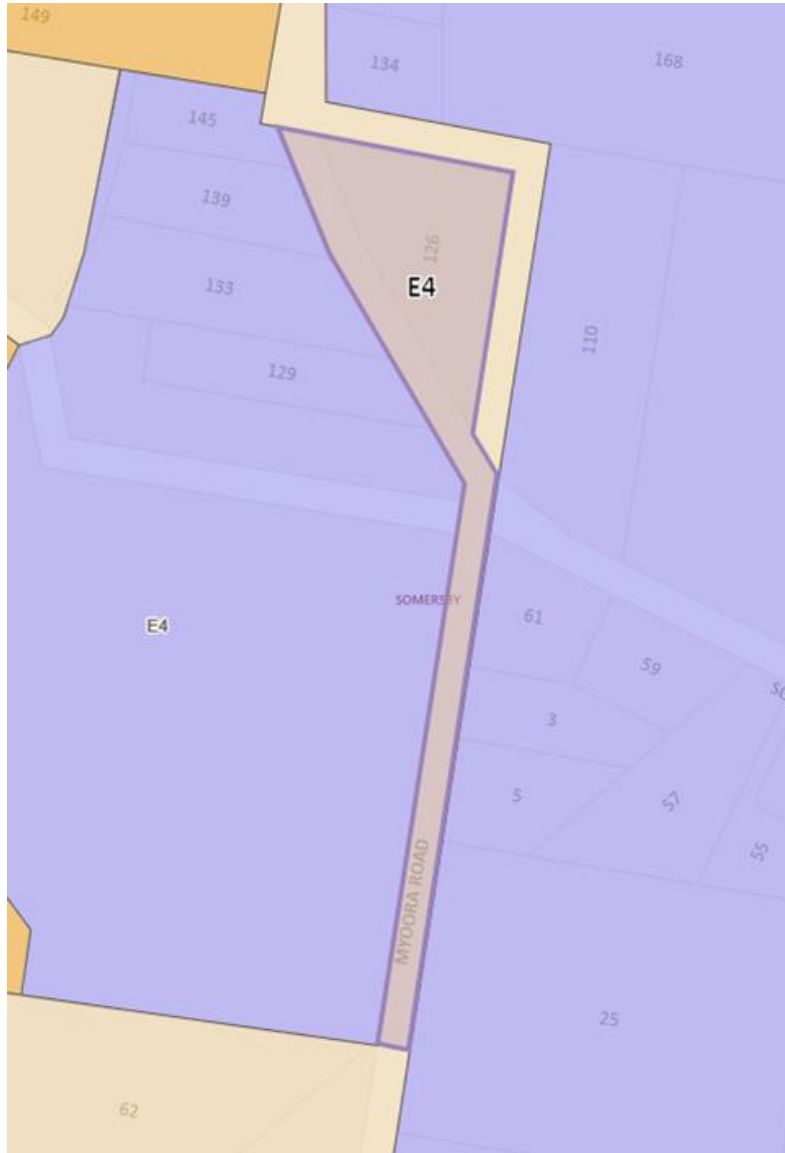


### Existing Minimum Lot Size Map under CCLEP 2022



Figure 8: Minimum Existing Lot Size

**Proposed Land Use Zoning Map under CCLEP 2022**



**Figure 9:** Proposed Land Use Zone

### Proposed Minimum Lot Size Map under CCLEP 2022

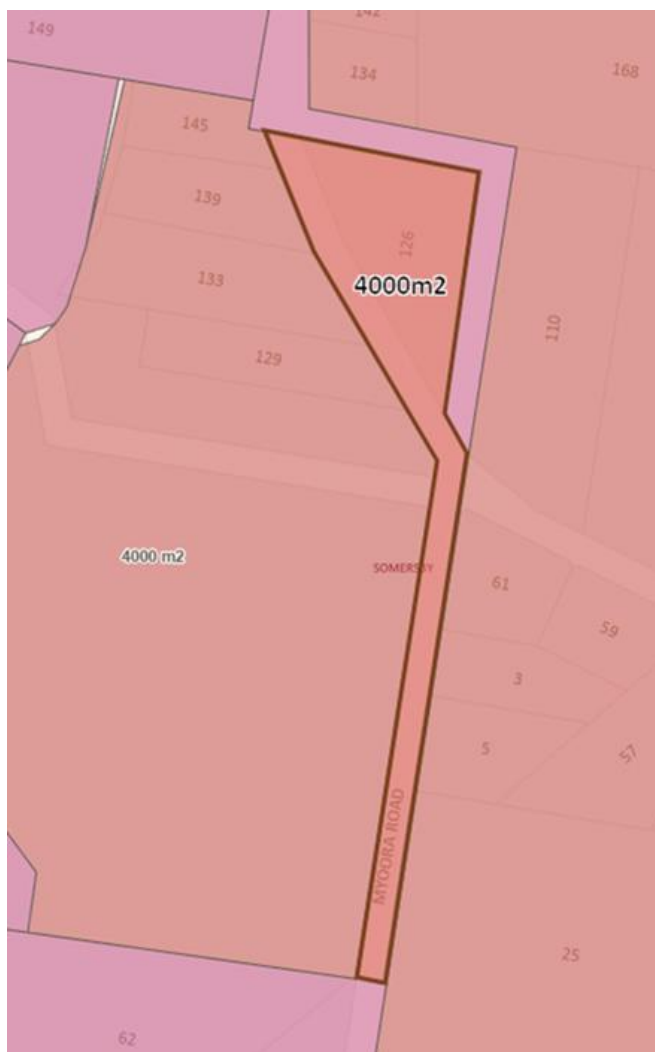


Figure 10: Proposed Minimum Lot Size

**Item No:** 4.2  
**Title:** DA/4110/2022 - 120 Riviera Ave, TERRIGAL - Dual Occupancy  
**Department:** Environment and Planning

**Central Coast**  
Local Planning Panel

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## 20 June 2024 Local Planning Panel Meeting

Reference: DA/4110/2022 - D16231294  
Author: Amy Magurren, Senior Development Planner. Residential Assessments  
Section Manager: Ailsa Prendergast, Section Manager. Development Assessments  
Manager: Andrew Roach, Unit Manager, Development Assessment

### Summary

An application has been received for the construction of a **Dual Occupancy(attached)** development at 120 Riviera Avenue, Terrigal. The application has been examined having regard to the matters for consideration detailed in section 4.15 of the Environmental Planning and Assessment Act and other statutory requirements with the issues requiring attention and consideration being addressed in the report.

The development application is required to be reported to the Local Planning Panel due to the development exceeding the "*Height of Buildings*" development standard specified and calculated in Clause 4.3 of the *Central Coast Local Environmental Plan 2022 (Central Coast LEP 2022)* by more than 10%. The current height standard for the site is 8.5m and the development proposes a maximum height of 9.65m (a variation of 1.15m or 13.5%).

One (1) submission was received in relation to the application.

The application is recommended for approval.

<b>Applicant</b>	Perception Planning
<b>Owner</b>	Always Forward Pty Ltd
<b>Application No</b>	DA/4110/2022
<b>Description of Land</b>	Lot 8 in DP 248806
<b>Proposed Development</b>	Dual Occupancy (attached)
<b>Site Area</b>	1,128m <sup>2</sup>
<b>Zoning</b>	R2 Low Density Residential
<b>Existing Use</b>	Vacant Land
<b>Employment Generation</b>	No
<b>Estimated Value</b>	\$500,000

**Recommendation**

- 1     *The Central Coast Local Planning Panel accept that the Applicants Clause 4.6 written request demonstrates that compliance with the Height of Buildings development standard is unreasonable in the circumstances of the case because of the steep topography of the site and the minimal environmental impact that would arise from the non-compliance with the height of buildings standard.***  
  
***Further, the panel consider that the proposed development will be in the public interest because it is consistent with the objectives of the development standard and the objectives for development within the R2 Low Density Residential zone in which the development is proposed to be carried out.***
- 2     *That the Local Planning Panel grant consent to DA/4110/2022 – 120 Riviera Ave Terrigal for a Dual Occupancy (attached) subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.***
- 3     *The Local Planning Panel assume the concurrence of the Secretary of the Department of Planning to permit the non-compliance with the development standard under Clause 4.6 of the Central Coast Local Environmental Plan 2022, in accordance with the provisions of Clause 55 of the Environmental Planning and Assessment Regulation 2022.***
- 4     *That Council advise those who made written submissions of the Panel's decision.***

**Precis:**

<b>Proposed Development</b>	Dual Occupancy (attached)
<b>Permissibility and Zoning</b>	<p>The subject site is zoned R2 Low Density Residential under the provisions of the <i>Central Coast Local Environmental Plan 2022 (Central Coast LEP 2022)</i>. The proposed development is defined as a Dual Occupancy and is permissible with consent in the current zone.</p> <p><b>dual occupancy (attached)</b> means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.</p>
<b>Current Use</b>	Vacant Land
<b>Integrated Development</b>	No
<b>Submissions</b>	<p>One (1) submission</p> <p>The development was notified in accordance with the provisions of Central Coast LEP 2022 and CCDCP 2022 from the 10<sup>th</sup> March 2023 to 24 March 2023.</p>

**Variations to Policies**Proposed variations to Central Coast Local Environmental Plan 2022

<b>Clause</b>	4.3 Height of Buildings
<b>Standard</b>	Height Limit of 8.5m
<b>Departure basis</b>	The proposal seeks a maximum building height of 9.65m. This represents a variation of 1.15m or 13.5%.

Proposed variations to Central Coast Development Control Plan 2022 – Chapter 2.2 Dual Occupancy and Multi Dwelling Housing development.

<b>Clause</b>	2.2.3.1
<b>Planning Control</b>	Height limit of 8.5m
<b>Departure basis</b>	The proposal seeks a maximum height of 9.65m. This represents a variation of 1.15m or 13.5% at the highest point.

<b>Clause</b>	2.2.5
<b>Planning Control</b>	Front setback – Average of the nearest two dwellings being 8m
<b>Departure basis</b>	The proposal seeks a front setback of 4.9m to the supporting columns. .This represents a variation of 3.1m or 38%.

<b>Clause</b>	2.2.6.1
<b>Planning Control</b>	Garage Prominence
<b>Departure basis</b>	The proposal seeks a total combined garage width of 10.4m. This represents a variation of 0.741m or 3%.



### The Site and Surrounding Development

The site is legally described as Lot 8 in DP 248806 and commonly known as 120 Riviera Ave, Terrigal. The site has a total area of 1,128m<sup>2</sup> with a 16.765m frontage to Riviera Avenue. The site is on the south-west side of the street, rising steeply (approximately 20m) from the road up to the south-west boundary at the rear of the site.

The site is currently vacant land that is surrounded by single residential dwellings constructed in sympathy to the steep topography of the surrounding areas, which are a mix of slab on ground and pole home with detached garages.

The development site rises from RL37.98 at the kerb to between RL58.0 and RL60.0 at the rear of the site. The survey plan prepared by Trehy Ingold Neate dated 02/09/2014 prepared to support the application indicates evidence of previous excavation into the site by previous attempts to construct buildings on the site.

Part of the site is identified as "bushfire prone land" on Council's bushfire maps. A Bushfire Assessment (BAR) report prepared by Perception Planning dated 30 August 2022 was submitted with the application identifying the site as BAL19 and BAL12.5 as it is 89m downslope from the bushfire threat which is located south of the site. Council is satisfied that the proposed development conforms to the specifications prescribed by the Planning for Bush Fire Protections if constructed in accordance with the requirements of the bushfire assessment report.

The site is also burdened by a Council Sewer main that travels along the southern boundary of the site, as well as a 2m wide drainage easement that travels along the northern boundary and also travels through the site at the rear from north to south. A restriction as to user 8m wide also traverses the front of the site.





**Figure 1: Site Locality Plan**



**Figure 2: The proposed development site**



**Figure 3: Neighbouring development at 118 & 116 Riviera Ave, Terrigal**



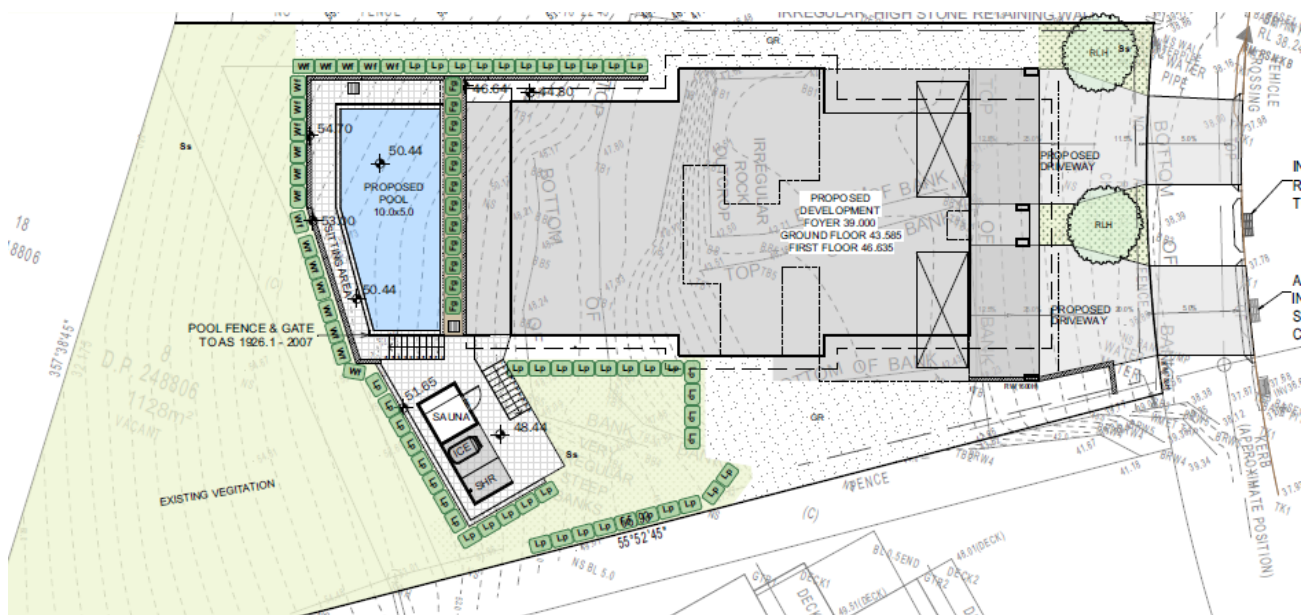


**Figure 4: Neighbouring development at 122 & 124 Riviera Ave, Terrigal**

### The Proposed Development

The application seeks development consent for the construction of a dual occupancy (attached) on the development site. The proposed dual occupancy includes:

- 2 x 4-bedroom dwellings in a stacked arrangement
- Basement level parking, stairwell to unit 1 and Lift access to both units.
- Two (2) parking spaces per dwelling;
- Earthworks including driveway access; and
- Swimming pool



**Figure 5: The proposed development plans**



**Figure 6: The proposed development 3D image**

### History

- DA/8544/2000 for a Dwelling house was approved on the 13th September 2000
- DA/27881/2005 for a Dwelling house (New), In-ground swimming pool and lift was approved 24th April 2006
- DA/40173/2011 for a Dwelling house (New) & Associated Earthworks was approved on the 9<sup>th</sup> August 2011.
- DA/48696/2015 for Dwelling House, Secondary dwelling, Inground Pool & driveway was approved on the 29th June 2016.
- DA/48696/2015A a section 4.55 Amendment to Enlarge Garages, Move Entry Stairs & Media room was Approved on the 19th June 2018.

### ASSESSMENT:

Having regard for the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979 and other statutory requirements, Council's policies and Section 10.7 Certificate details, the assessment has identified the following key issues, which are elaborated upon for Council's information. Any tables relating to plans or policies are provided as an attachment.

### **State Environmental Planning Policy (Building Sustainability Index) BASIX 2004**

The application is supported by a BASIX certificate which confirms the proposal will meet the NSW Government's requirements for sustainability, if built in accordance with the commitments in the certificate.

The proposal is considered to be consistent with the requirements of *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*.

***State Environmental Planning Policy (Sustainable Buildings (2022)***

The State Environmental Planning Policy (Sustainable Buildings (2022) (Sustainable Buildings SEPP) commenced on 1 October 2023 and provides savings and transitional provisions in clause 4.2. The applicant has submitted a valid BASIX Certificate.

***State Environmental Planning Policy (Resilience and Hazards) 2021***

The aims of Chapter 2 are to be considered when determining an application within the Coastal Management Areas which are defined on maps issued by the NSW Department of Planning and Environment. The site is not located within the Coastal Environment Area as identified on these maps and is not subject to the provisions of Section 2.10 of the SEPP.

***Central Coast Local Environmental Plan 2022 (Central Coast LEP 2022)***

The subject site is zoned R2 - Low Density Residential under the provisions of CCELP 2022. The proposed development is best defined a 'dual occupancy (attached)', which is defined under Central Coast LEP 2022 as:

***dual occupancy (attached)*** means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.

The development is permissible in the zone, with development consent.

Central Coast Local Environmental Plan 2022 – Zone Objectives

The land is zoned *R2 Low Density Residential* under the provisions of the Central Coast LEP 2022.

The objectives for the R2 zone are:

- To provide for the housing needs of the community within a low-density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To encourage best practice in the design of low-density residential development.
- To ensure that non-residential uses do not adversely affect residential amenity or place unreasonable demands on services.
- To maintain and enhance the residential amenity and character of the surrounding area.

Following a detailed assessment of the proposed development and with the Applicant's written request to vary a development standard within Central Coast LEP 2022, it is

considered that the proposal is consistent with the stated objectives of the zone, providing housing consistent with the emerging character of the area and does not have adverse impacts on the locality.

#### Central Coast Local Environmental Plan 2022 – Principal Development Standards

The proposal has been assessed in accordance with the relevant development standards of Central Coast LEP 2022.

Development Standard	Required	Proposed	Compliance with Controls	Variation %	Compliance with Objectives
Clause 4.3 Height of Buildings	8.5m	9.65m	No	13.5%	Yes
Clause 4.4 Floor Space Ratio	Not mapped - CCDCP requires 0.5:1 FSR for Dual Occupancies	0.4:1	Yes	Nil	Yes

#### **Central Coast LEP 2022 - 4.1B - Minimum lot sizes for dual occupancies**

Clause 4.1B(3) of Central Coast LEP 2022 provides that the minimum lot size development standard for dual occupancies (attached) is 550m<sup>2</sup>. The site area is 1,128m<sup>2</sup> and the proposal complies with the development standard.

#### **Central Coast LEP 2022 - Clause 4.3 - Height of buildings**

The proposed development proposes a variation to the maximum permitted height set out under clause 4.3 of Central Coast LEP 2022 and is accompanied by a clause 4.6 written request to vary the development standard.

The subject site has a very significant slope and a double storey dual occupancy with basement parking is proposed. Only a small portion of the building is over the height limit (eastern portion of the front of the building). Accordingly, the majority of the building is within the height limit, the steep slope is a major constraint, and the dwelling will be consistent with the height of the existing development either side and in the locality.

#### **Central Coast LEP 2022 – Clause 4.4 - Floor Space Ratio**

Clause 4.4(2) Floor Space Ratio (FSR) of Central Coast LEP 2022 provides the maximum floor space ratio for a building on any land. The site is not identified on the Central Coast LEP 2022 FSR map as having a minimum floor space ratio. The *Central Coast Development Control Plan 2022* sets the Floor Space Ratio for dual occupancy developments as 0.5:1.

The proposed development has an FSR of 0.4:1 and complies with the development control.



**Central Coast LEP 2022 - Clause 4.6 - Exceptions to development standards**

The applicant seeks a variation to clause 4.3(2) of Central Coast LEP 2022 in relation to the proposed maximum height of the dwelling. In this regard, the proposal seeks a maximum overall height of 9.65m in lieu of the 8.5m mapped maximum height limit applicable to the allotment. This represents a variation of 13.5%.

Clause 4.6 of Central Coast LEP 2022 provides the ability to grant consent to a development application where the variation to a development standard can be adequately justified and where the objectives of clause 4.6 are satisfied, being:

- (a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
- (b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

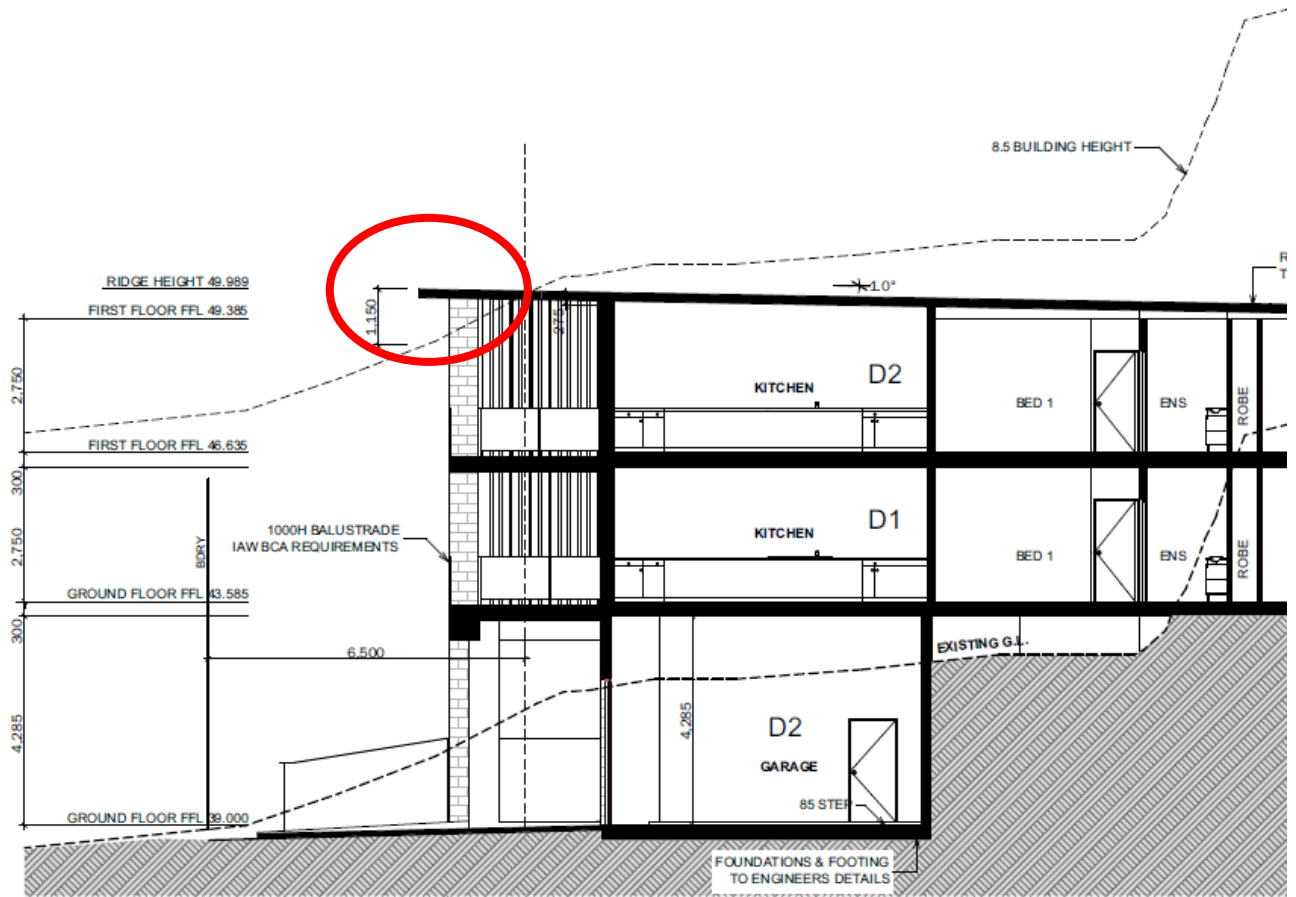
**Applicant's Written Clause 4.6 Request**

The Applicant has provided a detailed request to vary the mapped height development standard by the proposed 13.5%. In requesting the variation, the applicant has provided the following matters in support of the proposal (the Applicant's full clause 4.6 request is included in Attachment 3).

The basis of the applicants' arguments, as set out in the clause 4.6 request, are:

- The additional height over 8.5m will have negligible effect on shadows cast by the building on adjoining properties.*
- The additional height will not impact on the privacy of adjoining residents given the lack of habitable space and glazing within the exceeding element.*
- The additional height will not materially impact on view sharing due to the topography of the site and locations of existing development. The building above 8.5m is architecturally designed and appropriately articulated to provide visual interest and prominence when viewed from the public domain.*
- The proposed development results in a high-quality architectural design that will positively contribute to the locality.*
- A compliant height would not improve the buildings appropriateness in the context and character of the area, as detailed in response to objective (b) of clause 4.3 under Section 10 above. The exceeding element relates to the roof form only. The exceeding element, being the roof tip, does not contribute to any additional overshadowing, bulk, scale, privacy, or amenity issues, thus compliance with the 8.5m HOB standard would be unreasonable.*

- *The development has also been identified to be consistent with the relevant objectives, which provides sufficient environmental planning grounds under the LEP (Clause 4.6) for a variation to the numerical development standard.*
- *The height variation proposed does not compromise the natural environment in which the site is located and is appropriate in the context of surrounding built form and neighbourhood character. It is crucial to note that despite the proposed height variation, the development adheres to the broader principles of ecologically sustainable development by integrating economic, environmental, and social considerations into the planning process.*
- *The proposed development results in a high-quality architectural design that will positively contribute to the locality.*
- *Strict adherence to the numerical height of buildings development standard would be unreasonable and unnecessary as required under the Five Part Test (Wehbe vs Pittwater Council).*
- *The proposed height of building is appropriate when considering it in relation to the existing natural features of the site such as topography, the location of the site and existing built form established in close proximity.*
- *The proposed development (including additional height) integrates in with the desired contemporary built form of the area and will have no significant impact on the 'views' held by existing properties or recreational areas.*
- *Despite the variation, the proposed development will achieve the objectives of the development standard and the objectives of the relevant land use zone being R2 – Low Density Residential, through enabling the residential use of the site to serve the needs of people who live in, work in, or visit the area.*
- *The proposed development provides an appropriate response to the context of the site and its location within Terrigal and along Riviera Avenue.*



**Figure 7: The area of variation to the height development standard**

Pre - conditions to be satisfied.

Clause 4.6 (4) of Central Coast LEP 2022 establishes preconditions that must be satisfied before a consent authority can exercise the power to grant development consent for development that contravenes a development standard. Clause 4.6(2) provides this permissive power to grant development consent for a development that contravenes the development standard is subject to conditions.

The two preconditions are:

1. Tests to be satisfied pursuant to clause 4.6(4)(a) – this includes matters under clause 4.6(3)(a) and (b) in relation to whether the proposal is unreasonable and unnecessary in the circumstances of the case and whether there are sufficient environmental planning grounds to justify contravening the development standard and whether the proposal is in the public interest (clause 4.6(a)(ii)); and
2. Tests to be satisfied pursuant to clause 4.6(4)(b) – concurrence of the Planning Secretary.

Clause 4.6(3)

Clause 4.6 (3) of Central Coast LEP 2022 requires consideration of the following:

*'Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating –*

*(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*

*(b) that there are sufficient environmental planning grounds to justify contravening the development standard.'*

In reviewing whether the proposed variation is unreasonable or unnecessary, and whether there are sufficient environmental planning grounds to justify contravening the variation, consideration of the objectives for maximum building height controls are relevant. Central Coast LEP 2022 sets out two objectives pertaining to the building height development standard. The objectives are contained within clause 4.3 (1) (a) and (b). These objectives are replicated below and commentary in respect to compliance or otherwise with each of the objectives in relation to the proposed development:

*a) to establish a maximum height of buildings to enable appropriate development density.*

Comment: The proposed height of the building, whilst exceeding the numerical height limit, is consistent with numerous other dwellings within the vicinity of this steep Terrigal location. The proposed dwelling design meets the relevant zone objectives and does not cause any unreasonable level of view loss impacts to the adjoining and surrounding properties. The proposed dwelling design and height will not create any overshadowing to public open spaces and not impact on viewing natural topographical features from surrounding open spaces within the Terrigal location.

*b) to ensure that the height of buildings is compatible with the character of the locality.*

Comment: The proposed dual occupancy incorporates a flat roof profile and typical windows and will result in a contemporary design. The use of quality materials will encourage a desired urban form in the locality. The proposed dwelling will not result in any appreciable additional overshadowing of the adjoining property in the winter months. The extent of shadowing, considering the orientation of the dwellings and hillside location is reasonable as demonstrated on the shadow diagrams.

Clause 4.6(4)

Clause 4.6 (4) of Central Coast LEP 2022 requires consideration of the following:

*'Development consent must not be granted for development that contravenes a development standard unless—*

*(a) the consent authority is satisfied that—*

- (i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
- (ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

*(b) the concurrence of the Planning Secretary has been obtained.'*

#### Consideration of Applicant's Submission

The Applicant's submission in accordance with clause 4.6 is attached, and adequately addresses the provisions of clause 4.6(3), as set out above.

#### Zone Objectives

In reviewing the proposed variation, consideration of the R2 Low Density Residential Zone objectives is also considered necessary.

The *R2 Low Density Residential Zone* objectives are as follows:

- To provide for the housing needs of the community within a low-density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that development is compatible with the desired future character of the zone.
- To encourage best practice in the design of low-density residential development.
- To promote ecologically, socially and economically sustainable development and the need for, and value of, biodiversity in Gosford.
- To ensure that non-residential land uses do not adversely affect residential amenity or place demands on services beyond the level reasonably required for low-density housing.

In considering these zone objectives, the following points are considered relevant:

- Dual occupancy developments are permissible in the zone and satisfies the zone objective in terms of the provision of low-density residential development.
- The proposed dwelling design is considered in keeping with desired future character of the area.
- The design of the development incorporates suitable architectural design elements and incorporates sustainable design features.

The proposal meets the relevant zone objectives and does not cause view loss or overshadowing impacts to the adjoining properties. The proposal is consistent with the objectives of the development standard, as noted above, and approval of the development is therefore in the public interest.

Having regard to the site constraints, minimal impact on the character of the area and that of the residents, the applicants request to vary the building height development standard is considered reasonable and therefore supported.

#### **Central Coast LEP 2022 - Clause 5.21 Flood Planning**

The proposal has been reviewed by Council's Development Engineer in relation to flooding and is considered satisfactory in respect to clause 5.21 of Central Coast LEP 2022.

#### **Central Coast LEP 2022 - Clause 7.1 - Acid Sulfate Soils**

This land has been identified as being affected by the Acid Sulfate Soils Map and the matters contained in clause 7.1 of Central Coast LEP 2022 have been considered. The site contains Class 5 Acid Sulfate Soils. In this instance, the proposal works are not considered to impact on Acid Sulfate Soils. However, in the unlikely event acid sulfate soils are found during works a condition is included to cease all excavation works if acid sulfate soils are identified until such time as details of mitigation and treatment measures are submitted to, and approved by, the Principal Certifier.

#### **Central Coast LEP 2022 – Clause 7.6 – Essential Services**

Development consent must not be granted to development unless the consent authority is satisfied that all of the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required:

- a) the supply of water,
- b) the supply of electricity,
- c) the disposal and management of sewage,
- d) stormwater drainage or on-site conservation,
- e) suitable vehicular access
- f) the collection and management of waste

The panel can be satisfied that the proposed development complies with the provisions of clause 7.6 and that adequate essential servicing is available to the development having regard for water, sewer, electricity, stormwater drainage, waste collection and vehicular access.

#### **Central Coast Development Control Plan (Central Coast DCP 2022)**

Central Coast DCP 2022 provides objectives, design criteria and design guidance on how development proposals can achieve good design and planning practice.



Consideration of relevant controls from Central Coast DCP 2022 are included in the following sections of this report:

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
2.2.3.1 Height	a. Max building height mapped CCLEP 2022 8.5m	9.65m	No	Yes
	c. 3 storeys on steeply sloping sites where only a small section of the three-storey component extends along the building	3 storeys – Basement parking provided as third level only.	Yes	
2.2.4.2 Floor Space Ratio (FSR)	a. Max FSR mapped CCLEP 2022 0.5:1	0.4:1	Yes	Yes
2.2.4.3 Site Coverage	a. 25% of site area (282sqm) at ground level shall be 'soft' landscaping, excluding hardstand areas. Private open space areas and setback areas may be included where these do not include hardstand surfaces.	<ul style="list-style-type: none"> <li>476sqm 'soft' landscaping' or 42% of site area is provided as shown on the Site Plan.</li> <li>Landscaped areas are increased by reducing the building footprint providing improved internal amenity and stormwater infiltration.</li> </ul>	Yes	Yes
2.2.5a Front Setback	ii Local roads Avg distance nearest 2 dwelling houses with same primary road boundary within 40m  Dwellings must have direct access to a public road for pedestrian access, mail and waste collection	<ul style="list-style-type: none"> <li>Avg setback is 8m.</li> <li>Proposes 4.9m setback to the supporting pylons and an 8.1m – 8.3m building setback.</li> <li>Access to a public road provided.</li> </ul>	No	Yes – refer comments below
2.2.5b Side Setback	i. For any part of the building up to a height of 4.5m, 0.9m, and	<ul style="list-style-type: none"> <li>Provides 2.080m side setback to the north at ground level and 2.080m – 3.580m at first floor.</li> <li>Provides 1.925m side setback to the south at ground level and 2.705m at first floor.</li> </ul>	Yes	
	ii. For any part of the building >4.5m, 0.9m plus 25% of the height of the building above 4.5m i.e. building height at side boundary of 6.5m = 1.5m setback		Yes	
2.2.5c Rear Setback	i. 4.5m	<ul style="list-style-type: none"> <li>Provides 7m setback</li> </ul>	Yes	
2.2.6.1	a. No monotonous and unbroken lengths of	Facades are articulated in length and height. The proposal	Yes	Yes

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
Facades & Articulation	wall exceeding 10m in length and 3m in height	provides a variety in materials which is encouraged to break up the elevations and add visual interest to the building.		Yes
	b. Garage prominence ii. Dual Occupancy <ul style="list-style-type: none"> <li>Width of garage doors 6m or 60% of width of building (whichever is the greater) for lots &gt; 12m at the building line.</li> </ul>	<ul style="list-style-type: none"> <li>Garage building width is 10.4m.</li> <li>Garage provides parking for 2 vehicles for each dwelling – doors are each 5.2m in width.</li> <li>The garage appears as integrated elements of the overall presentation of the building.</li> </ul>	No – See comments below	
2.2.6.2 Roof Elements	a. Responds to orientation of site	Roof design responds to the orientation of the site, has architectural merit and maintains the privacy of adjoining sites.	Yes	Yes
	b. Minimise impact of service elements – integrate into design of roof			
2.2.6.3 Residential Address	a. Dwellings located at front of each development – street to be visible from regularly occupied rooms as well as upper storey balconies, private terraces or courtyards at ground level	<ul style="list-style-type: none"> <li>The street can be viewed from both of the first-floor balconies which are associated with living spaces that are considered regularly occupied rooms.</li> </ul>	Yes	Yes
	b. Street number and building access easily identified from street	The building is easily identified from the street		
2.2.7.1 Views	a. Sited and designed to enable view sharing to adjoining / adjacent sites particularly from habitable rooms	Revised plans submitted provided improved levels of privacy for the proposed dwellings and neighbouring dwellings. The proposed development does not unreasonably obstruct any public or private views.	Yes	Yes
	b. Design roof form for view sharing	Roof form appropriate for the site. No impact on views of adjoining development		
	c. Design 'from the ground up' – floors located at or near to natural ground level / incorporating reasonable ceiling heights and roof pitch	Construction of the dwelling will require cut into the steeply sloping site to be located near to natural ground level. Incorporates reasonable ceiling heights to minimise height of building.		

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
2.2.7.2.1 Visual Privacy	a. Minimise direct overlooking of internal living areas and private open space to / from surrounding dwellings	Privacy impacts have been considered in the amended design provided to Council.  Privacy screening is provided to forward decks on the ground and first floor of each dwelling to minimise overlooking of adjoining properties.	Yes	Yes
	b. Minimise overlooking of adjacent dwellings: <ul style="list-style-type: none"> <li>Offset windows of living areas or balconies within 12m of and facing living areas or balconies of adjacent dwellings.</li> <li>First floor level windows and above orientated / designed to maintain privacy.</li> </ul> c. Windows to be opaque finish / have appropriate sill height above floor level.	Highlight windows are provided to the southern and northern side elevations to reduce overlooking of adjoining properties.  The front balconies have been adequately screened to protect the privacy of the future occupants as well as the neighbouring dwelling particularly the dwelling to the north.		
2.2.7.2.2 Acoustic Privacy	a. Site layout should separate recreation areas, parking areas, vehicle accessways and service equipment from bedroom areas of dwellings.	Recreational areas and parking areas are located away from bedrooms.  Building design is satisfactory to minimise external noise.	Yes	Yes
	b. Minimise external noise through building design, window placement, noise attenuation measures and external wall treatment			
2.2.7.3 Private Open Space areas (POS)	a. Min area 45m <sup>2</sup> and min dimension 4.5m located at ground level and accessible from living area	Unit 1 has a balcony POS of approximately 64sqm which is accessible from the living area and meets the minimum dimensions for balconies. Unit 2 has a balcony POS which is accessible from the living area, as well as direct access to the rear POS and pool area.	Yes	Yes
	b. Max grade 1:14 for private courtyards	Complies	Yes	
	c. Dimensions less than min area/dimension shall not be counted as POS areas	Dimensions >4.5m	Yes	

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
	d. Ground level POS may be provided in up to 2 locations for each dwelling subject to min dimension	Complies	Yes	
	e. Ground level courtyards not permitted within front building setback area fronting local roads	Complies	Yes	
2.3.6.5 Sunlight Access	a. Minimum 3 hours/day unobstructed sunlight access provided to 50% of required principal POS area for all dwellings on 21 June between 9am and 3pm b. Dwelling orientated to allow optimum solar access for internal living areas c. Minimum 3 hours/day unobstructed sunlight access provided to 50% of required principal POS of adjoining land on 21 June between 9am and 3pm d. Developments of 2 or more storeys in height or greater shall provide shadow diagrams for the site and adjoining development at 9am, 12 noon and 3pm on 21 June	Shadow diagrams provided demonstrate the proposal complies with the required solar access to the living areas and private open space areas of the proposed dwellings.	Yes	Yes
2.2.8.1 Car Parking	<ul style="list-style-type: none"> <li>4 or more-bedroom dwellings – 2 spaces per dwelling</li> <li>At least one of the required resident spaces is to be enclosed in a garage.</li> </ul>	<ul style="list-style-type: none"> <li>Each dwelling has 4 bedrooms – 2 spaces are required per dwelling.</li> <li>The proposal requires 4 car spaces which are provided within the proposed basement garage.</li> </ul>	Yes	Yes
2.2.8.2.1 Access Design General Requirements	Access is to comply with relevant standards and councils' civil works specification.	Driveways and vehicular access comply with AS2890 subject to conditions.	Yes	Yes

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
2.2.8.2.2 Access Design Ground Level Parking	<ul style="list-style-type: none"> <li>Fully enclosed garages must not visually dominate any building elevation.</li> <li>Driveways must not be continuous straight lines and shall be offset by landscaped sections.</li> <li>A minimum pavement width of 3m is required.</li> <li>Driveways shall be offset from any side boundary by 2m at the front boundary and taper to 500mm side setback and to continue for the length of the driveway.</li> </ul>	<ul style="list-style-type: none"> <li>The garage appears as an integrated component of the overall design of the building given the steep topography of the development site.</li> </ul>	Yes	Yes
2.2.9.1 Earthworks	Excavation must not exceed a maximum depth measured from existing ground level of 1m if less than 1m from a boundary or 3m if greater than 1m	Excavation will be required for the proposed development, which has been minimised through revised designs. Retaining walls will be conditioned to be designed by a professional engineer.	Yes	Yes
2.2.9.2 Retaining Walls and Structural Support	No more than 600mm with 1m of boundary.	Retaining walls up to 5.5m in height proposed.	No – See comments below	Yes
2.2.10.1 Landscape Design - General	<ul style="list-style-type: none"> <li>Provide shades from trees or structures.</li> <li>Screen car parking and courtyards on ground level</li> <li>Use planting, fencing appropriate to the scale of the development.</li> <li>Visually soften development to the street</li> <li>Incorporate suitable deep soil zones.</li> <li>Visually soften hardstand areas for car parking, unit paving and shade tree planting.</li> <li>Incorporate native trees/shrubs.</li> <li>Retention of existing vegetation on site.</li> </ul>	<ul style="list-style-type: none"> <li>Landscape plan provided.</li> <li>Amendments to the proposal during assessment demonstrates compliance with the controls.</li> <li>The level of landscaping and fencing is considered satisfactory and appropriate to the scale of the development.</li> <li>The landscaping will soften the visual impact of the development to the street and provide garden areas consistent with existing dwellings.</li> </ul>	Yes	Yes

Development Control	Required	Proposed	Compliance with Control	Compliance with Objective
2.2.10.2 Street Trees	Provide street trees	Street trees x 2 shown on Landscape Plan proposed within the boundary of the property due to the limited space in the road reserve – condition also applied	Yes	Yes
2.2.10.3 Deep Soil	50% of required 'soft' landscaping to be deep soil.  282sqm of soft landscaping x 50% = 141sqm of deep soil.	The Landscape Plan indicates areas of soft landscaping which is all deep soil.	Yes	Yes
2.2.10.4 Fencing	<ul style="list-style-type: none"> <li>Retain/enhance amenity of public domain – use plantings to soften fencing.</li> <li>Decorative fencing max 1.2m height on front boundary</li> <li>Fencing visible from street shall be decorative, form part of architectural and landscaping design concept for the site.</li> <li>Fencing shown on the development application plans</li> </ul>	Fencing in the locality is generally not provided due to the steep hillside location. Fencing for the site will be a matter for the owners and neighbours to finalise post development construction, sympathetic to the topography of the site. Currently the site has natural rock retaining walls on the boundaries.	Yes	Yes
2.2.11.1 Services General	Provide adequate services to cater for future occupants	Adequate arrangements have been made for supply of services	Yes	Yes
2.2.11.2 Civil Works	Construction of kerb and guttering, associated street drainage and pavement construction in accordance with Councils Civil specifications.	Capable of compliance. Conditions applied.	Yes	Yes
2.3.11.3 Stormwater Management	Ensure land can be adequately drained and not contribute to drainage or flooding problems elsewhere.	Concept stormwater plans indicate the proposal is capable of compliance. Conditions applied.	Yes	Yes
2.2.11.4 Garbage & Waste Services	Waste management in accordance with Waste Control Guidelines	Architectural plans indicate garbage bin storage area within the basement for each dwelling and not visible to public places. Satisfactory access can be achieved to collection point in the street.	Yes	Yes



The relevant provisions and non-compliances with Chapter 2.2 of Central Coast DCP 2022 are discussed as on the following pages:

#### Clause 2.2.5 Building Setbacks – Front Setback

Clause 2.2.5.a requires a front setback to be an average distance of the nearest two dwelling houses having the same boundary to a primary road. The required setback is 8m.

The proposal has been amended from the originally lodged plans which provided a 3m front setback. The revised plans increased the front setback to 4.9m to the supporting columns, which is a 3.1m variation or 38%. The built form of the development is set back 8.1m to 8.3m from the front boundary which is consistent with the surrounding development.

#### Clause 2.2.6.1 Garage Prominence

Clause 2.2.6.1 requires the maximum width of the garages provided for the development to not exceed 60% of the width of the building if the lot has a width greater than 12m. The width of the proposed development lot is 16.765m by survey therefore the maximum width of the garages fronting the local road would be 10.059m. The proposed garages are measured at 5.2m each with a total of 10.4m which is a minor variation of 0.741m or 3%. The proposed garages have been set apart and separated by the building entry, which creates an integrated and varied building form, and the minor variation will be imperceivable to the street.

#### 2.2.9.2 Retaining Walls and Structural Support

Retaining walls are proposed within the site (up to 5.5m in height) those retaining walls above 600mm need to be designed and certified by a registered civil/structural engineer. Council development engineer has reviewed the proposed retaining wall design and provided conditions of consent requiring that any retaining walls greater than 600mm in height must be certified by a registered practising Civil or Structural engineer as being in accordance with Australian Standards.

### **Central Coast DCP 2022 – Chapter 2.13 – Transport and Parking**

The proposed development generates an off-street car parking requirement of 4 residential spaces which have been provided within the basement garage comprising double garages for each dwelling. The proposal is satisfactory in respect to Chapter 2.12 Transport and Parking.

### **Central Coast DCP 2022 – Chapter 2.14 – Site Waste Management**

A Waste Management Plan has been submitted with the proposal for demolition, construction works and ongoing management of waste. The proposal has demonstrated compliance with this chapter of the CCDCP 2022 and associated Waste Control Guidelines. Appropriate conditions are included in the development consent.

**Central Coast DCP 2022 – Chapter 2.17 – Character and Scenic Quality**

The proposed development is located within the Terrigal 2: Open Parkside Hillside character area identified in Chapter 2.17 with the *Central Coast Development Control Plan 2022*.

The desired character statement which provides:

*“These should remain low-density residential hillside where existing streetscape quality and amenity are enhanced substantially by further “greening” of gardens and street verges.*

*Minimise disturbance to natural slopes and any existing trees that are visually prominent. Retain existing ground levels along all boundaries, and on the steeper slopes, use low-impact construction such as suspended floors and decks rather than extensive cut-and-fill.*

*Avoid the appearance of a continuous wall of development along any street or hillside. Locate new buildings behind front setbacks that are similar to their surrounding properties. Provide at least one wide side setback or step the shape of front and rear facades, and plant clusters of trees and shrubs throughout each garden to screen buildings and driveways, as well as to provide shady backdrops to the roadway. Facing the street, emphasise a leafy garden character by gardens and street verges planted with taller trees that are indigenous plus hedges of shrubs, and avoid wide driveways, tall fences or multiple retaining walls.*

*On hillside that are scenically prominent, minimise the scale and bulk of buildings by stepping floor-levels to follow natural slopes and by using irregular floorplans to create well-articulated forms. For example, divide floorspace into linked pavilions that are capped by individual roofs and separated by courtyards. Front or rear facades that are taller than neighbouring dwellings should be screened by balconies, verandahs or extra setbacks. Roofs should be gently pitched to minimise the height of ridges and flanked by wide eaves to disguise the scale of exterior walls.*

*Minimise the scale of prominent facades by using extensive windows and verandahs plus a variety of materials and finishes rather than expanses of plain masonry. All dwellings should display a traditional “street address” with verandahs or decks, and living rooms or front doors that are visible from the roadway. Avoid wide garages that would visually-dominate any front façade or block views from a dwelling to the street. Locate and screen all balconies or decks to maintain the existing levels of privacy and amenity that are enjoyed by neighbouring dwellings.”*

The proposed basement level has been reduced from the originally lodged proposal to limit the amount of cut required for the proposed development, which now only includes garage parking, stairs and access to the higher levels to minimise the footprint of the development. The proposed development includes balconies, a mix of finishes, screens, landscaping and increased setbacks to create an integrated built form that maintains the existing levels of privacy and amenity of the surrounding properties and adjoining development and is considered to satisfactorily address the desired character of the area.

**Central Coast DCP 2022 – Chapter 3.1 – Floodplain Management/Water Cycle Management**

The proposal has been supported by Stormwater Engineering plans prepared by DRB Consulting Engineers, Revision G dated 29/05/2024 which have been reviewed by Councils Development Engineer, and subject to conditions addresses the requirements of the Chapter 3.1 Part C: Southern Area Water Cycle Management.

**Central Coast DCP 2022 – Chapter 3.5 – Tree and Vegetation Management**

The site is currently vacant land, and the proposal does not impact nor require removal of prominent trees. The proposal has adequately addressed this chapter of the CCDCP 2022.

**Central Coast DCP 2022 – Chapter 3.7 – Geotechnical Requirements**

The proposal has been supported by a Geotechnical report prepared by Ascent Geo dated 16 February 2024 which have been reviewed by Council Development Engineer, and subject to conditions addresses the requirement of the Chapter 3.7 Geotechnical requirements.

**Likely Impacts of the Development**

Section 4.15 (1)(b) of the *Environmental Planning and Assessment Act 1979* requires consideration of the likely impacts of the development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.

In this regard, potential impacts related to the proposal have been considered in response to SEPPs, LEP and DCP controls outlined above and summarised below:

***Built Environment, Context and Setting***

The subject site is zoned R2 Low Density Residential and is surrounded by a mix of one and two storey single dwellings in the steep hillside locality.

A thorough assessment of the impacts of the proposed development on the built environment has been undertaken in terms of CCLEP 2022 and CCDCP 2022 compliance. The proposal is generally consistent with the development controls for dual occupancy developments. The proposal generally complies with the development controls as discussed throughout the report and the proposal will not have any unreasonable impacts on the character or amenity of the area in terms of overshadowing, privacy, noise generating activities and views. The proposed built form is considered acceptable in the context of the site, subject to the recommended conditions of consent.

The proposal is consistent with the character of surrounding development. Adequate separation distance and adequate screening is provided to adjoining dwellings and therefore does not have detrimental impact on the privacy and amenity of dwellings on adjoining properties.

**Access and traffic**

The local road network is considered to have adequate capacity to cater for the proposed development and minimal increase in traffic generated by the proposal.

**Natural Environment**

The subject site does not contain any threatened species or habitat. The proposal is satisfactory in relation to impacts on the natural environment as identified throughout this report. There will be no significant impact upon the natural environment as a result of the proposal.

**Economic and Social Impacts**

The proposed development will contribute to the supply of housing needs in the locality and is satisfactory from an economic perspective. No unreasonable social impacts will arise from the approval of this residential development.

**Suitability of the Site for the Development**

Section 4.15 (1)(c) of the *Environmental Planning and Assessment Act 1979* requires consideration whether the site is suitable for the proposed development.

The site is zoned R2 Low Density Residential under CCLEP 2022 where dual occupancy developments are permissible in the zone.

There are no environmental hazards which would prevent development of the site. Existing utilities are available to the site and the site is located within walking distance of public bus services and near public recreation / community facilities.

The proposed use of the site is for a residential purpose. As such the site is considered suitable for this type of development subject to conditions of consent relating to civil works, stormwater/drainage works and the provision of landscaping.

There will be no significant impact upon the natural environment as a result of the proposal. There are no adjoining land uses which impact upon the development.

**Any Submission made in Accordance with the Act or Regulations**

Section 4.15 (1)(d) of the *Environmental Planning and Assessment Act 1979* requires consideration of any submissions received during notification of the proposal.

The application was formally advertised and notified in accordance with CCDCP 2022 Chapter 1.2 Notification of Development Proposals from 10<sup>th</sup> March 2023 to 24 March 2023. One (1) submission was received.

A summary of the submissions objecting to the proposal is detailed below.

Summary of Submissions	Response
Damage to the neighbouring property as a result of construction of the dwelling.	The applicant will be required to prepare a dilapidation report prepared by a suitably qualified person detailing the structural characteristics of all buildings located on properties immediately adjoining the site boundaries and any Council asset in the vicinity of the development to be submitted to the certifying authority in the event of any damage to neighbouring properties or Council assets.
Impact of the development on the Council Sewer main.  Location of sewer on the proposed lot seems to be incorrect and should be checked by Council.	The application has been reviewed by Councils Water and Sewer officer and minor amendments have been made to the stormwater plan to relocate the proposed stormwater pipes away from the sewer main. A standard condition of consent will be added that require the applicant to apply for a Section 305/307 certificate which will address building in the Proximity of Water & Sewer Pipelines Procedures.

### Submissions from Public Authorities

The application did not require referral to any public authority.

### Internal Consultation

Development Engineer	Supported subject to conditions.
Water and Sewer	Supported subject to conditions.

### Ecologically Sustainable Principles:

The proposal has been assessed having regard to ecologically sustainable development principles and is considered to be consistent with the principles.

The proposed development is considered to incorporate satisfactory stormwater, drainage and erosion control and the retention of vegetation where possible and is unlikely to have any significant adverse impacts on the environment and will not decrease environmental quality for future generations. The proposal does not result in the disturbance of any endangered flora or fauna habitats and is unlikely to significantly affect fluvial environments.

### Climate Change

The potential impacts of climate change on the proposed development have been considered by Council as part of the assessment of the application.

This assessment has included consideration of such matters as potential rise in sea level; potential for more intense and/or frequent extreme weather conditions including storm events, bushfires, drought, flood and coastal erosion; as well as how the proposed

development may cope, combat, withstand these potential impacts. The proposed development is considered satisfactory in relation to climate change.

### **The Public Interest**

Approval of the proposed development is in the public interest for the following reasons:

- The proposed development has been prepared having regard to the aims and objectives of relevant state and local environmental planning instruments and generally complies.
- Subject to various mitigation measures recommended by consultants and Council's technical officers, the proposal is deemed to have no negative environmental, social or economic impacts to surrounding residential dwellings or the public domain.
- The proposed development will result in a quality residential development.
- The proposed development is designed and sighted to make a positive contribution to the streetscape.
- The proposed development remains sympathetic to the existing character of the surrounding neighbourhood and respects and maintains privacy to and from neighbouring properties.

### **Political Donations**

During assessment of the application there were no political donations were declared by the applicant, applicant's consultant, owner, objectors and/or residents.

### **Other Matters for Consideration**

#### ***Section 7.11 Contributions***

The subject site is located within Terrigal - Local Open Space, Pedestrian Footpaths, Town Centre Improvements, Cycleways, Stormwater and Flood Mitigation - Contributions Plan No. 47A - Section 7.11 Development Contribution Plan where Dual Occupancy developments are subject to section 7.11 contributions. The applicable contribution amount was calculated and imposed as a standard condition of consent requiring the contribution to be paid prior to the issue of any Construction Certificate.



## Conclusion


















This application has been assessed under the heads of consideration of Section 4.15 of the *Environmental Planning and Assessment Act 1979* and all relevant instruments and policies. Following a thorough assessment of the relevant planning controls and the key issues identified in this report which have been resolved satisfactorily through amendments to the proposal, it is considered that the application can be supported, noting that:

- The Panel can be satisfied that the proposed development is considered satisfactory having regard for the matters for consideration provided in Section 4.15 of the *Environmental Planning and Assessment Act 1979*.
- The Panel is satisfied that the development is consistent with section 4.14(1) of the EP&A 1979 and the application meets the requirements of Planning for Bushfire Protection 2019, subject to compliance with the Bushfire Assessment Report submitted with the application.
- The Panel can be satisfied that the provisions of the following State Environmental Planning Policies have been considered and satisfied:
  - i) *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*
  - ii) Chapter 4, section 4.6(4) of the *State Environmental Planning Policy (Resilience and Hazards) 2021*
- Assessment of the application has concluded the proposed development is permitted within the current R2 – Low Density Residential zone under the provisions of the Central Coast Local Environmental Plan 2022 and meets the objectives for the zone.
- Assessment of the application has concluded the proposed development meets the objectives related to the building height development standard contained in Central Coast Local Environmental Plan 2022.
- Assessment of the application has concluded the requirements of clauses 4.6 (3) and (4) of Central Coast Local Environmental Plan 2022 have been satisfied and that variation to the maximum building height provisions of the Central Coast Local Environmental Plan 2022 is warranted.
- The Panel is satisfied that the provisions of clause 4.6(4) have been met and has concluded that:
  - a. The applicant's written request for a variation to development standards (height) adequately addresses the matters required to be addressed under clause 4.6(3) of the Central Coast Local Environmental Plan 2022.
  - b. The development is in the public interest because it is consistent with the objectives for development in the zone.
  - c. The concurrence of the Secretary can be assumed.

- The Panel is satisfied that the proposed development is consistent with the zone objectives as set out in the Central Coast Local Environmental Plan 2022.
- The Panel can be satisfied that the provisions of clause 7.1 Acid Sulfate Soils and 7.6 Essential Services of *Central Coast Local Environmental Plan 2022* have been considered and satisfied.
- The Panel can be satisfied that the relevant provisions of the environmental planning instruments, plans and policies that apply to the development have been considered in the assessment of the application.
- Subject to the imposition of appropriate conditions, the proposed development is not expected to have any adverse social or economic impact.

Accordingly, the application is recommended for approval pursuant to Section 4.16 of the *Environmental Planning and Assessment Act 1979*, subject to conditions.

## Attachments

<a href="#"></a> <a href="#"></a> 1	Draft conditions/reasons - 120 Riviera Avenue, TERRIGAL NSW 2260 - DA/4110/2022 - Central Coast Council		D16233197
<a href="#"></a> <a href="#"></a> 2	PUBLIC - Statement of Environmental Effects - PAN-289969 - DA/4110/2022 - 120 Riviera Avenue, TERRIGAL NSW 2260 - Dual occupancy		D15469385
<a href="#"></a> <a href="#"></a> 3	PUBLIC Redacted Clause 4.6 Variation Report (Request to Vary Development Standard) - 120 Riviera Avenue, TERRIGAL DA/4110/2022		D16039797
<a href="#"></a> 4	Architectural Plans - Revision C - 120 Riviera Avenue, TERRIGAL DA/4110/2022	Provided Under Separate Cover	D16234390
<a href="#"></a> <a href="#"></a> 5	PUBLIC - Notification Plans - Revision C - 120 Riviera Avenue, TERRIGAL - PAN-289969 - DA/4110/2022		D16234431
<a href="#"></a> <a href="#"></a> 6	PUBLIC Stormwater Engineering Plans - 120 Riviera Avenue TERRIGAL - DA/4110/2022		D16231859
<a href="#"></a> <a href="#"></a> 7	PUBLIC - Revised Geotechnical Report - 120 Riviera Avenue - TERRIGAL - PAN-289969 - DA/4110/2022		D16085558
<a href="#"></a> <a href="#"></a> 8	Revised Structural Engineering Plans - 120 Riviera Avenue TERRIGAL - DA/4110/2022		D16177930
<a href="#"></a> <a href="#"></a> 9	PUBLIC AMENDED - BASIX - Dual Occupancy Dwelling 1 - 120 Riviera Avenue TERRIGAL - DA/4110/2022		D15514197
<a href="#"></a> <a href="#"></a> 10	PUBLIC AMENDED - BASIX - Dual Occupancy Dwelling 2 - 120 Riviera Avenue TERRIGAL - DA/4110/2022		D15514193
<a href="#"></a> <a href="#"></a> 11	PUBLIC Bushfire report - 120 Riviera Avenue, TERRIGAL - DA/4110/2022		D15490271
<a href="#"></a> <a href="#"></a> 12	PUBLIC - Survey - PAN-289969 - DA/4110/2022 - 120 Riviera Avenue, TERRIGAL NSW 2260 - Dual occupancy		D15469384

**Date:** 4 June 2024  
**Responsible Officer:** Amy Magurren  
**Location:** 120 Riviera Avenue, TERRIGAL NSW 2260  
Lot 8 DP 248806  
**Owner:** Always Forward Pty Ltd  
**Applicant:** M Brown  
**Date of Application:** 7 December 2022  
**Application No:** DA/4110/2022  
**Proposed Development:** Attached Dual Occupancy  
**Land Area:** 1128.00  
**Existing Use:** Vacant Land

#### PROPOSED CONDITIONS

The development taking place in accordance with the approved development plans reference number DA/4110/2022 except as modified by any conditions of this consent, and any amendments in red.

#### 1.PARAMETERS OF THIS CONSENT

##### Approved Plans and Supporting Documentation

- 1.1 Development must be carried out in accordance with the following approved plans and supporting documentation (stamped by Council), except where the conditions of this consent expressly require otherwise.

##### Architectural Plans by Sorensen Design and Planning

Plan Title	Revision	Dated
Survey	C	31/05/2024
Site Plan Proposed	C	31/05/2024
Landscape Plan	C	31/05/2024
Ground Floor Plan	C	31/05/2024
Level 1 Plan	C	31/05/2024
Level 2 Plan	C	31/05/2024
North Elevation	C	31/05/2024
East Elevation	C	31/05/2024
South and West Elevation	C	31/05/2024
Section A-A	C	31/05/2024
3D Shadow Diagrams	C	31/05/2024
Shadow Diagram 9:00am	C	31/05/2024
Shadow Diagram 12:00 Noon	C	31/05/2024
Shadow Diagram 3:00pm	C	31/05/2024
Schedules	C	31/05/2024

Details	C	31/05/2024
Basix Dual Occupancy Dwelling 1	C	31/05/2024
Basix Dual Occupancy Dwelling 2	C	31/05/2024
3D View	C	31/05/2024

#### Stormwater Plans by DRB Consulting Engineers

Plan No.	Plan Title	Revision	Dated
CIV-001	Cover page, Drawing list and Locality Plan	G	29/05/2024
CIV-011	Civil Works Plan	C	31/05/2024
CIV-021	Civil Details & Calculations – Sheet 1	G	29/05/2024
CIV-022	Civil Details & Calculations – Sheet 2	G	29/05/2024
CIV-023	Driveway Long Sections	G	29/05/2024

#### Structural Plans by Omega Project Services

Sheet No.	Plan Title	Revision	Dated
1 of 15	General Notes	2	30/04/2024
2 of 15	General Notes – 2	2	30/04/2024
3 of 15	General Notes – 3	2	30/04/2024
4 of 15	Standard Details – 1	2	30/04/2024
5 of 15	Standard Details – 2	2	30/04/2024
6 of 15	Foundation Layout Plan	2	30/04/2024
7 of 15	Sewer Layout Plan	2	30/04/2024
8 of 15	Foundation Details	2	30/04/2024
9 of 15	First Floor Framing / Foundation Plan	2	30/04/2024
10 of 15	2 <sup>nd</sup> Floor Framing / Foundation Plan	2	30/04/2024
11 of 15	2 <sup>nd</sup> Floor /Foundation & Column Fixing Detail	2	30/04/2024
12 of 15	Roof Framing Plan	2	30/04/2024
13 of 15	Wall Bracing Plan – 2 <sup>nd</sup> Floor	2	30/04/2024
14 of 15	Typ. Connection Details	2	30/04/2024
15 of 15	Lintel and Wall Framing Schedule	2	30/04/2024

#### Supporting Documents

Document Title	Prepared by	Dated
BASIX Certificate No 1355371S_03	Sorensen Design	12/01/2023
BASIX Certificate No 1355379S	Sorensen Design	16/11/2022
Bushfire Assessment Report (BAR)	Perception Planning Pty Ltd	30/08/2022
Geotechnical Report	Ascent GEO	16/02/2024

In the event of any inconsistency between the approved plans and the supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a condition of this consent, the condition prevails.

**Note:** an inconsistency occurs between an approved plan and supporting documentation or between an approved plan and a condition when it is not possible to comply with both at the relevant time.

- 1.1. Carry out all building works in accordance with the National Construction Code Series, Building Code of Australia, Volume 1 and 2 as appropriate.
- 1.2. Comply with all commitments listed in the BASIX Certificate for each unit of the development as required under Clause 97A of the *Environmental Planning and Assessment Regulation 2000*.

## 2. PRIOR TO ISSUE OF ANY CONSTRUCTION CERTIFICATE

- 2.1. All conditions under this section must be met prior to the issue of any Construction Certificate.
- 2.2. No activity is to be carried out on-site until the Construction Certificate has been issued, other than:
  - a) Site investigation for the preparation of the construction, and / or
  - b) Implementation of environmental protection measures, such as erosion control and the like that are required by this consent
  - c) Demolition.
- 2.3. Submit an application to Council under section 305 of the Water Management Act 2000 for a section 306 Requirements Letter. The Application form can be found on Council's website [centralcoast.nsw.gov.au](http://centralcoast.nsw.gov.au). Early application is recommended.

The section 305 application will result in a section 306 letter of requirements which must be obtained prior to the issue of any Construction Certificate. The requirements letter will outline which requirements must be met prior to each development milestone e.g. prior to construction certificate, subdivision works certificate, occupation certificate and/or subdivision certificate.

- 2.4. Obtain a Roads Act Works Approval by submitting an application to Council for a Section 138 Roads Act Works Approval for all works required within the road reserve. The application is to be lodged using an *Application for Subdivision Works Certificate or Construction Certificate, Roads Act Works Approval and other Development related Civil Works* form.

The application is to be accompanied by detailed design drawings, reports and other documentation prepared by a suitably experienced qualified professional in accordance with Council's *Civil Works Specifications*.



Fees, in accordance with Council's Fees and Charges, will be invoiced to the applicant following lodgement of the application. Fees must be paid prior to Council commencing assessment of the application.

Design drawings, reports and documentation will be required to address the following works within the road reserve:

- a) Construction of the road verge/footway formation graded at +5% from the top of existing kerb to the property boundary, across the full frontage of the site in Riviera Avenue. Construction to include transitions to existing formation either side of the site.
- b) Construction of a two residential vehicle access crossing that has a width of minimum 3 metres at the property boundary including construction of a gutter crossing and road pavement adjacent to the gutter crossing.
- c) Removal of all redundant vehicle gutter crossings / laybacks and replacement with kerb.
- d) Introduce the new Kerb pit Relocation of the Kerb lintel in Riviera Avenue.  
**NOTE:** This kerb pit works need to complete prior to starting the building works and need to be in accordance with Sec138 approval plans.
- e) Construction of any works required to transition new works into existing infrastructure and the surrounding land formation.
- f) erosion and sedimentation control plan

The section 138 Roads Act Works Approval must be issued by Council and all conditions of that approval must be addressed prior to occupying and commencing any works in the road reserve.

- 2.5. Submit to the Registered Certifier responsible for issuing the construction certificate for works within the development site detailed design drawings and design reports for the following engineering works:
  - a) Construction of driveways, ramps and car parking areas in accordance with the requirements of the current edition Australian Standard AS/NZS 2890: Parking Facilities and other applicable Australian Standards.  
**NOTE:** No obstructions including mailboxes, fencing, gates, and gate supports are to be located within the required 2m x 2.5m unobstructed sight distance to pedestrian splays to be provided in accordance with Section 3.2.4 and Fig 3.3 of AS/NZS2890.1:2004
  - b) Construction of nutrient and pollution control measures. Design in accordance with Central Coast DCP 2022 Chapter 3.1 Water Cycle Management. A nutrient and pollution control report including an operation and maintenance plan must accompany the design. The nutrient/pollution control measures shall be generally in accordance with the "Civil works plan " prepared by DRB consulting Engineers (Ref 221870 and Drawing No CIV-011, 021, 022,023, All revision G dated 29.05.2024).
  - c) Construction of on-site stormwater retention measures. Design in accordance with Chapter Central Coast DCP 2022 Chapter 3.1 Water Cycle Management. A report

detailing the method of stormwater harvesting, sizing of retention tanks for re-use on the site and an operation and maintenance plan must accompany the design. The stormwater retention measures shall be generally in accordance with the "Civil works plan" prepared by DRB consulting Engineers (Ref 221870 and Drawing No CIV-011, 021, 022,023, All revision G dated 29.05.2024).

- d) Construction of stormwater drainage collection and piping of all stormwater runoff from areas within the site to the approved connection to Council's storm water drainage system located in Riviera Avenue The drainage shall be generally in accordance with the "Civil works plan" prepared by DRB consulting Engineers (Ref 221870 and Drawing No CIV-011, 021, 022,023, All revision G dated 29.05.2024).
- e) Construction of retaining walls where indicated on development approval documentation. Retaining wall design must not conflict with existing or proposed services or utilities. Retaining walls designs for wall greater than 600mm in height must be certified by a registered practising Civil or Structural engineer as being in accordance with Australian Standards.

Detailed design drawings and design reports acceptable to the Registered Certifier must be included in the Construction Certificate documentation.

- 2.6. Assessment of the development against the provisions of Planning for Bush Fire Protection (2019) (NSW) has determined a Bush Fire Attack level (BAL) of BAL-19 to the Eastern, Southern and Western elevations and BAL-12.5 to the Northern elevation of the dual occupancy.

Submit to the Registered Certifier for approval construction details showing that the development complies with this Bush Fire Attack Level (BAL) as prescribed by Australian Standard AS 3959-2018: *Construction of buildings in bush fire prone areas and (where applicable) the additional measures contained within section 7.5.2 – 'NSW State variations to AS3959' of Planning for Bush Fire Protection (2019) (NSW).*

- 2.7. Pursuant to Section 7.11 of the *Environmental Planning and Assessment Act 1979*, pay to Council a total contribution amount of **\$20,206.40**, that may require adjustment at the time of payment, in accordance with the relevant Council Contribution Plans No. 47A - Terrigal.

Open Space - Embellishment	A	(Key No 804)	\$331.00
Footpaths - Capital	A	(Key No 805)	\$860.35
Town Centre / Foreshore Improvements	A	(Key No 835)	\$11,366.60
Stormwater & Flood Mitigation	A	(Key No 836)	\$7,648.45
TOTAL AMOUNT			<b>\$20,206.40</b>

The total amount must be indexed each quarter in accordance with the Consumer Price Index (All Groups Index) for Sydney issued by the Australian Statistician as outlined in the contributions plan.

Contact Council's Contributions Planner on (02) 4306 7900 for an up-to-date contribution payment amount.

Any Construction Certificate must not be issued until the developer has provided the Certifier with a copy of a receipt issued by Council that verifies that the contributions have been paid. A copy of this receipt must accompany the documents submitted by the certifying authority to Council under Clause 104/160(2) of the *Environmental Planning and Assessment Regulation 2000*.

A copy of the Contribution Plan may be inspected at the office of Central Coast Council, 2 Hely Street Wyong or on Council's website: [Development Contributions - former Gosford LGA](#).

### 3. PRIOR TO ISSUE OF ANY SUBDIVISION WORKS CERTIFICATE

- 3.1. All conditions under this section must be met prior to the issue of any Subdivision Works Certificate.

No Conditions

### 4. PRIOR TO COMMENCEMENT OF ANY WORKS

- 4.1. All conditions under this section must be met prior to the commencement of any works.
- 4.2. Appoint a Principal Certifier for the building work:
- a) The Principal Certifier (if not Council) is to notify Council of their appointment and notify the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work no later than two (2) days before the building work commences.
  - b) Submit to Council a Notice of Commencement of Building Work form giving at least two (2) days' notice of the intention to commence building work. The forms can be found on Council's website: [www.centralcoast.nsw.gov.au](http://www.centralcoast.nsw.gov.au)
- 4.3. Erect a sign in a prominent position on any work site on which building, subdivision or demolition work is being carried out. The sign must indicate:
- a) The name, address and telephone number of the Principal Certifier for the work; and
  - b) The name of the principal contractor and a telephone number at which that person can be contacted outside of working hours; and
  - c) That unauthorised entry to the work site is prohibited.
  - d) Remove the sign when the work has been completed.

- 4.4. Submit both a Plumbing and Drainage Inspection Application, with the relevant fee, and a Plumbing and Drainage Notice of Work in accordance with the *Plumbing and Drainage Act 2011* (to be provided by licensed plumber). These documents can be found on Council's website at: [www.centralcoast.nsw.gov.au](http://www.centralcoast.nsw.gov.au)

Contact Council prior to submitting these forms to confirm the relevant fees.

This condition only applies if installation / alteration of plumbing and / or drainage works are proposed (excludes stormwater drainage). This condition does not apply to swimming pool plumbing that does not physically connect / break into the sewer system.

- 4.5. Prepare a Construction Traffic and Pedestrian Management Plan (CTPMP) for all activities related to works within the site. The plan must be prepared and implemented only by persons with Roads and Maritime Service accreditation for preparing and implementing traffic management plans at work sites.

The CTPMP must describe the proposed construction works, the traffic impacts on the local area and how these impacts will be addressed.

The CTPMP must address, but not be limited to, the following matters:

- Ingress and egress of construction related vehicles to the development site.
- Details of the various vehicle lengths that will be used during construction and the frequency of these movement.
- Use of swept path diagrams to demonstrate how heavy vehicles enter, circulate and exit the site or Works Zone in a forward direction.
- Deliveries to the site, including loading / unloading materials and requirements for work zones along the road frontage to the development site. A Plan is to be included that shows where vehicles stand to load and unload, where construction plant will stand, location of storage areas for equipment, materials and waste, locations of Work Zones (if required) and location of cranes (if required).
- Works Zones if heavy vehicles cannot enter or exit the site in a forward direction.
- Control of pedestrian and vehicular traffic where pre-construction routes are affected.
- Temporary Road Closures.

Where the plan identifies that the travel paths of pedestrians and vehicular traffic are proposed to be interrupted or diverted for any construction activity related to works inside the development site an application must be made to Council for a Road Occupancy Licence. Implementation of traffic management plans that address interruption or diversion of pedestrian and/or vehicular traffic must only take place following receipt of a Road Occupancy Licence from Council or the Roads and Maritime Service where on a classified road.

Where a dedicated delivery vehicle loading and unloading zone is required along the road frontage of the development site a Works Zone Application must be lodged and

approved by Council. A minimum of 3 months is required to allow Traffic Committee endorsement and Council approval.

The Construction Traffic and Pedestrian Management Plan must be reviewed and updated during construction of the development to address any changing site conditions.

A copy of the Construction Traffic and Pedestrian Management Plan must be held on site at all times and be made available to Council upon request.

- 4.6. Install run-off and erosion controls to prevent soil erosion, water pollution or the discharge of loose sediment on the surrounding land by:
- erecting a silt fence and providing any other necessary sediment control measures that will prevent debris escaping into drainage systems, waterways or adjoining properties, and
  - diverting uncontaminated run-off around cleared or disturbed areas, and
  - preventing the tracking of sediment by vehicles onto roads, and
  - stockpiling top soil, excavated materials, construction and landscaping supplies and debris within the lot.
- 4.7. Notify the intention to commence works by giving written notice to the owner of the adjoining property affected by the proposed excavation and/or structural protective works. The required notice must be accompanied by details of the proposed work at least seven (7) days prior to the commencement of proposed excavation and/or structural protection works.
- 4.8. Erect a temporary hoarding or temporary construction site fence between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works, if the works:
- a) could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic, or
  - b) could cause damage to adjoining lands by falling objects, or
  - c) involve the enclosure of a public place or part of a public place.

**Note 1:** A structure on public land or on or over a public road requires the prior approval of the relevant authority under the *Local Government Act 1993* or the *Roads Act 1993*, respectively.

**Note 2:** The *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2011* contain provisions relating to scaffolds, hoardings and other temporary structures.

- 4.9. Provide or make available toilet facilities at the work site before works begin and maintain the facilities until the works are completed at a ratio of one toilet plus one additional toilet for every twenty (20) persons employed at the site.

Each toilet must:

- a) be a standard flushing toilet connected to a public sewer, or
- b) have an on-site effluent disposal system approved under the Local Government Act 1993, or
- c) be a temporary chemical closet approved under the Local Government Act 1993.

## 5.DURING WORKS

- 5.1. All conditions under this section must be met during works.
- 5.2. The principal certifier must ensure that building work, demolition or vegetation removal is only carried out between:

7.00 am and 5.00 pm on Monday to Saturday.

The principal certifier must ensure building work, demolition or vegetation removal is not carried out on Sundays and public holidays, except where there is an emergency.

Unless otherwise approved within a construction site management plan, construction vehicles, machinery, goods or materials must not be delivered to the site outside the approved hours of site works.

Note: Any variation to the hours of work requires Council's approval.

- 5.3. While demolition or building work is being carried out, all such works must cease immediately if a relic or Aboriginal object is unexpectedly discovered. The applicant must notify the Heritage Council of NSW in respect of a relic and notify the Secretary of the Department of Planning, Industry and Environment and the Heritage Council of NSW in respect of an Aboriginal object. Building work may recommence at a time confirmed by either the Heritage Council of NSW or the Secretary of the Department of Planning, Industry and Environment.

In this condition:

"relic" means any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance; and

"Aboriginal object" means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that



comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains. To ensure the protection of objects of potential significance.

- 5.4. Implement and maintain all erosion and sediment control measures at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.
- 5.5. Keep a copy of the stamped approved plans on-site for the duration of site works and make the plans available upon request to either the Principal Certifier or an officer of Council.
- 5.6. Notify Council when plumbing and drainage work will be ready for inspection(s) and make the work accessible for inspection in accordance with the *Plumbing and Drainage Act 2011*.

This condition only applies if installation / alteration of plumbing and / or drainage works are proposed (excludes stormwater drainage).

- 5.7. Place all building materials, plant and equipment on the site of the development during the construction phase of the development so as to ensure that pedestrian and vehicular access within adjoining public roads, footpaths and reserve areas, is not restricted and to prevent damage to public infrastructure. Further, no construction work is permitted to be carried out within the road reserve unless the works are associated with a separate approval issued under the provisions of the *Roads Act 1993*.
- 5.8. Arrange with the relevant service provider / Authority (eg. Ausgrid, Jemena, NBN or other communications provider) for the supply of services concurrently with the engineering works required by this consent. Arrangements must include, where required, any relocation of existing mains and services, and dedication of easements for mains and services.
- 5.9. Erect or install prior to the swimming pool being filled with water all the required swimming pool safety barriers and gates in accordance with the approved plans and specifications and the provisions of the *Swimming Pools Act 1992*, *Swimming Pools Regulation 2018* and Australian Standard AS 1926.1-2012 including the display of an approved sign regarding pool safety and resuscitation techniques that contains all of the following information:
  - "YOUNG CHILDREN SHOULD BE SUPERVISED WHEN USING THIS SWIMMING POOL"
  - "POOL GATES MUST BE KEPT CLOSED AT ALL TIMES"
  - "KEEP ARTICLES, OBJECTS AND STRUCTURES AT LEAST 900mm CLEAR OF THE POOL FENCE AT ALL TIMES"

- A simple flow sequence (which may be the flow sequence depicted in the Cardiopulmonary Resuscitation Guideline) containing details of resuscitation techniques (for infants, children and adults).

5.10. Do not fill the swimming pool with water until the common boundary fence forming part of the pool enclosure has been installed with a minimum height of 1.8 metres when measured inside the pool enclosure in accordance with the provisions of Australian Standard AS 1926.1 2012. The maintenance and effectiveness of the fence is the responsibility of the pool owner whilst ever the pool exists.

Alternatively, the pool must be fully enclosed by swimming pool safety fencing complying with the provisions of Australian Standard AS 1926.1-2012 in lieu of any boundary fencing.

- 5.11. Dispose filter backwash and overflow to the sewer. The sewer connection must be completed prior to the filling of the pool with water and in a manner that will not cause a nuisance, or where sewer is not available, the disposal of filter backwash must be discharged into a rubble absorption trench to the satisfaction of the Principal Certifier.
- 5.12. Cease all excavation works if acid sulfate soils are identified until such time as details of mitigation and treatment measures are submitted to, and approved by, the Principal Certifier.
- 5.13. Connect downpipes and the associated stormwater disposal system to the site stormwater connection point immediately after the roof materials are positioned in order to prevent erosion of the site from roof water run-off. The Principal Certifier for the development must not issue a mandatory critical stage Compliance Certificate for framing unless connection of the site stormwater (or temporary system) has occurred.
- 5.14. Re-use, recycle or dispose of all building materials in accordance with the Waste Management Plan prepared by Perception Planning dated 15 February 2023, submitted to support the application.
- 5.15. Implement all recommendations of the Geotechnical Report prepared by Ascent Geo Geotechnical Consulting, Ref AG24034 dated 16 February 2024, listed as supporting documentation in this development consent. Furthermore, the geotechnical engineer must provide written certification to the Principal Certifier that all works have been carried out in accordance with the recommendations contained within the geotechnical report(s).

#### **6. PRIOR TO ISSUE OF ANY OCCUPATION CERTIFICATE**

- 6.1. All conditions under this section must be met prior to the issue of any Occupation Certificate.

- 6.2. Obtain the Section 307 Certificate of Compliance under the *Water Management Act 2000* for water and sewer requirements for the development from Central Coast Council as the Water Supply Authority, prior to issue of the Occupation Certificate.
- 6.3. Complete construction of the stormwater management system in accordance with the Stormwater Management Plan and Australian Standard AS 3500.3-*Stormwater drainage systems*. Certification of the construction by a suitably qualified consultant must be provided to the Principal Certifier.
- 6.4. Complete construction of all works within the road reserve in accordance with the Roads Act Works Approval. Completion of works includes the submission and acceptance by Council of all work as executed drawings plus other construction compliance documentation and payment of a maintenance/defects bond to Council in accordance with Council's Fees and Charges.
- 6.5. Repair any damage to Council's infrastructure and road reserve as agreed with Council. Damage not shown in the dilapidation report submitted to Council before the development works had commenced will be assumed to have been caused by the development works unless the Developer can prove otherwise.
- 6.6. Complete the civil engineering works within the development site in accordance with the detailed design drawings and design reports plans within the construction certificate.
- 6.7. Complete the landscaping works in accordance with the Landscape Plan prepared by Sorenson Design and Planning, Revision C dated 31/05/2024 submitted to support the application.
- 6.8. Provide mail receptacles appropriately numbered for each dwelling unit in the development, in accordance with the requirements of Australia Post.
- 6.9. Complete the building in accordance with the relevant provisions and requirements of the National Construction Code Series.
- 6.10. Complete the building in accordance with the provisions of *Planning for Bush Fire Protection 2006 (NSW)* and the requirements of Australian Standard AS 3959-2009 - *Construction of Buildings in Bush Fire Prone Areas* and additional measures as contained within Appendix 3 of the *Planning for Bush Fire Protection Guidelines 2010*, for a Bush Fire Attack Level of BAL-19 to the Eastern, Southern and Western elevations and BAL-12.5 to the Northern elevation of the dual occupancy.
- 6.11. Install a rainwater tank with a minimum capacity of **2000L for Unit 1 and 7000L for Unit 2** as detailed within the BASIX Certificates applicable to the development.

The tank should be fitted with suitable plumbing connections to collect rainwater from the roof area as detailed within the approved development plans with suitable plumbing connections provided to collect rainwater from the roof area as detailed

within the BASIX Certificate applicable to the development for each unit. The required rainwater tank is to be installed in accordance with the requirements of the National Plumbing and Drainage Code Australian Standard AS 3500 and must be provided with first flow diversion devices fixed to all inflows and a functioning pressure pump plumbed to service all fixtures as detailed within the BASIX Certificate applicable to the development. The required tank must be controlled in order that supplemental flow from domestic mains does not take place until the capacity of the tank has been reduced to 20%. All overflow must be connected via piped drainage line to street kerb outlet / allotment drainage line / infiltration trench.

**Note:** Infiltration trenches are to be designed by a practicing engineer experienced in hydraulics. The design details are to cater for a 1 in 20 year AEP storm event and are to allow for a minimum setback of three (3) metres from any sewer main and lot boundaries.

#### 7. PRIOR TO ISSUE OF ANY SUBDIVISION CERTIFICATE

- 7.1. All conditions under this section must be met prior to the issue of any Subdivision Certificate.

No Conditions

#### 8. PRIOR TO OCCUPATION OF THE MANUFACTURED HOME

- 8.1. All conditions under this section must be met prior to Occupation of the Manufactured Home.

No Conditions

#### 9. ONGOING

- 9.1. Insulate and / or isolate the motor, filter, pump and all sound producing equipment or fitting associated with or forming part of the pool filtering system so as not to create an offensive noise to the occupants of the adjoining premises as defined in the *Protection of the Environment Operations Act 1997*.
- 9.2. Ensure the garbage / recycling bins do not encroach on the car parking or vehicle manoeuvring areas.
- 9.3. Maintain all works associated with the approved Landscape Plans for a period of twelve (12) months from the date of the issue of any Occupation Certificate to ensure the survival and establishment of the landscaping.

## 10. PENALTIES

Failure to comply with this development consent and any condition of this consent may be a **criminal offence**. Failure to comply with other environmental laws may also be a **criminal offence**.

Where there is any breach Council may without any further warning:

- Issue Penalty Infringement Notices (On-the-spot fines);
- Issue notices and orders;
- Prosecute any person breaching this consent, and/or
- Seek injunctions/orders before the courts to retain and remedy any breach.

### Warnings as to Potential Maximum Penalties

Maximum Penalties under NSW Environmental Laws include fines up to \$1.1 Million and/or custodial sentences for serious offences.

## ADVISORY NOTES

- Discharge of sediment from a site may be determined to be a pollution event under provisions of the *Protection of the Environment Operations Act 1997*. Enforcement action may commence where sediment movement produces a pollution event.
- The following public authorities may have separate requirements in the following aspects:
  - a) Australia Post for the positioning and dimensions of mail boxes in new commercial and residential developments
  - b) Jemena Asset Management for any change or alteration to the gas line infrastructure
  - c) Ausgrid for any change or alteration to electricity infrastructure or encroachment within transmission line easements
  - d) Telstra, Optus or other telecommunication carriers for access to their telecommunications infrastructure
  - e) Central Coast Council in respect to the location of water, sewerage and drainage services.
- Carry out all work under this Consent in accordance with SafeWork NSW requirements including the *Workplace Health and Safety Act 2011 No 10* and subordinate regulations, codes of practice and guidelines that control and regulate the development industry
- Dial Before You Dig  
Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at [www.1100.com.au](http://www.1100.com.au) or telephone on 1100 before excavating or erecting structures. (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new

development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial Before You Dig service in advance of any construction or planning activities.

- Telecommunications Act 1997 (Commonwealth)  
Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the *Criminal Code Act 1995 (Cth)* and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact: Telstra's Network Integrity Team on phone number 1800 810 443.
- Install and maintain backflow prevention device(s) in accordance with Council's WS4.0 Backflow Prevention Containment Policy. This policy can be found on Council's website:  
[www.centralcoast.nsw.gov.au](http://www.centralcoast.nsw.gov.au)

This condition only applies if installation / alteration of plumbing and / or drainage works are proposed (excludes stormwater drainage)

The staff responsible for the preparation of the report, recommendation or advice to any person with delegated authority to deal with the application have no pecuniary interest to disclose in respect of the application.

Amy Magurren  
Reporting Officer

Ailsa Prendergast  
Reviewing Officer

The staff authorised to determine the application have no pecuniary interest to disclose in respect of the application. The report is endorsed and the recommendation contained therein.

Approved  
Date: 04/06/2024





# **STATEMENT OF ENVIRONMENTAL EFFECTS**

## **CONSTRUCTION OF AN ATTACHED DUAL OCCUPANCY**

**120 RIVIERA AVENUE, TERRIGAL, NSW, 2260  
(LOT 8, DP 248806)**

Cara Stoltenberg Senior Planner PO BOX 107 CLARENCE TOWN, NSW, 2321	<b>Phone:</b> 0418 164 129 <b>Email:</b> <a href="mailto:cara@perceptionplanning.com.au">cara@perceptionplanning.com.au</a>
<b>PP Reference</b>	J002906
<b>Prepared for</b>	Scott Sharman

Document Versions and Control				
Statement of Environmental Effects, 120 Riviera Avenue, Terrigal, 2260				
No:	Date:	PP Ref:	Author:	Reviewed by:
Version 1	14/08/22	SEE_120 Riviera Avenue_Terrigal_DRAFT	CS	CS
Version 2	1/2/22	SEE_120 Riviera Avenue_Terrigal_V1	CS	Client
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## EXECUTIVE SUMMARY

Perception Planning Pty Ltd has been engaged by Scott Sharman (**‘the client’**) to prepare a Statement of Environmental Effects (SEE) for the proposed construction of a Dual Occupancy (attached) Development at 120 Riviera Avenue, Terrigal, NSW, 2260 (LOT 8 DP 248806) (**‘the site’**).

The site is subject to a land use zone of R2 Low Density Residential. The proposed dual occupancy development is permissible with consent within the land use zone and the proposal is identified to meet the objectives of the zone. The proposed development comprises the following elements:

Construction of two (2) new two (2) storey dwellings consisting of:

- Two (2) car garage;
- Open plan kitchen, dining and living;
- Three (3) bathrooms and laundry;
- Four (4) bedrooms; and
- Balconies.

The development is considered to be in the public interest as it:

- Is a permissible form of development, and
- Is consistent with the applicable environmental planning instruments.

The key reasons why the proposed development is appropriate are as follows;

- The proposed development is permissible on the site with consent;
- No adverse impact on the existing character or amenity of the area will result;
- The development will have positive economic impacts for the site and provide additional housing in a suitable locality.

The proposal has been assessed against the relevant statutory planning framework to identify and address the key planning requirements and site constraints. These issues have been addressed throughout the SEE to ensure potential environmental issues have been suitably managed or mitigated where possible to allow the proposed development to be approved by the Consent Authority.

## TERMS AND ABBREVIATIONS

AHIMS	Aboriginal Heritage Information Management System
EPA	Environment Protection Authority
EP&A Act	Environmental Planning & Assessment Act 1979
EPI	Environmental Planning Instrument
DA	Development Application
DCP	Development Control Plan
LEP	Local Environmental Plan
LGA	Local Government Area
SEPP	State Environmental Planning Policy
SEE	Statement of Environmental Effects

## LIST OF FIGURES

Figure 1: Locality Plan (Six Maps, 2022) .....	10
Figure 2: Proposed Development (Sorensen Design & Planning, 2022) .....	12
Table 1 - Integrated development .....	15

## PLANS AND SUPPORTING DOCUMENTATION

This SEE is supported by the following plans and documentation:

Appendix	Document	Prepared by
1	DCP Compliance Table	Perception Planning
2	Deposited Plan	Land Registry Services
3	Dial Before You Dig Results	Dial Before You Dig
4	AHIMS search	OEI
5	BASIX Certificate	Planning Industry and Environment
6	Stormwater Management & Civil Works Plan	DRB
7	Architectural Plans	Sorensen

**TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....	3
TERMS AND ABBREVIATIONS .....	4
LIST OF FIGURES .....	4
PLANS AND SUPPORTING DOCUMENTATION .....	5
TABLE OF CONTENTS.....	6
1 BACKGROUND .....	8
1.1 PURPOSE .....	8
1.2 SITE DETAILS .....	9
1.3 SITE DESCRIPTION.....	9
1.4 CURRENT USE AND EXISTING DEVELOPMENT DETERMINATIONS .....	9
2 DESCRIPTION OF THE DEVELOPMENT .....	11
2.1 PROPOSED DEVELOPMENT .....	11
3 PLANNING CONTROLS .....	13
3.1 ACTS .....	13
3.1.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 .....	13
3.1.2 HUNTER WATER ACT 1991 .....	15
3.1.3 WATER MANAGEMENT ACT 2000 .....	13
3.1.4 BIODIVERSITY CONSERVATION ACT 2016 .....	13
3.1.5 RURAL FIRES ACT 1997 .....	13
3.1.6 ROADS ACT 1993 .....	14
3.2 STATE ENVIRONMENTAL PLANNING POLICIES (SEPPS) .....	16
3.2.1 SEPP (BUILDING SUSTAINABILITY INDEX: BASIX) 2004 .....	16
3.2.1 SEPP (BIODIVERSITY AND CONSERVATION) 2021 .....	16
3.2.3 SEPP (RESILIENCE AND HAZARDS) 2021 .....	17
3.2.4 SEPP (TRANSPORT AND INFRASTRUCTURE) 2021 .....	17
3.3 LOCAL ENVIRONMENTAL PLAN.....	18
3.4 DEVELOPMENT CONTROL PLAN.....	20
3.5 SECTION 7.11 – DEVELOPMENT CONTRIBUTIONS PLAN .....	20
3.6 ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2000 .....	20
3.7 PROPOSED ENVIRONMENTAL PLANNING INSTRUMENTS .....	20
4 LIKELY IMPACTS OF THE DEVELOPMENT .....	21
4.1 BUILT ENVIRONMENT .....	21
4.1.1 CONTEXT, SETTING AND VISUAL IMPACT .....	21
4.1.2 ACCESS, TRANSPORT AND TRAFFIC.....	21
4.1.3 PUBLIC DOMAIN.....	21
4.1.4 SERVICES .....	21
4.1.5 WASTE MANAGEMENT .....	21
4.1.6 NOISE AND VIBRATION.....	21
4.2 NATURAL ENVIRONMENT.....	21
4.2.1 ECOLOGICAL.....	21
4.2.2 LANDSCAPING .....	22
4.2.3 ARCHAEOLOGY .....	22
4.2.4 STORMWATER .....	22
4.2.5 FLOODING .....	22
4.2.6 ACID SULFATE SOILS .....	22
4.2.7 MINE SUBSIDENCE.....	22
4.2.8 CUMULATIVE IMPACTS.....	22



4.3	SOCIAL AND ECONOMIC .....	22
4.3.1	SAFETY, SECURITY AND CRIME PREVENTION .....	23
5	SUITABILITY OF THE SITE.....	23
6	ANY SUBMISSIONS AND CONSULTATION.....	23
7	PUBLIC INTEREST .....	23
8	CONCLUSION.....	23

## 1 BACKGROUND

### 1.1 PURPOSE

The purpose of this SEE is to assist Council in their assessment and determination, and to assist the community in understanding the proposed development.

This SEE has been prepared in coordination with the client and other sub-consultants to demonstrate the relevant matters associated with in the proposed development. The SEE examines the existing development and site location, how the proposed development relates to the location and the environment, as well as the planning merits of the development with respect to the relevant legislation, regulation and other requirements. The SEE examines the applicable site attributes and the specifics of the development proposal that are appropriate to the development application stage. The SEE seeks to provide all the relevant data to give a suitable level of certainty to the consent authority that the proposal has a positive impact on the immediate area and the wider surrounds.

This SEE has been prepared in accordance with best practice principles, applicable aspects of the Development Assessment Framework and the Department of Planning and Infrastructure's (now the Department of Planning, Infrastructure and Environment) guide to the *Environmental Planning and Assessment Act* (EP&A Act) 1979 (s4.15). The objectives of this SEE are as follows:

- To provide a description of the site, existing development and the surrounding locality;
- To provide a description of the proposal and the key issues;
- To provide a discussion of the relevant Environmental Planning Instruments (EPI)s; and
- To provide an assessment of the potential environmental impacts, having regard to the matters for consideration pursuant to the EP&A Act (s4.15) and other State, Regional and Local environmental planning policies and guidelines.

## 1.2 SITE DETAILS

<b>Property Address</b>	120 Riviera Avenue, Terrigal, NSW, 2260
<b>Lot and DP</b>	Lot 8 DP 248806
<b>Current Use</b>	Vacant Land
<b>Zoning</b>	R2 – Low Density Residential
<b>Size</b>	1128 m <sup>2</sup>
<b>Site Constraints</b>	Minimum lot size – 550m <sup>2</sup> Acid Sulfate Soils – Class 5 Height of Buildings Map – 8.5m Bushfire Prone Land – Vegetation Buffer
<b>Owner</b>	Owners consent has been provided to lodge this development application by the client.
<b>DP and Instrument</b>	<b>88B</b> The deposited plan is contained in <b>APPENDIX 2</b> . There are no easements and restrictions that prohibit the proposed development on the land.

## 1.3 SITE DESCRIPTION

The site is located at 120 Riviera Avenue, Terrigal, and is legally identified as Lot 8 in Deposited Plan 248806. The location of the site within the surrounding locality is shown in **FIGURE 1**. The site is located within the Central Coast Local Government Area (LGA). Site particulars are provided in the table above.

The site is mainly rectangular in shape, with the shortest sides running north-east and south-west and fronting the street. The site slopes from the north-east boundary on Riviera Street, up to the south-west boundary by approximately 20m. Existing dwellings are located on both adjoining properties. The locality consists of a range of older housing stock through to contemporary architecturally designed homes. The housing stock ranges from single storey detached dwellings through to two storey attached multi-dwelling housing. There is a significant diversity in size and style.

A Dial Before You Dig search conducted 16 May 2022 indicated the site is currently is not serviced by existing telecommunications, electricity, and reticulated sewer and water services. Refer to **APPENDIX 3** for search results.

## 1.4 CURRENT USE AND EXISTING DEVELOPMENT DETERMINATIONS

The site is currently vacant. There are no known compliance issues relating to the site.

Figure 1: Locality Plan (Six Maps, 2022)



## 2 DESCRIPTION OF THE DEVELOPMENT

### 2.1 PROPOSED DEVELOPMENT

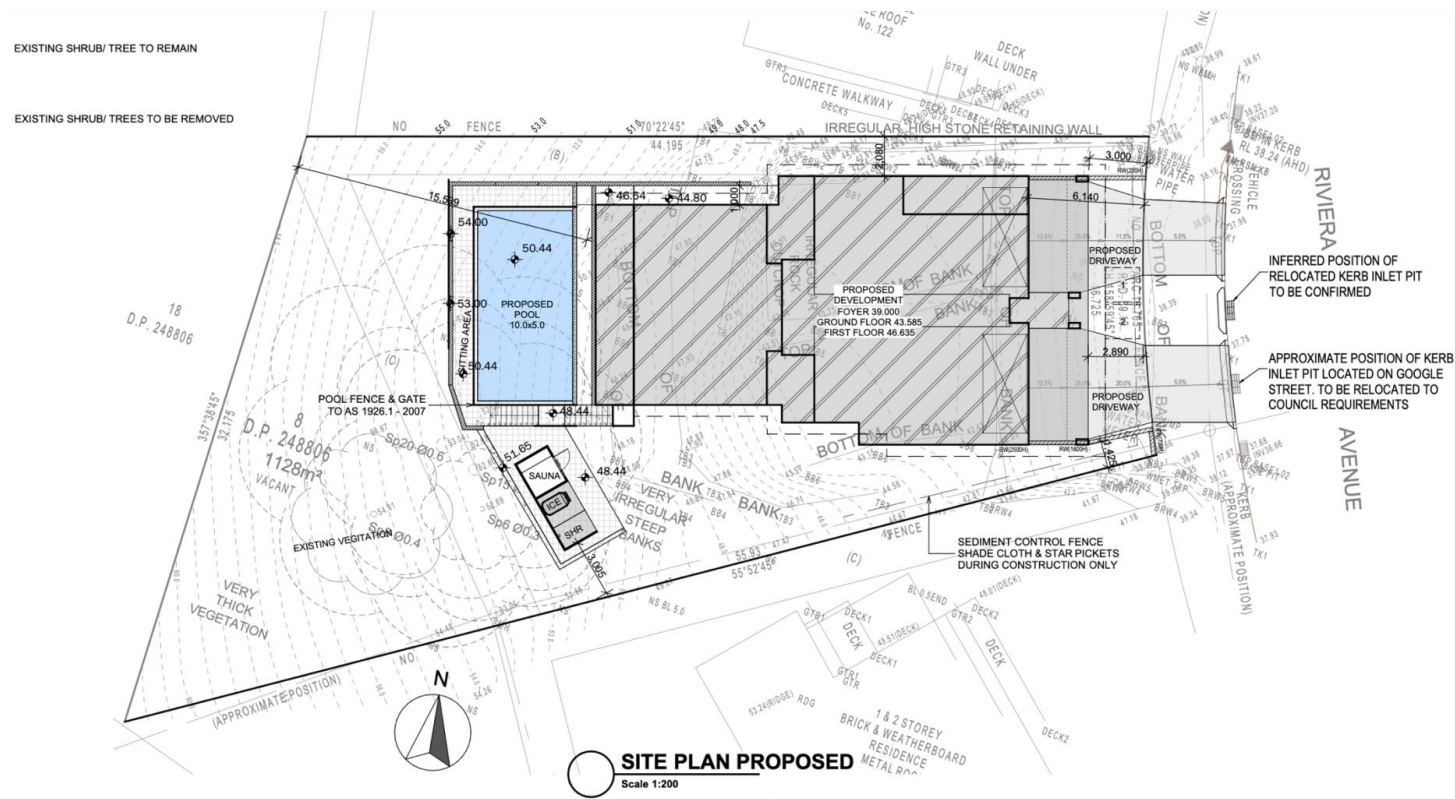
The objective of the proposed development is to obtain development consent for the construction of a dual occupancy (attached) at the site. This development is enabled through the Central Coast Local Environment Plan 2022 (LEP) and the Central Coast Development Control Plan 2014 (DCP). **FIGURE 2** demonstrates the proposed development from a birds eye view. Detailed architectural plans are contained in **APPENDIX 7**.

The characteristics of the development include:

Construction of two (2) new two (2) storey dwellings consisting of:

- Two (2) car garage;
- Open plan kitchen, dining and living room;
- Multiple bedrooms and bathrooms; and
- Upper level balcony.

**Figure 2: Proposed Development (Sorensen Design & Planning, 2022)**





### 3 PLANNING CONTROLS

#### 3.1 ACTS

All NSW Acts have been considered in the preparation of this SEE. The following Acts are considered relevant to the proposed development and discussed in further detail below.

- *Environmental Planning and Assessment Act 1979*
- *Water Management Act 2000*
- *Biodiversity Conservation Act 2016*
- *Rural Fires Act 1997*

##### 3.1.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the principal planning and development legislation in NSW and is applicable to the proposed development. Section 4.15 of the EP&A Act specifies the matters which a consent authority must consider when determining a DA. The relevant matters for consideration under Section 4.15 are addressed in further detail in separate sections of this SEE below.

- **Section 4.46 – What is integrated development?**

Integrated development is development (not being State significant development or complying development) that, in order for it to be carried out, requires development consent and one or more of the approvals listed within **TABLE 1** below. The proposed development is not classified as integrated development.

##### 3.1.3 WATER MANAGEMENT ACT 2000

The subject site is not located within a Drinking Water Catchment and there are no watercourses or waterbodies located on the site, referral to NRAR is not required pursuant to the *Water Management Act 2000*.

##### 3.1.4 BIODIVERSITY CONSERVATION ACT 2016

The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The proposed development does not require the removal of large amounts of established vegetation to enable the development. The site is not located within or in proximity to an area of outstanding biodiversity values. To this extent, further consideration of the BC Act is not required.

##### 3.1.5 RURAL FIRES ACT 1997

The subject site is identified as being within the bushfire prone land buffer zone. The proposed development will therefore require referral to the NSW Rural Fire Authority. Please refer to the attached Bushfire Assessment Report (BAR) submitted as part of this development application for further information.

### **3.1.6 ROADS ACT 1993**

The development is not located adjacent to a classified road, accordingly, referral to Transport for NSW is not triggered. However, approval under *Section 138 of the Roads Act 1993* will be required prior to construction commencing for the proposed new crossovers/driveways.

Table 1 - Integrated development

Integrated development	Proposed Development	
<b>Fisheries Management Act 1994</b>	<ul style="list-style-type: none"> <li>▪ s 144</li> <li>▪ s 201</li> <li>▪ s 205</li> <li>▪ s 219</li> </ul>	N/A
<b>Heritage Act 1977</b>	<ul style="list-style-type: none"> <li>▪ s 58</li> </ul>	N/A – The site is not identified as a heritage item or within a heritage conservation area.
<b>Coal Mine Subsidence Compensation Act 2017</b>	<ul style="list-style-type: none"> <li>▪ s 22</li> </ul>	N/A – The site is not located within a Mine Subsidence District.
<b>Mining Act 1992</b>	<ul style="list-style-type: none"> <li>▪ s 63, 64</li> </ul>	N/A
<b>National Parks &amp; Wildlife Act 1974 (as amended)</b>	<ul style="list-style-type: none"> <li>▪ s 90</li> </ul>	<p>NA – An AHIMs Search with a 50m buffer did not identify any Aboriginal sites recorded in or near the subject site. The results of these searches are contained in <b>APPENDIX 4</b>.</p> <p>Given the disturbance of land in the area, it is unlikely that the development will disturb any Aboriginal objects or relics. Accordingly, it is considered that no referral to the Biodiversity Conservation Division (BCD) as integrated development is required as part of this application. Should any Aboriginal objects be uncovered during the development process, all works will cease immediately, and the relevant authority will be notified.</p>
<b>Protection of the Environment Operations Act 1997</b>	<ul style="list-style-type: none"> <li>▪ ss 43(a), 47, 55</li> <li>▪ ss 43(b), 48, 55</li> <li>▪ ss 43(d), 55, 122</li> </ul>	N/A
<b>Roads Act 1993</b>	<ul style="list-style-type: none"> <li>▪ s 138</li> </ul>	N/A
<b>Rural Fires Act 1997</b>	<ul style="list-style-type: none"> <li>▪ s 100B</li> </ul>	The site is identified as being within the bushfire prone buffer zone, however it does not require referral to the NSW RFS under clause 100B of the Rural Fires Act and is therefore no considered integrated development.
<b>Water Management Act 2000</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>	N/A – The proposed development is not within 40m of a designated waterway.

### 3.2 STATE ENVIRONMENTAL PLANNING POLICIES (SEPPS)

All State Environmental Planning Policies (SEPPs) have been considered. The following SEPPs are considered relevant to the proposed development and discussed in further detail below.

- *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
  - *Chapter 2 – Vegetation in non-rural areas*
  - *Chapter 4 – Koala Habitat Protection 2021*
- *State Environmental Planning Policy (Industry and Employment) 2021*
  - *Chapter 3 – Advertising and Signage*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
  - *Chapter 2 – Coastal Management*
  - *Chapter 3 – Hazardous and Offensive Development*
  - *Chapter 4 – Remediation of Land*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*
  - *Chapter 2 – Infrastructure*

#### 3.2.1 SEPP (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

This SEPP seeks to encourage sustainable residential development. This SEPP applies to the development as the proposed dual occupancy is defined as residential accommodation. The BASIX Certificate, contained in **APPENDIX 5**, provides a set of commitments and achieves the requirements of the SEPP.

#### 3.2.1 SEPP (BIODIVERSITY AND CONSERVATION) 2021

##### CHAPTER 2 – VEGETATION IN NON-RURAL AREAS

The aim of this Chapter is to protect the biodiversity values of trees and other vegetation in non-rural areas. The proposed development does not require large vegetation removal to enable the construction, accordingly no permit is triggered under the Part 2.2 of the Chapter. Further consideration of this Chapter is not warranted.

##### CHAPTER 4 – KOALA HABITAT PROTECTION 2021

This Policy aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline. Section 4.4 and Schedule 2 of the SEPP identify the Central Coast Local Government Area as land to which the policy applies and subject to the Central Coast Koala Management Area.

The key threats within the Central Coast Koala Management Area have been identified as:

- Habitat clearing and fragmentation;
- Vehicle strike and dog attack;
- Bushfire;
- Invasive plant species;
- Disease;

- Reduction in feed trees; and
- Sea level rise.

The proposed development does not include vegetation removal of any trees and as such there is no impact identified on koala habitat or the free-living population. Further assessment of this Chapter is not warranted.

### 3.2.3 SEPP (RESILIENCE AND HAZARDS) 2021

#### CHAPTER 2 – COASTAL MANAGEMENT

The aim of this Chapter is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area, by—

- (a) *managing development in the coastal zone and protecting the environmental assets of the coast, and*
- (b) *establishing a framework for land use planning to guide decision-making in the coastal zone, and*
- (c) *mapping the 4 coastal management areas that comprise the NSW coastal zone for the purpose of the definitions in the Coastal Management Act 2016.*

The subject site is not mapped as being subject to a coastal use or coastal environment area, nor is it in proximity to coastal wetland or littoral rainforests. Further assessment of this Policy is not warranted.

#### CHAPTER 4 – REMEDIATION OF LAND

This Chapter applies to the whole state. Under Section 4.6, a consent authority must not grant consent to the carrying out of any development unless they have considered whether the land is contaminated.

The site is currently zoned for residential accommodation and sits within an established residential area. It is not expected or known that the subject site itself or any of the surrounding locality has the potential to be contaminated. To this extent, the allotment remains as land suitable for the proposed development. The development is therefore consistent with the provisions of the Chapter.

### 3.2.4 SEPP (TRANSPORT AND INFRASTRUCTURE) 2021

#### CHAPTER 2 – INFRASTRUCTURE

The purpose of this Chapter is to facilitate the effective delivery of infrastructure across the state and identifying matters to be considered in the assessment of developments adjacent to particular types of development.

**Division 5, Subdivision 2 Development likely to affect an electricity transmission or distribution network**

**Section 2.48 – Determination of development applications – Other development**  
 Further assessment of this Policy is not warranted.

**Division 12A, Subdivision 2 Development adjacent to pipeline corridors**

**Section 2.76 – Determination of development applications**

The proposed development is not in the vicinity of a 'licensed' pipeline corridor as defined under Section 2.76 (2). Accordingly, the proposed development does not trigger referral to any pipeline operator pursuant to Section 2.76.

**Division 17, Subdivision 2 Development in or adjacent to road corridors and road reservations**

Riviera Avenue, Terrigal, is identified as a local public road under the maintenance of the Central Coast Council. As such, referral or Transport for NSW (TfNSW) for development on or adjacent to a classified road is not triggered under Sections 2.117, 2.118 and 2.119.

**Section 2.121 – Traffic Generating Development**

In accordance with Section 2.121, development listed in Schedule 3 is identified as traffic-generating development. The proposed development is not identified under Schedule 3 and therefore does not warrant referral to TfNSW. The proposed development is compliant with the relevant provisions of the Transport and Infrastructure SEPP.

**3.3 LOCAL ENVIRONMENTAL PLAN**

Pursuant to the LEP Land Application Map/s the subject site is land to which the environmental plan applies. The following assessment will demonstrate that the development proposal is compliant with the relevant clauses of the LEP and permits approval by the Consent Authority.

• **Clause 2.3 – Zone Objectives and Land Use Table**

The site is zoned R2 – Low Density Residential under the LEP. The R2 zone objectives are as follows;

- *To provide for the housing needs of the community within a low-density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To protect and enhance the existing residential amenity and character of the area.*
- *To ensure that development is carried out in a way that is compatible with the flood risk of the area.*

Under the Land Use Table - Zone R2 of the LEP, a **Dual Occupancy** is permissible with development consent. The proposed development will provide additional housing within the locality to meet the housing needs of the community within a low density residential development. No conflict of land use is envisaged to the amenity and character of the neighbouring properties given the consistency of the proposed development with the residential zoning of the area and surrounding land uses. To this extent, the proposed development is consistent with the objectives and aims of the R2 zoning. The proposed development is considered to meet the objectives of the R2 zone by extending the capacity of the site and providing infill residential development for future use by local residents and families.



- **Clause 2.7 – Demolition**

Pursuant to Clause 2.7 of the NLEP, demolition may only be carried out with consent. The Development Application does not include any proposed demolition onsite.

- **Clause 4.1B – Minimum lot sizes for dual occupancies**

The objective of this clause is to achieve planned residential density in certain zones. Development consent may be granted to development on a lot less than 550m<sup>2</sup>. The site measures 1128m<sup>2</sup>, thus in accordance with Clause 4.1B a dual occupancy (attached) is permissible on the site.

- **Clause 4.1C - Exceptions to minimum lot sizes for dual occupancies**

The objective of this clause is to encourage housing diversity without adversely impacting on residential amenity. In accordance with this clause, development consent may be granted to a single development application for development to which this clause applies that is both of the following:

- a) the erection of a dual occupancy,
- b) the subdivision of the land into 2 lots that are both smaller than the minimum size shown on the Lot Size Map.

No subdivision is proposed as part of this development application.

- **Clause 4.3 – Height of Buildings**

The objective of Clause 4.3 is to ensure that the height of buildings is appropriate for the context and character of the area. The LEP identifies the maximum height of building to be 9m. To ensure compliance with AS2890, the garage floor has to be cut to achieve what is proposed. The height of the building achieves the 9m height requirement, however due to the sloping nature of the site and the cut and fill required for the proposed design, the eve of the top of the balcony is over 9m from the new ground level at the front of the site. The top ridge of the balconies at the front of the development is proposed to be 10.989m and we would like to formally request that Council allow this variation to the total height of the whole building in this instance. The proposed overall height of the dual occupancy development is in-keeping with the surrounding existing residential neighbourhood built on similarly sloping blocks. The proposed development is specifically similar in bulk and scale to the existing residential dwellings situated at 110, 112 and 114 Riviera Avenue.

The proposed development is all but under the 10m maximum building height set as a blanket height for the LGA when no other maximum building height is proposed for an area.

The proposed dual occupancy development is 2 storeys of living space, however the need for 2 separate garages onsite requires the proposed dual occupancy to be 3 storeys in total. This is because of the steep slope of the site not facilitating any other area that could be used for parking.

- **Clause 5.10 – Heritage Conservation**

The site is not identified as a heritage item or within a heritage conservation area. There are no items of heritage within close proximity to the development, thus the proposed development is not considered to impact upon heritage conservation.

An AHIMs Search conducted with a 50m buffer did not identify any Aboriginal sites recorded in or near the subject site. The results of these searches are contained in **APPENDIX 4**.

Given the disturbance of land in the area, it is unlikely that the development will disturb any Aboriginal objects or relics. Should any Aboriginal objects be uncovered during the development process, all works will cease immediately, and the relevant authority will be notified. In this regard, the proposed development is consistent with the requirements of Clause 5.10.

- **Clause 5.21 – Flood Planning**

The site is not identified as being within a flood prone area.

- **Clause 7.1 – Acid Sulfate Soils**

The site is identified as containing Class 5 ASS. The development proposal is not within 500m of a Class 1-4 ASS and will not result works more than 5m below the natural ground surface. The development is not anticipated to result in an adverse impact in relation to exposure of ASS Accordingly, further assessment of this Clause is not warranted.

### **3.4 DEVELOPMENT CONTROL PLAN**

Consideration of compliance and/or consistency with the relevant provisions of the DCP is provided in the Table of Compliance provided at **APPENDIX 1**. The Table of Compliance identifies that the proposed development demonstrates compliance with the relevant provisions of the DCP or overarching objectives where variations are proposed.

### **3.5 SECTION 7.11 – DEVELOPMENT CONTRIBUTIONS PLAN**

Development contributions will be calculated and charged in accordance with the relevant Section 7.12 Infrastructure Contributions Plan.

### **3.6 ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2000**

This Statement has been prepared to support a development application, as described in Section 2, to Central Coast Council in accordance with Part 3 of the *Environmental Planning Assessment Regulations 2021* (EPA Regulations).

### **3.7 PROPOSED ENVIRONMENTAL PLANNING INSTRUMENTS**

Section 4.15(1)(a)(ii) requires the consent authority to consider:

*Any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved).*

At the time of lodgement of this development application there were no draft environmental planning instruments that are relevant to the proposed development or subject site; that should be considered as part of this development application.

#### **4 LIKELY IMPACTS OF THE DEVELOPMENT**

The likely impacts of the proposed development and constraints affecting the subject site have been explored throughout this SEE. The following sections detail the major potential impacts and constraints in greater detail, in accordance with Section 4.15(1) of the EP&A Act 1979.

##### **4.1 BUILT ENVIRONMENT**

###### **4.1.1 CONTEXT, SETTING AND VISUAL IMPACT**

The proposed development has demonstrated consistency with the surrounding locality through the environmental planning framework and site features that have informed the proposed development. The proposed development retains the low to medium density housing character in the locality. The development supports the future housing needs of a growing municipality by providing infill development appropriate for the location. Whilst the development is visible from the street and public domain, the architectural design is contemporary and creates diversity. It is considered that the proposed development is suitable in the locality.

###### **4.1.2 ACCESS, TRANSPORT AND TRAFFIC**

The proposed development will not result in adverse impact on the road network. The proposed development is not considered traffic generating development in accordance with Schedule 3 of the Transport and Infrastructure SEPP. Accordingly, a Traffic Impact Assessment is not warranted for the dual occupancy development.

###### **4.1.3 PUBLIC DOMAIN**

The development will not have an impact on any public domain. The development contributions derived from this development will support the delivery of infrastructure and public domain improvements in accordance with Council's Development Contributions Plan.

###### **4.1.4 SERVICES**

As discussed in Section 1.3 of this SEE, the site has the capacity to connect to reticulated water, sewer and overhead electricity. Provision of all services to the dwelling/s will occur during construction.

###### **4.1.5 WASTE MANAGEMENT**

Operational waste management will be as for normal household dwellings. Collection of general waste and recycling will be the responsibility of Council on a weekly basis for general waste and every fortnight for recycling.

###### **4.1.6 NOISE AND VIBRATION**

No potential for noise or vibration impacts have been identified. Demolition and construction noise will be as per normal construction times/processes.

##### **4.2 NATURAL ENVIRONMENT**

###### **4.2.1 ECOLOGICAL**

Considering the existing built form on the site and that the development does not require any large scale vegetation removal to enable the construction of the development, negligible environmental impact are identified. A stormwater management plan, contained in **APPENDIX 7** details how increased stormwater will be managed. Accordingly, it is believed that water quality and the hydrological environment will be maintained.

#### **4.2.2 LANDSCAPING**

A landscaping plan is contained in **APPENDIX 7**. The proposed landscaping and plant choice is considered sufficient for the proposed development and can successfully improve the amenity of the site given the lack of current landscaping.

#### **4.2.3 ARCHAEOLOGY**

An AHIMs Search with a 50m buffer did not identify any Aboriginal sites recorded in or near the subject site. The results of this search is contained in **APPENDIX 4**. Given the disturbance of land in the area, it is unlikely that the development will disturb any Aboriginal objects or relics. Should any Aboriginal objects be uncovered during the development process, all works will cease immediately, and the relevant authority will be notified.

#### **4.2.4 STORMWATER**

The stormwater plans contained in **APPENDIX 7** demonstrate the proposed management of stormwater across the proposed development. It is considered that the stormwater management is suitable for the development and will not result in a negative impact on adjoining neighbours.

#### **4.2.5 FLOODING**

The site is not identified as being within a flood prone area.

#### **4.2.6 ACID SULFATE SOILS**

The site is identified as containing Class 5 ASS. The development proposal will not result works more than 5m below the natural ground surface, thus, will not result in an adverse impact in relation to exposure of ASS. Accordingly, further assessment of this ASS is not warranted.

#### **4.2.7 MINE SUBSIDENCE**

The site is not located within a mine subsidence district.

#### **4.2.8 CUMULATIVE IMPACTS**

There are no tangible cumulative impacts arising from the proposal, given the small-scale nature and appropriateness of the development in conjunction with the allotment.

### **4.3 SOCIAL AND ECONOMIC**

The proposed development is not considered to produce any adverse social or economic impact on the locality. Rather the proposed development provides positive economic and social impacts by facilitating construction activity and providing new and diverse residential accommodation for the area meeting the future needs of the local community.

#### **4.3.1 SAFETY, SECURITY AND CRIME PREVENTION**

No additional safety, security for crime prevention measures are required as a result of the proposed development. The proposed development will not create any safety, security or crime concerns on or around the site.

#### **5 SUITABILITY OF THE SITE**

The proposal is consistent with the zone permissibility and meets the objectives of the R2 Residential zone. The demonstrated in this SEE, the proposed development meets the relevant provisions of the LEP and is generally compliant with the DCP controls for the site. The assessment has demonstrated that it is appropriate in the locality and does not result in any significant negative amenity or environmental impacts which cannot be managed or mitigated. The proposed development is quite similar to recent development in the area in terms of multi-dwelling residential accommodation. The site is therefore considered suitable for the development.

#### **6 ANY SUBMISSIONS AND CONSULTATION**

As part of the DA consideration process, it is envisaged Council may place the proposal on public exhibition and send neighbour notification letters to adjoining or adjacent properties. We welcome the opportunity to respond to any submission made in relation to this development application.

#### **7 PUBLIC INTEREST**

The public interest is best served by the orderly and economic use and development of land for purposes permissible under the relevant planning regime and predominantly in accordance with the prevailing planning controls. The development proposal as outlined by this SEE, has negligible impact on the surrounding locality and is considered compatible with the development within the surround area.

The development is considered to be in the public interest as it:

- Is a permissible form of development, and
- Is consistent with the applicable environmental planning instruments.

The proposal represents a positive contribution to the diversity of available housing and housing size in the municipality and is considered to be in the public's best interest.

#### **8 CONCLUSION**

This SEE has shown that the development is within the public interest, from a social, economic and environmental perspective. Any relevant matters have been addressed through this SEE with any potential issues managed or mitigated.

The key reasons why the proposed development is appropriate are as follows;

- The proposed development is permissible on the site with consent;
- No adverse impact on the existing character or amenity of the area will result;
- The development will have positive economic impacts for the site and provide additional housing in a suitable locality.

It is considered that the proposal will have no significant impacts on the surrounding properties to that it is likely to adversely affect their ability future industrial development opportunities. We look forward to Council's determination of this matter. If we can provide any further information or clarity, please don't hesitate to contact us.



Perception Planning Pty Ltd.  
PO Box 107,  
Clarence Town, NSW, 2321  
Phone: 0411 551 433  
Email: [admin@perceptionplanning.com.au](mailto:admin@perceptionplanning.com.au)





# **REQUEST TO VARY DEVELOPMENT STANDARD**

**CENTRAL COAST LEP 2022**

**CLAUSE 4.3 – BUILDING HEIGHT**

**120 Riviera Avenue, Terrigal, NSW, 2260  
(LOT: 8 DP248806)**

Jordan Long Town Planner PO Box 107 Clarence Town, NSW, 2321	<b>Phone:</b> 0475 713 934 <b>Email:</b> <a href="mailto:jordan@perceptionplanning.com.au">jordan@perceptionplanning.com.au</a>			
<b>PP Reference</b>	J002961			
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Variation to development standard, 120 Riviera Avenue, Terrigal, NSW, 2260				
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1	10/01/2024	Clause 4.6 – 120 Riviera Avenue, Terrigal, NSW, 2260	JL	ED
2	17/01/2024	Clause 4.6 – 120 Riviera Avenue, Terrigal, NSW, 2260	ED	JL
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## EXECUTIVE SUMMARY

Perception Planning Pty Ltd have prepared this submission because of a variation to a development standard at 120 Riviera Avenue, Terrigal, NSW, 2260 (LOT: 8 DP248806) ('the site'). This report has been prepared to support the Development Application for the attached dual occupancy at the site.

The proposed development results in a 'building' measuring greater than the maximum building height (HoB) applicable to the land specified under Clause 4.3 of the Central Coast Local Environmental Plan 2022 ('CCLEP'). The site contains a prescribed maximum height of building of 8.5m. The highest point of the proposed development measures 9.65m above the natural ground level at the front of the building, representing a 1.15m or 13.5% variation.

The proposed development proposes an attached dual occupancy on the site. The proposed height exceedance has been caused by the severely sloping site and efforts to reduce the amount of cut required, resulting in a small section of roof at the front of the proposed development exceeding the height limit of 8.5m. No habitable space, windows, or doors are contained within this area.

The proposed design results in a better planning outcome on-site despite the variation, through reducing ground disturbance works, without resulting in additional overshadowing, bulk or amenity impacts caused by the exceeding element. Given the topography of the land and established development in Terrigal, the proposed development is not out of character and does not detract from or impact on the existing landscape in a negative way.

The non-compliant portions of the development do not impact on the architectural merits of the building, with the exceedance in height not increasing the overall bulk and scale of the building. Rather, the development results in a high-quality architectural outcome on-site which contributes to the residential built environment of Terrigal. The development demonstrates consistency with the desired height and building typology within this location without adversely affecting the character of the existing area. It is our view that the development is consistent with the character of the locality and enables the objectives of the CCLEP to be satisfied.

We believe, the proposed development is in harmony with the locality's prevailing architectural style and character, and concurrently promotes the achievement of the CCLEP's objectives.

Clause 4.6 of the CCLEP provides for an appropriate degree of flexibility in applying certain development standards such as building height to achieve better planning outcomes. This report demonstrates that the proposed development should not be refused on the basis of a variation to the maximum height of buildings development standard resulting from the development.

## TERMS AND ABBREVIATIONS

EP&A Act	Environmental Planning & Assessment Act 1979
EPI	Environmental Planning Instrument
FSR	Floor Space Ratio
DA	Development Application
LGA	Local Government Area
CCLEP	Central Coast Local Environmental Plan
SEPP	State Environmental Planning Policy
SEE	Statement of Environmental Effects
VIA	Visual Impact Assessment

## LIST OF TABLE AND FIGURES

Table 1 - Central Coast Council Clause 4.6 Variations Register .....	16
Figure 1 - Aerial View of Site (Nearmap 2023) .....	6
Figure 2 - Street View of Site (Google Maps 2023) .....	6
Figure 3 – Section A-A Showing Area of Variation (Sorensen Design 2023) .....	10
Figure 4 - Shadow Diagram Comparison - Compliant vs Non-Compliant Height (Sorensen Design 2024).....	12
Figure 5 - DA/48696/2015/A - Approved Height Variation .....	19

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	3
TERMS AND ABBREVIATIONS .....	4
LIST OF TABLE AND FIGURES .....	4
SITE AND PROPOSED DEVELOPMENT .....	6
1. Describe the site. ....	6
2. Describe the proposed development.....	7
PLANNING INSTRUMENT, DEVELOPMENT STANDARD AND PROPOSED VARIATION .	9
3. What is the environmental planning instrument/s you are seeking to vary? .....	9
4. What is the site's zoning? .....	9
5. Identify the development standard to be varied. ....	9

6. Identify the type of development standard. ....	9
7. What is the numeric value of the development standard in the environmental planning instrument? .....	9
8. What is the difference between the existing and proposed numeric values? What is the percentage variation (between the proposal and the environmental planning instrument)? .....	9
9. Visual representation of the proposed variation .....	10
JUSTIFICATION FOR THE PROPOSED VARIATION .....	11
10. How is compliance with the development standard unreasonable or unnecessary in the circumstances of this particular case? .....	11
a) <i>Are the objectives of the development standard achieved notwithstanding the non-compliance?</i> .....	11
b) <i>Are the underlying objectives or purpose of the development standard not relevant to the development?</i> .....	14
11. Are there sufficient environmental planning grounds to justify contravening the development standard? .....	18
12. Is there any other relevant information relating to justifying a variation of the development standard? <i>(If required)</i> .....	18
CONCLUSION .....	20

## SITE AND PROPOSED DEVELOPMENT

### 1. Describe the site.

The site is located at 120 Riviera Avenue, Terrigal, NSW, 2260 and is legally identified as Lot 8 in Deposited Plan 248806. The location of the site within the surrounding locality is shown in **Figures 1 and 2**. The site is located within the Central Coast Local Government Area (LGA).



Figure 1 - Aerial View of Site (Nearmap 2023)



Figure 2 - Street View of Site (Google Maps 2023)



The site is mainly rectangular in shape and has an area of 1128m<sup>2</sup>, with the shortest sides running north-east and south-west and fronting the street. The site slopes significantly, falling by approximately 20m from the rear (West) to the front (East) on Riviera Avenue. Existing dwellings are located on both adjoining properties. The locality consists of a range of older housing stock through to contemporary architecturally designed homes. The housing stock ranges from single storey detached dwellings through to two storey attached multi-dwelling housing. There is a significant diversity in size and style, with a considerable number of existing similar developments with height variations located within Terrigal and along Riviera Avenue.

## **2. Describe the proposed development.**

The proposed development proposes an attached dual occupancy on the site and will consist of the following components:

### **Ground Floor (non-habitable)**

- Driveway and Garage for Dwelling 1
- Driveway and Garage for Dwelling 2
- Porch
- Entry foyer
- Bin storage
- Stairwell
- Lift (D1)
- Lift (D2)

### **First Floor (Dwelling 1)**

- Stairwell
- Foyer
- Lift (D1 service)
- Lift (D2 no service)
- Hall
- Linen cupboard
- Two bedrooms with wardrobes
- Bedroom with wardrobe and ensuite
- Main bedroom with walk in wardrobe and ensuite
- Bathroom
- Living, Dining, and Kitchen with pantry
- Laundry
- Front patio

### **Second Floor (Dwelling 2)**

- Stairwell
- Foyer
- Lift (D2 service)
- Lift (D1 no service)
- Hall

- Linen cupboard
- Two bedrooms with wardrobes
- Bedroom with wardrobe and ensuite
- Main bedroom with walk in wardrobe and ensuite
- Bathroom
- Living, Dining, and Kitchen with pantry
- Laundry
- Front patio
- Rear patio

The height variation has arisen due to the steeply sloping site, requiring a design that responds to the natural contours of the site to minimise the extent of earthworks required to support construction, which in turn reduces impacts on the site and adjacent existing development. The majority of the proposed building is set below the 8.5m limit, with only a small section of the front of the roof extending above the 8.5m height limit. The South Elevation shown as **Figure 3** identifies the minor nature of the maximum height encroachment proposed.

## PLANNING INSTRUMENT, DEVELOPMENT STANDARD AND PROPOSED VARIATION

### 3. What is the environmental planning instrument/s you are seeking to vary?

Central Coast Local Environmental Plan 2022

### 4. What is the site's zoning?

R2 Low Density Residential

### 5. Identify the development standard to be varied.

*What is the development standard being varied?*

Height of Buildings

*What clause is the development standard listed in the EPI?*

Clause 4.3 – Height of buildings

*“building height (or height of building) means—*

- (a) in relation to the height of a building in metres—the vertical distance from ground level (existing) to the highest point of the building, or*
- (b) in relation to the RL of a building—the vertical distance from the Australian Height Datum to the highest point of the building,*

*including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like”.*

*What are the objectives of the development standard?*

The objectives of clause 4.3 are as follows:

- (a) to establish a maximum height of buildings to enable appropriate development density,*
- (b) to ensure that the height of buildings is compatible with the character of the locality*

### 6. Identify the type of development standard.

The development standard is numerical.

### 7. What is the numeric value of the development standard in the environmental planning instrument?

8.5m above ground level. As per the Standard Instrument “ground level (existing)” is defined as: *“ground level (existing) means the existing level of a site at any point.”*

### 8. What is the difference between the existing and proposed numeric values? What is the percentage variation (between the proposal and the environmental planning instrument)?

The proposal exceeds the maximum 8.5m development standard (Height of Buildings) by 1.15m, which is a percentage variation of 13.5%.

### 9. Visual representation of the proposed variation

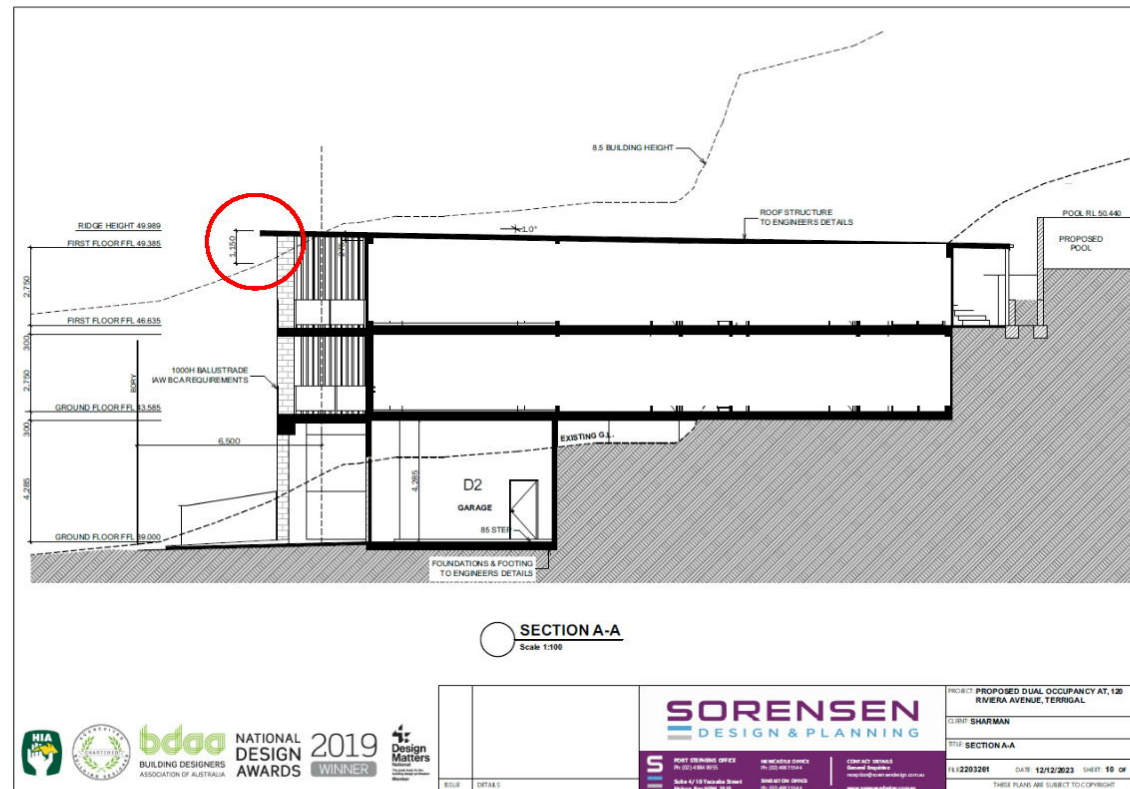


Figure 3 – Section A-A Showing Area of Variation (Sorensen Design 2023)

## JUSTIFICATION FOR THE PROPOSED VARIATION

### 10. How is compliance with the development standard unreasonable or unnecessary in the circumstances of this particular case?

There are five common ways that compliance with a development standard may be demonstrated to be unreasonable or unnecessary (items a to e), in accordance with the Five Part Test (*Wehbe vs Pittwater Council*). The five possible ways and associated assessment are set out in **TABLE 1** below. Three of them are relevant in this case.

<p><i>a) Are the objectives of the development standard achieved notwithstanding the non-compliance?</i></p>
<p>The most commonly invoked way is to establish that compliance with the development standards is unreasonable or unnecessary because the objectives of the development standard are achieved notwithstanding non-compliance with the standard. The rationale is that development standards are not ends in themselves but means of achieving ends. The ends are environmental or planning objectives. If the proposed development proffers an alternative means of achieving the objective, strict compliance with the standard would be unnecessary or unreasonable.</p> <p>The objectives of the development standard (clause 4.3 – height of buildings) are:</p> <ul style="list-style-type: none"><li><i>(a) to establish a maximum height of buildings to enable appropriate development density,</i></li><li><i>(b) to ensure that the height of buildings is compatible with the character of the locality.</i></li></ul> <p>In response to the above, the following is provided:</p> <p>(a) The proposed development includes visually compatible elements within the streetscape and results in a positive impact to the site and surrounds. Given the number of substantial buildings, building density, and steep topography of the area, the proposed development is not out of character and does not create any perceived dominance. The building is not found to dominate the skyline due to the exceeding element and respects the scale and setting of the existing natural and built environment in which it is located. Taking the above into consideration, the objectives of the development standard are achieved notwithstanding non-compliance with the standard.</p> <p>Although there is a minor height variation, the exceeding element maintains consistency with the DCP controls and objectives relating to overshadowing, privacy, and the amenity of the adjacent properties will not be unreasonably impacted.</p> <p><b>Overshadowing</b></p> <p><b>Figure 4</b> below and sheet 11 of <b>ATTACHMENT 2</b> identifies no noticeable overshadowing impact between the proposed development (inclusive of height variation) and the same development if it was of compliant height (8.5m). It can be seen that the exceeding element and resulting area of additional overshadowing highlighted as orange in <b>Figure 4</b> is not located over any built area where it would impact residential amenity in either function or aesthetics.</p>

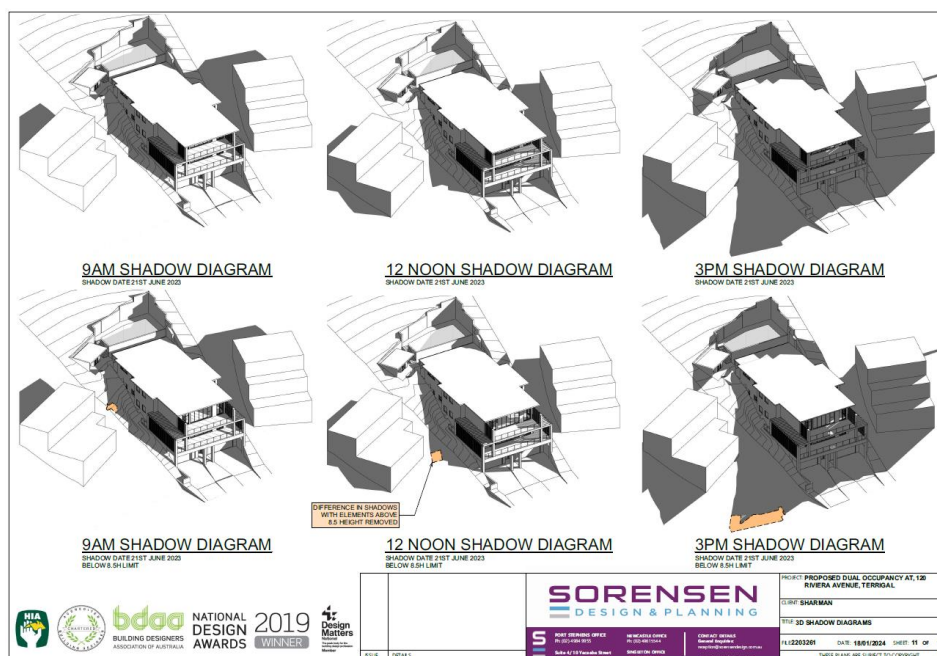


Figure 4 - Shadow Diagram Comparison - Compliant vs Non-Compliant Height (Sorensen Design 2024)

### Amenity and Privacy

Regarding the amenity and privacy of neighbouring properties and existing development, the area of height exceedance consists of roof eave overhang only and extends for a height of 1.15m and a length of just 2.3m. As no windows, occupiable space, or large expanse of solid built form are located within the area of exceedance, no adverse impacts to the existing level of residential amenity or privacy for existing neighbouring properties will be created when compared to a compliant development.

A key reason why the proposed development is located towards the front of the site is to minimise elevation difference between the Street level and the proposed garages. This enables the proposed driveways to be of decreased grade, avoiding steep and angled driveways such as at adjacent 118 and 116 Riviera Avenue. In turn, this improves safety by decreasing driveway steepness and maximising view corridors for reversing vehicles.

Additionally, there are no views of visual interest or significance to which the proposed exceeding element would impact when viewed or calculated numerically from the street or from nearby properties to the North, South, or West.

### Environmental

The proposed minor variation to the 8.5m building height limit is sought to enable ease of construction on a sloping site, whilst achieving a development that is both desirable and feasible within the Terrigal Area. The built form is consistent with the buildings



surrounding the site and maintains a consistent streetscape in terms of bulk and scale, to which the exceeding element does not add to or detract from.

The roof incorporates a flat design to limit any detrimental impacts on the adjacent properties or surrounding area. The area of non-compliance at the front portion of roof top and associated roof structure of 1.15m is not easily identifiable in the context of the environment due to the topography of the site and the built form already established. Once the area is further developed, the area of non-compliance will be enveloped and unable to be identified, demonstrating the development achieves appropriate density within the area, despite the minor-non-compliance.

- (b) The proposed development has considered site constraints such as topography and surrounding existing development, resulting in the largest building mass being located to the East at the front of the lot in an effort to reduce cut excavation into the site. This is consistent with the architectural character and construction typology of the area, where buildings often consist of higher mass at street level in order to reduce the amount of cut excavation required at the rear of sites, which is a key requirement of Central Coast Council's DCP (2.2.9).

It is also noted that the small area of height exceedance is located towards the front of the site, where existing development on either side consists of only non-habitable and infrequently occupied areas such as garages and driveways. The minor height exceedances will therefore have no adverse effects on the residential areas of the adjacent properties.

Given the number of substantial buildings and high-density dwellings in the area due to site constraints, the proposed development is not out of character in the locality and does not create any perceived dominance resulting from the exceeding element. The building is not found to dominate the skyline because of the exceeding element and respects the scale and setting of the natural environment in which it is located. Taking the above into consideration, compatibility with the existing and emerging character of the locality is achieved notwithstanding non-compliance with the standard.

Whilst the building will be higher than the existing buildings surrounding the site, at the front most portion of roof due to the sloping nature of the site, it is consistent with development intentions of the site and adjoining sites being narrow in nature thus, it is considered that the development contributes to the transitioning nature of Terrigal through the development of modern residences. The development demonstrates consistency with the desired height and building typology within this location without adversely affecting the character of the existing streets.

The proposed development aims to complement the existing contemporary architectural design along Riviera Avenue. As such, maintaining compliance with the HOB standard from a strict numerical perspective is considered unreasonable and unnecessary for the proposed development, when on merit, no negative impacts will result from the exceeding element.

<p>The proposed development takes advantage of the sloping topography of the site by minimising earthworks and reducing the overall environmental impact of the project. This approach aligns with the objective of promoting ecologically sustainable development. The development design and planning are also carefully considered to ensure that they are feasible, desirable, and appropriate for the area, considering the site's topography and the surrounding neighbourhood character.</p> <p>In conclusion, it is considered that the proposed development height is reflective of the character and is consistent with the context of the area in regard to both older housing stock and recently constructed development.</p> <p>Strict compliance with the development standard, particularly given the location and minor extent of variation, would not result in noticeable or positive outcomes for adjacent lots or the wider area of Terrigal, and would conversely limit the potential for suitable residential accommodation of suitable architectural standards.</p>
<p><i>b) Are the underlying objectives or purpose of the development standard not relevant to the development?</i></p>
<p>N/A – Not relevant in this case.</p>
<p><i>c) Would the underlying objective or purpose be defeated or thwarted if compliance was required? (Give details if applicable)</i></p>
<p>A third way is to establish that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable.</p> <p>Compliance with the development standard would limit architectural opportunities available on the site, affecting the provision of suitable residential amenity due to the slope of the site, which affects the available habitable space for the proposal.</p> <p>For all practical purposes, the exceeding element proposed is minor in size and impact, with no tangible adverse environmental effects on the surrounding area as a result.</p> <p>If compliance was required to the height of buildings limit, the underlying objective of the development standard would be thwarted as buildings that are compatible with the character of the locality would not be achievable given the challenging site conditions relating to a steep topography. Given that the limitation of excavation is a key consideration and objective for development in the area (Refer to part 2.2.9 of the DCP), the minor height variation resulting in negligible adverse effect is considered a favourable outcome on the site. The Central Coast Council Variations Register (<b>Table 1</b>) supports this tendency and design methodology.</p>
<p><i>d) Has the development standard been virtually abandoned or destroyed by the council's own actions in granting consents departing from the standard?</i></p>

A fourth way is to establish that the development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable.

The Central Coast Council Development Variations Register identifies multiple variations to the maximum height limit for residential development in the area, as shown in **Table 1** below. The Variations Register records multiple variation approvals along Riviera Avenue.

Upon review of recent and historic variation approvals, particularly relating to clause 4.3 maximum height in residential zones, in many cases the development standard is considered to have been abandoned when assessing proposals on merit in relation to the extent of variation. Given the extremely small portion of the proposed development containing the height exceedance, it is considered that strict adherence to the development standard would be unreasonable and would limit opportunities to maximise residential amenity and architectural opportunity on the site.

*e) Is the zoning of the land unreasonable or inappropriate so that the development standard is also unreasonable or unnecessary?*

N/A – Not relevant in this case.

Table 1 - Central Coast Council Clause 4.6 Variations Register

DA Number	Address	Category of Development	Zoning	Development Standard	Justification of variation	Extent of Variation	Date DA Determined
<b>Riviera Avenue 2021 and 2022 Only</b>							
DA/556/2022	131 Riviera Avenue, TERRIGAL NSW 2260	1: Residential - Alterations & additions	*PR2, GR2, GLGPO2A	Clause 4.3 - Height of Buildings	Slope of land	4%	31/05/2022
011.2020.000 60304.001	93 Riviera Avenue, TERRIGAL NSW 2260	Residential - Single new dwelling	R2 LOW DENSITY RESIDENTIAL	Clause 4.3 - Height of Buildings	The slope of land means it would be difficult to meet standard and there will be minimal impact on the amenity of neighbours	9.4%	17/03/2021
DA/62709/2021	95 Riviera Avenue, TERRIGAL NSW 2260	2: Residential - Single new dwelling	*PR2, GR2, GLGPO2A	Clause 4.3 - Height of Buildings	The slope of land means it would be difficult to meet standard and there will be no impact on amenity of neighbours.	9%	19/11/2021
<b>Jan-March 2022 Only</b>							
DA/60907/2021	44 North Scenic Road, FORRESTER BEACH NSW 2260	2: Residential - Single new dwelling	*PR2, GR2, GLGPO2A	Clause 4.3 - Height of Buildings	The slope of the land means it would be difficult to meet the standard and there will be no impact of amenity of neighbours.	10%	08/12/2021
DA/61600/2021	4/42 Reeves Street, NARARA NSW 2250	2: Residential - Single new dwelling	*PR2, GR2	Clause 4.3 - Height of Buildings	Slope of land and building design.	8.10%	12/11/2021
DA/61752/2021	122 Oceano Street, COPACABANA NSW 2251	1: Residential - Alterations & additions	*PR2, GR2, GLGPO2A	Clause 4.3 - Height of Buildings	Steep slope of land and minimal extent of variation over a small area of building.	10%	26/11/2021
DA/62381/2021	86 Daley Avenue, DALEYS POINT NSW 2257	2: Residential - Single new dwelling	*PR2, GR2, GLGPO9C	Clause 4.3 - Height of Buildings	The peculiarities of the allotments topography, specifically the slope and its location, provide difficulties to achieve compliance with the standard. The same topography	10%	15/11/2021

					and location also limits any neighbour impacts from the proposed minor variation.		
DA/62709/2021	95 Riviera Avenue, TERRIGAL NSW 2260	2: Residential - Single new dwelling	*PR2, GR2, GLGPSO2A	Clause 4.3 - Height of Buildings	The slope of land means it would be difficult to meet standard and there will be no impact on amenity of neighbours.	9%	19/11/2021
DA/62773/2021	46 Barnhill Road, TERRIGAL NSW 2260	1: Residential - Alterations & additions	*PR1, *PR2, GR1, GLGPSO2B	Clause 4.3 - Height of Buildings	Slope of land means it would be difficult to meet standard and there will be no impact on amenity of neighbours, and area is an existing building footprint and finished floor level.	32%	14/12/2021
DA/62923/2021	107 Chamberlain Road, WYOMING NSW 2250	2: Residential - Single new dwelling	*PR2, GR2	Clause 4.3 - Height of Buildings	The site is located on the low side of the street and slopes to the rear. The design of the new proposed dwelling has architectural merit and the size, scale and bulk is not unreasonable. The building height requirement of 8.5m is exceeded by 6%. This is not considered to have a significant impact on the surrounding built environment or the amenity of adjoining premises.	6%	20/10/2021

**11. Are there sufficient environmental planning grounds to justify contravening the development standard?**

Environmental planning grounds that justify contravening the development standard include:

- The additional height over 8.5m will have negligible effect on shadows cast by the building on adjoining properties, as demonstrated in **Figure 4** and sheet 11 of **ATTACHMENT 2**.
- The additional height will not impact on the privacy of adjoining residents given the lack of habitable space and glazing within the exceeding element.
- The additional height will not materially impact on view sharing due to the topography of the site and locations of existing development. The building above 8.5m is architecturally designed and appropriately articulated to provide visual interest and prominence when viewed from the public domain.
- The proposed development results in a high-quality architectural design that will positively contribute to the locality.
- A compliant height would not improve the buildings appropriateness in the context and character of the area, as detailed in response to objective (b) of clause 4.3 under Section 10 above. The exceeding element relates to the roof form only. The exceeding element, being the roof tip, does not contribute to any additional overshadowing, bulk, scale, privacy, or amenity issues, thus compliance with the 8.5m HOB standard would be unreasonable.
- The development has also been identified to be consistent with the relevant objectives, which provides sufficient environmental planning grounds under the LEP (Clause 4.6) for a variation to the numerical development standard.
- The height variation proposed does not compromise the natural environment in which the site is located and is appropriate in the context of surrounding built form and neighbourhood character. It is crucial to note that despite the proposed height variation, the development adheres to the broader principles of ecologically sustainable development by integrating economic, environmental, and social considerations into the planning process.
- The proposed development results in a high-quality architectural design that will positively contribute to the locality.

The development has been identified to be consistent with the relevant objectives, which provides sufficient environmental planning grounds under the LEP (Clause 4.6) for a variation to the numerical development standard.

**12. Is there any other relevant information relating to justifying a variation of the development standard? (If required)**

It is noted that in addition to the multiple examples of height variations in the area and along Riviera Avenue (**Table 1**), the proposed development is also consistent with a previously approved development on the site (DA/48696/2015/A) for which a minor height variation was approved (refer to **Figure 5** below).



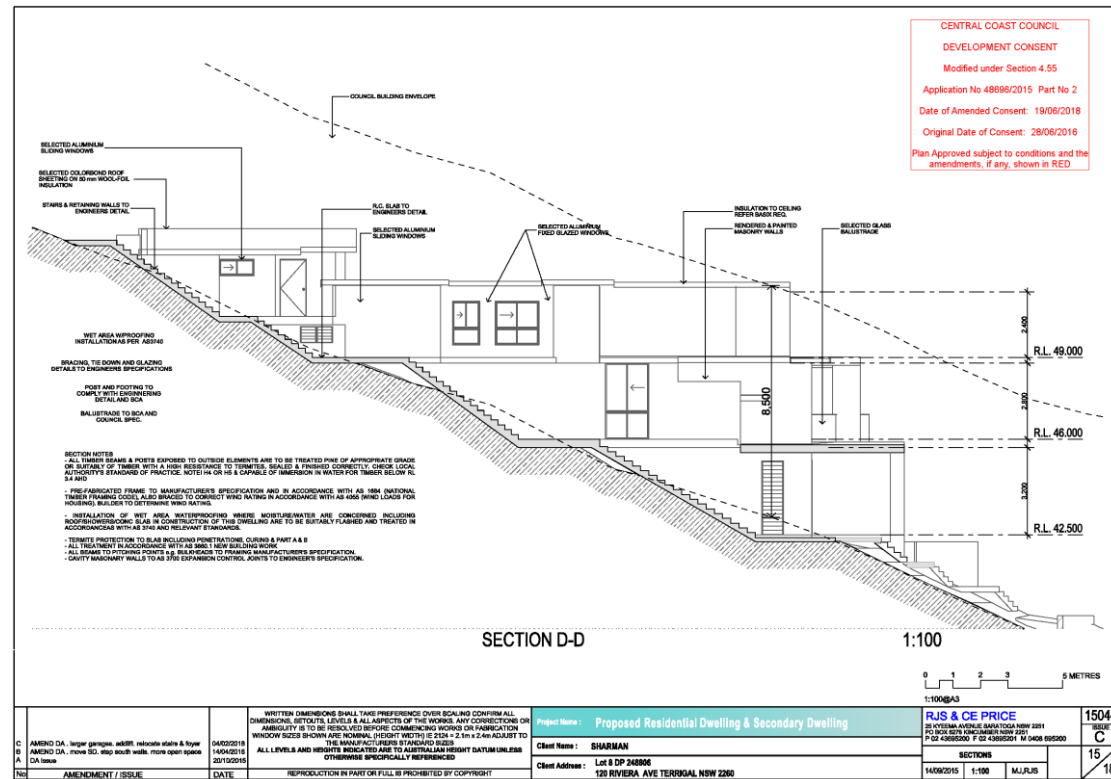


Figure 5 - DA/48696/2015/A - Approved Height Variation

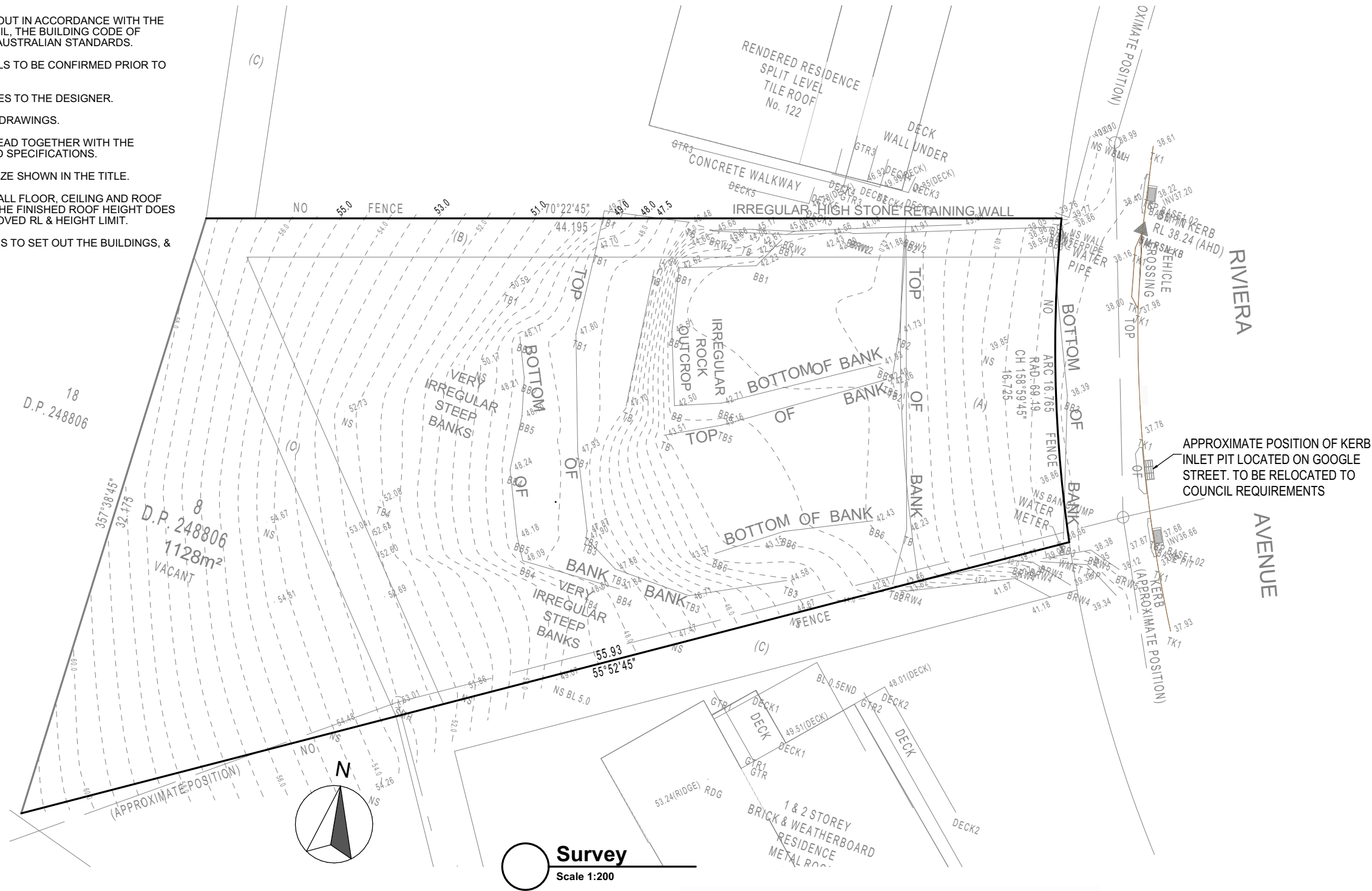
## CONCLUSION

In summary, through this Clause 4.6 analysis it has been found that;

- Strict adherence to the numerical height of buildings development standard would be unreasonable and unnecessary as required under the Five Part Test (*Wehbe vs Pittwater Council*).
- The proposed height of building is appropriate when considering it in relation to the existing natural features of the site such as topography, the location of the site and existing built form established in close proximity.
- The proposed development (including additional height) integrates in with the desired contemporary built form of the area and will have no significant impact on the 'views' held by existing properties or recreational areas.
- Despite the variation, the proposed development will achieve the objectives of the development standard and the objectives of the relevant land use zone being R2 – Low Density Residential, through enabling the residential use of the site to serve the needs of people who live in, work in, or visit the area.
- The proposed development provides an appropriate response to the context of the site and its location within Terrigal and along Riviera Avenue.
- There are negligible environmental or social impacts as a result of the proposed variation.

GENERAL NOTES

- 1 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF COUNCIL, THE BUILDING CODE OF AUSTRALIA AND CURRENT AUSTRALIAN STANDARDS.
- 2 ALL DIMENSIONS AND LEVELS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
- 3 REPORT ANY DISCREPANCIES TO THE DESIGNER.
- 4 DO NOT SCALE OFF THESE DRAWINGS.
- 5 THESE PLANS ARE TO BE READ TOGETHER WITH THE ENGINEERS DRAWINGS AND SPECIFICATIONS.
- 6 SCALES APPLY TO SHEET SIZE SHOWN IN THE TITLE.
- 7 THE BUILDER IS TO CHECK ALL FLOOR, CEILING AND ROOF LEVELS TO ENSURE THAT THE FINISHED ROOF HEIGHT DOES NOT EXCEED THE DA APPROVED RL & HEIGHT LIMIT.
- 8 A REGISTERED SURVEYOR IS TO SET OUT THE BUILDINGS, & CONFIRM ALL LEVELS.



NATIONAL DESIGN AWARDS 2019 WINNER



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
REV B	18.01.24 - RFI ADDITIONAL 3D SHADOWS
REV C	31.05.24 - TITLE BLOCK DETAILS ADDED

ISSUE	DETAILS
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SORENSEN DESIGN & PLANNING



PORT STEPHENS OFFICE  
Ph: (02) 4964 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

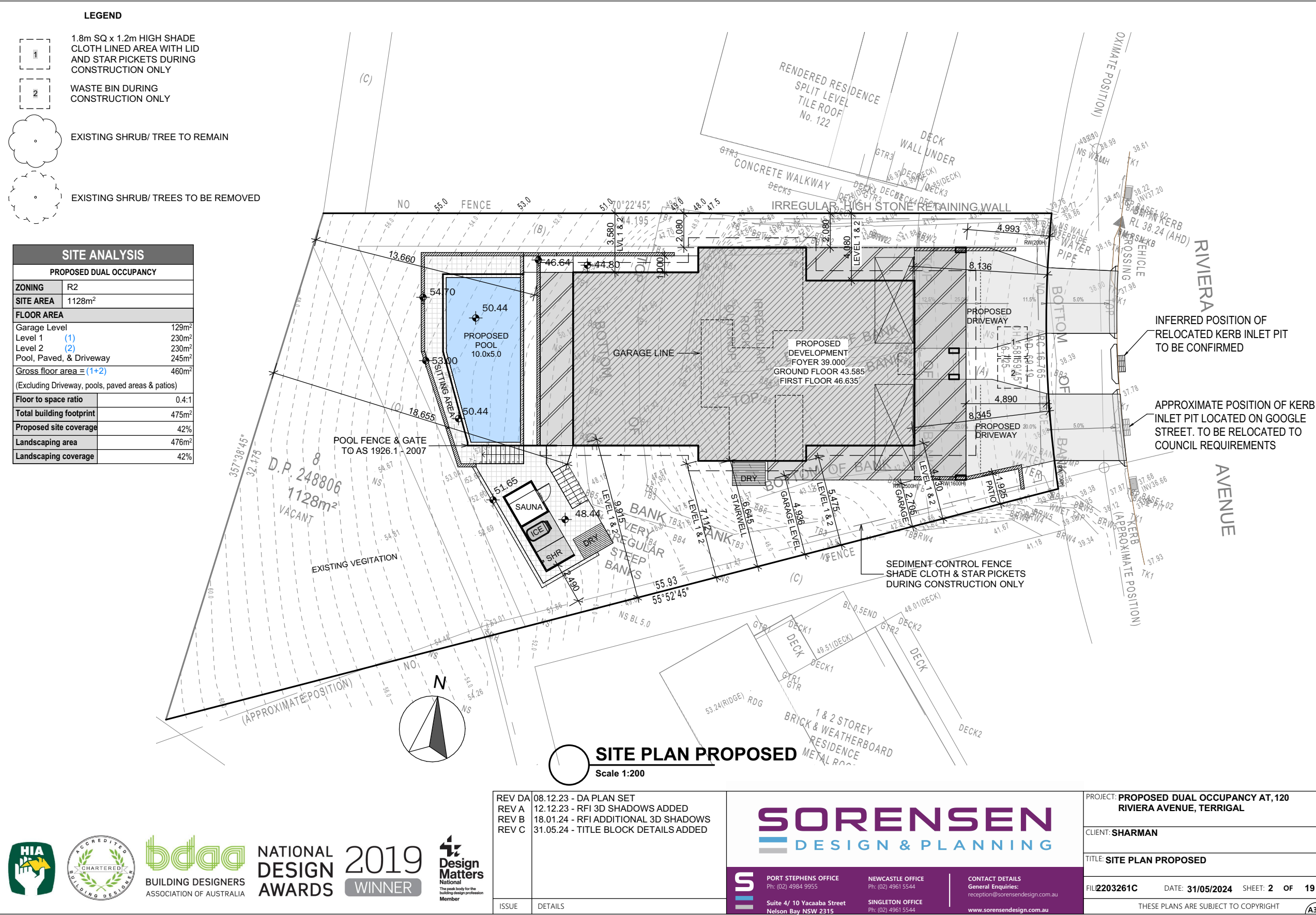
PROJECT: PROPOSED DUAL OCCUPANCY AT 120 RIVIERA AVENUE, TERRIGAL

CLIENT: SHARMAN

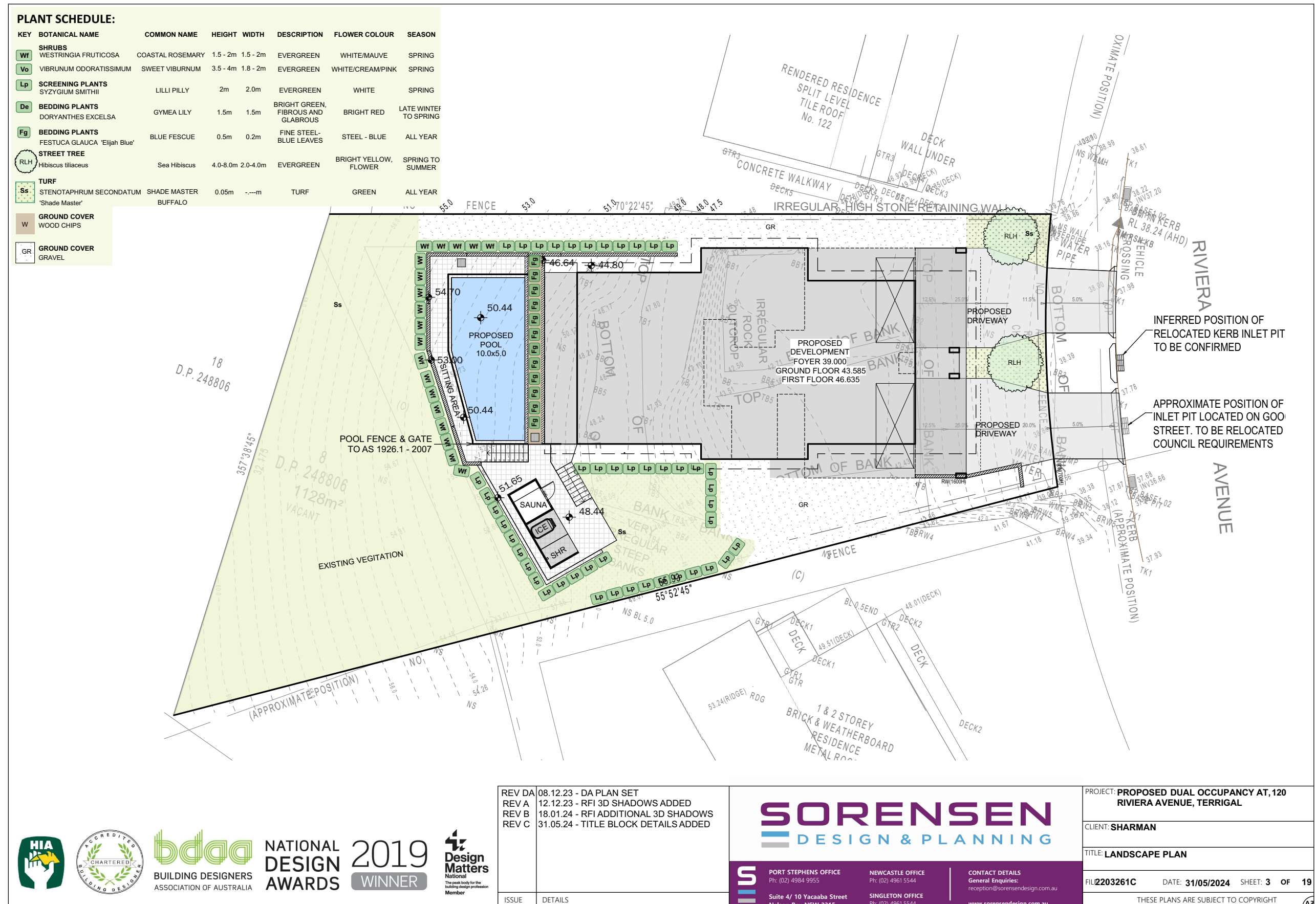
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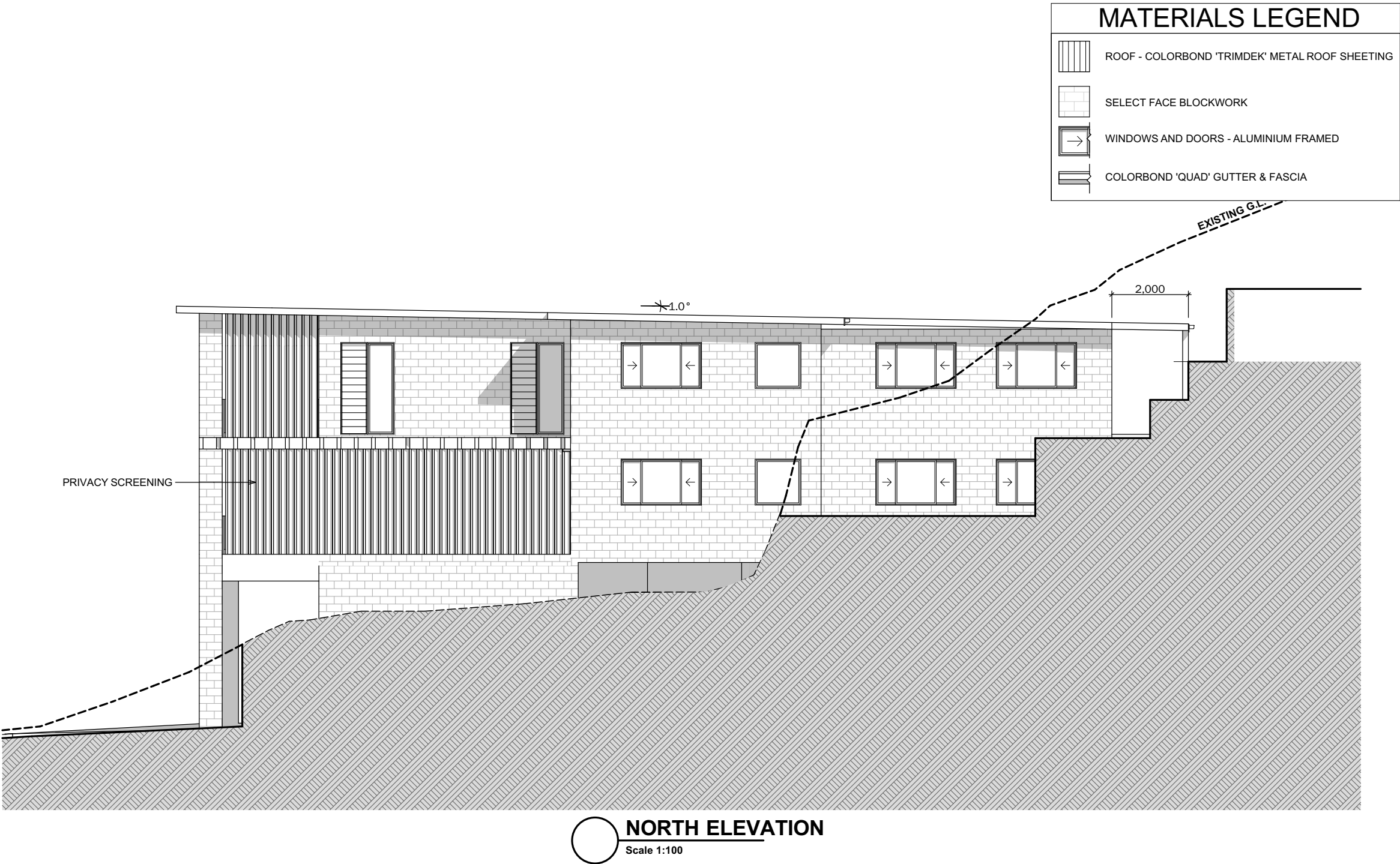
FILE 2203261C DATE: 31/05/2024 SHEET: 1 OF 19

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1.0°

EXISTING G.L.


2,000

PRIVACY SCREENING


**NORTH ELEVATION**  
Scale 1:100



**NATIONAL DESIGN AWARDS**  
2019  
WINNER



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
REV B	18.01.24 - RFI ADDITIONAL 3D SHADOWS
REV C	31.05.24 - TITLE BLOCK DETAILS ADDED
ISSUE	DETAILS



**S**

PORT STEPHENS OFFICE  
Ph: (02) 4964 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544

SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: **PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL**

CLIENT: **SHARMAN**

TITLE: **NORTH ELEVATIONS**

FILE: **2203261C**    DATE: **31/05/2024**    SHEET: **7** OF **19**




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- 613 -





 **EAST ELEVATION**  
Scale 1:100

MATERIALS LEGEND	
	ROOF - COLORBOND 'TRIMDEK' METAL ROOF SHEETING
	SELECT FACE BLOCKWORK
	WINDOWS AND DOORS - ALUMINIUM FRAMED
	COLORBOND 'QUAD' GUTTER & FASCIA
	SELECT STACK STONE



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
REV B	18.01.24 - RFI ADDITIONAL 3D SHADOWS
REV C	31.05.24 - TITLE BLOCK DETAILS ADDED
ISSUE	DETAILS



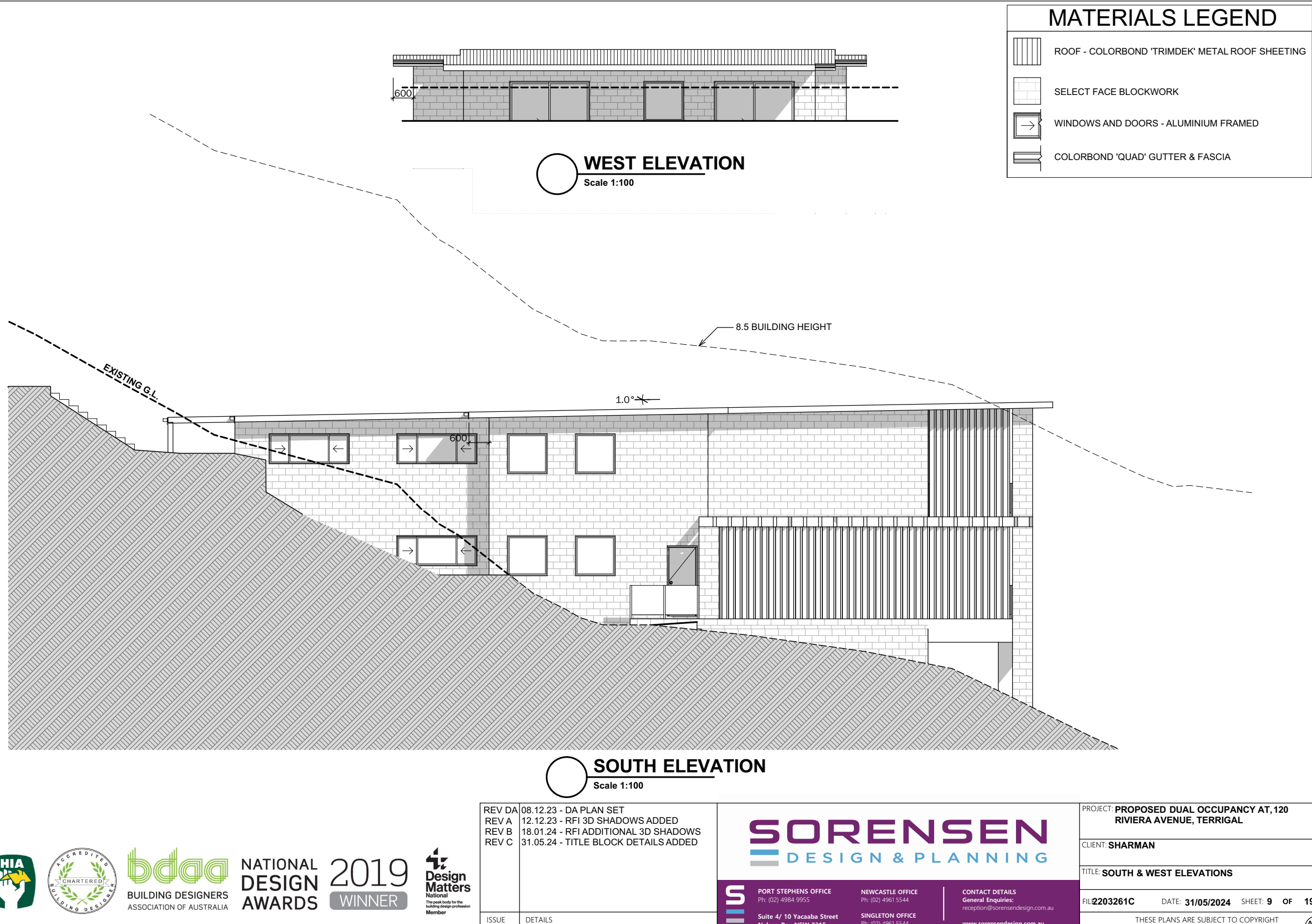


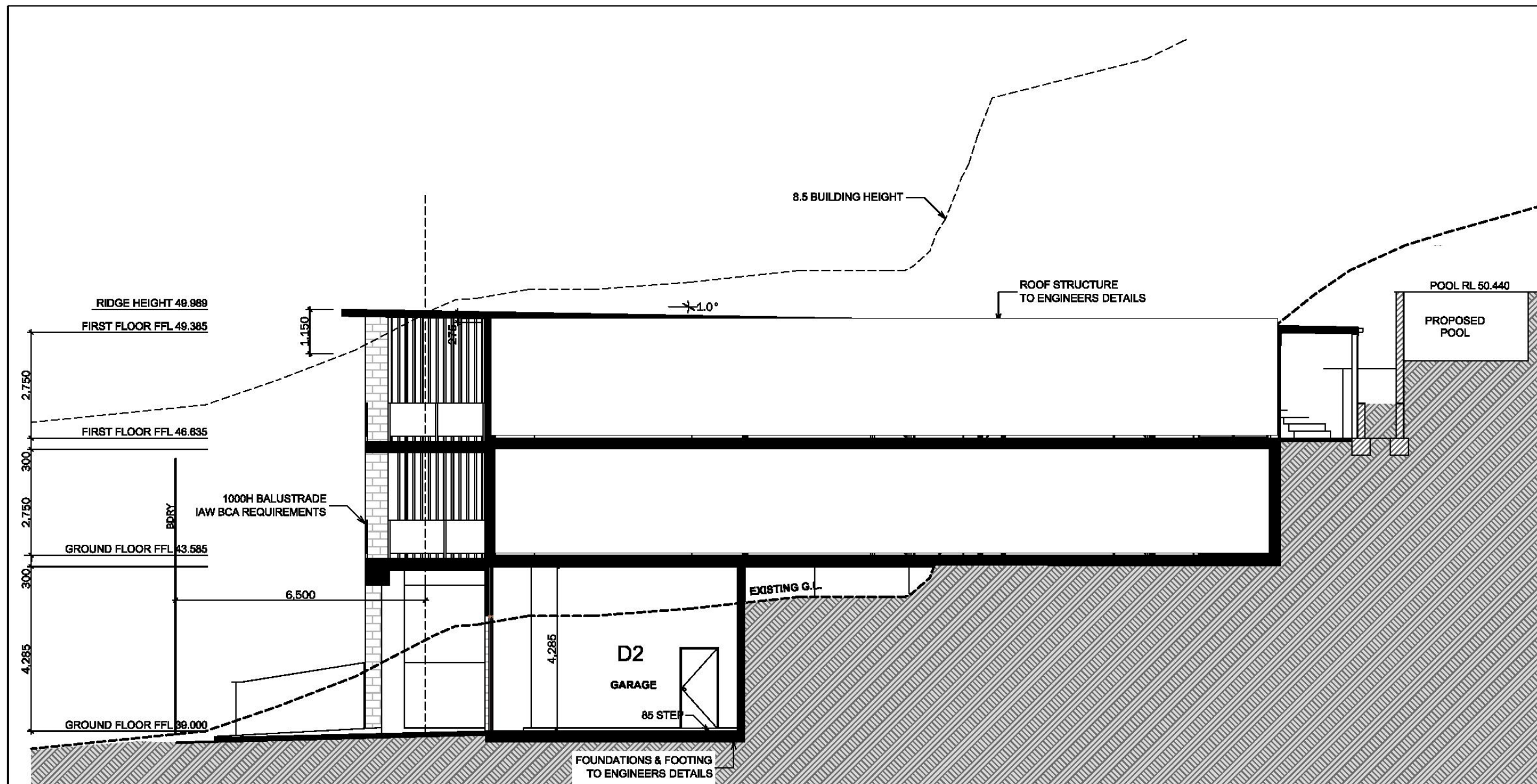
PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: <b>PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL</b>			
CLIENT: <b>SHARMAN</b>			
TITLE: <b>EAST ELEVATIONS</b>			
FILE: <b>2203261C</b>	DATE: <b>31/05/2024</b>	SHEET: <b>8</b> OF <b>19</b>	THESE PLANS ARE SUBJECT TO COPYRIGHT





**SECTION A-A**  
Scale 1:100



**NATIONAL DESIGN AWARDS 2019 WINNER**



REV DA 08.12.23 - DA PLAN SET  
REV A 12.12.23 - RFI 3D SHADOWS ADDED  
REV B 18.01.24 - RFI ADDITIONAL 3D SHADOWS  
REV C 31.05.24 - TITLE BLOCK DETAILS ADDED

ISSUE DETAILS

**SORENSEN**  
DESIGN & PLANNING

**PORT STEPHENS OFFICE**  
Ph: (02) 4964 9955  
Suite 4/ 10 Yacarra Street  
Nelson Bay NSW 2315

**NEWCASTLE OFFICE**  
Ph: (02) 4961 5544  
**SINGLETON OFFICE**  
Ph: (02) 4961 5544

**CONTACT DETAILS**  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: **PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL**

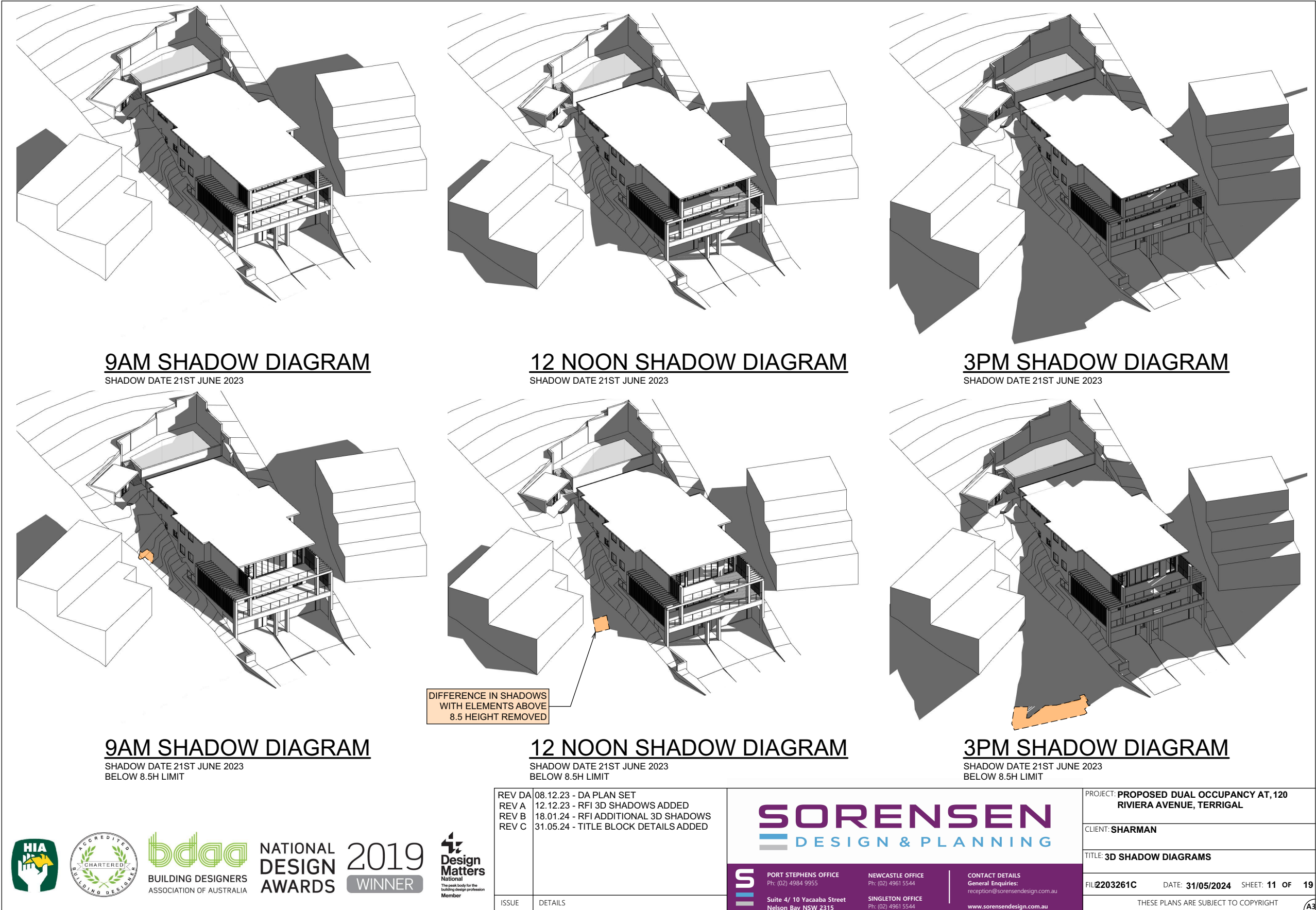
CLIENT: **SHARMAN**

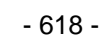
TITLE: **SECTION A-A**

FILE: **2203261C** DATE: **31/05/2024** SHEET: **10 OF 19**

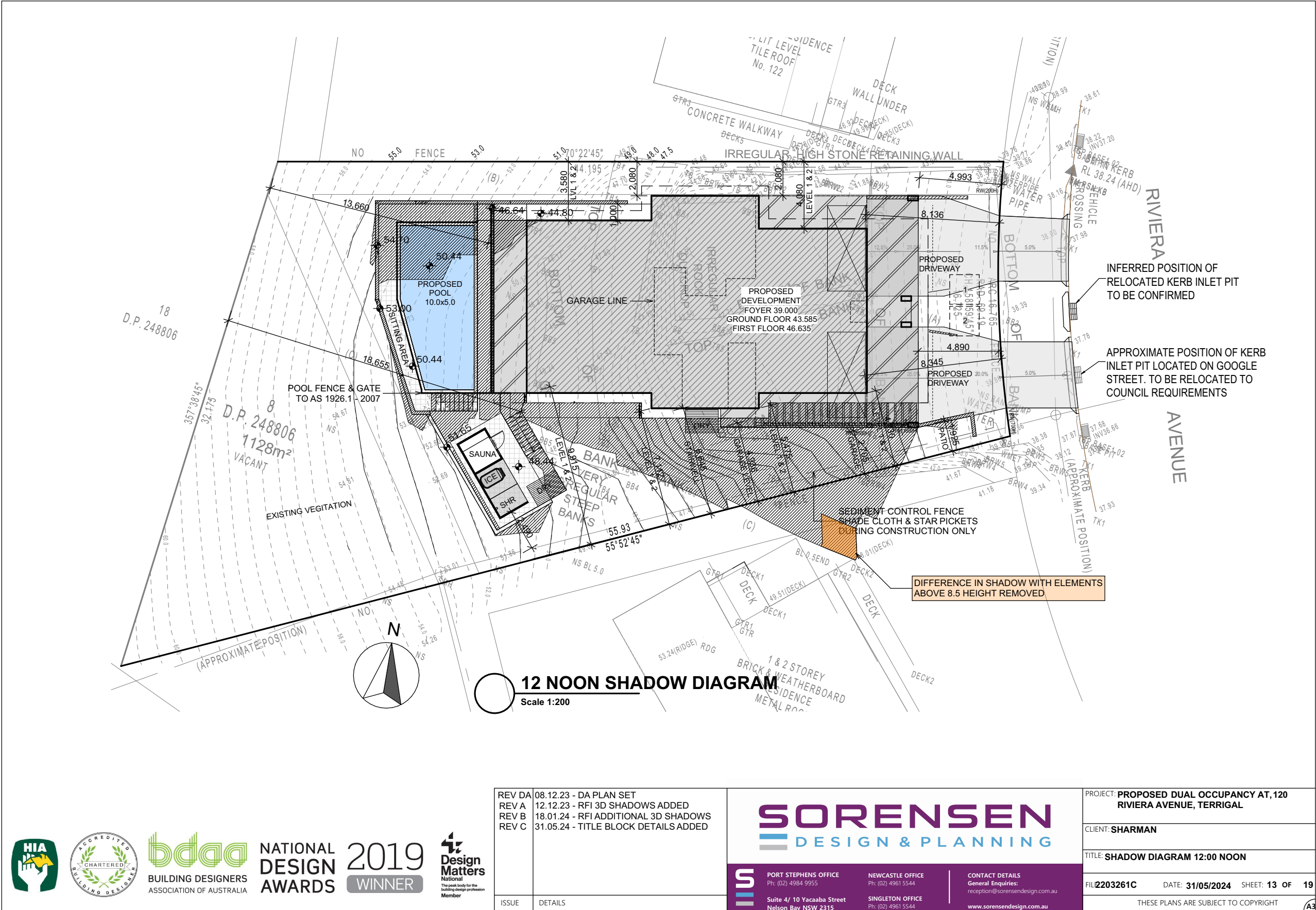
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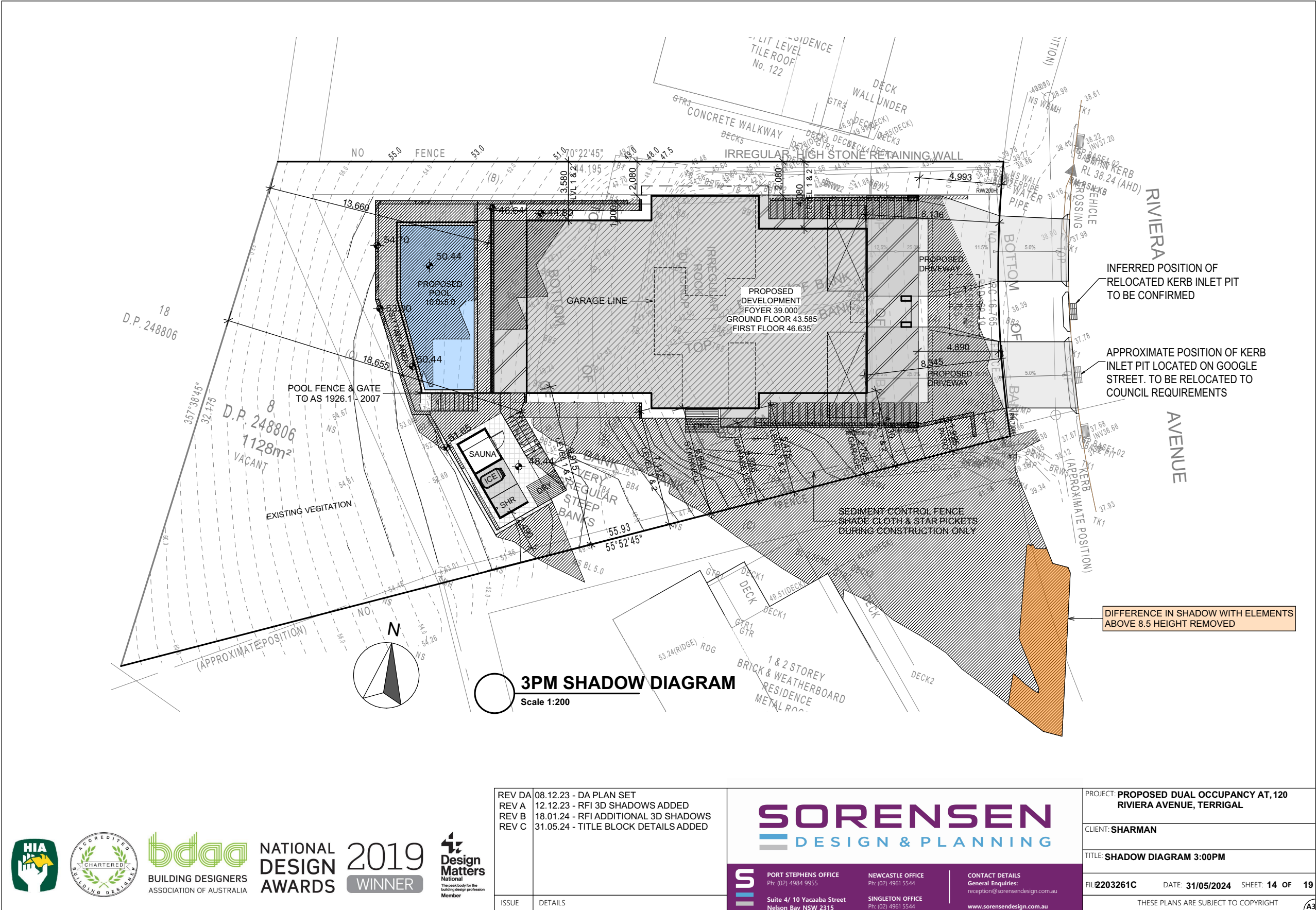












WINDOW SCHEDULE D1										
NO.	Window Name	H (mm)	W (mm)	2D Symbol	Element Type	Head Height	Glazing	3D Front View	Frame	Area
W1	Sliding window	1	2		Window	2			ALUMINIUM	2.52
W2	Sliding window	1	2		Window	2			ALUMINIUM	2.52
W3	Fixed glass panel	1	1		Window	2			ALUMINIUM	1.44
W4	Sliding window	1	2		Window	2			ALUMINIUM	2.52
W5	Fixed glass panel	2	1		Window	2			ALUMINIUM	1.68
W6	Louvre window	2	1		Window	2			ALUMINIUM	1.68
W7	Fixed glass panel	2	1		Window	2			ALUMINIUM	1.68
W8	Louvre window	2	1		Window	2	AS PER BASIX		ALUMINIUM	1.68
W9	Swinging door	2	1		Door	2			ALUMINIUM	1.97
W10	Louvre window	2	1		Window	2			ALUMINIUM	1.68
W11	Fixed glass panel	2	1		Window	2			ALUMINIUM	1.68
W12	Sliding door Multi-panels	2	5		Door	2			ALUMINIUM	10.80
W13	Fixed glass panel	2	1		Window	2			ALUMINIUM	1.68
W14	Fixed glass panel	1	1		Window	2			ALUMINIUM	1.44
W15	Fixed glass panel	1	1		Window	2			ALUMINIUM	1.44
W16	Sliding window	1	2		Window	2			ALUMINIUM	2.16
W17	Sliding window	1	2		Window	2			ALUMINIUM	2.16
W18	Louvre window	2	1		Window	2			ALUMINIUM	1.68
W19	Swinging door	2	1		Door	2			ALUMINIUM	1.72

WINDOW SCHEDULE D2										
NO.	Window Name	H (mm)	W (mm)	2D Symbol	Element Type	Head Height	Glazing	3D Front View	Frame	Area
D2W1	Sliding window	1,200	2,100		Window	2,400			ALUMINIUM	2.52
D2W2	Sliding window	1,200	2,100		Window	2,400			ALUMINIUM	2.52
D2W3	Fixed glass panel	1,200	1,200		Window	2,400			ALUMINIUM	1.44
D2W4	Sliding window	1,200	2,100		Window	2,400			ALUMINIUM	2.52
D2W5	Fixed glass panel	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W6	Louvre window	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W7	Fixed glass panel	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W8	Louvre window	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W09	Louvre window	2,400	900		Window	2,400	AS PER BASIX		ALUMINIUM	2.16
D2W10	Louvre window	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W11	Fixed glass panel	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W12	Sliding door Multi-panels	2,400	4,500		Door	2,400			ALUMINIUM	10.80
D2W13	Fixed glass panel	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W14	Fixed glass panel	1,200	1,200		Window	2,400			ALUMINIUM	1.44
D2W15	Fixed glass panel	1,200	1,200		Window	2,400			ALUMINIUM	1.44
D2W16	Sliding window	900	2,400		Window	2,400			ALUMINIUM	2.16
D2W17	Sliding window	900	2,400		Window	2,400			ALUMINIUM	2.16
D2W18	Louvre window	2,400	700		Window	2,400			ALUMINIUM	1.68
D2W19	Sliding door Multi-panels	2,400	2,400		Door	2,400			ALUMINIUM	5.76
D2W20	Fixed glass panel	1,200	1,200		Window	2,400			ALUMINIUM	1.44
D2W21	Sliding door Multi-panels	2,400	2,400		Door	2,400			ALUMINIUM	5.76



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
REV B	18.01.24 - RFI ADDITIONAL 3D SHADOWS
REV C	31.05.24 - TITLE BLOCK DETAILS ADDED

ISSUE	DETAILS
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<b>S</b> PORT STEPHENS OFFICE Ph: (02) 4984 9955 Suite 4/ 10 Yacaaba Street Nelson Bay NSW 2315	NEWCASTLE OFFICE Ph: (02) 4961 5544 SINGLETON OFFICE Ph: (02) 4961 5544	CONTACT DETAILS General Enquiries: reception@sorensendesign.com.au www.sorensendesign.com.au
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PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL

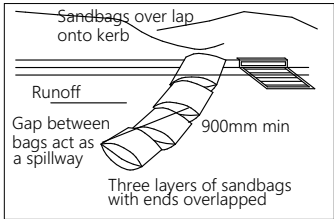
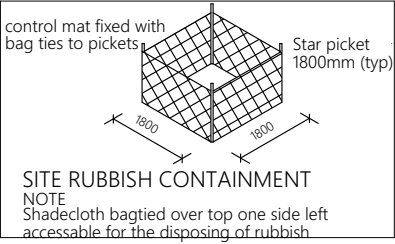
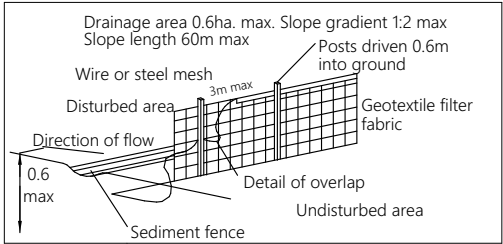
CLIENT: SHARMAN

TITLE: SCHEDULES

FILE: 2203261C DATE: 31/05/2024 SHEET: 15 OF 19

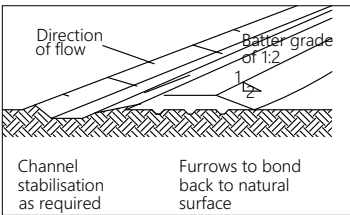
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NOTE

- 1 No vehicle crossing or stockpiling of material on vegetation buffer.
- 2 All sedimentation control structures to be inspected & maintained by site manager daily.
- 3 All sediment retaining structures to be cleaned on reaching 50% storage capacity.
- 4 All existing vegetation will be retained outside the construction site.
- 5 Clean sediments from footpaths, driveways & roads daily.
- 6 Roof drainage via sealed pipeline to street gutter on roof completion.



POOL NOTES

- 1) THE SWIMMING POOL IS TO BE FULLY ENCLOSED WITH FENCING AND GATES TO COMPLY WITH THE SWIMMING POOL ACT 1992 AND REGULATIONS.
- 2) ALL BACKWASH/POOL WASTE WATER IS TO BE PIPED/DRAINED TO THE SEWER IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL WATER AUTHORITY.
- 3) A DURABLE RESUSCITATION INSTRUCTION CHART IS TO BE DISPLAYED IN A PROMINENT POSITION IN THE POOL AT ALL TIMES.
- 4) WHERE A COMMON BOUNDARY FENCE FORMS PART OF THE POOL ENCLOSURE, IT SHALL BE INCREASED IN HEIGHT TO 1.8M. THE EFFECTIVENESS OF THE FENCE AS A CHILD SAFE BARRIER SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE POOL IN PERPETUITY.
- 5) POOL PLANT AND EQUIPMENT SHALL BE SITED OR ENCLOSED IN A SOUND ABSORBING ENCLOSURE TO MINIMISE ANY POTENTIAL OFFENSIVE NOISE IMPACTS TO ADJOINING NEIGHBOURS AS DEFINED UNDER THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997.
- 6) THE SWIMMING POOL SURROUNDS AND/OR PAVING IS TO BE CONSTRUCTED IN A MANNER SO AS TO ENSURE WATER FROM THE POOL OVERFLOW DOES NOT DISCHARGE ONTO THE NEIGHBOURING PROPERTIES.
- 7) THE SWIMMING POOL/SPA WATER RECIRCULATION AND FILTRATION SYSTEM INSTALLATION SHALL COMPLY WITH AS 1926.3 - 2010. INCORPORATING THIS SAFETY MEASURE MAY ASSIST IN AVOIDING ENTRAPMENT OF/OR INJURY TO YOUNG CHILDREN.
- 8) WHERE THERE IS POSSIBLE ACCESS FROM A WINDOW IN ANY RESIDENTIAL BUILDING TO THE SWIMMING POOL, ACCESS IS TO BE RESTRICTED BY
  - A) THE BOTTOM OF THE LOWEST OPENING PANEL OF THE WINDOW MUST (WHEN MEASURED IN THE CLOSED POSITION) BE AT LEAST 1.2 METRES ABOVE FINISHED FLOOR LEVEL; AND
  - B) THERE MUST NOT BE ANY FOOTHOLDS WIDER THAN TEN (10) MILLIMETRES BETWEEN THE BOTTOM OF THE LOWEST OPENING PANEL OF THE WINDOW AND ANY POINT WITHIN 1.1 METRES BELOW THE BOTTOM OF THAT PANEL. \*\*THIS DOES NOT APPLY TO A CHILD SAFE WINDOW OR TO A WINDOW THAT IS TOTALLY ENCLOSED BY A CHILD-SAFE GRILL.

NOTE: CHILD SAFE MEANS A WINDOW BEING OF SUBSTANTIAL CONSTRUCTION AND BEING SO FIXED (BY MEANS OF A KEYED LOCKING DEVICE OR OTHER CHILD RESISTANT DEVICE) THAT IT HAS NO OPENING THROUGH WHICH IT IS POSSIBLE TO PASS A STANDARD TEST BAR.

LEGEND

- AW AWNING WINDOW  
BFD BI-FOLD DOOR  
DH DOUBLE-HUNG WINDOW  
DP DOWNPIPE  
CONC CONCRETE  
CPT CARPET  
CW CASEMENT WINDOW  
CSD CAVITY SLIDING DOOR  
FG FIXED GLASS  
f.w. FLOOR WASTE  
GB GLASS BLOCKS  
HWS HOT WATER SYSTEM  
LV LOUVRE WINDOW  
PLD PANEL LIFT DOOR  
REF REFRIGERATOR  
RD ROLLER DOOR  
SH SHOWER  
SD SLIDING DOOR  
SW SLIDING WINDOW  
S.D. SMOKE DETECTOR  
VA VANITY BASIN  
WM WASHING MACHINE  
WC WATER CLOSET



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
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ISSUE	DETAILS
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PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL

CLIENT: SHARMAN

TITLE: DETAILS

FILE: 2203261C DATE: 31/05/2024 SHEET: 16 OF 19

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## DUAL OCCUPANCY DWELLING 1

**BASIX<sup>®</sup>Certificate**  
Building Sustainability Index www.basix.nsw.gov.au

## Single Dwelling

Certificate number: 13553715\_03

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

Secretary  
Date of issue: Thursday, 12 January 2023  
To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary			
Project name	2203261 Sharmar D1_03		
Street address	120 Riviera Avenue Terrigal 2260		
Local Government Area	Central Coast Council		
Plan type and plan number	deposited 248806		
Lot no.	8		
Section no.	-		
Project type	unit		
No. of bedrooms	4		
Project score			
Water	✓ 45	Target 40	
Thermal Comfort	✓ Pass	Target Pass	
Energy	✓ 51	Target 50	

## Certificate Prepared by

Name / Company Name: Sorensen Design  
ABN (if applicable): 75805073495

## Description of project

Project address		Assessor details and thermal loads	
Project name	2203261 Sharmar D1_03	Assessor number	n/a
Street address	120 Riviera Avenue Terrigal 2260	Certificate number	n/a
Local Government Area	Central Coast Council	Climate zone	n/a
Plan type and plan number	Deposited Plan 248806	Area adjusted cooling load (MJ/m <sup>2</sup> /year)	n/a
Lot no.	8	Area adjusted heating load (MJ/m <sup>2</sup> /year)	n/a
Section no.	-	Ceiling fan in at least one bedroom	n/a
Project type	unit	Ceiling fan in at least one living room or other conditioned area	n/a
Site details		Project score	
No. of bedrooms	4	Water	✓ 45 Target 40
Site area (m <sup>2</sup> )	1128	Thermal Comfort	✓ Pass Target Pass
Roof area (m <sup>2</sup> )	335	Energy	✓ 51 Target 50
Conditioned floor area (m <sup>2</sup> )	199.0		
Unconditioned floor area (m <sup>2</sup> )	12.0		
Total area of garden and lawn (m <sup>2</sup> )	50		

## 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.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 4.5 but <= 6 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	✓
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	✓
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 335 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to:		✓	✓
• all toilets in the development		✓	✓
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)		✓	✓

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Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	✓	✓	✓
The conditioned floor area of the dwelling must not exceed 300 square metres.	✓	✓	✓
The dwelling must not contain open mezzanine area exceeding 25 square metres.	✓	✓	✓
The dwelling must not contain third level habitable attic room.	✓	✓	✓
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above enclosed subfloor, concrete	0.70 (or 1.3 including construction) (down)	
floor - suspended floor above garage, concrete	nil	
external wall - brick veneer	1.86 (or 2.40 including construction)	
external wall - cavity brick	0.50 (or 1.17 including construction)	
ceiling and roof - flat ceiling / flat roof, concrete/plasterboard internal	ceiling: 4 (up), roof: none	concrete/plasterboard internal, light (solar absorptance < 0.475)

Note • Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.  
Note • In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.

BASIX Planning, Industry &amp; Environment www.basix.nsw.gov.au Version: 3.0 / DARWINA\_3\_20\_0 Certificate No.: 13553715\_03 Thursday, 12 January 2023 page 4/9

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 36 to 40 STCs or better.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans + 1-phase airconditioning, Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase airconditioning, Energy rating: 4 Star (old label)		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning, Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning, Energy rating: 4 Star (old label)		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study; dedicated		✓	✓
• at least 3 of the living / dining rooms; dedicated		✓	✓
• the kitchen; dedicated		✓	✓

BASIX Planning, Industry &amp; Environment www.basix.nsw.gov.au Version: 3.0 / DARWINA\_3\_20\_0 Certificate No.: 13553715\_03 Thursday, 12 January 2023 page 7/9

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✓	✓	✓
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:	✓	✓	✓
• For the following glass and frame types, the certifier check can be performed by visual inspection.		✓	✓
- Aluminium single clear		✓	✓
- Aluminium double (air) clear		✓	✓
- Timber/UPVC/fibreglass single clear		✓	✓
- Timber/UPVC/fibreglass double (air) clear		✓	✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W03	1200	1200	aluminium, single, clear	none	not overshadowed
W02	1200	2100	aluminium, single, clear	none	not overshadowed
W04	1200	2100	aluminium, single, clear	none	not overshadowed
W08	2400	700	aluminium, single, clear	none	not overshadowed
W06	2400	700	aluminium, single, clear	none	not overshadowed
W05	2400	700	aluminium, single, clear	none	not overshadowed
W01	1200	2100	aluminium, single, clear	none	not overshadowed
W07	2400	700	aluminium, single, clear	none	not overshadowed

East facing					
W11	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed

BASIX Planning, Industry &amp; Environment www.basix.nsw.gov.au Version: 3.0 / DARWINA\_3\_20\_0 Certificate No.: 13553715\_03 Thursday, 12 January 2023 page 5/9

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
• all bathrooms/toilets; dedicated		✓	✓
• the laundry; dedicated		✓	✓
• all hallways; dedicated		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

BASIX Planning, Industry &amp; Environment www.basix.nsw.gov.au Version: 3.0 / DARWINA\_3\_20\_0 Certificate No.: 13553715\_03 Thursday, 12 January 2023 page 6/9

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W18	2400	700	aluminium, single, clear	solid overhang 9700 mm, 265 mm above head of window or glazed door	not overshadowed
W12	2400	4500	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W09	2400	820	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W10	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W13	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
South facing					
W17	900	2400	aluminium, single, clear	none	not overshadowed
W19	2100	820	aluminium, single, clear	none	not overshadowed
W15	1200	1200	aluminium, single, clear	none	not overshadowed
W14	1200	1200	aluminium, single, clear	none	not overshadowed
W16	900	2400	aluminium, single, clear	none	not overshadowed

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Legend
In these commitments, "applicant" means the person carrying out the development.
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).
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.
Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX Planning, Industry &amp; Environment www.basix.nsw.gov.au Version: 3.0 / DARWINA\_3\_20\_0 Certificate No.: 13553715\_03 Thursday, 12 January 2023 page 9/9



REV DA 08.12.23 - DA PLAN SET  
REV A 12.12.23 - RFI 3D SHADOWS ADDED  
REV B 18.01.24 - RFI ADDITIONAL 3D SHADOWS  
REV C 31.05.24 - TITLE BLOCK DETAILS ADDED

ISSUE DETAILS

**SORENSEN**  
DESIGN & PLANNING



PORT STEPHENS OFFICE  
Ph: (02) 4964 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL

CLIENT: SHARMAN

TITLE: BASIX DUAL OCCUPANCY DWELLING 1

FILE: 2203261C DATE: 31/05/2024 SHEET: 17 OF 19

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## DUAL OCCUPANCY DWELLING 2

## BASIX Certificate

Building Sustainability Index www.basix.nsw.gov.au

## Single Dwelling

Certificate number: 13553795

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

Secretary  
Date of issue: Wednesday, 16 November 2022  
To be valid, this certificate must be lodged within 3 months of the date of issue.

Planning,  
Industry &  
Environment

Project summary		
Project name	2203261 Sharnan D2	
Street address	120 Riviera Avenue Terrigal 2260	
Local Government Area	Central Coast Council	
Plan type and plan number	deposited 248806	
Lot no.	8	
Section no.	-	
Project type	unit	
No. of bedrooms	4	
Project score		
Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 50

Certificate Prepared by		
Name / Company Name:	Sorensen Design	
ABN (if applicable):	75803073495	

## Description of project

Project address		Assessor details and thermal loads	
Project name	2203261 Sharnan D2	Assessor number	n/a
Street address	120 Riviera Avenue Terrigal 2260	Certificate number	n/a
Local Government Area	Central Coast Council	Climate zone	n/a
Plan type and plan number	Deposited Plan 248806	Area adjusted cooling load (MJ/m <sup>2</sup> /year)	n/a
Lot no.	8	Area adjusted heating load (MJ/m <sup>2</sup> /year)	n/a
Section no.	-	Ceiling fan in at least one bedroom	n/a
Project type		Project score	
Project type	unit	Water	✓ 40 Target 40
No. of bedrooms	4	Thermal Comfort	✓ Pass Target Pass
Site details		Energy	✓ 51 Target 50
Site area (m <sup>2</sup> )	1128		
Roof area (m <sup>2</sup> )	335		
Conditioned floor area (m <sup>2</sup> )	199.0		
Unconditioned floor area (m <sup>2</sup> )	12.0		
Total area of garden and lawn (m <sup>2</sup> )	50		

## 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.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but <= 6 Litres per spray force and/or coverage tests) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 7000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 355 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to:			
• all toilets in the development		✓	✓
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)		✓	✓
• a tap that is located within 10 metres of the swimming pool in the development		✓	✓
Swimming pool			
The swimming pool must not have a volume greater than 50 kilolitres.	✓	✓	
The swimming pool must be outdoors.	✓	✓	

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Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
General features			
The dwelling must not have more than 2 storeys.	✓	✓	✓
The conditioned floor area of the dwelling must not exceed 300 square metres.	✓	✓	✓
The dwelling must not contain open mezzanine area exceeding 25 square metres.	✓	✓	✓
The dwelling must not contain third level habitable attic room.	✓	✓	✓
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓
Construction	Additional insulation required (R-Value)		Other specifications
Floor - suspended floor above enclosed subfloor, concrete	0.70 (or 1.3 including construction) (down)		
external wall - brick veneer	1.86 (or 2.40 including construction)		
external wall - cavity brick	0.60 (or 1.17 including construction)		
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 9 (up), roof: full backed blanket (75 mm)		framed; medium (solar absorptance 0.475-0.70)
Note	• Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.		
Note	• In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.		

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Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Windows, glazed doors and skylights</b>			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✓	✓	✓
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:	✓	✓	✓
• For the following glass and frame types, the certifier check can be performed by visual inspection.			✓
- Aluminium single clear			✓
- Aluminium double (air) clear			✓
- Timber/UPVC/fibreglass single clear			✓
- Timber/UPVC/fibreglass double (air) clear			✓
• For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only.			✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W03	1200	1200	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W02	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W01	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W06	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W05	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W08	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W07	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W04	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
East facing					
W09	2400	800	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 995 mm, 850 mm above head of window or glazed door	not overshadowed
W10	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W13	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W18	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W11	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W12	2400	4500	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
South facing					
W17	900	2400	aluminium, single, clear	none	not overshadowed
W14	1200	1200	aluminium, single, clear	none	not overshadowed
W15	1200	1200	aluminium, single, clear	none	not overshadowed
W16	900	2400	aluminium, single, clear	none	not overshadowed
West facing					

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Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W19	2400	2400	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed
W20	1200	1200	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed
W21	2400	2400	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 36 to 40 STCs or better.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans + 1-phase air conditioning. Energy rating: 4 Star (old label)	✓	✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase air conditioning. Energy rating: 4 Star (old label)	✓	✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase air conditioning. Energy rating: 4 Star (old label)	✓	✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase air conditioning. Energy rating: 4 Star (old label)	✓	✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof. Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the 'primary type of artificial lighting' is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word 'dedicated' appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study: dedicated		✓	✓
• at least 3 of the living / dining rooms: dedicated		✓	✓
• the kitchen: dedicated		✓	✓

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
• all bathrooms/toilets: dedicated		✓	✓
• the laundry: dedicated		✓	✓
• all hallways: dedicated		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Swimming pool			
The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): solar only		✓	
The applicant must install a timer for the swimming pool pump in the development.		✓	
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 2 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	✓	✓	✓
Other			
The applicant must construct each refrigerator space in the development so that it is 'well ventilated', as defined in the BASIX definitions.		✓	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.		✓	

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Legend	
In these commitments, "applicant" means the person carrying out the development.	
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).	
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.	
Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.	

PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL

CLIENT: SHARMAN

TITLE: BASIX DUAL OCCUPANCY DWELLING 2

FILE: 2203261C DATE: 31/05/2024 SHEET: 18 OF 19

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PORT STEPHENS OFFICE  
Ph: (02) 4964 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au





Street View



REV DA	08.12.23 - DA PLAN SET
REV A	12.12.23 - RFI 3D SHADOWS ADDED
REV B	18.01.24 - RFI ADDITIONAL 3D SHADOWS
REV C	31.05.24 - TITLE BLOCK DETAILS ADDED
ISSUE	DETAILS

**SORENSEN**  
DESIGN & PLANNING



PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: **PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL**

CLIENT: **SHARMAN**

TITLE: **3D VIEW**

FILE: **2203261C** DATE: **31/05/2024** SHEET: **19 OF 19**

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# PROPOSED DUAL OCCUPANCY

## CIVIL DOCUMENTATION FOR DEVELOPMENT APPROVAL

LOT 8 DP248806, 120 RIVIERA AVENUE, TERRIGAL, NSW 2260






LOCALITY PLAN  
NTS

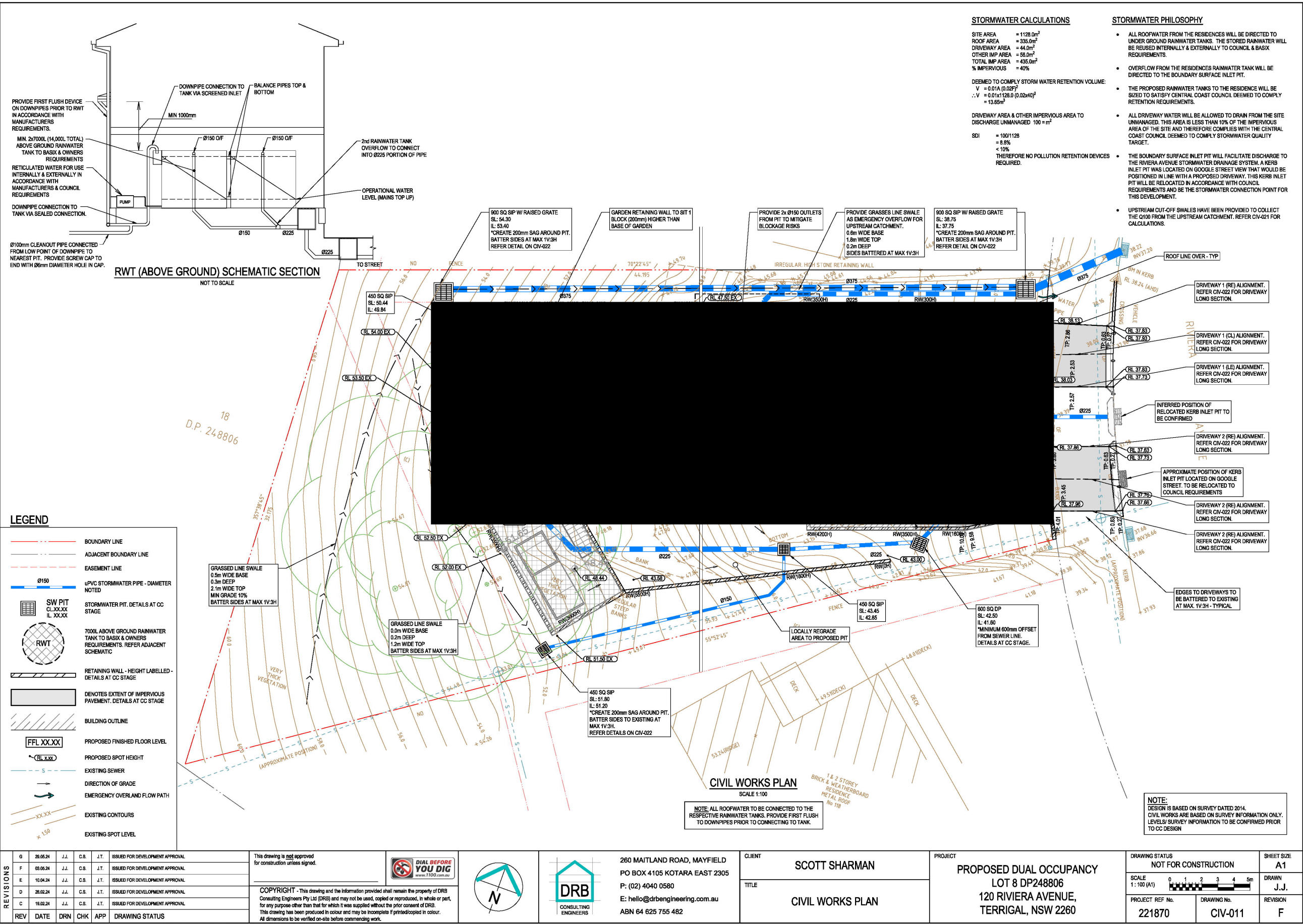
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DRAWING LIST

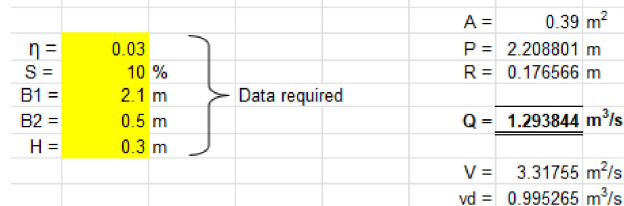
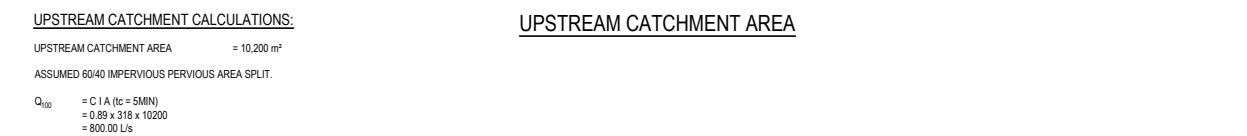
DWG No.	DRAWING TITLE
CIV-001	COVER PAGE, DRAWING LIST AND LOCALITY PLAN
CIV-011	CIVIL WORKS PLAN
CIV-021	CIVIL DETAILS & CALCULATIONS - SHEET 1
CIV-022	CIVIL DETAILS & CALCULATIONS - SHEET 2
CIV-023	DRIVEWAY LONG SECTIONS



REVISIONS	G	29.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL	<div>This drawing is <b>not</b> approved for construction unless signed.</div> <div></div> <div><div></div><div></div><div>260 MAITLAND ROAD, MAYFIELD PO BOX 4105 KOTARA EAST 2305 P: (02) 4040 0580 E: hello@drbengineering.com.au ABN 64 625 755 482</div></div>	CLIENT SCOTT SHARMAN	PROJECT PROPOSED DUAL OCCUPANCY LOT 8 DP248806 120 RIVIERA AVENUE, TERRIGAL, NSW 2260	DRAWING STATUS NOT FOR CONSTRUCTION		SHEET SIZE A1
	F	03.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL				SCALE NOT TO SCALE	DRAWN J.J.	
	E	10.04.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL						
	D	26.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL						
	C	19.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL						
REV	DATE	DRN	CHK	APP	DRAWING STATUS		TITLE COVER PAGE, DRAWING LIST AND LOCALITY PLAN		PROJECT REF No. 221870	DRAWING No. CIV-001	REVISION F	

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REVIEWS	G	29.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL	<div>This drawing is <b>not</b> approved for construction unless signed.</div> <div></div>	<div></div> <div>260 MAITLAND ROAD, MAYFIELD PO BOX 4105 KOTARA EAST 2305 P: (02) 4404 0580 E: hello@drbengineering.com.au ABN 64 625 755 482</div>	CLIENT <div>SCOTT SHARMAN</div>	PROJECT <div>PROPOSED DUAL OCCUPANCY LOT 8 DP248806 120 RIVIERA AVENUE, TERRIGAL, NSW 2260</div>	DRAWING STATUS NOT FOR CONSTRUCTION		SHEET SIZE A1
	F	03.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL					SCALE	NOT TO SCALE	DRAWN J.J.
	E	10.04.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL					PROJECT REF No.		REVISION
	D	26.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL					DRAWING No.		
	C	19.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL							
	REV	DATE	DRN	CHK	APP	DRAWING STATUS					221870		CIV-021





RAINWATER TANK OVERFLOW CALCULATIONS:

ROOF AREA = 335 m²  
RWT1 CATCHMENT = 167.5 m²  
RWT2 CATCHMENT = 167.5 m²

100% IMPERVIOUS AREA

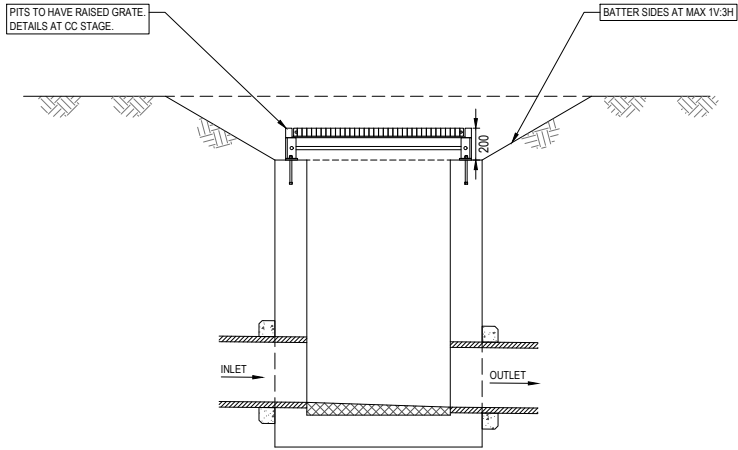
$Q_{100} = C I A (t_c = 5 \text{ MIN})$   
 $= 1.00 \times 318 \times 335$   
 $= 29.5 \text{ L/s}$

EACH OVERFLOW WILL TAKE APPROX 15L/s IN THE 100 YR STORM EVENT

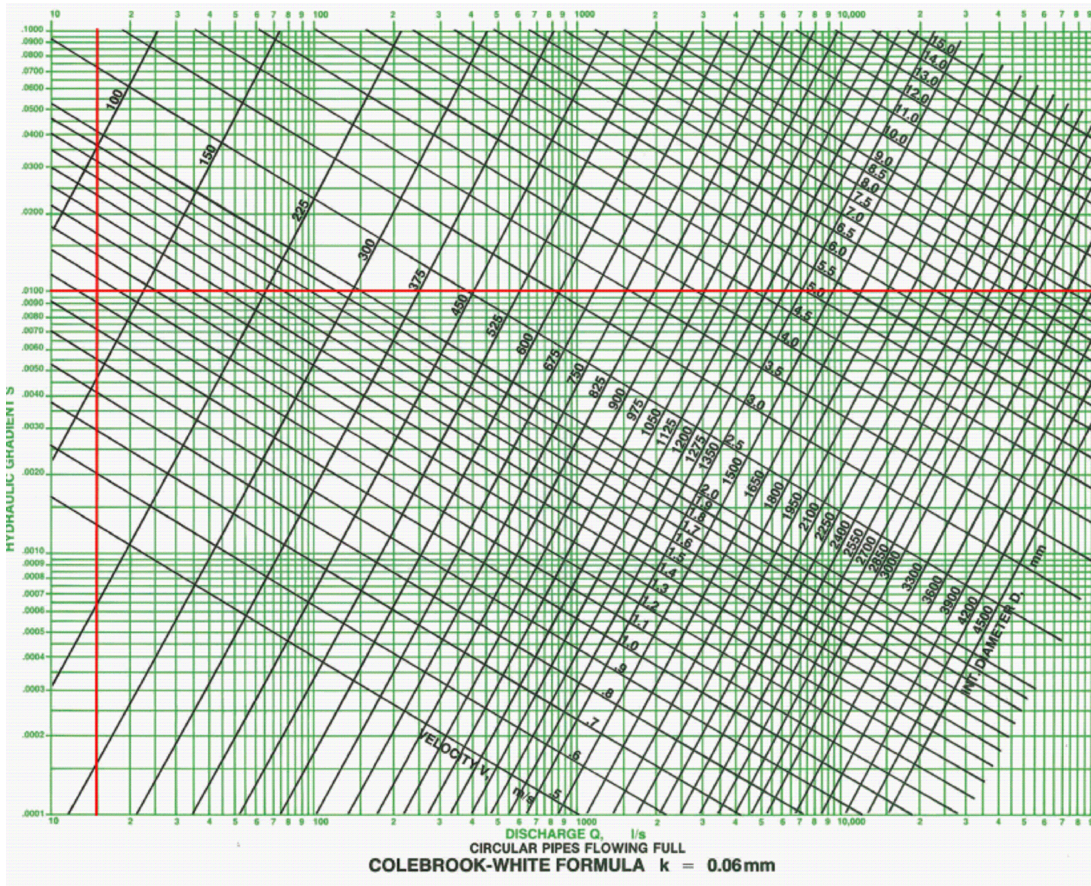
RWT 1 OVERFLOW IS A 150 PIPE: (15L/s)

RWT 2 OVERFLOW IS A 225 PIPE: (30L/s)

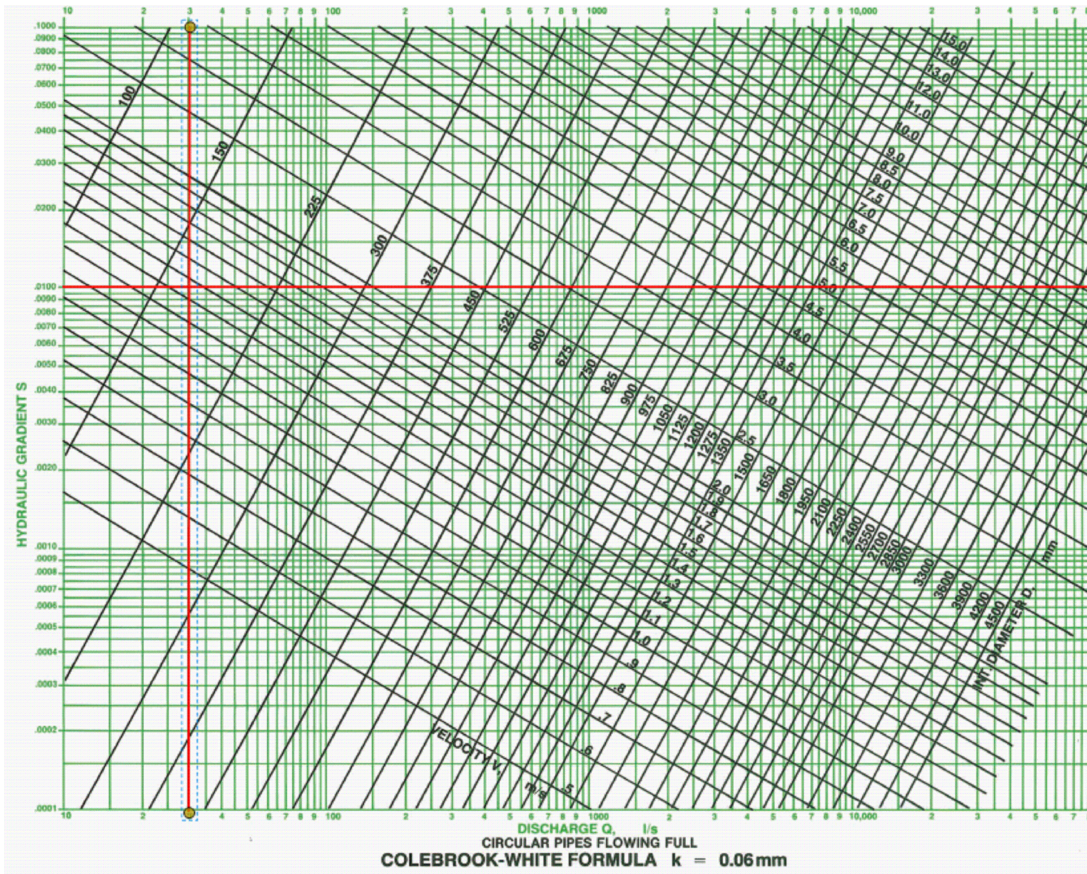
REFER COLEBROOK-WHITE CHARTS BELOW FOR CALCULATIONS FOR THE 1% CAPACITY.





RAISED PIT GRATE DETAIL  
SCALE 1:20



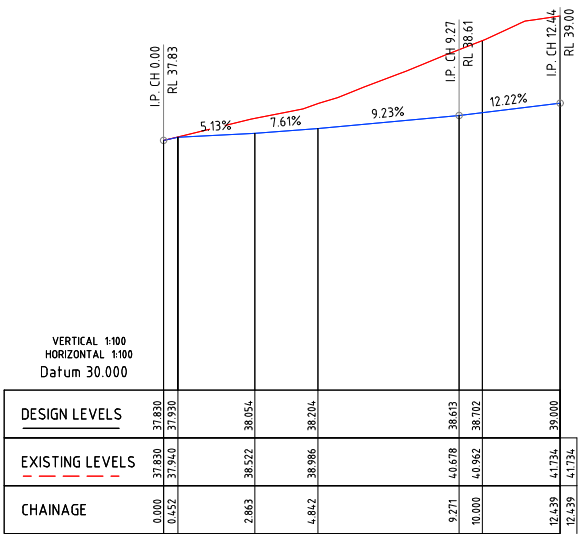
RWT 1 O/F (150mm - 15L/s)



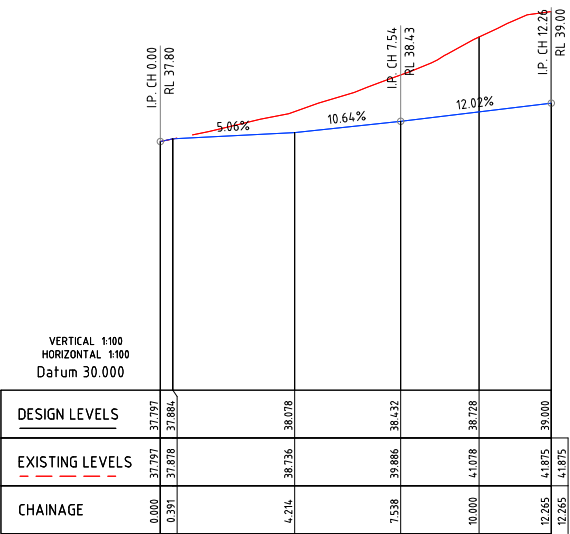
RWT 2 O/F (225mm - 30L/s)

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	F	03.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL				SCALE NOT TO SCALE		DRAWN J.J.
	E	10.04.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL				PROJECT REF No. 221870		DRAWING No. CIV-022
	D	26.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL				REVISION F		
	C	19.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL						
	REV	DATE	DRN	CHK	APP	DRAWING STATUS						
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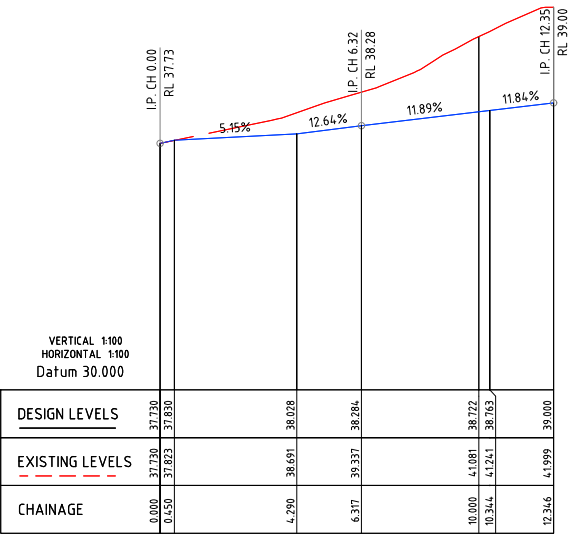




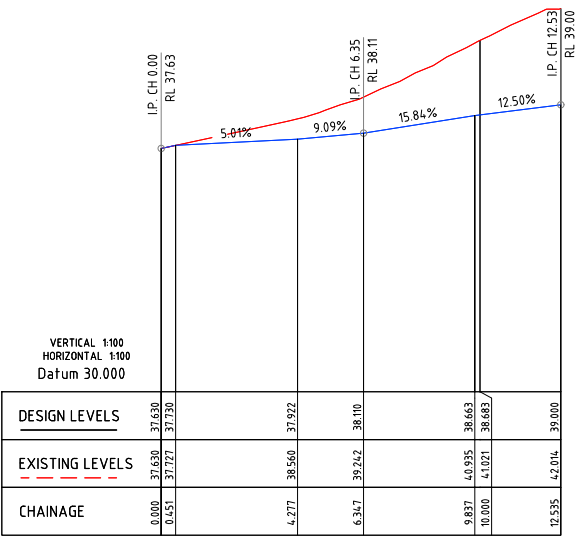
DW1 RE LONG SECTION



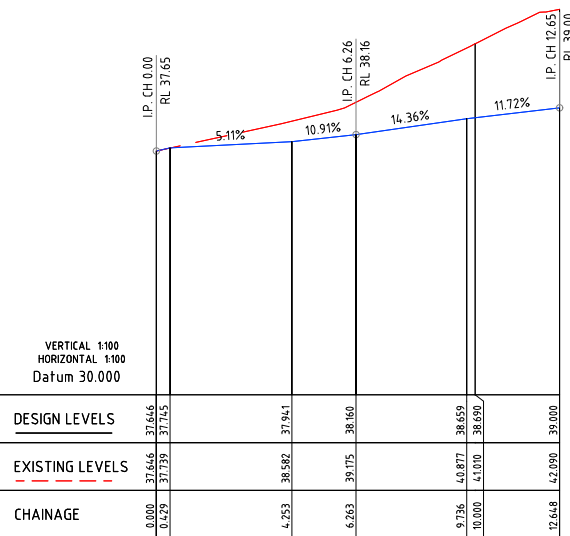
DW1 CL LONG SECTION



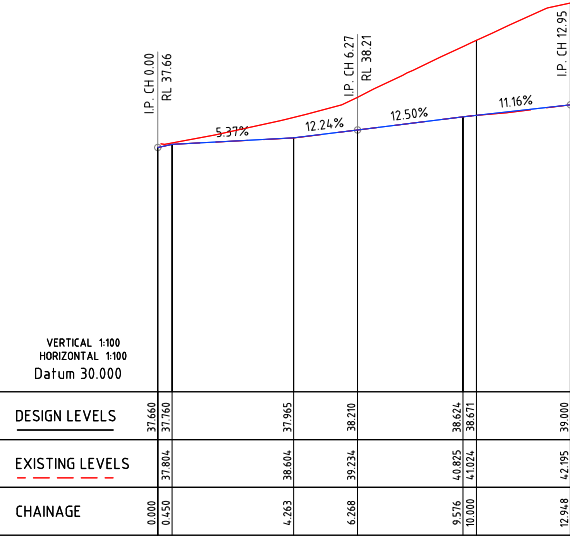
DW1 LE LONG SECTION





DW2 RE LONG SECTION



DW2 CL LONG SECTION



DW2 LE LONG SECTION

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	F	03.05.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL		NOT FOR CONSTRUCTION		A1			
	E	10.04.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL		SCALE	NOT TO SCALE	DRAWN			
	D	26.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL		PROJECT REF No. 221870	DRAWING No. CIV-023	REVISION F			
	C	19.02.24	J.J.	C.S.	J.T.	ISSUED FOR DEVELOPMENT APPROVAL							
REV	DATE	DRN	CHK	APP	DRAWING STATUS								

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## Geotechnical Assessment

**Project:** New Dwelling/Dual Occupancy  
120 Riviera Avenue, Terrigal NSW

**Prepared for:**  
**Scott Sharman**

**Ref:** AG 24034  
16 February 2024







## WHAT TO DO WITH THIS REPORT

While your geotechnical assessment report may be a statutory requirement from council in support of your development application, it also contains information important to the structural design and construction methodology of your project. Therefore, it is critical that all relevant parties are provided with a copy of this report.

**We suggest you give a copy of your geotechnical assessment report to:**

- |   |  |
|---|--|
| <input type="checkbox"/> Your Architect/Building Designer | <input type="checkbox"/> Your Structural/Stormwater/Civil Engineer |
| <input type="checkbox"/> Your Certifier                   | <input type="checkbox"/> Your Project Manager                      |
| <input type="checkbox"/> Your Excavation Contractor       | <input type="checkbox"/> Your Builder                              |

We would also suggest that if any of your project team have questions regarding the contents of this report, that we be contacted for clarification.

## NEXT CRITICAL STAGES

Keep in mind that you will need AscentGeo again at different stages of your project. This may include:

- ☐ Review or endorsement of structural plans/architectural plans for a Construction Certificate
- ☐ Foundation/Footing inspection during construction
- ☐ Excavation hold point inspection, usually at hold points not exceeding 1.5m drops
- ☐ Final inspection and certification for an Occupation Certificate upon completion of works

## GENERAL ADVICE

**If after reading this report you have any questions, are unsure what to do next or when you need to get in touch, please reach out to us.**

Given AscentGeo can't be on site the whole time, we recommend that you or/and your builder take a lot of progress photos, especially during excavation. Many of the potential problems that may pop up can be resolved if we have clear photos of the work that's been done.

A lot can change on site during a construction project: some of these changes are normal and innocuous, while others can be symptoms of larger or more serious issues. For this reason, it's important to contact us to discuss any changes you notice on site that you aren't sure about. This could include but not be limited to changes to ground or surface water, movement of structures, and settlement of paths or landscaping elements.

We're here to help.

**The AscentGeo Team**

✉ [admin@ascentgeo.com.au](mailto:admin@ascentgeo.com.au)

☎ 9913 3179

🌐 [ascentgeo.com.au](http://ascentgeo.com.au)




AG 24034  
16 February 2024



## Geotechnical Assessment

For Dual Occupancy at

**120 Riviera Avenue, Terrigal NSW**

Document Status			Approved for Issue	
Version	Author		Reviewer	Date
1	Ben Morgan BScGeol MAIG RPGeo		 Ben Morgan BScGeol MAIG RPGeo	16.02.2024
Document Distribution				
Version	Copies	Format	To	Date
1	1	PDF	Scott Sharman	16.02.2024

### Limitations

This report has been prepared for Scott Sharman, in accordance with AscentGeo's fee proposal dated 5 February 2024.

The report is provided for the exclusive use of the property owner and their nominated agents for the specific development and purpose as described in the report. This report must not be used for purposes other than those outlined in the report or applied to any other projects.

The information contained within this report is considered accurate at the time of issue with regard to the current conditions on site as identified by AscentGeo and the documentation provided by others.

The report should be read in its entirety and should not be separated from its attachments or supporting notes. It should not have sections removed or included in other documents without the express approval of AscentGeo.



AG 24034  
16 February 2024



## Contents

1	Overview .....	2
1.1	Background .....	3
1.2	Proposed Development .....	4
1.3	Relevant Instruments.....	4
2	Site Description .....	4
2.1	Summary.....	4
2.2	Site Description.....	5
2.3	Geology and Geological Interpretation .....	6
2.3	Fieldwork .....	6
3	Geotechnical Assessment.....	7
3.1	Geological Model.....	7
3.2	Site Classification .....	8
3.3	Groundwater .....	8
3.4	Surface Water .....	9
3.5	Slope Instability .....	9
3.6	Geotechnical Hazards and Risk Analysis .....	9
3.7	Conclusion and Recommendations .....	9
4	References.....	17
5	Appendices	
Appendix A:	Site plan/ground test locations and geological cross section	
Appendix B:	Site photos	
Appendix C:	Engineering logs	
Appendix D:	General notes	

CSIRO Publishing, 2012. 'Foundation Maintenance and Footing Performance: A Homeowners Guide', Sheet BTF-18.

Australian GeoGuide LR8, 2007. 'Examples of Good/Bad Hillside Construction Practice'.

Australian Geomechanics, 2007. 'Practice Note Guidelines for Landslide Management', Appendix C: Qualitative Terminology.



AG 24034  
16 February 2024



## 1 Overview

### 1.1 Background

This report presents the findings of a geotechnical assessment carried out at 120 Riviera Avenue, Terrigal NSW (the 'Site'), by AscentGeo. This geotechnical assessment has been prepared to meet Central Coast Council lodgement requirements for a Development Application (DA), as well as informing detailed structural design and construction methodology.

**Table R3.** Geotechnical Report Data

Assessed by:		Assessment date:
Lot No: 8	Street No: 120	Street: Riviera Avenue
D.P. 248806		Suburb: Terrigal
SITE DATA		Area 1 (Building footprint)
Site Classification [AS 2870]:		S
Land slope [degrees]:		~15
Geological abbreviation of underlying bedrock type:		Rnt
Description of surficial soil:		Firm silty clay
Type of Stability Risk [e.g. landslide, rockfall, etc.]:		Landslip/Soil Creep Rockfall/topple during construction
Risk Assessment [e.g. low, moderate, etc:]		Low
Geotechnical Inspections required during construction? [yes/no]:		Yes Excavation hold point & Foundation Material Inspections
Risks from adjoining land:		Insignificant



AG 24034  
16 February 2024



## 1.2 Proposed Development

The proposed development will take place on Lot 8 in DP 248806, being 120 Riviera Avenue, Terrigal NSW as per the survey by Barry Hunt Associates dated 7 September 2021.

Details of the proposed development are outlined in a series of architectural drawings prepared by Sorensen Design & Planning, File Number 2203261, Sheet 1 -19, dated 12 December 2023.

The works comprise the following:

- Site clearing, removal of fill, excavation and footings preparation
- Construction of new vehicle crossover and driveway
- Construction of new dual occupancy with lower ground floor garages and lifts.
- Construction of new swimming pool and associated works
- Associated hard and soft landscaping.

It is anticipated that the proposed works will require significant bulk excavation to achieve desired FFL's. A cut of approximately 4.0m will be required for the proposed lower ground floor or garage level to a finished RL of approximately 38.50. An excavation of approximately 8.0m will be required to accommodate ground and first floors to a finished RL of approximately 43.00. Terraced excavations each of approximately 4.0m will be required to construct the proposed swimming pool and rear retaining walls to finished RL's of approximately 48.00 and 50.00 respectively.

## 1.3 Relevant Instruments

This geotechnical assessment has been prepared in accordance with the following relevant guidelines and standards:

- Central Coast Council – Local Environment Plan (CCLEP) 2022 and Development Control Plan (CCDCP) 2022
- Australian Geomechanics Society's 'Landslide Risk Management Guidelines' (AGS 2007)
- Australian Standard 1726–2017 Geotechnical Site Investigations
- Australian Standard 2870–2011 Residential Slabs and Footings
- Australian Standard 1289.6.3.2–1997 Methods of Testing Soils for Engineering Purposes
- Australian Standard 3798–2007 Guidelines on Earthworks for Commercial and Residential Developments.

## 2 Site Description

### 2.1 Summary

A summary of site conditions identified at the time of our assessment is provided in Table 1.

**Table 1.** Summary of site conditions



AG 24034  
16 February 2024



Parameter	Description
Site visit	Ben Morgan, Engineering Geologist – 8 February 2024
Site address	120 Riviera Avenue, Terrigal – Lot 8 in DP 248806
Site area m <sup>2</sup> (approx.)	1069m <sup>2</sup> (by calc.)
Existing development	Vacant lot
Slope Aspect	North-east
Average gradient	~22 degrees
Vegetation	Overgrown grasses and weeds. Small to medium shrubs and trees
Retaining structures	N/A
Neighbouring environment	Residentially developed to the north, south & west. Riviera Avenue to the East.



Figure 1. Site location – 120 Riviera Avenue, Terrigal NSW (© SIX Maps NSW Gov)

## 2.2 Site Description

The subject site is situated in a residential area and has a north-easterly aspect. The site is situated on the high side of the road and is bound by residential lots and on 2-3 story rendered masonry, brick, and timber clad homes to the north, south, and west. The currently vacant lot has an irregular rectangular shape and rises steeply from the road frontage at Riviera Avenue to the western boundary





AG 24034  
16 February 2024



of the block. The geomorphology of the site has been significantly modified previously, with a large excavation and fill dominating the eastern half of the block. The block is currently heavily overgrown with +2m high grasses, and sporadic small to medium sized shrubs and trees. A site plan is included in Appendix A.

The photos presented in Appendix B show the general conditions of the site on the day of the site visit conducted by AscentGeo.

### 2.3 Geology and Geological Interpretation

The Gosford-Lake Macquarie Special 1:100,000 Geological Sheet 9131 and part sheet 9231 (NSW Dept. Mineral Resources, 2015) indicates that the site is underlain by the Middle Triassic Age Terrigal Formation (Gosford Subgroup) of the upper Narrabeen Group (Rnt). The Terrigal Formation is typically comprised of interbedded laminite, shale and fine to coarse grained quartz to quartz-lithic sandstones, and minor red claystone.

The soil profile consists of uncontrolled fill (locally derived excavation spoil) and silty/sandy topsoil (O & A Horizons), silty and clayey sand (B Horizon) and weathered bedrock (C Horizon). Based on our observations and the results of testing on site, we would expect weathered shale and sandstone bedrock to be found within 0.5 to 2.0 metres below current surface levels across the area of the proposed works and potentially deeper where filling has been carried out.

**Note:** The local geology is comprised of highly variable interbedded clay, shale and sandstone, with sandstone boulders potentially present in the soil profile. Subsequently ground conditions on site may alter significantly across short distances. This variability should be anticipated and accounted for in the design and construction of any new foundations.

### 2.3 Fieldwork

A site visit and investigation was undertaken on 2023, which included a geotechnically focused visual assessment of the property and its surrounds; geotechnical mapping; photographic documenting; and a limited subsurface investigation including hand auger borehole and dynamic cone penetrometer (DCP) testing.

Due to the high probability of erroneous results from large sandstone boulders, or sandstone rubble entrained in the disturbed soil profile, further assessment incorporating mechanical borehole testing may be required at later stages of the development where more accurate information regarding rock quality and strength will be beneficial to confirm assumptions made for structural design.

#### Hand Auger Borehole Testing

Two hand auger boreholes (BH01 & BH02) tests were drilled at the approximate locations shown on the site plan to visually identify the subsurface material. Engineering logs of the hand auger boreholes are presented in Appendix C.

#### Dynamic Cone Penetrometer (DCP) Testing

Two (2) DCP tests were carried out to assess the in situ relative density of the shallow soils and the depth to weathered rock. These tests were carried out in accordance with the Australian Standard for



AG 24034  
16 February 2024

ground testing: AS 1289.6.3.2–1997 ‘Methods of testing soils for engineering purposes.’ Test locations were constrained by existing structures, sandstone floaters, hard surfaces and the presence of utilities.

The location of these tests is shown on the site plan provided in Appendix B and a summary of the test results is presented below in Table 2, with the full details presented in the engineering logs in Appendix C.

**Table 2.** Summary DCP test results

Test	DCP 1	DCP 2
<b>Summary</b>	Refusal @ 0.65m Bouncing on bedrock or large floater. Brown sandy mud on damp tip.	Refusal @ 0.45m Bouncing on bedrock or large floater. Brown/grey sand on dry tip.

**Note:** The equipment chosen to undertake ground investigations provides the most cost-effective method for understanding the subsurface conditions given site access constraints. Our interpretation of the subsurface conditions is limited to the results of testing undertaken and the known geology in the area. While every care is taken to accurately identify the subsurface conditions on site, variation between the interpreted model presented herein and the actual conditions on site may occur. Should actual ground conditions vary from those anticipated, we recommend that the geotechnical engineer at AscentGeo is informed as soon as possible to advise if modifications to our recommendations are required.

### 3 Geotechnical Assessment

#### 3.1 Geological Model

Based on the results of our site assessment, ground testing, geological mapping and our experience in the area, the subsurface conditions encountered on site may be summarised as follows in Table 3.

**Table 3.** Interpreted geological model.

Unit	Material	Comments
1	Fill	Limited testing would indicate that at least the upper 500mm of soil on site is comprised of locally derived disturbed fill and excavation spoil. Some areas, possibly the eastern portion of the site may have thicker units of fill
2	Silty Sand	Topsoil comprising of Fine to medium grained silty sand in areas undisturbed by previous earthworks or filling
3	Silty Clay	While not encountered in our limited testing, typically residual silty clays overly the extremely weathered rock.
4	Extremely low to low strength shale/sandstone	Extremely Low to Low strength (Class V to IV*) bedrock



AG 24034  
16 February 2024



Unit	Material	Comments
5	Medium strength shale/sandstone	Typically encountered below the weathered crust (0.5 – 1.0M). Medium strength (Class III*) sandstone bedrock was encountered in the excavation face approximately halfway up the site, towards the northern boundary.

\* Pells, Mostyn & Walker, 1998.

### 3.2 Site Classification

Due to the presence of uncontrolled fill, and the steep landslip prone slope, the Site is classified as “P” in accordance with AS 2870–2011. A classification of A may be adopted for any footings founded on confirmed medium strength bedrock.

**Table 4.** Site classification table for residential slabs and footings (AS2870-2011)

Site Classification	Soil description	Expected range of movement
A	Most sand and rock sites with little or no ground movement from moisture changes.	
S	Slight reactive clay sites, which may experience only slight ground movement from moisture changes.	0–20mm
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes.	20–40mm
H1	Highly reactive clay sites, which may experience high ground movement from moisture changes.	40–60mm
H2	Highly reactive clay sites, which may experience very high ground movement from moisture changes.	60–75mm
E	Extremely reactive sites, which may experience extreme ground movement from moisture changes.	>75mm
P	May consist of any of the above soil types, but in combination with site conditions produce undesirable foundations. P sites may also include fill, soft soils, mine subsidence, collapsing soils, prior or potential landslip, soils subject to erosion, reactive sites subject to abnormal moisture conditions, or sites which cannot be classified otherwise.	

### 3.3 Groundwater

While groundwater seepage was identified running over the exposed rock cut near the northern boundary of the site, this is likely as a result of recent rainfall and is not expected to constitute a permanent standing water table. Due to the site elevation and position of the site relative to the slope and the underlying geology, the regional permanent groundwater water table is expected to be below



AG 24034  
16 February 2024



the final excavation level. On this basis, it is considered that the groundwater regime will not be significantly affected by the proposed works and that it is unnecessary to undertake pre-construction or construction stage groundwater monitoring.

There is a high likelihood that natural intermittent perched groundwater to develop above shallow bedrock as groundwater seepage is expected to move downslope through the soil profile above the interface with underlying bedrock and/or above any other low permeability impervious horizons such as clays in overlying soils or siltstone/shale bands in rock.

Groundwater seepage during and after periods of inclement weather should be anticipated through more permeable soil layers, close to the interface with weathered rock and from joints and discontinuities deeper in the weathered rock. Appropriate ground support measures should be utilised in soils overlying rock to manage any localised groundwater inflows and prevent ground loss due to saturated/fluidised sands. Sump dewatering systems or thoughtfully designed gravity drainage systems should be used to dewater the basement excavation.

### 3.4 Surface Water

Overland or surface flows entering the site from the adjoining areas were not identified at the time of our inspection. Appropriate surface water should be implemented to prevent overland runoff entering the site from adjacent areas during heavy or extended rainfall.

### 3.5 Slope Instability

A landslide hazard assessment of the existing slope has been undertaken in general accordance with Australian Geomechanics Society's 'Practice Note Guidelines for Landslide Risk Management', published in March 2007.

No evidence of significant soil creep, tension cracks or landslip instability were identified across the site or on adjacent properties as viewed from the subject site at the time of our inspection. Previous reporting on the site noted that trees onsite, now removed, showed evidence of growth patterns indicative of soil creep.

### 3.6 Geotechnical Hazards and Risk Analysis

No significant geotechnical hazards were identified above, beside or below the subject site, including but not limited to the immediately adjoining residential properties, and the road reserve.

The scope of the proposed excavations on site, and the local geology make this site susceptible to instability during the proposed construction works and adjoining properties susceptible to vibration impacts during the proposed excavation works. Careful control of all site works will be required during the installation of any required retention systems, excavations, and the construction of the proposed structures to maintain the stability of the block, and adjacent land.

Based on observation made during our site assessment the following geological/geotechnical hazards have been identified in relation to the proposed works.

- **Hazard One:** The potential mobilisation of detached sandstone boulders.
- **Hazard Two:** Failure of the proposed excavations.



AG 24034  
16 February 2024



- **Hazard Three:** Vibrations from the proposed works damaging adjacent structures.

**Table 5.** Risk Analysis Summary

HAZARDS	HAZARD ONE	HAZARD TWO	HAZARD THREE
<b>TYPE</b>	The potential mobilisation of detached sandstone boulders	Failure of the proposed excavations	Vibrations from the proposed works damaging adjacent structures
<b>LIKELIHOOD</b>	'Unlikely' ( $10^{-4}$ )	'Possible' ( $10^{-3}$ )	'Possible' ( $10^{-3}$ )
<b>CONSEQUENCES TO PROPERTY</b>	'Medium' (15%)	'Minor' (5%)	'Minor' (5%)
<b>RISK TO PROPERTY</b>	'Low' ( $2 \times 10^{-4}$ )	'Moderate' ( $2 \times 10^{-3}$ )	'Moderate' ( $2 \times 10^{-3}$ )
<b>RISK TO LIFE</b>	$3.2 \times 10^{-7}$ /annum	$4.5 \times 10^{-4}$ /annum	$6.4 \times 10^{-7}$ /annum
<b>COMMENTS</b>	This level of risk to life and property is 'ACCEPTABLE'.	Following implementation of the recommendations outlined in Section 3.6, the above risk levels would reduce to 'Acceptable' levels within the site.	Following implementation of the recommendations outlined in Section 3.6, the above risk levels would reduce to 'Acceptable' levels within the site.

The existing conditions and proposed development are considered to constitute an '**ACCEPTABLE**' risk to life and a '**LOW**' risk to property *provided that the recommendations outlined in Table 6 in Section 3.7 below are adhered to during design and construction.*

### 3.7 Conclusion and Recommendations

The proposed development is considered to be suitable for the site. The existing conditions and proposed development are considered to constitute an '**ACCEPTABLE**' risk to life and a '**LOW**' risk to property *provided that the recommendations outlined in Table 6 are adhered to during design and construction.*

**Table 6.** Geotechnical recommendations

Recommendation	Description
<b>Dilapidation Reporting</b>	We would recommend that detailed dilapidation reporting, undertaken by others (typically the structural engineer or accredited building inspector), be prepared for all adjacent structures, within 20m of the proposed excavation, before the demolition, installation of shoring systems or excavations commence onsite.



AG 24034  
16 February 2024



Recommendation	Description
<b>General</b>	<p>It is critical to the success of this project that consultants, contractors and trades engaged to participate in the project have demonstrable experience managing similar scale works on steep sites.</p> <p>AscentGeo can be contacted for contact details of recommended engineer and excavators if required.</p>
<b>Soil Excavation</b>	<p>Soil excavation will be required to establish pad levels and new footings across the site. It is anticipated that these excavations will encounter uncontrolled fill and sandy topsoil, silty sand and weathered bedrock. The excavation of soil, clay and extremely weathered rock should be possible with the use of bucket excavators and rippers, or for piered footings, traditional auger attachments.</p> <p>Temporary batter slopes may be considered where setbacks from existing structures and property boundaries permits. For shallow excavations in soil (&lt;1.0m deep), provided the soil is battered back no steeper than 35 degrees, they should remain stable without support for a short period until permanent support is in place. Unsupported batter slopes in sandy soil will be prone to erosion in inclement weather.</p> <p>If permanent batters are proposed, the unsupported batter must not be steeper than 30 degrees and should be protected from erosion by geotextile fabric pinned to the slope and planted with soil binding vegetation.</p>
<b>Rock Excavation</b>	<p>All excavation recommendations as outlined below should be read in conjunction with Safe Work Australia's <i>Code of Practice: Excavation Work</i>, published in October 2018.</p> <p>The proposed excavation will encounter shale and sandstone of at least low to medium strength. It is probable that deeper excavations will encounter higher strength rock. A specific excavation methodology (paragraph below) must be implemented to minimise vibration impacts to adjoining structures.</p> <p>It is essential that any excavation through rock that cannot be readily achieved with a bucket excavator or ripper should be carried out initially using a rock saw to minimise the vibration impact and disturbance on the adjoining properties, existing structures and any previously installed supporting systems. Any rock breaking must be carried out only after the rock has been sawed, and in short bursts (2–5 seconds), to prevent the vibration amplifying. The break in the rock from the saw must be between the rock to be broken and the closest adjoining structure.</p> <p>All excavated material is to be removed from the site in accordance with current Office of Environment and Heritage (OEH) regulations.</p> <p><b>A site meeting between the excavation contractor and the geotechnical consultant should be arranged prior to commencement of works to discuss appropriate plant and methodology.</b></p>





AG 24034  
16 February 2024



Recommendation	Description															
Vibrations	<p>The Australian Standard AS2670.1–2001 ‘Evaluation of human exposure to whole-body vibration General requirements. Part 1: General requirements’, suggests a daytime limit of 5mm/s component PPV for human comfort is acceptable. In general, vibration criteria for human disturbance are more stringent than vibration criteria for effects on building contents and building structural damage. Hence, compliance with the more stringent limits dictated for human exposure, would ensure that compliance is also achieved for the other two categories. Furthermore, it is noted that this approach satisfies the requirements of Appendix J of AS2187.2–2006 ‘Explosives-storage and use’, which also limits PPV to 5mm/s for residential settings.</p> <p>As such, we would suggest that the recommendations for method and/or equipment presented in the table below be adopted to maintain an allowable vibration limit of 5mm/s PPV.</p> <table><tr><th></th><th colspan="2">Maximum Peak Particle Velocity 5mm/sec</th></tr><tr><th>Distance from adjoining structure (m)</th><th>Equipment</th><th>Operating Limit (% of Maximum Capacity)</th></tr><tr><td>1.5 – 2.5</td><td>Hand operated jackhammer only</td><td>100</td></tr><tr><td>2.5 – 5.0</td><td>300kg rock hammer</td><td>50</td></tr><tr><td>5.0 – 10.0</td><td>300kg rock hammer or 600kg rock hammer</td><td>100 (300kg) or 50 (600kg)</td></tr></table> <p>It may be necessary to move to smaller rock hammers or to rotary grinders or rock saws if vibrations limits cannot be met. (Manufactures of the plant should be contacted for information regarding peak vibration output.)</p> <p>The propagation of vibrations can be mitigated by pulsing the use of rock hammers, i.e., short bursts, utilising line sawing along boundaries.</p> <p><b>It is essential that at all times excavation equipment must be operated by experienced personnel, according to the manufacturer’s instructions and in a manner consistent with minimising vibration effects.</b></p>		Maximum Peak Particle Velocity 5mm/sec		Distance from adjoining structure (m)	Equipment	Operating Limit (% of Maximum Capacity)	1.5 – 2.5	Hand operated jackhammer only	100	2.5 – 5.0	300kg rock hammer	50	5.0 – 10.0	300kg rock hammer or 600kg rock hammer	100 (300kg) or 50 (600kg)
	Maximum Peak Particle Velocity 5mm/sec															
Distance from adjoining structure (m)	Equipment	Operating Limit (% of Maximum Capacity)														
1.5 – 2.5	Hand operated jackhammer only	100														
2.5 – 5.0	300kg rock hammer	50														
5.0 – 10.0	300kg rock hammer or 600kg rock hammer	100 (300kg) or 50 (600kg)														
Excavation Support	<p>It is anticipated that support of the soil profile and low strength rock will require support to be installed prior to/or as part of staged top-down excavation. A soldier pile, spaced pile wall or similar systems are considered appropriate where setbacks to boundaries limit or prevent battering of the soft sediments.</p> <p>Careful inspection of cut faces by Ascent, at regular hold points initially not exceeding 1.0m drops as the excavation progresses, should be carried out to ensure no significant geological defects such as clay seams, joints or fractures are present in the rock which may compromise the stability of the cut faces.</p>															



AG 24034  
16 February 2024



Recommendation	Description																																				
	<p>Depending on the condition of the excavation face, some areas may require additional support using rock bolts, shotcrete and/or underpinning using brick piers or reinforcement and infill concrete.</p> <p>Full height retaining walls or fully drained shotcrete coverings should be considered as a better long term option where seepage and weathering of lower strength rocks may compromise the stability of the cut face and cause drainage issues in difficult to access subfloor cavities.</p> <p>Further assessment incorporating mechanical borehole testing would provide additional data to more accurately anticipate the likely excavation support required.</p>																																				
Retaining Structures	<p>Retention systems should be designed by a qualified structural engineer in accordance with Australian Standard AS 4678 using the following geotechnical parameters:</p> <table><tr><th colspan="3"></th><th colspan="3">Earth Pressure Coefficients</th></tr><tr><th>(Unit) Material</th><th>Bulk Unit Weight (kN/m<sup>3</sup>)</th><th>Friction Angle (°)</th><th>Active K<sub>a</sub></th><th>At Rest K<sub>0</sub></th><th>Passive K<sub>p</sub></th></tr><tr><td>(Unit 1) Fill / Topsoil</td><td>18</td><td>29</td><td>0.38</td><td>0.60</td><td>2.00</td></tr><tr><td>(Unit 2) Silty Sand</td><td>18</td><td>29</td><td>0.33</td><td>0.50</td><td>2.00</td></tr><tr><td>(Unit 3) Sandstone Class V</td><td>22</td><td>30</td><td>0.27</td><td>0.43</td><td>4.0</td></tr><tr><td>(Unit 4) Sandstone Class IV</td><td>23</td><td>35</td><td>0.25</td><td>0.40</td><td>4.0</td></tr></table> <p>Retention systems should be designed to prevent hydrostatic pressure from developing behind the wall. As such, retaining walls to be constructed as part of the site works are to incorporate back wall subsoil drainage pipes, and are to be backfilled with suitable free-draining materials wrapped in a non-woven geotextile fabric (i.e., Bidim A34 or similar) to prevent the clogging of the drainage with fine-grained sediment.</p> <p>Design of appropriate retention systems should consider potential surcharges from sloping land above the wall, soil creep, groundwater, adjacent structures and footings, and construction related activities such as compaction of fill, traffic of vehicles and construction plant.</p>				Earth Pressure Coefficients			(Unit) Material	Bulk Unit Weight (kN/m <sup>3</sup> )	Friction Angle (°)	Active K <sub>a</sub>	At Rest K <sub>0</sub>	Passive K <sub>p</sub>	(Unit 1) Fill / Topsoil	18	29	0.38	0.60	2.00	(Unit 2) Silty Sand	18	29	0.33	0.50	2.00	(Unit 3) Sandstone Class V	22	30	0.27	0.43	4.0	(Unit 4) Sandstone Class IV	23	35	0.25	0.40	4.0
			Earth Pressure Coefficients																																		
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(Unit 4) Sandstone Class IV	23	35	0.25	0.40	4.0																																
Footings	<p>We recommend that all new footings are taken to and socketed a minimum of 400mm into the underlying medium strength bedrock (Unit 5) using piers as required.</p> <p>The allowable bearing pressure for footings taken to competent weathered Unit 5 bedrock of at least low strength is <b>800kPa</b>. Higher allowable bearing</p>																																				



AG 24034  
16 February 2024



Recommendation	Description
	<p>capacities may be achievable subject to inspection and certification of excavated footings by AscentGeo.</p> <p>Pier footings should be of sufficient diameter to enable effective base cleaning to be carried out during construction. Small diameter piers that cannot be cleaned should be designed for shaft friction, resulting in a longer rock socket.</p> <p>To mitigate the risk of differential settlement, it is essential that all footings are founded on competent bedrock of similar consistency. This may require excavation through sandstone floaters or the relocation of planned footings.</p> <p><b>It is essential that the foundation materials of all footing excavations be inspected and approved before steel reinforcement and concrete is placed. This inspection should be scheduled while excavation plant and operators are still on site, and before steel reinforcement has been fixed or the concrete booked.</b></p>
<b>Fills</b>	<p>Any fill that may be required is to comprise local sand, clay, and weathered rock. Existing organic topsoil is to be cleared in preparation for the introduction of fill.</p> <p>Any new fill material is to be placed in layers not more than 250mm thick and compacted to not less than 98% of Standard Optimum Dry Density at plus or minus 2% of Standard Optimum Moisture Content.</p> <p>All new fill placement is to be carried out in accordance with AS 3798–2007 ‘Guidelines on earthworks for commercial and residential developments.’</p> <p>Fill should not be placed on the site outside of the lateral extent of new engineered retaining walls. The retaining walls should be in place prior to the placement of new fill, with suitable permanent and effective drainage of backfill.</p>
<b>Sediment and Erosion Control</b>	<p>Appropriate design and construction methods shall be required during site works to minimise erosion and provide sediment control. In particular, siltation fencing, and barriers will be required and are to be designed by others.</p>
<b>Stormwater Disposal</b>	<p>The effective management of ground and surface water on site is an important factor in maintaining the long-term performance of built structures, and the stability of the block more generally.</p> <p>It is essential that gutters, downpipes, drains, pipes, and connections are appropriately sized, functioning effectively, and discharging appropriately via non-erosive discharge.</p> <p>All stormwater collected from hard surfaces is to be collected and piped directly to the council stormwater network through any storage tanks or on-site detention that may be required by the regulating authorities, and in</p>



AG 24034  
16 February 2024



Recommendation	Description
	<p>accordance with all relevant Australian Standards and the detailed stormwater management plan by others.</p> <p>Where discharge to council curb and gutter stormwater system, or easement, is not available, on-site stormwater management via non-erosive discharge such and dispersion, or absorption systems may be achievable subject to further testing to establish soil infiltration rates (if necessary), and the detailed stormwater management plan by others.</p> <p>Saturation of soils is one of the key triggers for many landslide events and a significant factor in destabilisation of structures over time. As such, the review and design of stormwater systems must consider climate change and the increased potential for periods of concentrated heavy rainfall.</p>
<b>Inspections</b>	<p>We would recommend that a site visit be organised with the principal contractor and excavation contractor to discuss staging, construction methodology and hold points.</p> <p>Excavation hold points will be required at drops not exceeding 1.5m to visually inspect excavation faces and determine if additional supporting structures are required.</p> <p>It is essential that the foundation materials of all footing excavations be visually assessed and approved by AscentGeo before steel reinforcement and concrete is placed.</p> <p><b>Failure to engage AscentGeo for the required hold point / excavation / foundation material inspections will negate our ability to provide final geotechnical sign off or certification.</b></p>
<b>Further Geotechnical Work</b>	<p>The following is a summary of further geotechnical input required, and which has been detailed in the preceding sections of this report:</p> <ul style="list-style-type: none"> <li>• Preparation of dilapidation reports (by others) on the adjoining houses to the north and south prior to the commencement of construction. These reports should be forwarded to AscentGeo (Not a requirement of this report, but strongly recommended)</li> <li>• Completion of continuous vibration monitoring during any percussive excavation</li> <li>• Hold point inspections of all vertical cuts through sandstone bedrock at drops initially not exceeding 1.0m to allow any adverse defects to be identified and, where required localised support measures initiated.</li> <li>• Inspection by a geotechnical engineer of all footing excavations prior to pouring concrete to confirm that ground conditions comply with design recommendation presented in this report, and as detailed by the structural engineer.</li> </ul>



AG 24034  
16 February 2024



Recommendation	Description
<b>Conditions Relating to Design and Construction Monitoring</b>	<p>To comply with Central Coast Council conditions and/or Private Certifier requirements it may be necessary at the following stages for AscentGeo to:</p> <ul style="list-style-type: none"> <li>• Review the geotechnical content of all structural designs prior to the issue of Construction Certificate.</li> <li>• Complete the abovementioned excavation hold point and/or foundation material inspections during construction to ensure compliance to design with respect to stability and geotechnical design parameters.</li> <li>• By Occupation Certificate stage (project completion), AscentGeo must have inspected and certified excavation/foundation materials. A final site inspection will be required at this stage before the issue of the Occupation Certificate.</li> </ul>

Should you have any queries regarding this report, please do not hesitate to contact the author of this report, undersigned.

For and on behalf of **AscentGeo**,

**Ben Morgan** BScGeol MAIG RPGeo  
Managing Director | Engineering Geologist





AG 24034  
16 February 2024



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## Appendix A

Site plans



[illegible]



## Appendix B

Site photos



AG 24034  
16 February 2024



**Photo 1.** Looking west from Riviera Avenue.



**Photo 2.** Bedrock exposed in previous excavation. With seepage.



**Photo 3.** Low exposed sandstone bedrock, extent obscured by vegetation.



**Photo 4.** Looking north-east from near western boundary.



## Appendix C

Bore Logs | DCP Test Results





# **GEOTECHNICAL LOG - BORE HOLE**

<b>Client:</b> Scott Sharman		<b>Job No:</b> AG 24034		<b>BOREHOLE NO.:</b> BH01		
<b>Project:</b> New Dwellings		<b>Date:</b> 8.2.2024				
<b>Location:</b> 120 Riviera Avenue, Terrigal		<b>Operator:</b> BM		Sheet 1 of 1		
W T A B L E	S A M P L E S	DEPTH (m)	DESCRIPTION OF DRILLED PRODUCT (Soil type, colour, grain size, plasticity, minor components, observations)	S Y M B O L	CONSISTENCY (cohesive soils) or RELATIVE DENSITY (sands and gravels)	M O I S T U R E
		0.0	FILL. CLAYEY/SILTY SAND. Grey/brown/yellow. Fine to medium grained. Disturbed excavation spoil. Sandstone clasts and rubble. rootlets	SM	L	0
		0.4	Auger refusal @ 0.4m unable to penetrate rocky fill. Ground weater not encountered.			
		1.0				
		2.0				
NOTE: D - disturbed sample    U - undisturbed tube sample    B - bulk sample WT - level of water table or free water    N - Standard Penetration Test (SPT)				Contractor: N/A Equipment: Hand Auger Hole width (mm): Angle from Vertical (°):		
See explanation sheets for meaning of all descriptive terms and symbols						



## GEOTECHNICAL LOG - BORE HOLE

Client: Scott Sharman			Job No: AG 24034		BOREHOLE NO.: BH02		
Project: New Dwellings			Date: 8.2.2024				
Location: 120 Riviera Avenue, Terrigal			Operator: BM		Sheet 1 of 1		
W A T E R	T A B L E	S A M P L E S	DEPTH (m)	DESCRIPTION OF DRILLED PRODUCT (Soil type, colour, grain size, plasticity, minor components, observations)	S Y M B O L	CONSISTENCY (cohesive soils) or RELATIVE DENSITY (sands and gravels)	M O I S T U R E
			0.0	FILL. CLAYEY/SILTY SAND. Grey/brown/yellow. Fine to medium grained. Disturbed excavation spoil. Sandstone clasts and rubble. rootlets	SM	L	M
			0.45	Auger refusal @ 0.45m terminating on bedrock or large floater. Ground water not encountered.			
			1.0				
			2.0				
NOTE: D - disturbed sample    U - undisturbed tube sample    B - bulk sample WT - level of water table or free water    N - Standard Penetration Test (SPT)						Contractor: N/A Equipment: Hand Auger Hole width (mm): Angle from Vertical (°):	
See explanation sheets for meaning of all descriptive terms and symbols							



1457 Pittwater Road, North Narrabeen NSW 2101  
T: (02) 9913 3179 E: admin@ascentgeo.com.au

### Dynamic Cone Penetration Test Report

<b>Client:</b>	Scott Sharman	<b>Job No:</b>	AG 24034
<b>Project:</b>	New Dwellings	<b>Date:</b>	8.2.2024
<b>Location:</b>	120 Riviera Avenue, Terrigal	<b>Operator:</b>	BM
<b>Test Procedure:</b>	AS 1289.6.3.2 - 1997		
Test Data			
Test No: DCP 1	Test No: DCP 2	Test No:	Test No:
Test Location: Refer to Site Plan	Test Location: Refer to Site Plan	Test Location:	Test Location:
RL:	RL:	RL:	RL:
Soil Classification: P	Soil Classification: P	Soil Classification:	Soil Classification:
Depth (m)	Blows	Depth (m)	Blows
0.0 - 0.3	6	0.0 - 0.3	2
0.3 - 0.6	6	0.3 - 0.6	10 Rs
0.6 - 0.9	4 Rs	0.6 - 0.9	
0.9 - 1.2		0.9 - 1.2	
1.2 - 1.5		1.2 - 1.5	
1.5 - 1.8		1.5 - 1.8	
1.8 - 2.1		1.8 - 2.1	
2.1 - 2.4		2.1 - 2.4	
2.4 - 2.7		2.4 - 2.7	
2.7 - 3.0		2.7 - 3.0	
3.0 - 3.3		3.0 - 3.3	
3.3 - 3.6		3.3 - 3.6	
3.6 - 3.9		3.6 - 3.9	
3.9 - 4.2		3.9 - 4.2	
4.2 - 4.5		4.2 - 4.5	
4.5 - 4.8		4.5 - 4.8	
DCP 1: Refusal @ 0.65m Bouncing on bedrock or large floater. Brown sandy mud on damp tip.	DCP 2: Refusal @ 0.45m Bouncing on bedrock or large floater. Brown/grey sand on dry tip.		
Remarks: Test locations limited to proposed footprint area avoiding existing hard surfaces and possible buried services . M inor seepage encountered in DCP 1		Weight:	9 kg
		Drop:	510 mm
		Rod Diameter	16 mm

Rs = Solid ring/Hammer bouncing



## Appendix D

### Information Sheets



## General Notes About This Report

### INTRODUCTION

These notes have been prepared by Ascent Geotechnical Consulting Pty Ltd (Ascent) to help our Clients interpret and understand the limitations of this report. Not all sections below are necessarily relevant to all reports.

### SCOPE OF SERVICES

This report has been prepared in accordance with the scope of services set out in Ascent's proposal under Ascent's Terms and Conditions, or as otherwise agreed with the Client. The scope of work may have been limited by a range of factors including time, budget, access and/or site constraints.

### RELIANCE ON INFORMATION PROVIDED

In preparing the report, Ascent has necessarily relied upon information provided by the Client and/or their Agents. Such data may include surveys, analyses, designs, maps and design plans. Ascent has not verified the accuracy or completeness of the data except as stated in this report.

### GEOTECHNICAL AND ENVIRONMENTAL REPORTING

Geotechnical and environmental reporting relies on the interpretation of factual information, based on judgment and opinion, and is far less exact than other engineering or design disciplines.

Geotechnical and environmental reports are prepared for a specific purpose, development, and site, as described in the report, and may not contain sufficient information for other purposes, developments, or sites (including adjacent sites), other than that described in the report.

### SUBSURFACE CONDITIONS

Subsurface conditions can change with time and can vary between test locations. For example, the actual interface between the materials may be far more gradual or abrupt than indicated.

Therefore, actual conditions in areas not sampled may differ from those predicted, since no subsurface investigation, no matter how comprehensive, can reveal all subsurface details and anomalies.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes or groundwater fluctuations can also affect subsurface conditions, and thus the continuing adequacy of a geotechnical report. Ascent should be kept informed of any such events, and should be retained to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

### GROUNDWATER

Groundwater levels indicated on borehole and test pit logs are recorded at specific times. Depending on ground permeability, measured levels may or may not reflect actual levels if measured over a longer time period. Also, groundwater levels and seepage inflows may fluctuate with seasonal and environmental variations and construction activities.

### INTERPRETATION OF DATA

Data obtained from nominated discrete locations, subsequent laboratory testing and empirical or external sources are interpreted by trained professionals in order to provide an opinion about overall site conditions, their likely impact with respect to the report purpose and recommended actions in accordance with any relevant industry standards, guidelines or procedures.

### SOIL AND ROCK DESCRIPTIONS

Soil and rock descriptions are based on AS 1726 – 1993, using visual and tactile assessment, except at discrete locations where field and / or laboratory tests have been carried out. Refer to the accompanying soil and rock terms sheet for further information.

### COPYRIGHT AND REPRODUCTION

The contents of this document are and remain the intellectual property of Ascent. This document should only be used for the purpose for which it was commissioned and should not be used for other projects, or by a third party without written permission from Ascent.

This report shall not be reproduced either totally or in part without the permission of Ascent. Where information from this report is to be included in contract documents or engineering specification for the project, the entire report should be included in order to minimise the likelihood of misinterpretation.

### FURTHER ADVICE

Ascent would be pleased to further discuss how any of the above issues could affect a specific project. We would also be pleased to provide further advice or assistance including:

- Assessment of suitability of designs and construction techniques;
- Contract documentation and specification;
- Construction advice (foundation assessments, excavation support).

## Abbreviations, Notes & Symbols

### SUBSURFACE INVESTIGATION

#### METHOD

##### Borehole Logs

AS# Auger screwing (#-bit)

AD# Auger drilling (#-bit)

B Blank bit

V V-bit

T TC-bit

HA Hand auger

R Roller/tricone

W Washbore

AH Air hammer

AT Air track

LB Light bore push tube

MC Macro core push tube

DT Dual core push tube

##### Excavation Logs

BH Backhoe/excavator bucket

NE Natural exposure

HE Hand excavation

X Existing excavation

##### Cored Borehole Logs

NMLC NMLC core drilling

NQ/HQ Wireline core drilling

SW Well graded sands and gravelly sands, little or no fines  
 SP Poorly graded sands and gravelly sands, little or no fines  
 SM Silty sand, sand-silt mixtures  
 SC Clayey sand, sand-clay mixtures  
 ML Inorganic silts of low plasticity, very fine sands, rock flour, silty or clayey fine sands  
 CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays  
 OL Organic silts and organic silty clays of low plasticity  
 MH Inorganic silts of high plasticity  
 CH Inorganic clays of high plasticity  
 OH Organic clays of medium to high plasticity  
 PT Peat muck and other highly organic soils

### ROCK

#### WEATHERING

RS Residual Soil

XW Extremely Weathered

HW Highly Weathered

MW Moderately Weathered

DW\* Distinctly Weathered

SW Slightly Weathered

FR Fresh

\*covers both HW & MW

#### STRENGTH

EL Extremely Low

VL Very Low

L Low

M Medium

H High

VH Very High

EH Extremely High

#### ROCK QUALITY DESIGNATION (%)

=  $\frac{\text{sum of intact core pieces} > 100\text{mm}}{\text{total length of section being evaluated}} \times 100$

#### CORE RECOVERY (%)

=  $\frac{\text{core recovered}}{\text{core lift}} \times 100$

#### NATURAL FRACTURES

##### Type

JT Joint

BP Bedding plane

SM Seam

FZ Fractured zone

SZ Shear zone

VN Vein

##### Infill or Coating

Cn Clean

St Stained

Vn Veneer

Co Coating

Cl Clay

Ca Calcite

Fe Iron oxide

Mi Micaceous

Qz Quartz

##### Shape

pl Planar

cu Curved

un Undulose

st Stepped

ir Irregular

##### Roughness

pol Polished

slk Slickensided

smo Smooth

rou Rough

#### SUPPORT

##### Borehole Logs

C Casing

M Mud

##### Excavation Logs

S Shoring

B Benched

#### SAMPLING

B Bulk sample

D Disturbed sample

U# Thin-walled tube sample (#mmdiameter)

ES Environmental sample

EW Environmental water sample

#### FIELD TESTING

PP Pocket penetrometer (kPa)

DCP Dynamic cone penetrometer

PSP Perth sand penetrometer

SPT Standard penetration test

PBT Plate bearing test

su Vane shear strength peak/residual (kPa) and vane size (mm)

N\* SPT (blows per 300mm)

Nc SPT with solid cone

R Refusal

\*denotes sample taken

#### BOUNDARIES

\_\_\_\_\_ Known

----- Probable

..... Possible

### SOIL

#### MOISTURE CONDITION

D Dry

M Moist

W Wet

Wp Plastic Limit

WL Liquid Limit

MC Moisture Content

#### CONSISTENCY

VS Very Soft

S Soft

F Firm

St Stiff

VSt Very Stiff

H Hard

Fb Friable

#### DENSITY INDEX

VL Very Loose

L Loose

MD Medium Dense

D Dense

VD Very Dense

#### USCS SYMBOLS

GW Well graded gravels and gravel-sand mixtures, little or no fines

GP Poorly graded gravels and gravel-sand mixtures, little or no fines

GM Silty gravels, gravel-sand-silt mixtures

GC Clayey gravels, gravel-sand-clay mixtures










































## Soil & Rock Terms

SOIL				STRENGTH			
MOISTURE CONDITION				Term	Is50 (MPa)	Term	Is50 (MPa)
Term	Description			Extremely Low	< 0.03	High	1 – 3
Dry	Looks and feels dry. Cohesive and cemented soils are hard, friable or powdery. Uncemented granular soils run freely through the hand.			Very Low	0.03 – 0.1	Very High	3 – 10
Moist	Feels cool and darkened in colour. Cohesive soils can be moulded. Granular soils tend to cohere.			Low	0.1 – 0.3	Extremely High	> 10
Wet	As for moist, but with free water forming on hands when handled.			Medium	0.3 – 1		
For cohesive soils, moisture content may also be described in relation to plastic limit (W <sub>p</sub> ) or liquid limit (W <sub>L</sub> ). [>> much greater than, > greater than, < less than, << much less than].							
CONSISTENCY				WEATHERING			
Term	c (kPa)	Term	c (kPa)	Term	Description		
Very Soft	< 12	Very Stiff	100 200	Residual Soil	Soil developed on extremely weathered rock; the mass structure and substance fabric are no longer evident		
Soft	12 - 25	Hard	> 200	Extremely Weathered	Rock is weathered to such an extent that it has 'soil' properties, i.e. it either disintegrates or can be remoulded, in water. Fabric of original rock is still visible		
Firm	25 - 50	Friable	-	Highly Weathered	Rock strength usually highly changed by weathering; rock may be highly discoloured		
Stiff	50 - 100			Moderately Weathered	Rock strength usually moderately changed by weathering; rock may be moderately discoloured		
DENSITY INDEX				Distinctly Weathered	See 'Highly Weathered' or 'Moderately Weathered'		
Term	I <sub>D</sub> (%)	Term	I <sub>D</sub> (%)	Slightly Weathered	Rock is slightly discoloured but shows little or no change of strength from fresh rock		
Very Loose	< 15	Dense	65 – 8	Fresh	Rock shows no signs of decomposition or staining		
Loose	15 – 35	Very Dense	> 85	NATURAL FRACTURES			
Medium Dense	35 – 65			Type	Description		
PARTICLE SIZE				Joint	A discontinuity or crack across which the rock has little or no tensile strength. May be open or closed		
Name	Subdivision	Size (mm)		Bedding plane	Arrangement in layers of mineral grains of similar sizes or composition		
Boulders		> 200		Seam	Seam with deposited soil (infill), extremely weathered insitu rock (XW), or disoriented usually angular fragments of the host rock (crushed)		
Cobbles		63 - 200		Shear zone	Zone with roughly parallel planar boundaries, of rock material intersected by closely spaced (generally < 50mm) joints and/or microscopic fracture (cleavage)		
Gravel	coarse	20 - 63			planes		
	medium	6 - 20		Vein	Intrusion of any shape dissimilar to the adjoining rock mass. Usually igneous		
	fine	2.36 - 6		Shape	Description		
Sand	coarse	0.6 - 2.36		Planar	Consistent orientation		
	medium	0.2 - 0.6		Curved	Gradual change in orientation		
	fine	0.075 0.2		Undulose	Wavy surface		
Silt & Clay		< 0.075		Stepped	One or more well defined steps		
				Irregular	Many sharp changes in orientation		
MINOR COMPONENTS				Infill or Coating	Description		
Term	Proportion by Mass coarse grained	fine grained		Clean	No visible coating or discolouring		
Trace	≤ 5%	≤ 15%		Stained	No visible coating but surfaces are discoloured		
Some	5 - 2%	15 - 30%		Veneer	A visible coating of soil or mineral, too thin to measure; may be patchy		
SOIL ZONING				Coating	Visible coating ≤ 1mm thick. Ticker soil material described as seam		
Layers	Continuous exposures			Roughness	Description		
Lenses	Discontinuous layers of lenticular shape			Polished	Shiny smooth surface		
Pockets	Irregular inclusions of different material			Slickensided	Grooved or striated surface, usually polished		
SOIL CEMENTING				Smooth	Smooth to touch. Few or no surface irregularities		
Weakly	Easily broken up by hand			Rough	Many small surface irregularities (amplitude generally < 1mm). Feels like fine to coarse sandpaper		
Moderately	Effort is required to break up the soil by hand			ROCK			
SOIL STRUCTURE				SEDIMENTARY ROCK TYPE DEFINITIONS			
Massive	Coherent, with any partings both vertically and horizontally spaced at greater than 100mm			Rock Type	Definition (more than 50% of rock consists of....)		
Weak	Peds indistinct and barely observable on pit face. When disturbed approx. 30% consist of peds smaller than 100mm			Conglomerate	... gravel sized (> 2mm) fragments		
Strong	Peds are quite distinct in undisturbed soil. When disturbed >60% consists of peds smaller than 100mm			Sandstone	... sand sized (0.06 to 2mm) grains		
				Siltstone	... silt sized (<0.06mm) particles, rock is not laminated		
				Claystone	... clay, rock is not laminated		
				Shale	... silt or clay sized particles, rock is laminated		
				Note: soil and rock descriptions are generally in accordance with AS1726-1993 Geotechnical Site Investigations			

Note: soil and rock descriptions are generally in accordance with AS1726-1993 Geotechnical Site Investigations

## Graphic Symbols Index

Soil		Rock		Water Measurements	
	Fill		Sandstone		Level at time of drilling
	Peat, Topsoil		Shale		Level after drilling
	Clay		Clayey Shale		Inflow
	Silty Clay		Siltstone		Outflow
	Gravelly Clay		Conglomerate		
	Sandy Clay		Claystone		
	Silt		Dolerite, Basalt		
	Sandy Silt		Granite		
	Clayey Silt		Limestone		
	Gravelly Silt		Tuff		
	Gravel		Coarse grained Metamorphic		
	Sandy Gravel		Medium grained Metamorphic		
	Clayey Gravel		Fine grained Metamorphic		
	Silty Gravel		Coal		
	Sand				
	Gravelly Sand	<b>Other</b>			
	Silty Sand		Asphalt		
	Clayey Sand		Concrete		
			Brick		

# Foundation Maintenance and Footing Performance: A Homeowner's Guide



BTF 18  
replaces  
Information  
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

## Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870, the Residential Slab and Footing Code.

## Causes of Movement

### Settlement due to construction

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

### Erosion

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

### Saturation

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume – particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

### Seasonal swelling and shrinkage of soil

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

### Shear failure

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.
- In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

## GENERAL DEFINITIONS OF SITE CLASSES

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites with only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which can experience moderate ground movement from moisture changes
H	Highly reactive clay sites, which can experience high ground movement from moisture changes
E	Extremely reactive sites, which can experience extreme ground movement from moisture changes
A to P	Filled sites
P	Sites which include soft soils, such as soft clay or silt or loose sands; landslip; mine subsidence; collapsing soils; soils subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise

**Tree root growth**

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

**Unevenness of Movement**

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

**Effects of Uneven Soil Movement on Structures****Erosion and saturation**

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpend).

Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

**Seasonal swelling/shrinkage in clay**

Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.



As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

**Movement caused by tree roots**

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

**Complications caused by the structure itself**

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

**Effects on full masonry structures**

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.



The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

#### Effects on framed structures

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation cause a footing to fall away this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

#### Effects on brick veneer structures

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

### Water Service and Drainage

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem.

Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.

- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

### Seriousness of Cracking

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870.

AS 2870 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

### Prevention/Cure

#### Plumbing

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

#### Ground drainage

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a graded drain system connected to the stormwater collection system is usually an easy solution.

It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

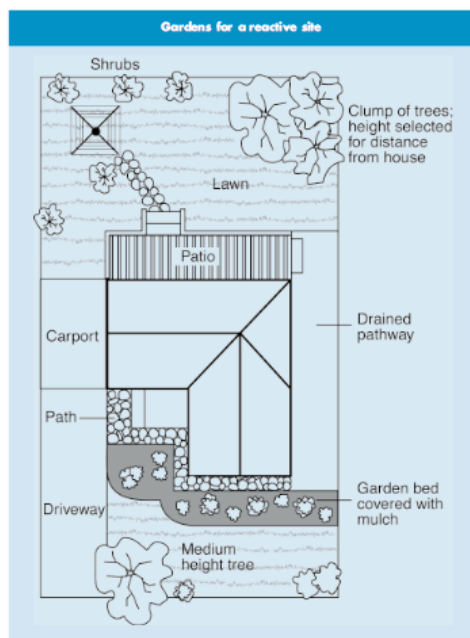
#### Protection of the building perimeter

It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving

### CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

Description of typical damage and required repair	Approximate crack width limit (see Note 3)	Damage category
Hairline cracks	<0.1 mm	0
Fine cracks which do not need repair	<1 mm	1
Cracks noticeable but easily filled. Doors and windows stick slightly	<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired	5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted	15–25 mm but also depend on number of cracks	4



- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

#### The garden

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

#### Existing trees

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

#### Information on trees, plants and shrubs

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

#### Excavation

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

#### Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

**This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.**

should extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

#### Condensation

In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

**Warning:** Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

The information in this and other issues in the series was derived from various sources and was believed to be correct when published.

The information is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject.

Further professional advice needs to be obtained before taking any action based on the information provided.

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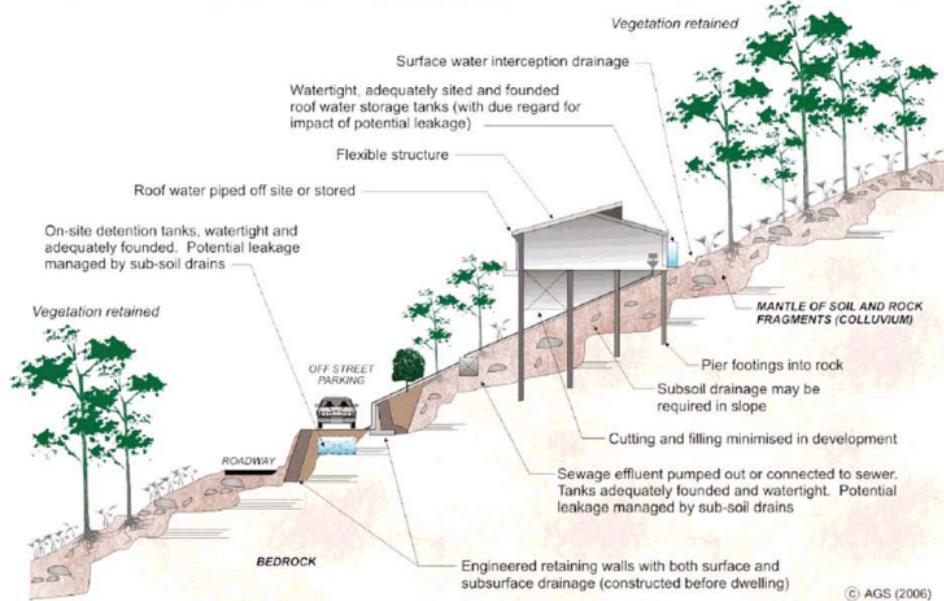
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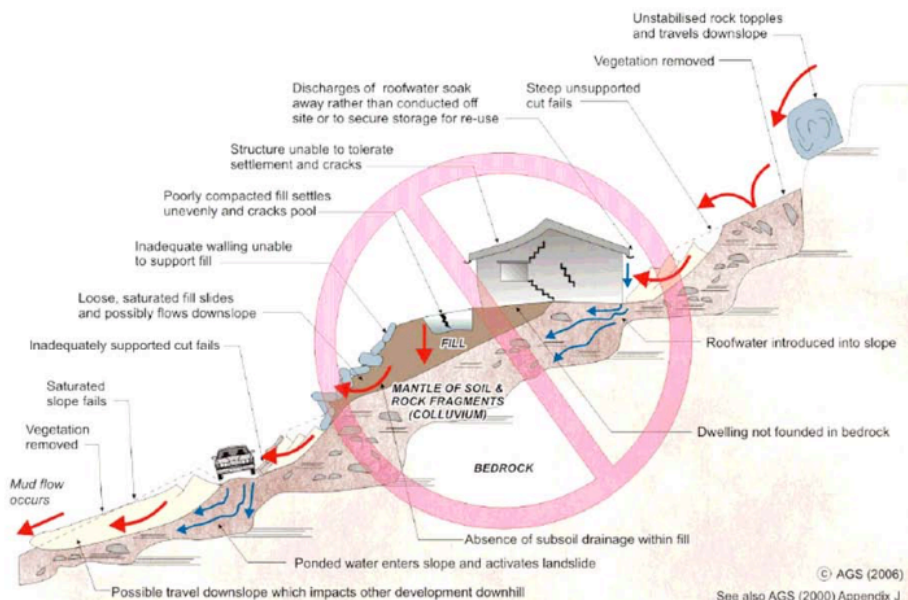
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## EXAMPLES OF **GOOD** HILLSIDE PRACTICE



## EXAMPLES OF **POOR** HILLSIDE PRACTICE



## PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

## APPENDIX C: LANDSLIDE RISK ASSESSMENT

## QUALITATIVE TERMINOLOGY FOR USE IN ASSESSING RISK TO PROPERTY

## QUALITATIVE MEASURES OF LIKELIHOOD

Approximate Annual Probability		Implied Indicative Landslide Recurrence Interval	Description	Descriptor	Level
Indicative Value	Notional Boundary				
10 <sup>-1</sup>	5x10 <sup>-2</sup>	10 years	The event is expected to occur over the design life. The event will probably occur under adverse conditions over the design life.	ALMOST CERTAIN LIKELY	A
10 <sup>-2</sup>		100 years			
10 <sup>-3</sup>	5x10 <sup>-3</sup>	200 years	The event could occur under adverse conditions over the design life. The event might occur under very adverse circumstances over the design life.	POSSIBLE UNLIKELY	B
10 <sup>-4</sup>	5x10 <sup>-4</sup>	1000 years			
10 <sup>-5</sup>	5x10 <sup>-5</sup>	10,000 years	The event is conceivable but only under exceptional circumstances over the design life. The event is inconceivable or fanciful over the design life.	RARE BARELY CREDIBLE	C
		20,000 years			
		100,000 years	The event is conceivable but only under exceptional circumstances over the design life. The event is inconceivable or fanciful over the design life.	RARE BARELY CREDIBLE	D
		1,000,000 years			
10 <sup>-6</sup>	5x10 <sup>-6</sup>	200,000 years			E
					F

## QUALITATIVE MEASURES OF CONSEQUENCES TO PROPERTY

Approximate Cost of Damage		Description	Descriptor	Level
Indicative Value	Notional Boundary			
200%	100%	Structure(s) completely destroyed and/or large scale damage requiring major engineering works for stabilisation. Could cause at least one adjacent property major consequence damage.	CATASTROPHIC	1
60%	40%	Extensive damage to most of structure, and/or extending beyond site boundaries requiring significant stabilisation works. Could cause at least one adjacent property medium consequence damage.	MAJOR	2
20%	10%	Moderate damage to some of structure, and/or significant part of site requiring large stabilisation works.	MEDIUM	3
5%	1%	Could cause at least one adjacent property minor consequence damage.	MINOR	4
0.5%		Limited damage to part of structure, and/or part of site requiring some reinstatement stabilisation works. Little damage. (Note for high probability event (Almost Certain), this category may be subdivided at a notional boundary of 0.1%. See Risk Matrix.)	INSIGNIFICANT	5

- Notes:**
- (2) The Approximate Cost of Damage is expressed as a percentage of market value, being the cost of the improved property which includes the land plus the unaffected structures.
  - (3) The Approximate Cost is to be an estimate of the direct cost of the damage, such as the cost of reinstatement of the damaged portion of the property (land plus structures), stabilisation works required to render the site to tolerable risk level for the landslide which has occurred and professional design fees, and consequential costs such as legal fees, temporary accommodation. It does not include additional stabilisation works to address other landslides which may affect the property.
  - (4) The table should be used from left to right; use Approximate Cost of Damage or Description to assign Descriptor, not vice versa

**PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007**  
**APPENDIX C: – QUALITATIVE TERMINOLOGY FOR USE IN ASSESSING RISK TO PROPERTY (CONTINUED)**

**QUALITATIVE RISK ANALYSIS MATRIX – LEVEL OF RISK TO PROPERTY**

LIKELIHOOD		CONSEQUENCES TO PROPERTY (With Indicative Approximate Cost of Damage)				
	Indicative Value of Approximate Annual Probability	1: CATASTROPHIC 200%	2: MAJOR 60%	3: MEDIUM 20%	4: MINOR 5%	5: INSIGNIFICANT 0.5%
A - ALMOST CERTAIN	10 <sup>-1</sup>	VH	VH	VH	H	M or L (5)
B - LIKELY	10 <sup>-2</sup>	VH	VH	H	M	L
C - POSSIBLE	10 <sup>-3</sup>	VH	H	M	M	VL
D - UNLIKELY	10 <sup>-4</sup>	H	M	L	L	VL
E - RARE	10 <sup>-5</sup>	M	L	L	VL	VL
F - BARELY CREDIBLE	10 <sup>-6</sup>	L	VL	VL	VL	VL

Notes: (5) For Cell A5, may be subdivided such that a consequence of less than 0.1% is Low Risk.  
 (6) When considering a risk assessment it must be clearly stated whether it is for existing conditions or with risk control measures which may not be implemented at the current time.

**RISK LEVEL IMPLICATIONS**

Risk Level		Example Implications (7)
VH	VERY HIGH RISK	Unacceptable without treatment. Extensive detailed investigation and research, planning and implementation of treatment options essential to reduce risk to Low; may be too expensive and not practical. Work likely to cost more than value of the property.
H	HIGH RISK	Unacceptable without treatment. Detailed investigation, planning and implementation of treatment options required to reduce risk to Low. Work would cost a substantial sum in relation to the value of the property.
M	MODERATE RISK	May be tolerated in certain circumstances (subject to regulator's approval) but requires investigation, planning and implementation of treatment options to reduce the risk to Low. Treatment options to reduce to Low risk should be implemented as soon as practicable.
L	LOW RISK	Usually acceptable to regulators. Where treatment has been required to reduce the risk to this level, ongoing maintenance is required.
VL	VERY LOW RISK	Acceptable. Manage by normal slope maintenance procedures.

Note: (7) The implications for a particular situation are to be determined by all parties to the risk assessment and may depend on the nature of the property at risk; these are only given as a general guide.

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GENERAL NOTES

G1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF CONSTRUCTION OF THE WORKS.

G2. REFER ANY DISCREPANCY, AMBIGUITY, OMISSION OR INCONSISTENCY TO THE OMEGA PROJECT SERVICES BEFORE PROCEEDING WITH THE WORK. IF IN DOUBT, ASK.

G3. DO NOT OBTAIN DIMENSIONS BY SCALING THE STRUCTURAL ELEMENTS.

G4. VERIFY ALL SETTING OUT DIMENSIONS WITH THE WORKS.

G5. SETTING OUT DIMENSIONS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION/FABRICATION, WHO SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.

G6. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE BUILDING CODE OF AUSTRALIA (BCA), THE APPROPRIATE AUSTRALIAN STANDARDS, THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

G7. DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

G8. WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL WORKCOVER REQUIREMENTS, THE WORK HEALTH AND SAFETY ACT AND THE WORK HEALTH AND SAFETY REGULATION.

G9. CONSTRUCTION SHALL NOT COMMENCE UNTIL THE RELEVANT CERTIFICATE IS ISSUED BY THE INDEPENDENT CERTIFIER.

G10. EXISTING SERVICES SHOWN ON DRAWINGS ARE INDICATIVE ONLY. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS, THE CONTRACTOR IS TO IDENTIFY ALL EXISTING SERVICES. ANY DAMAGES TO THE EXISTING SERVICES ARE TO BE RECTIFIED AT THE CONTRACTOR'S EXPENSE.

G11. DURING CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE STRUCTURES AND EXCAVATIONS ARE MAINTAINED IN A SAFE AND STABLE CONDITION AT ALL TIME AND NO PART IS TO BE OVERSTRESSED. THE CONTRACTOR SHALL DEVELOP WORK METHOD STATEMENTS FOR ALL ERECTION OF STRUCTURAL STEEL/FORMWORK/DEMOLITION/EXCAVATION/TILT PANELS/PRECAST CONCRETE ELEMENTS ETC. AND PROVIDE TEMPORARY WORKS SUCH AS BRACING, PROPPING AND SHORING ETC. TO KEEP THE WORKS AND EXCAVATIONS STABLE AND FREE FROM WATER AT ALL TIMES. THE CONTRACTOR IS TO ENGAGE AN NPER REGISTERED STRUCTURAL ENGINEER TO DESIGN AND CERTIFY THE TEMPORARY WORKS.

G12. ALL PROPRIETARY PRODUCTS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS UNLESS NOTED OTHERWISE.

G13. ALL PENETRATIONS THROUGH SLABS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF WORK.

G14. THE DRAWINGS MAY NOT SHOW ALL DETAILS OF FIXTURES, INSERTS, SLEEVES, OPENINGS ETC. REQUIRED BY THE VARIOUS TRADES. ALL SUCH DETAILS, INCLUDING RECESSES AND CHASES, ARE TO BE APPROVED BY OPS STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE CONSTRUCTION.

GENERAL NOTES (CONT'D)

G15. A MINIMUM OF 24 HOURS NOTICE IS REQUIRED FOR INSPECTION. ALL WORKS TO BE INSPECTED MUST BE COMPLETED PRIOR TO THE TIME OF INSPECTION.

G16. INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE COMPLETENESS AND CORRECTNESS OF THE WORKS.

G17. INSPECTIONS WILL BE PERIODIC AND REPRESENTATIVE AND WILL NOT NECESSARILY BE MADE OF ALL WORKS. THE CONTRACTOR IS TO ADVISE THE ENGINEER OF ALL WORK COMPLETION, BUT ELECTION TO INSPECT OR OTHERWISE WILL BE AT THE ENGINEER'S DISCRETION. THE CONTRACTOR IS TO ALLOW TIME AND PROVIDE SITE ACCESS FOR THE INSPECTIONS TO TAKE PLACE AND IS TO HAVE A RESPONSIBLE SITE SUPERVISOR AVAILABLE TO RECEIVE ANY COMMENT OR DIRECTION FROM THE INSPECTING PARTY.

G18. WHERE STRUCTURAL ELEMENTS ARE DESIGNED AND CERTIFIED BY OTHER PARTIES, THE CONTRACTOR SHALL OBTAIN WRITTEN CERTIFICATION, PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WHICH MAY PREVENT INSPECTION OR REMEDIAL WORKS BEING UNDERTAKEN TO THESE ITEMS.

G19. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

G20. THE DESIGN CERTIFICATION AND PERFORMANCE OF FORMWORK AND FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE CARRIED OUT IN ACCORDANCE WITH SPECIFICATION FOR CONCRETE AND RELEVANT CODES.

G21. DESIGN LIVE LOADS ARE FOLLOWS.  
ROOF LOAD 1.0 kPa.  
FLOOR LOAD 1.5 kPa.  
DECK / BALCONY LOAD 2.0 kPa.

GENERAL NOTES (CONT'D)

G21. FIRE RESISTANCE LEVELS (FRL'S) OF THE STRUCTURE ARE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION C1.1 OF THE BCA FOR A CLASS 1a BUILDING OF TYPE A CONSTRUCTION UNLESS NOTED OTHERWISE THE FOLLOWING FRL'S SHALL APPLY.

ELEMENT	FRL (MINUTES)
CONCOURSE	120
COLUMNS	120
PLATFORM STEELWORK STRUCTURE	60

LOADING NOTES

L1. ALL LOADINGS HAVE BEEN ASSESSED IN ACCORDANCE WITH AS1170.0:2002

L2. THE STRUCTURAL COMPONENTS IN THESE DRAWINGS HAVE BEEN DESIGNED FOR THE LOADINGS SHOWN ON THE LOADING PLANS.

L3. THE DESIGN WIND CRITERIA TO AS/NZS1170.2:2011 IS AS FOLLOWS:

DESIGN LIFE:	50 YRS
REGION:	A2
IMPORTANCE LEVEL:	3
TERRAIN CATEGORY:	2.5
TOPOGRAPHIC MULTIPLIER, Mt:	1.0
TERRAIN/HEIGHT MULTIPLIER, Mz, CAT:	0.83
SHIELDING MULTIPLIER, Ms:	1.0
REGIONAL WIND SPEED -	-
ULTIMATE Vu:	46 m/s
SERVICE Vs:	37 m/s

L4. DO NOT PLACE OR STORE BUILDING MATERIALS ON CONCRETE MEMBERS WITHOUT THE OPS AND THE STRUCTURAL ENGINEER'S APPROVAL.

CHEMICAL & ANCHOR NOTES

CA1. "CHEMSET" DENOTES RAMSET GRADE 5.8 HOT DIPPED GALV. STUDS FIXED WITH RAMSET CHEMSET REO 502 WITH THE FOLLOWING MINIMUM EMBEDMENT:

M12 CHEMSET - 110mm EMBEDMENT
M16 CHEMSET - 125mm EMBEDMENT
M20 CHEMSET - 150mm EMBEDMENT
M24 CHEMSET - 160mm EMBEDMENT

CA2. "CHEMSET 101 ANCHORS" DENOTES RAMSET GRADE 5.8 HOT DIPPED GALV. STUDS, FIXED WITH AN EFFECTIVE DEPTH OF 64mm INTO EXTRUDED BRICK OR HOLLOW CONCRETE BLOCK, USING THE MANUFACTURER'S SLEEVES/SIEVES AND RAMSET CHEMSET INJECTION 101.

CA3. ALL ANCHORS ARE TO BE FIXED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS. IN PARTICULAR ENSURE HOLES ARE CLEAN OF DUST PRIOR TO INSTALLATION OF CHEMICAL ANCHORS.

CA4. DESIGN HAS BEEN CARRIED OUT USING THE PRODUCTS SPECIFIED ON THE DRAWINGS. PRODUCTS MAY BE SUBSTITUTED FOR A TECHNICALLY EQUIVALENT ANCHOR SUBJECT TO THE STRUCTURAL ENGINEER'S APPROVAL.

CA5. CHEMICAL ANCHORS MUST NOT BE USED TO SUPPORT DIRECT/PURE TENSILE LOADS IMPOSED BY ANY STRUCTURAL ELEMENTS. ANCHORS SUBJECT TO TENSILE LOADS AS A RESULT OF BENDING ACTION ARE ACCEPTED AND CAN BE INCORPORATED INTO THIS DESIGN PACKAGE.

2

REVISED AS PER CLIENT COMMENTS

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ZEE

30-04-2024

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REVISED AS PER CLIENT COMMENTS

HAK

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10-11-2023

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ISSUE FOR APPROVAL

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07-04-2023

REV. NO.

DESCRIPTION

DRAWN


CHKD.

APPVD.

DATE

CLIENT:

SHARMAN

 **Omega Project Services**  
Structural - Hydraulics - Project Management

CLIENT PROJECT NO.

0000

PR SR PROJECT NO.

1037-DR-SR-01

PROJECT:

120 RIVIERA AVENUE, TERRIGAL

TITLE:

GENERAL NOTES-1

DRAWING NUMBER:

1037-DR-SR-01

REV. 

2

DRAWN	CHECKED	APPROVED	SCALE	SHEET SIZE	DATE	SHEET
HA	ZEE	ZEE	AS SHOWN	A3	30-04-2024	01

SR.NO.

DESCRIPTION

DOC / DRAWING NO.

REFERENCE DOCUMENT / DRAWINGS

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- 671 -



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FOOTING NOTES

F1.

FOOTINGS HAVE BEEN DESIGNED FOR AN NET ALLOWABLE /SERVICEABILITY BEARING PRESSURE OF 180 kPa

F2.

ALL FOOTING EXCAVATIONS SHALL BE CLEANED OF LOOSE UNCOMPACTED MATERIAL AND WATER PRIOR TO PLACING CONCRETE.

F3.

WHERE THERE HAS BEEN A DELAY OF MORE THAN 24 HOURS BETWEEN CERTIFICATION FOR COMMENCEMENT OF FOUNDATION CONSTRUCTION OR WHEN FOUNDATION EXCAVATION HAS BEEN OBSERVED TO DETERIORATE

F4.

UNLESS OTHERWISE NOTED ON THE DRAWINGS, LOCATE ALL PIPES, RETAINING WALLS AND EXCAVATIONS OUTSIDE A VERTICAL & HORIZONTAL ZONE OF INFLUENCE FROM THE BOTTOM EDGE OF THE FOOTING.

F5.

FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE IF DIRECTED BY DSGR FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE.

F6.

DO NOT ALLOW WATER TO INFILTRATE THE FOUNDATION EXCAVATION AT ANY POINT DURING THE FOUNDATION CONSTRUCTION.

F7.

STRIP ALL TOPSOIL FROM THE CONSTRUCTION AREA. ALL STRIPPED TOPSOIL IS TO BE REMOVED FROM SITE UNLESS DIRECTED OTHERWISE BY DSGR.

F8.

HOLD POINT: PRIOR TO PLACEMENT OF MASS CONCRETE BLINDING LAYER OR CONCRETE, THE FOUNDING MATERIAL ASSUMPTIONS SHALL BE VALIDATED BY THE DSGR THE CONTRACTOR SHALL ENSURE THAT ANY NECESSARY FOUNDATION TREATMENT HAS BEEN COMPLETED PRIOR TO COMMENCING CONSTRUCTION OF THE FOUNDATION

F9.

THE DSGR SHALL BE ADVISED IMMEDIATELY IF ANY UNEXPECTED GROUND WATER IS ENCOUNTERED ON SITE.

F10.

USE SUITABLE CONSTRUCTION TECHNIQUES AND EQUIPMENT FOR BACKFILLING ADJACENT TO STRUCTURES TO PREVENT OVERSTRESS AND DAMAGE. BACKFILL, CONCRETE STRENGTH IS ACHIEVED, AND PERMANENT SUPPORT INSTALLED WHERE APPLICABLE. -

F11.

BACKFILL OVER AND ADJACENT TO STRUCTURES SHALL NOT COMMENCE UNTIL THE STRUCTURAL CONCRETE HAS REACHED THE SPECIFIED 28 DAY STRENGTH U.N.O.

REINFORCEMENT NOTES

R1.

BAR NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER:  
NO OF BARS; GRADE; BAR SIZE (mm); SPACING (mm, IF REQUIRED);  
PLACING INFORMATION EG. 20-N16-200 BTM.

R2.

MESH NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER:  
SL OR RL SYMBOL; AS REFERENCE NUMBER IF STANDARD MESH OR SPECIAL CODE IF NON-STANDARD MESH; PLACING INFORMATION. EG, RL918 TOP.

R3.

MAIN WIRES OF MESH AND COVERAGE OF SHEETS SHOWN IN PLAN-VIEW AND ELEVATION THUS:

RECTANGULAR MESH

SQUARE MESH

WIDTH OF SHEETS

DIRECTION OF MAIN WIRE SPAN

R4.

EXTENT OF BARS AND MESH SHOWN THUS:

EXTENT LINE

DIRECTION OF BAR LINE.

R5.

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

R6.

REINFORCEMENT DIMENSIONS SHALL NOT BE SCALED.

R7.

SPLICE REINFORCEMENT ONLY AT LOCATIONS SHOWN IN THE DRAWINGS. LAP LENGTH SHALL COMPLY WITH AS3600:2009.

REINFORCEMENT SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS. IF SPLICES ARE NOT INDICATED IN THE DRAWINGS, SUITABLE LOCATIONS SHALL BE PROPOSED FOR WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER. THE SPLICED LENGTH OF BARS SHALL BE AS GIVEN IN THE FOLLOWING TABLE, EXCEPT WHERE OTHER DIMENSIONS ARE STATED ON THE ACTUAL DETAIL:

TYPE OF MEMBER	TENSILE LAP LENGTH (mm) FOR GRADE 500N DEFORMED BARS.								
	N10	N12	N16	N20	N24	N28	N32	N36	N40
SLAB OR WALL (WITH 300mm OR LESS DEPTH OF CONCRETE BELOW THE BAR) AND ALL VERTICAL BARS	400	500	750	1000	1250	1500	1800	2200	2450
SLAB OR WALL (WITH GREATER THAN 300mm OF CONCRETE BELOW THE BAR)	500	650	1000	1300	1600	1950	2300	2800	3200

WHERE REINFORCEMENT IS LAPPED THE LAP SHALL BE STAGGERED.

LAP LENGTH

50 %

LAP LENGTH

50 %

WHERE GREATER THAN 50% OF BARS IN ONE LAYER ARE LAPPED IN ANY CROSS SECTION THEN LAP LENGTH ARE TO BE INCREASED BY A MULTIPLIER OF 1:3

REINFORCEMENT NOTES (CONT'D)

R8.

MESH SHALL NOT BE LAID ON THE GROUND AND PULLED INTO POSITION THROUGH THE CONCRETE. MESH SHALL NOT BE WALKED IN.

R9.

ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, ADEQUATELY SUPPORTED, AND THEN INSPECTED BY THE STRUCTURAL ENGINEER BEFORE ANY CONCRETE IS PLACED.

R10.

WELDING OF REINFORCEMENT INCLUDING TACK-WELDING FOR FIXING PURPOSES SHALL COMPLY WITH AS3600:2009 AND AS1554.3:2008. WELDING IS PERMITTED ONLY WHERE SHOWN IN THE DRAWINGS OR WHERE OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER.

REINFORCEMENT NOTES (CONT' D)

R11.

REINFORCEMENT SHALL BE BENT COLD IN ACCORDANCE WITH AS3600:2009 EXCEPT WHERE APPROVED BY OPS IJV. NO REBENDING SHALL BE PERMITTED UNLESS APPROVED BY OPS IJV.

R12.

WHERE LAP IS SPECIFIED, MESH SHALL BE LAPPED SUCH THAT THE TWO OUTERMOST WIRES LAP WITH THOSE OF THE OTHER SHEET AS SHOWN:

200 MIN. LAP

50

ALL LAPS ARE TO BE WIRED TOGETHER AT 1000 CRS.

R13.

WHERE NO REINFORCEMENT IS SHOWN ON THE DRAWINGS AT RIGHT ANGLES TO THE MAIN REINFORCEMENT, PLACE N12-300 TRANSVERSE TO THE REINFORCEMENT SHOWN TO SUIT THE BAR LAYING SEQUENCE. ALL OPENINGS AND RE-ENTRANT CORNERS IN THE CONCRETE SHALL HAVE 2-N12 BARS x 1200 LONG TOP AND BOTTOM DIAGONALLY ACROSS THE CORNER.

R14.

UNLESS DETAILED OTHERWISE ON THE DRAWINGS PROVIDE 2N16-100 TRIMMER BARS AROUND OPENINGS AND RE-ENTRANT CORNERS IN EACH (TOP/BOTTOM) FACE OF MEMBER AND EXTENDING 600mm BEYOND THEIR CROSS-OVER POINT.

R15.

REINFORCEMENT SHALL NOT BE CUT, BENT OR HEATED ON SITE WITHOUT THE OPS PRIOR APPROVAL. DO NOT CUT REINFORCEMENT ON SITE TO CLEAR PENETRATIONS. DISPLACE REINFORCEMENT SLIGHTLY AS NECESSARY. MAINTAIN COVER DURING POUR.

R16.

ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON PLASTIC OR CONCRETE CHAIRS UNLESS NOTED OTHERWISE. MAXIMUM CENTRES OF SUPPORTING CHAIRS SHALL BE 600mm FOR MESH, 600mm FOR BARS UP TO 12mm DIAMETER, 900mm FOR BARS 16mm AND GREATER. REINFORCEMENT SHALL BE SECURELY TIED WITH GALVANISED WIRE TIES AND ALL TIE ENDS SHALL BE TURNED INTO THE MEMBER CLEAR OF THE COVER ZONE.

R17.

REFER TO THE CONCRETE NOTES FOR THE COVER TO REINFORCEMENT NEAREST THE CONCRETE SURFACE. UNLESS NOTED OTHERWISE ON DRAWINGS.

R18.

THE REQUIRED COVER SHALL BE MAINTAINED TO ALL PIPES, CONDUITS, REGLETS, DRIP GROOVES ETC.

R19.

SPACING OF REINFORCEMENT SHALL BE TAKEN AS EQUAL U.N.O.

SR.NO.

DESCRIPTION

DOC / DRAWING NO.

REFERENCE DOCUMENT / DRAWINGS

REV. NO.

DESCRIPTION

DRAWN

CHKD.

APPVD.

DATE

CLIENT:

SHARMAN

CLIENT PROJECT NO.

0000

PR SR PROJECT NO.

1037-DR-SR-01

PROJECT:

120 RIVIERA AVENUE, TERRIGAL

TITLE:

GENERAL NOTES-2

DRAWING NUMBER:

1037-DR-SR-01

REV.

2

DRAWN

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CHECKED

ZEE

APPROVED

ZEE

SCALE

AS SHOWN

SHEET SIZE

A3

DATE

30-04-2024

SHEET

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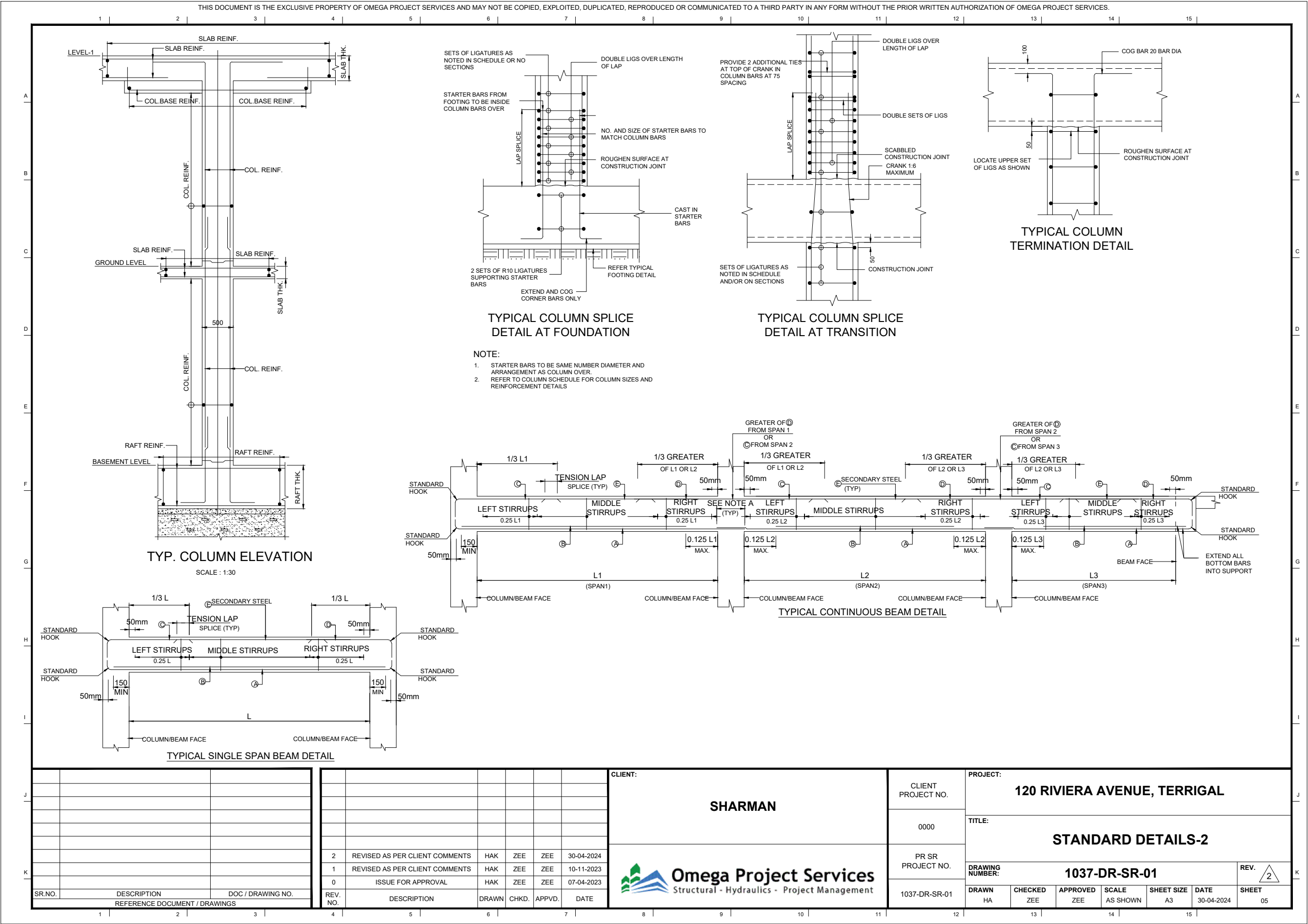
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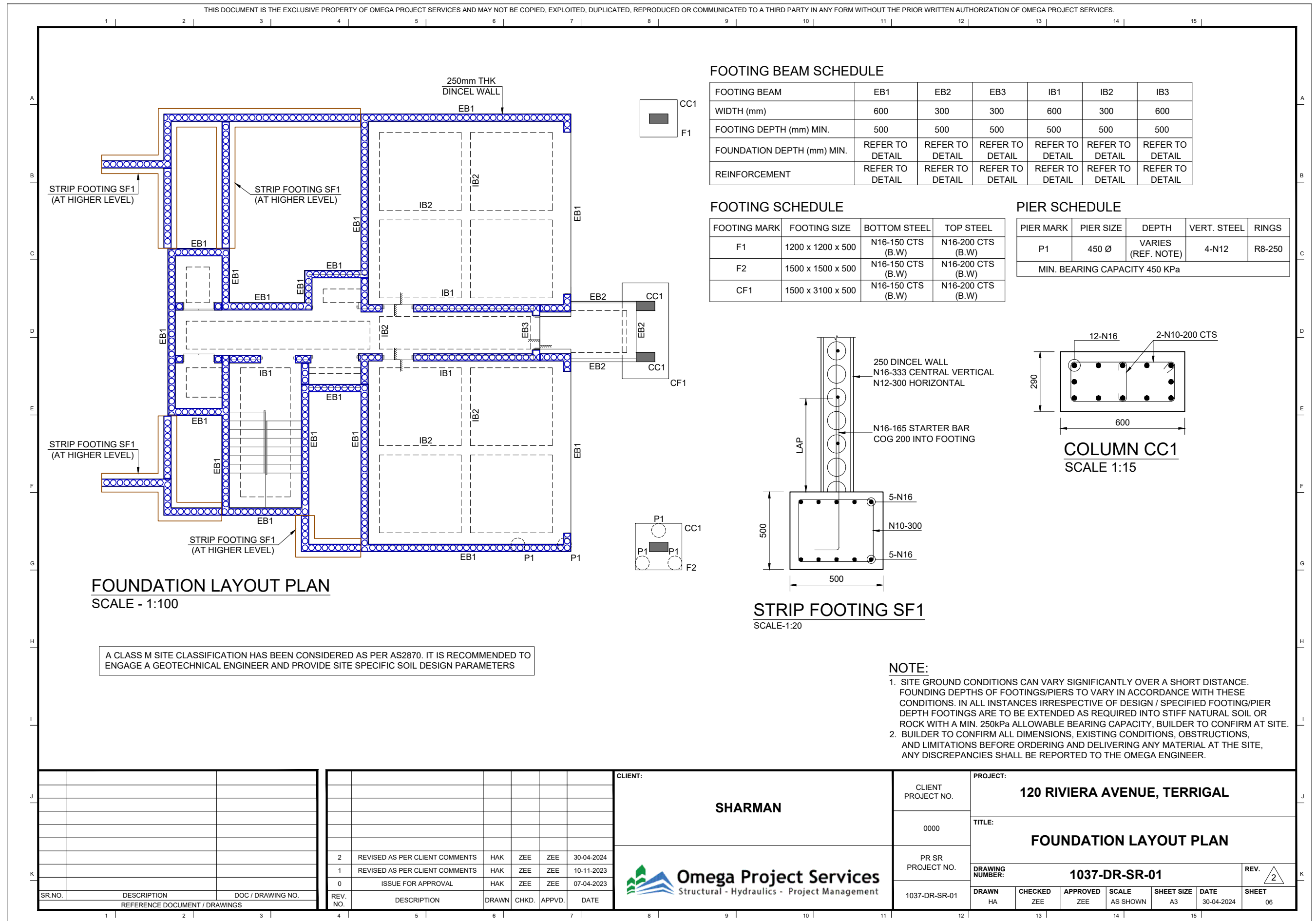
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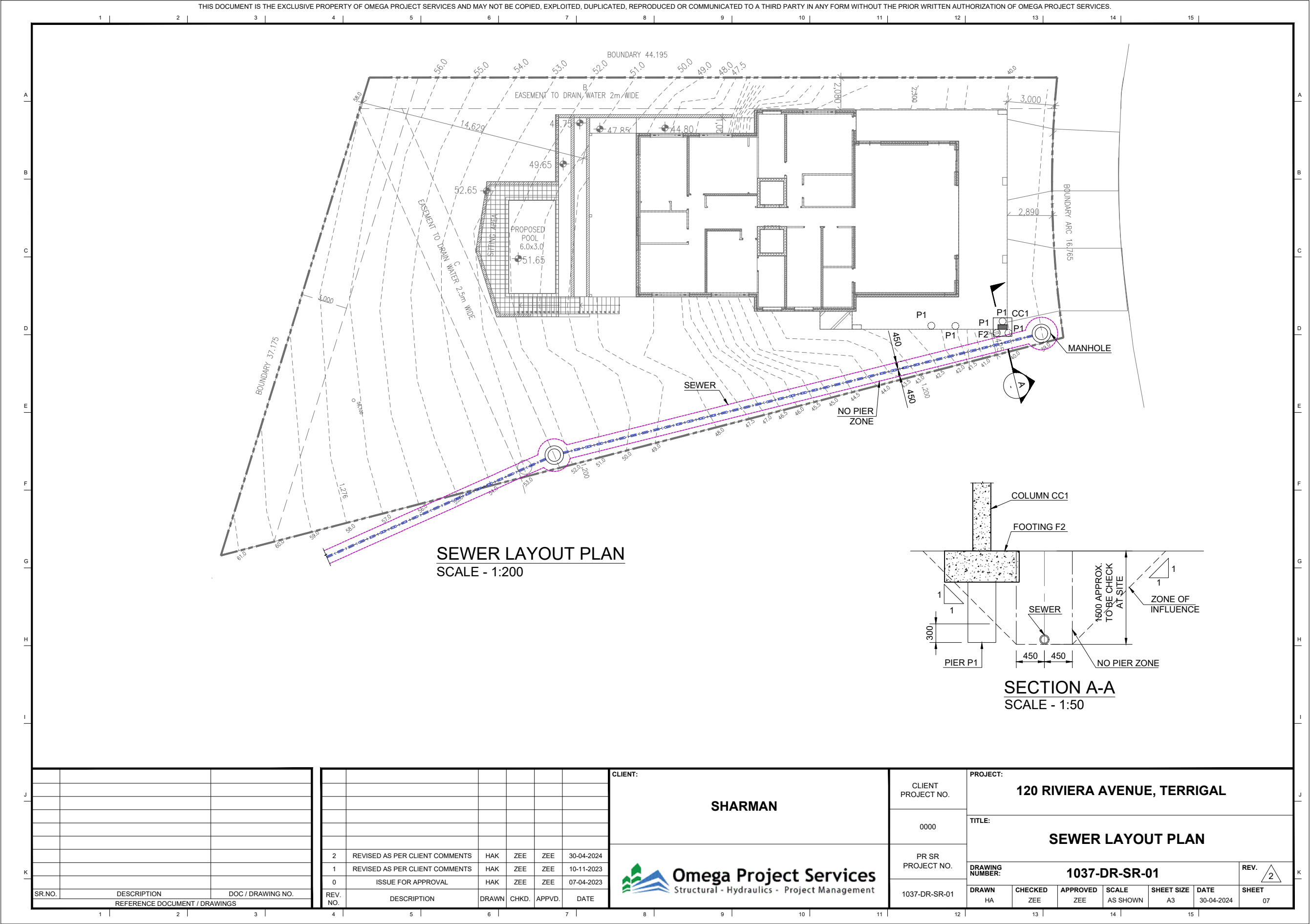
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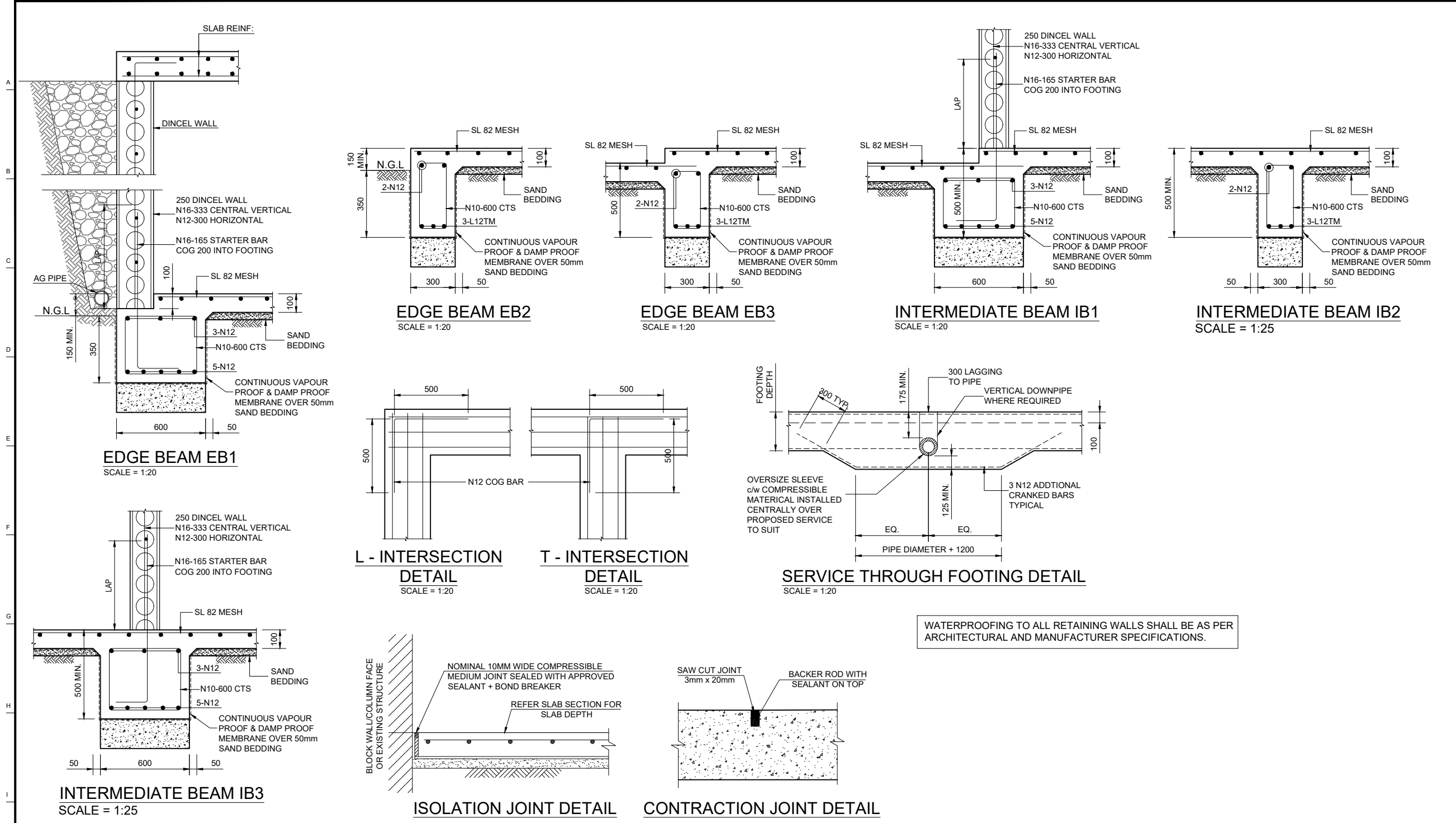
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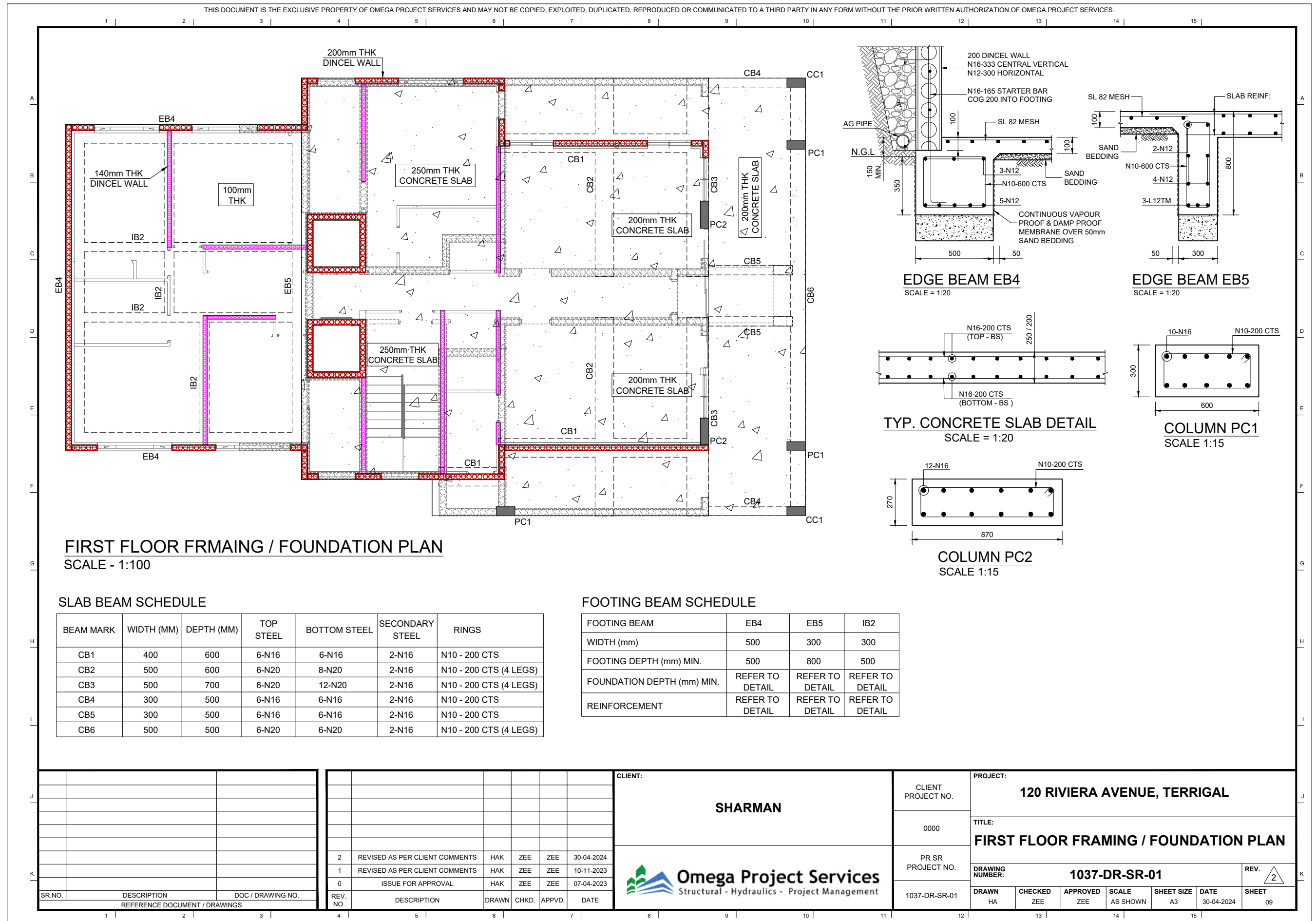


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						SHARMAN		120 RIVIERA AVENUE, TERRIGAL	
						0000		TITLE:	
						PR SR PROJECT NO.		FOUNDATION DETAILS	
						1037-DR-SR-01		DRAWING NUMBER:	
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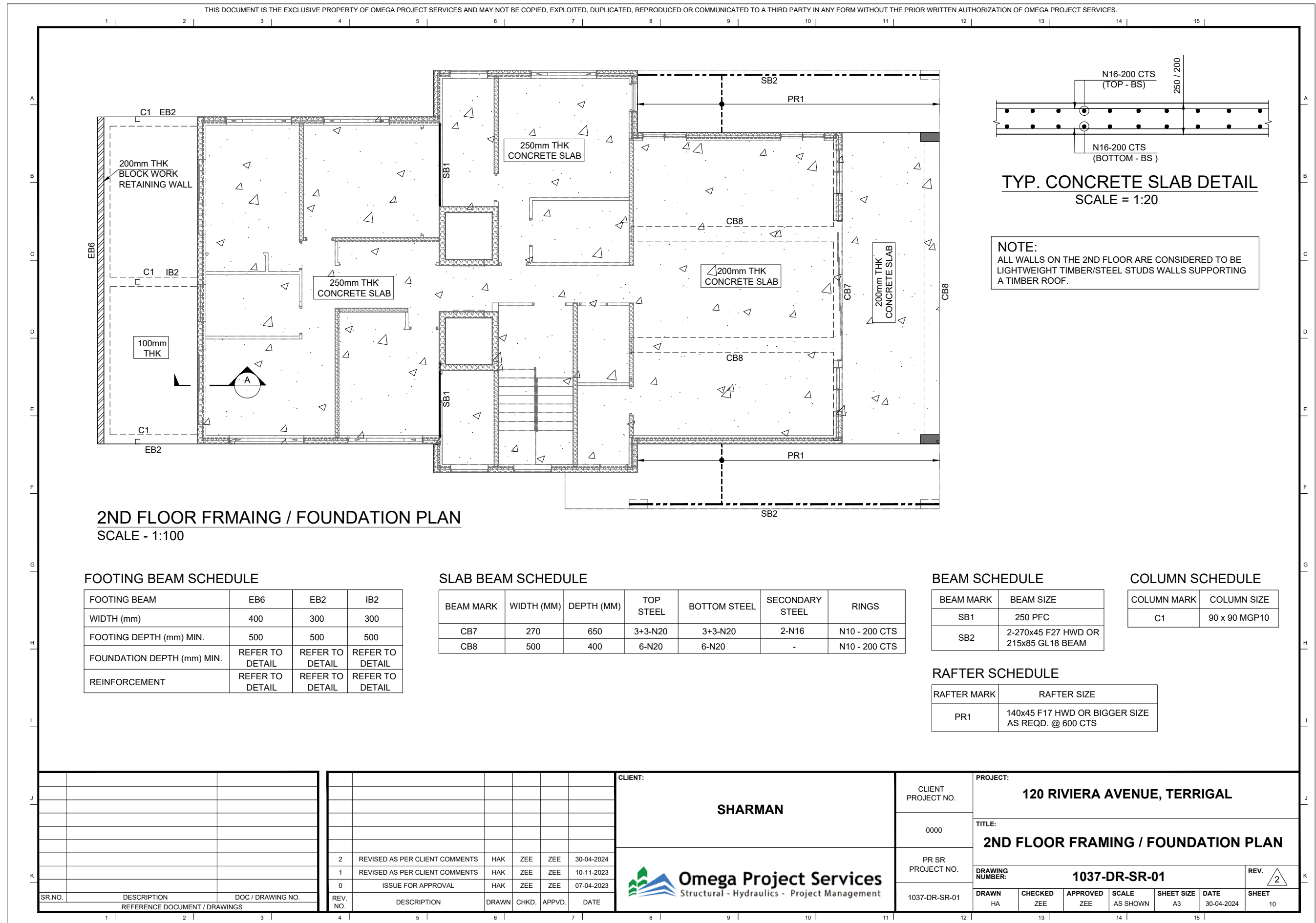
SR.NO.	DESCRIPTION	DOC / DRAWING NO.
2	REVISED AS PER CLIENT COMMENTS	HAK
1	REVISED AS PER CLIENT COMMENTS	HAK
0	ISSUE FOR APPROVAL	HAK
REV. NO.	DESCRIPTION	DRAWN
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		APPVD.
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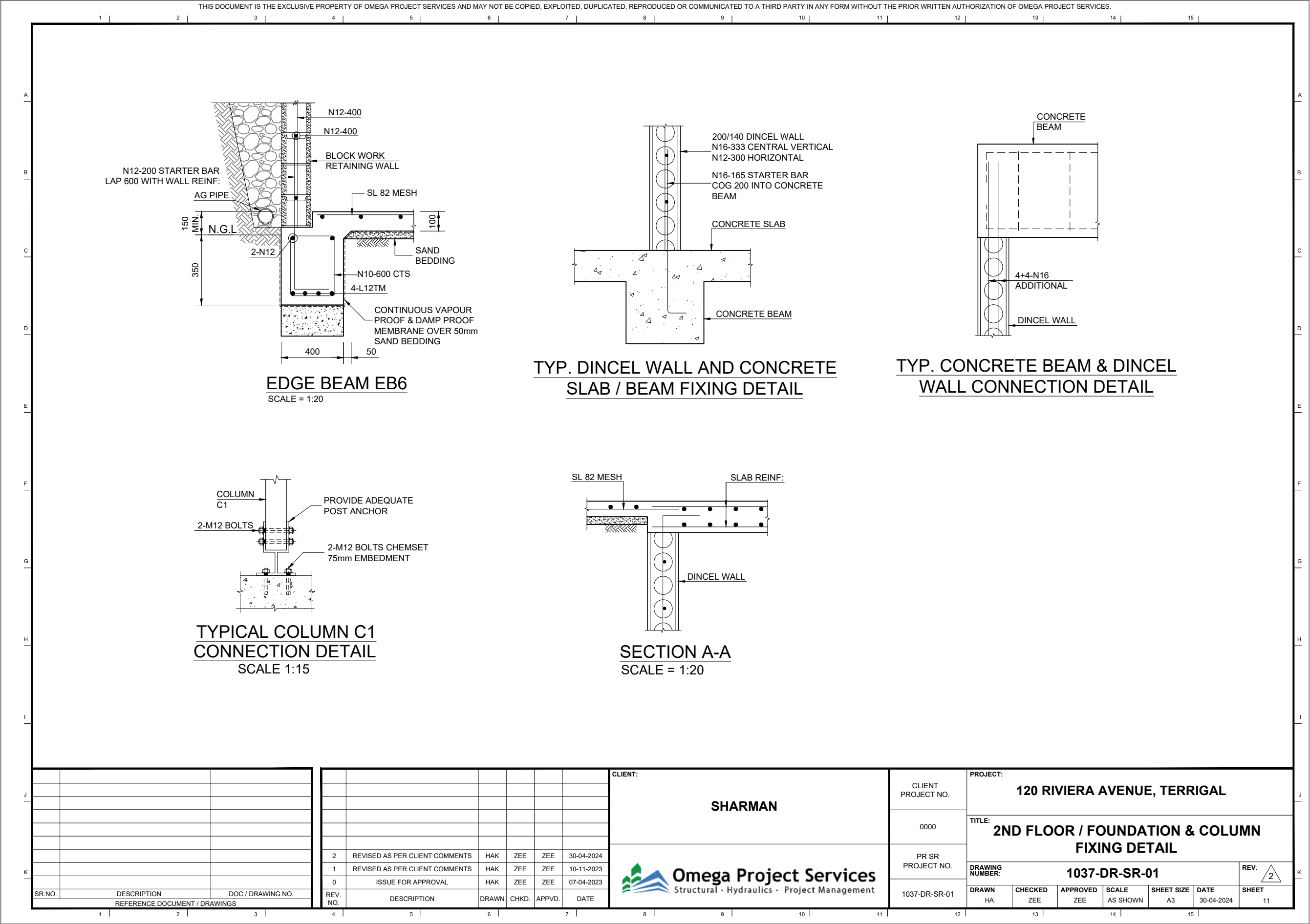
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PR SR PROJECT NO.		FOUNDATION DETAILS	
1037-DR-SR-01		DRAWING NUMBER:	
		REV. 2	
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SCALE AS SHOWN		SHEET SIZE A3	DATE 30-04-2024
		SHEET 08	

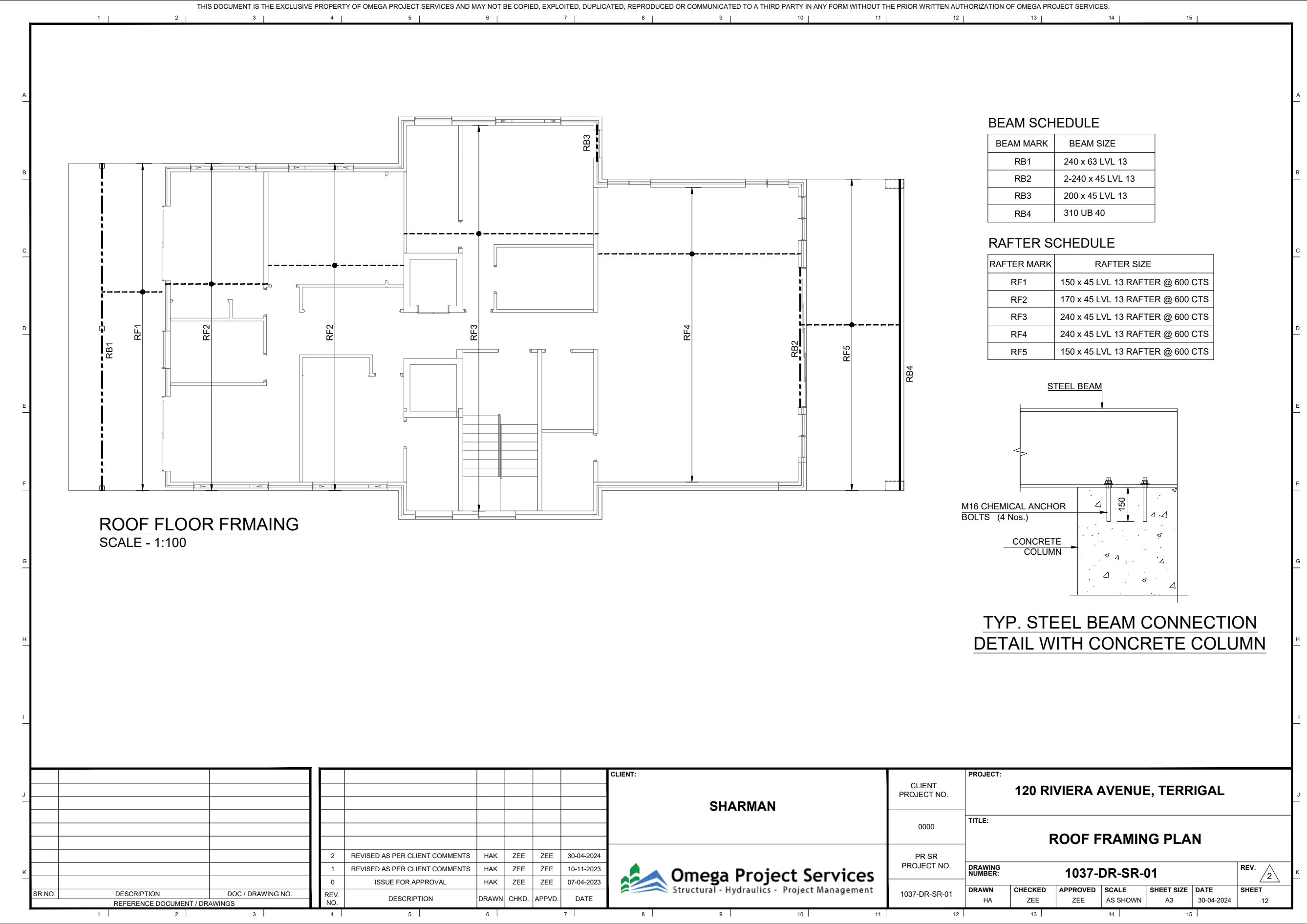


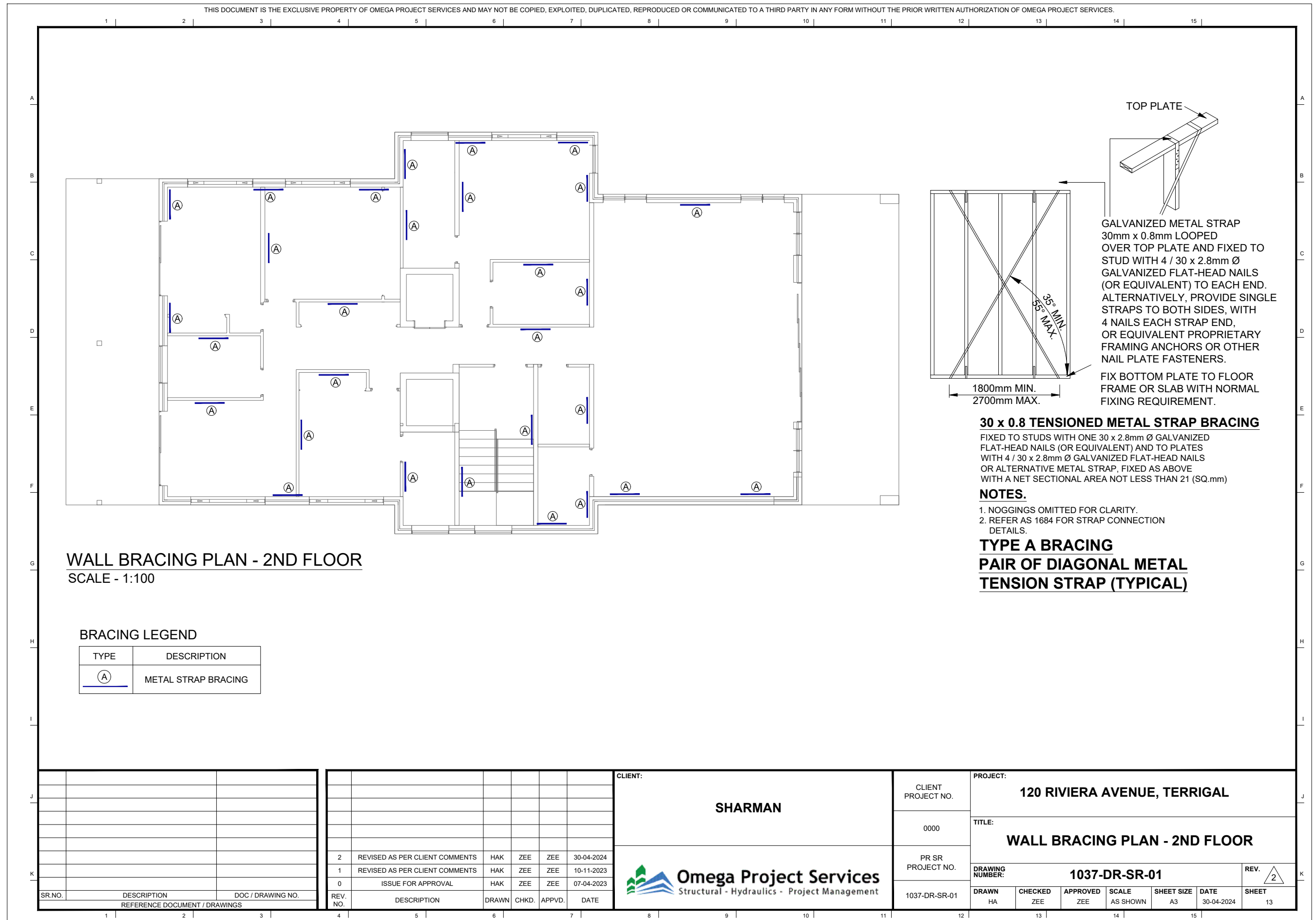


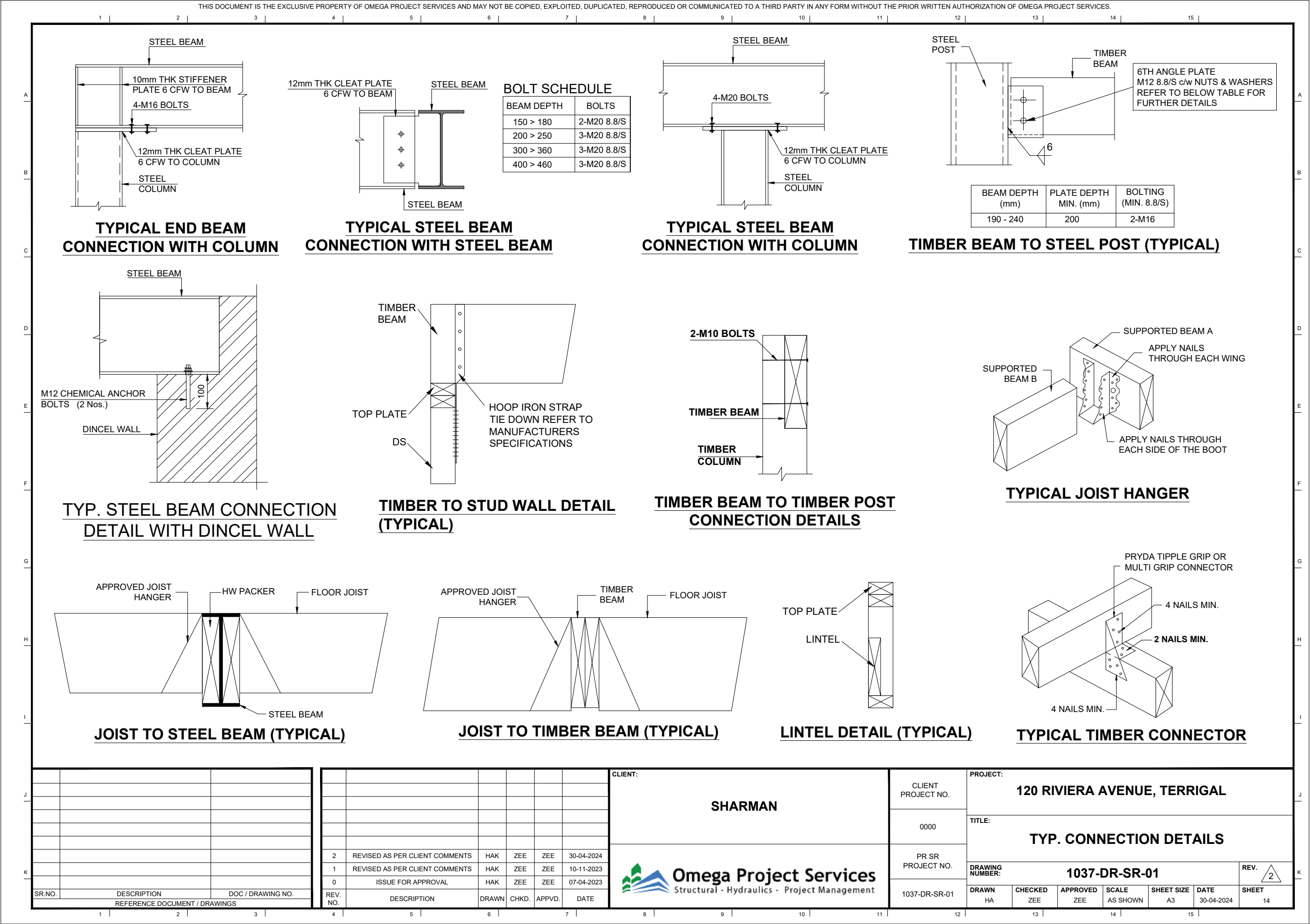












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# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 1355371S\_03

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](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Thursday, 12 January 2023

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning,  
Industry &  
Environment

### Project summary

Project name	2203261 Sharman D1_03
Street address	120 Riviera Avenue Terrigal 2260
Local Government Area	Central Coast Council
Plan type and plan number	deposited 248806
Lot no.	8
Section no.	-
Project type	unit
No. of bedrooms	4

### Project score

Water	✓ 45	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 50

### Certificate Prepared by

Name / Company Name: Sorensen Design

ABN (if applicable): 75803073495

## Description of project

Project address	
Project name	2203261 Sharman D1_03
Street address	120 Riviera Avenue Terrigal 2260
Local Government Area	Central Coast Council
Plan type and plan number	Deposited Plan 248806
Lot no.	8
Section no.	-
Project type	
Project type	unit
No. of bedrooms	4
Site details	
Site area (m²)	1128
Roof area (m²)	335
Conditioned floor area (m2)	199.0
Unconditioned floor area (m2)	12.0
Total area of garden and lawn (m2)	50

Assessor details and thermal loads			
Assessor number	n/a		
Certificate number	n/a		
Climate zone	n/a		
Area adjusted cooling load (MJ/m².year)	n/a		
Area adjusted heating load (MJ/m².year)	n/a		
Ceiling fan in at least one bedroom	n/a		
Ceiling fan in at least one living room or other conditioned area	n/a		
Project score			
Water	✓	45	Target 40
Thermal Comfort	✓	Pass	Target Pass
Energy	✓	51	Target 50

### 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.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star (> 4.5 but ≤ 6 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 335 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>all toilets in the development</li> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		✓ ✓	✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>General features</b>			
The dwelling must not have more than 2 storeys.	✓	✓	✓
The conditioned floor area of the dwelling must not exceed 300 square metres.	✓	✓	✓
The dwelling must not contain open mezzanine area exceeding 25 square metres.	✓	✓	✓
The dwelling must not contain third level habitable attic room.	✓	✓	✓
<b>Floor, walls and ceiling/roof</b>			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above enclosed subfloor, concrete	0.70 (or 1.3 including construction) (down)	
floor - suspended floor above garage, concrete	nil	
external wall - brick veneer	1.86 (or 2.40 including construction)	
external wall - cavity brick	0.50 (or 1.17 including construction)	
ceiling and roof - flat ceiling / flat roof, concrete/plasterboard internal	ceiling: 4 (up), roof: none	concrete/plasterboard internal; light (solar absorptance < 0.475)

Note	<ul style="list-style-type: none"> <li>Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.</li> </ul>
Note	<ul style="list-style-type: none"> <li>In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.</li> </ul>















Thermal Comfort Commitments				Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights						
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.				✓	✓	✓
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.				✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:  • For the following glass and frame types, the certifier check can be performed by visual inspection.  - Aluminium single clear - Aluminium double (air) clear - Timber/uPVC/fibreglass single clear - Timber/uPVC/fibreglass double (air) clear				✓	✓	✓  ✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W03	1200	1200	aluminium, single, clear	none	not overshadowed
W02	1200	2100	aluminium, single, clear	none	not overshadowed
W04	1200	2100	aluminium, single, clear	none	not overshadowed
W08	2400	700	aluminium, single, clear	none	not overshadowed
W06	2400	700	aluminium, single, clear	none	not overshadowed
W05	2400	700	aluminium, single, clear	none	not overshadowed
W01	1200	2100	aluminium, single, clear	none	not overshadowed
W07	2400	700	aluminium, single, clear	none	not overshadowed
East facing					
W11	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W18	2400	700	aluminium, single, clear	solid overhang 9700 mm, 265 mm above head of window or glazed door	not overshadowed
W12	2400	4500	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W09	2400	820	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W10	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
W13	2400	700	aluminium, single, clear	solid overhang 3125 mm, 265 mm above head of window or glazed door	not overshadowed
<b>South facing</b>					
W17	900	2400	aluminium, single, clear	none	not overshadowed
W19	2100	820	aluminium, single, clear	none	not overshadowed
W15	1200	1200	aluminium, single, clear	none	not overshadowed
W14	1200	1200	aluminium, single, clear	none	not overshadowed
W16	900	2400	aluminium, single, clear	none	not overshadowed





Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 36 to 40 STCs or better.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans + 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study; dedicated		✓	✓
• at least 3 of the living / dining rooms; dedicated		✓	✓
• the kitchen; dedicated		✓	✓


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>all bathrooms/toilets; dedicated</li> <li>the laundry; dedicated</li> <li>all hallways; dedicated</li> </ul>		  	  
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.			
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.			
<b>Other</b>			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.			
The applicant must install a fixed outdoor clothes drying line as part of the development.			

### Legend

In these commitments, "applicant" means the person carrying out the development.

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).

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.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 1355379S

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](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Wednesday, 16 November 2022

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning,  
Industry &  
Environment

### Project summary

Project name	2203261 Sharman D2
Street address	120 Riviera Avenue Terrigal 2260
Local Government Area	Central Coast Council
Plan type and plan number	deposited 248806
Lot no.	8
Section no.	-
Project type	unit
No. of bedrooms	4

### Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 50

### Certificate Prepared by

Name / Company Name: Sorensen Design

ABN (if applicable): 75803073495

## Description of project

### Project address

Project name	2203261 Sharman D2
Street address	120 Riviera Avenue Terrigal 2260
Local Government Area	Central Coast Council
Plan type and plan number	Deposited Plan 248806
Lot no.	8
Section no.	-

### Project type

Project type	unit
No. of bedrooms	4

### Site details

Site area (m²)	1128
Roof area (m²)	335
Conditioned floor area (m2)	199.0
Unconditioned floor area (m2)	12.0
Total area of garden and lawn (m2)	50

### Assessor details and thermal loads

Assessor number	n/a
Certificate number	n/a
Climate zone	n/a
Area adjusted cooling load (MJ/m².year)	n/a
Area adjusted heating load (MJ/m².year)	n/a
Ceiling fan in at least one bedroom	n/a
Ceiling fan in at least one living room or other conditioned area	n/a

### Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 50

### 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.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but <= 6 L/min plus spray force and/or coverage tests) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 7000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 335 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>all toilets in the development</li> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> <li>a tap that is located within 10 metres of the swimming pool in the development</li> </ul>		✓ ✓ ✓	✓ ✓ ✓
<b>Swimming pool</b>			
The swimming pool must not have a volume greater than 90 kilolitres.	✓	✓	
The swimming pool must be outdoors.	✓	✓	



Thermal Comfort Commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>General features</b>				
The dwelling must not have more than 2 storeys.		✓	✓	✓
The conditioned floor area of the dwelling must not exceed 300 square metres.		✓	✓	✓
The dwelling must not contain open mezzanine area exceeding 25 square metres.		✓	✓	✓
The dwelling must not contain third level habitable attic room.		✓	✓	✓
<b>Floor, walls and ceiling/roof</b>				
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.		✓	✓	✓

Construction	Additional insulation required (R-Value)	Other specifications
floor - suspended floor above enclosed subfloor, concrete	0.70 (or 1.3 including construction) (down)	
external wall - brick veneer	1.86 (or 2.40 including construction)	
external wall - cavity brick	0.50 (or 1.17 including construction)	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 5 (up), roof: foil backed blanket (75 mm)	framed; medium (solar absorptance 0.475-0.70)

Note	<ul style="list-style-type: none"> <li>Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.</li> </ul>
Note	<ul style="list-style-type: none"> <li>In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.</li> </ul>




















Thermal Comfort Commitments				Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights						
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.				✓	✓	✓
The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.				✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:				✓	✓	✓
<ul style="list-style-type: none"><li>For the following glass and frame types, the certifier check can be performed by visual inspection.<ul style="list-style-type: none"><li>- Aluminium single clear</li><li>- Aluminium double (air) clear</li><li>- Timber/uPVC/fibreglass single clear</li><li>- Timber/uPVC/fibreglass double (air) clear</li></ul></li><li>For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only.</li></ul>						✓

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
North facing					
W03	1200	1200	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W02	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W01	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W06	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W05	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W08	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W07	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
W04	1200	2100	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	none	not overshadowed
<b>East facing</b>					
W09	2400	820	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 9995 mm, 850 mm above head of window or glazed door	not overshadowed
W10	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W13	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W18	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W11	2400	700	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
W12	2400	4500	U-value: 5.6, SHGC: 0.369 - 0.451 (aluminium, single, Lo-Tsol Low-e)	solid overhang 4025 mm, 850 mm above head of window or glazed door	not overshadowed
<b>South facing</b>					
W17	900	2400	aluminium, single, clear	none	not overshadowed
W14	1200	1200	aluminium, single, clear	none	not overshadowed
W15	1200	1200	aluminium, single, clear	none	not overshadowed
W16	900	2400	aluminium, single, clear	none	not overshadowed
<b>West facing</b>					

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Type	Shading Device (Dimension within 10%)	Overshadowing
W19	2400	2400	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed
W20	1200	1200	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed
W21	2400	2400	aluminium, single, clear	solid overhang 2000 mm, 300 mm above head of window or glazed door	not overshadowed


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 36 to 40 STCs or better.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans + 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans + 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 4 Star (old label)		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study; dedicated		✓	✓
• at least 3 of the living / dining rooms; dedicated		✓	✓
• the kitchen; dedicated		✓	✓


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>all bathrooms/toilets; dedicated</li> <li>the laundry; dedicated</li> <li>all hallways; dedicated</li> </ul>		  	  
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.			
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.			
<b>Swimming pool</b>			
The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): solar only			
The applicant must install a timer for the swimming pool pump in the development.			
<b>Alternative energy</b>			
The applicant must install a photovoltaic system with the capacity to generate at least 2 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.			
<b>Other</b>			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.			
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.			




**Legend**

In these commitments, "applicant" means the person carrying out the development.

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).

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.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.



## **BUSHFIRE ASSESSMENT REPORT (BAR)**

### **DWELLING HOUSE (1A) FOR DUAL OCCUPANCY (PBP, 2019, PART 7 – RESIDENTIAL INFILL DEVELOPMENT)**

120 RIVIERA AVENUE, TERRIGAL, NSW, 2260  
(LOT 8, DP248806)

Prepared by Perception Planning Pty Ltd on behalf of Mr. Scott Sharman



**30 August 2022**

**Table 1 – Document Versions and Disclaimer**

No:	Perception Planning Reference:	Author:	Reviewer:
Version 1	30/08/22_BAR_120 Riviera Avenue_V1	T.T	M.B
<p><b>Disclaimer:</b></p> <p>This document may only be used for the purpose for which it was commissioned and in accordance with the contract between Perception Planning and the client.</p> <p>The scope of services has been defined in consultation with the client with consideration to time, budgetary constraints and the availability of reports and other data relating to the site. Changes to information, legislation and schedule are made on an ongoing basis in consultation with the client. Stakeholders should therefore obtain up-to-date information.</p> <p>Perception Planning accepts no liability or responsibility whatsoever for, or in respect of, any use of or reliance upon this report and its supporting material by any third party. Information provided is not identified to be suitable for legal advice in relation to any matter. Unauthorised use of this report in any form is prohibited.</p> <p>Any recommendation or advice expressed in this report is made in good faith and in accordance with the relevant legislation for bushfire prone development in NSW. It should be borne in mind that the measures recommended in this report cannot guarantee that a building will survive a bushfire event on every occasion. This is due to the degree of vegetation management, the unpredictable behaviour of bushfires and extreme weather conditions. As such, the author is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to the person acting or not acting based on the recommendations of this report.</p> <p>This bush fire assessment report shall remain valid for 12 months from the date of issue.</p>			

Notwithstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small, always remains and although the standard is designed to improve the performance of such buildings, there can be no guarantee because of the variable nature of bushfires that any one building will withstand bushfire attack on every occasion. This BAR provides the above required information to assist Council and the RFS in determining compliance in accordance with the PBP and AS 3959. Council is the final consenting authority and the future construction works must comply with the recommendations included in the Council's conditions of consent.

## EXECUTIVE SUMMARY

Perception Planning has been engaged by Mr. Scott Sharman (the client) to prepare a Bushfire Assessment Report (BAR) for a Dual Occupancy (the development) at 120 Riviera Avenue, Terrigal NSW 2260 (LOT 8, DP248806) (the site).

The development is neither defined as residential subdivision, rural residential subdivision, nor a Special Fire Protection Purpose (SFPP) under RFS, 2019, 'Planning for Bushfire Protection' (PBP). It is therefore defined as 'residential infill development'. A Bush Fire Safety Authority (BFSA) is not required from the RFS under the Rural Fire Act 1997 (s100B).

The site is a cleared site, which is an 8-minute drive or 3.6km to the south of Wamberal and is located within the Central Coast Local Government Area (LGA). The site is identified as Bushfire Prone Land (BPL), being Vegetation Buffer under the Environmental Planning & Assessment Act 1979 (s10.3) (EP&A).

A Dial Before You Dig (DBYD) request identified that mains electricity and water is located in the road reserve. A Deposited Plan (DP) was also obtained from 'NSW Land Registry Services', which identified no restrictions in relation to Asset Protection Zones (APZ)s or site access. However there is an Easement to drain water that is 2m wide along the Northern boundary of the site and an Easement to Drain water that is 2.5m wide along the Western boundary crossing through the Western portion of site, Refer to **(Attachment 2)** for DP.

This BAR identifies that the predominant bushfire hazard is located to South of the site over Downslope ground (15-20°) and at a distance of 89m. The development is to be constructed to BAL-19 to the Eastern, Southern and Western elevations in accordance with PBP (Part 7 – Residential Infill Development and BAL-12.5 to the Northern elevation of dual occupancy. The removal of native flora or fauna will not be required. The BAR provides a series of recommendations in relation to the specific Bushfire Protection Measures (BPM)s based on the assessment of this infill development, Refer to Tables 2 – 10.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	3
1.0 INTRODUCTION .....	5
1.1 SITE PARTICULARS .....	5
1.2 CURRENT LAND USE: .....	5
1.2 SCOPE .....	5
1.3 PROPOSAL .....	5
2.0 ASSESSMENT.....	9
2.1 VEGETATION ASSESSMENT.....	9
2.2 SLOPE ASSESSMENT .....	9
2.3 DETERMINATION OF FIRE DANGER INDEX (FDI).....	9
2.4 DETERMINATION OF BUSHFIRE ATTACK LEVEL (BAL) .....	9
3.0 BUSHFIRE PROTECTION MEASURES AND RECOMMENDATIONS .....	10
3.1 ASSET PROTECTION ZONES .....	10
3.2 SITING AND DESIGN PRINCIPLES .....	11
3.3 ACCESS.....	11
3.4 WATER SUPPLIES.....	12
3.5 GAS AND ELECTRICITY SERVICES .....	13
3.6 CONSTRUCTION STANDARDS .....	13
3.7 LANDSCAPING.....	14
3.8 EMERGENCY MANAGEMENT .....	15
4.0 CONCLUSION.....	16
REFERENCE LIST.....	17
ATTACHMENT 1 – AHMIS RESULTS .....	18
ATTACHMENT 2 – DEPOSITED PLAN .....	19
ATTACHMENT 3 – ARCHITECTURAL PLANS.....	20
ATTACHMENT 4 – CONSTRUCTION REQUIREMENTS TABLE.....	21
ATTACHMENT 5 – (APPENDIX 4 – ASSET PROTECTION ZONES) .....	22

## 1.0 INTRODUCTION

### 1.1 SITE PARTICULARS

Address:	120 Riviera Avenue, Terrigal NSW 2260(the site)
Legal Description:	Lot 8, DP248806
Total Area:	0.11ha
Local Government Area:	Central Coast
Fire Danger Index (FDI):	100 – Greater Hunter.
Boundaries:	Land zoned R2 – Low Density Residential encompasses the site and surrounds. Land zoned RE1 – Public Recreation is located directly to the east and to the South which is currently unmanaged vegetation (Public Reserve) and Terrigal Palm Grove Reserve, respectively.

### 1.2 CURRENT LAND USE:

Highly disturbed/Managed Land and proposed works is for a dual occupancy development. The site has access to Riviera Avenue which is currently a sealed public road. Refer to **(Figure 2)** for Vegetation and Separation Map. Refer to **(Photos 1-2)** for the Site Aspects.

### 1.2 SCOPE

The scope of this BAR is to identify the bush fire hazard and provide measures to assist Council and the RFS that the identified fire hazard would be reduced to a level that is considered necessary to provide adequate protection to life and property.

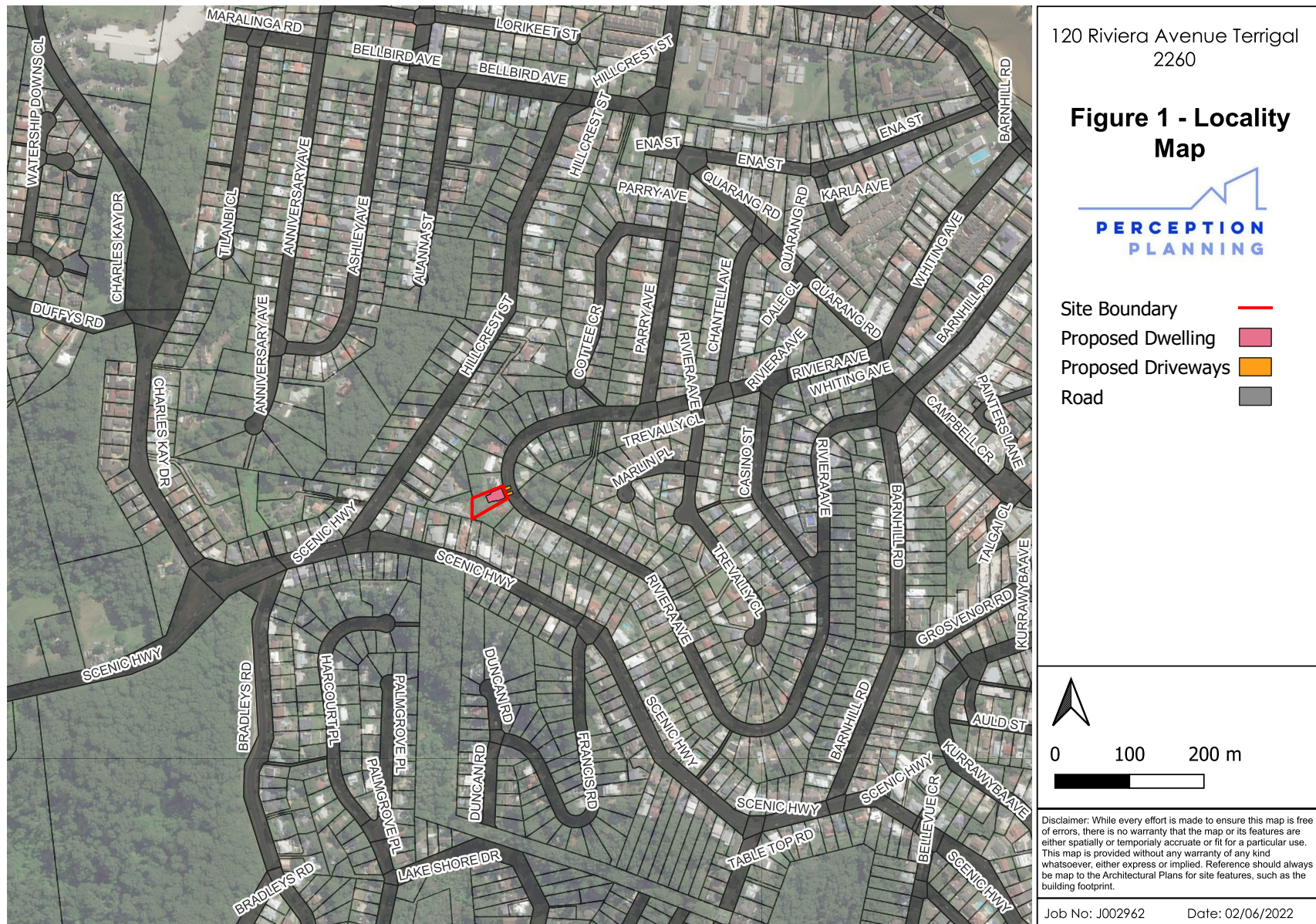
This BAR provides the required information to assist Council and the RFS in determining compliance in accordance with the RFS, 2019, 'Planning for Bush Fire Protection' (PBP) and AS 3959-2018. Council is the final consenting authority and the future construction works must comply with the conditions listed in the Notice of Determination issued by Council.

The site is not mapped as containing Biodiversity Values under the Biodiversity Conservation Act 2016. A basic search of the AHIMS database identified zero sites and/or places **(ATTACHMENT 1)**. The site is identified as BPL, being Vegetation Buffer. A Deposited Plan (DP) was also obtained from 'NSW Land Registry Services', which identified an easement to drain water 2m wide along the Northern boundary and an easement to drain water 2.5m wide within the Western portion of the lot.

### 1.3 PROPOSAL

The proposal is for a dual occupancy (the development), see **(ATTACHMENT 2)** for Architectural Plans at 120 Riviera Avenue, Terrigal NSW 2260 (the site). The development is defined as 'residential infill development' under PBP and could be defined under the National Construction Code (NCC) as A dwelling (Class 1a). An illustration of the proposed siting is provided as **(FIGURE 1)**.











**Photo 1: Western Elevation**



**Photo 2: Eastern Elevation**



## 2.0 ASSESSMENT

### 2.1 VEGETATION ASSESSMENT

The vegetation was determined by the following methods:

- Near Map to identify vegetation cover;
- Sharing and Enabling Environmental Data (SEED) Portal to identify Vegetation Classification and Biodiversity Values Map;
- ePlanning Spatial Viewer to identify Bushfire Prone Land Map;
- Site Inspection to confirm vegetation formation using Keith, 2004, 'Ocean Shores to Desert Dunes'.

The predominant vegetation formation within 140m in all directions around the proposed building has been identified to be Forest vegetation. The removal of native flora or fauna will not be required to achieve the development, including the establishment of APZs.

### 2.2 SLOPE ASSESSMENT

The effective slope was determined by the following methods:

- Elevation and Depth – Foundation Spatial Data (ELVIS) to identify 1m Contours;
- Site Inspection to confirm slope using a Bosch Rangefinder.

The effective slope under the classified vegetation to the South has been identified to be Downslope >15 to 20 degrees. The effective slope for each direction is outlined below.

### 2.3 DETERMINATION OF FIRE DANGER INDEX (FDI)

The FDI was determined by identifying the FDI rating within PBP (Part A1.6) (p.84). The FDI is 100 - Greater Hunter.

### 2.4 DETERMINATION OF BUSHFIRE ATTACK LEVEL (BAL)

The assessment of vegetation and slope has been used to calculate the following BALs for the secondary dwelling:

**Table 2 – BAL Table for New Dwelling**

Direction	Vegetation	Slope (°)	Separation(m)	BAL
North	Managed Land	N/A	N/A	BAL-LOW
East	Low-Threat*	N/A	N/A	BAL-LOW
South	Forest – Terrigal Palm Grove Reserve	Downslope (15-20°)	>89m	BAL-19
West	Managed Land	N/A	N/A	BAL-LOW

\*The vegetation to the East of site at 93A Riviera Avenue, Terrigal is zoned (RE1 – Public Recreation) and was assessed under A1.10 of PBP being a single area of vegetation <1Ha in area and greater than 100m separation from other areas of Category 1 or 2 vegetation.

The development is setback >89m from the classified vegetation to the South and therefore is required to be constructed to BAL-19 to the Eastern, Southern and Western elevation and BAL-12.5 to the Northern elevation due to shielding in accordance with National Construction Code (NCC) with the exception of the construction requirements of the RFS, 2019, 'Planning for Bushfire Protection' (Clause 7.5.2 – NSW State Variations).

### 3.0 BUSHFIRE PROTECTION MEASURES AND RECOMMENDATIONS

#### 3.1 ASSET PROTECTION ZONES

The RFS, 2019, PBP states that the intent of these Bushfire Protection Measures is 'to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting firefighting activities'.

**Table 3 - Compliance with PBP for Asset Protection Zones**

Performance Criteria	Acceptable Solution	Response
<ul style="list-style-type: none"> <li>APZs are provided commensurate with the construction of the building; and</li> <li>A defensible space is provided onsite</li> </ul>	An APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	<b>Complies with Acceptable Solution -</b> This BAR identifies that the APZ has been calculated in accordance with Table A1.12.2 to demonstrate that the dual occupancy is able to achieve BAL-19 for the Eastern, Southern and Western elevation and BAL-12.5 to the Northern elevation. Refer to <b>(Attachment 4)</b> for Construction Requirements Table.
<ul style="list-style-type: none"> <li>APZs are managed and maintained to prevent the spread of a fire to the building.</li> </ul>	APZs are managed in accordance with the requirements of Appendix 4 of PBP.	<b>Complies with Acceptable Solution -</b> The BAR identifies that the APZ managed as an Inner Protection Area (IPA) is in accordance with Appendix 4 of PBP <b>(Attachment 5)</b> .
<ul style="list-style-type: none"> <li>The APZ is provided in perpetuity.</li> <li>APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.</li> </ul>	APZs are wholly within the boundaries of the development site. APZs are located on lands with a slope less than 18 degrees.	<b>Complies with Acceptable Solution -</b> The BAR identifies that the APZ managed as an Inner Protection Area (IPA). The separation between vegetation and proposed works allows for compliance with BAL-19.

### 3.2 SITING AND DESIGN PRINCIPLES

The RFS, 2019, PBP does not include siting and design principles. In turn, the siting and design principles from the RFS, 2006, PBP (Section 4.3.5 – Specifications and Requirements for Bush Fire Protection Measures for Infill Development) have been discussed below.

Commentary regarding these Siting and Design principles of the development is outlined below.

**Table 4 – Compliance with PBP for Siting and Design**

Performance Criteria	Acceptable Solution	Response
Buildings are sited and designed to minimise the risk of bush fire attack.	Buildings are designed and sited in accordance with the siting and design principles in this section (see also Figure 4.7 (p.42)).	<p>The performance of the building is enhanced through the following siting and design principles:</p> <ol style="list-style-type: none"> <li>1. Not built on a ridge top or saddle;</li> <li>2. Reduction in the bulk of a building (height and width) facing a bushfire hazard;</li> <li>3. Simple building design with reduced numbers of re-entrant corners;</li> <li>4. Provision of a simplified roofline;</li> <li>5. Avoiding raised floors and utilising concrete slabs (raft construction);</li> <li>6. Reducing the number of windows facing the bushfire hazard.</li> </ol>

### 3.3 ACCESS

**Table 5 – Compliance with PBP for Access**

Performance Criteria	Acceptable Solutions	Response
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	Property access roads are two-wheel, all weather roads.	<b>Complies with Acceptable Solution</b> - The property access road can be a two-wheel, all weather road.
The capacity of access roads is adequate for firefighting vehicles.	The capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges and causeways are to clearly indicate load rating.	<b>Complies with Acceptable Solution</b> - The capacity of road surfaces and any bridges/causeways can be designed to carry fully loaded firefighting vehicles (up to 23 tonnes).
There is appropriate access to water supply.	Hydrants are provided in accordance with the relevant causes of AS2419.1:2005 There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	<b>Complies with Acceptable Solution</b> - Existing water hydrants are located in the road reserves of Riviera Avenue and provided in accordance with the relevant causes of AS2419.1:2005



Firefighting vehicles can access the dwelling and exit the property safely.	At least one alternative property access road is provided for individual dwellings or groups of dwellings that are located more than 200 metres from a public thorough road.  There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70 kph) that supports the operational use of emergency firefighting vehicles.	<b>Complies with Acceptable Solution</b> - There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided.
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### 3.4 WATER SUPPLIES

**Table 6 – Compliance with PBP for Water Supplies**

Performance Solutions	Acceptable Solutions	Response
An adequate water supply is provided for firefighting purposes.	Reticulated water is provided to the development, where available, and A static water supply is provided where no reticulated water is available.	<b>Complies with Acceptable Solution</b> – Reticulated water supply is available.
<ul style="list-style-type: none"> <li>Water supplies are located at regular intervals</li> <li>The water supply is accessible and reliable for firefighting purposes</li> </ul>	Fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005 Hydrants are not located within any road carriageway Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	<b>Complies with Acceptable Solution</b> – Fire hydrant spacing, design and sizing are to comply with the relevant clauses of AS 2419.1:2005
Flows and pressure are appropriate.	Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005	<b>Complies with Acceptable Solution</b> – Fire hydrant flows and pressure are assumed compliant
The integrity of the water supply is maintained.	All above-ground water service pipes external to the building are metal, including and up to any taps.	<b>Complies with Acceptable Solution</b> – All above-ground water service pipes external to the building are to be metal, including and up to any taps.
A static water supply is provided for firefighting purposes in areas where reticulated water is not available.	Where no reticulated water supply is available, water for firefighting purposes is provided in accordance with Table 5.3d, being:	<b>Complies with Acceptable Solution</b> – Reticulated water supply is available and therefore no static water supply is required.

### 3.5 GAS AND ELECTRICITY SERVICES

**Table 7 – Compliance with PBP for Electricity Services**

Performance Solutions	Acceptable Solutions	Response
Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	Where practicable, electrical transmission lines are underground; and Where overhead, electrical transmission lines are proposed as follows: <ul style="list-style-type: none"> <li>• Lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and</li> <li>• No part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guidelines for Managing Vegetation Near Power Lines.</li> </ul>	<b>Complies with Acceptable Solution –</b> Electrical services are assumed compliant and to be in accordance with acceptable solution.
Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	<ul style="list-style-type: none"> <li>- Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used.</li> <li>- All fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side.</li> <li>- Connections to and from gas cylinders are metal.</li> <li>- Polymer-sheathed flexible gas supply lines are not used.</li> </ul> Above-ground gas service pipes are metal, including and up to any outlets.	<b>Complies with Acceptable Solution –</b> Gas services are assumed compliant and to be in accordance with acceptable solution.

### 3.6 CONSTRUCTION STANDARDS

**Table 8 – Compliance with PBP for Construction Standards**

Performance Criteria	Acceptable Solution	Response
The proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.	BAL is determined in accordance with Tables A1.12.5 to A1.12.7 Construction is provided in accordance with the NCC and as modified by section 7.5 (please see advice on construction in the flame zone).	<b>Complies with Acceptable Solution –</b> This BAR identifies that the dual occupancy are to be constructed to BAL-19. Refer to <b>(ATTACHMENT 3)</b> for Construction Requirements. For the development, a reduction is achieved for the Northern elevation due to shielding under AS3959-2018 (Clause 3.5 – Reduction in Construction Requirements Due to Shielding). This shielded elevation can be constructed to BAL-12.5
Proposed fences and gates are designed to minimise the	Fencing and gates are constructed in accordance with section 7.6	<b>Complies with Acceptable Solution –</b> Fencing and gates are to be constructed in accordance with section 7.6.

spread of bush fire		
Proposed Class 10a buildings are designed to minimise the spread of bush fire	Class 10a buildings are constructed in accordance with section 8.3.2	<b>Not Applicable</b> - No class 10a buildings are proposed.
Home-based childcare: the proposed building can withstand bush fire attack in the form of wind, localised smoke, embers and expected levels of radiant heat.	An APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1 of this document around the entire building or structure. The existing dwelling is required to be upgraded to improve ember protection. This is to be achieved by enclosing or covering all openings with a corrosion-resistant steel, bronze or aluminium mesh with a maximum aperture of 2mm. Where applicable, this includes the openable portion of the windows, vents, weepholes and eaves, but does not include roof tile spaces. Weather strips, draught excluders or draught seals shall be installed at the base of side hung external doors as per AS3959. The subfloor space must be enclosed.	<b>Not Applicable</b> - The development is not for home-based childcare and therefore this performance criteria does not apply.

### 3.7 LANDSCAPING

**Table 9 – Compliance with PBP for Landscaping**

Performance Solutions	Acceptable Solutions	Response
Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind drive embers to cause ignitions.	<p>Compliance with the NSW RFS 'Asset protection zone standards' (see Appendix 4).</p> <p>A clear area of low-cut lawn or pavement is maintained adjacent to the house.</p> <p>Fencing is constructed in accordance with section 7.6.</p> <p>Trees and shrubs are located so that:</p> <ul style="list-style-type: none"> <li>• The branches will not overhang the roof</li> <li>• The tree canopy is not continuous</li> <li>• Any proposed windbreak is located on the elevation from which fires are likely to approach.</li> </ul>	<p><b>Complies with Acceptable Solution –</b></p> <p>The BAR identifies that the entire site is to be managed as an Inner Protection Area in accordance with PBP (Appendix 4) – <b>(Attachment 5).</b></p>

### 3.8 EMERGENCY MANAGEMENT

**Table 10 – Compliance with PBP for Emergency Management**

Performance Solutions	Acceptable Solutions	Response
Home-based child care: a bushfire emergency and evacuation management plan is prepared.	A Bush Fire Emergency Management and Evacuation Plan is prepared by the operator consistent with the NSW RFS publication: A guide to Developing a Bush Fire Emergency and Evacuation Plan, and the AS 3745:2010.	<b>Complies with Acceptable Solution</b> – A bushfire survival plan is recommended as development is on bushfire prone land and to provide a better outcome.

Note: The above are recommendations in line with the required BPM's for this type of development. Any development approval is to comply with the Conditions listed on the Council Notice of Determination, not the above recommendations. The above recommendations are only intended to assist Council in their assessment of the DA.

## 4.0 CONCLUSION

Perception Planning has been engaged by Mr. Scott Sharman (the client) to prepare a Bushfire Assessment Report (BAR) for a Dual Occupancy (the development) at 120 Riviera Avenue, Terrigal NSW 2260 (LOT 8, DP248806) (the site).

This BAR identifies that the predominant bushfire hazard is located to South of the site over Downslope ground (15-20°) and at a distance of 89m. The development is to be constructed to BAL-19 in accordance with PBP (Part 7 – Residential Infill Development. The removal of native flora or fauna will not be required

The BAR provides a series of recommendations in relation to the specific Bushfire Protection Measures (BPM)s based on the assessment of this infill development, Refer to Tables 2 – 10. These include:

- The BAR identifies the proposed dual occupancy is to be constructed to BAL-19 to the Eastern, Southern and Western elevations and BAL-12.5 to the Northern elevation due to shielding under AS3959-2018 (Clause 3.5 – Reduction in Construction Requirements Due to Shielding).
- The entire site is to be managed as an Inner Protection Area in accordance with PBP (Appendix 4) – (Attachment 5).

A Bushfire Survival Plan is recommended for the proposed works to ensure bushfire safety.

## REFERENCE LIST

Australian Standard AS3959 – Construction of Buildings in Bushfire Prone Areas (AS3959), viewed 30 August 2022, < <http://www.as3959.com.au/>>

Dial Before You Dig, 2019, 'Lodge an Inquiry', viewed 30 August 2022, < [onecall.1100.com.au](http://onecall.1100.com.au)>

Keith, 2004, 'Ocean Shore to Desert Dunes'. Published by the Department of Environment and Conservation (NSW) July 2004. PO Box 1967, Hurstville, NSW, 2220

NSW Government, 2015, 'E-Planning Portal', viewed 30 August 2022, < <https://www.planningportal.nsw.gov.au/find-a-property>>

NSW Government, 2019, 'Biodiversity Vales Map and Threshold Tool', viewed 30 August 2022, <[www.lmbc.nsw.gov.au](http://www.lmbc.nsw.gov.au)>

NSW Government, 2019, 'Sharing and Enabling Environmental Data (SEED)', viewed 30 August 2022<[geo.seed.nsw.gov.au](http://geo.seed.nsw.gov.au)>

NSW Office of Environment, 2016, 'Aboriginal Heritage Information Management System (AHIMS)', viewed 30 August 2022, <<http://www.environment.nsw.gov.au>>

Rural Fire Service, 2016, 'NSW Rural Fire Service – Guide for Bush Fire Prone Land Mapping', viewed 30 August 2022, <http://www.rfs.nsw.gov.au>

Rural Fire Service, 2019, 'Planning for Bushfire Protection', viewed 30 August 2022, < <http://www.rfs.nsw.gov.au>>

Rural Fire Service, March 2019, 'Comprehensive Fuel Loads', viewed 30 August 2022, < <http://www.rfs.nsw.gov.au>>



## ATTACHMENT 1 – AHMIS RESULTS



## AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : 10

Client Service ID : 686146

Perception Planning

Date: 27 May 2022

260 Maitland Road

Mayfield New South Wales 2304

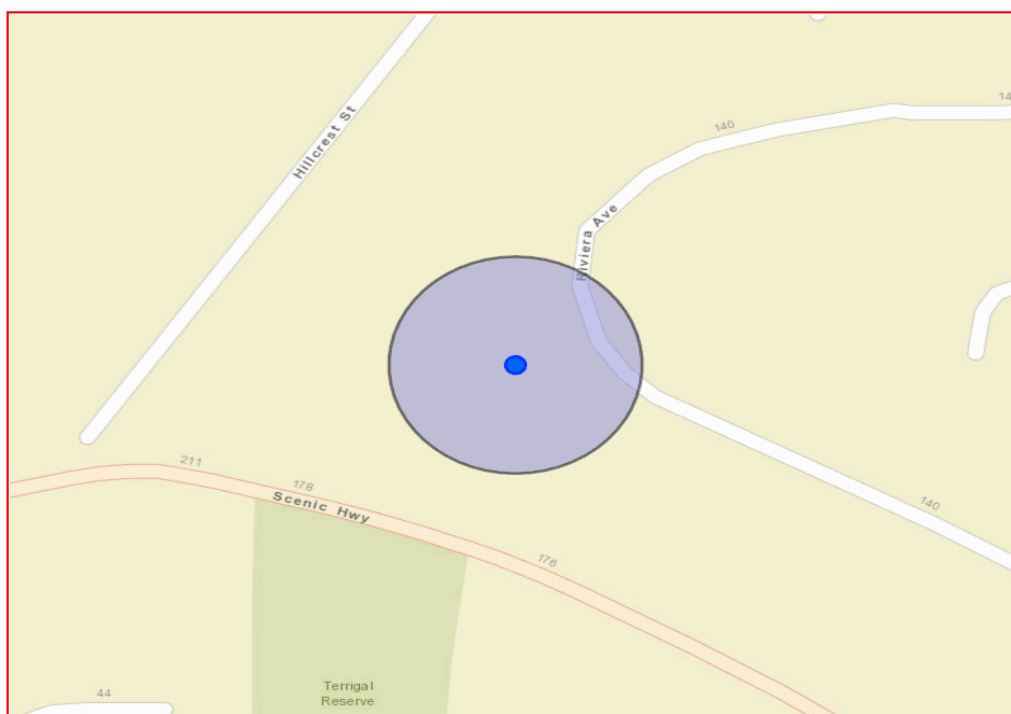
Attention: Tahlia Thompson

Email: tahlia@perceptionplanning.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Address : 120 RIVIERA AVENUE TERRIGAL 2260 with a Buffer of 50 meters, conducted by Tahlia Thompson on 27 May 2022.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

## ATTACHMENT 2 – DEPOSITED PLAN

Reg:R828933 /Doc:DP 0248806 P /Rev:15-Jun-1992 /NSW LRS /Pgs:ALL /Prt:16-May-2022 14:49 /Seq:1 of 1  
© Office of the Registrar-General /Src:GLXTerrain /Ref:Perception Planning Pty Ltd

[illegible]

## ATTACHMENT 3 – ARCHITECTURAL PLANS

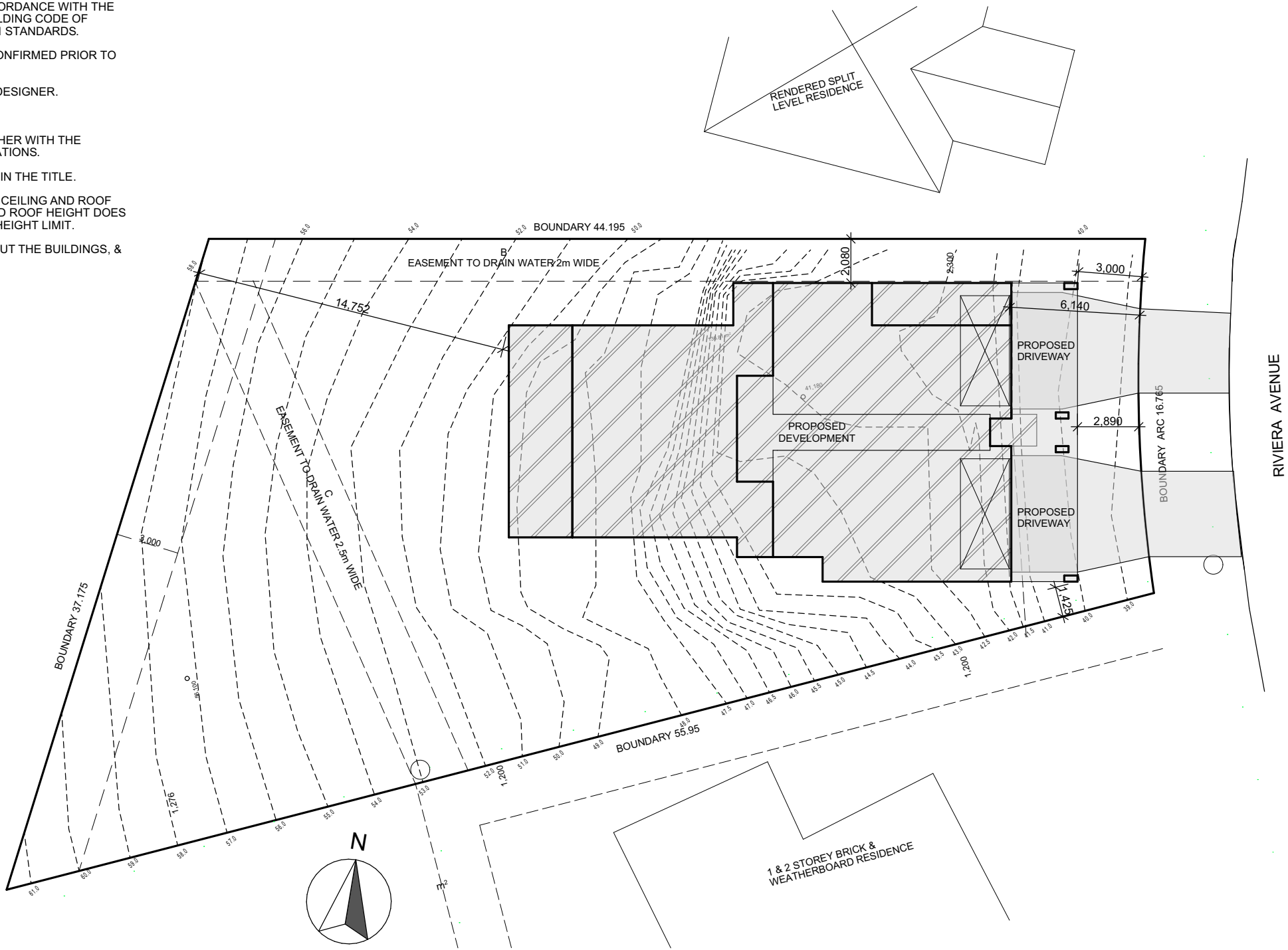


GENERAL NOTES

- 1 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF COUNCIL, THE BUILDING CODE OF AUSTRALIA AND CURRENT AUSTRALIAN STANDARDS.
- 2 ALL DIMENSIONS AND LEVELS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
- 3 REPORT ANY DISCREPANCIES TO THE DESIGNER.
- 4 DO NOT SCALE OFF THESE DRAWINGS.
- 5 THESE PLANS ARE TO BE READ TOGETHER WITH THE ENGINEERS DRAWINGS AND SPECIFICATIONS.
- 6 SCALES APPLY TO SHEET SIZE SHOWN IN THE TITLE.
- 7 THE BUILDER IS TO CHECK ALL FLOOR, CEILING AND ROOF LEVELS TO ENSURE THAT THE FINISHED ROOF HEIGHT DOES NOT EXCEED THE DA APPROVED RL & HEIGHT LIMIT.
- 8 A REGISTERED SURVEYOR IS TO SET OUT THE BUILDINGS, & CONFIRM ALL LEVELS.

LEGEND

- AW AWNING WINDOW
- BFD BI-FOLD DOOR
- DH DOUBLE-HUNG WINDOW
- DP DOWNPIPE
- CONC CONCRETE
- CPT CARPET
- CW CASEMENT WINDOW
- CSD CAVITY SLIDING DOOR
- FG FIXED GLASS
- f.w. FLOOR WASTE
- GB GLASS BLOCKS
- HWS HOT WATER SYSTEM
- LV LOUVRE WINDOW
- PLD PANEL LIFT DOOR
- REF REFRIGERATOR
- RD ROLLER DOOR
- SH SHOWER
- SD SLIDING DOOR
- SW SLIDING WINDOW
- S.D. SMOKE DETECTOR
- VA VANITY BASIN
- WM WASHING MACHINE
- WC WATER CLOSET



ISSUE	DETAILS

SORENSEN

DESIGN & PLANNING

PORT STEPHENS OFFICE

Ph: (02) 4984 9955

Suite 4/ 10 Yacaaba Street

Nelson Bay NSW 2315

NEWCASTLE OFFICE

Ph: (02) 4961 5544

SINGLETON OFFICE

Ph: (02) 4961 5544

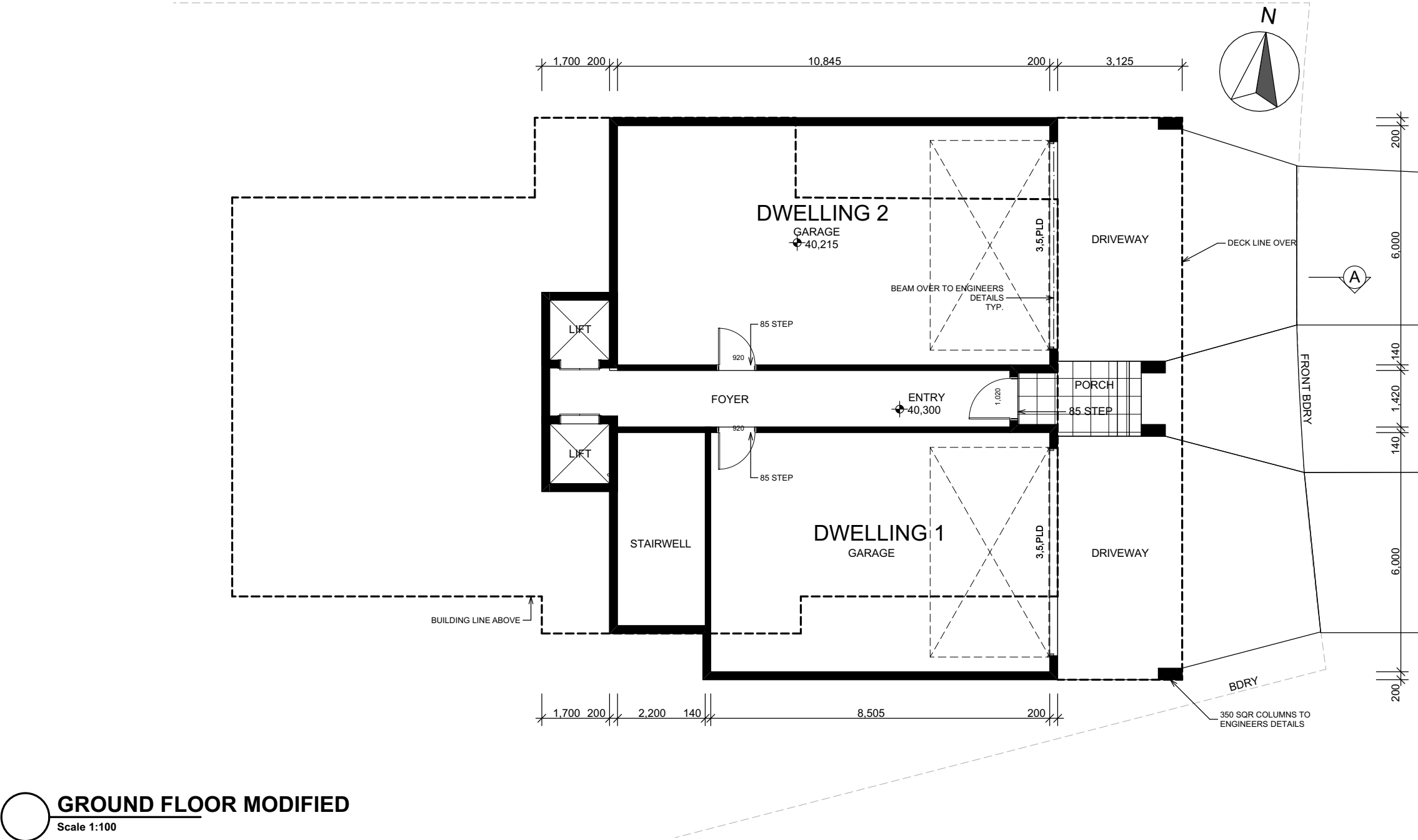
CONTACT DETAILS

General Enquiries:

reception@sorensendesign.com.au

www.sorensendesign.com.au

PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL
CLIENT: SHARMAN
TITLE: SITE PLAN
FILE: 22032561 DATE: 26/04/2022 SHEET: 1 OF 6
THESE PLANS ARE SUBJECT TO COPYRIGHT



**GROUND FLOOR MODIFIED**  
Scale 1:100



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**SORENSEN**  
DESIGN & PLANNING

**S** PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: <b>PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL</b>
CLIENT: <b>SHARMAN</b>
TITLE: <b>GROUND FLOOR PLAN</b>
FILE: <b>22032561</b> DATE: <b>26/04/2022</b> SHEET: <b>2</b> OF <b>6</b>
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**LEVEL 1 PLAN**  
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PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

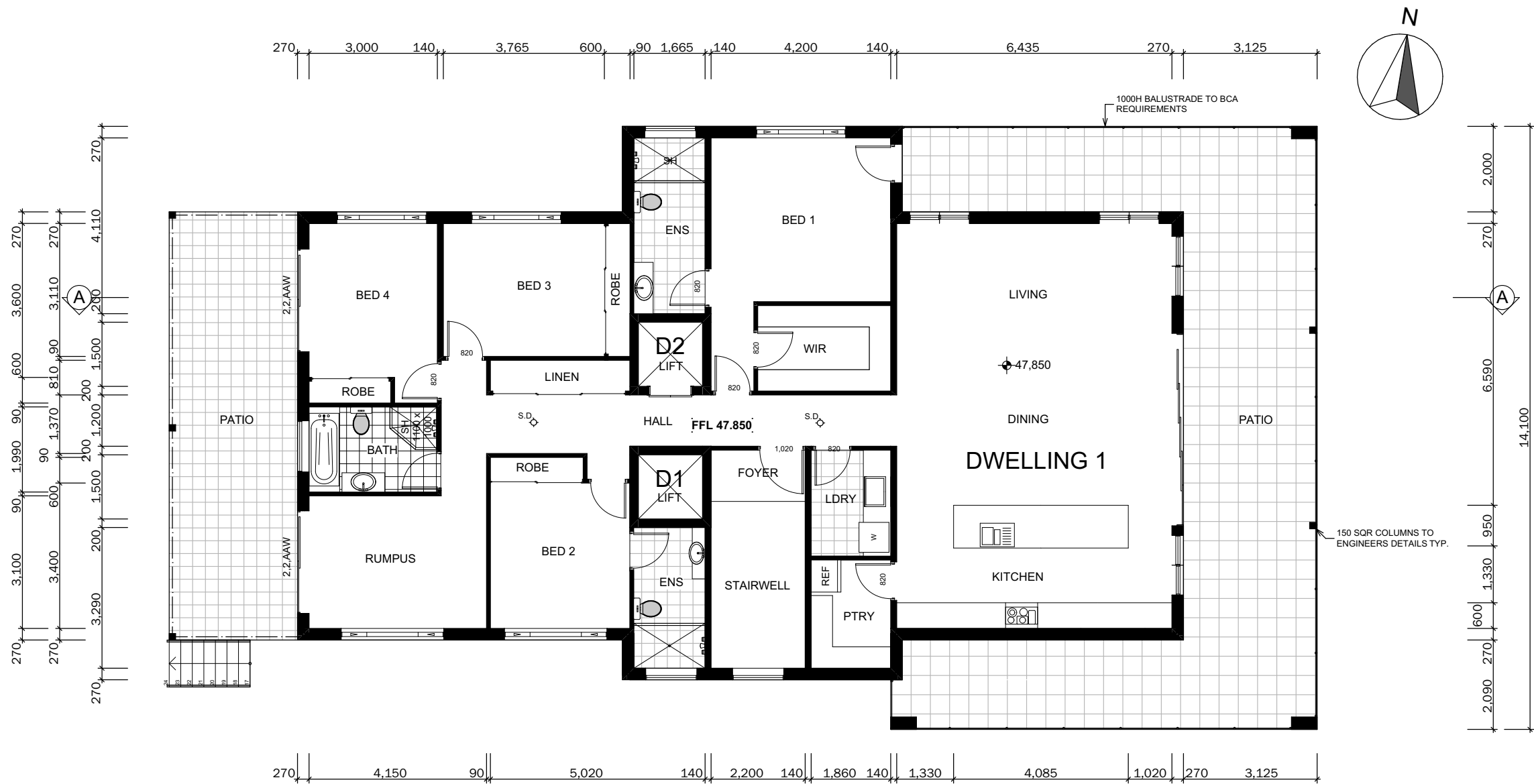
PROJECT: **PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL**

CLIENT: **SHARMAN**

TITLE: **LEVEL 1 PLAN**

FILE: **22032561** DATE: **26/04/2022** SHEET: **3** OF **6**

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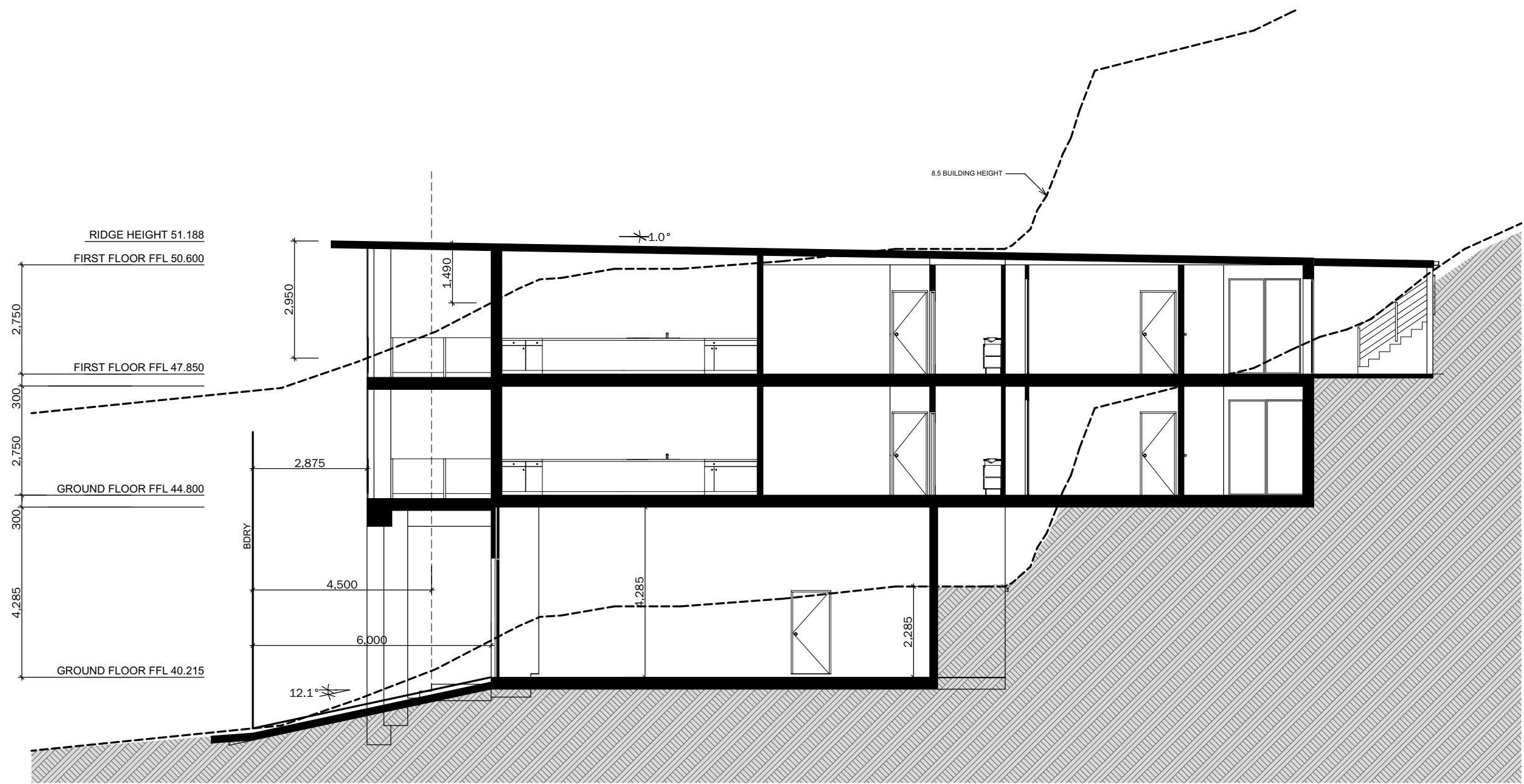
LEVEL 2 PLAN  
Scale 1:100

PORT STEPHENS OFFICE  
Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL
CLIENT: SHARMAN
TITLE: LEVEL 2 PLAN
FILE: 22032561    DATE: 26/04/2022    SHEET: 4 OF 6
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**SECTION A-A**  
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Ph: (02) 4984 9955  
Suite 4/ 10 Yacaaba Street  
Nelson Bay NSW 2315

NEWCASTLE OFFICE  
Ph: (02) 4961 5544  
SINGLETON OFFICE  
Ph: (02) 4961 5544

CONTACT DETAILS  
General Enquiries:  
reception@sorensendesign.com.au  
www.sorensendesign.com.au

PROJECT: **PROPOSED DUAL OCCUPANCY AT, 120 RIVIERA AVENUE, TERRIGAL**

CLIENT: **SHARMAN**

TITLE: **SECTION A-A**

FILE: **22032561** DATE: **26/04/2022** SHEET: **5** OF **6**

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Street View




Street View



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			CLIENT: <b>SHARMAN</b>	
			TITLE: <b>3D VIEW</b>	
			FILE: <b>22032561</b>	DATE: <b>26/04/2022</b>
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## ATTACHMENT 4 – CONSTRUCTION REQUIREMENTS TABLE

	BAL-LOW	BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-Flame Zone
<b>SUBFLOOR SUPPORTS</b>	No Construction Requirements	No Construction Requirements	No Construction Requirements	enclosed by external wall or by steel, bronze or aluminium mesh. where the subfloor is unenclosed, support posts, columns, stumps, piers and poles shall be of non-combustible material or fire-resistant timber.	Subfloor space enclosed with a wall, sarking not required, where subfloor Unenclosed, support posts, columns, stumps, piers to be non-combustible material or tested for bushfire resistance to as 1530.8.1.	subfloor supports- enclosed by external wall = no construction requirements. Subfloor space unenclosed incl. support posts, columns, stumps, piers and poles to be non-combustible with an frl of 30/- or be tested for bushfire resistance to as 1530.8.2.
<b>FLOORS</b>	No Construction Requirements	No Construction Requirements	No Construction Requirements	concrete slab on ground or enclosure by external wall, metal mesh with 2mm aperture for elevated floors above 400mm. If <400mm above finished ground level, Bearers and joists to be non-combustible, fire-resistant timber, flooring the same or protected and lined on the underside with sarking or mineral wool insulation.	concrete slab on ground or enclosure by external wall. Unenclosed subfloor space, bearers, joists and flooring to be protection of underside with a non-combustible material such as fibre cement sheet or metal or be non-combustible or be tested for bushfire resistance to as 1530.8.1	concrete slab on ground – no construction requirements. Enclosed subfloor space by external wall. Unenclosed subfloor space an FRL of 30/30/30 or protection of underside with 30-minute incipient spread of fire system or be tested for bushfire resistance to as 1530.8.2.
<b>EXTERNAL WALLS</b>	No Construction Requirements	Same as BAL-19	Exposed external wall that is <400mm from ground or above decks to be of non-combustible material min 90mm thick Or timber logs (high density) Or fixed cladding that is non-combustible, fire resistant, 6mm fibre cement. all joints to be less than 3mm & vents to be screened.	non-combustible material – min 90mm thick - (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 6mm fibre cement or steel sheeting or bushfire resistant timber. All joints covered, sealed and overlapped <3mm & vents to be screened with mesh	non-combustible material (Masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 9mm fibre cement sheeting or steel sheeting to be tested for bushfire resistance to as 1530.8.1. All joints covered, sealed and overlapped <3mm & vents to be screened with mesh.	non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete) with a min 90mm thick OR a system with an FRL of -/30/30 when tested from outside OR be tested for bushfire resistance to as 1530.8.2.
<b>EXTERNAL WINDOWS</b>	No Construction Requirements	Bushfire shutter Or external screens covering entire assemble Or window frame <400mm from ground: material bushfire resistant or metal/metal-reinforced uPVC. Glazing grade A safety glass min 4mm thick. No require. For	Bushfire shutter Or external screens covering entire assemble Or window frame <400mm from ground: material bushfire resistant or metal/metal-reinforced uPVC. Glazing is toughened glass 5mm thick with openable	Bushfire shutter or frames & joinery bushfire resisting timber metal or uPVC, glazing 5mm toughened glass or double glazed external panel, where screen glazing <400mm off ground or <400mm above decks and extending >110mm	Bushfire shutter conforms with clause 3.7 & 8.5.1 Or window frames and hardware to be metal. Glazing 6mm toughened glass. fixed and openable portion screened with steel or bronze mesh.	protected by bushfire shutter to conform with 3.7, Openable portion of window to be screened with steel or bronze mesh internally or externally with 3.6 and FRL of -/30/- OR be tested for bushfire resistance to as 1530.8.2.

		seals or hardware. Openable portion of window to be screened internally.	portion of windows screened internally or externally Or annealed glass may be used to AS1288 standards with fixed & openable windows screened externally only. No require, for seals.	in width from window frame = glazing is to be externally screened.		
<b>EXTERNAL DOORS – French doors, panel fold, bi-fold and sliding</b>	No Construction Requirements	As for BAL-19, except that door framing can be naturally fire resistant (high density) timber	Protected by bushfire shutters Or by external screens Or door material being non-combustible, solid timber with framing made from metal, fire resistant timber or uPVC. Glazing toughened glass 5mm thick. No require for hardware or screens.	Protected by bushfire shutters Or by external screens Or door material being non-combustible, solid timber with framing made from metal, fire resistant timber or uPVC. Metal hardware and trims, Doors with glazing shall be toughened glass 6mm thick. Doors tight fitting and weather strips or seals installed.	Protected by bushfire shutters with 3.7 Or door panel non-combustible or 35mm solid timber protected by screened with steel or bronze mesh, metal framed, hardware material to be metal. Glazing toughened glass 6mm thick. Doors tight fitting with weather strips at base.	Protected by bushfire shutter with 3.7 OR door frames and doors with glazed panels to have FRL of min -/30/- OR conform with AS1530.8.2 tested from outside. tight-fitting with weather strips at base and seals shall not compromise the FRL or performance achieved in AS1530.4.
<b>ROOFS</b>	No Construction Requirements	Non-combustible covering. roof/wall junction sealed. openings fitted with non-combustible ember guards. Tiled and sheet roofs to be fully sarked. Verandah, carport or awning roof connected to main roof shall meet require. Of main roof, if separated from main, shall be non-combustible.	Roof tiles, sheets and covering to be non-combustible. roof/wall junction sealed. openings fitted with non-combustible ember guards. Verandah, carport or awning roof connected to main roof shall meet require. Of main roof, if separated from main, shall be non-combustible covering.	non-combustible covering. roof/wall junction sealed. openings fitted with non-combustible ember guards. Tiled and sheet roofs to be fully sarked. Sheet roofs sealed at fascia by mesh, mineral wool. Verandah, carport or awning roof connected to main roof shall meet require. Of main roof, if separated from main, shall be non-combustible or fire resisting timber.	All types of roofs shall be non-combustible, junction sealed by fascia and eaves linings or sealing wall and underside of roof. openings fitted with non-combustible ember guards. roof to be fully sarked and roof mounted evaporative coolers NOT permitted. No require for downpipes, if installed to be non-combustible.	Roof with FRL of 30/30/30 or tested for bushfire resistance to as 1530.8.2. Roof junction sealed by fascia and eaves linings or sealing wall and underside of roof. openings fitted with non-combustible ember guards. Roof to be fully sarked and roof mounted evaporative coolers NOT permitted. Verandah, carport or awning roof connected to main roof shall meet require. Of main roof, if separated from main, shall be non-combustible mat OR timber rafters lined with fibre-cement sheet of min 6mm thick OR AS1530.8.2
<b>VERANDAHS, DECKS ETC</b>	Same as BAL-29	Same as BAL-29	Same as BAL-29	enclosed subfloor space conforms with clause 7.4, All openings protected in accordance 3.6 to be made of resistant steel or bronze. Enclosed no requirement for supports or framing. Unenclosed subfloor space supports, framing, decking, balustrades, verandah posts to be non-combustible or bushfire resistant timber.	No requirement to enclosed subfloor space except for decking, stair treads to be non-combustible OR Fibre-cement sheet OR AS1530.8.2 Unenclosed subfloor space supports, framing and decking to be non-combustible or system conforming with AS1530.8.1. Balustrades & handrails <125mm from glazing or combustible wall shall be of non-combustible. Verandah posts, non-combustible.	No requirement to enclosed subfloor space except for decking, stair treads to be non-combustible OR Fibre-cement sheet OR AS1530.8.2 Unenclosed subfloor space supports, framing and decking to be non-combustible or system conforming with AS1530.8.1. Balustrades & handrails <125mm from ANY glazing to be non-combustible. Verandah posts, non-combustible.

## ATTACHMENT 5 – (APPENDIX 4 – ASSET PROTECTION ZONES)

# APPENDIX 4

## ASSET PROTECTION ZONE REQUIREMENTS

In combination with other BPMs, a bush fire hazard can be reduced by implementing simple steps to reduce vegetation levels. This can be done by designing and managing landscaping to implement an APZ around the property.

Careful attention should be paid to species selection, their location relative to their flammability, minimising continuity of vegetation (horizontally and vertically), and ongoing maintenance to remove flammable fuels (leaf litter, twigs and debris).

This Appendix sets the standards which need to be met within an APZ.

### A4.1 Asset Protection Zones

An APZ is a fuel-reduced area surrounding a building or structure. It is located between the building or structure and the bush fire hazard.

For a complete guide to APZs and landscaping, download the NSW RFS document *Standards for Asset Protection Zones* at the NSW RFS Website [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au).

An APZ provides:

- a buffer zone between a bush fire hazard and an asset;
- an area of reduced bush fire fuel that allows for suppression of fire;
- an area from which backburning or hazard reduction can be conducted; and
- an area which allows emergency services access and provides a relatively safe area for firefighters and home owners to defend their property.

Bush fire fuels should be minimised within an APZ. This is so that the vegetation within the zone does not provide a path for the spread of fire to the building, either from the ground level or through the tree canopy.

An APZ, if designed correctly and maintained regularly, will reduce the risk of:

- direct flame contact on the building;
- damage to the building asset from intense radiant heat; and
- ember attack.

The methodology for calculating the required APZ distance is contained within Appendix 1. The width of the APZ required will depend upon the development type and bush fire threat. APZs for new development are set out within Chapters 5, 6 and 7 of this document.

In forest vegetation, the APZ can be made up of an Inner Protection Area (IPA) and an Outer Protection Area (OPA).



#### A4.1.1 Inner Protection Areas (IPAs)

The IPA is the area closest to the building and creates a fuel-managed area which can minimise the impact of direct flame contact and radiant heat on the development and act as a defensible space. Vegetation within the IPA should be kept to a minimum level. Litter fuels within the IPA should be kept below 1cm in height and be discontinuous.

In practical terms the IPA is typically the curtilage around the building, consisting of a mown lawn and well maintained gardens.

When establishing and maintaining an IPA the following requirements apply:

##### Trees

- tree canopy cover should be less than 15% at maturity;
- trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2m above the ground;
- tree canopies should be separated by 2 to 5m; and
- preference should be given to smooth barked and evergreen trees.

##### Shrubs

- create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover; and
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

##### Grass

- grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed.

#### A4.1.2 Outer Protection Areas (OPAs)

An OPA is located between the IPA and the unmanaged vegetation. It is an area where there is maintenance of the understorey and some separation in the canopy. The reduction of fuel in this area aims to decrease the intensity of an approaching fire and restricts the potential for fire spread from crowns; reducing the level of direct flame, radiant heat and ember attack on the IPA.

Because of the nature of an OPA, they are only applicable in forest vegetation.

When establishing and maintaining an OPA the following requirements apply:

##### Trees

- tree canopy cover should be less than 30%; and
- canopies should be separated by 2 to 5m.

##### Shrubs

- shrubs should not form a continuous canopy; and
- shrubs should form no more than 20% of ground cover.

##### Grass

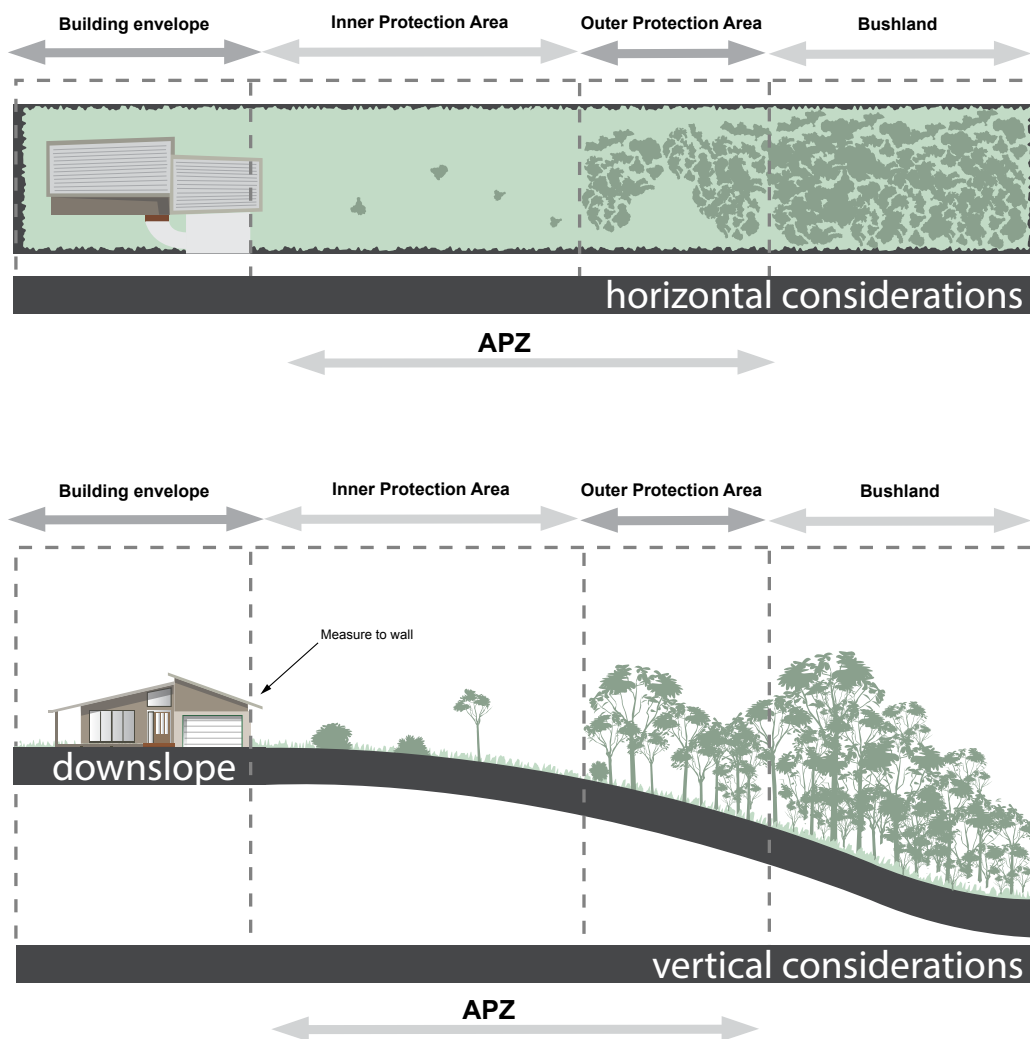
- grass should be kept mown to a height of less than 100mm; and
- leaf and other debris should be removed.

An APZ should be maintained in perpetuity to ensure ongoing protection from the impact of bush fires. Maintenance of the IPA and OPA as described above should be undertaken regularly, particularly in advance of the bush fire season.



**Figure A4.1**

Typical Inner and Outer Protection Areas.





Perception Planning Pty Ltd.  
PO Box 107,  
Clarence Town, NSW, 2324  
Phone: 04 1155 1433  
Email: [admin@perceptionplanning.com.au](mailto:admin@perceptionplanning.com.au)

