



# Development Assessment Panel

## Business Paper

**date of meeting:** Wednesday 23 October 2019

**location:** Function Room  
Port Macquarie-Hastings Council  
17 Burrawan Street  
Port Macquarie

**time:** 2:00pm

## **Development Assessment Panel**

### **CHARTER**

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#### **1.0 OBJECTIVES**

To assist in managing Council's development assessment function by providing independent and expert determinations of development applications that fall outside of staff delegations.

#### **2.0 KEY FUNCTIONS**

- To review development application reports and conditions;
- To determine development applications outside of staff delegations;
- To refer development applications to Council for determination where necessary;
- To provide a forum for objectors and applicants to make submissions on applications before the Development Assessment Panel (DAP);
- To maintain transparency in the determination of development applications.

#### **Delegated Authority of Panel**

Pursuant to Section 377 of the Local Government Act, 1993 delegation to:

- Determine development applications under Part 4 of the Environmental Planning and Assessment Act 1979 having regard to the relevant environmental planning instruments, development control plans and Council policies.
- Vary, modify or release restrictions as to use and/or covenants created by Section 88B instruments under the Conveyancing Act 1919 in relation to development applications for subdivisions being considered by the panel.
- Determine Koala Plans of Management under State Environmental Planning Policy 44 - Koala Habitat Protection associated with development applications being considered by the Panel.

Noting the trigger to escalate decision making to Council as highlighted in section 5.2.

#### **3.0 MEMBERSHIP**

##### **3.1 Voting Members**

- Two independent external members. One of the independent external members to



- be the Chairperson.
- Group Manager Development Assessment (alternate - Director Development & Environment or Development Assessment Planner)

The independent external members shall have expertise in one or more of the following areas: planning, architecture, heritage, the environment, urban design, economics, traffic and transport, law, engineering, government and public administration.

### **3.2 Non-Voting Members**

- Not applicable

### **3.3 Obligations of members**

- Members must act faithfully and diligently and in accordance with this Charter.
- Members must comply with Council's Code of Conduct.
- Except as required to properly perform their duties, DAP members must not disclose any confidential information (as advised by Council) obtained in connection with the DAP functions.
- Members will have read and be familiar with the documents and information provided by Council prior to attending a DAP meeting.
- Members must act in accordance with Council's Workplace Health and Safety Policies and Procedures
- External members of the Panel are not authorised to speak to the media on behalf of Council. Council officers that are members of the Committee are bound by the existing operational delegations in relation to speaking to the media.
- Staff members shall not vote on matters before the Panel if they have been the principle author of the development assessment report.

### **3.4 Member Tenure**

- The independent external members will be appointed for the term of four (4) years maximum in which the end of the tenure of these members would occur in a cascading arrangement.

### **3.5 Appointment of members**

- The independent external members (including the Chair) shall be appointed by the General Manager following an external Expression of Interest process.
- Staff members of the Panel are in accordance with this Charter.

## **4.0 TIMETABLE OF MEETINGS**

- The Development Assessment Panel will generally meet on the 1st and 3rd Wednesday each month at 2.00pm at the Port Macquarie offices of Council.
- Special Meetings of the Panel may be convened by the Director Development & Environment Services with three (3) days notice.

## **5.0 MEETING PRACTICES**

### **5.1 Meeting Format**

- At all Meetings of the Panel the Chairperson shall occupy the Chair and preside. The Chair will be responsible for keeping of order at meetings.
- Meetings shall be open to the public.
- The Panel will hear from applicants and objectors or their representatives.
- Where considered necessary, the Panel will conduct site inspections which will be open to the public.

### **5.2 Decision Making**

- Decisions are to be made by consensus. Where consensus is not possible on any item, that item is to be referred to Council for a decision.
- All development applications involving a proposed variation to a development standard greater than 10% under Clause 4.6 of the Local Environmental Plan will be considered by the Panel and recommendation made to the Council for a decision.

### **5.3 Quorum**

- All members (2 independent external members and 1 staff member) must be present at a meeting to form a quorum.

### **5.4 Chairperson and Deputy Chairperson**

- Independent Chair (alternate, second independent member)

### **5.5 Secretariat**

- The Director Development & Environment is to be responsible for ensuring that the Panel has adequate secretariat support. The secretariat will ensure that the business paper and supporting papers are circulated at least three (3) days prior to each meeting. Minutes shall be appropriately approved and circulated to each member within three (3) weeks of a meeting being held.
- The format of and the preparation and publishing of the Business Paper and Minutes shall be similar to the format for Ordinary Council Meetings.

### **5.6 Recording of decisions**

- Minutes will record decisions and how each member votes for each item before the Panel.

## **6.0 CONVENING OF “OUTCOME SPECIFIC” WORKING GROUPS**

Not applicable.

## **7.0 CONFIDENTIALITY AND CONFLICT OF INTEREST**

- Members of the Panel must comply with the applicable provisions of Council’s Code of Conduct. It is the personal responsibility of members to comply with the standards in the Code of Conduct and regularly review their personal circumstances with this in mind.
- Panel members must declare any conflict of interests at the start of each meeting or before discussion of a relevant item or topic. Details of any conflicts of interest should be appropriately minuted. Where members are deemed to have a real or perceived conflict of interest, it may be appropriate they be excused from deliberations on the issue where the conflict of interest may exist. A Panel meeting may be postponed where there is no quorum.

## **8.0 LOBBYING**

- All members and applicants are to adhere to Council’s Lobbying policy. Outside of scheduled Development Assessment Panel meetings, applicants, their representatives, Councillors, Council staff and the general public are not to lobby Panel members via meetings, telephone conversations, correspondence and the like. Adequate opportunity will be provided at Panel inspections or meetings for applicants, their representatives and the general public to make verbal submissions in relation to Business Paper items.

## Development Assessment Panel

### ATTENDANCE REGISTER

Member	12/06/19	24/07/19	28/08/19	11/09/19	25/09/19	09/10/19
Paul Drake	✓	✓	✓	✓	✓	✓
Robert Hussey			✓	✓		✓
David Crofts (alternate member)	✓	✓			✓	
Dan Croft (Group Manager Development Assessment) (alternates) - Director Development & Environment - Development Assessment Planner	✓	✓	✓	A  ✓	✓	A  ✓

**Key:** ✓ = Present

A = Absent With Apology

X = Absent Without Apology

# Development Assessment Panel Meeting

Wednesday 23 October 2019

## Items of Business

Item	Subject	Page
01	Acknowledgement of Country .....	<u>8</u>
02	Apologies.....	<u>8</u>
03	Confirmation of Minutes .....	<u>8</u>
04	Disclosures of Interest.....	<u>12</u>
05	DA2019 - 621 Medical Centre - Lot 27 DP 253280, No 6 Browallia Place, Port Macquarie .....	<u>16</u>
06	DA2019 - 476.1 Change of Use from Medical Centre to Dual Occupancy and Torrens Title Subdivison, Lot 5 DP 226787, 70 Hill Street, Port Macquarie .....	<u>46</u>
07	DA2019 - 203.1 Demolition of Existing Buildings and Construction of Restaurant at 24 Clarence Street, Port Macquarie .....	<u>77</u>
08	DA2019 - 400 Concept Proposal for Staged Residential Subdivision (25 torrens title lots) & Staged Residential Subdivision (19 torrens title lots) - 165 John Oxley Drive, Port Macquarie .....	<u>159</u>
09	DA2019 - 401.1 - Concept proposal for residential subdivision (25 torrens title lots) & staged residential subdivision (16 torrens title lots) at 153 John Oxley Drive, Port Macquarie .....	<u>471</u>
10	General Business	

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**Item: 01****Subject: ACKNOWLEDGEMENT OF COUNTRY**

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"I acknowledge that we are gathered on Birpai Land. I pay respect to the Birpai Elders both past and present. I also extend that respect to all other Aboriginal and Torres Strait Islander people present."

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**Item: 02****Subject: APOLOGIES**

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**RECOMMENDATION**

That the apologies received be accepted.

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**Item: 03****Subject: CONFIRMATION OF PREVIOUS MINUTES**

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**RECOMMENDATION**

That the Minutes of the Development Assessment Panel Meeting held on 9 October 2019 be confirmed.



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**PRESENT**

***Members:***

Paul Drake  
Robert Hussey  
Pat Gailbraith-Robertson

***Other Attendees:***

Ben Roberts  
Grant Burge

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The meeting opened at 2:06pm.

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**01 ACKNOWLEDGEMENT OF COUNTRY**

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The Acknowledgement of Country was delivered.

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**02 APOLOGIES**

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CONSENSUS:

That the apology received from Dan Croft be accepted, noting that Pat Gailbraith-Robertson is alternate for the Panel.

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**03 CONFIRMATION OF MINUTES**

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CONSENSUS:

That the Minutes of the Development Assessment Panel Meeting held on 25 September 2019 be confirmed.

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**04 DISCLOSURES OF INTEREST**

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There were no disclosures of interest presented.

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**05 DA2018 - 988.1 STAGED TORRENS TITLE SUBDIVISION AND MULTI DWELLING HOUSING WITH STRATA TITLE SUBDIVISION AT LOT 100 DP 1009007, NO. 16 OCEAN STREET, PORT MACQUARIE**

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Speakers:

Michelle Chapman

Daniel Marzoll

Chris Bombardiere (applicants)

Bob Bailey (opposed)

CONSENSUS:

That DA 2018 - 988.1 for a staged torrens title subdivision and multi dwelling housing with strata title subdivision at Lot 100 DP 1009007, No.16 Ocean Street, Port Macquarie be approved subject to a Deferred Commencement Consent which is to be subject to the following:

1. The following items be satisfied within 3 months of the issuing of the deferred commencement consent to the satisfaction of the Director of Development and Environment of Council:
  - a) The section of public footpath proposed in John Street be removed from the plans and relevant conditions of consent be amended to not require the footpath.
  - b) Amendments be made to the proposal to retain the existing Swamp Mahogany tree in the John Street road reserve. Such amendments are to be made with submission of a new Aborist report which justifies long term retention of the tree based upon design changes.
  - c) Subject to point b) being satisfactorily resolved amendments to conditions of consent to reflect the retention of the Swamp Mahogany tree.

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**06 DA2019-254.1 INDUSTRIAL BUILDING AND CARETAKER'S RESIDENCE - LOT 2 DP 1084479, NO. 3 PRODUCTION DRIVE, WAUCHOPE.**

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Speakers:

Derek Collins (applicant)

CONSENSUS:

That the determination by the Development Assessment Panel (DAP) of DA2019 - 254 for an industrial building and caretaker's residence at Lot 2 DP1084479, be deferred to address the following:

1. The Applicant give consideration to an amended layout which better satisfies section 3.5.3.3 of Development Control Plan 2013 to require open storage areas at the rear.
2. The Applicant rationalise the parking layout to be a safe and minimise potential for conflict between workers and customers.

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3. The Applicant submit a more detailed landscaping plan inclusive of species of plantings.
  4. The Applicant relocate the parking spaces beside the storage containers.
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**07 PROPOSED MEETING DATES FOR 2020 - DEVELOPMENT ASSESSMENT PANEL**

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CONSENSUS:

That the Development Assessment Panel endorse the meeting dates for 2020 as follows:

- ☐ 22 January
- ☐ 12 February
- ☐ 26 February
- ☐ 11 March
- ☐ 25 March
- ☐ 8 April
- ☐ 22 April
- ☐ 13 May
- ☐ 27 May
- ☐ 10 June
- ☐ 24 June

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**08 GENERAL BUSINESS**

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Nil.

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The meeting closed at 3:49pm.

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Item: 04  
Subject: DISCLOSURES OF INTEREST

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**RECOMMENDATION**

That Disclosures of Interest be presented

**DISCLOSURE OF INTEREST DECLARATION**

<b>Name of Meeting:</b>	
<b>Meeting Date:</b>	
<b>Item Number:</b>	
<b>Subject:</b>	
<b>I, the undersigned, hereby declare the following interest:</b>	
<input type="checkbox"/> <b>Pecuniary:</b> Take no part in the consideration and voting and be out of sight of the meeting.	
<input type="checkbox"/> <b>Non-Pecuniary – Significant Interest:</b> Take no part in the consideration and voting and be out of sight of the meeting.	
<input type="checkbox"/> <b>Non-Pecuniary – Less than Significant Interest:</b> May participate in consideration and voting.	
<b>For the reason that:</b>	
<b>Name:</b>  <b>Signed:</b>	<b>Date:</b>
<b>Please submit to the Governance Support Officer at the Council Meeting.</b>	

*(Refer to next page and the Code of Conduct)*

**Pecuniary Interest**

- 4.1 A pecuniary interest is an interest that you have in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to you or a person referred to in clause 4.3.
- 4.2 You will not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision you might make in relation to the matter, or if the interest is of a kind specified in clause 4.6.
- 4.3 For the purposes of this Part, you will have a pecuniary interest in a matter if the pecuniary interest is:
  - (a) your interest, or
  - (b) the interest of your spouse or de facto partner, your relative, or your partner or employer, or
  - (c) a company or other body of which you, or your nominee, partner or employer, is a shareholder or member.
- 4.4 For the purposes of clause 4.3:
  - (a) Your "relative" is any of the following:
    - i) your parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
    - ii) your spouse's or de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
    - iii) the spouse or de facto partner of a person referred to in paragraphs (i) and (i)
  - (b) "de facto partner" has the same meaning as defined in section 21C of the *Interpretation Act 1987*.
- 4.5 You will not have a pecuniary interest in relation to a person referred to in subclauses 4.3(b) or (c)
  - (a) if you are unaware of the relevant pecuniary interest of your spouse, de facto partner, relative, partner, employer or company or other body, or
  - (b) just because the person is a member of, or is employed by, a council or a statutory body, or is employed by the Crown, or
  - (c) just because the person is a member of, or a delegate of a council to, a company or other body that has a pecuniary interest in the matter, so long as the person has no beneficial interest in any shares of the company or body.

**Non-Pecuniary**

- 5.1 Non-pecuniary interests are private or personal interests a council official has that do not amount to a pecuniary interest as defined in clause 4.1 of this code. These commonly arise out of family or personal relationships, or out of involvement in sporting, social, religious or other cultural groups and associations, and may include an interest of a financial nature.
- 5.2 A non-pecuniary conflict of interest exists where a reasonable and informed person would perceive that you could be influenced by a private interest when carrying out your official functions in relation to a matter.
- 5.3 The personal or political views of a council official do not constitute a private interest for the purposes of clause 5.2.
- 5.4 Non-pecuniary conflicts of interest must be identified and appropriately managed to uphold community confidence in the probity of council decision-making. The onus is on you to identify any non-pecuniary conflict of interest you may have in matters that you deal with, to disclose the interest fully and in writing, and to take appropriate action to manage the conflict in accordance with this code.
- 5.5 When considering whether or not you have a non-pecuniary conflict of interest in a matter you are dealing with, it is always important to think about how others would view your situation.

**Managing non-pecuniary conflicts of interest**

- 5.6 Where you have a non-pecuniary conflict of interest in a matter for the purposes of clause 5.2, you must disclose the relevant private interest you have in relation to the matter fully and in writing as soon as practicable after becoming aware of the non-pecuniary conflict of interest and on each occasion on which the non-pecuniary conflict of interest arises in relation to the matter. In the case of members of council staff other than the general manager, such a disclosure is to be made to the staff member's manager. In the case of the general manager, such a disclosure is to be made to the mayor.
- 5.7 If a disclosure is made at a council or committee meeting, both the disclosure and the nature of the interest must be recorded in the minutes on each occasion on which the non-pecuniary conflict of interest arises. This disclosure constitutes disclosure in writing for the purposes of clause 5.6.
- 5.8 How you manage a non-pecuniary conflict of interest will depend on whether or not it is significant.
- 5.9 As a general rule, a non-pecuniary conflict of interest will be significant where it does not involve a pecuniary interest for the purposes of clause 4.1, but it involves:
  - a) a relationship between a council official and another person who is affected by a decision or a matter under consideration that is particularly close, such as a current or former spouse or de facto partner, a relative for the purposes of clause 4.4 or another person from the council official's extended family that the council official has a close personal relationship with, or another person living in the same household
  - b) other relationships with persons who are affected by a decision or a matter under consideration that are particularly close, such as friendships and business relationships. Closeness is defined by the nature of the friendship or business relationship, the frequency of contact and the duration of the friendship or relationship.
  - c) an affiliation between the council official and an organisation (such as a sporting body, club, religious, cultural or charitable organisation, corporation or association) that is affected by a decision or a matter under consideration that is particularly strong. The strength of a council official's affiliation with an organisation is to be determined by the extent to which they actively participate in the management, administration or other activities of the organisation.
  - d) membership, as the council's representative, of the board or management committee of an organisation that is affected by a decision or a matter under consideration, in circumstances where the interests of the council and the organisation are potentially in conflict in relation to the particular matter
  - e) a financial interest (other than an interest of a type referred to in clause 4.6) that is not a pecuniary interest for the purposes of clause 4.1
  - f) the conferral or loss of a personal benefit other than one conferred or lost as a member of the community or a broader class of people affected by a decision.
- 5.10 Significant non-pecuniary conflicts of interest must be managed in one of two ways:
  - a) by not participating in consideration of, or decision making in relation to, the matter in which you have the significant non-pecuniary conflict of interest and the matter being allocated to another person for consideration or determination, or
  - b) if the significant non-pecuniary conflict of interest arises in relation to a matter under consideration at a council or committee meeting, by managing the conflict of interest as if you had a pecuniary interest in the matter by complying with clauses 4.28 and 4.29.
- 5.11 If you determine that you have a non-pecuniary conflict of interest in a matter that is not significant and does not require further action, when disclosing the interest you must also explain in writing why you consider that the non-pecuniary conflict of interest is not significant and does not require further action in the circumstances.
- 5.12 If you are a member of staff of council other than the general manager, the decision on which option should be taken to manage a non-pecuniary conflict of interest must be made in consultation with and at the direction of your manager. In the case of the general manager, the decision on which option should be taken to manage a non-pecuniary conflict of interest must be made in consultation with and at the direction of the mayor.
- 5.13 Despite clause 5.10(b), a councillor who has a significant non-pecuniary conflict of interest in a matter, may participate in a decision to delegate consideration of the matter in question to another body or person.
- 5.14 Council committee members are not required to declare and manage a non-pecuniary conflict of interest in accordance with the requirements of this Part where it arises from an interest they have as a person chosen to represent the community, or as a member of a non-profit organisation or other community or special interest group, if they have been appointed to represent the organisation or group on the council committee.

## SPECIAL DISCLOSURE OF PECUNIARY INTEREST DECLARATION

*This form must be completed using block letters or typed.*

*If there is insufficient space for all the information you are required to disclose, you must attach an appendix which is to be properly identified and signed by you.*

<b>By</b> <i>[insert full name of councillor]</i>	
<b>In the matter of</b> <i>[insert name of environmental planning instrument]</i>	
<b>Which is to be considered at a meeting of the</b> <i>[insert name of meeting]</i>	
<b>Held on</b> <i>[insert date of meeting]</i>	
<b>PECUNIARY INTEREST</b>	
Address of the affected principal place of residence of the councillor or an associated person, company or body <i>(the <b>identified land</b>)</i>	
Relationship of identified land to councillor <i>[Tick or cross one box.]</i>	<input type="checkbox"/> The councillor has interest in the land (e.g. is owner or has other interest arising out of a mortgage, lease, trust, option or contract, or otherwise). <input type="checkbox"/> An associated person of the councillor has an interest in the land. <input type="checkbox"/> An associated company or body of the councillor has interest in the land.
<b>MATTER GIVING RISE TO PECUNIARY INTEREST<sup>1</sup></b>	
Nature of land that is subject to a change in zone/planning control by proposed LEP <i>(the <b>subject land</b><sup>2</sup>)</i> <i>[Tick or cross one box]</i>	<input type="checkbox"/> The identified land. <input type="checkbox"/> Land that adjoins or is adjacent to or is in proximity to the identified land.
Current zone/planning control <i>[Insert name of current planning instrument and identify relevant zone/planning control applying to the subject land]</i>	
Proposed change of zone/planning control <i>[Insert name of proposed LEP and identify proposed change of zone/planning control applying to the subject land]</i>	
Effect of proposed change of zone/planning control on councillor or associated person <i>[Tick or cross one box]</i>	<input type="checkbox"/> Appreciable financial gain. <input type="checkbox"/> Appreciable financial loss.

*[If more than one pecuniary interest is to be declared, reprint the above box and fill in for each additional interest]*

**Councillor's Signature:** ..... **Date:** .....

*This form is to be retained by the council's general manager and included in full in the minutes of the meeting*

Last Updated: 3 June 2019



**Important Information**

This information is being collected for the purpose of making a special disclosure of pecuniary interests under clause 4.36(c) of the Model Code of Conduct for Local Councils in NSW (the Model Code of Conduct).

The special disclosure must relate only to a pecuniary interest that a councillor has in the councillor's principal place of residence, or an interest another person (whose interests are relevant under clause 4.3 of the Model Code of Conduct) has in that person's principal place of residence.

Clause 4.3 of the Model Code of Conduct states that you will have a pecuniary interest in a matter because of the pecuniary interest of your spouse or your de facto partner or your relative or because your business partner or employer has a pecuniary interest. You will also have a pecuniary interest in a matter because you, your nominee, your business partner or your employer is a member of a company or other body that has a pecuniary interest in the matter.

"Relative" is defined by clause 4.4 of the Model Code of Conduct as meaning your, your spouse's or your de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child and the spouse or de facto partner of any of those persons.

You must not make a special disclosure that you know or ought reasonably to know is false or misleading in a material particular. Complaints about breaches of these requirements are to be referred to the Office of Local Government and may result in disciplinary action by the Chief Executive of the Office of Local Government or the NSW Civil and Administrative Tribunal.

This form must be completed by you before the commencement of the council or council committee meeting at which the special disclosure is being made. The completed form must be tabled at the meeting. Everyone is entitled to inspect it. The special disclosure must be recorded in the minutes of the meeting.

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<sup>1</sup> Clause 4.1 of the Model Code of Conduct provides that a pecuniary interest is an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person. A person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to the matter, or if the interest is of a kind specified in clause 4.6 of the Model Code of Conduct.

<sup>2</sup> A pecuniary interest may arise by way of a change of permissible use of land adjoining, adjacent to or in proximity to land in which a councillor or a person, company or body referred to in clause 4.3 of the Model Code of Conduct has a proprietary interest

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**Item: 05****Subject: DA2019 - 621 MEDICAL CENTRE - LOT 27 DP 253280, NO 6  
BROWALLIA PLACE, PORT MACQUARIE****Report Author: Development Assessment Planner, Fiona Tierney**

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**Applicant: Ian Sercombe Architect****Owner: S & J Kennedy****Estimated Cost: \$353,120****Parcel no: 2775**

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**Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

**RECOMMENDATION**

**That DA 2019 - 621 for Medical Centre at Lot 27, DP 253280, No. 6 Browallia Place, Port Macquarie, be determined by granting consent subject to the recommended conditions.**

**Executive Summary**

This report considers a development application for a medical centre at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application, one (1) submission was received.

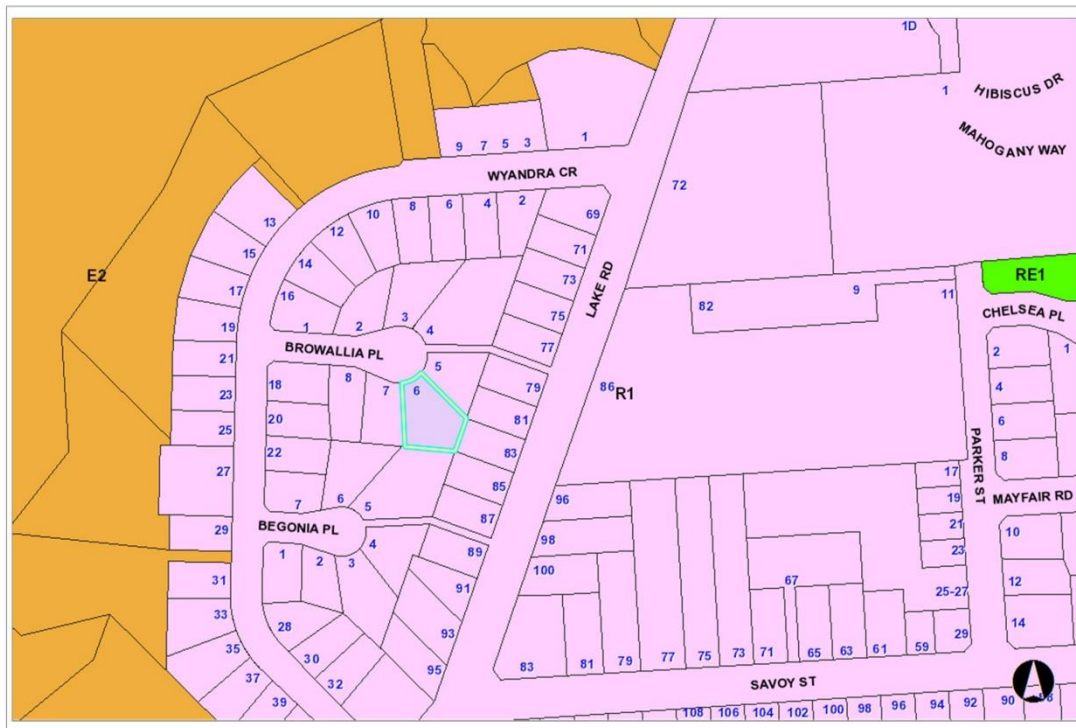
The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result in a significant adverse social, environmental or economic impact.

This report recommends the development application be approved subject to the conditions included as Attachment 1.

**1. BACKGROUND****Existing Sites Features and Surrounding Development**

The site has an area of 984.2m<sup>2</sup>.

The site is zoned R1 General Residential in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan:



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:



## 2. DESCRIPTION OF DEVELOPMENT

Key aspects of the proposal include the following:



- Demolition of the existing dwelling (retain existing slab)
- Construction of a medical centre and associated parking.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

### Application Chronology

- 30 August 2019 - Application lodged.
- 9 September - 23 September 2019 - Public exhibition via neighbour notification.
- 13 September - Additional information requested on staff/practitioner numbers.
- 13 September 2019 - Additional Information received.

### 3. STATUTORY ASSESSMENT

#### Section 4.15(1) Matters for Consideration

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

- (a) The provisions (where applicable) of:
- (i) Any Environmental Planning Instrument

#### State Environmental Planning Policy 55 – Remediation of Land

In accordance with clause 7, following an inspection of the site and a search of Council records, the subject land is not identified as being potentially contaminated and is suitable for the intended use.

#### State Environmental Planning Policy 64 - Advertising and Signage

The proposed development includes proposed advertising signage in the form of a single business/building identification sign.

In accordance with clause 7, this SEPP prevails over the Port Macquarie-Hastings LEP 2011 in the event of any inconsistency.

The following assessment table provides an assessment checklist against the Schedule 1 requirements of this SEPP:

Applicable clauses for consideration	Comments	Satisfactory
Clause 8(a) Consistent with objectives of the policy as set out in Clause 3(1) (a).	Proposed business identification signage considered consistent with the objectives.	Yes
Schedule 1(1) Character of the area.	The proposed scale and number of signs is considered acceptable having regard to the character of the residential area. Similar signage exists for other medical centres in the locality.	Yes
Schedule 1(2) Special areas.	The site is not located in a special area.	Yes
Schedule 1(3) Views and vistas.	The signage would not compromise existing views or vistas and would not	Yes

	project into the skyline.	
Schedule 1(4) Streetscape, setting or landscape.	The proposed scale and number of signs is considered acceptable having regard to the character of the residential area. The signage would not require ongoing vegetation management.	Yes
Schedule 1(5) Site and building.	The proposed signage is compatible with the scale of the building.	Yes
Schedule 1(6) Associated devices and logos with advertisements and advertising structures.	None proposed.	n/a
Schedule 1(7) Illumination.	The signage is proposed to be illuminated. Conditions of consent are to be applied that restrict illumination to approved hours of operation of the business and no light overspill to adjoining properties. External illumination only.	Yes
Schedule 1(7) Safety.	The proposal would not reduce safety on Browallia PI or reduce sightlines from public areas.	Yes

**State Environmental Planning Policy (Infrastructure) 2007**

In accordance with clause 57(1), health services facilities (including medical centres) are permissible with consent in the R1 General Residential zone, which is a prescribed zone.

**Port Macquarie-Hastings Local Environmental Plan 2011**

- Clause 2.2 - The subject site is zoned R1 General Residential.
- Clause 2.3(1) and the R1 zone landuse table - The proposed development for a change of use from a single dwelling house to medical centre is a permissible landuse with consent.

The objectives of the R1 zone are 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.
- Clause 2.3(2) - The proposal is consistent with the zone objectives having regard to the following:
  - The proposal is a permissible landuse.
  - The development will provide a medical facility and service to meet the needs of residents.
- Clause 4.3 - The maximum overall height of the building above ground level (existing) is 5.05m which complies with the standard height limit of 8.5m applying to the site.

- Clause 5.9 - No trees are proposed to be removed, however one tree (Melaleuca) in the rear yard may have root systems impacted. The applicant has advised of his desire to keep the tree and will propose a parking area adjoining the tree that will allow root systems to be minimally impacted and water infiltration. Council's arborist has advised this is acceptable and Melaleuca trees are quite tolerant of compaction over root systems as long as area around trunk is kept well drained to prevent rotting.
- Clause 5.10 – Heritage. The site does not contain or adjoin any known heritage items or sites of significance.
- Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development.

**(ii) Any draft instruments that apply to the site or are on exhibition**

Nil

**(iii) Any Development Control Plan in force**

**Port Macquarie-Hastings Development Control Plan 2013**

<b>DCP 2013: General Provisions</b>			
<b>DCP Objective</b>	<b>Development Provisions</b>	<b>Proposed</b>	<b>Complies</b>
2.7.2.2	Design addresses generic principles of Crime Prevention Through Environmental Design guideline: <ul style="list-style-type: none"> <li>• Casual surveillance and sightlines</li> <li>• Land use mix and activity generators</li> <li>• Definition of use and ownership</li> <li>• Lighting</li> <li>• Way finding</li> <li>• Predictable routes and entrapment locations</li> </ul>	The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area.	Yes
2.3.3.1	Cut and fill 1.0m max. 1m outside the perimeter of the external building walls	<1m cut or fill outside the external walls of the building.	Yes
2.3.3.8 onwards	Removal of hollow bearing trees	None proposed to be removed.	Yes
2.6.3.1	Tree removal (3m or higher with 100mm diameter trunk and 3m outside dwelling footprint)	None proposed to be removed.	Yes
2.4.3	Bushfire risk, Acid sulphate soils, Flooding, Contamination, Airspace protection, Noise and Stormwater	Refer to main body of report.	Yes
2.5.3.3	Off-street parking in accordance with Table 2.5.1: <ul style="list-style-type: none"> <li>• 3 per consultant + 1 per 2</li> </ul>	It is proposed to construct 6 spaces including 1	Yes



	employees. The proposal includes 1 practitioner and 2 employees, therefore 5 spaces required.	disabled accessible space. One additional space is available over the required number of spaces on site for staff parking.	
2.5.3.11	Section 94 A contributions	Refer to main body of report.	N/A

(iiiia) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4

Nil

(iv) Any matters prescribed by the Regulation

#### **New South Wales Coastal Policy:**

The proposed development is consistent with the objectives and strategic actions of this policy.

#### **Demolition of buildings AS 2601:**

Demolition of the existing building on the site is capable of compliance with this Australian Standard and is recommended to be conditioned.

(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality

#### **Context and Setting**

The site is located within an existing residential area. The precinct is located in an area in close proximity to the private hospital and several other medical centres. This has encouraged a cluster of associated medical professionals to locate their premises within this area.

The proposal is the second medical centre within the cul-de-sac and is considered to be a low scale development that does not involve external additional bulk and scale to the existing building and is not considered to be at odds with the character of the locality. The development adequately responds to planning controls for the area.

#### **Access, Transport and Traffic Roads**

The site has road frontage to Browallia Place, a sealed public road under the care and control of Council, with an 8m wide carriageway within a 16m road reserve. Upright (SA) type kerb and gutter is present in the street, with a small section of footpath paving existing outside the medical centre at 2 Browallia Place. Browallia Place is an Urban Access Place under the AUSPEC standard, and is a cul-de-sac with access to Lake Road via Wyandra Crescent.

#### **Traffic and Transport**

It is likely the existing land use as a residential dwelling generates around 9 vehicle trips per day on average. The RMS *Guide to Traffic Generating Developments* (2002)

provides guidance on traffic generation for commercial developments. Using the rate for medical centres we can assume a lower range rate of 3.1 vehicle trips per 100 square metres of floor area per hour during the evening peak hour. This equates to daily traffic generation of between 20 and 40 vehicle trips per day.

Public submissions received during exhibition of the DA mention that under existing conditions Browallia Place is congested by parked vehicles, sometimes restricting available traffic width to one lane. Safety concerns are highlighted by nearby residents with the visibility of pedestrian and bicycle users under these conditions. However, the AUSPEC 'Access Place' standard has capacity for up to 30 dwellings, and the low speed, low traffic environment of the short cul-de-sac is consistent with the standard of an 'Access Place'. With regard to the above factors, the increase in traffic associated with the development is within the capacity of the existing public road network.

**Site Frontage and Access**

The existing driveway access to the site is approximately 3.0m wide. This crossover will need to be removed and replaced with a 'heavy duty' commercial driveway to Council's AUSPEC Standard Drawing 202 due to the increase in traffic. The minimum width of the crossing shall be 5.5m to allow two vehicles to pass and provide additional manoeuvring clearance.

Council's footpath policy specifies that for new developments, a concrete footpath shall be provided along one side of Access Place roads. A 1.5m wide footpath will be required along the full frontage of the development site. This is consistent with the change in use of the site to a medical centre, and the likely increase in pedestrian traffic using the existing footpath directly to Lake Road is considered to warrant it.

**Parking and Manoeuvring**

A total of six parking spaces (including one disabled space and adjacent shared area) have been shown on the plans. For use as a public carpark with short term turnover (such as a medical centre), the minimum dimensions of spaces and aisles are required to meet User Class 3 of AS2890. The dimensions shown on the plans do not meet this standard. However, the dimensions on Construction Certificate plans can comply and conditions have been imposed to reflect these requirements.

Commercial developments are required to provide vehicles with the ability to exit to the public road in a forward direction. Additionally, if all spaces are full and another vehicle enters the carpark, they must have the opportunity to turn around and exit. One of the parking spaces shall be line marked with 'No Parking' for use as a dedicated turning bay, unless the Construction Certificate details provide an adequate area for turning.

A condition is recommended requiring the number of spaces to be provided on site as set out in the DCP. Any proposed increase in the number of consultants will require a modification application.

**Water Supply Connection**

Records indicate that the current development site has a 20mm metered water service from the 100mm AC water main on the same side of Browallia Place. Final water service sizing will need to be determined by a hydraulic consultant to suit the domestic and commercial components of the development, as well as fire service and backflow protection requirements. Minimum containment backflow protection for medical facilities is an RPZD at the property boundary. Minimum water service size for commercial development is 25mm.

**Sewer Connection**

Sewer is available and connected to the site via a 150mm main that traverses the adjacent properties at the rear of the lot. Council records indicate that the existing junction is on the north western property boundary. The existing junction can be used for the proposed development.

**Stormwater**

The site naturally grades towards Browallia Place street frontage and is currently serviced via an existing kerb outlet. There are no known issues relating to stormwater infrastructure in this location.

The legal point of discharge for the proposed development is defined as a direct connection to Council's kerb and gutter with the use of an approved adaptor (one per lot only), as there is no public piped drainage system in close proximity to the frontage of the site. Nearest public stormwater pit is approximately 70 metres west of the site.

Due to an increase in impervious area the development will require on-site detention (OSD) to limit site discharge to pre-development flow rates, as per the requirements of AUSPEC D5, where pre-development conditions suitable for this location is existing conditions.

Submitted plans do not demonstrate stormwater provisions, including OSD, however, preliminary assessment of the development site indicates that adequate fall towards the street frontage, and upstream neighbouring properties having access to an interallotment system should allow for conventional OSD design suitable for this development i.e. Rainwater re-use tanks (for roof catchments) and / or above ground OSD in car parking areas.

Preliminary assessment of expected OSD volume required for this development, consistent with similar sized developments, should be less than 11m<sup>3</sup> of storage volume, as the proposed approximate impervious area is 60%, which is typical for residential developments.

A detailed site stormwater management plan will be required to be submitted for assessment with the Section 68 application and prior to the issue of a CC.

**Other Utilities**

Telecommunication and electricity services are available to the site.

**Soils**

The proposed development will be unlikely to have any adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

**Air and Micro-climate**

The construction of the proposed development will be unlikely to result in any adverse impacts on the existing air quality or result in any pollution.

**Flora and Fauna**

Construction of the proposed development will not require removal/clearing of any significant vegetation.

**Waste**

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated.

**Energy**

No adverse impacts. The proposal will be required to comply with the Building Code of Australia.

**Noise and Vibration**

No adverse impacts anticipated. A condition is recommended to restrict construction to standard construction hours.

The proposed operating hours are considered appropriate for the residential zoning applicable to the site. The proposed operating hours are: Monday to Friday: 8.30am to 8pm.

**Natural Hazards**

The site is not identified as bushfire prone.

**Safety, Security and Crime Prevention**

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area.

**Social Impact in the Locality**

Given the nature of the proposed development, the proposal is unlikely to result in any adverse social impacts.

**Economic Impact in the Locality**

No adverse impacts. Likely positive impacts can be attributed to the construction of the development and associated flow on effects (i.e. increased expenditure in the area).

**Site Design and Internal Design**

The proposed development design satisfactorily responds to the site attributes and will fit into the locality. No adverse impacts are likely.

**Construction**

No potential adverse impacts identified to neighbouring properties with the construction of the proposal.

**Cumulative Impacts**

The proposed health consulting rooms are located in an area where there are increasing pressures in relation to parking and traffic generation (particularly at either end of Wyandra Cr). Given that the proposal is for a single practitioner that is located in a cul-de-sac where there are one other health service facilities it is considered that the proposed development is not expected to have sufficiently adverse cumulative impacts that would justify refusal of the application.

**(c) The suitability of the site for the development**

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

Site constraints of have been adequately addressed and appropriate conditions of consent recommended.

**(d) Any submissions made in accordance with this Act or the Regulations**

One (1) written submission has been received following public exhibition of the application. Copies of the written submission has been provided under separate cover to members of the DAP.

Key issues raised in the submission and comments in response are provided as follows:

<b>Submission Issue/Summary</b>	<b>Planning Comment/Response</b>
Overdevelopment in the street-inconsistent with residential use.	The proposal is for a single specialist practitioner. This is considered appropriately compatible for a residential area. The proposed development does not include weekend opening times.
Traffic and parking issues	<p>The applicant has provided 6 spaces on site and complies with the requirements of the Development Control Plan. (See assessment DCP table).</p> <p>It is acknowledged that the area is undergoing significant change in character with significant demand for medical practitioners to be close to the private hospital. One additional space has been provided above the minimum requirements of the DCP.</p>
Sign illuminated-unsuitable impacts	A condition of consent is recommended to limit illumination only during the approved hours of operation and no flashing or light overspill to adjoining properties is permitted. (Attachment 1)
Tree removal	The applicant has advised that their intention is to remove some shrubs but that all trees in the rear yard would be retained. The tree adjoining the fence has root systems that may be impacted and the applicant has advised that they are proposing to use a surface around this area that allows water infiltration rather than a solid concrete and required minimal ground surface disturbance. A condition of consent has been recommended to address this matter (Attachment 1).

**(e) The Public Interest:**

The proposed development satisfies relevant planning controls and will not adversely impact on the wider public interest.

**4. DEVELOPMENT CONTRIBUTIONS APPLICABLE**

- Development contributions will be required in accordance with Section 7.12 of the Environmental Planning and Assessment Act 1979.
- A copy of the contribution estimate is included as Attachment 3.

**5. CONCLUSION AND STATEMENT OF REASON**

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact. It is recommended that the application be approved, subject to the recommended conditions of consent provided in the attachment section of this report.

**Attachments**

1[View](#). DA2019 - 621.1 Recommended Conditions

2[View](#). DA2019 - 621.1 Plans

3[View](#). DA2019 - 621.1 Development Contribution Estimate



**FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF  
PROPOSED CONDITIONS - 2011****NOTE: THESE ARE DRAFT ONLY****DA NO: 2019/621****DATE: 11/10/2019****PRESCRIBED CONDITIONS**

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations* 2000.

**A – GENERAL MATTERS**

- (1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

<b>Plan / Supporting Document</b>	<b>Reference</b>	<b>Prepared by</b>	<b>Date</b>
SOEE		Ian Sercombe Architect	23 August 2019
Survey	11526_DTM 23-05-2019	B R Development Consulting	23/5/2019
Architectural Plans	19575	Ian Sercombe Architect	24/8/2019

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A002) No work shall commence until a Construction Certificate has been issued and the applicant has notified Council of:
- the appointment of a Principal Certifying Authority; and
  - the date on which work will commence.

Such notice shall include details of the Principal Certifying Authority and must be submitted to Council at least two (2) days before work commences.

- (3) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (4) (A009) The development site is to be managed for the entirety of work in the following manner:
- Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
  - Appropriate dust control measures;
  - Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work

adjoins the public domain, fencing is to be in place so as to prevent public access to the site;

4. Building waste is to be managed via appropriate receptacles into separate waste streams;
5. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
6. Building work being limited to the following hours, unless otherwise permitted by Council;
  - Monday to Saturday from 7.00am to 6.00pm
  - No work to be carried out on Sunday or public holidays

The builder to be responsible to instruct and control his sub-contractors regarding the hours of work.

- (5) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (6) (A024) The list of measures contained in the schedule attached to the Construction Certificate are required to be installed in the building or on the land to ensure the safety of persons in the event of fire in accordance with Clause 168 of the Environmental Planning and Assessment Regulation 2000.
- (7) (A029) The provision, at no cost to Council, of concrete foot paving for the full street frontages of the development. For a 1.5-metre-wide footpath (unless varied in writing by Council) is required with design details in accordance with AUSPEC and Council Standard drawing. The design plans must be approved by Council pursuant to Section 138 of the Roads Act.
- (8) (A030) The restoration of any vehicle access rendered redundant by the development, to standard kerb and footpath formation at no cost to Council, in accordance with Council's current AUSPEC Specifications and Standards. All works must be approved by Council pursuant to Section 138 of the Roads Act.
- (9) (A033) The applicant shall provide security to the Council for the payment of the cost of the following:
  - a. making good any damage caused to any property of the Council as a consequence of doing anything to which the consent relates,
  - b. completing any public work (such as road work, kerbing and guttering, footway construction, utility services, stormwater drainage and environmental controls) required in connection with the consent,
  - c. remedying any defects in any such public work that arise within twelve (12) months after the work is completed.

Such security is to be provided to Council prior to the issue of the Subdivision Certificate/Construction Certificate or Section 138 of the Roads Act, 1993.

The security is to be for such reasonable amount as is determined by the consent authority, being an amount that is 10% of the contracted works for Torrens Title subdivision development/the estimated cost plus 30% for building development of public works or \$5000, whichever is the greater of carrying out the development by way of:

- i. deposit with the Council, or
- ii. an unconditional bank guarantee in favour of the Council.

The security may be used to meet any costs referred to above and on application being made to the Council by the person who provided the security

any balance remaining is to be refunded to, or at the direction of, that person. Should Council have to call up the bond and the repair costs exceed the bond amount, a separate invoice will be issued. If no application is made to the Council for a refund of any balance remaining of the security within 6 years after the work to which the security relates has been completed the Council may pay the balance to the Chief Commissioner of State Revenue under the Unclaimed Money Act 1995.

#### **B – PRIOR TO ISSUE OF A CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
  - Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
  1. Public parking areas including;
    - a. Driveways and access aisles;
    - b. Parking bays;
  2. Sewerage reticulation.
  3. Water supply plans shall include hydraulic plans for internal water supply services and associated works in accordance with AS 3500, Plumbing Code of Australia and Port Macquarie-Hastings Council Policies.
  4. Stormwater systems.
  5. Erosion & Sedimentation controls.
  6. Location of all existing and proposed utility services including:
    - a. Conduits for electricity supply and communication services (including fibre optic cable).
    - b. Water supply
    - c. Sewerage
    - d. Stormwater
  7. Detailed driveway profile in accordance with Australian Standard 2890, AUSPEC D1, and ASD 207, Port Macquarie-Hastings Council current version.
  8. Provision of a 1.5m (unless varied in writing by Council) concrete footpath across the full road frontage of the property.
- (3) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

- Civil works
  - Traffic management
  - Work zone areas
  - Hoardings
  - Concrete foot paving
  - Footway and gutter crossing
  - Functional vehicular access
- (4) (B010) Payment to Council, prior to the issue of the Construction Certificate of the Section 7.12 contributions set out in the "Notice of Payment – Developer Charges" schedule attached to this consent unless deferral of payment of contributions has been approved by Council. The contributions are levied, pursuant to the Environmental Planning and Assessment Act 1979 as amended, and in accordance with the provisions of the following plans:
- Port Macquarie-Hastings Council Section 94A Levy Contributions Plan 2007
- The plans may be viewed during office hours at the Council Chambers located on the corner of Burrawan and Lord Streets, Port Macquarie, 9 Laurie Street, Laurieton, and High Street, Wauchope.
- The attached "Notice of Payment" is valid for the period specified on the Notice only. The contribution amounts shown on the Notice are subject to adjustment in accordance with CPI increases adjusted quarterly and the provisions of the relevant plans. Payments can only be made using a current "Notice of Payment" form. Where a new Notice of Payment form is required, an application in writing together with the current Notice of Payment application fee is to be submitted to Council.
- (5) (B024) Submission to Council of an application for water meter hire, which is to be referred to the Water Supply section so that a quotation for the installation can be prepared and paid for prior to the issue of a Construction Certificate. This application is also to include an application for the disconnection of any existing service not required.
- (6) (B039) Detailed drawings and specifications prepared by a professional engineer for all retaining walls supporting:
- i. earthworks that are more than 600mm above or below ground level (existing) and located within 1m of the property boundaries; or
  - ii. earthworks that are more than 1m above or below ground level (existing) in any other location;
- are to be submitted to the Principal Certifying Authority with the application for a Construction Certificate.
- (7) (B045) A schedule of existing and proposed fire safety measures is to be submitted to the Principal Certifying Authority with the application for the Construction Certificate.
- (8) (B053) The design of the carpark and accesses is to be in accordance with Australian Standard 2890 (including AS 2890.1, AS 2890.2 and AS 2890.6). Certification of the design by a suitably qualified consultant is to be provided to the Principal Certifying Authority prior to release of the Construction Certificate.
- (9) (B054) A driveway longitudinal section shall accompany the section 138 application pursuant to section 138 of the *Roads Act, 1993*. The section

shall demonstrate compliance with Council's adopted AUSPEC Design and Construction Guidelines.

- (10) (B057) The existing sewer including junction and/or stormwater drainage shall be located on the site and the position and depth indicated on the plans which accompany the application for the Construction Certificate.
- (11) (B063) Prior to release of the Construction Certificate submission of a detailed landscape plan to the Principal Certifying Authority.
- (12) (B064) The applicant's landscape consultant shall consult with service authorities regarding the selection and placement of street trees near services. The location of all proposed and existing overhead and underground service lines shall be indicated on the Detailed Landscape Plan to be submitted with the Construction Certificate application.
- (13) (B071) Prior to the issue of any Construction Certificate, the provision of water and sewer services to the land are to be approved by the relevant Water Authority and relevant payments received.
- (14) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
  - a) The legal point of discharge for the proposed development is defined as the kerb and gutter of Browallia Place.
  - b) The design shall incorporate on-site stormwater detention facilities to limit site stormwater discharge to pre development flow rates for all storm events up to and including the 100 year ARI event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
  - c) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
  - d) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
  - e) The design shall provide details of any components of the existing stormwater drainage system servicing the site that are to be retained.
- (14) (B195) Advice is to be obtained by an arborist in relation the tree (Melaleuca) adjoining the southern boundary that has been marked for retention. A suitable, Council approved, all weather surface for the turning bay that will allow minimal root damage and water infiltration is to be provided. Details are to be submitted with the application for the construction certificate.
- (15) (B197) Council records indicate that the development site has an existing 20mm metered water service. Final water service sizing will need to be determined by a hydraulic consultant to suit the domestic and commercial components of the development, as well as fire service and backflow protection requirements in accordance with AS3500. Minimum backflow protection for a medical centre is a Reduced Pressure Zone Device (RPZ) at the boundary.
- (16) (B198) Council records indicate that the development site is connected to Sewer via junction to the existing sewer main which runs inside of the northern boundary of the development site. The proposed development may discharge all sewage to the existing point of connection to Council's sewer system.

- (17) Prior to the issue of a Construction Certificate, a detail of the proposed business identification sign shall be submitted for the approval of the Principal Certifying Authority. The plan shall provide for a minimum 900mm setback from the edge of the driveway and demonstrate that the sign (including the structure it is fixed to) will not exceed 1.2m in height.

#### **C – PRIOR TO ANY WORK COMMENCING ON SITE**

- (1) (C001) A minimum of one (1) week's notice in writing of the intention to commence works on public land is required to be given to Council together with the name of the principal contractor and any major sub-contractors engaged to carry out works. Works shall only be carried out by a contractor accredited with Council.
- (2) (C015) Tree protection fencing, compliant with AS 4970/2009 *Protection of trees on development sites* must be provided. The fencing shall be in place prior to the commencement of any works or soil disturbance and maintained for the entirety of the works.

#### **D – DURING WORK**

- (1) (D001) Development works on public property or works to be accepted by Council as an infrastructure asset are not to proceed past the following hold points without inspection and approval by Council. Notice of required inspection must be given 24 hours prior to inspection, by contacting Council's Customer Service Centre on (02) 6581 8111. You must quote your Construction Certificate number and property description to ensure your inspection is confirmed:
- at completion of installation of erosion control measures
  - when trenches are open, stormwater/water/sewer pipes and conduits jointed and prior to backfilling;
  - before pouring of kerb and gutter;
  - prior to the pouring of concrete for sewerage works and/or works on public property;
  - during construction of sewer infrastructure;
  - during construction of water infrastructure;

All works at each hold point shall be certified as compliant in accordance with the requirements of AUSPEC Specifications for Provision of Public Infrastructure and any other Council approval, prior to proceeding to the next hold point.

- (2) (D006) A copy of the current stamped approved construction plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.
- (3) (D029) The demolition of any existing structure shall be carried out in accordance with Australian Standard AS 2601: *The Demolition of Structures*. No demolition materials shall be burnt or buried on site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on an adjoining public road or reserve, separate application shall be made to Council to enclose the public place with a hoarding fence.

Should asbestos be present, its removal shall be carried out in accordance with the National OH&S Committee – *Code of Practice for Safe Removal of*



*Asbestos and Code of Practice for the Management and Control of Asbestos in Workplaces.*

For further information on asbestos handling and safe removal practices refer to the following links:

Safely disposing of asbestos waste from your home  
Fibro & Asbestos - A Renovator and Homeowner's Guide  
Asbestos Awareness

- (4) (D040) Wastes including vegetation, demolition waste, and construction waste shall not be disposed of by burning.
- (5) (D042) The washing of equipment and/or the disposal of building materials, including cement slurry, shall not occur within the drip line of any tree that has been nominated for retention on the site or adjacent land.
- (6) (D043) Any damage to a tree nominated for retention/protection during the construction phase shall be treated by an Arborist with a minimum qualification AQF level 5 (diploma level) or an international qualification considered equivalent by Council, or a person deemed suitable by Council at the developer's expense.
- (7) (D050) The capacity and effectiveness of tree protection fencing, compliant with *AS 4970/2009 Protection of trees on development sites* shall be maintained at all times in accordance with the approved management plan until such time as the site is no longer subject to any construction or earth moving works.

#### **E – PRIOR TO OCCUPATION OR THE ISSUE OF OCCUPATION CERTIFICATE**

- (1) (E001) The premises shall not be occupied or used in whole or in part until an Occupation Certificate has been issued by the Principal Certifying Authority.
- (2) (E005) Prior to the release of any bond securities held by Council for infrastructure works associated with developments, a formal written application is to be submitted to Council specifying detail of works and bond amount.
- (3) (E010) Driveways, access aisles and parking areas shall be provided with an approved surface. Such a surface shall be on a suitable pavement, constructed and maintained in accordance with Council's Development, Design and Construction Manuals (as amended).
- (4) (E016) Prior to occupation or the issue of the Occupation Certificate (or Interim Occupation Certificate) the owner of the building must cause the Principal Certifying Authority to be given a fire safety certificate (or interim fire safety certificate in the case of a building or part of a building occupied before completion) in accordance with Clause 153 of the Environmental Planning and Assessment Regulation 2000 for each measure listed in the schedule. The certificate must only be in the form specified by Clause 174 of the Regulation. A copy of the certificate is to be given to the Commissioner of the New South Wales Fire Brigade and a copy is to be prominently displayed in the building.
- (5) (E030) Vehicle ramps, driveways, turning circles and parking spaces being paved, sealed and line marked prior to occupation or the issue of the Occupation Certificate or commencement of the approved land use.
- (6) (E034) Prior to occupation or the issuing of the Final Occupation Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all

matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.

- (7) (E036) Certification by a suitably qualified consultant is to be submitted to the Principal Certifying Authority (PCA) confirming that the car park and internal accesses have been constructed in accordance with Port Macquarie-Hastings Development Control Plan 2013 and Australian Standard 2890 (including AS 2890.1, AS 2890.2 and AS 2890.6) prior to occupation or issue of the Occupation Certificate.
- (8) (E039) An appropriately qualified and practising consultant is required to certify the following:
  - a. all drainage lines have been located within the respective easements, and
  - b. any other drainage structures are located in accordance with the Construction Certificate.
  - c. all stormwater has been directed to a Council approved drainage system
  - d. all conditions of consent/ construction certificate approval have been complied with.
  - e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (9) (E051) Prior to occupation or the issuing of any Occupation Certificate a section 68 Certificate of Completion shall be obtained from Port Macquarie-Hastings Council.
- (10) (E061) Landscaped areas being completed prior to occupation or issue of the Occupation Certificate.
- (11) (E066) Ancillary works shall be undertaken at no cost to Council to make the engineering works required by this Consent effective to the satisfaction of Director of Council's Infrastructure Division. Such works shall include, but are not limited to the following:
  - a. The relocation of underground services where required by civil works being carried out.
  - b. The relocation of above ground power and telephone services
  - c. The relocation of street lighting
  - d. The matching of new infrastructure into existing or future design infrastructure
- (12) (E072) Lodgement of a security deposit with Council upon practical completion of the subdivision works.
- (13) (E082) Submission of a compliance certificate accompanying Works as Executed plans with detail included as required by Council's current AUSPEC Specifications. The information is to be submitted in electronic format in accordance with Council's "CADCHECK" requirements detailing all infrastructure for Council to bring in to account its assets under the provisions of AAS27. This information is to be approved by Council prior to issue of the Subdivision or Occupation Certificate. The copyright for all information supplied, shall be assigned to Council.
- (14) (E056) A Certificate of Compliance under the provisions of Section 307 of the *Water Management Act* must be obtained prior to the issue of the Occupation Certificate.

#### **F – OCCUPATION OF THE SITE**

- (1) (F001) On site car parking in accordance with the approved plans to be provided in an unrestricted manner at all times during the operations of

development for use by both staff and patrons. A total of 6 spaces are to be provided onsite.

- (2) (F006) The basin of the outflow control pit and the debris screen must be cleaned of debris and sediment on a regular basis by the owner.
- (3) (F009) All new and existing essential fire safety measures shall be maintained in working condition at all times.
- (4) (F010) Within each 12 months after completion of the building, the owner of the building must cause Council to be given an annual fire safety statement in accordance with Clause 177 of the Environmental Planning and Assessment Regulation 2000 for each measure listed in the schedule. The statement must only be in the form specified by clause 181 of the Regulation. A copy of the statement is to be given to the Commissioner of the New South Wales Fire Brigade and a copy is to be prominently displayed in the building.
- (5) (F195) The business identification sign is only permitted to be externally illuminated during approved operating hours and shall not cause a nuisance through excessive light overspill to adjoining properties. It is not permitted to be an internally illuminated or LED sign.
- (6) A suitably sized plaster arrestor is to be installed if plaster casts are fitted or removed. If x-ray equipment is installed that generates silver bearing waste, the applicant has the option of having all silver bearing waste removed from site or discharging the waste to sewer via a 100 litre balancing pit and a silver recovery unit. Formal Trade Waste Approval will be required if either the plaster arrestor or silver recovery unit are to be discharged to sewer.
- (7) (F013) All garbage areas are to be screened from the street, create no adverse odour impact on adjoining properties and be kept free of pests at all times.
- (8) (F019) Clinical wastes shall be removed from the site by an approved waste contractor for disposal at an approved facility.
- (9) (F024) Offensive noise as defined under the Protection of the Environment Operations Act 1997, shall not be generated as a result of the operation of the development.
- (10) (F030) The number of staff associated with the approved use shall not exceed 1 consultant and 3 support staff at any time.
- (11) (F036) Any exterior lighting on the site shall be designed and installed so as not to cause a nuisance or adverse impact on the amenity of the surrounding area by light overspill. The lighting shall be the minimum level of illumination necessary for safe operation and must be designed, installed and used in accordance with AS 4282 control of the obtrusive effects of outdoor lighting. No flashing, moving or intermittent lighting is permitted on the site.
- (12) (F195) All staff must park in the rear car park, to ensure that parking is available for patients in the front car park.
- (13) The use of the rehabilitation area must remain ancillary to the medical centre and cannot be operated independently. No group sessions/classes are permitted.
- (14) (F025) Hours of operation of the development are restricted to the following hours:  
- 8.30 am to 8.00 pm – Mondays to Fridays

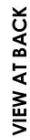
DRAFT

6 BROWALLIA PL PORT MACQUARIE NSW 2444

NO.	DRAWING - DA SET	SCALE	AREAS
A1.1	COVER SHEET	1:1000	AREA
A2.1	EXISTING SITE PLAN	1:250	SITE AREA
A2.2	SITE / ROOF PLAN	1:250	SITE AREA
A2.3	FLOOR PLAN	1:100	LANDSCAPE OPEN SPACE
A3.1	ELEVATIONS	1:100	1: LANDSCAPE
A3.2	ELEVATIONS	1:100	FLOOR AREA
A3.3	SECTIONS	1:100	1: GROUND FLOOR 2: EXISTING FLOOR
			182.78 161.24



**NOTES**  
This drawing shall be read in conjunction with all other drawings and specifications for the project.  
Any discrepancies shall be referred to the architect for interpretation.  
All dimensions shall be verified on site prior to commencement of construction or fabrication on and off site.  
The dimensions listed are used rather than scaling.  
All building work must be carried out in accordance with the Building Code of Australia, all relevant Australian Standards, Council Consent and specialist CAD Ref: 195/93/Screened Sluice-V22.dwg  
DRAWN BY: SH



IAN SCERCOMBE ARCHITECT

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PROJECT

KENNEDY STUDIOS

6 BROWALLA PL

PORT MACQUARIE NSW 2444

LOT 27 DP 253280

HEALTH CONSULTING ROOMS

DEVELOPMENT APPLICATION

S&K Kennedy Pty (Incorporation Fund

5/108 Hightfield Circuit

PORT MACQUARIE NSW 2444

DRAWINGS TITLE

COVER SHEET

REVISION

DATE

24 AUG 2019

DRAWING NO.

PROJECT NO.

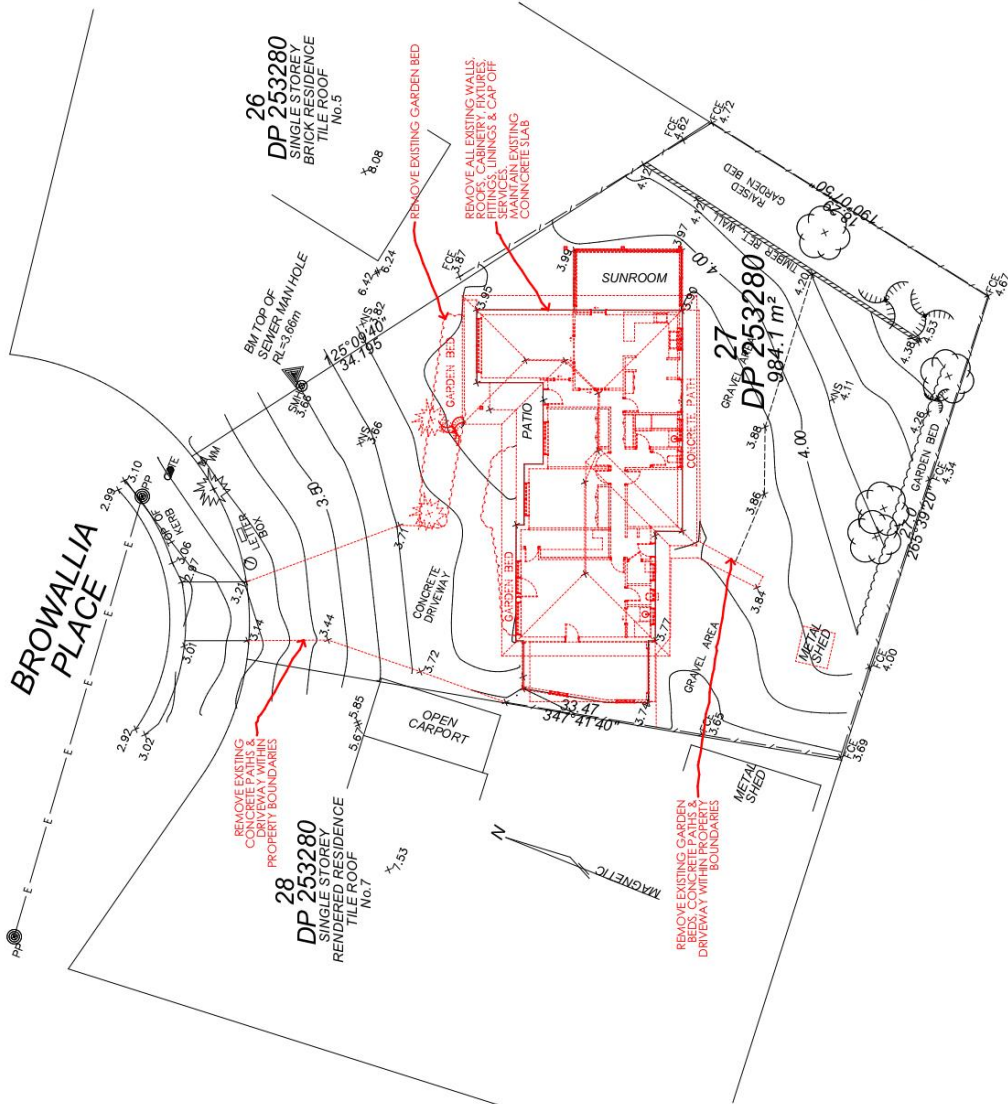
SCALE/3

1:1000

19575

A1.1

24/08/19



**NOTES**  
This drawing shall be read in conjunction with all other drawings and specifications for the project.  
Any discrepancies shall be referred to the architect for clarification.  
All dimensions shall be read from site prior to commencement of construction of fabrication on and off site.  
The dimensions should be used other than loading.  
All building work must be carried out in accordance with the Building Code of Australia, all relevant Australian Standards, Council Consent and specialist advice.  
CAD Ref: 195/Examined/Studio-V22.pjn  
**DRAWN BY:** SH

DRAWING TITLE  
**EXISTING SITE PLAN**

LOT:27 DP:25280  
 HEALTH CONSULTING ROOMS  
 DEVELOPMENT APPLICATION  
 CLIENT: J. Kennedy & J. Sparrmann Fund  
 5/109 Highfield Circuit  
 PORT MACQUARRE NSW 2444  
 REVISION: 24 AUG 2019  
 DRAWING NO: 24/08/19  
 PROJECT NO: 19575  
 SCALE: 1:250  
 DRAWING NO: A2.1

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#### SEDIMENT CONTROL NOTES

- THE SITE IS TO BELIEF CLEAN AFTER ALL. SEDIMENT CONTROL MEASURES ARE TO GENERALLY REMAIN MAINTAINED DURING ANY PERIOD OF UNOCCUPANCY.
- SEDIMENT FENCING AND BROSON CONTROL FILTERS SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION WORKS ARE COMPLETED. BUILT UP SEDIMENT FENCING AND BROSON CONTROL FILTERS SHALL TAKE PLACE.
- SEDIMENT CONTROL FENCES AND FILTERS SHALL BE REGULARLY MAINTAINED TO ENSURE CONTINUOUS PERFORMANCE AS PER DESIGN.



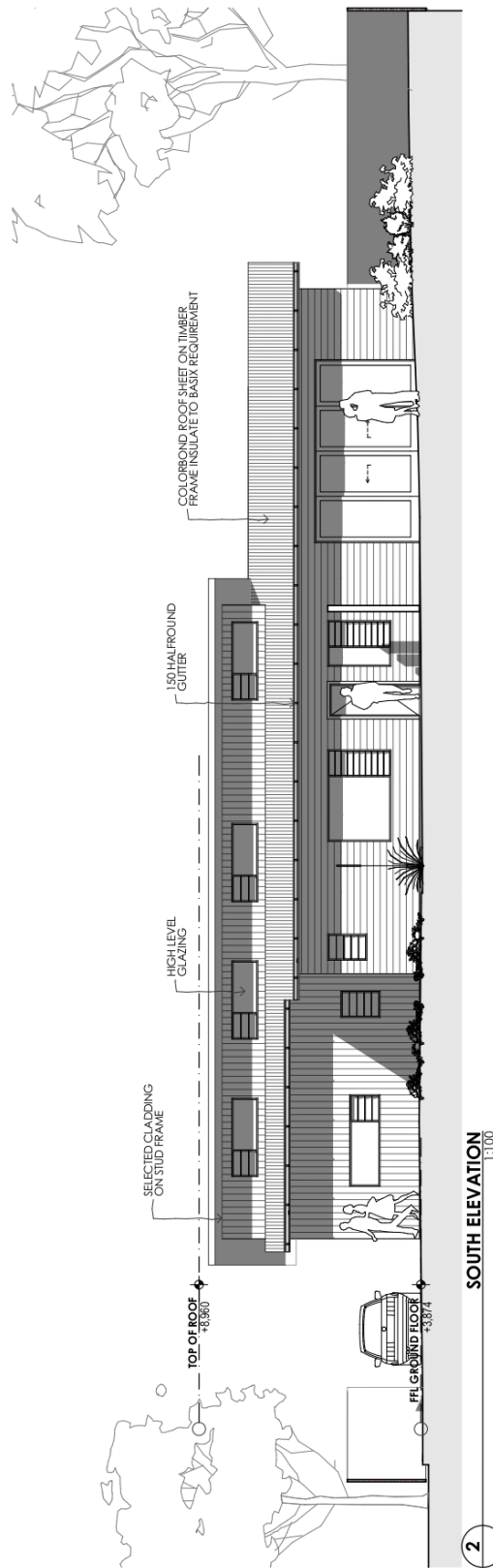
**NOTES**  
The title boundaries shown hereon were not marked at the time of the survey and are shown by plan. Services shown hereon have been located where possible by field survey. The location of any services not shown hereon have been plotted from the records of relevant authorities where available and have been rated accordingly on the plan. The location of any services not shown hereon or are inadequate a notation has been made hereon.  
Prior to any demolition, excavation or construction on the site, the owner must obtain a copy of the relevant services and location of any underground services and detailed locations of all services.

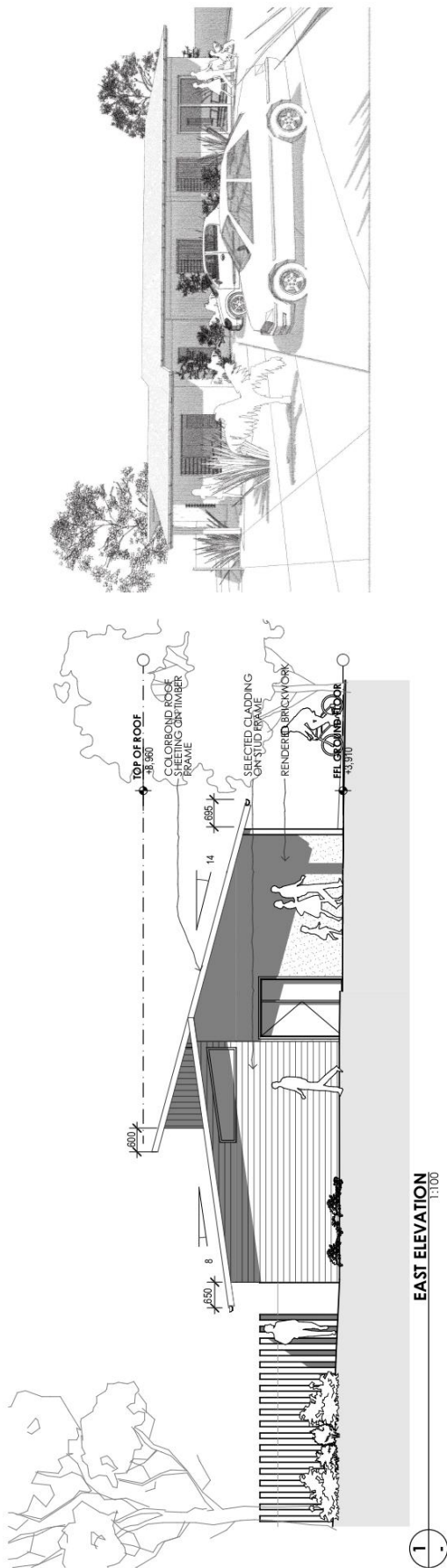
#### LINEWORK & CODE LEGEND

LINE/SYMBOL	Description
-----	BOTTOM OF BANK
-----	DRAIN
-----	EDGE OF TREES
-----	ELEC. CABLE LUG
-----	FENCE
-----	STORMWATER PIPE
-----	SEWER PIPE
-----	TOP OF BANK
-----	WATER MAIN
-----	SYMBOL
○	BENCH MARK
○	BOLLARD
○	ELECTRICAL BOX
○	ELP
○	ELEC. LIGHT POLE
○	HYDRANT
○	NATURAL SURFACE
○	POWER POLE
○	PROF. WATER JUNCTION
○	SEWER JUNCTION
○	SEWER MANHOLE
○	STOP VALVE
○	TELEPHONE PIT
○	TRE
○	TRELLIS LIGHT
○	WATER METER

**SURVEY INFORMATION BY:**  
B.R. Development Consulting  
Surveying, Civil, Structural Engineering & Planning  
B.R. Development Consulting Pty Ltd  
1100/1101/1102/1103/1104/1105/1106/1107/1108/1109/1110/1111/1112/1113/1114/1115/1116/1117/1118/1119/1120/1121/1122/1123/1124/1125/1126/1127/1128/1129/1130/1131/1132/1133/1134/1135/1136/1137/1138/1139/1140/1141/1142/1143/1144/1145/1146/1147/1148/1149/1150/1151/1152/1153/1154/1155/1156/1157/1158/1159/1160/1161/1162/1163/1164/1165/1166/1167/1168/1169/1170/1171/1172/1173/1174/1175/1176/1177/1178/1179/1180/1181/1182/1183/1184/1185/1186/1187/1188/1189/1190/1191/1192/1193/1194/1195/1196/1197/1198/1199/1200/1201/1202/1203/1204/1205/1206/1207/1208/1209/1210/1211/1212/1213/1214/1215/1216/1217/1218/1219/1220/1221/1222/1223/1224/1225/1226/1227/1228/1229/1230/1231/1232/1233/1234/1235/1236/1237/1238/1239/1240/1241/1242/1243/1244/1245/1246/1247/1248/1249/1250/1251/1252/1253/1254/1255/1256/1257/1258/1259/1260/1261/1262/1263/1264/1265/1266/1267/1268/1269/1270/1271/1272/1273/1274/1275/1276/1277/1278/1279/1280/1281/1282/1283/1284/1285/1286/1287/1288/1289/1290/1291/1292/1293/1294/1295/1296/1297/1298/1299/1300/1301/1302/1303/1304/1305/1306/1307/1308/1309/1310/1311/1312/1313/1314/1315/1316/1317/1318/1319/1320/1321/1322/1323/1324/1325/1326/1327/1328/1329/1330/1331/1332/1333/1334/1335/1336/1337/1338/1339/1340/1341/1342/1343/1344/1345/1346/1347/1348/1349/1350/1351/1352/1353/1354/1355/1356/1357/1358/1359/1360/1361/1362/1363/1364/1365/1366/1367/1368/1369/1370/1371/1372/1373/1374/1375/1376/1377/1378/1379/1380/1381/1382/1383/1384/1385/1386/1387/1388/1389/1390/1391/1392/1393/1394/1395/1396/1397/1398/1399/1400/1401/1402/1403/1404/1405/1406/1407/1408/1409/1410/1411/1412/1413/1414/1415/1416/1417/1418/1419/1420/1421/1422/1423/1424/1425/1426/1427/1428/1429/1430/1431/1432/1433/1434/1435/1436/1437/1438/1439/1440/1441/1442/1443/1444/1445/1446/1447/1448/1449/1450/1451/1452/1453/1454/1455/1456/1457/1458/1459/1460/1461/1462/1463/1464/1465/1466/1467/1468/1469/1470/1471/1472/1473/1474/1475/1476/1477/1478/1479/1480/1481/1482/1483/1484/1485/1486/1487/1488/1489/1490/1491/1492/1493/1494/1495/1496/1497/1498/1499/1500/1501/1502/1503/1504/1505/1506/1507/1508/1509/1510/1511/1512/1513/1514/1515/1516/1517/1518/1519/1520/1521/1522/1523/1524/1525/1526/1527/1528/1529/1530/1531/1532/1533/1534/1535/1536/1537/1538/1539/1540/1541/1542/1543/1544/1545/1546/1547/1548/1549/1550/1551/1552/1553/1554/1555/1556/1557/1558/1559/1560/1561/1562/1563/1564/1565/1566/1567/1568/1569/1570/1571/1572/1573/1574/1575/1576/1577/1578/1579/1580/1581/1582/1583/1584/1585/1586/1587/1588/1589/1590/1591/1592/1593/1594/1595/1596/1597/1598/1599/1600/1601/1602/1603/1604/1605/1606/1607/1608/1609/1610/1611/1612/1613/1614/1615/1616/1617/1618/1619/1620/1621/1622/1623/1624/1625/1626/1627/1628/1629/1630/1631/1632/1633/1634/1635/1636/1637/1638/1639/1640/1641/1642/1643/1644/1645/1646/1647/1648/1649/1650/1651/1652/1653/1654/1655/1656/1657/1658/1659/1660/1661/1662/1663/1664/1665/1666/1667/1668/1669/1670/1671/1672/1673/1674/1675/1676/1677/1678/1679/1680/1681/1682/1683/1684/1685/1686/1687/1688/1689/1690/1691/1692/1693/1694/1695/1696/1697/1698/1699/1700/1701/1702/1703/1704/1705/1706/1707/1708/1709/1710/1711/1712/1713/1714/1715/1716/1717/1718/1719/1720/1721/1722/1723/1724/1725/1726/1727/1728/1729/1730/1731/1732/1733/1734/1735/1736/1737/1738/1739/1740/1741/1742/1743/1744/1745/1746/1747/1748/1749/1750/1751/1752/1753/1754/1755/1756/1757/1758/1759/1760/1761/1762/1763/1764/1765/1766/1767/1768/1769/1770/1771/1772/1773/1774/1775/1776/1777/1778/1779/1780/1781/1782/1783/1784/1785/1786/1787/1788/1789/1790/1791/1792/1793/1794/1795/1796/1797/1798/1799/1800/1801/1802/1803/1804/1805/1806/1807/1808/1809/1810/1811/1812/1813/1814/1815/1816/1817/1818/1819/1820/1821/1822/1823/1824/1825/1826/1827/1828/1829/1830/1831/1832/1833/1834/1835/1836/1837/1838/1839/1840/1841/1842/1843/1844/1845/1846/1847/1848/1849/1850/1851/1852/1853/1854/1855/1856/1857/1858/1859/1860/1861/1862/1863/1864/1865/1866/1867/1868/1869/1870/1871/1872/1873/1874/1875/1876/1877/1878/1879/1880/1881/1882/1883/1884/1885/1886/1887/1888/1889/1890/1891/1892/1893/1894/1895/1896/1897/1898/1899/1900/1901/1902/1903/1904/1905/1906/1907/1908/1909/1910/1911/1912/1913/1914/1915/1916/1917/1918/1919/1920/1921/1922/1923/1924/1925/1926/1927/1928/1929/1930/1931/1932/1933/1934/1935/1936/1937/1938/1939/1940/1941/1942/1943/1944/1945/1946/1947/1948/1949/1950/1951/1952/1953/1954/1955/1956/1957/1958/1959/1960/1961/1962/1963/1964/1965/1966/1967/1968/1969/1970/1971/1972/1973/1974/1975/1976/1977/1978/1979/1980/1981/1982/1983/1984/1985/1986/1987/1988/1989/1990/1991/1992/1993/1994/1995/1996/1997/1998/1999/2000/2001/2002/2003/2004/2005/2006/2007/2008/2009/2010/2011/2012/2013/2014/2015/2016/2017/2018/2019/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/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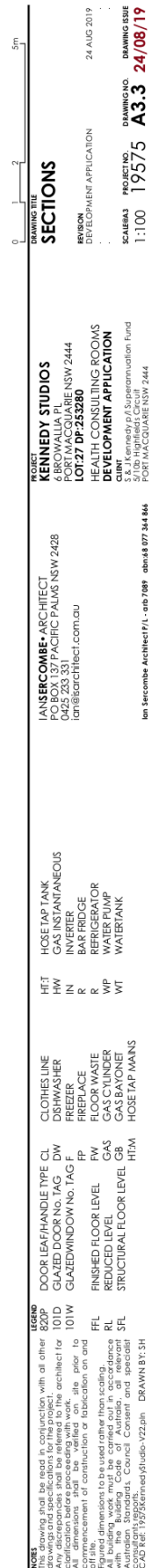
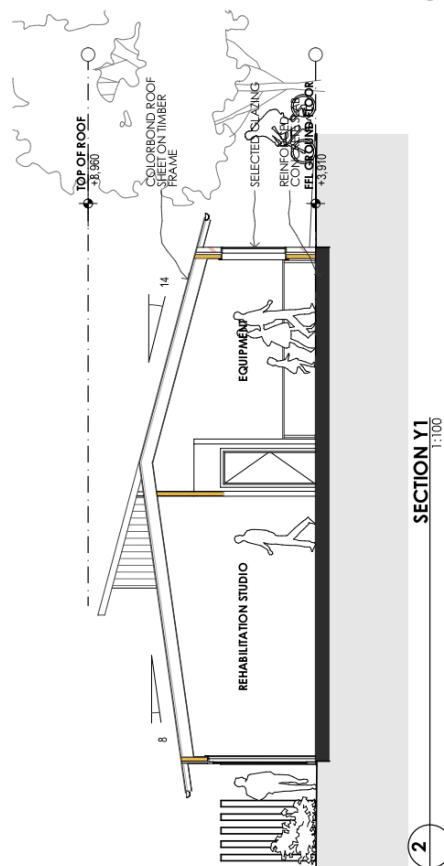
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SECTIONAL PERSPECTIVE - SKETCH

DRAWING TITLE		PROJECT		REVISION		SCALES	
ELEVATIONS		KENNEDY STUDIOS		DEVELOPMENT APPLICATION		1:100	
REVISION		LOT 27 DP 255280		PROJECT NO.		19575	
DEVELOPMENT APPLICATION		HEALTH CONSULTING ROOMS		DRAWING NO.		A3.2	
CLIENT		PORT MACQUARIE Hospital & Suburbs Health Service		DRAWING DATE		24/08/19	
CLIENT		PORT MACQUARIE Hospital & Suburbs Health Service		DRAWING NO.		A3.2	
CLIENT		PORT MACQUARIE Hospital & Suburbs Health Service		DRAWING DATE		24/08/19	









## Developer Charges - Estimate

Applicants Name: Ian Sercombe Architect  
 Property Address: 6 Browallia Pl, Port Macquarie  
 Lot & Dp: Lot(s):27, DP(s):253280  
 Development: Health Consulting Rooms (DA2019/621)



Water and Sewerage Headworks Levies are levied under S64 of the LGA Act & S306 of the Water Management Act 2000.  
 Other contributions are levied under Section 7.11 of the Environmental Planning and Assessment Act and Council's Contribution Plans.

Levy Area	Units	Cost	Estimate
1 N/A			
2 N/A			
3 N/A			
4 N/A			
5 N/A			
6 N/A			
7 N/A			
8 N/A			
9 N/A			
10 N/A			
11 N/A			
12 N/A			
13 N/A			
14 S94A Levy - Applicable to Consents approved after 2/12/07	1.00%	\$ 353,120	\$3,531.00
15 Admin General Levy - Applicable to Consents approved after 11/2/03	Contribution Not Applicable		
16			
17			
18			
Total Amount of Estimate (Not for Payment Purposes)			\$3,531.00

**Not for Payment Purposes**

NOTES: These contribution rates apply to new development and should be used as a guide only.  
 Contributions will be determined in conjunction with a Development Application (DA) or Complying Development Application (CDA).  
 DAs will be subject to the contributions plans in force at the time of issue of the Consent and for CDCs at time of lodgement.  
 Contribution Rates are adjusted quarterly in line with the CPI.

DATE OF ESTIMATE:

11-Oct-2019

Estimate Prepared By Fiona Tierney

This is an ESTIMATE ONLY - NOT for Payment Purposes

sercombe Architect, 6 Browallia Pl, Port Macquarie, 11-Oct-2019.xls

PORT MACQUARIE-HASTINGS COUNCIL

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**Item: 06****Subject: DA2019 - 476.1 CHANGE OF USE FROM MEDICAL CENTRE TO  
DUAL OCCUPANCY AND TORRENS TITLE SUBDIVISION, LOT 5 DP  
226787, 70 HILL STREET, PORT MACQUARIE****Report Author: Development Assessment Planner, Benjamin Roberts**

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**Applicant: Rob Beukers****Owner: J L Hill****Estimated Cost: \$250,000****Parcel no: 9187**

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**Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

**RECOMMENDATION**

**That DA 2019 - 476 for a change of use from medical centre to dual occupancy and Torrens title subdivision at Lot 5, DP 226787, No. 70 Hill Street, Port Macquarie, be determined by granting consent subject to the recommended conditions.**

**Executive Summary**

This report considers a development application for a change of use from medical centre to dual occupancy and Torrens title subdivision at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application, one (1) submission was received.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact.

This report recommends that the development application be approved subject to the conditions included as Attachment 1.

**1. BACKGROUND****Existing Sites Features and Surrounding Development**

The site has an area of approximately 620m<sup>2</sup>.

The site is zoned R1 General Residential in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan:



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:



**2. DESCRIPTION OF DEVELOPMENT**

Key aspects of the proposal include the following:

- Conversion of existing medical centre building to a dwelling.
- Construction of a new dwelling.
- Torrens title subdivision.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

**Application Chronology**

- 3 July 2019 - Application lodged.
- 5 July 2019 - Additional information request.
- 9 - 22 July 2019 - Public exhibition via neighbour notification.
- 2 September 2019 - Additional information provided.

**3. STATUTORY ASSESSMENT****Section 4.15(1) Matters for Consideration**

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

- (a) **The provisions (where applicable) of:**  
(i) **Any Environmental Planning Instrument**

**State Environmental Planning Policy No. 44 - Koala Habitat Protection**

There is no Koala Plan of Management on the site. Additionally, the site is less than 1ha in area therefore no further investigations are required.

**State Environmental Planning Policy No. 55 – Remediation of Land**

Following an inspection of the site and a search of Council records, the subject land is not identified as being potentially contaminated and is suitable for the intended use.

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

BASIX certificates have been submitted demonstrating that the proposal will comply with the requirements of the SEPP. It is recommended that a condition be imposed to ensure that the commitments are incorporated into the development and certified at Occupation Certificate stage.

**Port Macquarie-Hastings Local Environmental Plan 2011**

The proposal is consistent with the LEP having regard to the following:

- Clause 2.2 -The subject site is zoned R1 General Residential.



- Clause 2.3(1) and the R1 zone landuse table - dual occupancy and subdivision is a permissible landuse with consent.
- The objectives of the R1 zone are 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.*
- Clause 2.3(2) - The proposal is consistent with the zone objectives as it is a permissible landuse and consistent with the established residential locality. The proposal will contribute to the range of housing options available.
- Clause 4.1A - The proposal includes the construction of a new dwelling and Torrens subdivision. The Torrens subdivision to create lots smaller than the 450m<sup>2</sup> minimum lot size specified on the Lot Size Map is therefore permitted.
- Clause 4.3 - The maximum overall height of the new building above ground level (existing) complies with the height limit of 8.5m applying to the site.
- Clause 4.4 - The floor space ratio of the proposal complies with the maximum 1:1 floor space ratio applying to the site.
- Clause 5.10 – Heritage. The site does not contain or adjoin any known heritage items or sites of significance.
- Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development.

**(ii) Any draft instruments that apply to the site or are on exhibition**

No draft instruments apply.

**(iii) Any Development Control Plan in force**

**Port Macquarie-Hastings Development Control Plan 2013**

<b>DCP 2013: Dwellings, Dual occupancies, Dwelling houses, Multi dwelling houses &amp; Ancillary development</b>			
	<b>Requirements</b>	<b>Proposed</b>	<b>Complies</b>
3.2.2.2	Articulation zone: <ul style="list-style-type: none"> <li>• Min. 3m front setback</li> <li>• An entry feature or portico</li> <li>• A balcony, deck, patio, pergola, terrace or verandah</li> <li>• A window box treatment</li> <li>• A bay window or similar feature</li> <li>• An awning or other feature over a window</li> <li>• A sun shading feature</li> </ul>	The new dwelling contains an entry porch feature setback 3m to the Grant Street property boundary.	Yes
	Front setback (Residential not R5 zone):	No change to setbacks of existing building. 3m	Yes

<b>DCP 2013: Dwellings, Dual occupancies, Dwelling houses, Multi dwelling houses &amp; Ancillary development</b>			
	<b>Requirements</b>	<b>Proposed</b>	<b>Complies</b>
	<ul style="list-style-type: none"> <li>Min. 4.5m local road</li> <li>Min. 3.0m secondary road</li> </ul>	setback provided to Grant Street boundary, which is the secondary frontage.	
3.2.2.3	<p>Garage 5.5m min. and 1m behind front façade.</p> <p>Garage door recessed behind building line or eaves/overhangs provided</p>	<p>The garage to the new dwelling is setback 5.5m and greater than 1m behind the building line to the Grant Street frontage.</p> <p>There is no change to the existing setback to Hill Street via conversion of the ground floor office to a garage. The garage doors are recessed behind the main building lines.</p>	Yes
	6m max. width of garage doors and 50% max. width of building	Width of garage door requirements are complied with.	Yes
	Driveway crossovers 1/3 max. of site frontage and max. 5.0m width	Driveway crossing width requirements are complied with.	Yes
3.2.2.4	4m min. rear setback. Variation subject to site analysis and provision of private open space	The site is a corner block. No rear setback requirement.	N/A
3.2.2.5	<p>Side setbacks:</p> <ul style="list-style-type: none"> <li>Ground floor = min. 0.9m</li> <li>First floors &amp; above = min. 3m setback or where it can be demonstrated that overshadowing not adverse = 0.9m min.</li> <li>Building wall set in and out every 12m by 0.5m</li> </ul>	<p>New dwelling single storey. South side setback = 1.05m. East side setback = 1.1m.</p> <p>The wall articulation is compliant and satisfies the objectives of the development provision.</p>	Yes
3.2.2.6	35m <sup>2</sup> min. private open space area including a useable 4x4m min. area which has 5% max. grade	Each occupancy contains minimum of 35m <sup>2</sup> open space in one area including a useable 4m x 4m area directly off the ground floor living area.	Yes
3.2.2.7	<p>Front fences:</p> <ul style="list-style-type: none"> <li>If solid 1.2m max height and front setback 1.0m with landscaping</li> <li>3x3m min. splay for corner sites</li> </ul>	No new fencing proposed.	N/A



<b>DCP 2013: Dwellings, Dual occupancies, Dwelling houses, Multi dwelling houses &amp; Ancillary development</b>			
	<b>Requirements</b>	<b>Proposed</b>	<b>Complies</b>
	<ul style="list-style-type: none"> <li>Fences &gt;1.2m to be 1.8m max. height for 50% or 6.0m max. length of street frontage with 25% openings</li> <li>0.9x0.9m splays adjoining driveway entrances</li> </ul>		
3.2.2.8	Front fences and walls to have complimentary materials to context No chain wire, solid timber, masonry or solid steel front fences	No new fencing proposed.	N/A
3.2.2.10	Privacy: <ul style="list-style-type: none"> <li>Direct views between living areas of adjacent dwellings screened when within 9m radius of any part of window of adjacent dwelling and within 12m of private open space areas of adjacent dwellings. ie. 1.8m fence or privacy screening which has 25% max. openings and is permanently fixed</li> <li>Privacy screen required if floor level &gt; 1m height, window side/rear setback (other than bedroom) is less than 3m and sill height less than 1.5m</li> <li>Privacy screens provided to balconies/verandahs etc which have &lt;3m side/rear setback and floor level height &gt;1m</li> </ul>	The new dwelling is single storey in construction and the primary living and open space area are orientated north. There are no elevated living areas orientated south that would compromise privacy to the adjacent dwelling.	Yes

<b>DCP 2013: General Provisions</b>			
	<b>Requirements</b>	<b>Proposed</b>	<b>Complies</b>
2.7.2.2	Design addresses generic principles of Crime Prevention Through Environmental Design guideline	No concealment or entrapment areas proposed. Adequate casual surveillance available.	Yes
2.3.3.1	Cut and fill 1.0m max. 1m outside the perimeter of the external building walls	No cut or fill more than 1m proposed.	Yes
2.3.3.2	1m max. height retaining walls along road frontage	No retaining walls proposed along road frontages.	N/A
	Any retaining wall >1.0 in height to be certified by structure	No retaining walls proposed.	N/A

<b>DCP 2013: General Provisions</b>			
	<b>Requirements</b>	<b>Proposed</b>	<b>Complies</b>
	engineer		
	Combination of retaining wall and front fence height max 1.8m, max length 6.0m or 30% of frontage, fence component 25% transparent, and splay at corners and adjacent to driveway	No retaining wall or fencing combination proposed.	N/A
2.3.3.8	Removal of hollow bearing trees	No hollow bearing trees proposed to be removed	N/A
2.6.3.1	Tree removal (3m or higher with 100mm diameter trunk at 1m above ground level and 3m from external wall of existing dwelling)	No tree removal proposed.	N/A
2.4.3	Bushfire risk, Acid sulphate soils, Flooding, Contamination, Airspace protection, Noise and Stormwater	Refer to main body of report.	Yes
2.5.3.2	New accesses not permitted from arterial or distributor roads	No new access proposed to arterial or distributor road.	N/A
	Driveway crossing/s minimal in number and width including maximising street parking	Driveway crossings are existing and acceptable.	Yes
2.5.3.3	Parking in accordance with Table 2.5.1. <u>Dual Occupancy</u> 1 space per dwelling/occupancy (behind building line).	Proposal involves a double garage to the new dwelling and conversion of ground floor area to provide a single garage to the existing dwelling. Sufficient parking is proposed.	Yes
2.5.3.11	Section 94 contributions	Contributions apply - refer to ET calc and NOP.	Yes
2.5.3.12 and 2.5.3.13	Landscaping of parking areas	Suitable existing landscaping around driveway/parking locations.	Yes
2.5.3.14	Sealed driveway surfaces unless justified	Existing driveways are sealed.	Yes
2.5.3.15 and 2.5.3.16	Driveway grades first 6m or 'parking area' shall be 5% grade with transitions of 2m length	Driveways are existing.	Yes
2.5.3.17	Parking areas to be designed to avoid concentrations of water runoff on the surface.	Stormwater drainage is capable of being managed as part of plumbing construction.	Yes

- (iiia) **Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4**

No planning agreement has been offered or entered into.

- iv) **Any matters prescribed by the Regulations**

No matters prescribed by the regulations apply.

- (b) **The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality:**

**Context and setting**

- The proposal will be unlikely to have any adverse impacts to existing adjoining properties and satisfactorily addresses the public domain.
- The proposal is sufficiently compatible with other existing residential development in the locality and adequately addresses planning controls for the area.
- There are no significant adverse impacts on existing view sharing. Specifically, the view currently enjoyed across the site from 80 Grant Street is not special or iconic and is across the side boundary. The impacts to this view are negligible. The proposal is single storey in nature and below the maximum 8.5m building height control applicable to the site. The complete retention of the existing view is unrealistic having regard to the planning controls.
- No adverse privacy impacts would result from the proposal. Specifically, the new dwelling is single storey in construction and the primary living and open space area is orientated north. There are no elevated living areas or living rooms orientated south that would compromise privacy to the adjacent dwelling at 80 Grant Street.
- There are no identified adverse overshadowing impacts to the adjoining property at 80 Grant Street. Specifically, the new dwelling is single storey in nature, the adjoining property contains a side access down this boundary and the dwelling is setback approximately 2.5m from the boundary. The adjoining dwelling is also two storey with elevated living and deck areas. The proposal does not prevent the adjoining property from receiving 3 hours of sunlight to private open space and primary living areas on 21 June.

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**Roads**

The site has road frontages to Grant Street and Hill Street.

Adjacent to the site, Grant Street is a sealed public road under the care and control of Council. Grant Street is a Local road with a 14m road width within a 30m road reserve. There is SA kerb and gutter, a pedestrian refuge island at the intersection and on-street parking available.

Adjacent to the site, Hill Street is a sealed public road under the care and control of Council. Hill Street is a Collector road with an 11m road width within a 20m road reserve. There is SA kerb and gutter and a 1.2m wide footpath on the northern side and on-street parking available.

**Traffic and Transport**

This development proposes to generate an additional 9 daily trips. The addition in traffic associated with the development is unlikely to have any adverse impacts to the existing road network within the immediate locality.

**Site Frontage and Access**

Vehicle access to the existing and new building are proposed through existing driveways with direct frontages to Grant and Hill Streets, being Council-owned public roads. As these remain in good condition, no further driveway works will be required under the subdivision application.

**Parking and Manoeuvring**

Parking and driveway widths comply with relevant Australian Standards (AS 2890).

**Water Supply Connection**

Council records indicate that the development site has an existing 20mm meter. The site is fronted by 150mm diameter PVC water mains on the opposite side of Hill Street and the opposite side of Grant Street. An additional water service is required to service the development. Engineering plans are required to show all proposed water services to the lot.

Details will be required to accompany the section 68 application. Refer to recommended conditions of consent.

**Sewer Connection**

Council records indicate that the development site has an existing junction from the sewer main which runs inside the eastern boundary of the development lot. Torrens title subdivision shall require provision of a sewer service to each lot. Engineering plans shall be required as part of the Construction Certificate (Infrastructure) application.

Details will also be required to accompany the section 68 application. Refer to recommended conditions of consent.

**Stormwater**

The site naturally grades towards the northeast corner of the property and is currently serviced via an existing inter-allotment drainage system connecting to a kerb outlet on Hill Street.

The legal point of discharge for the proposed development is defined as a direct connection to the existing inter-allotment drainage system servicing the site, providing that a suitably qualified plumber inspects the line and deems it to be in good condition. A new 600 x 600 grated surcharge pit will also need to be installed into the line, inside the property boundary adjacent to the road reserve.

Stormwater from the proposed development is planned to be disposed via inter-allotment drainage, which is consistent with the above requirements.

A detailed site stormwater management plan will be required to be submitted for assessment with the Section 68 application and prior to the issue of a building construction certificate.

In accordance with Councils AUSPEC requirements, the following must be incorporated into the stormwater drainage plan:

- Provision of inter-allotment drainage to allow the proposed development to drain to the nominated point of discharge via a single suitably sized conduit. If after inspection by a suitably qualified plumber the existing inter-allotment line is deemed to be in an unserviceable condition, then a new inter-allotment arrangement will need to be established, in a dedicated easement, clear of any conflicting services.

**Other Utilities**

Telecommunication and electricity services are available to the site.

**Heritage**

No known items of Aboriginal or European heritage significance exist on the property. No adverse impacts anticipated. The site is in a residential context and considered to be disturbed land.

**Other land resources**

The site is within an established urban context and will not sterilise any significant mineral or agricultural resource.

**Water cycle**

The proposed development will be unlikely to have any adverse impacts on water resources and the water cycle.

**Soils**

The proposed development will not have any significant adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

**Air and microclimate**

The construction and/or operations of the proposed development will be unlikely to result in any adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

**Flora and fauna**

Construction of the proposed development will not require any removal/clearing of any native vegetation and therefore does not trigger the biodiversity offsets scheme. Part 7 of the Biodiversity Conservation Act 2016 is considered to be satisfied.

**Waste**

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated. Standard precautionary site management condition recommended.

**Energy**

The proposal includes measures to address energy efficiency and will be required to comply with the requirements of BASIX.

**Noise and vibration**

No adverse impacts anticipated. Condition recommended to restrict construction to standard construction hours.

**Bushfire**

The site is not identified as being bushfire prone.



**Safety, security and crime prevention**

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area. The increase in housing density will improve natural surveillance within the locality and openings from each dwelling overlook common and private areas.

**Social impacts in the locality**

Given the nature of the proposed development and its' location the proposal is unlikely to result in any adverse social impacts.

**Economic impact in the locality**

No adverse impacts. A likely positive impact is that the development will maintain employment in the construction industry, which will lead to flow impacts such as expenditure in the area.

**Site design and internal design**

The proposed development design satisfactorily responds to the site attributes and will fit into the locality. No adverse impacts likely.

**Construction**

Construction impacts are considered capable of being managed, standard construction and site management conditions have been recommended.

**Cumulative impacts**

The proposed development is not expected to have any adverse cumulative impacts on the natural or built environment or the social and economic attributes of the locality.

**(c) The suitability of the site for the development**

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

**(d) Any submissions made in accordance with this Act or the Regulations**

One (1) written submission was received following public exhibition of the application. Copies of the written submissions have been provided under separate cover to members of the DAP.

Key issues raised in the submission received and comments in response to these issues are provided as follows:

Submission Issue/Summary	Planning Comment/Response
The new dwelling would significantly impact on existing solar access to the north facing living room and kitchen of the adjoining dwelling at 80 Grant Street.	There are no identified adverse overshadowing impacts to the adjoining property at 80 Grant Street. The new dwelling is single storey in nature, the adjoining property contains a side access down the boundary and the dwelling is setback approximately 2.5m from the boundary. The adjoining dwelling is also two storey with elevated living and deck areas. The proposal does not prevent the adjoining property from receiving 3 hours of sunlight to private open space and primary living areas on 21 June.
The new dwelling would block a significant view enjoyed from the adjoining dwelling at 80 Grant Street.	There are no significant adverse impacts on existing view sharing. The view currently enjoyed across the site from 80 Grant Street is not special or iconic and is across the side boundary. The impacts to this view are negligible. The proposal is single storey in nature and below the maximum 8.5m building height control applicable to the site.

**(e) The Public Interest**

The proposed development satisfies relevant planning controls and will not adversely impact on the wider public interest.

**4. DEVELOPMENT CONTRIBUTIONS APPLICABLE**

- Development contributions will be required towards augmentation of town water supply and sewerage system head works under Section 64 of the Local Government Act 1993.
- Development contributions will be required in accordance with Section 7.11 of the Environmental Planning and Assessment Act 1979 towards roads, open space, community cultural services, emergency services and administration buildings.
- A copy of the contribution estimate is included as Attachment 3.

**5. CONCLUSION AND STATEMENT OF REASON**

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact. It is recommended that the application be



approved, subject to the recommended conditions of consent provided in the attachment section of this report.

**Attachments**

- 1 [View](#). DA2019 - 476.1 Recommended Conditions
- 2 [View](#). DA2019 - 476.1 Plans
- 3 [View](#). DA2019 - 476.1 Contributions Quote

**FOR USE BY PLANNERS / SURVEYORS TO PREPARE LIST OF  
PROPOSED CONDITIONS 2011****NOTE: THESE ARE DRAFT ONLY****DA NO: 2019/476.1****DATE: 15/10/2019****PRESCRIBED CONDITIONS**

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations 2000*

**A – GENERAL MATTERS**

- (1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

<b>Plan / Supporting Document</b>	<b>Reference</b>	<b>Prepared by</b>	<b>Date</b>
Existing Site and Dwelling Floor Plans	Job Ref: 11517 Sheets 1 and 2	Beukers & Ritter Consulting	28 August 2019
New Dwelling Plans	J462 Drawing No: DA01, DA02, DA03, DA04	Steve Lockhart Architectural Graphics	25 June 2019
BASIX Certificates	A357450	Beukers & Ritter Consulting	2 September 2019
	1023924s	ArchiECO	28 June 2019
Draft Subdivision Plan	11517	Beukers & Ritter Consulting	Undated

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A002) No work shall commence until a building Construction Certificate has been issued and the applicant has notified Council of:
- the appointment of a Principal Certifying Authority; and
  - the date on which work will commence.

Such notice shall include details of the Principal Certifying Authority and must be submitted to Council at least two (2) days before work commences.

- (3) (A003) The proponent shall submit an application for a Subdivision Certificate for Council certification with all relevant documentation.
- (4) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (5) (A009) The development site is to be managed for the entirety of work in the following manner:
  1. Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
  2. Appropriate dust control measures;
  3. Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work adjoins the public domain, fencing is to be in place so as to prevent public access to the site;
  4. Building waste is to be managed via an appropriate receptacle;
  5. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
  6. Building work being limited to the following hours, unless otherwise permitted by Council;
    - Monday to Saturday from 7.00am to 6.00pm
    - No work to be carried out on Sunday or public holidaysThe builder to be responsible to instruct and control his sub-contractors regarding the hours of work.
- (6) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (7) (A033) The applicant shall provide security to the Council for the payment of the cost of the following:
  - a. making good any damage caused to any property of the Council as a consequence of doing anything to which the consent relates,
  - b. completing any public work (such as road work, kerbing and guttering, footway construction, utility services, stormwater drainage and environmental controls) required in connection with the consent,
  - c. remedying any defects in any such public work that arise within twelve (12) months after the work is completed.

Such security is to be provided to Council prior to the issue of the Subdivision Certificate/Construction Certificate or Section 138 of the Roads Act, 1993.

Page 2 of 6

The security is to be for such reasonable amount as is determined by the consent authority, being an amount that is 10% of the contracted works for Torrens Title subdivision development/the estimated cost plus 30% for building development of public works or \$5000, whichever is the greater of carrying out the development by way of:

- i. deposit with the Council, or
- ii. an unconditional bank guarantee in favour of the Council.

The security may be used to meet any costs referred to above and on application being made to the Council by the person who provided the security any balance remaining is to be refunded to, or at the direction of, that person. Should Council have to call up the bond and the repair costs exceed the bond amount, a separate invoice will be issued. If no application is made to the Council for a refund of any balance remaining of the security within 6 years after the work to which the security relates has been completed the Council may pay the balance to the Chief Commissioner of State Revenue under the Unclaimed Money Act 1995.

#### **B – PRIOR TO ISSUE OF A CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the building Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:

- Position and depth of the sewer (including junction)
- Stormwater drainage termination point
- Easements
- Water main
- Proposed water meter location

- (2) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the building Construction Certificate.

Such works include, but not be limited to:

- Civil works
- Water services
- Utility services

- (3) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:

1. Sewerage reticulation. The Torrens title subdivision shall require provision of a sewer service to each lot.

2. Water supply plans shall include hydraulic plans for internal water supply services and associated works in accordance with AS 3500, Plumbing Code of Australia and Port Macquarie-Hastings Council Policies. An additional water service is required to service the development.
  3. Stormwater systems.
- (4) (B010) Payment to Council, prior to the issue of the Construction or Subdivision Certificate (whichever occurs first) of the Section contributions set out in the "Notice of Payment – Developer Charges" schedule attached to this consent unless deferral of payment of contributions has been approved by Council. The contributions are levied, pursuant to the Environmental Planning and Assessment Act 1979 as amended, and in accordance with the provisions of the following plans:
- Port Macquarie-Hastings Administration Building Contributions Plan 2007
  - Hastings S94 Administration Levy Contributions Plan
  - Port Macquarie-Hastings Open Space Contributions Plan 2018
  - Hastings S94 Major Roads Contributions Plan
  - Port Macquarie-Hastings Community Cultural and Emergency Services Contributions Plan 2005
- The plans may be viewed during office hours at the Council Chambers located on the corner of Burrawan and Lord Streets, Port Macquarie, 9 Laurie Street, Laurieton, and High Street, Wauchope.
- The attached "Notice of Payment" is valid for the period specified on the Notice only. The contribution amounts shown on the Notice are subject to adjustment in accordance with CPI increases adjusted quarterly and the provisions of the relevant plans. Payments can only be made using a current "Notice of Payment" form. Where a new Notice of Payment form is required, an application in writing together with the current Notice of Payment application fee is to be submitted to Council.
- (5) (B011) As part of Notice of Requirements by Port Macquarie-Hastings Council as the Water Authority under Section 306 of the Water Management Act 2000, the payment of a cash contribution, prior to the issue of a Construction or Subdivision Certificate (whichever occurs first), of the Section 64 contributions, as set out in the "Notice of Payment – Developer Charges" schedule attached to this consent unless deferral of payment of contributions has been approved by Council. The contributions are levied in accordance with the provisions of the relevant Section 64 Development Servicing Plan towards the following:
- augmentation of the town water supply headworks
  - augmentation of the town sewerage system headworks
- (6) (B016) Provision to each lot of a separate sewer line to Council's main. All work will need to comply with the requirements of Council's adopted AUSPEC Design and Construction Guidelines and Policies. Any abandoned sewer junctions are to be capped off at Council's sewer main.

- (7) (B024) Submission to Council of an application for water meter hire, which is to be referred to the Water Supply section so that a quotation for the installation can be prepared and paid for prior to the issue of a Construction Certificate. This application is also to include an application for the disconnection of any existing service not required.
- (8) (B037) The finished floor level of the building shall be at least 1050mm above the soffit of Council's sewer main. Details indicating compliance with this are to be submitted to the Principal Certifying Authority with the application for Construction Certificate.
- (9) (B038) Footings and/or concrete slabs of buildings adjacent to sewer lines or stormwater easements are to be designed so that no loads are imposed on the infrastructure. Detailed drawings and specifications prepared by a practising chartered professional civil and/or structural engineer are to be submitted to the Principal Certifying Authority with the application for the Construction Certificate.
- (10) (B071) Prior to the issue of any building Construction Certificate, the provision of water and sewer services to the land are to be approved by the relevant Water Authority and relevant payments received.
- (11) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a building Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
- a) The legal point of discharge for the proposed development is defined as the kerb and gutter on Hill Street.
  - b) The design is to be generally in accordance with the stormwater drainage concept plan on Drawing No. 11517 prepared by BR Consulting and dated 28/08/2019.
  - c) The design requires the provision of interallotment drainage in accordance with AUSPEC D5.
  - d) Where works are staged, a plan is to be provided which demonstrates which treatment measure/s is/are to be constructed with which civil works stage. Separate plans are required for any temporary treatment (where applicable e.g. for building phase when a staged construction methodology is adopted) and ultimate design.
  - e) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
  - f) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
  - g) The design shall provide details of any components of the existing stormwater drainage system servicing the site that are to be retained.
  - h) CCTV inspection of the existing 150mm UPVC drainage pipeline, proposed to be used as interallotment drainage, shall be carried out by a licenced plumber or suitably qualified person. If the condition of the existing line is determined as poor, then a new pipeline shall be installed

in a location clear of other existing services, with a dedicated easement provided over it.

#### **C – PRIOR TO ANY WORK COMMENCING ON SITE**

- (1) (C001) A minimum of (1) week notice in writing of the intention to commence works on public land is required to be given to Council together with the name of the principal contractor and any major sub-contractors engaged to carry out works. Works shall only be carried out by a contractor accredited with Council.
- (2) (C004) Prior to works commencing an application being made to the electricity and telecommunications service providers. Services are required to be underground.
- (2) (C013) Where a sewer manhole and/or Vertical Inspection Shaft (VIS) exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

#### **D – DURING WORK**

- (1) (D001) Development works on public property or works to be accepted by Council as an infrastructure asset are not to proceed past the following hold points without inspection and approval by Council. Notice of required inspection must be given 24 hours prior to inspection, by contacting Council's Customer Service Centre on (02) 6581 8111. You must quote your Construction Certificate number and property description to ensure your inspection is confirmed:
  - a. when trenches are open, stormwater/water/sewer pipes and conduits jointed and prior to backfilling;
  - b. prior to the pouring of concrete for sewerage works and/or works on public property;
  - c. during construction of sewer infrastructure;All works at each hold point shall be certified as compliant in accordance with the requirements of AUSPEC Specifications for Provision of Public Infrastructure and any other Council approval, prior to proceeding to the next hold point.
- (2) (D003) The site is in an area known to contain rock that may contain naturally occurring asbestos (NOA). Should potential NOA be located on site notification shall be provided to Council and Workcover prior to works proceeding. No work shall recommence until a NOA management plan has been approved by Council or Workcover.
- (4) (D025) The sewer junction shall be capped off with an approved fitting in conjunction with demolition works and Council notified to carry out an inspection prior to backfilling of this work.
- (5) (D029) The part demolition of any existing structure shall be carried out in accordance with Australian Standard AS 2601: *The Demolition of Structures*. No demolition materials shall be burnt or buried on site. The

Page 6 of 6



person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on an adjoining public road or reserve, separate application shall be made to Council to enclose the public place with a hoarding fence.

Should asbestos be present, its removal shall be carried out in accordance with the National OH&S Committee – *Code of Practice for Safe Removal of Asbestos* and *Code of Practice for the Management and Control of Asbestos in Workplaces*.

#### **E – PRIOR TO OCCUPATION OR THE ISSUE OF OCCUPATION CERTIFICATE / SUBDIVISION CERTIFICATE**

- (1) (E001) The premises shall not be occupied or used in whole or in part until an Occupation Certificate has been issued by the Principal Certifying Authority.
- (2) (E005) Prior to the release of any bond securities held by Council for infrastructure works associated with developments, a formal written application is to be submitted to Council specifying detail of works and bond amount.
- (3) (E010) Driveways, access aisles and parking areas shall be provided with an approved surface. Such a surface shall be on a suitable pavement, constructed and maintained in accordance with Council's Development, Design and Construction Manuals (as amended).
- (4) (E034) Prior to occupation or the issuing of the Occupation Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.
- (5) (E038) Interallotment drainage shall be piped and centrally located within an inter-allotment drainage easement, installed in accordance with Council's current AUSPEC standards (minimum 150mm diameter pipe within a minimum 1.5m easement). Details shall be provided:
  - As part of a Local Government Act (s68) application with evidence of registration of the easement with the Land Titles Office provided to Council prior to issue of the s68 Certificate of Completion; or
  - As part of a Construction Certificate application for subdivision works with dedication of the easement as part of any Subdivision Certificate associated with interallotment drainage.
- (6) (E051) Prior to occupation or the issuing of any Occupation Certificate a section 68 Certificate of Completion shall be obtained from Port Macquarie-Hastings Council.
- (7) (E053) All works relating to public infrastructure shall be certified by a practicing Civil Engineer or Registered Surveyor as compliant with the requirements of AUSPEC prior to issue of Occupation/Subdivision Certificate or release of the security bond, whichever is to occur first.

- (8) (E056) A Certificate of Compliance under the provisions of Section 307 of the Water Management Act must be obtained prior to the issue of any occupation or subdivision certificate. The application for the certificate is to include an acceptable Work-As-Executed plan for water and sewer mains and services from a Professional Engineer or Registered Surveyor.
- (9) (E058) Written confirmation being provided to the Principal Certifying Authority (PCA) from any properly qualified person (eg the builder), stating that all commitments made as part of the BASIX Certificate have been completed in accordance with the certificate.
- (10) (E061) Landscaped areas being completed prior to occupation or issue of the Certificate.
- (11) (E068) Prior to the issue of a subdivision certificate, evidence to the satisfaction of the Certifying Authority from the electricity and telecommunications providers that satisfactory services arrangements have been made to the lots (including street lighting and fibre optic cabling where required).
- (12) Prior to issue of a Subdivision or Occupation Certificate, whichever occurs first, an inter-allotment drainage system, and associated 1.5m wide easement for drainage must be provided over proposed Lot 1 to enable the gravity drainage of proposed Lot 2. The easement and inter-allotment system, must comply with the requirements of AUSPEC D5.
- (13) (E195) The subdivision certificate shall not be issued until such time that the dwellings associated with this development are substantially commenced (as determined by Council) or where a strata management statement, or restriction as to user, prohibits any dwelling on each lot other than the dwelling approved as part of this consent.

#### **F – OCCUPATION OF THE SITE**

- (1) (F004) The dwellings are approved for permanent residential use and not for short term tourist and visitor accommodation.

The reason for this decision is that the site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public interest and will not result in significant adverse social, environmental or economic impacts. The conditions referred to in this schedule are imposed in conformity with the relevant provisions of the Environmental Planning and Assessment Act and Regulations, the Local Government Act and Regulations, The Building Code of Australia and with Council's Policies and Development Control Plan or any other ancillary Act or Regulation in force at the time of the date of determination. The conditions are aimed at protecting the natural environment, preserving our heritage and providing a functional, safe and healthy built environment.

**Rights of Appeal**

If you are dissatisfied with this decision:

1. A request for a review of the determination may be made to Council, under the provisions of Section 8.3 of the Environmental Planning and Assessment Act 1979.
2. Section 8.7 of the Environmental Planning and Assessment Act 1979 gives you the right of appeal to the Land and Environment Court.

DRAFT

SHEET 1 OF 1 SHEETS

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

PLAN FORM 2 (A2)

<p>LOT 1 400.5m<sup>2</sup></p> <p>LOT 2 225m<sup>2</sup></p> <p>6 / 226787</p> <p>4 / 226787</p> <p>17.985</p> <p>12.5</p> <p>12.5</p> <p>19.5</p> <p>22.53</p> <p>114.63</p> <p>0.81d</p> <p>(A)</p> <p>N</p>		<p>CAUTION</p> <p>THIS PLAN IS PRELIMINARY AND IS FOR INFORMATION ONLY. IT IS NOT TO BE USED FOR ANY PURPOSES WITHOUT FURTHER SURVEY &amp; INVESTIGATION, &amp; REGISTRATION AT THE LAND TITLES OFFICE.</p> <p>ALL AREAS &amp; DIMENSIONS ARE SUBJECT TO CONFIRMATION</p> <p>PREPARED BY:</p> <p><b>Beukers &amp; Ritter Consulting</b> SURVEYING • CIVIL &amp; STRUCTURAL ENGINEERING • TRAINING</p> <p>1000, 100 West Road Riverside, 1900, 1910 11 February 2019</p> <p>Phone: 0121 602 2700 Fax: 0121 602 2701 Email: info@beukers-ritter.co.uk</p>		Registered	DP
<p>Surveyor: Date of survey: Surveyor's ref: 11517</p>		<p>PLAN OF SUBDIVISION OF LOT 5 DP 226787</p>	<p>ILGA: Locality: Subdivision No: Lengths are in metres. Reduction ratio: 1:200</p>	<p>(A) - EASEMENT TO DRAIN WATER - 1.5 WIDE</p>	

System ref: 118erslephenslockhartDocument04	
Steve Lockhart Architectural Graphics 968 Curlew Street Port Macquarie, NSW 2444, PO Box 260 Port Macquarie, NSW 2444. P 02 6563 6393 ABN 92 192 201 542	
REF	DATE DETAILS
AMENDMENTS	
N	
Project North This builder shall check and verify all dimensions and verify all areas and omissions to the Building Designer. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Building Designer for construction.	
Project Name <b>PROPOSED DUAL OCC.</b> Site Address <b>LOT 5 DP 226787 70 HILL STREET PORT MACQUARIE 2444</b> Owner: J HILL	
Drawing Title: <b>Plans</b>	
<b>SITE ANALYSIS</b>	
Scale:	Issue Date:
<b>1:200</b>	<b>1<sup>st</sup> 25 JUN 19</b>
Designer:	Checked By:
<b>JHILL</b>	
Project No:	Drawing No:
<b>J462</b>	<b>DA01</b>
Proj Date:	26/6/19

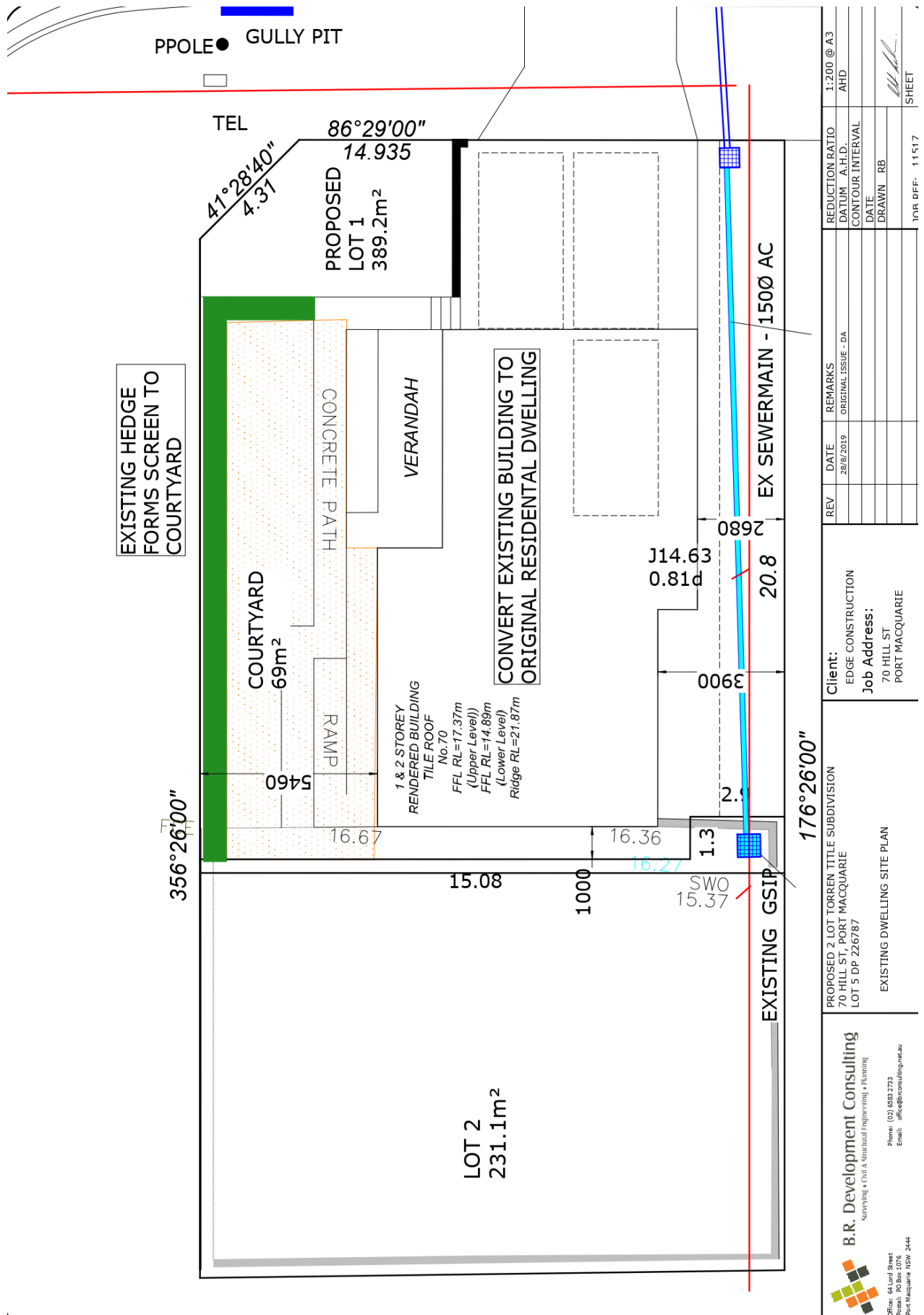


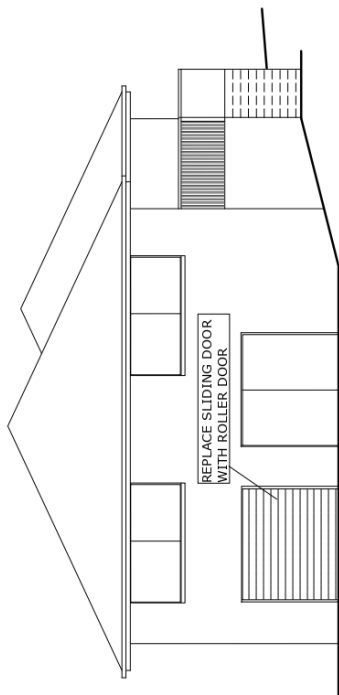
DEVELOPMENT STANDARDS PROPOSED		1	
LOT SIZE	231.1 sq m		
PROPOSED FLOOR AREAS			
HABITABLE GROSS FLOOR AREA	90.84 sq m	PROPOSED	
GARAGE FLOOR AREA	21.85 sq m	3.9 m	
DECK AND PORCH	21.45 sq m		
TOTAL SITE COVERAGE	134.14 sq m	= 58.0%	
STREET SETBACK	MINIMUM	PROPOSED	
PRIVATE OPEN SPACE	35.0 sq m	35.05 sq m	
LANDSCAPING	54.57 sq m	= 23.6%	



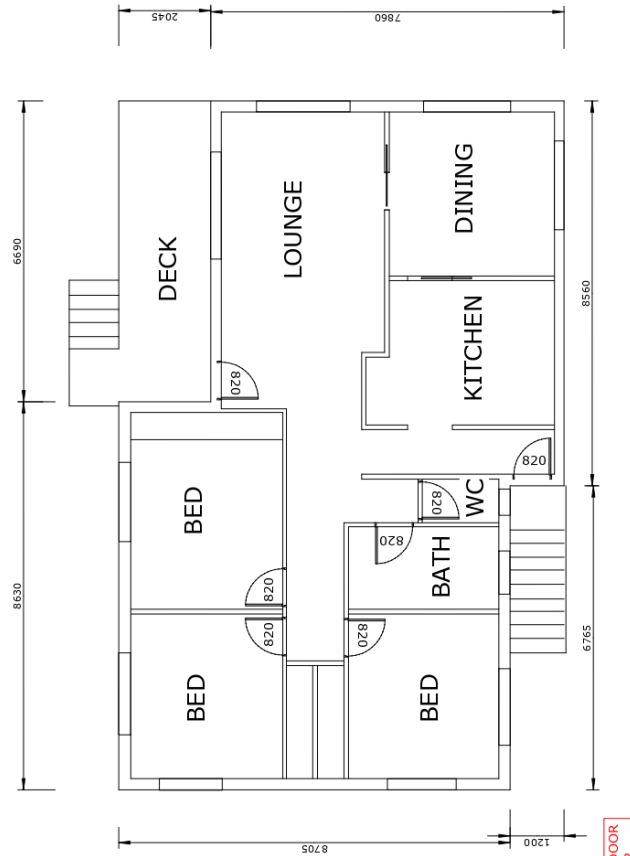
Architectural elevation drawing of the south side of a building. The drawing shows a long, low structure with a gabled roof. The roof is labeled "COLORBOND CUSTOM ORB ROOF SHEETING". The walls are labeled "SELECTED WEATHERBOARDS" and "PAINTED FLUSH JOINT BRICKWORK SUBFLOOR WALLS". There are four windows: two small square windows on the left, and two larger rectangular windows on the right. The drawing includes dimensions: 3300 for the total width and 2400 for the width of the brickwork section. A scale bar indicates 1:100. The drawing is labeled "4" and "SOUTH".

3

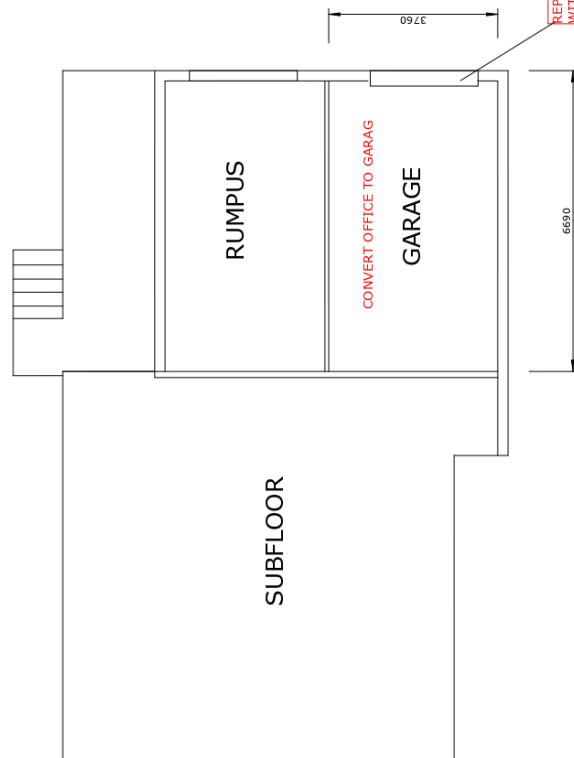





NORTHERN ELEVATION

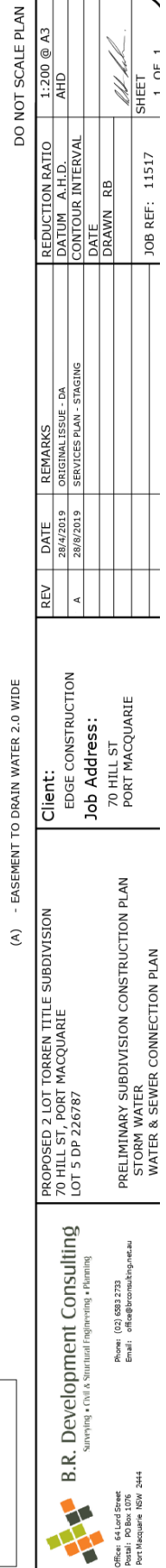


MAIN FLOOR PLAN 1:100



GROUND FLOOR PLAN 1:100

<div><div><div><b>B.R. Development Consulting</b> Surveying • Civil &amp; Structural Engineering • Planning</div><div>Office: 64 Lord Street Portail: PO Box 1076 Port Macquarie NSW 2444</div><div>Phone: (02) 6589 2733 Email: office@brconsulting.net.au</div></div></div>	<div>PROPOSED 2 LOT TORREN TITLE SUBDIVISION 70 HILL ST, PORT MACQUARIE LOT 5 DP 226787</div> <div>EXISTING DWELLING FLOOR PLANS</div>	<div><b>Client:</b> EDGE CONSTRUCTION</div> <div><b>Job Address:</b> 70 HILL ST PORT MACQUARIE</div>	REV	DATE	REMARKS	REDUCTION RATIO
				28/6/2019	ORIGINAL ISSUE - DA	A.H.D.
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						AHD
						</



## Developer Charges - Estimate

**Applicants Name:** B R Consulting Pty Ltd  
**Property Address:** 70 Hill Street, Port Macquarie  
**Lot & Dp:** Lot(s):5,DP(s):226787  
**Development:** Change of use from medical centre to dwelling and dual occupancy with torrens title subdivision



Water and Sewerage Headworks Levies are levied under S64 of the LGA Act & S306 of the Water Management Act 2000.  
 Other contributions are levied under Section 7.11 of the Environmental Planning and Assessment Act and Council's Contribution Plans.

Levy Area	Units	Cost	Estimate
1 Water Supply	0.4	\$10,190.00 Per ET	\$4,076.00
2 Sewerage Scheme Port Macquarie	0.75	\$3,866.00 Per ET	\$2,899.50
3 Since 1.7.04 - Major Roads - Port Macquarie - Per ET	0.67	\$7,638.00 Per ET	\$5,117.40
4 Since 31.7.18 - Open Space - Port Macquarie - Per ET	0.67	\$5,628.00 Per ET	\$3,770.70
5 Commenced 3 April 2006 - Com, Cul and Em Services CP - Port Macquarie	0.67	\$4,621.00 Per ET	\$3,096.00
6 Com 1.3.07 - Administration Building - All areas	0.67	\$910.00 Per ET	\$609.70
7 N/A			
8 N/A			
9 N/A			
10 N/A			
11 N/A			
12 N/A			
13 N/A			
14 N/A			
15 Admin General Levy - Applicable to Consents approved after 11/2/03	2.2% S94 Contribution		\$277.00
16			
17			
18			
<b>Total Amount of Estimate (Not for Payment Purposes)</b>			<b>\$19,846.30</b>

NOTES: These contribution rates apply to new development and should be used as a guide only.  
 Contributions will be determined in conjunction with a Development Application (DA) or Complying Development Application (CDA).  
 DAs will be subject to the contributions plans in force at the time of issue of the Consent and for CDCs at time of lodgement.  
 Contribution Rates are adjusted quarterly in line with the CPI.

DATE OF ESTIMATE:

15-Oct-2019

Estimate Prepared By Ben Roberts

This is an ESTIMATE ONLY - NOT for Payment Purposes

Consulting Pty Ltd, 70 Hill Street, Port Macquarie, 15-Oct-2019.xls

PORT MACQUARIE-HASTINGS COUNCIL



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**Item: 07**

**Subject: DA2019 - 203.1 DEMOLITION OF EXISTING BUILDINGS AND  
CONSTRUCTION OF RESTAURANT AT 24 CLARENCE STREET,  
PORT MACQUARIE**

**Report Author: Development Assessment Planning Coordinator, Patrick  
Galbraith-Robertson**

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**Applicant: All About Planning**  
**Owner: Darzi Group Pty Ltd**  
**Estimated Cost: \$1,200,000**  
**Parcel no: 4539**

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#### **Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

#### **RECOMMENDATION**

**That DA2019 - 203.1 for a demolition of existing buildings and construction of restaurant at Lot 1, DP 713378, No. 24 Clarence Street, Port Macquarie, be determined by granting consent subject to the recommended conditions.**

#### **Executive Summary**

This report considers a Development Application for demolition of existing buildings and construction of restaurant at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application on two (2) occasions, five (5) submissions were received.

The proposal has been amended during the assessment of the application in response to assessment issues. Amendments have been made to the design of the proposed building and removal of outdoor dining and parklet dining.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result in a significant adverse social, environmental or economic impact.

This report recommends that the development application be approved subject to the conditions included in Attachment 1.

## 1. BACKGROUND

### Existing Sites Features and Surrounding Development

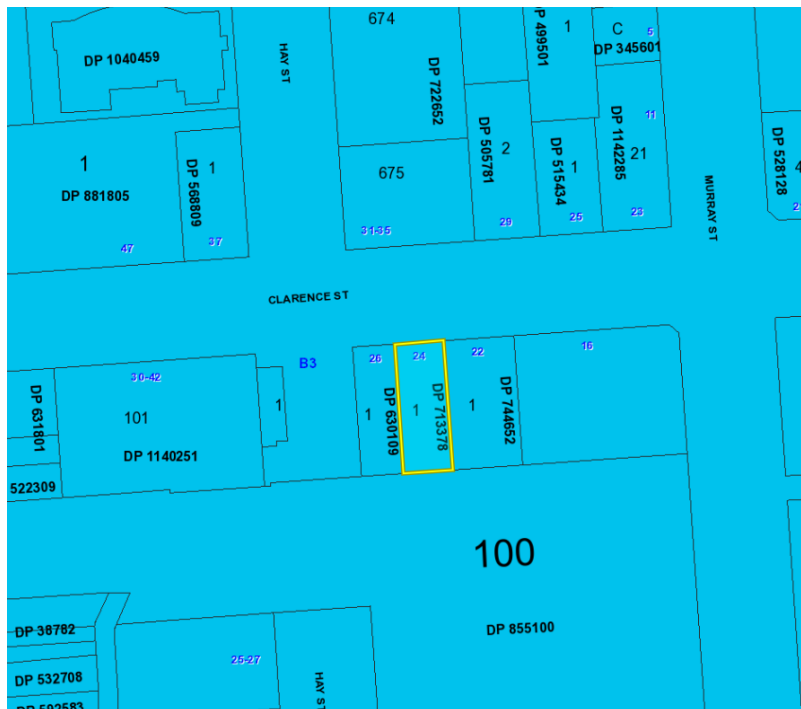
The site has an area of 614m<sup>2</sup>.

The site is currently occupied by two (2) existing commercial buildings and concrete slabs. The remainder of site is vacant and grassed.

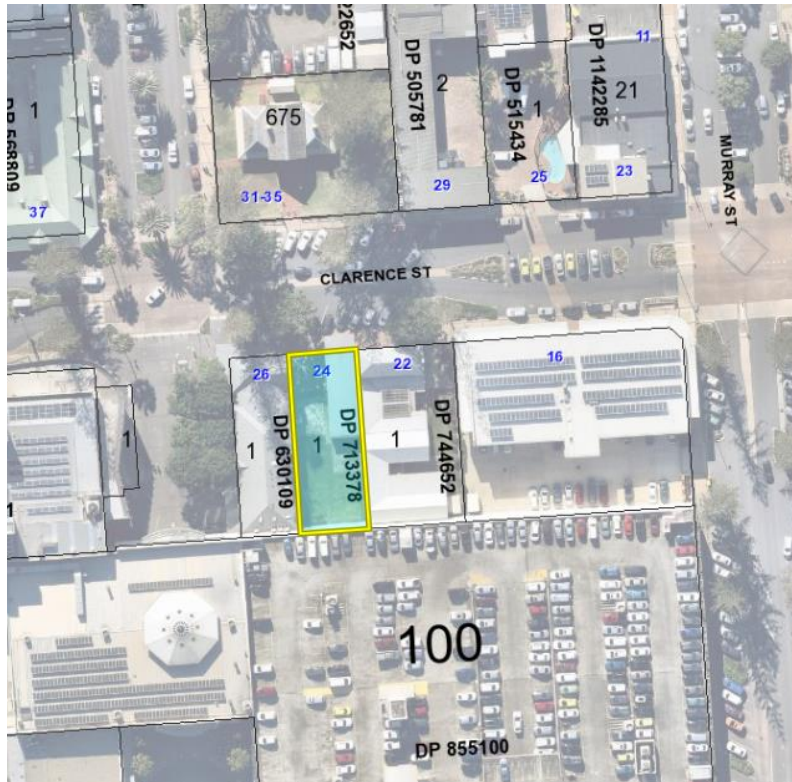
The site is located between and adjoining heritage listed items being the Port Macquarie Historical Museum and the Garrison Building and opposite the heritage listed Port Macquarie Historic Court House.

The site is located within the Port Macquarie Town Centre and adjoins the Port Central Shopping Centre.

The site is zoned B3 commercial core in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan:



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:



## **2. DESCRIPTION OF DEVELOPMENT**

Key aspects of the proposal include the following:

- Demolition of two (2) existing single storey brick buildings;
- Construction of a masonry single storey restaurant building.

Amended plans submitted include the following changes to the proposed design to address assessment issues:

- Relocation of the office/ store room from the front north eastern corner of the site towards the rear.
- Opening up of the proposed courtyard for the length of the Historic Museum existing side wall facing the site, with a 1m high planter bed.
- Lengthening to the rear of the services and storeroom opposite the above on the front north western corner.
- The on street parklet outside the site within the existing carparking spaces has been deleted.
- Revised delineation and calculation of serviced area for the restaurant; and
- The services store rooms are now single storey to reduce the scale from the previously (2) storey height.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

### **Application Chronology**

- 22 March 2019 - DA lodged with Council.
- 28 March 2019 - Referral of proposal to NSW Heritage Council for comment.
- 12 to 30 April 2019 - Neighbour notification of proposal.

- 30 April 2019 - Redacted copies of submissions forwarded to Applicant for consideration.
- 9 April 2019 - Review of proposal by Council's Heritage Advisor.
- 30 April 2019 - Advice received from the NSW Heritage Council (attached to this report).
- 2 May 2019 - Site visit by Assessing Officer.
- 2 May 2019 - Meeting with Applicant to discuss assessment issues and request additional information.
- 3 May 2019 - Additional information requested from Applicant in regards to stormwater management.
- 31 July 2019 - Additional information including heritage impact statement and amended plans received from Applicant.
- 1 August 2019 - Assessment update provided to Applicant.
- 6 to 19 August 2019 - Neighbour notification of amended proposal.
- 13 August 2019 - Review of amended proposal by Council's Heritage Advisor.
- 15 August 2019 - Heritage Advisor's advice forwarded to Applicant for consideration.
- 10 September 2019 - Amended stormwater plans received from Applicant.
- 11 October 2019 - Applicant's Consulting Engineer queried on stormwater design concept.

### **3. STATUTORY ASSESSMENT**

#### **Section 4.15(1) Matters for Consideration**

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

- (a) The provisions (where applicable) of:**  
**(i) Any Environmental Planning Instrument**

#### **State Environmental Planning Policy No. 44 - Koala Habitat Protection**

With reference to clauses 6 and 7, the subject land is less than 1 hectare (including any adjoining land under same ownership) and therefore the provisions of SEPP do not require consideration.

#### **State Environmental Planning Policy No. 55 – Remediation of Land**

Following an inspection of the site and a search of Council records, the subject land is not identified as being potentially contaminated and is suitable for the intended use.

#### **State Environmental Planning Policy No. 62 – Sustainable Aquaculture**

Given the nature of the proposed development and proposed stormwater controls (as amended) the proposal will be unlikely to have any adverse impacts on existing aquaculture industries within the nearby Hastings River.

**State Environmental Planning Policy No. 64 – Advertising and Signage**

The proposed development includes proposed advertising signage in the form of business identification sign. The proposed sign will be 1.8m x 0.6m, with a total area of 1.08m<sup>2</sup> and does not protrude more than 300mm from the wall or above the building parapet or eave.

In accordance with clause 7, this SEPP prevails over the Port Macquarie-Hastings LEP 2011 in the event of any inconsistency.

The following assessment table provides an assessment checklist against the Schedule 1 requirements of this SEPP:

Applicable clauses for consideration	Comments	Satisfactory
Clause 8(a) Consistent with objectives of the policy as set out in Clause 3(1)(a).	The proposed signage is consistent with the objectives of this policy.	Yes
Schedule 1(1) Character of the area.	The proposed "The Sicilian" signage is considered consistent and compatible with the existing and desire future character of the locality noting the adjoining heritage items and advertising in the area. The signage is modest in scale.	Yes
Schedule 1(2) Special areas.		
Schedule 1(3) Views and vistas.	No impacts to existing views or vistas with the proposed signage.	Yes
Schedule 1(4) Streetscape, setting or landscape.	The proposed sign is considered to be integrated with the overall design, it does not obscure significant architectural elements of the building (and other business identification signs are not elsewhere displayed on the building elevation). The signage is compatible with the Clarence Street streetscape. The proposal is compatible with the scale, proportion and other characteristics of the building and is rationalised and simplified in its context.	Yes
Schedule 1(5) Site and building.		
Schedule 1(6) Associated devices and logos with advertisements and advertising structures.	No logos are proposed.	N/A
Schedule 1(7) Illumination.	The sign is not proposed to be illuminated and will not result in unacceptable glare, affect safety for pedestrians, vehicles or aircraft and will not impact on any residences.	Yes
Schedule 1(7) Safety.	The signage does not reduce the safety for any public road, pedestrians or	Yes



	cyclists or obscure sightlines from public areas.	
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**State Environmental Planning Policy (Coastal Management) 2018**

The site is located within a coastal environment area within the Port Macquarie Town Centre.

In accordance with clause 7, this SEPP prevails over the Port Macquarie-Hastings LEP 2011 in the event of any inconsistency.

Having regard to clauses 13 and 14 of the SEPP the proposed development is not considered likely to result in any of the following:

- a) any adverse impact on integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment;
- b) any adverse impacts coastal environmental values and natural coastal processes;
- c) any adverse impacts on marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms;
- d) any adverse impact on marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms;
- e) any adverse impact on Aboriginal cultural heritage, practices and places;
- f) any adverse impacts on the cultural and built environment heritage;
- g) any adverse impacts the use of the surf zone;
- h) any adverse impact on the visual amenity and scenic qualities of the coast, including coastal headlands;
- i) overshadowing, wind funneling and the loss of views from public places to foreshores;
- j) any adverse impacts on existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability;

The bulk, scale and size of the proposed development is compatible with the surrounding coastal and built environment. The site is located within an area zoned for commercial purposes.

**State Environmental Planning Policy (Infrastructure) 2007**

Under the provisions of clause 104, the proposal is not identified as a traffic generating development and does not front a classified road.

**Port Macquarie-Hastings Local Environmental Plan 2011**

The proposal is consistent with the LEP having regard to the following:

- Clause 2.2 - The subject site is zoned B3 commercial core.
- Clause 2.3(1) and the B3 zone landuse table - The proposed development for a restaurant (as a form of commercial premises) is a permissible landuse with consent.

The objectives of the B3 zone are as follows:

- *To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community.*
- *To encourage appropriate employment opportunities in accessible locations.*
- *To maximise public transport patronage and encourage walking and cycling.*



- *To ensure that new residential accommodation and tourist and visitor accommodation within the zone does not conflict with the primary function of the centre for retail and business use.*
- *To provide for the retention and creation of view corridors and pedestrian links throughout the Greater Port Macquarie city centre.*

In accordance with Clause 2.3(2), the proposal is consistent with the zone objectives having regard to the following:

- the proposal is a permissible landuse; and
  - the proposal will provide a suitable retail landuse to serve the community.
- Clause 2.7 - The demolition requires consent as it does not fit within the provisions of SEPP (Exempt and Complying) 2008.
  - Clause 4.3 - The maximum overall height of the building above ground level (existing) is 4.7m which complies with the standard height limit of part 13m (north) and part 16m (south) applying to the site.
  - Clause 4.4 - The floor space ratio of the proposal is below 1:1.0 which complies with the maximum part 2.5:1(north) and part 3:1(south) floor space ratio applying to the site.
  - Clause 5.10 – The property is not listed as a heritage item in Schedule 5 Part 1 however is listed as an archaeological site in Schedule 5 Part 3.
    - (a) The proposal has been referred to the NSW Heritage Council for comment and their advice is attached to this report. The recommendations of the advice have been satisfactorily responded to by the Applicant inclusive of making design amendments to the building and providing a specialist Heritage Impact Statement prepared by John Oultram Heritage and Design. Council's Heritage Advisor has also reviewed the amended proposal and makes recommendation to support the proposal. With regards to the potential for European archaeological impacts appropriate conditions have been recommended.
  - Clause 7.3 - The site is not on land within a mapped "flood planning area" (Land subject to flood discharge of 1:100 annual recurrence interval flood event (plus the applicable climate change allowance and relevant freeboard).
  - Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development.

**(ii) Any draft instruments that apply to the site or are on exhibition**

No draft instruments apply to the site.

**(iii) Any Development Control Plan in force**

The following tables provide an assessment of the proposal against the development provisions of Port Macquarie-Hastings Development Control Plan 2013 and Development Control Plan 2011 - Port Macquarie Greater Town Centre.

<b>Parts 2 &amp; 3 - General and commercial provisions</b>			
<b>DCP Objective</b>	<b>Development Provisions</b>	<b>Proposed</b>	<b>Complies</b>
2.2.2.1	a) Signs identifying products or services are	The proposed signage is of a high quality design and	Yes

	<p>not acceptable, even where relating to products or services available on that site.</p> <p>b) Signage is not permitted outside property boundaries.</p> <p>c) An on-building 'chalkboard' sign for the purposes of describing services to goods for sale should not be larger than 1.5m<sup>2</sup>.</p> <p>d) On-premise signs should not project above or to the side of building facades</p>	<p>finish, contributing to the streetscape and identification of the premises. The sign does not dominate the streetscape, do not obscure or limit motorist or pedestrian activity or their safety.</p> <p>An assessment of the proposed signage has been included under the discussion of SEPP 64 Advertising and Signage earlier in this report.</p>	
2.3.3.1	Development shall not exceed a maximum cut of 1.0m and fill of 1.0m measured vertically above the ground level (existing) at a distance of 1.0m outside the perimeter of the external walls of the building.	As a relatively level site, the proposed development will only require minimal site disturbance through cut and fill.	Yes
2.2.3.6	All stormwater infrastructure is designed in accordance with the Council's Auspec Design Specification Documents.	<p>All stormwater from the proposed development will be collected and managed in accordance with a stormwater management plan prepared by David Johnson Engineer as submitted with the subject DA in compliance with the DCP.</p> <p>Refer to assessment comments later in this report. Appropriate consent conditions are recommended to address this matter.</p>	Yes - capable
2.5.3.3	Off-street Parking is provided in accordance with Table 2.5.1 <i>Restaurants in Commercial Zones</i> : 1 per 30m <sup>2</sup> Serviced Floor Area.	<p>The site does not currently provide for any off-street carparking. The proposal does not propose to change this arrangement.</p> <p>The proposal includes 225m<sup>2</sup> of serviceable restaurant floor area which requires <math>225/30\text{m}^2 = 7.5</math> parking spaces.</p>	No*

		The site has a 5.5 parking space credit for current approved uses on the site which equates to 165m <sup>2</sup> of commercial/retail floor space.	
2.5.3.11	Parking requirements of the community are met without imposing an additional liability on general rating revenue. To provide a mechanism to offset parking shortfalls. Contributions will be accepted in commercial areas of Port Macquarie.	As noted above, a deficiency of 2 carparking space is associated with the subject development. Council's Section 94 Contributions Plan and DCP 2013 makes provision for the levying of contributions for any shortfall in onsite carparking (in the CBD) which is recommended to be used to address the parking shortfall.	Yes
2.7.2.2	The development is to address the generic principles of crime prevention; <ul style="list-style-type: none"> <li>• Casual surveillance and sightlines;</li> <li>• Land use mix and activity generators;</li> <li>• Definition of use and ownership;</li> <li>• Basic exterior building design;</li> <li>• Lighting;</li> <li>• Way-finding; and</li> <li>• Predictable routes and entrapment locations;</li> </ul> as described in the Crime Prevention Through Environmental Design (CPTED) principles.	The site layout of the proposal achieves: <i>Effective access control</i> through the following: 1. Providing clearly visible access from the street, and differentiating the various areas within the restaurant/café. 2. Minimising unintended access by intruders to the building including secure gates locked after hours; 3. Clear delineation of private and public areas is made; <i>Surveillance:</i> The proposal achieves effective surveillance through the following: 1. The proposed buildings and structures have clear and active orientations to the sites street frontage. 2. The building entrances on Clarence Street are open and have a wide angle of visibility from the street. 3. There are no public areas with blind corners. 4. Appropriate lighting (in accordance with relevant Australian Standards) will be installed. 5. Only suitable site landscaping that does not	Yes

		<p>provide concealment opportunities will be installed (ref submitted landscaping plan).</p> <p><i>Territorial Reinforcement:</i> The proposal achieves effective territorial reinforcement through the following:</p> <ol style="list-style-type: none"> <li>1. Clear building identification.</li> <li>2. Front boundary delineation by the use of design elements, planting and other features which clearly define public and private areas.</li> </ol> <p><i>Space Management:</i> The proposal achieves effective space management and maintenance through the following:</p> <ol style="list-style-type: none"> <li>1. Using building materials and design aspects such as avoiding blank walls, and lighting design to minimise opportunities for vandalism.</li> <li>2. Use of hard wearing materials to reduce maintenance and provide the basis for an attractive,</li> </ol>	
3.4.3.1	A zero metre or consistent setback to ground floor is preferred in all business zone developments.	The proposal has adopted a zero-street setback, consistent with businesses in Clarence Street for the framed entry to the restaurant premises and the remainder of the building setback is suitable having regard to the existing context with adjoining heritage items.	Yes
3.4.3.3	<p>a) Variations in roof form including the use of skillions, gables and hips are to be provided in the development.</p> <p>b) Variations in roof materials should be used.</p> <p>c) Parapets and flat roofs should be avoided.</p> <p>d) In an established street, roof form and</p>	<p>The proposed high arched entrances provide a visually interesting design feature in this location, and hides the various sections of the roof design that sits behind.</p> <p>Variations in roof materials, and design style have been incorporated within the building to add interest and architectural detail to the restaurant. These details</p>	Yes

	<p>materials should be consistent or complementary to those developments in that street.</p> <p>e) Lift over-runs and service plant should be concealed within roof structures.</p> <p>f) All roof plant should be represented on plans and elevations.</p> <p>g) Outdoor recreation areas on flat roofs should be landscaped and incorporate shade structures and wind screens to encourage use.</p> <p>h) Roof design should generate an interesting skyline and be visually interesting when viewed from adjoining developments.</p>	<p>hide parts of the large domineering wall of the Port Central Plaza which is located on its rear southern boundary.</p> <p>The side elevations of the adjoining building do not include any windows therefore avoiding any privacy, bulk and scale and overshadowing impacts. The proposal will provide a positive contribution to the Clarence Street streetscape.</p>	
3.4.3.4	<p>Colours, construction materials and finishes should respond in a positive manner to the existing built form, character and architectural qualities of the street.</p>	<p>The proposed front archway entrance will be subservient in height and form to both of the adjoining heritage items and will not physically dominate either.</p> <p>Additionally, the proposed colours and finish for the archway will be uncomplicated and formal and will visually be complementary to the Garrison Building and less intense than the Historical Museum. The design adds positively to the streetscape, and does not detract from the surrounding heritage building's built form or character.</p>	Yes
3.4.3.5	<p>Building facades should be designed to reflect the orientation of the site incorporating environmental control devices eg. sun sheds, ventilation vents, overhangs, building</p>	<p>The building has been designed taking into consideration its orientation.</p> <p>The arched entranceway is a high quality architectural feature adding diversity to the streetscape facade.</p>	Yes



	recesses, eaves as an integrated design feature of the building.	The entry to the restaurant has alfresco open-air eating including natural ventilation, landscaping and elements of sunshade features which will make a positive contribution to reducing bulk of the building as the main roof structure is setback from the street facade. The restaurant incorporates quality architectural features in its design adding to its contemporary, unique and vibrant appearance.	
3.4.3.6	Any security grilles should be provided inside the building, behind glazing and designed to ensure transparency to the interior.	Open decorative metal gates will provide safety being locked and secured after hours. The transparency of the gates provide surveillance internally within the building. The arched entranceway also designates the public streetscape from the restaurant or private area for diners. The internal layout of the restaurant has been designed to provide a sense of space, safety and openness for patrons.	Yes
3.4.3.7	a) Infill development or alterations should respect the form, scale and massing of existing traditional buildings. b) Where traditional frontages and facades set the architectural theme for parts of a Centre, infill buildings or alterations respect and reflect the architectural qualities and traditional materials of those buildings, but do not necessarily imitate historical architectural styles.	The building has been designed to complement the existing form, scale and massing of the existing adjoining buildings.  The Port Macquarie CBD has a mix of various frontages and architectural detailing. The new restaurant frontage adds to the diversity within the commercial centre.  Given the proximity to heritage items, the design of the restaurant has been made distinctive so as to avoid imitating or lessen the worth of, the adjoining historical architectural features.	Yes
3.4.3.9	a) Active frontages	The proposed building	Yes



	<p>should consist of a shop front, café or restaurant if accompanied by an entry from the street.</p> <p>b) A minimum of 50% of the ground floor level front facade should be clear glazed.</p> <p>c) Active ground floor uses are to be accessible and at the same level as the footpath.</p> <p>d) Restaurants, cafés and the like should provide openable shop fronts to the footpath but should not encroach into footpath.</p> <p>e) Colonnade structures should not be used unless it is demonstrated that the design would not restrict visibility into the shop or commercial premise or limit natural daylight along footpaths and do not create opportunities for concealment.</p>	<p>design has incorporated an active frontage, being accessible from the streetscape, and several open arched entries provides direct visual contact through the building.</p> <p>The restaurant design will not impede pedestrian access along the streetscape.</p> <p>Further activation and liveliness will be provided by the proposed outdoor footpath dining immediately adjoining the entrance archways and the parklet dining within the roadway. Each of these are proposed under Council's policies for each component within the PMQ CBD.</p> <p>The openness of the entry provides natural light and ventilation, and the restaurant layout has been designed to reduce opportunities for concealment.</p>	
3.4.3.11	Continuous shelter from the weather is to be provided for the full extent of the active street frontage.	No awning is proposed across public footpath	No*
3.4.3.15	<p>a) A landscaping plan to be submitted with the development application.</p> <p>b) Vegetation is provided on top of podium levels fronting the street below podium level.</p>	Satisfactory landscaping proposed within the site.	Yes
3.4.3.22	<p>a) Any ramps are to be integrated into the overall building and landscape design.</p> <p>b) The development complies with AS1428 - Design for Access and Mobility.</p>	Due to the flat nature of the site and its levels relative to the footpath, the proposed development will not require access ramps and the like to provide the required access. Nevertheless, a continuous accessible path of travel will be provided	Yes

		through the development including to the uni-sex accessible/ disabled compliant toilet.	
3.4.3.24 to 3.4.3.26	Waste management both construction and operational.	A waste management plan will be submitted as part of the construction certificate. As indicated on the submitted architectural plans, a dedicated roofed and sealed garbage and recycling bin storage area is provided in the front western corner of the development with direct access off the street for servicing. Required drainage and services to this area will be provided. Appropriate consent conditions are recommended to reflect these requirements.	Yes

**Part 5 Port Macquarie Town Centre**

Development Provisions	Proposed	Complies
<p>The future heritage and leisure focus of the town for visitors and residents, Clarence Street will be a distinctive tree lined pedestrian dominated area with hotels and holiday apartments above an active street frontage lined with restaurants, heritage buildings and sidewalk cafés.</p> <p>The new buildings should respond to the heritage buildings without mimicking them.</p>	<p>The proposed restaurant development is complimentary to the variety of businesses and building styles along Clarence Street.</p> <p>The building promotes its own style, and does not mimic the heritage buildings interspersed along Clarence Street.</p> <p>The proposed building is single storey, maintaining through its design a distinctive character which is consistent with the shops/cafes/restaurants within the locality.</p> <p>Materials and finishes will be pale in colour, and incorporate lightweight indoor/outdoor spaces.</p> <p>Smaller roof forms are proposed, setback from the street behind the hard built form edge established by the entrance archway without</p>	Yes

	dominating the streetscape or adjoining heritage buildings.  The proposed front archway entrance will be subservient in height and form to both of the adjoining heritage items	
<b>Façade Enclosure</b> OB6 - To have the ground floor have a high percentage of enclosures to provide a consistent edge to the streets and an urban character.	The design of the proposal has been assessed as being suitable particularly having regard to the existing adjoining heritage items.	Yes/No - acceptable
<b>Roof Design</b> OB7 – To improve the roofscapes impression of the Town Centre	The architectural plans/design of this single storey restaurant building has considered the adjoining heritage building features including roof forms.	Yes
<b>Block controls B(12)</b>	The design of the proposal has been assessed as being suitable particularly having regard to the existing adjoining heritage items.  The treatment of the eastern section of the building in consultation with Council's Heritage Advisor is acceptable.	Yes/No

The proposal seeks to vary Development Provision relating to the standard requirements for provision of calculated off-street parking. As detailed above, the proposal has a calculated shortfall of two (2) parking spaces.

The relevant objectives are:

- *Adequate provision is made for off-street parking commensurate with volume and turnover of traffic likely to be generated by the development.*
- *To ensure no adverse impacts on traffic and road function.*

The Applicant has submitted a request to support the variation to 2 space parking requirement and also waive any the requirement for payment of development contributions for the following reasons:

- The degree of variation is only minor and not significant;
- The proposal represents a significant investment in the Port Macquarie CBD by the proponent who is a motivated and experienced restaurateur who has wanted to open a premises in Port Macquarie for an extended period of time;
- The development will be a highly prominent addition to the hospitality sector of Port Macquarie that will be a significant enhancement to the dining options currently available;
- As a restaurant the nature of trade will be such that much of its operation is outside of regular daytime business hours thereby reducing potential impacts on parking demand in the CBD.
- Much trade of the proposal as a restaurant involves multi-purpose trips where patrons can be undertaking a number of tasks in the one trip to the CBD

including working in businesses, shopping, utilising one form or the other of commercial, legal or real estate services, attending a medical practice for an appointment, tourists staying in CBD accommodation, enjoying a concert or show at The Glasshouse, or a movie at the Majestic Cinema Complex, all in addition to enjoying a meal at the proposed restaurant. This will reduce the actual parking demand from the proposal.

The above request has been carefully considered and assessed. It is recommended that above request not be supported however the parking space variation be supported subject to payment of the development contributions in accordance with Section 2.5.3.11 of the DCP 2013.

Having regard for the development provisions and relevant objectives, the variation is considered acceptable for the following reasons:

- The parking variation is minor;
- A Development Contributions Plan and DCP 2013 permits the payment of contributions in lieu of provision of parking on-site;
- The proposal does not reduce the amount of street parking in Clarence Street with any new proposed driveway access noting this is the only access to the site; and
- The site does not currently have off-street parking.

The proposal seeks to vary Development Provision relating to not providing a street awning.

The relevant objectives are:

- *To provide pedestrian amenity by the provision of weather protection.*

Having regard for the development provisions and relevant objectives, the variation is considered acceptable for the following reasons:

- The design of the proposal has been assessed as being suitable particularly having regard to the existing adjoining heritage items; and
- Council's Heritage Advisor has recommended that a street awning not be provided given the existing context between the existing adjoining heritage items.

Based on the above assessment, the variations proposed to the provisions of the DCP are considered acceptable and the relevant objectives have been satisfied.

Cumulatively, the variations do not amount to an adverse impact or a significance that would justify refusal of the application.

**(iiia) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4**

No planning agreement has been offered or entered into relating to the site.

**(iv) Any matters prescribed by the Regulations**

**Demolition of buildings AS 2601 – Clause 92**

Demolition of the existing buildings on the site are capable of compliance with this Australian Standard. An appropriate standard consent condition is recommended.

**(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality**

**Context and setting**

The proposal will be unlikely to have any adverse impacts to existing adjoining properties and satisfactorily addresses the public domain.

The proposal is considered to be sufficient compatible with other existing commercial development in the locality including existing heritage buildings and adequately addresses planning controls for the area.

The proposal does not have a significant adverse impact on existing view sharing.

The proposal does not have significant adverse lighting impacts.

**Access, Traffic and Transport**

The proposal will not have any significant adverse impacts in terms access, transport and traffic. The existing immediate road network will satisfactorily cater for any increase in traffic generation as a result of the development.

**Water Supply Connection**

Council records indicate that the development site an existing 20mm metered water service.

Final water service sizing will need to be determined by a hydraulic consultant to suit the domestic and commercial components of the development, as well as fire service and backflow protection requirements.

Detailed plans will be required to be submitted for assessment with the S.68 application.

Appropriate consent conditions have been recommended to address water supply requirements.

**Sewer Connection**

Council records indicate that the development site is connected to sewer via junction to the existing sewer line that runs along the southern property boundary.

The development must drain sewage to an existing point of connection to Council's sewer system.

The proposal will require a trade waste system to be installed and sized accordingly to meet the sewerage intakes of the development.

Detailed plans will be required to be submitted for assessment with the Section 68 application.

Appropriate consent conditions have been recommended to address sewer servicing requirements.

**Stormwater**



The site naturally grades towards the Clarence Street frontage and is currently drained to the existing kerb inlet pit at that site frontage. This pit will also be the legal point of discharge for the proposed development.

A stormwater drainage plan has been submitted in support of the development application and includes the on-site stormwater detention facilities which have conceptually been designed to limit site stormwater discharge to a rate less than or equal to pre-development rates.

This detention system is located beneath the floor of the building, adjoining the Clarence Street frontage of the site and is drained directly to the stormwater pit referred to above.

A review of the proposed detention system and associated summary calculations indicate that the system achieves compliance with AUSPEC requirements with regard to stormwater discharge rates pre and post development. Furthermore, correspondence between Council's Senior Stormwater Engineer and the applicants Engineer confirm that the system has been designed in accordance with the current version of Australian Rainfall and Runoff 2019 and having regard for the likely elevated tail water levels in the downstream drainage system.

Appropriate consent conditions have been recommended to address stormwater servicing requirements.

**Other Utilities**

Telecommunication and electricity services are available to the site.

**Heritage**

Refer to comments provided earlier in this report addressing the heritage requirements of the Port Macquarie-Hastings Local Environmental Plan 2011.

**Other land resources**

The site is within an established urban context and will not sterilise any significant mineral or agricultural resource.

**Water cycle**

The proposed development will be unlikely to have any adverse impacts on water resources and the water cycle.

**Soils**

The proposed development will be unlikely to have any adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

**Air and microclimate**

The construction and/or operations of the proposed development will be unlikely to result in any adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

**Flora and fauna**

Construction of the proposed development will not require any removal/clearing of any native vegetation and therefore does not trigger the biodiversity offsets scheme. Part 7 of the Biodiversity Conservation Act 2016 is considered to be satisfied.



**Waste**

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated. Standard precautionary site management condition recommended.

**Energy**

The proposal includes measures to address energy efficiency and will be required to comply with the requirements of Section J of the Building Code of Australia. No adverse impacts anticipated.

**Noise and vibration**

No adverse impacts anticipated. Condition recommended to restrict construction to standard construction hours.

**Bushfire**

The site is not identified as being bushfire prone.

**Safety, security and crime prevention**

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area. The design of the restaurant and orientation will improve natural surveillance within this section of the Port Macquarie Town Centre locality.

**Social impacts in the locality**

Given the nature of the proposed development and its' location the proposal is unlikely to result in any adverse social impacts.

**Economic impact in the locality**

No adverse impacts. A likely positive impact is that the development will maintain employment in the construction industry, which will lead to flow impacts such as expenditure in the area.

**Site design and internal design**

The proposed development design satisfactorily responds to the site attributes and will fit into the locality. No adverse impacts likely.

**Construction**

No potential adverse impacts identified to neighbouring properties with the construction of the proposal.

**Cumulative impacts**

The proposed development is not expected to have any adverse cumulative impacts on the natural or built environment or the social and economic attributes of the locality.

**(c) The suitability of the site for the development**

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

Site constraints of existing European heritage and adjoining and adjacent heritage has been adequately addressed and appropriate conditions of consent recommended.

**(d) Any submissions made in accordance with this Act or the Regulations**

Five (5) written submissions were received following public exhibition of the application on two (2) occasions. Copies of the written submissions have been provided separately to members of the DAP.

Key issues raised in the submissions received and comments are provided as follows:

Submission Issue/Summary	Planning Comment/Response
Concern with removal of 4 parking spaces in Clarence Street with parklet.	Proposal has been amended to remove parklets in Clarence Street.
The sewer mains within the locality are at capacity.	Council's Water & Sewer section have reviewed the proposal and raised no objections to the proposal subject to conditions. Refer to comments earlier in this report.
The demolition and construction processes at 24 Clarence Street has the potential to highly impact the businesses and their customers at 26 Clarence Street. To minimise any disruption to these businesses trading capacity, it would be strongly preferred that works could be undertaken outside of normal trading hours.	Appropriate standard conditions are recommended with flexibility for Council to approve variations to construction hours in certain circumstances.
The proposal fails to appropriately acknowledge or respect the cultural precinct in which the development will be taking place, nor the architectural features of the nearby State significant buildings.	The proposal has been amended to address compatibility of the proposal within the existing context. Council's Heritage Advisor supports the proposal as amended.
Proximity of proposed structures to the external western wall of the adjoining Museum building which are too close and jeopardise any conservation work and place it at permanent risk of future damage both during the construction phase and afterwards given we will have restricted external access to it.	A revised proposal has been submitted. Changes have been incorporated in the principal areas of assessment and submissions concern including: <ul style="list-style-type: none"> <li>• Removal of potential abutments to the Port Macquarie Museum building, setting the Office back to the south of the building.</li> <li>• Setting the street front façade back from the principal street alignment.</li> <li>• Providing clearance between the built elements of the proposal to any built element on the adjacent eastern site.</li> <li>• Adjustment of the colonnaded façade elemental heights and relating the components to the adjacent buildings.</li> <li>• The provision of a street elevation demonstrating the fit of the intervention.</li> </ul>
Suggest that the development be set back to enable not only access to our building but that it could form an interesting feature of the new development.	

Submission Issue/Summary	Planning Comment/Response
	<ul style="list-style-type: none"> <li>• Provision of a Statement of Heritage Impact prepared by John Oultram Heritage and Design. Council's Heritage Advisor supports the proposal as amended.</li> </ul>
The proposal has failed to adequately assess the heritage impacts of the development on both the streetscape and the heritage buildings in the precinct, nor does it adequately address the requirements of its Archaeological Management Zoning.	A heritage impact statement has been submitted during the assessment of the DA. This has been reviewed as being acceptable together with the amendments made to the proposal.
The idea of a 'screen' type street-edge structure at the front boundary is broadly supported. However, the proposed faux-"Roman" detail and proportions of the masonry rendered and arched wall are not appropriate in this case. This element does not reference the proportions, form and fenestration pattern of the Museum or Garrison buildings nor is it an appropriate use of this architectural language in an Australian colonial context.	The proposal has been amended to address compatibility of the proposal within the existing context. Council's Heritage Advisor supports the proposal as amended.

**(e) The Public Interest**

The proposed development satisfies relevant planning controls including justified variations to standard planning controls and will not adversely impact on the wider public interest.

**4. DEVELOPMENT CONTRIBUTIONS APPLICABLE**

- Development contributions will be required towards augmentation of town water supply and sewerage system head works under Section 64 of the Local Government Act 1993.
- Development contributions will be required in accordance with Section 7.11 of the Environmental Planning and Assessment Act 1979 towards public parking.  
(b)
- A copy of the contributions estimate is included as Attachment 3.

**5. CONCLUSION AND STATEMENT OF REASON**

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social,

environmental or economic impact. It is recommended that the application be approved, subject to the recommended conditions of consent provided in the attachment section of this report.

**Attachments**

- 1 [View](#). DA2019 - 203.1 Recommended Conditions
- 2 [View](#). DA2019 - 203.1 Plans and Supporting Documents
- 3 [View](#). DA2019 - 203.1 Contribution Estimate

**FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF  
PROPOSED CONDITIONS****NOTE: THESE ARE DRAFT ONLY****DA NO: 2019/203****DATE: 15/10/2019****PRESCRIBED CONDITIONS**

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations* 2000.

**A – GENERAL MATTERS**

- (1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

<b>Plan / Supporting Document</b>	<b>Reference</b>	<b>Prepared by</b>	<b>Date</b>
Development plans	Drawing numbers 01 to 06	Craig Teasdell Architect	2 July 2019
Site survey plan	Sheet 1	Coastal Survey Solutions	18 March 2018
Heritage Impact Statement		John Oultram Heritage & Design	July 2019

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A002) No work shall commence until a Construction Certificate has been issued and the applicant has notified Council of:
- the appointment of a Principal Certifying Authority; and
  - the date on which work will commence.

Such notice shall include details of the Principal Certifying Authority and must be submitted to Council at least two (2) days before work commences.

- (3) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (4) (A009) The development site is to be managed for the entirety of work in the following manner:
- Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
  - Appropriate dust control measures;
  - Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work

adjoins the public domain, fencing is to be in place so as to prevent public access to the site;

4. Building waste is to be managed via appropriate receptacles into separate waste streams;
5. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
6. Building work being limited to the following hours, unless otherwise permitted by Council;
  - Monday to Saturday from 7.00am to 6.00pm
  - No work to be carried out on Sunday or public holidays

The builder to be responsible to instruct and control his sub-contractors regarding the hours of work.

- (5) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (6) (A012) This consent does not provide for staging of the development. Any staging will require a separate consent or an amendment to this consent.
- (7) (A013) The general terms of approval from the following authorities, as referred to in section 4.50 of the Environmental Planning and Assessment Act 1979, and referenced below, are attached and form part of the consent conditions for this approval.

- **NSW Office of Environment and Heritage** - Written advice in relation to heritage impacts, Reference DOC19/289097 and dated 30 April 2019, are attached and form part of this consent.

- (8) (A014) This approval does not provide any indemnity to the owner or applicant under the Disability Discrimination Act 1992 with respect to the provision of access and facilities for people with disabilities.
- (9) (A033) The applicant shall provide security to the Council for the payment of the cost of the following:
  - a. making good any damage caused to any property of the Council as a consequence of doing anything to which the consent relates,
  - b. completing any public work (such as road work, kerbing and guttering, footway construction, utility services, stormwater drainage and environmental controls) required in connection with the consent,
  - c. remedying any defects in any such public work that arise within twelve (12) months after the work is completed.

Such security is to be provided to Council prior to the issue of the Subdivision Certificate/Construction Certificate or Section 138 of the Roads Act, 1993.

The security is to be for such reasonable amount as is determined by the consent authority, being an amount that is 10% of the contracted works for Torrens Title subdivision development/the estimated cost plus 30% for building development of public works or \$5000, whichever is the greater of carrying out the development by way of:

- i. deposit with the Council, or
- ii. an unconditional bank guarantee in favour of the Council.

The security may be used to meet any costs referred to above and on application being made to the Council by the person who provided the security any balance remaining is to be refunded to, or at the direction of, that person. Should Council have to call up the bond and the repair costs exceed the bond



amount, a separate invoice will be issued. If no application is made to the Council for a refund of any balance remaining of the security within 6 years after the work to which the security relates has been completed the Council may pay the balance to the Chief Commissioner of State Revenue under the Unclaimed Money Act 1995.

- (10) (A059) Commercial food preparation activities which generate greasy/oily types of liquid trade waste are required to install an approved grease arrestor pit with a minimum capacity to be sized according to inflow. Installation is to be performed by a licenced plumber and drainer, at Council's direction and to Council's satisfaction. Further advice or assistance can be given by Council's Trade Waste Officer.
- (11) (A062) The Applicant shall submit to Port Macquarie-Hastings Council plans for the management of trade waste including pre treatment facilities to the sewerage authority for approval pursuant to Section 68 of the Local Government Act. Upon approval the proponent shall enter into a written "Trade Waste Agreement" with Council prior to discharging wastes.

#### **B – PRIOR TO ISSUE OF A CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
  - Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
  1. Sewerage reticulation.
  2. Water supply plans shall include hydraulic plans for internal water supply services and associated works in accordance with AS 3500, Plumbing Code of Australia and Port Macquarie-Hastings Council Policies.
  3. Stormwater systems.
  4. Erosion & Sedimentation controls.
- (3) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

  - Civil works
  - Traffic management
  - Work zone areas
  - Hoardings
  - Concrete foot paving (width)

- Footway and gutter crossing
  - Functional vehicular access
- (4) (B010) Payment to Council, prior to the issue of the Construction Certificate of the Section 7.11 contributions set out in the "Notice of Payment – Developer Charges" schedule attached to this consent unless deferral of payment of contributions has been approved by Council. The contributions are levied, pursuant to the Environmental Planning and Assessment Act 1979 as amended, and in accordance with the provisions of the following plans:

- Port Macquarie-Hastings Contributions Plan 1993 - Part C – Car Parking
- Hastings S94 Administration Levy Contributions Plan

The plans may be viewed during office hours at the Council Chambers located on the corner of Burrawan and Lord Streets, Port Macquarie, 9 Laurie Street, Laurieton, and High Street, Wauchope.

The attached "Notice of Payment" is valid for the period specified on the Notice only. The contribution amounts shown on the Notice are subject to adjustment in accordance with CPI increases adjusted quarterly and the provisions of the relevant plans. Payments can only be made using a current "Notice of Payment" form. Where a new Notice of Payment form is required, an application in writing together with the current Notice of Payment application fee is to be submitted to Council.

- (5) (B011) As part of Notice of Requirements by Port Macquarie-Hastings Council as the Water Authority under Section 306 of the Water Management Act 2000, the payment of a cash contribution, prior to the issue of a Construction Certificate, of the Section 64 contributions, as set out in the "Notice of Payment – Developer Charges" schedule attached to this consent unless deferral of payment of contributions has been approved by Council. The contributions are levied in accordance with the provisions of the relevant Section 64 Development Servicing Plan towards the following:
- augmentation of the town water supply headworks
  - augmentation of the town sewerage system headworks
- (6) (B012) To ensure that adequate provision is made for the cleanliness and maintenance of all food preparation areas, all work involving construction or fitting out of the premises shall comply with the requirements of Australian Standard 4674-2004 – "Design, Construction and Fit-Out of Food Premises", Food Act 2003, the provisions of the Food Safety Standards Code (Australia) and the conditions of development consent. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to release of the Construction Certificate.
- (7) (B038) Footings and/or concrete slabs of buildings adjacent to sewer lines or stormwater easements are to be designed so that no loads are imposed on the infrastructure. Detailed drawings and specifications prepared by a practising chartered professional civil and/or structural engineer are to be submitted to the Principal Certifying Authority with the application for the Construction Certificate.
- (8) (B048) Prior to the issue of a Construction Certificate, provision shall be made for the storage of garbage containers and containers for recyclable material in a designated garbage area. If an external area is used for the storage of putrescible material, then the area shall be:

- a. Bunded with a minimum volume of the bund being capable of containing 110% of the capacity of the largest container stored, or 25% of the total storage volume, whichever is the greatest.
  - b. Provided with a hose tape connected to the water supply;
  - c. Paved with impervious material;
  - d. Graded and drained to the sewer system, and
  - e. Roofed to prevent the entry rainwater.
- (9) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
- a) The legal point of discharge for the proposed development is defined as Council's piped system.
  - b) All allotments must be provided with a direct point of connection to the public piped drainage system. Kerb outlets are not permitted.
  - c) The design requires the provision of interallotment drainage in accordance with AUSPEC D5
  - d) The design shall incorporate on-site stormwater detention facilities to limit site stormwater discharge to pre development flow rates for all storm events up to and including the 100 year ARI event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
  - e) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
  - f) Updated modelling and an OSD design that includes the tail water requirements of AUSPEC D5. In this regard, where downstream tail water levels are unknown, the modelling shall be updated to include a tail water level equal to a level of 150mm below the grate level in the downstream kerb inlet pit.
- (10) (B057) The existing sewer including junction and/or stormwater drainage shall be located on the site and the position and depth indicated on the plans which accompany the application for the Construction Certificate.
- (11) (B061) Prior to release of the Construction Certificate submission of a Waste Management Plan to the Principal Certifying Authority, in accordance with Council's current requirements.
- (12) (B071) Prior to the issue of any Construction Certificate, the provision of water and sewer services to the land are to be approved by the relevant Water Authority and relevant payments received.
- (13) (B195) Council records indicate that the development site an existing 20mm metered water service. Final water service sizing will need to be determined by a hydraulic consultant to suit the domestic and commercial components of the development, as well as fire service and backflow protection requirements. Details are to be submitted with the application for Construction Certificate.
- (14) (B196) Council records indicate that the development site is connected to sewer via junction to the existing sewer line that runs along the southern property boundary. The development must drain sewage to an existing point of connection to Council's sewer system. Details are to be submitted with the application for Construction Certificate.

**C – PRIOR TO ANY WORK COMMENCING ON SITE**

- (1) (C001) A minimum of one (1) week's notice in writing of the intention to commence works on public land is required to be given to Council together with the name of the principal contractor and any major sub-contractors engaged to carry out works. Works shall only be carried out by a contractor accredited with Council.
- (2) (C013) Where a sewer manhole and Vertical Inspection Shaft exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

**D – DURING WORK**

- (1) (D001) Development works on public property or works to be accepted by Council as an infrastructure asset are not to proceed past the following hold points without inspection and approval by Council. Notice of required inspection must be given 24 hours prior to inspection, by contacting Council's Customer Service Centre on (02) 6581 8111. You must quote your Construction Certificate number and property description to ensure your inspection is confirmed:
  - a. when trenches are open, stormwater/water/sewer pipes and conduits jointed and prior to backfilling;All works at each hold point shall be certified as compliant in accordance with the requirements of AUSPEC Specifications for Provision of Public Infrastructure and any other Council approval, prior to proceeding to the next hold point.
- (2) (D003) The site is in an area known to contain rock that may contain naturally occurring asbestos (NOA). Should potential NOA be located on site notification shall be provided to Council and Workcover prior to works proceeding. No work shall recommence until a NOA management plan has been approved by Council or Workcover.
- (3) (D006) A copy of the current stamped approved construction plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.
- (4) (D007) A survey certificate from a registered land surveyor is to be submitted to the Principal Certifying Authority at footings and/or formwork stage. Such certificate shall set out the boundaries of the site, the actual situation of the buildings and include certification that siting levels comply with the approved plans.
- (5) (D025) The sewer junction shall be capped off with an approved fitting in conjunction with demolition works and Council notified to carry out an inspection prior to backfilling of this work.
- (6) (D029) The demolition of any existing structure shall be carried out in accordance with Australian Standard AS 2601: *The Demolition of Structures*. No demolition materials shall be burnt or buried on site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on an adjoining public road or reserve, separate application shall be made to Council to enclose the public place with a hoarding fence.

Should asbestos be present, its removal shall be carried out in accordance with the National OH&S Committee – *Code of Practice for Safe Removal of Asbestos* and *Code of Practice for the Management and Control of Asbestos in Workplaces*.

- (7) (D033) Should any Aboriginal objects be discovered in any areas of the site then all excavation or disturbance to the area is to stop immediately and the National Parks and Wildlife Service, Department of Environment and Conservation is to be informed in accordance with Section 91 of the *National Parks and Wildlife Act 1974*. Subject to an assessment of the extent, integrity and significance of any exposed objects, applications under either Section 87 or Section 90 of the *National Parks and Wildlife Act 1974* may be required before work resumes.
- (8) (D046) Should any historical relics be unexpectedly discovered in any areas of the site not subject to an excavation permit, then all excavation or disturbance to the area is to stop immediately and the Heritage Council of NSW is to be informed in accordance with Section 146 of the *Heritage Act 1977*.

#### **E – PRIOR TO OCCUPATION OR THE ISSUE OF OCCUPATION CERTIFICATE**

- (1) (E001) The premises shall not be occupied or used in whole or in part until an Occupation Certificate has been issued by the Principal Certifying Authority.
- (2) (E005) Prior to the release of any bond securities held by Council for infrastructure works associated with developments, a formal written application is to be submitted to Council specifying detail of works and bond amount.
- (3) (E025) Prior to occupation or the issue of an Occupation Certificate, provide a certificate from the installer certifying that the mechanical ventilation system meets the requirements of AS 1668 Parts 1 & 2. The certificate must include:
  - a. Inspection, testing and commissioning details
  - b. Date of inspection, testing and commissioning
  - c. The name and address of the individual/company, who carried out the test
  - d. Statement that the service has been designed, installed and is capable of operating to AS 1668.
- (4) (E027) Prior to issue of an Occupation Certificate, a final site inspection relating to the works carried out on the premises shall be arranged by the applicant and shall be undertaken by Council's Environmental Health Officer.
- (5) (E039) An appropriately qualified and practising consultant is required to certify the following:
  - a. all drainage lines have been located within the respective easements, and
  - b. any other drainage structures are located in accordance with the Construction Certificate.
  - c. all stormwater has been directed to a Council approved drainage system
  - d. all conditions of consent/ construction certificate approval have been complied with.
  - e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (6) (E040) Each onsite detention system is to be marked by a plate in a prominent position which states:

"This is an onsite detention system. It is an offence to reduce the volume of the tank or basin or interfere with any part of the structure that controls the outflow".

This plate is to be fixed into position prior to occupation or the issue of the Occupation or Subdivision Certificate.

- (7) (E046) Prior to the issue of an Occupation Certificate, a positive covenant is to be created under Section 88E of the Conveyancing Act 1919, burdening the owner(s) with the requirement to maintain the on-site stormwater detention facilities on the property.

The terms of the 88E instrument with positive covenant shall include, but not be limited to, the following:

- a. The Proprietor of the property shall be responsible for maintaining and keeping clear all pits, pipelines, trench barriers and other structures associated with the on-site stormwater detention facilities ("OSD").
- b. The Proprietor shall have the OSD inspected annually by a competent person.
- c. The Council shall have the right to enter upon the land referred to above, at all reasonable times to inspect, construct, install, clean, repair and maintain in good working order all pits, pipelines, trench barriers and other structures in or upon the said land which comprise the OSD or which convey stormwater from the said land; and recover the costs of any such works from the proprietor.
- d. The registered proprietor shall indemnify the Council and any adjoining land owners against damage to their land arising from the failure of any component of the OSD, or failure to clean, maintain and repair the OSD.

The proprietor or successor must bear all costs associated in the preparation of the subject 88E instrument. Evidence of registration with the Lands and Property Information NSW shall be submitted to and approved by the Principal Certifying Authority prior to the issue of an Occupation Certificate.

- (8) (E051) Prior to occupation or the issuing of any Occupation Certificate a section 68 Certificate of Completion shall be obtained from Port Macquarie-Hastings Council.
- (9) (E056) A Certificate of Compliance under the provisions of Section 307 of the *Water Management Act* must be obtained prior to the issue of any occupation certificate.

#### **F – OCCUPATION OF THE SITE**

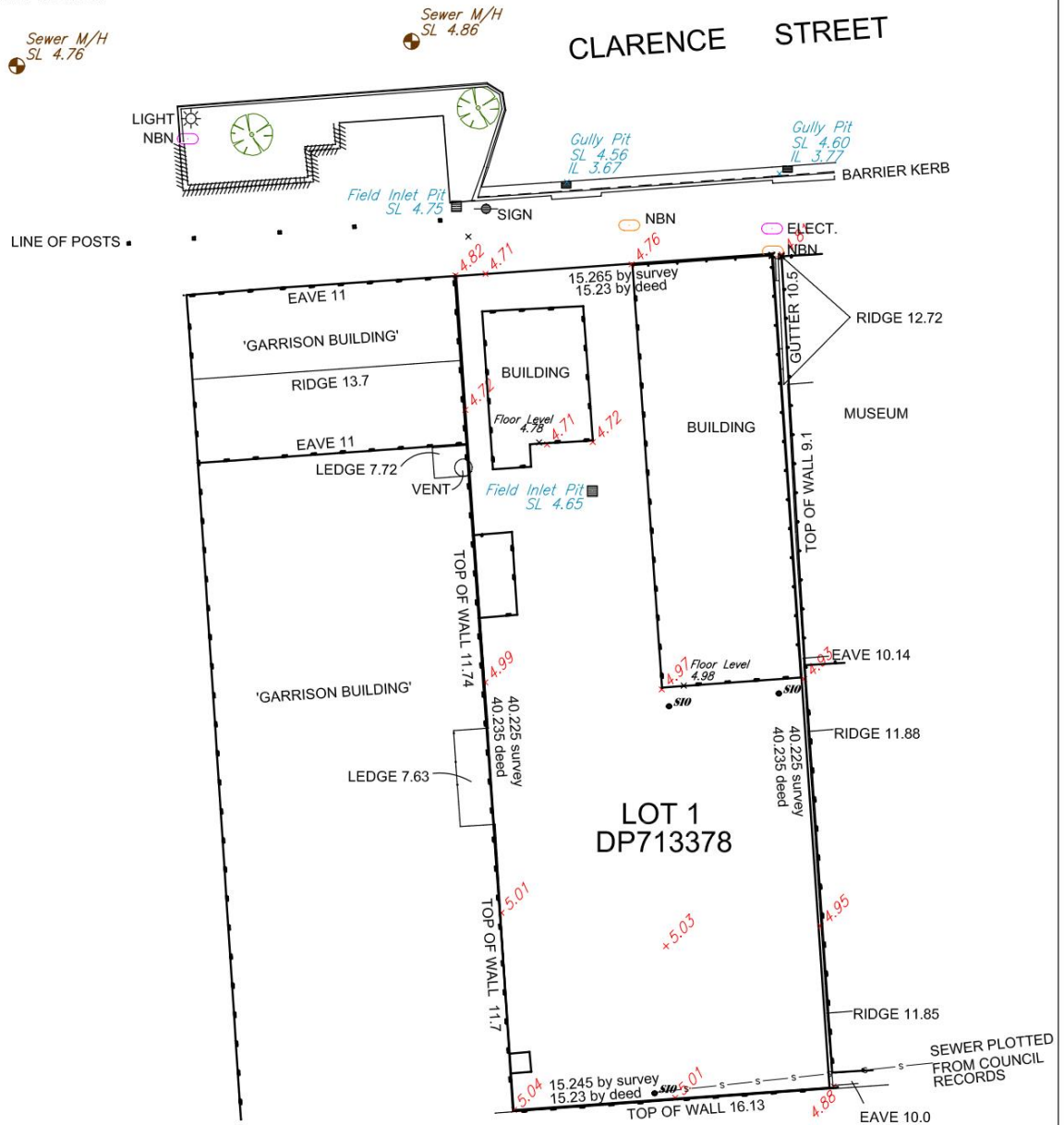
- (1) (F009) All new and existing essential fire safety measures shall be maintained in working condition at all times.
- (2) (F013) All garbage areas are to be screened from the street, create no adverse odour impact on adjoining properties and be kept free of pests at all times.
- (3) All garbage is to be collected by way of private garbage collection arrangements with a suitable service provider.
- (4) (F024) Offensive noise as defined under the Protection of the Environment Operations Act 1997, shall not be generated as a result of the operation of the development.
- (5) (F025) Hours of operation of the development are restricted to the following hours:
  - 7am to 10pm – Mondays to Sundays





## NOTES:-

- i) SERVICE PITS SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. LOCATION OF SERVICE LINES WHERE SHOWN ARE APPROXIMATE
- ii) PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE THE RELEVANT SERVICE AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATION OF ALL SERVICES
- iii) CADASTRAL BOUNDARIES SHOWN HEREON HAVE BEEN COMPILED FROM PLANS ON PUBLIC RECORD AND DETERMINED FROM LIMITED SURVEYED CONNECTIONS. A COMPLETE SURVEY REDEFINITION HAS NOT BEEN DONE.
- iv) SEWER HAS NOT BEEN SURVEYED



SCALE: 1:200		ORIGINAL SHEET SIZE A3	 <b>COASTAL SURVEY SOLUTIONS</b> CONSULTING SURVEYORS AND PLANNERS 7 WILLOW PLACE PORT MACQUARIE NSW 2444 PO BOX 2223 PMQ Ph. 65 837574 Mobile 0488 464 844 mar@coastalsurveysolutions.com.au	DETAIL AND CONTOUR SURVEY		ROAD NO: 8067	SHEET NO. 1	NO. OF SHEETS 1	COUNCIL PLAN NO.
DRAWN: RND	JOB No: 8067	DESIGNED: NA				CONV NO: C0407			
ORIGIN: SSM00081	DATE: 16/03/2018	DRAWN: MC	<b>LOT 1 DP 713378</b> <b>PORT MACQUARIE</b>		CLIENT: DARZI GROUP		REF: 8067		
RAJ: 4.435	SURVEYED: LE	CHECKED:							



DEVELOPMENT APPLICATION

SUITE SF 21 CLARENCE STREET  
PORT MACQUARIE NSW 2444  
M: 0498 600 340  
E: craig@portmacquariearchitect.com.au

Craig Teasdale  
ARCHITECT

This builder must check all dimensions and levels on site prior to construction.  
The drawings are not to be used for construction purposes until issued for construction.  
All dimensions and details are subject to survey.

REVISIONS  
A REVISION IS ISSUED FOR DEVELOPMENT APPLICATION  
AND FOR THE FINAL DEVELOPMENT PLAN.

RESTAURANT & BAR  
24 CLARENCE STREET  
LOT 1 DP713378  
DP713378 L&P 7/11 L&P

PHOTO MONTAGE  
DATE: 05/05/2019 @ 14:20  
FILE: 2719

DRAWING NUMBER  
01  
REV: R



The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey.

SUITE 5F 23 CLARENCE STREET  
PORT MACQUARIE NSW 2444  
M: 0498 660 240  
E: [crain@crainteasdalellarchitect.com](mailto:crain@crainteasdalellarchitect.com)

**SURVEY BY COASTAL SURVEY SOLUTIONS  
(SURVEYOR - MARK CORNISH)**

NOTES:

- 1) SERVICE PITS SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. LOCATION OF SERVICE LINES WHERE SHOWN ARE APPROXIMATE.
- 2) PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION OF THE SITE, THE EXISTING UTILITIES SHOULD BE LOCATED AND DEEPLY MARKED FOR THE PROTECTION OF THE UTILITIES.
- 3) LOCATION OF FURNISH UNDERGROUND SERVICES AND DETAILED LOCATION OF ALL SERVICES.
- 4) CALL TO THE NEAREST ADJACENT PROPERTY TO DETERMINE THE LOCATION OF ANY FURNISH UNDERGROUND SERVICES HEREON HAVE BEEN OBTAINED FROM PLANS ON PUBLIC RECORD.
- 5) THE LOCATION OF ALL UTILITIES SHOWN HEREON HAVE BEEN OBTAINED FROM PUBLIC RECORDS AND DETERMINED FROM LIMITED SURVEYED CONNECTIONS. A COMPLETE SURVEY RECOGNITION HAS NOT BEEN DONE.
- 6) OWNER HAS NOT BEEN SURVEYED.

CLARENCE STREET

A cross-section diagram of a road. On the left, a 'Gully Pit' is shown with a depth of 'SL 4.60' and a width of 'IL 3.77'. To the right of the gully is a 'BARRIER KERB' with a height of 'IL 3.67'.

☐ NBN ☐ ELECT. ☐ NBN

15.265 by survey  
15.23 by deed

ALL EXISTING BUILDINGS  
TO BE DEMOLISHED

A line drawing of a building with a sign that reads "MUSEUM" and "BUILDING". The building is a simple rectangular structure with a flat roof. The sign is located on the right side of the building, with the word "MUSEUM" above the word "BUILDING". The drawing is oriented vertically, with the building's height increasing towards the right. The background is white, and the building is drawn with black lines. The sign is also drawn with black lines. The overall style is minimalist and architectural.

 Pit  Pit



Floor Level  
4.98

0.05 • 40.2 40.2

LOT 1

DP713378

5.03 4.95

SEWER PLOTTED  
S.C.M. COUNCIL

FROM COASTAL RECORDS

245 by survey  
223 by deed

TOP OF WALL 16.13

RESTAURANT & BAR  
24 CLARENCE STREET  
SYDNEY NSW 2008

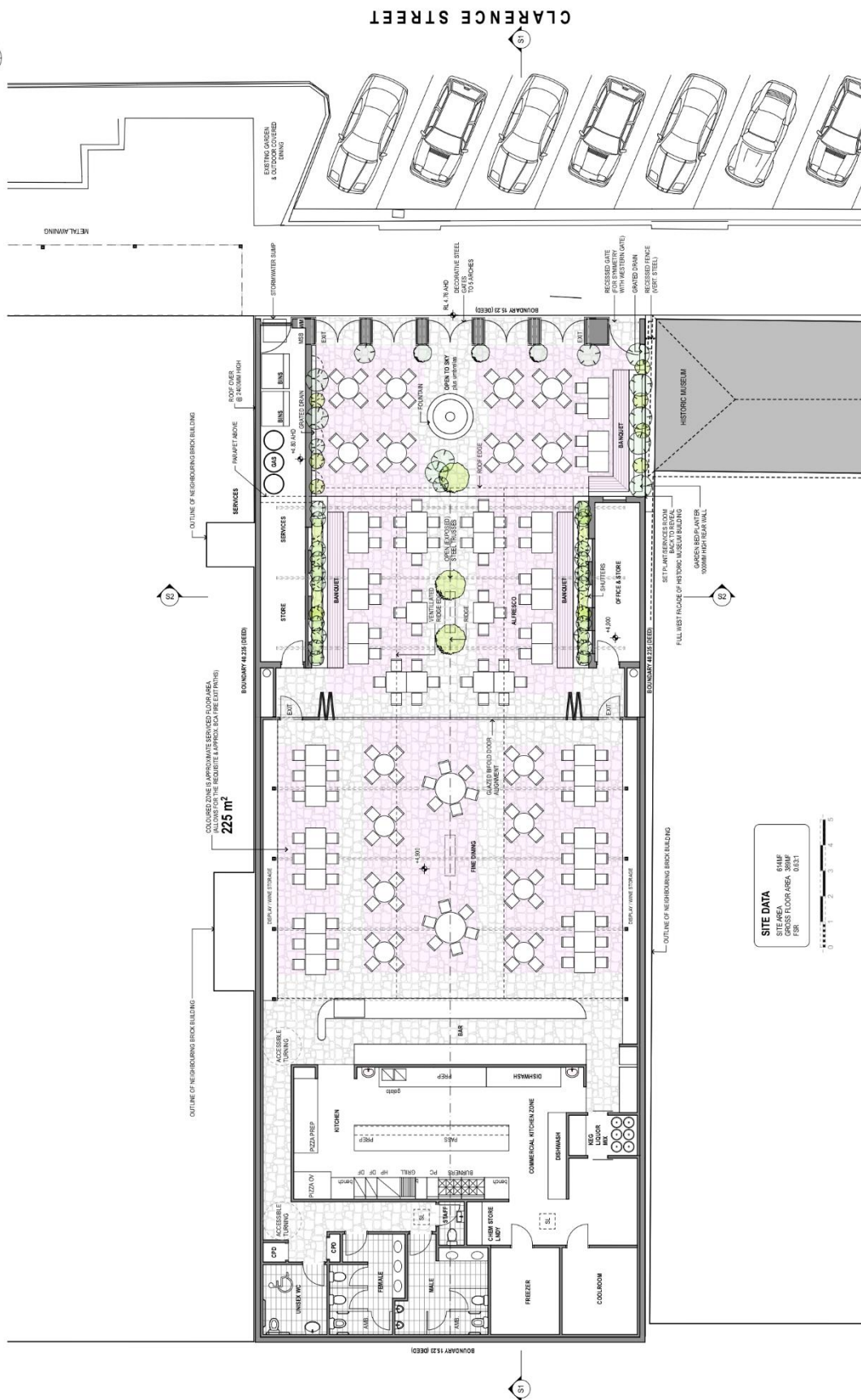
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REF DRAWING @ A2

SHEET  
01 OF 02

LOU LUPP/13378  
POST MASON LADIE  
DATE: 2/7/19





A2 sheet  
DRAWING NUMBER  
03  
REV  
R

GENERAL PLAN  
DATE: 27/19  
BY: ...  
REV: ...

RESTAURANT & BAR  
24 CLARENCE STREET  
LOT 1 DP113378  
DRAFT 14/11/19

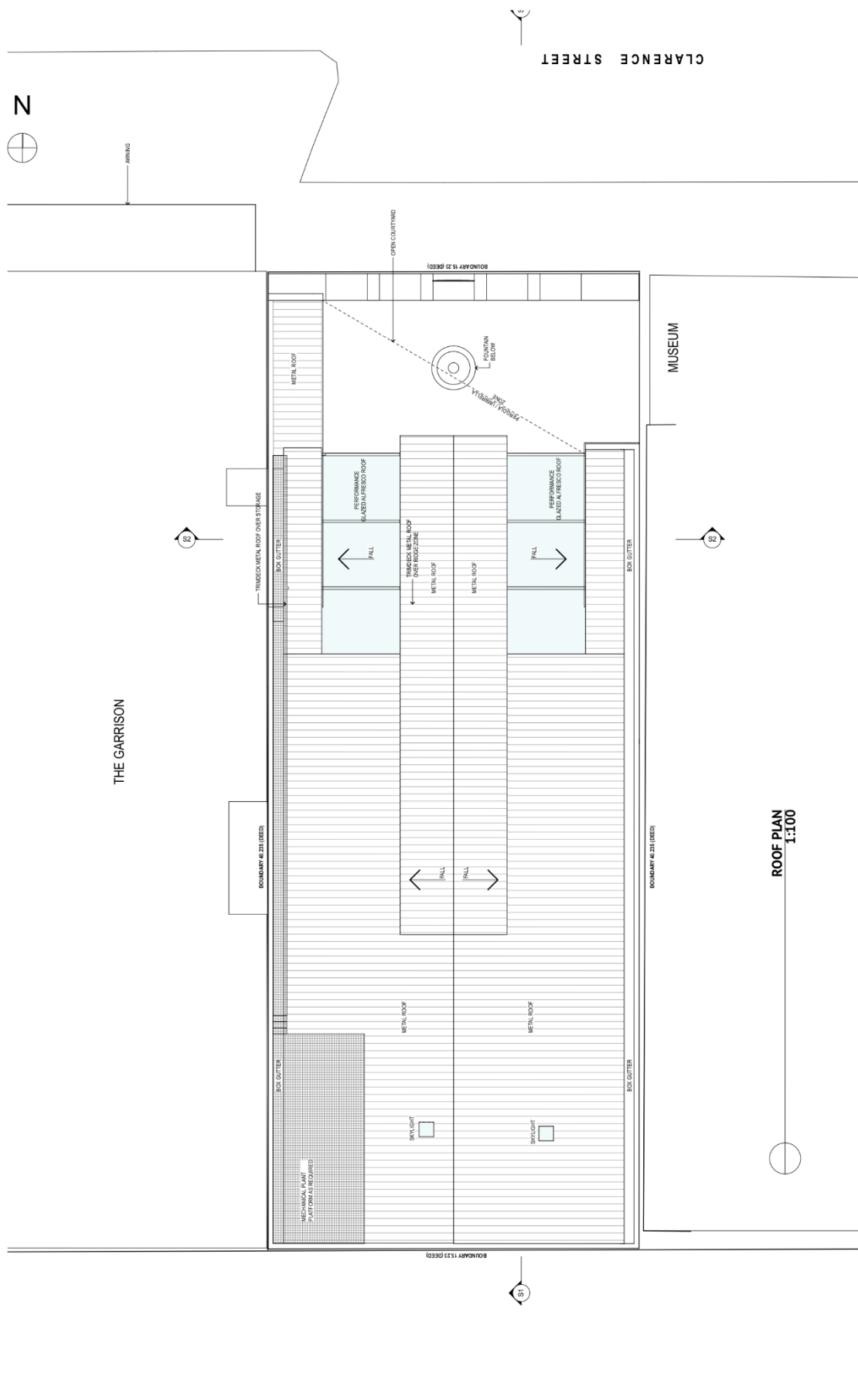
REVISIONS  
A B33378 ISSUE FOR DEVELOPMENT APPLICATION  
A B33378 ISSUE FOR DEVELOPMENT APPLICATION

STREET LEVEL PLAN  
1:100

This plan was checked and approved for construction.  
Drawings shall not be used for construction purposes until issued for construction.  
All foundations and details are subject to survey.

CRAY TASTE  
ARCHITECTURE

SUITE SF 21 CLARENCE STREET  
PORT MACQUARIE NSW 2444  
M: 0498 600 340  
E: craig@craytaste.com.au

ROOF PLAN  
1:300

**Roof Plan**  
DATE: 27/10/19  
BY: R

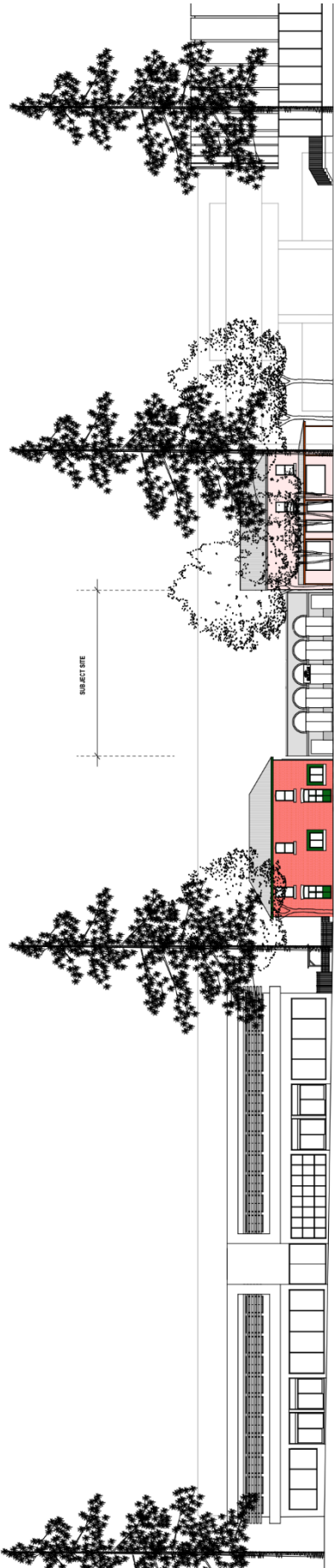
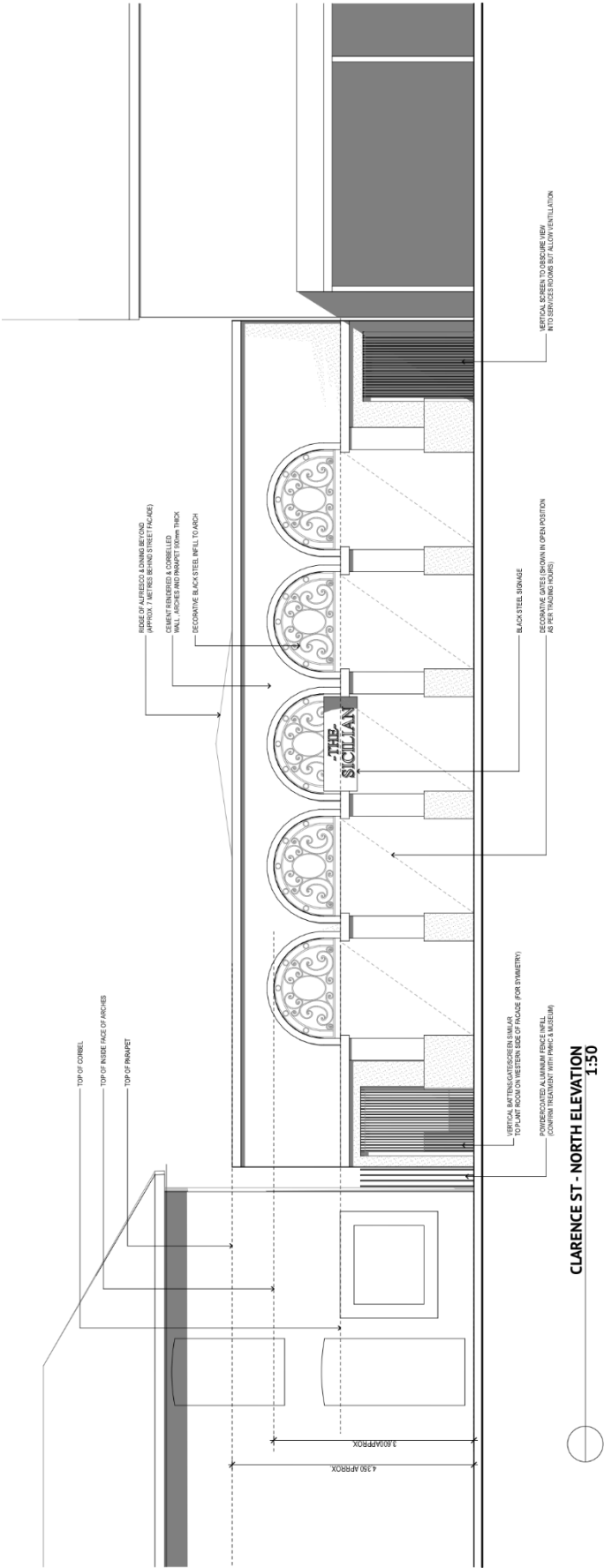
**RESTAURANT & BAR**  
24 CLARENCE STREET  
LOT 1 DP113378  
SHEET 1 OF 1

**REVISIONS**  
A B3/2019 ISSUE FOR DEVELOPMENT APPLICATION  
A B3/2019 ISSUE FOR DEVELOPMENT APPLICATION

This plan was checked and approved on the date of construction.  
Drawings shall not be used for construction purposes until issued for construction.  
All boundaries and dimensions are subject to survey.

**Craig Tisdell**  
ARCHITECT

SUITE SF 21 CLARENCE STREET  
PORT MACQUARIE NSW 2444  
M: 0498 600 340  
E: craig@portmacquariearchitect.com.au



CLARENCE ST CONTEXT ELEVATION

SUITE SF 21 CLARENCE STREET  
PORT MACQUARIE NSW 2444  
M: 0498 600 340  
E: [enquiries@portmacleisharchitect.com.au](mailto:enquiries@portmacleisharchitect.com.au)

*Craig Teasdale*  
ARCHITECT

This builder shall check all dimensions and levels on site prior to construction.  
Drawings shall not be used for construction purposes until issued for construction.  
All foundations and structures subject to survey.

REVISIONS  
A REVISION ISSUE FOR DEVELOPMENT OF APPLICATION  
DATE: 27/10/2019  
BY: [Signature]

RESTAURANT & BAR  
24 CLARENCE STREET  
LOT 1 DP113378  
SHEET 14 OF 171 L&E

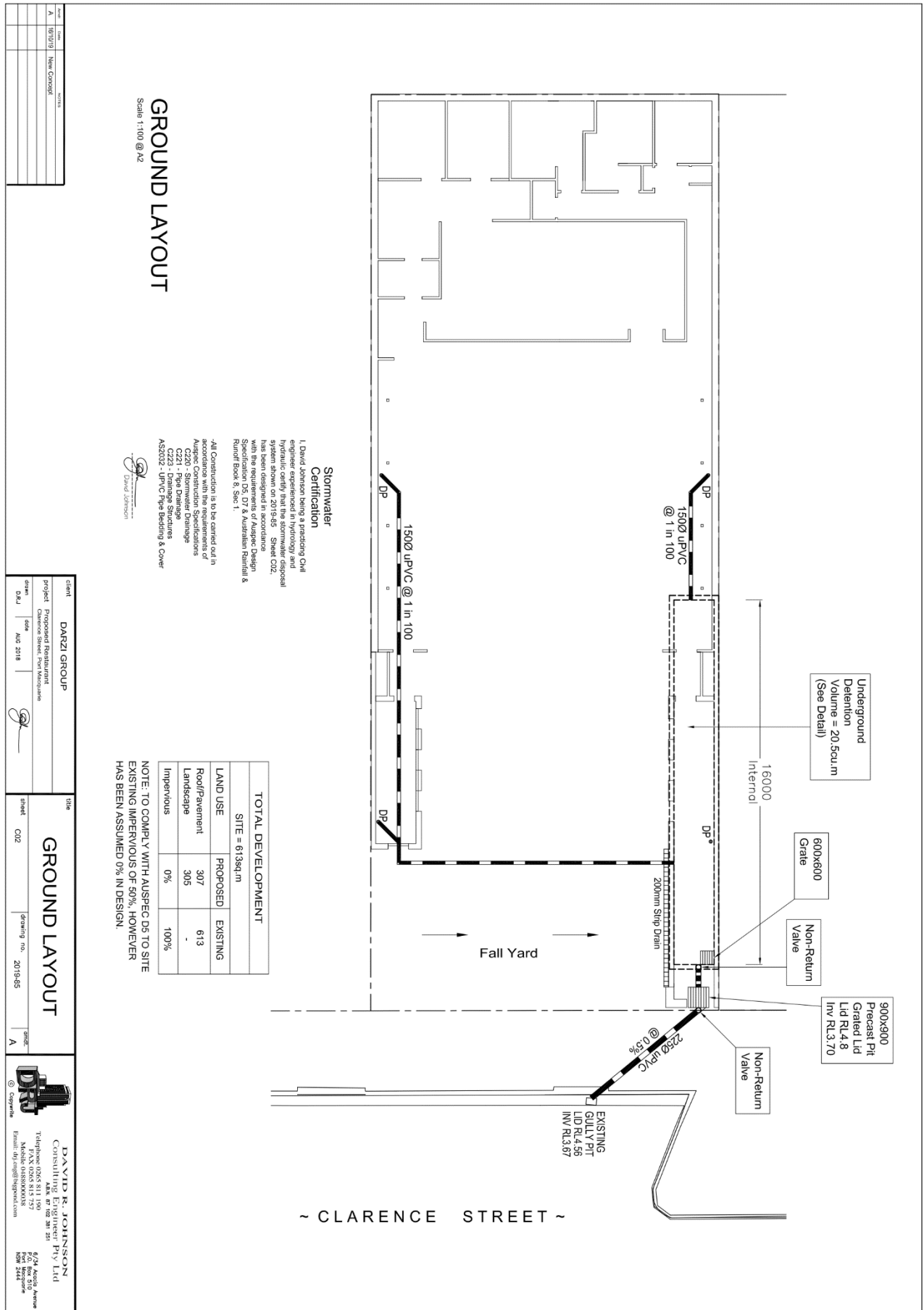
STREET ELEVATION  
DATE: 27/10/2019  
BY: [Signature]

A2 sheet  
DRAWING NUMBER: 05  
REV: R





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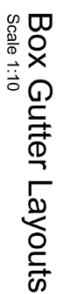


## 10 Year ARI Storm Durations

10 Year ARI Storm Durations							
EXISTING		PROPOSED					
		100% Impervious Site					
0%	Q l/s	Catchment Q l/s	Office Q l/s	Overflow Q l/s	Total Q l/s	D1 Water Level	Pit Water Level
23		31	23	-	23	4.52	4.44

## PROPOSED

100 Year ARI Storm Durations						
EXISTING		PROPOSED				
Q		100% Impervious Site			D1	Pt
Q	Catchment	Office	Overflow	Total	Water Level	Water Level
l/s	Q l/s	Q l/s	Q l/s	Q l/s		
36	50	36	-	36	4.72	4.47



**PROPOSED REDEVELOPMENT**

**AT**

**24 CLARENCE STREET,  
PORT MACQUARIE, NSW**

**HERITAGE IMPACT STATEMENT**



Prepared by:

John Oultram Heritage & Design  
Level 2, 386 New South Head Road,  
Double Bay, NSW 2028

T: (02) 9327 2748

E: [heritagedesign@bigpond.com](mailto:heritagedesign@bigpond.com)

Prepared for:

Gabriel & Sonia Darzi

July 2019

© John Oultram Heritage & Design

## 1.0 INTRODUCTION

### 1.1 THE BRIEF

The following report has been prepared to accompany a development application for the redevelopment of the existing property at 24 Clarence Street, Port Macquarie, NSW. The report has been prepared on behalf of Gabriel & Sonia Darzi, the owners of the property.

### 1.2 THE STUDY AREA

The study area is Lot 1 in DP 713378 at Port Macquarie, County of Macquarie and Parish of Macquarie (Figure 1.1).



Figure 1.1 The Study Area shaded

Source: Six Maps

### 1.3 LIMITATIONS AND TERMS

The report only addresses the European significance of the place. The terms *fabric*, *conservation*, *maintenance*, *preservation*, *restoration*, *reconstruction*, *adaptation*, *compatible use* and *cultural significance* used in this report are as defined in the Australia ICOMOS Burra Charter.

### 1.4 METHODOLOGY

This report was prepared in accordance with the *NSW Heritage Manual* "Statements of Heritage Impact", "Assessing Heritage Significance Guidelines" and the Woollahra Council guidelines for the preparation of heritage impact statements. The philosophy adopted is that guided by the Australia ICOMOS Burra Charter 2013.

### 1.5 AUTHORS AND ACKNOWLEDGMENTS

This report, including all diagrams and photographs, was prepared by John Oultram of John Oultram Heritage & Design, unless otherwise noted. Historical research was prepared by Nicholas Jackson. John Oultram Heritage & Design was established in 1998 and is on the NSW Heritage Office list of heritage consultants.



## 2.0 HISTORICAL DEVELOPMENT

### 2.1 THE PENAL SETTLEMENT

The locale of Port Macquarie was discovered by the British colonists in 1818. In 1820 the administration of Governor Macquarie decided to settle the area of the present day city as a place of secondary punishment for convicted felons. In May 1821 the advance party of 41 soldiers and 60 convicts commanded by Captain Francis Allman (1780-1860) arrived from Sydney by sea and set up temporary encampment and military barracks. Governor Macquarie visited the new penal settlement in November 1821. Allman remained at Port Macquarie until April 1824, and around the time of his departure he prepared a plan of the settlement.

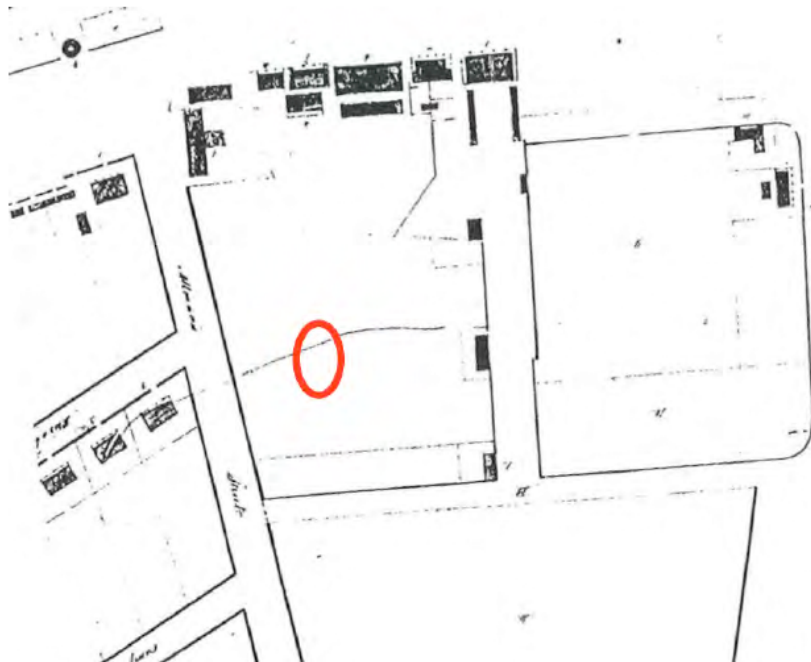


Figure 2.1 Detail from the Captain Wright's 'Plan of Port Macquarie', dated 1826. Amended with the circled area to show the approximate location of the property. The line depicted probably indicated a natural watercourse

Source: State Archives NSW Map 3821 (reproduced in Kass 2006)

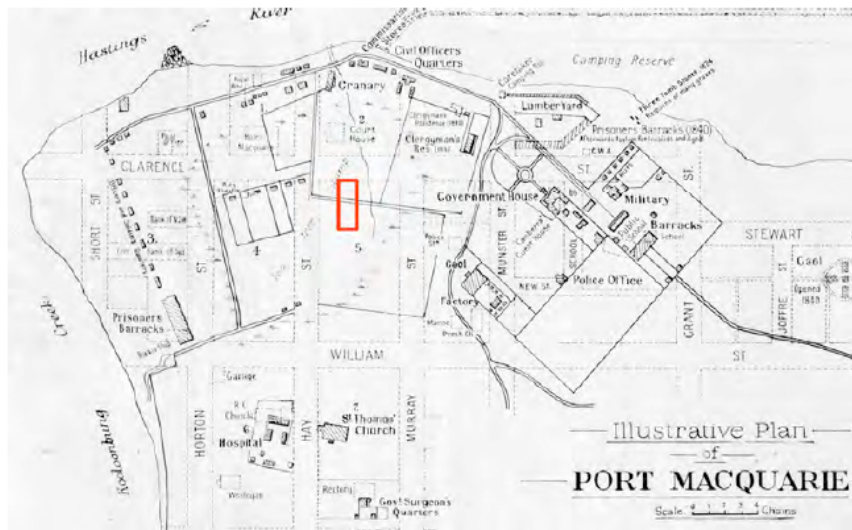


Figure 2.2 'Illustrative plan of Port Macquarie' prepared in 1938 showing the layouts of Port Macquarie in the period 1821-1831. Amended to show the approximate location of the property then set within tea tree swamp

Source: National Library of Australia (Map F 885) 1830

Port Macquarie remained a penal settlement until 1832. At its peak, reached in 1825, there were about 1500 convicts held there. However, in May 1825 Governor Brisbane considered the location untenable and looked to opening the place to free settlers. Over the following two years the convict population was reduced to about 500. In late 1828 the next governor, Sir Ralph Darling, was granted permission from London to open the place to settlers and wound down the penal settlement.

Consequently, in 1830 Port Macquarie was proclaimed open to free settlers, and in 1831 measures were taken to plan for a permanent civil township. The new township was laid out by surveyor FR D'Arcy. This included a new layout of regularly aligned streets and building allotments. At this time the sites of present day Nos. 22-26 Clarence Street were within the new allotment defined as Allotment 1 in Section 5. The new government plan of Port Macquarie was approved by Governor Ralph Darling in July 1831, and he permitted free settlers to select town allotments.

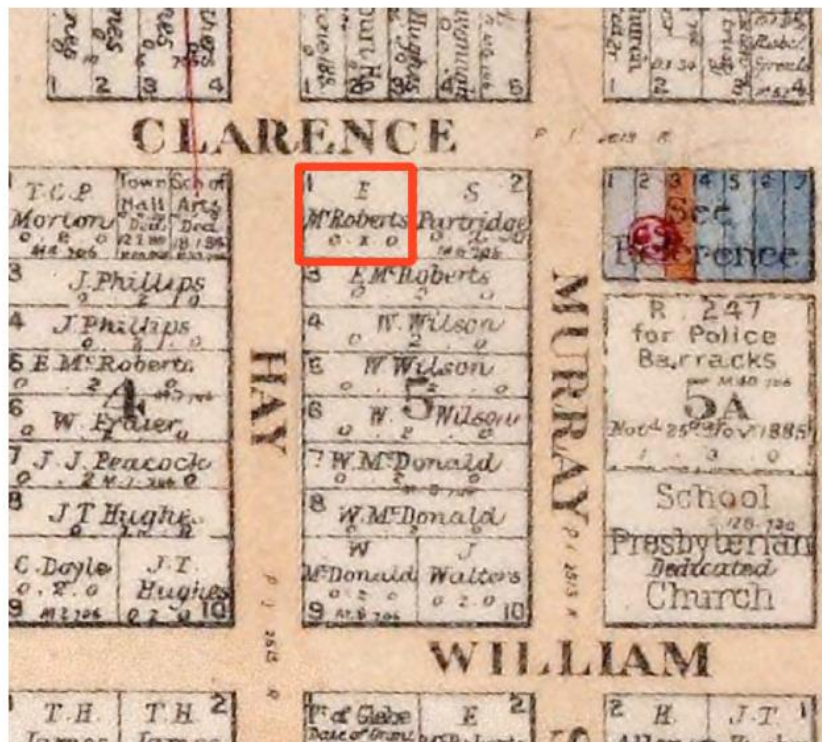


Figure 2.3 Detail from the 1921 edition of the government plan of Port Macquarie township

Source: NSW Land Registry Services

## 2.2 ALLOTMENT 1 IN SECTION 5 (NOS. 22-26 CLARENCE STREET)

In the instance of Allotment 1 in Section 5 it was purchased by and granted to Edward McRoberts in November 1834.<sup>1</sup> The purchase was speculative, for having paid about 13 pounds for the allotment, McRoberts in December 1835 sold the same to Andrew Blowers Smith for 50 pounds.<sup>2</sup> Smith (1809-1888) was a general merchant and shipping agent trading as AB Smith and Co with his Sydney premises at Darling Harbour. In 1843 Smith conveyed the same to William Stokes,<sup>3</sup> who immediately mortgaged it to Smith for the same amount as the purchase.<sup>4</sup> Smith and Stokes (died in 1849 at Port Macquarie)<sup>5</sup> prior to 1843 had been business partners trading as storekeepers at Port Macquarie under the name of William Stokes,<sup>6</sup> and the inflated price of the property (6256 pounds) possibly had more to do with business liabilities than built improvements.

<sup>1</sup> Crown Grant Serial 37 No. 73

<sup>2</sup> Old System Conveyance Book J No. 62

<sup>3</sup> Old System Conveyance Book 4 No. 376

<sup>4</sup> Old System Conveyance Book 4 No. 377

<sup>5</sup> NSW Government Gazette, 6/7/1849, p.1013

<sup>6</sup> NSW Government Gazette, 7/4/1843, p.511

A number of surveys of the allotment prepared between 1831 and 1840 are available to document the built improvements undertaken by AB Smith. The improvements fronting Clarence Street included the present day local museum at No 22, the cottage at No. 24, and the Garrison at No. 26.



Figure 2.4 Detail from Berni's 'Plan of Port Macquarie' dated 1831. The diagonal pair of lines crossing the property (highlighted) have been interpreted a roadway, but also could represent a drainage channel.

Source: State Archives NSW Map 3682 (reproduced in Kass 2006)



24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT



Figure 2.5 Detail from FR D'Arcy's plan of the town of Port Macquarie dated 1836. Amended to show the location of the property (the black stroke within is a 1 demarcating the allotment number). The faint diagonal lines crossing the property have been interpreted as a roadway

Source: State Archives NSW Map 3672 (reproduced in Kass 2006)

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

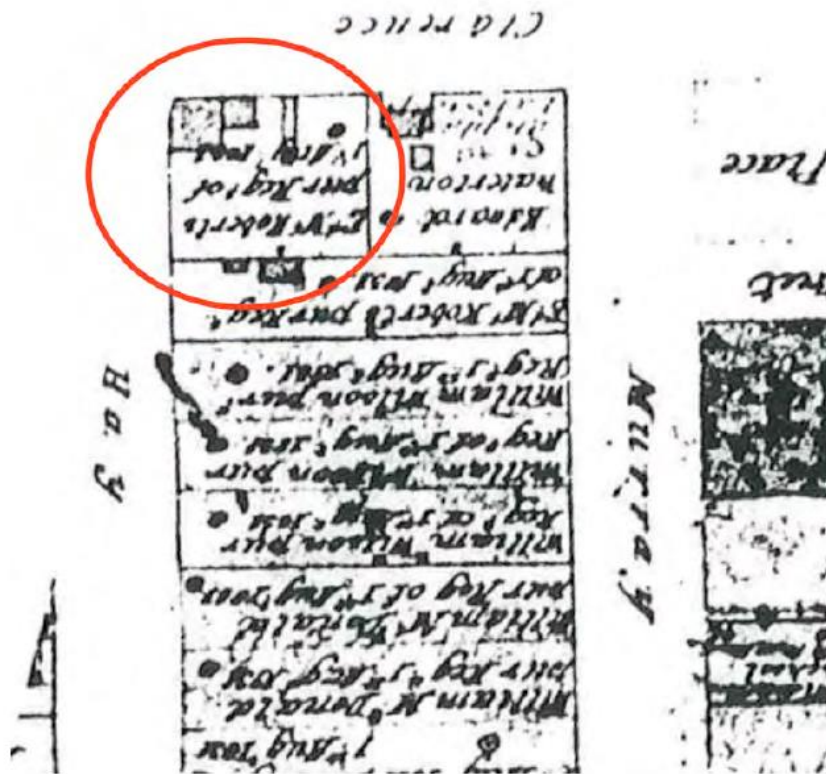


Figure 2.6

Detail from GB White's 'Plan of the town' of Port Macquarie dated 1836, but evidently with later amendments. Depicted within Allotment 1 are the present day Garrison and a smaller building beside it (subject property) and a narrow building (now demolished) to the east, possibly a shed/stables

Source: State Archives NSW Map 3677 (reproduced in Kass 2006)



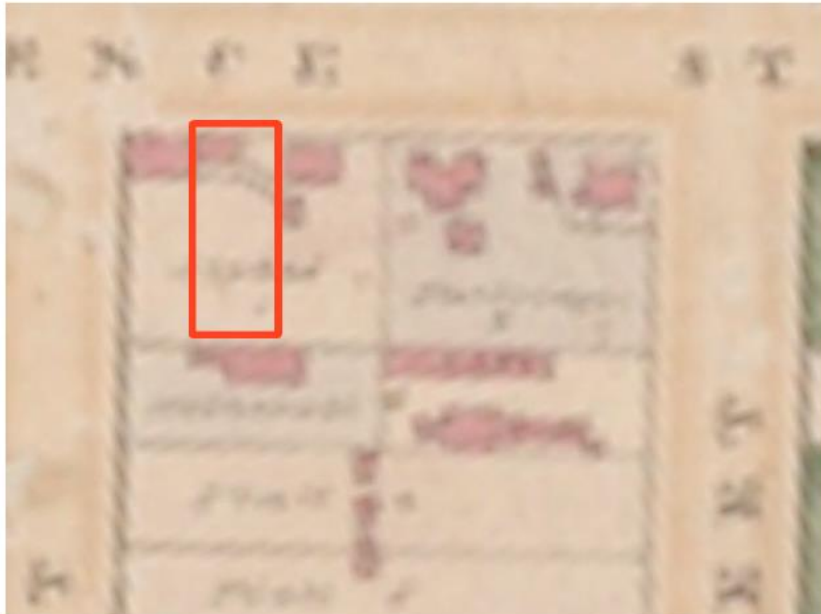


Figure 2.7a Detail from WH Chapman's 'Plan of allotments at Port Macquarie ..', dated 1840, and the most detailed of the surveys of the town. By 1840 the property comprised a brick building (dwelling) fronting Clarence Street with a covered way leading to a detached brick building (kitchen) behind the present day local museum. Prior to the early 1850s all four buildings depicted were under the same ownership. Best coloured copy reproduction possible

Source: State Library of NSW (Z/M3 811.221/1840/1)

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT



Figure 2.7b A clearer black and white reproduction of Chapman's sale plan of 1840. The owner was noted as William Stokes

Source: State Library of NSW (M3/1811.221/1840/1) reproduced in Bickford 2006



Figure 2.8 Detail from a plan of Port Macquarie mis-catalogued as FR Darcy's survey and with a date of 1831, but now considered to be 1840 and the same as Chapman's

Source: State Archives NSW Map 3673 (reproduced in Kass 2006)

By 1846 Smith was again in possession of the allotment,<sup>7</sup> and in 1848 he conveyed it to his brothers Henry Arthur Smith and John Smith (the three traded as Smith Brothers). In 1850 the two brothers sold the allotment to local storekeeper Samuel Henry Cohen for 100 pounds.<sup>8</sup>

Cohen traded as Cohen and Co with premises in Sydney and Port Macquarie. In November 1852 Cohen advised in the Sydney newspapers that he was closing his business, and disposing of his Port Macquarie premises trading as the Commercial Stores. The newspaper sale notice<sup>9</sup> noted the Port Macquarie property comprised 'the most roomy and handsome dwelling in the town', a retail draper's store, a brick built boiling down works, and a general warehouse type building. This property seems to have been Allotment 8 in Section 3, fronting Horton Street, which Cohen sold in 1853 for 1100 pounds.<sup>10</sup>

In respect of Allotment 1 in Section 5 Cohen subsequently subdivided the allotment with the western half (No. 24 Clarence Street (Lot 1 in DP 713378) and No. 26 Clarence Street (Lot 1 in DP 630109)) being conveyed to Dr Henry Taylor in December 1852 for 100 pounds.<sup>11</sup> The eastern half (No. 22 Clarence Street (Lot 1 in DP744652)) was conveyed to shopkeeper William Killion in January 1853 for 75 pounds.<sup>12</sup>

### 2.3 NOS. 24-26 CLARENCE STREET

Historical details about Dr Henry Taylor, doctor of medicine, are scarce for he returned to his native England and died there in June 1853.<sup>13</sup> Settling his business affairs in the colony took some time to resolve, for it was December 1854 when the property was conveyed to Joseph Phillips for 325 pounds.<sup>14</sup> Phillips (1793-1865) was the proprietor of the Port Macquarie New Inn. Phillips died at Port Macquarie in 1865 and his widow, Esther, died a little later, in June 1866. The beneficiary of their estates was Charles Watts (1825?-1869),<sup>15</sup> a son of Mrs Phillips by her previous marriage to John Watts (1797?-1823?), and who took on the management of the hotel.<sup>16</sup> Watts died at Port Macquarie in February 1869, and his estate passed to the widowed Mrs Mary Watts.

In November 1871 the insolvent estate of Mrs Mary Watts was sequestered.<sup>17</sup> Subsequently her assets were put up for sale at public auction in May 1872. The newspaper notice advertising the auction described No 26 Clarence Street as a two storey brick building with store, and No. 24 Clarence Street as a single storey weatherboard cottage.<sup>18</sup> The property (both buildings) was sold to Edward Bennett in 1872 for 138 pounds (there were other properties included).<sup>19</sup> As Bennett (1811-1879) resided in Sydney, the buildings were leased.

<sup>7</sup> Old System Conveyance Book 10 No. 717

<sup>8</sup> Old System Conveyance Book 18 No. 752

<sup>9</sup> Advertising, *Sydney Morning Herald*, 23/11/1852, p.3

<sup>10</sup> Old System Conveyance Book 29 No. 154

<sup>11</sup> Old System Conveyance Book 25 No. 168

<sup>12</sup> Old System Conveyance Book 25 No. 167

<sup>13</sup> Recited in Old System Conveyance 38 No. 562

<sup>14</sup> Old System Conveyance 38 No. 562

<sup>15</sup> *New South Wales Government Gazette*, 13/7/1866

<sup>16</sup> Advertising, *Sydney Morning Herald*, 9/7/1866, p.8

<sup>17</sup> State Archives NSW Insex to Insolvencies File No 10793

<sup>18</sup> Advertising, *Sydney Morning Herald*, 21/5/1872, p.9

<sup>19</sup> Old System Conveyance 131 No. 495

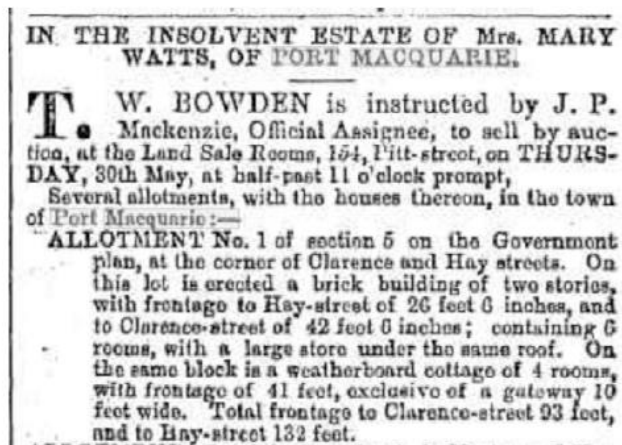


Figure 2.9 In this sale notice published in 1872, No. 26 Clarence Street was described as a two storey brick store with residence above, and No. 24 Clarence Street as a weatherboard cottage

Source: *Sydney Morning Herald*, 21/5/1872, p.9

After the death of Bennett at Elizabeth Bay in 1879, in 1880 Nos. 24-26 Clarence Street were conveyed to Bernard Cavanagh for 200 pounds.<sup>20</sup> Cavanagh (1832-1916) came to the Manning River district in 1858, and moved to Port Macquarie in 1862. He later took up dairying on Rawdon Island.<sup>21</sup> Cavanagh owned other properties in Port Macquarie town, and Nos. 24-26 Clarence Street were leased evidently.



Figure 2.10A Clarence Street in about 1870. The property is circled and depicted is single storey dwelling situated between the present day local museum and the Garrison

Source: State Library of NSW (bcp\_04994h)

<sup>20</sup> Old System Conveyance 200 No.331

<sup>21</sup> 'An Old Identity', *Port Macquarie News*, 5/2/1916, p.5



24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT



Figure 2.10B Detail from the above historical photograph. Depicted is a single storey dwelling with front verandah

Source: State Library of NSW (bcp\_04994h)



Figure 2.11A Clarence Street in about 1880. The property is circled and depicted is a single storey dwelling with front verandah and garden beside it

Source: State Library of NSW (bcp\_04964h)

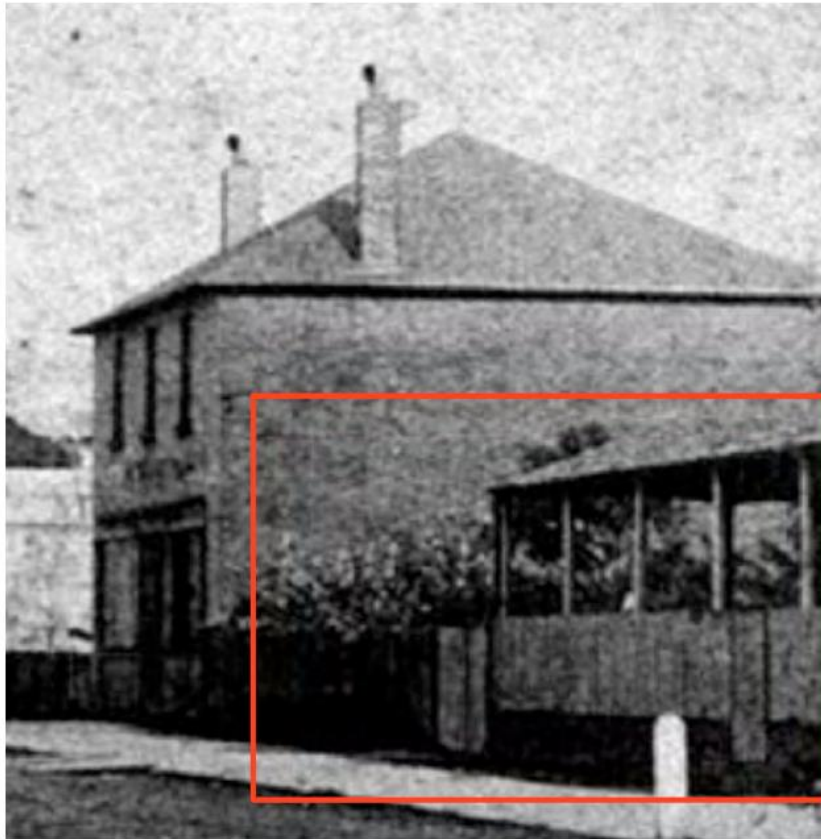


Figure 2.11B Detail from the above historical photograph. Depicted are the verandah details and the garden (orchard) beside it.

Source: State Library of NSW (bcp\_04964h)

#### 2.4 NO. 24 CLARENCE STREET

In 1892 the allotment of Nos. 22-24 Clarence Street was subdivided to form two allotments defined by the existing dwellings. The allotment of No. 24 Clarence Street was conveyed in 1892 to Mrs Rosa Kerr for 100 pounds.<sup>22</sup> Mrs Kerr was the widow of John Kerr (died 1881), and they were pioneer settlers in the district.<sup>23</sup>

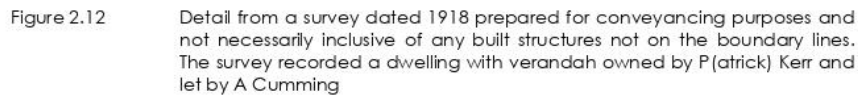
After the death of Mrs Kerr in 1908, the property passed to son Patrick John Kerr (1877-1921), who was well-known in Port Macquarie in being born and raised there. He was employed in the local timber industry until the mid 1910s when he seems to have moved to Woollahra where he died.<sup>24</sup> He married Melvina Anderson (1875-1961) at Port Macquarie in 1897. The cottage possibly was the home of Mrs Kerr and her son.

<sup>22</sup> Old System Conveyance 491 No. 639

<sup>23</sup> 'Mr P J Kerr', *Port Macquarie News*, 21/5/1921, p.4

<sup>24</sup> 'Mr P J Kerr', *Port Macquarie News*, 21/5/1921, p.4





After the death of Kerr, in 1923 the property was conveyed to Gordon Henry Nelson for 375 pounds.<sup>25</sup> Nelson (1892-1939) was the police constable stationed at Port Macquarie, where he had lived since the mid 1890s.<sup>26</sup> Probably resulting from his transfer to Yamba, Nelson in 1927 conveyed the property to carter James Pearce for 550 pounds.<sup>27</sup> Pearce's wife Catherine was the owner of the neighbouring No. 26 Clarence Street, having contracted to purchase the property in 1912;<sup>28</sup> she continued to own No. 26 Clarence Street until 1934.<sup>29</sup> By a survey dated 1918 the Pearces resided at No. 26 Clarence Street.<sup>30</sup>

<sup>25</sup> Old System Conveyance Book 1209 No. 645  
<sup>26</sup> 'Sergt GH Nelson', *Port Macquarie News*, 17/6/1939, p.5  
<sup>27</sup> Old System Conveyance Book 1463 No. 296  
<sup>28</sup> Old System Conveyance 1121 No. 538  
<sup>29</sup> Old System Conveyance 1697 No. 265  
<sup>30</sup> Deposited Plan 82385



Figure 2.13 The property in 1949. Depicted are the dwelling with steeply pitched roof, the front verandah, and the side entry (vehicular access) to the rear. At this time the property was owned by James Pearce, a carter

Source: State Library of NSW (d1\_04440h)

While Pearce and his wife died in the 1950s, the property remained in the ownership of the family until 1960 when it was sold to South Pacific Accommodation Ltd for 4000 pounds.<sup>31</sup> Presumably, this company wanted to redevelop the property for the neighbouring property, No. 22 Clarence Street, was purchased in 1961 for 7500 pounds.<sup>32</sup> No redevelopment was undertaken, and in 1965 the company sold No. 24 Clarence Street to Gerald Francis Tyrrell for 4500 pounds.<sup>33</sup>

By the 1970s Tyrrell was describing his profession as an amusement parlour proprietor, and therefore it seems the former pin-ball parlour located on the eastern boundary of the property was built for Tyrrell in about 1965 or 1966. The use of the nineteenth century dwelling perhaps also changed at this time to a commercial use, or was retained as his residence. In 1974 Tyrrell sold his property to the Semitecolos family for \$26,000.<sup>34</sup>

In 1997 the property was the subject of a development proposal necessitating the demolition of the historic dwelling and the pin-ball parlour. At that time an archaeological assessment was undertaken.<sup>35</sup> That development proposal lapsed, but in 2006 another development was proposed, again necessitating demolition to make way for residential and holiday flats inclusive of basement level car parking.<sup>36</sup> That development proposal lapsed.

<sup>31</sup> Old System Conveyance Book 2549 No. 415

<sup>32</sup> Old System Conveyance Book 2570 No. 936

<sup>33</sup> Old System Conveyance Book 2751 No. 444

<sup>34</sup> Old System Conveyance Book 3157 No. 111

<sup>35</sup> Edward Higginbotham & Associates, 'Historical and Archaeological Assessment of 24 Clarence Street, Port Macquarie', for John Walsh Architect, 1997 (not sighted by the author)

<sup>36</sup> Archaeology and Heritage Pty Ltd, '24 Clarence Street, Port Macquarie, Archaeological Assessment', for McNeil Ellis Architects, February 2006

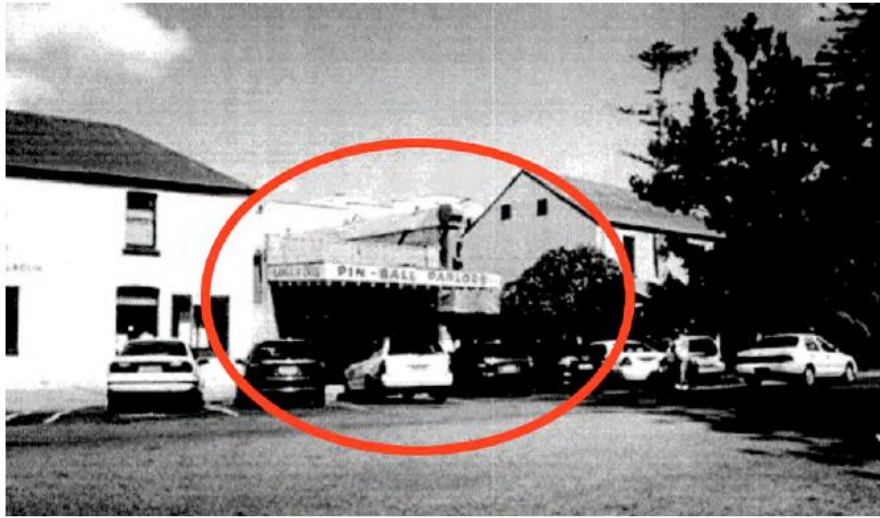


Figure 2.14 The property in 2004 comprised the narrow fronted pin-ball parlour, and the former dwelling in use as a beauty salon

Source: Archaeology and Heritage (2006)



Figure 2.15 The property in 2006 comprised the narrow fronted pin-ball parlour, and the former dwelling in use as a beauty salon

Source: Archaeology and Heritage (2006)

### 3.0 PHYSICAL DESCRIPTION

An inspection of the property was carried out by John Oultram in June 2019. The current site plan is shown in Figure 3.1.

24 Clarence Street is a large site set to the south side of the street that is occupied by two small buildings both relatively modern, infill developments. The rear section of the site is largely cleared apart from an outbuilding and concrete hardstands.

#### 3.1 OFFICE

To the west of the site is a small, single storey painted brick and weatherboard building with a hipped, terracotta tile roof. The building is set close to the street and has an entrance door and large format, aluminium window. There is a small lavatory at the rear under the main roof.

Internally the building is divided to two rooms. Floors are carpeted. Walls and ceilings are in plasterboard with coved, plaster cornices. Windows are in aluminium and internal doors are in flush timber.

There is a small store at the rear in fibro with a skillion corrugated metal roof.

#### 3.2 FORMER SHOP

To the east is a single storey, former shop in face brick with a long, skillion metal roof. There is a modern shopfront to the street in aluminium. There is a suspended metal awning above the shopfront with cladding to the parapet. To the side there are series of high-level windows and a large set of glazed doors at the rear in aluminium.

There are concrete hardstands to the rear of both properties with a large lawn area beyond.

#### 3.3 ENVIRONS

The property is in the heart of the commercial and civic centre along Clarence Street.

To the east is the Hastings Historical Society Museum, a two storey, mid Victorian building in painted brick with a hipped corrugated metal roof. The Museum has a passage at the side that leads to a number of two storey extensions, also in brick with hipped and gabled, corrugated metal roofs. The side elevations to the Museum and its extensions are set along the boundary of the subject site.

To the west is the Garrison Building a large, two storey mid Victorian building in brick and render with a hipped, corrugated metal roof. The Garrison has a wrap around verandah to the front and to the plaza entrance to the nearby shopping complex and Glasshouse Theatre. The building is currently in commercial use with cafes and restaurants at the ground floor.

To the rear of the subject site is a large, multi-storey car park with a blank masonry wall to the subject site and louvred openings to the upper level.

Further east and west are modern, two storey commercial buildings in a variety of styles.



24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

Opposite the site is the former Court House, a collection of single storey, Victorian buildings set in landscaped grounds. The buildings are in painted brick with shingle and corrugated metal roofs. The main building has a gable to Clarence Street and is flanked by two wings with wrap around verandahs.

Figures 3.2 - 3.6



Figure 3.1 24 Clarence Street Port Macquarie

Site plan

Source: Architect

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT



Figure 3.2 24 Clarence Street, Port Macquarie

Front elevation



Figure 3.3 24 Clarence Street, Port Macquarie

Rear elevation



Figure 3.4 24 Clarence Street, Port Macquarie

View to rear garden and car park



24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT



Figure 3.5 24 Clarence Street, Port Macquarie

View looking northwest from the subject site



Figure 3.6 24 Clarence Street, Port Macquarie

View looking northeast from the subject site

#### 4.0 HERITAGE CONTROLS

##### 4.1 NATIONAL TRUST

The property is not classified on the Register of the National Trust of Australia (NSW).

##### 4.2 HERITAGE DIVISION OF THE NSW OFFICE OF ENVIRONMENT AND HERITAGE

###### 4.2.1 State Heritage Register

Under the Heritage Act 1977 (as amended), the NSW Heritage Council, administered by the Heritage Division of NSW Office of Environment and Heritage, maintains the State Heritage Register (SHR), a register of items and places that are considered to have heritage significance at a state level. The property is not listed on the Register.

###### 4.2.2 State Heritage Inventory

The Heritage Division also compiles the State Heritage Inventory (SHI), a collated database of all places listed on statutory heritage lists, including Local Environmental Plans. The property is not listed on the Inventory

##### 4.3 LOCAL AUTHORITY

The local authority for the area is Port Macquarie-Hastings Council. The property is not listed as a heritage item in Schedule 5 Part 1 of the *Port Macquarie-Hastings Local Environmental Plan 2011* (as amended) (PMHLEP) but is listed as a archaeological site in Schedule 5 Part 3 of the PMHLEP.

REF	ADDRESS	ITEM	RANKING
A111	Parts of Town Centre and Town Beach Precincts	Archaeology of Early European Settlement	Local

The property is not within a conservation area but is in the vicinity of the following:

###### 4.3.1 Heritage Items

REF	ADDRESS	ITEM	RANKING
I013	31–35 Clarence Street (corner Hay Street)	Former Courthouse building and mature Norfolk Island pine trees	State
I014	26 Clarence Street (corner Hay Street)	“Garrison” building	Local
I015	22 Clarence Street	Hastings Historical Society Museum	State

###### 4.3.2 Archaeological Sites

REF	ADDRESS	ITEM	RANKING
A035	Clarence Street (between Hay and Murray Streets)	Brick storm water drain	Local

Development would be the subject of the heritage provisions of the PMHLEP relating to development of an archaeological site and in the vicinity of a heritage item.

Council may also take into consideration the Port Macquarie-Hastings *Development Control Plan 2013* (PMHDCP) that contains detailed objectives and controls for development.

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

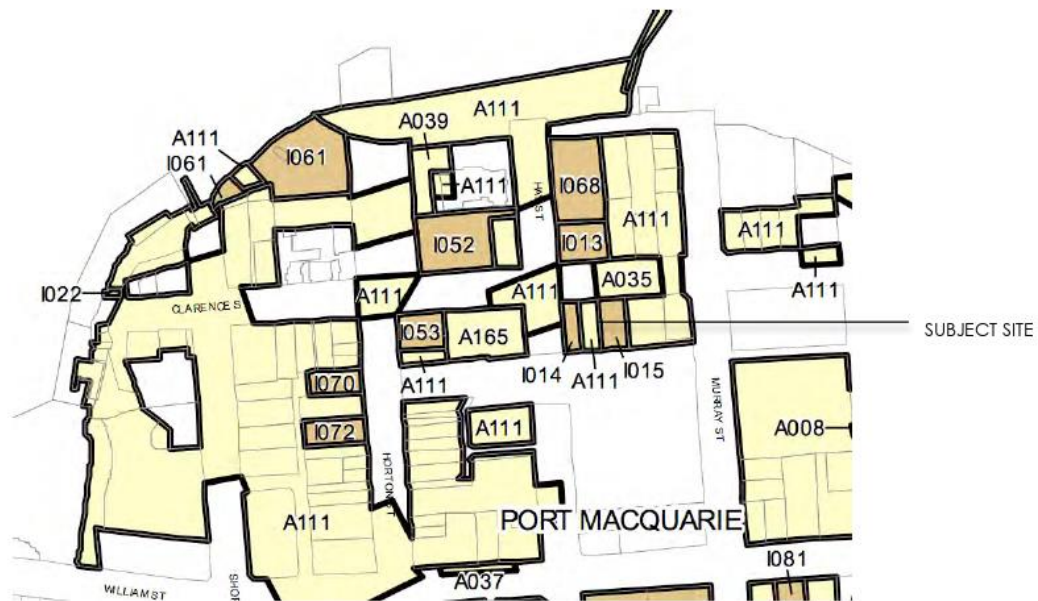


Figure 4.1 Port Macquarie-Hastings Local Environmental Plan 2011 Heritage Map  
HER\_013Fa

Source: Port Macquarie-Hastings Council

**5.0 ASSESSMENT OF SIGNIFICANCE**

The Heritage Office of New South Wales has issued guidelines as part of the NSW Heritage Manual regarding the assessment of heritage significance. The Manual is a well-regarded methodology for the assessment of cultural significance and is appropriate for application to the subject property.

**5.1 HISTORIC SIGNIFICANCE****5.1.1 Historical Development**

<i>Criterion (a)</i>	<i>An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area)</i>
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The site has a very interesting history but its more recent development is more mundane. The current buildings on the site include the former pinball parlour that was built c. 1965 for Gerald Tyrrell who identified himself as an amusement parlour proprietor. The building was later converted to offices.

The office building to the west appears to have been rebuilt on the site of the early dwelling. The date of the current building is not known. The earlier dwelling may have originally been built in the 1830s for Andrew Blowers Smith, a general merchant. Smith sold the property to William Stokes (his business partner) in 1843. Smith later took ownership of the property but sold it to his brothers in 1848. The brothers sold the property in 1850 to Samuel Cohen and the building was then noted as a store and dwelling with outbuildings. The dwelling was later described as being in weatherboard that was wider than the current building and the early photographs show a timber building with a timber verandah (see Figures 2.11 to 2.13).

The site was originally part of the penal settlement that was given over to free settlers in the 1830s when a new township was laid out. The subject property was within Allotment 1 of Section 5 of the township that also include the property at 26 Clarence Street that was at one time in common ownership with the subject site. The Garrison and the Museum (that was on the adjoining lot) were built sometime in the 1830s.

The current property signals the ongoing development of the township and the development of the commercial centre of Port Macquarie.

Local Significance.

**5.1.2 Historical Associations**

<i>Criterion (b)</i>	<i>An item has strong or special associations with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)</i>
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The place has had numerous owners who were active commercially in the township but the current buildings on the site do not reflect the previous ownership patterns and have no associations of note.

Does not meet the criterion.

## 5.2 AESTHETIC SIGNIFICANCE

Criterion (c)	<i>An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)</i>
---------------	---

The current buildings on the site are of the most mundane construction and have no stylistic qualities.

No architect appears to have been involved in their design and the buildings are not a major work by an important designer and have lost much of their integrity. The buildings have no landmark qualities and could not be seen as a creative or technical achievement.

Does not meet the criterion.

## 5.2.1 Social Significance

Criterion (d)	<i>The item has strong or special association with a particular community or cultural group in NSW (or the local area) for social or spiritual reasons</i>
---------------	--

The subject site has been in commercial use since its early development but the place has had numerous owners and the current buildings have no special associations with any particular group.

Does not meet the criterion.

## 5.3 TECHNICAL/SCIENTIFIC SIGNIFICANCE

Criterion (e)	<i>An item has the potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)</i>
---------------	--

There was a previous dwelling to the eastern side of the site fronting Clarence Street but this appears to have been demolished. There are also reports of other structures on the site (also demolished). The site was part of the early penal settlement and later the township and the site may contain evidence of former structures.

An early roadway is shown the plan of 1836 (see Figure 2.5) that crossed the site but the detail of this are not known.

The place has some archaeological potential.

The current buildings are of no technical significance.

Local Significance (Archaeological Potential).

## 5.4 RARITY

Criterion (f)	<i>An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)</i>
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The building types are less common in the central commercial area due to the scale of later and modern development but would have been common the area prior to this. Not rare.

Does not meet the criterion.

## 5.5 REPRESENTATIVENESS

Criterion (g)	<i>An item is important in demonstrating the principal characteristics of a class of NSW's Cultural or natural places; or Cultural or natural environments</i>
	<i>(or a class of the local area's: Cultural or natural places; or Cultural or natural environments)</i>

The site generally is representative of the early development of the place but the current buildings are poor examples of their types and are relatively recent constructions.

Does not meet the criterion.

## 5.6 SUMMARY OF SIGNIFICANCE

Based on the above we consider that the property would only meet one of the Heritage Manual criteria for identification as a place of local significance (Criterion (a)) but only in the most general terms that is not demonstrated in the current built form.

We consider that the site is of low to moderate significance locally.



## 6.0 THE CURRENT PROPOSALS

### 6.1 CURRENT PROPOSALS

The current owner would like to demolish the current buildings on the site and develop the site for a restaurant. The proposals are shown on Drawings Nos. 1808 01 to 06 (inclusive, all revision B) dated July 2019 and prepared by Craig Teasdell Architect.

The proposals include:

### 6.2 DEMOLITION AND EXCAVATION

- Demolition of the current buildings on the site
- Site clearance and excavation for footings and services

### 6.3 REDEVELOPMENT

- Single storey restaurant
- Arched colonnade to the street

The restaurant is built boundary to boundary and extends to the rear boundary with a part covered, open court to the front with an arched colonnade to the street. The building is in rendered masonry with a gabled, metal roof with a raised section to the front with glazed panels each side at the front courtyard. There are service areas, stores and offices each side of the court with the western section extending to the street.

The kitchens and lavatories are to the rear with a bar/servery to the main restaurant area with folding doors to the front courtyard.

The colonnade is set to the footpath and has metal gates to the street.

## 7.0 IMPACT OF THE PROPOSED DEVELOPMENT

### 7.1 GENERALLY

The subject site is in the heart of the commercial centre of Port Macquarie and is currently rather moribund having two, poor quality buildings with large, vacant areas to the rear. The site is close to the waterfront, the main shopping centre and the theatre and is ideal for commercial development as a restaurant that is a common use for town centre properties including the Garrison Building to the west.



Figure 7.1 Views to buildings to the east and west



Figure 7.2 Views to the Garrison plaza and the theatre (left) and to the Garrison Building (right)

### 7.2 DEMOLITIONS AND ARCHAEOLOGY

The current buildings on the site are of very low quality and of no heritage significance as their significance largely relates to the earlier development of the site and its origins as part of the early township and penal settlement. There are no heritage considerations that would preclude the demolition of the current buildings and structures on the site.

The site has been identified as having some archaeological potential as there were clearly earlier buildings on the site and an early plan (Figure 2.5) shows a roadway crossing the site. Excavation for the Theatre revealed some drains and walls indicating that there are archaeological remains close to.

Low level excavation will be required for footings, services and the like and these works should be the subject of archaeological monitoring by a suitably qualified consultant and any finds be the subject of assessment.

### 7.3 PROPOSED DEVELOPMENT

#### 7.3.1 Generally

As noted, the site is ideal for the proposed use and the proposed building is single storey and reflects the current type and scale of development in the immediate area.

The site adjoins two heritage items that both date from the early development of the township and that are quite prominent in the local streetscape. Along with Courthouse opposite the buildings provide a strong key to the historic development of the area.

The main issues relating to the development are its impact on the heritage items adjoining and the general streetscape.

#### 7.3.2 Setbacks

The building is set tight to its current boundaries but has an open court to the front with a colonnade to the street. There is a multi storey car park to the rear of the site and the new building will abut this shielding the nondescript elevation from Clarence Street.

The rear sections of the heritage items are modern with two storey brick walls and lightwells and the proposed development is single storey along these boundaries. Closer to the street the store areas will abut the heritage items but these elements are single storey as per the existing development on the site and will not block views to the upper sections of the Garrison Building.

The open court to the front will allow views to the lower section of the side wall to the Museum (that will be exposed) and the upper sections of both items will remain visible allowing the buildings to be read in the round.

The colonnade is set to footpath but this is a common approach to commercial buildings in Clarence Street and the heritage items also follow this alignment. The colonnade is open to the street allowing views into the open court beyond and providing a linking masonry element along the street frontage.

#### 7.3.3 Scale and Form

The proposed building is single storey that is in line early and current development of the place and lower than the two, two storey buildings adjoining. The scale avoids any sense of the building overwhelming the heritage items and is quite modest for such a central CBD site. The pitched roof form is quite traditional and the main roof is set back from the front colonnade that is single storey to the street with the arched openings providing views into the site.

#### 7.3.4 Colonnade

The colonnade is designed to reflect the use of the place for an Italian restaurant and provide a degree of solidity to the front while affording some sense of enclosure to the open court and allowing for security.

The wall forms a solid link between the two heritage items each side and is considerably lower than their eaves allowing views to the upper sections of both buildings and their side elevations. There are antecedents from the early development of the township including the School of Arts in Clarence Street (now demolished) and the Bank of New South Wales.



Figure 7.3 School of Arts in Clarence Street, Port Macquarie, undated. Note the arched colonnade on the gabled frontage

Source: Port Macquarie Historical Museum



Figure 7.4 Bank of New South Wales, Port Macquarie, undated

Source: Moyes, John and Gilbert Mant, A Town Called Port Macquarie. p.12

The colonnade provides an elegant and well-scaled frontage to the building that has some depth but which reads as a wall to the open court beyond. The design does not seek to introduce faux historical detail but is strongly reflective of the proposed use and ownership and uses an appropriate, historical form.

#### 7.4 PORT MACQUARIE-HASTINGS LOCAL ENVIRONMENTAL PLAN 2011 (PMHLEP)

##### 7.4.1 Impact on the Heritage Items in the Vicinity

The subject site is in the vicinity of a number of heritage items.

###### 7.4.1.1 Hastings Historical Society Museum

To the east of the site is the Hastings Historical Society Museum, a two storey Colonial Georgian style building in painted brick with a hipped, corrugated metal roof. The Museum was formerly a dwelling and shop that was built in the 1830s and later extended. There is a collection of later, domestic scale additions to the rear that house the Museum collections.



Figure 7.5 Hastings Historical Society Museum

The Museum is listed in the State Heritage Register as well and the State Heritage Inventory. The listing sheet for the item (Database No. 5045338) contains a statement of significance.

*The museum building demonstrates the form scale and style of development which took place when free settlement was permitted in Port Macquarie. One of the only surviving early commercial and residential buildings in Port Macquarie. Located near other historic buildings such as the Courthouse and The Garrison. As a museum it continues to provide a focus for historical research and heritage within the community (Suters Architects Snell, 1991).*

The proposed development will have no direct impact on the item as the sites are separate and the removal of the unsympathetic buildings on the subject site will improve the setting of the item.

The rear of the Museum has little of the character of the front section being later buildings with a plain brick wall to the subject site. Here the new development is single storey and will not impact on any significant views.

The new colonnade will have some impact on views to the front but is well scaled and has its own architectural language to clearly distinguish it from the Museum and is lower than the eave to allow the Museum to be read in the round. This is amplified by the open court beyond that is clear of structures to allow views to the side elevation of the Museum.

Overall we consider that the development will have a very limited and acceptable impact on the significance and setting item.



#### 7.4.1.2 Garrison Building

To the west of the site is the Garrison Building, a two storey building in painted brick and render with a hipped, corrugated metal roof. The building was a commercial/residential building that was built in the 1830s and later extended and the verandah added.



Figure 7.6 The Garrison Building

The State Heritage Inventory listing sheet for the item (SHI 1730014) contains a statement of significance.

*The building represents the form scale and style of development which took place following free settlement. One of the only surviving early commercial and residential buildings in Port Macquarie.*

The proposed development will have no direct impact on the item as the sites are separate and the removal of the unsympathetic buildings on the subject site will improve the setting of the item.

The rear of the building has little of the character of the front section being later buildings with plain brick walls to the subject site. Here the new development is single storey and will not impact on any significant views.

The new colonnade will have some impact on views to the front but is well scaled and has its own architectural language to clearly distinguish it from the Garrison that is considerably higher and the development is lower than the eave to allow the Garrison to be read in the round. This is amplified by the open court beyond that will allow views to the upper section of the item. There are stores along the abutting wall but this reflects the current site arrangement where the current office building is set close to the side wall to the item.





Figure 7.7 Side wall to the subject site and the Garrison

Overall we consider that the development will have a very limited and acceptable impact on the significance and setting item.

#### 7.4.2 Former Courthouse Building

Opposite the subject site is the former Courthouse building, a range of single storey buildings set in well-landscaped grounds.



Figure 7.8 The former Courthouse

The proposed development will have no direct impact on the item as the sites are well separated and the current site plays little role in the setting of the Courthouse.

The new colonnade will provide the new street frontage to the building but, as noted above, colonnaded forms are not out of character with some of the earlier buildings in the township and the colonnade is well scaled and has its own architectural language to clearly distinguish it. The proposed building is single storey and sits between two, two storey buildings

Overall we consider that the development will not impact on the significance of the item and only a very limited and acceptable impact on its setting

## 7.5 PORT MACQUARIE-HASTINGS DEVELOPMENT CONTROL PLAN 2013 (PMHDCP)

### 7.5.1 Building Setbacks

The PMHDCP contains a requirement for a 3.0 metre setback to the Museum for new development on the site. The current design has the colonnade set to the footpath in the manner of the current office building on the site.

The colonnade is an open structure that has no roof and views will be available through this element to the open courtyard beyond with the side elevation to the Museum exposed and open to view. The courtyard is seven metres and will allow ample views to the side of the Museum. It will also allow access to the Museum wall for maintenance as the current building (that is set close to the Museum) will be demolished. The pattern of the historic buildings in the immediate vicinity is for them to be set to the street alignment across their whole width.

We consider that the proposals are an appropriate treatment for the subject site as a setback would simply leave an unoccupied space to the side that would serve little purpose. The design is sympathetic to the presentation of the historic buildings each side as these were not designed to be seen in the round and have blank elevations to the subject site.

## 8.0 SUMMARY AND RECOMMENDATIONS

### 8.1 SUMMARY

Overall, we consider that the proposals are a modest and very well considered piece of infill development that respond well to the historic context of the site and pay due regard to the heritage significance of surrounding development.


The demolition of the current buildings on the site affords an opportunity to improve the setting of the adjoining heritage items and the low key design of the proposal with its elegant colonnade and open court allow for a well mannered development of a currently moribund site.

We consider that the proposals will have a very limited and acceptable impact on the heritage items in the vicinity and provide for a 'quiet' infill development that does not seek to overwhelm the items. The development provides for a building that has its own clear, architectural language and will revitalize the site and the local context drawing on historical precedents in the surrounding area.

In heritage terms, we consider that the proposal should be approved.

### 8.2 RECOMMENDATIONS

Any excavation should be the subject of archaeological monitoring by a suitable qualified archaeologist and any finds be the subject of assessment and recording or inclusion in the works.



JOHN OULTRAM

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

**9.0 APPENDIX - OWNERS 1835-1980S WITH PREAMBLE**

Auto Folio 1/713378 (Source: NSW Land Registry Services)

Year	Owner
1834	26th November CROWN GRANT Serial 37 Page 73 Parish of Macquarie 2 roods Allotment 1 Section 5 Town of Port Macquarie Edward McRoberts, Sydney 13 pounds 6 shillings 8 pence
1835	21st December BOOK J NO. 62 Lease and Release (Conveyance) 2 roods Allotment 1 Section 5 Town of Port Macquarie From: Edward McRoberts and wife Jane To: Andrew Blowers Smith, esquire 50 pounds
1843	26th June BOOK 4 NO. 376 Conveyance 2 roods Allotment 1 Section 5 From: Andrew Blowers Smith To: William Stokes 6256 pounds 6 shillings 4 pence in promissory notes
1843	27th June BOOK 4 NO. 377 Mortgage 2 roods, Allotment 1 Section 5 2 roods, Allotment 4 Section 19 2 roods, Allotment 5 Section 19 From: William Stokes To: Andrew Blowers Smith Henry Arthur Smith 6256 pounds 6 shillings 4 pence
1846	3rd April BOOK 10 NO. 717 Conveyance of Equity of Redemption From: William Stokes To: Andrew Blowers Smith Henry Arthur Smith 103 pounds owing
1848	11th March BOOK NO. Release From: Andrew Blowers Smith To: John Smith

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

Year	Owner
1850	2nd May BOOK 18 NO. 752 Conveyance 2 roods Allotment 1 Section 5 From: Henry Arthur Smith, Melbourne, merchant John Smith, Sydney, merchant To: Samuel Henry Cohen, Port Macquarie, storekeeper 100 pounds
1852	24th December BOOK 25 NO. 168 Conveyance of part Allotment 1 Section 5 (Nos. 24-26 Clarence Street) From: Samuel Henry Cohen, storekeeper, Port Macquarie, and wife Eliza To: Dr Henry Taylor, doctor of medicine, Port Macquarie 100 pounds
1853	19th June Henry Taylor died, probably at Nottingham, England
1854	3rd December BOOK 38 NO. 562 Conveyance of part Allotment 1 Section 5 (Nos. 24-26 Clarence Street) From: Edward Denny Day, esquire, Port Macquarie Arthur Edward Halloran, esquire, Wide Bay To: Joseph Phillips, innkeeper, Port Macquarie 325 pounds
1865	Joseph Phillips died at Port Macquarie
1866	22nd June Mrs Esther Phillips died at Port Macquarie
1871	8th November Sequestration of the estate of Mrs Mary Watts
1872	24th June BOOK 131 NO. 495 Conveyance Allotment 1 Section 5 (Nos. 24-26 Clarence Street) And other properties From: John Piper Mackenzie, official assignee of the estate of the insolvent estate of Mrs Mary Watts, widow of Charles Watts To: Edward Bennett, Sydney, esquire 138 pounds
1879	1st December Edward Bennett the elder died at Elizabeth Bay
1880	28th February BOOK 200 NO.331 Conveyance Allotment 1 Section 5 (Nos. 24-26 Clarence Street) From: Frederick Naboth Burt, Elizabeth Bay, gentleman Edward Bennett, Elizabeth Bay, gentleman Executors of Edward Bennett the elder To: Bernard Cavanagh, Port Macquarie, freeholder 200 pounds

24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

Year	Owner
1892	1st June BOOK 491 NO. 639 Conveyance (No. 24 Clarence Street) 24&1/5 perches part Lot 1 of Section 5, Port Macquarie Town From: Bernard Cavanagh, Port Macquarie, gentleman To: Rosa Kerr, Port Macquarie, widow 100 pounds
1921	18th May Patrick John Kerr died at Woollahra
1921	12th August Probate No. 108005 of the will of Patrick John Kerr, late of Woollahra, labourer granted
1923	(not given) BOOK 1289 NO. 644 Acknowledgement Malvina Kerr, Woollahra, widow Executrix of the will of Patrick John Kerr
1923	19th January BOOK 1209 NO. 645 Conveyance 24&1/5 perches part Lot 1 of Section 5, Port Macquarie Town From: Malvina Kerr, Woollahra, widow To: Gordon Henry Nelson, Port Macquarie, police constable 375 pounds
1927	4th February BOOK 1463 NO. 296 Conveyance 24&1/5 perches part Lot 1 of Section 5, Port Macquarie Town From: Gordon Henry Nelson, Port Macquarie, police constable To: James Pearce, Port Macquarie, carter 550 pounds
1952	9th July James Pearce died
1955	23rd August Catherine Pearce died
1960	14th September BOOK 2549 NO. 415 Conveyance 24&1/5 perches, part Lot 1 of Section 5, Port Macquarie Town From: Dorothy May Braithwaite, Port Macquarie, married woman, administratrix To: South Pacific Accommodation Ltd 4000 pounds
1965	6th July BOOK 2751 NO. 444 Conveyance 24&1/5 perches, part Lot 1 of Section 5, Port Macquarie Town From: South Pacific Accommodation Ltd To: Gerald Francis Tyrrell, Lane Cove, company director 4,500 pounds



24 CLARENCE STREET, PORT MACQUARIE

HERITAGE IMPACT STATEMENT

Year	Owner
1974	28th May BOOK 3157 NO. 111 Conveyance 24&1/5 perches, part Lot 1 of Section 5, Port Macquarie Town From: Gerald Francis Tyrrell, Port Macquarie, amusement parlour proprietor To: John Valerious Semitecolos and Port Macquarie, amusement parlour proprietors, and wife Maureen June Semitecolos \$26,000
1985	27th March BOOK 3621 NO. 971 Mortgage 24&1/5 perches, part Lot 1 of Section 5, Port Macquarie Town From: John Valerious Semitecolos and Maureen June Semitecolos, 24 Clarence Street, Port Macquarie, amusement parlour proprietors To: Coltid Pty Ltd
	Conversion Action 4509
	Auto Folio 1/713378 not searched



Level 6, 10 Valentine Avenue  
Parramatta NSW 2150  
Locked Bag 5020  
Parramatta NSW 2124  
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500  
Facsimile: 61 2 9873 8599  
[heritagemailbox@environment.nsw.gov.au](mailto:heritagemailbox@environment.nsw.gov.au)  
[www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au)

Mr Patrick Galbraith-Robertson  
Port Macquarie Hastings Council  
PO BOX 84  
PORT MACQUARIE  
NSW 2444  
Email: [patrickg@pmhc.nsw.gov.au](mailto:patrickg@pmhc.nsw.gov.au)

Our File No: EF19/16669  
Our Ref: DOC19/289097  
Your ref: DA/2019/203

Dear Mr Galbraith-Robertson

**DEVELOPMENT APPLICATION REFERRAL 24 CLARENCE STREET, PORT MACQUARIE, PORT MACQUARIE-HASTINGS LGA (DA Referral 2019/203)**

I refer to your letter received by Heritage Division 4 April 2019 referring the above named development application for comment under clause 5.10(7) of the Port Macquarie-Hastings Local Environmental Plan 2011. The referral has been made as the subject site falls within the heritage listing known as 'Archaeology of early European Settlement' item A111. The subject site is identified within the Port Macquarie Archaeological Management Plan, 1994 prepared by Higginbotham and Associates as Item 131. This site has historical archaeological potential.

This development is for demolition of existing buildings and construction of restaurant/café, footpath and parklet dining for Lot 1, DP 713378. The application was referred with the following documents:

- Statement of Environmental Effects, prepared by All about planning dated March 2019
- Architectural Plans and Elevations including stormwater management plans prepared by David Johnson Engineers, and a site survey prepared by Coastal Survey Solutions.
- A preliminary BCA/NCC Summary statement prepared by Craig Teasdall Architect.

It is noted an Archaeological Assessment was not supplied in support of this Development application. The SEE prepared for the site does not identify the requirements to the layer of 'Archaeology of early European Settlement' within the study area, nor does it identify requirements under the Heritage Act 1977. Rather, the SEE recommends stopping work if relics are identified during excavation activities. The Heritage Division does not support the approach identified in the SEE for this application.

Review of Heritage Council of NSW records indicates two previous approvals under s140 of the Heritage Act 1977 have been issued for ground disturbance works at this site (in 1998 and 2006). However, works do not appear to have been undertaken and these approvals have now lapsed.

The Heritage Division has reviewed the 2006 Archaeological Assessment prepared for 24 Clarence Street, Port Macquarie by Archaeology and Heritage Pty Ltd to provide advice to Council on the anticipated archaeological resources at this site to inform this DA referral.

24 Clarence Street has potential for remains of a building which fronted Clarence Street and other structures which date to the early 19<sup>th</sup> century. The Statement of Significance prepared by Archaeology and Heritage Pty Ltd (p42) states these remains '*are of considerable significance. If remains are preserved on site [ie. If they are confirmed to be substantially intact] they would be assessed as being important enough to be of State significance*'.

The DA drawings indicate the proposed building will be supported by reinforced concrete footings which have been designed for minimal impact on foundations of potential archaeology and a reinforced concrete slab to support the building (Craig Teasdall Architect, Short Section Through Site drawing 06, dated 22/3/19 Rev A). Proposed Parklets are present at the Clarence street frontage and appear to involve some ground disturbance, although the detail is unclear from the Architectural section drawing provided (Craig Teasdall Architect Short section, drawing 06, dated 22/3/19 Rev A).

The proposed with stormwater connections will presumably be installed below ground, although there is insufficient detail to understand if they will require excavation of existing or new trenches for connections



to the street stormwater. They will also connect to an above ground 6000L storm water tank on site. An underground carpark does not appear to be proposed.

It is recommended that Council includes the following conditions on the application, should it be approved by Council.

1. Prior to any ground disturbance activities commencing on site (including removal of foundations as part of the demolition process), the Applicant will need to obtain an approved s140 application under the *Heritage Act 1977*. This application will need to clearly outline what mitigation measures are proposed to avoid harm to potential State significant archaeological deposits including options for redesign, if appropriate.
2. Prior to the issue of the occupation certificate by Council and/or the Principal Certifying Authority, the Applicant shall supply a copy of written correspondence from the Heritage Council of NSW or its delegate confirming that their requirements under any *Heritage Act 1977* approval have been satisfied.

*Reasons: The subject site has potential to contain historical archaeological relics, which are protected under s.139 of the Heritage Act 1977. The Applicant must obtain an approval under s.141 of the Heritage Act 1977 prior to any harm occurring to relics.*

It is recommended the following additional advice is provided to the Applicant prior to determination of the application for their information and action ahead of a decision on the DA. A prior historical archaeological Assessment exists for the subject site prepared by Archaeology and Heritage Pty Ltd dated 2006, and would be available from the Heritage Division, OEH library. To support an application under s140 of the *Heritage Act 1977*, the Applicant will need to ensure the following additional documents are prepared by a suitably qualified and experienced historical archaeologist and submitted with the s140 application. This must be specific to the works and impacts propose under the current DA:

- An updated addendum to the existing Historical Archaeological Assessment for 24 Clarence Street that assesses what the specific impacts of the proposed development would be on the potential archaeological resources. It should outline any measures identified by the development to reduce impact to these anticipated significant deposits. This short addendum should be consistent with the Heritage Council of NSW *Guidelines Statements of Heritage Impact, 1996* and *Assessing Significance for Historical Archaeological sites and Relics 2009*.
- A revised assessment of significance must be included in this addendum given that finds in Port Macquarie since 2006 have resulted in two sites being listed on the State Heritage Register due to their archaeological resources and state significance.
- An Archaeological Research Design and Excavation Methodology for the proposed ground disturbance works.
- A nominated Excavation Director for any archaeological investigations needed. That person would need to meet the ED Criteria for State significant archaeological sites.

If you have any questions regarding the above matter please contact Felicity Barry, Senior Historical Archaeologist, at the Heritage Division, Office of Environment and Heritage, on (02) 9995 6914 or by email at [Felicity.Barry@environment.nsw.gov.au](mailto:Felicity.Barry@environment.nsw.gov.au).

Yours sincerely



30 April 2019

**Dr Siobhan Lavelle, OAM**  
Senior Team Leader, Specialist Services  
Heritage Division  
Office of Environment and Heritage  
**AS DELEGATE OF THE NSW HERITAGE COUNCIL OF NSW**

Helping the community conserve our heritage

## Developer Charges - Estimate

Applicants Name: All About Planning  
 Property Address: 24 Clarence Street, Port Macquarie  
 Lot & Dp: Lot(s):1,DP(s):713378  
 Development: Demolition of existing buildings and construction of restaurant



Water and Sewerage Headworks Levies are levied under S64 of the LGA Act & S306 of the Water Management Act 2000.  
 Other contributions are levied under Section 7.11 of the Environmental Planning and Assessment Act and Council's Contribution Plans.

Levy Area	Units	Cost	Estimate
1 Water Supply	2.18	\$10,190.00 Per ET	\$22,214.20
2 Sewerage Scheme Port Macquarie	2.18	\$3,866.00 Per ET	\$8,427.80
3 N/A			
4 N/A			
5 N/A			
6 N/A			
7 N/A			
8 N/A			
9 PMQ CBD Car Parking Contribution	2	\$22,764.00 Per Space	\$45,528.00
10 N/A			
11 N/A			
12 N/A			
13 N/A			
14 N/A			
15 Admin General Levy - Applicable to Consents approved after 11/2/03	2.2% S94 Contribution		\$1,001.60
16			
17			
18			
<b>Total Amount of Estimate (Not for Payment Purposes)</b>			<b>\$77,171.60</b>

NOTES: These contribution rates apply to new development and should be used as a guide only.  
 Contributions will be determined in conjunction with a Development Application (DA) or Complying Development Application (CDA).  
 DAs will be subject to the contributions plans in force at the time of issue of the Consent and for CDCs at time of lodgement.  
 Contribution Rates are adjusted quarterly in line with the CPI.

DATE OF ESTIMATE:

16-Oct-2019

Estimate Prepared By Pat Galbraith-Robertson

This is an ESTIMATE ONLY - NOT for Payment Purposes

out Planning, 24 Clarence Street, Port Macquarie, 16-Oct-2019.xls

PORT MACQUARIE-HASTINGS COUNCIL

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**Item: 08****Subject: DA2019 - 400 CONCEPT PROPOSAL FOR STAGED RESIDENTIAL SUBDIVISION (25 TORRENS TITLE LOTS) & STAGED RESIDENTIAL SUBDIVISION (19 TORRENS TITLE LOTS) - 165 JOHN OXLEY DRIVE, PORT MACQUARIE****Report Author: Development Assessment Planning Coordinator, Patrick Galbraith-Robertson**

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<b>Applicant:</b>	<b>N &amp; P Mann, P &amp; J Mann, P &amp; B Pye CARE King &amp; Campbell Pty Ltd</b>
<b>Owner:</b>	<b>N &amp; P Mann, P &amp; J Mann, P &amp; B Pye</b>
<b>Estimated Cost:</b>	<b>\$750,000</b>
<b>Parcel no:</b>	<b>16155</b>

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**Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

**RECOMMENDATION**

**That DA2019 - 400 for a concept proposal for staged residential subdivision (25 Torrens title lots) & staged residential subdivision (19 Torrens title lots) at Lot 3 DP 533058, No. 165 John Oxley Drive, Port Macquarie, be determined by granting consent subject to the recommended conditions.**

**Executive Summary**

This report considers a development application for a concept proposal for staged residential subdivision & staged residential subdivision at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application, three (3) submissions were received.

The proposal has been amended during the assessment of the application in response to assessment issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact.

This report recommends that the development application be approved subject to the attached conditions.

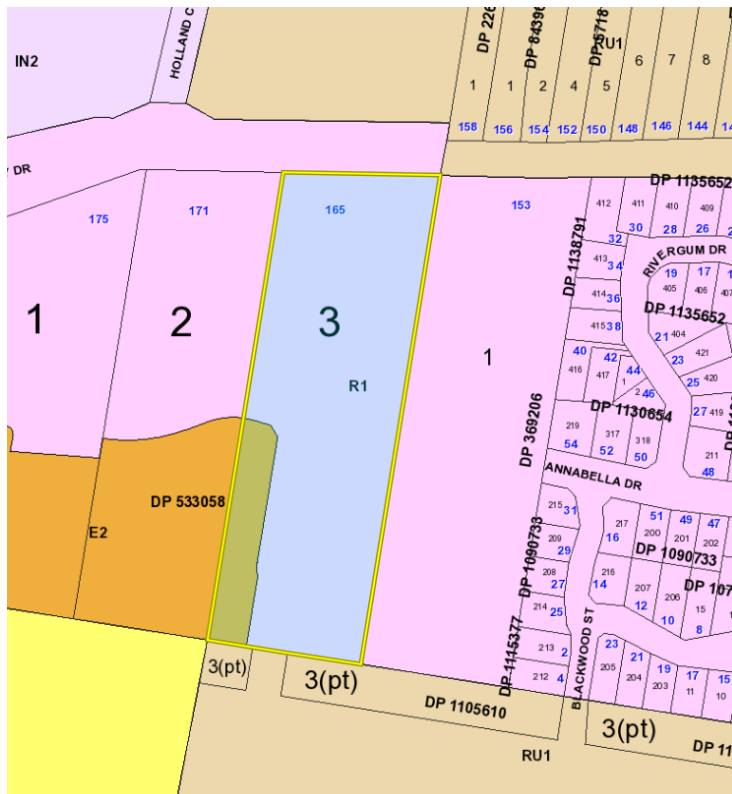
**1. BACKGROUND****Existing Sites Features and Surrounding Development**

The site has an area of 2.4132 hectares.

The site has recently been rezoned to part R1 General Residential and part E2 Environmental Conservation with the gazettal of Amendment No.39 to the Port Macquarie Hastings LEP 2011.

The site is subject to an existing Planning Agreement known as the *South Lindfield Urban Release Area Planning Agreement (Mann VPA)*.

The site is zoned part R1 general residential and part E2 Environmental Conservation in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan.



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:





## 2. DESCRIPTION OF DEVELOPMENT

Key aspects of the proposal include the following:

- Concept proposal for a Torrens title subdivision of the site into 25 lots; and
- A Stage 1 works development which includes:
  - Vegetation clearing within the development footprint (R1 zone);
  - Confirmation of the bushfire asset protection (APZs) for the concept proposal;
  - Demolition of existing dwelling and sheds;
  - Construction of the northern sewer route within the John Oxley Drive road reserve and Lot 1 DP 22676 to the existing sewerage reticulation infrastructure; and
  - The subdivision of the northern catchment, including road no.1, road no.2, part road no.3 and residential subdivision to provide 19 lots, which will be released in 3 sub-stages.
- The subsequent Stage 2 Works DA will provide for the residential subdivision of the southern catchment to provide 6 Torrens title lots:
  - The Stage 2 Works DA will include details of the downstream connections to the existing pump station and stormwater treatment via a bio-retention swale within the adjoining property to the south (Lot 399 DP 1241278), which is held in separate ownership.
  - The proposed subdivision has been concurrently lodged with a Concept DA and Stage 1 Works DA on the adjoining property to the west, described as Lot 3 DP 533058. The required servicing (sewer and stormwater) for the northern catchments of both the subject site and adjoining Lot 1 will be provided on a shared arrangement.
- The concept proposal has been made pursuant to Part 4 Division 4.4 of the Environmental Planning and Assessment Act 1979 (the Act) and relates to land identified within the South Lindfield Urban Release Area.

- The Act establishes at clause 4.22 (5) that Council's assessment of a Concept DA need only consider the likely impact of the concept proposal, including any first stage and does not need to consider the likely impact of the carrying out of development (the works) that may be the subject of subsequent Development Applications.
- The proposal is also an Integrated Development requiring Bushfire Safety Authority under the Rural Fires Act 1997.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

### **Application Chronology**

- 5 June 2019 - DA lodged with Council.
- 6 June 2019 - Referral of proposal to NSW Rural Fire Service to obtain Bushfire Safety Authority.
- 12 to 25 June 2019 - Neighbour notification of proposal.
- 24 June 2019 - Referral of Biodiversity Assessment Report (BDAR) to the Department of Planning, Industry and Environment.
- 1 July 2019 - Site inspection by Assessing Officer with Applicant and request for additional information - approach to noise assessment and Vegetation Management Plan (VMP).
- 3 July 2019 - Copy of submissions forwarded to Applicant for consideration.
- 18 July 2019 - Bushfire Safety Authority issued by the NSW Rural Fire Service.
- 28 August 2019 - Meeting with Applicant to discuss assessment issues.
- 4 September 2019 - Copy of correspondence received from Applicant of additional information sent to the Department of Planning, Industry and Environment (DPIE) in regards to an exemption request to the Biodiversity Conservation Act 2016.
- 5 September 2019 - Amended VMP received from Applicant.
- 17 September 2019 - DPIE provided advice on BDAR received.
- 19 September 2019 - Additional information requested from Applicant - arborist report queries, VMP suggestions, copy of BDAR issues raised by DPIE and bushfire risk queries.
- 9 October 2019 - Additional information received from Applicant - response to all assessment queries and updated BDAR.

### **3. STATUTORY ASSESSMENT**

#### **Section 4.15(1) Matters for Consideration**

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

- (a) **The provisions (where applicable) of:**  
(i) **Any Environmental Planning Instrument**

#### **State Environmental Planning Policy No. 44 - Koala Habitat Protection**

The site is identified within Council's *Koala Plan of Management for South Lindfield Stage 3 (KPOM)* dated November 2018.





Under the provisions of clause 104, the proposed subdivision is not identified as a traffic generating development.

Under the provisions of clause 106, the proposed northern sewer route is a permissible landuse outside the development site in the RU1 primary production zone to the north of the site.

Based on the above, the proposed development addresses relevant clauses in the SEPP and will not to create any significant adverse conflict in terms of traffic or noise.

**Port Macquarie-Hastings Local Environmental Plan 2011**

The proposal is consistent with the LEP having regard to the following:

- Clause 2.2 - The subject site is zoned part R1 general residential and part E2 environmental conservation.

The objectives of the R1 zone are 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.*

The objectives of the E2 zone are as follows:

- *To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.*
- *To prevent development that could destroy, damage or otherwise have an adverse effect on those values.*
- *To protect coastal wetlands and littoral rainforests.*
- *To protect land affected by coastal processes and environmentally sensitive land.*
- *To prevent development that adversely affects, or would be adversely affected by, coastal processes.*
- *To enable development of public works and environmental facilities where such development would not have an overall detrimental impact on ecological, scientific, cultural or aesthetic values.*

In accordance with Clause 2.3(2), the proposal is consistent with the objectives of both zones having regard to the following:

- The proposal will ensure the protection of the section of the site which is zoned E2 which has high ecological value.
  - The proposal will increase the ecological value of the E2 zoned section of the site with the proposed VMP works and koala offset plantings;
  - The subdivision is a permissible landuse; and
  - The subdivision will provide for new housing needs of the community.
- Clause 2.7 - The demolition of the existing dwelling requires consent as it does not fit within the provisions of SEPP (Exempt and Complying) 2008.
  - Clause 4.1 - The lot sizes within the proposed Stage 1 subdivision development area range from 497.6m<sup>2</sup> to 819.5m<sup>2</sup>. All proposed lots comply with the minimum 450m<sup>2</sup> lot size standard identified in the Lot Size Map relating to the site.
  - Clause 5.10 – Heritage. The site does not contain or adjoin any known heritage items or sites of significance. A standard precautionary condition is

recommended to stop works should any aboriginal archaeological items be discovered during any works.

- Clause 7.5 – Koala Habitat. This clause applies to land that is shown as “Koala Habitat area” on the Koala Habitat Map. The site is identified within Council’s *Koala Plan of Management for South Lindfield Stage 3*. Koala trees are proposed to be removed as detailed in the submitted plans and offset plantings of trees are proposed within the planned location within the E2 environmental conservation zone. The E2 zoned section of the site is intended to be dedicated to Council under the Mann VPA.
- Clause 7.8 - The site is not subject to any identifiable adverse aircraft noise associated with the operations of the Port Macquarie Airport.
- Clause 7.9 - The site is subject to acoustic controls as shown on the ‘acoustic controls map’. A specialist site specific Road Noise Assessment has been submitted to address any potential amenity impacts to future residential uses on the site. This report recommends that a continuous 1.8m fence (either standard colorbond or timber lapped), to the northern property boundary will ensure that the relevant requirements for road traffic noise intrusion will be achieved for all future dwellings that are constructed to normal residential standards.
- Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development. Provision of electricity will be subject to obtaining satisfactory arrangements certification prior to the issue of a Subdivision Certificate as recommended by a condition of consent.

**(ii) Any draft instruments that apply to the site or are on exhibition**

No draft instruments apply to the site.

**(iii) Any Development Control Plan in force**

The relevant provisions of the Development Control Plan 2013 include:

- Part 4 – Chapter 4.4.3 - South Lindfield precinct;
- Part 3 – Chapter 3.6 Subdivision; and
- Part 2 - General Provisions.

The South Lindfield Precinct is identified in the below image:



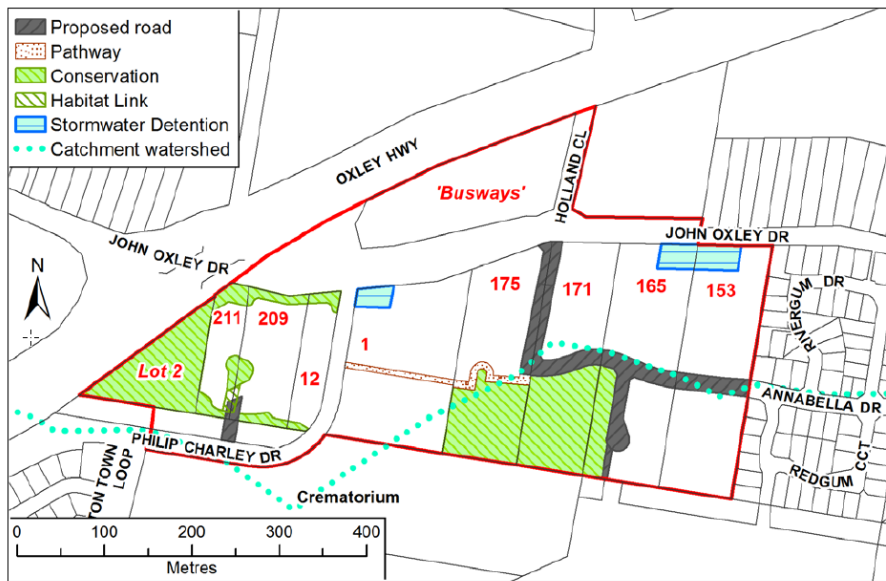


Figure 4.4.3-2 South Lindfield key development components

**Part 4 - Chapter 4.4.3 South Lindfield Precinct**

DCP Objective	Development Provisions	Proposed	Complies
4.4.3.1 & 4.4.3.2	Subdivision layouts to provide a road network that conforms with the connectivity shown in Figure 4.4.3-2 - (refer above Figure extract). New development within the western sub precinct has access via a single access from Philip Charley Drive from the south.	The proposed internal road network is consistent with Figure 4.4.3-2, which provides for an extension to Anabella Drive. All proposed lots will only be accessible from the new internal road network.	Yes
4.4.3.3 & 4.4.3.4	All stormwater infrastructure is consistent with the outcomes of the stormwater management strategy summarised in Figure 4.4.3-2. All stormwater infrastructure (including access) is to be dedicated to Council.	The location of the proposed stormwater basin to serve the northern catchment of the site (Lot 3) and the adjoining property at Lot 1, is consistent with Figure 4.4.3-2. It is proposed to dedicate the stormwater infrastructure which will serve a number of properties, to Council.	Yes
4.4.3.5	Development is to provide an integrated solution for sewerage services with adjoining properties. Development will require approval from relevant landowners for gravity sewerage mains connecting to the	The proposed sewer strategy for the Concept DA is illustrated on the plans submitted. The northern catchment, the subject of the Stage 1 Works DA, will ultimately drain to Pump Station 54 via a connection through	Yes



	<p>existing sewerage network.</p> <p>In the northern catchment:</p> <ul style="list-style-type: none"> <li>• the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54, until a sewer pumping station on Lindfield Park Road is operational</li> <li>• the alignment should cater for possible extension to serve the bulk of the 4 lots west of Philip Charley Drive</li> <li>• development yields of the land zoned Residential are not to exceed 16 et/ha prior to provision of upgraded local sewerage main capacity.</li> </ul> <p>In the southern catchment the sewer mains are to connect to Sewer Pump Station 80 to the south.</p>	<p>Lot 1 DP 22675 to PM54P010MH. The owner's consent from the landowner of Lot 1 DP 22675 has been submitted.</p> <p>The development of the southern catchment, the subject of the future Stage 2 Works DA, will drain to Pump Station 80 through Lot 399 DP1241278 to PM80P001MH. The point of the future connection within the site is shown on the plans submitted.</p>	
4.4.3.6	<p>Compliance with requirements of the South Lindfield Koala Plan of Management.</p> <p>The areas shown on Figure 4.4.3-2 for Conservation are to be dedicated to Council for long term management, following embellishment planting of koala food trees:</p> <ul style="list-style-type: none"> <li>• in forested areas - within available canopy spaces where the space has a radius of at least 5 m, or</li> <li>• in cleared areas - at 10 m centres.</li> </ul> <p>Alternatively, with Council approval planting in cleared areas can be provided elsewhere in the vicinity at an offset ratio of 4 trees for each koala food tree removed, with trees at 10 m centres.</p> <p>Where land zoned E2 or land containing offset planning is held in private</p>	<p>Figure 6 of the South Lindfield KPoM confirms that will the proposed removal of the existing koala food trees these will be required to be offset within the E2 environmental conservation area which is to be dedicated to Council. The VMP submitted sets out a satisfactory approach to addressing these requirements.</p>	Yes

	ownership, satisfactory arrangements will be required for ongoing maintenance in perpetuity. Development adjoining the land zoned E2 Environmental Conservation must ensure that the long-term habitat integrity of that E2 land is not compromised by the development activities.		
4.4.3.8	Applications for subdivisions should provide site-specific updated traffic noise assessments, with adequate information to simplify subsequent assessment of building proposals. Acoustic mitigation measures should not use high visual barriers.	A specialist Road Noise Assessment has been submitted. This report confirms that a continuous 1.8m fence (either standard colorbond or timber lapped), to the northern property boundary will ensure that the relevant requirements for road traffic noise intrusion will be achieved for all future dwellings that are constructed to conventional residential development standards.	Yes

**DCP 2013: Chapter 3.6 - Subdivision**

DCP Objective	Development Provisions	Proposed	Complies
3.6.3.1	<p>A site analysis is required for all development and shall illustrate:</p> <ul style="list-style-type: none"> <li>• microclimate;</li> <li>• lot dimensions;</li> <li>• north point;</li> <li>• existing contours and levels to AHD;</li> <li>• flood affected areas;</li> <li>• overland flow patterns, drainage and services;</li> <li>• any contaminated soils or filled areas, or areas of unstable land;</li> <li>• easements and/or connections for drainage and utility services;</li> <li>• identification of any</li> </ul>	A satisfactory site analysis plan has been submitted.	Yes

	<p>existing trees and other significant vegetation;</p> <ul style="list-style-type: none"> <li>• any existing buildings and other structures, including their setback distances;</li> <li>• heritage and archaeological features;</li> <li>• fences;</li> <li>• existing and proposed road network, including connectivity and access for all adjoining land parcels;</li> <li>• pedestrian and vehicle access;</li> <li>• views to and from the site;</li> <li>• overshadowing by neighbouring structures; and</li> <li>• any other notable features or characteristics of the site.</li> </ul>		
3.6.3.2	Torrens title lots minimum width of 15m when measured at a distance of 5.5m from front property boundary.	All lots have a minimum or greater width of 15m when measured at a distance of 5.5m from front property boundary.	Yes
	Minimum width of 7m when boundaries are extended to kerb line.	All lots have a width greater than 7m for lots which have boundaries extended to the kerb line.	Yes
	Minimum depth of 25m.	All lots have a depth greater than 25m.	Yes
	For lots where average slope of the site is equal to, or exceeds 16%, indicative road and driveway grades are required demonstrating satisfactory access.	No indicative driveway grades are required for individual lots as the slope grades are less than 16%.	N/A
3.6.3.3	Battle-axe lots discouraged in greenfield development.	No battle-axe lots are proposed.	Yes
3.6.3.4	Lots are to be designed to allow the construction of a dwelling, which does not	All proposed lots are designed to allow for future construction of dwellings,	Yes

	involve more than 1m cut, or fill, measured from natural ground level, outside the dwellings external walls.	which will be unlikely to require more than 1m cut or fill.	
	Additional information provided for slope categories in accordance with Table 3.6.2.	All proposed lots will meet the criteria for Slope A standards with no special lot designs required.	Yes
3.6.3.5	Wherever possible orientate streets to maximise the number of east, west and south facing lots and to minimise the number of narrow north facing lots. Residential street blocks should preferably be orientated north-south with dimensions generally limited to 60-80m by 120-150m as illustrated in Figure 3.6-2.  Lot size and shape are to reflect orientation to ensure future dwelling construction has optimal opportunity for passive solar design.	The orientation of the proposed lots has been determined primarily having regard to the position of the east-west extension of Annabella Drive and planned road corridors.	Yes
3.6.3.6	Kerb and guttering, associated street drainage, pavement construction and foot paving across the street frontages should be constructed as part of the subdivision works where these do not exist (may be varied subject to criteria in this clause)	The proposed street pattern has been determined having regard to the position of the east-west extension of Annabella Drive and includes a pathway network and consideration of the future external connections in the South Lindfield neighbourhood.	Yes + appropriate consent conditions recommended.
3.6.3.7	Subdivisions close to urban centres or along arterial roads serviced by public transport achieve yield of >35 dwellings per hectare.	The proposal will achieve a yield of approximately 10-11 dwelling per hectare. Satisfactory density achieved particularly having regard to general residential zoning of land and noting there is no minimum floor space ratio controls. There is also potential for more than 1 dwelling on some of the proposed lots.	Satisfactory
3.6.3.8	All new roads are to be dedicated to Council	All proposed roads meet Councils current Aus-Spec	Yes

	<p>designed in accordance the Council's adopted AUSPEC design specification documents.</p> <p>All applications to subdivide land should include a road layout plan that meets the Council's design requirements including providing connectivity and access for all land parcels consistent with Council's road hierarchy.</p>	requirements and provides for connectivity within the South Lindfield neighbourhood.	
3.6.3.9	<p>The design of roads identified for bus routes should comply with the AUSTROADS standards, including the design of bus bays and stops.</p> <p>Development should provide the bus stops, including bus bays and shelters not more than 600m apart.</p>	<p>The site is adjacent John Oxley Drive and it is anticipated that all future bus stops will be provided for in this existing road reserve.</p> <p>No bus stops are proposed within the subdivision.</p>	Yes
3.6.3.10	<p>The design of roads should aspire to achieve standards illustrated in Figure 3.6-3 to Figure 3.6-11.</p> <p>At a minimum all new roads should include:</p> <ul style="list-style-type: none"> <li>• street trees at a rate of 1 per 20m along the street frontage and in accordance with Council's <i>Indigenous Street and Open Space Planting List</i>;</li> <li>• underground utilities;</li> <li>• formed kerb and guttering;</li> <li>• 1.2metres pedestrian path.</li> </ul>	<p>The proposed road network provides for the following:</p> <ul style="list-style-type: none"> <li>- Street trees on the opposite side of the roads are proposed to allow for the water services/ footpaths;</li> <li>- Underground utilities;</li> <li>- Formed kerb and guttering; and</li> <li>- 1.5m wide footpaths.</li> </ul>	Yes
3.6.3.11	Perimeter roads adjoining bushland should be designed in accordance with Figure 3.6-8 and may be considered part of the APZ requirements for the adjoining land.	The positioning of the Annabella Drive extension, as required by the DCP provisions for South Lindfield, has generally determined the road layout within each property. An edge road to the southern	Yes
3.6.3.12	Perimeter roads should be		

	designed in accordance with Figure 3.6-8	boundary is acceptable and accordingly the lots that front this boundary will include 10m wide APZ's.	
3.6.3.13	Development for the subdivision for land or major residential development should provide footpaths on both sides of all collector and arterial roads.	All proposed footpaths have been designed to one street frontage, ensuring street tree planting can be undertaken on the opposite side of each street. All proposed lots have frontage to a public road ensuring future casual surveillance.	Yes
	Footpaths should be provided on one side of the street for access places and local streets in accordance with Council's adopted AUSPEC design specification documents.		
	Off street share-ways and on road cycle ways should be provided.		
	Footpaths and cycleway are to have regard for <i>Crime Prevention Through Environmental Design</i> (CPTED) principles.		
	The choice of direction and possible routes should be maximised, with streets and footpaths substantially capable of surveillance by residents.		
3.6.3.14	Local roads are to be designed for a maximum vehicle speed of 50kph.	The road network has been designed to restrict vehicle speeds to 50km/hr. This also supported in the KPoM that applies to the South Lindfield neighbourhood.	Yes
	Traffic management schemes may be appropriate to discourage speeding in long stretches of local roads or to discourage 'rat-running'.		
	On street parking should be discouraged along local roads.		
3.6.3.15	Cycling infrastructure should be provided in accordance with the Council's Cycling Plan.	N/A	N/A
	Where physical infrastructure or land dedication cannot be provided or is not identified, a contribution in accordance with the	Development contributions recommended for contribution to recreation facilities in accordance with Council's adopted Development Contributions	Yes



	Councils' contribution plan/s.	Plans.	
3.6.3.16	An application for subdivision should be accompanied by an a Integrated Water Cycle Management Strategy prepared by a certified practicing engineer and in accordance with Council's adopted design specification documents.	A satisfactory Stormwater and Servicing Strategy has been submitted. This Plan includes the stormwater management provisions for the development of the northern catchments for the site (Lot 3) and the adjoining property at Lot 1 DP 369206.	Yes
3.6.3.17 - 3.6.3.19	An application for subdivision should be accompanied by a Stormwater Management Strategy prepared by a certified practicing engineer and in accordance with Council's adopted Aus-Spec design specification documents.  The finished floor level of buildings should be above the 100 year ARI flood level (plus freeboard) and in accordance with the council's current flood policy.	The plans submitted illustrate the extent of the stormwater management provisions within the northern catchment of both Lot 3 (the site) and adjoining Lot 1. Note: The proposed works for the stormwater infrastructure and bio-retention swale within the adjoining property to the south (Lot 399 DP 1241278), will be undertaken as part of the Stage 2 DA to this Concept DA. In relation to the proposed stormwater management provisions, the impact of the proposed development on stormwater quantity and stormwater quality was modelled in the 12d and MUSIC programs respectively, comparing existing pre-development conditions to proposed post-development conditions, and the change to water quality from source to outlet. The modelling has demonstrated that the subject land has the capability to provide the necessary mitigation measures to ensure protection of the downstream environment and hydrology.	
3.6.3.20	Water supply to meet Council's design	It is proposed to connect to the existing 200mm water	

	specifications.	main in Annabella Drive and run reticulated water through the development as shown on the Stormwater and Servicing Strategy. The future Stage 2 DA for the development of the southern catchment will provide a connection to either the 450mm DICL or 525mm AC main to the south of the property and will be subject of further consultation with the PMHC Water and Sewer Section.	
3.6.3.21 - 3.6.3.22	All lots connected to reclaimed water if available.		
3.6.3.24	Separate sewer junction provided for each lot.	The northern catchment, the subject of the Stage 1 Works DA will ultimately drain to Pump Station 54 via a connection through Lot 1 DP 22675 to PM54P010MH, as shown in the submitted plans. The owner's consent from the landowner of Lot 1 DP 22675 accompanies this submission.	Yes
3.6.3.25	Extension of sewer infrastructure at cost of developer.	The development of the southern catchment, the subject of the future Stage 2 Works DA, will drain to Pump Station 80 through Lot 399 DP1241278 to PM80P001MH. The point of connection within the site is shown in the submitted plans.	
3.6.3.26 - 3.6.3.27	Erosion and sediment control plan to be provided.	A silt and sediment control plan will be provided with the Construction Certificate for the subdivision works.	Yes - capable with consent condition recommend er.
3.6.3.28	Saving and re-using top soil and the incorporation of additives to improve existing soils is preferred to the importation of soils for landscaping.	Construction details will be required to be provided with the Construction Certificate for the subdivision works.	Yes
3.6.3.29	Neighbourhood parks area to be provided so that all residential areas are	The subject site is not identified to make provision for public open space for	N/A

	<p>generally within 500m of the nearest park.</p> <p>The location of neighbourhood parks is to be optimised so that a minimal number of parks are required.</p> <p>Neighbourhood parks and playing fields should be connected to the cycleway and pedestrian path networks.</p> <p>Neighbourhood parks should provide a range of facilities.</p> <p>Sports fields should be located close to school facilities.</p> <p>As a minimum 1.5 hectares active open space (sports fields); 5000m<sup>2</sup> neighbourhood park; 1 hectare of linkage/amenity space (total 3 hectares open space) to be provided per 1,000 people.</p>	recreational purposes.	
3.6.3.30	<p>Neighbourhood parks are to be dedicated as development occurs, and are to include the following:</p> <ul style="list-style-type: none"> <li>• Minimum size of 5,000m<sup>2</sup>.</li> <li>• At least 2000m<sup>2</sup> should be level to gently sloping land.</li> <li>• Street frontage to the same standard as adjoining residential areas (i.e. kerb and gutter, or drainage swales where appropriate).</li> <li>• Any landform grooming to ensure the park is to a standard to suit Council's maintenance regime.</li> <li>• Any drainage works to ensure the functionality of the park.</li> <li>• Access via more than one street.</li> <li>• Integration with other community facilities.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Should be located to cause minimal disruption to traffic.</li> </ul>		
	<p>Neighbourhood park embellishment is to incorporate:</p> <ul style="list-style-type: none"> <li>• Park furniture including seats with shelters, barriers and any appropriate path and cycleway linkages along desire lines or linking to the cycleway network.</li> <li>• Any boardwalks necessary to achieve the required functionality of the park.</li> <li>• Works should generally be required to be undertaken prior to dedication to Council.</li> </ul>		
3.6.3.31	An open space management strategy should accompany any subdivision application where open space that connects to natural linkages, drainage and wildlife corridors.	N/A	N/A
3.6.3.32	All street plantings are to be selected from Council's <i>Indigenous Street and Open Space Planting List</i> from the relevant vegetation community adjacent to the Development.	The proposed street planting will be consistent with Council's Indigenous Street and Open Space Planting List.	Yes
3.6.3.33	<p>Lot layout should address areas of open space or public environmental management areas.</p> <p>Perimeter roads should border any area of open space or public environmental management areas.</p>	The positioning of the Annabella Drive extension, as required by the DCP provisions for South Lindfield, has generally determined the road layout within each property. Not providing an edge road to the southern boundary is acceptable and accordingly the lots that front this boundary will included 10m wide APZ's.	Yes
	An assessment against the generic elements of crime prevention through environmental design	No battle axe lots are proposed. All lots have street frontage connection to provide for casual	Yes

	described in the <i>Crime Prevention Through Environmental Design</i> (CPTED) principles is provided with the subdivision application.	observation of street.	
3.6.3.34	<p>All service infrastructure should be underground unless otherwise approved by Council.</p> <p>All service infrastructure should be installed in a common trench.</p> <p>Conduits for the main technology network system should be provided in all streets.</p> <p>Conduits are to be installed in accordance with the National Broadband Network Company Limited's '<i>Guidelines for Fibre to the Premises Underground Deployment</i>'.</p> <p>Access pits are to be installed at appropriate intervals along all streets.</p>	All services will be provided underground, in accordance with the relevant construction codes.	Yes
3.6.3.35	<p>All new roads are to be designed in accordance the Council's Aus-Spec design specification documents.</p> <p>All applications to subdivide land should include a road layout plan that meets the Council's design requirements.</p>	All proposed roads are compliant with Council's Aus-Spec design specification documents.	Yes
3.6.3.45	Street lighting should be provided in accordance with Australian Standards	Street lighting should be provided in accordance with Australian Standards.	Yes
3.6.3.46	All new development should use energy efficient street lighting.		
3.6.3.47	Lighting should be provided along pathways, cycle ways and in public places.		
3.6.3.51	<p>Street trees should be provided along all road frontages generally at a rate of 1 per 20m interval.</p> <p>Street trees should not affect solar access.</p>	Street trees are provided to one side of every street, enabling footpaths and water services to be provided on the alternate side.	Yes

3.6.3.52	Street trees from Council's list.	The proposed street planting will be consistent with Councils' Indigenous Street and Open Space Planting List.	
3.6.3.53 - 3.6.3.54	CPTED assessment required	All proposed lots have frontage to a public road, allowing for casual surveillance.	Yes

**DCP 2013: General Provisions**

DCP Objective	Development Provisions	Proposed	Complies
2.3.3.8 onwards	Removal of hollow bearing trees	A specialist site specific ecological assessment has been submitted. This assessment confirms that Hollow bearing trees are not present within the site.	N/A
2.6.3.1	Tree removal (3m or higher with 100mm diameter trunk and 3m outside dwelling footprint	Tree removal is proposed which has been satisfactorily addressed with the submitted ecological Biodiversity Assessment Report.	Yes
2.4.3	Bushfire risk, Acid sulphate soils, Flooding, Contamination, Airspace protection, Noise and Stormwater	Refer to main body of report.	Yes
2.5.3.11	Section 94 contributions	Refer to main body of report.	Yes

**(iia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4**

There is an existing planning agreement in place between the landowner's and Council known as the *South Lindfield Planning Agreement (Mann VPA)* which has been entered into relating to the site. The Ramm VPA sets out the following provisions:

- Roads Contribution - requires payment of the current Roads Contribution or the Roads Contribution determined by the next review of the Roads Contribution Plan (Clause 8)
- Clause 9 - provides the landowner of the adjoining western property with the opportunity to construct and dedicate the Link Road across the subject property in order to connect to Annabella Drive.
- Clause 10 - includes provisions facilitating payment of compensation by the subject landowner to the adjoining western landowner in the event that the adjoining landowner has constructed and dedicated the Link Road across the subject property.
- Clauses 13 – 15 - includes provisions that provide for the construction of Stormwater Catchment Work and where appropriate reimbursement of the cost of those works on a catchment share basis.



- Clause 16 - provides for the payment of the Sewerage Services Contribution and Sewerage Services Contribution Local.
- Clause 17 - provides for the payment of the current Open Space Contribution or the Open Space Contribution determined by the next review of the Open Space Contribution Plan.
- Clauses 18 to 23 - includes provisions relating to the Environmental Management Land within the subject property. These clauses require the establishment, management and dedication of the Environmental Management Land (EML) in conjunction with the subdivision of the subject land. It is proposed to undertake the establishment, management and dedication of the EML, as detailed in the attached VMP and the South Lindfield KPOM, as part of the Stage 1 Works DA.

The proposed subdivision is consistent with this VPA and appropriate conditions are recommended to require the VPA to be performed.

**(iv) Any matters prescribed by the Regulations**

**Demolition of buildings AS 2601 – Clause 92**

The submitted plan of subdivision includes demolition of the existing dwelling and sheds.

Demolition of the existing buildings on the site are capable of compliance with this Australian Standard and an appropriate standard condition is recommended.

**(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality:**

**Context and setting**

The proposal will not have any significant adverse impacts to existing adjoining properties or the public domain.

The proposal is considered to be sufficiently compatible with other residential development in the locality and adequately addresses planning controls for the area.

The concept Development Application component of the proposal provides for the following:

- The identification of the future vegetation clearing within the site and tree removal within the John Oxley Drive road reserve;
- The indicative future residential lot layout that will provide for 25 Torrens title lots to satisfy the minimum lot size requirements set out in the PMH LEP 2011;
- The location of the future internal road network and the locations for connections to the existing road network to the east and the proposed adjacent network to the west;
- The identification of the location for a future stormwater basin, to be provided within a public reserve and straddle the boundaries of the subject site and adjoining Lot 1 DP 369206;
- The identification of the connection locations for the future upstream and downstream servicing through adjoining properties; and
- The identification of the location for future Asset Protection Zones.

Pursuant to Section 4.22(2) of the Act the DA also provides for the first stages of subdivision development, being the Staged Works DA within the northern section of the site. The environmental, social and economic impacts of the concept DA have been assessed as being acceptable under Section 4.22(5) of the Act. In particular, the justification details submitted for the southern section/catchment of the site are considered acceptable.

An appropriate condition is recommended to restrict development of the southern section/catchment which will need to be the subject of a separate DA and development consent.

**Roads**

The site has road frontage to John Oxley Drive and Annabella Drive via an adjoining proposed subdivision under DA2019 - 401, also reported to this DAP meeting.

John Oxley Drive is classified as a Sub-Arterial road which is in the care and control of Council. It is a sealed road with a pavement formation of 6m, with shoulders to both sides of the pavement. The road reserve is approximately 24m wide.

Annabella Drive is classified as a local road with a pavement formation of 9m wide in a 20m road reserve. The pavement has layback kerb.

Annabella drive is connected to the Ruins Way (which is a collector road) via a single lane roundabout.

**Traffic and Transport**

Anabella Drive is classified as a Local Road with a 9m pavement width. Based on the number of existing dwellings and the proposed lots, the calculated daily vehicle trips along Anabella Drive will be approximately 1806vpd (using RMS guidelines of 7 daily vehicles trips per day, over approx. 258 lots (existing and proposed DA2019 - 400.1 and DA2019 - 401.1)). In accordance with Aus-Spec, the design criteria of a local road is 100 - 2000vpd. In this regard, the development is unlikely to have any adverse impacts to the existing road network within the immediate locality. The immediate existing road network has capacity for the anticipated additional traffic.

**Site Frontage & Access**

This development has proposed an internal road network in accordance with our current DCP for the Lindfield Area development. The Development Control Plan 2013 refers to this precinct the "South Lindfield precinct" and has defined the future road layout to minimise road connections to John Oxley Drive, noting that it is a sub-arterial road. This application does not include the lot required to make the second connection to John Oxley Drive (refer to image below and circled). This future access will be subject to a future DA on Lot 2 DP 533058 (i.e. lot 171, refer to image extracted from DCP2013 below). This will ultimately require all vehicles movements associated with this development to use the existing Annabella Drive exit via the Ruins Way until Lot 2 DP533058 develops further.

The plans provided are generally in accordance with this strategic plan.

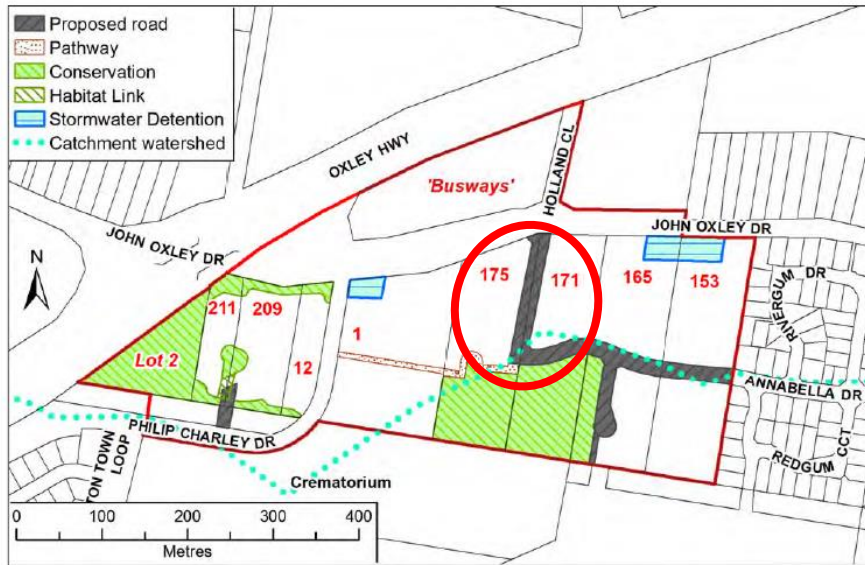


Figure 4.4.3-2 South Lindfield key development components

The development proposal is for vehicle access to the development via Annabella Drive, which is a 9m wide road running east west through the development site. Annabella Drive is classified as a local road with a 9m wide pavement formation.

This DA application proposes to extend Annabella Drive to the west, (Road 1, east-west) providing access to the Ruins Way and ultimately John Oxley drive. Additional local roads in the development are proposed in a north-south direction (off Road 1) providing access to all residential lots.

It should be noted that once the development lot to the west of the development site (Lot 171 in the above image) develops, a further extension of Annabella Drive and connection to John Oxley Drive shall be required in accordance with DCP2013. This will provide an additional entry/exit to this residential area, which will ultimately alleviate traffic movements to the east along Annabella Drive/The Ruins Way. The construction of this connection to John Oxley Drive is a requirement of the Voluntary Planning Agreement for the South Linfield Urban Release Area and will be a development requirement once the applicable stage generates a demand for the link road.

The internal roads shall be classified as follows:

Road Name	Pavement width
Road 1	9m - Local Anabella Drive is a local road with a 9m wide formation. Road 1 is an extension of Anabella drive and would require a similar 9m wide pavement width.
Road 2	8m - Local with min. 9m radius turning head (northern side only)
Road 3	8m - Local with a 12m radius turning head (subject to future DA)

All internal roads shall comply with Council AUSPEC and Australian Standards, and conditions have been imposed to reflect these requirements.

Due to the type and size of development, additional works are required to include:

- Concrete footpath paving along on one side of all local roads
- Concrete footpath connecting the development site to the bus-stops on John Oxley Drive
- A temporary construction access from John Oxley Drive. No construction traffic is recommended via Annabella Drive on the basis that the construction of the development will have significant impacts to Council's existing road network.

Appropriate consent conditions are recommended to address new road and impact to existing road requirements.

**Parking and Manoeuvring**

N/A

**Water Supply Connection**

Council records indicate that the development site has an existing 20mm metered water service from the 200 PVC water main on the opposite side of John Oxley Drive. Upon development of the adjoining western property (Lot 2 DP 533058) an extension of Council's 200mm water main in Annabella Drive and connection made to the existing water main in John Oxley Drive, at no cost to Council, can service the proposed development.

Pipe sizes shall be confirmed by PMHC's Water and Sewer Section with application for the Construction Certificate.

Each proposed lot is to have an individual service connection.

Appropriate consent conditions are recommended to address water supply requirements.

**Sewer Connection**

Council records indicate that the proposed development site does not currently have a connection to sewer. Council's sewer infrastructure is to be extended at no cost to Council to provide each lot with an individual connection. In accordance with Council's adopted specifications, sewer shall be provided to enable 100% of building areas within lots to drain to sewer

The proposed development is to provide an integrated solution for sewerage services with adjoining properties. Any proposed gravity sewerage mains connections to the existing sewerage network requires approval from relevant landowners.

In the northern catchment:

- the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54
- the alignment is to consider a possible extension to serve the bulk of the following lots west of Philip Charley Drive; Lot 2 DP1186806, Lot 21 DP1089272, Lot 2 DP578793, Lot 4 DP 630393.

In the southern catchment, the sewer mains are to connect to Sewer Pump Station 80 to the south of the proposed development lot.

PMHC's Water and Sewer Section shall confirm proposed pipe locations with application for the Construction Certificate.

Appropriate consent conditions are recommended to address sewer servicing requirements.

**Stormwater**

The site contains two catchments separated by a ridge line in the East –West direction and draining to the northern & southern boundary respectively. Drainage is primarily directed by overland means to the proposed pit and pipe stormwater network for both catchments.

The overall site catchment is composed of two catchments, with both being of a roughly rectangular shape. The northern catchment drains northwards, crossing the John Oxley Drive & Oxley Highway via existing stormwater culverts and drainage swales to the Hastings River Floodplain and ultimately the Hastings River itself. The southern catchment drains southwards over land and via a series of small creeks and swales to enter the Lake Innes Floodplain and ultimately Lake Innes itself.

The legal point of discharge for the proposed development is defined as a direct connection to Council's stormwater pit/pipeline.

A detailed site stormwater management plan will be required to be submitted for assessment with the Section 68 application and prior to the issue of a Construction Certificate.

In accordance with Council's AUSPEC requirements, the following must be incorporated into the stormwater drainage plan:

- On site stormwater detention facilities
- Water quality
- Provision of interallotment drainage to allow the proposed development to drain to the nominated point of discharge via a single suitably sized conduit

Appropriate consent conditions are recommended to address stormwater servicing requirements.

**Other Utilities**

Telecommunication and electricity services are available to the site.

Evidence of satisfactory arrangements with the relevant utility authorities for provision to each proposed lot will be required prior to Subdivision Certificate approval.

Appropriate consent conditions are recommended to address utility servicing requirements.

**Heritage**

Following a site inspection (and a search of Council records), no known items of Aboriginal or European heritage significance exist on the property. No adverse impacts anticipated. The site is considered to be disturbed land.

As a precaution, a condition of consent has been recommended that works are to cease in the unexpected event heritage items are found. Works can only recommence when appropriate approvals are obtained for management and/or removal of the heritage item.



**Other land resources**

The site is within a planned urban release context and will not sterilise any significant mineral or agricultural resource.

**Water cycle**

The proposed development will not have any significant adverse impacts on water resources and the water cycle.

**Soils**

The proposed development will not have any significant adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

**Air and microclimate**

The construction and/or operations of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

**Flora and fauna**

The proposed development includes clearing of approximately 0.45 hectares of native vegetation. Under the Biodiversity Conservation Act 2016, the Biodiversity Offset Scheme (BoS) applies for the following reasons:

- The extent of clearing is above the thresholds in Clause 7.2 of the Biodiversity Conservation Regulation 2017;

Minimum lot size of land (LEP Lot Size Map)	Area of Clearing
Less than 1 hectare	0.25 hectare or more

The Applicant has submitted a Biodiversity Development Assessment Report (BDAR as amended) prepared by an authorised person - Biodiversity Australia. The report has been reviewed and it is considered that adequate measures have been taken to avoid or minimise impacts, and the development would not result in serious and irreversible impacts on biodiversity.

The offset area specified in section 7.2 of the submitted Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019 to reduce ecosystem and species credit requirements is recommended to not supported. The BAM calculated credits are to be used for this development. The development will require the retirement of the following ecosystem credits and/or species credits to offset the impacts of the development: No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion 8 Credits and Koala (*Phascolarctos cinereus*) 9 Credits:

Impacted plant community type	Number of ecosystem credits	IBRA sub-region	Plant community type(s) that can be used to offset the impacts from development
No 690: Blackbutt - Tallowood moist	8		



ferny open forest of the coastal ranges of the NSW North Coast Bioregion			
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Impacted species	Number of species credits	IBRA sub-region
Koala ( <i>Phascolarctos cinereus</i> )	9	Anywhere in NSW

Conditions have been recommended requiring evidence of retirement of the relevant credits prior to the commencement of any clearing on the land.

The Applicant has also submitted a Vegetation Management Plan (VMP as amended) which has been reviewed as being acceptable and recommended to be approved. An appropriate standard condition is recommended to approve the VMP.

#### Waste

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated. Standard precautionary site management condition recommended.

#### Energy

No adverse energy impacts are anticipated.

#### Noise and vibration

The construction and/or operations of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

#### Bushfire

The site is identified as being bushfire prone.

In accordance with Section 100B - *Rural Fires Act 1997* - the application proposes subdivision of bush fire prone land that could lawfully be used for residential purposes. As a result, the applicant has submitted a bushfire report prepared by a Certified Consultant. The report was forwarded to the NSW Rural Fire Service who have since issued a Bushfire Safety Authority, which will be incorporated into the consent.

#### Safety, security and crime prevention

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area. The increase in housing density will improve natural surveillance within the locality.

#### Social impacts in the locality

Given the nature of the proposed development and its location the proposal is not considered to have any significant adverse social impacts.

#### Economic impact in the locality

The proposal is not considered to have any significant adverse economic impacts on the locality. A likely positive impact is that the development will maintain employment

in the construction industry, which will lead to flow impacts such as expenditure in the area.

**Site design and internal design**

The proposed development design satisfactorily responds to the site attributes and will fit into the locality.

**Construction**

Construction impacts are considered capable of being managed, standard construction and site management conditions have been recommended.

**Cumulative impacts**

The proposed development is not considered to have any significant adverse cumulative impacts on the natural or built environment or the social and economic attributes of the locality.

**(c) The suitability of the site for the development**

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

Site constraints of bushfire risk have been adequately addressed and appropriate conditions of consent recommended.

**(d) Any submissions made in accordance with this Act or the Regulations**

Three (3) written submissions were received following public exhibition of the application. Copies of the written submissions have been provided separately to members of the Development Assessment Panel.

Key issues raised in the submissions received and comments in response are provided as follows:

<b>Submission Issue/Summary</b>	<b>Planning Comment/Response</b>
Footpaths do not show kerb ramps and are on one side of the road	<p>The proposed footpath locations are illustrated diagrammatically on the subdivision plans that accompany the DA submission. The detail design will be provided with the Construction Certificate submission for the civil works and will be consistent with D1.16 of Councils AUSPEC, which includes the requirement for pram ramps.</p> <p>The proposed footpath locations are consistent with chapter 3.6 of the PMH DCP 2013 and Council's adopted AUSPEC design specification documents, including 1.2m wide footpath provision to one side of the local street network. This provision will also provide for street tree plantings on the opposite of each street.</p>

Submission Issue/Summary	Planning Comment/Response
Construction noise	<p>Any consent issued by Council will include hours of operation for construction, which will limit potential disturbance to existing adjoining residential premises. Additionally, construction for both subdivision works and future dwellings will be limited in overall duration, i.e.; construction noise will cease when development is completed.</p> <p>It is noted that safety reversing alarms will need to comply with the relevant Australian Standards and as such, cannot be conditioned Council. It is proposed that the future Construction Certificate documentation for the subdivision civil works will be required to make provision for a temporary construction access directly from John Oxley Drive. The intention of this temporary construction access arrangement is to minimise potential amenity impacts on the existing adjoining residential areas. An appropriate condition is recommended in this regard.</p>
Traffic impact	<p>The matters raised with respect to overall traffic congestion and general cumulative impacts are outside the scope of the subject Development Applications. These matters should be dealt with in Council's Regional Traffic Plan and review of the Major Roads Contribution Plan. The proposed subdivision as presented is consistent with Chapter 4.4.3 of Councils DCP 2013 for the South Lindfield Precinct. The proposed internal road network is consistent with Figure 4.4.3-2, which provides for an extension to Annabella Drive, an edge road to the E2 zoned land and a footpath connection to the south. In accordance with the DCP, Annabella Drive will extend further to the west to facilitate an intersection connection onto John Oxley Drive. This future intersection connection will provide a secondary means of access for the subject properties and the locality generally. Annabella Drive is currently</p>

Submission Issue/Summary	Planning Comment/Response
	<p>constructed to a collector road standard (9m carriageway) and that pursuant to Table D1.5 of Councils AUSPEC, and sufficient capacity for the likely additional traffic.</p> <p>Until such time as the new intersection is provided onto John Oxley Drive (as per the DCP), all 200 lots (includes existing and subject properties) will be required to enter/exit The Ruins Way via Annabella Drive.</p> <p>The proposed extension to Annabella Drive is therefore an efficient use of the existing road infrastructure.</p> <p>When a new intersection is available onto John Oxley Drive to the west, in accordance with Councils DCP, the existing 200 lots will have a choice of access onto John Oxley Drive, either to the west or to the east.</p>
Cumulative impacts	<p>The subject properties are part of the South Lindfield Urban Release Area where cumulative impacts and servicing were considered as part of the Planning Proposal process. The area has been included in Council's Urban Growth Strategies since 1998.</p> <p>The proposed subdivision is consistent with Chapter 4.4.3 of the DCP, including an extension to Annabella Drive, an edge road to the E2 zoned land and a footpath connection to the south.</p> <p>In addition as noted above, Annabella Drive will continue to operate within its capacity as a collector road and its extension to the west has been consistently included in the planning process to date.</p>
SEPP 55 Remediation of Land	<p>The Planning Proposal to support the rezoning the site included assessment of the site consistent with the provisions of this Policy.</p> <p>Geotechnical assessment was undertaken at areas with a previous land use history of potential contamination (nursery).</p> <p>The subject properties do not have a landuse history that would indicate potential contamination.</p>

Submission Issue/Summary	Planning Comment/Response
	<p>The Planning Proposal noted that there was a presumption that asbestos could be found in the older dwellings. Suitable conditions can be included in the consent to ensure consideration of this matter when demolition of the existing structures are undertaken.</p> <p>The site may contain rock that contains Naturally Occurring Asbestos (NOA). A standard condition is recommended to ensure preparation of a NOA management plan and to ensure compliance with WorkCover.</p> <p>Potential general dust nuisance can be addressed with a recommended standard condition for management of the site for the entirety of the works.</p>
Additional access to John Oxley Drive	<p>The subject Development Applications do not include a secondary access onto John Oxley Drive, however a temporary construction access for the civil works is proposed. The road network presented in the subject Development Application is consistent with Council's DCP and will enable a future connection to the west that will provide a secondary access to John Oxley Drive.</p> <p>Annabella Drive is constructed to a collector road standard (9m carriageway) and that pursuant to Table D1.5 of Councils AUSPEC.</p>
Public Open Space	<p>Council's DCP does not require the provision of additional areas of open space however development contributions are required to the provision of recreation facilities in accordance with Council's adopted Development Contribution Plan.</p>

**(e) The Public Interest**

The proposed development will be in the wider public interest with provision of appropriate additional housing opportunities.

The proposed development satisfies relevant planning controls and will not adversely impact on the wider public interest.

**Ecologically Sustainable Development and Precautionary Principle**

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes.

The four principles of ecologically sustainable development are:

- the precautionary principle,
- intergenerational equity,
- conservation of biological diversity and ecological integrity,
- improved valuation, pricing and incentive mechanisms.

The principles of ESD require that a balance needs to be struck between the man-made development and the need to retain the natural vegetation. Based on the assessment provided in the report and with recommended conditions of consent, it is considered an appropriate balance has been struck.

**Climate change**

The proposal is not considered to be vulnerable to any risks associated with climate change.

**4. DEVELOPMENT CONTRIBUTIONS APPLICABLE**

- Development contributions will be required towards augmentation of town water supply and sewerage system head works under Section 64 of the Local Government Act 1993.
- Development contributions will be required in accordance with Section 7.11 of the Environmental Planning and Assessment Act 1979 towards roads, open space, community cultural services, emergency services and administration buildings.
- A copy of the contributions estimate will be tabled at the DAP meeting.

**5. CONCLUSION AND STATEMENT OF REASON**

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact. It is recommended that the application be approved, subject to the recommended conditions of consent provided in the attachment section of this report.

**Attachments**

1 [View](#). DA2019 - 400.1 Recommended Conditions

2 [View](#). DA2019 - 400.1 Plans and Supporting Documents



**FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF  
PROPOSED CONDITIONS****NOTE: THESE ARE DRAFT ONLY****DA NO: 2019/400****DATE: 15/10/2019****PRESCRIBED CONDITIONS**

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations* 2000.

**A – GENERAL MATTERS**

- (1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

<b>Plan / Supporting Document</b>	<b>Reference</b>	<b>Prepared by</b>	<b>Date</b>
Development plans	Sheets 1 to 6	King & Campbell Pty Ltd	4 June 2019
Biodiversity Assessment Report	EC3272	Biodiversity Australia	4 October 2019
Vegetation Management Plan		King & Campbell Pty Ltd	October 2019
Road traffic noise assessment		EMM Consulting	12 November 2018
Aborist reports		Port Tree Fella	28 March 2019

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A003) The proponent shall submit an application for a Subdivision Certificate for Council certification with all relevant documentation.
- (3) (A004) An application for a Construction Certificate will be required to be lodged with Council prior to undertaking subdivision works and a Subdivision Certificate is required to be lodged with Council on completion of works.
- (4) This consent approves the Staged Concept proposal for subdivision of the site for the site. Separate development consent is required to be obtained for the development of the southern residue lot area within Stage 3 of the development.
- (5) The development must only proceed in accordance with the approved stages as set out below:
- Stage 1: Roads 01, 02 and 03 and creation of Lots 1, 2 and 16 to 19 and residue within Stage 1 works development within approved staged concept proposal;

- Stage 2: Creation of Lots 3 to 5 and 13 to 15 and residue; and
  - Stage 3: Creation of Lots 6 and 12 and residue Future Stage 2 DA.
- (6) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (7) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (8) (A013) The general terms of approval from the following authorities, as referred to in section 4.50 of the Environmental Planning and Assessment Act 1979, and referenced below, are attached and form part of the consent conditions for this approval.
- **NSW Rural Fire Service** - The General Terms of Approval, Reference D19/1977 DA19061419141 and dated 18 July 2019, are attached and form part of this consent.
- (9) (A032) The developer is responsible for any costs relating to minor alterations and extensions to ensure satisfactory transitions of existing roads, drainage and Council services for the purposes of the development.
- (10) (A034) Annabella Drive is to be extended to 'Local Street' standard (AUSPEC D1.5) joining smoothly with the existing section of road with a minimum carriage way width of metres ending in a temporary sealed nine (9) metre radii cul-de-sac with reflectorised posts.
- (10) (A057) The applicant is to ensure the proposed development will drain to the existing point of connection to Council's sewerage system.
- (11) (A069) Trees on the subject land, as marked on the approved plan, shall be retained.
- (12) (A070) Trees on the subject land, as marked on the approved plan, shall be removed.
- (13) (A195) Protective fencing of Native guava within the offset lands (E2 zone), comprising star pickets and wire mesh for deer browse protection. This fencing will be removed upon completion of the plantings within the E2 zone and installation of the chain wire floppy top Koala fence.
- (14) (A196) The development will require the retirement of the following ecosystem credits and/or species credits under the Biodiversity Offset Scheme, provisions of the *Biodiversity Conservation Act 2016* to offset the impacts of the development: No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion 8 Credits and Koala (*Phascolarctos cinereus*) 9 Credits.
- (15) (A197) Evidence of retirement of the relevant credits prior to the commencement of any clearing on the land:
- No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion 8 Credits and Koala (*Phascolarctos cinereus*) 9 Credits.
- (16) (A195) The applicant is to comply with and perform the provisions of the planning agreement entered into under section 7.4 of the Environmental Planning and Assessment Act known as the South Lindfield Urban Release Area Planning Agreement as modified from time to time between Port Macquarie-Hastings Council and Nigel Bruce Mann, Patricia Marie Mann, Phillip John Mann, Johanna Elizabeth Mann, Phillip J Pye and Brett Christian

Pye dated 16 January 2019 in relation to the carrying out of the development the subject of this consent.

#### **B – PRIOR TO ISSUE OF A CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
- Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
1. New roads within the subdivision.
  2. Earthworks, including filling of the land for flood protection.
  3. Sewerage reticulation.
  4. Water supply reticulation.
  5. Stormwater systems.
  6. Erosion & Sedimentation controls.
  7. Landscaping/waste management facilities.
  8. Provision of a 1.5m (unless varied in writing by Council) concrete footpath across the proposed road frontages of the property.
- (3) (B004) Road network within the subdivision is to be categorised with carriageway width as follows. Prior to release of the Construction Certificate such details are to be illustrated on the submitted plans.

Road No.	Road Width (Metres)					
	Share way	Access	Local	Collector	Commercial	Industrial
1			9m			
2			8m terminating at a 9m radius head			
3			8m			

- (4) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

- Civil works
- Traffic management
- Work zone areas

- Hoardings
- Concrete foot paving (width)
- Footway and gutter crossing
- Functional vehicular access
- Other

Where works are proposed on an RMS classified facility, the Road Authority shall obtain RMS concurrence prior to any approval.

- (5) (B007) Road names proposed for the development shall be submitted to Council prior to release of the Construction Certificate. A suitable name for any new road(s) shall be in accordance with the NSW Addressing User Manual.
- (6) (B015) Provision to each lot of a separate water connection (un-metered and sealed) to Council's main.
- (7) (B016) Provision to each lot of a separate sewer line to Council's main. All work will need to comply with the requirements of Council's adopted AUSPEC Design and Construction Guidelines and Policies. Any abandoned sewer junctions are to be capped off at Council's sewer main and Council notified to carry out an inspection prior to backfilling of this work.

Construction details are to be submitted to Port Macquarie-Hastings Council with the application for Construction Certificate.

- (8) (B030) Prior to issue of Construction Certificate, a pavement design report shall be prepared by a suitably qualified geotechnical or civil engineer and submitted to Council, including soil test results and in-situ CBR values (NATA certified). Council's minimum pavement compaction testing criteria are as follows:
- a. 98% (modified) base layers - Maximum Modified Dry Density test in accordance with AS1289.5.2.1
  - b. 95% (modified) sub-base layers - Maximum Modified Dry Density test in accordance with AS1289.5.2.1
  - c. 100% (standard) subgrade/select layers - Maximum Standard Dry Density test in accordance with AS1289.5.1.1 (or for in-situ subgrade soils only, wet density testing may be used)
- (9) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
- a) The legal point of discharge for the proposed development is defined as Council's piped system.  
  
In this regard, Council's piped drainage system must be extended by an appropriately sized pipeline (minimum 375mm diameter) to the frontage of the site, where a kerb inlet pit (minimum 2.4m lintel) must be installed, to allow direct piped connection from the development site into the public drainage system.  
  
The pipeline must be designed to have the capacity to convey flows that would be collected at that section of street as generated by a 20 year Average Recurrence Interval storm event.
  - b) The design requires the provision of interallotment drainage in accordance with AUSPEC D5

- c) The design shall incorporate on-site stormwater detention facilities to limit site stormwater discharge to pre development flow rates for all storm events up to and including the 100 year ARI event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
  - d) The design shall include water quality controls designed to achieve the targets specified within AUSPEC D7.
  - e) Where works are staged, a plan is to be provided which demonstrates which treatment measure/s is/are to be constructed with which civil works stage. Separate plans are required for any temporary treatment (where applicable e.g. for building phase when a staged construction methodology is adopted) and ultimate design.
  - f) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
  - g) The stormwater basin located at the John Oxley Dr frontage of the development site shall be sized to cater for post development stormwater runoff from the entire contributing catchment area in accordance with Port Macquarie - Hastings Council area specific DCP Requirements which necessitate a single end of line basin for this catchment only. In this regard, the basin shall provide suitable volume and treatment facilities to treat stormwater runoff from the post development contributing catchments in lots 2 & 3 DP533058 and Lot 1 DP369206. Modelling submitted with the CC submission shall detail relevant assumptions made regarding the post development landuse within adjoining lots.
  - h) Modelling must be submitted with the CC submission to demonstrate that stormwater discharge from the proposed stormwater basin to the downstream culvert beneath John Oxley Drive is not increased as a result of upstream development in the contributing catchment. Modelling shall demonstrate no increase in stormwater discharge to the downstream culvert for storm events including the 1EY, 20% AEP, 5%AEP and 1%AEP events for a range of equivalent durations at a minimum.
- (10) (B052) The provision of 3m x 3m splay corners or otherwise agreed to by Port Macquarie-Hastings Council. Details must be submitted to and approved by Port Macquarie-Hastings Council prior to release of the Construction Certificate.
  - (11) (B056) The Stormwater network proposed with the application for Construction Certificate is to include provision to each subdivided lot of a direct point of connection to Council's future piped drainage system.
  - (12) (B061) Prior to release of the Construction Certificate submission of a Waste Management Plan, in accordance with Council's current requirements.
  - (13) (B063) Prior to release of the Construction Certificate submission of a detailed landscape plan to the Principal Certifying Authority.
  - (14) (B071) Prior to the issue of any Construction Certificate, the provision of water and sewer services to the land are to be approved by the relevant Water Authority and relevant payments received.
  - (15) (B085) The location of electricity substations are to be clearly illustrated on the Construction Certificate plans. All substations are to remain on private property unless otherwise agreed to by Port Macquarie-Hastings Council.
  - (16) (B195) Council records indicate that the development site has an existing 20mm metered water service from the 200 PVC water main on the opposite

side of John Oxley Drive. Upon development of the adjoining western property (Lot 2 DP 533058) an extension of Council's 200mm water main in Annabella Drive and connection made to the existing watermain in John Oxley Drive, at no cost to Council, can service the proposed development. Pipe sizes shall be confirmed by PMHC's Water and Sewer Section with application for the Construction Certificate.

- (17) (B196) Council records indicate that the proposed development site does not currently have a connection to sewer. Council's sewer infrastructure is to be extended at no cost to Council to provide each lot with an individual connection. In accordance with Council's adopted specifications, sewer shall be provided to enable 100% of building areas within lots to drain to sewer.

The proposed development is to provide an integrated solution for sewerage services with adjoining properties. Any proposed gravity sewerage mains connections to the existing sewerage network requires approval from relevant landowners.

In the northern catchment:

- the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54
- the alignment is to consider a possible extension to serve the bulk of the following lots west of Philip Charley Drive; lot 2 DP1186806, lot 21 DP1089272, lot 2 DP578793, lot 4 DP 630393.

In the southern catchment, the sewer mains are to connect to Sewer Pump Station 80 to the south of the proposed development lot.

PMHC's Water and Sewer Section shall confirm proposed pipe locations with application for the Construction Certificate.

#### **C – PRIOR TO ANY WORK COMMENCING ON SITE**

- (1) (C001) A minimum of one (1) week's notice in writing of the intention to commence works on public land is required to be given to Council together with the name of the principal contractor and any major sub-contractors engaged to carry out works. Works shall only be carried out by a contractor accredited with Council.
- (2) (C013) Where a sewer manhole and Vertical Inspection Shaft exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

#### **D – DURING WORK**

- (1) (D001) Development works on public property or works to be accepted by Council as an infrastructure asset are not to proceed past the following hold points without inspection and approval by Council. Notice of required inspection must be given 24 hours prior to inspection, by contacting Council's Customer Service Centre on (02) 6581 8111. You must quote your Construction Certificate number and property description to ensure your inspection is confirmed:
- a. at completion of installation of erosion control measures
  - b. at the commencement of earthworks;
  - c. before commencement of any filling works;



- d. when the sub-grade is exposed and prior to placing of pavement materials;
- e. when trenches are open, stormwater/water/sewer pipes and conduits jointed and prior to backfilling;
- f. at the completion of each pavement (sub base/base) layer;
- g. before pouring of kerb and gutter;
- h. prior to the pouring of concrete for sewerage works and/or works on public property;
- i. on completion of road gravelling or pavement;
- j. during construction of sewer infrastructure;
- k. during construction of water infrastructure;
- l. prior to sealing and laying of pavement surface course.

All works at each hold point shall be certified as compliant in accordance with the requirements of AUSPEC Specifications for Provision of Public Infrastructure and any other Council approval, prior to proceeding to the next hold point.

- (2) (D003) The site is in an area known to contain rock that may contain naturally occurring asbestos (NOA). Should potential NOA be located on site notification shall be provided to Council and Workcover prior to works proceeding. No work shall recommence until a NOA management plan has been approved by Council or Workcover.
- (3) (D006) A copy of the current stamped approved construction plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.
- (4) (D029) The demolition of any existing structure shall be carried out in accordance with Australian Standard AS 2601: *The Demolition of Structures*. No demolition materials shall be burnt or buried on site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on an adjoining public road or reserve, separate application shall be made to Council to enclose the public place with a hoarding fence.  
  
Should asbestos be present, its removal shall be carried out in accordance with the National OH&S Committee – *Code of Practice for Safe Removal of Asbestos* and *Code of Practice for the Management and Control of Asbestos in Workplaces*.
- (5) (D033) Should any Aboriginal objects be discovered in any areas of the site then all excavation or disturbance to the area is to stop immediately and the National Parks and Wildlife Service, Department of Environment and Conservation is to be informed in accordance with Section 91 of the *National Parks and Wildlife Act 1974*. Subject to an assessment of the extent, integrity and significance of any exposed objects, applications under either Section 87 or Section 90 of the *National Parks and Wildlife Act 1974* may be required before work resumes.
- (6) (D040) Wastes including trees removed shall not be disposed of by burning.
- (7) (D195) Plant used in clearing and construction to be “certified” as weed free must follow the DPI decontamination guide prior to entering and leaving site.
- (8) (D196) Work zones on the site must be identified and fencing or flagging tape used to delineate no-go areas.

- (9) (D197) Weed monitoring and control must continue throughout the development phase to ensure that weeds do not establish and spread on the site.
- (10) (D051) Prior to commencement of any pavement works a material quality report from the proposed supplier shall be submitted to Council. The pavement materials shall meet Council's current specifications at the time of construction.
- (11) (D052) Prior to laying of Asphaltic Concrete (AC) or wearing surface course, submission to Council of pavement and soil test results prepared by a NATA registered person for all road pavement construction, including:
  - a. CBR test results, and
  - b. Subgrade / select fill, sub-base and base pavement compaction reports in accordance with AS1289.5.1.1 & AS1289.5.2.1 as applicable.

#### **E – PRIOR TO THE ISSUE OF SUBDIVISION CERTIFICATE**

- (1) (E005) Prior to the release of any bond securities held by Council for infrastructure works associated with developments, a formal written application is to be submitted to Council specifying detail of works and bond amount.
- (2) (E006) Completion of engineering and environmental works for any land (other than proposed public roads) to be transferred to Council, in accordance with the approved Construction Certificate.
- (3) (E008) Payment to Council, prior to the issue of the Subdivision Certificate of the Section 7.11 contributions set out in the "Notice of Payment – Developer Charges" schedule attached to this consent, unless deferral of payment of contributions has been approved by Council. The contributions are levied, pursuant to the Environmental Planning and Assessment Act 1979 as amended, in accordance with the provisions of the following plans or as specified by an applicable Planning Agreement:
  - Port Macquarie-Hastings Administration Building Contributions Plan 2007
  - Hastings S94 Administration Levy Contributions Plan
  - Port Macquarie-Hastings Open Space Contributions Plan 2018
  - Hastings S94 Major Roads Contributions Plan
  - Port Macquarie-Hastings Community Cultural and Emergency Services Contributions Plan 2005
  - Innes Peninsula Contributions Plan - Road Works.

The plans may be viewed during office hours at the Council Chambers located on the corner of Burrawan and Lord Streets, Port Macquarie, 9 Laurie Street, Laurieton, and High Street, Wauchope.

The attached "Notice of Payment" is valid for the period specified on the Notice only. The contribution amounts shown on the Notice are subject to adjustment in accordance with CPI increases adjusted quarterly and the provisions of the relevant plans. Payments can only be made using a current "Notice of Payment" form. Where a new Notice of Payment form is required, an application in writing together with the current Notice of Payment application fee is to be submitted to Council.

- (4) (E009) As part of Notice of Requirements by Port Macquarie-Hastings Council as the Water Authority under Section 306 of the Water Management Act 2000,

the payment of a cash contribution, prior to the issue of a Subdivision Certificate, of the Section 64 contributions, as set out in the "Notice of Payment – Developer Charges" schedule attached to this consent is required unless deferral of payment of contributions has been approved by Council. The contributions are levied in accordance with the provisions of the relevant Section 64 Development Servicing Plan or as specified by an applicable Planning Agreement towards the following:

- augmentation of the town water supply headworks
  - augmentation of the town sewerage system headworks.
- (5) (E013) Restrictions and/or positive covenant must be provided over the overland flow path for onsite detention storage areas with appropriate public awareness signage.
- (6) (E015) Prior to issue of the Subdivision Certificate, details of compliance with the Bushfire Safety Authority is to be provided to the Principal Certifying Authority.
- (7) (E034) Prior to the issuing of the Subdivision Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.
- (8) (E038) Interallotment drainage shall be piped and centrally located within an inter-allotment drainage easement, installed in accordance with Council's current AUSPEC standards (minimum 225mm pipe diameter within a minimum 1.5m easement). Details shall be provided:
- As part of a Local Government Act (s68) application with evidence of registration of the easement with the Land Titles Office provided to Council prior to issue of the s68 Certificate of Completion; or
  - As part of a Construction Certificate application for subdivision works with dedication of the easement as part of any Subdivision Certificate associated with interallotment drainage.
- (9) (E039) An appropriately qualified and practising consultant is required to certify the following:
- a. all drainage lines have been located within the respective easements, and
  - b. any other drainage structures are located in accordance with the Construction Certificate.
  - c. all stormwater has been directed to a Council approved drainage system
  - d. all conditions of consent/ construction certificate approval have been complied with.
  - e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (10) (E040) Each onsite detention system is to be marked by a plate in a prominent position which states:
- "This is an onsite detention system. It is an offence to reduce the volume of the tank or basin or interfere with any part of the structure that controls the outflow".
- This plate is to be fixed into position prior to occupation or the issue of the Occupation or Subdivision Certificate.
- (11) (E042) Creation of drainage easement between lots (i.e. interallotment)

Where stormwater pipelines traverse lots other than those which they benefit appropriate drainage easements shall be created and registered on the title of the relevant lot(s) with the Lands and Property Information NSW.

- a. For pipes less than 500mm diameter, the easement width must be a minimum of 1500mm. Easements for larger diameter pipes must be the pipeline diameter plus 1200mm wide, with a minimum width of 2400mm.
- b. Where easements are associated with a subdivision, the easement shall be established with the plan of subdivision and Section 88B instrument.  
Details to be submitted to Council prior to issue of Subdivision Certificate.

Where easements are not associated with a subdivision, the easement shall be approved by Council prior to lodgement at Lands and Property Information (LPI) NSW and evidence of registration shall be submitted to the Principal Certifying Authority prior to any Occupation Certificate.

- (12) (E050) Prior to Council accepting new stormwater infrastructure, a CCTV inspection of all new and modified stormwater assets must be undertaken in accordance with the Conduit Inspection Reporting Code of Australia WSA 05.

A copy of the CCTV inspection footage and inspection report prepared and certified by a suitably qualified person shall be provided to Council prior to the acceptance of works into the nominated 'into maintenance period'.

- (13) (E053) All works relating to public infrastructure shall be certified by a practicing Civil Engineer or Registered Surveyor as compliant with the requirements of AUSPEC prior to issue of Subdivision Certificate or release of the security bond, whichever is to occur first.
- (14) (E054) No building is to be connected to Council's future sewer main until Council has accepted such main. A pre-requisite for acceptance will be to successfully comply with Council's AUSPEC Specifications for air testing, visual inspection, manhole lid seal and the level of the lid mm above the proposed finished surface level. The manhole must be protected during dwelling construction by erecting a barrier around the manhole. Any alterations to the finished surface level requiring the raising or lowering of the manhole will require Council's approval.
- (15) (E056) A Certificate of Compliance under the provisions of Section 307 of the *Water Management Act* must be obtained prior to the issue of any subdivision certificate.
- (16) (E061) Landscaped areas being completed prior to occupation or issue of the Subdivision Certificate. Public landscaping may be bonded as agreed to by Council.
- (17) (E064) Provision of street lighting to all new roads in accordance with AS1158 and compliance with the requirements of the electricity authority regarding provision of electricity to serve the development. Provision shall be made for placement of conduits for future requirements or upgrades. Evidence by way of letter from the electricity provider, indicating compliance with this condition shall be submitted prior to the issue of the Subdivision Certificate.

Any proposal to erect non-standard, prestige or Smart Poles (or equivalent) street lighting shall:

- Forward all plans to the service provider for comment;
- Include instruction for completion of 'Lighting Requirements';
- be referred to Council together with details of the difference in annual charges over a twenty five (25) year period in accordance with Policy R5 – Street Lighting on Public Roads;

- Supply to Council to keep in stock, one (1) extra pole for every six (6) run of poles, for all poles that are non-standard poles.
- (18) (E066) Ancillary works shall be undertaken at no cost to Council to make the engineering works required by this Consent effective to the satisfaction of Director of Council's Infrastructure Division. Such works shall include, but are not limited to the following:
- a. The relocation of underground services where required by civil works being carried out.
  - b. The relocation of above ground power and telephone services
  - c. The relocation of street lighting
  - d. The matching of new infrastructure into existing or future design infrastructure
- (19) (E068) Prior to the issue of a Subdivision Certificate, evidence to the satisfaction of the Certifying Authority from the electricity and telecommunications providers that satisfactory services arrangements have been made to the lots (including street lighting and fibre optic cabling where required).
- (20) (E072) Lodgement of a security deposit with Council upon practical completion of the subdivision works.
- (21) (E076) The plan of subdivision and Section 88B instrument shall establish the following restrictions, easements and/or covenants; with Council having the benefit and having the sole authority to release, vary or modify each restriction, easement and/or covenant. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.
- a. Prohibiting the erection of any development within the Stage 3 southern residue lot except with the development consent of Port Macquarie-Hastings Council. This residue lot is also to be detailed to an unserviced lot.
  - b. Prohibiting direct vehicular access to and from John Oxley Drive.
- Details are to be submitted to Council prior to issue of the Subdivision Certificate.
- (21) (E078) The lot identified as proposed drainage land under Council's control is to be dedicated to Council for drainage purposes. Provision for this dedication is to be made in the application for the Subdivision Certificate.
- (22) (E079) Submission to the Principal Certifying Authority of certification by a Registered Surveyor prior to the issue of a Subdivision Certificate that all services and domestic drainage lines are wholly contained within the respective lots and easements.
- (23) (E081) The applicant will be required to submit prior to the issue of the Subdivision Certificate, a geotechnical report certifying construction of all earthworks as controlled fill in accordance with Council AUS-SPEC Standard and AS 37898. Such report to provide details of:
- a. The surface levels of the allotments created, filled or reshaped as part of the development.
  - b. Compaction testing carried out to Controlled Fill Standard as per AS 3798.
  - c. Standard penetration tests and calculated N values.
  - d. Bore logs

- e. Site classification of all allotments in accordance with AS2870.2011 - *Residential Slabs and Footings*.
- (24) (E082) Submission of a compliance certificate accompanying Works as Executed plans with detail included as required by Council's current AUSPEC Specifications. The information is to be submitted in electronic format in accordance with Council's "CADCHECK" requirements detailing all infrastructure for Council to bring in to account its assets under the provisions of AAS27. This information is to be approved by Council prior to issue of the Subdivision Certificate. The copyright for all information supplied, shall be assigned to Council.
- (25) (E195) The existing dwelling and sheds on the site are to be demolished prior to issue any Subdivision Certificate for Stage 1.

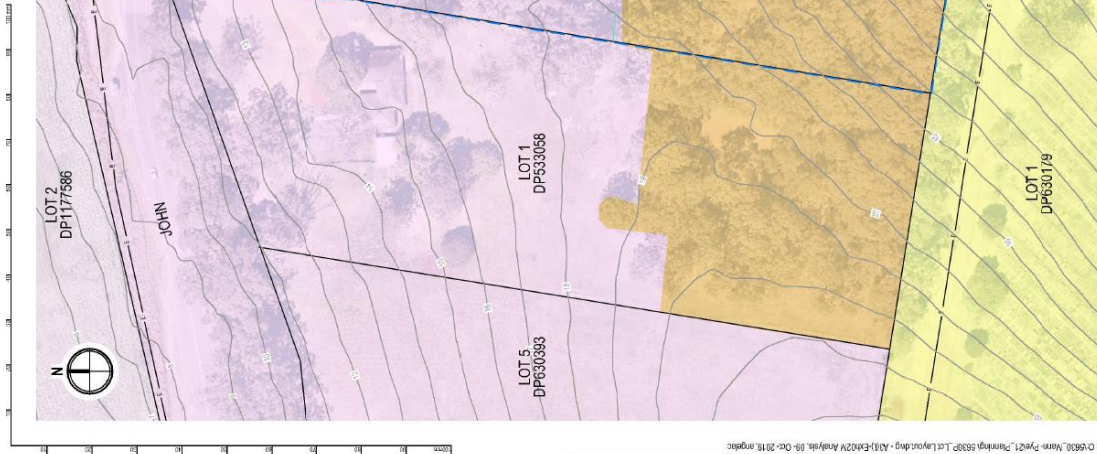
**F – OCCUPATION OF THE SITE**

- (1) (F006) The basin of the outflow control pit and the debris screen must be cleaned of debris and sediment on a regular basis by the owner.



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REV.	DATE	DESCRIPTION	BY	DATE	SCALE	DRAWING TITLE	PROJECT NO.	5630	<p><b>EXHIBIT 02 - SITE ANALYSIS</b></p> <p>CONCEPT DEVELOPMENT APPLICATION AND STAGE 1 WORKS DEVELOPMENT APPLICATION SOUTH-LINDEN URBAN RELEASE AREA, LOT 3 UP 933035, OCH ONE'Y DRIVE, PORT MACQUARIE</p>
1	30.10.2019	ISSUE FOR COUNCIL	AC		1:1,500 @ A3	PROJECT			
2	30.10.2019	ISSUE TO COUNCIL	AC		1:1,500 @ A3	DESIGNED BY:	BC		
						DRAWN BY:	AJC		
						CHECKED BY:	AJT		
						DATE CREATED:	NOV 2018		
									<p>WRS &amp; WRS&amp;S &amp; PM VIANI, MR &amp; MRS J P &amp; M VIANI, MR P J PYTE, MR BC PYTE</p> <p>DRAWING NO.</p> <p>5630P_Lot Layout</p> <p>SHEET</p> <p>02</p> <p>B</p>

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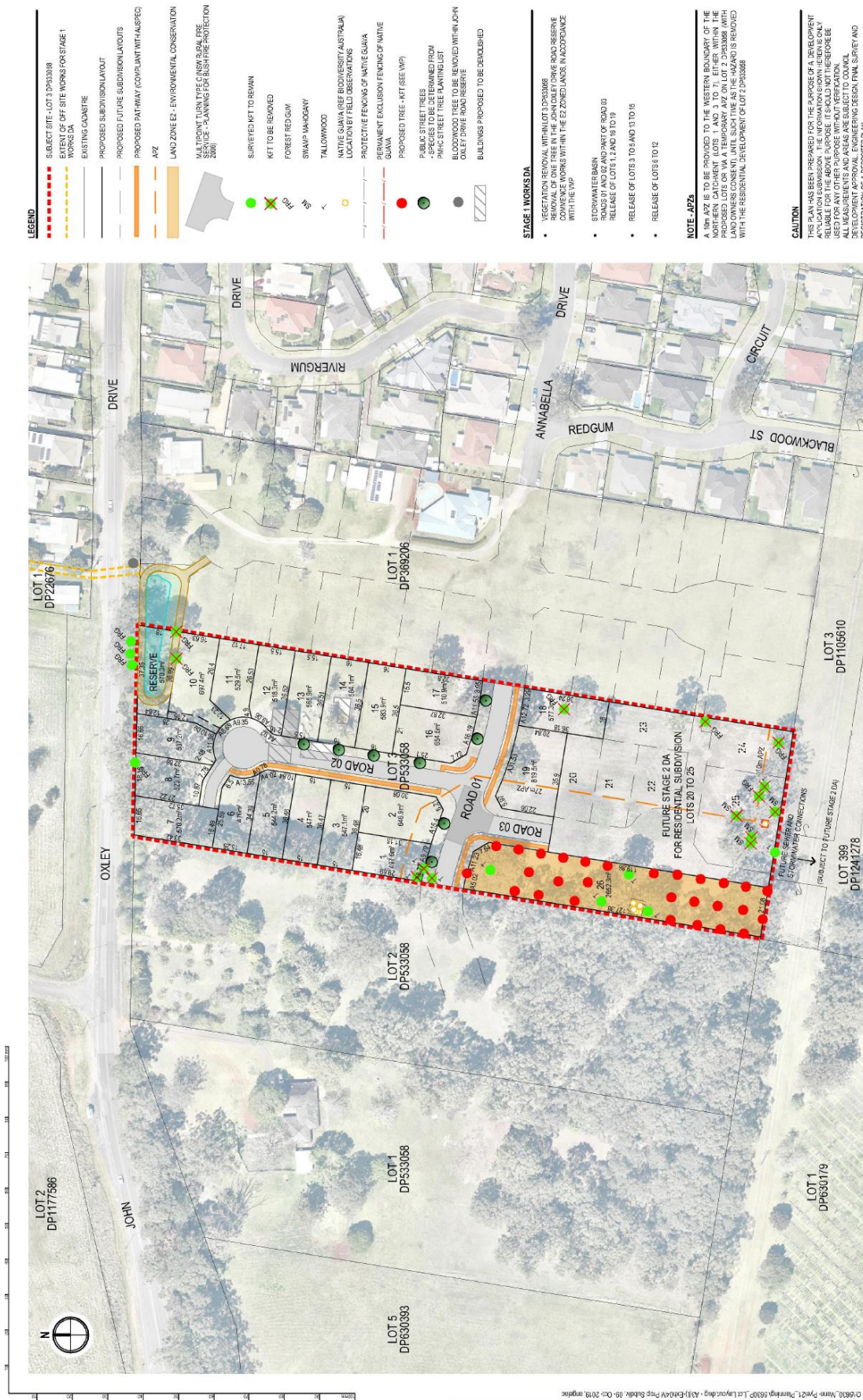




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Item 08  
Attachment 2  
Page 206

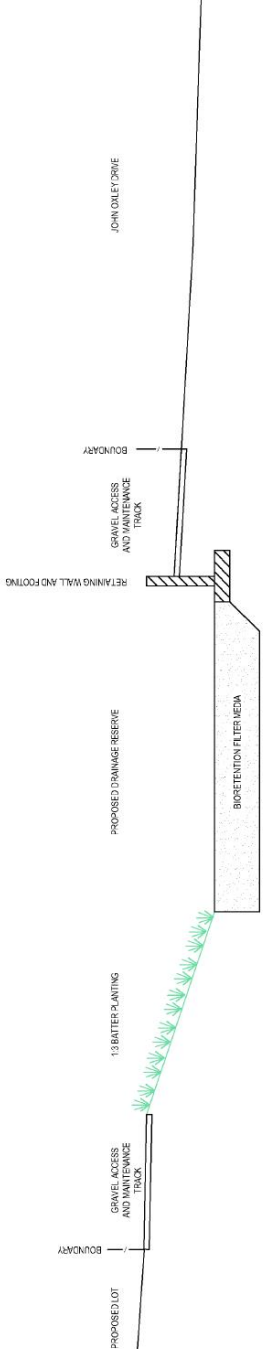
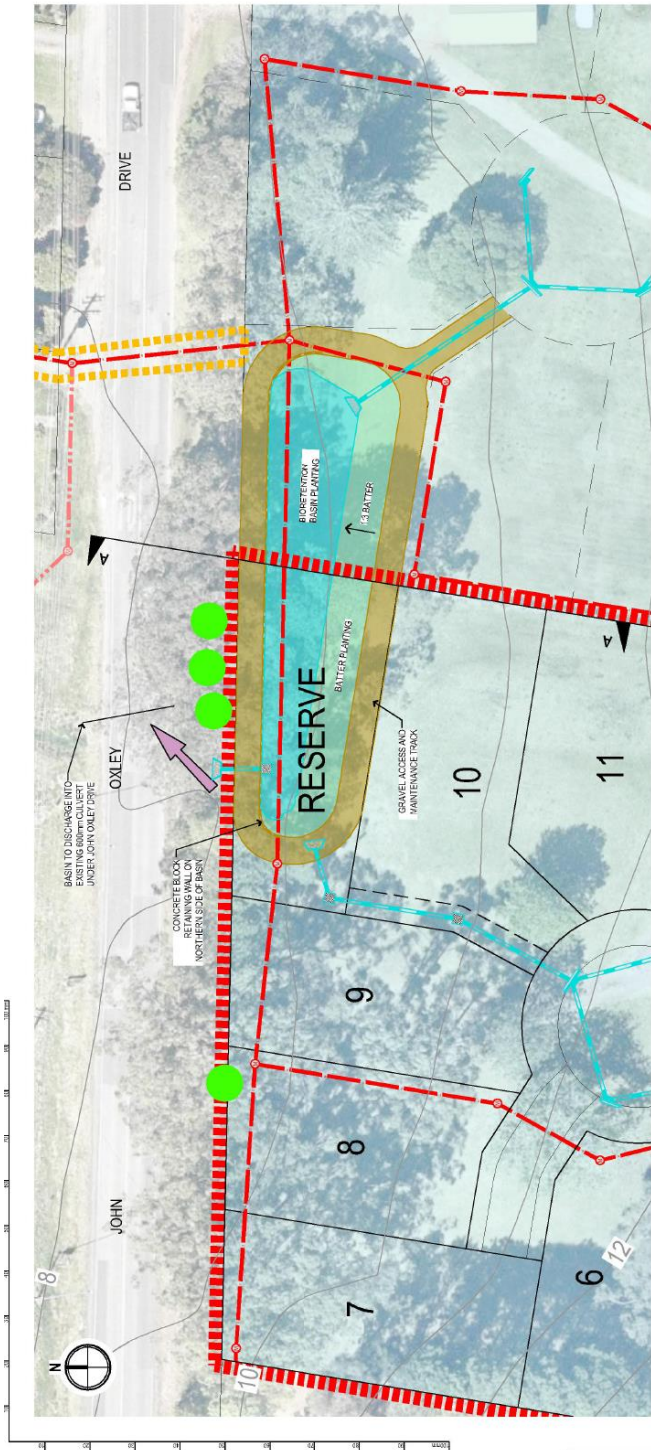




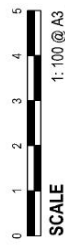
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**CAUTION**  
THIS PLAN HAS BEEN PREPARED FOR THE PURPOSE OF A DEVELOPMENT ASSESSMENT PANEL. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT VERIFICATION. THE DEVELOPMENT ASSESSMENT PANEL IS NOT A DEVELOPMENT APPROVAL. ENGINEERING DESIGN FINAL SURVEY AND REGISTRATION OF A DEPOSITED PLAN.



TYPICAL SECTION A-A

KING + CAMPBELL			KING + CAMPBELL Pty Ltd A 100 Box 243 Port Macquarie NSW 2444 T: 02 6586 2555 F: 02 6583 4054 E: info@kingandcampbell.com.au		EXHIBIT 05B - STAGE 1 DA - CONCEPT PLAN AND SECTION OF DRAINAGE BASIN AND RESERVE		A3				
REV	DATE	DESCRIPTION	BY	PROJECT NO	DRAWING TITLE	DESIGNED BY	CHECKED BY	DATE CREATED	CLIENT	DRAWING NO	SHEET
A	19/10/2019	ISSUED FOR DEVELOPMENT APPLICATION	AJC	5630	BC	AJC	AJC	NOV 2018	MR P J PYE, MR BC PYE	9550P_Lot Layout	06
CONCEPT DEVELOPMENT APPLICATION AND STAGE 1 WORKS DEVELOPMENT APPLICATION SOUTH LINDFIELD URBAN RELEASE AREA LOT 3 DP 933038 JOHN OXLEY DRIVE, PORT MACQUARIE											







# Biodiversity Development Assessment Report

## **Project:**

Proposed Residential Subdivision, Lot 3  
DP533058 John Oxley Drive, Port Macquarie

## **Client:**

Mr Nigel Mann  
C/- King and Campbell

October 2019



## Document Status

Version	Purpose	Author	Reviewed By	Approved By	Date
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## Accredited Assessor Authorisation

Assessor Name	Accreditation number	Expiry date	Signature	Date
Will Steggall	BAAS17107	19/12/2020		04/10/2019

Project Number: EC3272

Our Document Reference: EC3272-BEC-REP-JohnOxleyDrive\_BDAR-rev-2.0

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## Contents

<b>List of Photos</b>	<b>6</b>
<b>Executive Summary</b>	<b>7</b>
<b>1.0 Introduction</b>	<b>9</b>
1.1. Requirement for the BDAR	9
1.2. Definitions Used in the Report	10
1.3. Structure of the Report	10
1.4. Description of the Development Site	10
1.5. Identification of Impact Footprint	12
1.6. Information Sources	12
<b>2.0 Landscape Features &amp; Site Context</b>	<b>14</b>
2.1. Site Context	14
2.1.1. IBRA bioregions and Subregions	14
2.1.2. Native Vegetation Extent	14
2.1.3. Cleared Areas	14
2.1.4. Landscape Features	14
<b>3.0 Native Vegetation</b>	<b>16</b>
3.1. Survey Methods	16
3.1.1. Vegetation Integrity Survey	16
3.1.2. Vegetation Classification and Mapping	16
3.2. Plant Community Types and Description	17
3.2.1. Community 1	17
3.2.2. Non-native Vegetation	20
3.3. Vegetation Integrity Assessment	23
3.3.1. Vegetation Zones and Integrity Scores	23
<b>4.0 Threatened Species</b>	<b>26</b>
4.1. Ecosystem Credit Species	26
4.1.1. List of Species Derived	26
4.2. Species Credit Species	29
4.2.1. List of Species Derived	29
4.3. Targeted Survey Methods	35
4.3.1. Flora Survey	35



4.3.2.	Fauna Survey	38
4.3.3.	Survey Timing and Limitations	40
4.3.4.	Weather Conditions	40
4.4.	Targeted Survey Results	42
4.4.1.	Fauna	42
4.4.2.	Flora	50
<b>5.0</b>	<b>Avoidance and Minimisation</b>	<b>53</b>
5.1.	Impact Avoidance	53
5.2.	Measures to Minimise Impacts	53
5.2.1.	General Clearing Measures	53
5.2.2.	Pre-clearing Survey and Clearing Supervision	53
5.2.3.	Koala Food Tree Offset Plantings	54
5.2.4.	Protection of Native Guava	54
5.2.5.	Donation of Foliage	54
5.2.6.	Soil Erosion and Sedimentation Control	54
5.2.7.	Weed Control	54
5.2.8.	Landscaping	54
5.2.9.	Mitigation Measure summary	55
5.3.	Impacts Unable to be Avoided	55
5.3.1.	Vegetation and Habitat Removal	55
5.3.2.	Indirect Impacts	55
<b>6.0</b>	<b>Impact Assessment</b>	<b>57</b>
6.1.	Assessment of Serious and Irreversible Impacts	57
6.1.1.	Evaluation of Serious and Irreversible Impact	57
6.2.	Impacts Requiring Offsets	60
6.3.	Impacts Not Requiring Offsets	60
6.4.	Areas Not Requiring Assessment	61
<b>7.0</b>	<b>Impact Summary</b>	<b>63</b>
7.1.	Impact Area	63
7.1.1.	Ecosystem Credits	63
7.1.2.	Species Credits	63
7.2.	Offset Area	63
7.2.1.	Ecosystem Credits	64





7.2.2. Species Credits	64
<b>8.0 Conclusion</b>	<b>65</b>
<b>9.0 References</b>	<b>66</b>
<b>Appendix 1: Flora Species List</b>	<b>68</b>
<b>Appendix 2: Fauna Species List</b>	<b>71</b>
<b>Appendix 3: Biodiversity Credit Report</b>	<b>73</b>
<b>Appendix 4: SEPP 44 Assessment</b>	<b>74</b>
Offset Plantings	74
Clearing Management	74
Road Design and Speed Controls	75
Barriers and Fencing	75
Bushfire	75
Disease	76
<b>Appendix 5: PMHC DCP Assessment</b>	<b>77</b>
<b>Appendix 6: EPBC Act MNES Assessment</b>	<b>78</b>
<b>Appendix 7: MNES Search Results</b>	<b>85</b>
<b>Appendix 8: Bat Call Analysis Report</b>	<b>86</b>

## List of Figures

Figure 1: Extract from the Biodiversity Values Map	9
Figure 2: Location of the development site	11
Figure 3: Proposed development layout	13
Figure 4: Native vegetation extent	15
Figure 5: ground-truthed site vegetation communities	22
Figure 6: Map of vegetation zones in development site	25
Figure 7: Location of threatened flora transects	37
Figure 8: Location of fauna surveys	41
Figure 9: Koala species polygon	49
Figure 10: Location of Native Guava	52
Figure 11: Impact summary	62



## List of Tables

Table 1: Landscape features	14
Table 2: Vegetation community 1 (zone 1) description	17
Table 3: Vegetation community 1 (zone 2) description	18
Table 4: Vegetation zone and integrity score	24
Table 5: Ecosystem credit species	26
Table 6: Ecosystem credit species not predicted to occur on site	28
Table 7: List of candidate species credit species requiring survey	29
Table 8: List of candidate species credit species and survey requirement	30
Table 9: Targeted flora transect details	35
Table 10: Summary of site habitat values	42
Table 11: Species credit species (fauna) survey results	47
Table 12: Habitat components for species credit species recorded	47
Table 13: Species credits species (flora) survey results	50
Table 14: Mitigation measure summary	55
Table 15: Ecosystem credits required	63
Table 16: Species credits required	63
Table 17: Ecosystem credits required	64
Table 18: Species credits required	64
Table 19: Summary of MNES	78
Table 20: Koala habitat assessment	79
Table 21: Critical habitat assessment	80

## List of Photos

Photo 1: Community 1 at survey plot 1	18
Photo 2: Community 2 at vegetation plot	20
Photo 3: Managed exotic grassland	21
Photo 4: Red-necked Wallaby	44
Photo 5: Brushtail Possum	45
Photo 6: Sugar Glider	45
Photo 7: Red Fox	46
Photo 8: Koala observed on site	46
Photo 9: Native Guava	51



## Executive Summary

The proposal was assessed in accordance with the requirements of the NSW *Biodiversity Conservation Act 2016*, *Biodiversity Conservation Regulation 2017*, and the *Biodiversity Assessment Method 2017*.

The development site comprises a 2.4 ha property located on John Oxley Drive in Port Macquarie, NSW. The development site includes sewer lines that will be need to be established to the north of the property. The property has been largely cleared in the past and a mix of native and exotic grassland occurs over most of the site with trees fringing the site boundaries.

The development proposal is for the residential subdivision of the subject site into twenty-five residential Lots along with internal roads. Sewer pipelines will also extend offsite to the north. Establishment of the estate and associated infrastructure will require some vegetation removal which has been assessed in this report.

The Biodiversity Conservation Act 2016 and associated Regulation apply to the development proposal. The amount of native vegetation to be cleared exceeds the specified threshold level for triggering the application of the Biodiversity Assessment Method (BAM). A Biodiversity Development Assessment Report (BDAR) is therefore required to submit with the application. This development can be assessed using the small area development streamlined assessment module as detailed in Appendix 2 of the *Biodiversity Assessment Method 2017*.

The BDAR requires application of the Biodiversity Assessment Method (BAM) to assess impacts on biodiversity and determine offset requirements. A vegetation survey as per the BAM methodology was carried out in January 2019.

One vegetation community occurring in two condition classes was identified on the development site. This community is not listed as Endangered Ecological Community. Targeted surveys for threatened flora detected the Native Guava (*Rhodomyrtus psidioides*) which has been recently listed as Critically Endangered under the NSW BC Act. One individual plant was found at the rear of Lot 3 and a cluster was also found in the on-site offset area.

Seven threatened fauna species was detected during the targeted surveys comprising the Eastern False Pipistrelle, Little Bent-wing Bat, Eastern Bent-wing Bat, Eastern Coastal Free-tail Bat, Greater Broad-nosed Bat, Grey-headed Flying Fox and the Koala. It was determined that no breeding habitat for the bat species was present within the development footprint. As such, no species credit offsets for these species are required for the proposal. Species credit offsets are however required for the Koala.

It is recommended that a credit discount is applied as the proponent will meet offset planting obligations under the South Lindfield KPOM as detailed in Appendix 4. An area in the southwest of Lot 3 covering 0.27ha will be dedicated as an offset area, planted with trees, understorey shrubs and groundcover and managed through a Vegetation Management Plan. A credit assessment was undertaken in this offset area and it was determined that it would generate 1 ecosystem credit and 1 Koala species credit if were set up as a Stewardship Site.

The proposed development will require removal of approximately 0.45 ha of native vegetation and



associated habitat components. This comprises 0.30ha of dry sclerophyll forest/scattered trees and 0.15ha of slashed grassland dominated by native species. Other potential indirect impacts include habitat fragmentation and weed invasion. The loss of vegetation will be offset through the retirement of biodiversity credits. The credit requirement for the proposal is detailed in Section 7 of the report. A range of mitigation measures will be implemented to reduce other impacts associated with the proposal. These are described in Section 5 of the report.

Consideration of Serious and Irreversibly Impacts (SAIL) is provided in Section 6 of the report. This has determined that there is one SAIL candidate species present within the development site (Native Guava). The potential impact as a result of the development has been assessed against the SAIL guidelines.

The South Lindfield Koala Plan of Management has been administered over the development site. Further details of this is provided in Appendix 4. Assessment of the proposal under the PMHC Development Control Plan is provided in Appendix 5. Assessment of the proposal under Matters of National Environmental Significance are provided in Appendix 6.



## 1.0 Introduction

Biodiversity Australia (Bio Aus) was requested to undertake a Biodiversity Development Assessment Report (BDAR) for a proposed residential subdivision within Lot 3, DP 533058, John Oxley Drive, Port Macquarie. This assessment will form part of the Development Application (DA) to be submitted to Port Macquarie-Hastings Council (PMHC).

### 1.1. Requirement for the BDAR

The proposed development is for a residential subdivision of Lot 3 into 26 Lots. The development requires consent under Part 4 of the *Planning and Assessment Act 1979* (P&A Act), hence the *Biodiversity Conservation Act 2016* (BC Act) and Regulation applies.

The subject site is currently located on land with a minimum Lot size 450 m<sup>2</sup>, hence a 0.25 ha clearing threshold applies. The proposed amount of native vegetation to be cleared is 0.45 ha and exceeds the specified threshold level for triggering the application of the Biodiversity Assessment Method (BAM). A Biodiversity Development Assessment Report (BDAR) is therefore required to submit with the application. As the amount of native vegetation to be cleared is  $\leq 1$  ha, the streamlined assessment module for small area developments has been applied, as detailed in Appendix 2 of the *Biodiversity Assessment Method 2017*.

The BDAR is to assess the impacts of the proposed development on biodiversity and determine if any offset obligations are required.

The land proposed for clearing is not mapped on the Biodiversity Value Map as shown in Figure 1.

Figure 1: Extract from the Biodiversity Values Map







## 1.2. Definitions Used in the Report

This report uses the following key definitions:

- **Development site/subject site:** The site is defined as Lot 3 DP 533058 and includes sewer lines on adjoining land to the north.
- **Development footprint:** Refers to the area that will be directly impacted by the proposed action which covers the extent of the proposed subdivision.

These definitions are in line with the BAM methodology, which provides further explanation of definitions and legal terms that may be used in this report.

## 1.3. Structure of the Report

This report has been structured using guidance provided in Appendix 10 of the BAM. It is structured as follows:

- Section 1 provides background information for the assessment
- Section 2 describes the landscape features of the site
- Section 3 describes the native vegetation features of the site
- Section 4 describes the threatened species and habitat features associated with the site
- Section 5 details avoidance and minimisation measures for the proposal
- Section 6 provides an identification and assessment of impacts associated with the proposal
- Section 7 provides an impact summary and the number and type of credits required to offset impacts

## 1.4. Description of the Development Site

The development site is located on John Oxley Drive, approximately 5.5 km southwest of Port Macquarie CBD. The location of the development site is shown in Figure 2.

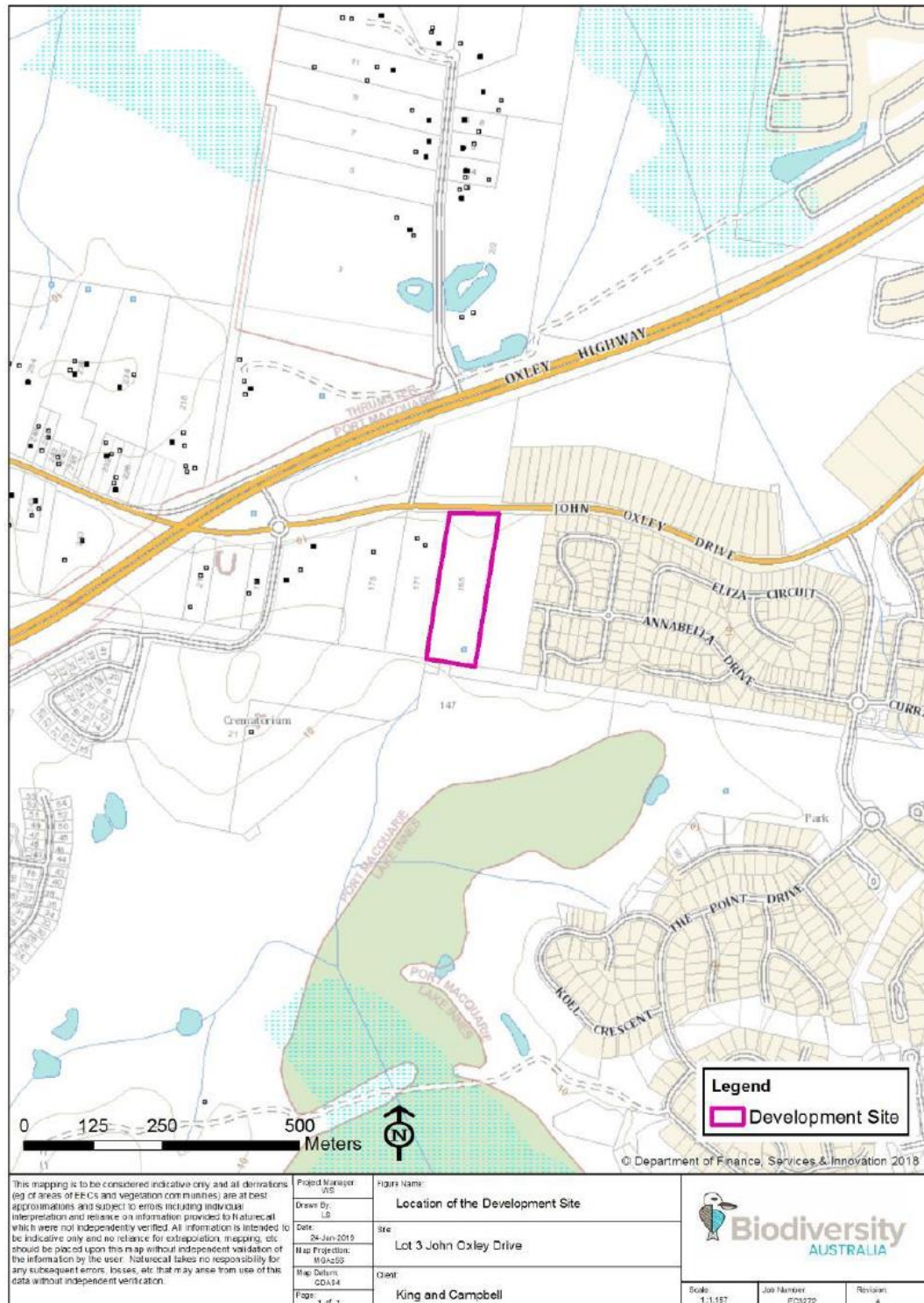
The development site currently has a single residence consisting of a two storey building and large open space area with managed lawns. Native vegetation on the site is limited to trees fringing the around the site boundaries and patches of native groundcover vegetation in the south.

Adjoining land along the sewer main to the north comprises managed lawns dominated by exotic grass.

Surrounding land uses comprise residential areas, small rural properties and a crematorium and cemetery. The nearest conservation area is Lake Inness Nature Reserve which is located 400 m to the south.



Figure 2: Location of the development site





## 1.5. Identification of Impact Footprint

The development/impact footprint consists of the area of the proposed subdivision and required easements for the sewer lines which extend beyond Lot 3. This covers most of the site aside from a conservation and tree planting area in the southwest which covers 0.27ha. An Asset Protection Zone (APZ) is located in the south of the property.

The proposed development plan is shown in Figure 3.

The total extent of the development footprint is approximately 2.3 ha with the extent of native vegetation proposed to be impacted totalling 0.45 ha.

The sewer main to be established to the north of the development site will require the removal of a single Bloodwood within the road reserve.

No site compounds will be required. No additional access roads will be required and machinery access will be on existing roads/tracks within and adjacent to the site. Post construction, no further clearing will be required.

## 1.6. Information Sources

The following databases and Geographic Information System (GIS) layers were searched/obtained:

- Department of Environment and Energy Protected Matters Search Tool (DEE 2019);
- Office of Environment and Heritage BioNet Atlas;
- Office of Environment and Heritage NSW Native Vegetation Regulatory Map (OEH 2019);
- Office of Environment and Heritage Threatened Biodiversity Data Collection (OEH 2019);
- Port Macquarie LGA Koala Habitat digital data layer (Biolink 2013);
- Port Macquarie LGA Vegetation Communities and EECs digital data layer (Biolink 2013);
- Coastal Quaternary Geology – North Coast of NSW digital data layer (Troedson & Hashimoto 2008); and
- South Lindfield Koala Plan of Management (Biodiversity Australia 2018).





Figure 3: Proposed development layout





## 2.0 Landscape Features & Site Context

### 2.1. Site Context

#### 2.1.1. IBRA bioregions and Subregions

The development site is located in the NSW North Coast Bioregion and the Macleay Hastings subregion. The development site is located in the Manning-Macleay Coastal Alluvial Plains Mitchell Landscape.

#### 2.1.2. Native Vegetation Extent

A 1500m buffer was established around the development site (Figure 4). Analysis with GIS has determined that there is approximately 32 % native vegetation cover within the 1500m buffer.

#### 2.1.3. Cleared Areas

Cleared areas occur both on and adjacent to the development site. Most of the development site has been cleared in the past and is managed by regular slashing.

#### 2.1.4. Landscape Features

The following table shows the presence of landscape features on the site and provides details of these features if present.

Table 1: Landscape features

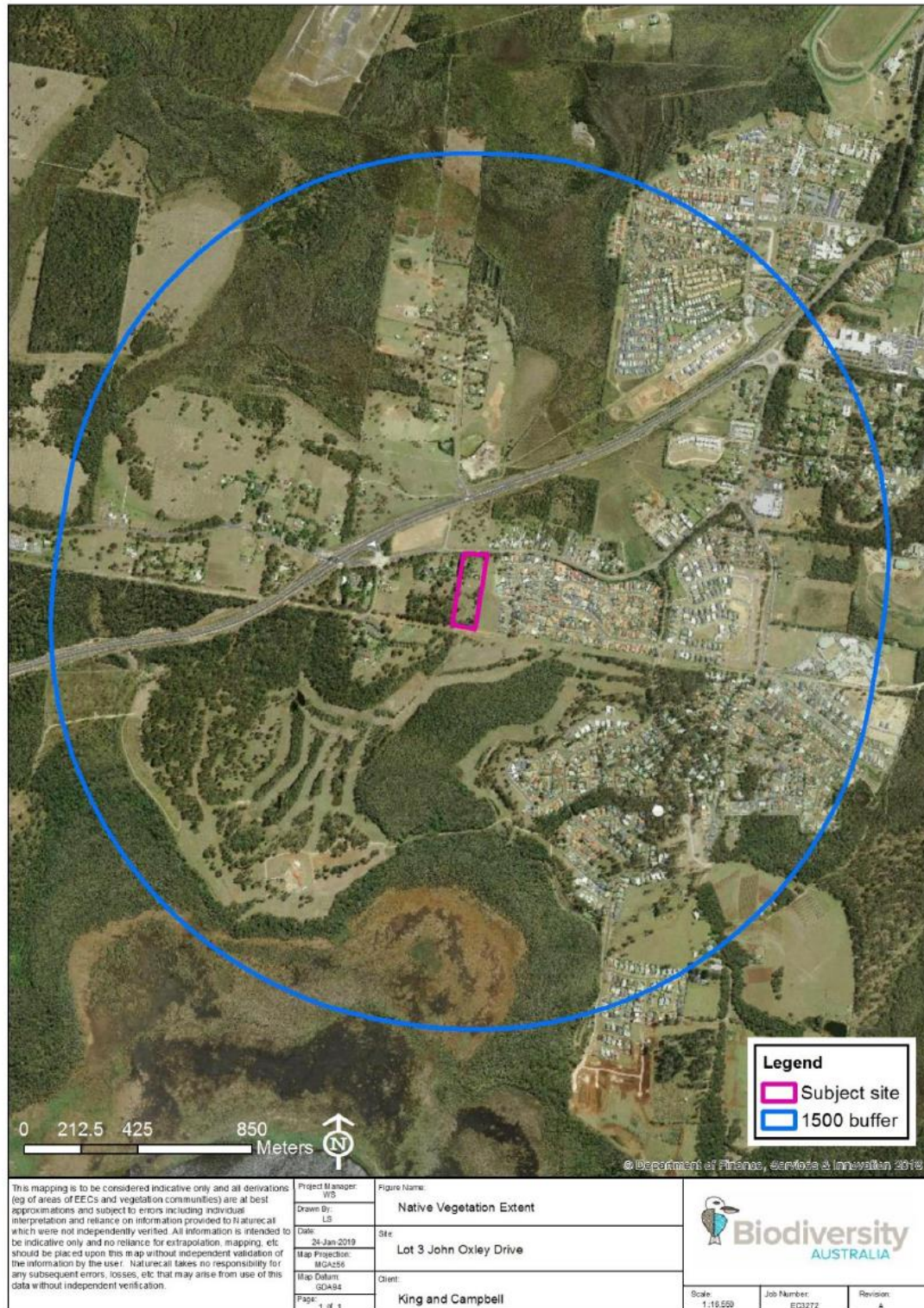
Feature	Present on site?	Present on adjoining land?	Description
Rivers and Streams	No	No	-
Important Local Wetlands	No	No	-
Connectivity Features	No	Yes	Vegetation on adjacent land has connectivity to Lake Innes Nature Reserve
Areas of Geological Significance (e.g. karst, caves, crevices, cliffs)	No	No	-
Soil Hazard Features	No	No	-
Areas of Outstanding Biodiversity Value	No	No	-





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 4: Native vegetation extent





## 3.0 Native Vegetation

### 3.1. Survey Methods

#### 3.1.1. Vegetation Integrity Survey

Vegetation Integrity survey plots were undertaken on the development site as per the BAM methodology. This consists of a 20x20 m plot in which floristic composition and structural attributes are collected, and a 20x50 m plot which collects ecosystem function attributes.

Three vegetation plots were sampled within the development footprint and one plot was sampled within the on-site offset area.

The following information was collected at each vegetation plot:

- Observer, location and date;
- Plot dimensions and orientation;
- Photographic record of vegetation;
- Vegetation Class and Plant Community Type (PCT);
- Physical features and disturbance history;
- Full flora list ;
- Growth form, cover and abundance of each species;
- Exotic and High Threat Exotic (HTE) plant cover;
- Number of large trees;
- Recruitment;
- Presence of hollow-bearing trees;
- Length of logs; and
- Litter cover.

The field data collected was tallied and input into the BAM calculator to determine a vegetation integrity score for each vegetation zone.

#### 3.1.2. Vegetation Classification and Mapping

Vegetation communities were sampled by the vegetation plot described above and through walking random meander transects. Due to the limited extent of vegetation on the development site this provided 100% coverage. The random meander transects also allowed for a more comprehensive flora inventory on the development site.

The vegetation classification is based on the NSW Plant Community Type (PCT) Classification and LGA wide vegetation community classification (Biolink 2013).

Plant species were identified to species or subspecies level and nomenclature conforms to that currently recognised by the Royal Botanic Gardens and follows Harden and PlantNET for changes since Harden.



## 3.2. Plant Community Types and Description

The following provides a description of the Plant Community Types (PCT) within the development site that will be affected by the proposal. The streamlined assessment module only requires identification of the dominant PCT on the development site. As described below, one PCT in two condition states was recorded in the footprint.

These communities are not listed as a Threatened Ecological Community (TEC) or Endangered Ecological Community (EEC) under the EPBC Act or NSW BC Act.

The native vegetation communities sampled are displayed in Photos 1-2 and a map of the vegetation is provided in Figure 6. A full flora list for the development site is provided in Appendix 1.

### 3.2.1. Community 1

#### 3.2.1.1. Vegetation Zone 1

Table 2: Vegetation community 1 (zone 1) description

<b>Vegetation Community (NSW PCT)</b>	No 690: Blackbutt - Tallowood dry grassy open forest of the central parts NSW North Coast Bioregion
<b>Vegetation Class</b>	Northern Hinterland Wet Sclerophyll Forests
<b>Mapped PMHC Community</b>	Blackbutt Shrubby Moist Forest / Broad-leaved Paperbark - Forest Red Gum Swamp Forest
<b>EEC Status</b>	Not an EEC
<b>Vegetation Zone</b>	1
<b>Number of Plots</b>	2
<b>Percent cleared</b>	55
<b>Location and area</b>	Occurs along edges of the sites boundary and extends offsite to the west. Covers an area of approximately 0.30 ha in the development footprint.
<b>Description</b>	<p><b>a) Canopy:</b></p> <p><i>Structure and Species:</i> Comprises an open canopy dominated by Blackbutt (<i>Eucalyptus pilularis</i>) and Flooded Gum (<i>Eucalyptus grandis</i>). Tallowood (<i>E. microcorys</i>), Swamp Mahogany (<i>E. robusta</i>), Forest Red Gum (<i>E. tereticornis</i>) and Pin Bloodwood (<i>Corymbia intermedia</i>) are occasionally present. Height ranges from 20-28m.</p> <p><b>b) Understory:</b></p> <p>Absent</p> <p><b>c) Shrub Layer:</b></p> <p><i>Structure and Species:</i> A sparse shrub layer is present largely around the base of mature trees. Species recorded include Cheese Tree (<i>Glochidion ferdinandii</i>), Fringed Wattle (<i>Acacia fimbriata</i>) and Coffee Bush (<i>Breynia oblongifolia</i>). Height ranges from 0.5-1.5m.</p>





	<p><b>d) Ground Layer:</b></p> <p><i>Structure and species:</i> Groundcover consisted of both native and exotic grasses and herbs including Narrow-leaved Carpet Grass (<i>Axonopus fissifolius</i>), Purpletop (<i>Verbena bonariensis</i>), Blady Grass (<i>Imperata cylindrica</i>) and Wattle Mat-rush (<i>Lomandra filiformis</i>). Height ranges from 0.01-0.3 m.</p>
<b>Condition</b>	<p>This community is generally in poor condition as a result of historical and ongoing disturbances. The understorey and shrub layers were either absent or sparse and species diversity is low. Much of the groundcover layer features exotic species.</p>

Photo 1: Community 1 at survey plot 1



### 3.2.1.2. Vegetation Zone 2

Table 3: Vegetation community 1 (zone 2) description

<b>Vegetation Community (NSW PCT)</b>	Derived grassland formerly comprising No 690: Blackbutt - Tallowood dry grassy open forest of the central parts NSW North Coast Bioregion
<b>Vegetation Class</b>	Northern Hinterland Wet Sclerophyll Forests
<b>Mapped PMHC Community</b>	Not mapped
<b>EEC Status</b>	Not an EEC
<b>Vegetation Zone</b>	2



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Number of Plots	1
Percent cleared	55
Location and area	A 0.15ha patch of native dominated ground cover which is located in the southern half of Lot 3.
Description	<p><b>e) Canopy:</b> Absent</p> <p><b>f) Understory:</b> Absent</p> <p><b>g) Shrub Layer:</b> Absent</p> <p><b>h) Ground Layer:</b> <i>Structure and species:</i> Groundcover is generally sparse and is dominated by Bracken (<i>Pteridium esculentum</i>) and Blady Grass. A few native forbs and herbs including Pastel Flower (<i>Pseuderanthemum variabile</i>), Kidney Weed (<i>Dichondra repens</i>), White Root (<i>Pratia purpurascens</i>). Exotic species recorded include Singapore Daisy, Carpet Grass, Purpletop and Common Paspalum.</p>
Condition	Poor condition due to past disturbances and ongoing slashing. Native species diversity is low.





Photo 2: Community 2 at vegetation plot 3



### 3.2.2. Non-native Vegetation

Remaining vegetation on the development site consists of managed grassland dominated by exotic grasses and herbs (Photo 3). Common species recorded in the exotic grassland include Narrow-leaved Carpet Grass, Common Paspalum, Parramatta Grass, Couch and Singapore Daisy.

Ornamental planted trees and a number of Radiata Pine trees are also present throughout the site. Pine trees are located along the northern and western boundary and have not been included as forming part of the native vegetation community.

Land along the proposed sewer line to the north largely comprises managed lawns dominated by Common Couch, Kikuyu and Carpet Grass. Very few native species occur in this area.



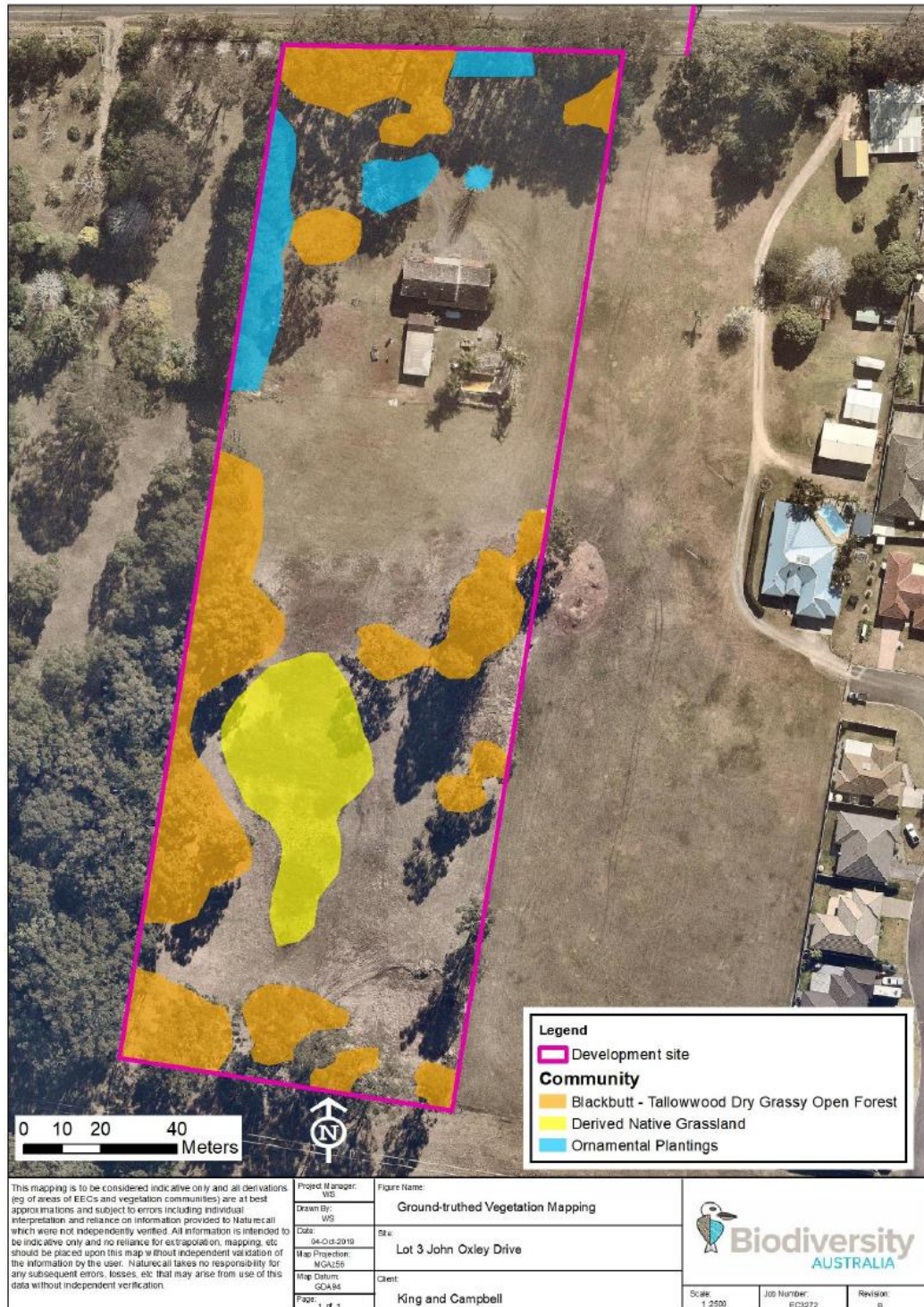
Photo 3: Managed exotic grassland







Figure 5: Ground-truthed site vegetation communities





### 3.3. Vegetation Integrity Assessment

#### 3.3.1. Vegetation Zones and Integrity Scores

Two vegetation zones have been mapped over the development footprint. These comprise the dry grassy open forest community and derived native grassland. The details of these zones are shown in the table below. This table also provides the vegetation integrity score for the zones which have been derived from the three BAM field plots undertaken on the development site. Figure 6 shows the location of the vegetation zones and survey locations.

Several dead trees occur in the south of the site (assessed by arborist) which have not been included within Vegetation Zone 1. There are scattered native shrubs and grasses within the shrub and ground layer beneath these dead trees, however the majority of vegetation is non-native or recently disturbed bare ground from the former dam at this location, hence it has not been included as part of the zone. This area also forms an Asset Protection Zone, and complete vegetation removal is not required. The ground layer components will remain intact under the same management regime as is currently experienced.

Trees within the John Oxley Drive road reserve which overhang into Lot 3 do not form part of Vegetation Zone 1 as they will not be impacted. Pine trees along the northern boundary and western boundary and other non-native ornamental plantings similarly do not form part of the vegetation zone as they do not comprise native vegetation and do not form part of a community. The patch of pine trees along the northern boundary does not contain a native understorey or ground layer.



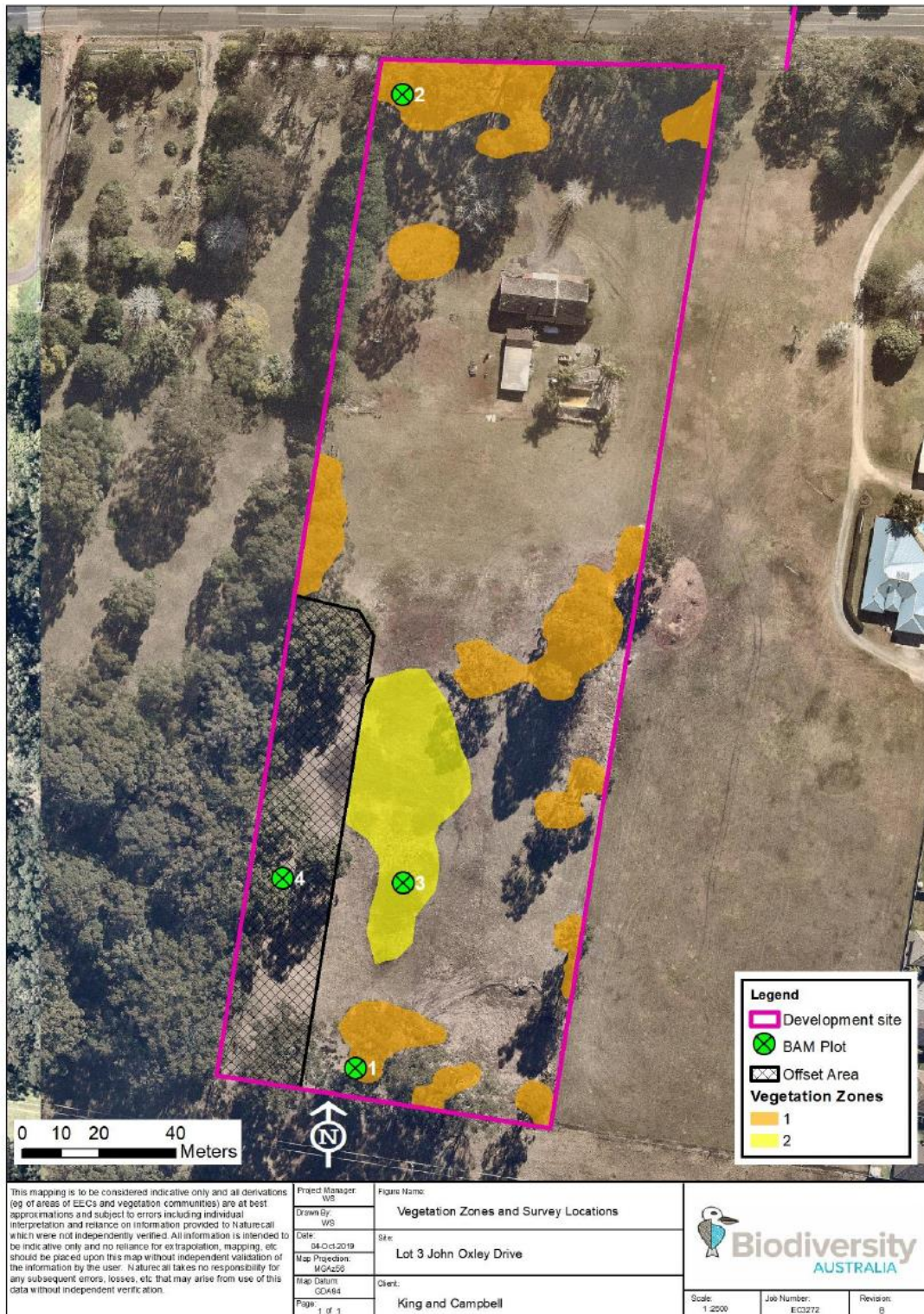
Table 4: Vegetation zone and integrity score

Vegetation Zone	Condition class	Community	Patch size category	Area Impacted	Vegetation Integrity Score		
					Composition	Structure	Function
1	Moderate	Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	>100	0.30 ha	45.3	48.1	66.3
2	Poor	Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	<5 ha	0.15 ha	17	16.5	10
							Total
							52.5
							14.1





Figure 6: Map of vegetation zones in development site





## 4.0 Threatened Species

### 4.1. Ecosystem Credit Species

Ecosystem credit species are threatened species which can be reliably predicted to occur by vegetation surrogates and landscape features. Targeted survey is not required for these species.

Some species which have specialised breeding requirements have dual credit classes to account for differences in foraging and breeding habitat. For example, Glossy Black Cockatoo foraging habitat can be reliably predicted through vegetation associations, however breeding habitat is specialised and requires hollow-bearing trees with hollows greater than 15cm diameter and greater than 5m above the ground (OEH Bionet 2018).

The BAM calculator produces a list of ecosystem credit species based on a number of attributes including Bioregion and subregion, patch size and the vegetation and habitat data collected in the field.

#### 4.1.1. List of Species Derived

The threatened species derived from the BAM calculator are presented in Table 5. below. These species have been predicted to occur based on the vegetation and habitat types present and are classed with ecosystem credits. Additional species, predicted to occur by the BAM calculator, which have been excluded from this list due to not meeting habitat and/or geographic requirements are listed in Table 6.

Table 5: Ecosystem credit species

Common Name	Scientific Name	Listing Status	
		BC Act	EPBC Act
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V	-
Glossy Black-Cockatoo (Foraging)	<i>Calyptorhynchus lathami</i>	V	-
Hoary Wattled Bat	<i>Chalinolobus nigrogriseus</i>	V	-
Brown Treecreeper (eastern subspecies)	<i>Climacteris picumnus victoriae</i>	V	-
Barred Cuckoo-shrike	<i>Coracina lineata</i>	V	-
Varied Sittella	<i>Daphoenositta chrysoptera</i>	V	-
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	V	-
Little Lorikeet	<i>Glossopsitta pusilla</i>	V	-
Square-tailed Kite (foraging)	<i>Lophoictinia isura</i>	V	-
Little Bent-wing Bat (foraging)	<i>Miniopterus australis</i>	V	-



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Eastern Bent-wing Bat (foraging)	<i>Miniopterus schreibersii oceanensis</i>	V	-
Eastern Free-tail Bat	<i>Mormopterus norfolkensis</i>	V	-
Barking Owl (Foraging)	<i>Ninox connivens</i>	V	-
Powerful Owl (foraging)	<i>Ninox strenua</i>	V	-
Koala (foraging)	<i>Phascolarctos cinereus</i>	V	V
Eastern Chestnut Mouse	<i>Pseudomys gracilicaudatus</i>	V	-
Grey-headed Flying Fox (foraging)	<i>Pteropus poliocephalus</i>	V	V
Yellow-bellied Sheath-tail-bat	<i>Saccolaimus flaviventris</i>	V	-
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	V	-
Masked Owl (foraging)	<i>Tyto novaehollandiae</i>	V	-

Listing status key: Critically Endangered (CE), Vulnerable (V).



Table 6: Ecosystem credit species not predicted to occur on site

Species	Listing Status		Habitat/Geographic constraints
	BC Act	EPBC Act	
<b>Pale-vented Bush-hen</b> <i>Amaurornis moluccana</i>	V	M	<u>BAM Habitat constraints</u> - Waterbodies / Dense vegetation, within 300 m of, or in shallows of streams or other natural or artificial wetlands <u>BAM Geographic constraints</u> - North of South West Rocks <b>BAM constraints not met:</b> <i>Habitat</i> - No waterbodies or dense vegetation occur within or adjacent to the development site. <i>Geographic</i> - The development site is south of South West Rocks.
<b>Yellow-bellied Glider</b> <i>Petaurus australis</i>	V	-	<u>BAM Habitat constraints</u> - Hollows greater than 25cm diameter <b>BAM constraints not met:</b> <i>Habitat</i> - No tree hollows of this size occur within the site.
<b>Long-nosed Potoroo</b> <i>Potorous tridactylus</i>	V	V	<u>BAM Habitat constraints</u> - Dense shrub layer or alternatively high canopy cover exceeding 70% <b>BAM constraints not met:</b> <i>Habitat</i> - Vegetation surveys on site determined that no dense shrub layer occurs within the development site nor does any community with a canopy cover greater than 70 %.





## 4.2. Species Credit Species

Species credit species are threatened species or elements of their habitat that cannot be confidently predicted by vegetation surrogates and landscape features. Targeted survey is required for these species if the development site contains suitable habitat components and is within the predicted range of the species.

### 4.2.1. List of Species Derived

The following two tables list the candidate threatened species (species credits) that have been derived from the BAM calculator. An assessment has been undertaken to determine if the habitat and geographic requirements are met on the development site, and if targeted survey is required.

The species with suitable habitat/geographic requirements on the site are provided in Table 7 along with the survey timing for each species (from the OEH Threatened Species profile database) in which targeted surveys should be undertaken. These candidate species can either be assumed present, surveyed or an expert report can be provided to confirm presence/absence. The option of a targeted survey has been nominated and the survey methods used are described in Section 4.3.

Species that have been excluded from the candidate species list are provided in Table 8 along with the assessment of habitat and geographic requirements which were not met. Targeted survey is not required for these species.

Table 7: List of candidate species credit species requiring survey

Common Name	Scientific Name	Listing Status		Survey timing
		BC Act	EPBC Act	
Flora				
Grove's Paperbark	Melaleuca groveana	V	-	Year round
Scant Pomaderris	Pomaderris queenslandica	E	-	Year round
Native Guava	Rhodomyrtus psidioides	CE	-	Year round
Scrub Turpentine	Rhodamnia rubescens	CE	-	Year round
Fauna				
Eastern Pygmy Possum	Cercartetus nanus	V	-	Oct-Mar
Square-tailed Kite (breeding)	Lophoictinia isura	V	-	Sep-Jan
Squirrel Glider	Petaurus norfolcensis	V	-	Year round
Brush-tailed Phascogale	Phascogale tapoatafa	V	-	Year round
Koala (breeding)	Phascolarctos cinereus	V	V	Year round



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Table 8: List of candidate species credit species and survey requirement

Common Name	Listing Status		Habitat/Geographic Constraints
	BC Act	EPBC Act	
Flora			
North Brother Wattle <i>Acacia courtii</i>	V	V	<u>BAM Habitat constraints</u> - Rocky areas / Shallow soils in dry open forest or rocky slopes <b>BAM constraints not met:</b> <i>Habitat</i> - Vegetation community surveys described in this report confirmed that these habitats do not occur within the development site. <u>Additional constraints:</u> <i>Geographic</i> - This species is only found on mountains in the Laurieton district.
	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species is found in gully, warm temperate or littoral rainforests with species spreading to adjacent understorey of moist eucalypt forests. This habitat does not occur within the development site and the site is outside of its known range.
Milky Silkpod <i>Parsonsia dorrigoensis</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species is known to occur on rainforest margins, in subtropical and warm-temperate rainforests and in moist eucalypt forests. Vegetation of this type does not occur within the development site.
	Fauna		
Rufous Bettong <i>Aepyprymnus rufescens</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species requires a dense layer of tall, native grasses and fallen logs. The dense grass layer is the preferred shelter for this species and grasses are also used to form nests at the base of fallen timber. No sufficient resources of dense, tall grass occur within the development site as the site is regularly slashed and some areas are devoid of groundcover vegetation. No large fallen logs are present within the site.
	CE	CE	<u>BAM Habitat constraints (breeding)</u> - Other (as per mapped areas) <b>BAM constraints not met:</b>

30



			<i>Breeding habitat</i> - Two known breeding areas for this species occur within NSW. The development site is not within one of these known regions and is not mapped as an important area.
<b>Bush Stone-curlew</b> <i>Burhinus grallarius</i>	E	-	<u>BAM Habitat constraints</u> - Fallen/standing dead timber including logs <b>BAM constraints not met:</b> <i>Habitat</i> - Habitat assessments on site found that there is a lack of fallen/standing dead timber sufficient to support this species within the development site.
<b>Glossy Black Cockatoo (breeding)</b> <i>Calyptorhynchus lathami</i>	V	-	<u>BAM Habitat constraints (breeding)</u> - Living or dead tree with hollows greater than 15cm diameter and greater than 5m above ground <b>BAM constraints not met:</b> <i>Breeding habitat</i> - This species requires large hollows to breed. No large hollows occur on the development site.
<b>Pale-headed Snake</b> <i>Hoplocephalus bitorquatus</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species is mainly found in dry eucalypt forests/woodlands and cypress forests and occasionally in rainforest or moist eucalypt forest. When in drier environments this species tends to favour habitats close to riparian areas as frogs are the favoured prey. This species required loose bark/tree-trunks, hollow tree trunks and hollow limbs of stags for shelter. The development site would not provide a sufficient habitat and prey requirements for this species and only limited potential shelter habitat occurs on site which would be subject to high competition with common species.
<b>Stephens' Banded Snake</b> <i>Hoplocephalus stephensii</i>	V	-	<u>BAM Habitat constraints</u> - Hollow-bearing trees / within 500 m of hollow-bearing trees / within 500 m of arboreal vine tangles/fallen/standing dead timber including logs) <b>BAM constraints not met:</b> <i>Habitat</i> - No hollow-bearing trees or arboreal vine tangles, rock crevices, slabs and hollow trunk limbs, occur on site which indicates that the site does not contain sufficient shelter resources to support this species.
<b>Green Thighed Frog</b> <i>Litoria brevipalmata</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species occurs in moist eucalypt forests and rainforests containing pooled water or flooded areas. Although some areas of suitable habitat may occur nearby, the development site itself does not contain habitat suitable for this species, is regularly slashed and has a significance disturbance history which is likely to have excluded the species.
<b>Parma Wallaby</b>	V	-	<u>BAM constraints</u> - none



<i>Macropus parma</i>			<p><u>Additional constraints:</u> <i>Habitat</i> - This species prefers moist eucalypt forests with a dense, shrubby understory that are nearby grassy areas. This habitat does not occur within the development site and all vegetation communities are highly exposed.</p>
<b>Little Bentwing-bat</b> <i>Miniopterus australis</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records in BioNet with microhabitat code '1C - in cave'; observation type code 'E nest-roost'; with numbers of individuals &gt;500; or from the scientific literature</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - This species is known to occur in well-timbered areas in a variety of vegetation communities. Breeding habitat comprises caves and tunnels within these communities. No caves or tunnels occur within the subject site hence breeding habitat does not occur.</p>
<b>Large Bentwing-bat</b> <i>Miniopterus schreibersii oceanensis</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records in BioNet with microhabitat code '1C - in cave'; observation type code 'E nest-roost'; with numbers of individuals &gt;500; or from the scientific literature</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - No caves, mines, tunnels or culverts occur within the subject site hence breeding habitat does not occur.</p>
<b>Stuttering Frog</b> <i>Mixophyes balbus</i>	E	V	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u> <i>Habitat</i> - This species is found in rainforest and wet, tall open forests. When not breeding, adults live in deep leaf litter and thick understory vegetation. Suitable vegetation and shelter requirements for this species does not occur within the development site.</p>
<b>Southern Myotis</b> <i>Myotis macropus</i>	V	-	<p><u>BAM constraints</u> - hollow-bearing trees / within 200 m of riparian zone / bridges, caves or artificial structures within 200 m of riparian zone</p> <p><b>BAM constraints not met:</b> <i>Habitat</i> - No hollow-bearing trees or riparian zones occur on site, hence there is no suitable habitat for this species.</p>
<b>Barking Owl (breeding)</b> <i>Ninox connivens</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Living or dead trees with hollows greater than 20 cm diameter and greater than 4m above the ground.</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - No large hollows occur on the development site.</p>



<b>Powerful Owl (breeding)</b> <i>Ninox strenua</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u>- Living or dead trees with hollow greater than 20cm diameter</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No large hollows occur on the development site.</p>
<b>Brush-tailed Rock-wallaby</b> <i>Petrogale penicillata</i>	E	V	<p><u>BAM Habitat constraints</u> - Land within 1 km of rocky escarpments, gorges, steep slopes, boulder piles, rock outcrops or cliff lines</p> <p><u>BAM Geographic constraints</u> - West of a north-south line through Kempsey</p> <p><b>BAM constraints not met:</b></p> <p><u>Geographic</u> - The development site is outside the described geographic range of this species</p> <p><u>Habitat</u> - The development site does not occur within 1 km of the required habitat features for this species.</p>
<b>Common Planigale</b> <i>Planigale maculata</i>	V	-	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u></p> <p><u>Habitat</u> - This species is found in areas where there is dense groundcover and in close proximity to water. Hollow logs, rocks and crevices are required for shelter diurnally. Very limited shelter occurs on the development site for this species due to the sites disturbance history, lack of coarse woody debris and regular slashing. As such, the site is not considered to contain suitable habitat</p>
<b>Grey-headed Flying Fox (breeding)</b> <i>Pteropus poliocephalus</i>	V	V	<p><u>BAM Habitat constraints (breeding)</u> - Breeding camps</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No breeding or roosting camps for this species are located within the development site.</p>
<b>Red-backed Button-quail</b> <i>Tumix maculosus</i>	V	-	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u></p> <p><u>Habitat</u> - This species requires a dense grass layer as it occurs in grasslands, open savannah woodlands with a grassy layer, crops and heath with a preference for vegetation near water. The development site contains areas of dense grass, however they are largely comprised of exotic grasses and are regularly slashed. As such the site would not provide suitable habitat</p>
<b>Masked Owl (breeding)</b> <i>Tyto novaehollandiae</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u>- Living or dead trees with hollow greater than 20cm diameter</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No large hollows occur on the development site.</p>



<b>Eastern Cave Bat</b> <i>Vespardelus troughtoni</i>	V	-	<p><u>BAM Habitat constraints</u> - Caves / Within 2 km of rocky areas containing caves, overhangs, escarpments, outcrops, crevices or boulder piles, or within 2 km of old mines, tunnels, old buildings or sheds</p> <p><b>BAM constraints not met:</b></p> <p><i>Habitat</i> - An on-ground assessment and aerial imagery assessments have determined that none of the required habitat features for this species occurs within 2 km of the development site.</p>
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Listing status key: Critically Endangered (CE), Endangered (E), Vulnerable (V).





### 4.3. Targeted Survey Methods

A targeted survey was undertaken for the candidate species identified in Table 6. This was undertaken by a BAM Accredited Principal Ecologist and Ecologist under Biodiversity Australia's scientific licence and animal research authority. A detailed description of the survey methods used is provided in the following sections.

#### 4.3.1. Flora Survey

A targeted survey for the following candidate threatened flora species was undertaken over the development site:

- Grove's Paperbark
- Scant Pomaderris
- Scrub Turpentine
- Native Guava

The survey methodology consisted of parallel field traverses as per the *NSW Guide to Surveying Threatened Plants* (OEH 2016). This survey technique involves searches along transects within the development site. The transects are a set distance apart depending on the life form and type of vegetation and cover the entire extent of potential habitat for each target plant species.

Four transects were conducted within the development site as part of the main survey period on 9<sup>th</sup> January 2019. The transects ran through vegetated areas around the perimeter of the development site. Four transects were conducted within and adjacent to the development site on 20<sup>th</sup> March 2019 to include the sewer lines which run offsite.

Opportunistic searches for threatened flora species were also undertaken during the vegetation plot surveys as well as during other activities on the development site.

Figure 7 maps the location of targeted flora transects and Table 9 provides details of the transects.

Table 9: Targeted flora transect details

Transect #	Bearing	Distance traversed (m)	Distance from previous traverse	Transect description
January 2019 survey				
Transect 1	E	80	-	Along south Lot boundary
Transect 2	NNE	150	-	Along southern section of eastern boundary
Transect 3	NNE	180	-	Along southern section of western boundary
Transect 4	E	150	-	Northern section of property
March 2019 survey				



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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Transect 1	S	100	-	Western boundary in offset area of lot 3
Transect 2	E	75	-	Along southern Lot boundary



Figure 7: Location of threatened flora transects







### 4.3.2. Fauna Survey

In consideration of the survey requirements of the candidate threatened fauna species (DEC 2004, DECC 2009), the following survey methods were utilised:

- Habitat evaluation;
- Searches for secondary evidence e.g. scats and tracks;
- Diurnal bird surveys;
- Passive Infra-Red (PIR) cameras;
- Spotlighting and torch searches;
- Microbat call recording and analysis;
- Call playback and detection; and
- Koala surveys.

The fauna surveys were undertaken between 11<sup>th</sup>- 22<sup>nd</sup> December 2018 and 9<sup>th</sup> - 22<sup>nd</sup> January 2019 by a Principal Ecologist and Ecologist under Biodiversity Australia's scientific license and animal research authority. The methods per survey measure are detailed below.

#### 4.3.2.1. Habitat Evaluation

This method was employed to assess the suitability of the development site habitats for the candidate threatened species.

Habitats on and adjacent to the development site were defined and assessed according to parameters such as:

- Structural and floristic characteristics of the vegetation e.g. understorey type and development, crown depth, groundcover density, etc.
- Degree and extent of disturbance e.g. fire, logging, weed invasion, modification to structure and diversity, etc.
- Presence of water in any form e.g. rivers, dams, creeks, drainage lines, soaks.
- Size and abundance of hollow-bearing trees and fallen timber.
- Availability of shelter e.g. rocks, logs, hollows, undergrowth.
- Wildlife corridors, refuges and proximate habitat types.
- Presence of mistletoe, nectar, gum, seed, sap, etc. sources.

#### 4.3.2.2. Secondary Evidence/Habitat Searches

Physical habitat searches involved lifting up of any timber, rocks and debris, and inspection of dense vegetation and leaf litter for frogs and reptiles; binocular inspection of trees; searches for nests; and searches for scats, owl regurgitation pellets, tracks and scratches. Dedicated scat searches for Koala scats were undertaken under all primary browse trees within the development footprint.



A total of four hours was spent on habitat and secondary evidence searches.

#### 4.3.2.3. Diurnal Bird Survey

This involved passive surveys (e.g. listening for bird calls) and active observation/binocular searches while walking around the entire development site; and opportunistically during other activities. The target bird species for these surveys was the Square-tailed Kite, however all bird species detected were recorded.

A total of four person hours was spent on bird surveys over four days.

#### 4.3.2.4. Passive Infrared Camera Stations

Six Stealthcam STC-G34 infra-red cameras were deployed on site for a period of 10 days.

Three were mounted on trees at a height of approximately four metres facing a hair tube on a platform to target arboreal species, specifically the Squirrel Glider, Eastern Pygmy Possum and Brush-tailed Phascogale. The remaining three were placed on trees at approximately 0.5m facing a hair tube placed on the ground. The hair tubes were baited with a mixture of oats, peanut butter, honey and vanilla essence.

The location of PIR cameras are shown in Figure 8.

#### 4.3.2.5. Spotlight Survey

Spotlighting was conducted for two hours per night over four nights. The procedure involved walking with a hand held 1100 lumen LED spotlight over the entire development site, targeting the trunks and branches of canopy trees and understorey, and periodically scanning the ground.

The target species for spotlighting were the Koala, Squirrel Glider, Brushtailed Phascogale, Eastern Pygmy Possum and Grey-headed Flying Fox.

#### 4.3.2.6. Microbat Call Detection and Analysis

Microchiropteran bat call detection was undertaken using an Anabat Express unit (Titley Scientific) set along the edge of potential microbat corridors for six nights. The recordings were forwarded to Dr Anna McConville of Echo Ecology, a bat call identification consultant, for identification of the bat species.

#### 4.3.2.7. Call Playback Survey

The Koala and Squirrel Glider were the main target species for the call playback survey, and calls of these species were broadcast prior to and after spotlighting surveys. Recorded calls of the Barking Owl, Powerful Owl, Masked Owl and Yellow-bellied Glider were also broadcast during the call playback survey.

Calls were played through a portable MP3 player via a 55W PA system from multiple separate locations at a sound level approximating natural intensities for the target species. The general methodology involved an initial period of listening and spotlighting; followed by playback of the calls simulating a natural pattern.

Playback was utilised over four nights. The location of call playback surveys is shown in Figure 7.





#### 4.3.2.8. Active Searches - Scat and Track

Diurnal active searches were undertaken to target the candidate species, the Koala. Searches targeted preferred habitat for these species with particular regards to searches under preferred Koala Food Trees.

Survey techniques employed included:

- Searches in all trees on site for foraging/sleeping individuals; and
- Searches for secondary evidence such as scats, scratches on trees and tracks.

#### 4.3.3. Survey Timing and Limitations

Fauna detectability is limited by seasonal, behavioural or lifecycle characteristics of each species, and even by habitat variations (e.g. flowering periods), which can occur within a year, between years, decades, etc. (DEC 2004).

The fauna survey period fell in summer which is a period of higher activity for arboreal mammals, Microchiropteran bats, frogs and birds, (DEC 2004). Longitudinal and latitudinal migrants such as the Swift Parrot and Regent Honeyeater would not be present at this time of year however.

The survey timing coincided with the recommended survey period for all of the candidate flora and fauna species.

#### 4.3.4. Weather Conditions

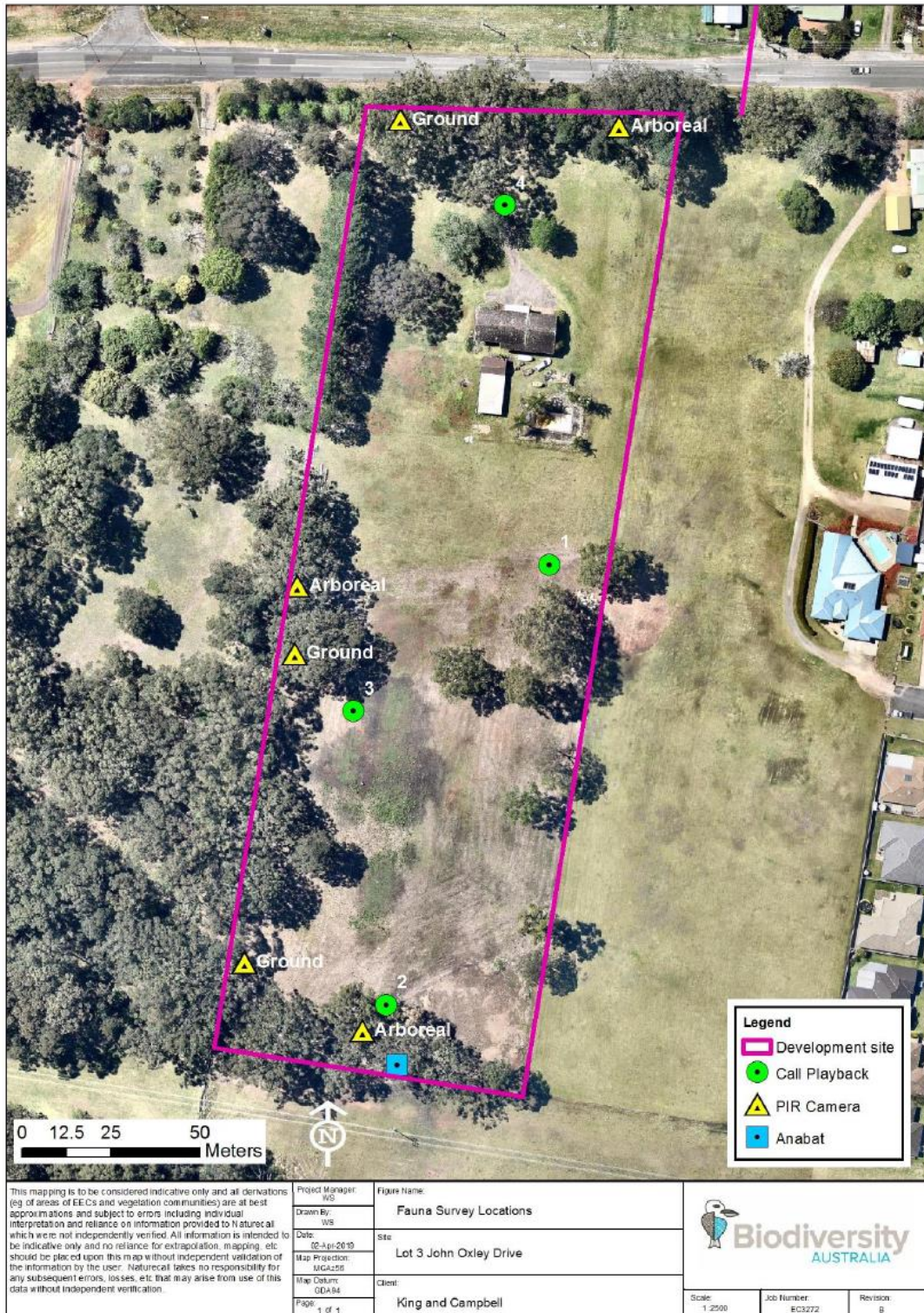
The weather over the two survey periods was fine and sunny, however a heavy rainfall event and storms occurred within the time period between these two surveys. During the December survey period (11<sup>th</sup>- 22<sup>nd</sup> December 2018), the temperature during surveys ranged from 11°C to 33.9°C. During the January survey period (9<sup>th</sup> - 22<sup>nd</sup> January 2019), temperatures ranged from a minimum of 14.9°C to a maximum of 34.6°C (BOM 2018 - nearest weather station at Port Macquarie airport).

Across these surveys, the full extent of moon phases were covered with a full moon occurring on the 23<sup>rd</sup> December 2018 and the 11<sup>th</sup> January 2019.



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 8: Location of fauna surveys







## 4.4. Targeted Survey Results

### 4.4.1. Fauna

#### 4.4.1.1. Habitat Features

The development site was found to be in a modified state as a result of a range of disturbances including historical clearing, underscrubbing, weed invasion and continued slashing. Limited habitat features were recorded within the development footprint and across the remainder of the site. These findings are described in the following table.

Table 10: Summary of site habitat values

Habitat/ Attribute Type	Site Values
Groundcover	Open groundcover of native and exotic grasses and herbs. Regularly mown and slashed. No significance to any threatened species.
Leaf litter	Vegetated patches contain sparse leaf litter around canopy trees. No significance to any threatened species.
Logs and debris	No log or debris piles occurred on site.
Hollows	No trees within subject site contain hollows.
Nectar Sources	The eucalypts on site would provide a potential year round nectar source for birds, arboreal mammals and Flying Foxes. The site would only provide a minor nectar source due to the limited extent of canopy trees.
Sap and gum sources	Occasional Pink Bloodwood trees occur over the site and in adjacent forest to the west. This is a preferred sap source for the Squirrel Glider. Other eucalypt species are less preferred.
Primary preferred Koala browse trees	The subject site contains Tallowwood, Forest Red Gum and Swamp Mahogany which are preferred Koala browse species. A number of these species on the subject site are proposed to be retained in a conservation offset area. The remaining preferred Koala browse species will be offset as per the South Lindfield KPOM (Appendix 5). The Koala was observed within subject site and scats were also detected.
Allocasuarinas	No Allocasuarinas present on site. No food source for Glossy Black Cockatoo.
Aquatic/wetland habitats	No aquatic habitats are present on the site. Absence of aquatic habitat to support threatened frogs and waterbirds.



Habitat/ Attribute Type	Site Values
<b>Fruiting species</b>	Fruiting species are very rare on the site and most are immature with no fruiting resource. Site is unlikely to attract threatened frugivorous birds.
<b>Forest bird habitat</b>	Poor quality. Vegetated areas on site are highly exposed. The understory and shrub layer are largely removed across much of the site. No significance to any threatened species.
<b>Caves, cliffs, overhangs, culverts, bridges</b>	Absent.
<b>Small terrestrial prey</b>	Likely to be low prey abundance over most of the site due to limited vegetation cover, historic disturbances and frequent human activity. Arboreal prey species such as possums and gliders would be rare due to the lack of hollow-bearing trees. Potential for the site to form part of the foraging range of raptors or forest owls.
<b>Habitat Linkages</b>	The subject site and immediate locality has a high level of fragmentation by urban development and historical rural land uses. Tentative habitat linkages can be seen from the site to Lake Innes Nature Reserve in the south and to retained forest habitat around the crematorium to the southwest. Highly mobile species such as macropods, birds, forest owls and bats could move freely throughout the development site and further into neighbouring vegetation.

#### 4.4.1.2. Observed/Detected Fauna

The surveys detected a range of fauna species over the development site. Birds were the most common species detected (29), followed by mammals (23) (Photos 4-8). No amphibians or reptiles were identified over the course of the site survey. Pest species detected on the site comprised Fallow Deer, European Rabbit and Red Fox.

Seven threatened fauna species was detected during the survey. These comprised:

- Koala (*Phascolarctos cinereus*);
- Grey-headed Flying Fox (*Pteropus poliocephalus*);
- Eastern False Pipistrelle (*Falsistrellus tasmaniensis*);
- Little Bent-wing Bat (*Miniopterus australis*);
- Eastern Bent-wing Bat (*Miniopterus schreibersii oceanensis*);
- Eastern Coastal Free-tail Bat (*Mormopterus norfolkensis*); and
- Greater Broad-nosed Bat (*Scoteanax rueppellii*).

Each of these species are listed as Vulnerable under the BC Act with the Koala and Grey-headed Flying Fox also listed as Vulnerable under the EPBC Act. The five threatened microbats recorded were detected via Anabat deployment. The remaining two threatened species identified were visually observed within the subject site during the course of surveys and fresh Koala scats were recorded.



The Koala recorded was observed crossing John Oxley Drive and entering the subject site during the course of survey. This individual then resided in a Lemon-scented Gum in the northwest of the development site.

Koala scats were identified under a Tallowwood along the western site boundary. The use of vegetation, within the subject site and adjoining properties by the Koala was already documented prior to this survey. The South Lindfield KPoM determined that the subject site forms part of a wider area of habitat used by a population of Koalas. It was determined that the population likely extends well beyond the site, over the wider Ruins Way area, south to Lake Innes Nature reserve and possibly west to Ascot Park.

Appendix 2 provides the total fauna list for the site and the method of detection.

Photo 4: Red-necked Wallaby







Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Photo 5: Brushtail Possum



Photo 6: Sugar Glider





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Photo 7: Red Fox



Photo 8: Koala observed on site





#### 4.4.1.3. Species Credit Species

##### Species detected

The following table provides a list of the candidate species credits species subject to targeted survey. As shown in the table below, the Little Bent-wing Bat, Eastern Bent-wing Bat and Grey-headed Flying Fox were detected however suitable breeding habitat was not present on the site. The Koala was the only other species credit species detected over the development site.

Table 11: Species credit species (fauna) survey results

Common Name	Scientific Name	Targeted survey guidelines met?	Species detected?
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	Yes	No
Square-tailed Kite (breeding)	<i>Lophoictinia isura</i>	Yes	No
Little Bent-wing Bat (breeding)	<i>Miniopterus australis</i>	Yes	Yes – not breeding
Eastern Bent-wing Bat (breeding)	<i>Miniopterus schreibersii oceanensis</i>	Yes	Yes – not breeding
Squirrel Glider	<i>Petaurus norfolcensis</i>	Yes	No
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>	Yes	No
Koala (breeding)	<i>Phascolarctos cinereus</i>	Yes	Yes
Grey-headed Flying Fox (breeding)	<i>Pteropus poliocephalus</i>	Yes	Yes – not breeding

##### Habitat components and credit requirement

The following table shows the species credit species detected on site and whether the suitable habitat components are present on site.

Table 12: Habitat components for species credit species recorded

Common Name	Credit Class	Biodiversity Risk Weighting	Habitat components (breeding)	Present on site?	Credits required?
Little Bent-wing Bat ( <i>Miniopterus australis</i> )	Ecosystem (foraging) Species (breeding)	3.00	Caves, tunnels, tree hollows, derelict mines, stormwater drains, culverts, bridges etc.	There is no breeding habitat located within the development site.	No
Eastern Bent-wing Bat ( <i>Miniopterus schreibersii</i> )	Ecosystem (foraging)	3.00	Caves, derelict mines, storm-water	There is no breeding	No



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

<i>oceanensis</i> )	Species (breeding)		tunnels etc.	habitat located within the development site.	
Koala ( <i>Phascolarctos cinereus</i> )	Ecosystem (foraging) Species (breeding)	2.00	High connectivity, known KFTs, Core Koala Habitat	Yes	Yes
Grey-headed Flying Fox ( <i>Pteropus poliocephalus</i> )	Ecosystem (foraging) Species (breeding)	2.00	Breeding camps	There are no breeding camps located within the development site.	No

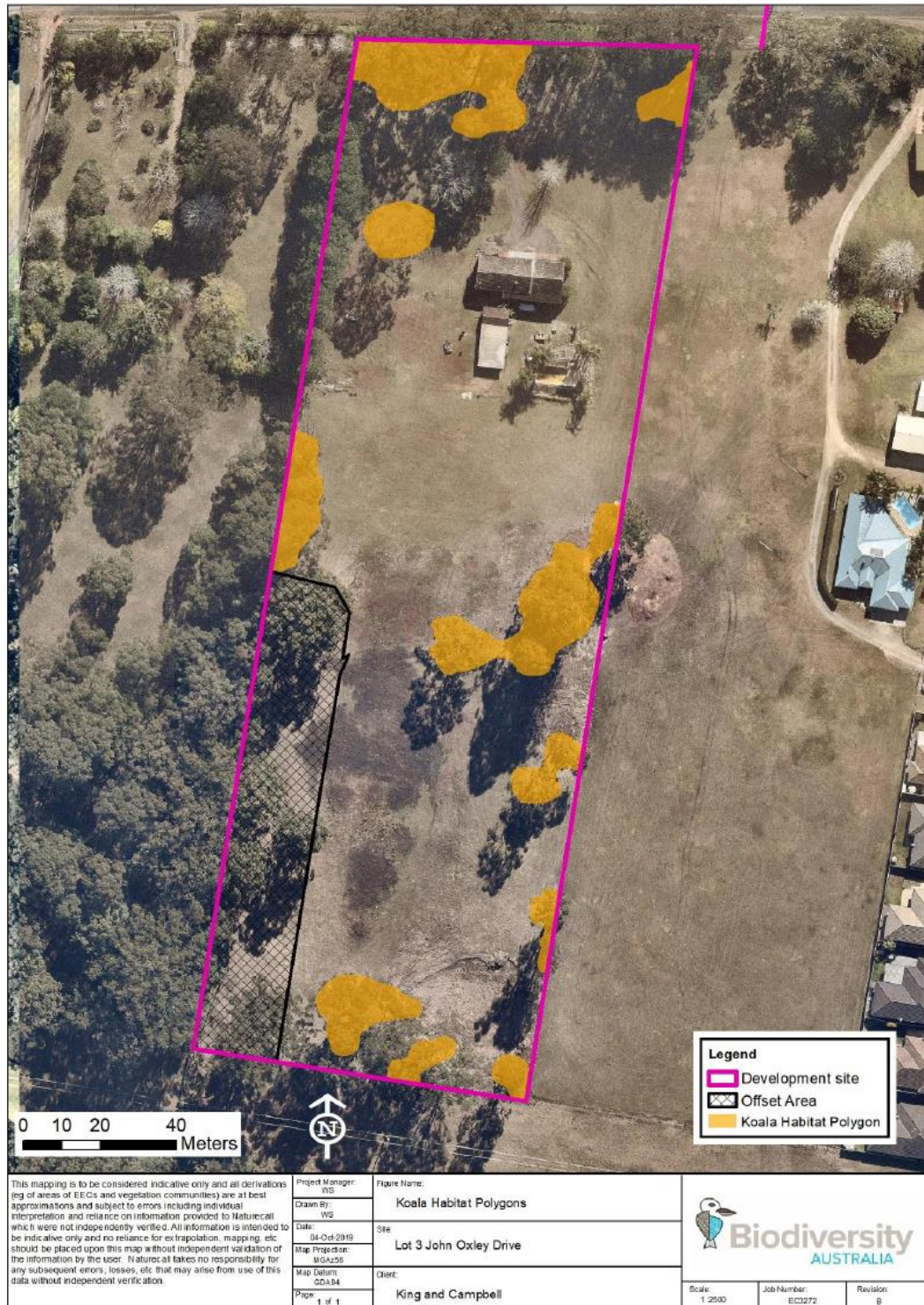
As shown in the above table, the habitat components required for the Little Bent-wing Bat, Eastern Bent-wing Bat and Grey-headed Flying Fox to breed are not present within the development footprint. As such, credits for breeding habitat for these species are not required. The foraging habitat for these species will be offset through ecosystem credits.

Credits for breeding habitat for the Koala are required and credit calculations for this species is provided in Section 7.2. The location of suitable habitat within the development site for the Koala comprises all of the dry sclerophyll forest on site (Vegetation zone 1) and covers 0.30ha. This is shown in Figure 9.





Figure 9: Koala species polygon







#### 4.4.2. Flora

##### 4.4.2.1. Candidate Species

Threatened flora surveys over the development site in March 2019 detected the Native Guava (*Rhodomyrtus psidioides*) in several locations within Lot 3 (both on the development site and on-site offset area). The locations are shown in Figure 10.

One individual was recorded in the south of Lot 3 and falls within the proposed APZ. This plant is able to be retained in situ and will be afforded protective fencing to ensure it is not removed or damaged by future land owners. This is further detailed in the VMP prepared for the proposal.

At least 10 small plants were also recorded in the offset area within Lot 3. These will be retained and will be allowed to regenerate through cessation of slashing and will be protected from browsing by Deer.

This species was listed in February 2019 under the NSW Biodiversity Conservation Act as critically endangered due to the risk of extinction posed by the plant disease Myrtle Rust.

None of the other species were detected hence there is no offset requirement and they are not considered further.

Table 13: Species credits species (flora) survey results

Common Name	Scientific Name	Targeted survey guidelines met?	Species detected?
Grove's Paperbark	<i>Melaleuca groveana</i>	Yes	No
Scant Pomaderris	<i>Pomaderris queenslandica</i>	Yes	No
Scrub Turpentine	<i>Rhodamnia rubescens</i>	Yes	No
Native Guava	<i>Rhodomyrtus psidioides</i>	Yes	<b>Yes – however no impact</b>



Photo 9: Native Guava on Lot 25

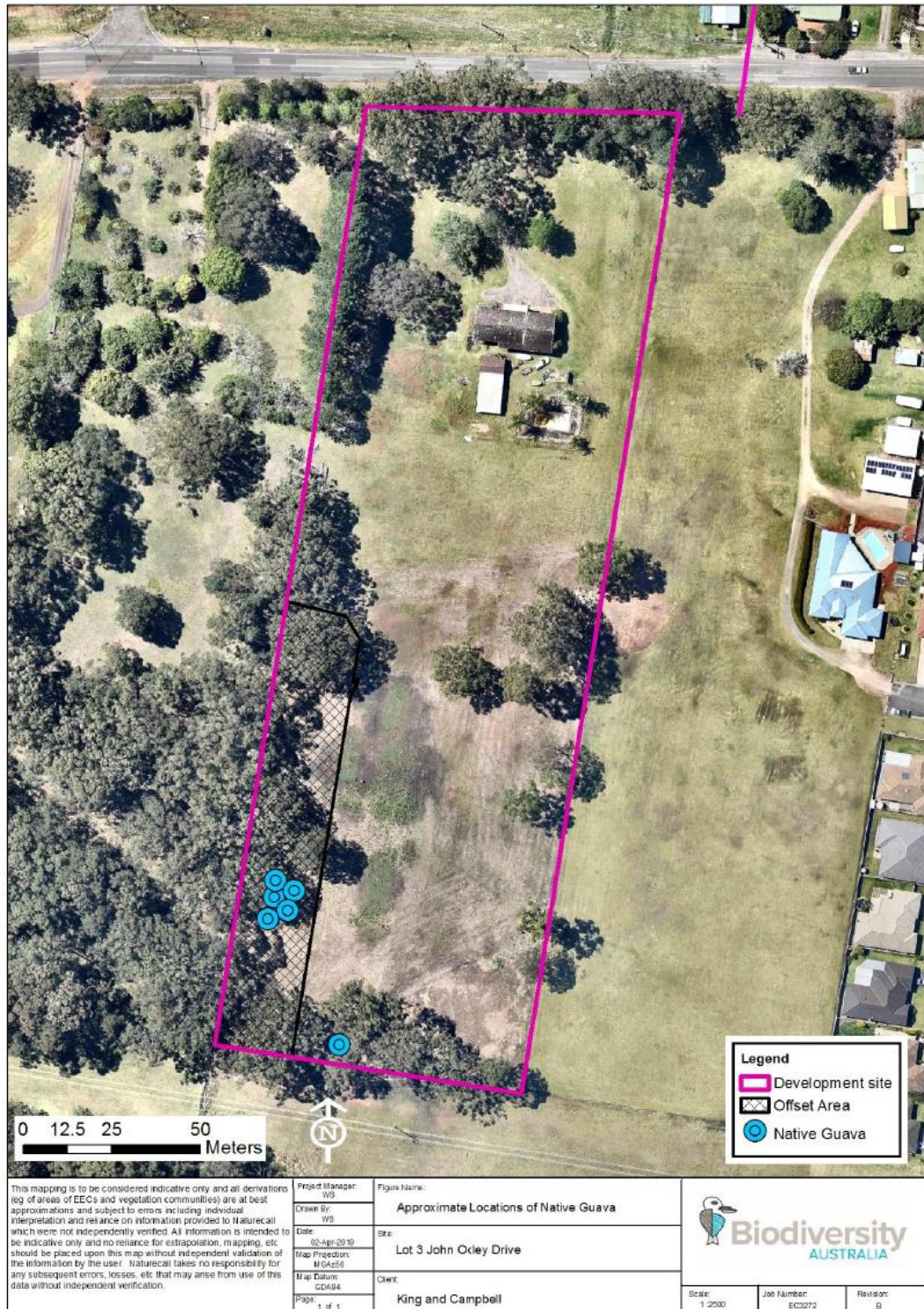






Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 10: Approximate location of Native Guava





## 5.0 Avoidance and Minimisation

### 5.1. Impact Avoidance

The proposed development has been designed so as to avoid some vegetated areas on site and minimise vegetation removal, including known Koala food trees. Vegetation removal will be limited to the minimum required in order to establish the residential estate.

An on-site offset area has been established in the southwest of Lot 3. This will retain a number of large Tallowwood and Blackbutt trees and contains a number of Native Guava that will be protected and managed under an VMP. An APZ will also be established in the south of Lot 3 and some vegetation can be retained here.

The sewer line which runs to the north has also been aligned to avoid removal of mature trees and native vegetation.

The single Native Guava plant present within the development site is located in an APZ and can be retained. This will be fenced to ensure it is not disturbed.

### 5.2.Measures to Minimise Impacts

The proposal would be subject to a number of mitigation measures and environmental controls to reduce the overall impact of the development on biodiversity and ensure potential offsite impacts are minimised.

#### 5.2.1. General Clearing Measures

The area to be cleared should be clearly marked prior to clearing in order to prevent inadvertent clearance beyond what is required and has been assessed.

Site induction is to specify that no clearing is to occur beyond the marked area, and vehicles are only to be parked in designated areas. Clearing and earthworks is to avoid damage to root zones of any retained trees and no materials or fill are to be placed under retained trees or within adjacent vegetation.

No further clearing is to be undertaken outside of that required for the earthworks.

#### 5.2.2. Pre-clearing Survey and Clearing Supervision

The following ameliorative measures should be carried out during clearing works on site.

- The clearing extent is to be inspected for Koalas and other fauna by a qualified ecologist immediately prior to commencement of any vegetation removal involving machinery and/or tree-felling. This is to occur each morning if clearing spans over multiple days/weeks.
- If a Koala is present in an area subject to vegetation removal/modification, works must be suspended until the Koala moves along on its own volition. If the Koala is located in a position that a 50m buffer may be established, works may proceed outside this buffer.
- The ecologist is to remain on site to supervise tree removal to retrieve any fauna detected during





works, manage any fauna interactions and ensure Koalas do not enter the site during clearing works.

### 5.2.3. Koala Food Tree Offset Plantings

The required KFT plantings are to be established within the offset area of Lot 3. Trees should be sourced locally and ideally planted prior to vegetation removal on the site. These are to be managed as per a Vegetation Management Plan which has been prepared.

### 5.2.4. Protection of Native Guava

The single Native Guava plant in the rear of the development site is to be retained in situ and protected via permanent post and rail fencing at a 1 m radius around the plant. New owners of the Lot on which the plant is located are to be informed of the presence of this plant and the requirement that it is to remain undisturbed.

The existing Native Guava in the offset area are to be enclosed in a fenced area to avoid being impacted by Deer or being accidentally trampled. Monitoring of the offset area is to include inspections of the Native Guava plants to ensure they are healthy and not being impacted by growth of weeds or animal grazing.

### 5.2.5. Donation of Foliage

The Koala Hospital and/or Billabong Wildlife Park are also to be contacted for interest in collecting the foliage and limbs of the fallen Tallowwood.

Due to chemical changes in the leaves, foliage must be collected as soon as possible after felling, hence collectors must be contacted and arranged prior to felling.

### 5.2.6. Soil Erosion and Sedimentation Control

Standard soil and sedimentation control measures will be required throughout the earthworks phase to ensure that habitats in the study area, as well as subsequent habitats nearby are not substantially affected.

### 5.2.7. Weed Control

Disturbance of the subject site's soils has potential to encourage weed invasion. Hence, it is recommended that:

- Disturbance of vegetation and soils on the site should be limited to the areas of the proposed work and should not extend into adjacent vegetation;
- All plant used for clearing and construction works is certified as weed free;
- Appropriate collection and disposal of all weed material removed via clearing;
- Any recent weed invasions within the development area should be removed, and
- Ongoing weed control in the development area.

### 5.2.8. Landscaping





Any landscaping proposed as part of the development should give due consideration to the establishment of native plants as ornamental species to maintain and/or increase biodiversity, provide replacement habitat, and maximise water efficiency. Plant selection should focus on species that do not pose a risk of invasion of native vegetation communities.

### 5.2.9. Mitigation Measure summary

The following table provides a summary of the mitigation measures and the timing and responsibility.

Table 14: Mitigation measure summary

Mitigation measure	Timing	Responsibility
Clearing management	Prior to clearing	Clearing contractor/surveyor
Pre-clearing survey	Prior to clearing	Ecologist
Clearing supervision	During clearing	Ecologist
Donation of foliage	Prior to clearing	Clearing contractor
Native Guava protection	Prior to clearing	Surveyor/landscaper
Habitat retention and offset plantings	Prior to/during/after clearing	Bush regenerator
Erosion and sedimentation control	Prior to/during/after clearing and earthworks	Civil contractor
Weed control	After clearing and earthworks	Bush regenerator
Landscaping	Development establishment phase	Landscaper/bush regenerator

## 5.3. Impacts Unable to be Avoided

### 5.3.1. Vegetation and Habitat Removal

There will be some vegetation removal associated with the proposal. Vegetation loss will be long term and there will be limited scope to re-establish any native vegetation within the subdivision footprint. No further vegetation loss will be required once the development has been established. Native vegetation loss associated with the proposal will total 0.45 ha.

The vegetation affected may provide foraging habitat for a number of fauna species. This includes a nectar source for birds and flying foxes, and preferred Koala food trees.

### 5.3.2. Indirect Impacts

The following potential indirect impacts may be associated with the proposal:

- **Fragmentation:** The proposal will contribute to local habitat loss, however the habitat to be removed does not comprise key wildlife linkages and its removal will not isolate any areas of habitat.



- **Erosion and Sedimentation:** The soils on site are prone to erosion. Standard mechanisms and controls should ensure the prevention of erosion and sedimentation during construction and post-development and such impacts do not extend beyond the development footprint.
- **Injury/mortality during clearing:** No hollow-bearing trees occur on site, hence the risk of fauna injury or mortality during clearing is low.

Koalas are at risk of injury if they are present on site at the time of clearing. An ecologist /fauna spotter must be present prior to clearing activities to search for Koalas and ensure they do not enter the site.

- **Edge effects:** The vegetation on site is currently exposed to edge effects due to current land use practices and historic clearing. These communities are not likely to be impacted by edge effects beyond levels which are currently experienced.
- **Weed invasion:** The proposed works may increase the potential for the spread of weeds on the property to some extent. All plant used for clearing and construction works is to be certified as weed free and any ornamental plantings within the site are recommended to be native species or species which do not pose a high risk of invasion.
- **Noise and vibration:** Fauna occurring in the study area are likely to be accustomed to existing noise levels given the extent of agricultural and construction activities in the area. Thus the clearing phase is unlikely to significantly increase this threat beyond that which already occurs in the study area. Beyond the development phase, noise levels will return to that of a normal residential area.
- **Increased human presence:** The site is currently in use as residential Lot with some existing human presence. Human presence will significantly increase over time both on site and in the area as the total development is completed. This has the potential to impact some fauna species that are not accustomed to human presence and other associated effects such as noise and lighting. This has the greatest potential to impact sensitive fauna (e.g. via avoidance, behavioural changes etc.) in neighbouring adjoining forested areas to the south and west.
- **Introduction of feral and domestic predators:** No introduction of feral species is predicted to occur as a result of the proposed subdivision. New owners may wish to keep pets; cats or dogs which can prey on native wildlife, however this is an existing threat in the area.



## 6.0 Impact Assessment

### 6.1. Assessment of Serious and Irreversible Impacts

Section 6.5 of the *Biodiversity Conservation Act 2016 (BC Act)* requires developments to consider Serious and Irreversible Impacts (SAIL) on threatened species and ecological communities which meet the following criteria:

- are in a rapid rate of decline;
- have a very small population size;
- have a very limited geographic distribution; and
- are unlikely to respond to measures to improve habitat.

These criteria have been applied to all threatened species and ecological communities listed under the *BC Act*. Entities that meet the criteria under one or more principles are identified as 'potential' SAIL species/communities in the guidance document *Guide to assist decision-maker to determine a serious and irreversible impact* (OEH 2017).

Review of this document has determined that the Native Guava which was recorded on site is an SAIL candidate species and has been assessed as per the relevant guidelines.

#### 6.1.1. Evaluation of Serious and Irreversible Impact

The Native Guava was recorded on the development site in March 2019. A single juvenile plant was recorded within the APZ on proposed Lot 25 and it was found to be in poor health and did not show any signs of growth. A cluster of juvenile plants was also found within the conservation area in the west of the site. The potential impacts of the development have been assessed against the SAIL assessment provisions in the following section.

##### 6.1.1.1. Impact Assessment Provisions

###### a) the action and measures taken to avoid the direct and indirect impact on the potential entity for an SAIL

The single Native Guava within the development footprint is located within an APZ and can be retained. To minimise the potential for future impacts, the plant will be protected with permanent fencing. Indirect impacts are likely to be minimal given the extent of buffering land between a future dwelling on Lot 25 and the plant. The plant has persisted in this location despite many years of continued slashing and appears to have high resilience.

The cluster of plants within the conservation area have also been avoided and will be permanently protected. The offset area will be fenced and vegetation will be allowed to regenerate naturally which will provide improved conditions for these plants to regenerate. There is unlikely to be any indirect impacts on these plants as a result of the development.



**b) the size of the local population directly and indirectly impacted by the development, clearing or biodiversity certification**

The population within the development footprint consists of one juvenile plant. There are approximately 15 plants within the conservation area on site and many more were noted on the adjoining land to the west during a recent site inspection. The total population size is not known as detailed counts have not been undertaken.

**c) the extent to which the impact exceeds any threshold for the potential entity that is specified in the *Guidance and criteria to assist a decision-maker to determine a serious and irreversible impact***

There is no impact threshold listed for the Native Guava on the Threatened Biodiversity Data Collection.

**d) the likely impact (including direct and indirect impacts) that the development, clearing or biodiversity certification will have on the habitat of the local population, including but not limited to:**

**i. an estimate of the change in habitat available to the local population as a result of the proposed development**

The development will slightly reduce the area of habitat available for the Native Guava within the development site, however most of this habitat would be unlikely to support the species given the management regime and high level of exposure. The offset conservation area will however protect 0.27ha of known habitat for this species and provide suitable conditions for it to regenerate further.

**ii. the proposed loss, modification, destruction or isolation of the available habitat used by the local population, and**

Refer to point above.

**iii. modification of habitat required for the maintenance of processes important to the species' life cycle (such as in the case of a plant – pollination, seed set, seed dispersal, germination), genetic diversity and long-term evolutionary development**

The proposed subdivision and eventual residential development on the site will lead to a reduction in the ability for the species to disperse northwards as this area will be highly developed. Given the management regime and historical disturbances, the potential for this species to colonise this area would however be limited. The species will still be able to disperse southwards and westwards from the site as no barrier will be created. Protection and regeneration of the conservation area on site will allow for further recolonisation and recovery of the local population.

The development is unlikely to reduce pollination success of the Native Guava as no barrier to pollination will be created and the limited vegetation removal associated with the proposal is unlikely to reduce abundance of pollinators.



**e) The likely impact on the ecology of the local population. At a minimum, address the following:**

**i. for flora, address how the proposal is likely to affect the ecology and biology of any residual plant population that will remain post development including where information is available:**

**ii. pollination cycle**

The proposal is unlikely to affect the pollination cycle of the native Guava population as previously discussed.

**iii. seedbanks and recruitment, and**

The proposal is unlikely to remove a seed bank of the Native Guava as no mature fruiting plants have been located in the area and there appears to be no recruitment at present, especially within the development footprint. The potential for future recruitment around the single plant on Lot 25 will remain at the current level as this area will be continually managed. The offset area on site will however allow the Native Guava to recruit over time and will improve the opportunity for recruitment through cessation of slashing.

**iv. interactions with other species (e.g. pollinators, host species, mycorrhizal associations)**

The proposal is unlikely to result in any adverse effects on interactions with other species. As no plants will be removed and limited vegetation removal or soil disturbance will occur around the single plant on Lot 25, any mycorrhizal associations are unlikely to be affected.

**f) a description of the extent to which the local population will become fragmented or isolated as a result of the proposed development**

No part of the local population will be removed or fragmented as a result of the development. No barriers between existing plants or populations will be created.

**g) the relationship of the local population to other population/populations of the species. This must include consideration of the interaction and importance of the local population to other population/populations for factors such as breeding, dispersal and genetic viability/diversity, and whether the local population is at the limit of the species 'range**

The single plant on Lot 25 forms part of a larger population in the area, which includes a number of immature plants in the adjoining offset area. This plant is unlikely to play an important role in the local population as it is immature and isolated from other nearby plants. It is also not at the limit of the species distribution.

**h) the extent to which the proposed development will lead to an increase in threats and indirect impacts, including impacts from invasive flora and fauna, that may in turn lead to a decrease in the viability of the local population**

The proposal may slightly increase indirect threats on the Native Guava in Lot 25, however it will be protected and fenced off during construction, and permanent fencing will be established. It is currently in an exposed





area subject to high edge effects, and the development is unlikely to increase this current threat.

Use of fertilisers and herbicides or changes in hydrology from stormwater runoff may have the potential to harm the plant, however suitable stormwater measures will be in place to reduce runoff and fertilisers affecting the plant.

This species is highly susceptible to Myrtle Rust, however this is an existing threat and the proposed development is unlikely to have the capacity to increase the risk or impact of this disease on the Native Guava population.

- i) **An estimate of the area, or number of populations and size of populations that is in the reserve system in NSW, the IBRA region and the IBRA subregion the measure/s proposed to contribute to the recovery of the species in the IBRA subregion.**

The extent of known populations of the Native Guava in the NSW reserve system is unknown.

#### 6.1.1.2. Conclusion

The assessment of the proposed development against the SAI provisions for threatened species has determined that the development would only pose a minor indirect threat to the single native Guava plant on Lot 25 which is already subject to existing threats. The potential for indirect threats will be reduced through a range of measures including constructing a permanent fence around the plant and management of stormwater and runoff.

Potential indirect threats on the existing cluster of plants in the on-site conservation area will be reduced as a result of the proposed development and this population will be given a chance to recover and potentially recolonise a larger area.

In conclusion, the development is highly unlikely to result in serious and irreversible impacts to the native Guava population.

## 6.2. Impacts Requiring Offsets

A total of 0.30 ha of moderate to good condition native vegetation is proposed for removal as a result of the proposed residential subdivision. The loss of this vegetation will be offset through biodiversity credits detailed in this report. Impacts on 0.30 ha of Koala habitat will be offset via species credits and planting trees within the offset area on site. The extent of area requiring assessment is mapped in Figure 10.

## 6.3. Impacts Not Requiring Offsets

The area of grassland falling within vegetation zone 2 does not require offsets. As per the BAM, the vegetation integrity score for this zone is below 17 and it is not an Endangered Ecological Community. Potential indirect impacts associated with the development proposal also do not require offsets.

In addition, the species credit species, the Grey-headed Flying Fox, Eastern Bent-wing Bat and Little Bent-wing Bat, detected during this survey period are not required to be offset through species credits as breeding



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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habitat for these species were not found in the development footprint

## 6.4.Areas Not Requiring Assessment

Areas of exotic dominated grassland and cleared land within the development site do not require assessment as they do not qualify as native vegetation. This includes land affected by the sewer pipelines. This is shown in Figure 11.



Figure 11: Impact summary







## 7.0 Impact Summary

### 7.1. Impact Area

#### 7.1.1. Ecosystem Credits

The following table details the credit requirement for the vegetation zones that will be impacted by the development. The full credit report is provided in Appendix 3.

Table 15: Ecosystem credits required

Zone	Zone/PCT ID	PCT Name	Change in Integrity Score	Impact Area	No. of Credits Required
1	No 690: Moderate	No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	-59.8	0.3 ha	8
2	No 690: Poor	No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	-14.1	0.15 ha	0

#### 7.1.2. Species Credits

The following table details the candidate threatened species credit requirements for the proposed subdivision on the development site. The full credit report is provided in Appendix 3.

Table 16: Species credits required

Species	PCT ID	Biodiversity Risk Weighting	Impact Area	Candidate SAI	No. of Credits Required
Koala ( <i>Phascolarctos cinereus</i> )	No 690: Moderate	2	0.30 ha	No	9

### 7.2. Offset Area

The on-site conservation and tree planting area was assessed for its potential to generate ecosystem and species credits to demonstrate that it is meeting part of the offset requirements for the development site. This was achieved via a BAM plot as described in Section 3.1.1 and credit assessment in the BAM calculator. The conservation area contains the same vegetation type as the development site.

The following sections detail the amount of ecosystem and species credits that would be generated by conserving this area.



### 7.2.1. Ecosystem Credits

The following table details the ecosystem credits created by the on-site offset area.

Table 17: Ecosystem credits required

Zone	Zone/PCT ID	PCT Name	Current Integrity Score	Future score with management	Area	No. of Credits Generated
1	No 690: Moderate	No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	37.4	51.4	0.27ha	1

### 7.2.2. Species Credits

The Koala has been recorded within the on-site offset area. The following table details the number of Koala species credits that would be generated by the offset area.

Table 18: Species credits required

Species	PCT ID	Habitat condition gain	Area	No. of Credits Generated
Koala ( <i>Phascolarctos cinereus</i> )	No 690: Moderate	14.3	0.27ha	1





## 8.0 Conclusion

This report has assessed the impact of vegetation clearing for a residential subdivision at 165 John Oxley Drive, Port Macquarie. This will require the removal of 0.45 ha of native vegetation within the development footprint.

The development requires consent under Part 4 of the Planning and Assessment Act. The amount of clearing required for the proposal has triggered the requirement for application of the Biodiversity Assessment Method and a Biodiversity Development Assessment Report. The proposal can be assessed using the small area development streamlined assessment module.

One vegetation community comprising two vegetation zones was identified in the development footprint. The total area of native vegetation that will require removal is approximately 0.45 ha. This impact will be offset through an existing offset area that has been established through the South Lindfield KPOM, as well as retirement of ecosystem and species credits.

A single threatened flora species was detected on the development site comprising the Native Guava. One plant was found in the south of Lot 3 and can be retained. Given the significant disturbance history and small extent of vegetation on the subject site, no other threatened flora species are considered potential occurrences. No Endangered Ecological Communities occur within the development site.

The targeted fauna survey detected seven threatened fauna species, the Little Bent-wing Bat, Eastern Bent-wing Bat, Eastern False Pipistrelle, Eastern Coastal Free-tail Bat, Greater Broad-nosed Bat, Grey-headed Flying Fox and the Koala. No suitable breeding/roosting habitat exists in the development footprint for each of the bat species. As such, no species credits are required for these species. The Koala was observed within the subject site during the survey and species credits for this species have been described in this report. As existing offsets for the Koala are currently prescribed under the South Lindfield KPOM, it is recommended that the Koala credit requirements described in this report are discounted.

Direct impacts of the proposal will be limited to vegetation and habitat removal. A number of mitigation measures will be implemented to reduce potential offsite impacts during the construction phase. Indirect impacts that may be associated with the proposal are considered to be minor and can be mitigated through the measures described in Section 5.2.

An assessment of Serious and Irreversible Impacts has found that the Native Guava is a potential SAIL candidate species and has been assessed accordingly under the SAIL guidelines. The proposal will not have any effect on Areas of Outstanding Biodiversity Value.



## 9.0 References

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## Appendix 1: Flora Species List

Common name	Scientific name
<b>Canopy Trees</b>	
Lemon-scented Gum	<i>Corymbia citriodora</i>
Pink Bloodwood	<i>Corymbia intermedia</i>
Flooded Gum	<i>Eucalyptus grandis</i>
Tallowood	<i>Eucalyptus microcorys</i>
Blackbutt	<i>Eucalyptus pilularis</i>
Swamp Mahogany	<i>Eucalyptus robusta</i>
Forest Red Gum	<i>Eucalyptus tereticornis</i>
Radiata Pine*	<i>Pinus radiata</i> *
<b>Small Trees/Shrubs</b>	
Fringed Wattle	<i>Acacia fimbriata</i>
Asparagus Fern**	<i>Asparagus aethiopicus**</i>
Coffee Bush	<i>Breynia oblongifolia</i>
Camphor Laurel*	<i>Cinnamomum camphora</i> *
Corkwood	<i>Duboisia myoporoides</i>
-	<i>Ficus sp.</i>
Cheese Tree	<i>Glochidion ferdinandi</i>
Balloon Cotton bush*	<i>Gomphocarpus physocarpus</i> *
Lantana**	<i>Lantana camara**</i>
Prickly Tea-tree	<i>Leptospermum juniperinum</i>
Small-leaved Privet**	<i>Ligustrum sinense**</i>
Broad-leaved Paperbark	<i>Melaleuca quinquenervia</i>
Flax-leaved Paperbark	<i>Melaleuca linariifolia</i>
Sieber's Paperbark	<i>Melaleuca sieberi</i>
Prickly-leaved Paperbark	<i>Melaleuca styphelioides</i>
Butterfly Bush*	<i>Oenothera lindheimeri</i> *
Slender Rice Flower	<i>Pimelea linifolia</i>
Wild Yellow Jasmine	<i>Pittosporum revolutum</i>
Native Daphne	<i>Pittosporum undulatum</i>
<b>Native Guava</b>	<b><i>Rhodomyrtus psidioides</i></b>
Molucca Bramble	<i>Rubus moluccanus</i>
Native Raspberry	<i>Rubus parvifolius</i>
Blackberry*	<i>Rubus sp.*</i>
Wild Tobacco Bush*	<i>Solanum mauritianum</i> *
Cocos Palm*	<i>Syagrus romanzoffiana</i> *
Scentless Rosewood	<i>Synoum glandulosum</i>
Tie Bush	<i>Wikstroemia indica</i>
<b>Vines and Scramblers</b>	
Climbing Asparagus Fern**	<i>Asparagus plumosus**</i>



Appleberry	<i>Billardiera scandens</i>
-	<i>Desmodium rhytidophyllum</i>
Wombat Berry	<i>Eustrephus latifolius</i>
Scrambling Lily	<i>Geitonoplesium cymosum</i>
-	<i>Glycine clandestina</i>
-	<i>Glycine tabacina</i>
Climbing Guinea Flower	<i>Hibbertia scandens</i>
-	<i>Polymeria calycina</i>
Lawyer Vine	<i>Smilax australis</i>
Snake Vine	<i>Stephania japonica</i>
<b>Grasses</b>	
Threeawn Speargrass	<i>Aristida vagans</i>
Narrow-leafed Carpet Grass**	<i>Axonopus fissifolius**</i>
Kikuyu Grass*	<i>Cenchrus clandestinus*</i>
Barbed Wire Grass	<i>Cymbopogon refractus</i>
Couch	<i>Cynodon dactylon</i>
Slender Flat-sedge	<i>Cyperus gracilis</i>
-	<i>Cyperus sp.</i>
Shorthair Plumegrass	<i>Dichelachne micrantha</i>
Tufted Hedgehog-grass	<i>Echinopogon caespitosus</i>
Panic Veldtgrass**	<i>Ehrharta erecta**</i>
Boarered Panic	<i>Entolasia marginata</i>
Wiry Panic	<i>Entolasia stricta</i>
Brown's Lovegrass	<i>Eragrostis brownii</i>
Tall Saw-sedge	<i>Gahnia clarkei</i>
Blady Grass	<i>Imperata cylindrica</i>
Blown Grass	<i>Lachnagrostis filiformis</i>
Wimmera Ryegrass*	<i>Lolium rigidum*</i>
Wattle Mat-rush	<i>Lomandra filiformis</i>
Spiny-headed Mat-rush	<i>Lomandra longifolia</i>
Many-flowered Mat-rush	<i>Lomandra multiflora</i>
Weeping Grass	<i>Microlaena stipoides</i>
Australian Basket Grass	<i>Oplismenus aemulus</i>
Paspalum**	<i>Paspalum dilatatum**</i>
Broadleaf Paspalum*	<i>Paspalum mandiocanum*</i>
Vasey Grass	<i>Paspalum urvillei</i>
South African Pigeon Grass	<i>Setaria sphacelata</i>
Parramatta Grass*	<i>Sporobolus africanus*</i>
Giant Parramatta Grass**	<i>Sporobolus fertilis**</i>
<b>Groundcovers</b>	
Billygoat Weed*	<i>Ageratum houstonianum*</i>
-	<i>Baumea juncea</i>





Cobblers Peg	<i>Bidens pilosa</i> **
Blue Trumpet	<i>Brunoniella australis</i>
Indian Pennywort	<i>Centella asiatica</i>
Spear Thistle*	<i>Cirsium vulgare</i> *
Native Wondering Jew	<i>Commelina cyanea</i>
Fleabane*	<i>Conyza bonariensis</i> *
Celery Weed*	<i>Cyclosporum leptophyllum</i> *
Blue Flax Lily	<i>Dianella caerulea</i>
Kidney Weed	<i>Dichondra repens</i>
Saw Sedge	<i>Gahnia clarkei</i>
scrambling Lily	<i>Geitonoplesium cymosum</i>
Cranesbill Geranium	<i>Geranium molle</i>
Raspwort	<i>Gonocarpus micranthus</i>
-	<i>Gonocarpus micranthus</i>
Swamp Goodenia	<i>Goodenia bellidifolia</i>
Forest Goodenia	<i>Goodenia hederacea</i>
-	<i>Hybanthus stellarioides</i>
Stinky Pennywort	<i>Hydrocotyle laxiflora</i>
Flatweed*	<i>Hypochaeris radicata</i> *
Harsh Ground Fern	<i>Hypolepis muelleri</i>
-	<i>Juncus usitatus</i>
Water Primrose	<i>Ludwigia peploides</i>
Scarlet Pimpernel	<i>Lysimachia arvensis</i> *
Scotch Thistle	<i>napordum acanthium</i>
Spotted knotweed	<i>Persicaria strigosa</i>
Woolly Waterlily	<i>Philydrium lanuginosum</i>
Ink Weed*	<i>Phytolacca octandra</i> *
Lamb's Tounge*	<i>Plantago lanceolata</i> *
-	<i>Poranthera microphylla</i>
Whiteroot	<i>Pratia purpurascens</i>
Pastel Flower	<i>Pseuderanthemum variabile</i>
Common Bracken	<i>Pteridium esculentum</i>
-	<i>Richardia stellaris</i> *
Fireweed**	<i>Senecio madagascariensis</i> **
Paddy's Lucerne*	<i>Sida rhombifolia</i> *
Indian Weed*	<i>Sigesbeckia orientalis</i> *
Blackberry Nightshade*	<i>Solanum nigrum</i> *
Singapore Daisy*	<i>Sphagneticola trilobata</i> *
Yellow Autumn-lily	<i>Tricoryne elatior</i>
Purpletop**	<i>Verbena bonariensis</i> **
* denotes exotic species; ** denote High Threat Exotic species	
<b>Bold:</b> Critically Endangered under NSW BC Act	



## Appendix 2: Fauna Species List

Group	Common Name	Species	Detection Method
Birds	King Parrot	<i>Alisterus scapularis</i>	HC
	Little Wattlebird	<i>Anthochaera chrysoptera</i>	Vis
	White-necked Heron	<i>Ardea pacifica</i>	Vis
	Little Corella	<i>Cacatua sanguinea</i>	Vis
	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	HC, Vis
	Pheasant Coucal	<i>Centropus phasianus</i>	HC
	Black-faced Cuckoo Shrike	<i>Coracina novaehollandiae</i>	HC
	White-throated Tree-creeper	<i>Cornobates leucophaeus</i>	HC
	Torresian Crow	<i>Corvus orru</i>	Vis
	Australian Magpie	<i>Cracticus tibicen</i>	Cam, HC, Vis
	Grey Butcherbird	<i>Cracticus torquatus</i>	HC
	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	HC, Vis
	White-faced Heron	<i>Egretta novahollandia</i>	Vis
	Galah	<i>Eolophus roseicapilla</i>	Vis
	Dollar Bird	<i>Eurystomus orientalis</i>	Vis
	Magpie Lark	<i>Grallina cyanoleuca</i>	HC, Vis
	Painted Honeyeater	<i>Grantiella picta</i>	Vis
	White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	Vis
	Whistling Kite	<i>Haliastur sphenurus</i>	Vis
	Noisy Miner	<i>Manorina melanocephala</i>	Cam, HC, Vis
	Crested Pigeon	<i>Ocyphaps lophotes</i>	Vis
	Noisy Friarbird	<i>Philemon comicalatus</i>	HC, Vis
	Eastern Rosella	<i>Platycercus eximius</i>	HC, Vis
	Tawny Frogmouth	<i>Podargus strigoides</i>	Vis
	Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	HC
	Indian Myna*	<i>Sturnis tristis*</i>	Vis
	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	Vis
	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	HC, Vis
	Masked Lapwing	<i>Vanellus miles</i>	HC, Vis
Mammals	White-striped Free-tailed Bat	<i>Austronomus australis</i>	Anabat
	Gould's Wattled Bat	<i>Chalinolobus gouldii</i>	Anabat
	Chocolate Wattled Bat	<i>Chalinolobus morio</i>	Anabat
	Fallow Deer*	<i>Dama dama*</i>	Cam, Sc, Vis
	<b>Eastern False Pipistrelle</b>	<b><i>Falsistrellus tasmaniensis</i></b>	Anabat
	Eastern Grey Kangaroo	<i>Macropus giganteus</i>	Sc, Vis
	Red-necked Wallaby	<i>Macropus rufogriseus</i>	Cam
	<b>Little Bent-wing Bat</b>	<b><i>Miniopterus australis</i></b>	Anabat
	<b>Eastern Bent-wing Bat</b>	<b><i>Miniopterus schreibersii oceanensis</i></b>	Anabat
	<b>Eastern Coastal Free-tail Bat</b>	<b><i>Mormopterus norfolkensis</i></b>	Anabat
	European Rabbit *	<i>Oryctolagus cuniculus*</i>	Vis
	Ride's Free-tailed Bat	<i>Ozimops ridei</i>	Anabat
	Sugar Glider	<i>Petaurus breviceps</i>	Cam
	<b>Koala</b>	<b><i>Phascolarctos cinereus</i></b>	Sc, Vis



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Group	Common Name	Species	Detection Method
	Common Ringtail	<i>Pseudocheirus peregrinus</i>	Cam
	<b>Grey-headed Flying Fox</b>	<b><i>Pteropus poliocephalus</i></b>	Vis
	Black Rat	<i>Rattus rattus</i>	Cam
	<b>Greater Broad-nosed Bat</b>	<b><i>Scoteanax rueppellii</i></b>	Anabat
	Eastern Broad-nosed Bat	<i>Scotorepens orion</i>	Anabat
	Brush-tail Possum	<i>Trichosurus vulpecula</i>	Cam
	Large Forest Bat	<i>Vespadelus darlingtoni</i>	Anabat
	Eastern Forest Bat	<i>Vespadelus pumilus</i>	Anabat
	Red Fox*	<i>Vulpes vulpes</i> *	Cam, Vis
Observation Key: Cam – PIR camera; HC – heard calling; Sc - scats; Vis - visual observation Bold - Vulnerable under <i>BC Act</i> and/or <i>EPBC Act</i> ; * denotes exotic species			



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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## Appendix 3: Biodiversity Credit Report



## BAM Credit Summary Report

### Proposal Details

Assessment Id	00013767/BAAS18146/19/00014462	Proposal Name	Lot 3 John Oxley Drive - Streamlined	BAM data last updated *	27/09/2019
Assessor Name	Will Steggall	Report Created	04/10/2019	BAM Data version *	15
Assessor Number	BAAAS17107	BAM Case Status	Finalised	Date Finalised	03/10/2019
Assessment Revision	0	Assessment Type	Part 4 Developments (Small Area)		

\* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

### Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetation zone name	Vegetation integrity loss / gain	Area (ha)	Constant	Species sensitivity to gain class (for BRW)	Biodiversity risk weighting	Potential SAI	Ecosystem credits
<b>Blackbutt - Tallowwood dry grassy open forest of the central parts NSW North Coast Bioregion</b>								
1	690_Moderate	59.8	0.3	0.25	High Sensitivity to Potential Gain	1.75		8

Assessment Id	00013767/BAAS18146/19/00014462	Proposal Name	Lot 3 John Oxley Drive - Streamlined
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Page 1 of 2





BAM Credit Summary Report

2 690_Low	14.1	0.2	0.25	High Sensitivity to Potential Gain	1.75		0
						Subtotal	8
						Total	8

Species credits for threatened species

Vegetation zone name	Habitat condition (HC)	Area (ha) / individual (HL)	Constant	Biodiversity risk weighting	Potential SAI	Species credits
<b>Phascolarctos cinereus / Koala ( Fauna )</b>						
690_Moderate	59.8	0.29	0.25	2	False	9
					Subtotal	9

Assessment Id	Proposal Name
00013767/BAAS18146/19/00014462	Lot 3 John Oxley Drive - Streamlined



## Appendix 4: SEPP 44 Assessment

A complete SEPP 44 Koala Habitat Assessment for the development site and adjoining land has been undertaken by Biodiversity Australia in 2014. This assessment determined that the development site was considered to form a part of a larger area of Core Koala Habitat due to:

- evident generational persistence of Koalas in the study area;
- the presence of female Koalas on site;
- the presence of a breeding male in the study area;
- ongoing records of Koalas within associated habitats; and
- previous activity levels.

These areas of Core Koala Habitat are regularly used by a small local aggregate of Koalas, which form part of a local population that extends to the south, southeast and southwest over a larger landscape of occupied Koala habitat.

As a result of this assessment, the South Lindfield Koala Plan of Management (KPoM) (Biodiversity Australia 2018) has been developed and implemented as part of the South Lindfield rezoning.

The following provisions in the KPoM are relevant for development on Lot 3.

### Offset Plantings

The removal of Koala food trees on Lot 3 will be subject to offset tree plantings within the offsite area in the southwest of the property. These will be managed and maintained under a VMP. The KPoM specifies the following planting specifications:

*"The offset plantings are to comprise Tallowwoods, Forest Red Gum and Swamp Mahogany, with species selection targeting suitable edaphics at the planting location.*

*All Koala offset plantings are to be located in available canopy spacings within existing forest or planted out at 10m spacings with accompanied mid and ground storey plantings to create a fully structured forest.*

*These plantings will be managed and monitored as per the specifications in Appendix 1. All plantings are to be maintained in perpetuity with any failures to be replaced in accordance with this KPoM.*

*Plantings must not conflict with current or future planning, engineering, infrastructure and bushfire requirements, including the 10/50 Vegetation Clearing Code of Practice."*

### Clearing Management

In order to minimise the risk of Koalas being killed or injured during any clearing works on the site; the following measures must be implemented:

- The area of work is to be inspected for Koalas by an ecologist immediately prior to commencement of any vegetation removal.



- The ecologist is to remain on-site during vegetation removal to maintain surveillance for Koalas and rescue other fauna as required.
- No such vegetation removal is to be carried out while any Koala is present in the area of operation unless a 50m buffer is established; or if Koala does not voluntarily move on, is removed by Port Macquarie Koala Hospital staff.
- A report by the ecologist is to be provided within 7 days of the clearing event detailing methods and results of the supervision.

## Road Design and Speed Controls

To reduce the risk of Koala road strike, the following measures will need to be implemented:

- If a formal road is directed through the southwest boundary of Lot 3 DP 533058, Koala crossing points will be required.
- Koala crossing and warning signage should be erected at crossing points. The Port Macquarie Koala Hospital number is to be displayed on the sign.
- Street lighting to be strategically positioned at the southwest corner of Lot 3 if required.
- Street lighting along roads where required to help motorists see any Koalas that have wandered onto roads

## Barriers and Fencing

Development of the site will introduce new barriers for Koalas in the form of fences, hence the following measures should be implemented:

- To separate Koalas from the hazards of residential areas, fencing is to be erected around the E2 public reserve. Three one way bridges will be installed on the northern boundary of the E2 public land to allow for koala access into the reserve. Three two-way bridges will be provided on the southern boundary with the Crematorium.
- No fence design (either temporary or permanent) is to include a material or design feature that may potentially injure Koalas (or other fauna) e.g. barbs and loose wire.
- Retro-fitting the crematorium boundary fencing with Koala ladders is recommended to increase access to this habitat, and general linkages across the wider landscape.

## Bushfire

The following measures are to be implemented in regards to bushfire:

- The designation/location and management of APZs is to minimise perceived risk of vulnerability to bushfire and hence demand for hazard reduction in adjacent habitat including retained habitat and offset areas.



- Offsets are to be located to avoid conflicts with APZs and negate risk for their potential to be removed by legislation changes, etc.

## Disease

Disease is a current threat to the local Koala aggregate and habitat loss associated with development of the site has the potential to increase the current disease risk. To help reduce this, the following measures are to be implemented:

- Contact details for Koala Hospital at site office during construction.
- Koala warning signage is to detail contact details for the Koala Hospital to facilitate prompt reporting of sick or injured Koalas.



## Appendix 5: PMHC DCP Assessment

Under the Port Macquarie-Hastings Council Local Environmental Plan (PMHC LEP) 2011, Council has prepared and implemented the PMHC Development Control Plan (DCP) 2013. The DCP has a specific section titled Environmental Management. This section has provisions for hollow-bearing trees, Koala food trees (KFT), Endangered Ecological Communities (EEC) and Riparian areas.

### Hollow-bearing Trees

No hollow-bearing trees were identified on site, therefore no assessment or compensatory measures are required.

### Koala Food Trees

Primary Koala food trees listed under the Port Macquarie Hastings Council Development Control Plan 2013 have previously been located and flagged within and adjacent to the clearing footprint. Details of these are available in the South Lindfield Koala Plan of Management (KPoM) (Biodiversity Australia 2018).

The Port Macquarie Hastings Council Development Control Plan 2013 states that the removal of Koala browse tree species is to be replaced at a ratio of 2:1 on site or at a secure offsite location agreed to by Council.

These offset provisions apply to the Koala food trees within the development footprint and offset requirements for these have been accounted for within the South Lindfield KPoM. Planting specifications, monitoring requirements and compliance checks for these offsets are further detailed within this KPoM.

### Endangered Ecological Communities

No Endangered Ecological Communities are located within the development site, hence there is no requirement for a buffer.

### Riparian Areas

No defined watercourses occur on the development site, hence there is no requirement for riparian buffers.





## Appendix 6: EPBC Act MNES Assessment

The provisions of the EPBC Act 1999 require determination of whether the proposal has, will or is likely to have a significant impact on a “matter of national environmental significance”. These matters are listed and addressed in summary as follows:

Table 19: Summary of MNES

Category	Relevance	Significant Impact Likely?
World Heritage Properties	The site is not listed as a World Heritage area.	N/A
National Heritage Places	The site is not listed as a National Heritage Place.	N/A
Wetlands of International Importance	The site does not contain important wetlands.	N/A
Great Barrier Reef Marine Park	The proposal does not affect the Great Barrier Reef Marine Park.	N/A
Commonwealth Marine Environment (CME)	The site is not within the CME.	N/A
Listed Threatened Ecological Communities	No listed TEC's occur in the study area or are affected by the proposal.	N/A
Listed Threatened Species	The Koala (Vulnerable) and Grey-Headed Flying Fox (Vulnerable) were recorded on site.	No threatened species is likely to be significantly affected by the proposal as assessed below.
Listed Migratory Species	Several migratory birds are considered potential occurrences.	No Migratory species is likely to be significantly affected by the proposal as assessed below.
Nuclear Actions	The proposal is not a nuclear action.	N/A
A water resource, in relation to coal seam gas development and large coal mining development	The proposal is not a mining development.	N/A

The proposal thus is not considered to require referral to Department of Environment and Energy (DEE) for approval under the EPBCA 1999.



## Koala Referral Assessment

The habitat on site has been assessed using the Koala habitat assessment tool from the *EPBC Act* Referral Guidelines (DotE 2014). To qualify as critical habitat, it must score 5 or more. This is shown in the following table:

Table 20: Koala habitat assessment

Attribute	Score	Reason	
Koala occurrence	2	Desktop	A number of Koala records occur within 2km of the site on Bionet Atlas.
		On-ground	Koala recorded on site during the survey.
Vegetation structure and composition	2	Desktop	PMHC vegetation mapping of site shows Secondary (A) Koala habitat on site comprising Blackbutt Shrubby Moist Forest.
		On-ground	Vegetation on site contains two known Koala food tree species.
Habitat connectivity	2	Site habitat is contiguous with other areas of habitat in the south and south-west.	
Key existing threats	1	Desktop	OEH Bionet has records of Koala road kill further west on John Oxley Drive.
		On-ground	John Oxley Drive is unfenced and would pose a risk of road strike.  Domestic and wild dogs in surrounding areas would be a high threat to local Koalas.
Recovery value	1	<p>The following factors indicate that it is uncertain if the habitat to be removed is important for achieving the interim recovery objectives for the Koala:</p> <ul style="list-style-type: none"> <li>• Site contains preferred foraging resources.</li> <li>• Risk of car strike in study area.</li> <li>• Koala activity in study area.</li> <li>• Removal of site vegetation will not affect movement throughout the regional corridor.</li> </ul>	
Total	8	Site qualifies as critical habitat	

As per the Koala habitat assessment tool, the site qualifies as critical habitat. An assessment has been undertaken to determine if the proposal will adversely affect this habitat and/or interfere substantially with the recovery of the Koala and require referral to the Minister.



The following table derived from the Koala Referral Guidelines (DoE 2014) assesses whether the proposal is likely to adversely affect habitat critical to the survival of the Koala.

Table 21: Critical habitat assessment

Factor	Y/N	Reason
Does impact area contain habitat critical to the survival of the Koala	Y	Site scores eight as per the Koala habitat assessment tool.
Do the areas proposed to be cleared contain known Koala food trees	Y	Habitat to be removed contains primary browse species that may be used by the Koala.
Are you proposing to clear ≤2 ha of habitat containing known Koala food trees in an area with a habitat score of ≤5	N	Proposal will remove a total of 0.30 ha of open forest vegetation that scores eight.
Are you proposing to clear >20 ha of habitat containing known Koala food trees in an area with a habitat score of ≥8	N	Proposal will remove a total of 0.30 ha of open forest vegetation that scores eight.
Outcome	Impacts uncertain, further assessment required.	

## Protected Species Assessments: Koala and Grey-headed Flying Fox

The guidelines to assessment of significance to this Matter, define an action is likely to have a significant impact on a Vulnerable and/or Endangered species, if it will:

- Lead to a long-term decrease in the size of an important population (Vulnerable) or population (Endangered) of a species, or:
- Reduce the area of occupancy of an important population (Vulnerable) or population (Endangered), or:
- Fragment an existing important population (Vulnerable) or population (Endangered) into two or more populations, or:
- Adversely affect habitat critical to the survival of a species, or:
- Disrupt the breeding cycle of an important population (Vulnerable) or population (Endangered), or:
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:
- Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable or Endangered species, becoming established in the Vulnerable and/or Endangered species' habitat, or:
- Introduce a disease that may cause a species to decline, or:



- i) Interferes substantially with the recovery of the species.

An *important population* is one that is necessary for a species' long-term recovery. This includes such populations as:

- Key populations either for breeding or dispersal.
- Populations that are necessary for maintaining genetic diversity, and or:
- Populations that are near the limit of the species range:

### Assessment of Significance

This section addresses each of the previous points listed.

- a) Lead to a long-term decrease in the size of an important population (Vulnerable) or population (Endangered) of a species, or:**

#### Grey-headed Flying Fox

The proposal will require the removal of a small extent of potential foraging habitat which provides an extremely small nectar resource for the population relative to its ecological requirements and local extent of potential habitat. While in very strict terms a negative effect, this loss will have a very low impact on the local Grey-headed Flying Fox population as the site in total may only form a very minute fraction of this species wider opportunistic/seasonally variable foraging range.

The study area is also not a known roost (Eby 2000) and better quality alternative foraging habitat in the locality is evidently extensive. The proposal will thus not lead to a long-term decrease in the size of an important population.

#### Koala

The proposal will require the removal of preferred Koala food trees within the subject site. These will be offset through plantings as per the South Lindfield KPOM.

Higher quality Koala habitat is located to the south and south-west of the site and a number of preferred Koala food trees occur throughout this area.

Given the presence of higher quality habitat in the area, the current potential to support Koalas will be retained post development and the proposal would not lead to a long-term decrease of an important population.

- b) Reduce the area of occupancy of an important population (Vulnerable) or population (Endangered), or:**

For the Grey-headed Flying Fox, the proposal will not result in the loss of any roosting habitat, as the site is not known or suitable to be a roost site. Foraging habitat of this species is measured in terms of hundreds of thousands of hectares, hence the loss of habitat on site is insignificant relative to the area of occupancy.

For the Koala, the proposal will remove preferred foraging species in the subject site which will lead to a minor reduction in the area of occupancy. The habitat contained within the site however is relatively small in



comparison to higher quality habitat remaining to the south and southwest. Trees to be removed will be offset through plantings which will replace lost habitat over time.

**c) Fragment an existing important population (Vulnerable) or population (Endangered) into two or more populations, or:**

The proposal will not create a barrier to movement for the Grey-headed Flying Fox. Thus it will not fragment an existing important population.

The proposal will lead to further fragmentation of Koala habitat in the South Lindfield area, however the proposal will not isolate any areas of currently interconnected habitat. The proposed offset area in the south of Lot 3 and on adjoining land to the west will aim to consolidate Koala habitat and minimise the risk of Koalas crossing urban areas and major roads.

**d) Adversely affect habitat critical to the survival of a species, or:**

*“Critical habitat”* refers to areas critical to the survival of a species or ecological community and may include areas that are necessary for/to:

- Activities such as foraging, breeding, roosting or dispersal
- Succession
- Maintain genetic diversity and long term evolutionary development, or
- Reintroduction of populations or recovery of the species/community.

The vegetation to be removed on site is not considered critical habitat for the Grey-headed Flying Fox. Post-development, other habitats in the locality will retain the potential to support this species, hence helping support the viability of the local populations.

As demonstrated previously, the site qualifies as critical habitat for the Koala. To determine if the proposal is likely to adversely affect this habitat (and thus require a referral) the proposed development has been assessed against the following factors (DoE 2014):

- **The score calculated for the impact area:** The site scored 8 out of a possible 10. This is due to the presence of Koala food trees on site, Koala recorded on site and the sites connectivity to larger areas of habitat nearby. The site scored one for key existing threats due to the medium threat level posed by dogs in surrounding residential areas and potential for vehicle strike.
- **Amount of Koala habitat being cleared:** The proposal will remove approximately 0.30 ha of vegetation. This level of clearing is much less than the threshold in the referral guidelines for adverse impacts in critical habitat.
- **Method of clearing:** The proposal will require removal of the vegetation within the development footprint. Koala food trees within close proximity to the development footprint will be clearly marked for retention. It is recommended that an ecologist conducts pre-clearing surveys for Koalas prior to vegetation removal.
- **The density or abundance of Koalas:** There is a high number of Koala records in the locality, however the wider population is estimated to be small as determined in the South Lindfield KPoM.





- **Level of fragmentation caused by the clearing:** The proposal will lead to a minor increase in habitat fragmentation in an already fragmented landscape. Habitat retention and offset plantings will help consolidate Koala habitat in the South Lindfield area.

Given the above, the proposal is not considered to significantly affect habitat critical to the survival of the Koala.

**e) Disrupt the breeding cycle of an important population (Vulnerable) or population (Endangered) or:**

The proposal is unlikely to disrupt the breeding cycle of an important population/population given that:

- The site does not represent potential breeding habitat for the Grey-headed Flying Fox;
- The subject species have large ranges that far exceed the site; and
- The extent of alternative potential habitat in the locality is sufficient to support the local populations and offset plantings will see the habitat lost replaced over time.

**f) Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:**

As detailed previously, the nature of the development and degree of vegetation/habitat loss is not significant enough to affect a population of the subject species to the point it could cause a decline of the species.

**g) Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable and/or Endangered species, becoming established in the Vulnerable species' habitat, or:**

No new species that affects the Grey-headed Flying Fox or Koala is likely to be introduced as a direct result of the proposed development.

**h) Introduce disease that may cause a species to decline; or**

No disease that affects the subject species is likely to be introduced as a direct result of the proposal.

**i) Interferes substantially with the recovery of the species.**

As detailed previously, the proposal will result in the removal/modification of a relatively minute area of foraging habitat for two of the subject fauna species that is not significant enough to interfere with their recovery.

### Conclusion

The proposal is not considered likely to have a significant impact on the Grey-headed Flying Fox or Koala and thus a referral to DEE is not required.

### Migratory species

No migratory bird species were recorded during the field survey. The habitats present across the site provide potential habitat for a few listed migratory species such as the Cattle Egret, White-throated Needle-tail Swift and Fork-tailed Swift. These species are collectively assessed below.



The guidelines to assessment of significance to this Matter, define an action as likely to have a significant impact on a migratory species, if it will:

- a) Substantially modify (including fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or;
- b) Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat of the migratory species, or;
- c) Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species.

An *important area of habitat* is:

- 1) Habitat used by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, or;
- 2) Habitat utilised by a migratory species which is at the limit of the species range, or;
- 3) Habitat within an area where the species is declining.

### Assessment of Significance

This section addresses each of the previous points listed.

- a) **Substantially modify (including fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or;**

The site was not considered to be *important habitat* for the migratory species likely to occur there. Overall, the development will displace a minor area of vegetation which is unlikely to represent *substantial* modification of such habitat which is abundant elsewhere in the locality.

- b) **Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat of the migratory species, or;**

An invasive species is one that may become established in the habitat and harm the migratory species by direct competition, modification of habitat, or predation. No such invasive species is to be introduced by the proposal.

- c) **Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species**

The site is unlikely to be important habitat for migratory species and their lifecycles are unlikely to be disrupted by the proposed development. Species which fly over the site (Swifts and Needletails) are unlikely to be affected as they would rarely land there and are also regularly observed flying over urban centres (pers. obs.).

### Conclusion

In view of the above, no migratory bird is considered likely to be significantly affected by the proposal.



## Appendix 7: MNES Search Results



Australian Government  
Department of the Environment and Energy

## EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 17/01/19 12:46:37

### [Summary](#)

### [Details](#)

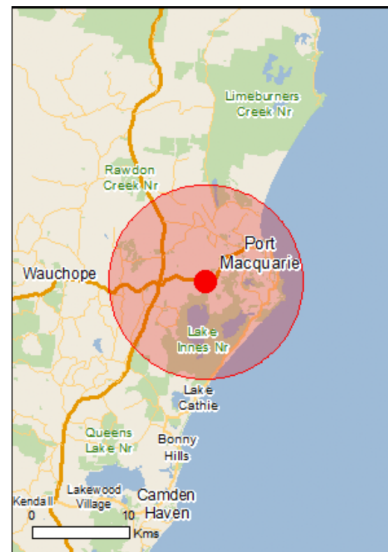
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

### [Caveat](#)

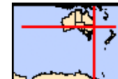
### [Acknowledgements](#)



This map may contain data which are  
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[Coordinates](#)

Buffer: 10.0Km



## Summary

### Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance:</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	4
<a href="#">Listed Threatened Species:</a>	70
<a href="#">Listed Migratory Species:</a>	66

### Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

<a href="#">Commonwealth Land:</a>	6
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	88
<a href="#">Whales and Other Cetaceans:</a>	12
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None

### Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

<a href="#">State and Territory Reserves:</a>	9
<a href="#">Regional Forest Agreements:</a>	1
<a href="#">Invasive Species:</a>	37
<a href="#">Nationally Important Wetlands:</a>	1
<a href="#">Key Ecological Features (Marine)</a>	None



## Details

## Matters of National Environmental Significance

Listed Threatened Ecological Communities		[ Resource Information
For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.		
Name	Status	Type of Presence
<a href="#">Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community</a>	Endangered	Community likely to occur within area
<a href="#">Littoral Rainforest and Coastal Vine Thickets of Eastern Australia</a>	Critically Endangered	Community likely to occur within area
<a href="#">Lowland Rainforest of Subtropical Australia</a>	Critically Endangered	Community likely to occur within area
<a href="#">Subtropical and Temperate Coastal Saltmarsh</a>	Vulnerable	Community likely to occur within area
Listed Threatened Species		[ Resource Information
Name	Status	Type of Presence
<b>Birds</b>		
<a href="#">Anthochaera phrygia</a> Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Botaurus poiciloptilus</a> Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Dasyornis brachypterus</a> Eastern Bristlebird [533]	Endangered	Species or species habitat likely to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea antipodensis gibsoni</a> Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

<a href="#">Diomedea exulans</a>		
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Erythrotriorchis radiatus</a>		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Fregetta grallaria grallaria</a>		
White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Grantiella picta</a>		
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
<a href="#">Lathamus discolor</a>		
Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Limosa lapponica baueri</a>		
Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Limosa lapponica menzbieri</a>		
Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Macronectes giganteus</a>		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a>		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a>		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Pachyptila turtur subantarctica</a>		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Phoebastria fusca</a>		
Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#">Pterodroma leucoptera leucoptera</a>		
Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
<a href="#">Pterodroma neglecta neglecta</a>		
Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area
<a href="#">Rostratula australis</a>		
Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<a href="#">Thalassarche bulleri</a>		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche bulleri platei</a>		
Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area

<a href="#">Thalassarche cauta_cauta</a>		
Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche cauta_steady</a>		
White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche eremita</a>		
Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#">Thalassarche impavida</a>		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche melanophris</a>		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche salvini</a>		
Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<b>Fish</b>		
<a href="#">Epinephelus daemeli</a>		
Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area
<b>Frogs</b>		
<a href="#">Litoria aurea</a>		
Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Mixophyes iteratus</a>		
Giant Barred Frog, Southern Barred Frog [1944]	Endangered	Species or species habitat may occur within area
<b>Insects</b>		
<a href="#">Argynnis hyperbius_inconstans</a>		
Australian Fritillary [88056]	Critically Endangered	Species or species habitat likely to occur within area
<b>Mammals</b>		
<a href="#">Balaenoptera musculus</a>		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#">Chalinolobus dwyeri</a>		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Dasyurus maculatus_maculatus (SE mainland population)</a>		
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area
<a href="#">Eubalaena australis</a>		
Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
<a href="#">Megaptera novaeangliae</a>		
Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Petauroides volans</a>		
Greater Glider [254]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Petrogale penicillata</a>		
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area

<a href="#"><u>Phascogale cinerea</u></a> (combined populations of Qld, NSW and the ACT)		
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Potorous tridactylus</u></a>		
Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Pseudomys novaehollandiae</u></a>		
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Pteropus poliocephalus</u></a>		
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
Plants		
<a href="#"><u>Acronychia littoralis</u></a>		
Scented Acronychia [8582]	Endangered	Species or species habitat likely to occur within area
<a href="#"><u>Allocasuarina defungens</u></a>		
Dwarf Heath Casuarina [21924]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Allocasuarina thalassoscopia</u></a>		
[21927]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Arthraxon hispidus</u></a>		
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Asperula asthenes</u></a>		
Trailing Woodruff [14004]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Cryptostylis hunteriana</u></a>		
Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Cynanchum elegans</u></a>		
White-flowered Wax Plant [12533]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Euphrasia arguta</u></a>		
[4325]	Critically Endangered	Species or species habitat may occur within area
<a href="#"><u>Macadamia integrifolia</u></a>		
Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Melaleuca biconvexa</u></a>		
Biconvex Paperbark [5583]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Parsonsia dorrigoensis</u></a>		
Milky Silkpod [64684]	Endangered	Species or species habitat likely to occur within area
<a href="#"><u>Phaius australis</u></a>		
Lesser Swamp-orchid [5872]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Syzygium paniculatum</u></a>		
Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thesium australe</u></a>		
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Reptiles		

<a href="#">Caretta caretta</a>		
Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Chelonia mydas</a>		
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dermochelys coriacea</a>		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Eretmochelys imbricata</a>		
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Natator depressus</a>		
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<b>Sharks</b>		
<a href="#">Carcharias taurus (east coast population)</a>		
Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat likely to occur within area
<a href="#">Carcharodon carcharias</a>		
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Rhincodon typus</a>		
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
<b>Listed Migratory Species</b>		
<b>[ Resource Information</b>		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
<b>Migratory Marine Birds</b>		
<a href="#">Anous stolidus</a>		
Common Noddy [825]		Species or species habitat likely to occur within area
<a href="#">Apus pacificus</a>		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardenna carneipes</a>		
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
<a href="#">Calonectris leucomelas</a>		
Streaked Shearwater [1077]		Species or species habitat may occur within area
<a href="#">Diomedea antipodensis</a>		
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a>		
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea exulans</a>		
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Fregata ariel</a>		
Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area



<a href="#"><u>Fregata minor</u></a>		
Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
<a href="#"><u>Macronectes giganteus</u></a>		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Macronectes halli</u></a>		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Phoebastria fusca</u></a>		
Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Sternula albifrons</u></a>		
Little Tern [82849]		Species or species habitat may occur within area
<a href="#"><u>Thalassarche bulleri</u></a>		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche cauta</u></a>		
Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
<a href="#"><u>Thalassarche eremita</u></a>		
Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Thalassarche impavida</u></a>		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche melanophris</u></a>		
Black-browed Albatross [64472]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche salvini</u></a>		
Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#"><u>Thalassarche steadi</u></a>		
White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<b>Migratory Marine Species</b>		
<a href="#"><u>Balaena glacialis australis</u></a>		
Southern Right Whale [75529]	Endangered*	Species or species habitat likely to occur within area
<a href="#"><u>Balaenoptera edeni</u></a>		
Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#"><u>Balaenoptera musculus</u></a>		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Carcharodon carcharias</u></a>		
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Caretta caretta</u></a>		
Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#"><u>Chelonia mydas</u></a>		
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area

<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dugong dugon</a> Dugong [28]		Species or species habitat may occur within area
<a href="#">Eretmochelys imbricata</a> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Lamna nasus</a> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
<a href="#">Manta alfredi</a> Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
<a href="#">Manta birostris</a> Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
<a href="#">Sousa chinensis</a> Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
<b>Migratory Terrestrial Species</b>		
<a href="#">Cuculus optatus</a> Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]		Species or species habitat known to occur within area
<a href="#">Monarcha melanopsis</a> Black-faced Monarch [609]		Species or species habitat known to occur within area
<a href="#">Monarcha trivirgatus</a> Spectacled Monarch [610]		Species or species habitat known to occur within area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area
<b>Migratory Wetlands Species</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area

<a href="#">Arenaria interpres</a> Ruddy Turnstone [872]		Roosting known to occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Calidris ruficollis</a> Red-necked Stint [860]		Roosting known to occur within area
<a href="#">Charadrius bicinctus</a> Double-banded Plover [895]		Roosting known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
<a href="#">Gallinago megala</a> Swinhoe's Snipe [864]		Roosting likely to occur within area
<a href="#">Gallinago stenura</a> Pin-tailed Snipe [841]		Roosting likely to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Numenius minutus</a> Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area
<a href="#">Numenius phaeopus</a> Whimbrel [849]		Roosting known to occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area
<a href="#">Pluvialis fulva</a> Pacific Golden Plover [25545]		Roosting known to occur within area
<a href="#">Pluvialis squatarola</a> Grey Plover [865]		Roosting known to occur within area
<a href="#">Tringa brevipes</a> Grey-tailed Tattler [851]		Roosting known to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
<a href="#">Xenus cinereus</a> Terek Sandpiper [59300]		Roosting known to occur within area

## Other Matters Protected by the EPBC Act

## Commonwealth Land [ Resource Information

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

## Name

Commonwealth Land - Australian Postal Commission  
Commonwealth Land - Australian Postal Corporation  
Commonwealth Land - Australian Telecommunications Commission  
Commonwealth Land - Commonwealth Bank of Australia  
Commonwealth Land - Defence Service Homes Corporation  
Commonwealth Land - Telstra Corporation Limited

## Listed Marine Species [ Resource Information

\* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
<b>Birds</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area
<a href="#">Anous stolidus</a> Common Noddy [825]		Species or species habitat likely to occur within area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardea alba</a> Great Egret, White Egret [59541]		Species or species habitat known to occur within area
<a href="#">Ardea ibis</a> Cattle Egret [59542]		Species or species habitat may occur within area
<a href="#">Arenaria interpres</a> Ruddy Turnstone [872]		Roosting known to occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Calidris ruficollis</a> Red-necked Stint [860]		Roosting known to occur within area
<a href="#">Calonectris leucomelas</a> Streaked Shearwater [1077]		Species or species habitat may occur within area
<a href="#">Catharacta skua</a> Great Skua [59472]		Species or species habitat may occur within area

<a href="#">Charadrius bicinctus</a> Double-banded Plover [895]		Roosting known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Charadrius ruficapillus</a> Red-capped Plover [881]		Roosting known to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea gibsoni</a> Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Fregata ariel</a> Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area
<a href="#">Fregata minor</a> Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
<a href="#">Gallinago megala</a> Swinhoe's Snipe [864]		Roosting likely to occur within area
<a href="#">Gallinago stenura</a> Pin-tailed Snipe [841]		Roosting likely to occur within area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
<a href="#">Heteroscelus brevipes</a> Grey-tailed Tattler [59311]		Roosting known to occur within area
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]		Species or species habitat known to occur within area
<a href="#">Lathamus discolor</a> Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area



<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area
<a href="#">Monarcha melanopsis</a> Black-faced Monarch [609]		Species or species habitat known to occur within area
<a href="#">Monarcha trivirgatus</a> Spectacled Monarch [610]		Species or species habitat known to occur within area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Numenius minutus</a> Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area
<a href="#">Numenius phaeopus</a> Whimbrel [849]		Roosting known to occur within area
<a href="#">Pachyptila turtur</a> Fairy Prion [1066]		Species or species habitat known to occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area
<a href="#">Phoebastria fusca</a> Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#">Pluvialis fulva</a> Pacific Golden Plover [25545]		Roosting known to occur within area
<a href="#">Pluvialis squatarola</a> Grey Plover [865]		Roosting known to occur within area
<a href="#">Puffinus carneipes</a> Flesh-footed Shearwater, Fleishy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area
<a href="#">Rostratula benghalensis (sensu lato)</a> Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
<a href="#">Sterna albifrons</a> Little Tern [813]		Species or species habitat may occur within area
<a href="#">Thalassarche bulleri</a> Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche cauta</a> Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
<a href="#">Thalassarche eremita</a> Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed	Vulnerable	Species or species

Albatross [64459]		habitat may occur within area
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche salvini</a> Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche sp. nov.</a> Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
<a href="#">Xenus cinereus</a> Terek Sandpiper [59300]		Roosting known to occur within area
<b>Fish</b>		
<a href="#">Acentronura tentaculata</a> Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area
<a href="#">Festucalex cinctus</a> Girdled Pipefish [66214]		Species or species habitat may occur within area
<a href="#">Filicampus tigris</a> Tiger Pipefish [66217]		Species or species habitat may occur within area
<a href="#">Heraldia nocturna</a> Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
<a href="#">Hippichthys heptagonus</a> Madura Pipefish, Reticulated Freshwater Pipefish [66229]		Species or species habitat may occur within area
<a href="#">Hippichthys penicillus</a> Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area
<a href="#">Hippocampus whitei</a> White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]		Species or species habitat likely to occur within area
<a href="#">Histiogamphelus briggsii</a> Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
<a href="#">Lissocampus runa</a> Javelin Pipefish [66251]		Species or species habitat may occur within area
<a href="#">Maroubra perserrata</a> Sawtooth Pipefish [66252]		Species or species habitat may occur within area
<a href="#">Solegnathus dunckeri</a> Duncker's Pipehorse [66271]		Species or species habitat may occur within area
<a href="#">Solegnathus spinosissimus</a> Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within

<b>Fish</b>		
<a href="#">Solenostomus cyanopterus</a> Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		area Species or species habitat may occur within area
<a href="#">Solenostomus paradoxus</a> Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area
<a href="#">Stigmatopora nigra</a> Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
<a href="#">Syngnathoides biaculeatus</a> Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
<a href="#">Trachyrhamphus bicoarctatus</a> Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area
<a href="#">Urocampus carinirostris</a> Hairy Pipefish [66282]		Species or species habitat may occur within area
<a href="#">Vanacampus margaritifer</a> Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
<b>Mammals</b>		
<a href="#">Arctocephalus forsteri</a> Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
<a href="#">Arctocephalus pusillus</a> Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
<a href="#">Dugong dugon</a> Dugong [28]		Species or species habitat may occur within area
<b>Reptiles</b>		
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Eretmochelys imbricata</a> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Hydrophis elegans</a> Elegant Seasnake [1104]		Species or species habitat may occur within area
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<a href="#">Pelamis platurus</a> Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area
<b>Whales and other Cetaceans</b>		
<b>[ Resource Information ]</b>		
Name	Status	Type of Presence

Mammals		
<a href="#">Balaenoptera acutorostrata</a> Minke Whale [33]		Species or species habitat may occur within area
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#">Delphinus delphis</a> Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
<a href="#">Grampus griseus</a> Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Sousa chinensis</a> Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
<a href="#">Stenella attenuata</a> Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
<a href="#">Tursiops aduncus</a> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
<a href="#">Tursiops truncatus s. str.</a> Bottlenose Dolphin [68417]		Species or species habitat may occur within area

## Extra Information

State and Territory Reserves	[ Resource Information
Name	State
LNE Special Management Zone No1	NSW
Lake Innes	NSW
Lake Innes	NSW
Limeburners Creek	NSW
Macquarie	NSW
Queens Lake	NSW
Rawdon Creek	NSW
Sea Acres	NSW
Woregore	NSW

Regional Forest Agreements	Resource Information
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Note that all areas with completed RFAs have been included.

Name	State
<a href="#">North East NSW RFA</a>	New South Wales

Invasive Species	Resource Information
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Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
<b>Birds</b>		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Pycnonotus jocosus Red-whiskered Bulbul [631]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
<b>Frogs</b>		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
<b>Mammals</b>		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area



Feral deer Feral deer species in Australia [85733]	Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]	Species or species habitat likely to occur within area
Mus musculus House Mouse [120]	Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]	Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]	Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]	Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]	Species or species habitat likely to occur within area
<b>Plants</b>	
Alternanthera philoxeroides Alligator Weed [11620]	Species or species habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]	Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]	Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]	Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]	Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]	Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. rotundata Bitou Bush [16332]	Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]	Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]	Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]	Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]	Species or species habitat likely to occur

		within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[ Resource Information
Name		State
<a href="#">Limeburners Creek Nature Reserve</a>		NSW

## Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull) or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

## Coordinates

-31.46067 152.86369

## Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Office of Environment and Heritage, New South Wales](#)
- [Department of Environment and Primary Industries, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment, Water and Natural Resources, South Australia](#)
- [Department of Land and Resource Management, Northern Territory](#)
- [Department of Environmental and Heritage Protection, Queensland](#)
- [Department of Parks and Wildlife, Western Australia](#)
- [Environment and Planning Directorate, ACT](#)
- [Birdlife Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [South Australian Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Canberra](#)
- [University of New England](#)
- [Ocean Biogeographic Information System](#)
- [Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [Geoscience Australia](#)
- [CSIRO](#)
- [Australian Tropical Herbarium, Cairns](#)
- [eBird Australia](#)
- [Australian Government – Australian Antarctic Data Centre](#)
- [Museum and Art Gallery of the Northern Territory](#)
- [Australian Government National Environmental Science Program](#)
- [Australian Institute of Marine Science](#)
- [Reef Life Survey Australia](#)
- [American Museum of Natural History](#)
- [Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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## Appendix 8: Bat Call Analysis Report





## Microbat Call Identification Report

<b>Prepared for ("Client"):</b>	Biodiversity Australia
<b>Survey location/project name:</b>	Port Macquarie
<b>Survey dates:</b>	11-16 December 2018
<b>Client project reference:</b>	
<b>Job no.:</b>	BIA-1901
<b>Report date:</b>	24 January 2019

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## Methods

*Balance! Environmental* received six ZCA data files and associated LOG files, recorded on an Anabat Express (Titley Scientific, Brisbane) over six consecutive nights (11<sup>th</sup> – 16<sup>th</sup> December 2018).

The ZCA data files were converted to Anabat sequence file format (ZC files) and then analysed using Titley Scientific's *Anabat Insight*.

The conversion process yielded 6432 ZC files; however, 5891 of those files contained only non-bat background noise.

## Call identification

All ZC files with bat calls were viewed manually in *Anabat Insight*, with the calls identified by comparing the zero-crossing call sonograms and derived metrics with those of regionally-relevant reference calls and published call descriptions for New South Wales and South-eastern Queensland (Reinhold *et al.* 2001; Pennay *et al.* 2004). Species' identification was also guided by considering probability of occurrence based on general distribution information (Churchill 2008; van Dyck *et al.* 2013) and/or *Atlas of Living Australia* on-line database records (<http://www.ala.org.au>).

Where calls could not be reliably allocated to a single species due to overlapping characteristics ("unresolved calls"), they were assigned to a multi-species group.

## Reporting standard

The format and content of this report follows Australasian Bat Society standards for the interpretation and reporting of bat call data (Reardon 2003), available on-line at <http://www.ausbats.org.au/>.

Species nomenclature follows Jackson & Groves (2015), which applies updated taxonomy to several species. **Table 1** lists the new names used in this report against their synonyms as used in the *Biodiversity Conservation Act 2016* (BCA) and by Churchill (2008).

**Table 1** Species nomenclatural changes applied in this report.

Jackson & Groves 2015	BCA 2016	Churchill 2008
<i>Ozimops ridei</i> Ride's Free-tailed Bat	Not listed	<i>Mormopterus ridei</i> Eastern freetail bat
<i>Micronomus norfolkensis</i> Eastern Coastal Free-tailed Bat	<i>Mormopterus norfolkensis</i> Eastern Freetail Bat	<i>Micronomus norfolkensis</i> East-coast freetail Bat
<i>Miniopterus orianae</i> Large Bent-winged Bat	<i>Miniopterus schreibersii oceanensis</i> Eastern Bentwing-bat	<i>Miniopterus orianae oceanensis</i> Eastern bentwing bat



## Results & Discussion

No bat call data were retrieved from the first night of recording (11/12/2018), but the other five nights all produced identifiable bat calls.

Of the 541 ZC files with recognisable bat calls, 213 could not be identified because the calls were very brief (<3 pulses) and/or highly fragmented.

At least 13 and up to 19 species were recorded during the Port Macquarie survey. Twelve call types were positively identified to individual species (**Table 2**, upper portion) and another seven call types were allocated to unresolved species groups (**Table 2**, lower portion). These unresolved groups are discussed in more detail on the following page. **Appendix 1** contains sample sonograms extracted from the data set for each identified species or group.

Five threatened species were positively identified: *Falsistrellus tasmaniensis* (Eastern Falsistrelle); *Scoteanax rueppellii* (Greater Broad-nosed Bat); *Miniopterus australis* (Little Bent-winged Bat); *M. orianae* (Large/Eastern Bent-winged Bat); and *Micronomus norfolkensis* (Eastern Coastal Free-tailed Bat). Up to three additional threatened species may also have been present but their calls could not be definitively identified: *Nyctophilus bifax* (Eastern Long-eared Bat); *Myotis macropus* (Large-footed Myotis); and *Vespadelus troughtoni* (Eastern Cave Bat).

**Table 2** Bat species recorded during the Port Macquarie survey, 11-16 December 2018.  
Number of calls allocated to each species or unresolved species group.  
† Denotes species listed as threatened under the NSW *Biodiversity Conservation Act 2016*

Night of:	12 Dec.	13 Dec.	14 Dec.	15 Dec.	16 Dec.	Species Total
<b>Positively identified calls</b>						
<i>Chalinolobus gouldii</i>		7	6	1	9	23
<i>Chalinolobus morio</i>	11	17	1	1	32	62
<i>Falsistrellus tasmaniensis</i> †					10	10
<i>Scoteanax rueppellii</i> †		2		2	2	6
<i>Scotorepens orion</i>		3				3
<i>Vespadelus darlingtoni</i>	2	4	1		1	8
<i>Vespadelus pumilus</i>		2			6	8
<i>Miniopterus australis</i> †	36	11	11	2	4	64
<i>Miniopterus orianae oceanensis</i> †			1		2	3
<i>Austronomus australis</i>	2					2
<i>Micronomus norfolkensis</i> †		5	2	2	1	10
<i>Ozimops ridei</i>	16	18	3	6	5	48
<b>Unresolved calls</b>						
<i>C. gouldii</i> or <i>Ozimops ridei</i>		1			7	8
<i>C. morio</i> or <i>Vespadelus</i> sp.	8	8			1	17
<i>M. norfolkensis</i> or <i>O. ridei</i>		1	3	6	1	11
<i>Nyctophilus</i> species †	3	1			1	5
<i>Nyctophilus</i> sp. or <i>Myotis macropus</i> †	1	1				2
<i>V. darlingtoni</i> or <i>Scotorepens</i> sp.	6	3		2	3	14
<i>V. pumilus</i> or <i>V. troughtoni</i> † or <i>V. vulturus</i>	14	5	1	3	17	40
<b>Detector-night total</b>	<b>99</b>	<b>89</b>	<b>29</b>	<b>25</b>	<b>102</b>	<b>344</b>



The unresolved species groups identified in **Table 2** were erected on the basis of the following call characteristics:

- *C. gouldii* or *Ozimops ridei*
  - Calls with characteristic frequency (Fc) in the range 29-32 kHz
  - *C. gouldii* positively identified where pulse shape was steep, broadband, curvilinear with distinctive alternation in Fc
  - Calls with more regular Fc and flat or narrow-band curvilinear pulses were allocated to *O. ridei*
  - Calls allocated to the group had intermediate pulse shapes and/or variable (but not distinctly alternating) Fc
- *M. norfolkensis* or *O. ridei*
  - Similar frequency range to above, but all pulses flat (narrow-band) or nearly so
  - Calls with alternating Fc and very flat pulses attributed to *M. norfolkensis* and those with regular Fc and more slanted pulses identified to *O. ridei*
  - Several calls with variable Fc and pulse-shape allocated to the combined group
- *Nyctophilus* species
  - Steep (almost vertical), broadband, more-or-less linear, evenly-spaced pulses
  - Species in the genus cannot be differentiated
  - Two call types allocated to the group – one terminating at >50 kHz and the other terminating at <40 kHz – so probably two species present
  - *N. geoffroyi* (Lesser Long-eared Bat); *N. gouldi* (Gould's Long-eared Bat); and *N. bifax* all potentially occur in the study area
- *Nyctophilus* sp. or *Myotis macropus*
  - Steep, linear calls similar to above group, but more narrow-band and somewhat erratic changes in pulse shape through sequence
  - *M. macropus* typically recorded over water, its preferred foraging habitat, but could be commuting through other areas
- *V. pumilus* or *V. troughtoni* or *V. vulturnus*
  - Steep, curvilinear pulses with distinctively hooked body, up-swept tail and Fc>50 kHz
  - *V. pumilus* positively identified where Fc>54 kHz otherwise indistinguishable
  - Most calls of this shape had Fc=51-53 kHz and could have been any of these species
- *C. morio* or *Vespadelus* sp.
  - Steep, curvilinear pulses with Fc=50-54.5 kHz
  - Calls with shapes described above allocated to *Vespadelus* spp.
  - *C. morio* positively identified where calls had distinctive slanted pulse-body and downward-sweeping tail
  - Many calls with mixed or intermediate pulse shapes were allocated only to the combined group
- *V. darlingtoni* or *Scotorepens* sp.
  - Steep, curvilinear pulses with Fc=38-40 kHz
  - Where pulses had flattish body with no apparent tail, calls allocated to *V. darlingtoni*
  - Calls with mixed pulse shapes, including flattish and slightly-hooked bodies, could not be reliably identified and may have represented *Scotorepens* sp. (Central-eastern broad-nosed Bat)



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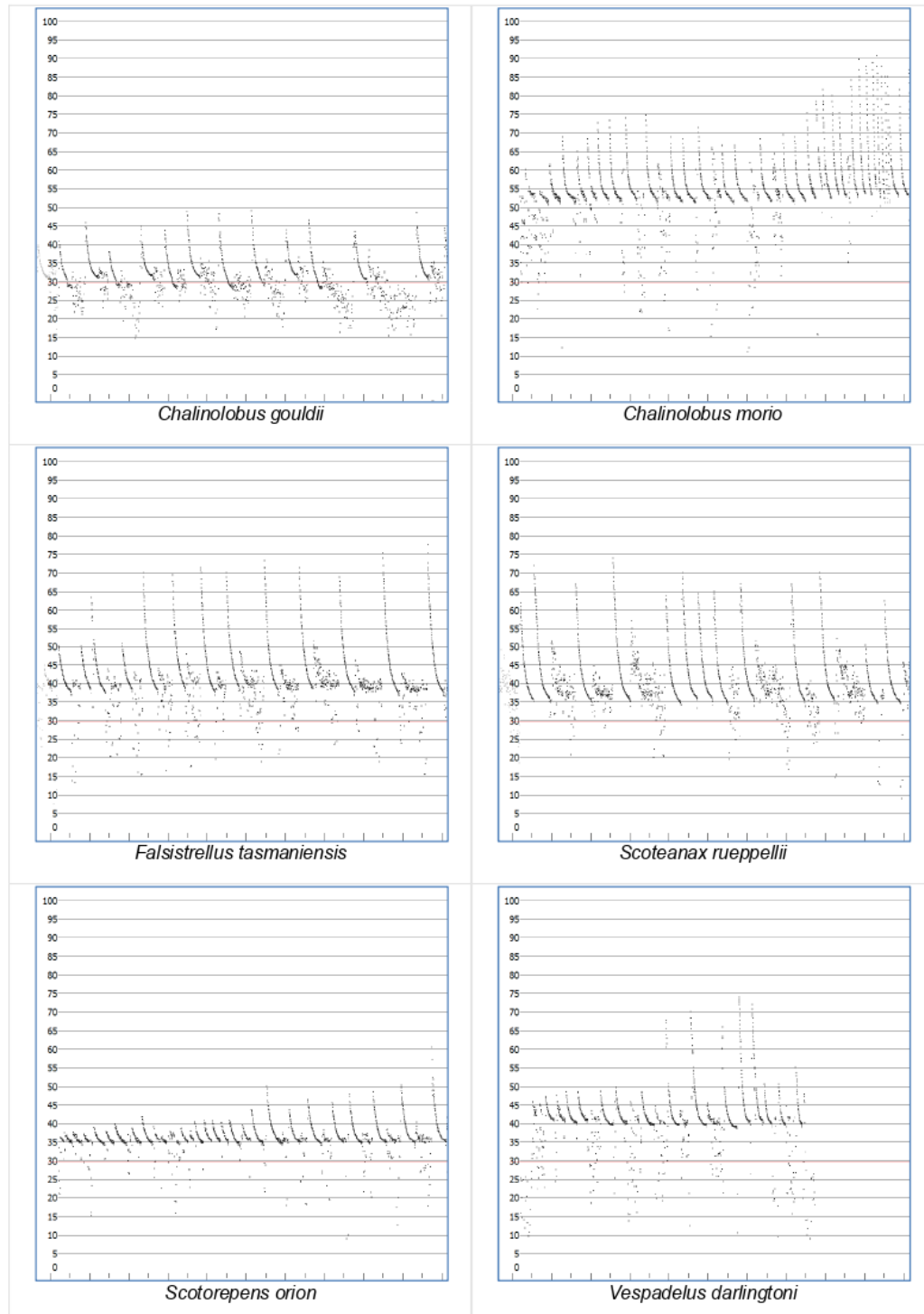
## Glossary

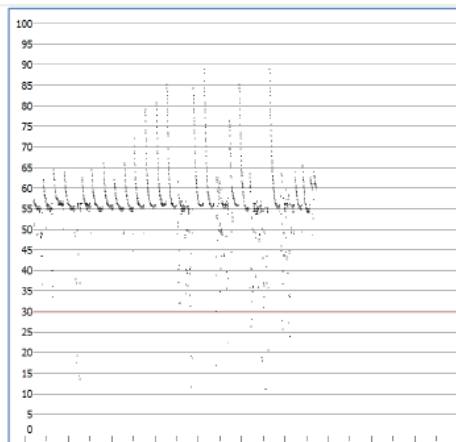
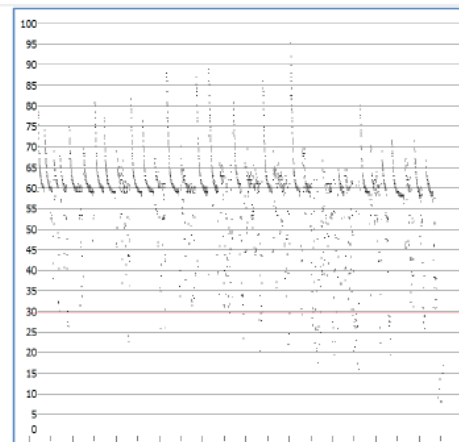
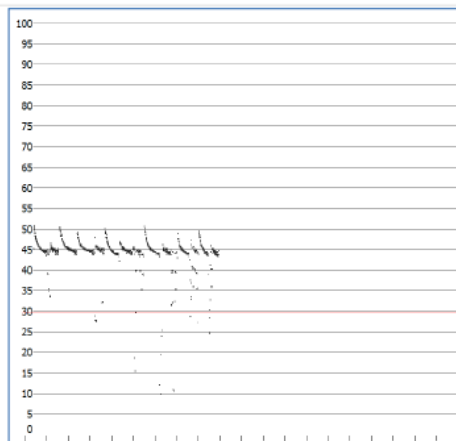
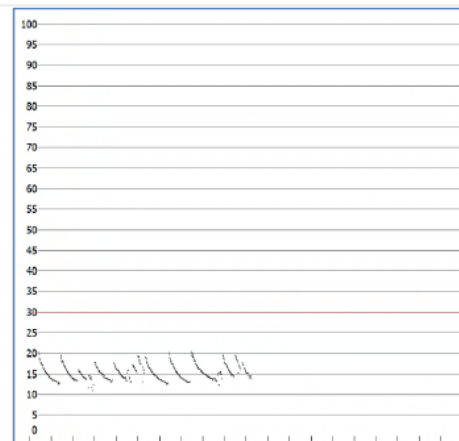
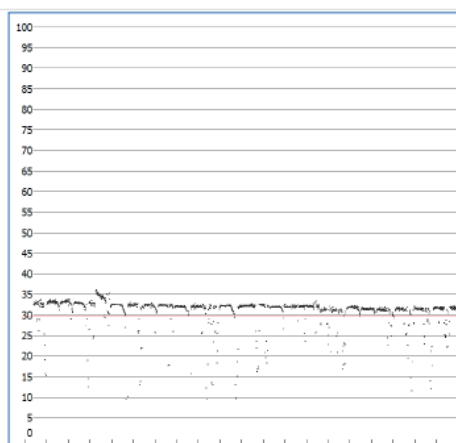
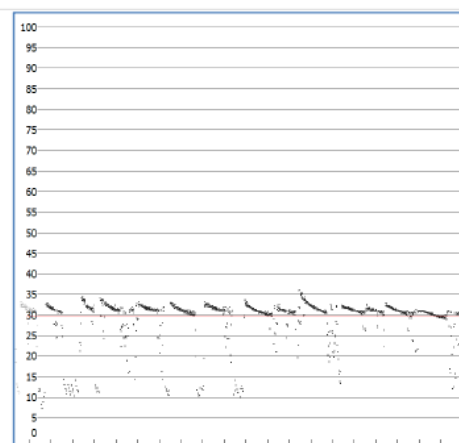
Technical terms used in this report are described in the following table.

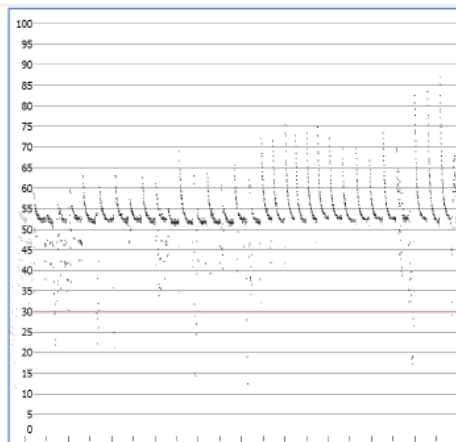
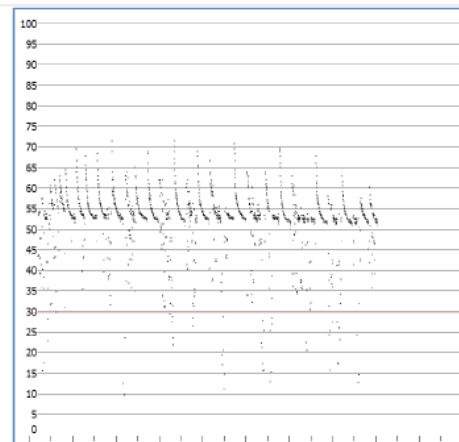
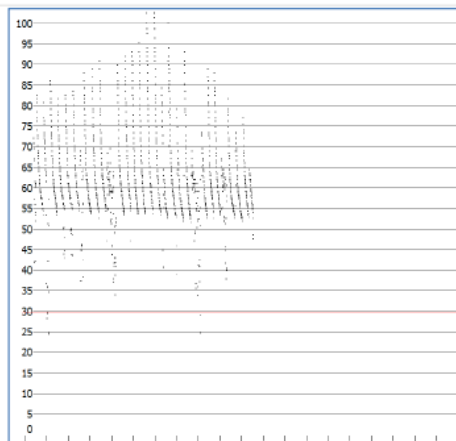
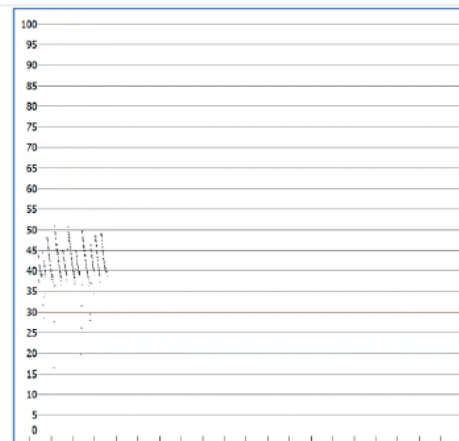
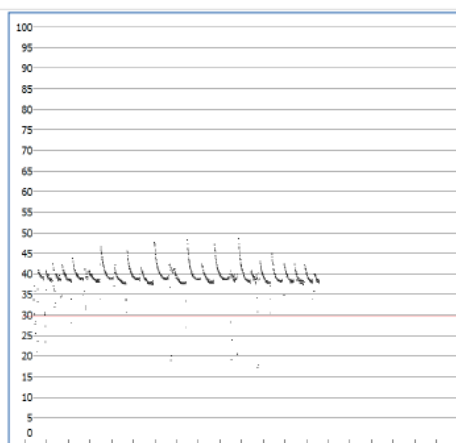
Approach phase	The part of a bat <i>call</i> emitted as the bat starts to home in on a detected prey item; a transitional series of <i>pulses</i> between the <i>search phase</i> and <i>feeding buzz</i> , that become progressively steeper and shorter in duration.
Call	Refers to a single bat call, made up of a series of individual sound <i>pulses</i> in one or more <i>phases</i> ( <i>search, approach, feeding buzz</i> ).
CF (=Constant Frequency)	A type of <i>pulse</i> in which the dominant component consists of a more-or-less 'pure tone' of sound at a Constant Frequency; with <i>shape</i> appearing flat on the sonogram. Often also contains a brief <i>FM</i> component at the beginning and/or end of the CF component (viz. FM-CF-FM).
Characteristic frequency (Fc)	The frequency of the flattest part of a <i>pulse</i> ; usually the lowest frequency reached in the <i>qCF</i> component of a pulse. This is often the primary diagnostic feature for species identification.
Duration	The time period from the beginning of a <i>pulse</i> to the end of the pulse.
Feeding buzz	The terminal part of a <i>call</i> , following the <i>approach phase</i> , emitted as the bat catches a prey item; a distinctive, rapid series of very steep, very short-duration pulses.
FM (=Frequency Modulated)	A type of <i>pulse</i> in which there is substantial change in frequency from beginning to end; <i>shape</i> ranges from almost vertical and linear through varying degrees of curvature.
FC range	Refers to the range of frequencies occupied by the <i>characteristic frequency</i> section of <i>pulses</i> within a call or set of calls.
Frequency sweep or "band-width"	The range of frequencies through which a <i>pulse</i> sweeps from beginning to end; Maximum frequency (Fmax) – minimum frequency (Fmin).
Knee	The transitional part of a <i>pulse</i> between the initial (usually steeper) frequency sweep and the <i>characteristic frequency</i> section (usually flatter); time to knee (Tk) and frequency of knee (Fk) can be diagnostic for some species.
Pulse	An individual pulse of sound within a bat <i>call</i> ; the <i>shape, duration</i> and <i>characteristic frequency</i> of a pulse are the key diagnostic features used to differentiate species.
Pulse body	The part of the <i>pulse</i> between the <i>knee</i> and <i>tail</i> and containing the <i>characteristic frequency</i> section.
Pulse shape	The general appearance of a <i>pulse</i> on the sonogram, described using relative terms related to features such as slope and degree of curvature. See also <i>CF, qCF</i> and <i>FM</i> .
qCF (=quasi Constant Frequency)	A type of <i>pulse</i> in which there is very little change in frequency from beginning to end; <i>shape</i> appears to be almost flat. Some pulses also contain an <i>FM</i> component at the beginning and/or end of the qCF component (viz. FM-qCF).
Search phase	The part of a bat <i>call</i> generally required for reliable species diagnosis. A consistent series of <i>pulses</i> emitted by a bat that is searching for prey or and/or navigating through its habitat. Search phase pulses generally have longer duration, flatter slope and more consistent shape than <i>approach phase</i> and <i>feeding buzz</i> pulses.
Sequence	Literally, a sequence of <i>pulses</i> that may be from one or more bats; but generally refers to a <i>call</i> or part (e.g. <i>phase</i> ) of a call.
Tail	The final component of a <i>pulse</i> , following the <i>characteristic frequency</i> section; may consist of a short or long sweep of frequencies either upward or downward from the Fc; or may be absent.



**Appendix 1** Representative call sequences from the Port Macquarie survey, 11-16 Dec. 2018.  
x-axis (time) = 0.01 sec per tick; y-axis (frequency) = kHz per tick



*Vespadelus pumilus**Miniopterus australis**Miniopterus orianae oceanensis**Austronomus australis**Micronomus norfolkensis**Ozimops ridei*

*V. pumilus or V. troughtoni or V. vulturinus**C. morio or Vespadelus sp.**Nyctophilus species**Nyctophilus sp. or Myotis macropus**V. darlingtoni or Scotorepens sp.*

## KING + CAMPBELL

Vegetation Management Plan  
Residential Subdivision  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

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*Prepared for:*

**Mr & Mrs N & P Mann, Mr & Mrs P & J Mann,  
Mr P. Pye and Mr B. Pye**

*Prepared by:*

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*Date:*     **October, 2019 (version 3)**



## Table of Contents

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<b>Introduction.....</b>	<b>4</b>
1.1 Introduction .....	4
1.2 VMP - Objectives .....	5
<b>Existing Site Conditions.....</b>	<b>6</b>
2.1 Vegetation communities .....	6
2.2 Threatened flora species.....	8
2.3 Weed identification .....	9
<b>Proposed works – detail.....</b>	<b>10</b>
3.1 Summary of works .....	10
3.2 General guidelines for all revegetation works .....	11
3.2.1 Seed collection.....	11
3.2.2 General site preparation for planting .....	11
3.2.3 Revegetation .....	11
3.2.4 Koala feed tree planting specification.....	12
3.2.5 Contingency for failed works .....	13
3.3 Key performance indicators .....	13
3.4 Monitoring.....	14
3.5 Location of the lands to be dedicated.....	14
3.6 Timing of the dedication .....	14

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## List of Exhibits

After Page

<b>Exhibit VMP_01 – Site Location .....</b>	<b>5</b>
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## List of Appendices

<b>Appendix VMP_A – KFT planting locations and fencing requirements</b>	
<b>Appendix VMP_B – Summary of works, timing and draft costings</b>	
<b>Appendix VMP_C – Weed treatment schedule</b>	
<b>Appendix VMP_D – Biodiversity Development Assessment Report, Biodiversity Australia</b>	

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## List of Tables

Page

<b>Table VMP_01 – Vegetation communities .....</b>	<b>7</b>
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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

# Section 1

## Introduction

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### 1.1 Introduction

This Vegetation Management Plan (VMP) has been prepared to accompany a Concept Development Application (Concept DA) and Stage 1 Works Development Application (Stage 1 DA) with respect to Lot 3 DP 533058. **This VMP has been prepared in relation to the offset lands, being the existing E2 zone within existing Lot 3 and to the existing Native Guava (*Rhodomyrtus psidioides*) within proposed Lot 25.**

The Concept DA and Stage 1 Works DA will provide for the following:

- A **concept** proposal for the Torrens title subdivision of the site into 25 lots; and
- Details of the proposed **Stage 1 Works DA** that will include:
  - Vegetation management works including clearing of vegetation within the development footprint and removal of one (1) tree in the John Oxley Drive road reserve, and establishment of the environmental management land in accordance with this VMP and the South Lindfield KPOM;
  - Confirmation of the bushfire APZ's for the concept proposal;
  - Construction of the northern sewer route within the John Oxley Drive road reserve and Lot 1 DP 22676 to the existing sewerage ; and
  - The subdivision of the northern catchment, including road no.1, road no.2 and residential subdivision to provide 19 lots, which will be released in 3 sub-stages.

This VMP has been prepared in accordance with the *South Lindfield Urban Release Area Planning Agreement* (Mann VPA) and the *Koala Plan of Management for South Lindfield Stage 3* (South Lindfield KPOM).

The area of the offset lands (E2 zone) is 2,652.3m<sup>2</sup> and these lands will be dedicated to Council as a public reserve as required by the Mann VPA.

The implementation of this VMP will be the responsibility of the landowner and all works are to be carried out by a suitably qualified bush regenerator.

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

The preparation of this VMP has utilised the following resources:

- Biodiversity Development Assessment Report (BDAR), Biodiversity Australia, 4 October, 2019; and
- Specialist advice and mapping from Kelly Benson of Wild Things Native Gardens, with reference to:
  - Guidelines for controlled activities – Vegetation Management Plans. NSW Department of Primary Industries, July 2012.
  - NSW Weeds Action Program 2015 -2020;
  - Biosecurity Act 2015 No 24; and
  - Florabank Guideline 5: Seed collection from woody plants for local revegetation 1999.

## 1.2 VMP - Objectives

The objectives of this VMP are to clearly set out the environmental obligations for the offset lands (E2 zone), as established by the Mann VPA and South Lindfield KPOM **and the environmental obligations for the Native Guava (*Rhodomyrtus psidioides*)**, by specifying the following control measures:

- Implementation of regeneration treatments and ongoing maintenance regimes including weed control;
- Revegetation works including protection of existing vegetation communities;
- **Permanent exclusion fencing of the Native Guava (*Rhodomyrtus psidioides*) within proposed Lot 25; and**
- **Protective fencing of the Native Guava (*Rhodomyrtus psidioides*) within the offset lands (E2 zone).**
- **Compensatory planting of Koala feed tree species (Tallowwood) with protective fencing;**
- **Fencing of offset lands (E2 zone);**





KING + CAMPBELL		EXHIBIT VMP 01 - SITE CONTEXT		A3	
<b>KING + CAMPBELL</b> King & Campbell Pty Ltd 10/11 Macquarie Street Sydney NSW 2000 T: 02 6883 2555 F: 02 6883 4054 E: info@kingandcampbell.com.au	REV	DATE	DESCRIPTION	BY	JAC
	A	14.02.2018	ISSUED FOR DEVELOPMENT APPLICATION		
PROJECT NO: 5630		DRAWING TITLE		CONCEPT DEVELOPMENT APPLICATION AND STAGE 1 WORKS DEVELOPMENT APPLICATION	
SAND: BC		PROJECT		SOUTH LINDFIELD URBAN RELEASE AREA LOT 3 DP 533058 JOHN OXLEY DRIVE, PORT MACQUARIE	
DESIGNED BY: ALC		CLIENT		MRS & MRS JIB & JIB MANN, MR & MRS JIB & JIB MANN, MR & MRS JIB & JIB MANN	
CHECKED BY: AJT		DRAWING NO:		9550P_Lot Layout	
DATE CREATED: NOV 2018		SHEET		01	
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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

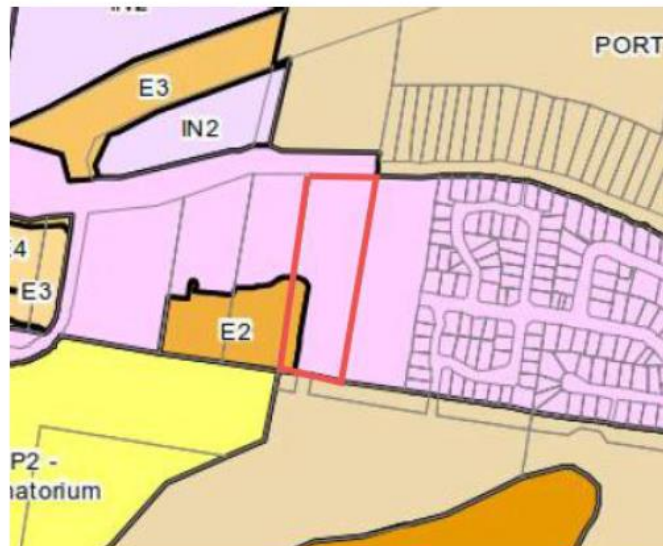
## Section 2

### Existing Site Conditions

#### 2.1 Vegetation communities

A Biodiversity Development Assessment Report (BDAR) has been prepared by Biodiversity Australia to accompany the Concept DA and Stage 1 Works DA.

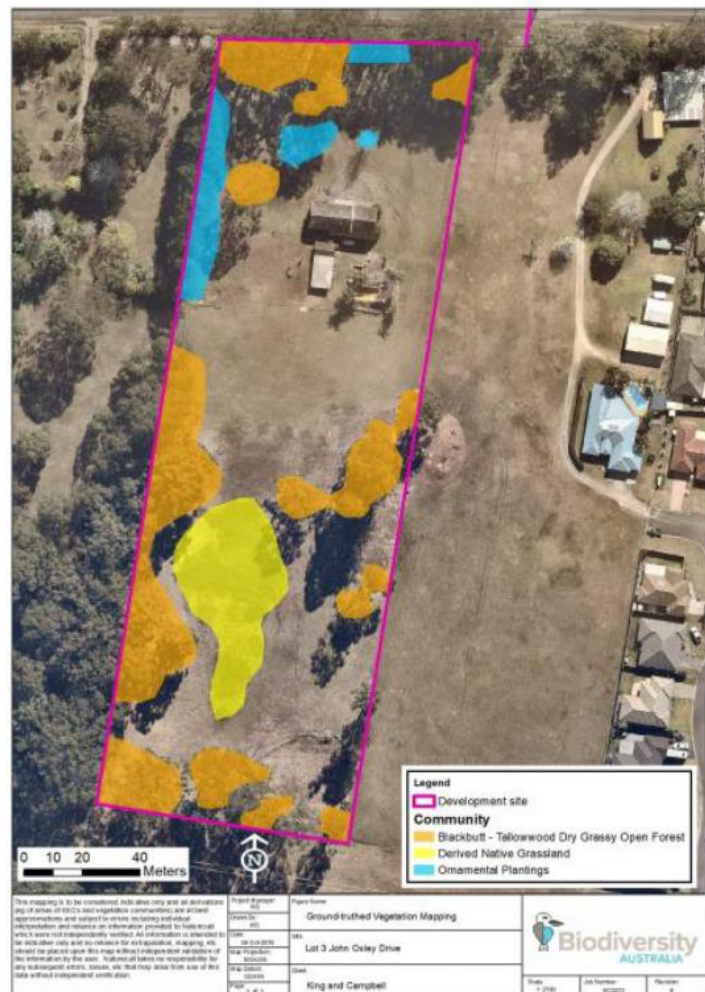
Two (2) Plant Community Types (PCT) were recorded within the offset lands (E2 zone), with neither listed as being a Threatened Ecological Community (TEC) or an Endangered Ecological Community (EEC) under the EPBC Act or the NSW BC Act.



(source: PMH LEP Land Zoning Map – sheet LZN\_013D)

The ground truthed site vegetation communities are shown on the plan extract below:

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

(source: BDAR, Biodiversity Australia, Figure 5, page 22)

The tables below provide a description of the recorded PCT's within the offset lands (E2 zone) (see p. 17 of the BDAR at **Appendix VMP\_C**):

Table VMP_01 - Vegetation communities	
No 690: Blackbutt - Tallwood dry grassy open forest of the central parts NSW North Coast Bioregion (orange hatch)	
Vegetation Class	Northern Hinterland Wet Sclerophyll Forests
Mapped PMHC community	Blackbutt Shrubby Moist Forest / Broad-leaved Paperbark - Forest Red Gum Swamp Forest
EEC status	Not an EEC
Location	Occurs along the western edge of the E2 zoned lands.

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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

Table VMP_01 - Vegetation communities	
Description	
a) Canopy	Structure and Species: Comprises an open canopy dominated by Blackbutt ( <i>Eucalyptus pilularis</i> ) and Flooded Gum ( <i>Eucalyptus grandis</i> ). Tallowwood ( <i>E. microcorys</i> ), Swamp Mahogany ( <i>E. robusta</i> ), Forest Red Gum ( <i>E. tereticornis</i> ) and Pin Bloodwood ( <i>Corymbia intermedia</i> ) are occasionally present. Height ranges from 20-28m.
b) Understorey	Absent
c) Shrub layer	Structure and Species: A sparse shrub layer is present largely around the base of mature trees. Species recorded include Cheese Tree ( <i>Glochidion ferdinandii</i> ), Fringed Wattle ( <i>Acacia fimbriata</i> ) and Coffee Bush ( <i>Breynia oblongifolia</i> ). Height ranges from 0.5-1.5m.
d) Ground layer	Structure and species: Groundcover consisted of both native and exotic grasses and herbs including Narrow-leaved Carpet Grass ( <i>Axonopus fissifolius</i> ), Purpletop ( <i>Verbena onariensis</i> ), Blady Grass ( <i>Imperata cylindrica</i> ) and Wattle Mat-rush ( <i>Lomandra filiformis</i> ). Height ranges from 0.01-0.3 m.
Condition	This community is generally in poor condition as a result of historical and ongoing disturbances. The understorey and shrub layers were either absent or sparse and species diversity is low. Much of the groundcover layer features exotic species.
<b>Derived grassland formerly comprising No 690: Blackbutt - Tallowwood dry grassy open forest of the central parts NSW North Coast Bioregion (yellow hatch)</b>	
Vegetation Class	Northern Hinterland Wet Sclerophyll Forests
Mapped PMHC community	Not mapped
EEC status	Not an EEC
Location	A small patch on the eastern edge of the E2 zoned lands.
Description	
a) Canopy	Absent
b) Understorey	Absent
c) Shrub layer	Absent
d) Ground layer	Structure and species: Groundcover is generally sparse and is dominated by Bracken ( <i>Pteridium esculentum</i> ) and Blady Grass. A few native forbs and herbs including Pastel Flower ( <i>Pseuderanthemum variabile</i> ), Kidney Weed ( <i>Dichondra repens</i> ), White Root ( <i>Pratia purpurascens</i> ). Exotic species recorded include Singapore Daisy, Carpet Grass, Purpletop and Common Paspalum.
Condition	Poor condition due to past disturbances and ongoing slashing. Native species diversity is low.

## 2.2 Threatened flora species

The targeted flora survey undertaken by *Biodiversity Australia* in March, 2019, detected the Native Guava (*Rhodomyrtus psidioides*) in several locations within Lot 3, including within the offset lands (E2 zone) and within the 10m APZ to proposed Lot 25. This species was listed in February 2019 under the NSW Biodiversity Conservation Act as critically endangered due to the risk of extinction posed by the plant disease Myrtle Rust.

The Native Guava has been located by survey and temporary fencing (star picket with high visibility tape) has been installed to prevent slashing.

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

In consultation with *Biodiversity Australia*, the following management actions for the Native Guava have been adopted in this VMP:

- The existing Native Guava in the offset lands (E2 zone) are to be enclosed in a fenced area to avoid being impacted by Deer or being accidentally trampled during revegetation works;
- The monitoring of the offset lands (E2 zone) is to include inspections of the Native Guava plants to ensure they are healthy and not being impacted by growth of weeds or animal grazing (see **Section 3.4** for monitoring requirements);
- Protective fencing of Native guava within the offset lands (E2 zone), comprising star pickets and wire mesh for deer browse protection.

These works will be undertaken prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400; and

- Permanent exclusion fencing of Native guava within proposed Lot 25, comprising post and rail fencing (2m x 2m) and wire mesh for deer browse protection.

These works will be undertaken prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400

## 2.3 Weed identification

A site inspection was undertaken by Wild Things Native Gardens to assess the existing condition of the offset lands (E2 zone) and determine the required treatment. During the site inspection, weed mapping was undertaken to establish weed species present and density of infestation and this information has been used to inform the required management actions of this Plan.

The required weed treatment measures are provided at **Appendix VMP\_C**.

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

## Section 3

### Proposed works – detail

---

#### 3.1 Summary of works

Establishment works, (see table at **Appendix VMP\_B**), will include the following:

1. Installation of protective fencing of the Native Guava (*Rhodomyrtus psidioides*) within the offset lands (E2 zone) prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400.
2. Installation of permanent exclusion fencing of the Native Guava (*Rhodomyrtus psidioides*) within proposed Lot 25 prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400.
3. Site preparation, including primary weed control and two (2) follow up passes, consistent with the weed treatment schedule at **Appendix VMP\_C**.
4. Planting works to include:
  - a. Upper canopy:  
  
Planting of 28 Schedule 2 feed tree species (Tallowwood).  
  
All new plantings of trees to be 600mm high at time of planting, with protective fencing to prevent deer browse.  
  
All planting to be watered at the time of planting.
  - b. Mid and ground storey planting to be undertaken, if required, to establish fully structured plant communities, as set out in Table VMP\_01.

#### 5. Installation of permanent koala fencing to off-set area (E2 zone).

Maintenance works will continue during the 3 year management period, following the 12 month establishment period. A focus on follow up spot spraying and hand treatment of all new seedlings in all previously worked areas will be required to maintain weed loads to a minimum.

Photo monitoring points will be set up in the management unit at the beginning of the project with GPS readings taken for each point. Photos will be taken each year for the life of the project. An annual audit report will be completed and provided to PMHC at the end of each year.

Draft costings are outlined in **Appendix VMP\_B**.



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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

### 3.2 General guidelines for all revegetation works

#### 3.2.1 Seed collection

- Seed collection records are to be maintained including date of collection, collector, collection site and species.
- Dry seed can be stored for up to 12 months in water proof containers.
- Fleshy seed such as *Lomandra longifolia* and *Crinum pedunculatum* collected for direct seeding should not be stored for longer than 7 days, less if humidity is high.
- Fleshy rainforest species seed is to be sown fresh or composed for propagating as appropriate.
- Seed collection should begin and project commencement and continue until all required species are germinated.
- No more than 20% of the seed stock to be taken from a single individual (Florabank guidelines 1999)

#### 3.2.2 General site preparation for planting

- Initial woody weed treatment in the planting areas is to be completed a minimum of 6 months prior to commencement of Stage 1 planting.
- During this 6 month interim period, the following weed control measures are to be implemented:
  - Re-treatment of woody weeds as necessary;
  - Multiple treatments of pasture grasses and annuals present, timed to minimise seed production and deplete the soil stored weed seed bank.
- Prior to any works within the offset lands (E2 zone), the protective fencing of the Native Guava shall be in place.
- At time of planting for the soil surface should be weed free.
- Prior to planting soil horizons should be intact and free from fill or other earthworks substances including gravel, blue metal etc.

#### 3.2.3 Revegetation

Unless otherwise specified the following applies to all planting activities.

- With the exception of transplants, all plants are to be supplied in a weed free state as tubestock. Roots should extend to base of tube without circling. When removed from the tube, the root ball and growing medium should remain intact.

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Lot 3 DP 533058, 165 John Oxley Drive  
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- Placement of plants on site is to be undertaken by a suitably qualified bush regenerator who is able to identify all species to be planted and has an understanding of their mature size and ecological requirements.
- Plants should be placed to mimic a common natural distribution pattern of clumped groups of 3 to 7 plants of same species.
- All plants are to be watered on the day of planting with 2 litres of water. A liquid water retention and wetting agent additive (such as Hydretain® or Hydrasoil®) is to be used with this initial watering. If no rainfall greater than 10mm in a single event occurs during one month following planting, the initial watering, including additive, is to be repeated. Water retention crystals are not to be used.
- At the time of planting all plants are to be planted using a slow release native fertiliser such as Terracottem®, Terraform® or Osmocote®.
- Planting should be monitored regularly during the establishment period and replaced if any deaths occur.
- Maintenance of plantings and weed infestations will occur at 3 monthly intervals.

### 3.2.4 Koala feed tree planting specification

Planting of the Koala feed trees species (Tallowwood) within the offset lands (E2 zone), as required under the South Lindfield KPOM Stage 3, shall be undertaken in accordance with the location plan at **Appendix VMP\_A**.

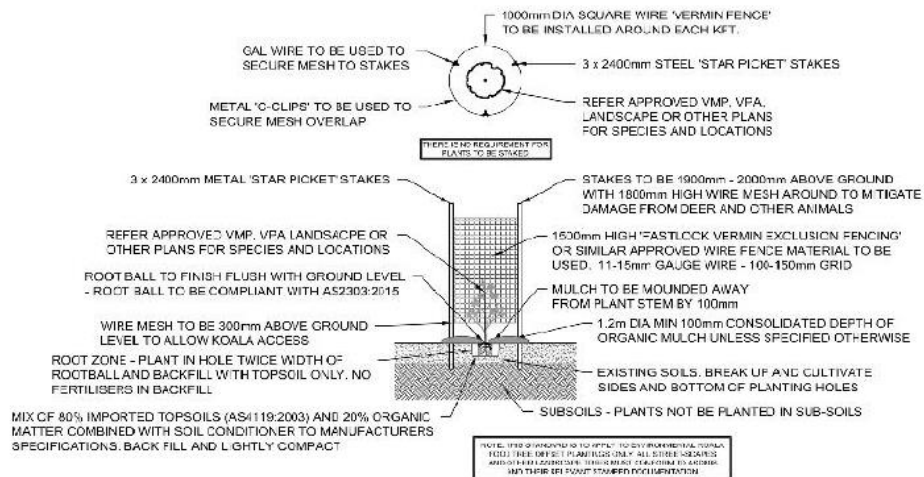
The following table sets out the number and type of existing Koala feed tree to be removed within the development footprint (R1 zone) and the replacement rate, to be planted in the offset lands (E2 zone):

Koala feed tree to be removed within R1 zone		Offset planting of Tallowwood within E2 zone
No.	Type	
6	Forest Red Gum	12
4	Swamp Mahogany	8
4	Tallowwood	8
14		28

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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

The following specification for planting **and protective deer browse fencing** will apply to all KFT plantings:



**PMHC STANDARD KFT OFFSETS PLANTING DETAIL** SCALE 1:50  
200mm - 300mm POT SIZES ONLY

### 3.2.5 Contingency for failed works

A contingency of 10% for plants (tubestock) and staged planting costs is provided at **Appendix VMP\_B**.

### 3.3 Key performance indicators

Maintenance of all Management units are to be based on the following Key Performance Indicator.

- 100% survival of the planted Schedule 2 feed trees;
- 95% reduction in invasive weed control (including grasses) per annum; and
- No mature or seed set of invasive weeds.

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie**3.4 Monitoring**

- Half Yearly Photo monitoring of at least two photo monitoring points showing progress of plantings.
- Yearly VMP audit reports as per PMHC requirements for the 3 year Management period.

**3.5 Location of the lands to be dedicated**

The Environmental Management Lands (offset lands) to be dedicated to Council includes all of the land within **Lot 3 DP 533058** zoned E2 Environmental Conservation identified on the map at Schedule 1 attached to the *South Lindfield Urban Release Area Planning Agreement*. **The Environmental Management Lands within Lot 3 DP 533058 are to be dedicated to Council as part of the first subdivision certificate issued by Council pursuant to DA 2019/400.**

**3.6 Timing of the dedication**

The VPA has established the following timing periods in relation to the Environmental Management Lands:

- Establishment Period – means the period commencing when the development is commenced (within the meaning of the Act) or such other period or periods commencing at such other time or times as the Parties agree and ending when the Establishment Obligation is completed to the reasonable satisfaction of Council; and
- Management Period – means the period commencing immediately at the end of the Establishment Period and ending three years after the Environmental Management Land is dedicated to the Council or such other period or periods as the Parties agree.

**This VMP provides for the following works to be undertaken in the Establishment Period:**

- **Protective fencing of Native guava within the offset lands (E2 zone) to be undertaken prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400;**
- **Permanent exclusion fencing of Native guava within proposed Lot 25 to be undertaken prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400;**
- **Site preparation and planting works within the offset lands (E2 zone) to be undertaken prior to commencement of vegetation removal works or civil works within the site; and**
- **Permanent fencing of the offset lands (E2 zone) to be undertaken following the 12 month establishment period.**

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

# Appendix VMP\_A

## KFT planting locations and fencing requirements

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[illegible]

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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

## Appendix VMP\_B

### Summary of works, timing and draft costings

Description of works	Timing	Draft costing	Comments	Performance criteria
<b>1. Pre Establishment works</b>				
Cease slashing of Native Guava	Immediately	-	The existing Native Guava within the offset lands (E2 zone) and proposed Lot 25 have been located by survey and identified with star pickets and high visibility tape.	
Protective fencing of Native guava within the offset lands (E2 zone), comprising star pickets with wire mesh for deer browse protection	Prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400.	\$100	 <p>Wire mesh for deer browse to be installed to existing star pickets</p>	Fence to be monitored and maintained during establishment works to ensure on-going protection of the Native guava from planting works and deer browse.
Permanent exclusion fencing of Native guava within proposed Lot 25, comprising post and rail (2m x 2m) and wire mesh for deer browse protection	Prior to commencement of the VMP establishment works, vegetation clearing works, or any other works approved by DA 2019/400.	\$150	 <p>Example (<i>Lumara Enviro Tree Guards</i>):</p>	Fence to be monitored and maintained during establishment works and 3 year management period to ensure on-going protection of the Native guava.

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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

Description of works	Timing	Draft costing	Comments	Performance criteria
<b>2. Establishment works within E2 zone</b>				
1. Site preparation, including primary weed control and two (2) follow up passes	Site preparation and planting works to be undertaken prior to commencement of vegetation removal works or civil works within the site, including: - Primary weed control – within 1-3 months after issue of development consent for the Stage 1 Works under DA 2019/400; and - Follow up passes – within 4 – 12 months after issue of development consent for the Stage 1 Works under DA 2019/400	\$1,540	Refer to schedule at Appendix VMP_C for weed treatment.	95% reduction in invasive weed control (including grasses) per annum. No mature or seed set of invasive weeds.  Performance criteria for initial woody weed control to be based on final outcome.
2. Planting works to include: a. Upper canopy: Planting of 28 Schedule 2 feed tree species (Tallowwood) with protective fencing to prevent deer browse.  All new plantings of trees to be 600mm high at time of planting and watered at time of planting  b. Mid and ground storey: To be undertaken, if required, to establish fully structured plant communities, as set	All planting works to be undertaken prior to commencement of vegetation removal works or civil works within the site.  Follow up watering of all planting works to be undertaken within 6 weeks of planting	\$2,640  \$3,920  \$924  \$1,400	Labour for all planting works  \$140/Tallowwood with protective fencing (see Section 3.2.4 for detail)  Follow up watering (x3)  700 tubes.	100% survival of Tallowwoods, where all failed plantings are replaced within 3 months of failure within the establishment and management periods.  90% survival of all tubestock

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Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

Description of works	Timing	Draft costing	Comments	Performance criteria
out in Table VMP_01. No ripping of soil to be undertaken.  Preference to be given to low palatability in species due to fauna browsing, at a density of 1/4m2 in the shrub layer				
3. Permanent fencing of offset area (E2 zone)	Fencing of the offset area to be undertaken following completion of the planting works within the establishment period.	\$7,200	\$50/lineal metre	Fence condition to be monitored and maintained during the 3 year management period.
<b>3. Management Period</b>				
Annual monitoring of:	For a period of 3 years following the 12 month establishment period.	\$264	For 3 years	
- Tallwood plantings and tubestock;				
- Guava fencing within proposed Lot 25; and			Monitoring of the Native Guava plants within the E2 zone is to ensure they are healthy and not being impacted by growth of weeds or animal grazing.	
- Koala fencing.				
<b>4. Contingency</b>				
		\$860	10% of all planting costs	
	<b>TOTAL</b>	<b>\$18,998</b>		



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Lot 3 DP 533058, 165 John Oxley Drive  
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## Appendix VMP\_C

### Weed treatment schedule

Type	Genus/species	Common name	Recommended Treatment
Grasses	<i>Andropogon virginicus</i>	Whiskey grass	Spray with 1:100 glyphosate and surfactant such as Pulse.
	<i>Paspalum mandiocanum</i>	Broad leaved paspalum	Target <i>Paspalum mandiocanum</i> as it is a shade tolerant transforming weed.
	<i>Setaria plamifolia</i>	Palm grass	
	<i>Sporobolus sp.</i>	Parramatia Grass	
Annuals	<i>Ageratum houstonianum</i>	Blue billygoat weed	Spray with 1:100 glyphosate and surfactant such as Pulse. Hand removal.
	<i>Bidens pilosa</i>	Cobblers pegs	
	<i>Lilium formosum var. pricei</i>	Formosan lilly	
	<i>Tephrosia purpurea</i>	Wild indigo	
	<i>Verbena bonariensis</i>	Purple top	
Woody Weeds	<i>Cinnamomum Camphora</i>	Camphor laurel	Drill and fill with 100% Glyphosate.
	<i>Lantana camara</i>	Lantana	Cut/scrape and paint or Drill and fill mature individuals with 100% Glyphosate. Seedling can be sprayed with Glyphosate 1:100 at 6 monthly intervals for 18 months to break the seeding cycle. Mickey mouse plant to be treated by basal barking with Starane advanced® and bio-oil® if in large infestations.
	<i>Ochna serrulata</i>	Mickey Mouse bush	
	<i>Poplar sp.</i>		
	<i>Senna Pendula</i>	Cassia	
	<i>Solanum Mauritanium</i>	Wild Tobacco	Cut and paint with neat glyphosate.



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Vegetation Management Plan  
Lot 3 DP 533058, 165 John Oxley Drive  
Port Macquarie

# Appendix VMP\_D

## Biodiversity Development Assessment Report, Biodiversity Australia

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# Biodiversity Development Assessment Report

## **Project:**

Proposed Residential Subdivision, Lot 3  
DP533058 John Oxley Drive, Port Macquarie

## **Client:**

Mr Nigel Mann  
C/- King and Campbell

October 2019



## Document Status

Version	Purpose	Author	Reviewed By	Approved By	Date
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## Accredited Assessor Authorisation

Assessor Name	Accreditation number	Expiry date	Signature	Date
Will Steggall	BAAS17107	19/12/2020		04/10/2019

Project Number: EC3272

Our Document Reference: EC3272-BEC-REP-JohnOxleyDrive\_BDAR-rev-2.0

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## Contents

<b>List of Photos</b>	<b>6</b>
<b>Executive Summary</b>	<b>7</b>
<b>1.0 Introduction</b>	<b>9</b>
1.1. Requirement for the BDAR	9
1.2. Definitions Used in the Report	10
1.3. Structure of the Report	10
1.4. Description of the Development Site	10
1.5. Identification of Impact Footprint	12
1.6. Information Sources	12
<b>2.0 Landscape Features &amp; Site Context</b>	<b>14</b>
2.1. Site Context	14
2.1.1. IBRA bioregions and Subregions	14
2.1.2. Native Vegetation Extent	14
2.1.3. Cleared Areas	14
2.1.4. Landscape Features	14
<b>3.0 Native Vegetation</b>	<b>16</b>
3.1. Survey Methods	16
3.1.1. Vegetation Integrity Survey	16
3.1.2. Vegetation Classification and Mapping	16
3.2. Plant Community Types and Description	17
3.2.1. Community 1	17
3.2.2. Non-native Vegetation	20
3.3. Vegetation Integrity Assessment	23
3.3.1. Vegetation Zones and Integrity Scores	23
<b>4.0 Threatened Species</b>	<b>26</b>
4.1. Ecosystem Credit Species	26
4.1.1. List of Species Derived	26
4.2. Species Credit Species	29
4.2.1. List of Species Derived	29
4.3. Targeted Survey Methods	35
4.3.1. Flora Survey	35



4.3.2.	Fauna Survey	38
4.3.3.	Survey Timing and Limitations	40
4.3.4.	Weather Conditions	40
4.4.	Targeted Survey Results	42
4.4.1.	Fauna	42
4.4.2.	Flora	50
<b>5.0</b>	<b>Avoidance and Minimisation</b>	<b>53</b>
5.1.	Impact Avoidance	53
5.2.	Measures to Minimise Impacts	53
5.2.1.	General Clearing Measures	53
5.2.2.	Pre-clearing Survey and Clearing Supervision	53
5.2.3.	Koala Food Tree Offset Plantings	54
5.2.4.	Protection of Native Guava	54
5.2.5.	Donation of Foliage	54
5.2.6.	Soil Erosion and Sedimentation Control	54
5.2.7.	Weed Control	54
5.2.8.	Landscaping	54
5.2.9.	Mitigation Measure summary	55
5.3.	Impacts Unable to be Avoided	55
5.3.1.	Vegetation and Habitat Removal	55
5.3.2.	Indirect Impacts	55
<b>6.0</b>	<b>Impact Assessment</b>	<b>57</b>
6.1.	Assessment of Serious and Irreversible Impacts	57
6.1.1.	Evaluation of Serious and Irreversible Impact	57
6.2.	Impacts Requiring Offsets	60
6.3.	Impacts Not Requiring Offsets	60
6.4.	Areas Not Requiring Assessment	61
<b>7.0</b>	<b>Impact Summary</b>	<b>63</b>
7.1.	Impact Area	63
7.1.1.	Ecosystem Credits	63
7.1.2.	Species Credits	63
7.2.	Offset Area	63
7.2.1.	Ecosystem Credits	64





7.2.2. Species Credits	64
<b>8.0 Conclusion</b>	<b>65</b>
<b>9.0 References</b>	<b>66</b>
<b>Appendix 1: Flora Species List</b>	<b>68</b>
<b>Appendix 2: Fauna Species List</b>	<b>71</b>
<b>Appendix 3: Biodiversity Credit Report</b>	<b>73</b>
<b>Appendix 4: SEPP 44 Assessment</b>	<b>74</b>
Offset Plantings	74
Clearing Management	74
Road Design and Speed Controls	75
Barriers and Fencing	75
Bushfire	75
Disease	76
<b>Appendix 5: PMHC DCP Assessment</b>	<b>77</b>
<b>Appendix 6: EPBC Act MNES Assessment</b>	<b>78</b>
<b>Appendix 7: MNES Search Results</b>	<b>85</b>
<b>Appendix 8: Bat Call Analysis Report</b>	<b>86</b>

## List of Figures

Figure 1: Extract from the Biodiversity Values Map	9
Figure 2: Location of the development site	11
Figure 3: Proposed development layout	13
Figure 4: Native vegetation extent	15
Figure 5: ground-truthed site vegetation communities	22
Figure 6: Map of vegetation zones in development site	25
Figure 7: Location of threatened flora transects	37
Figure 8: Location of fauna surveys	41
Figure 9: Koala species polygon	49
Figure 10: Location of Native Guava	52
Figure 11: Impact summary	62



## List of Tables

Table 1: Landscape features	14
Table 2: Vegetation community 1 (zone 1) description	17
Table 3: Vegetation community 1 (zone 2) description	18
Table 4: Vegetation zone and integrity score	24
Table 5: Ecosystem credit species	26
Table 6: Ecosystem credit species not predicted to occur on site	28
Table 7: List of candidate species credit species requiring survey	29
Table 8: List of candidate species credit species and survey requirement	30
Table 9: Targeted flora transect details	35
Table 10: Summary of site habitat values	42
Table 11: Species credit species (fauna) survey results	47
Table 12: Habitat components for species credit species recorded	47
Table 13: Species credits species (flora) survey results	50
Table 14: Mitigation measure summary	55
Table 15: Ecosystem credits required	63
Table 16: Species credits required	63
Table 17: Ecosystem credits required	64
Table 18: Species credits required	64
Table 19: Summary of MNES	78
Table 20: Koala habitat assessment	79
Table 21: Critical habitat assessment	80

## List of Photos

Photo 1: Community 1 at survey plot 1	18
Photo 2: Community 2 at vegetation plot	20
Photo 3: Managed exotic grassland	21
Photo 4: Red-necked Wallaby	44
Photo 5: Brushtail Possum	45
Photo 6: Sugar Glider	45
Photo 7: Red Fox	46
Photo 8: Koala observed on site	46
Photo 9: Native Guava	51



## Executive Summary

The proposal was assessed in accordance with the requirements of the NSW *Biodiversity Conservation Act 2016*, *Biodiversity Conservation Regulation 2017*, and the *Biodiversity Assessment Method 2017*.

The development site comprises a 2.4 ha property located on John Oxley Drive in Port Macquarie, NSW. The development site includes sewer lines that will be need to be established to the north of the property. The property has been largely cleared in the past and a mix of native and exotic grassland occurs over most of the site with trees fringing the site boundaries.

The development proposal is for the residential subdivision of the subject site into twenty-five residential Lots along with internal roads. Sewer pipelines will also extend offsite to the north. Establishment of the estate and associated infrastructure will require some vegetation removal which has been assessed in this report.

The Biodiversity Conservation Act 2016 and associated Regulation apply to the development proposal. The amount of native vegetation to be cleared exceeds the specified threshold level for triggering the application of the Biodiversity Assessment Method (BAM). A Biodiversity Development Assessment Report (BDAR) is therefore required to submit with the application. This development can be assessed using the small area development streamlined assessment module as detailed in Appendix 2 of the *Biodiversity Assessment Method 2017*.

The BDAR requires application of the Biodiversity Assessment Method (BAM) to assess impacts on biodiversity and determine offset requirements. A vegetation survey as per the BAM methodology was carried out in January 2019.

One vegetation community occurring in two condition classes was identified on the development site. This community is not listed as Endangered Ecological Community. Targeted surveys for threatened flora detected the Native Guava (*Rhodomyrtus psidioides*) which has been recently listed as Critically Endangered under the NSW BC Act. One individual plant was found at the rear of Lot 3 and a cluster was also found in the on-site offset area.

Seven threatened fauna species was detected during the targeted surveys comprising the Eastern False Pipistrelle, Little Bent-wing Bat, Eastern Bent-wing Bat, Eastern Coastal Free-tail Bat, Greater Broad-nosed Bat, Grey-headed Flying Fox and the Koala. It was determined that no breeding habitat for the bat species was present within the development footprint. As such, no species credit offsets for these species are required for the proposal. Species credit offsets are however required for the Koala.

It is recommended that a credit discount is applied as the proponent will meet offset planting obligations under the South Lindfield KPOM as detailed in Appendix 4. An area in the southwest of Lot 3 covering 0.27ha will be dedicated as an offset area, planted with trees, understorey shrubs and groundcover and managed through a Vegetation Management Plan. A credit assessment was undertaken in this offset area and it was determined that it would generate 1 ecosystem credit and 1 Koala species credit if were set up as a Stewardship Site.

The proposed development will require removal of approximately 0.45 ha of native vegetation and



associated habitat components. This comprises 0.30ha of dry sclerophyll forest/scattered trees and 0.15ha of slashed grassland dominated by native species. Other potential indirect impacts include habitat fragmentation and weed invasion. The loss of vegetation will be offset through the retirement of biodiversity credits. The credit requirement for the proposal is detailed in Section 7 of the report. A range of mitigation measures will be implemented to reduce other impacts associated with the proposal. These are described in Section 5 of the report.

Consideration of Serious and Irreversibly Impacts (SAIL) is provided in Section 6 of the report. This has determined that there is one SAIL candidate species present within the development site (Native Guava). The potential impact as a result of the development has been assessed against the SAIL guidelines.

The South Lindfield Koala Plan of Management has been administered over the development site. Further details of this is provided in Appendix 4. Assessment of the proposal under the PMHC Development Control Plan is provided in Appendix 5. Assessment of the proposal under Matters of National Environmental Significance are provided in Appendix 6.



## 1.0 Introduction

Biodiversity Australia (Bio Aus) was requested to undertake a Biodiversity Development Assessment Report (BDAR) for a proposed residential subdivision within Lot 3, DP 533058, John Oxley Drive, Port Macquarie. This assessment will form part of the Development Application (DA) to be submitted to Port Macquarie-Hastings Council (PMHC).

### 1.1. Requirement for the BDAR

The proposed development is for a residential subdivision of Lot 3 into 26 Lots. The development requires consent under Part 4 of the *Planning and Assessment Act 1979* (P&A Act), hence the *Biodiversity Conservation Act 2016* (BC Act) and Regulation applies.

The subject site is currently located on land with a minimum Lot size 450 m<sup>2</sup>, hence a 0.25 ha clearing threshold applies. The proposed amount of native vegetation to be cleared is 0.45 ha and exceeds the specified threshold level for triggering the application of the Biodiversity Assessment Method (BAM). A Biodiversity Development Assessment Report (BDAR) is therefore required to submit with the application. As the amount of native vegetation to be cleared is  $\leq 1$  ha, the streamlined assessment module for small area developments has been applied, as detailed in Appendix 2 of the *Biodiversity Assessment Method 2017*.

The BDAR is to assess the impacts of the proposed development on biodiversity and determine if any offset obligations are required.

The land proposed for clearing is not mapped on the Biodiversity Value Map as shown in Figure 1.

Figure 1: Extract from the Biodiversity Values Map







## 1.2. Definitions Used in the Report

This report uses the following key definitions:

- **Development site/subject site:** The site is defined as Lot 3 DP 533058 and includes sewer lines on adjoining land to the north.
- **Development footprint:** Refers to the area that will be directly impacted by the proposed action which covers the extent of the proposed subdivision.

These definitions are in line with the BAM methodology, which provides further explanation of definitions and legal terms that may be used in this report.

## 1.3. Structure of the Report

This report has been structured using guidance provided in Appendix 10 of the BAM. It is structured as follows:

- Section 1 provides background information for the assessment
- Section 2 describes the landscape features of the site
- Section 3 describes the native vegetation features of the site
- Section 4 describes the threatened species and habitat features associated with the site
- Section 5 details avoidance and minimisation measures for the proposal
- Section 6 provides an identification and assessment of impacts associated with the proposal
- Section 7 provides an impact summary and the number and type of credits required to offset impacts

## 1.4. Description of the Development Site

The development site is located on John Oxley Drive, approximately 5.5 km southwest of Port Macquarie CBD. The location of the development site is shown in Figure 2.

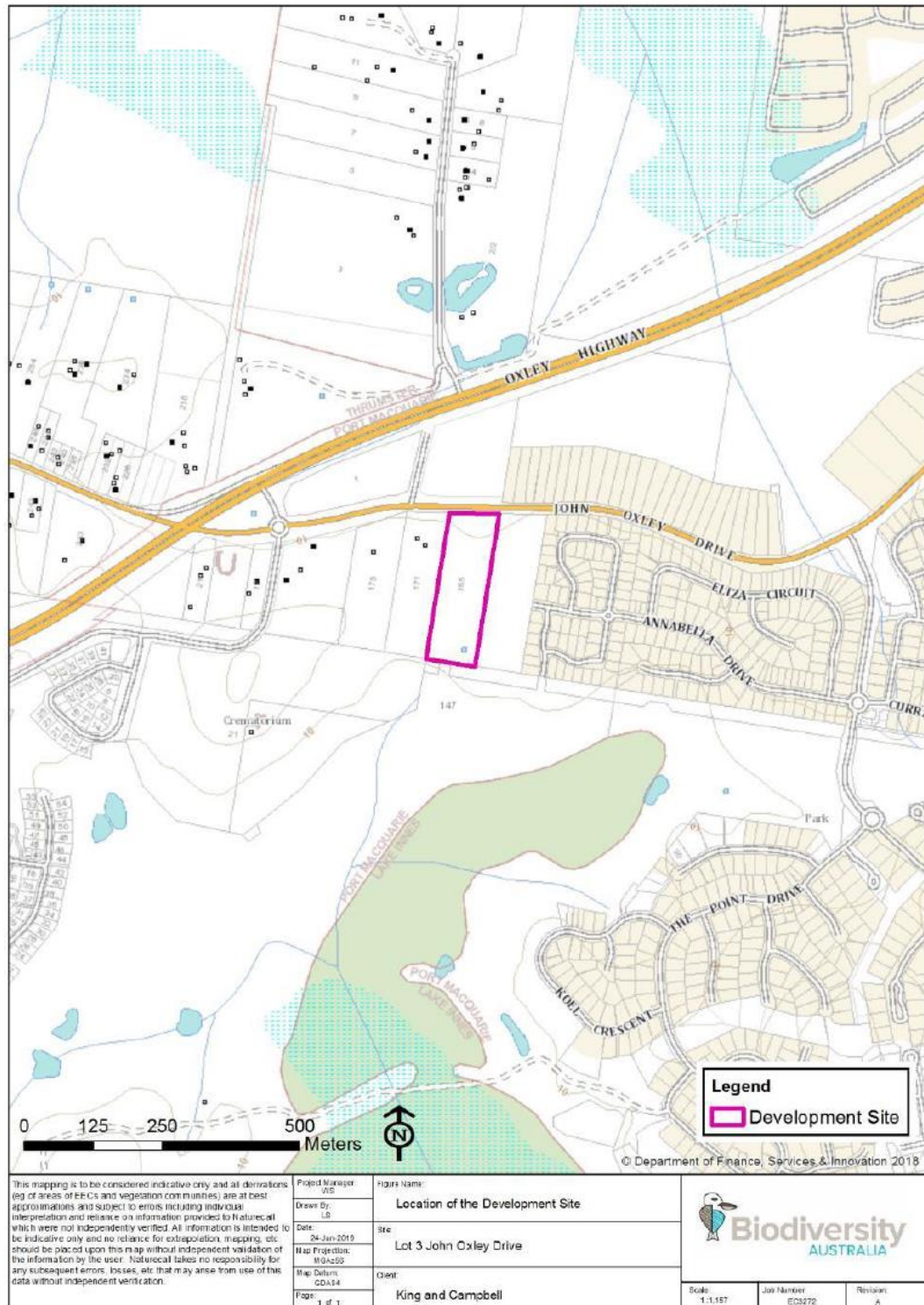
The development site currently has a single residence consisting of a two storey building and large open space area with managed lawns. Native vegetation on the site is limited to trees fringing the around the site boundaries and patches of native groundcover vegetation in the south.

Adjoining land along the sewer main to the north comprises managed lawns dominated by exotic grass.

Surrounding land uses comprise residential areas, small rural properties and a crematorium and cemetery. The nearest conservation area is Lake Inness Nature Reserve which is located 400 m to the south.



Figure 2: Location of the development site





## 1.5. Identification of Impact Footprint

The development/impact footprint consists of the area of the proposed subdivision and required easements for the sewer lines which extend beyond Lot 3. This covers most of the site aside from a conservation and tree planting area in the southwest which covers 0.27ha. An Asset Protection Zone (APZ) is located in the south of the property.

The proposed development plan is shown in Figure 3.

The total extent of the development footprint is approximately 2.3 ha with the extent of native vegetation proposed to be impacted totalling 0.45 ha.

The sewer main to be established to the north of the development site will require the removal of a single Bloodwood within the road reserve.

No site compounds will be required. No additional access roads will be required and machinery access will be on existing roads/tracks within and adjacent to the site. Post construction, no further clearing will be required.

## 1.6. Information Sources

The following databases and Geographic Information System (GIS) layers were searched/obtained:

- Department of Environment and Energy Protected Matters Search Tool (DEE 2019);
- Office of Environment and Heritage BioNet Atlas;
- Office of Environment and Heritage NSW Native Vegetation Regulatory Map (OEH 2019);
- Office of Environment and Heritage Threatened Biodiversity Data Collection (OEH 2019);
- Port Macquarie LGA Koala Habitat digital data layer (Biolink 2013);
- Port Macquarie LGA Vegetation Communities and EECs digital data layer (Biolink 2013);
- Coastal Quaternary Geology – North Coast of NSW digital data layer (Troedson & Hashimoto 2008); and
- South Lindfield Koala Plan of Management (Biodiversity Australia 2018).





Figure 3: Proposed development layout





## 2.0 Landscape Features & Site Context

### 2.1. Site Context

#### 2.1.1. IBRA bioregions and Subregions

The development site is located in the NSW North Coast Bioregion and the Macleay Hastings subregion. The development site is located in the Manning-Macleay Coastal Alluvial Plains Mitchell Landscape.

#### 2.1.2. Native Vegetation Extent

A 1500m buffer was established around the development site (Figure 4). Analysis with GIS has determined that there is approximately 32 % native vegetation cover within the 1500m buffer.

#### 2.1.3. Cleared Areas

Cleared areas occur both on and adjacent to the development site. Most of the development site has been cleared in the past and is managed by regular slashing.

#### 2.1.4. Landscape Features

The following table shows the presence of landscape features on the site and provides details of these features if present.

Table 1: Landscape features

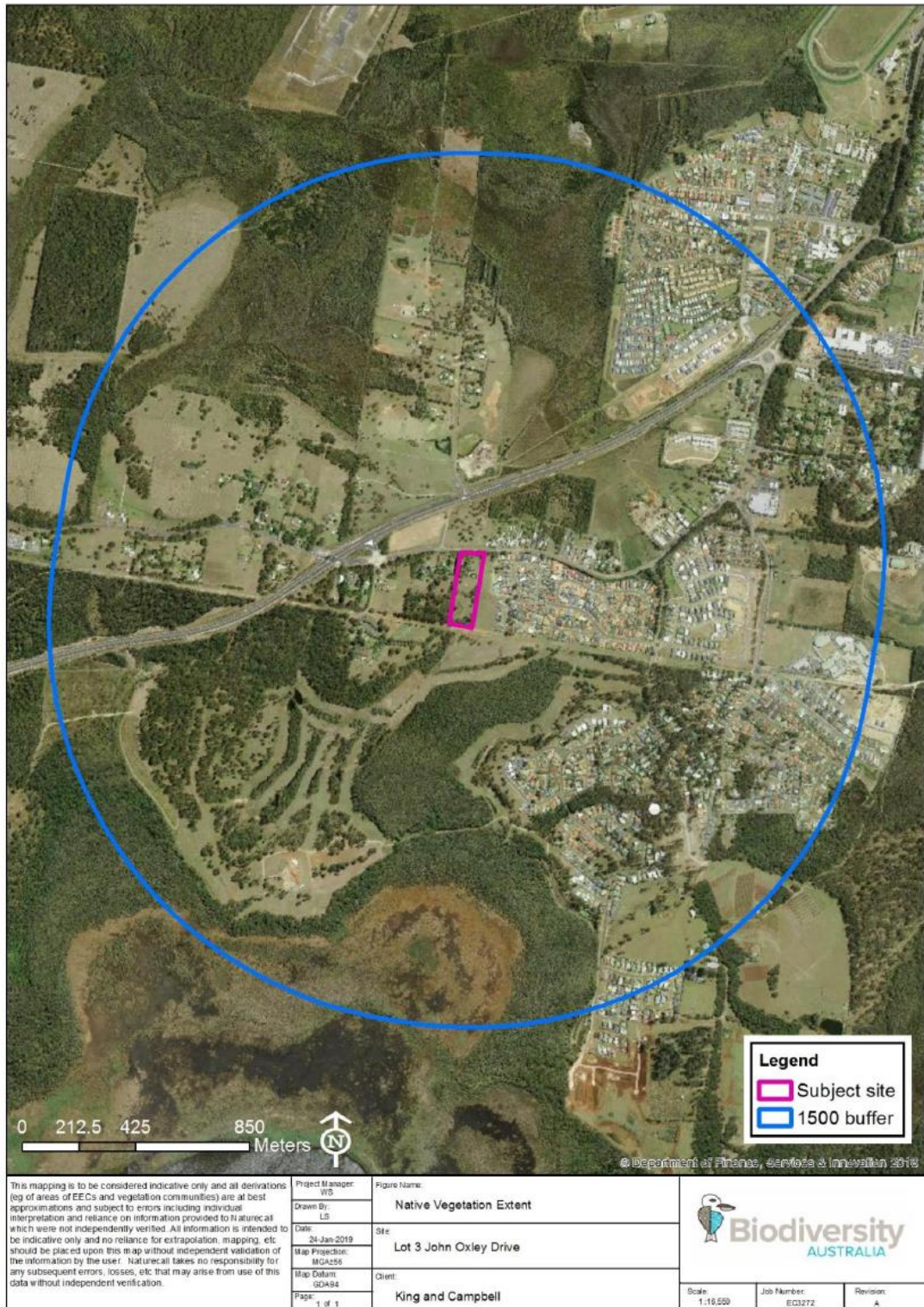
Feature	Present on site?	Present on adjoining land?	Description
Rivers and Streams	No	No	-
Important Local Wetlands	No	No	-
Connectivity Features	No	Yes	Vegetation on adjacent land has connectivity to Lake Innes Nature Reserve
Areas of Geological Significance (e.g. karst, caves, crevices, cliffs)	No	No	-
Soil Hazard Features	No	No	-
Areas of Outstanding Biodiversity Value	No	No	-





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 4: Native vegetation extent





## 3.0 Native Vegetation

### 3.1. Survey Methods

#### 3.1.1. Vegetation Integrity Survey

Vegetation Integrity survey plots were undertaken on the development site as per the BAM methodology. This consists of a 20x20 m plot in which floristic composition and structural attributes are collected, and a 20x50 m plot which collects ecosystem function attributes.

Three vegetation plots were sampled within the development footprint and one plot was sampled within the on-site offset area.

The following information was collected at each vegetation plot:

- Observer, location and date;
- Plot dimensions and orientation;
- Photographic record of vegetation;
- Vegetation Class and Plant Community Type (PCT);
- Physical features and disturbance history;
- Full flora list ;
- Growth form, cover and abundance of each species;
- Exotic and High Threat Exotic (HTE) plant cover;
- Number of large trees;
- Recruitment;
- Presence of hollow-bearing trees;
- Length of logs; and
- Litter cover.

The field data collected was tallied and input into the BAM calculator to determine a vegetation integrity score for each vegetation zone.

#### 3.1.2. Vegetation Classification and Mapping

Vegetation communities were sampled by the vegetation plot described above and through walking random meander transects. Due to the limited extent of vegetation on the development site this provided 100% coverage. The random meander transects also allowed for a more comprehensive flora inventory on the development site.

The vegetation classification is based on the NSW Plant Community Type (PCT) Classification and LGA wide vegetation community classification (Biolink 2013).

Plant species were identified to species or subspecies level and nomenclature conforms to that currently recognised by the Royal Botanic Gardens and follows Harden and PlantNET for changes since Harden.



## 3.2. Plant Community Types and Description

The following provides a description of the Plant Community Types (PCT) within the development site that will be affected by the proposal. The streamlined assessment module only requires identification of the dominant PCT on the development site. As described below, one PCT in two condition states was recorded in the footprint.

These communities are not listed as a Threatened Ecological Community (TEC) or Endangered Ecological Community (EEC) under the EPBC Act or NSW BC Act.

The native vegetation communities sampled are displayed in Photos 1-2 and a map of the vegetation is provided in Figure 6. A full flora list for the development site is provided in Appendix 1.

### 3.2.1. Community 1

#### 3.2.1.1. Vegetation Zone 1

Table 2: Vegetation community 1 (zone 1) description

<b>Vegetation Community (NSW PCT)</b>	No 690: Blackbutt - Tallowood dry grassy open forest of the central parts NSW North Coast Bioregion
<b>Vegetation Class</b>	Northern Hinterland Wet Sclerophyll Forests
<b>Mapped PMHC Community</b>	Blackbutt Shrubby Moist Forest / Broad-leaved Paperbark - Forest Red Gum Swamp Forest
<b>EEC Status</b>	Not an EEC
<b>Vegetation Zone</b>	1
<b>Number of Plots</b>	2
<b>Percent cleared</b>	55
<b>Location and area</b>	Occurs along edges of the sites boundary and extends offsite to the west. Covers an area of approximately 0.30 ha in the development footprint.
<b>Description</b>	<p><b>a) Canopy:</b></p> <p><i>Structure and Species:</i> Comprises an open canopy dominated by Blackbutt (<i>Eucalyptus pilularis</i>) and Flooded Gum (<i>Eucalyptus grandis</i>). Tallowood (<i>E. microcorys</i>), Swamp Mahogany (<i>E. robusta</i>), Forest Red Gum (<i>E. tereticornis</i>) and Pin Bloodwood (<i>Corymbia intermedia</i>) are occasionally present. Height ranges from 20-28m.</p> <p><b>b) Understory:</b></p> <p>Absent</p> <p><b>c) Shrub Layer:</b></p> <p><i>Structure and Species:</i> A sparse shrub layer is present largely around the base of mature trees. Species recorded include Cheese Tree (<i>Glochidion ferdinandii</i>), Fringed Wattle (<i>Acacia fimbriata</i>) and Coffee Bush (<i>Breynia oblongifolia</i>). Height ranges from 0.5-1.5m.</p>





	<p><b>d) Ground Layer:</b></p> <p><i>Structure and species:</i> Groundcover consisted of both native and exotic grasses and herbs including Narrow-leaved Carpet Grass (<i>Axonopus fissifolius</i>), Purpletop (<i>Verbena bonariensis</i>), Blady Grass (<i>Imperata cylindrica</i>) and Wattle Mat-rush (<i>Lomandra filiformis</i>). Height ranges from 0.01-0.3 m.</p>
<b>Condition</b>	<p>This community is generally in poor condition as a result of historical and ongoing disturbances. The understorey and shrub layers were either absent or sparse and species diversity is low. Much of the groundcover layer features exotic species.</p>

Photo 1: Community 1 at survey plot 1



### 3.2.1.2. Vegetation Zone 2

Table 3: Vegetation community 1 (zone 2) description

<b>Vegetation Community (NSW PCT)</b>	Derived grassland formerly comprising No 690: Blackbutt - Tallowood dry grassy open forest of the central parts NSW North Coast Bioregion
<b>Vegetation Class</b>	Northern Hinterland Wet Sclerophyll Forests
<b>Mapped PMHC Community</b>	Not mapped
<b>EEC Status</b>	Not an EEC
<b>Vegetation Zone</b>	2



Number of Plots	1
Percent cleared	55
Location and area	A 0.15ha patch of native dominated ground cover which is located in the southern half of Lot 3.
Description	<p><b>e) Canopy:</b> Absent</p> <p><b>f) Understory:</b> Absent</p> <p><b>g) Shrub Layer:</b> Absent</p> <p><b>h) Ground Layer:</b> <i>Structure and species:</i> Groundcover is generally sparse and is dominated by Bracken (<i>Pteridium esculentum</i>) and Blady Grass. A few native forbs and herbs including Pastel Flower (<i>Pseuderanthemum variable</i>), Kidney Weed (<i>Dichondra repens</i>), White Root (<i>Pratia purpurascens</i>). Exotic species recorded include Singapore Daisy, Carpet Grass, Purpletop and Common Paspalum.</p>
Condition	Poor condition due to past disturbances and ongoing slashing. Native species diversity is low.





Photo 2: Community 2 at vegetation plot 3



### 3.2.2. Non-native Vegetation

Remaining vegetation on the development site consists of managed grassland dominated by exotic grasses and herbs (Photo 3). Common species recorded in the exotic grassland include Narrow-leaved Carpet Grass, Common Paspalum, Parramatta Grass, Couch and Singapore Daisy.

Ornamental planted trees and a number of Radiata Pine trees are also present throughout the site. Pine trees are located along the northern and western boundary and have not been included as forming part of the native vegetation community.

Land along the proposed sewer line to the north largely comprises managed lawns dominated by Common Couch, Kikuyu and Carpet Grass. Very few native species occur in this area.



Photo 3: Managed exotic grassland

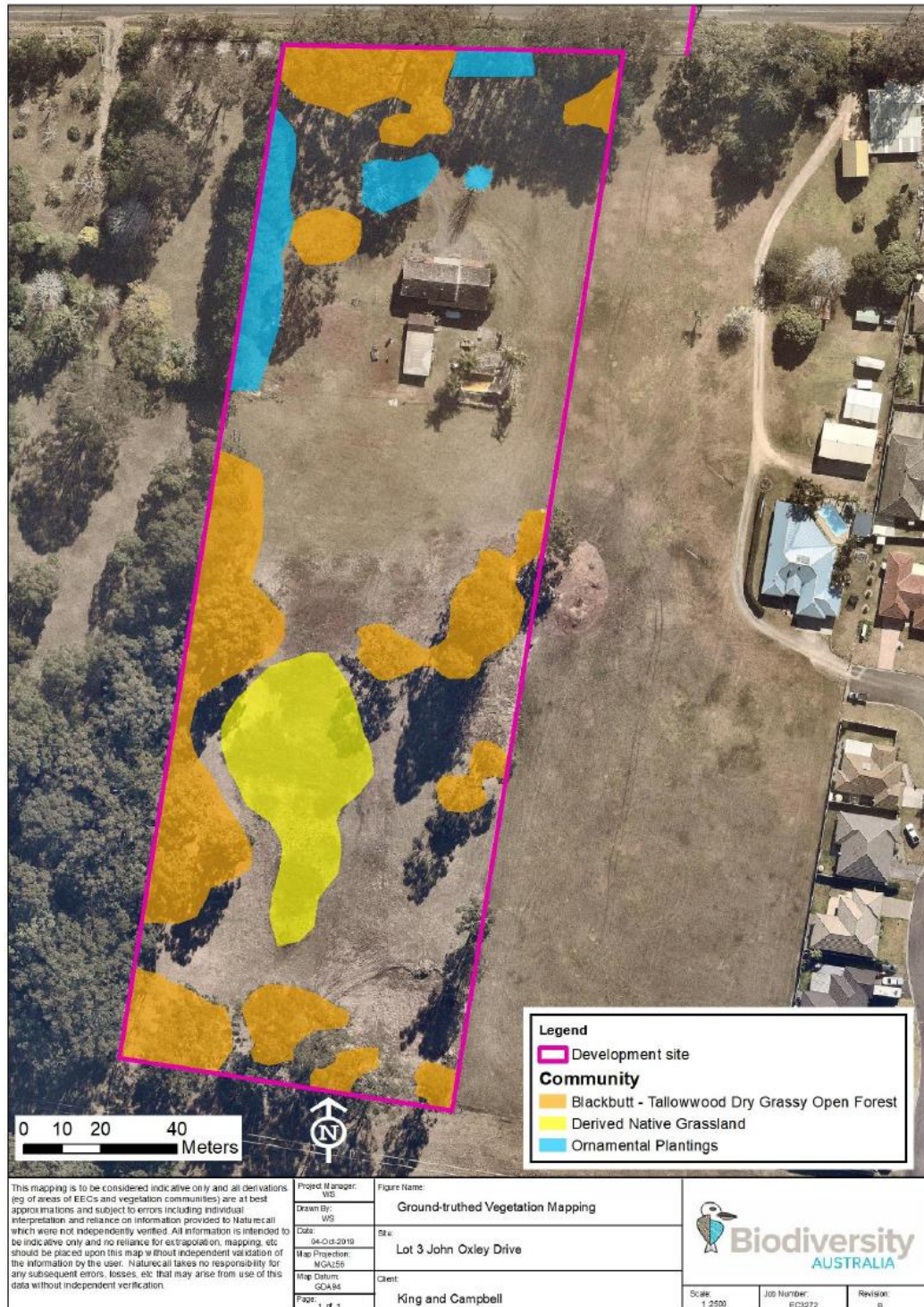






Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 5: Ground-truthed site vegetation communities





### 3.3. Vegetation Integrity Assessment

#### 3.3.1. Vegetation Zones and Integrity Scores

Two vegetation zones have been mapped over the development footprint. These comprise the dry grassy open forest community and derived native grassland. The details of these zones are shown in the table below. This table also provides the vegetation integrity score for the zones which have been derived from the three BAM field plots undertaken on the development site. Figure 6 shows the location of the vegetation zones and survey locations.

Several dead trees occur in the south of the site (assessed by arborist) which have not been included within Vegetation Zone 1. There are scattered native shrubs and grasses within the shrub and ground layer beneath these dead trees, however the majority of vegetation is non-native or recently disturbed bare ground from the former dam at this location, hence it has not been included as part of the zone. This area also forms an Asset Protection Zone, and complete vegetation removal is not required. The ground layer components will remain intact under the same management regime as is currently experienced.

Trees within the John Oxley Drive road reserve which overhang into Lot 3 do not form part of Vegetation Zone 1 as they will not be impacted. Pine trees along the northern boundary and western boundary and other non-native ornamental plantings similarly do not form part of the vegetation zone as they do not comprise native vegetation and do not form part of a community. The patch of pine trees along the northern boundary does not contain a native understorey or ground layer.



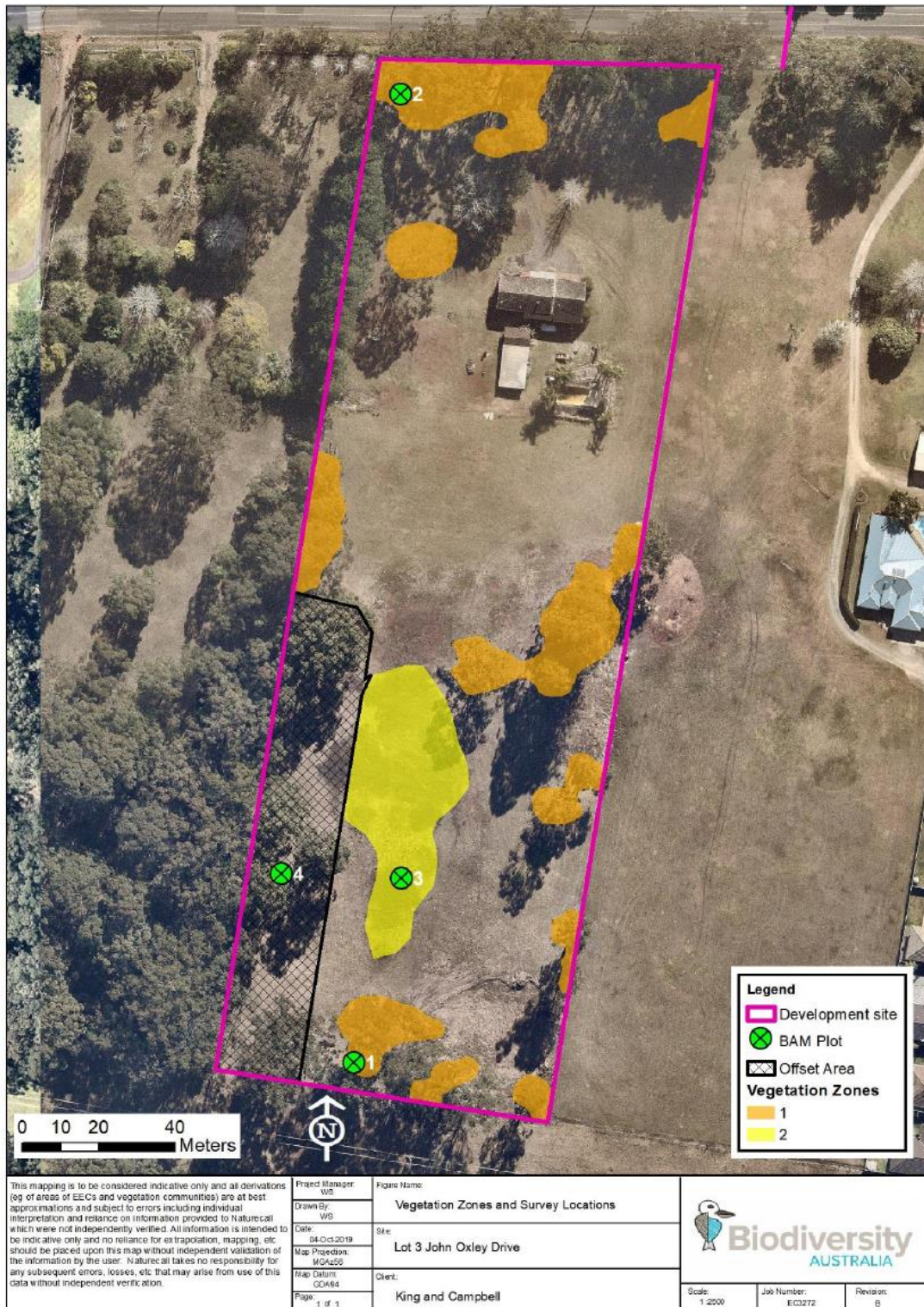
Table 4: Vegetation zone and integrity score

Vegetation Zone	Condition class	Community	Patch size category	Area Impacted	Vegetation Integrity Score		
					Composition	Structure	Function
1	Moderate	Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	>100	0.30 ha	45.3	48.1	66.3
2	Poor	Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	<5 ha	0.15 ha	17	16.5	10
							Total
							52.5
							14.1





Figure 6: Map of vegetation zones in development site





## 4.0 Threatened Species

### 4.1. Ecosystem Credit Species

Ecosystem credit species are threatened species which can be reliably predicted to occur by vegetation surrogates and landscape features. Targeted survey is not required for these species.

Some species which have specialised breeding requirements have dual credit classes to account for differences in foraging and breeding habitat. For example, Glossy Black Cockatoo foraging habitat can be reliably predicted through vegetation associations, however breeding habitat is specialised and requires hollow-bearing trees with hollows greater than 15cm diameter and greater than 5m above the ground (OEH Bionet 2018).

The BAM calculator produces a list of ecosystem credit species based on a number of attributes including Bioregion and subregion, patch size and the vegetation and habitat data collected in the field.

#### 4.1.1. List of Species Derived

The threatened species derived from the BAM calculator are presented in Table 5. below. These species have been predicted to occur based on the vegetation and habitat types present and are classed with ecosystem credits. Additional species, predicted to occur by the BAM calculator, which have been excluded from this list due to not meeting habitat and/or geographic requirements are listed in Table 6.

Table 5: Ecosystem credit species

Common Name	Scientific Name	Listing Status	
		BC Act	EPBC Act
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V	-
Glossy Black-Cockatoo (Foraging)	<i>Calyptorhynchus lathami</i>	V	-
Hoary Wattled Bat	<i>Chalinolobus nigrogriseus</i>	V	-
Brown Treecreeper (eastern subspecies)	<i>Climacteris picumnus victoriae</i>	V	-
Barred Cuckoo-shrike	<i>Coracina lineata</i>	V	-
Varied Sittella	<i>Daphoenositta chrysoptera</i>	V	-
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	V	-
Little Lorikeet	<i>Glossopsitta pusilla</i>	V	-
Square-tailed Kite (foraging)	<i>Lophoictinia isura</i>	V	-
Little Bent-wing Bat (foraging)	<i>Miniopterus australis</i>	V	-



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Eastern Bent-wing Bat (foraging)	<i>Miniopterus schreibersii oceanensis</i>	V	-
Eastern Free-tail Bat	<i>Mormopterus norfolkensis</i>	V	-
Barking Owl (Foraging)	<i>Ninox connivens</i>	V	-
Powerful Owl (foraging)	<i>Ninox strenua</i>	V	-
Koala (foraging)	<i>Phascolarctos cinereus</i>	V	V
Eastern Chestnut Mouse	<i>Pseudomys gracilicaudatus</i>	V	-
Grey-headed Flying Fox (foraging)	<i>Pteropus poliocephalus</i>	V	V
Yellow-bellied Sheath-tail-bat	<i>Saccolaimus flaviventris</i>	V	-
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	V	-
Masked Owl (foraging)	<i>Tyto novaehollandiae</i>	V	-

Listing status key: Critically Endangered (CE), Vulnerable (V).



Table 6: Ecosystem credit species not predicted to occur on site

Species	Listing Status		Habitat/Geographic constraints
	BC Act	EPBC Act	
<b>Pale-vented Bush-hen</b> <i>Amaurornis moluccana</i>	V	M	<u>BAM Habitat constraints</u> - Waterbodies / Dense vegetation, within 300 m of, or in shallows of streams or other natural or artificial wetlands <u>BAM Geographic constraints</u> - North of South West Rocks <b>BAM constraints not met:</b> <i>Habitat</i> - No waterbodies or dense vegetation occur within or adjacent to the development site. <i>Geographic</i> - The development site is south of South West Rocks.
<b>Yellow-bellied Glider</b> <i>Petaurus australis</i>	V	-	<u>BAM Habitat constraints</u> - Hollows greater than 25cm diameter <b>BAM constraints not met:</b> <i>Habitat</i> - No tree hollows of this size occur within the site.
<b>Long-nosed Potoroo</b> <i>Potorous tridactylus</i>	V	V	<u>BAM Habitat constraints</u> - Dense shrub layer or alternatively high canopy cover exceeding 70% <b>BAM constraints not met:</b> <i>Habitat</i> - Vegetation surveys on site determined that no dense shrub layer occurs within the development site nor does any community with a canopy cover greater than 70 %.





## 4.2. Species Credit Species

Species credit species are threatened species or elements of their habitat that cannot be confidently predicted by vegetation surrogates and landscape features. Targeted survey is required for these species if the development site contains suitable habitat components and is within the predicted range of the species.

### 4.2.1. List of Species Derived

The following two tables list the candidate threatened species (species credits) that have been derived from the BAM calculator. An assessment has been undertaken to determine if the habitat and geographic requirements are met on the development site, and if targeted survey is required.

The species with suitable habitat/geographic requirements on the site are provided in Table 7 along with the survey timing for each species (from the OEH Threatened Species profile database) in which targeted surveys should be undertaken. These candidate species can either be assumed present, surveyed or an expert report can be provided to confirm presence/absence. The option of a targeted survey has been nominated and the survey methods used are described in Section 4.3.

Species that have been excluded from the candidate species list are provided in Table 8 along with the assessment of habitat and geographic requirements which were not met. Targeted survey is not required for these species.

Table 7: List of candidate species credit species requiring survey

Common Name	Scientific Name	Listing Status		Survey timing
		BC Act	EPBC Act	
Flora				
Grove's Paperbark	Melaleuca groveana	V	-	Year round
Scant Pomaderris	Pomaderris queenslandica	E	-	Year round
Native Guava	Rhodomyrtus psidioides	CE	-	Year round
Scrub Turpentine	Rhodamnia rubescens	CE	-	Year round
Fauna				
Eastern Pygmy Possum	Cercartetus nanus	V	-	Oct-Mar
Square-tailed Kite (breeding)	Lophoictinia isura	V	-	Sep-Jan
Squirrel Glider	Petaurus norfolcensis	V	-	Year round
Brush-tailed Phascogale	Phascogale tapoatafa	V	-	Year round
Koala (breeding)	Phascolarctos cinereus	V	V	Year round



Table 8: List of candidate species credit species and survey requirement

Common Name	Listing Status		Habitat/Geographic Constraints
	BC Act	EPBC Act	
Flora			
North Brother Wattle <i>Acacia courtii</i>	V	V	<u>BAM Habitat constraints</u> - Rocky areas / Shallow soils in dry open forest or rocky slopes <b>BAM constraints not met:</b> <u>Habitat</u> - Vegetation community surveys described in this report confirmed that these habitats do not occur within the development site. <u>Additional constraints:</u> <u>Geographic</u> - This species is only found on mountains in the Laurieton district
	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <u>Habitat</u> - This species is found in gully, warm temperate or littoral rainforests with species spreading to adjacent understorey of moist eucalypt forests. This habitat does not occur within the development site and the site is outside of its known range.
Milky Silkpod <i>Parsonsia dorrigoensis</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <u>Habitat</u> - This species is known to occur on rainforest margins, in subtropical and warm-temperate rainforests and in moist eucalypt forests. Vegetation of this type does not occur within the development site.
	Fauna		
Rufous Bettong <i>Aepyprymnus rufescens</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <u>Habitat</u> - This species requires a dense layer of tall, native grasses and fallen logs. The dense grass layer is the preferred shelter for this species and grasses are also used to form nests at the base of fallen timber. No sufficient resources of dense, tall grass occur within the development site as the site is regularly slashed and some areas are devoid of groundcover vegetation. No large fallen logs are present within the site.
	CE	CE	<u>BAM Habitat constraints (breeding)</u> - Other (as per mapped areas) <b>BAM constraints not met:</b>



			<i>Breeding habitat</i> - Two known breeding areas for this species occur within NSW. The development site is not within one of these known regions and is not mapped as an important area.
<b>Bush Stone-curlew</b> <i>Burhinus grallarius</i>	E	-	<u>BAM Habitat constraints</u> - Fallen/standing dead timber including logs <b>BAM constraints not met:</b> <i>Habitat</i> - Habitat assessments on site found that there is a lack of fallen/standing dead timber sufficient to support this species within the development site.
<b>Glossy Black Cockatoo (breeding)</b> <i>Calyptrorhynchus lathamii</i>	V	-	<u>BAM Habitat constraints (breeding)</u> - Living or dead tree with hollows greater than 15cm diameter and greater than 5m above ground <b>BAM constraints not met:</b> <i>Breeding habitat</i> - This species requires large hollows to breed. No large hollows occur on the development site.
<b>Pale-headed Snake</b> <i>Hoplocephalus bitorquatus</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species is mainly found in dry eucalypt forests/woodlands and cypress forests and occasionally in rainforest or moist eucalypt forest. When in drier environments this species tends to favour habitats close to riparian areas as frogs are the favoured prey. This species required loose bark/tree-trunks, hollow tree trunks and hollow limbs of stags for shelter. The development site would not provide a sufficient habitat and prey requirements for this species and only limited potential shelter habitat occurs on site which would be subject to high competition with common species.
<b>Stephens' Banded Snake</b> <i>Hoplocephalus stephensii</i>	V	-	<u>BAM Habitat constraints</u> - Hollow-bearing trees / within 500 m of hollow-bearing trees / within 500 m of arboreal vine tangles/fallen/standing dead timber including logs) <b>BAM constraints not met:</b> <i>Habitat</i> - No hollow-bearing trees or arboreal vine tangles, rock crevices, slabs and hollow trunk limbs, occur on site which indicates that the site does not contain sufficient shelter resources to support this species.
<b>Green Thighed Frog</b> <i>Litoria brevipalmata</i>	V	-	<u>BAM constraints</u> - none <u>Additional constraints:</u> <i>Habitat</i> - This species occurs in moist eucalypt forests and rainforests containing pooled water or flooded areas. Although some areas of suitable habitat may occur nearby, the development site itself does not contain habitat suitable for this species, is regularly slashed and has a significance disturbance history which is likely to have excluded the species.
<b>Parma Wallaby</b>	V	-	<u>BAM constraints</u> - none



<i>Macropus parma</i>			<p><u>Additional constraints:</u> <i>Habitat</i> - This species prefers moist eucalypt forests with a dense, shrubby understory that are nearby grassy areas. This habitat does not occur within the development site and all vegetation communities are highly exposed.</p>
<b>Little Bentwing-bat</b> <i>Miniopterus australis</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records in BioNet with microhabitat code 'IC - in cave'; observation type code 'E nest-roost'; with numbers of individuals &gt;500; or from the scientific literature</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - This species is known to occur in well-timbered areas in a variety of vegetation communities. Breeding habitat comprises caves and tunnels within these communities. No caves or tunnels occur within the subject site hence breeding habitat does not occur.</p>
<b>Large Bentwing-bat</b> <i>Miniopterus schreibersii oceanensis</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records in BioNet with microhabitat code 'IC - in cave'; observation type code 'E nest-roost'; with numbers of individuals &gt;500; or from the scientific literature</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - No caves, mines, tunnels or culverts occur within the subject site hence breeding habitat does not occur.</p>
<b>Stuttering Frog</b> <i>Mixophyes balbus</i>	E	V	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u> <i>Habitat</i> - This species is found in rainforest and wet, tall open forests. When not breeding, adults live in deep leaf litter and thick understory vegetation. Suitable vegetation and shelter requirements for this species does not occur within the development site.</p>
<b>Southern Myotis</b> <i>Myotis macropus</i>	V	-	<p><u>BAM constraints</u> - hollow-bearing trees / within 200 m of riparian zone / bridges, caves or artificial structures within 200 m of riparian zone</p> <p><b>BAM constraints not met:</b> <i>Habitat</i> - No hollow-bearing trees or riparian zones occur on site, hence there is no suitable habitat for this species.</p>
<b>Barking Owl (breeding)</b> <i>Ninox connivens</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u> - Living or dead trees with hollows greater than 20 cm diameter and greater than 4m above the ground.</p> <p><b>BAM constraints not met:</b> <i>Breeding Habitat</i> - No large hollows occur on the development site.</p>



<b>Powerful Owl (breeding)</b> <i>Ninox strenua</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u>- Living or dead trees with hollow greater than 20cm diameter</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No large hollows occur on the development site.</p>
<b>Brush-tailed Rock-wallaby</b> <i>Petrogale penicillata</i>	E	V	<p><u>BAM Habitat constraints</u> - Land within 1 km of rocky escarpments, gorges, steep slopes, boulder piles, rock outcrops or cliff lines</p> <p><u>BAM Geographic constraints</u> - West of a north-south line through Kempsey</p> <p><b>BAM constraints not met:</b></p> <p><u>Geographic</u> - The development site is outside the described geographic range of this species</p> <p><u>Habitat</u> - The development site does not occur within 1 km of the required habitat features for this species.</p>
<b>Common Planigale</b> <i>Planigale maculata</i>	V	-	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u></p> <p><u>Habitat</u> - This species is found in areas where there is dense groundcover and in close proximity to water. Hollow logs, rocks and crevices are required for shelter diurnally. Very limited shelter occurs on the development site for this species due to the sites disturbance history, lack of coarse woody debris and regular slashing. As such, the site is not considered to contain suitable habitat</p>
<b>Grey-headed Flying Fox (breeding)</b> <i>Pteropus poliocephalus</i>	V	V	<p><u>BAM Habitat constraints (breeding)</u> - Breeding camps</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No breeding or roosting camps for this species are located within the development site.</p>
<b>Red-backed Button-quail</b> <i>Tumix maculosus</i>	V	-	<p><u>BAM constraints</u> - none</p> <p><u>Additional constraints:</u></p> <p><u>Habitat</u> - This species requires a dense grass layer as it occurs in grasslands, open savannah woodlands with a grassy layer, crops and heath with a preference for vegetation near water. The development site contains areas of dense grass, however they are largely comprised of exotic grasses and are regularly slashed. As such the site would not provide suitable habitat</p>
<b>Masked Owl (breeding)</b> <i>Tyto novaehollandiae</i>	V	-	<p><u>BAM Habitat constraints (breeding)</u>- Living or dead trees with hollow greater than 20cm diameter</p> <p><b>BAM constraints not met:</b></p> <p><u>Breeding Habitat</u> - No large hollows occur on the development site.</p>



<b>Eastern Cave Bat</b> <i>Vespardelus troughtoni</i>	V	-	<p><u>BAM Habitat constraints</u> - Caves / Within 2 km of rocky areas containing caves, overhangs, escarpments, outcrops, crevices or boulder piles, or within 2 km of old mines, tunnels, old buildings or sheds</p> <p><b>BAM constraints not met:</b></p> <p><i>Habitat</i> - An on-ground assessment and aerial imagery assessments have determined that none of the required habitat features for this species occurs within 2 km of the development site.</p>
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Listing status key: Critically Endangered (CE), Endangered (E), Vulnerable (V).





### 4.3. Targeted Survey Methods

A targeted survey was undertaken for the candidate species identified in Table 6. This was undertaken by a BAM Accredited Principal Ecologist and Ecologist under Biodiversity Australia's scientific licence and animal research authority. A detailed description of the survey methods used is provided in the following sections.

#### 4.3.1. Flora Survey

A targeted survey for the following candidate threatened flora species was undertaken over the development site:

- Grove's Paperbark
- Scant Pomaderris
- Scrub Turpentine
- Native Guava

The survey methodology consisted of parallel field traverses as per the *NSW Guide to Surveying Threatened Plants* (OEH 2016). This survey technique involves searches along transects within the development site. The transects are a set distance apart depending on the life form and type of vegetation and cover the entire extent of potential habitat for each target plant species.

Four transects were conducted within the development site as part of the main survey period on 9<sup>th</sup> January 2019. The transects ran through vegetated areas around the perimeter of the development site. Four transects were conducted within and adjacent to the development site on 20<sup>th</sup> March 2019 to include the sewer lines which run offsite.

Opportunistic searches for threatened flora species were also undertaken during the vegetation plot surveys as well as during other activities on the development site.

Figure 7 maps the location of targeted flora transects and Table 9 provides details of the transects.

Table 9: Targeted flora transect details

Transect #	Bearing	Distance traversed (m)	Distance from previous traverse	Transect description
January 2019 survey				
Transect 1	E	80	-	Along south Lot boundary
Transect 2	NNE	150	-	Along southern section of eastern boundary
Transect 3	NNE	180	-	Along southern section of western boundary
Transect 4	E	150	-	Northern section of property
March 2019 survey				



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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Transect 1	S	100	-	Western boundary in offset area of lot 3
Transect 2	E	75	-	Along southern Lot boundary



Figure 7: Location of threatened flora transects







### 4.3.2. Fauna Survey

In consideration of the survey requirements of the candidate threatened fauna species (DEC 2004, DECC 2009), the following survey methods were utilised:

- Habitat evaluation;
- Searches for secondary evidence e.g. scats and tracks;
- Diurnal bird surveys;
- Passive Infra-Red (PIR) cameras;
- Spotlighting and torch searches;
- Microbat call recording and analysis;
- Call playback and detection; and
- Koala surveys.

The fauna surveys were undertaken between 11<sup>th</sup>- 22<sup>nd</sup> December 2018 and 9<sup>th</sup> - 22<sup>nd</sup> January 2019 by a Principal Ecologist and Ecologist under Biodiversity Australia's scientific license and animal research authority. The methods per survey measure are detailed below.

#### 4.3.2.1. Habitat Evaluation

This method was employed to assess the suitability of the development site habitats for the candidate threatened species.

Habitats on and adjacent to the development site were defined and assessed according to parameters such as:

- Structural and floristic characteristics of the vegetation e.g. understorey type and development, crown depth, groundcover density, etc.
- Degree and extent of disturbance e.g. fire, logging, weed invasion, modification to structure and diversity, etc.
- Presence of water in any form e.g. rivers, dams, creeks, drainage lines, soaks.
- Size and abundance of hollow-bearing trees and fallen timber.
- Availability of shelter e.g. rocks, logs, hollows, undergrowth.
- Wildlife corridors, refuges and proximate habitat types.
- Presence of mistletoe, nectar, gum, seed, sap, etc. sources.

#### 4.3.2.2. Secondary Evidence/Habitat Searches

Physical habitat searches involved lifting up of any timber, rocks and debris, and inspection of dense vegetation and leaf litter for frogs and reptiles; binocular inspection of trees; searches for nests; and searches for scats, owl regurgitation pellets, tracks and scratches. Dedicated scat searches for Koala scats were undertaken under all primary browse trees within the development footprint.



A total of four hours was spent on habitat and secondary evidence searches.

#### 4.3.2.3. Diurnal Bird Survey

This involved passive surveys (e.g. listening for bird calls) and active observation/binocular searches while walking around the entire development site; and opportunistically during other activities. The target bird species for these surveys was the Square-tailed Kite, however all bird species detected were recorded.

A total of four person hours was spent on bird surveys over four days.

#### 4.3.2.4. Passive Infrared Camera Stations

Six Stealthcam STC-G34 infra-red cameras were deployed on site for a period of 10 days.

Three were mounted on trees at a height of approximately four metres facing a hair tube on a platform to target arboreal species, specifically the Squirrel Glider, Eastern Pygmy Possum and Brush-tailed Phascogale. The remaining three were placed on trees at approximately 0.5m facing a hair tube placed on the ground. The hair tubes were baited with a mixture of oats, peanut butter, honey and vanilla essence.

The location of PIR cameras are shown in Figure 8.

#### 4.3.2.5. Spotlight Survey

Spotlighting was conducted for two hours per night over four nights. The procedure involved walking with a hand held 1100 lumen LED spotlight over the entire development site, targeting the trunks and branches of canopy trees and understorey, and periodically scanning the ground.

The target species for spotlighting were the Koala, Squirrel Glider, Brushtailed Phascogale, Eastern Pygmy Possum and Grey-headed Flying Fox.

#### 4.3.2.6. Microbat Call Detection and Analysis

Microchiropteran bat call detection was undertaken using an Anabat Express unit (Titley Scientific) set along the edge of potential microbat corridors for six nights. The recordings were forwarded to Dr Anna McConville of Echo Ecology, a bat call identification consultant, for identification of the bat species.

#### 4.3.2.7. Call Playback Survey

The Koala and Squirrel Glider were the main target species for the call playback survey, and calls of these species were broadcast prior to and after spotlighting surveys. Recorded calls of the Barking Owl, Powerful Owl, Masked Owl and Yellow-bellied Glider were also broadcast during the call playback survey.

Calls were played through a portable MP3 player via a 55W PA system from multiple separate locations at a sound level approximating natural intensities for the target species. The general methodology involved an initial period of listening and spotlighting; followed by playback of the calls simulating a natural pattern.

Playback was utilised over four nights. The location of call playback surveys is shown in Figure 7.





#### 4.3.2.8. Active Searches - Scat and Track

Diurnal active searches were undertaken to target the candidate species, the Koala. Searches targeted preferred habitat for these species with particular regards to searches under preferred Koala Food Trees.

Survey techniques employed included:

- Searches in all trees on site for foraging/sleeping individuals; and
- Searches for secondary evidence such as scats, scratches on trees and tracks.

#### 4.3.3. Survey Timing and Limitations

Fauna detectability is limited by seasonal, behavioural or lifecycle characteristics of each species, and even by habitat variations (e.g. flowering periods), which can occur within a year, between years, decades, etc. (DEC 2004).

The fauna survey period fell in summer which is a period of higher activity for arboreal mammals, Microchiropteran bats, frogs and birds, (DEC 2004). Longitudinal and latitudinal migrants such as the Swift Parrot and Regent Honeyeater would not be present at this time of year however.

The survey timing coincided with the recommended survey period for all of the candidate flora and fauna species.

#### 4.3.4. Weather Conditions

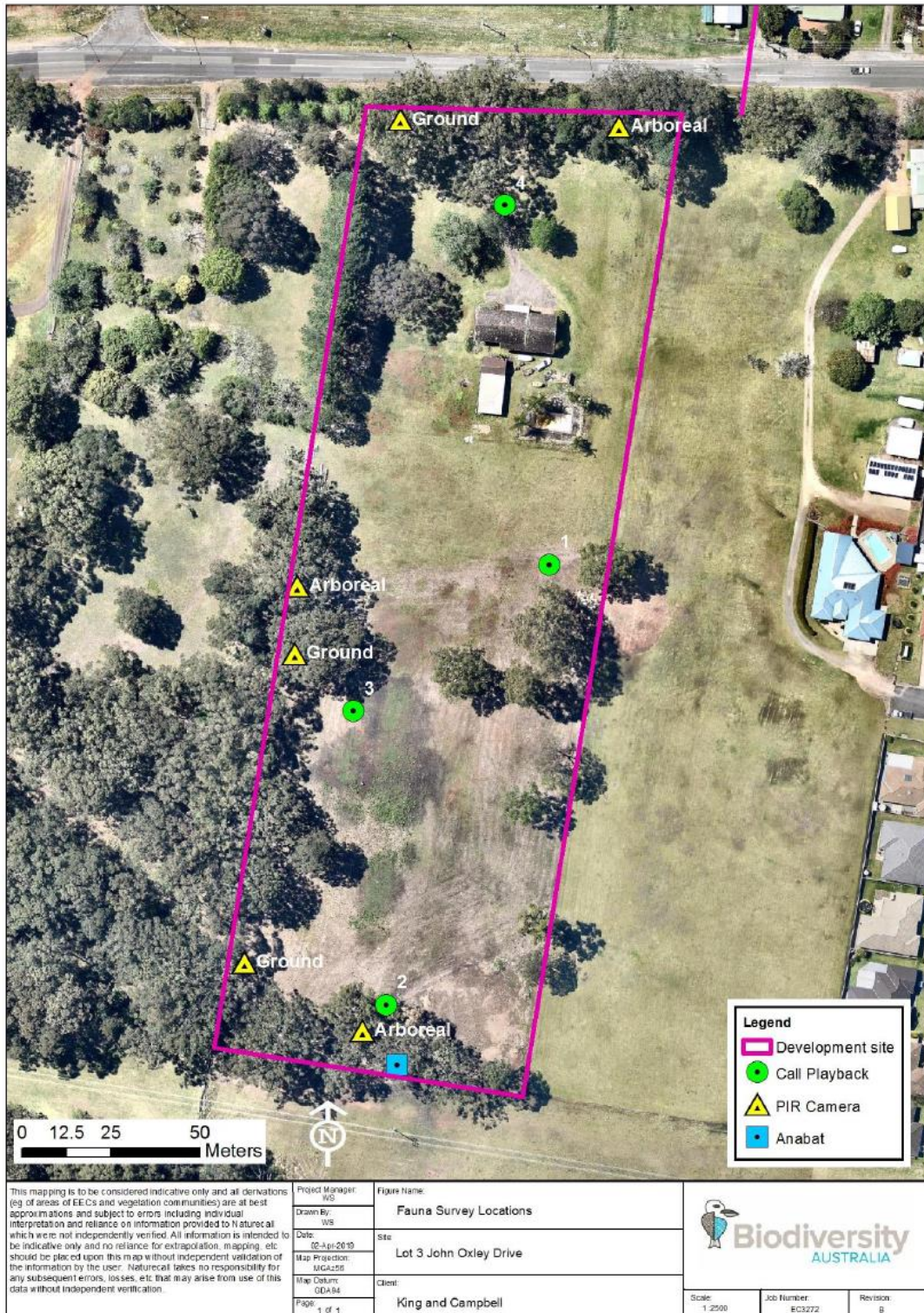
The weather over the two survey periods was fine and sunny, however a heavy rainfall event and storms occurred within the time period between these two surveys. During the December survey period (11<sup>th</sup>- 22<sup>nd</sup> December 2018), the temperature during surveys ranged from 11°C to 33.9°C. During the January survey period (9<sup>th</sup> - 22<sup>nd</sup> January 2019), temperatures ranged from a minimum of 14.9°C to a maximum of 34.6°C (BOM 2018 - nearest weather station at Port Macquarie airport).

Across these surveys, the full extent of moon phases were covered with a full moon occurring on the 23<sup>rd</sup> December 2018 and the 11<sup>th</sup> January 2019.



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 8: Location of fauna surveys







## 4.4. Targeted Survey Results

### 4.4.1. Fauna

#### 4.4.1.1. Habitat Features

The development site was found to be in a modified state as a result of a range of disturbances including historical clearing, underscrubbing, weed invasion and continued slashing. Limited habitat features were recorded within the development footprint and across the remainder of the site. These findings are described in the following table.

Table 10: Summary of site habitat values

Habitat/ Attribute Type	Site Values
Groundcover	Open groundcover of native and exotic grasses and herbs. Regularly mown and slashed. No significance to any threatened species.
Leaf litter	Vegetated patches contain sparse leaf litter around canopy trees. No significance to any threatened species.
Logs and debris	No log or debris piles occurred on site.
Hollows	No trees within subject site contain hollows.
Nectar Sources	The eucalypts on site would provide a potential year round nectar source for birds, arboreal mammals and Flying Foxes. The site would only provide a minor nectar source due to the limited extent of canopy trees.
Sap and gum sources	Occasional Pink Bloodwood trees occur over the site and in adjacent forest to the west. This is a preferred sap source for the Squirrel Glider. Other eucalypt species are less preferred.
Primary preferred Koala browse trees	The subject site contains Tallowwood, Forest Red Gum and Swamp Mahogany which are preferred Koala browse species. A number of these species on the subject site are proposed to be retained in a conservation offset area. The remaining preferred Koala browse species will be offset as per the South Lindfield KPOM (Appendix 5). The Koala was observed within subject site and scats were also detected.
Allocasuarinas	No Allocasuarinas present on site. No food source for Glossy Black Cockatoo.
Aquatic/wetland habitats	No aquatic habitats are present on the site. Absence of aquatic habitat to support threatened frogs and waterbirds.



Habitat/ Attribute Type	Site Values
<b>Fruiting species</b>	Fruiting species are very rare on the site and most are immature with no fruiting resource. Site is unlikely to attract threatened frugivorous birds.
<b>Forest bird habitat</b>	Poor quality. Vegetated areas on site are highly exposed. The understory and shrub layer are largely removed across much of the site. No significance to any threatened species.
<b>Caves, cliffs, overhangs, culverts, bridges</b>	Absent.
<b>Small terrestrial prey</b>	Likely to be low prey abundance over most of the site due to limited vegetation cover, historic disturbances and frequent human activity. Arboreal prey species such as possums and gliders would be rare due to the lack of hollow-bearing trees. Potential for the site to form part of the foraging range of raptors or forest owls.
<b>Habitat Linkages</b>	The subject site and immediate locality has a high level of fragmentation by urban development and historical rural land uses. Tentative habitat linkages can be seen from the site to Lake Innes Nature Reserve in the south and to retained forest habitat around the crematorium to the southwest. Highly mobile species such as macropods, birds, forest owls and bats could move freely throughout the development site and further into neighbouring vegetation.

#### 4.4.1.2. Observed/Detected Fauna

The surveys detected a range of fauna species over the development site. Birds were the most common species detected (29), followed by mammals (23) (Photos 4-8). No amphibians or reptiles were identified over the course of the site survey. Pest species detected on the site comprised Fallow Deer, European Rabbit and Red Fox.

Seven threatened fauna species was detected during the survey. These comprised:

- Koala (*Phascolarctos cinereus*);
- Grey-headed Flying Fox (*Pteropus poliocephalus*);
- Eastern False Pipistrelle (*Falsistrellus tasmaniensis*);
- Little Bent-wing Bat (*Miniopterus australis*);
- Eastern Bent-wing Bat (*Miniopterus schreibersii oceanensis*);
- Eastern Coastal Free-tail Bat (*Mormopterus norfolkensis*); and
- Greater Broad-nosed Bat (*Scoteanax rueppellii*).

Each of these species are listed as Vulnerable under the BC Act with the Koala and Grey-headed Flying Fox also listed as Vulnerable under the EPBC Act. The five threatened microbats recorded were detected via Anabat deployment. The remaining two threatened species identified were visually observed within the subject site during the course of surveys and fresh Koala scats were recorded.



The Koala recorded was observed crossing John Oxley Drive and entering the subject site during the course of survey. This individual then resided in a Lemon-scented Gum in the northwest of the development site.

Koala scats were identified under a Tallowwood along the western site boundary. The use of vegetation, within the subject site and adjoining properties by the Koala was already documented prior to this survey. The South Lindfield KPoM determined that the subject site forms part of a wider area of habitat used by a population of Koalas. It was determined that the population likely extends well beyond the site, over the wider Ruins Way area, south to Lake Innes Nature reserve and possibly west to Ascot Park.

Appendix 2 provides the total fauna list for the site and the method of detection.

Photo 4: Red-necked Wallaby







Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Photo 5: Brushtail Possum



Photo 6: Sugar Glider





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Photo 7: Red Fox



Photo 8: Koala observed on site





#### 4.4.1.3. Species Credit Species

##### Species detected

The following table provides a list of the candidate species credits species subject to targeted survey. As shown in the table below, the Little Bent-wing Bat, Eastern Bent-wing Bat and Grey-headed Flying Fox were detected however suitable breeding habitat was not present on the site. The Koala was the only other species credit species detected over the development site.

Table 11: Species credit species (fauna) survey results

Common Name	Scientific Name	Targeted survey guidelines met?	Species detected?
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	Yes	No
Square-tailed Kite (breeding)	<i>Lophoictinia isura</i>	Yes	No
Little Bent-wing Bat (breeding)	<i>Miniopterus australis</i>	Yes	Yes – not breeding
Eastern Bent-wing Bat (breeding)	<i>Miniopterus schreibersii oceanensis</i>	Yes	Yes – not breeding
Squirrel Glider	<i>Petaurus norfolcensis</i>	Yes	No
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>	Yes	No
Koala (breeding)	<i>Phascolarctos cinereus</i>	Yes	Yes
Grey-headed Flying Fox (breeding)	<i>Pteropus poliocephalus</i>	Yes	Yes – not breeding

##### Habitat components and credit requirement

The following table shows the species credit species detected on site and whether the suitable habitat components are present on site.

Table 12: Habitat components for species credit species recorded

Common Name	Credit Class	Biodiversity Risk Weighting	Habitat components (breeding)	Present on site?	Credits required?
Little Bent-wing Bat ( <i>Miniopterus australis</i> )	Ecosystem (foraging) Species (breeding)	3.00	Caves, tunnels, tree hollows, derelict mines, stormwater drains, culverts, bridges etc.	There is no breeding habitat located within the development site.	No
Eastern Bent-wing Bat ( <i>Miniopterus schreibersii</i> )	Ecosystem (foraging)	3.00	Caves, derelict mines, storm-water	There is no breeding	No



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

<i>oceanensis</i> )	Species (breeding)		tunnels etc.	habitat located within the development site.	
Koala ( <i>Phascolarctos cinereus</i> )	Ecosystem (foraging) Species (breeding)	2.00	High connectivity, known KFTs, Core Koala Habitat	Yes	Yes
Grey-headed Flying Fox ( <i>Pteropus poliocephalus</i> )	Ecosystem (foraging) Species (breeding)	2.00	Breeding camps	There are no breeding camps located within the development site.	No

As shown in the above table, the habitat components required for the Little Bent-wing Bat, Eastern Bent-wing Bat and Grey-headed Flying Fox to breed are not present within the development footprint. As such, credits for breeding habitat for these species are not required. The foraging habitat for these species will be offset through ecosystem credits.

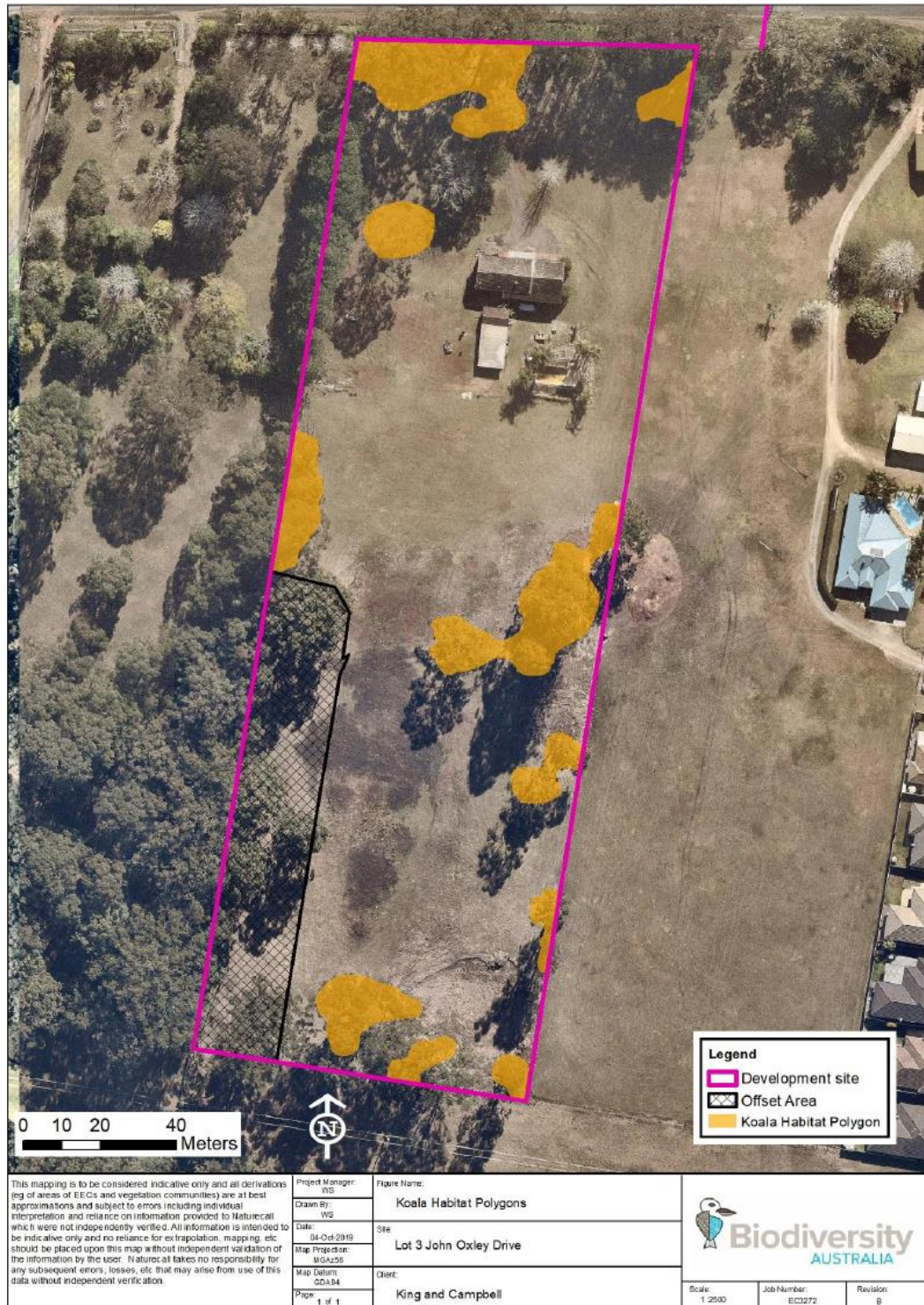
Credits for breeding habitat for the Koala are required and credit calculations for this species is provided in Section 7.2. The location of suitable habitat within the development site for the Koala comprises all of the dry sclerophyll forest on site (Vegetation zone 1) and covers 0.30ha. This is shown in Figure 9.





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 9: Koala species polygon







#### 4.4.2. Flora

##### 4.4.2.1. Candidate Species

Threatened flora surveys over the development site in March 2019 detected the Native Guava (*Rhodomyrtus psidioides*) in several locations within Lot 3 (both on the development site and on-site offset area). The locations are shown in Figure 10.

One individual was recorded in the south of Lot 3 and falls within the proposed APZ. This plant is able to be retained in situ and will be afforded protective fencing to ensure it is not removed or damaged by future land owners. This is further detailed in the VMP prepared for the proposal.

At least 10 small plants were also recorded in the offset area within Lot 3. These will be retained and will be allowed to regenerate through cessation of slashing and will be protected from browsing by Deer.

This species was listed in February 2019 under the NSW Biodiversity Conservation Act as critically endangered due to the risk of extinction posed by the plant disease Myrtle Rust.

None of the other species were detected hence there is no offset requirement and they are not considered further.

Table 13: Species credits species (flora) survey results

Common Name	Scientific Name	Targeted survey guidelines met?	Species detected?
Grove's Paperbark	<i>Melaleuca groveana</i>	Yes	No
Scant Pomaderris	<i>Pomaderris queenslandica</i>	Yes	No
Scrub Turpentine	<i>Rhodamnia rubescens</i>	Yes	No
Native Guava	<i>Rhodomyrtus psidioides</i>	Yes	<b>Yes – however no impact</b>



Photo 9: Native Guava on Lot 25

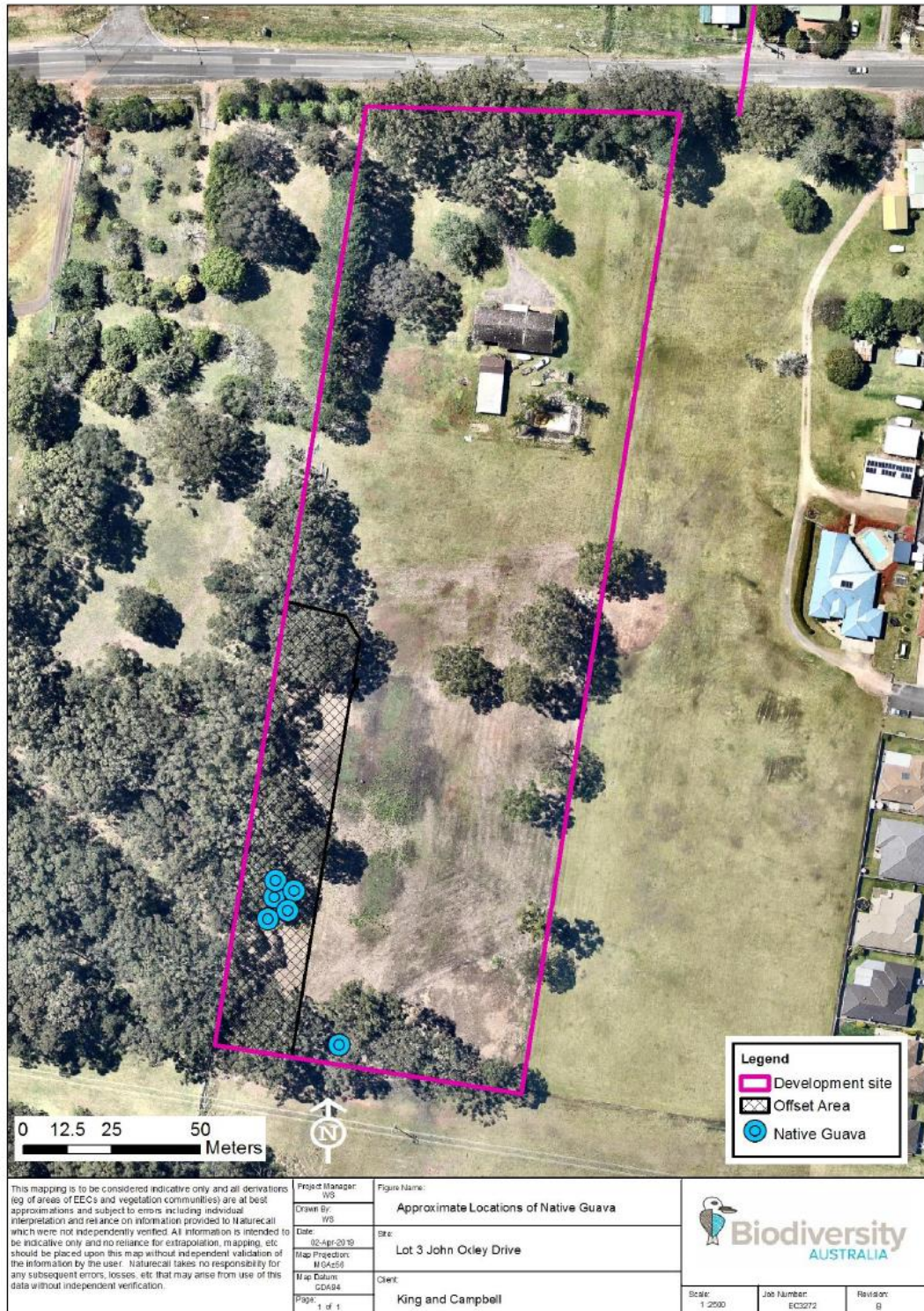






Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Figure 10: Approximate location of Native Guava





## 5.0 Avoidance and Minimisation

### 5.1. Impact Avoidance

The proposed development has been designed so as to avoid some vegetated areas on site and minimise vegetation removal, including known Koala food trees. Vegetation removal will be limited to the minimum required in order to establish the residential estate.

An on-site offset area has been established in the southwest of Lot 3. This will retain a number of large Tallowwood and Blackbutt trees and contains a number of Native Guava that will be protected and managed under an VMP. An APZ will also be established in the south of Lot 3 and some vegetation can be retained here.

The sewer line which runs to the north has also been aligned to avoid removal of mature trees and native vegetation.

The single Native Guava plant present within the development site is located in an APZ and can be retained. This will be fenced to ensure it is not disturbed.

### 5.2. Measures to Minimise Impacts

The proposal would be subject to a number of mitigation measures and environmental controls to reduce the overall impact of the development on biodiversity and ensure potential offsite impacts are minimised.

#### 5.2.1. General Clearing Measures

The area to be cleared should be clearly marked prior to clearing in order to prevent inadvertent clearance beyond what is required and has been assessed.

Site induction is to specify that no clearing is to occur beyond the marked area, and vehicles are only to be parked in designated areas. Clearing and earthworks is to avoid damage to root zones of any retained trees and no materials or fill are to be placed under retained trees or within adjacent vegetation.

No further clearing is to be undertaken outside of that required for the earthworks.

#### 5.2.2. Pre-clearing Survey and Clearing Supervision

The following ameliorative measures should be carried out during clearing works on site.

- The clearing extent is to be inspected for Koalas and other fauna by a qualified ecologist immediately prior to commencement of any vegetation removal involving machinery and/or tree-felling. This is to occur each morning if clearing spans over multiple days/weeks.
- If a Koala is present in an area subject to vegetation removal/modification, works must be suspended until the Koala moves along on its own volition. If the Koala is located in a position that a 50m buffer may be established, works may proceed outside this buffer.
- The ecologist is to remain on site to supervise tree removal to retrieve any fauna detected during





works, manage any fauna interactions and ensure Koalas do not enter the site during clearing works.

### 5.2.3. Koala Food Tree Offset Plantings

The required KFT plantings are to be established within the offset area of Lot 3. Trees should be sourced locally and ideally planted prior to vegetation removal on the site. These are to be managed as per a Vegetation Management Plan which has been prepared.

### 5.2.4. Protection of Native Guava

The single Native Guava plant in the rear of the development site is to be retained in situ and protected via permanent post and rail fencing at a 1 m radius around the plant. New owners of the Lot on which the plant is located are to be informed of the presence of this plant and the requirement that it is to remain undisturbed.

The existing Native Guava in the offset area are to be enclosed in a fenced area to avoid being impacted by Deer or being accidentally trampled. Monitoring of the offset area is to include inspections of the Native Guava plants to ensure they are healthy and not being impacted by growth of weeds or animal grazing.

### 5.2.5. Donation of Foliage

The Koala Hospital and/or Billabong Wildlife Park are also to be contacted for interest in collecting the foliage and limbs of the fallen Tallowwood.

Due to chemical changes in the leaves, foliage must be collected as soon as possible after felling, hence collectors must be contacted and arranged prior to felling.

### 5.2.6. Soil Erosion and Sedimentation Control

Standard soil and sedimentation control measures will be required throughout the earthworks phase to ensure that habitats in the study area, as well as subsequent habitats nearby are not substantially affected.

### 5.2.7. Weed Control

Disturbance of the subject site's soils has potential to encourage weed invasion. Hence, it is recommended that:

- Disturbance of vegetation and soils on the site should be limited to the areas of the proposed work and should not extend into adjacent vegetation;
- All plant used for clearing and construction works is certified as weed free;
- Appropriate collection and disposal of all weed material removed via clearing;
- Any recent weed invasions within the development area should be removed, and
- Ongoing weed control in the development area.

### 5.2.8. Landscaping





Any landscaping proposed as part of the development should give due consideration to the establishment of native plants as ornamental species to maintain and/or increase biodiversity, provide replacement habitat, and maximise water efficiency. Plant selection should focus on species that do not pose a risk of invasion of native vegetation communities.

### 5.2.9. Mitigation Measure summary

The following table provides a summary of the mitigation measures and the timing and responsibility.

Table 14: Mitigation measure summary

Mitigation measure	Timing	Responsibility
Clearing management	Prior to clearing	Clearing contractor/surveyor
Pre-clearing survey	Prior to clearing	Ecologist
Clearing supervision	During clearing	Ecologist
Donation of foliage	Prior to clearing	Clearing contractor
Native Guava protection	Prior to clearing	Surveyor/landscaper
Habitat retention and offset plantings	Prior to/during/after clearing	Bush regenerator
Erosion and sedimentation control	Prior to/during/after clearing and earthworks	Civil contractor
Weed control	After clearing and earthworks	Bush regenerator
Landscaping	Development establishment phase	Landscaper/bush regenerator

## 5.3. Impacts Unable to be Avoided

### 5.3.1. Vegetation and Habitat Removal

There will be some vegetation removal associated with the proposal. Vegetation loss will be long term and there will be limited scope to re-establish any native vegetation within the subdivision footprint. No further vegetation loss will be required once the development has been established. Native vegetation loss associated with the proposal will total 0.45 ha.

The vegetation affected may provide foraging habitat for a number of fauna species. This includes a nectar source for birds and flying foxes, and preferred Koala food trees.

### 5.3.2. Indirect Impacts

The following potential indirect impacts may be associated with the proposal:

- **Fragmentation:** The proposal will contribute to local habitat loss, however the habitat to be removed does not comprise key wildlife linkages and its removal will not isolate any areas of habitat.



- **Erosion and Sedimentation:** The soils on site are prone to erosion. Standard mechanisms and controls should ensure the prevention of erosion and sedimentation during construction and post-development and such impacts do not extend beyond the development footprint.
- **Injury/mortality during clearing:** No hollow-bearing trees occur on site, hence the risk of fauna injury or mortality during clearing is low.

Koalas are at risk of injury if they are present on site at the time of clearing. An ecologist /fauna spotter must be present prior to clearing activities to search for Koalas and ensure they do not enter the site.

- **Edge effects:** The vegetation on site is currently exposed to edge effects due to current land use practices and historic clearing. These communities are not likely to be impacted by edge effects beyond levels which are currently experienced.
- **Weed invasion:** The proposed works may increase the potential for the spread of weeds on the property to some extent. All plant used for clearing and construction works is to be certified as weed free and any ornamental plantings within the site are recommended to be native species or species which do not pose a high risk of invasion.
- **Noise and vibration:** Fauna occurring in the study area are likely to be accustomed to existing noise levels given the extent of agricultural and construction activities in the area. Thus the clearing phase is unlikely to significantly increase this threat beyond that which already occurs in the study area. Beyond the development phase, noise levels will return to that of a normal residential area.
- **Increased human presence:** The site is currently in use as residential Lot with some existing human presence. Human presence will significantly increase over time both on site and in the area as the total development is completed. This has the potential to impact some fauna species that are not accustomed to human presence and other associated effects such as noise and lighting. This has the greatest potential to impact sensitive fauna (e.g. via avoidance, behavioural changes etc.) in neighbouring adjoining forested areas to the south and west.
- **Introduction of feral and domestic predators:** No introduction of feral species is predicted to occur as a result of the proposed subdivision. New owners may wish to keep pets; cats or dogs which can prey on native wildlife, however this is an existing threat in the area.



## 6.0 Impact Assessment

### 6.1. Assessment of Serious and Irreversible Impacts

Section 6.5 of the *Biodiversity Conservation Act 2016 (BC Act)* requires developments to consider Serious and Irreversible Impacts (SAII) on threatened species and ecological communities which meet the following criteria:

- are in a rapid rate of decline;
- have a very small population size;
- have a very limited geographic distribution; and
- are unlikely to respond to measures to improve habitat.

These criteria have been applied to all threatened species and ecological communities listed under the *BC Act*. Entities that meet the criteria under one or more principles are identified as 'potential' SAII species/communities in the guidance document *Guide to assist decision-maker to determine a serious and irreversible impact* (OEH 2017).

Review of this document has determined that the Native Guava which was recorded on site is an SAII candidate species and has been assessed as per the relevant guidelines.

#### 6.1.1. Evaluation of Serious and Irreversible Impact

The Native Guava was recorded on the development site in March 2019. A single juvenile plant was recorded within the APZ on proposed Lot 25 and it was found to be in poor health and did not show any signs of growth. A cluster of juvenile plants was also found within the conservation area in the west of the site. The potential impacts of the development have been assessed against the SAII assessment provisions in the following section.

##### 6.1.1.1. Impact Assessment Provisions

#### a) the action and measures taken to avoid the direct and indirect impact on the potential entity for an SAII

The single Native Guava within the development footprint is located within an APZ and can be retained. To minimise the potential for future impacts, the plant will be protected with permanent fencing. Indirect impacts are likely to be minimal given the extent of buffering land between a future dwelling on Lot 25 and the plant. The plant has persisted in this location despite many years of continued slashing and appears to have high resilience.

The cluster of plants within the conservation area have also been avoided and will be permanently protected. The offset area will be fenced and vegetation will be allowed to regenerate naturally which will provide improved conditions for these plants to regenerate. There is unlikely to be any indirect impacts on these plants as a result of the development.



**b) the size of the local population directly and indirectly impacted by the development, clearing or biodiversity certification**

The population within the development footprint consists of one juvenile plant. There are approximately 15 plants within the conservation area on site and many more were noted on the adjoining land to the west during a recent site inspection. The total population size is not known as detailed counts have not been undertaken.

**c) the extent to which the impact exceeds any threshold for the potential entity that is specified in the *Guidance and criteria to assist a decision-maker to determine a serious and irreversible impact***

There is no impact threshold listed for the Native Guava on the Threatened Biodiversity Data Collection.

**d) the likely impact (including direct and indirect impacts) that the development, clearing or biodiversity certification will have on the habitat of the local population, including but not limited to:**

**i. an estimate of the change in habitat available to the local population as a result of the proposed development**

The development will slightly reduce the area of habitat available for the Native Guava within the development site, however most of this habitat would be unlikely to support the species given the management regime and high level of exposure. The offset conservation area will however protect 0.27ha of known habitat for this species and provide suitable conditions for it to regenerate further.

**ii. the proposed loss, modification, destruction or isolation of the available habitat used by the local population, and**

Refer to point above.

**iii. modification of habitat required for the maintenance of processes important to the species' life cycle (such as in the case of a plant – pollination, seed set, seed dispersal, germination), genetic diversity and long-term evolutionary development**

The proposed subdivision and eventual residential development on the site will lead to a reduction in the ability for the species to disperse northwards as this area will be highly developed. Given the management regime and historical disturbances, the potential for this species to colonise this area would however be limited. The species will still be able to disperse southwards and westwards from the site as no barrier will be created. Protection and regeneration of the conservation area on site will allow for further recolonisation and recovery of the local population.

The development is unlikely to reduce pollination success of the Native Guava as no barrier to pollination will be created and the limited vegetation removal associated with the proposal is unlikely to reduce abundance of pollinators.



**e) The likely impact on the ecology of the local population. At a minimum, address the following:**

**i. for flora, address how the proposal is likely to affect the ecology and biology of any residual plant population that will remain post development including where information is available:**

**ii. pollination cycle**

The proposal is unlikely to affect the pollination cycle of the native Guava population as previously discussed.

**iii. seedbanks and recruitment, and**

The proposal is unlikely to remove a seed bank of the Native Guava as no mature fruiting plants have been located in the area and there appears to be no recruitment at present, especially within the development footprint. The potential for future recruitment around the single plant on Lot 25 will remain at the current level as this area will be continually managed. The offset area on site will however allow the Native Guava to recruit over time and will improve the opportunity for recruitment through cessation of slashing.

**iv. interactions with other species (e.g. pollinators, host species, mycorrhizal associations)**

The proposal is unlikely to result in any adverse effects on interactions with other species. As no plants will be removed and limited vegetation removal or soil disturbance will occur around the single plant on Lot 25, any mycorrhizal associations are unlikely to be affected.

**f) a description of the extent to which the local population will become fragmented or isolated as a result of the proposed development**

No part of the local population will be removed or fragmented as a result of the development. No barriers between existing plants or populations will be created.

**g) the relationship of the local population to other population/populations of the species. This must include consideration of the interaction and importance of the local population to other population/populations for factors such as breeding, dispersal and genetic viability/diversity, and whether the local population is at the limit of the species 'range**

The single plant on Lot 25 forms part of a larger population in the area, which includes a number of immature plants in the adjoining offset area. This plant is unlikely to play an important role in the local population as it is immature and isolated from other nearby plants. It is also not at the limit of the species distribution.

**h) the extent to which the proposed development will lead to an increase in threats and indirect impacts, including impacts from invasive flora and fauna, that may in turn lead to a decrease in the viability of the local population**

The proposal may slightly increase indirect threats on the Native Guava in Lot 25, however it will be protected and fenced off during construction, and permanent fencing will be established. It is currently in an exposed





area subject to high edge effects, and the development is unlikely to increase this current threat.

Use of fertilisers and herbicides or changes in hydrology from stormwater runoff may have the potential to harm the plant, however suitable stormwater measures will be in place to reduce runoff and fertilisers affecting the plant.

This species is highly susceptible to Myrtle Rust, however this is an existing threat and the proposed development is unlikely to have the capacity to increase the risk or impact of this disease on the Native Guava population.

- i) **An estimate of the area, or number of populations and size of populations that is in the reserve system in NSW, the IBRA region and the IBRA subregion the measure/s proposed to contribute to the recovery of the species in the IBRA subregion.**

The extent of known populations of the Native Guava in the NSW reserve system is unknown.

#### 6.1.1.2. Conclusion

The assessment of the proposed development against the SAI provisions for threatened species has determined that the development would only pose a minor indirect threat to the single native Guava plant on Lot 25 which is already subject to existing threats. The potential for indirect threats will be reduced through a range of measures including constructing a permanent fence around the plant and management of stormwater and runoff.

Potential indirect threats on the existing cluster of plants in the on-site conservation area will be reduced as a result of the proposed development and this population will be given a chance to recover and potentially recolonise a larger area.

In conclusion, the development is highly unlikely to result in serious and irreversible impacts to the native Guava population.

## 6.2. Impacts Requiring Offsets

A total of 0.30 ha of moderate to good condition native vegetation is proposed for removal as a result of the proposed residential subdivision. The loss of this vegetation will be offset through biodiversity credits detailed in this report. Impacts on 0.30 ha of Koala habitat will be offset via species credits and planting trees within the offset area on site. The extent of area requiring assessment is mapped in Figure 10.

## 6.3. Impacts Not Requiring Offsets

The area of grassland falling within vegetation zone 2 does not require offsets. As per the BAM, the vegetation integrity score for this zone is below 17 and it is not an Endangered Ecological Community. Potential indirect impacts associated with the development proposal also do not require offsets.

In addition, the species credit species, the Grey-headed Flying Fox, Eastern Bent-wing Bat and Little Bent-wing Bat, detected during this survey period are not required to be offset through species credits as breeding



habitat for these species were not found in the development footprint

## 6.4.Areas Not Requiring Assessment

Areas of exotic dominated grassland and cleared land within the development site do not require assessment as they do not qualify as native vegetation. This includes land affected by the sewer pipelines. This is shown in Figure 11.



Figure 11: Impact summary







## 7.0 Impact Summary

### 7.1. Impact Area

#### 7.1.1. Ecosystem Credits

The following table details the credit requirement for the vegetation zones that will be impacted by the development. The full credit report is provided in Appendix 3.

Table 15: Ecosystem credits required

Zone	Zone/PCT ID	PCT Name	Change in Integrity Score	Impact Area	No. of Credits Required
1	No 690: Moderate	No 690: Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	-59.8	0.3 ha	8
2	No 690: Poor	No 690: Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	-14.1	0.15 ha	0

#### 7.1.2. Species Credits

The following table details the candidate threatened species credit requirements for the proposed subdivision on the development site. The full credit report is provided in Appendix 3.

Table 16: Species credits required

Species	PCT ID	Biodiversity Risk Weighting	Impact Area	Candidate SAI	No. of Credits Required
Koala ( <i>Phascolarctos cinereus</i> )	No 690: Moderate	2	0.30 ha	No	9

### 7.2. Offset Area

The on-site conservation and tree planting area was assessed for its potential to generate ecosystem and species credits to demonstrate that it is meeting part of the offset requirements for the development site. This was achieved via a BAM plot as described in Section 3.1.1 and credit assessment in the BAM calculator. The conservation area contains the same vegetation type as the development site.

The following sections detail the amount of ecosystem and species credits that would be generated by conserving this area.



### 7.2.1. Ecosystem Credits

The following table details the ecosystem credits created by the on-site offset area.

Table 17: Ecosystem credits required

Zone	Zone/PCT ID	PCT Name	Current Integrity Score	Future score with management	Area	No. of Credits Generated
1	No 690: Moderate	No 690: Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion	37.4	51.4	0.27ha	1

### 7.2.2. Species Credits

The Koala has been recorded within the on-site offset area. The following table details the number of Koala species credits that would be generated by the offset area.

Table 18: Species credits required

Species	PCT ID	Habitat condition gain	Area	No. of Credits Generated
Koala ( <i>Phascolarctos cinereus</i> )	No 690: Moderate	14.3	0.27ha	1





## 8.0 Conclusion

This report has assessed the impact of vegetation clearing for a residential subdivision at 165 John Oxley Drive, Port Macquarie. This will require the removal of 0.45 ha of native vegetation within the development footprint.

The development requires consent under Part 4 of the Planning and Assessment Act. The amount of clearing required for the proposal has triggered the requirement for application of the Biodiversity Assessment Method and a Biodiversity Development Assessment Report. The proposal can be assessed using the small area development streamlined assessment module.

One vegetation community comprising two vegetation zones was identified in the development footprint. The total area of native vegetation that will require removal is approximately 0.45 ha. This impact will be offset through an existing offset area that has been established through the South Lindfield KPOM, as well as retirement of ecosystem and species credits.

A single threatened flora species was detected on the development site comprising the Native Guava. One plant was found in the south of Lot 3 and can be retained. Given the significant disturbance history and small extent of vegetation on the subject site, no other threatened flora species are considered potential occurrences. No Endangered Ecological Communities occur within the development site.

The targeted fauna survey detected seven threatened fauna species, the Little Bent-wing Bat, Eastern Bent-wing Bat, Eastern False Pipistrelle, Eastern Coastal Free-tail Bat, Greater Broad-nosed Bat, Grey-headed Flying Fox and the Koala. No suitable breeding/roosting habitat exists in the development footprint for each of the bat species. As such, no species credits are required for these species. The Koala was observed within the subject site during the survey and species credits for this species have been described in this report. As existing offsets for the Koala are currently prescribed under the South Lindfield KPOM, it is recommended that the Koala credit requirements described in this report are discounted.

Direct impacts of the proposal will be limited to vegetation and habitat removal. A number of mitigation measures will be implemented to reduce potential offsite impacts during the construction phase. Indirect impacts that may be associated with the proposal are considered to be minor and can be mitigated through the measures described in Section 5.2.

An assessment of Serious and Irreversible Impacts has found that the Native Guava is a potential SAIL candidate species and has been assessed accordingly under the SAIL guidelines. The proposal will not have any effect on Areas of Outstanding Biodiversity Value.



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## Appendix 1: Flora Species List

Common name	Scientific name
<b>Canopy Trees</b>	
Lemon-scented Gum	<i>Corymbia citriodora</i>
Pink Bloodwood	<i>Corymbia intermedia</i>
Flooded Gum	<i>Eucalyptus grandis</i>
Tallowood	<i>Eucalyptus microcorys</i>
Blackbutt	<i>Eucalyptus pilularis</i>
Swamp Mahogany	<i>Eucalyptus robusta</i>
Forest Red Gum	<i>Eucalyptus tereticornis</i>
Radiata Pine*	<i>Pinus radiata</i> *
<b>Small Trees/Shrubs</b>	
Fringed Wattle	<i>Acacia fimbriata</i>
Asparagus Fern**	<i>Asparagus aethiopicus**</i>
Coffee Bush	<i>Breynia oblongifolia</i>
Camphor Laurel*	<i>Cinnamomum camphora</i> *
Corkwood	<i>Duboisia myoporoides</i>
-	<i>Ficus sp.</i>
Cheese Tree	<i>Glochidion ferdinandi</i>
Balloon Cotton bush*	<i>Gomphocarpus physocarpus</i> *
Lantana**	<i>Lantana camara**</i>
Prickly Tea-tree	<i>Leptospermum juniperinum</i>
Small-leaved Privet**	<i>Ligustrum sinense**</i>
Broad-leaved Paperbark	<i>Melaleuca quinquenervia</i>
Flax-leaved Paperbark	<i>Melaleuca linariifolia</i>
Sieber's Paperbark	<i>Melaleuca sieberi</i>
Prickly-leaved Paperbark	<i>Melaleuca styphelioides</i>
Butterfly Bush*	<i>Oenothera lindheimeri</i> *
Slender Rice Flower	<i>Pimelea linifolia</i>
Wild Yellow Jasmine	<i>Pittosporum revolutum</i>
Native Daphne	<i>Pittosporum undulatum</i>
<b>Native Guava</b>	<b><i>Rhodomyrtus psidioides</i></b>
Molucca Bramble	<i>Rubus moluccanus</i>
Native Raspberry	<i>Rubus parvifolius</i>
Blackberry*	<i>Rubus sp.*</i>
Wild Tobacco Bush*	<i>Solanum mauritianum</i> *
Cocos Palm*	<i>Syagrus romanzoffiana</i> *
Scentless Rosewood	<i>Synoum glandulosum</i>
Tie Bush	<i>Wikstroemia indica</i>
<b>Vines and Scramblers</b>	
Climbing Asparagus Fern**	<i>Asparagus plumosus**</i>



Appleberry	<i>Billardiera scandens</i>
-	<i>Desmodium rhytidophyllum</i>
Wombat Berry	<i>Eustrephus latifolius</i>
Scrambling Lily	<i>Geitonoplesium cymosum</i>
-	<i>Glycine clandestina</i>
-	<i>Glycine tabacina</i>
Climbing Guinea Flower	<i>Hibbertia scandens</i>
-	<i>Polymeria calycina</i>
Lawyer Vine	<i>Smilax australis</i>
Snake Vine	<i>Stephania japonica</i>
<b>Grasses</b>	
Threeawn Speargrass	<i>Aristida vagans</i>
Narrow-leafed Carpet Grass**	<i>Axonopus fissifolius**</i>
Kikuyu Grass*	<i>Cenchrus clandestinus*</i>
Barbed Wire Grass	<i>Cymbopogon refractus</i>
Couch	<i>Cynodon dactylon</i>
Slender Flat-sedge	<i>Cyperus gracilis</i>
-	<i>Cyperus sp.</i>
Shorthair Plumegrass	<i>Dichelachne micrantha</i>
Tufted Hedgehog-grass	<i>Echinopogon caespitosus</i>
Panic Veldtgrass**	<i>Ehrharta erecta**</i>
Boarered Panic	<i>Entolasia marginata</i>
Wiry Panic	<i>Entolasia stricta</i>
Brown's Lovegrass	<i>Eragrostis brownii</i>
Tall Saw-sedge	<i>Gahnia clarkei</i>
Blady Grass	<i>Imperata cylindrica</i>
Blown Grass	<i>Lachnagrostis filiformis</i>
Wimmera Ryegrass*	<i>Lolium rigidum*</i>
Wattle Mat-rush	<i>Lomandra filiformis</i>
Spiny-headed Mat-rush	<i>Lomandra longifolia</i>
Many-flowered Mat-rush	<i>Lomandra multiflora</i>
Weeping Grass	<i>Microlaena stipoides</i>
Australian Basket Grass	<i>Oplismenus aemulus</i>
Paspalum**	<i>Paspalum dilatatum**</i>
Broadleaf Paspalum*	<i>Paspalum mandiocanum*</i>
Vasey Grass	<i>Paspalum urvillei</i>
South African Pigeon Grass	<i>Setaria sphacelata</i>
Parramatta Grass*	<i>Sporobolus africanus*</i>
Giant Parramatta Grass**	<i>Sporobolus fertilis**</i>
<b>Groundcovers</b>	
Billygoat Weed*	<i>Ageratum houstonianum*</i>
-	<i>Baumea juncea</i>





Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Cobblers Peg	<i>Bidens pilosa</i> **
Blue Trumpet	<i>Brunoniella australis</i>
Indian Pennywort	<i>Centella asiatica</i>
Spear Thistle*	<i>Cirsium vulgare</i> *
Native Wondering Jew	<i>Commelina cyanea</i>
Fleabane*	<i>Conyza bonariensis</i> *
Celery Weed*	<i>Cyclosporum leptophyllum</i> *
Blue Flax Lily	<i>Dianella caerulea</i>
Kidney Weed	<i>Dichondra repens</i>
Saw Sedge	<i>Gahnia clarkei</i>
scrambling Lily	<i>Geitonoplesium cymosum</i>
Cranesbill Geranium	<i>Geranium molle</i>
Raspwort	<i>Gonocarpus micranthus</i>
-	<i>Gonocarpus micranthus</i>
Swamp Goodenia	<i>Goodenia bellidifolia</i>
Forest Goodenia	<i>Goodenia hederacea</i>
-	<i>Hybanthus stellarioides</i>
Stinky Pennywort	<i>Hydrocotyle laxiflora</i>
Flatweed*	<i>Hypochaeris radicata</i> *
Harsh Ground Fern	<i>Hypolepis muelleri</i>
-	<i>Juncus usitatus</i>
Water Primrose	<i>Ludwigia peploides</i>
Scarlet Pimpernel	<i>Lysimachia arvensis</i> *
Scotch Thistle	<i>napordum acanthium</i>
Spotted knotweed	<i>Persicaria strigosa</i>
Woolly Waterlily	<i>Philydrium lanuginosum</i>
Ink Weed*	<i>Phytolacca octandra</i> *
Lamb's Tounge*	<i>Plantago lanceolata</i> *
-	<i>Poranthera microphylla</i>
Whiteroot	<i>Pratia purpurascens</i>
Pastel Flower	<i>Pseuderanthemum variabile</i>
Common Bracken	<i>Pteridium esculentum</i>
-	<i>Richardia stellaris</i> *
Fireweed**	<i>Senecio madagascariensis</i> **
Paddy's Lucerne*	<i>Sida rhombifolia</i> *
Indian Weed*	<i>Sigesbeckia orientalis</i> *
Blackberry Nightshade*	<i>Solanum nigrum</i> *
Singapore Daisy*	<i>Sphagneticola trilobata</i> *
Yellow Autumn-lily	<i>Tricoryne elatior</i>
Purpletop**	<i>Verbena bonariensis</i> **
* denotes exotic species; ** denote High Threat Exotic species	
<b>Bold:</b> Critically Endangered under NSW BC Act	



## Appendix 2: Fauna Species List

Group	Common Name	Species	Detection Method
Birds	King Parrot	<i>Alisterus scapularis</i>	HC
	Little Wattlebird	<i>Anthochaera chroptera</i>	Vis
	White-necked Heron	<i>Ardea pacifica</i>	Vis
	Little Corella	<i>Cacatua sanguinea</i>	Vis
	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	HC, Vis
	Pheasant Coucal	<i>Centropus phasianus</i>	HC
	Black-faced Cuckoo Shrike	<i>Coracina novaehollandiae</i>	HC
	White-throated Tree-creeper	<i>Cornobates leucophaeus</i>	HC
	Torresian Crow	<i>Corvus orru</i>	Vis
	Australian Magpie	<i>Cracticus tibicen</i>	Cam, HC, Vis
	Grey Butcherbird	<i>Cracticus torquatus</i>	HC
	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	HC, Vis
	White-faced Heron	<i>Egretta novahollandia</i>	Vis
	Galah	<i>Eolophus roseicapilla</i>	Vis
	Dollar Bird	<i>Eurystomus orientalis</i>	Vis
	Magpie Lark	<i>Grallina cyanoleuca</i>	HC, Vis
	Painted Honeyeater	<i>Grantiella picta</i>	Vis
	White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	Vis
	Whistling Kite	<i>Haliastur sphenurus</i>	Vis
	Noisy Miner	<i>Manorina melanocephala</i>	Cam, HC, Vis
	Crested Pigeon	<i>Ocyphaps lophotes</i>	Vis
	Noisy Friarbird	<i>Philemon comicalatus</i>	HC, Vis
	Eastern Rosella	<i>Platycercus eximius</i>	HC, Vis
	Tawny Frogmouth	<i>Podargus strigoides</i>	Vis
	Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	HC
	Indian Myna*	<i>Sturnis tristis*</i>	Vis
	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	Vis
	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	HC, Vis
	Masked Lapwing	<i>Vanellus miles</i>	HC, Vis
Mammals	White-striped Free-tailed Bat	<i>Austronomus australis</i>	Anabat
	Gould's Wattled Bat	<i>Chalinolobus gouldii</i>	Anabat
	Chocolate Wattled Bat	<i>Chalinolobus morio</i>	Anabat
	Fallow Deer*	<i>Dama dama*</i>	Cam, Sc, Vis
	<b>Eastern False Pipistrelle</b>	<b><i>Falsistrellus tasmaniensis</i></b>	Anabat
	Eastern Grey Kangaroo	<i>Macropus giganteus</i>	Sc, Vis
	Red-necked Wallaby	<i>Macropus rufogriseus</i>	Cam
	<b>Little Bent-wing Bat</b>	<b><i>Miniopterus australis</i></b>	Anabat
	<b>Eastern Bent-wing Bat</b>	<b><i>Miniopterus schreibersii oceanensis</i></b>	Anabat
	<b>Eastern Coastal Free-tail Bat</b>	<b><i>Mormopterus norfolkensis</i></b>	Anabat
	European Rabbit *	<i>Oryctolagus cuniculus*</i>	Vis
	Ride's Free-tailed Bat	<i>Ozimops ridei</i>	Anabat
	Sugar Glider	<i>Petaurus breviceps</i>	Cam
	<b>Koala</b>	<b><i>Phascolarctos cinereus</i></b>	Sc, Vis



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

Group	Common Name	Species	Detection Method
	Common Ringtail	<i>Pseudocheirus peregrinus</i>	Cam
	<b>Grey-headed Flying Fox</b>	<b><i>Pteropus poliocephalus</i></b>	Vis
	Black Rat	<i>Rattus rattus</i>	Cam
	<b>Greater Broad-nosed Bat</b>	<b><i>Scoteanax rueppellii</i></b>	Anabat
	Eastern Broad-nosed Bat	<i>Scotorepens orion</i>	Anabat
	Brush-tail Possum	<i>Trichosurus vulpecula</i>	Cam
	Large Forest Bat	<i>Vespadelus darlingtoni</i>	Anabat
	Eastern Forest Bat	<i>Vespadelus pumilus</i>	Anabat
	Red Fox*	<i>Vulpes vulpes</i> *	Cam, Vis
Observation Key: Cam – PIR camera; HC – heard calling; Sc - scats; Vis - visual observation Bold - Vulnerable under <i>BC Act</i> and/or <i>EPBC Act</i> ; * denotes exotic species			



Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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## Appendix 3: Biodiversity Credit Report



## BAM Credit Summary Report

### Proposal Details

Assessment Id	00013767/BAAS18146/19/00014462	Proposal Name	Lot 3 John Oxley Drive - Streamlined	BAM data last updated *	27/09/2019
Assessor Name	Will Steggall	Report Created	04/10/2019	BAM Data version *	15
Assessor Number	BAAAS17107	BAM Case Status	Finalised	Date Finalised	03/10/2019
Assessment Revision	0	Assessment Type	Part 4 Developments (Small Area)		

\* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

### Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetation zone name	Vegetation integrity loss / gain	Area (ha)	Constant	Species sensitivity to gain class (for BRW)	Biodiversity risk weighting	Potential SAI	Ecosystem credits
<b>Blackbutt - Tallowwood dry grassy open forest of the central parts NSW North Coast Bioregion</b>								
1	690_Moderate	59.8	0.3	0.25	High Sensitivity to Potential Gain	1.75		8

Assessment Id	00013767/BAAS18146/19/00014462	Proposal Name	Lot 3 John Oxley Drive - Streamlined
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Page 1 of 2





BAM Credit Summary Report

2 690_Low	14.1	0.2	0.25	High Sensitivity to Potential Gain	1.75		0
						Subtotal	8
						Total	8

Species credits for threatened species

Vegetation zone name	Habitat condition (HC)	Area (ha) / individual (HL)	Constant	Biodiversity risk weighting	Potential SAI	Species credits
<b>Phascolarctos cinereus / Koala ( Fauna )</b>						
690_Moderate	59.8	0.29	0.25	2	False	9
					Subtotal	9



## Appendix 4: SEPP 44 Assessment

A complete SEPP 44 Koala Habitat Assessment for the development site and adjoining land has been undertaken by Biodiversity Australia in 2014. This assessment determined that the development site was considered to form a part of a larger area of Core Koala Habitat due to:

- evident generational persistence of Koalas in the study area;
- the presence of female Koalas on site;
- the presence of a breeding male in the study area;
- ongoing records of Koalas within associated habitats; and
- previous activity levels.

These areas of Core Koala Habitat are regularly used by a small local aggregate of Koalas, which form part of a local population that extends to the south, southeast and southwest over a larger landscape of occupied Koala habitat.

As a result of this assessment, the South Lindfield Koala Plan of Management (KPoM) (Biodiversity Australia 2018) has been developed and implemented as part of the South Lindfield rezoning.

The following provisions in the KPoM are relevant for development on Lot 3.

### Offset Plantings

The removal of Koala food trees on Lot 3 will be subject to offset tree plantings within the offsite area in the southwest of the property. These will be managed and maintained under a VMP. The KPoM specifies the following planting specifications:

*"The offset plantings are to comprise Tallowwoods, Forest Red Gum and Swamp Mahogany, with species selection targeting suitable edaphics at the planting location.*

*All Koala offset plantings are to be located in available canopy spacings within existing forest or planted out at 10m spacings with accompanied mid and ground storey plantings to create a fully structured forest.*

*These plantings will be managed and monitored as per the specifications in Appendix 1. All plantings are to be maintained in perpetuity with any failures to be replaced in accordance with this KPoM.*

*Plantings must not conflict with current or future planning, engineering, infrastructure and bushfire requirements, including the 10/50 Vegetation Clearing Code of Practice."*

### Clearing Management

In order to minimise the risk of Koalas being killed or injured during any clearing works on the site; the following measures must be implemented:

- The area of work is to be inspected for Koalas by an ecologist immediately prior to commencement of any vegetation removal.



- The ecologist is to remain on-site during vegetation removal to maintain surveillance for Koalas and rescue other fauna as required.
- No such vegetation removal is to be carried out while any Koala is present in the area of operation unless a 50m buffer is established; or if Koala does not voluntarily move on, is removed by Port Macquarie Koala Hospital staff.
- A report by the ecologist is to be provided within 7 days of the clearing event detailing methods and results of the supervision.

## Road Design and Speed Controls

To reduce the risk of Koala road strike, the following measures will need to be implemented:

- If a formal road is directed through the southwest boundary of Lot 3 DP 533058, Koala crossing points will be required.
- Koala crossing and warning signage should be erected at crossing points. The Port Macquarie Koala Hospital number is to be displayed on the sign.
- Street lighting to be strategically positioned at the southwest corner of Lot 3 if required.
- Street lighting along roads where required to help motorists see any Koalas that have wandered onto roads

## Barriers and Fencing

Development of the site will introduce new barriers for Koalas in the form of fences, hence the following measures should be implemented:

- To separate Koalas from the hazards of residential areas, fencing is to be erected around the E2 public reserve. Three one way bridges will be installed on the northern boundary of the E2 public land to allow for koala access into the reserve. Three two-way bridges will be provided on the southern boundary with the Crematorium.
- No fence design (either temporary or permanent) is to include a material or design feature that may potentially injure Koalas (or other fauna) e.g. barbs and loose wire.
- Retro-fitting the crematorium boundary fencing with Koala ladders is recommended to increase access to this habitat, and general linkages across the wider landscape.

## Bushfire

The following measures are to be implemented in regards to bushfire:

- The designation/location and management of APZs is to minimise perceived risk of vulnerability to bushfire and hence demand for hazard reduction in adjacent habitat including retained habitat and offset areas.



- Offsets are to be located to avoid conflicts with APZs and negate risk for their potential to be removed by legislation changes, etc.

## Disease

Disease is a current threat to the local Koala aggregate and habitat loss associated with development of the site has the potential to increase the current disease risk. To help reduce this, the following measures are to be implemented:

- Contact details for Koala Hospital at site office during construction.
- Koala warning signage is to detail contact details for the Koala Hospital to facilitate prompt reporting of sick or injured Koalas.



## Appendix 5: PMHC DCP Assessment

Under the Port Macquarie-Hastings Council Local Environmental Plan (PMHC LEP) 2011, Council has prepared and implemented the PMHC Development Control Plan (DCP) 2013. The DCP has a specific section titled Environmental Management. This section has provisions for hollow-bearing trees, Koala food trees (KFT), Endangered Ecological Communities (EEC) and Riparian areas.

### Hollow-bearing Trees

No hollow-bearing trees were identified on site, therefore no assessment or compensatory measures are required.

### Koala Food Trees

Primary Koala food trees listed under the Port Macquarie Hastings Council Development Control Plan 2013 have previously been located and flagged within and adjacent to the clearing footprint. Details of these are available in the South Lindfield Koala Plan of Management (KPoM) (Biodiversity Australia 2018).

The Port Macquarie Hastings Council Development Control Plan 2013 states that the removal of Koala browse tree species is to be replaced at a ratio of 2:1 on site or at a secure offsite location agreed to by Council.

These offset provisions apply to the Koala food trees within the development footprint and offset requirements for these have been accounted for within the South Lindfield KPoM. Planting specifications, monitoring requirements and compliance checks for these offsets are further detailed within this KPoM.

### Endangered Ecological Communities

No Endangered Ecological Communities are located within the development site, hence there is no requirement for a buffer.

### Riparian Areas

No defined watercourses occur on the development site, hence there is no requirement for riparian buffers.





## Appendix 6: EPBC Act MNES Assessment

The provisions of the EPBC Act 1999 require determination of whether the proposal has, will or is likely to have a significant impact on a “matter of national environmental significance”. These matters are listed and addressed in summary as follows:

Table 19: Summary of MNES

Category	Relevance	Significant Impact Likely?
World Heritage Properties	The site is not listed as a World Heritage area.	N/A
National Heritage Places	The site is not listed as a National Heritage Place.	N/A
Wetlands of International Importance	The site does not contain important wetlands.	N/A
Great Barrier Reef Marine Park	The proposal does not affect the Great Barrier Reef Marine Park.	N/A
Commonwealth Marine Environment (CME)	The site is not within the CME.	N/A
Listed Threatened Ecological Communities	No listed TEC's occur in the study area or are affected by the proposal.	N/A
Listed Threatened Species	The Koala (Vulnerable) and Grey-Headed Flying Fox (Vulnerable) were recorded on site.	No threatened species is likely to be significantly affected by the proposal as assessed below.
Listed Migratory Species	Several migratory birds are considered potential occurrences.	No Migratory species is likely to be significantly affected by the proposal as assessed below.
Nuclear Actions	The proposal is not a nuclear action.	N/A
A water resource, in relation to coal seam gas development and large coal mining development	The proposal is not a mining development.	N/A

The proposal thus is not considered to require referral to Department of Environment and Energy (DEE) for approval under the EPBCA 1999.



## Koala Referral Assessment

The habitat on site has been assessed using the Koala habitat assessment tool from the *EPBC Act* Referral Guidelines (DotE 2014). To qualify as critical habitat, it must score 5 or more. This is shown in the following table:

Table 20: Koala habitat assessment

Attribute	Score	Reason	
Koala occurrence	2	Desktop	A number of Koala records occur within 2km of the site on Bionet Atlas.
		On-ground	Koala recorded on site during the survey.
Vegetation structure and composition	2	Desktop	PMHC vegetation mapping of site shows Secondary (A) Koala habitat on site comprising Blackbutt Shrubby Moist Forest.
		On-ground	Vegetation on site contains two known Koala food tree species.
Habitat connectivity	2	Site habitat is contiguous with other areas of habitat in the south and south-west.	
Key existing threats	1	Desktop	OEH Bionet has records of Koala road kill further west on John Oxley Drive.
		On-ground	John Oxley Drive is unfenced and would pose a risk of road strike.  Domestic and wild dogs in surrounding areas would be a high threat to local Koalas.
Recovery value	1	<p>The following factors indicate that it is uncertain if the habitat to be removed is important for achieving the interim recovery objectives for the Koala:</p> <ul style="list-style-type: none"> <li>• Site contains preferred foraging resources.</li> <li>• Risk of car strike in study area.</li> <li>• Koala activity in study area.</li> <li>• Removal of site vegetation will not affect movement throughout the regional corridor.</li> </ul>	
Total	8	Site qualifies as critical habitat	

As per the Koala habitat assessment tool, the site qualifies as critical habitat. An assessment has been undertaken to determine if the proposal will adversely affect this habitat and/or interfere substantially with the recovery of the Koala and require referral to the Minister.



The following table derived from the Koala Referral Guidelines (DoE 2014) assesses whether the proposal is likely to adversely affect habitat critical to the survival of the Koala.

Table 21: Critical habitat assessment

Factor	Y/N	Reason
Does impact area contain habitat critical to the survival of the Koala	Y	Site scores eight as per the Koala habitat assessment tool.
Do the areas proposed to be cleared contain known Koala food trees	Y	Habitat to be removed contains primary browse species that may be used by the Koala.
Are you proposing to clear ≤2 ha of habitat containing known Koala food trees in an area with a habitat score of ≤5	N	Proposal will remove a total of 0.30 ha of open forest vegetation that scores eight.
Are you proposing to clear >20 ha of habitat containing known Koala food trees in an area with a habitat score of ≥8	N	Proposal will remove a total of 0.30 ha of open forest vegetation that scores eight.
Outcome	Impacts uncertain, further assessment required.	

## Protected Species Assessments: Koala and Grey-headed Flying Fox

The guidelines to assessment of significance to this Matter, define an action is likely to have a significant impact on a Vulnerable and/or Endangered species, if it will:

- Lead to a long-term decrease in the size of an important population (Vulnerable) or population (Endangered) of a species, or:
- Reduce the area of occupancy of an important population (Vulnerable) or population (Endangered), or:
- Fragment an existing important population (Vulnerable) or population (Endangered) into two or more populations, or:
- Adversely affect habitat critical to the survival of a species, or:
- Disrupt the breeding cycle of an important population (Vulnerable) or population (Endangered), or:
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:
- Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable or Endangered species, becoming established in the Vulnerable and/or Endangered species' habitat, or:
- Introduce a disease that may cause a species to decline, or:



- i) Interferes substantially with the recovery of the species.

An *important population* is one that is necessary for a species' long-term recovery. This includes such populations as:

- Key populations either for breeding or dispersal.
- Populations that are necessary for maintaining genetic diversity, and or:
- Populations that are near the limit of the species range:

### Assessment of Significance

This section addresses each of the previous points listed.

- a) Lead to a long-term decrease in the size of an important population (Vulnerable) or population (Endangered) of a species, or:**

#### Grey-headed Flying Fox

The proposal will require the removal of a small extent of potential foraging habitat which provides an extremely small nectar resource for the population relative to its ecological requirements and local extent of potential habitat. While in very strict terms a negative effect, this loss will have a very low impact on the local Grey-headed Flying Fox population as the site in total may only form a very minute fraction of this species wider opportunistic/seasonally variable foraging range.

The study area is also not a known roost (Eby 2000) and better quality alternative foraging habitat in the locality is evidently extensive. The proposal will thus not lead to a long-term decrease in the size of an important population.

#### Koala

The proposal will require the removal of preferred Koala food trees within the subject site. These will be offset through plantings as per the South Lindfield KPOM.

Higher quality Koala habitat is located to the south and south-west of the site and a number of preferred Koala food trees occur throughout this area.

Given the presence of higher quality habitat in the area, the current potential to support Koalas will be retained post development and the proposal would not lead to a long-term decrease of an important population.

- b) Reduce the area of occupancy of an important population (Vulnerable) or population (Endangered), or:**

For the Grey-headed Flying Fox, the proposal will not result in the loss of any roosting habitat, as the site is not known or suitable to be a roost site. Foraging habitat of this species is measured in terms of hundreds of thousands of hectares, hence the loss of habitat on site is insignificant relative to the area of occupancy.

For the Koala, the proposal will remove preferred foraging species in the subject site which will lead to a minor reduction in the area of occupancy. The habitat contained within the site however is relatively small in



comparison to higher quality habitat remaining to the south and southwest. Trees to be removed will be offset through plantings which will replace lost habitat over time.

**c) Fragment an existing important population (Vulnerable) or population (Endangered) into two or more populations, or:**

The proposal will not create a barrier to movement for the Grey-headed Flying Fox. Thus it will not fragment an existing important population.

The proposal will lead to further fragmentation of Koala habitat in the South Lindfield area, however the proposal will not isolate any areas of currently interconnected habitat. The proposed offset area in the south of Lot 3 and on adjoining land to the west will aim to consolidate Koala habitat and minimise the risk of Koalas crossing urban areas and major roads.

**d) Adversely affect habitat critical to the survival of a species, or:**

*“Critical habitat”* refers to areas critical to the survival of a species or ecological community and may include areas that are necessary for/to:

- Activities such as foraging, breeding, roosting or dispersal
- Succession
- Maintain genetic diversity and long term evolutionary development, or
- Reintroduction of populations or recovery of the species/community.

The vegetation to be removed on site is not considered critical habitat for the Grey-headed Flying Fox. Post-development, other habitats in the locality will retain the potential to support this species, hence helping support the viability of the local populations.

As demonstrated previously, the site qualifies as critical habitat for the Koala. To determine if the proposal is likely to adversely affect this habitat (and thus require a referral) the proposed development has been assessed against the following factors (DoE 2014):

- **The score calculated for the impact area:** The site scored 8 out of a possible 10. This is due to the presence of Koala food trees on site, Koala recorded on site and the sites connectivity to larger areas of habitat nearby. The site scored one for key existing threats due to the medium threat level posed by dogs in surrounding residential areas and potential for vehicle strike.
- **Amount of Koala habitat being cleared:** The proposal will remove approximately 0.30 ha of vegetation. This level of clearing is much less than the threshold in the referral guidelines for adverse impacts in critical habitat.
- **Method of clearing:** The proposal will require removal of the vegetation within the development footprint. Koala food trees within close proximity to the development footprint will be clearly marked for retention. It is recommended that an ecologist conducts pre-clearing surveys for Koalas prior to vegetation removal.
- **The density or abundance of Koalas:** There is a high number of Koala records in the locality, however the wider population is estimated to be small as determined in the South Lindfield KPoM.





- **Level of fragmentation caused by the clearing:** The proposal will lead to a minor increase in habitat fragmentation in an already fragmented landscape. Habitat retention and offset plantings will help consolidate Koala habitat in the South Lindfield area.

Given the above, the proposal is not considered to significantly affect habitat critical to the survival of the Koala.

**e) Disrupt the breeding cycle of an important population (Vulnerable) or population (Endangered) or:**

The proposal is unlikely to disrupt the breeding cycle of an important population/population given that:

- The site does not represent potential breeding habitat for the Grey-headed Flying Fox;
- The subject species have large ranges that far exceed the site; and
- The extent of alternative potential habitat in the locality is sufficient to support the local populations and offset plantings will see the habitat lost replaced over time.

**f) Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:**

As detailed previously, the nature of the development and degree of vegetation/habitat loss is not significant enough to affect a population of the subject species to the point it could cause a decline of the species.

**g) Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable and/or Endangered species, becoming established in the Vulnerable species' habitat, or:**

No new species that affects the Grey-headed Flying Fox or Koala is likely to be introduced as a direct result of the proposed development.

**h) Introduce disease that may cause a species to decline; or**

No disease that affects the subject species is likely to be introduced as a direct result of the proposal.

**i) Interferes substantially with the recovery of the species.**

As detailed previously, the proposal will result in the removal/modification of a relatively minute area of foraging habitat for two of the subject fauna species that is not significant enough to interfere with their recovery.

### Conclusion

The proposal is not considered likely to have a significant impact on the Grey-headed Flying Fox or Koala and thus a referral to DEE is not required.

### Migratory species

No migratory bird species were recorded during the field survey. The habitats present across the site provide potential habitat for a few listed migratory species such as the Cattle Egret, White-throated Needle-tail Swift and Fork-tailed Swift. These species are collectively assessed below.



The guidelines to assessment of significance to this Matter, define an action as likely to have a significant impact on a migratory species, if it will:

- a) Substantially modify (including fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or;
- b) Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat of the migratory species, or;
- c) Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species.

An *important area of habitat* is:

- 1) Habitat used by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, or;
- 2) Habitat utilised by a migratory species which is at the limit of the species range, or;
- 3) Habitat within an area where the species is declining.

### Assessment of Significance

This section addresses each of the previous points listed.

- a) **Substantially modify (including fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or;**

The site was not considered to be *important habitat* for the migratory species likely to occur there. Overall, the development will displace a minor area of vegetation which is unlikely to represent *substantial* modification of such habitat which is abundant elsewhere in the locality.

- b) **Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat of the migratory species, or;**

An invasive species is one that may become established in the habitat and harm the migratory species by direct competition, modification of habitat, or predation. No such invasive species is to be introduced by the proposal.

- c) **Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species**

The site is unlikely to be important habitat for migratory species and their lifecycles are unlikely to be disrupted by the proposed development. Species which fly over the site (Swifts and Needletails) are unlikely to be affected as they would rarely land there and are also regularly observed flying over urban centres (pers. obs.).

### Conclusion

In view of the above, no migratory bird is considered likely to be significantly affected by the proposal.



## Appendix 7: MNES Search Results



Australian Government  
Department of the Environment and Energy

## EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 17/01/19 12:46:37

[Summary](#)

[Details](#)

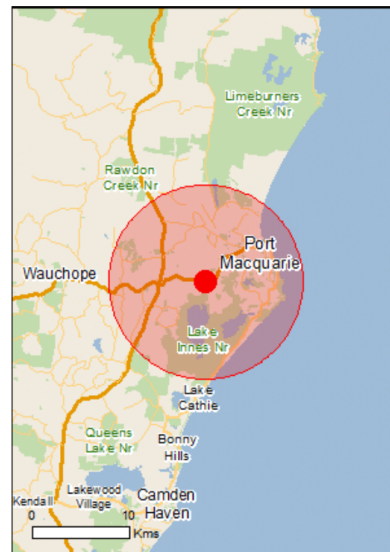
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

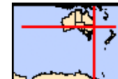
[Acknowledgements](#)



This map may contain data which are  
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[Coordinates](#)

Buffer: 10.0Km



## Summary

### Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance:</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	4
<a href="#">Listed Threatened Species:</a>	70
<a href="#">Listed Migratory Species:</a>	66

### Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

<a href="#">Commonwealth Land:</a>	6
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	88
<a href="#">Whales and Other Cetaceans:</a>	12
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None

### Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

<a href="#">State and Territory Reserves:</a>	9
<a href="#">Regional Forest Agreements:</a>	1
<a href="#">Invasive Species:</a>	37
<a href="#">Nationally Important Wetlands:</a>	1
<a href="#">Key Ecological Features (Marine)</a>	None



## Details

## Matters of National Environmental Significance

Listed Threatened Ecological Communities		[ Resource Information
For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.		
Name	Status	Type of Presence
<a href="#">Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community</a>	Endangered	Community likely to occur within area
<a href="#">Littoral Rainforest and Coastal Vine Thickets of Eastern Australia</a>	Critically Endangered	Community likely to occur within area
<a href="#">Lowland Rainforest of Subtropical Australia</a>	Critically Endangered	Community likely to occur within area
<a href="#">Subtropical and Temperate Coastal Saltmarsh</a>	Vulnerable	Community likely to occur within area
Listed Threatened Species		[ Resource Information
Name	Status	Type of Presence
<b>Birds</b>		
<a href="#">Anthochaera phrygia</a> Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Botaurus poiciloptilus</a> Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Dasyornis brachypterus</a> Eastern Bristlebird [533]	Endangered	Species or species habitat likely to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea antipodensis gibsoni</a> Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

<a href="#">Diomedea exulans</a>		
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Erythrotriorchis radiatus</a>		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Fregetta grallaria grallaria</a>		
White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Grantiella picta</a>		
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
<a href="#">Lathamus discolor</a>		
Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Limosa lapponica baueri</a>		
Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Limosa lapponica menzbieri</a>		
Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Macronectes giganteus</a>		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a>		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a>		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Pachyptila turtur subantarctica</a>		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Phoebastria fusca</a>		
Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#">Pterodroma leucoptera leucoptera</a>		
Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
<a href="#">Pterodroma neglecta neglecta</a>		
Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area
<a href="#">Rostratula australis</a>		
Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<a href="#">Thalassarche bulleri</a>		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche bulleri platei</a>		
Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area

<a href="#"><u>Thalassarche cauta cauta</u></a>		
Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche cauta steadi</u></a>		
White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#"><u>Thalassarche eremita</u></a>		
Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Thalassarche impavida</u></a>		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche melanophris</u></a>		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche salvini</u></a>		
Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<b>Fish</b>		
<a href="#"><u>Epinephelus daemeli</u></a>		
Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area
<b>Frogs</b>		
<a href="#"><u>Litoria aurea</u></a>		
Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Mixophyes iteratus</u></a>		
Giant Barred Frog, Southern Barred Frog [1944]	Endangered	Species or species habitat may occur within area
<b>Insects</b>		
<a href="#"><u>Argynnis hyperbius inconstans</u></a>		
Australian Fritillary [88056]	Critically Endangered	Species or species habitat likely to occur within area
<b>Mammals</b>		
<a href="#"><u>Balaenoptera musculus</u></a>		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Chalinolobus dwyeri</u></a>		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Dasyurus maculatus maculatus (SE mainland population)</u></a>		
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Eubalaena australis</u></a>		
Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
<a href="#"><u>Megaptera novaeangliae</u></a>		
Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Petauroides volans</u></a>		
Greater Glider [254]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Petrogale penicillata</u></a>		
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area

<a href="#"><u>Phascogale cinerea</u></a> (combined populations of Qld, NSW and the ACT)		
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Potorous tridactylus</u></a>		
Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Pseudomys novaehollandiae</u></a>		
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Pteropus poliocephalus</u></a>		
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
<b>Plants</b>		
<a href="#"><u>Acronychia littoralis</u></a>		
Scented Acronychia [8582]	Endangered	Species or species habitat likely to occur within area
<a href="#"><u>Allocasuarina defungens</u></a>		
Dwarf Heath Casuarina [21924]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Allocasuarina thalassoscopia</u></a>		
[21927]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Arthraxon hispidus</u></a>		
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Asperula asthenes</u></a>		
Trailing Woodruff [14004]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Cryptostylis hunteriana</u></a>		
Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area
<a href="#"><u>Cynanchum elegans</u></a>		
White-flowered Wax Plant [12533]	Endangered	Species or species habitat known to occur within area
<a href="#"><u>Euphrasia arguta</u></a>		
[4325]	Critically Endangered	Species or species habitat may occur within area
<a href="#"><u>Macadamia integrifolia</u></a>		
Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Melaleuca biconvexa</u></a>		
Biconvex Paperbark [5583]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Parsonsia dorrigoensis</u></a>		
Milky Silkpod [64684]	Endangered	Species or species habitat likely to occur within area
<a href="#"><u>Phaius australis</u></a>		
Lesser Swamp-orchid [5872]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Syzygium paniculatum</u></a>		
Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thesium australe</u></a>		
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
<b>Reptiles</b>		

<a href="#">Caretta caretta</a>		
Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Chelonia mydas</a>		
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dermochelys coriacea</a>		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Eretmochelys imbricata</a>		
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Natator depressus</a>		
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<b>Sharks</b>		
<a href="#">Carcharias taurus (east coast population)</a>		
Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat likely to occur within area
<a href="#">Carcharodon carcharias</a>		
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Rhincodon typus</a>		
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
<b>Listed Migratory Species</b>		
<b>[ Resource Information</b>		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
<b>Migratory Marine Birds</b>		
<a href="#">Anous stolidus</a>		
Common Noddy [825]		Species or species habitat likely to occur within area
<a href="#">Apus pacificus</a>		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardenna carneipes</a>		
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
<a href="#">Calonectris leucomelas</a>		
Streaked Shearwater [1077]		Species or species habitat may occur within area
<a href="#">Diomedea antipodensis</a>		
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a>		
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea exulans</a>		
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Fregata ariel</a>		
Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area



<a href="#"><u>Fregata minor</u></a>		
Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
<a href="#"><u>Macronectes giganteus</u></a>		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Macronectes halli</u></a>		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Phoebastria fusca</u></a>		
Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Sternula albifrons</u></a>		
Little Tern [82849]		Species or species habitat may occur within area
<a href="#"><u>Thalassarche bulleri</u></a>		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche cauta</u></a>		
Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
<a href="#"><u>Thalassarche eremita</u></a>		
Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Thalassarche impavida</u></a>		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche melanophris</u></a>		
Black-browed Albatross [64472]	Vulnerable	Species or species habitat may occur within area
<a href="#"><u>Thalassarche salvini</u></a>		
Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#"><u>Thalassarche steadi</u></a>		
White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<b>Migratory Marine Species</b>		
<a href="#"><u>Balaena glacialis australis</u></a>		
Southern Right Whale [75529]	Endangered*	Species or species habitat likely to occur within area
<a href="#"><u>Balaenoptera edeni</u></a>		
Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#"><u>Balaenoptera musculus</u></a>		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#"><u>Carcharodon carcharias</u></a>		
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
<a href="#"><u>Caretta caretta</u></a>		
Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#"><u>Chelonia mydas</u></a>		
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area

<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dugong dugon</a> Dugong [28]		Species or species habitat may occur within area
<a href="#">Eretmochelys imbricata</a> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Lamna nasus</a> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
<a href="#">Manta alfredi</a> Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
<a href="#">Manta birostris</a> Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
<a href="#">Sousa chinensis</a> Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
<b>Migratory Terrestrial Species</b>		
<a href="#">Cuculus optatus</a> Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]		Species or species habitat known to occur within area
<a href="#">Monarcha melanopsis</a> Black-faced Monarch [609]		Species or species habitat known to occur within area
<a href="#">Monarcha trivirgatus</a> Spectacled Monarch [610]		Species or species habitat known to occur within area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area
<b>Migratory Wetlands Species</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area

<a href="#">Arenaria interpres</a> Ruddy Turnstone [872]		Roosting known to occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Calidris ruficollis</a> Red-necked Stint [860]		Roosting known to occur within area
<a href="#">Charadrius bicinctus</a> Double-banded Plover [895]		Roosting known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
<a href="#">Gallinago megala</a> Swinhoe's Snipe [864]		Roosting likely to occur within area
<a href="#">Gallinago stenura</a> Pin-tailed Snipe [841]		Roosting likely to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Numenius minutus</a> Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area
<a href="#">Numenius phaeopus</a> Whimbrel [849]		Roosting known to occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area
<a href="#">Pluvialis fulva</a> Pacific Golden Plover [25545]		Roosting known to occur within area
<a href="#">Pluvialis squatarola</a> Grey Plover [865]		Roosting known to occur within area
<a href="#">Tringa brevipes</a> Grey-tailed Tattler [851]		Roosting known to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
<a href="#">Xenus cinereus</a> Terek Sandpiper [59300]		Roosting known to occur within area

## Other Matters Protected by the EPBC Act

## Commonwealth Land [ Resource Information

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

## Name

Commonwealth Land - Australian Postal Commission  
 Commonwealth Land - Australian Postal Corporation  
 Commonwealth Land - Australian Telecommunications Commission  
 Commonwealth Land - Commonwealth Bank of Australia  
 Commonwealth Land - Defence Service Homes Corporation  
 Commonwealth Land - Telstra Corporation Limited

## Listed Marine Species [ Resource Information

\* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
<b>Birds</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area
<a href="#">Anous stolidus</a> Common Noddy [825]		Species or species habitat likely to occur within area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardea alba</a> Great Egret, White Egret [59541]		Species or species habitat known to occur within area
<a href="#">Ardea ibis</a> Cattle Egret [59542]		Species or species habitat may occur within area
<a href="#">Arenaria interpres</a> Ruddy Turnstone [872]		Roosting known to occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Calidris ruficollis</a> Red-necked Stint [860]		Roosting known to occur within area
<a href="#">Calonectris leucomelas</a> Streaked Shearwater [1077]		Species or species habitat may occur within area
<a href="#">Catharacta skua</a> Great Skua [59472]		Species or species habitat may occur within area

<a href="#">Charadrius bicinctus</a> Double-banded Plover [895]		Roosting known to occur within area
<a href="#">Charadrius mongolus</a> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
<a href="#">Charadrius ruficapillus</a> Red-capped Plover [881]		Roosting known to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea gibsoni</a> Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Fregata ariel</a> Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area
<a href="#">Fregata minor</a> Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
<a href="#">Gallinago megala</a> Swinhoe's Snipe [864]		Roosting likely to occur within area
<a href="#">Gallinago stenura</a> Pin-tailed Snipe [841]		Roosting likely to occur within area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
<a href="#">Heteroscelus brevipes</a> Grey-tailed Tattler [59311]		Roosting known to occur within area
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]		Species or species habitat known to occur within area
<a href="#">Lathamus discolor</a> Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area



<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area
<a href="#">Monarcha melanopsis</a> Black-faced Monarch [609]		Species or species habitat known to occur within area
<a href="#">Monarcha trivirgatus</a> Spectacled Monarch [610]		Species or species habitat known to occur within area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Numenius minutus</a> Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area
<a href="#">Numenius phaeopus</a> Whimbrel [849]		Roosting known to occur within area
<a href="#">Pachyptila turtur</a> Fairy Prion [1066]		Species or species habitat known to occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area
<a href="#">Phoebastria fusca</a> Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
<a href="#">Pluvialis fulva</a> Pacific Golden Plover [25545]		Roosting known to occur within area
<a href="#">Pluvialis squatarola</a> Grey Plover [865]		Roosting known to occur within area
<a href="#">Puffinus carneipes</a> Flesh-footed Shearwater, Fleishy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area
<a href="#">Rostratula benghalensis (sensu lato)</a> Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
<a href="#">Sterna albifrons</a> Little Tern [813]		Species or species habitat may occur within area
<a href="#">Thalassarche bulleri</a> Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche cauta</a> Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
<a href="#">Thalassarche eremita</a> Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed	Vulnerable	Species or species

Albatross [64459]		habitat may occur within area
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche salvini</a> Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche sp. nov.</a> Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
<a href="#">Xenus cinereus</a> Terek Sandpiper [59300]		Roosting known to occur within area
<b>Fish</b>		
<a href="#">Acentronura tentaculata</a> Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area
<a href="#">Festucalex cinctus</a> Girdled Pipefish [66214]		Species or species habitat may occur within area
<a href="#">Filicampus tigris</a> Tiger Pipefish [66217]		Species or species habitat may occur within area
<a href="#">Heraldia nocturna</a> Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
<a href="#">Hippichthys heptagonus</a> Madura Pipefish, Reticulated Freshwater Pipefish [66229]		Species or species habitat may occur within area
<a href="#">Hippichthys penicillus</a> Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area
<a href="#">Hippocampus whitei</a> White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]		Species or species habitat likely to occur within area
<a href="#">Histiogamphelus briggsii</a> Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
<a href="#">Lissocampus runa</a> Javelin Pipefish [66251]		Species or species habitat may occur within area
<a href="#">Maroubra perserrata</a> Sawtooth Pipefish [66252]		Species or species habitat may occur within area
<a href="#">Solegnathus dunckeri</a> Duncker's Pipehorse [66271]		Species or species habitat may occur within area
<a href="#">Solegnathus spinosissimus</a> Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within

<b>Fish</b>		
<a href="#">Solenostomus cyanopterus</a> Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		area Species or species habitat may occur within area
<a href="#">Solenostomus paradoxus</a> Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area
<a href="#">Stigmatopora nigra</a> Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
<a href="#">Syngnathoides biaculeatus</a> Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
<a href="#">Trachyrhamphus bicoarctatus</a> Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area
<a href="#">Urocampus carinirostris</a> Hairy Pipefish [66282]		Species or species habitat may occur within area
<a href="#">Vanacampus margaritifer</a> Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
<b>Mammals</b>		
<a href="#">Arctocephalus forsteri</a> Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
<a href="#">Arctocephalus pusillus</a> Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
<a href="#">Dugong dugon</a> Dugong [28]		Species or species habitat may occur within area
<b>Reptiles</b>		
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
<a href="#">Eretmochelys imbricata</a> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Hydrophis elegans</a> Elegant Seasnake [1104]		Species or species habitat may occur within area
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
<a href="#">Pelamis platurus</a> Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area
<b>Whales and other Cetaceans</b>		
<b>[ Resource Information ]</b>		
Name	Status	Type of Presence

Mammals		
<a href="#">Balaenoptera acutorostrata</a> Minke Whale [33]		Species or species habitat may occur within area
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat may occur within area
<a href="#">Delphinus delphis</a> Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
<a href="#">Grampus griseus</a> Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Sousa chinensis</a> Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
<a href="#">Stenella attenuata</a> Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
<a href="#">Tursiops aduncus</a> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
<a href="#">Tursiops truncatus s. str.</a> Bottlenose Dolphin [68417]		Species or species habitat may occur within area

## Extra Information

State and Territory Reserves	[ Resource Information
Name	State
LNE Special Management Zone No1	NSW
Lake Innes	NSW
Lake Innes	NSW
Limeburners Creek	NSW
Macquarie	NSW
Queens Lake	NSW
Rawdon Creek	NSW
Sea Acres	NSW
Woregore	NSW

Regional Forest Agreements	Resource Information
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Note that all areas with completed RFAs have been included.

Name	State
<a href="#">North East NSW RFA</a>	New South Wales

Invasive Species	Resource Information
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Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
<b>Birds</b>		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Pycnonotus jocosus Red-whiskered Bulbul [631]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
<b>Frogs</b>		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
<b>Mammals</b>		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area



Feral deer Feral deer species in Australia [85733]	Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]	Species or species habitat likely to occur within area
Mus musculus House Mouse [120]	Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]	Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]	Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]	Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]	Species or species habitat likely to occur within area
<b>Plants</b>	
Alternanthera philoxeroides Alligator Weed [11620]	Species or species habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]	Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]	Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]	Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]	Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]	Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. rotundata Bitou Bush [16332]	Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]	Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]	Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]	Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]	Species or species habitat likely to occur

		within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[ Resource Information
Name		State
<a href="#">Limeburners Creek Nature Reserve</a>		NSW

## Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull) or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

## Coordinates

-31.46067 152.86369

## Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Office of Environment and Heritage, New South Wales](#)
- [Department of Environment and Primary Industries, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment, Water and Natural Resources, South Australia](#)
- [Department of Land and Resource Management, Northern Territory](#)
- [Department of Environmental and Heritage Protection, Queensland](#)
- [Department of Parks and Wildlife, Western Australia](#)
- [Environment and Planning Directorate, ACT](#)
- [Birdlife Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [South Australian Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Canberra](#)
- [University of New England](#)
- [Ocean Biogeographic Information System](#)
- [Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [Geoscience Australia](#)
- [CSIRO](#)
- [Australian Tropical Herbarium, Cairns](#)
- [eBird Australia](#)
- [Australian Government – Australian Antarctic Data Centre](#)
- [Museum and Art Gallery of the Northern Territory](#)
- [Australian Government National Environmental Science Program](#)
- [Australian Institute of Marine Science](#)
- [Reef Life Survey Australia](#)
- [American Museum of Natural History](#)
- [Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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Biodiversity Development Assessment Report | Lot 3 John Oxley Drive | October 2019

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## Appendix 8: Bat Call Analysis Report





## Microbat Call Identification Report

<b>Prepared for ("Client"):</b>	Biodiversity Australia
<b>Survey location/project name:</b>	Port Macquarie
<b>Survey dates:</b>	11-16 December 2018
<b>Client project reference:</b>	
<b>Job no.:</b>	BIA-1901
<b>Report date:</b>	24 January 2019

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## Methods

*Balance! Environmental* received six ZCA data files and associated LOG files, recorded on an Anabat Express (Titley Scientific, Brisbane) over six consecutive nights (11<sup>th</sup> – 16<sup>th</sup> December 2018).

The ZCA data files were converted to Anabat sequence file format (ZC files) and then analysed using Titley Scientific's *Anabat Insight*.

The conversion process yielded 6432 ZC files; however, 5891 of those files contained only non-bat background noise.

## Call identification

All ZC files with bat calls were viewed manually in *Anabat Insight*, with the calls identified by comparing the zero-crossing call sonograms and derived metrics with those of regionally-relevant reference calls and published call descriptions for New South Wales and South-eastern Queensland (Reinhold *et al.* 2001; Pennay *et al.* 2004). Species' identification was also guided by considering probability of occurrence based on general distribution information (Churchill 2008; van Dyck *et al.* 2013) and/or *Atlas of Living Australia* on-line database records (<http://www.ala.org.au>).

Where calls could not be reliably allocated to a single species due to overlapping characteristics ("unresolved calls"), they were assigned to a multi-species group.

## Reporting standard

The format and content of this report follows Australasian Bat Society standards for the interpretation and reporting of bat call data (Reardon 2003), available on-line at <http://www.ausbats.org.au/>.

Species nomenclature follows Jackson & Groves (2015), which applies updated taxonomy to several species. **Table 1** lists the new names used in this report against their synonyms as used in the *Biodiversity Conservation Act 2016* (BCA) and by Churchill (2008).

**Table 1** Species nomenclatural changes applied in this report.

Jackson & Groves 2015	BCA 2016	Churchill 2008
<i>Ozimops ridei</i> Ride's Free-tailed Bat	Not listed	<i>Mormopterus ridei</i> Eastern freetail bat
<i>Micronomus norfolkensis</i> Eastern Coastal Free-tailed Bat	<i>Mormopterus norfolkensis</i> Eastern Freetail Bat	<i>Micronomus norfolkensis</i> East-coast freetail Bat
<i>Miniopterus orianae</i> Large Bent-winged Bat	<i>Miniopterus schreibersii oceanensis</i> Eastern Bentwing-bat	<i>Miniopterus orianae oceanensis</i> Eastern bentwing bat



## Results & Discussion

No bat call data were retrieved from the first night of recording (11/12/2018), but the other five nights all produced identifiable bat calls.

Of the 541 ZC files with recognisable bat calls, 213 could not be identified because the calls were very brief (<3 pulses) and/or highly fragmented.

At least 13 and up to 19 species were recorded during the Port Macquarie survey. Twelve call types were positively identified to individual species (**Table 2**, upper portion) and another seven call types were allocated to unresolved species groups (**Table 2**, lower portion). These unresolved groups are discussed in more detail on the following page. **Appendix 1** contains sample sonograms extracted from the data set for each identified species or group.

Five threatened species were positively identified: *Falsistrellus tasmaniensis* (Eastern Falsistrelle); *Scoteanax rueppellii* (Greater Broad-nosed Bat); *Miniopterus australis* (Little Bent-winged Bat); *M. orianae* (Large/Eastern Bent-winged Bat); and *Micronomus norfolkensis* (Eastern Coastal Free-tailed Bat). Up to three additional threatened species may also have been present but their calls could not be definitively identified: *Nyctophilus bifax* (Eastern Long-eared Bat); *Myotis macropus* (Large-footed Myotis); and *Vespadelus troughtoni* (Eastern Cave Bat).

**Table 2** Bat species recorded during the Port Macquarie survey, 11-16 December 2018.  
Number of calls allocated to each species or unresolved species group.  
† Denotes species listed as threatened under the NSW *Biodiversity Conservation Act 2016*

Night of:	12 Dec.	13 Dec.	14 Dec.	15 Dec.	16 Dec.	Species Total
<b>Positively identified calls</b>						
<i>Chalinolobus gouldii</i>		7	6	1	9	23
<i>Chalinolobus morio</i>	11	17	1	1	32	62
<i>Falsistrellus tasmaniensis</i> †					10	10
<i>Scoteanax rueppellii</i> †		2		2	2	6
<i>Scotorepens orion</i>		3				3
<i>Vespadelus darlingtoni</i>	2	4	1		1	8
<i>Vespadelus pumilus</i>		2			6	8
<i>Miniopterus australis</i> †	36	11	11	2	4	64
<i>Miniopterus orianae oceanensis</i> †			1		2	3
<i>Austronomus australis</i>	2					2
<i>Micronomus norfolkensis</i> †		5	2	2	1	10
<i>Ozimops ridei</i>	16	18	3	6	5	48
<b>Unresolved calls</b>						
<i>C. gouldii</i> or <i>Ozimops ridei</i>		1			7	8
<i>C. morio</i> or <i>Vespadelus</i> sp.	8	8			1	17
<i>M. norfolkensis</i> or <i>O. ridei</i>		1	3	6	1	11
<i>Nyctophilus</i> species †	3	1			1	5
<i>Nyctophilus</i> sp. or <i>Myotis macropus</i> †	1	1				2
<i>V. darlingtoni</i> or <i>Scotorepens</i> sp.	6	3		2	3	14
<i>V. pumilus</i> or <i>V. troughtoni</i> † or <i>V. vulturnus</i>	14	5	1	3	17	40
<b>Detector-night total</b>	<b>99</b>	<b>89</b>	<b>29</b>	<b>25</b>	<b>102</b>	<b>344</b>



The unresolved species groups identified in **Table 2** were erected on the basis of the following call characteristics:

- *C. gouldii* or *Ozimops ridei*
  - Calls with characteristic frequency (Fc) in the range 29-32 kHz
  - *C. gouldii* positively identified where pulse shape was steep, broadband, curvilinear with distinctive alternation in Fc
  - Calls with more regular Fc and flat or narrow-band curvilinear pulses were allocated to *O. ridei*
  - Calls allocated to the group had intermediate pulse shapes and/or variable (but not distinctly alternating) Fc
- *M. norfolkensis* or *O. ridei*
  - Similar frequency range to above, but all pulses flat (narrow-band) or nearly so
  - Calls with alternating Fc and very flat pulses attributed to *M. norfolkensis* and those with regular Fc and more slanted pulses identified to *O. ridei*
  - Several calls with variable Fc and pulse-shape allocated to the combined group
- *Nyctophilus* species
  - Steep (almost vertical), broadband, more-or-less linear, evenly-spaced pulses
  - Species in the genus cannot be differentiated
  - Two call types allocated to the group – one terminating at >50 kHz and the other terminating at <40 kHz – so probably two species present
  - *N. geoffroyi* (Lesser Long-eared Bat); *N. gouldi* (Gould's Long-eared Bat); and *N. bifax* all potentially occur in the study area
- *Nyctophilus* sp. or *Myotis macropus*
  - Steep, linear calls similar to above group, but more narrow-band and somewhat erratic changes in pulse shape through sequence
  - *M. macropus* typically recorded over water, its preferred foraging habitat, but could be commuting through other areas
- *V. pumilus* or *V. troughtoni* or *V. vulturnus*
  - Steep, curvilinear pulses with distinctively hooked body, up-swept tail and Fc>50 kHz
  - *V. pumilus* positively identified where Fc>54 kHz otherwise indistinguishable
  - Most calls of this shape had Fc=51-53 kHz and could have been any of these species
- *C. morio* or *Vespadelus* sp.
  - Steep, curvilinear pulses with Fc=50-54.5 kHz
  - Calls with shapes described above allocated to *Vespadelus* spp.
  - *C. morio* positively identified where calls had distinctive slanted pulse-body and downward-sweeping tail
  - Many calls with mixed or intermediate pulse shapes were allocated only to the combined group
- *V. darlingtoni* or *Scotorepens* sp.
  - Steep, curvilinear pulses with Fc=38-40 kHz
  - Where pulses had flattish body with no apparent tail, calls allocated to *V. darlingtoni*
  - Calls with mixed pulse shapes, including flattish and slightly-hooked bodies, could not be reliably identified and may have represented *Scotorepens* sp. (Central-eastern broad-nosed Bat)



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- Churchill, S. (2008). *Australian Bats*. Jacana Books, Allen & Unwin; Sydney.
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- Reinhold, L., Law, B., Ford, G. and Pennay, M. (2001). *Key to the bat calls of south-east Queensland and north-east New South Wales*. Department of Natural Resources and Mines, Brisbane.
- van Dyck, S., Gynther, I. and Baker, A. (ed.) (2013). *Field Companion to the Mammals of Australia*. New Holland; Sydney.





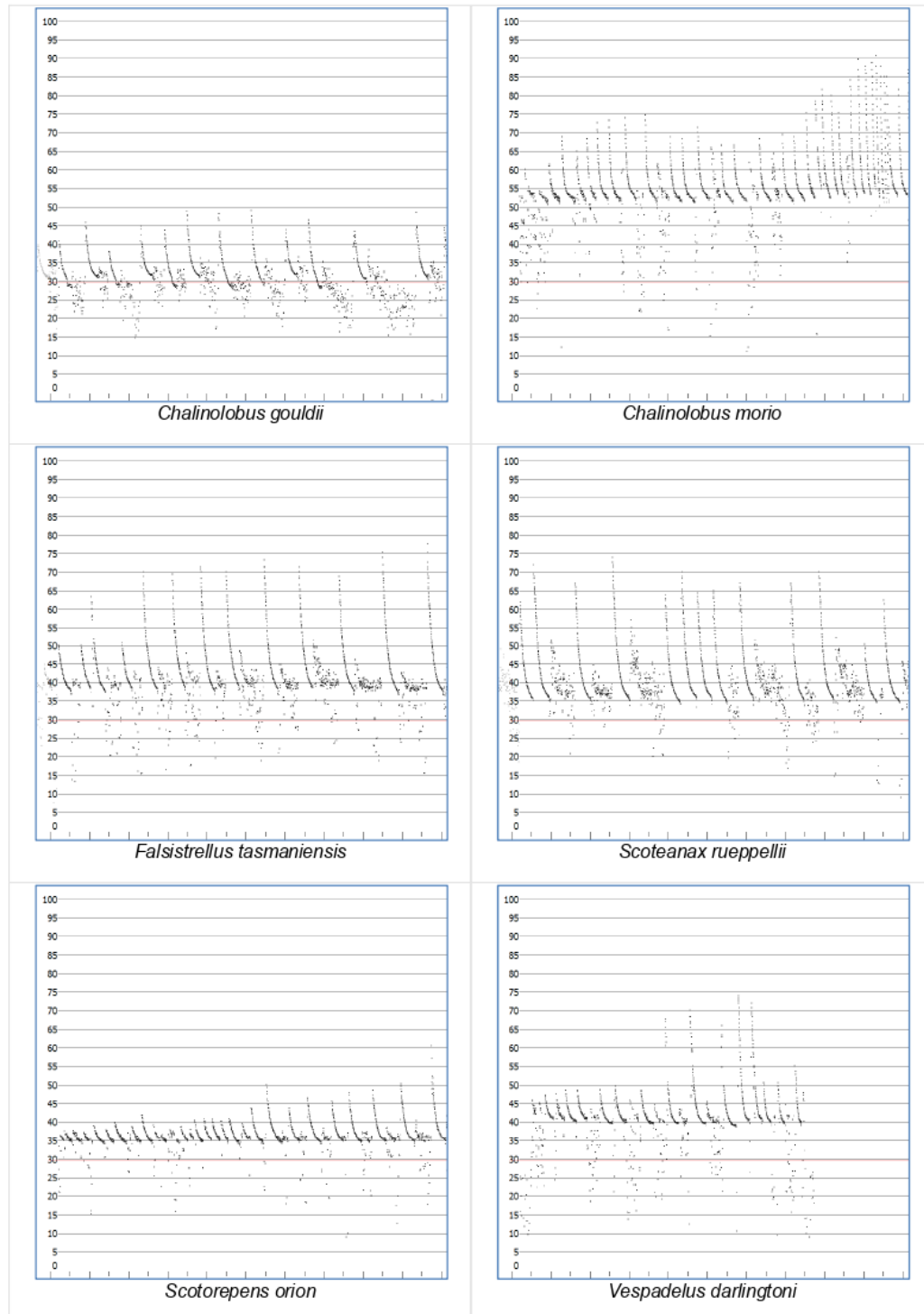
## Glossary

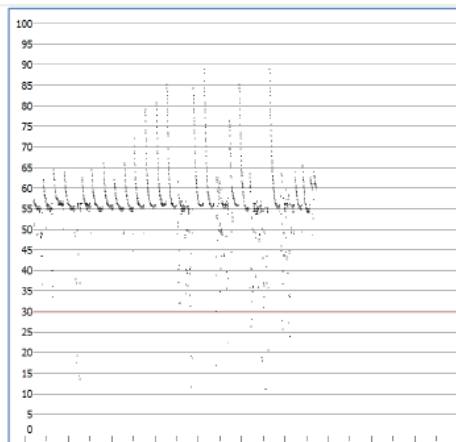
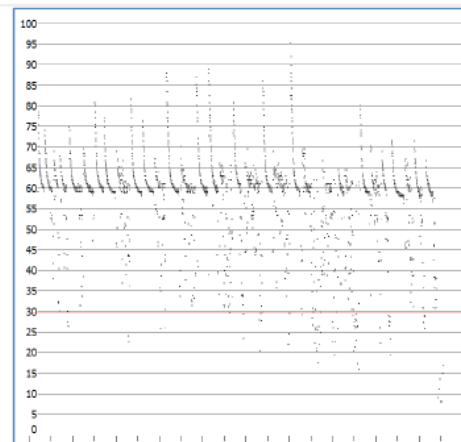
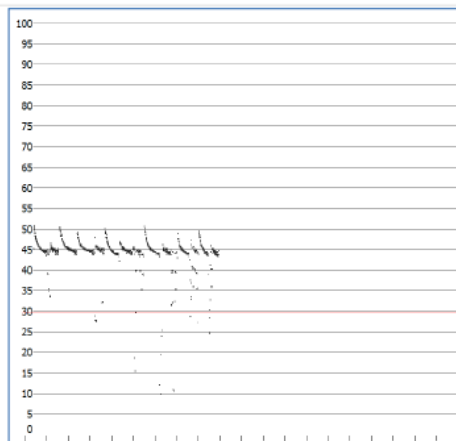
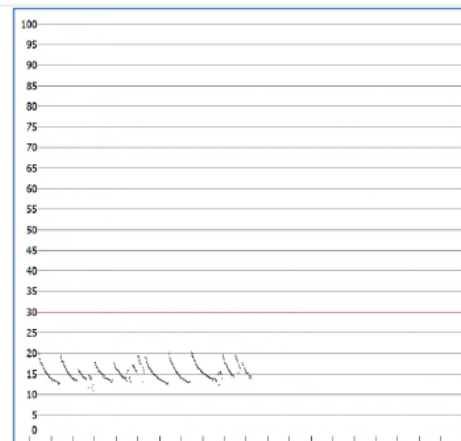
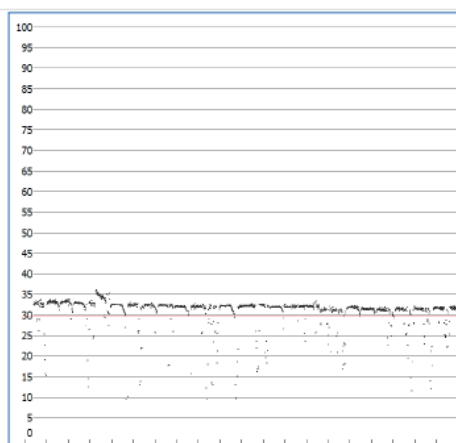
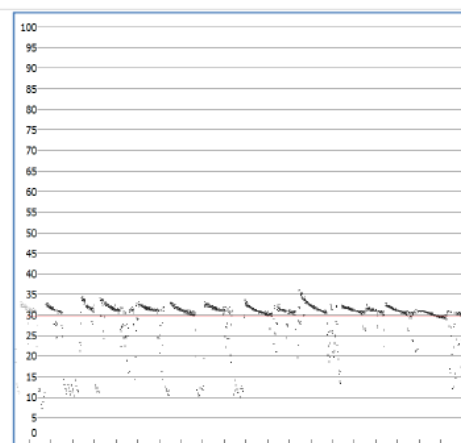
Technical terms used in this report are described in the following table.

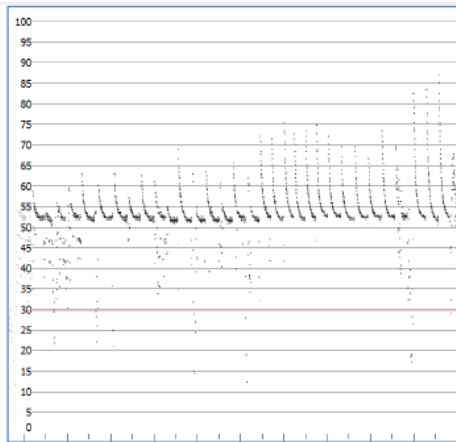
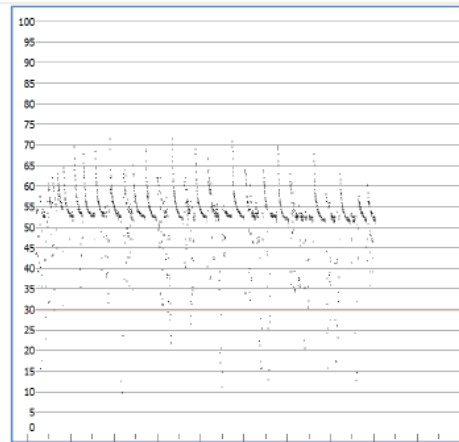
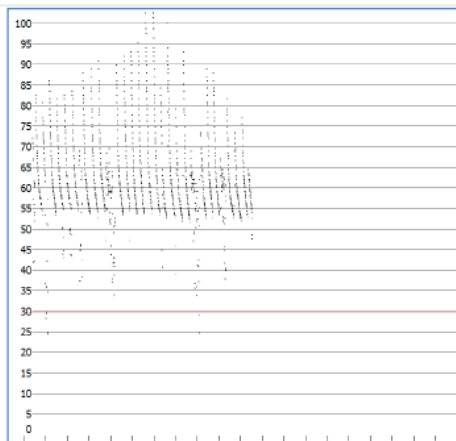
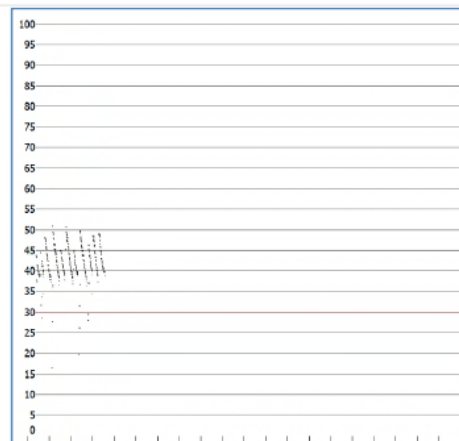
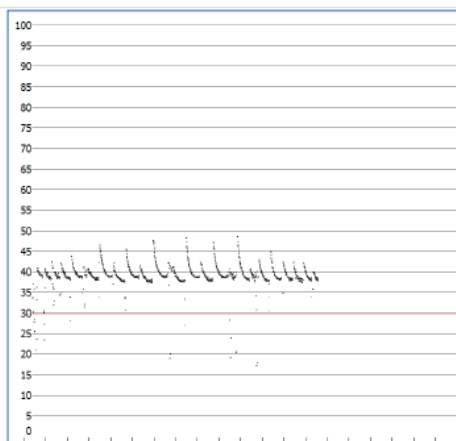
Approach phase	The part of a bat <i>call</i> emitted as the bat starts to home in on a detected prey item; a transitional series of <i>pulses</i> between the <i>search phase</i> and <i>feeding buzz</i> , that become progressively steeper and shorter in duration.
Call	Refers to a single bat call, made up of a series of individual sound <i>pulses</i> in one or more <i>phases</i> ( <i>search, approach, feeding buzz</i> ).
CF (=Constant Frequency)	A type of <i>pulse</i> in which the dominant component consists of a more-or-less 'pure tone' of sound at a Constant Frequency; with <i>shape</i> appearing flat on the sonogram. Often also contains a brief <i>FM</i> component at the beginning and/or end of the CF component (viz. FM-CF-FM).
Characteristic frequency (Fc)	The frequency of the flattest part of a <i>pulse</i> ; usually the lowest frequency reached in the <i>qCF</i> component of a pulse. This is often the primary diagnostic feature for species identification.
Duration	The time period from the beginning of a <i>pulse</i> to the end of the pulse.
Feeding buzz	The terminal part of a <i>call</i> , following the <i>approach phase</i> , emitted as the bat catches a prey item; a distinctive, rapid series of very steep, very short-duration pulses.
FM (=Frequency Modulated)	A type of <i>pulse</i> in which there is substantial change in frequency from beginning to end; <i>shape</i> ranges from almost vertical and linear through varying degrees of curvature.
FC range	Refers to the range of frequencies occupied by the <i>characteristic frequency</i> section of <i>pulses</i> within a call or set of calls.
Frequency sweep or "band-width"	The range of frequencies through which a <i>pulse</i> sweeps from beginning to end; Maximum frequency (Fmax) – minimum frequency (Fmin).
Knee	The transitional part of a <i>pulse</i> between the initial (usually steeper) frequency sweep and the <i>characteristic frequency</i> section (usually flatter); time to knee (Tk) and frequency of knee (Fk) can be diagnostic for some species.
Pulse	An individual pulse of sound within a bat <i>call</i> ; the <i>shape, duration</i> and <i>characteristic frequency</i> of a pulse are the key diagnostic features used to differentiate species.
Pulse body	The part of the <i>pulse</i> between the <i>knee</i> and <i>tail</i> and containing the <i>characteristic frequency</i> section.
Pulse shape	The general appearance of a <i>pulse</i> on the sonogram, described using relative terms related to features such as slope and degree of curvature. See also <i>CF, qCF</i> and <i>FM</i> .
qCF (=quasi Constant Frequency)	A type of <i>pulse</i> in which there is very little change in frequency from beginning to end; <i>shape</i> appears to be almost flat. Some pulses also contain an <i>FM</i> component at the beginning and/or end of the qCF component (viz. FM-qCF).
Search phase	The part of a bat <i>call</i> generally required for reliable species diagnosis. A consistent series of <i>pulses</i> emitted by a bat that is searching for prey or and/or navigating through its habitat. Search phase pulses generally have longer duration, flatter slope and more consistent shape than <i>approach phase</i> and <i>feeding buzz</i> pulses.
Sequence	Literally, a sequence of <i>pulses</i> that may be from one or more bats; but generally refers to a <i>call</i> or part (e.g. <i>phase</i> ) of a call.
Tail	The final component of a <i>pulse</i> , following the <i>characteristic frequency</i> section; may consist of a short or long sweep of frequencies either upward or downward from the Fc; or may be absent.



**Appendix 1** Representative call sequences from the Port Macquarie survey, 11-16 Dec. 2018.  
x-axis (time) = 0.01 sec per tick; y-axis (frequency) = kHz per tick



*Vespadelus pumilus**Miniopterus australis**Miniopterus orianae oceanensis**Austronomus australis**Micronomus norfolkensis**Ozimops ridei*

*V. pumilus or V. trougtoni or V. vulturinus**C. morio or Vespadelus sp.**Nyctophilus species**Nyctophilus sp. or Myotis macropus**V. darlingtoni or Scotorepens sp.*

*All communications to be addressed to:*

Headquarters  
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Headquarters  
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e-mail: records@rfs.nsw.gov.au

Facsimile: 8741 5433



The General Manager  
Port Macquarie-Hastings Council  
PO Box 84  
PORT MACQUARIE NSW 2444

Your Ref: 2019/400  
Our Ref: D19/1977  
DA19061419141 PC

**ATTENTION:** Patrick Galbraith-Robertson

18 July 2019

Dear Mr Galbraith-Robertson

**Integrated Development Application - 3//533058 - 165 John Oxley Drive Port Macquarie**

I refer to your correspondence dated 16 July 2019 seeking general terms of approval for the above Integrated Development Application.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted. General Terms of Approval, under Division 4.8 of the 'Environmental Planning and Assessment Act 1979', and a Bush Fire Safety Authority, under Section 100B of the 'Rural Fires Act 1997', are now issued subject to the following conditions:

**Asset Protection Zones**

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building. To achieve this, the following conditions shall apply:

1. At the issue of subdivision certificate and in perpetuity, the entire area of Stage 1, excluding Lot 26, shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.



2. Asset protection zones are to be provided as depicted in the diagram titled 'Appendix 4 – APZ Concepts, Lot 3 DP 533058, 165 John Oxley Drive, Port Macquarie' in the Bushfire Hazard Assessment prepared by David Pensini (Version 4.0), dated 4 June 2019. The asset protection zones shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.
3. A restriction to the land use pursuant to section 88B of the 'Conveyancing Act 1919' shall be placed over any temporary asset protection zone(s) on adjoining land. The asset protection zone(s) shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'. The restriction to land use for the purpose of a temporary asset protection zone may be extinguished upon commencement of future development over the affected areas. The relevant land owner's consent is required for the proposed temporary asset protection zone(s) on Lot 2 DP 533058 and Lot 1 DP 369206 prior to creation of any restriction to land use.
4. A restriction to the land use pursuant to section 88B of the 'Conveyancing Act 1919' shall be placed over the residue lot (Future Stage 2) for the purpose of a temporary 10 metre wide asset protection zone to the south of Lots 18 and 19. Alternatively, the entire area of the residue lot (Future Stage 2) shall be managed as an asset protection zone. The asset protection zone shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'. The restriction to land use for the purpose of a temporary asset protection zone may be extinguished upon commencement of future development over the affected areas.

#### **Water and Utilities**

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building. To achieve this, the following conditions shall apply:

5. Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

#### **Access**

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area. To achieve this, the following conditions shall apply:

6. Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006', except that:
  - a turning circle is not required at the western termination of Road 1; and
  - a 12 metre outer radius turning circle is not required for Road 2.

#### **Landscaping**

7. Landscaping to the site is to comply with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.

**General Advice – consent authority to note**

Any future development application lodged within this subdivision under section 4.14 of the 'Environmental Planning & Assessment Act 1979' will be subject to requirements as set out in 'Planning for Bush Fire Protection 2006'.

The concept turning head for Road 3 (Stage 2) should comply with Figure A3.5 (Type D) in pre-release Planning for Bush Fire Protection (August 2018).

This letter is in response to a further assessment of the application submitted and supersedes our previous general terms of approval dated 15 July 2019.

Should you wish to discuss this matter please contact Paul Creenaune on 1300 NSW RFS.

Yours sincerely



Alan Bawden

**Team Leader - Development Assessment & Planning**

For general information on bush fire protection please visit [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)

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**Item: 09****Subject: DA2019 - 401.1 - CONCEPT PROPOSAL FOR RESIDENTIAL  
SUBDIVISION (25 TORRENS TITLE LOTS) & STAGED RESIDENTIAL  
SUBDIVISION (16 TORRENS TITLE LOTS) AT 153 JOHN OXLEY  
DRIVE, PORT MACQUARIE****Report Author: Development Assessment Planning Coordinator, Patrick  
Galbraith-Robertson**

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**Applicant: Lifestyle Design Homes CARE King & Campbell Pty Ltd  
Owner: RW & JM Ramm  
Estimated Cost: \$750,000  
Parcel no: 16156**

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**Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

**RECOMMENDATION**

**That DA2019 - 401.1 for a concept proposal for residential subdivision (25 Torrens title lots) & staged residential subdivision (16 Torrens title lots) at Lot 1 DP 369206, No. 153 John Oxley Drive, Port Macquarie, be determined by granting consent subject to the recommended conditions.**

**Executive Summary**

This report considers a Development Application for a concept proposal for residential subdivision and staged residential subdivision at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application, four (4) submissions were received.

The proposal has been amended during the assessment of the application in response to assessment issues.

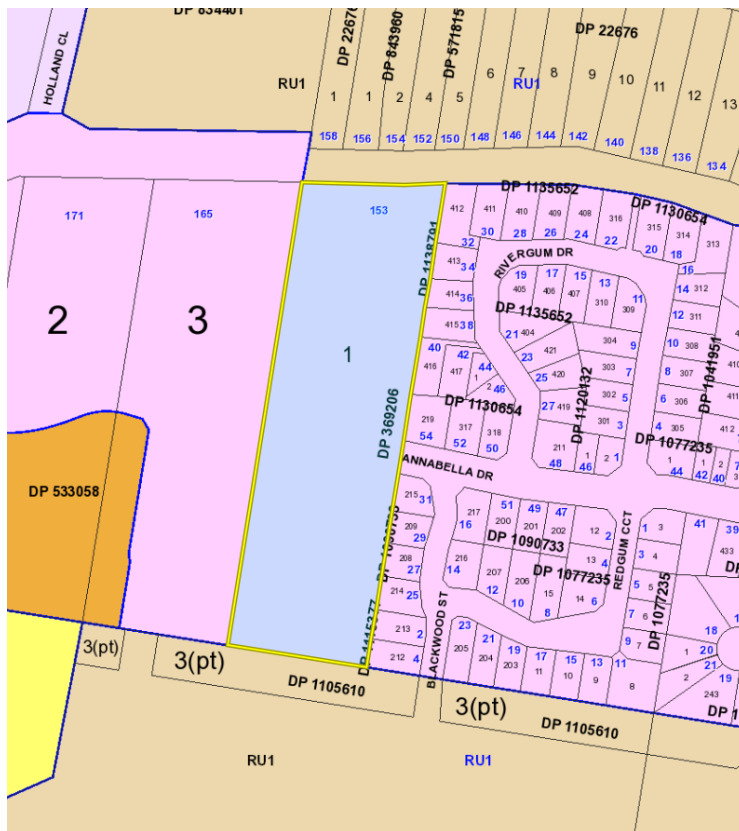
The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact.

This report recommends that the Development Application be approved subject to the attached conditions.

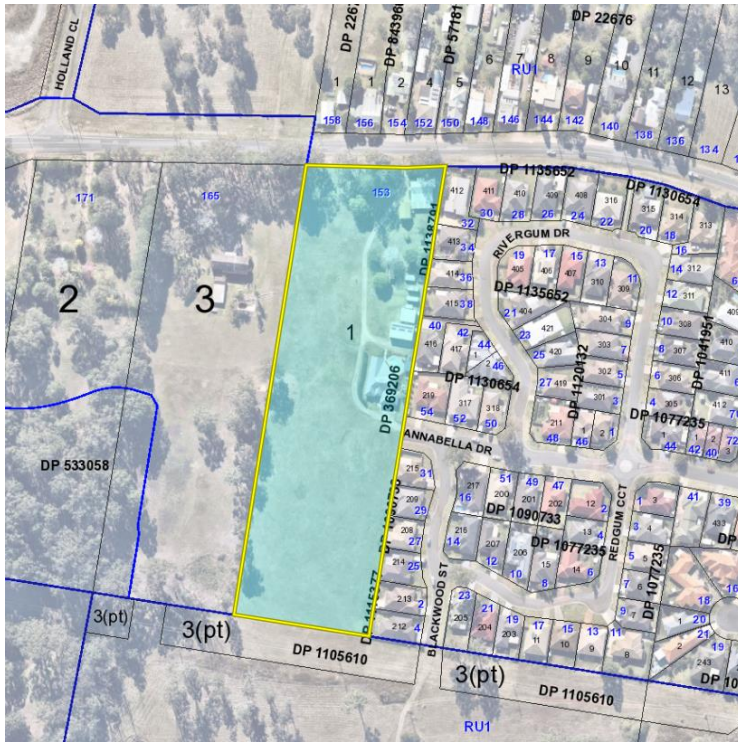
## Existing Sites Features and Surrounding Development

The site has recently been rezoned to R1 General Residential with the gazettal of Amendment No.39 to the Port Macquarie Hastings LEP 2011.

The site is zoned R1 General Residential in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan.



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:



## 2. DESCRIPTION OF DEVELOPMENT

Key aspects of the proposal include the following:

- Concept proposal for a Torrens title subdivision of the site into 25 lots; and
- A Stage 1 works development which includes:
  - Vegetation clearing within the development footprint (R1 zone) and removal of two (2) trees in the John Oxley Drive road reserve;
  - Confirmation of the bushfire asset protection (APZs) for the concept proposal;
  - Demolition of existing dwelling on proposed Lot 6 and sheds on proposed Lots 4 and 5;
  - Construction of the northern sewer route within the John Oxley Drive road reserve and Lot 1 DP 22676 to the existing sewerage reticulation infrastructure; and
  - The subdivision of the northern catchment, including road no.1, road no.2, part road no.3 and residential subdivision to provide 16 lots, which will be released in 3 sub-stages.
- The subsequent Stage 2 Works DA will provide for the residential subdivision of the southern catchment to provide 9 Torrens title lots:
  - The Stage 2 Works DA will include details of the downstream connections to the existing pump station and stormwater treatment via a bio-retention swale within the adjoining property to the south (Lot 399 DP 1241278), which is held in separate ownership.
  - The proposed subdivision has been concurrently lodged with a Concept DA and Stage 1 Works DA on the adjoining property to the west, described as Lot 3 DP 533058. The required servicing (sewer and stormwater) for the northern catchments of both the subject site and adjoining Lot 3 will be provided on a shared arrangement.
- The concept proposal has been made pursuant to Part 4 Division 4.4 of the Environmental Planning and Assessment Act 1979 (the Act) and relates to land identified within the South Lindfield Urban Release Area.



- The Act establishes at clause 4.22 (5) that Council's assessment of a Concept DA need only consider the likely impact of the concept proposal, including any first stage and does not need to consider the likely impact of the carrying out of development (the works) that may be the subject of subsequent Development Applications.
- The proposal is also an Integrated Development requiring Bushfire Safety Authority under the Rural Fires Act 1997.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

### **Application Chronology**

- 4 June 2019 - DA lodged with Council.
- 6 June 2019 - Confirmation of estimated cost of works.
- 6 June 2019 - Referral of proposal to the NSW Rural Fire Service to seek Bushfire Safety Authority.
- 11 June to 24 June 2019 - Neighbour notification of proposal.
- 1 July 2019 - Assessing Officer site meeting with Applicant and request for additional information: confirmation of zoning boundaries, queries relating to approach of road noise assessment and queries in relation to demolition of existing sheds.
- 3 July 2019 - Redacted copies of submissions forwarded to Applicant for consideration.
- 18 July 2019 - Bushfire Safety Authority granted by the NSW Rural Fire Service.
- 5 September 2019 - Additional information received from the Applicant: confirmation of zoning boundaries, additional noise assessment justification details and queries in relation to demolition of existing sheds.

### **3. STATUTORY ASSESSMENT**

#### **Section 4.15(1) Matters for Consideration**

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

- (a) The provisions (where applicable) of:**  
**(i) Any Environmental Planning Instrument**

#### **State Environmental Planning Policy No. 44 - Koala Habitat Protection**

The site is identified within Council's *Koala Plan of Management for South Lindfield Stage 3 (KPoM)* dated November 2018.

The Plan confirms that no existing Koala feed trees are mapped within the site and that no specific offset works are required to be provided as part of this development.

No further considerations under this SEPP are therefore required.

**State Environmental Planning Policy No. 55 – Remediation of Land**

Following an inspection of the site and a search of Council records, the subject land is not identified as being potentially contaminated and is suitable for the intended residential use.

**State Environmental Planning Policy (Coastal Management) 2018**

The site is not located within a coastal use area or coastal environment area.

**State Environmental Planning Policy (Infrastructure) 2007**

The site does not have frontage to a classified road. John Oxley Drive has been declassified from previously being the Oxley Highway.

On the basis that the site is not adjacent to the road corridor for a freeway, a tollway or a transit way or any other road with an annual average daily traffic volume of more than 40,000 vehicles, clause 102 does not apply.

Under the provisions of clause 104, the proposed subdivision is not identified as a traffic generating development.

Under the provisions of clause 106, the proposed northern sewer route is a permissible landuse outside the development site in the RU1 primary production zone to the north of the site.

Based on the above, the proposed development addresses relevant clauses in the SEPP and will not to create any significant adverse conflict in terms of traffic or noise.

**Port Macquarie-Hastings Local Environmental Plan 2011**

The proposal is consistent with the LEP having regard to the following:

- Clause 2.2 - The subject site is zoned R1 general residential.  
The objectives of the R1 zone are 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.
- Clause 2.3(2) - The proposal is consistent with the zone objectives having regard to the following:
  - the subdivision is a permissible landuse; and
  - the subdivision will provide for new housing needs of the community.
- Clause 2.7 - The demolition of the existing sheds and dwelling on proposed Lot 6 requires consent as it does not fit within the provisions of SEPP (Exempt and Complying) 2008.
- Clause 4.1 - The lot sizes within the proposed Stage 1 subdivision development area range from 466.4m<sup>2</sup> to 1274.4m<sup>2</sup>. All proposed lots comply with the minimum 450m<sup>2</sup> lot size standard identified in the Lot Size Map relating to the site.
- Clause 5.10 – Heritage. The site does not contain or adjoin any known heritage items or sites of significance. A standard precautionary condition is

recommended to stop works should any aboriginal archaeological items be discovered during any works.

- Clause 7.5 – Koala Habitat. This clause applies to land that is shown as “Koala Habitat area” on the Koala Habitat Map. The site is identified within Council’s *Koala Plan of Management for South Lindfield Stage 3*. In this regard, no removal of koala food trees is proposed and therefore no further considerations of this clause is required.
- Clause 7.8 - The site is not subject to any identifiable adverse aircraft noise associated with the operations of the Port Macquarie Airport.
- Clause 7.9 - The site is subject to acoustic controls as shown on the ‘acoustic controls map’. A specialist site specific Road Noise Assessment has been submitted to address any potential amenity impacts to future residential uses on the site. This report recommends that a continuous 1.8m fence (either standard colorbond or timber lapped), to the northern property boundary will ensure that the relevant requirements for road traffic noise intrusion will be achieved for all future dwellings that are constructed to normal residential standards.
- Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development. Provision of electricity will be subject to obtaining satisfactory arrangements certification prior to the issue of a Subdivision Certificate as recommended by a condition of consent.

**(ii) Any draft instruments that apply to the site or are on exhibition**

No draft instruments apply to the site.

**(iii) Any Development Control Plan in force**

The relevant provisions of the Development Control Plan 2013 include:

- Part 4 – Chapter 4.4.3 - South Lindfield precinct;
- Part 3 – Chapter 3.6 Subdivision; and
- Part 2 - General Provisions.

The South Lindfield Precinct is identified in the below image:

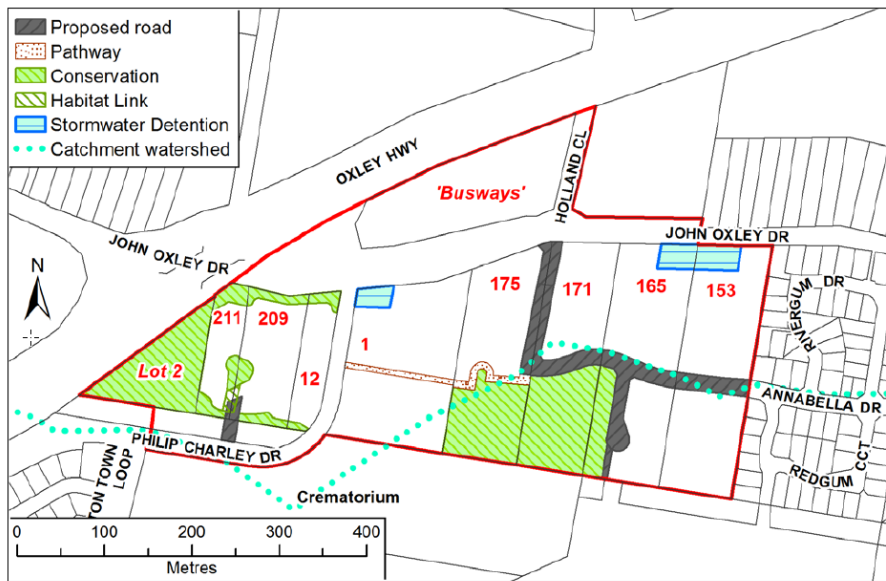


Figure 4.4.3-2 South Lindfield key development components

**Part 4 - Chapter 4.4.3 South Lindfield Precinct**

DCP Objective	Development Provisions	Proposed	Complies
4.4.3.1 & 4.4.3.2	Subdivision layouts to provide a road network that conforms with the connectivity shown in Figure 4.4.3-2 - (refer above Figure extract). New development within the western sub precinct has access via a single access from Philip Charley Drive from the south.	The proposed internal road network is consistent with Figure 4.4.3-2, which provides for an extension to Anabella Drive. All proposed lots will only be accessible from the new internal road network.	Yes
4.4.3.3 & 4.4.3.4	All stormwater infrastructure is consistent with the outcomes of the stormwater management strategy summarised in Figure 4.4.3-2. All stormwater infrastructure (including access) is to be dedicated to Council.	The location of the proposed stormwater basin to serve the northern catchment of the site (Lot 1) and the adjoining property at Lot 3, is consistent with Figure 4.4.3-2. It is proposed to dedicate the stormwater infrastructure which will serve a number of properties, to Council.	Yes
4.4.3.5	Development is to provide an integrated solution for sewerage services with adjoining properties. Development will require approval from relevant landowners for gravity sewerage mains connecting to the	The proposed sewer strategy for the Concept DA is illustrated on the plans submitted. The northern catchment, the subject of the Stage 1 Works DA, will ultimately drain to Pump Station 54 via a connection through	Yes

	<p>existing sewerage network.</p> <p>In the northern catchment:</p> <ul style="list-style-type: none"> <li>• the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54, until a sewer pumping station on Lindfield Park Road is operational</li> <li>• the alignment should cater for possible extension to serve the bulk of the 4 lots west of Philip Charley Drive</li> <li>• development yields of the land zoned Residential are not to exceed 16 et/ha prior to provision of upgraded local sewerage main capacity.</li> </ul> <p>In the southern catchment the sewer mains are to connect to Sewer Pump Station 80 to the south.</p>	<p>Lot 1 DP 22675 to PM54P010MH. The owner's consent from the landowner of Lot 1 DP 22675 has been submitted.</p> <p>The development of the southern catchment, the subject of the future Stage 2 Works DA, will drain to Pump Station 80 through Lot 399 DP1241278 to PM80P001MH. The point of the future connection within the site is shown on the plans submitted.</p>	
4.4.3.6	<p>Compliance with requirements of the South Lindfield Koala Plan of Management.</p> <p>The areas shown on Figure 4.4.3-2 for Conservation are to be dedicated to Council for long term management, following embellishment planting of koala food trees:</p> <ul style="list-style-type: none"> <li>• in forested areas - within available canopy spaces where the space has a radius of at least 5 m, or</li> <li>• in cleared areas - at 10 m centres.</li> </ul> <p>Alternatively, with Council approval planting in cleared areas can be provided elsewhere in the vicinity at an offset ratio of 4 trees for each koala food tree removed, with trees at 10 m centres.</p> <p>Where land zoned E2 or land containing offset planning is held in private</p>	<p>Figure 6 of the South Lindfield KPOM confirms that no existing Koala feed trees are mapped within the site and that no offset works are required to be provided.</p>	Yes



	ownership, satisfactory arrangements will be required for ongoing maintenance in perpetuity. Development adjoining the land zoned E2 Environmental Conservation must ensure that the long-term habitat integrity of that E2 land is not compromised by the development activities.		
4.4.3.8	Applications for subdivisions should provide site-specific updated traffic noise assessments, with adequate information to simplify subsequent assessment of building proposals. Acoustic mitigation measures should not use high visual barriers.	A specialist site specific Road Noise Assessment has been submitted. This report confirms that a continuous 1.8m fence (either standard colorbond or timber lapped), to the northern property boundary will ensure that the relevant requirements for road traffic noise intrusion will be achieved for all future dwellings that are constructed to normal residential development standards.	Yes

**DCP 2013: Chapter 3.6 - Subdivision**

DCP Objective	Development Provisions	Proposed	Complies
3.6.3.1	<p>A site analysis is required for all development and shall illustrate:</p> <ul style="list-style-type: none"> <li>• microclimate;</li> <li>• lot dimensions;</li> <li>• north point;</li> <li>• existing contours and levels to AHD;</li> <li>• flood affected areas;</li> <li>• overland flow patterns, drainage and services;</li> <li>• any contaminated soils or filled areas, or areas of unstable land;</li> <li>• easements and/or connections for drainage and utility services;</li> <li>• identification of any</li> </ul>	A satisfactory site analysis plan has been submitted.	Yes

	<p>existing trees and other significant vegetation;</p> <ul style="list-style-type: none"> <li>• any existing buildings and other structures, including their setback distances;</li> <li>• heritage and archaeological features;</li> <li>• fences;</li> <li>• existing and proposed road network, including connectivity and access for all adjoining land parcels;</li> <li>• pedestrian and vehicle access;</li> <li>• views to and from the site;</li> <li>• overshadowing by neighbouring structures; and</li> <li>• any other notable features or characteristics of the site.</li> </ul>		
3.6.3.2	Torrens title lots minimum width of 15m when measured at a distance of 5.5m from front property boundary.	All lots have a minimum or greater width of 15m when measured at a distance of 5.5m from front property boundary.	Yes
	Minimum width of 7m when boundaries are extended to kerb line.	All lots have a width greater than 7m for lots which have boundaries extended to the kerb line.	Yes
	Minimum depth of 25m.	All lots have a depth greater than 25m.	Yes
	For lots where average slope of the site is equal to, or exceeds 16%, indicative road and driveway grades are required demonstrating satisfactory access.	No indicative driveway grades are required for individual lots as the slope grades are less than 16%.	N/A
3.6.3.3	Battle-axe lots discouraged in greenfield development.	No battle-axe lots are proposed.	Yes
3.6.3.4	Lots are to be designed to allow the construction of a dwelling, which does not	All proposed lots are designed to allow for future construction of dwellings,	Yes

	involve more than 1m cut, or fill, measured from natural ground level, outside the dwellings external walls.	which will be unlikely to require more than 1m cut or fill.	
	Additional information provided for slope categories in accordance with Table 3.6.2.	All proposed lots will meet the criteria for Slope A standards with no special lot designs required.	Yes
3.6.3.5	Wherever possible orientate streets to maximise the number of east, west and south facing lots and to minimise the number of narrow north facing lots. Residential street blocks should preferably be orientated north-south with dimensions generally limited to 60-80m by 120-150m as illustrated in Figure 3.6-2.  Lot size and shape are to reflect orientation to ensure future dwelling construction has optimal opportunity for passive solar design.	The orientation of the proposed lots has been determined primarily having regard to the position of the east-west extension of Annabella Drive and planned road corridors.	Yes
3.6.3.6	Kerb and guttering, associated street drainage, pavement construction and foot paving across the street frontages should be constructed as part of the subdivision works where these do not exist (may be varied subject to criteria in this clause)	The proposed street pattern has been determined having regard to the position of the east-west extension of Annabella Drive and includes a pathway network and consideration of the future external connections in the South Lindfield neighbourhood.	Yes + appropriate consent conditions recommended.
3.6.3.7	Subdivisions close to urban centres or along arterial roads serviced by public transport achieve yield of >35 dwellings per hectare.	The proposal will achieve a yield of approximately 10-11 dwelling per hectare. Satisfactory density achieved particularly having regard to general residential zoning of land and noting there is no minimum floor space ratio controls. There is also potential for more than 1 dwelling on some of the proposed lots.	Satisfactory
3.6.3.8	All new roads are to be dedicated to Council	All proposed roads meet Councils current Aus-Spec	Yes

	<p>designed in accordance the Council's adopted AUSPEC design specification documents.</p> <p>All applications to subdivide land should include a road layout plan that meets the Council's design requirements including providing connectivity and access for all land parcels consistent with Council's road hierarchy.</p>	requirements and provides for connectivity within the South Lindfield neighbourhood.	
3.6.3.9	<p>The design of roads identified for bus routes should comply with the AUSTROADS standards, including the design of bus bays and stops.</p> <p>Development should provide the bus stops, including bus bays and shelters not more than 600m apart.</p>	<p>The site is adjacent John Oxley Drive and it is anticipated that all future bus stops will be provided for in this existing road reserve.</p> <p>No bus stops are proposed within the subdivision.</p>	Yes
3.6.3.10	<p>The design of roads should aspire to achieve standards illustrated in Figure 3.6-3 to Figure 3.6-11.</p> <p>At a minimum all new roads should include:</p> <ul style="list-style-type: none"> <li>• street trees at a rate of 1 per 20m along the street frontage and in accordance with Council's <i>Indigenous Street and Open Space Planting List</i>;</li> <li>• underground utilities;</li> <li>• formed kerb and guttering;</li> <li>• 1.2metres pedestrian path.</li> </ul>	<p>The proposed road network provides for the following:</p> <ul style="list-style-type: none"> <li>- Street trees on the opposite side of the roads are proposed to allow for the water services/ footpaths;</li> <li>- Underground utilities;</li> <li>- Formed kerb and guttering; and</li> <li>- 1.5m wide footpaths.</li> </ul>	Yes
3.6.3.11	Perimeter roads adjoining bushland should be designed in accordance with Figure 3.6-8 and may be considered part of the APZ requirements for the adjoining land.	The positioning of the Annabella Drive extension, as required by the DCP provisions for South Lindfield, has generally determined the road layout within each property. An edge road to the southern	Yes
3.6.3.12	Perimeter roads should be		

	designed in accordance with Figure 3.6-8	boundary is acceptable and accordingly the lots that front this boundary will include 10m wide APZ's.	
3.6.3.13	Development for the subdivision for land or major residential development should provide footpaths on both sides of all collector and arterial roads.	All proposed footpaths have been designed to one street frontage, ensuring street tree planting can be undertaken on the opposite side of each street. All proposed lots have frontage to a public road ensuring future casual surveillance.	Yes
	Footpaths should be provided on one side of the street for access places and local streets in accordance with Council's adopted AUSPEC design specification documents.		
	Off street share-ways and on road cycle ways should be provided.		
	Footpaths and cycleway are to have regard for <i>Crime Prevention Through Environmental Design</i> (CPTED) principles.		
	The choice of direction and possible routes should be maximised, with streets and footpaths substantially capable of surveillance by residents.		
3.6.3.14	Local roads are to be designed for a maximum vehicle speed of 50kph.	The road network has been designed to restrict vehicle speeds to 50km/hr. This also supported in the KPoM that applies to the South Lindfield neighbourhood.	Yes
	Traffic management schemes may be appropriate to discourage speeding in long stretches of local roads or to discourage 'rat-running'.		
	On street parking should be discouraged along local roads.		
3.6.3.15	Cycling infrastructure should be provided in accordance with the Council's Cycling Plan.	N/A	N/A
	Where physical infrastructure or land dedication cannot be provided or is not identified, a contribution in accordance with the	Development contributions recommended for contribution to recreation facilities in accordance with Council's adopted Development Contributions	Yes



	Councils' contribution plan/s.	Plans.	
3.6.3.16	An application for subdivision should be accompanied by an a Integrated Water Cycle Management Strategy prepared by a certified practicing engineer and in accordance with Council's adopted design specification documents.	A satisfactory Stormwater and Servicing Strategy has been submitted. This Plan includes the stormwater management provisions for the development of the northern catchments for the site (Lot 1) and the adjoining property at Lot 3 DP 533058.	Yes
3.6.3.17 - 3.6.3.19	An application for subdivision should be accompanied by a Stormwater Management Strategy prepared by a certified practicing engineer and in accordance with Council's adopted Aus-Spec design specification documents.  The finished floor level of buildings should be above the 100 year ARI flood level (plus freeboard) and in accordance with the council's current flood policy.	The plans submitted illustrate the extent of the stormwater management provisions within the northern catchment of both Lot 1 (the site) and adjoining Lot 3. Note: The proposed works for the stormwater infrastructure and bio-retention swale within the adjoining property to the south (Lot 399 DP 1241278), will be undertaken as part of the Stage 2 DA to this Concept DA. In relation to the proposed stormwater management provisions, the impact of the proposed development on stormwater quantity and stormwater quality was modelled in the 12d and MUSIC programs respectively, comparing existing pre-development conditions to proposed post-development conditions, and the change to water quality from source to outlet. The modelling has demonstrated that the subject land has the capability to provide the necessary mitigation measures to ensure protection of the downstream environment and hydrology.	
3.6.3.20	Water supply to meet Council's design	It is proposed to connect to the existing 200mm	

	specifications.	watermain in Annabella Drive and run reticulated water through the development as shown on the Stormwater and Servicing Strategy. The future Stage 2 DA for the development of the southern catchment will provide a connection to either the 450mm DICL or 525mm AC main to the south of the property and will be subject of further consultation with the PMHC Water and Sewer Section.	
3.6.3.21 - 3.6.3.22	All lots connected to reclaimed water if available.		
3.6.3.24	Separate sewer junction provided for each lot.	The northern catchment, the subject of the Stage 1 Works DA will ultimately drain to Pump Station 54 via a connection through Lot 1 DP 22675 to PM54P010MH, as shown in the submitted plans. The owner's consent from the landowner of Lot 1 DP 22675 accompanies this submission.	Yes
3.6.3.25	Extension of sewer infrastructure at cost of developer.	The development of the southern catchment, the subject of the future Stage 2 Works DA, will drain to Pump Station 80 through Lot 399 DP1241278 to PM80P001MH. The point of connection within the site is shown in the submitted plans.	
3.6.3.26 - 3.6.3.27	Erosion and sediment control plan to be provided.	A silt and sediment control plan will be provided with the Construction Certificate for the subdivision works.	Yes - capable with consent condition recommend er.
3.6.3.28	Saving and re-using top soil and the incorporation of additives to improve existing soils is preferred to the importation of soils for landscaping.	Construction details will be required to be provided with the Construction Certificate for the subdivision works.	Yes
3.6.3.29	Neighbourhood parks area to be provided so that all	The subject site is not identified to make provision	N/A

	<p>residential areas are generally within 500m of the nearest park.</p> <p>The location of neighbourhood parks is to be optimised so that a minimal number of parks are required.</p> <p>Neighbourhood parks and playing fields should be connected to the cycleway and pedestrian path networks.</p> <p>Neighbourhood parks should provide a range of facilities.</p> <p>Sports fields should be located close to school facilities.</p> <p>As a minimum 1.5 hectares active open space (sports fields); 5000m<sup>2</sup> neighbourhood park; 1 hectare of linkage/amenity space (total 3 hectares open space) to be provided per 1,000 people.</p>	for public open space for recreational purposes.	
3.6.3.30	<p>Neighbourhood parks are to be dedicated as development occurs, and are to include the following:</p> <ul style="list-style-type: none"> <li>• Minimum size of 5,000m<sup>2</sup>.</li> <li>• At least 2000m<sup>2</sup> should be level to gently sloping land.</li> <li>• Street frontage to the same standard as adjoining residential areas (i.e. kerb and gutter, or drainage swales where appropriate).</li> <li>• Any landform grooming to ensure the park is to a standard to suit Council's maintenance regime.</li> <li>• Any drainage works to ensure the functionality of the park.</li> <li>• Access via more than one street.</li> <li>• Integration with other</li> </ul>		

	community facilities. • Should be located to cause minimal disruption to traffic.		
	Neighbourhood park embellishment is to incorporate: • Park furniture including seats with shelters, barriers and any appropriate path and cycleway linkages along desire lines or linking to the cycleway network. • Any boardwalks necessary to achieve the required functionality of the park. • Works should generally be required to be undertaken prior to dedication to Council.		
3.6.3.31	An open space management strategy should accompany any subdivision application where open space that connects to natural linkages, drainage and wildlife corridors.	N/A	N/A
3.6.3.32	All street plantings are to be selected from Council's <i>Indigenous Street and Open Space Planting List</i> from the relevant vegetation community adjacent to the Development.	The proposed street planting will be consistent with Council's Indigenous Street and Open Space Planting List.	Yes
3.6.3.33	Lot layout should address areas of open space or public environmental management areas. Perimeter roads should border any area of open space or public environmental management areas.	The positioning of the Annabella Drive extension, as required by the DCP provisions for South Lindfield, has generally determined the road layout within each property. Not providing an edge road to the southern boundary is acceptable and accordingly the lots that front this boundary will included 10m wide APZ's.	Yes
	An assessment against the generic elements of crime prevention through	No battle axe lots are proposed. All lots have street frontage connection	Yes

	environmental design described in the <i>Crime Prevention Through Environmental Design</i> (CPTED) principles is provided with the subdivision application.	to provide for casual observation of street.	
3.6.3.34	<p>All service infrastructure should be underground unless otherwise approved by Council.</p> <p>All service infrastructure should be installed in a common trench.</p> <p>Conduits for the main technology network system should be provided in all streets.</p> <p>Conduits are to be installed in accordance with the National Broadband Network Company Limited's '<i>Guidelines for Fibre to the Premises Underground Deployment</i>'.</p> <p>Access pits are to be installed at appropriate intervals along all streets.</p>	All services will be provided underground, in accordance with the relevant construction codes.	Yes
3.6.3.35	<p>All new roads are to be designed in accordance the Council's Aus-Spec design specification documents.</p> <p>All applications to subdivide land should include a road layout plan that meets the Council's design requirements.</p>	All proposed roads are compliant with Council's Aus-Spec design specification documents.	Yes
3.6.3.45	Street lighting should be provided in accordance with Australian Standards	Street lighting should be provided in accordance with Australian Standards.	Yes
3.6.3.46	All new development should use energy efficient street lighting.		
3.6.3.47	Lighting should be provided along pathways, cycleways and in public places.		
3.6.3.51	<p>Street trees should be provided along all road frontages generally at a rate of 1 per 20m interval.</p> <p>Street trees should not</p>	Street trees are provided to one side of every street, enabling footpaths and water services to be provided on the alternate	Yes



	affect solar access.	side.	
3.6.3.52	Street trees from Council's list.	The proposed street planting will be consistent with Councils' Indigenous Street and Open Space Planting List.	
3.6.3.53 - 3.6.3.54	CPTED assessment required	All proposed lots have frontage to a public road, allowing for casual surveillance.	Yes

**DCP 2013: General Provisions**

DCP Objective	Development Provisions	Proposed	Complies
2.3.3.8 onwards	Removal of hollow bearing trees	A specialist site specific ecological assessment has been submitted. This assessment confirms that Hollow bearing trees are not present within the site.	N/A
2.6.3.1	Tree removal (3m or higher with 100mm diameter trunk and 3m outside dwelling footprint	Tree removal is proposed which has been satisfactorily addressed with the submitted ecological assessment.	Yes
2.4.3	Bushfire risk, Acid sulphate soils, Flooding, Contamination, Airspace protection, Noise and Stormwater	Refer to main body of report.	Yes
2.5.3.11	Section 94 contributions	Refer to main body of report.	Yes

**(iia) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4**

There is an existing planning agreement in place between the landowner's and Council known as the *South Lindfield Planning Agreement (Ramm VPA)* which has been entered into relating to the site. The Ramm VPA sets out the following provisions:

- Clause 8 - requires payment of the current Roads Contribution or the Roads Contribution determined by the next review of the Roads Contribution Plan.
- Clause 9 - provides the landowner of the adjoining western property with the opportunity to construct and dedicate the Link Road across the subject property in order to connect to Annabella Drive.
- Clause 10 - includes provisions facilitating payment of compensation by the subject landowner to the adjoining western landowner in the event that the adjoining landowner has constructed and dedicated the Link Road across the subject property.
- Clauses 13 – 15 - includes provisions that provide for the construction of Stormwater Catchment Work and where appropriate reimbursement of the cost of those works on a catchment share basis.

- Clause 16 - provides for the payment of the Sewerage Services Contribution and Sewerage Services Contribution Local.
- Clause 17 - provides for the payment of the current Open Space Contribution or the Open Space Contribution determined by the next review of the Open Space Contribution Plan.

The proposed subdivision is consistent with this VPA and appropriate conditions are recommended to require the VPA to be performed.

**(iv) Any matters prescribed by the Regulations**

**Demolition of buildings AS 2601 – Clause 92**

Existing Lot 1 includes a number of existing sheds/outbuildings (note that the aerial image includes an existing caravan on proposed Lot 3). The submitted plan of subdivision includes demolition of the existing sheds on proposed Lots 4 and 6. In relation to proposed Lot 2, it is proposed that this lot will not be released until such time as the sheds are removed. An appropriate condition of consent is recommended in this regard.

Demolition of the existing buildings on the site are capable of compliance with this Australian Standard and an appropriate standard condition is recommended.

**(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality:**

**Context and Setting**

The proposal will not have any identifiable significant adverse impacts to existing adjoining properties or the public domain.

The proposal is considered to be sufficiently compatible with other residential development in the locality and adequately addresses planning controls for the area.

**Concept proposal for residential subdivision**

The concept Development Application component of the proposal provides for the following:

- The identification of the future vegetation clearing within the site and tree removal within the John Oxley Drive road reserve;
- The indicative future residential lot layout that will provide for 25 Torrens title lots to satisfy the minimum lot size requirements set out in the PMH LEP 2011;
- The location of the future internal road network and the locations for connections to the existing road network to the east and the proposed adjacent network to the west;
- The identification of the location for a future stormwater basin, to be provided within a public reserve and straddle the boundaries of the subject site and adjoining Lot 3 DP 533058;
- The identification of the connection locations for the future upstream and downstream servicing through adjoining properties; and
- The identification of the location for future Asset Protection Zones.

Pursuant to Section 4.22(2) of the Act the DA also provides for the first stages of subdivision development, being the Staged Works DA within the northern section of

the site. The environmental, social and economic impacts of the concept DA have been assessed as being acceptable under Section 4.22(5) of the Act. The justification details submitted for the southern section/catchment of the site are considered acceptable.

An appropriate condition is recommended to restrict development of the southern section/catchment which will need to be the subject of a separate DA and development consent.

**Roads**

The site has road frontage to John Oxley Drive and Annabella Drive.

John Oxley Drive is classified as a Sub-Arterial road, which is in the care and control of Council. It is a sealed road with a pavement formation of 6m, with shoulders to both sides of the pavement. The road reserve is approximately 24m wide.

Annabella Drive is classified as a local road with a pavement formation of 9m wide in a 20m road reserve. The pavement has layback kerb.

Annabella drive is connected to the Ruins Way (which is a collector road) via a single lane roundabout.

**Traffic and Transport**

Anabella Drive is classified as a Local Road with a 9m pavement width. Based on the number of existing dwellings and the proposed lots, the calculated daily vehicle trips along Anabella Drive will be approximately 1806vpd (using RMS guidelines of 7 daily vehicles trips per day, over approx. 258 lots (existing and proposed DA2019 - 400.1 and DA2019 - 401.1)). In accordance with Aus-Spec, the design criteria of a local road is 100 - 2000vpd. In this regard, the development is unlikely to have any adverse impacts to the existing road network within the immediate locality. The immediate existing road network has capacity for the anticipated additional traffic.

**Site Frontage and Access**

This development has proposed an internal road network in accordance with our current DCP for the Lindfield Area development. The Development Control Plan 2013 refers to this precinct the "South Lindfield precinct" and has defined the future road layout to minimise road connections to John Oxley Drive, noting that it is a sub-arterial road. This application does not include the lot required to make the second connection to John Oxley Drive (refer to image below and circled). This future access will be subject to a future DA on Lot 2 DP 533058 (i.e. lot 171, refer to image extracted from DCP2013 below). This will ultimately require all vehicles movements associated with this development to use the existing Annabella Drive exit via the Ruins Way until Lot 2 DP533058 develops further.

The plans provided are generally in accordance with this strategic plan and are supported.

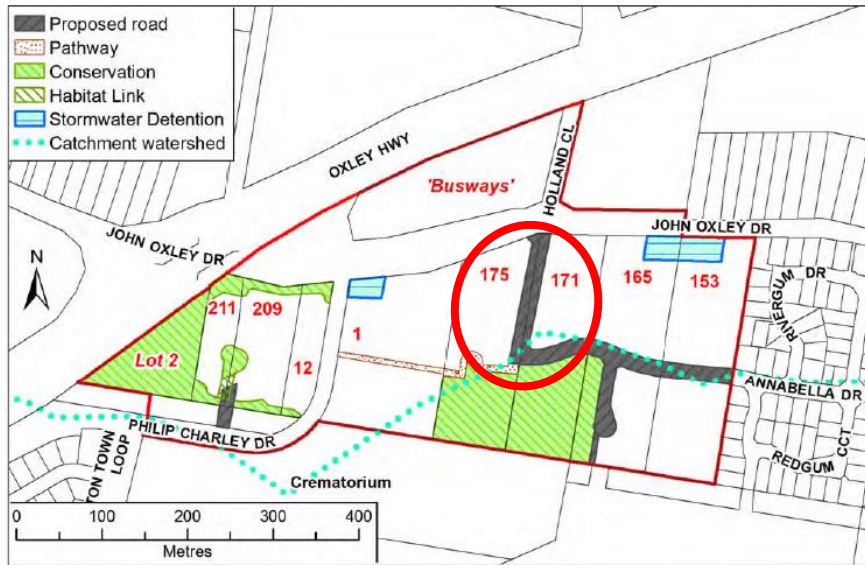


Figure 4.4.3-2 South Lindfield key development components

The development proposal is for vehicle access to the development via Annabella Drive, which is a 9m wide road running east west through the development site. Annabella Drive is classified as a local road with a 9m wide pavement formation.

This proposal includes the extension to Annabella Drive to the west, (Road 1, east-west) providing access to the Ruins Way and ultimately John Oxley drive. Additional local roads in the development are proposed in a north-south direction (off Road 1) providing access to all residential lots.

It should be noted that once the development lot to the west of the development site (Lot 171 in the above image) develops, a further extension of Annabella Drive and connection to John Oxley Drive shall be required in accordance with DCP2013. This will provide an additional entry/exit to this residential area, which will ultimately alleviate traffic movements to the east along Annabella Drive/The Ruins Way. The construction of this connection to John Oxley Drive is a requirement of the Voluntary Planning Agreement/s for the South Lindfield Urban Release Area and will be a development requirement once the applicable stage generates a demand for the link road.

The internal roads shall be classified as follows:

Road Name	Pavement width
Road 1	9m - Local Anabella Drive is a local road with a 9m wide formation. Road 1 is an extension of Anabella drive and would require a similar 9m wide pavement width.
Road 2	8m - Local with min. 9m radius turning head (northern side only)
Road 3	8m - Local with a 12m radius turning head (subject to future DA)

All internal roads shall comply with Council AUSPEC and Australian Standards, and conditions have been imposed to reflect these requirements.

Due to the type and size of development, additional works are required to include:

- Concrete footpath paving along on one side of all local roads
- Concrete footpath connecting the development site to the bus-stops on John Oxley Drive
- A temporary construction access from John Oxley Drive. No construction traffic is recommended via Annabella Drive on the basis that the construction of the development will have significant impacts to Council's existing road network.

Appropriate consent conditions are recommended to address the new road and impact to existing road requirements.

**Parking and Manoeuvring**

N/A

**Water Supply Connection**

Council records indicate that the development site has an existing 20mm metered water service from the 200 PVC water main on the opposite side of John Oxley Drive. An extension of Council's 200mm water main in Annabella Drive, at no cost to Council, can service the proposed development.

Pipe sizes shall be confirmed by PMHC's Water and Sewer Section with application for the Construction Certificate.

Each proposed lot is to have an individual service connection.

Appropriate consent conditions are recommended to address water supply requirements.

**Sewer Connection**

Council records indicate that the proposed development site does not currently have a connection to sewer. Council's sewer infrastructure is to be extended at no cost to Council to provide each lot with an individual connection. In accordance with Council's adopted specifications, sewer shall be provided to enable 100% of building areas within lots to drain to sewer.

The proposed development is to provide an integrated solution for sewerage services with adjoining properties. Any proposed gravity sewerage mains connections to the existing sewerage network requires approval from relevant landowners.

In the northern catchment:

- the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54
- the alignment is to consider a possible extension to serve the bulk of the following lots west of Philip Charley Drive; Lot 2 DP1186806, Lot 21 DP1089272, Lot 2 DP578793, Lot 4 DP 630393.

In the southern catchment, the sewer mains are to connect to Sewer Pump Station 80 to the south of the proposed development lot.

PMHC's Water and Sewer Section shall confirm proposed pipe locations with application for the Construction Certificate.

Appropriate consent conditions are recommended to address sewer servicing requirements.



**Stormwater**

The site contains two catchments separated by a ridge line in the East –West direction and draining to the northern and southern boundary respectively. Drainage is primarily directed by overland means to the proposed pit and pipe stormwater network for both catchments.

The overall site catchment is composed of two catchments, with both being of a roughly rectangular shape. The northern catchment drains northwards, crossing the John Oxley Drive and Oxley Highway via existing stormwater culverts and drainage swales to the Hastings River Floodplain and ultimately the Hastings River itself. The southern catchment drains southwards over land and via a series of small creeks and swales to enter the Lake Innes Floodplain and ultimately Lake Innes itself.

The legal point of discharge for the proposed development is defined as a direct connection to Council's stormwater pit/pipeline.

A detailed site stormwater management plan will be required to be submitted for assessment with the Section 68 application and prior to the issue of a Construction Certificate.

In accordance with Council's AUSPEC requirements, the following must be incorporated into the stormwater drainage plan:

- On site stormwater detention facilities
- Water quality
- Provision of interallotment drainage to allow the proposed development to drain to the nominated point of discharge via a single suitably sized conduit

Appropriate consent conditions are recommended to address stormwater servicing requirements.

**Other Utilities**

Telecommunication and electricity services are available to the site.

Evidence of satisfactory arrangements with the relevant utility authorities for provision to each proposed lot will be required prior to Subdivision Certificate approval.

Appropriate consent conditions are recommended to address utility servicing requirements.

**Heritage**

Following a site inspection (and a search of Council records), no known items of Aboriginal or European heritage significance exist on the property. No adverse impacts anticipated. The site is considered to be disturbed land.

As a precaution, a condition of consent has been recommended that works are to cease in the unexpected event heritage items are found. Works can only recommence when appropriate approvals are obtained for management and/or removal of the heritage item.

**Other land resources**

The site is within a planned urban release context and will not sterilise any significant mineral or agricultural resource.

**Water cycle**

The proposed development will not have any significant adverse impacts on water resources and the water cycle.

**Soils**

The proposed development will not have any significant adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

**Air and microclimate**

The construction and/or operations of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

**Flora and fauna**

A specialist ecological assessment prepared by Biodiversity Australia has been submitted to support the proposal.

In summary the Biodiversity report states that:

- A bloodwood tree in the John Oxley Drive road reserve will require removal to establish the proposed sewer line running to the north of the site.
- A large Blackbutt also in the road reserve has been assessed by an Arborist who has found it to be unsound and recommended its removal.
- No preferred Koala food trees or hollow-bearing trees are present within the subject site. The proposal will require the removal of garden ornamentals and exotic trees only as well as a Bloodwood tree in the John Oxley Drive road reserve which will be impacted by a sewer line.
- No threatened flora species or Endangered Ecological Communities were found on the site during the survey.
- No threatened fauna species were detected during the survey. Eight threatened fauna species are considered to potentially occur.
- The site does not contain Core Koala habitat and no evidence of the Koala was found on the subject site. The Koala has been recorded on adjacent land however and has been assessed for potential impacts from the proposed development.

Construction of the proposed development will not require any removal/clearing of any significant native vegetation and therefore does not trigger the biodiversity offsets scheme. Part 7 of the Biodiversity Conservation Act 2016 is considered to be satisfied.

**Waste**

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated. Standard precautionary site management condition recommended.

**Energy**

No adverse energy impacts are anticipated.

**Noise and vibration**

The construction and/or operations of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

**Bushfire**

The site is identified as being bushfire prone.

In accordance with Section 100B - *Rural Fires Act 1997* - the application proposes subdivision of bush fire prone land that could lawfully be used for residential purposes. As a result, the applicant has submitted a bushfire report prepared by a Certified Consultant. The report was forwarded to the NSW Rural Fire Service who have since issued a Bushfire Safety Authority subject to conditions. The conditions are recommended to be incorporated into the consent.

**Safety, security and crime prevention**

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area. The increase in housing density will improve natural surveillance within the locality.

**Social impacts in the locality**

Given the nature of the proposed development and its location the proposal is not considered to have any significant adverse social impacts.

**Economic impact in the locality**

The proposal is not considered to have any significant adverse economic impacts on the locality. A likely positive impact is that the development will maintain employment in the construction industry, which will lead to flow impacts such as expenditure in the area.

**Site design and internal design**

The proposed development design satisfactorily responds to the site attributes and will fit into the locality.

**Construction**

Construction impacts are considered capable of being managed, standard construction and site management conditions have been recommended.

**Cumulative impacts**

The proposed development is not considered to have any significant adverse cumulative impacts on the natural or built environment or the social and economic attributes of the locality.

**(c) The suitability of the site for the development**

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

Site constraints of bushfire risk have been adequately addressed and appropriate conditions of consent recommended.

**(d) Any submissions made in accordance with this Act or the Regulations**

Four (4) written submissions were received following public exhibition of the application. Copies of the written submissions have been provided separately to members of the Development Assessment Panel.

Key issues raised in the submissions received and comments in response are provided as follows:

<b>Submission Issue/Summary</b>	<b>Planning Comment/Response</b>
Rear boundary fence between proposed Lots 3, 4 and 5 in existing Lot 1 DP 369206 and no. 36 Rivergum Drive.	<p>An existing well maintained boundary fence currently divides existing Lot 1 DP 369206 and no.36 Rivergum Drive. Any future negotiations between the future residents of proposed lots 3, 4 and 5 within existing Lot 1 DP 369206 and no.36 Rivergum Drive will need to be consistent with the Dividing Fences Act, which is not administered by Council.</p> <p>On the basis that proposed lots 4 and 5 have minimum widths of 15m, an amendment to the subdivision layout is not proposed.</p>
Footpaths do not show kerb ramps and are on one side of the road	<p>The proposed footpath locations are illustrated diagrammatically on the subdivision plans that accompany the DA submission. The detail design will be provided with the Construction Certificate submission for the civil works and will be consistent with D1.16 of Councils AUSPEC, which includes the requirement for pram ramps.</p> <p>The proposed footpath locations are consistent with chapter 3.6 of the PMH DCP 2013 and Council's adopted AUSPEC design specification documents, including 1.2m wide footpath provision to one side of the local street network. This provision will also provide for street tree plantings on the opposite of each street.</p>
Construction noise	Any consent issued by Council will include hours of operation for construction, which will limit potential disturbance to existing adjoining residential premises. Additionally, construction for both subdivision works and future dwellings will be limited in overall duration, i.e.; construction noise will cease when

Submission Issue/Summary	Planning Comment/Response
	<p>development is completed.</p> <p>It is noted that safety reversing alarms will need to comply with the relevant Australian Standards and as such, cannot be conditioned Council.</p> <p>It is proposed that the future Construction Certificate documentation for the subdivision civil works will be required to make provision for a temporary construction access directly from John Oxley Drive. The intention of this temporary construction access arrangement is to minimise potential amenity impacts on the existing adjoining residential areas. An appropriate condition is recommended in this regard.</p>
Traffic impact	<p>The matters raised with respect to overall traffic congestion and general cumulative impacts are outside the scope of the subject Development Applications. These matters should be dealt with in Council's Regional Traffic Plan and review of the Major Roads Contribution Plan.</p> <p>The proposed subdivision as presented is consistent with Chapter 4.4.3 of Councils DCP 2013 for the South Lindfield Precinct. The proposed internal road network is consistent with Figure 4.4.3-2, which provides for an extension to Annabella Drive, an edge road to the E2 zoned land and a footpath connection to the south. In accordance with the DCP, Annabella Drive will extend further to the west to facilitate an intersection connection onto John Oxley Drive. This future intersection connection will provide a secondary means of access for the subject properties and the locality generally.</p> <p>Annabella Drive is currently constructed to a collector road standard (9m carriageway) and that pursuant to Table D1.5 of Councils AUSPEC, and sufficient capacity for the likely additional</p>



Submission Issue/Summary	Planning Comment/Response
	<p>traffic. Until such time as the new intersection is provided onto John Oxley Drive (as per the DCP), all 200 lots (includes existing and subject properties) will be required to enter/exit The Ruins Way via Annabella Drive.</p> <p>The proposed extension to Annabella Drive is therefore an efficient use of the existing road infrastructure. When a new intersection is available onto John Oxley Drive to the west, in accordance with Council's DCP, the existing 200 lots will have a choice of access onto John Oxley Drive, either to the west or to the east.</p>
Cumulative impacts	<p>The subject properties are part of the South Lindfield Urban Release Area where cumulative impacts and servicing were considered as part of the Planning Proposal process. The area has been included in Council's Urban Growth Strategies since 1998.</p> <p>The proposed subdivision is consistent with Chapter 4.4.3 of the DCP, including an extension to Annabella Drive, an edge road to the E2 zoned land and a footpath connection to the south.</p> <p>In addition as noted above, Annabella Drive will continue to operate within its capacity as a collector road and its extension to the west has been consistently included in the planning process to date.</p>
SEPP 55 Remediation of Land	<p>The Planning Proposal to support the rezoning of the site included assessment of the site consistent with the provisions of this Policy.</p> <p>Geotechnical assessment was undertaken at areas with a previous land use history of potential contamination (nursery).</p> <p>The subject properties do not have a land use history that would indicate potential contamination.</p> <p>The Planning Proposal noted that</p>

Submission Issue/Summary	Planning Comment/Response
	<p>there was a presumption that asbestos could be found in the older dwellings. Suitable conditions can be included in the consent to ensure consideration of this matter when demolition of the existing structures are undertaken.</p> <p>The site may contain rock that contains Naturally Occurring Asbestos (NOA). A standard condition is recommended to ensure preparation of a NOA management plan and to ensure compliance with WorkCover.</p> <p>Potential general dust nuisance can be addressed with a recommended standard condition for management of the site for the entirety of the works.</p>
Additional access to John Oxley Drive	<p>The subject Development Applications do not include a secondary access onto John Oxley Drive, however a temporary construction access for the civil works is proposed. The road network presented in the subject Development Application is consistent with Council's DCP and will enable a future connection to the west that will provide a secondary access to John Oxley Drive. Annabella Drive is constructed to a collector road standard (9m carriageway) and that pursuant to Table D1.5 of Councils AUSPEC.</p>
Public Open Space	<p>Council's DCP does not require the provision of additional areas of open space however development contributions are required to the provision of recreation facilities in accordance with Council's adopted Development Contribution Plan.</p>

**(e) The Public Interest**

The proposed development will be in the wider public interest with provision of appropriate additional housing opportunities.

The proposed development satisfies relevant planning controls and will not have any significant adverse impacts on the wider public interest.

**Ecologically Sustainable Development and Precautionary Principle**

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes.

The four principles of ecologically sustainable development are:

- the precautionary principle,
- intergenerational equity,
- conservation of biological diversity and ecological integrity,
- improved valuation, pricing and incentive mechanisms.

The principles of ESD require that a balance needs to be struck between the man-made development and the need to retain the natural vegetation. Based on the assessment provided in the report and with recommended conditions of consent, it is considered an appropriate balance has been struck.

**Climate change**

The proposal is not considered to be vulnerable to any risks associated with climate change.

**4. DEVELOPMENT CONTRIBUTIONS APPLICABLE**

- Development contributions will be required towards augmentation of town water supply and sewerage system head works under Section 64 of the Local Government Act 1993.
- Development contributions will be required in accordance with Section 7.11 of the Environmental Planning and Assessment Act 1979 towards roads, open space, community cultural services, emergency services and administration buildings.
- A copy of the contributions estimate will be tabled at the DAP meeting.

a

**5. CONCLUSION AND STATEMENT OF REASON**

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact. It is recommended that the application be approved, subject to the recommended conditions of consent provided in the attachment section of this report.

**Attachments**

1 [View](#). DA2019 - 401.1 Recommended Conditions

2 [View](#). DA2019 - 401.1 Plans and Supporting Documents

**FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF  
PROPOSED CONDITIONS****NOTE: THESE ARE DRAFT ONLY****DA NO: 2019/401****DATE: 11/10/2019****PRESCRIBED CONDITIONS**

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations 2000*.

**A – GENERAL MATTERS**

- (1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

<b>Plan / Supporting Document</b>	<b>Reference</b>	<b>Prepared by</b>	<b>Date</b>
Development plans	Sheets 1 to 5	King & Campbell Pty Ltd	4 June 2019
Road traffic noise assessment		EMM Consulting	12 November 2018
Arborist Report		Port Tree Fella	29 March 2019

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A003) The proponent shall submit an application for a Subdivision Certificate for Council certification with all relevant documentation.
- (3) (A004) An application for a Construction Certificate will be required to be lodged with Council prior to undertaking subdivision works and a Subdivision Certificate is required to be lodged with Council on completion of works.
- (4) This consent approves the Staged Concept proposal for subdivision of the site for the site. Separate development consent is required to be obtained for the development of the southern residue lot area within Stage 3 of the development.
- (5) The development must only proceed in accordance with the approved stages as set out below:
- Stage 1: Roads 01, 02 and 03 and creation of Lots 1, 14, 15 and 16 and residue within Stage 1 works development within approved staged concept proposal;
  - Stage 2: Creation of Lots 2, 3 and 10 to 13 and residue; and
  - Stage 3: Creation of Lots 4 to 9 and residue Future Stage 2 DA.
- (6) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of

the relevant authority including the provision of easements over existing and proposed public infrastructure.

- (7) (A009) The development site is to be managed for the entirety of work in the following manner:

1. All construction vehicles are to access the site from John Oxley Drive and not Annabella Drive. Appropriate temporary signage is to be erected within the road reserves to enforce this requirement.
2. Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
3. Appropriate dust control measures;
4. Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work adjoins the public domain, fencing is to be in place so as to prevent public access to the site;
5. Building waste is to be managed via appropriate receptacles into separate waste streams;
6. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
7. Building work being limited to the following hours, unless otherwise permitted by Council;
  - Monday to Saturday from 7.00am to 6.00pm
  - No work to be carried out on Sunday or public holidays

The builder to be responsible to instruct and control his sub-contractors regarding the hours of work.

- (8) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.

- (9) (A013) The general terms of approval from the following authorities, as referred to in section 4.50 of the Environmental Planning and Assessment Act 1979, and referenced below, are attached and form part of the consent conditions for this approval.

- **NSW Rural Fire Service** - The General Terms of Approval, Reference D19/1979 DA19061419142 PC and dated 18 July 2019, are attached and form part of this consent.

- (10) (A032) The developer is responsible for any costs relating to minor alterations and extensions to ensure satisfactory transitions of existing roads, drainage and Council services for the purposes of the development.

- (11) (A033) The applicant shall provide security to the Council for the payment of the cost of the following:

- a. making good any damage caused to any property of the Council as a consequence of doing anything to which the consent relates,
- b. completing any public work (such as road work, kerbing and guttering, footway construction, utility services, stormwater drainage and environmental controls) required in connection with the consent,
- c. remedying any defects in any such public work that arise within twelve (12) months after the work is completed.

Such security is to be provided to Council prior to the issue of the Subdivision Certificate/Construction Certificate or Section 138 of the Roads Act, 1993.



The security is to be for such reasonable amount as is determined by the consent authority, being an amount that is 10% of the contracted works for Torrens Title subdivision development/the estimated cost plus 30% for building development of public works or \$5000, whichever is the greater of carrying out the development by way of:

- i. deposit with the Council, or
- ii. an unconditional bank guarantee in favour of the Council.

The security may be used to meet any costs referred to above and on application being made to the Council by the person who provided the security any balance remaining is to be refunded to, or at the direction of, that person. Should Council have to call up the bond and the repair costs exceed the bond amount, a separate invoice will be issued. If no application is made to the Council for a refund of any balance remaining of the security within 6 years after the work to which the security relates has been completed the Council may pay the balance to the Chief Commissioner of State Revenue under the Unclaimed Money Act 1995.

- (12) (A057) The applicant is to ensure the proposed development will drain to the existing point of connection to Council's sewerage system.
- (13) (A195) The applicant is to comply with and perform the provisions of the planning agreement entered into under section 7.4 of the Environmental Planning and Assessment Act known as the South Lindfield Urban Release Area Planning Agreement as modified from time to time between Port Macquarie-Hastings Council and Ross Wayne Ramm and Jennifer Maree Ramm dated 16 January 2019 in relation to the carrying out of the development the subject of this consent.

#### **B – PRIOR TO ISSUE OF A CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
  - Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
  1. New roads within the subdivision.
  2. Earthworks, including filling of the land for flood protection.
  3. Sewerage reticulation.
  4. Water supply reticulation.
  5. Stormwater systems.
  6. Erosion & Sedimentation controls.
  7. Landscaping/waste management facilities.

8. Provision of a 1.5m (unless varied in writing by Council) concrete footpath across the proposed road frontages of the property.

- (3) (B004) Road network within the subdivision is to be categorised with carriageway width as follows. Prior to release of the Construction Certificate such details are to be illustrated on the submitted plans.

Road No.	Road Width (Metres)					
	Share way	Access	Local	Collector	Commercial	Industrial
1			9m			
2			8m terminating at a 9m radius head			
3			8m			

- (4) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

- Civil works
- Traffic management
- Work zone areas
- Hoardings
- Concrete foot paving (width)
- Footway and gutter crossing
- Functional vehicular access

Where works are proposed on an RMS classified facility, the Road Authority shall obtain RMS concurrence prior to any approval.

- (5) (B007) Road names proposed for the development shall be submitted to Council prior to release of the Construction Certificate. A suitable name for any new road(s) shall be in accordance with the NSW Addressing User Manual.
- (6) (B015) Provision to each lot of a separate water connection (un-metered and sealed) to Council's main.
- (7) (B016) Provision to each lot of a separate sewer line to Council's main. All work will need to comply with the requirements of Council's adopted AUSPEC Design and Construction Guidelines and Policies. Any abandoned sewer junctions are to be capped off at Council's sewer main and Council notified to carry out an inspection prior to backfilling of this work.
- Construction details are to be submitted to Port Macquarie-Hastings Council with the application for Construction Certificate.
- (8) (B030) Prior to issue of Construction Certificate, a pavement design report shall be prepared by a suitably qualified geotechnical or civil engineer and submitted to Council, including soil test results and in-situ CBR values (NATA certified). Council's minimum pavement compaction testing criteria are as follows:
- a. 98% (modified) base layers - Maximum Modified Dry Density test in accordance with AS1289.5.2.1

- b. 95% (modified) sub-base layers - Maximum Modified Dry Density test in accordance with AS1289.5.2.1
  - c. 100% (standard) subgrade/select layers - Maximum Standard Dry Density test in accordance with AS1289.5.1.1 (or for in-situ subgrade soils only, wet density testing may be used)
- (9) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
- a) The legal point of discharge for the proposed development is defined as Council's piped system.

In this regard, Council's piped drainage system must be extended by an appropriately sized pipeline (minimum 375mm diameter) to the frontage of the site, where a kerb inlet pit (minimum 2.4m lintel) must be installed, to allow direct piped connection from the development site into the public drainage system.

The pipeline must be designed to have the capacity to convey flows that would be collected at that section of street as generated by a 20-year Average Recurrence Interval storm event.
  - b) The design requires the provision of interallotment drainage in accordance with AUSPEC D5
  - c) The design shall incorporate on-site stormwater detention facilities to limit site stormwater discharge to pre development flow rates for all storm events up to and including the 100 year ARI event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
  - d) The design shall include water quality controls designed to achieve the targets specified within AUSPEC D7.
  - e) Where works are staged, a plan is to be provided which demonstrates which treatment measure/s are to be constructed with which civil works stage. Separate plans are required for any temporary treatment (where applicable e.g. for building phase when a staged construction methodology is adopted) and ultimate design.
  - f) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
  - g) The stormwater basin located at the John Oxley Dr frontage of the development site shall be sized to cater for post development stormwater runoff from the entire contributing catchment area in accordance with Port Macquarie - Hastings Council area specific DCP Requirements which necessitate a single end of line basin for this catchment only. In this regard, the basin shall provide suitable volume and treatment facilities to treat stormwater runoff from the post development contributing catchments in lots 2 & 3 DP533058 and Lot 1 DP369206. Modelling submitted with the CC submission shall detail relevant assumptions made regarding the post development landuse within adjoining lots.
  - h) Modelling must be submitted with the CC submission to demonstrate that stormwater discharge from the proposed stormwater basin to the downstream culvert beneath John Oxley Drive is not increased as a result of upstream development in the contributing catchment. Modelling shall

demonstrate no increase in stormwater discharge to the downstream culvert for storm events including the 1EY, 20% AEP, 5%AEP and 1%AEP events for a range of equivalent durations at a minimum.

- (10) (B052) The provision of 3m x 3m splay corners or otherwise agreed to by Port Macquarie-Hastings Council. Details must be submitted to and approved by Port Macquarie-Hastings Council prior to release of the Construction Certificate.
- (11) (B056) The Stormwater network proposed with the application for Construction Certificate is to include provision to each subdivided lot of a direct point of connection to Council's future piped drainage system.
- (12) (B061) Prior to release of the Construction Certificate submission of a Waste Management Plan, in accordance with Council's current requirements.
- (13) (B063) Prior to release of the Construction Certificate submission of a detailed landscape plan to the Principal Certifying Authority.
- (14) (B071) Prior to the issue of any Construction Certificate, the provision of water and sewer services to the land are to be approved by the relevant Water Authority and relevant payments received.
- (15) (B085) The location of electricity substations are to be clearly illustrated on the Construction Certificate plans. All substations are to remain on private property unless otherwise agreed to by Port Macquarie-Hastings Council.
- (16) (B195) Council records indicate that the development site has an existing 20mm metered water service from the 200 PVC water main on the opposite side of John Oxley Drive. An extension of Council's 200mm water main in Annabella Drive, at no cost to Council, can service the proposed development. PMHC's Water and Sewer Section shall confirm pipe sizes with application for the Construction Certificate.
- (17) (B196) Council's sewer infrastructure is to be extended at no cost to Council to provide each lot with an individual connection. In accordance with Council's adopted specifications, sewer shall be provided to enable 100% of building areas within lots to drain to sewer.

The proposed development is to provide an integrated solution for sewerage services with adjoining properties. Any proposed gravity sewerage mains connections to the existing sewerage network requires approval from relevant landowners.

In the northern catchment:

- the sewer mains are to connect to an existing gravity main connecting to Sewer Pump Station 54
- The alignment is to consider a possible extension to serve the bulk of the following lots west of Philip Charley Drive; lot 2 DP1186806, lot 21 DP1089272, lot 2 DP578793, lot 4 DP 630393.

In the southern catchment, the sewer mains are to connect to Sewer Pump Station 80 to the south of the proposed development lot.

PMHC's Water and Sewer Section shall confirm proposed pipe locations with application for the Construction Certificate.

#### **C – PRIOR TO ANY WORK COMMENCING ON SITE**

- (1) (C001) A minimum of one (1) weeks' notice in writing of the intention to commence works on public land is required to be given to Council together with the name of the principal contractor and any major sub-contractors

engaged to carry out works. Works shall only be carried out by a contractor accredited with Council.

- (2) (C013) Where a sewer manhole and Vertical Inspection Shaft exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

#### D – DURING WORK

- (1) (D001) Development works on public property or works to be accepted by Council as an infrastructure asset are not to proceed past the following hold points without inspection and approval by Council. Notice of required inspection must be given 24 hours prior to inspection, by contacting Council's Customer Service Centre on (02) 6581 8111. You must quote your Construction Certificate number and property description to ensure your inspection is confirmed:
  - a. at completion of installation of erosion control measures
  - b. at the commencement of earthworks;
  - c. before commencement of any filling works;
  - d. when the sub-grade is exposed and prior to placing of pavement materials;
  - e. when trenches are open, stormwater/water/sewer pipes and conduits jointed and prior to backfilling;
  - f. at the completion of each pavement (sub base/base) layer;
  - g. before pouring of kerb and gutter;
  - h. prior to the pouring of concrete for sewerage works and/or works on public property;
  - i. on completion of road gravelling or pavement;
  - j. during construction of sewer infrastructure;
  - k. during construction of water infrastructure;
  - l. prior to sealing and laying of pavement surface course.

All works at each hold point shall be certified as compliant in accordance with the requirements of AUSPEC Specifications for Provision of Public Infrastructure and any other Council approval, prior to proceeding to the next hold point.

- (2) (D003) The site is in an area known to contain rock that may contain naturally occurring asbestos (NOA). Should potential NOA be located on site notification shall be provided to Council and Workcover prior to works proceeding. No work shall recommence until a NOA management plan has been approved by Council or Workcover.
- (3) (D006) A copy of the current stamped approved construction plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.
- (4) (D029) The demolition of any existing structure shall be carried out in accordance with Australian Standard AS 2601: *The Demolition of Structures*. No demolition materials shall be burnt or buried on site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on an adjoining public road or



reserve, separate application shall be made to Council to enclose the public place with a hoarding fence.

Should asbestos be present, its removal shall be carried out in accordance with the National OH&S Committee – *Code of Practice for Safe Removal of Asbestos* and *Code of Practice for the Management and Control of Asbestos in Workplaces*.

- (5) (D040) Wastes including trees removed shall not be disposed of by burning.
- (6) (D033) Should any Aboriginal objects be discovered in any areas of the site then all excavation or disturbance to the area is to stop immediately and the National Parks and Wildlife Service, Department of Environment and Conservation is to be informed in accordance with Section 91 of the *National Parks and Wildlife Act 1974*. Subject to an assessment of the extent, integrity and significance of any exposed objects, applications under either Section 87 or Section 90 of the *National Parks and Wildlife Act 1974* may be required before work resumes.
- (7) (D051) Prior to commencement of any pavement works a material quality report from the proposed supplier shall be submitted to Council. The pavement materials shall meet Council's current specifications at the time of construction.
- (8) (D052) Prior to laying of Asphaltic Concrete (AC) or wearing surface course, submission to Council of pavement and soil test results prepared by a NATA registered person for all road pavement construction, including:
  - a. CBR test results, and
  - b. Subgrade / select fill, sub-base and base pavement compaction reports in accordance with AS1289.5.1.1 & AS1289.5.2.1 as applicable.
- (9) (D195) Plant used in clearing and construction to be "certified" as weed free must follow the DPI decontamination guide prior to entering and leaving site.
- (10) (D196) Work zones on the site must be identified and fencing or flagging tape used to delineate no-go areas.
- (11) (D197) Weed monitoring and control must continue throughout the development phase to ensure that weeds do not establish and spread on the site.

#### **E – PRIOR TO THE ISSUE OF ANY SUBDIVISION CERTIFICATE**

- (1) (E005) Prior to the release of any bond securities held by Council for infrastructure works associated with developments, a formal written application is to be submitted to Council specifying detail of works and bond amount.
- (2) (E006) Completion of engineering and environmental works for any land (other than proposed public roads) to be transferred to Council, in accordance with the approved Construction Certificate.
- (3) (E008) Payment to Council, prior to the issue of the Subdivision Certificate of the Section 7.11 contributions set out in the "Notice of Payment – Developer Charges" schedule attached to this consent, unless deferral of payment of contributions has been approved by Council. The contributions are levied, pursuant to the Environmental Planning and Assessment Act 1979 as amended, in accordance with the provisions of the following plans or as specified by an applicable Planning Agreement:
  - Hastings S94 Administration Building Contributions Plan
  - Hastings Administration Levy Contributions Plan

- Hastings S94 Major Roads Contributions Plan
- Port Macquarie-Hastings Open Space Contributions Plan 2018
- Community Cultural and Emergency Services Contributions Plan 2005
- Innes Peninsula Contributions Plan - Road Works.

The plans may be viewed during office hours at the Council Chambers located on the corner of Burrawan and Lord Streets, Port Macquarie, 9 Laurie Street, Laurieton, and High Street, Wauchope.

The attached "Notice of Payment" is valid for the period specified on the Notice only. The contribution amounts shown on the Notice are subject to adjustment in accordance with CPI increases adjusted quarterly and the provisions of the relevant plans. Payments can only be made using a current "Notice of Payment" form. Where a new Notice of Payment form is required, an application in writing together with the current Notice of Payment application fee is to be submitted to Council.

- (4) (E009) As part of Notice of Requirements by Port Macquarie-Hastings Council as the Water Authority under Section 306 of the Water Management Act 2000, the payment of a cash contribution, prior to the issue of a Subdivision Certificate, of the Section 64 contributions, as set out in the "Notice of Payment – Developer Charges" schedule attached to this consent is required unless deferral of payment of contributions has been approved by Council. The contributions are levied in accordance with the provisions of the relevant Section 64 Development Servicing Plan or as specified by an applicable Planning Agreement towards the following:
  - augmentation of the town water supply headworks
  - augmentation of the town sewerage system headworks.
- (5) (E013) Restrictions and/or positive covenant must be provided over the overland flow path for on site detention storage areas with appropriate public awareness signage.
- (6) (E015) Prior to issue of any Subdivision Certificate, details of compliance with the Bushfire Safety Authority is to be provided to the Principal Certifying Authority.
- (7) (E034) Prior to occupation or the issuing of the Subdivision Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.
- (8) (E038) Interallotment drainage shall be piped and centrally located within an inter-allotment drainage easement, installed in accordance with Council's current AUSPEC standards (minimum 225mm pipe diameter within a minimum 1.5m easement). Details shall be provided:
  - As part of a Local Government Act (s68) application with evidence of registration of the easement with the Land Titles Office provided to Council prior to issue of the s68 Certificate of Completion; or
  - As part of a Construction Certificate application for subdivision works with dedication of the easement as part of any Subdivision Certificate associated with interallotment drainage.
- (9) (E039) An appropriately qualified and practising consultant is required to certify the following:
  - a. all drainage lines have been located within the respective easements, and

- b. any other drainage structures are located in accordance with the Construction Certificate.
  - c. all stormwater has been directed to a Council approved drainage system
  - d. all conditions of consent/ construction certificate approval have been complied with.
  - e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (10) (E040) Each onsite detention system is to be marked by a plate in a prominent position which states:
- "This is an onsite detention system. It is an offence to reduce the volume of the tank or basin or interfere with any part of the structure that controls the outflow".
- This plate is to be fixed into position prior to occupation or the issue of the Occupation or Subdivision Certificate.
- (11) (E042) Creation of drainage easement between lots (i.e. interallotment)
- Where stormwater pipelines traverse lots other than those which they benefit appropriate drainage easements shall be created and registered on the title of the relevant lot(s) with the Lands and Property Information NSW.
- a. For pipes less than 500mm diameter, the easement width must be a minimum of 1500mm. Easements for larger diameter pipes must be the pipeline diameter plus 1200mm wide, with a minimum width of 2400mm.
  - b. Where easements are associated with a subdivision, the easement shall be established with the plan of subdivision and Section 88B instrument.  
Details to be submitted to Council prior to issue of Subdivision Certificate.
- Where easements are not associated with a subdivision, the easement shall be approved by Council prior to lodgement at Lands and Property Information (LPI) NSW and evidence of registration shall be submitted to the Principal Certifying Authority prior to any Occupation Certificate.
- (12) (E050) Prior to Council accepting new stormwater infrastructure, a CCTV inspection of all new and modified stormwater assets must be undertaken in accordance with the Conduit Inspection Reporting Code of Australia WSA 05.
- A copy of the CCTV inspection footage and inspection report prepared and certified by a suitably qualified person shall be provided to Council prior to the acceptance of works into the nominated 'into maintenance period'.
- (13) (E053) All works relating to public infrastructure shall be certified by a practicing Civil Engineer or Registered Surveyor as compliant with the requirements of AUSPEC prior to issue of Subdivision Certificate or release of the security bond, whichever is to occur first.
- (14) (E054) No building is to be connected to Council's future sewer main until Council has accepted such main. A pre-requisite for acceptance will be to successfully comply with Council's AUSPEC Specifications for air testing, visual inspection, manhole lid seal and the level of the lid mm above the proposed finished surface level. The manhole must be protected during dwelling construction by erecting a barrier around the manhole. Any alterations to the finished surface level requiring the raising or lowering of the manhole will require Council's approval.
- (15) (E056) A Certificate of Compliance under the provisions of Section 307 of the *Water Management Act* must be obtained prior to the issue of any subdivision certificate.

- (16) (E061) Landscaped areas being completed prior to occupation or issue of the Subdivision Certificate. Public landscaping may be bonded as agreed to by Council.
- (17) (E064) Provision of street lighting to all new roads in accordance with AS1158 and compliance with the requirements of the electricity authority regarding provision of electricity to serve the development. Provision shall be made for placement of conduits for future requirements or upgrades. Evidence by way of letter from the electricity provider, indicating compliance with this condition shall be submitted prior to the issue of the Subdivision Certificate.

Any proposal to erect non-standard, prestige or Smart Poles (or equivalent) street lighting shall:

- Forward all plans to the service provider for comment;
  - Include instruction for completion of 'Lighting Requirements';
  - be referred to Council together with details of the difference in annual charges over a twenty-five (25) year period in accordance with Policy R5 – Street Lighting on Public Roads;
  - Supply to Council to keep in stock, one (1) extra pole for every six (6) run of poles, for all poles that are non-standard poles.
- (18) (E066) Ancillary works shall be undertaken at no cost to Council to make the engineering works required by this Consent effective to the satisfaction of Director of Council's Infrastructure Division. Such works shall include, but are not limited to the following:
- a. The relocation of underground services where required by civil works being carried out.
  - b. The relocation of above ground power and telephone services
  - c. The relocation of street lighting
  - d. The matching of new infrastructure into existing or future design infrastructure
- (19) (E068) Prior to the issue of a Subdivision Certificate, evidence to the satisfaction of the Certifying Authority from the electricity and telecommunications providers that satisfactory services arrangements have been made to the lots (including street lighting and fibre optic cabling where required).
- (20) (E072) Lodgement of a security deposit with Council upon practical completion of the subdivision works.
- (21) (E076) The plan of subdivision and Section 88B instrument shall establish the following restrictions, easements and/or covenants; with Council having the benefit and having the sole authority to release, vary or modify each restriction, easement and/or covenant. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.
- a. Prohibiting the erection of any development within the Stage 3 southern residue lot except with the development consent of Port Macquarie-Hastings Council. This residue lot is also to be detailed to an unserved lot.
  - b. Prohibiting direct vehicular access to and from John Oxley Drive.
- Details are to be submitted to Council prior to issue of the Subdivision Certificate.

- (21) (E078) The lot identified as proposed drainage land under Council's control is to be dedicated to Council for drainage purposes. Provision for this dedication is to be made in the application for the Subdivision Certificate.
- (22) (E079) Submission to the Principal Certifying Authority of certification by a Registered Surveyor prior to the issue of a Subdivision Certificate that all services and domestic drainage lines are wholly contained within the respective lots and easements.
- (23) (E081) The applicant will be required to submit prior to the issue of the Subdivision Certificate, a geotechnical report certifying construction of all earthworks as controlled fill in accordance with Council AUS-SPEC Standard and AS 37898. Such report to provide details of:
- a. The surface levels of the allotments created, filled or reshaped as part of the development.
  - b. Compaction testing carried out to Controlled Fill Standard as per AS 3798.
  - c. Standard penetration tests and calculated N values.
  - d. Bore logs
  - e. Site classification of all allotments in accordance with AS2870.2011 - *Residential Slabs and Footings*.
- (24) (E082) Submission of a compliance certificate accompanying Works as Executed plans with detail included as required by Council's current AUSPEC Specifications. The information is to be submitted in electronic format in accordance with Council's "CADCHECK" requirements detailing all infrastructure for Council to bring in to account its assets under the provisions of AAS27. This information is to be approved by Council prior to issue of the Subdivision Certificate. The copyright for all information supplied, shall be assigned to Council.
- (25) (E195) The applicant is to comply with and perform the provisions of the planning agreement entered into under section 7.4 of the Environmental Planning and Assessment Act known as the South Lindfield Urban Release Area Planning Agreement as modified from time to time between Port Macquarie-Hastings Council and Ross Wayne Ramm and Jennifer Maree Ramm dated 16 January 2019 in relation to the carrying out of the development the subject of this consent.

**F – OCCUPATION OF THE SITE**

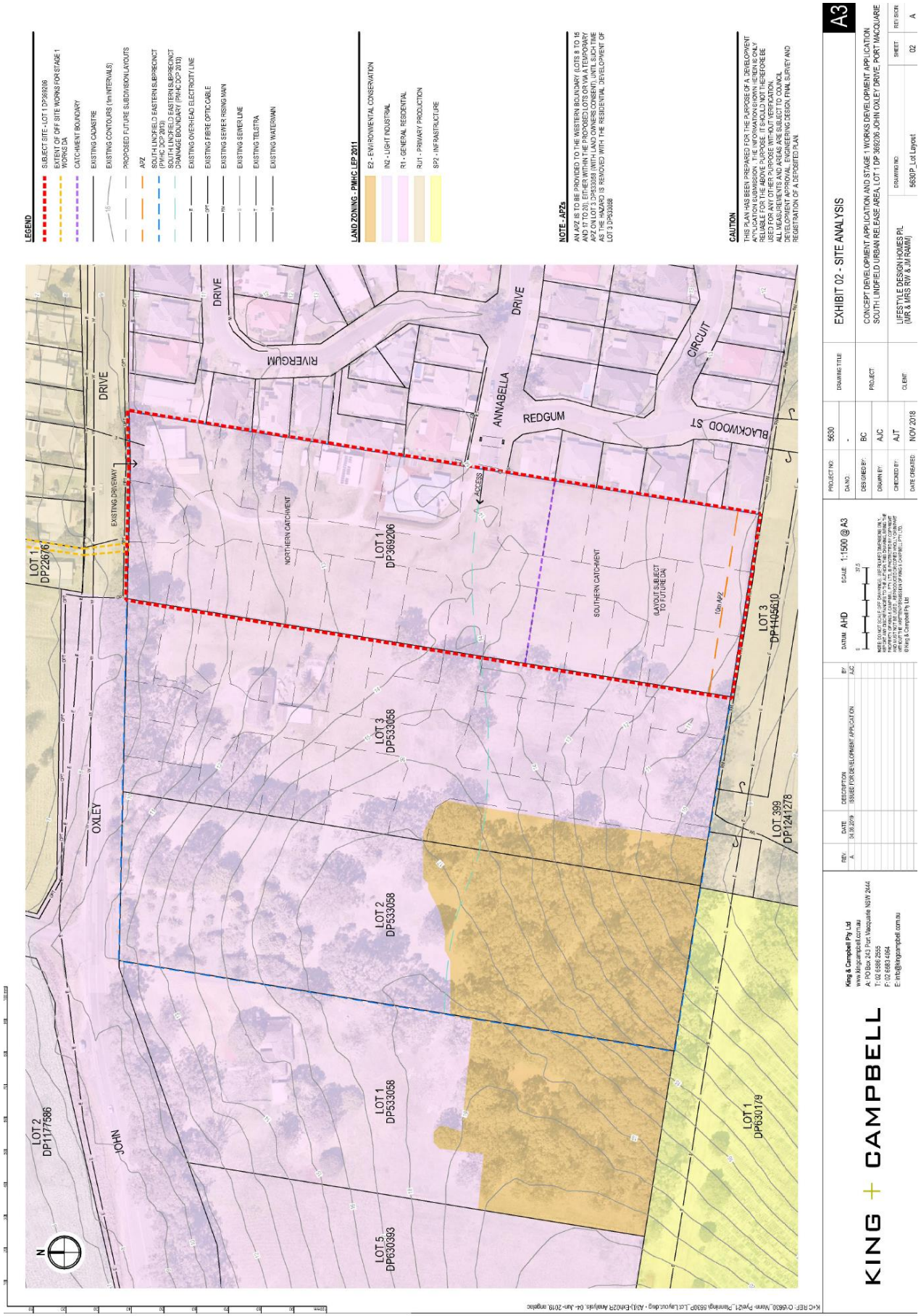
- (1) (F006) The basin of the outflow control pit and the debris screen must be cleaned of debris and sediment on a regular basis by the owner.





<b>KING + CAMPBELL</b>		<b>EXHIBIT 01 - SITE CONTEXT</b>		<b>A3</b>	
<p><b>King &amp; Campbell Pty Ltd</b>                  10/11 Macquarie Street                  Sydney NSW 2000                  T: 02 6883 2555                  F: 02 6883 4064                  E: info@kingandcampbell.com.au</p>		<p><b>PROJECT NO:</b> 9530  <b>SCALE:</b> 1:1000 @ A3  <b>DATUM:</b> AHD  <b>DATE:</b> 14.02.2019  <b>BY:</b> JAC</p>		<p><b>DESIGNED BY:</b> BC  <b>DRAWN BY:</b> ALC  <b>CHECKED BY:</b> AJT  <b>DATE CREATED:</b> NOV 2018</p>	
<p><b>DESCRIPTION:</b> ISSUED FOR DEVELOPMENT APPLICATION</p>		<p><b>DRAWING TITLE:</b> PROJECT</p>		<p><b>CONCEPT DEVELOPMENT APPLICATION AND STAGE 1 WORKS DEVELOPMENT APPLICATION</b>                  SOUTH LINFIELD URBAN RELEASE AREA LOT 1 DP 389206 JOHN OXLEY DRIVE PORT MACQUARIE</p>	
<p><b>DATE:</b> 14.02.2019</p>		<p><b>CLIENT:</b></p>		<p><b>DRAWING NO:</b> 9530P_Lot Layout</p>	
<p><b>REV:</b> A</p>		<p><b>SHEET:</b> 01</p>		<p><b>REV. NO:</b> A</p>	







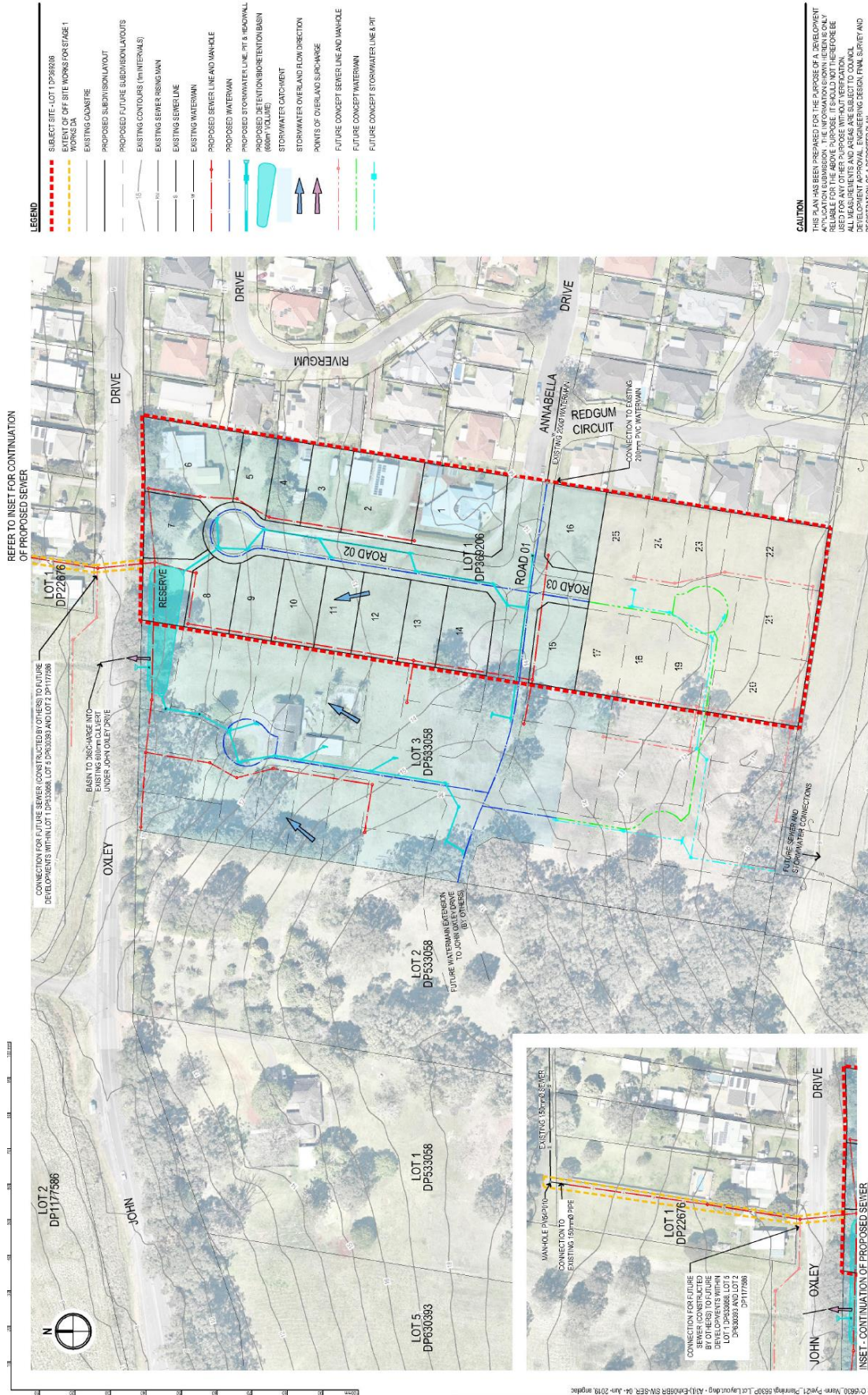






<p><b>KING + CAMPBELL</b></p> <p><b>KING &amp; Campbell Pty Ltd</b>          www.kingcampbell.com.au          100 Macquarie Street, Port Macquarie NSW 2444          T: 02 6885 2838          F: 02 6883 0694          E: info@kingcampbell.com.au</p>		<p>REV: 1          DATE: 28/09/20          DESCRIPTION: SOUTH UNIFIED URBAN RELEASE AREA</p>		<p>DATE: 28/09/20          SCALE: 1:1,000 @ A3          BY: JAC</p>		<p>PROJECTING: 5630          D.W.G.: -          DESIGNED BY: BC          DRAWN BY: AJC          CHECKED BY: AJT          DATE CREATED: NOV/2018</p>		<p>EXHIBIT 04 - STAGE 1 WORKS DA - PLAN OF PROPOSED SUBDIVISION</p> <p>CONCEPT DEVELOPMENT, APPLICATION AND STAGE 1 WORKS DEVELOPMENT APPLICATION          SOUTH UNIFIED URBAN RELEASE AREA LOT 1 DP 9630 JOHN OXLEY DRIVE PORT MACQUARIE</p> <p>LIFESTYLE DESIGN HOMES PT L          (MKS &amp; MKS PT &amp; LOT 10406)</p> <p>9630P Lot Layout</p>		<p><b>A3</b></p> <p>FIG. SIZE: SHEET 04          NO. OF SHEETS: 04</p>	
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Sustainable Partners

Friday 22<sup>nd</sup> March 2019

ABN 81 127 154 787

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Port Macquarie NSW 2444  
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[www.biodiversityaust.com.au](http://www.biodiversityaust.com.au)

Dear Kylie,

**Re: Ecological Assessment for Proposed Subdivision of Lot 1 DP369206,  
John Oxley Drive, Port Macquarie**

As requested, Biodiversity Australia undertook a site survey and ecological assessment for the proposed subdivision of Lot 1 DP369206, John Oxley Drive.

In summary:

- No preferred Koala food trees or hollow-bearing trees are present within the subject site. The proposal will require the removal of garden ornamentals and exotic trees only as well as a Bloodwood tree in the John Oxley Drive road reserve which will be impacted by a sewer line.
- No threatened flora species or Endangered Ecological Communities were found on the site during the survey.
- No threatened fauna species were detected during the survey. Eight threatened fauna species are considered to potentially occur.
- The site does not contain Core Koala habitat and no evidence of the Koala was found on the subject site. The Koala has been recorded on adjacent land however and has been assessed for potential impacts from the proposed development.
- Under the NSW Biodiversity Conservation Act, the subject site is not mapped on the Biodiversity Values map and the area of clearing does not exceed the threshold to trigger the Biodiversity Assessment Method. The minor tree removal is unlikely to have a significant impact on any potentially occurring threatened fauna species. Hence a Biodiversity Development Assessment Report is not required and the development has been assessed via the 5 Part Test of Significance.
- The proposed subdivision is unlikely to have a significant impact on Matters of National Environmental Significance and a referral to the Department of Environment and Energy would not be required.



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## 1.0 Background Information

### 1.1. Location of the Study Site

The subject site is located on John Oxley Drive, approximately 6km southwest of Port Macquarie CBD. It is formally described as Lot 1 DP369206 or 153 John Oxley Drive, Port Macquarie (Figure 1).

The **subject site** is defined as the entirety of Lot 1 DP369206. The **study area** comprises land within 50m of the site. The **locality** is land within a 10km radius of the site.

### 1.2. Proposed Subdivision

The subject site comprises a 2.43 ha lot, zoned as R1 - General Residential and adjoins an established estate to the east. The proposed development is for a residential subdivision of Lot 1. A concept development layout is provided in Figure 2.

A sewer main is required to be established and will run northwards under John Oxley Drive and onto adjacent land. This is shown in Figure 3.

The proposed development almost entirely encompasses the subject site and is proposed to contain 23 new residential lots, road access and a storm water reserve. The road access is proposed to be an extension of Annabella Drive in the adjoining estate and a northern and southern cul-de-sac. The proposed stormwater reserve is located in the north-west corner of the subject site and encompasses an area of 868.5 m<sup>2</sup>.

At present, the site contains a dwelling in the east of the property and multiple sheds. The subject site has been cleared historically and only scattered ornamental trees and grassland remain. These trees are proposed to be removed and overhanging trees in the John Oxley Drive road reserve will be pruned where required.

A bloodwood tree in the John Oxley Drive road reserve will require removal to establish the sewer line. A large Blackbutt also in the road reserve has previously been assessed by an Arborist who has found it to be unsound and recommended its removal. Removal of this tree does not form part of this assessment.



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Figure 1: Location of the subject site

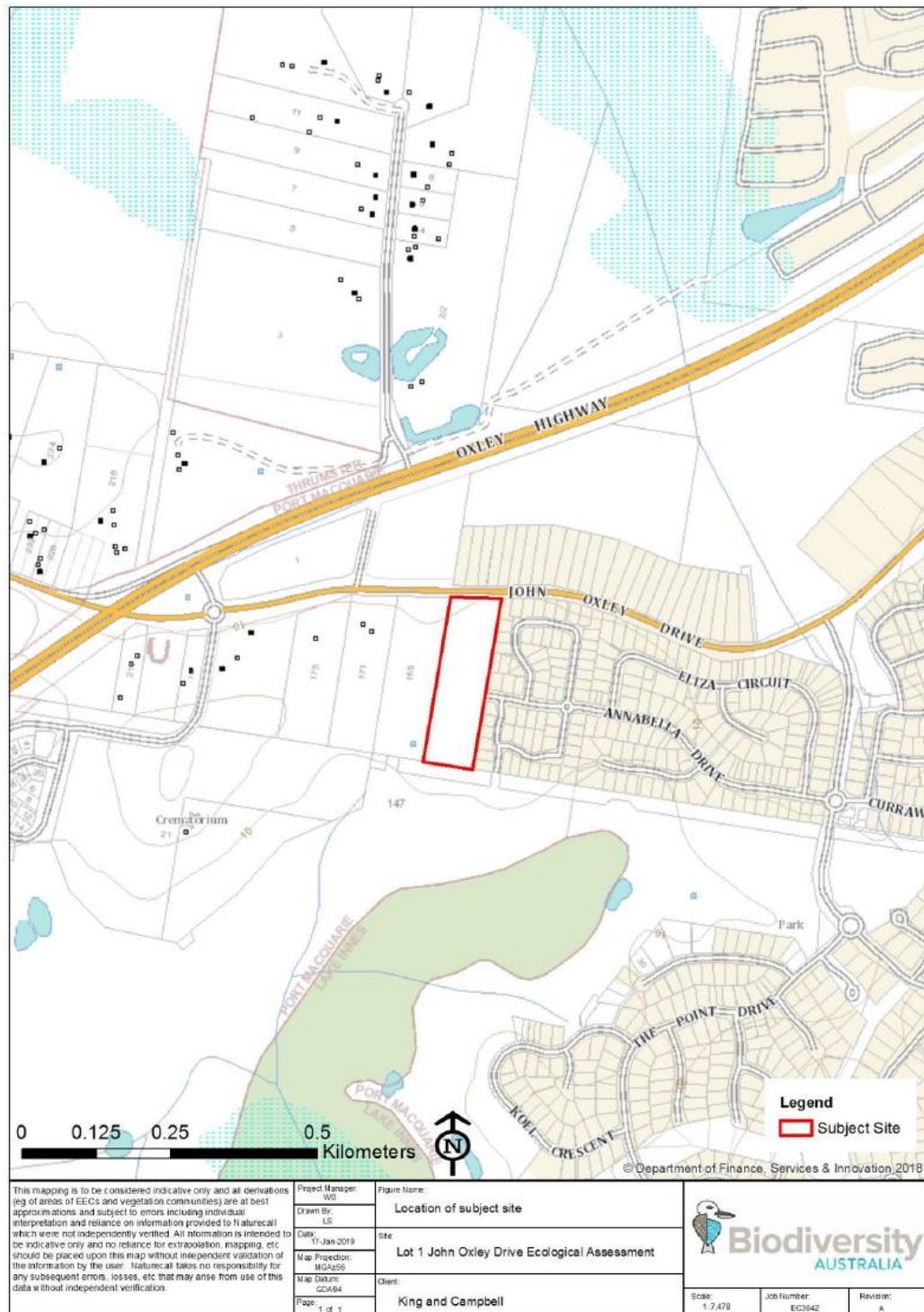
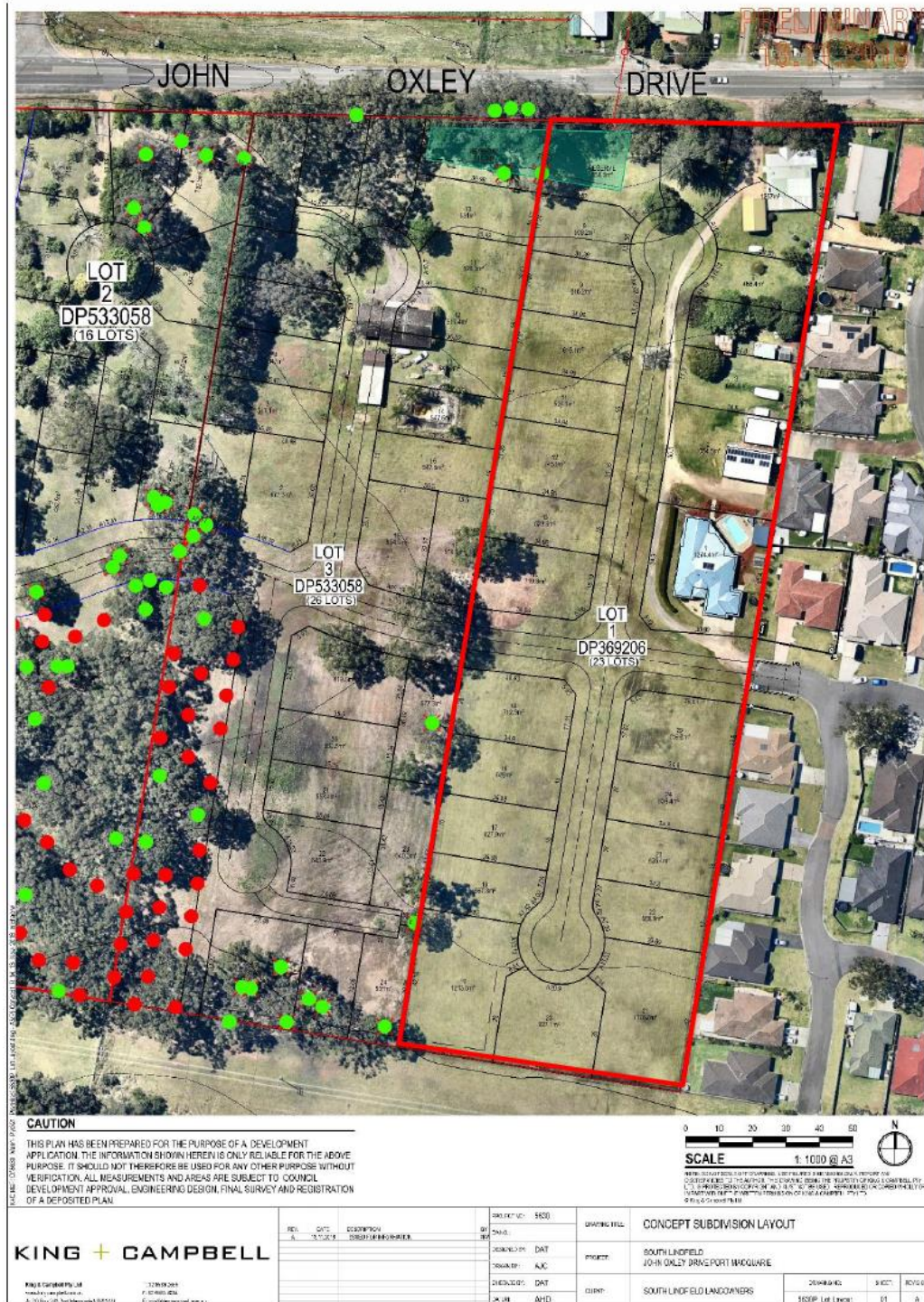




Figure 2: Proposed development plan







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Figure 3: Location of sewer line to north of site







## 2.0 Methods

### 2.1. Desktop Study and Literature Review

A desktop study was carried out prior to the field survey to gather relevant information and data. The following databases and Geographic Information System (GIS) layers were searched/obtained:

- Department of Environment and Energy Protected Matters Search Tool (DEE 2019);
- Office of Environment and Heritage NSW Bionet (OEH 2019a);
- NSW Biodiversity Value Map (OEH 2019c); and
- Port Macquarie LGA Vegetation Communities and EECs digital data layer (Biolink 2013);
- Port Macquarie LGA Koala Habitat digital data layer (Biolink 2013);
- Coastal Quaternary Geology – North and South Coast of NSW digital data layer (Troedson & Hashimoto 2008).

### 2.2. Flora Survey

The floral survey consisted of identification of vegetation by walking random meander transects over the subject site. Due to the limited extent of the site and lack of vegetation present, this survey method encompassed the total extent of the site. Walking transects were considered most suitable survey method for the following reasons:

- Provide the most amount of information for a given input.
- Provide a means to sample vegetation boundaries.
- Provide means for assessing floristic diversity and possible presence of threatened species.

#### 2.2.1. Vegetation Classification and Mapping

The vegetation communities were described from data collected during the random meander transect studies. The vegetation classification is based on the NSW Plant Community Type (PCT) Classification and LGA wide vegetation community classification (Biolink 2013). Identification of possible Threatened Ecological Communities (TECs) was based on the data collected by the survey and review of the relevant listings on the OEH website ([www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)) and Department of Environment – MNES SPRAT website (DotE 2016a).

Flora species were identified to species or subspecies level and nomenclature conforms to that currently recognised by the Royal Botanic Gardens and follows Harden and PlantNET for changes since Harden.

Desktop mapping was undertaken in ArcGIS 10.2.2 (ESRI 2014) using the data collected in the field and high resolution satellite imagery (NearMaps 2018).



### 2.2.2. Threatened Flora Species Searches

Searches for threatened flora recorded in the Local Government Area (LGA) and/or in regionally similar habitats to that on the site were carried out over the entire subject site in conjunction with the flora survey.

### 2.2.3. Potential Occurrence Assessment

Potential occurrence assessment of threatened flora species is provided in Section 3.2.3. This section assesses all considered threatened species listed under the BC Act 2016 and EPBCA 1999 for their potential to occur in the study area.

## 2.3. Fauna Survey

The fauna surveys were undertaken by an Ecologist under Biodiversity Australia's scientific license and animal research authority in December 2018.

A description of the fauna survey methods utilised is provided as follows.

### 2.3.1. Habitat Evaluation

The subject site was surveyed to determine the available potential habitats, and the support value of these habitats for threatened species. Habitats were defined according to parameters such as:

- 1) Structural and floristic characteristics of the vegetation e.g. understorey type and development, crown depth, groundcover density, etc.
- 2) Degree and extent of disturbance e.g. fire, logging, weed invasion, modification to structure and diversity, etc.
- 3) Soil type and suitability e.g. for digging and burrowing.
- 4) Presence of water in any form e.g. dams, creeks, drainage lines, soaks.
- 5) Size and abundance of hollows and fallen timber.
- 6) Availability of shelter e.g. rocks, logs, hollows, undergrowth.
- 7) Wildlife corridors, refuges and proximate habitat types.
- 8) Presence of mistletoe, nectar, gum, seed, sap, etc. sources.

### 2.3.2. Secondary Evidence/Habitat Searches

Physical habitat searches involved lifting up of any timber, rocks and debris, and inspection of dense vegetation and leaf litter for frogs and reptiles; inspection of trees for Koalas and claw markings; binocular inspection of trees for potential hollows; searches for nests; and searches for scats, owl regurgitation pellets, tracks and scratches.

### 2.3.3. Diurnal Bird Survey

This involved passive surveys (eg listening for bird calls) and active observation/binocular searches while walking around the entire subject site; and opportunistically during other activities. Bird surveys were



undertaken primarily within two hours of dawn or dusk to coincide with periods of peak activity.

A total of two hours was spent on bird surveys over the course of the surveys.

#### **2.3.4. Hollow-bearing Tree and Koala Food Tree Survey**

Searches for hollow-bearing trees (HBTs) and preferred Koala Food Trees (KFTs) were carried out over the entire site.

#### **2.3.5. Potential Occurrence Assessment**

Potential occurrence assessment of threatened fauna species are provided in Section 3.3.4 and Appendix 3. This section assesses all considered threatened species listed under the BCA 2016 and EPBCA 1999 for their potential to occur in the study area.



### 3.0 Results

#### 3.1. Desktop Search Results

##### 3.1.1. Locally Recorded Threatened Species

The following table lists the threatened flora and fauna species identified in database and literature searches.

Table 1: Locally recorded threatened species

Common Name	Scientific Name	BC Act	EPBC	Source
<b>Flora</b>				
Scented Acronychia	<i>Acronychia littoralis</i>	E	E	OEH Bionet
Dwarf Heath Casuarina	<i>Allocasuarina defungens</i>	E	E	OEH Bionet
Trailing Woodruff	<i>Asperula asthenes</i>	V	V	OEH Bionet
Sand Spurge	<i>Chamaesyce psammogeton</i>	E	-	OEH Bionet
Spider Orchid	<i>Dendrobium melaleucaphilum</i>	E	-	OEH Bionet
Narrow-leaved Black Peppermint	<i>Eucalyptus nicholii</i>	V	V	OEH Bionet
-	<i>Maundia triglochinosides</i>	V	-	OEH Bionet
Biconvex Paperbark	<i>Melaleuca biconvexa</i>	V	V	OEH Bionet
Red-flowered King of the Fairies	<i>Oberonia titania</i>	V	-	OEH Bionet
Rainforest Cassia	<i>Senna acclinis</i>	E	-	OEH Bionet
Silverbush	<i>Sophora tomentosa</i>	E	-	OEH Bionet
<b>Fauna</b>				
<b>Amphibia</b>				
Wallum Froglet	<i>Crinia tinnula</i>	V	-	OEH Bionet
Green and Golden Bell Frog	<i>Litoria aurea</i>	E	V	OEH Bionet
<b>Aves</b>				
Magpie Goose	<i>Anseranas semipalmata</i>	V	-	OEH Bionet
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V	-	OEH Bionet
Australasian Bittern	<i>Botaurus poiciloptilus</i>	E	E	OEH Bionet
Glossy Black-Cockatoo	<i>Calyptorhynchus lathami</i>	V	E	OEH Bionet
Spotted Harrier	<i>Circus assimilis</i>	V	-	OEH Bionet
Barred Cuckoo-shrike	<i>Coracina lineata</i>	V	-	OEH Bionet
Varied Sittella	<i>Daphoenositta chrysoptera</i>	V	-	OEH Bionet
Little Lorikeet	<i>Glossopsitta pusilla</i>	V	-	OEH Bionet
Little Eagle	<i>Hieraaetus morphnoides</i>	V	-	OEH Bionet
Swift Parrot	<i>Lathamus discolor</i>	E	CE	OEH Bionet
Square-tailed Kite	<i>Lophoictinia isura</i>	V	-	OEH Bionet
Barking Owl	<i>Ninox connivens</i>	V	-	OEH Bionet



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Powerful Owl	<i>Ninox strenua</i>	V	-	OEH Bionet
Eastern Curlew	<i>Numenius madagascariensis</i>	-	CE	OEH Bionet
Blue-billed Duck	<i>Oxyura australis</i>	V	-	OEH Bionet
Eastern Osprey	<i>Pandion cristatus</i>	V	M	OEH Bionet
Eastern Ground Parrot	<i>Pezoporus wallicus wallicus</i>	V	-	OEH Bionet
Wompoo Fruit-Dove	<i>Ptilinopus magnificus</i>	V	-	OEH Bionet
Freckled Duck	<i>Stictonetta naevosa</i>	V	-	OEH Bionet
Eastern Grass Owl	<i>Tyto longimembris</i>	V	-	OEH Bionet
Masked Owl	<i>Tyto novaehollandiae</i>	V	-	OEH Bionet
<b>Insecta</b>				
Giant Dragonfly	<i>Petalura gigantea</i>	E	-	OEH Bionet
<b>Mammalia</b>				
Rufous Bettong	<i>Aepyprymnus rufescens</i>	V	-	OEH Bionet
Hoary Wattled Bat	<i>Chalinolobus nigrogriseus</i>	V	-	OEH Bionet
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E	OEH Bionet
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	V	-	OEH Bionet
Little Bentwing-bat	<i>Miniopterus australis</i>	V	-	OEH Bionet
Eastern Bentwing-bat	<i>Miniopterus schreibersii oceanensis</i>	V	-	OEH Bionet
Eastern Freetail-bat	<i>Mormopterus norfolkensis</i>	V	-	OEH Bionet
Southern Myotis	<i>Myotis macropus</i>	V	-	OEH Bionet
Greater Glider	<i>Petauroides volans</i>	E	V	OEH Bionet
Yellow-bellied Glider	<i>Petaurus australis</i>	V	-	OEH Bionet
Squirrel Glider	<i>Petaurus norfolcensis</i>	V	-	OEH Bionet
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>	V	-	OEH Bionet
Koala	<i>Phascolarctos cinereus</i>	V	-	OEH Bionet
Common Planigale	<i>Planigale maculata</i>	V	-	OEH Bionet
Eastern Chestnut Mouse	<i>Pseudomys gracilicaudatus</i>	V	-	OEH Bionet
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	V	V	OEH Bionet
Yellow-bellied Sheath-tail-bat	<i>Saccolaimus flaviventris</i>	V	-	OEH Bionet
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	V	-	OEH Bionet
Common Blossom-bat	<i>Syconycteris australis</i>	V	-	OEH Bionet
Eastern Cave Bat	<i>Vespadelus troughtoni</i>	V	-	OEH Bionet
Key: CE- Critically Endangered; E- Endangered; V- Vulnerable; M- Migratory				

### 3.1.1. Matters of National Environmental Significance

The results of the MNES search are provided in Section 8.1. The search was undertaken using a 10 km search radius from the subject site. See Appendix 4 for the full report.





### 3.2. Flora Survey Results

#### 3.2.1. Vegetation Community

The vegetation survey identified one vegetation community over the subject site. This consists of managed lawns and ornamental gardens with a number of planted exotic canopy species (Photo 1-2). This vegetation is mostly within the immediate surrounds of the dwelling and along the road reserve along the northern boundary of the property. A full flora species list is provided in Appendix 1.

##### 3.2.1.1. Managed Lawns and Ornamental Plantings

**Distribution:** Entire site

**Mapped PMHC Community:** Not mapped

**EEC Status:** Not an EEC

**Structure and Floristics:**

Canopy: The canopy comprises the exotic species Norfolk Island Pine (*Araucaria heterophylla*) and Liquidambar (*Liquidambar styraciflua*). A few large Blackbutt (*Eucalyptus pilularis*) and a Pink Bloodwood (*Corymbia intermedia*) occur in the road reserve adjoining the northern site boundary. The tree canopy ranges from 18-28 m in height.

Understorey: The understorey consists of garden ornamentals which surround the dwelling and sheds. These are predominantly exotic species with the rare occurrence of natives. Dominant species in this layer are Umbrella Tree (*Schefflera actinophylla*), Jacaranda (*Jacaranda mimosifolia*) and Camphor Laurel (*Cinnamomum camphora*). Vegetation in this layer ranges in height from 8-15 m.

Groundcover: The groundcover comprised a mix of native and exotic grasses. Dominant species in this layer comprised of Couch (*Cynodon dactylon*) and the exotic species Paspalum (*Paspalum dilatatum*). Common species in this layer included Kikuyu Grass (*Cenchrus clandestinus*), Buffalo Grass (*Stenotaphrum secundatum*) and Narrow-leaved Carpet Grass (*Axonopus fissifolius*).

**Comments:** Vegetation over the subject site is in poor condition as few native species present and mainly comprises artificial plantings dominated by exotic and non-indigenous species. Vegetation has been highly altered and subject to regular slashing, previous clearing and pastoralism.



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Photo 1: Garden plantings in the north of the subject site



Photo 2: Managed grassland in the south of the subject site





### 3.2.1. Recorded Threatened Flora

No threatened plant species were recorded in the subject site.

### 3.2.2. Endangered Ecological Communities

The vegetation on the subject site is not analogous to any Endangered Ecological Community listed under the BC Act or EPBC Act.

### 3.2.3. Potential Occurrence Assessment

Searches of relevant literature and databases (OEH 2019a) found records of eleven threatened flora species in the locality. The Protected Matters Search Tool produced a list of additional potential occurrences in the locality. These are assessed for their potential to occur on the subject site in Appendix 2.

Given that no threatened flora species were detected during this survey, it is considered highly unlikely that any such species would occur on the subject site. Thus no threatened flora species are considered in the subsequent statutory assessments.



### 3.3. Fauna Survey Results

#### 3.3.1. Habitat Evaluation, Corridors and Linkages

The following table summarises the habitat evaluation results and comments on regional/local corridors and habitat linkages.

Table 2: Summary of site habitat values

Habitat/ Attribute Type	Site Values	Potential Values to Threatened Species Occurrence
<b>Groundcover</b>	Mix of native and exotic groundcover. Comprised largely of grasses. Shallow accumulations of leaf litter under canopy trees.	No significance for any threatened species.
<b>Logs and debris</b>	Absent	No significance for any threatened species.
<b>Hollows</b>	Absent on site. Large Blackbutt in the adjoining road reserve may contain small to medium limb hollows.	No roosting/nesting/denning habitat for hollow obligate fauna present within the site boundary.
<b>Nectar Sources</b>	Canopy trees on site only likely to provide a spring/summer nectar source.	Trees on site could potentially be used when flowering by Grey-headed Flying Fox.
<b>Primary preferred Koala browse trees</b>	Absent	Lack of foraging resources for the Koala.
<b>Allocasuarinas</b>	Absent	Lack of foraging resources for the Glossy Black Cockatoo.
<b>Aquatic/wetland habitats</b>	Absent on site.	N/A
<b>Fruiting species</b>	Site contains a range of ornamental fruiting species including Mango trees.	Potential foraging resources for the Grey Headed Flying Fox.
<b>Caves, cliffs, overhangs, culverts, bridges</b>	Absent on site	Absence of roosts for obligate Microchiropteran bats.
<b>Small terrestrial prey</b>	Likely low abundance of prey species due to sparse understorey and absent shrub layer.	Unlikely to be sufficient prey resources to support foraging by owls or raptors.
<b>Corridors</b>	Site does not fall within a mapped corridor	N/A





Habitat/ Attribute Type	Site Values	Potential Values to Threatened Species Occurrence
Habitat Linkages	<p>Forest communities on adjoining properties extend south and southwest to Lake Inness Nature Reserve.</p> <p>Habitat on site only forms a minute area in the outmost reaches of this continuous habitat.</p> <p>Connectivity to the north and east is broken by road reserves and residential areas.</p>	<p>Poorly developed groundcover over the site would pose a barrier for small terrestrials' dependant on continuous cover (e.g. Common Planigale).</p> <p>Arboreal species such as the Koala and Gliders would be able to access the site vegetation along the John Oxley Drive road reserve.</p> <p>Highly mobile species (e.g. birds and bats) would be able to move freely through the site.</p>
Key Habitat	The site is not mapped as Key Habitat by OEH.	N/A

### 3.3.2. Fauna and Habitat Values

The habitats present within the subject site contain little value for fauna species with very few nectar and pollen source for birds, possum/gliders and Flying Foxes and limited prey resources (e.g. insects). No preferred forage trees for the Koala are located on the subject site.

Birds were the main species recorded during the field survey. Species recorded included the Rainbow Lorikeet (*Trichoglossus haematodus*), Willie Wagtail (*Rhipidura leucophrys*), Noisy Miner (*Manorina melanocphala*), Black-face Cuckoo-shrike (*Coracina novaehollandiae*) and White-necked Heron (*Ardea pacifica*). Four mammal species were recorded comprising the Brushtail Possum (*Trichosurus vulpecula*) and Eastern Grey Kangaroo (*Macropus giganteus*) and introduced species the Rusa Deer (*Rusa timorensis*) and Red Fox (*Vulpes vulpes*). No evidence of the Koala were detected during the field survey. A full fauna list derived from the survey is provided in Table 3.

Table 3: Fauna species recorded within subject site

Group	Common Name	Species	Detection Method
Birds	Magpie	<i>Creaticus tibicen</i>	Vis, HC
	Noisy Miner	<i>Manorina melanocphala</i>	HC, Vis
	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	HC
	Torresian Crow	<i>Corvus orru</i>	HC, Vis
	Grey Butcherbird	<i>Craticus torquatus</i>	Vis, HC
	Australasian Figbird	<i>Sphecotheres vieilloti</i>	Vis
	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	Vis, HC
	Indian Myna*	<i>Sturnis tristis*</i>	Vis
	Willie Wagtail	<i>Rhipidura leucophrys</i>	Vis
	Masked Lapwing	<i>Venellus miles</i>	Vis, HC
	Magpie-lark	<i>Grallina cyanoleuca</i>	Vis
	White Necked Heron	<i>Ardea pacifica</i>	Vis





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	Crested Pigeon	<i>Ocyphaps lophotes</i>	Vis
	Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	Vis
	Scaly breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	Vis
	Galah	<i>Eolophus roseicapilla</i>	Vis
Mammals	Eastern Grey Kangaroo	<i>Macropus giganteus</i>	Sc, Vis
	Rusa Deer*	<i>Rusa timorensis</i> *	Sc, Vis
	Red Fox*	<i>Vulpes vulpes</i> *	Vis
	Brushtail Possum	<i>Trichosurus vulpecula</i>	Sc
Key: * denotes introduced species. Detection Key; HC – heard calling; Vis – visual observation; Sc – scats.			

No trees on the subject site contain hollows nor would they provide potential denning/nesting habitat for hollow-obligate fauna species. Evidence of foraging was detected with Brushtail Possum scats found under Camphor Laurels and Mango trees. No sap incisions or birds' nests were detected in the trees on the subject site.

Vegetation within the subject site is bound by major barriers of access by terrestrial and arboreal fauna. John Oxley Drive to the north and the residential estate to the east offer a key barrier to many fauna, as well as mortality risks. Forest linkages are only provided to the west and south of the site with scattered trees in nearby yards offering an urban woodland linkage to Lake Innes Nature Reserve approximately 200 m to the east. With no sufficient habitat on the subject site and the surrounding major barriers, only the most mobile of fauna are likely to access the site.

There is no aquatic habitat in the subject site.

### 3.3.3. Recorded Threatened Fauna

Targeted surveys did not detect any threatened fauna within the subject site.

### 3.3.4. Potential Occurrence Assessment

Searches of relevant literature and databases (OEH 2019a) found a number of records threatened fauna species in the locality. The EPBC Protected Matters Search Tool (DEE 2019) has also generated a list of species with potential to occur. These species are evaluated for their potential to occur on the subject site and their eligibility/requirement for further assessment in Appendix 3.

No records of threatened fauna species occur within the subject site.

A number of species are considered potential occurrences based on the habitats present on site and presence of local records (OEH 2019a). These species have been evaluated in the following table and are subject to the Test of Significance.



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Table 4: Threatened species potentially occurring in the study area

Species	Occurrence Type	Occurrence Likelihood
Grey-headed Flying-fox ( <i>Pteropus poliocephalus</i> )	Generic potential foraging habitat.	The subject site contains suitable foraging habitat for the species and numerous records are present in the locality. High chance of occurrence.
Koala ( <i>Phascolarctos cinereus</i> )	Minute portion of large foraging range.	Subject site does not contain preferred browse species. Possible use of subject site when moving between preferred habitats nearby. Moderate chance of occurrence.
Little Bent-wing Bat ( <i>Miniopterus australis</i> )	Foraging over site as minute part of non-breeding range.	Moderate to high chance of using the site and study area as part of local foraging movements.
Eastern Bent-wing-Bat ( <i>Miniopterus schreibersii oceanensis</i> )		
Eastern Free-tail Bat ( <i>Mormopterus norfolkensis</i> )		
Yellow-bellied Sheath-tail Bat ( <i>Saccolaimus flaviventris</i> )		
Greater Broad-nosed Bat ( <i>Scoteanax rueppellii</i> )		
Eastern False Pipistrelle ( <i>Falsistrellus tasmaniensis</i> )		

## 4.0 Impact Assessment

As mentioned previously, the proposal is to subdivide the Lot into 23 new Lots for a proposed residential estate. The establishment of this will involve the following direct potential impacts:

- Loss of the planted flora species on the subject site;
- Removal of one Bloodwood in the adjoining road reserve for the sewer line (Photo 3)
- Trimming of other trees in the road reserve;
- Minor loss of foraging habitat for potentially occurring threatened species;
- Permanent prevention of recovery of vegetation.
- Minor drainage modification via expansion of hard surface cover.

No other vegetation removal will be required to establish the development. Potential indirect impacts would be minimal given the existing disturbances on the site.

Photo 3: Bloodwood in road reserve





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## 5.0 State Environmental Planning Policy No. 44 (SEPP 44) – South Lindfield KPoM

The subject site falls within the boundary of the South Lindfield Koala Plan of Management (KPoM), which has recently been approved by the Department of Planning and Environment. The following provisions in the KPoM are relevant for development on Lot 1.

### 5.1. Clearing Management

In order to minimise the risk of Koala's being killed or injured during any clearing works on the site; the following measures must be implemented:

- The area of work is to be inspected for Koalas by an ecologist immediately prior to commencement of any vegetation removal.
- The ecologist is to remain on-site during vegetation removal to maintain surveillance for Koalas and rescue other fauna as required.
- No such vegetation removal is to be carried out while any Koala is present in the area of operation unless a 50m buffer is established; or if Koala does not voluntarily move on, is removed by Port Macquarie Koala Hospital staff.
- A report by the ecologist is to be provided within 7 days of the clearing event detailing methods and results of the supervision.

### 5.2. Barriers and Fencing

Development of the site will introduce new barriers for Koalas in the form of fences, hence the following measures should be implemented:

- No fence design (either temporary or permanent) is to include a material or design feature that may potentially injure Koalas (or other fauna) e.g. barbs and loose wire.

### 5.3. Disease

Disease is a current threat to the local Koala aggregate and habitat loss associated with development of the site has the potential to increase the current disease risk. To help reduce this, the following measures are to be implemented:

- Contact details for Koala Hospital at site office during construction.
- Koala warning signage is to detail contact details for the Koala Hospital to facilitate prompt reporting of sick or injured Koalas.





## 6.0 Biodiversity Conservation Act 2016

The proposed subdivision has been assessed under the NSW *Biodiversity Conservation Act 2016* and *Biodiversity Conservation Regulation 2017*. The subject site is not mapped on the Biodiversity Values map and the area of clearing does not exceed the threshold to trigger the Biodiversity Assessment Method.

The likelihood of the proposed tree removal to have a significant impact on any potentially occurring threatened fauna is assessed below.

### 6.1. Test of Significance

The Test of Significance is prescribed in Part 7, Division 1, Section 7.2 of the *Biodiversity Conservation Act 2016*. The purpose of the Test of Significance is to determine whether a proposed subdivision or activity is likely to significantly affect threatened species or ecological communities, or their habitats.

No threatened species were found that automatically require assessment.

The potential occurrence assessment in Sections 5.2.3 and 5.3.3 have determined that the following species are considered to be potentially occurring on the site/study area and are subject to the Test of Significance:

- Koala
- Grey-headed Flying Fox
- Little and Eastern Bent-wing Bat
- Greater Broad-nosed Bat
- Eastern Free-tail Bat
- Yellow-bellied Sheath-tail Bat
- Eastern False Pipistrelle

Fauna species which have the potential to forage over nearby habitats and may fly over the site on occasion (eg Square-tailed Kite, Masked Owl, Powerful Owl, White-bellied Sea Eagle) are unlikely to be directly impacted by the proposed development and are not subject to the test of significance.

#### 6.1.1. Responses

- a) ***In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,***

The proposal will result in the removal of a single Bloodwood tree along with ornamental gardens and planted natives to establish the residential estate on the subject site. The site does not contain vegetation which is likely to be of any value to Koalas.





The proposal will only result in a minor increase of anthropogenic impacts and threats associated with urban development such lighting, noise, edge effects, etc. These impacts will incrementally and cumulatively add to the existing level of these in the study area.

For the subject species, the proposal will result in the loss of a very small area of low quality potential foraging habitat (eg nectar species and prey species), and mostly comprises ornamental plantings which are very common in surrounding residential areas. No nesting/denning/roosting habitat for the subject species occurs on the site hence breeding will not be affected.

This loss is unlikely to have a negative effect on the current carrying capacity of the local area for these species due to the minor amount of habitat removed and that these species have home ranges which far exceed the site.

Given the above, the proposal is unlikely to place a local population of the subject species at risk of extinction.

**b) *In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:***

- i. Is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or*
- ii. Is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,*

No EECs are present on the subject site.

**c) *In relation to the habitat of a threatened species or ecological community:***

- i. The extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and*

The proposal will see most of the subject site comprising lawns, ornamental gardens and planted trees removed and trimming of roadside canopy trees.

- ii. Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and*

The subject site currently comprises largely cleared land. The surrounding area is fragmented by roads and rural residential dwellings however some connectivity remains to larger areas of habitat e.g. Lake Innes Nature Reserve and Lot 3 to the west. Due to the small area of site vegetation, it would not currently offer any significant corridor values at present. Removal of this isolated vegetation is therefore unlikely to affect the local movements of fauna or fragment currently intact habitat.

- iii. The importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,*



The subject site does not offer refuge (denning, roosting, etc.) or breeding habitat for threatened fauna species. A minute portion of potential foraging habitat is present on the subject site however, the range of all potentially occurring species would extend well off the site.

The habitat on site is not of sufficient extent to be of any key importance to the long term survival of any of the subject species.

**d) *Whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),***

The proposed development will not directly or indirectly affect an area of outstanding biodiversity value.

**e) *Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.***

A Key Threatening Process (KTP) is defined as a process that threatens, or may have the capability to threaten, the survival or evolutionary development of species, populations or ecological communities.

Due to the minor impacts associated with the development, it is unlikely to introduce or substantially increase any KTPs.

#### **6.1.2. Conclusion**

The Test of Significance has determined that the proposed development would not result in a significant impact on threatened species or ecological communities. A BDAR is not required for the development proposal.



## 7.0 EPBC Act 1999 Significance Assessment

### 7.1. Assessment Summary

The provisions of the EPBC Act require determination of whether the proposal has, will or is likely to have a significant impact on a Matter of National Environmental Significance (MNES). These matters are listed and addressed in summary as follows:

Table 5: Summary of MNES

Category	Relevance	Significant Impact Likely?
World Heritage Properties	The site is not listed as a World Heritage area.	N/A
National Heritage Places	The site is not listed as a National Heritage Place.	N/A
Wetlands of International Importance	The site does not contain important wetlands.	N/A
Great Barrier Reef Marine Park	The proposal does not affect the Great Barrier Reef Marine Park.	N/A
Commonwealth Marine Environment (CME)	The site is not within the CME.	N/A
Listed Threatened Ecological Communities (TEC)	No listed TEC's occur on the site or are affected by the proposal.	N/A
Listed Threatened Species	The Grey-Headed Flying Fox (Vulnerable) and Koala (Vulnerable) are considered potential occurrences on site.	No threatened species is likely to be significantly affected by the proposal as assessed below.
Listed Migratory Species	Several migratory birds are considered potential occurrences.	No Migratory species is likely to be significantly affected by the proposal.
Nuclear Actions	The proposal is not a nuclear action.	N/A
A water resource, in relation to coal seam gas development and large coal mining development	The proposal is not a mining development.	N/A

As shown in the above table, the proposal thus is not considered to require referral to Department of Environment and Energy (DEE) for approval under the EPBC Act.



## 7.2. Koala Referral Assessment

The habitat on the subject site has been assessed using the Koala habitat assessment tool from the EPBC Act Referral Guidelines (DotE 2014). To qualify as critical habitat, it must score five or more. This is shown in the following table:

Table 6: Koala habitat assessment

Attribute	Score	Reason	
Koala occurrence	1	Desktop	Koala records from the last 5 years occur within 2km of the site.
		On-ground	Koala not recorded on site during surveys. This ecologist has recorded the Koala on an adjoining property in 2018.
Vegetation structure and composition	0	Desktop	The site is not mapped on PMHC vegetation mapping.
		On-ground	Site does not contain any Koala food trees
Habitat connectivity	2	Site has a tentative linkage to large areas of habitat >500ha.	
Key existing threats	1	Desktop	OEH Bionet has records of Koala road kill in locality.
		On-ground	Domestic dogs in surrounding residential areas would be a high threat to local Koalas. Oxley Highway nearby also poses a high risk of road strike.
Recovery value	0	<p>The following factors indicate that it is unlikely that the habitat to be removed is important for achieving the interim recovery objectives for the Koala:</p> <ul style="list-style-type: none"> <li>No Koala foraging resources occur on site</li> <li>No Koala activity recorded</li> <li>Risk of dog attack and car strike in study area</li> <li>Removal of site vegetation will not affect local movements</li> </ul>	
Total	4	Site does not qualify as critical habitat.	

As per the Koala habitat assessment tool, the subject site does not qualify as critical habitat and no further assessment is required.



## 7.3. Protected Species Assessments

### 7.3.1. Grey-headed Flying Fox

#### 7.3.1.1. Factors to Be Considered for Vulnerable Species

The guidelines to assessment of significance to this Matter, define an action is as likely to have a significant impact on a Vulnerable and/or Endangered species, if it will:

- a) Lead to a long-term decrease in the size of an important population of a species, or:
- b) Reduce the area of occupancy of an important population, or:
- c) Fragment an existing important population into two or more populations, or:
- d) Adversely affect habitat critical to the survival of a species, or:
- e) Disrupt the breeding cycle of an important population, or:
- f) Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:
- g) Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable species, becoming established in the Vulnerable species' habitat, or:
- h) Introduce a disease that may cause a species to decline, or:
- i) Interferes substantially with the recovery of the species.

An *important population* is one that is necessary for a species' long-term recovery. This includes such populations as:

- Key populations either for breeding or dispersal.
- Populations that are necessary for maintaining genetic diversity, and or:
- Populations that are near the limit of the species range:

#### 7.3.1.2. Assessment of Significance

This section addresses each of the previous points listed.

##### **a) Lead to a long-term decrease in the size of an important population of a species, or:**

The proposal will require the removal of a handful of trees from an area of potential foraging habitat. This may provide an extremely small nectar resource for the population relative to its ecological requirements and local extent of potential habitat. While in very strict terms a negative effect, this loss will have a very low impact on the local Grey-headed Flying Fox population as the site in total would only form a very minute fraction of this species wider opportunistic/seasonally variable foraging range.

The site is also not a known roost (Eby 2000) and better quality alternative foraging habitat in the locality is evidently extensive. The proposal will thus not lead to a long-term decrease in the size of an important population.



**b) Reduce the area of occupancy of an important population, or:**

For the Grey-headed Flying Fox, the minor loss of foraging habitat on the subject site is insignificant relative to the area of occupancy which is measured in terms of hundreds of thousands of hectares. Consequently, the proposal would not reduce the area of occupancy of the important population.

**c) Fragment an existing important population into two or more populations, or:**

The Grey-headed Flying Fox is highly mobile and known to be capable of crossing human-modified habitat. The proposal will offer no barrier to movement. Thus it will not fragment an existing important population.

**d) Adversely affect habitat critical to the survival of a species, or:**

"Critical habitat" refers to areas critical to the survival of a species or ecological community may include areas that are necessary for/to:

- Activities such as foraging, breeding, roosting or dispersal,
- Succession,
- Maintain genetic diversity and long term evolutionary development, or
- Reintroduction of populations or recovery of the species/community.

The vegetation on site is not considered critical habitat for the Grey-headed Flying Fox due to its limited extent and ecology of the species.

**e) Disrupt the breeding cycle of an important population or:**

The habitat in the site to be removed would not represent potential breeding habitat and its removal would not be capable of disrupting the breeding cycle of this species.

**f) Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or:**

As detailed previously, the degree of vegetation/habitat loss is not significant enough to affect a population of the subject species to the point it could cause a decline of the species.

**g) Result in invasive species, that are harmful (by competition, modification of habitat, or predation) to a Vulnerable species, becoming established in the Vulnerable species' habitat, or:**

No new species that affects the Grey-headed Flying Fox is likely to be introduced as a direct result of the proposal.

**h) Introduce disease that may cause a species to decline; or**

No disease that affects the subject species is likely to be introduced as a direct result of the proposed works.

**i) Interferes substantially with the recovery of the species.**



As detailed previously, the proposal will result in the removal/modification of a minute area of foraging habitat for the subject fauna species that is not significant enough to interfere with their recovery.

#### 7.3.1.3. Conclusion

The proposal is not considered likely to have a significant impact on the Grey-headed Flying Fox.



## 8.0 Recommendations

The following are recommended to be included as conditions of consent if the proposal is approved. The conclusions of this assessment assumes the measures are implemented and effective in mitigating impacts.

### 8.1. Domestic Animals

Cats and dogs should be restrained to the vicinity of the residences as far as practicable and not be allowed to roam nearby bushland to avoid potential injury to native fauna.

### 8.2. Weed Control

Disturbance of the site's soils during vegetation removal and construction has potential to encourage weed invasion. Hence, it is recommended that:

- Disturbance of vegetation and soils on the development site should be limited to the areas of the proposed work and should not extend into adjacent vegetation;
- All plant used for clearing and construction works is certified as weed free;
- Appropriate collection and disposal of all weed material removed via clearing;
- Any recent weed invasions within the development area should be removed, and
- Ongoing weed control in the development area.

### 8.3. Landscaping

Any landscaping proposed as part of the development should give due consideration to the establishment of native plants as ornamental species to maintain and/or increase biodiversity, provide replacement habitat, and maximise water efficiency. Plant selection should focus on species that do not pose a risk of invasion of native vegetation communities.



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## 8.0 Conclusion

This report has assessed the impact of establishing a residential subdivision on Lot 1 John Oxley Drive, Port Macquarie. No threatened flora or fauna species were recorded on site during the survey. A total of seven threatened fauna species were considered to have low to highly likely potential to occur, using the site at most as a small part of a larger foraging range. The test of significance undertaken found that the proposal is unlikely to result in a significant impact. A Biodiversity Development Assessment Report or referral under the EPBC Act is not required.

No native canopy trees, Koala food trees or hollow-bearing trees are present within the subject site. The proposal will involve removal of the small area of ornamental and exotic vegetation and one Bloodwood in the adjoining road reserve. This is recognised as a very minor negative incremental and cumulative contribution to the threatening processes affecting the subject species.

It is anticipated this correspondence contains all the relevant information you require, however if any additional information is required please don't hesitate to contact the undersigned.

Yours faithfully,

Leonie Stevenson  
Ecologist



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## 9.0 References

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## Appendix 1: Flora Species List

Table 7: Flora species recorded within subject site and road reserve

Common name	Scientific name	Occurrence
<b>Canopy Trees</b>		
Norfolk Island Pine*	<i>Araucaria heterophylla</i> *	R
Blackbutt	<i>Eucalyptus pilularis</i>	R
Liquidambar*	<i>Liquidambar styraciflua</i> *	R
<b>Understory trees and shrubs</b>		
Coffee Bush	<i>Breynia oblongifolia</i>	R
Swamp Oak	<i>Casuarina glauca</i>	R
Christmas Bush	<i>Ceratopetalum gummiferum</i>	R
Camphor Laurel*	<i>Cinnamomum camphora</i> *	U
Jacaranda*	<i>Jacaranda mimosifolia</i> *	U
Large-leaved Privet*	<i>Ligustrum lucidum</i> *	U
Small-leaved Privet*	<i>Ligustrum sinense</i> *	R
Macadamia (planted)	<i>Macadamia integrifolia</i>	R
Mango Tree*	<i>Mangifera indica</i> *	U
White Mulberry*	<i>Morus sp.</i> *	R
Mock Orange	<i>Murraya paniculata</i>	R
Mickey Mouse Plant*	<i>Ochna serrulata</i> *	R
Umbrella Tree	<i>Schefflera actinophylla</i>	U
Senna*	<i>Senna pendula</i> *	R
Wild Tobacco Bush*	<i>Solanum mauritianum</i> *	R
Cocos Palm*	<i>Syagrus romanzoffiana</i> *	U
<b>Grasses and Sedges</b>		
Narrow-leaved Carpet Grass*	<i>Axonopus fissifolius</i> *	C
Kikuyu Grass*	<i>Cenchrus clandestinus</i> *	C
Rhodes Grass*	<i>Chloris gayana</i> *	R
Flaxleaf Fleabane*	<i>Conyza bonariensis</i> *	O
Couch	<i>Cynodon dactylon</i>	D
Slender Flat-sedge	<i>Cyperus gracilis</i>	O
Queensland Bluegrass	<i>Dichanthium sericeum</i>	U
Blady Grass	<i>Imperata cylindrica</i>	R
Blown Grass	<i>Lachnagrostis billardiarei</i>	R
Weeping Grass	<i>Microlaena stipoides</i>	O
Creeping Beard Grass	<i>Oplismenus imbecillis</i>	R
Paspalum*	<i>Paspalum dilatatum</i> *	D
South African Pigeon Grass*	<i>Setaria sphacelata</i> *	U



Paramatta Grass*	<i>Sporobolus africanus*</i>	U
Buffalo Grass*	<i>Stenotaphrum secundatum*</i>	C
<b>Groundcovers</b>		
Exotic Ginger*	<i>Alpinia zerumbet*</i>	R
Asparagus Fern*	<i>Asparagus aethiopicus*</i>	O
Slender Celery*	<i>Cyclospermum leptophyllum*</i>	R
Kidney Weed	<i>Dichondra repens</i>	R
Flatweed*	<i>Hypochaeris radicata*</i>	C
Spring Starflower*	<i>Ipheion uniflorum*</i>	U
Whiteroot	<i>Lobelia purpurascens</i>	U
Scarlet Pimpernel*	<i>Lysimachia arvensis*</i>	U
Lamb's Tongue*	<i>Plantago lanceolata*</i>	C
White Clover*	<i>Trifolium repens*</i>	O
Purpletop*	<i>Verbena bonariensis*</i>	O
Ivy-leaved Violet	<i>Viola hederacea</i>	O
<b>Ferns</b>		
Fishbone Fern	<i>Nephrolepis cordifolia</i>	R
Key: * denotes introduced species. Occurrence Key: D = dominant, C = common, O = occasional, U = uncommon, R = rare.		



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## Appendix 2: Threatened Flora Potential Occurrence Assessment

Table 8: Threatened flora potential occurrence assessment

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Scented Acronychia ( <i>Acronychia littoralis</i> )	E	E	3	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10030">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10030</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Dwarf Heath Casuarina ( <i>Allocasuarina defungens</i> )	E	E	7	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10037">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10037</a>	No suitable habitat on site. Unlikely to occur.
- ( <i>Allocasuarina thalassoscopia</i> )	-	E	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=21927">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=21927</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Hairy-joint Grass ( <i>Arthraxon hispidus</i> )	V	V	0	<a href="https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10066">https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10066</a>	No suitable habitat on site and no local records. Unlikely to occur.
Trailing Woodruff ( <i>Asperula asthenes</i> )	V	V	2	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10068">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10068</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Sand Spurge ( <i>Chamaesyce psammogeton</i> )	E	-	2	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10160">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10160</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Leafless Tongue-orchid ( <i>Cryptostylis hunteriana</i> )	V	V	0	<a href="http://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10187">http://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10187</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
White-flowered Wax Plant ( <i>Cynanchum elegans</i> )	E	E	0	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10196">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10196</a>	No suitable habitat on site and no local records. Unlikely to occur.
Spider orchid ( <i>Dendrobium melaleucaphilum</i> )	E	-	1	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10213">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10213</a>	No suitable habitat on site and no nearby records. Unlikely to occur.



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Narrow-leaved Black Peppermint ( <i>Eucalyptus nicholii</i> )	V	V	3	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10302">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10302</a>	Local records are planted specimens. Unlikely to occur.
- ( <i>Euphrasia arguta</i> )	CE	CE	0	<a href="https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=20165">https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=20165</a>	No suitable habitat on site and no local records. Unlikely to occur.
Macadamia Nut ( <i>Macadamia integrifolia</i> )	-	V	0	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20244">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20244</a>	Local records are of planted ornamental species. Unlikely to occur.
- ( <i>Maundia triglochinoidea</i> )	V	-	10	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10511">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10511</a>	No suitable habitat on site. Unlikely to occur.
Biconvex Paperbark ( <i>Melaleuca biconvexa</i> )	V	V	29	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10514">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10514</a>	Site contains potential habitat for this species however it was not recorded during the field survey. Unlikely to occur.
Red-flowered King of the Fairies ( <i>Oberonia titania</i> )	V	-	1	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10571">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10571</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Milky Silkpod ( <i>Parsonia dorrigoensis</i> )	V	E	0	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10587">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10587</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Lesser Swamp-orchid ( <i>Phaius australis</i> )	E	E	0	<a href="https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10610">https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10610</a>	No suitable habitat on site and no local records. Unlikely to occur.
Rainforest Cassia ( <i>Senna acclinis</i> )	E	-	1	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10753">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10753</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Silverbush ( <i>Sophora tomentosa</i> )	E	-	5	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10765">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10765</a>	No suitable habitat on site and no nearby records. Unlikely to occur.



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Magenta Lilly Pilly ( <i>Syzygium paniculatum</i> )	E	V	0	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10794">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10794</a>	No suitable habitat on site and no nearby records. Unlikely to occur.
Austral Toadflax ( <i>Thesium australe</i> )	V	V	0	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10802">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10802</a>	No suitable habitat on the site and no proximate records. Unlikely to occur.

Key: CE = critically endangered, E = endangered, V = vulnerable.





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## Appendix 3: Threatened Fauna Potential Occurrence Assessment

Table 9: Threatened fauna potential occurrence assessment

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
<b>Amphibia</b>					
Wallum Froglet ( <i>Crinia tinnula</i> )	V	-	61	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10183">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10183</a>	No suitable habitat present on the subject site. Unlikely to occur.
Green and Golden Bell Frog ( <i>Litoria aurea</i> )	E	V	2	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10483">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10483</a>	No suitable habitat present on the subject site. Unlikely to occur.
Giant Barred Frog ( <i>Mixophyes iteratus</i> )	-	E	0	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10538">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10538</a>	No suitable habitat present on the subject site. Unlikely to occur.
<b>Ave</b>					
Magpie Goose ( <i>Anseranas semipalmata</i> )	V	-	3	<a href="https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10056">https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10056</a>	No suitable habitat present on the subject site. Unlikely to occur.
Regent Honeyeater ( <i>Anthochaera phrygia</i> )	CE	OE	0	<a href="https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10841">https://www.environment.nsw.gov.au/threatenedspeciesApp/profile.aspx?id=10841</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Dusky Woodswallow ( <i>Artamus cyanopterus cyanopterus</i> )	V	-	4	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20303">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20303</a>	No suitable habitat present on the subject site. Unlikely to occur.
Australasian Bittern ( <i>Botaurus poiciloptilus</i> )	E	E	5	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10105">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10105</a>	No suitable habitat present on the subject site. Unlikely to occur.
Glossy Black-Cockatoo ( <i>Calyptrornis lathami</i> )	V	E	27	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10140">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10140</a>	The subject site does not contain potential foraging habitat. Unlikely to occur.

24



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Spotted Harrier ( <i>Circus assimilis</i> )	V	-	12	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=20134">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=20134</a>	Unlikely chance of occurrence in the subject site as no foraging resources available for this species.
Barred Cuckoo-shrike ( <i>Coracina lineata</i> )	V	-	7	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10176">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10176</a>	The subject site does not contain potential foraging habitat. Unlikely to occur.
Varied Sittella ( <i>Daphoenositta chrysoptera</i> )	V	-	27	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20135">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20135</a>	No suitable habitat present on the subject site. Unlikely to occur.
Eastern Bristlebird ( <i>Dasyornis brachypterus</i> )	E	E	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=533">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=533</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Little Lorikeet ( <i>Glossopsitta pusilla</i> )	V	-	19	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20111">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20111</a>	No suitable habitat present on the subject site. Unlikely to occur.
Painted Honeyeater ( <i>Grantia picta</i> )	V	V	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=470">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=470</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Little Eagle ( <i>Hieraetus morphnoides</i> )	V	-	1	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20131">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20131</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur.
Swift Parrot ( <i>Lathamus discolor</i> )	E	OE	29	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10455">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10455</a>	Unlikely chance of occurrence in the subject site as no foraging resources available for this species.
Square-tailed Kite ( <i>Lopholictinia isura</i> )	V	-	22	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10495">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10495</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur, other than fly-over.
Barking Owl ( <i>Ninox connexa</i> )	V	-	1	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10561">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10561</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur.
Powerful Owl ( <i>Ninox strenua</i> )	V	-	10	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10562">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10562</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur other than fly-over.



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Eastern Curlew ( <i>Numenius madagascariensis</i> )	-	CE	18	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20284">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20284</a>	No suitable habitat present on the subject site. Unlikely to occur.
Blue-billed Duck ( <i>Oxyura australis</i> )	V	-	2	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10580">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10580</a>	No suitable habitat present on the subject site. Unlikely to occur.
Eastern Osprey ( <i>Pandion cristatus</i> )	V	M	47	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10585">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10585</a>	The subject site does not contain potential foraging habitat. Unlikely to occur.
Eastern Ground Parrot ( <i>Pezoporus wallicus wallicus</i> )	V	-	4	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10608">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10608</a>	No suitable habitat present on the subject site. Unlikely to occur.
Wompoo Fruit-Dove ( <i>Ptilinopus magnificus</i> )	V	-	2	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10707">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10707</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur.
Freckled Duck ( <i>Stictonetta naevosa</i> )	V	-	13	<a href="https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10771">https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10771</a>	No suitable habitat present on the subject site. Unlikely to occur.
Eastern Grass Owl ( <i>Tyto longimembris</i> )	V	-	28	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10819">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10819</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur.
Masked Owl ( <i>Tyto novaehollandiae</i> )	V	-	8	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10820">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10820</a>	No suitable foraging or breeding habitat present on the subject site. Unlikely to occur other than fly-over.
<b>Insecta</b>					
Australian Fritillary ( <i>Argynnis hyperbius inconstans</i> )	E	CE	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=88056">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=88056</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Giant Dragonfly ( <i>Petalura gigantea</i> )	E	-	1	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10600">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10600</a>	No suitable habitat present on the subject site. Unlikely to occur.
<b>Mammalia</b>					



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Rufous Bettong ( <i>Aepyprymnus rufescens</i> )	V	-	1	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10033">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10033</a>	No suitable habitat present on the subject site. Unlikely to occur.
Large-eared Pied Bat ( <i>Chalinolobus dwyeri</i> )	V	V	0	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10157">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10157</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Hoary Wattled Bat ( <i>Chalinolobus nigrogriseus</i> )	V	-	1	<a href="https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10158">https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10158</a>	No suitable habitat present on the subject site. Unlikely to occur
Spotted-tailed Quoll ( <i>Dasyurus maculatus</i> )	V	E	9	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10207">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10207</a>	The subject site habitat likely to be too disturbed. Unlikely to occur.
Eastern False Pipistrelle ( <i>Falsistrellus tasmanianensis</i> )	V	-	3	<a href="http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10331">http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10331</a>	Site only has marginal potential foraging habitat. Recorded on adjoining land however hence Moderate chance of occurrence as fly-over.
Little Bentwing-bat ( <i>Miniopterus australis</i> )	V	-	35	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10533">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10533</a>	Subject site contains a limited amount of potential foraging habitat for this species. Unlikely to roost in trees on the subject site. Recorded on adjoining land. High chance of occurrence.
Eastern Bent-wing Bat ( <i>Miniopterus schreibersii oceanensis</i> )	V	-	19	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10534">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10534</a>	Subject site contains a limited amount of potential foraging habitat for this species. Unlikely to roost in trees on the subject site. Recorded on adjoining land. High chance of occurrence.
Eastern Free-tail Bat ( <i>Mormopterus norfolkensis</i> )	V	-	17	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10544">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10544</a>	Subject site contains a limited amount of potential foraging habitat for this species. Unlikely to roost in trees on the subject site. Recorded on adjoining land. High chance of occurrence.
Southern Myotis ( <i>Myotis macropus</i> )	V	-	10	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10549">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10549</a>	The subject site does not contain suitable habitat for the species. Unlikely to occur.



## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Greater Glider ( <i>Petaurides volans</i> )	E	V	2	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20306">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20306</a>	No suitable habitat present on the subject site. Unlikely to occur.
Yellow-bellied Glider ( <i>Petaurus australis</i> )	V	-	5	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10601">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10601</a>	No suitable foraging habitat present on the subject site. Unlikely to occur.
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	V	-	26	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10604">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10604</a>	No suitable foraging habitat present on the subject site. Unlikely to occur.
Brush-tailed Rock-wallaby ( <i>Petrogale penicillata</i> )	E	V	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=225">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=225</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Brush-tailed Phascogale ( <i>Phascogale tapoatafa</i> )	V	-	1	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10613">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10613</a>	No suitable foraging habitat present on the subject site. Unlikely to occur.
Koala ( <i>Phascolarctos cinereus</i> )	V	V	4493	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10616">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10616</a>	Subject site has potential to be used by transient Koalas. Moderate chance of occurrence.
Common Planigale ( <i>Planigale maculata</i> )	V	-	3	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10635">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10635</a>	No suitable habitat present on the subject site. Unlikely to occur.
Long-nosed Potoroo ( <i>Potorous tridactylus tridactylus</i> )	V	V	0	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10662">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10662</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Eastern Chestnut Mouse ( <i>Pseudomys gracilicaudatus</i> )	V	-	14	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10687">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10687</a>	No suitable habitat present on the subject site. Unlikely to occur.
New Holland Mouse ( <i>Pseudomys novaehollandiae</i> )	-	V	0	<a href="http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=96">http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=96</a>	No suitable habitat present on the subject site and no local records. Unlikely to occur.
Grey-headed Flying-fox ( <i>Pteropus poliocephalus</i> )	V	V	83	<a href="http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10697">http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10697</a>	The subject site contains suitable foraging habitat for the species. Records in the locality. High chance of occurrence.





## Sustainable Partners

Species	BC Act	EPBC Act	No. of records	Link to Profile	Likelihood of Occurrence
Yellow-bellied Sheath-tail Bat ( <i>Saccolaimus flaviventris</i> )	V	-	3	<a href="http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10741">http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10741</a>	Subject site contains a limited amount of potential foraging habitat for this species. Unlikely to roost in trees on the subject site. Fair chance of occurrence.
Greater Broad-nosed Bat ( <i>Scoteanax rueppellii</i> )	V	-	13	<a href="http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10748">http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10748</a>	Subject site contains a limited amount of potential foraging habitat for this species. Unlikely to roost in trees on the subject site. Recorded on adjoining land. High chance of occurrence.
Common Blossom Bat ( <i>Syconycteris australis</i> )	V	-	1	<a href="http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10785">http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10785</a>	No suitable habitat present on the subject site. Unlikely to occur.
Eastern Cave Bat ( <i>Vespadelus troughtoni</i> )	V	-	4	<a href="http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10829">http://www.environment.nsw.gov.au/threatened-speciesapp/profile.aspx?id=10829</a>	No suitable habitat present on the subject site. Unlikely to occur.

Key: CE = critically endangered, E = endangered, V = vulnerable.



Sustainable Partners

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## Appendix 4: MNES Search Results

Arborist: Peter Berecny AQF 5 Diploma Arboriculture  
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Phone: (02) 6581 1707  
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## ARBORIST REPORT

**Lifestyle Design Homes Pty Ltd**

**C/- King & Campbell Pty Ltd**

**LOT 1 DP 369206 John Oxley Drive Port Macquarie**



Assessment Date: 29/3/2019

## Executive Summary

King and Campbell requested an Assessment of 2 large trees that are growing on Port Macquarie Hastings Council controlled land on the Northern boundary of Lot 1 DP 369206 John Oxley Drive Port Macquarie. Land is owner by Lifestyle Design Homes Pty Ltd Mr Ross Ramm.

The adjoining land is to be subdivided and residential allotments constructed close to 2 large trees. The Scope of work requested -The Northern boundary of Lot 1 is adjacent to 2 large trees that are within the John Oxley Drive road reserve. The trees are in close proximity to the future allotments and we require a pruning strategy that will ensure safety for the future dwelling on these new lots.

A Tree Hazard Evaluation was undertaken on both trees and detailed survey completed.

The following tree management is required to allow an acceptable risk threshold for the proposed housing development.

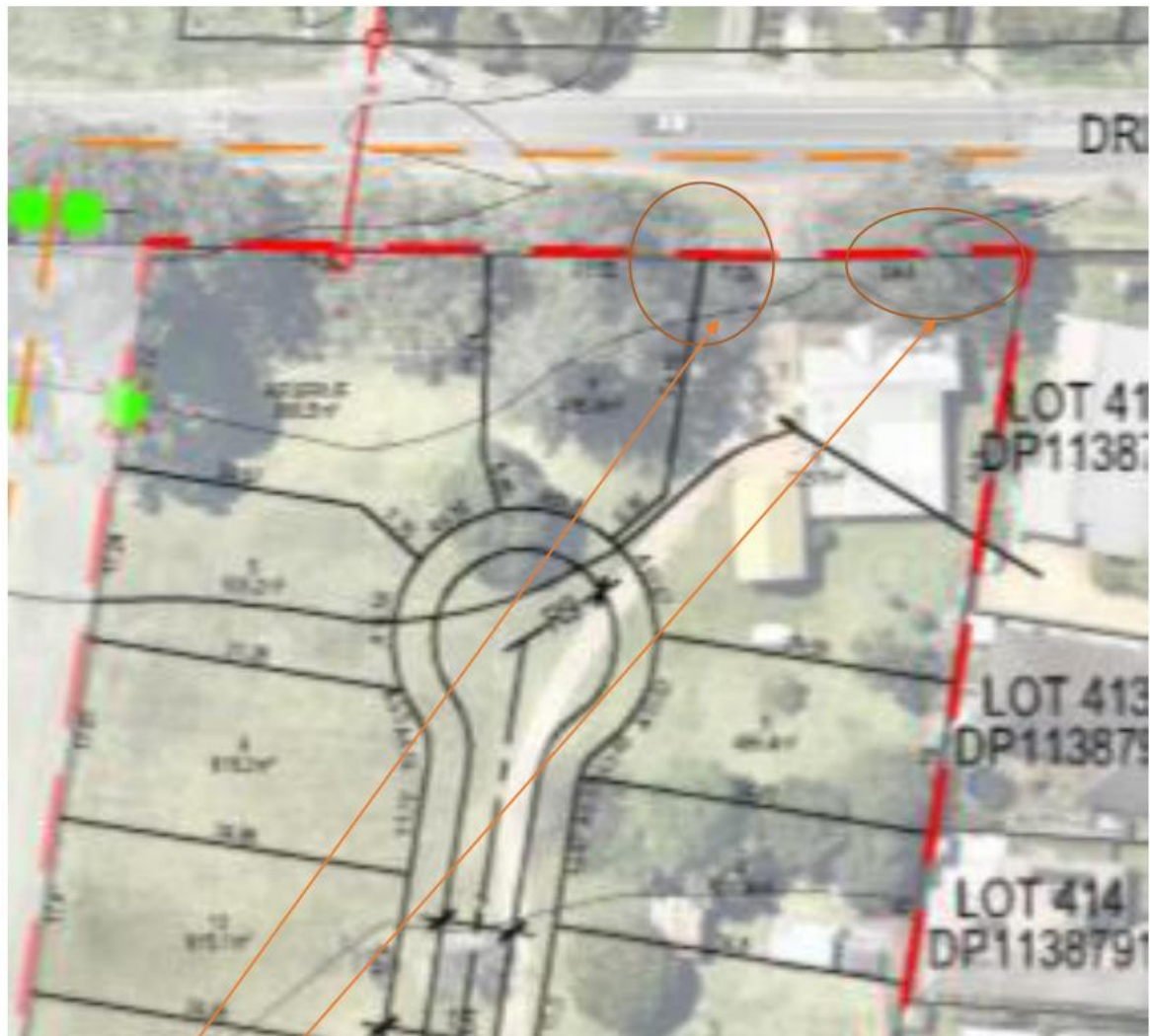
1. **TREE # 1 *Corymbia intermedia*** be retained and **PRUNED** as specified. Crown lifting and dead-wooding.
2. **Tree #2 *Eucalyptus pilularis*** be **REMOVED** as it poses an unacceptable HIGH ISA TRAQ Hazard.

Note: Both trees are on Port Macquarie Hastings Council controlled land and there permission must be sought prior to any works being undertaken.

- All works to strictly adhere to Australian Standard AS 4373-2007 Pruning Amenity Trees and Work Cover Code of Practice for Amenity Tree Industry.
- Climbing spikes are not to be used on trees to be retained.
- Contractor to supply a Site Specific Safe Work Method statement prior to works.
- Contractor to stump grind any trees that have been removed.
- Author of this report to be contacted if there are any further hazards found whilst undertaking aerial works.



## Site Map



## Map Key

Tree #1 *Corymbia intermedia* – Pruning to reduce hazard. Crown lifting Southern side.

Tree #2 *Eucalyptus pilularis* - Removal of structurally unsound declining tree. PMHC controlled land.



## Data Collection

Tree data has been collected on a modified tree evaluation form. The Hazard Evaluation form developed by ISA is designed to collect tree dimensions and takes into consideration tree characteristics, tree health, site conditions and tree structural defects.

## Risk Categorisation and Tree Classification

### Method 1

International Society of Arboriculture qualitative classification using the tree risk assessment as per *Tree Risk Assessment Manual*. Factors include target ratings, size of part to fail, probability of failure.

Part most likely to fail is located, fall distance and target protection noted.

Failure potential: improbable, possible, probable or imminent.

Impact likelihood: Very low, low, medium or high.

Failure and impact likelihood factors matched with consequences: of failure being Negligible, Minor, Significant and Severe.

Final rating of part to fail combination of all above factors to give ratings of..

**Extreme** – Act immediately

**High** – Urgent works necessary, fence off area if necessary. Act within 1 months.

**Moderate**- Undertake works within 3 months

**Low** – Manage as necessary, complete when resources and time permits.

**Method 2** Developed by world renowned Arborist Jeremy Barrell


**Useful life expectancy (ULE)** rating given to allow management of trees, ratings reflect the trees retention value, factors such as risk, health, species, historical and landscape significance. Dunster, Julian A., E. Thomas Smiley, Nelda Matheny and Sharon Lilly. 2013 Tree Risk Assessment Manual, Champaign, Illinois: International Society of Arboriculture.

Tree #	Species	Height Spread	DBH mm	Health & Vigor	Native or Exotic
	Corymbia intermedia	25m x 20m	800	Excellent	Native non Kbs

Age Class	Live Crown Ratio %	Retention Value	Tree Part	Target	Likely Risk	Consequence	ISA Hazard Rating
Mature	70%	High	Overhanging limbs	New houses	Somewhat likely	Significant	Moderate



**Recommendations**

Large well formed tree will overhang new development. Tree is well formed and a good spp. It is unlikely to pose an unacceptable hazard.

Retention with Pruning Specification.- Residual LOW



Arborist to supervise construction and maintain tree protection zone. Tree Pruning as specified by AQF 3 Min Arborist.

**Management**

Crown lifting on Southern side and dead-wooding.

1. Retain / minimal prune 3<sup>RD</sup> OB to SW 50mm
2. Prune 3<sup>RD</sup>OB x 6m SW 150mm
3. Prune 3<sup>RD</sup> OB x 4m 70mm.
4. Prune 3<sup>RD</sup> OB Sth 100mm x 5 m




Tree #	Species	Height Spread	DBH mm	Health & Vigor	Native or Exotic
2.	Eucalyptus pilularis	28m	1500	Declining-damaged	Native- non Kbs

Age Class	Live Crown Ratio %	Retention Value	Tree Part	Target	Likely Risk	Consequence	ISA Hazard Rating
Senescent	60%	Moderate	Leader	Residence	Probable	Severe	HIGH



**Recommendations**

Large senescing blackbutt is to be REMOVED.

Tree has had a significant amount of large diameter deadwood removed as temporary hazard reduction. 12 months ago- PTF crane/ manbasket 5t deadwood.

Decay in plane of lean. Likely to fail and pose as life threatening risk to development. Severe termite infestation of decayed – low lignin timber trunk



**Management**

Tree must be removed. In severe decline. Past root damage caused root crown decay.

Trenching in plane of lean for services. Likely whole tree or large limb failure onto high frequency of use area.

PMHC controlled land. **REMOVE**

## Disclaimer

This tree report has been compiled on the information gathered on the day of the tree inspections: 29/03/2019.

This report is not a prediction of what will happen in the future. The information contained in the report is not to be used by a third party without the written consent of the author. This report has been prepared for the clients and may be submitted to Port Macquarie ~ Hastings Council for their consideration.

The author accepts no responsibility for any use of the contents of this report by third parties and further that not all defects and faults have been listed due to the factors of natural change in trees and adverse environmental factors such as extreme storms and windy weather. The author accepts no responsibility for damage caused by the trees in this report to persons or property now and in the future – trees are living organisms and change with time and environmental conditions.

While some faults may have been detected on site, it is not possible to detect all bio-mechanical structural faults, both internally and in the higher canopy of the tree, as well as the underground root system. Further, it is not known by the Author if any structural roots have been severed or cut previously, particularly for the installation of underground services such as electrical wiring, sewer pipe installation, stormwater pipe installation, drainage lines, underground water tanks, telephone lines & cables, underground gas lines, swimming pools and their associated pipe work and electrical installation, and for structural landscaping. Trees and their root systems can suffer a lot of damage yet it may not be visible to the naked eye.

Similarly, the detection of internal wood decay in the branches, trunks and roots is not visible to the naked eye at the time of inspection but requires the use of sophisticated technological equipment such as the 'Resistograph', the 'Picus Tomagraph' or the 'Tree Radar'. The use of these technical devices can be expensive and is usually only used where doubt exists to the soundness of a tree after all other methods have been exhausted. None of these devices have been used in this report.

## Declaration

It is hereby stated that I, Peter Berecny, Author of this report, am a practising AQF Level 5 Arboricultural Consultant and that I have read and agree to be bound by the *Expert Witness 'Code of Conduct'* as set out in the *Uniform Civil Procedure Rules 2005 ~ Schedule 7* and further...

1. That I have no personal interest in the trees or property contained in this report.
2. That I am independent and have no bias for any of the parties involved including the Clients.
3. That my remuneration for compiling the report is not contingent upon a predetermined favourable outcome for any parties involved including the Clients.
4. I have included all relevant information available to me and have not withheld any significant information that may be useful in determining an outcome.
5. That the facts presented in this report are true to the best of my personal knowledge and that the recommendations expressed are also truly held by me.
6. That I have complied with the professional requirements and codes of practice of my industry and that I have attained Tree Risk Assessor Qualification through the *International Society of Arboriculture (ISA)* and am a professional member of *Arboriculture Australia (AA)*.

## PORT TREE FELLA

**Peter Berecny**

Owner / Manager

AQF 5 Diploma Arboriculture

AQF 5 Adv. Dip. Horticulture (Landscape)

AQF 3 Certificate Horticulture

ISA Qualified Tree Risk Hazard Assessor

Member International Society of Arboriculture (ISA) and Arboriculture Australia (AA)



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## INSURANCES

Professional indemnity Insurance: \$5,000,000 - QBE Insurance

Public Liability Insurance: \$20 million - QBE Insurance

Workers Compensation - QBE Insurance



# KING + CAMPBELL

Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP533058,  
John Oxley Drive, Port Macquarie.

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*Prepared for:*

***Lifestyle Design Homes  
(Mr & Mrs RW & JM Ramm)***

***and***

***Mr & Mrs NB & PM Mann  
Mr & Mrs PJ & JE Mann  
Mr PJ Pye & Mr BC Pye***

*Prepared by:*

***King & Campbell Pty Ltd***  
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Fax: (02) 6583 4064  
info@kingcampbell.com.au

*Date: May 2019*

## Executive Summary

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This Stormwater Management has been prepared in support of development applications for the residential subdivision of Lot 1 DP 369206 & Lot 3 DP533058, John Oxley Drive, Port Macquarie (the site). The site forms part of the South Lindfield Urban Release Area.

The site contains a total area of approximately 4.84 ha with the proposed development component consisting of approximately 4.58 ha and the remaining 0.26 ha being utilised for vegetation retention.

The site has been assessed for its suitability for the proposed development in terms of servicing requirements and the ability to mitigate the impact of urbanisation on the existing stormwater regime.

This assessment considered the stormwater requirements of the proposed development, including legal point of discharge, soils and the capacity of the land to cater to the water needs and production of the proposed development.

The impact of the proposed development on stormwater quantity and stormwater quality was modelled in the 12d and MUSIC programs, comparing existing conditions to proposed conditions, and the change to water quality from source to outlet against Port Macquarie-Hastings Council's AUS-SPEC requirements.

The results of the modelling demonstrate that measures to mitigate the post-development impacts on the catchment are minimal and can be readily accommodated within the site.

Appropriate measures to the requirements of Port Macquarie-Hastings Council's AUS-SPEC are recommended for the construction period to protect downstream infrastructure and receiving waters from temporary higher sediment loading caused by construction works.

## Table of Contents

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<b>Introduction.....</b>	<b>4</b>
<b>Stormwater Concept Plan .....</b>	<b>5</b>
<b>Site Conditions .....</b>	<b>6</b>
3.1 Location.....	6
3.2 Legal Point of Discharge.....	6
3.3 Topography.....	7
3.4 Soils .....	8
<b>Catchment Context and Land Capacity .....</b>	<b>9</b>
<b>Site and Receiving Water Quality .....</b>	<b>11</b>
5.1 Site and Receiving Water Quality.....	11
5.2 Water Quality of the Receiving Waters.....	11
5.3 Pre Development Modelled Pollutant Loads.....	11
5.4 Post Development Modelled Pollutant Loads.....	12
<b>Site Hydrology .....</b>	<b>15</b>
7.1 Site Hydrology.....	15
7.2 Northern Catchment Pre-Development Hydrology.....	15
7.2 Northern Catchment Pre-Development Hydraulics.....	16
7.3 Northern Catchment Post Development Hydrology.....	17
<b>Conclusion .....</b>	<b>20</b>
<b>Bibliography.....</b>	<b>21</b>

## Figures

Figure 1 - Extract from PMH LEP 2011.....	6
Figure 2 - Extract from 1:10,000 Topographic Mapping showing the terrain and extent of watercourses adjacent to the subject land. ....	7
Figure 3 - Extract from PMH Council's Acid Sulphate Soils Mapping with subject Land highlighted.....	8
Figure 4 - Extents of Coastal Wetlands and Proximity Areas for Coastal Wetlands from State Environmental Planning Policy (Coastal Management) 2018 .....	9
Figure 5 - Screenshot from MUSIC Software illustrating the proposed treatment train for the Northern & Southern Catchments.....	14
Figure 6 - Box-Plot Results of peak outflow for the Pre-Developed Northern Catchment .....	16
Figure 7 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Pre-Developed Northern Catchment.....	17
Figure 8 - Box-Plot Results of peak outflow for the Pre-Developed Northern Catchment .....	18
Figure 9 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Pre-Developed Northern Catchment.....	18
Figure 10 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Pre-Developed Northern Catchment.....	19

## Tables

Table 1 - Existing Condition Annual Export Loads.....	12
Table 2 - Extract Table D7.4 - Unmodified Ecosystem Median Trigger Values (Port Macquarie Hastings Council, 2004) .....	12
Table 3 - Comparison of Percentage Impervious (%) for the Pre- and Post- Development land uses.....	12
Table 4 - Comparison of Pre- and Post- Development Annual Loads.....	13
Table 5 - Table of Model Parameters within DRAINS software. ....	16
Table 6 - Pre-Development 12d modelling results. ....	17
Table 7 - Northern Catchment Post-Development 12d results .....	19

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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

# Section 1

## Introduction

---

This Stormwater Management Plan has been prepared in support of the Concept Development Applications (Concept DA) and the Stage 1 Works Development Applications for the residential subdivision of Lot 1 DP 369206 & Lot 3 DP533058.

The subject Applications contain the following details:

- The Concept DA for Lot 1 DP 369206 sets out the Concept Proposal for the residential subdivision of the subject land into 25 residential lots.
- The Stage 1 Works DA for Lot 1 DP 369206 includes details of the residential subdivision of the northern catchment to create 14 residential lots and the associated overall site works and services works.
- The Concept DA for Lot 3 DP 533058 sets out the Concept Proposal for the residential subdivision of the subject land into 25 residential lots.
- The Stage 1 Works DA for Lot 3 DP 533058 includes details of the residential subdivision of the northern catchment to create 19 residential lots and the associated overall site works and services works.

The site contains a total area of approximately 4.84 ha with the proposed development component consisting of approximately 4.58 ha and the remaining 0.26 ha being utilised for vegetation retention.

The site has been assessed for its suitability for the proposed development in terms of the ability to mitigate the impact of urbanisation on the existing stormwater regime.



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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 2

### Stormwater Concept Plan

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The site contains two catchments separated by a ridge line in the East – West direction and draining to the northern & southern boundary respectively. Drainage is primarily directed by overland means to the proposed pit and pipe stormwater network for both catchments.

The impact of the proposed development on stormwater quantity and stormwater quality for each catchment was modelled in the 12d and MUSIC programs, comparing existing to proposed conditions.

The proposed stormwater concept plan has been modelled in accordance with the procedures contained within the Australian Rainfall and Runoff 2016 using the Dynamic Drainage module within the 12d Model software, with the results revealing that peak flow post development will not exceed existing peak flows in the 1% AEP storm event for the northern catchment due to the additional storage capacity provided by the proposed northern stormwater bio-retention basin.

The proposed stormwater concept plan has been tested for water quality management using MUSIC, and it has been confirmed that the subject land has the capability to meet the water quality objectives of Council's AUS-SPEC D7 document and relevant Australian Standards.

The Stage 1 Works DAs include details as outlined in this document of the stormwater management measures required to meet the water quantity and water quality requirements of Council's AUS-SPEC document for the northern catchments of both Lot 1 DP3 69206 and Lot 3 DP 533058.

Appropriate measures are recommended for the construction period to protect downstream infrastructure and receiving waters from temporary higher sediment loading caused by construction works.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 3

### Site Conditions

#### 3.1 Location

The site is located within the Port Macquarie Hastings (PMH) Local Government Area (LGA), within the South Lindfield Urban Release Area on the western fringe of Port Macquarie and within the catchment of both the Hastings River (northern catchment) and Lake Innes (southern catchment) on the north coast of New South Wales.

The site is bound by a residential development to the east, rural zoned land to the south and west, and a combination of residential and rural zoned land to the north. The site is also bound by special purpose (crematorium) zoned land to the south west, with John Oxley Drive & the Oxley Highway to the north.

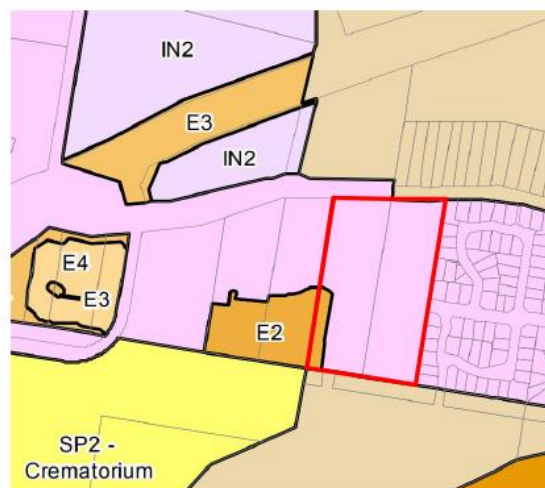


Figure 1 - Extract from PMH LEP 2011

#### 3.2 Legal Point of Discharge

In accordance with established conventions in determining the lawful point of discharge, a point of discharge is considered "lawful" if it satisfies the following two point test<sup>1</sup>:

- a) That the location of the discharge is under the lawful control of the local government or other statutory authority from whom permission to discharge has been received. This will include park, drainage or road reserve, stormwater drainage easement.

<sup>1</sup> Queensland Urban Drainage Manual – volume 1 second edition 2007 – pp 3-3 - [http://www.derm.qld.gov.au/water/regulation/pdf/guidelines/flood\\_risk\\_management/qudm\\_3.pdf](http://www.derm.qld.gov.au/water/regulation/pdf/guidelines/flood_risk_management/qudm_3.pdf) (Accessed 24 February 2012)

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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

- b) That in discharging in that location, the discharge will not cause an actionable nuisance (i.e. a nuisance for which the current or some future neighbouring proprietor may bring an action or claim for damages arising out of the nuisance). In general terms this implies no worsening as a result of the discharge.

All drainage from the site is directed to the tributary of the Hastings River for (northern catchment) and Lake Innes floodplain (southern catchment) in close proximity the site. The northern catchment discharges to an existing culvert under John Oxley Drive within the existing road reserve. John Oxley Drive is a road under the care and control of Port Macquarie Hastings Council. The tributaries and Lake Innes are shown on the topographic mapping series as being a permanent watercourse, and as such satisfy the requirement to be the lawful points of discharge for the subject land.

### 3.3 Topography

The site is located in gently sloping terrain, dominated by a slight ridge line which traverses the site from west to east and separates the catchment areas of the Hastings River and Lake Innes.

Topographic mapping reveals two watercourses in close proximity to the subject land as shown in the extract from the 1:10,000 topographic map series (Figure 2).



Figure 2 - Extract from 1:10,000 Topographic Mapping showing the terrain and extent of watercourses adjacent to the subject land.

The overall site catchment is composed of two catchments, with both being of a roughly rectangular shape. The northern catchment drains northwards, crossing the John Oxley Drive & Oxley Highway via existing stormwater culverts and drainage swales to the Hastings River Floodplain and ultimately the Hastings River itself. The southern catchment drains southwards over land and via a series of small creeks and swales to enter the Lake Innes Floodplain and ultimately Lake Innes itself.

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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

### 3.4 Soils

Acid Sulfate Soil mapping contained within the PMH Local Environmental Plan (LEP) 2011 classifies the subject land as being free of Acid Sulfate Soils, however areas of Class 3 Acid Sulfate Soils are present within small areas of the proposed vegetated drainage line to the south of the subject land.

An extract from PMH LEP 2011 Acid Sulfate Soils mapping is presented in Figure 3 for the subject land, where light pink represents Class 2 lands and yellow represents Class 5 lands.

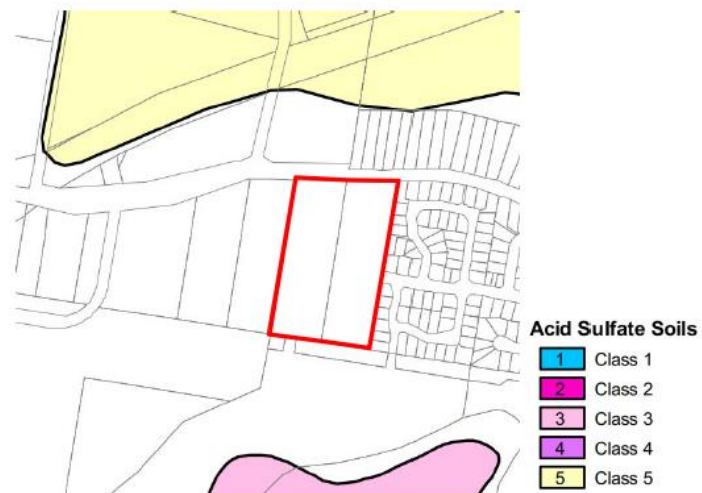


Figure 3 - Extract from PMH Council's Acid Sulphate Soils Mapping with subject Land highlighted.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 4

### Catchment Context and Land Capacity

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The proposed development is located at the boundary of two adjacent watersheds. The northern catchment (approximately 2.7 ha) of the subject land forms part of the Hastings River floodplain watershed and the southern catchment (approximately 2.2 ha) forms part of the Lake Innes floodplain watershed.

The northern catchment drains northwards, crossing the John Oxley Drive & Oxley Highway via existing stormwater culverts and drainage swales to the Hastings River Floodplain and ultimately the Hastings River itself. The southern catchment drains southwards over land and via a series of small creeks and swales to enter the Lake Innes Floodplain and ultimately Lake Innes itself.

In both cases the receiving waters have been considered in stormwater quality calculations as being a pristine environment, due to the existence of significant portions of coastal wetlands within the drainage path of both watersheds.

The regions of Coastal Wetlands and Proximity Areas for Coastal Wetlands as defined by the State Environmental Planning Policy (Coastal Management) 2018 are presented in Figure 4, with the approximate extents of the subject site highlighted.

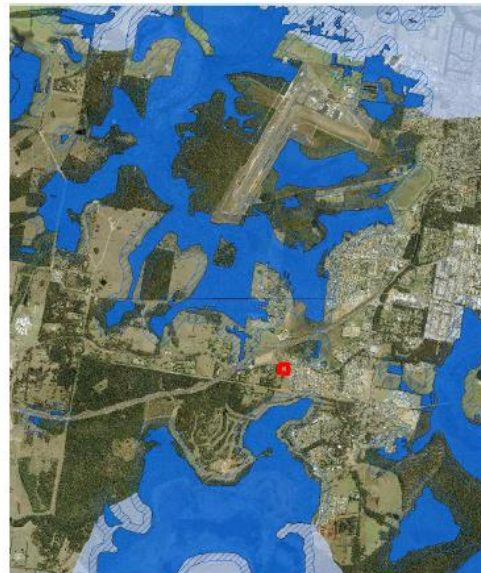


Figure 4 - Extents of Coastal Wetlands and Proximity Areas for Coastal Wetlands from State Environmental Planning Policy (Coastal Management) 2018



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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

The site therefore has the capability to adequately cater for the proposed development, including the provision of stormwater quality and quantity measures to mitigate the impact of the proposed development on the respective downstream catchments.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 5

### Site and Receiving Water Quality

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#### 5.1 Site and Receiving Water Quality

All stormwater quality modelling for the development was undertaken in accordance with recommended procedures within Chapter 13 – Modelling Urban Stormwater Management Systems within the Australian Runoff Quality (ARQ) Guide (Engineers Australia National Committee for Water Engineering, 2007). Given the *"highly non-linear"* and *"highly stochastic"* characteristics involved in stormwater management systems, there is an obvious requirement for the use of sophisticated computer modelling packages to estimate the likely pollutant export from the development.

The computer software MUSIC Version 6.3 (Build 0.1908) developed by eWater was utilised to determine the likely stormwater runoff quality for pre- and post- development scenarios.

Design parameters for the software were obtained and adopted from the NSW MUSIC Modelling Guidelines (BMT WBM Pty Ltd, August 2015) along with local rainfall and evaporation parameters for the PMH area (Port Macquarie Hastings Council, 2004).

The catchments containing the subject land discharge to the Hastings River Floodplain to the North and the Lake Innes Floodplain to the South.

A large proportion of the site itself has been substantially modified, including clearing of trees and vegetation, with only scattered areas remaining vegetated. Small areas of the site have been developed for rural residential use.

#### 5.2 Water Quality of the Receiving Waters

For the purposes of water quality modelling, and notwithstanding urbanisation and development that has occurred in the area of the receiving waters, the catchment of the proposed development has been considered to be pristine or unmodified ecosystems.

#### 5.3 Pre Development Modelled Pollutant Loads

The subject land was modelled as two discrete catchments, determined according to the existing landform and topography as well as considering the ultimate built form of the development on the subject land and the lands adjoining. The existing soils are considered to be generally sandy clay or better, allowing for small amounts of infiltration.

Results of the pre development modelling are presented in Table 1.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

Table 1 - Existing Condition Annual Export Loads

Flow (ML/yr)	Total Suspended Solids (kg/year)	Total Phosphorous (kg/yr)	Total Nitrogen (kg/yr)	Gross Pollutants (kg/yr)
28.3	5420	7.86	58.8	276

#### 5.4 Post Development Modelled Pollutant Loads

PMH Council specifies water quality objectives (Port Macquarie Hastings Council, 2004) sourced from the ARQ Guide (Engineers Australia National Committee for Water Engineering, 2007).

For an "unmodified ecosystem" the water quality objectives for median outflow concentrations are contained within Table D7.4 of AUS SPEC (Port Macquarie Hastings Council, 2004) and reproduced in

Table 2:

Table 2 - Extract Table D7.4 - Unmodified Ecosystem Median Trigger Values (Port Macquarie Hastings Council, 2004)

Receiving Water	Total Phosphorous (ug/L)	Total Nitrogen (ug/L)	Dissolved Oxygen % Sr	PH Units	SS mg/L
Estuaries	10-20	150-300	80-90	6.5-8.0	6

In the absence of detailed data on existing median values for water quality within the Hastings River & Lake Innes (and associated floodplains), the precautionary principle was adopted where the developed stormwater concentrations should be **no worse** than existing.

Consideration was given to the amount of change in land use proposed for the subject land for both the pre- and post- development land uses, with conservative selection of land use type informing which of the PMH Council AUS SPEC recommended values were adopted.

The percentage of impervious land adopted for both the pre- and post-developed cases is presented in Table 3. No variation in catchment type was present between the Northern and Southern catchments in either the pre- or post- development case.

Table 3 - Comparison of Percentage Impervious (%) for the Pre- and Post- Development land uses

Pre- Development		Post- Development	
Catchment Type	Percentage Impervious (%)	Catchment Type	Percentage Impervious (%)
Rural & Rural Residential	40	Medium Density Development	70

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

It is proposed to provide an end-of-line bio-retention basin prior to discharge at the existing John Oxley Drive culvert. The selected properties for the bio-retention basin are as follows:-

Parameter	Quantity
Basin Surface Area	600m <sup>2</sup>
Bio-retention Filter Area	120m <sup>2</sup>
Filter Depth	0.4m
Submerged Zone	0.3m

A model was created within the MUSIC software to reflect the proposed treatment train.

Results of stormwater quality modelling revealed that the change in land use resulting from the proposed development and proposed stormwater treatment measures results in minimal change to outflow concentration. These results are presented in Table 4.

Table 4 - Comparison of Pre- and Post- Development Annual Loads

Parameter	Northern Catchment				Southern Catchment*			
	Pre-Development	Post-Development	Percentage Reduction	Compliance?	Pre-Development	Post-Development	Percentage Reduction	Compliance?
Total Suspended Solids (kg/yr)	5890	510	91.3	✓	2550	253	90.1	✓
Total Phosphorus (kg/yr)	10.2	4.65	54.6	✓	3.46	2.96	14.4	✓
Total Nitrogen (kg/yr)	71.6	39.2	45.3	✓	26.1	13.4	48.5	✓
Gross Pollutants (kg/yr)	710	0	100	✓	266	0	100	✓

It should be noted that the pollutant generation profile within MUSIC is stochastically generated from median and standard deviation values. The results above are consistent with the limits of accuracy of the model (~10% variation of results).

Therefore the pollutant outflow concentrations as reported by MUSIC modelling software indicate that the land use modification will result in minimal change to the outflow concentrations from the subject land.

**Appendix SWMSP\_2** of this report contains the graphical and numerical parameters and output from the software.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

The proposed management plan identifies treatment measures using a treatment train approach to meet the stated Water Quality Objectives. A graphical summary produced within the MUSIC modelling software is presented in Figure 5.

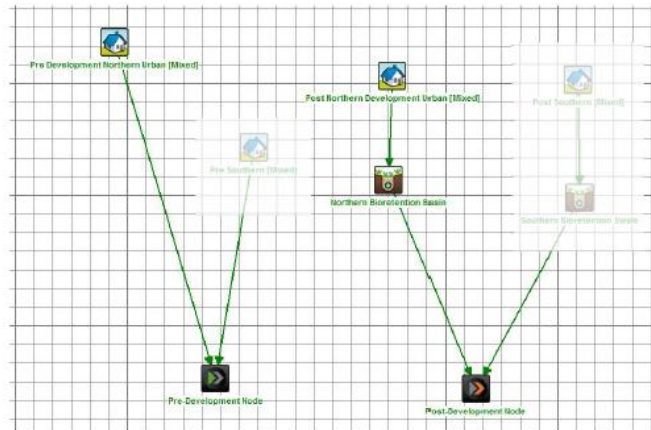


Figure 5 - Screenshot from MUSIC Software illustrating the proposed treatment train for the Northern & Southern Catchments.

The treatment train includes primary treatment measures consisting of the following water sensitive urban design:

Sediment Controls (Northern & Southern catchments)

- Bio-Retention Basin (Northern catchment only)
- Bio-Retention Swale (Southern catchment only – Subject to further investigation within future Development Application)



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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 7

### Site Hydrology

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#### **7.1 Site Hydrology**

For the Northern catchment of the proposed development, it is required that the peak outflow from the catchment for the developed 1% AEP (1 in 100 year ARI) storm be less than the pre-developed peak flow for the critical duration storm (Port Macquarie Hastings Council, 2004), to negate any impacts on existing downstream properties and infrastructure.

For the purposes of modelling the changes to stormwater flows from the site, a model was formulated using 12d to determine the runoff from the existing site.

Soil infiltration capacity along with site specific rainfall parameters were used in the model, with design storm ensembles to the method described in AR&R 2016 (Engineers Australia National Committee for Water Engineering, 2016).

Runoff and peak flow modelling was completed using the 12d computer software (12d Solutions Pty. Ltd.).

The design of the stormwater infrastructure to service the southern stormwater catchment will be considered in detail within a future Development Application. The stormwater conveyance requirements will be developed in conjunction with the owner of Lot 399 DP1241278 to ensure sufficient capacity is provided within downstream development to cater for the expected stormwater flow.

#### **7.2 Northern Catchment Pre-Development Hydrology**

The existing site and drainage infrastructure was modelled within 12d. The existing soils being of a sandy clay nature were modelled as being of low permeability, generating medium to high runoff from the site.

The 12d model was constructed in accordance with the parameters as specified by PMH Council, utilising the Australian Rainfall and Runoff 2016 methodology. The soil type was selected to reflect the existing soils as described above, along with antecedent moisture content suitable for "rather wet / saturated" soil conditions of up to 25mm of rainfall in the preceding 5 days.

The hydrologic and rainfall parameters presented in Table 5 were used for the western catchments for both pre and post development models.

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

Table 5 - Table of Model Parameters within DRAINS software.

Parameter	Value
Soil type	3 - Slow Infiltration
Impervious area depression storage (mm)	1
Pervious area depression storage (mm)	5
Rainfall Data Parameters	Localised AR&R 2016 IFD & Storm Ensembles
Antecedent moisture condition	3.5 ("Rather wet / Saturated")
Annual Recurrence Interval (major)	100 years

## 7.2 Northern Catchment Pre-Development Hydraulics

In accordance with site hydrology requirements, analysis of the volume and rate of flow was undertaken for the existing John Oxley Drive culvert catchment and the Northern catchment of the subject land. The design constraint for flows under Oxley Highway was to ensure flows do not increase beyond existing, to ensure the existing performance of the John Oxley Drive culvert is not impacted by the development.

The existing catchment for the John Oxley Drive culvert catchment was modelled in 12d, with existing the stormwater culvert determined to be adequate in catering for the pre-developed 1% AEP storm.

The Northern catchment of the subject land was also modelled in 12d and the peak median outflow was determined in accordance with AR&R 2016 requirements.

The box-plot results of the 1% AEP storm ensemble modelling for the pre-developed Northern catchment are presented in Figure 6.

The outflow hydrograph corresponding to the peak median outflow storm for the pre-developed Northern catchment is presented in Figure 7.

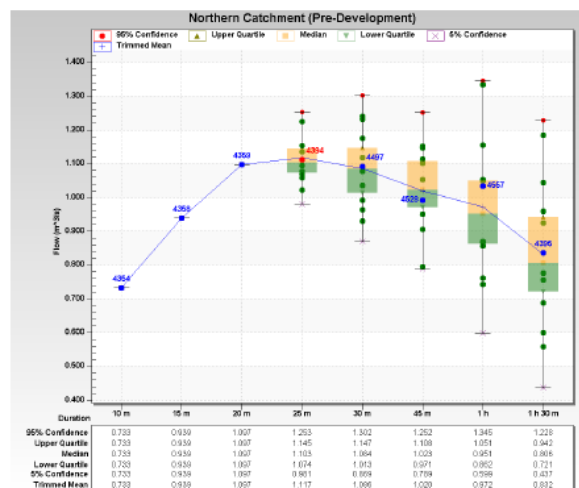


Figure 6 – Box-Plot Results of peak outflow for the Pre-Developed Northern Catchment

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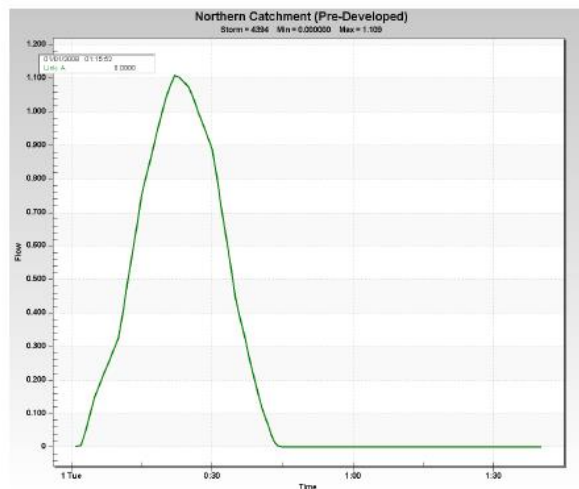
Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

Figure 7 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Pre-Developed Northern Catchment

Results of 12d modelling for the Pre-Development Northern catchment are reproduced in Table 6. Refer to **Appendix 1** for complete calculation results.

Table 6 – Pre-Development 12d modelling results.

Analysis Model	Critical AR&R 2016 Storm Duration	Peak Median Outflow (m³/s)
Northern Catchment (Pre- Development)	25 Min	1.109

### 7.3 Northern Catchment Post Development Hydrology

The influence of the proposed development on the Northern catchment was modelled within 12d to determine the impact on downstream lands and infrastructure in accordance with AR&R 2016 requirements.

Similarly to the water quality investigations above, the change to the impervious area within the catchment was considered and modelled to determine the effect.

The box-plot results of the 1% AEP storm ensemble modelling for the post-developed Northern catchment are presented in Figure 8.

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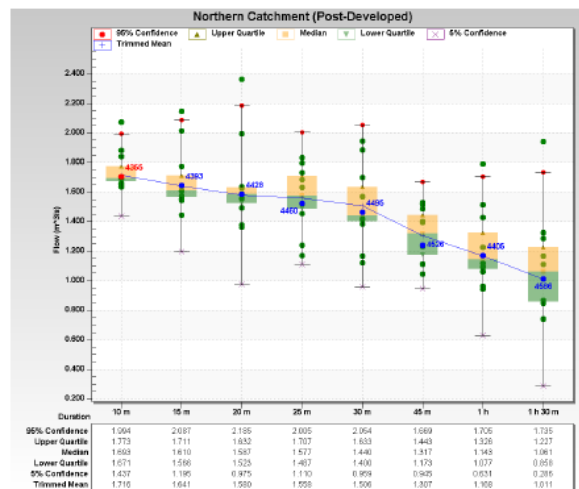
Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

Figure 8 – Box-Plot Results of peak outflow for the Post-Developed Northern Catchment

The modelling indicates that a detention facility is required to attenuate the change in peak flow resulting from the proposed development. A bio-retention basin was modelled at the point of discharge of the Northern catchment, to delay and reduce the peak outflow with the following parameters:-

Parameter	Quantity
Basin Surface Area	600m <sup>2</sup>
Maximum Depth	1m

The outflow hydrograph corresponding to the peak median outflow storm for the pre-developed Northern catchment (including bio-basin) is presented in Figure 9.

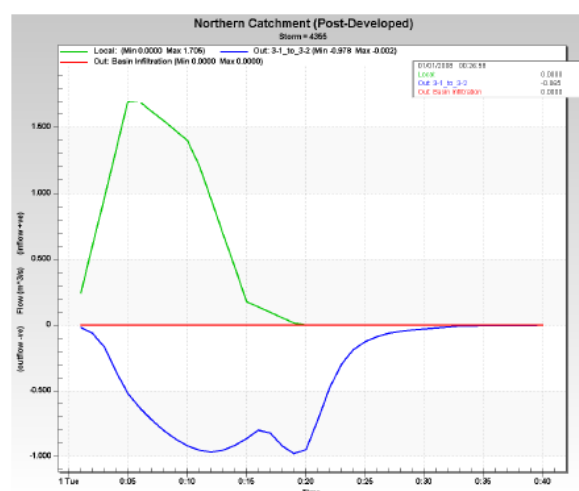


Figure 9 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Post-Developed Northern Catchment

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Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

The box-plot results of the 1% AEP storm ensemble modelling for the basin storage requirements at the post-developed Northern catchment are presented in Figure 10.

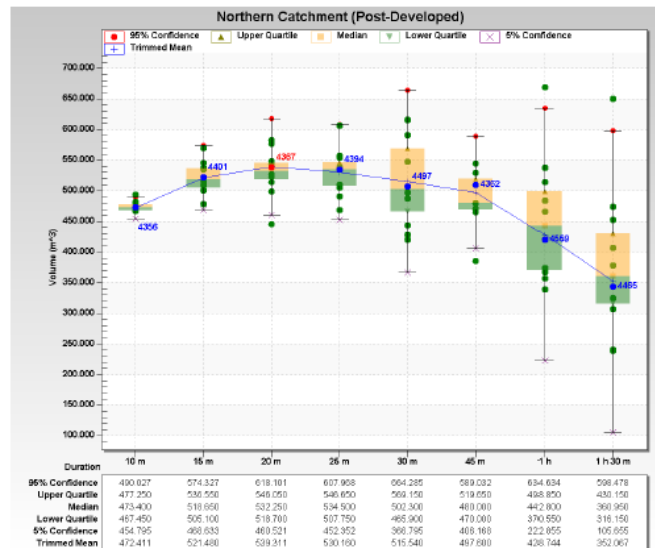


Figure 10 - Outflow Hydrograph of the peak median storm (25 Min, 1% AEP) for the Pre-Developed Northern Catchment

Results of 12d modelling for the Post-Development Northern catchment are reproduced in Table 7.

Table 7 – Northern Catchment Post-Development 12d results

Critical AR&R Storm Duration	Modelled Peak Inflow (Post-Development)	Modelled Peak Outflow (Post-Development)	Maximum Peak Outflow (Pre-Development)	Compliance?
10 Min	1.705 m³/s	0.978 m³/s	1.109 m³/s	✓

The complete output from the 12d investigation including input data is included as **Appendix 1** to this document.



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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

## Section 8

### Conclusion

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The proposed Concept DAs and Stage 1 Works DAs (northern catchments) for residential subdivision was assessed for suitability in terms of the ability to mitigate the impact of urbanisation on the existing stormwater regime.

The assessment considered the stormwater management of the proposed development, including legal point of discharge, soils, and the capacity of the land & existing infrastructure to cater to the water needs and production of the proposed development.

The assessment determined that the required mitigation measures for the northern catchment are able to be readily provided within or adjacent to the subject land, and the development can be adequately serviced with the design constraints and recommendations made within the relevant sections of this report.

The impact of the proposed development on stormwater quantity and stormwater quality for the northern catchment was modelled in the 12d and MUSIC programs respectively, comparing existing pre-development conditions to proposed post-development conditions, and the change to water quality from source to outlet. The modelling has clearly demonstrated that the subject land has the capability to provide the necessary mitigation measures to ensure protection of the downstream environment and hydrology.

Appropriate measures to the requirements of Port Macquarie Hastings Council's AUS-SPEC are recommended for the construction period to protect downstream infrastructure and receiving waters from temporary higher sediment loading caused by construction works.

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Stormwater Management Plan  
Proposed Residential Subdivision  
Lot 1 DP 369206 & Lot 3 DP 533058  
John Oxley Drive, Port Macquarie

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## APPENDIX TWCMP\_1 – 12d MODEL AND OUTPUTS – MAJOR STORM

## Pre and Post Developed Catchment Data &amp; Major Storm Results – 1 in 100 year AF

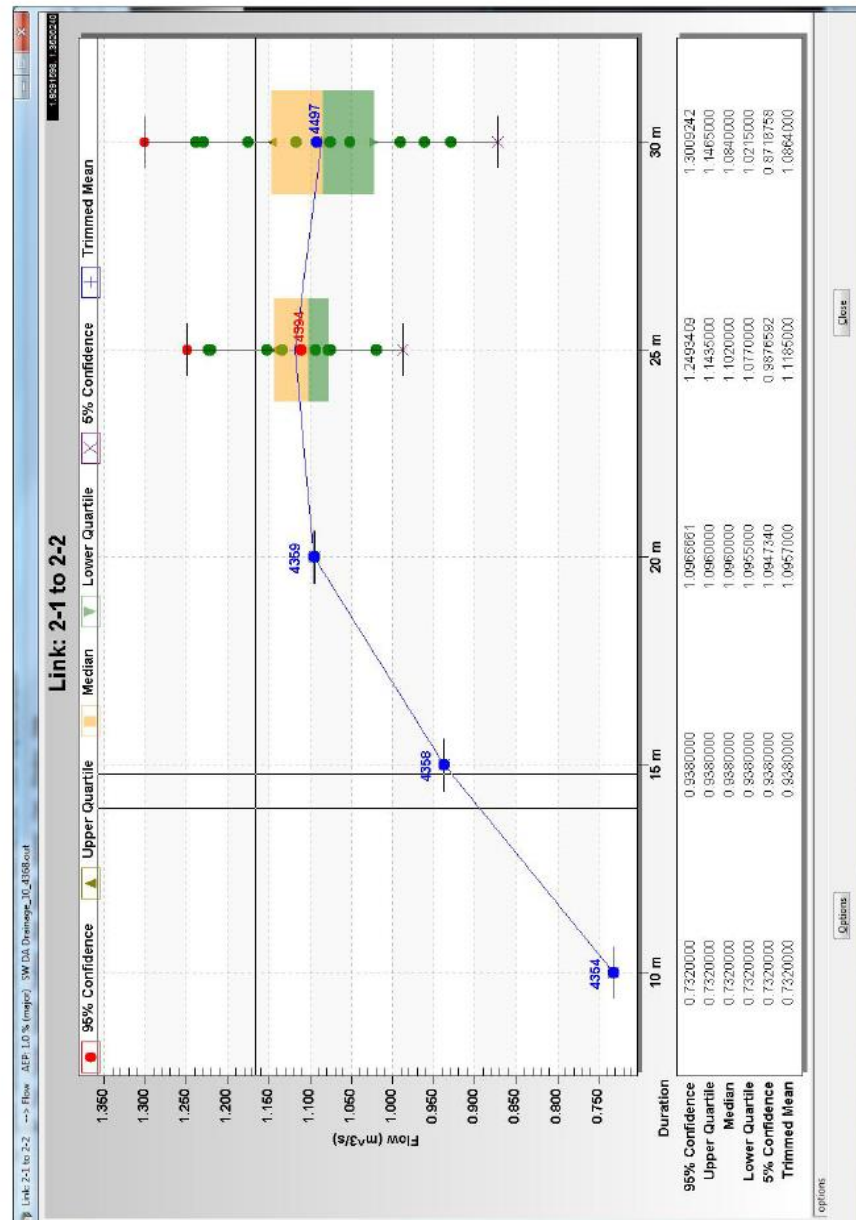


Figure 11- Pre-Development Boxplot Showing Peak Median Design Storm (RED)

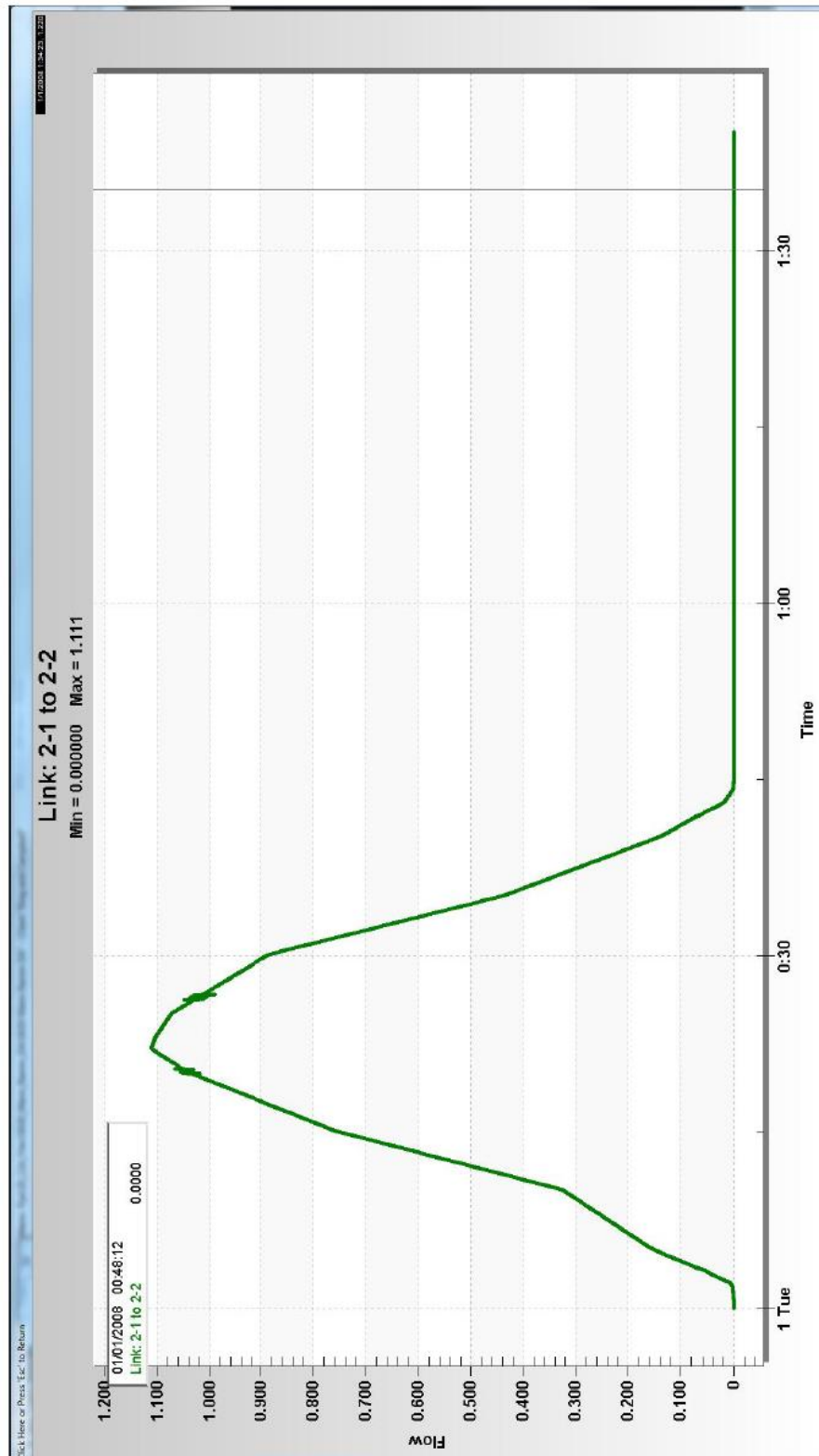


Figure 12 - Pre Development Peak Median 25 minute Storm Hydrograph

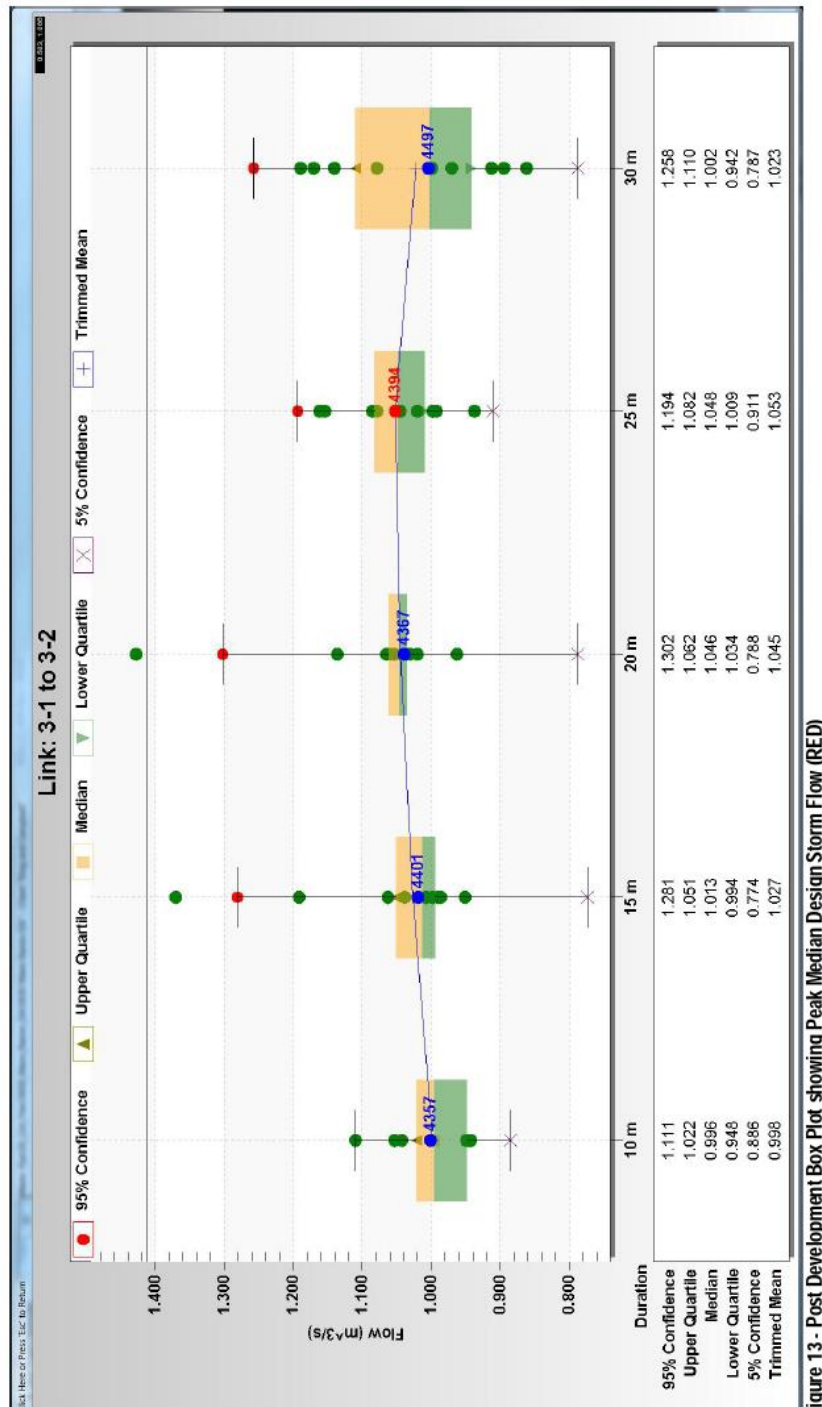


Figure 13 - Post Development Box Plot showing Peak Median Design Storm Flow (RED)



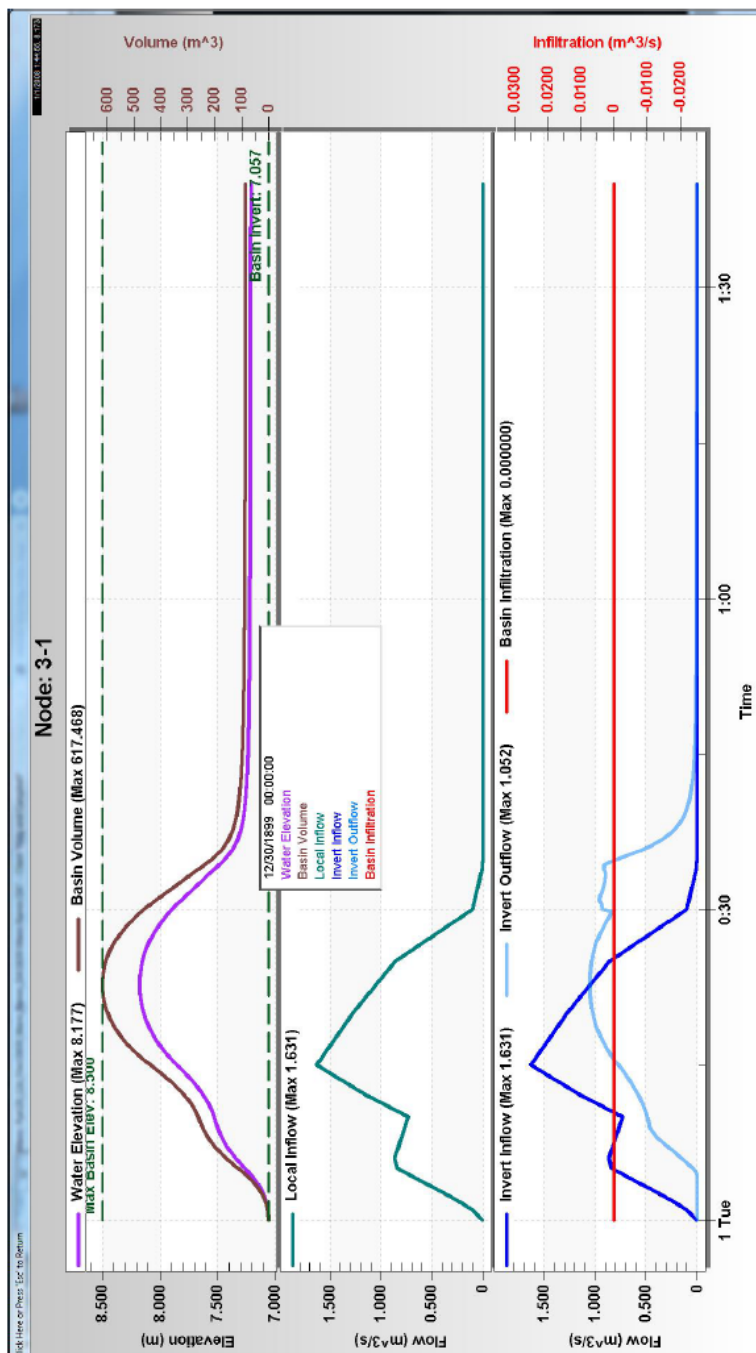


Figure 14 - Post development results showing Peak Elevations and Volumes within Basin, and Inflow / Outflow Hydrographs for the Detention Basin

**Pre and Post Developed Catchment Model Layout**

Dark Blue Catchment = Catchment for John Oxley Drive culvert (Pre-Developed)

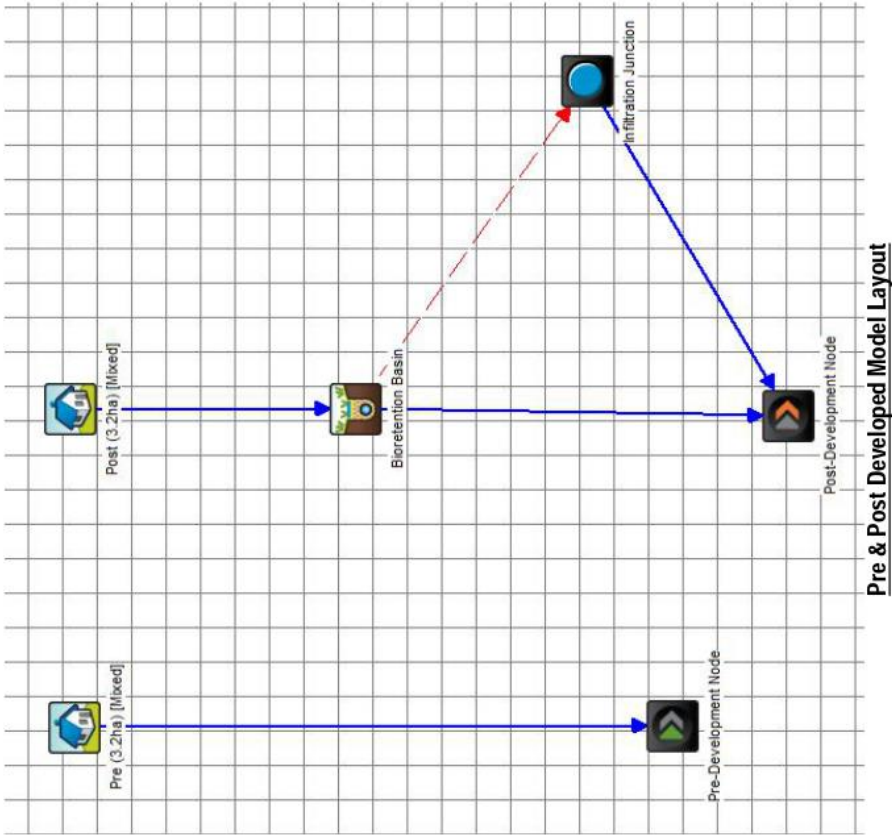
Light Blue Catchment = Catchment for subject property (Pre-Developed & Post-Developed)





APPENDIX TWCMP\_2 – MUSIC STORMWATER QUALITY MODELS AND OUTPUT

Pre & Post Developed Model Layout



## MUSIC Summary Repo

source nodes	Pre (3.2ha)	Post (3.2ha)
location	UrbanSourceNode	UrbanSourceNode
D	1	2
node Type	Mixed	Mixed
Joining Surface Type		
total Area (ha)	3.2	3.2
area Impervious (ha)	0.152835821	2.070328358
area Pervious (ha)	3.047164179	1.129671642
field Capacity (mm)	99	99
pervious Area Infiltration Capacity coefficient - a	180	180
pervious Area Infiltration Capacity exponent - b	3	3
impervious Area Rainfall Threshold (mm/day)	1	1
pervious Area Soil Storage Capacity (mm)	119	119
pervious Area Soil Initial Storage (% of Capacity)	25	25
groundwater Initial Depth (mm)	10	10
groundwater Daily Recharge Rate (%)	25	25
groundwater Daily Baseflow Rate (%)	25	25
groundwater Daily Deep Seepage Rate (%)	0	0
tormflow Total Suspended Solids Mean (log mg/L)	2.15	2.15
tormflow Total Suspended Solids Standard Deviation (log mg/L)	0.32	0.32
tormflow Total Suspended Solids Estimation Method	Stochastic	Stochastic
tormflow Total Suspended Solids Serial Correlation	0	0
tormflow Total Phosphorus Mean (log mg/L)	-0.6	-0.6
tormflow Total Phosphorus Standard Deviation (log mg/L)	0.25	0.25
tormflow Total Phosphorus Estimation Method	Stochastic	Stochastic
tormflow Total Phosphorus Serial Correlation	0	0
tormflow Total Nitrogen Mean (log mg/L)	0.3	0.3
tormflow Total Nitrogen Standard Deviation (log mg/L)	0.19	0.19
tormflow Total Nitrogen Estimation Method	Stochastic	Stochastic
tormflow Total Nitrogen Serial Correlation	0	0
baseflow Total Suspended Solids Mean (log mg/L)	1.2	1.2
baseflow Total Suspended Solids Standard Deviation (log mg/L)	0.17	0.17
baseflow Total Suspended Solids Estimation Method	Stochastic	Stochastic
baseflow Total Suspended Solids Serial Correlation	0	0
baseflow Total Phosphorus Mean (log mg/L)	-0.85	-0.85
baseflow Total Phosphorus Standard Deviation (log mg/L)	0.19	0.19
baseflow Total Phosphorus Estimation Method	Stochastic	Stochastic
baseflow Total Phosphorus Serial Correlation	0	0
baseflow Total Nitrogen Mean (log mg/L)	0.11	0.11
baseflow Total Nitrogen Standard Deviation (log mg/L)	0.12	0.12
baseflow Total Nitrogen Estimation Method	Stochastic	Stochastic
baseflow Total Nitrogen Serial Correlation	0	0
flow based constituent generation - enabled	Off	Off
flow based constituent generation - flow file		
flow based constituent generation - base flow column		
flow based constituent generation - pervious flow column		

flow based constituent generation - impervious flow column		
flow based constituent generation - unit		
OUT - Mean Annual Flow (ML/yr)	23.2	41.1
OUT - TSS Mean Annual Load (kg/yr)	3.74E+03	7.27E+03
OUT - TP Mean Annual Load (kg/yr)	7.15	13
OUT - TN Mean Annual Load (kg/yr)	50.7	95.3
OUT - Gross Pollutant Mean Annual Load (kg/yr)	118	891
rain in (ML/yr)	56.0616	56.0616
ET Loss (ML/yr)	32.2588	14.7517
Deep Seepage Loss (ML/yr)	0	0
baseflow Out (ML/yr)	3.33616	1.22911
mp. Stormflow Out (ML/yr)	2.57612	33.4896
erv. Stormflow Out (ML/yr)	17.2585	6.35838
total Stormflow Out (ML/yr)	19.8346	39.8479
total Outflow (ML/yr)	23.1707	41.0771
change in Soil Storage (ML/yr)	0.632043	0.232858
SS Baseflow Out (kg/yr)	55.4065	20.4129
SS Total Stormflow Out (kg/yr)	3683.15	7248.46
SS Total Outflow (kg/yr)	3738.56	7268.88
P Baseflow Out (kg/yr)	0.502631	0.18518
P Total Stormflow Out (kg/yr)	6.64289	12.8304
P Total Outflow (kg/yr)	7.14552	13.0155
N Baseflow Out (kg/yr)	4.50911	1.66125
N Total Stormflow Out (kg/yr)	46.1724	93.677
N Total Outflow (kg/yr)	50.6816	95.3383
Imported Data Source nodes	120.82	913.686
JSTM treatment nodes		
location		
D		
node Type		
o-flow bypass rate (cum/sec)	3	
ti-flow bypass rate (cum/sec)	0	
inlet pond volume	100	
area (sqm)	600	
initial Volume (m^3)	1	
extended detention depth (m)		
number of Rainwater tanks		
permanent Pool Volume (cubic metres)		
proportion vegetated		
equivalent Pipe Diameter (mm)		
overflow weir width (m)		
notional Detention Time (hrs)	5	
orifice Discharge Coefficient		
Weir Coefficient		
number of CSTR Cells	1.7	
total Suspended Solids - k (m/yr)	3	
total Suspended Solids - C* (mg/L)	8000	
total Suspended Solids - C** (mg/L)	20	
total Phosphorus - k (m/yr)	6000	
total Phosphorus - C* (mg/L)	0.13	

Bioretention Basin

BioRetentionNodeV4



total Phosphorus - C** (mg/L)	500
total Nitrogen - k (m/yr)	1.4
total Nitrogen - C* (mg/L)	
total Nitrogen - C** (mg/L)	
threshold Hydraulic Loading for C** (m/yr)	3
horizontal Flow Coefficient	
reuse Enabled	Off
Max drawdown height (m)	
Annual Demand Enabled	Off
Annual Demand Value (ML/year)	
Annual Demand Distribution	
Annual Demand Monthly Distribution: Jan	
Annual Demand Monthly Distribution: Feb	
Annual Demand Monthly Distribution: Mar	
Annual Demand Monthly Distribution: Apr	
Annual Demand Monthly Distribution: May	
Annual Demand Monthly Distribution: Jun	
Annual Demand Monthly Distribution: Jul	
Annual Demand Monthly Distribution: Aug	
Annual Demand Monthly Distribution: Sep	
Annual Demand Monthly Distribution: Oct	
Annual Demand Monthly Distribution: Nov	
Annual Demand Monthly Distribution: Dec	
Daily Demand Enabled	Off
Daily Demand Value (ML/day)	
Custom Demand Enabled	Off
Custom Demand Time Series File	
Custom Demand Time Series Units	
filter area (sqm)	120
filter perimeter (m)	46
filter depth (m)	0.4
filter Median Particle Diameter (mm)	
saturated Hydraulic Conductivity (mm/hr)	100
infiltration Media Porosity	0.35
length (m)	
bed slope	
base Width (m)	
top width (m)	
vegetation height (m)	
vegetation Type	
total Nitrogen Content in Filter (mg/kg)	
Orthophosphate Content in Filter (mg/kg)	
Base Lined?	No
Underdrain Present?	Yes
Submerged Zone Present?	Yes
Submerged Zone Depth (m)	0.3
Media Soil Texture	13
Proportion of upstream impervious area treated	
filtration Rate (mm/hr)	20
vaporative Loss as % of PET	
depth in metres below the drain pipe	100

Vegetated with Effective Nutrient Removal Plants

'SS A Coefficient	0.61
'SS B Coefficient	0.37
'P A Coefficient	0.11
'P B Coefficient	0.05
'N A Coefficient	0.008
'N B Coefficient	0.001
'fc	41.1
'*	7.27E+03
'h	13
'max (m/day)	95.3
'w (m/day)	891
N - Mean Annual Flow (ML/yr)	40.8
N - TSS Mean Annual Load (kg/yr)	623
N - TP Mean Annual Load (kg/yr)	5.01
N - TN Mean Annual Load (kg/yr)	42.5
N - Gross Pollutant Mean Annual Load (kg/yr)	0
JUT - Mean Annual Flow (ML/yr)	41.0771
JUT - TSS Mean Annual Load (kg/yr)	0.321808
JUT - TP Mean Annual Load (kg/yr)	15.9448
JUT - TN Mean Annual Load (kg/yr)	0
JUT - Gross Pollutant Mean Annual Load (kg/yr)	0
low In (ML/yr)	17.9451
'T Loss (ML/yr)	6.86348
infiltration Loss (ML/yr)	0
ow Flow Bypass Out (ML/yr)	0
igh Flow Bypass Out (ML/yr)	0
Drifice / Filter Out (ML/yr)	17.9451
Weir Out (ML/yr)	6.86348
'ransfer Function Out (ML/yr)	0
reuse Supplied (ML/yr)	0
reuse Requested (ML/yr)	0
% Reuse Demand Met	0
% Load Reduction	39.6048
'SS Flow In (kg/yr)	7268.89
'SS ET Loss (kg/yr)	0
'SS Infiltration Loss (kg/yr)	231.127
'SS Low Flow Bypass Out (kg/yr)	0
'SS High Flow Bypass Out (kg/yr)	0
'SS Orifice / Filter Out (kg/yr)	34.7689
'SS Weir Out (kg/yr)	357.143
'SS Transfer Function Out (kg/yr)	0
'SS Reuse Supplied (kg/yr)	0
'SS Reuse Requested (kg/yr)	0
'SS % Reuse Demand Met	0
'SS % Load Reduction	94.6084
'P Flow In (kg/yr)	13.0156
'P ET Loss (kg/yr)	0
'P Infiltration Loss (kg/yr)	1.93061
'P Low Flow Bypass Out (kg/yr)	0
'P High Flow Bypass Out (kg/yr)	0

P Orifice / Filter Out (kg/yr)	2.03918				
P Weir Out (kg/yr)	1.03604				
P Transfer Function Out (kg/yr)	0				
P Reuse Supplied (kg/yr)	0				
P Reuse Requested (kg/yr)	0				
P % Reuse Demand Met	0				
P % Load Reduction	76.3728				
N Flow In (kg/yr)	95.3385				
N ET Loss (kg/yr)	0				
N Infiltration Loss (kg/yr)	18.5602				
N Low Flow Bypass Out (kg/yr)	0				
N High Flow Bypass Out (kg/yr)	0				
N Orifice / Filter Out (kg/yr)	10.7671				
N Weir Out (kg/yr)	13.1876				
N Transfer Function Out (kg/yr)	0				
N Reuse Supplied (kg/yr)	0				
N Reuse Requested (kg/yr)	0				
N % Reuse Demand Met	0				
N % Load Reduction	74.8741				
3P Flow In (kg/yr)	891.193				
3P ET Loss (kg/yr)	0				
3P Infiltration Loss (kg/yr)	0				
3P Low Flow Bypass Out (kg/yr)	0				
3P High Flow Bypass Out (kg/yr)	0				
3P Orifice / Filter Out (kg/yr)	0				
3P Weir Out (kg/yr)	0				
3P Transfer Function Out (kg/yr)	0				
3P Reuse Supplied (kg/yr)	0				
3P Reuse Requested (kg/yr)	0				
3P % Reuse Demand Met	0				
3P % Load Reduction	100				
ET Scaling Factor	2.1				
Generic treatment nodes					
Other nodes					
Location					
D					
Node Type					
N - Mean Annual Flow (ML/yr)	40.8	23.2	15.9		
N - TSS Mean Annual Load (kg/yr)	623	3.74E+03	231		
N - TP Mean Annual Load (kg/yr)	501	7.15	1.93		
N - TN Mean Annual Load (kg/yr)	42.5	50.7	18.6		
N - Gross Pollutant Mean Annual Load (kg/yr)	0	118	0		
JUT - Mean Annual Flow (ML/yr)	40.8	23.2	15.9		
JUT - TSS Mean Annual Load (kg/yr)	623	3.74E+03	231		
JUT - TP Mean Annual Load (kg/yr)	501	7.15	1.93		
JUT - TN Mean Annual Load (kg/yr)	42.5	50.7	18.6		
JUT - Gross Pollutant Mean Annual Load (kg/yr)	0	118	0		
6 Load Reduction	0.788	0	61.2		
SS % Load Reduction	91.4	0	96.8		
N % Load Reduction	55.4	0	80.5		
P % Load Reduction	61.5	0	85.2		

**Item 09**  
**Attachment 2**  
**Page 602**



12 November 2018

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Re: Road traffic noise assessment - John Oxley Drive, South Lindfield

Dear Kylie,

## 1 Introduction

EMM Consulting Pty Limited (EMM) has been engaged by King & Campbell Pty Ltd (King & Campbell) to conduct a noise impact assessment relevant to the proposed residential subdivision located at John Oxley Drive, South Lindfield to satisfy a requirement by Port Macquarie Hastings Council (PMHC) for an assessment of road traffic noise.

The acoustic assessment has been guided by the following relevant guidelines, policies, and standards:

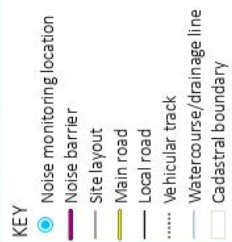
- NSW Department of Environment, Climate Change and Water (DECCW) 2011 *Road Noise Policy (RNP)*;
- NSW Department of Planning 2007 *State Environmental Planning Policy (SEPP) (Infrastructure)*;
- Australian Standard AS 1055-1997 *Acoustics – Description and measurement of environmental noise*;
- Australian Standard AS/NZS 2107-2000 *Acoustics – Recommended design sound levels and reverberation times for building interiors*;
- NSW Department of Planning 2008 *Development Near Rail Corridors and Busy Roads - Interim Guidelines*; and
- NSW Environmental Protection Authority (EPA) 2017, *Noise Policy for Industry (NPfI)*.

## 2 Project description

The proposed residential subdivision is located in the mid-north coast region of NSW in South Lindfield, approximately 6 km south west of Port Macquarie on John Oxley Drive.

The site is bounded by John Oxley Drive to the north, residences fronting Rivergum Drive and Redgum Circuit to the east, and rural residential land to the south and west. The subdivision is exposed to road traffic noise from John Oxley Drive (located immediately north of the site) and the Oxley Highway (located approximately 200 m to the north west of the site). The proposed lot layout has been provided and is shown in Figure 1.





Site layout and noise  
monitoring locations

South Lindfield  
Road traffic noise assessment  
Figure 1



### 3 Existing environment

#### 3.1 Unattended noise monitoring

EMM completed 18 days of unattended noise monitoring to establish existing road traffic noise levels at the site. An environmental noise logger was placed adjacent to John Oxley Drive, approximately 160 m east of the intersection of Lindfield Park Road and John Oxley Drive. The logger microphone was positioned approximately 70m from John Oxley Drive and 260 m from the Oxley Highway. The road traffic noise monitoring location is shown on Figure 1. The monitoring location was chosen after inspection of the site and giving due consideration to other noise sources which may influence the ambient noise environment and the safety of the logging device.

The unattended noise monitoring was carried out using a Rion NL-42EX noise logger (S/N 01173756). The noise logger was in place from 6 to 24 September 2018 and was programmed to record statistical noise level indices continuously in 15-minute intervals. Calibration of the noise logger was checked prior to and immediately following completion of the noise monitoring. Drift in calibration did not exceed  $\pm 0.5$  dB. The equipment carried appropriate and current NATA calibration certificates.

Weather data for the unattended noise monitoring period was obtained from the Bureau of Meteorology's (BoM) Port Macquarie Airport Automatic Weather Station (AWS ID 060139), located approximately 3 km north of the site. The wind speed and rainfall data was used to exclude noise data during periods of any rainfall and/or wind speeds in excess of 5 m/s (approximately 9 knots) in accordance with methodology provided in the Noise Policy for Industry (NPfI) (EPA 2017).

A summary of the unattended noise monitoring results is provided in Table 1. Detailed noise monitoring results are provided in Appendix A.

**Table 1 Unattended road traffic noise monitoring results**

Location	Road section	Assessment period <sup>1</sup>	Measured noise level, dB
L1 – John Oxley Drive	Between Lindfield Park Road and the Ruins Way	Day	57 $L_{Aeq,15 \text{ hour}}$
		Night	50 $L_{Aeq,9 \text{ hour}}$

Notes: 1. As per the RNP the day period is from 7:00 am to 10:00 pm and the night period is from 10:00 pm to 7:00 am.

#### 3.2 Attended noise monitoring

Operator-attended noise monitoring was conducted during deployment of the logger on 6 September 2018. The attended noise measurement was conducted using a Brüel and Kjær Type 2250 one-third octave hand-held analyser (serial number 2759405). Field calibration of the instrument was completed using a Brüel and Kjær type 4230 calibrator. Attended measurements were undertaken in accordance with AS 1055-1997 *Description and Measurement of Environmental Noise, Parts 1, 2 and 3*. Meteorological conditions throughout the survey period were calm and clear with no winds above 5 m/s or rain.

The results of the operator-attended noise measurements are summarised in Table 2.

**Table 2** Summary of 15-minute attended noise measurements

Location	Coordinates, MGA 56H	Start time	Measured noise level dB			Comments
			L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>Amax</sub>	
L1 – John Oxley Drive	487038 E, 6519424 S	14:45	54	57	70	Consistent traffic on the Oxley Highway. Frequent traffic on John Oxley Drive. Frequent bird noise and wind in trees. Occasional dogs barking and aircraft noise.

Results of the operator-attended noise survey indicate that road traffic noise is the main contributor to ambient noise levels with some contribution from natural sounds and aircraft noise.



## 4 Road traffic noise assessment criteria

### 4.1 NSW Road Noise Policy

The table note of Table 3 in the NSW Government Department of Environment, Climate Change and Water's (DECCW) NSW Road Noise Policy (RNP) (DECCW 2011) states:

Land use developers must meet internal noise goals in the Infrastructure SEPP (Department of Planning NSW 2007) for sensitive developments near busy roads (see Appendix C10).

Appendix C10 of the RNP states:

While application of the Infrastructure SEPP requirements is mandatory only for residential developments near specific highly trafficked roads as listed in the guidelines, the design advice offered in the SEPP may be useful when designing such a development near other high traffic roads.

### 4.2 SEPP (Infrastructure) 2007

The SEPP (Infrastructure) 2007 relates to roads having an annual average daily traffic volume of 40,000 vehicles, although it can also be applied to roads with 20,000 to 40,000 vehicles daily. Clause 102 of the SEPP (Infrastructure) 2007 addresses the impact of road noise on non-road development and states:

**Sub-clause 3:** "If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

(a) in any bedroom in the building-35 dB(A) at any time between 10 pm and 7 am,

(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)-40 dB(A) at any time."

Although not mandatory for this development (as mentioned in Section 4.1), the criteria provided in the SEPP (Infrastructure) 2007 are consistent with other relevant guidelines (i.e. AS 2107) and have been applied for the purpose of this assessment.

### 4.3 Development near Rail Corridors and Busy Roads – Interim Guideline

NSW Government Department of Planning *Development near Rail Corridors and Busy Roads – Interim Guideline* (2008) (the Guideline) adopts the same internal noise target prescribed by the SEPP (Infrastructure) 2007 and provides additional guidance on things like ventilation requirements. Section 3.6 of the Guideline states that:

If internal noise levels with windows or doors open exceed the criteria by more than 10 dB(A), the design of the ventilation for these rooms should be such that occupants can leave windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia.

## 5 Assessment of noise levels

### 5.1 Road traffic noise modelling

Quantitative modelling of road traffic noise was completed using the Calculation of Road Traffic Noise (CoRTN) algorithms within the Brüel & Kjær Predictor noise prediction software. The model incorporates factors such as:

- the lateral and vertical location of noise sources;
- source-to- receptor distances;
- ground effects;
- atmospheric absorption;
- topography; and
- meteorological conditions.

The noise model was calibrated using the measured noise data assuming that the total measured ambient noise level at each noise logger was from traffic. This provides a conservative approach to the road traffic noise assessment since other sources (natural sounds, aircraft noise and residential activity) also contributed to ambient noise levels.

The noise model included hypothetical residential dwelling envelopes at each proposed lot as per the plans provided by King & Campbell (refer Appendix B) and the proposed noise barrier (1.8m standard colorbond fence) on the northern boundary (refer Figure 1). The model was then used to predict and assess road traffic noise levels across the subject site, and noise contours were created to enable determination of areas of potential road traffic noise affectation.

### 5.2 Noise modelling results

Likely internal noise levels have been predicted by applying a correction to external noise levels based on published literature. Table 3 provides a summary of the typical performance of buildings with respect to noise reduction.

**Table 3** Indicative building noise reduction (adapted from FHWA 1995)

Building type	Windows	Internal noise reduction
All	Open	10 dB
Light frame	Single glazed (closed)	20 dB
Masonry	Single glazed (closed)	25 dB
	Double glazed(closed)	35 dB

Notes: FHWA is the US Federal Highway traffic noise publication.

The noise modelling results for road traffic noise emissions from the Oxley Highway and John Oxley Drive at proposed dwelling locations are provided in Table 4. It has been conservatively assumed that the proposed dwellings are of a light frame construction and the windows are single glazed. The 1.8m noise barrier on the northern boundary (refer Figure 1) was also included in the noise modelling.



Table 4 Road traffic noise modelling results

Assessment location	Period	External $L_{Aeq,period}$ dB	Internal $L_{Aeq,period}$ dB <sup>1</sup>	Internal criteria $L_{Aeq,period}$ dB	Exceedance?
Lot 1 DP 369206					
Lot 1	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 2	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 3	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 4	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 5	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 6	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 7	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 8	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 9	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 10	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 11	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 12	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 13	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 14	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 15	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 16	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 17	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 18	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 19	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 20	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 21	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 22	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil

**Table 4** Road traffic noise modelling results

Assessment location	Period	External $L_{Aeq,period}$ dB	Internal $L_{Aeq,period}$ dB <sup>1</sup>	Internal criteria $L_{Aeq,period}$ dB	Exceedance?
Lot 23	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
<b>Lot 3 DP 533058</b>					
Lot 1	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 2	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 3	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 4	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 5	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 6	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 7	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 8	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 9	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 10	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 11	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 12	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 13	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 14	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 15	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 16	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 17	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 18	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 19	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 20	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 21	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil

**Table 4** Road traffic noise modelling results

Assessment location	Period	External $L_{Aeq,period}$ dB	Internal $L_{Aeq,period}$ dB <sup>1</sup>	Internal criteria $L_{Aeq,period}$ dB	Exceedance?
Lot 22	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil
Lot 23	Day	<60	<40	40 (living areas)	Nil
	Night	<55	<35	35 (bedrooms)	Nil

Notes: 1. Assumes standard light framed construction with windows closed.

The results demonstrate that, with windows closed, internal road traffic noise levels within living areas and bedrooms are predicted to satisfy relevant noise criteria assuming standard, complying development construction for all proposed dwellings. Further, results with windows open demonstrate that road traffic noise levels are predicted to be within 10 dB of the criteria at all dwellings and therefore an alternate means of ventilation is not required for any dwellings with reference to the interim guideline (DP&I 2008).

## 6 Conclusion

EMM has completed a noise impact assessment for the proposed residential subdivision at John Oxley Drive, South Lindfield. Long-term attended noise monitoring was completed to establish existing ambient noise levels and road traffic noise exposure across the subject site.

Long-term attended noise monitoring was completed to establish existing ambient noise levels and road traffic noise exposure across the subject site. Measured noise levels were assessed with reference to Clause 102 of the infrastructure SEPP (2007) and DPE's *"Development near Rail Corridors and Busy Roads – Interim Guidelines"* (2008).

Road traffic noise levels were predicted across the site. Results of noise modelling indicated that the relevant requirements regarding road traffic noise intrusion will be achieved for all dwellings by adopting standard, complying development construction techniques and the proposed noise barrier (1.8m standard colorbond fence) on the northern boundary (refer Figure 1).

We trust the preceding meets your current requirements. If you have any questions or need any further information please contact our office.

Yours sincerely



Lucas Adamson  
Acoustic Consultant  
[ladamson@emmconsulting.com.au](mailto:ladamson@emmconsulting.com.au)  
Review: KT (9/11/2018)

## Appendix A

### Unattended noise monitoring results and charts

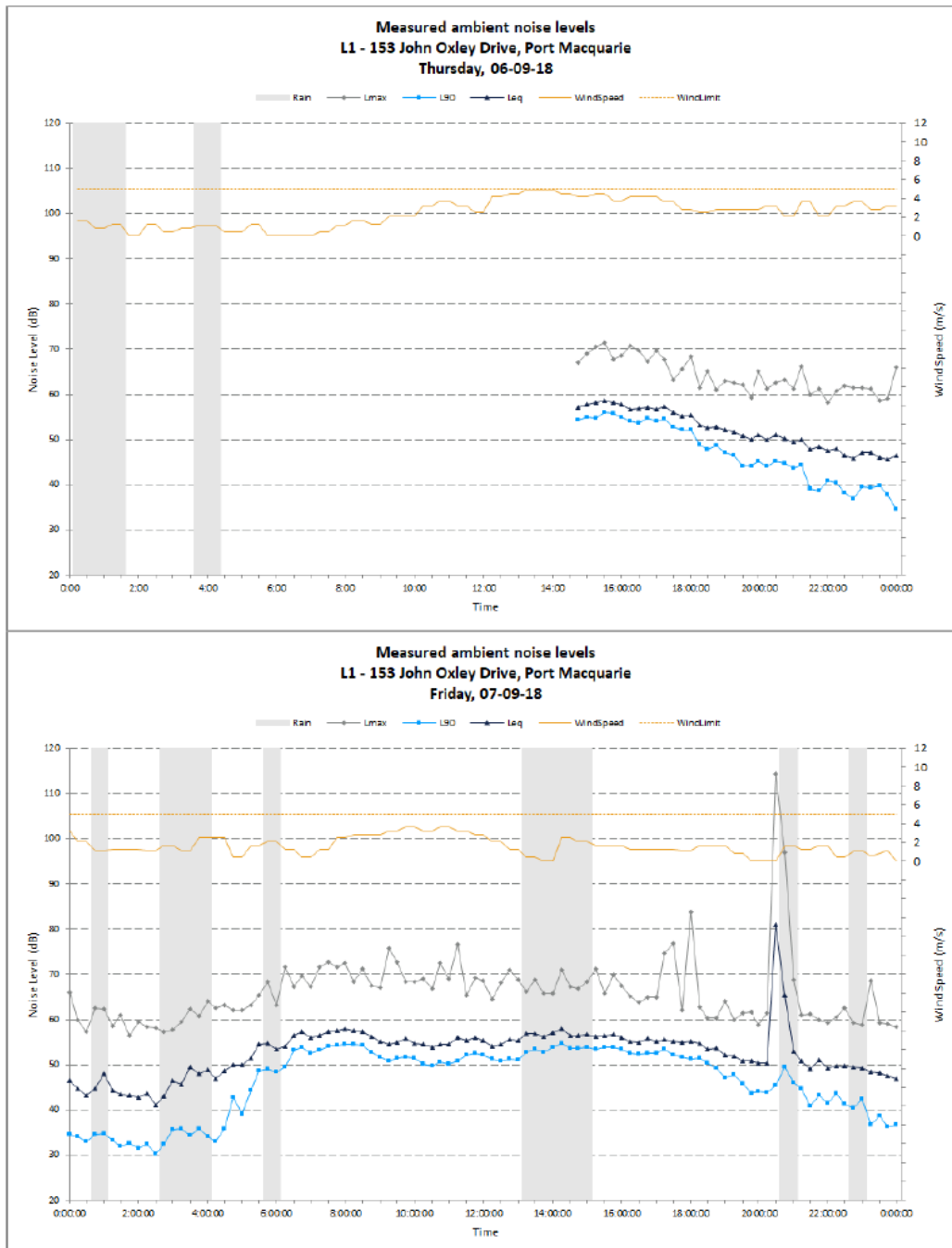
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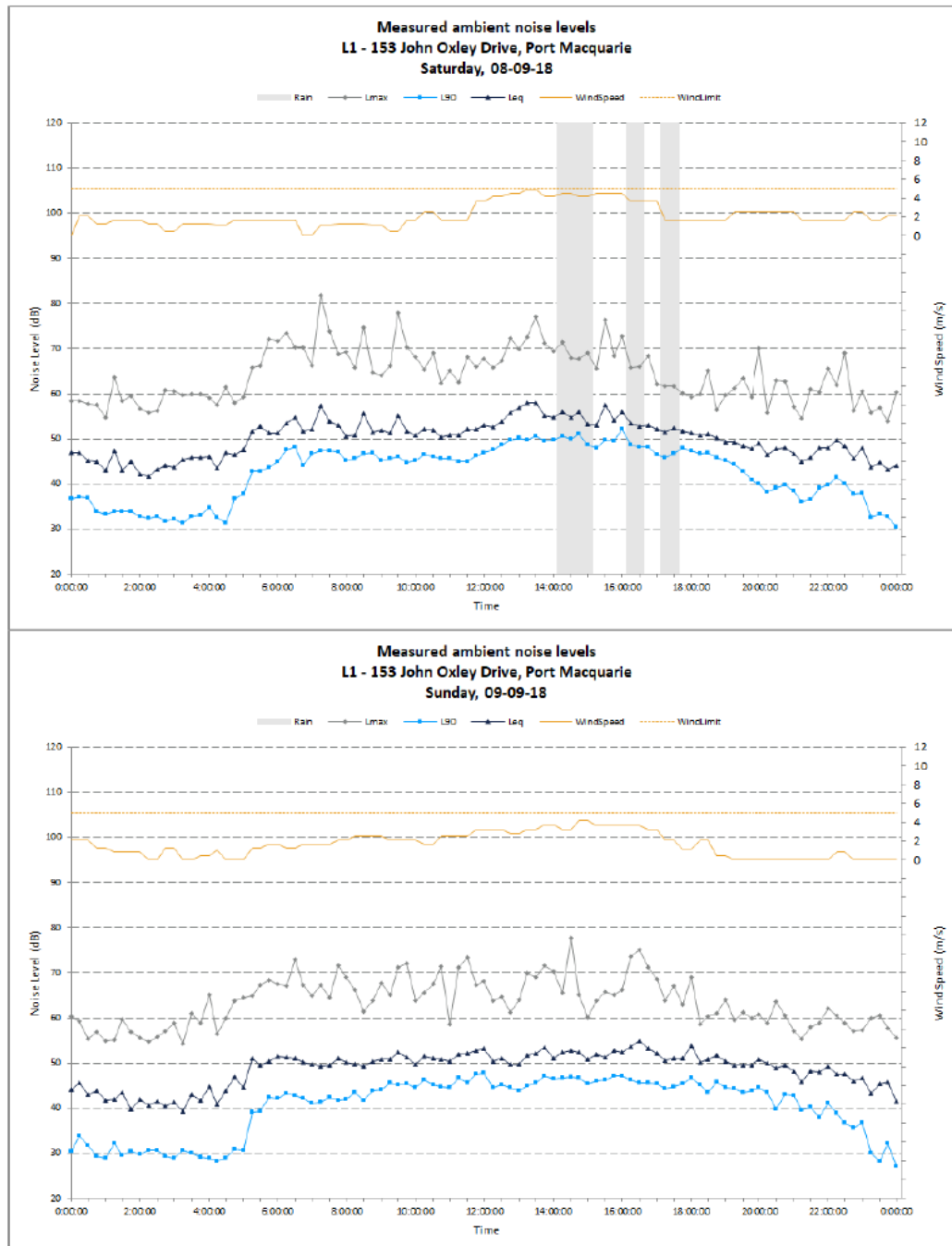


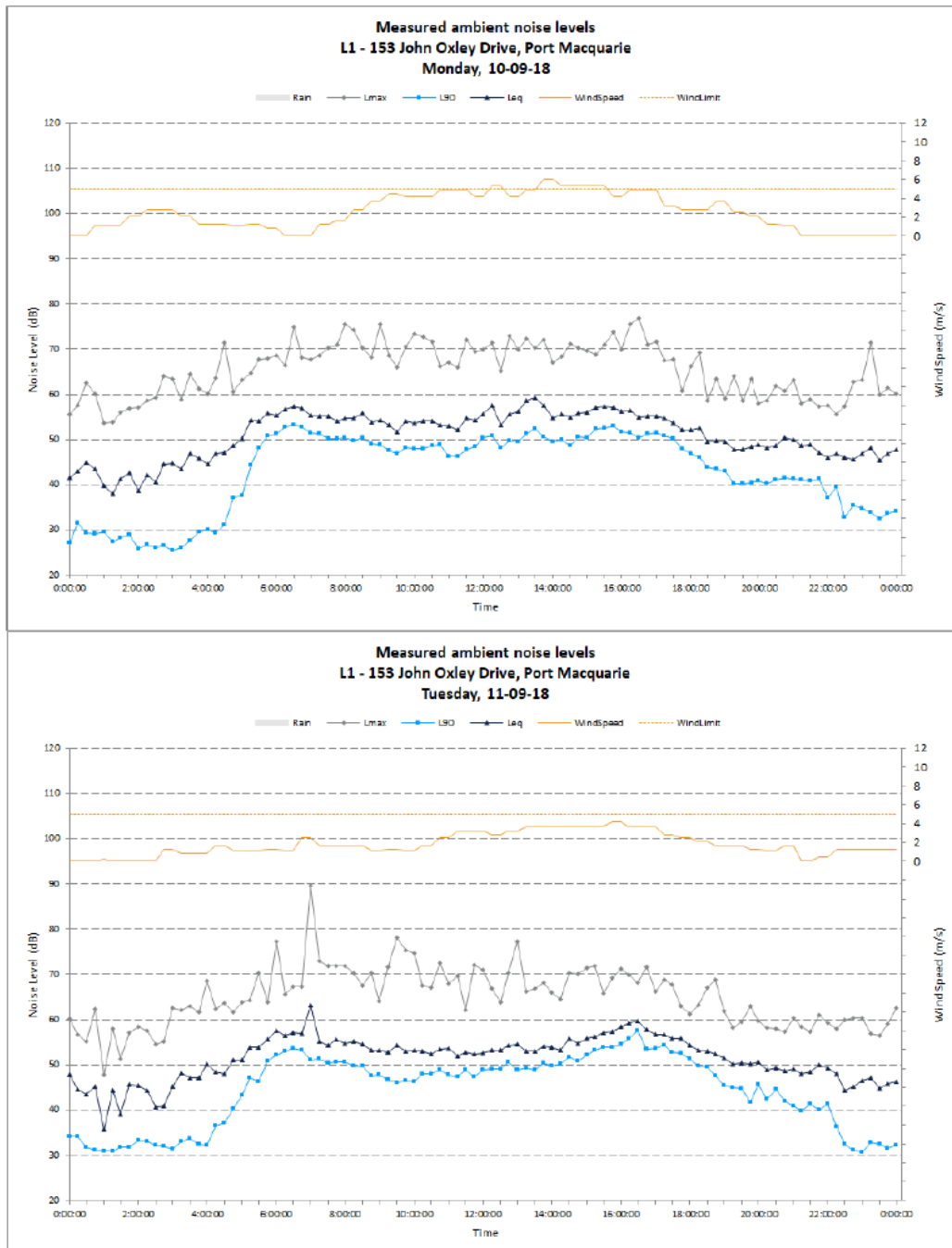
**Table A1** Summary of daily noise logging results – L1 (153 John Oxley Drive, Port Macquarie)

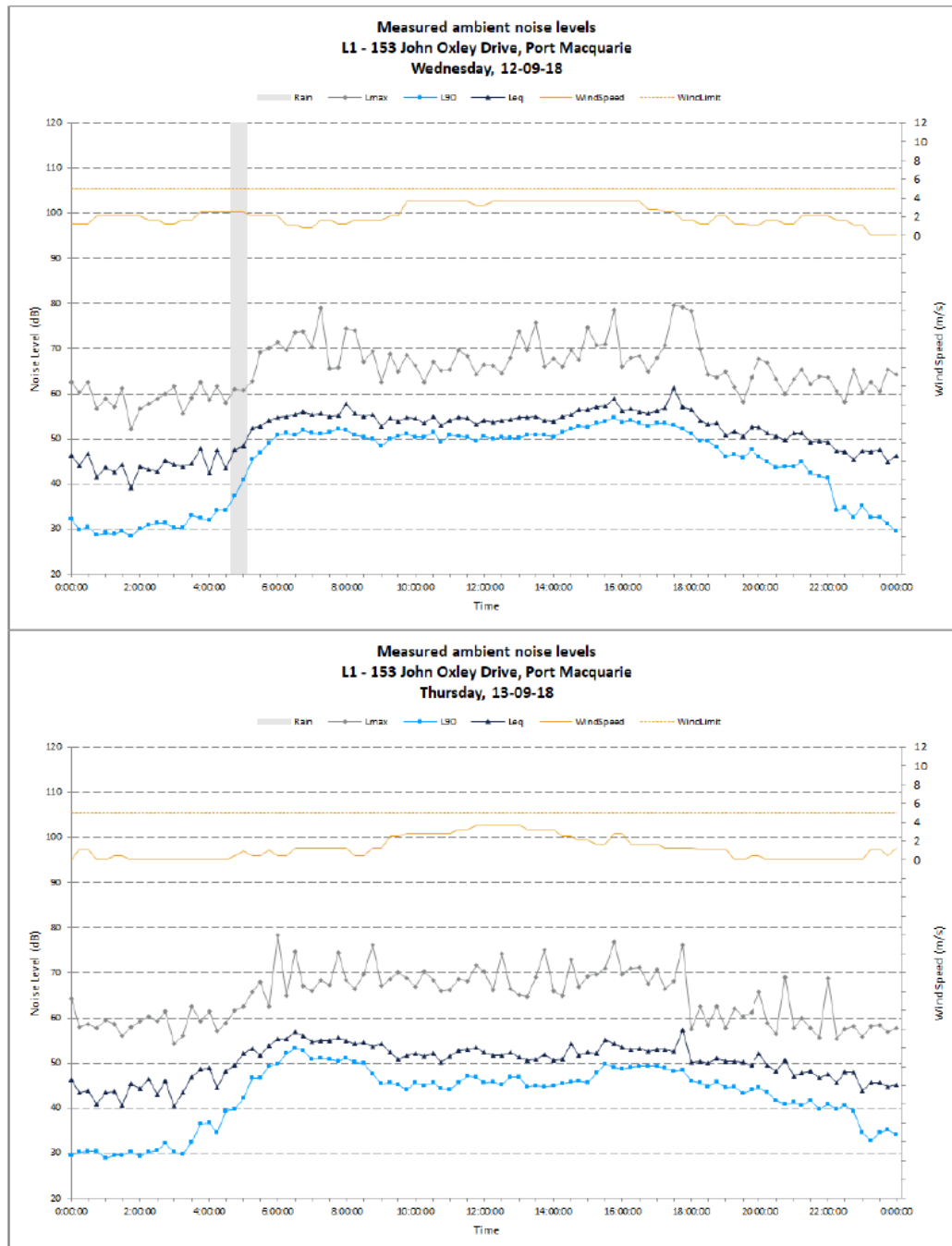
Date	RBL (Day)	RBL (Evening)	RBL (Night)	L <sub>Aeq,15 hour</sub> dB (Day)	L <sub>Aeq,9 hour</sub> dB (Night)
Thursday, 06-09-18	0	39	0	0	0
Friday, 07-09-18	51	42	32	65	49
Saturday, 08-09-18	45	37	29	53	47
Sunday, 09-09-18	42	40	26	51	50
Monday, 10-09-18	0	40	31	54	52
Tuesday, 11-09-18	47	40	29	54	50
Wednesday, 12-09-18	50	42	30	55	50
Thursday, 13-09-18	45	41	30	52	49
Friday, 14-09-18	50	43	30	55	48
Saturday, 15-09-18	48	40	0	53	0
Sunday, 16-09-18	0	35	34	0	49
Monday, 17-09-18	45	40	30	53	50
Tuesday, 18-09-18	0	38	29	0	50
Wednesday, 19-09-18	0	0	0	0	0
Overall	47	40	30	57	50

Notes: "0" indicates periods with too few valid samples due to weather or logger operation

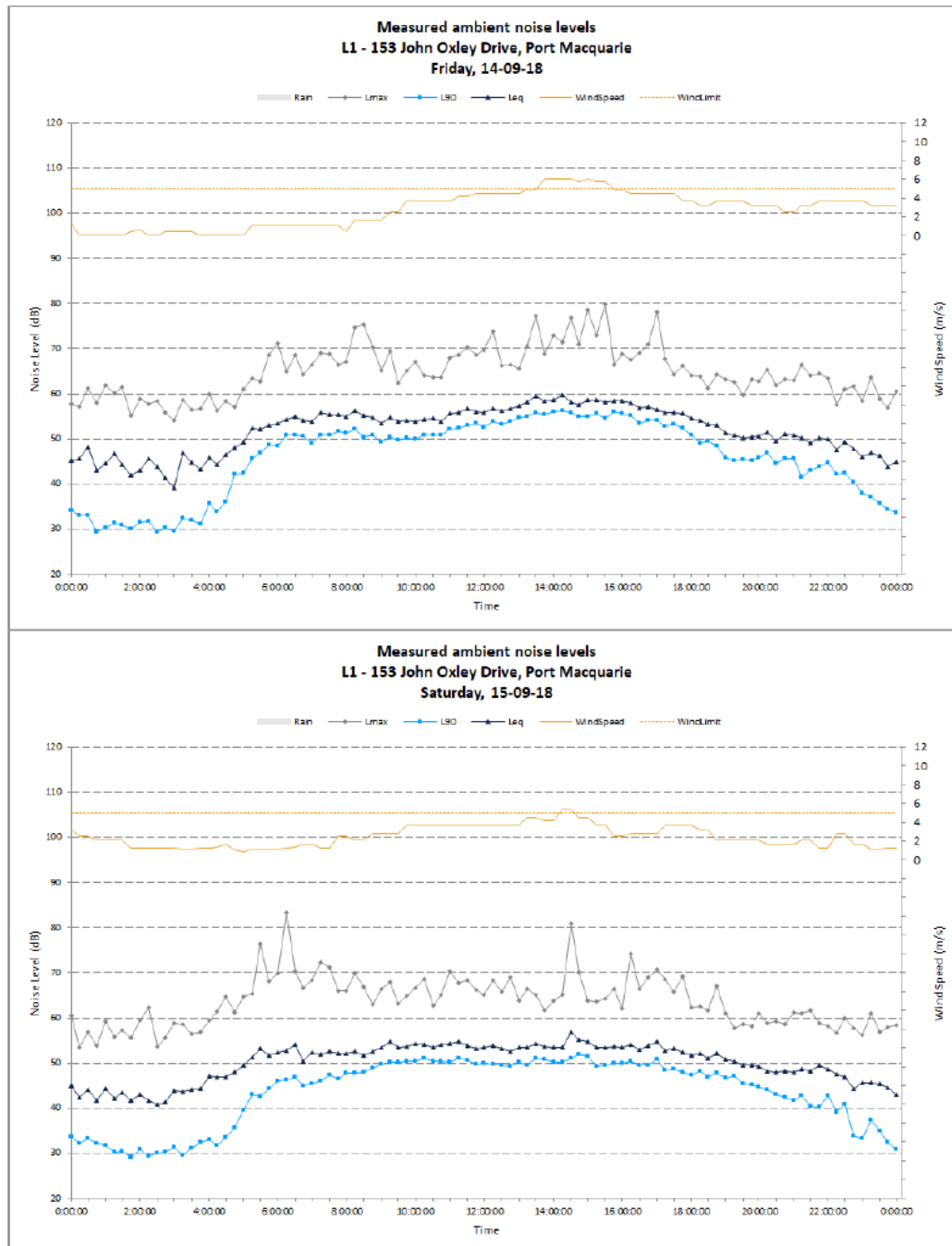


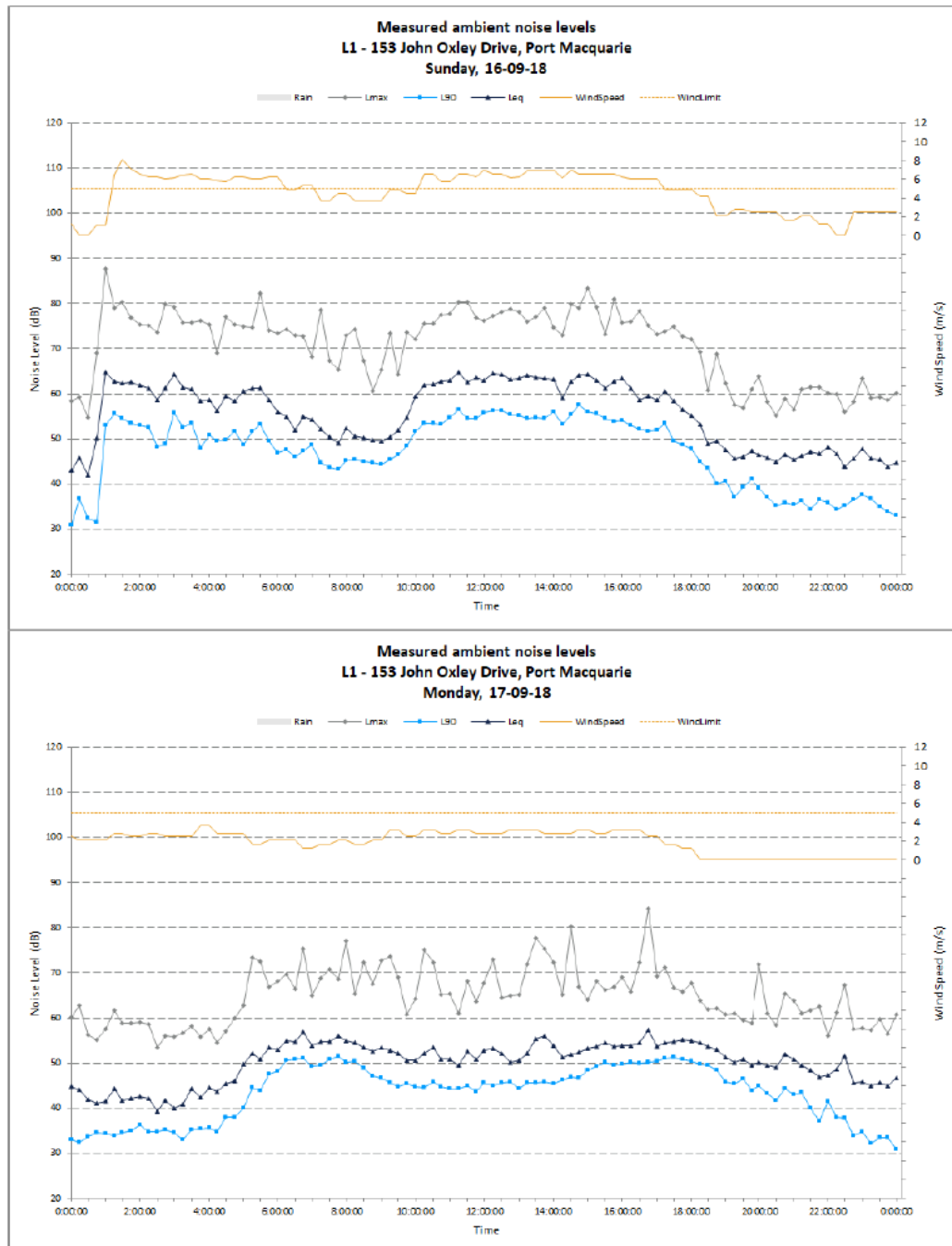


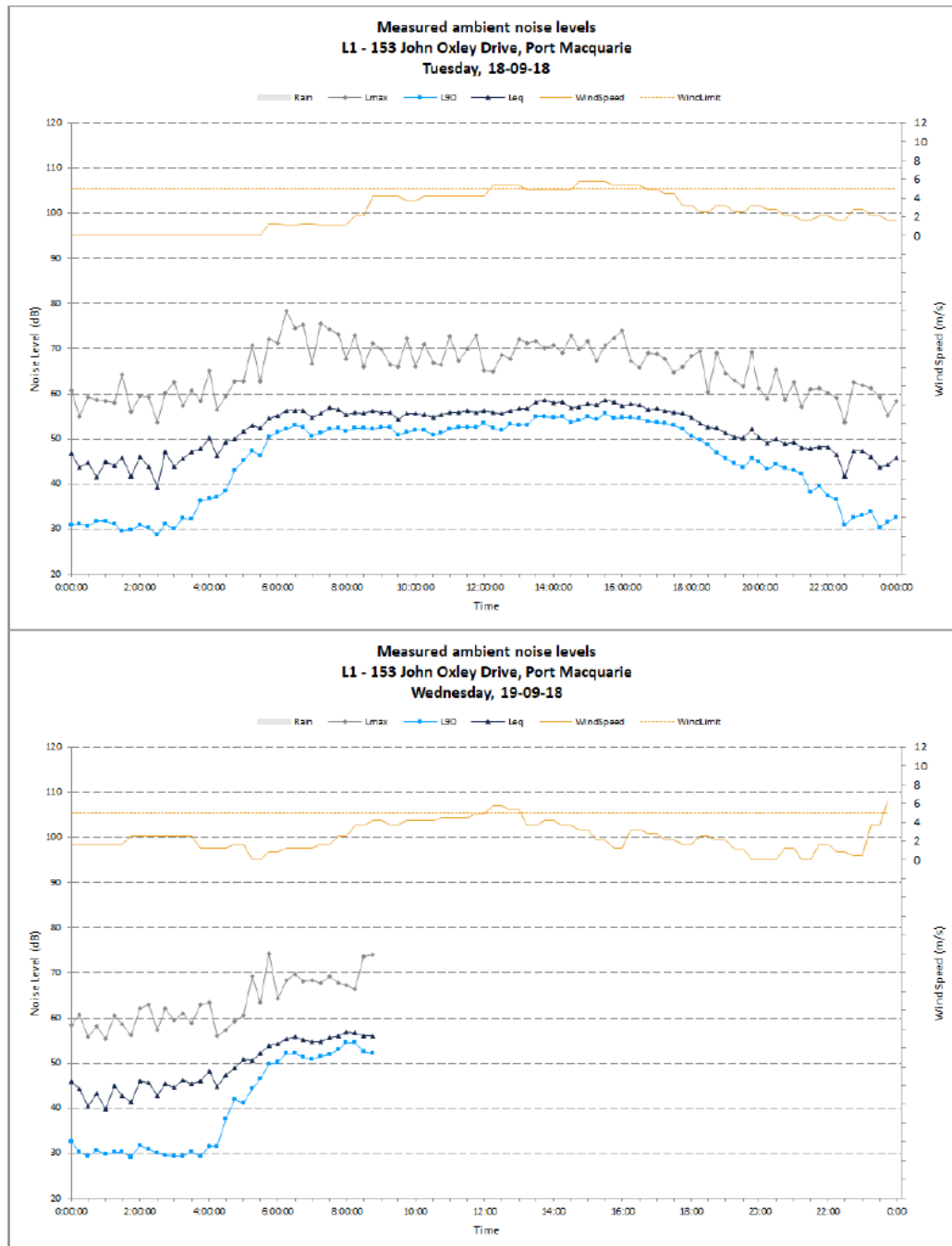








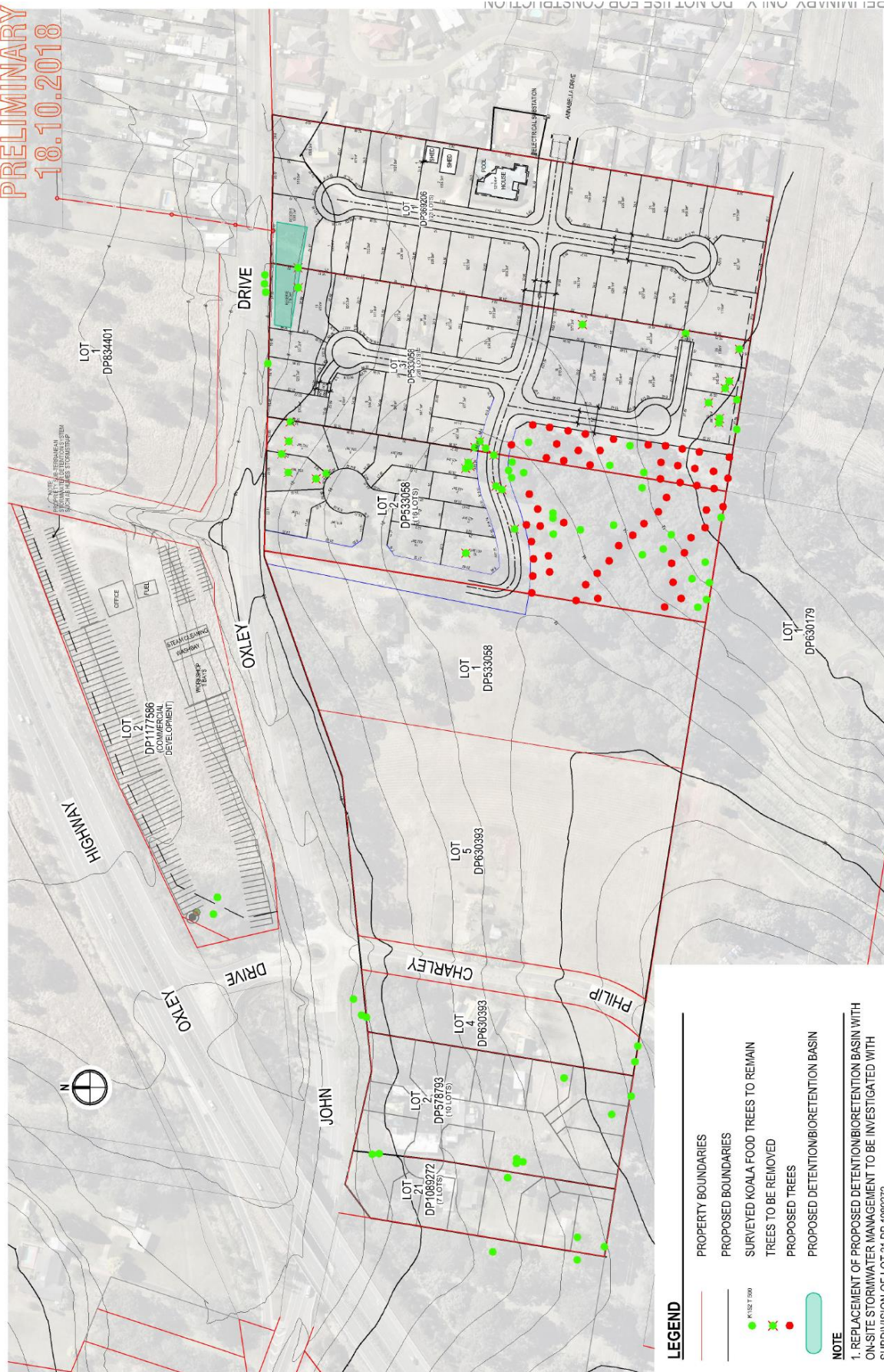







## Appendix B

### Subdivision plans

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	King + Campbell Pty Ltd <a href="http://www.kingandcampbell.com.au">www.kingandcampbell.com.au</a> 4 F/100 Sturt Street, Melbourne VIC 3006 T: 03 9593 0200 F: 03 9593 1884 E: <a href="mailto:info@kingandcampbell.com.au">info@kingandcampbell.com.au</a>		10/11/2014 13/11/2014 13/11/2014	25/01/2014 13/11/2014	DATE: 14/12/2013 SCALE: 1:1000 @ A1 1:2000 @ A3 	PROJECT NO: 1000 DRAWING NO: 1000	DRAWING TITLE: CONCEPT SUBDIVISION LAYOUT	A
	King + Campbell Pty Ltd 4 F/100 Sturt Street, Melbourne VIC 3006 T: 03 9593 0200 F: 03 9593 1884 E: <a href="mailto:info@kingandcampbell.com.au">info@kingandcampbell.com.au</a>		10/11/2014 13/11/2014 13/11/2014	25/01/2014 13/11/2014	DATE: 14/12/2013 SCALE: 1:1000 @ A1 1:2000 @ A3 	PROJECT NO: 1000 DRAWING NO: 1000	DRAWING TITLE: CONCEPT SUBDIVISION LAYOUT	A



*All communications to be addressed to:*

Headquarters  
4 Murray Rose Ave  
Sydney Olympic Park NSW 2127

Headquarters  
Locked Bag 17  
Granville NSW 2142

Telephone: 1300 NSW RFS  
e-mail: records@rfs.nsw.gov.au

Facsimile: 8741 5433



The General Manager  
Port Macquarie-Hastings Council  
PO Box 84  
PORT MACQUARIE NSW 2444

Your Ref: 2019/401  
Our Ref: D19/1979  
DA19061419142 PC

**ATTENTION:** Patrick Galbraith-Robertson

18 July 2019

Dear Mr Galbraith-Robertson

**Integrated Development Application - 1/369206 - 153 John Oxley Drive Port Macquarie**

I refer to your correspondence dated 16 July 2019 seeking general terms of approval for the above Integrated Development Application.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted. General Terms of Approval, under Division 4.8 of the 'Environmental Planning and Assessment Act 1979', and a Bush Fire Safety Authority, under Section 100B of the 'Rural Fires Act 1997', are now issued subject to the following conditions:

**Asset Protection Zones**

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building. To achieve this, the following conditions shall apply:

1. At the issue of subdivision certificate and in perpetuity, the entire area of Stage 1 shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

2. Asset protection zones are to be provided as depicted in the diagram titled 'Appendix 4 – APZ Concepts, Lot 1 DP 369206, 153 John Oxley Drive, Port Macquarie' in the Bushfire Hazard Assessment prepared by David Pensini (Version 4.0), dated 4 June 2019. The asset protection zones shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.
3. A restriction to the land use pursuant to section 88B of the 'Conveyancing Act 1919' shall be placed over any temporary asset protection zone(s) on adjoining land. The asset protection zone(s) shall be managed as an IPA as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'. The restriction to land use for the purpose of a temporary asset protection zone may be extinguished upon commencement of future development over the affected areas. The relevant land owner's consent is required for the proposed temporary asset protection zone on Lot 3 DP 533058 prior to creation of any restriction to land use.
4. A restriction to the land use pursuant to section 88B of the 'Conveyancing Act 1919' shall be placed over the residue lot (Future Stage 2) for the purpose of a temporary 10 metre wide asset protection zone to the south of Lots 15 and 16. Alternatively, the entire area of the residue lot (Future Stage 2) shall be managed as an asset protection zone. The asset protection zone shall be managed as an IPA as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'. The restriction to land use for the purpose of a temporary asset protection zone may be extinguished upon commencement of future development over the affected areas.

#### **Water and Utilities**

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building. To achieve this, the following conditions shall apply:

5. Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

#### **Access**

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area. To achieve this, the following conditions shall apply:

6. Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006', except that:
  - a turning circle is not required at the western termination of Road 1; and
  - a 12 metre outer radius turning circle is not required for Road 2 or Road 3.

#### **Landscaping**

7. Landscaping to the site is to comply with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.

**General Advice – consent authority to note**

Any future development application lodged within this subdivision under section 4.14 of the 'Environmental Planning & Assessment Act 1979' will be subject to requirements as set out in 'Planning for Bush Fire Protection 2006'.

This letter is in response to a further assessment of the application submitted and supersedes our previous general terms of approval dated 15 July 2019.

Should you wish to discuss this matter please contact Paul Creenaune on 1300 NSW RFS.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Alan Bawden', with a stylized, cursive script.

Alan Bawden  
**Team Leader - Development Assessment & Planning**

For general information on bush fire protection please visit [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)

**Deed**

**South Lindfield Urban Release Area  
Planning Agreement**

Under s93F of the *Environmental Planning and Assessment Act 1979*

**Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm**

Date: 16 January 2019

The block contains three handwritten signatures in black ink. The first signature, on the left, is a large, stylized cursive signature that appears to read 'R. Ramm'. To its right are two smaller, more compact signatures, one above the other. The second signature, at the bottom right, is also a cursive signature, possibly reading 'J. Maree'.

South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

## South Lindfield Urban Release Area Planning Agreement

### Table of Contents

Summary Sheet.....	5
Parties .....	7
Background .....	7
Operative provisions .....	7
Part 1 - Preliminary .....	7
1 Definitions & Interpretation .....	7
2 Status, application & effect of this Deed .....	15
3 Commencement of this Deed .....	15
4 Commencement of Development Contributions obligations .....	15
5 Further Agreements Relating to this Deed .....	15
6 Bar to proceedings.....	15
7 Application of s94, s94A and s94EF of the Act to the Development.....	16
Part 2 – Provisions relating to Roads.....	16
8 Roads Contribution .....	16
9 Construction & Dedication of Link Road & Link Pathway .....	16
10 Link Road Contribution .....	17
11 Busways Intersection Work and Busways Intersection Contribution .....	17
12 Link Road Intersection Works and Link Road Intersection Works Offset.....	18
Part 3 – Provision relating to Stormwater Catchment Work .....	18
13 Application of this Part.....	18
14 Stormwater Catchment Work.....	18
15 Stormwater Catchment Work Payments .....	19
Part 4 – Provisions relating to Sewerage Services.....	20
16 Sewerage Services Contribution and Sewerage Services Contribution Local .....	20
Part 5 – Provisions relating to Open Space.....	20
17 Open Space Contribution .....	20
Part 6 – Provisions relating to Environmental Management Land.....	21
18 Application of this Part.....	21
19 Approval of Vegetation Management Plan .....	21
20 Establishment & Management of Environmental Management Land .....	21
21 Failure to Perform Establishment or Management Obligations.....	22
22 Inspection of the Environmental Management Land .....	22

12/07/2017





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

23	Dedication of Environmental Management Dedication Land .....	22
24	Payment of Administration Levy Contribution .....	22
Part 8 – General Provisions Relating to Development Contributions .....		23
25	Provision of Development Contributions .....	23
26	Procedures relating to payment of monetary Development Contributions .....	23
27	Procedures relating to the dedication of land .....	24
28	Carrying out of Work .....	24
29	Access to the Land .....	25
30	Protection of people and property .....	25
31	Damage and repairs to Work .....	25
32	Variation of Work .....	25
33	Completion of Work .....	25
34	Rectification of defects .....	26
35	Works-As-Executed-Plan .....	26
Part 9 – Other Provisions .....		26
36	Indemnity and Insurance .....	26
37	Failure to carry out Work .....	27
38	Security for Performance .....	27
39	Security for obligation to dedicate land .....	28
40	Enforcement in a court of competent jurisdiction .....	29
41	Dispute Resolution – expert determination .....	29
42	Dispute Resolution - mediation .....	29
43	Registration of this Deed .....	30
44	Assignment, Sale of Land, etc .....	30
45	Review of this Deed .....	31
46	Notices .....	31
47	Costs .....	32
48	Entire Deed .....	32
49	Further Acts .....	32
50	Governing Law and Jurisdiction .....	32
51	Joint and Individual Liability and Benefits .....	32
52	No Fetter .....	33
53	Representations and Warranties .....	33
54	Severability .....	33
55	Modification .....	33
56	Waiver .....	33
57	GST .....	34

12/07/2017

3



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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58	Completion of Landowner's obligations under this Deed .....	35
59	Explanatory Note Relating to this Deed.....	35
<b>Schedule 1</b>	.....	<b>36</b>
<b>Schedule 2</b>	.....	<b>37</b>
<b>Schedule 3</b>	.....	<b>38</b>
<b>Appendix</b>	.....	<b>40</b>

12/07/2017

  
4

South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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## South Lindfield Urban Release Area Planning Agreement

### Summary Sheet

#### Council:

**Name:** Port Macquarie-Hastings Council  
**Address:** Corner Lord and Burrawan Streets, Port Macquarie, New South Wales,  
2444  
**Telephone:** (02) 6581 8111  
**Facsimile:** (02) 6581 8123  
**Representative:** Tim Molloy

#### Landowner:

**Name:** Ross Wayne Ramm and Jennifer Maree Ramm  
**Address:** ~~150 John Oxley Drive~~ <sup>P.O. Box 564</sup>, PORT MACQUARIE NSW 2444  
**Telephone:** 0418 655 855  
**Facsimile:** na  
**Email:** ramm57@beagle.com.au  
**Representative:** Ross Ramm



#### Land:

See definition of *Land* in clause 1.1.

#### Instrument Change

See definition of *South Lindfield LEP* in clause 1.1

#### Development:

See definition of *Development* in clause 1.1.

12/07/2017

5 

**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

---

**Application of s94, s94A and s94EF of the Act:**

See clause 7.

**Security:**

See clauses 37 and 38.

**Registration:**

Yes. See clause 42.

**Restriction on dealings:**

See clause 43.

**Dispute Resolution:**

Expert determination and mediation. See clauses 40 and 41.

12/07/2017

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6

**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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## **South Lindfield Urban Release Area Planning Agreement**

Under s93F of the *Environmental Planning and Assessment Act 1979*

### **Parties**

**Port Macquarie-Hastings Council** ABN 11 236 901 601 of Corner Lord and Burrawan Streets, Port Macquarie, New South Wales, 2444

**(Council)**

and

**Ross Wayne Ramm and Jennifer Maree Ramm** of 153 John Oxley Drive, PORT MACQUARIE NSW 2444 **(Landowner)**

### **Background**

- A The Landowner is the owner of the Land.
- B The Council has prepared the South Lindfield Planning Proposal.
- C The Land is within the area to which the South Lindfield Planning Proposal applies.
- D The South Lindfield Planning Proposal proposes the making of the South Lindfield LEP, which will permit the Development to be lawfully carried out on the Land under the Act.
- E The Landowner is prepared to make Development Contributions in accordance with this Deed in connection with the carrying out of the Development.

### **Operative provisions**

#### **Part 1 - Preliminary**

##### **1 Definitions & Interpretation**

- 1.1 In this Deed the following definitions apply:

**Act** means the *Environmental Planning and Assessment Act 1979* (NSW).

**Administration Levy Contribution** means a monetary Development Contribution calculated as follows:

$$ALC = 2.2\% \times SC$$

12/07/2017

7





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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Where:

**ALC** is the Administration Levy Contribution, and

**SC** is the sum of the amounts of all Open Space Contributions and Roads Contributions received by the Council under this Deed, not discounted in accordance with this Deed.

**Bank Guarantee** means an irrevocable and unconditional undertaking without any expiry or end date in favour of the Council to pay an amount or amounts of money to the Council on demand issued by:

- (a) one of the following trading banks:
  - (i) Australia and New Zealand Banking Group Limited,
  - (ii) Commonwealth Bank of Australia,
  - (iii) Macquarie Bank Limited,
  - (iv) National Australia Bank Limited,
  - (iv) St George Bank Limited,
  - (v) Westpac Banking Corporation, or
- (b) any other financial institution approved by the Council in its absolute discretion.

**BaptistCare Land** means Lot 2 DP533058 and any lot created by a Subdivision of that Lot.

**Building** has the same meaning as in the Act.

**Busways Intersection Contribution** means a monetary Development Contribution by the owner of the Busways Land to the Council in an amount equal to the Council's reasonable determination at the time of payment of the likely cost that the Council would have incurred if it had constructed the Busways Intersection Work.

**Busways Intersection Work** means the construction, to a design and specification approved by the Council of an upgrade to the intersection of John Oxley Drive and Holland Close.

**Busways Land** means Lot 2 DP 1177586 and any lot created by a Subdivision of that Lot.

**Certifying Authority** has the same meaning as in the Act.

**Compliance Certificate** has the same meaning as in the Act.

**Complying Development Certificate** has the same meaning as in the Act.

**Construction Certificate** has the same meaning as in the Act.

**Contributions Plan** has the same meaning as in the Act.

**CPI** means the *Consumer Price Index (All Groups - Sydney)* published by the Australian Bureau of Statistics.

**Deed** means this Deed and includes any schedules, annexures and appendices to this Deed.

**Defects Liability Period** means the period commencing on the date on which a Work is completed for the purposes of this Deed and ending 12 months after that date.

12/07/2017

8



**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

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**Development** means the development on the Land for urban purposes in accordance with amendments made to *Port Macquarie-Hastings Local Environmental Plan 2011* by the South Lindfield LEP or any other local environmental plan containing provisions consistent with the South Lindfield Planning Proposal, but excluding any development for the purpose of stormwater, sewerage or road works carried out by a Participating Landowner that is not the Landowner.

**Development Application** means an application under the Act for a Development Consent and includes an application for a Complying Development Certificate.

**Development Consent** means:

- (a) an approval to carry out a transitional Part 3A project (within the meaning of Schedule 6A of the Act), or
- (b) a consent under Part 4 of the Act to carry out development and includes a Complying Development Certificate, or
- (c) an approval under Part 5.1 of the Act to carry out development that is State significant infrastructure.

**Development Contribution** means a monetary contribution, the dedication of land free of cost to the Council, the carrying out of work, or the provision of any other material public benefit, or any combination of them, to be used for, or applied towards, a public purpose within the meaning of s93F(2) of the Act.

**Development Servicing Plan - Sewerage Services** means the document of the Council titled *Port Macquarie-Hastings Council Development Servicing Plans for Water Supply and Sewerage 2014*, a copy of which is available from the Council, or any document that replaces that document.

**Environmental Management Dedication Land** means the part of the Environmental Management Land identified as such on the Map or such other land as is agreed in writing between the Parties.

**Environmental Management Land** means any part of the Land that is situated within Zone E2 Environmental Conservation or Zone E3 Environmental Management under the South Lindfield LEP or any other part of the Land agreed between the Parties to be Environmental Management Land for the purposes of this Deed.

**Equivalent Tenement (ET)** has the same meaning as in *Council's Development Contribution Assessment Policy July 2007*, a copy of which is available from the Council, or any document that relevantly replaces that document.

**Establishment Obligation** means the establishment of the Environmental Management Land in accordance with:

- (a) the relevant requirements of any Development Consent relating to the Development, and
- (b) to the extent not inconsistent with such a Development Consent:
  - (i) any Vegetation Management Plan approved by the Council, and
  - (ii) otherwise to the satisfaction of the Council.

12/07/2017

9



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

---

**Establishment Period** means the period commencing when the Development is commenced (within the meaning of the Act) or such other period or periods commencing at such other time or times as the Parties agree and ending when the Establishment Obligation is completed to the reasonable satisfaction of the Council.

**Final Lot** means a lot having an area not exceeding 5,000 square metres to be created in the Development for separate occupation and disposition or a lot of a kind or created for a purpose that is otherwise agreed by the Parties, not being:

- (a) a lot created by a Subdivision of the Land that is to be dedicated or otherwise transferred to the Council, or
- (b) a lot created by a Subdivision of the Land on which is situated a dwelling-house that was in existence on the date of this Deed.

**GST** has the same meaning as in the GST Law.

**GST Law** has the same meaning as in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition or administration of the GST.

**Initial Developer Link Road Intersection Works** means the Landowner that carries out the Link Road Intersection Works, being either the owner of the BaptistCare Land or the Lake Innes Residential Land.

**Just Terms Act** means the *Land Acquisition (Just Terms Compensation) Act 1991*.

**Lake Innes Residential Land** means Lot 1 DP533058 and any lot created by the Subdivision of that lot.

**Land** means Lot 1 DP 369206 «Land».

**Landowner** means the owner of the Land.

**Link Pathway** means a pedestrian pathway and cycleway generally in the location shown as such on the Map.

**Link Road** means a road generally in the location shown cross-hatched on the Map.

**Link Road Contribution** means a payment by the Landowner to the Council in an amount equal to the Council's reasonable determination at the time of payment of the likely cost that the Council would have incurred if it had constructed the Link Road.

**Link Road Intersection Land** means the land identified as 'Link Road Intersection Land' on the Link Road Intersection Map.

**Link Road Intersection Map** means the map in Schedule 3.

**Link Road Intersection Works** means the construction, to a design and specification approved by the Council, of so much of the following that has not already been completed by the Council:

- (a) a roundabout, or other intersection design, at the intersection of Link Road, John Oxley Drive and Holland Close, and
- (b) the section of the Link Road on the Link Road Intersection Land.





**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

**Link Road Intersection Works Cost** means an amount determined by the Council as being the likely cost that the Council would have incurred if it had constructed the Link Road Intersection Works (or any part) that the Initial Developer Link Road Intersection Works has completed under clause 12.

**Link Road Intersection Works Offset** means an amount equal to the Link Road Intersection Works Cost, less:

- (a) any Busways Intersection Contribution that has been paid to the Initial Developer Link Road Intersection Works under clause 11.5,
- (b) any Link Road Contribution that has been paid to the Initial Developer Link Road Intersection Works under clause 10.3 that the Council reasonably determines is in respect of the Link Road Intersection Land that is not on the Land.

**Link Road Intersection Works Offset Balance** means an amount (if any) equal to the Link Road Intersection Works Offset less the amount by which the Roads Contributions and Open Space Contribution has been reduced under clause 12.3.1.

**Management Obligation** means the management of the Environmental Management Land to the satisfaction of the Council in accordance with:

- (a) the relevant requirements of any Development Consent relating to the Development, and
- (b) to the extent not inconsistent with such a Development Consent, any Vegetation Management Plan approved by the Council.

**Management Period** means the period commencing immediately at the end of the Establishment Period and ending three years after the Environmental Management Land is dedicated to the Council or such other period or periods as the Parties agree.

**Management Work** means Work forming part of the Establishment Obligation or the Management Obligation.

**Mann Land** means Lot 3 DP 533058 and any lot created by a Subdivision of that Lot.

**Manufactured Home** has the same meaning as in the *Local Government Act 1993*.

**Map** means the map in Schedule 1.

**Moveable Dwelling** has the same meaning as in the *Local Government Act 1993*.

**Occupation Certificate:**

- (a) in relation to development that comprises the erection of a Building - has the same meaning as in the Act,
- (b) in relation to a Manufactured Home - means a certificate issued by the Council under cl.69 of the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*,
- (c) in relation to a Moveable Dwelling - any approval of the Council to occupy and use a Moveable Dwelling that has been installed on land in accordance with an approval granted by the Council under Part A of the Table to s68 of the *Local Government Act*



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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1993 and that complies with the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*.

**Open Space Contribution** means a monetary Development Contribution towards the cost of open space that the Council determines is the greater of:

- (a) \$5,974.00 per ET in the Development indexed quarterly after 1 February 2016 in accordance with CPI, or
- (b) the amount of any open space monetary Development Contribution applying to the Development authorised by the first relevant amendment to or substitution of the document of the Council titled *Port Macquarie-Hastings Open Space Contributions Plan 2004* indexed in accordance with the amended or substituted plan.

**Participating Land** means the BaptistCare Land, Busways Land, Mann Land, Priest Land, Ramm Land, and Lake Innes Residential Land.

**Participating Landowner** means an owner of Participating Land

**Party** means a party to this Deed, including their successors and assigns.

**Priest Land** means Lot 5 DP 630393 and any lot created by a Subdivision of that Lot.

**Principal Certifying Authority** has the same meaning as in the Act.

**Ramm Land** means Lot 1 DP 369206 and any lot created by a Subdivision of that Lot.

**Real Property Act** means the *Real Property Act 1900*.

**Rectification Notice** means a notice in writing issued in the Defects Liability Period that identifies a defect in a Work and requires rectification of the defect during the Defects Liability Period or during such later period specified in the notice as is reasonable in the circumstances.

**Registrar-General** has the same meaning as in the Real Property Act.

**Regulation** means the *Environmental Planning and Assessment Regulation 2000*.

**Residue Lot** means a lot to be created in the Development that is not a Final Lot.

**Roads Contribution** means a monetary Development Contribution towards the cost of roads that the Council determines is the greater of

- (a) \$9,162.00 per ET in the Development indexed quarterly after 1 February 2016 in accordance with CPI, or
- (b) the amount of any roads monetary Development Contribution applying to the Development authorised by the first relevant amendment to or substitution of the document of the Council titled *Port Macquarie-Hastings Major Roads Contributions Plan 2004* indexed in accordance with the amended or substituted plan.

**Security** means a Bank Guarantee unless the Council, in its absolute discretion, agrees to another kind of security as a suitable means of enforcing the Landowner's obligations under this Deed.





**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

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**Sewerage Services Contribution** means a monetary Development Contribution payable under the Development Servicing Plan – Sewerage Services per ET created in the Development.

**Sewerage Services Contribution Local** means a monetary Development Contribution of \$3,128 per ET created in the Development indexed in accordance with CPI from 1 February 2016.

**South Lindfield LEP** means a local environmental plan (within the meaning of the Act) which gives effect to the South Lindfield Planning Proposal.

**South Lindfield Planning Proposal** means a planning proposal within the meaning of s55 of the Act that proposes rezoning of the Land generally in accordance with the zoning shown on the Map.

**Stage** means a stage in the Development approved by a Development Consent, or otherwise agreed to in writing by the Council for the purposes of this Deed.

**Stormwater Catchment** means Stormwater Catchment Central, Stormwater Catchment East or Stormwater Catchment South.

**Stormwater Catchment Central** means the area marked 'Central' on the Stormwater Catchment Map.

**Stormwater Catchment East** means the area marked 'East' on the Stormwater Catchment Map.

**Stormwater Catchment Land Payment** means a payment by the Landowner to the Council an amount determined by the Council at the time of payment as being the amount of compensation it would have paid to the owner of the other land if it had acquired an easement for the Stormwater Catchment Work over that land.

**Stormwater Catchment Map** means the map in Schedule 2.

**Stormwater Catchment South** means the area marked 'South' on the Stormwater Catchment Map.

**Stormwater Catchment Work** means Work including but not limited to a pump, pipe, channel, or detention facility that is constructed or used for the purpose of draining stormwater from land within a Stormwater Catchment.

**Stormwater Catchment Work Developer** means a person other than the Landowner who carries out Stormwater Catchment Work which serves the Development.

**Stormwater Catchment Work Payment** means a payment by the Landowner to the Council in an amount determined by the Council at the time of payment as being the likely cost that the Council would have incurred if it had carried out Stormwater Catchment Work serving the Development.

**Subdivision** has the same meaning as in the Act.

**Subdivision Certificate** has the same meaning as in the Act.

**Vegetation Management Plan** means a plan that contains provisions relating to the establishment and maintenance of the Environmental Management Land including provision for the staged dedication of the Environmental Management Land as a public reserve in conjunction with the Development.



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**Work** means the physical result of any building, engineering or construction work in, on, over or under land required to be carried out by the Landowner under this Deed.

**Zone** means a zone specified in *Port Macquarie-Hastings Local Environmental Plan 2011*.

- 1.2 In the interpretation of this Deed, the following provisions apply unless the context otherwise requires:
- 1.2.1 Headings are inserted for convenience only and do not affect the interpretation of this Deed.
  - 1.2.2 A reference in this Deed to a business day means a day other than a Saturday or Sunday on which banks are open for business generally in Sydney.
  - 1.2.3 If the day on which any act, matter or thing is to be done under this Deed is not a business day, the act, matter or thing is to be done on the next business day.
  - 1.2.4 A reference in this Deed to dollars or \$ means Australian dollars and all amounts payable under this Deed are payable in Australian dollars.
  - 1.2.5 A reference in this Deed to a \$ value relating to a Development Contribution is a reference to the value exclusive of GST.
  - 1.2.6 A reference in this Deed to any law, legislation or legislative provision includes any statutory modification, amendment or re-enactment, and any subordinate legislation or regulations issued under that legislation or legislative provision.
  - 1.2.7 A reference in this Deed to any agreement, deed or document is to that agreement, deed or document as amended, novated, supplemented or replaced.
  - 1.2.8 A reference to a clause, part, schedule or attachment is a reference to a clause, part, schedule or attachment of or to this Deed.
  - 1.2.9 An expression importing a natural person includes any company, trust, partnership, joint venture, association, body corporate or governmental agency.
  - 1.2.10 Where a word or phrase is given a defined meaning, another part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning.
  - 1.2.11 A word which denotes the singular denotes the plural, a word which denotes the plural denotes the singular, and a reference to any gender denotes the other genders.
  - 1.2.12 References to the word 'include' or 'including' are to be construed without limitation.
  - 1.2.13 A reference to this Deed includes the agreement recorded in this Deed.
  - 1.2.14 A reference to a party to this Deed includes a reference to the servants, agents and contractors of the party, and the party's successors and assigns.
  - 1.2.15 Any schedules, appendices and attachments form part of this Deed.
  - 1.2.16 Notes appearing in this Deed are operative provisions of this Deed.

12/07/2017

14



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**2 Status, application & effect of this Deed**

- 2.1 This Deed is a planning agreement for the purposes of s93F of the Act.
- 2.2 This Deed applies to the Land and the Development.

**3 Commencement of this Deed**

- 3.1 This Deed commences when it has been executed by all of the Parties and similar agreements between the Council and the owners of all other Participating Land have been entered into.
- 3.2 The Party who executes this Deed last is to notify the other Parties once it has done so and promptly provide them with a copy of the fully executed version of this Deed.

**4 Commencement of Development Contributions obligations**

- 4.1 The Parties acknowledge that the Development Contributions required to be made by the Landowner under this Deed are consequent upon the increased demand for public amenities and public services and other public benefits caused by the carrying out of the Development.
- 4.2 The Landowner is under no obligation to make the Development Contributions to the Council in accordance with this Deed unless and until both of the following events have occurred:
  - 4.2.1 the South Lindfield LEP has taken effect, and
  - 4.2.2 Development Consent is granted to the Development or any part of it.

**5 Further Agreements Relating to this Deed**

- 5.1 The Parties may, at any time and from time to time, enter into an agreement that provides more detail relating to the subject-matter of this Deed for the purpose of implementing this Deed.
- 5.2 Any such agreement is not to be inconsistent with this Deed.

**6 Bar to proceedings**

- 6.1 The Landowner is not to commence or maintain, or cause to be commenced or maintained, any proceedings in any court questioning or objecting to:
  - 6.1.1 this Deed, or
  - 6.1.2 the applicability of this Deed to the Development, or
  - 6.1.3 the South Lindfield Planning Proposal or the South Lindfield LEP.

12/07/2017

15





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**7 Application of s94, s94A and s94EF of the Act to the Development**

- 7.1 This Deed does not exclude the application of s94A of the Act to the Development.
- 7.2 Section 94 of the Act does not apply to the Development if, and to the extent to which, this Deed requires a Development Contribution towards specified public amenities and public services.
- 7.3 This Deed does not exclude the application of s94EF of the Act to the Development.

**Part 2 – Provisions relating to Roads**

**8 Roads Contribution**

- 8.1 This clause applies to the Landowner if the Landowner is not the owner of the Busways Land.
- 8.2 Subject to clause 12.3, the Landowner is to pay the Roads Contribution for the Development or each Stage of the Development at the following times:
  - 8.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 8.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
  - 8.2.3 in any other case – before the earlier of the issuing of the first Occupation Certificate for, or occupation of, the Development or Stage unless otherwise determined by the Council acting reasonably.

**9 Construction & Dedication of Link Road & Link Pathway**

- 9.1 Any part of the Link Road or Link Pathway that is required to provide access to the Land from an existing public road, and access to adjoining land, is to be completed to the reasonable satisfaction of the Council before:
  - 9.1.1 the first Subdivision Certificate is issued for the Development or Stage that generates a demand for the Link Road or Link Pathway, or
  - 9.1.2 if no Subdivision Certificate is required – before the first Occupation Certificate is issued for the Development or Stage that generates a demand for the Link Road or Link Pathway.
- 9.2 The Landowner is to permit a Participating Landowner access to the Land at reasonable times for the purposes of constructing the Link Road or Link Pathway on the Land.
- 9.3 The Landowner is to dedicate to the Council free of cost, before the time specified in clause 9.1, such of the Land on which construction of the Link Road or Link Pathway has been completed.

12/07/2017

16



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**10 Link Road Contribution**

- 10.1 This clause applies to the payment of the Link Road Contribution to the Council where a Participating Landowner who is not the Landowner has constructed and completed the Link Road on the Land.
- 10.2 The Landowner is to make the payment to which this clause applies at the following time:
- 10.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 10.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
  - 10.2.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.
- 10.3 As soon as practicable after receiving from the Landowner the payment of the Link Road Contribution, the Council is pay to the Participating Landowner who has constructed and completed the Link Road on the Land an amount equal to the Link Road Contribution received by the Council.
- 10.4 If the Landowner has paid a Link Road Contribution in respect of the Link Road Intersection Land then the amount of Roads Contributions and Open Space Contribution the Landowner is required to pay under this Deed is to be reduced by the amount of the Link Road Contribution that Council reasonably determines relates to the Link Road Intersection Land.

**11 Busways Intersection Work and Busways Intersection Contribution**

- 11.1 Clauses 11.1 to 11.4 apply if the Landowner is the owner of the Busways Land.
- 11.2 The Landowner is to carry out and complete the Busways Intersection Work to the reasonable satisfaction of the Council before:
- 11.2.1 the first Subdivision Certificate is issued for the Development or Stage on the Busways Land, or
  - 11.2.2 if no Subdivision Certificate is required – before the first Occupation Certificate is issued for the Development or Stage on the Busways Land.
- 11.3 Clause 11.2 does not apply if, at the time the Busways Intersection Works is required to be completed under this Deed, the Initial Developer Link Road Intersection Work has commenced carrying out of the Link Road Intersection Works.
- 11.4 If clause 11.2 does not apply, the Landowner is to pay to the Council the Busways Intersection Contribution before:
- 11.4.1 the first Subdivision Certificate is issued for the Development or Stage on the Busways Land, or

12/07/2017

17





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 11.4.2 if no Subdivision Certificate is required – before the first Occupation Certificate is issued for the Development or Stage on the Busways Land.
- 11.5 As soon as practicable after receiving from the Landowner the payment of the Busways Intersection Contribution, the Council is pay to the Initial Developer Link Road Intersection Work an amount equal to the Busways Intersection Contribution received by the Council.

**12 Link Road Intersection Works and Link Road Intersection Works Offset**

- 12.1 This clause applies to the Landowner if the Landowner is the Initial Developer Link Road Intersection Works.
- 12.2 The Landowner is to carry out and complete the Link Road Intersection Works, or any part of it that has not been completed under clause 9.1, to the reasonable satisfaction of the Council before:
- 12.2.1 the first Subdivision Certificate is issued for the Development or Stage that generates a demand for the Link Road Intersection Work, or
- 12.2.2 if no Subdivision Certificate is required – before the first Occupation Certificate is issued for the Development or Stage that generates a demand for the Link Road Intersection Work.
- 12.3 If the Landowner has carried out and completed the Link Road Intersection Works, or part, that is required to be completed under clause 12.2 then:
- 12.3.1 the amount of Roads Contributions and Open Space Contribution the Landowner is required to pay under this Deed is to be reduced by the Link Road Intersection Works Offset, and
- 12.3.2 the Council is to pay the Landowner any Roads Contributions or Open Space Contributions that it has received from Participating Landowners to the extent of the Link Road Intersection Works Offset Balance.

**Part 3 – Provision relating to Stormwater Catchment Work**

**13 Application of this Part**

- 13.1 This Part applies to land within a Stormwater Catchment.

**14 Stormwater Catchment Work**

- 14.1 Stormwater Catchment Work to serve the Development:
- 14.1.1 is not to be commenced unless the Council has given written approval to the design, specification and staging of the Stormwater Catchment

12/07/2017

18



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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Work within the relevant Stormwater Catchment or Stormwater Catchments as the case may be, and

14.1.2 is to be completed at no cost to the Council:

- (a) in accordance with the approval referred to in clause 14.1.1, and
- (b) before the first Subdivision Certificate is issued for any part of the Development, or if no Subdivision Certificate is required, before the first Occupation Certificate is issued for the Development.

## **15 Stormwater Catchment Work Payments**

15.1 This clause applies to the following payments:

15.1.1 the Stormwater Catchment Work Payment to the Council where the Stormwater Catchment Work Developer has carried out and completed Stormwater Catchment Work serving the Development, and

15.1.2 the Stormwater Catchment Land Payment to the Council where the Stormwater Catchment Work serving the Development has been carried out and completed.

15.2 The Landowner is to make payments to which this clause applies at the following times:

15.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,

15.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,

15.2.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.

15.3 The Landowner is not required to make payments to which this clause applies if the Landowner has entered into a legally enforceable agreement on terms satisfactory to the Council with the Stormwater Catchment Work Developer or the owner or owners of other land on which Stormwater Catchment Work serving the Development has been carried out and completed or both to jointly fund the relevant Stormwater Catchment Work.

15.4 As soon as practicable after receiving from the Landowner:

15.4.1 the Stormwater Catchment Work Payment, the Council is to pay to the Stormwater Catchment Work Developer an amount equal to the Stormwater Catchment Work Payment received by the Council, and

15.4.2 the Stormwater Catchment Land Payment, the Council is to pay to the owner or owners of other land on which Stormwater Catchment Work serving the Development has been carried out and completed an amount equal to the Stormwater Catchment Land Payment received by the Council.



South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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## Part 4 – Provisions relating to Sewerage Services

### 16 Sewerage Services Contribution and Sewerage Services Contribution Local

- 16.1 The Landowner is to pay the Sewerage Services Contribution to the Council for the Development or a Stage of the Development at the following times:
  - 16.1.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 16.1.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
  - 16.1.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.
- 16.2 The Landowner is to pay the Sewerage Services Contribution Local to the Council for the Development or a Stage of the Development at the following times:
  - 16.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 16.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
  - 16.2.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.

## Part 5 – Provisions relating to Open Space

### 17 Open Space Contribution

- 17.1 This clause applies to the Landowner if the Landowner is not the owner of the Busways Land.
- 17.2 Subject to clause 12.3, the Landowner is to pay the Open Space Contribution for the Development or a Stage of the Development at the following times:
  - 17.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 17.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
- 17.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.

12/07/2017

20





South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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## Part 6 – Provisions relating to Environmental Management Land

### 18 Application of this Part

- 18.1 Clauses 19 – 23 only apply if the Environmental Management Land is part of the Land.

### 19 Approval of Vegetation Management Plan

- 19.1 The Landowner is to ensure that any Development Application that seeks Development Consent for the establishment and maintenance of the Environmental Management Land is accompanied by a Vegetation Management Plan prepared at no cost to the Council.
- 19.2 The Landowner is not to establish or maintain the Environmental Management Land except in accordance with:
- 19.2.1 a Vegetation Management Plan that has been approved by the Council, and
- 19.2.2 the terms of any approval granted by the Council as modified from time to time.

### 20 Establishment & Management of Environmental Management Land

- 20.1 The Landowner is to perform the following at no cost to the Council:
- 20.1.1 the Establishment Obligation during the Establishment Period; and
- 20.1.2 the Management Obligation during the Management Period.
- 20.2 The Landowner is to perform its obligations under clause 20.1 in accordance with:
- 20.2.1 this Deed, and
- 20.2.2 any further agreement that is entered into by the Parties under clause 5, and
- 20.2.3 any requirements and directions notified in writing by the Council to the Landowner at any time before the Management Work is completed that is not inconsistent with:
- (a) this Deed, or
- (b) any agreement referred to in clause 20.2.2, or
- (c) any Development Consent relating to the Development.
- 20.3 The Establishment Obligation and the Management Obligation are not to be varied by the Landowner, unless:
- 20.3.1 the Parties agree in writing to the variation, and

12/07/2017

21



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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20.3.2 any consent or approval required under the Act or any other law to the variation is first obtained.

- 20.4 The Landowner is not to construct or allow the construction of, or make a development application or an application for a complying development certificate for, any building or structure on any part of the Land within Zone E2 or E3 without the written approval of the Council.

**21 Failure to Perform Establishment or Management Obligations**

- 21.1 Clause 37, with any necessary modifications, applies to a breach of the Establishment Obligation or the Management Obligation by the Landowner in the same way as it applies to a breach of an obligation to carry out Work by the Landowner.

**22 Inspection of the Environmental Management Land**

- 22.1 Before the Environmental Management Land is dedicated to the Council in accordance with this Deed, the Landowner is to permit the Council, its officers, employees, agents and contractors to enter that land at any time, for the purposes of establishing compliance with any approved Vegetation Management Plan, upon giving reasonable prior notice.
- 22.2 After the Environmental Management Land is dedicated to the Council in accordance with this Deed, the Landowner is to permit the Council, its officers, employees, agents and contractors to reasonably pass through land owned, occupied or otherwise controlled by the Landowner to enable the Council to obtain reasonable access to the Environmental Management Land.
- 22.3 This clause does not derogate from any other rights the Council has under this Deed to enter the Environmental Management Land.

**23 Dedication of Environmental Management Dedication Land**

- 23.1 The Landowner is to dedicate the Environmental Management Dedication Land to the Council as a public reserve free of cost to the Council in accordance with the Vegetation Management Plan as approved by the Council.

**Part 7 – Administration Levy Contribution**

**24 Payment of Administration Levy Contribution**

- 24.1 This clause applies to the Landowner if the Landowner is not the owner of the Busways Land.

12/07/2017

22





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 24.2 The Landowner is to pay the Administration Levy Contribution for the Development or each Stage of the Development at the following times:
- 24.2.1 if the Development or Stage involves Subdivision – before the issuing of the first Subdivision Certificate for the Development or Stage,
  - 24.2.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – before the issuing of the first Construction Certificate for the Development or Stage,
  - 24.2.3 in any other case – before the issuing of the first Occupation Certificate for the Development or Stage unless otherwise determined by the Council acting reasonably.

**Part 8 – General Provisions Relating to Development Contributions**

**25 Provision of Development Contributions**

- 25.1 The Landowner is to make Development Contributions to the Council in accordance with this Deed and otherwise to the satisfaction of the Council.
- 25.2 Subject to this Deed, the Council is to apply a Development Contribution made by the Landowner under this Deed towards the public purpose for which it is made and otherwise in accordance with this Deed.
- 25.3 The Council may apply a Development Contribution other than a monetary Development Contribution made under this Deed towards a public purpose other than the purpose specified in this Deed if the Council considers that the public interest would be better served by applying the Development Contribution towards the other purpose rather than the purpose specified in this Deed.

**26 Procedures relating to payment of monetary Development Contributions**

- 26.1 A monetary Development Contribution is made for the purposes of this Deed when the Council receives the full amount of the contribution payable under this Deed in cash or by unendorsed bank cheque or by the deposit by means of electronic funds transfer of cleared funds into a bank account nominated by the Council.
- 26.2 The Landowner is to give the Council not less than 2 business days written notice of its intention to pay a monetary Development Contribution.
- 26.3 The Landowner is not required to pay a monetary Development Contribution under this Deed unless the Council, after having received the Landowner's notice under clause 26.2, has given to the Landowner a tax invoice for the amount of the Development Contribution.
- 26.4 The Landowner is not in breach of this Deed if it fails to pay a monetary Development Contribution at the time required by this Deed by reason only of

12/07/2017

23



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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the Council's failure to give to the Landowner a tax invoice in relation to the amount proposed to be paid by it.

## **27 Procedures relating to the dedication of land**

- 27.1 A Development Contribution comprising the dedication of land is made for the purposes of this Deed when:
  - 27.1.1 a deposited plan is registered in the register of plans held with the Registrar-General that dedicates land as a public road (including a temporary public road) under the *Roads Act 1993* or creates a public reserve or drainage reserve under the *Local Government Act 1993*, or
  - 27.1.2 the Council is given an instrument in registrable form under the Real Property Act that is effective to transfer the title to the land to the Council when registered.
- 27.2 For the purposes of clause 27.1.2:
  - 27.2.1 the Landowner is to give the Council, for execution by the Council as transferee, an instrument of transfer under the Real Property Act relating to the land to be dedicated, and
  - 27.2.2 the Council is to execute the instrument of transfer and return it to Landowner within 7 days of receiving it from the Landowner, and
  - 27.2.3 the Landowner is to lodge the instrument of transfer for registration with the Registrar-General within 7 days of receiving it from the Council duly executed, and
  - 27.2.4 the Landowner and the Council are to do all things reasonably necessary to enable registration of the instrument of transfer to occur.

## **28 Carrying out of Work**

- 28.1 Except as otherwise specifically provided by this Deed, any Work that is required to be carried out by the Landowner under this Deed is to be carried out in accordance with:
  - 28.1.1 any relevant design, specification and staging approved by the Council under this Deed,
  - 28.1.2 any relevant Development Consent,
  - 28.1.3 any relevant policies and specifications of the Council existing at the time such a consent is granted,
  - 28.1.4 any other applicable law, and
  - 28.1.5 otherwise to the reasonable satisfaction of the Council.
- 28.2 The Landowner is to comply with any direction given to it by the Council, acting reasonably, to prepare or modify a design or specification relating to a Work that the Landowner is required to carry out under this Deed.

12/07/2017

24



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**29 Access to the Land**

- 29.1 The Landowner is to permit the Council, its officers, employees, agents and contractors to enter the Land or any other land at any time, upon giving reasonable prior notice, in order to inspect, examine or test any Work or to remedy any breach of the Landowner relating to the carrying out of a Work.
- 29.2 The Council is to permit the Landowner to enter and occupy any land owned or controlled by the Council for the purpose of enabling the Landowner to carry out any Work under this Deed that is required to be carried out on such land or to perform any other obligation imposed on the Landowner by or under this Deed.

**30 Protection of people and property**

- 30.1 The Landowner is to ensure to the fullest extent reasonably practicable in relation to the carrying out of any Work that:
- 30.1.1 all necessary measures are taken to protect people and property, and
- 30.1.2 unnecessary interference with the passage of people and vehicles is avoided, and
- 30.1.3 nuisances and unreasonable noise and disturbances are prevented.

**31 Damage and repairs to Work**

- 31.1 The Landowner, at its own cost, is to repair and make good to the satisfaction of the Council any loss or damage to a Work from any cause whatsoever which occurs before the date on which the Work is completed.

**32 Variation of Work**

- 32.1 A Work is not to be varied by the Landowner, unless:
- 32.1.1 the Landowner and the Council agree in writing to the variation, and
- 32.1.2 any consent or approval that is required to the variation under the Act or any other law is first obtained.
- 32.2 For the purposes of clause 32.1 a variation may relate to any matter in relation to the Work that is dealt with by this Deed.

**33 Completion of Work**

- 33.1 Work is completed for the purposes of this Deed if the Council, acting reasonably, gives a certificate to the Landowner to that effect or the Landowner gives the Council a Compliance Certificate to that effect.

12/07/2017

25





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**34 Rectification of defects**

- 34.1 During the Defects Liability Period, the Council may give the Landowner a Rectification Notice.
- 34.2 Subject to the resolution of a dispute in accordance with this Deed, the Landowner is to comply with a Rectification Notice at its own cost and to the reasonable satisfaction of the Council.

**35 Works-As-Executed-Plan**

- 35.1 No later than 60 days after a Work is completed, the Landowner is to submit to the Council a full works-as-executed-plan in respect of the Work.

**Part 9 – Other Provisions**

**36 Indemnity and Insurance**

- 36.1 The Landowner indemnifies the Council, its employees, officers, agents, contractors and workmen from and against all losses, damages, costs (including legal costs on a full indemnity basis), charges, expenses, actions, claims and demands whatsoever which may be sustained, suffered, recovered or made arising in connection with a negligent act or omission of the Landowner in carrying out any Work and the performance of any other obligation under this Deed.
- 36.2 The Landowner is to take out and keep current, or is to ensure that its contractors take out and keep current, to the satisfaction of the Council the following insurances in relation to Work required to be carried out by the Landowner under this Deed up until the Work is completed:
  - 36.2.1 contract works insurance, noting the Council as an interested party, for the full replacement value of the Works (including the cost of demolition and removal of debris, consultants' fees and authorities' fees), to cover the Landowner's liability in respect of damage to or destruction of the Works,
  - 36.2.2 public liability insurance for at least \$20,000,000.00 for a single occurrence, which covers the Council, the Landowner and any subcontractor of the Landowner, for liability to any third party,
  - 36.2.3 workers compensation insurance as required by law, and
  - 36.2.4 any other insurance required by law.
- 36.3 If the Landowner fails to comply with clause 36.2, the Council may effect and keep in force such insurances and pay such premiums as may be necessary for that purpose and the amount so paid is to be a debt due from the Landowner to the Council and may be recovered by the Council as it deems appropriate including:
  - 36.3.1 by calling upon the Security provided by the Landowner to the Council under this Deed, or

12/07/2017

26



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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36.3.2 recovery as a debt due in a court of competent jurisdiction.

- 36.4 The Landowner is not to commence to carry out any Work unless it has first provided to the Council satisfactory written evidence of all of the insurances specified in clause 36.2.

### **37 Failure to carry out Work**

- 37.1 If the Council reasonably considers that the Landowner is in breach of any obligation under this Deed relating to a Work, including compliance with a Rectification Notice, the Council may give the Landowner a notice requiring the breach to be rectified to the Council's reasonable satisfaction.
- 37.2 The dispute resolution provisions of this Deed do not apply to the giving of a notice under clause 37.1.
- 37.3 A notice given under clause 36.1 is to allow the Landowner a period of not less than 28 days to rectify the breach or such further period as the Council considers reasonable in the circumstances.
- 37.4 The Council may carry out and complete the Work the subject of a notice under clause 37.1 if the Landowner fails to comply with the notice to the Council's reasonable satisfaction.
- 37.5 The Landowner is to do all things reasonably necessary to enable the Council to exercise its rights under clause 37.4.
- 37.6 If the Council incurs a cost in carrying out, completing or rectifying a defect in a Work resulting from non-compliance by the Landowner with this Deed, the Council may recover the cost from the Landowner in a court of competent jurisdiction.
- 37.7 For the purpose of clause 37.6, the Council's costs of carrying out, completing or rectifying a defect in a Work includes, but is not limited to:
- 37.7.1 the reasonable costs of the Council's servants, agents and contractors reasonably incurred for that purpose,
  - 37.7.2 all fees and charges necessarily or reasonably incurred by the Council in order to have the Work carried out, completed or rectified, and
  - 37.7.3 all legal costs and expenses reasonably incurred by the Council, by reason of the Landowner's failure to comply with this Deed.

### **38 Security for Performance**

- 38.1 Despite any other provision in this Deed, the Landowner is not to apply for, or cause, suffer or permit the issuing of:
- 38.1.1 if the Development or Stage involves Subdivision – a Subdivision Certificate for the Development or Stage, or
  - 38.1.2 if the Development or Stage involves the erection of a Building but does not involve Subdivision – a Construction Certificate for the Development or Stage, or
  - 38.1.3 in any other case – an Occupation Certificate for the Development or Stage,

12/07/2017

27





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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unless and until the Development Contributions required to be made under this Deed before any such certificate is issued in respect of the Development or the Stage have been made in accordance with Deed.

- 38.2 The dispute resolution provisions of this Deed do not apply to a matter the subject of this clause.

**39 Security for obligation to dedicate land**

- 39.1 If the Landowner does not dedicate land required to be dedicated under this Deed at the time at which it is required to be dedicated or at all, the Landowner consents to the Council compulsorily acquiring the land for compensation in the amount of \$1 without having to follow the pre-acquisition procedure under the Just Terms Act.
- 39.2 Council is to only acquire land pursuant to clause 39.1 if to do so is reasonable having regard to the circumstances surrounding the failure by the Landowner to dedicate the land required to be dedicated under this Deed.
- 39.3 Clause 39.1 constitutes an agreement for the purposes of s30 of the Just Terms Act.
- 39.4 If, as a result of the acquisition referred to in clause 39.1, the Council must pay compensation to any person other than the Landowner, the Landowner must reimburse the Council for that amount, upon a written request being made by the Council, or the Council can call on any Security.
- 39.5 Except as otherwise agreed between the Parties, the Landowner must ensure that the land to be dedicated under this Deed is free of all encumbrances and affectations (whether registered or unregistered and including without limitation any charge or liability for rates, taxes and charges), on both the date that the Landowner is liable to transfer that land to the Council under this Deed, and the date on which the Council compulsorily acquires the whole or any part of that land in accordance with the Just Terms Act.
- 39.6 The Landowner indemnifies and keeps indemnified the Council against all claims made against the Council as a result of any acquisition by the Council of the whole or any part of the Land.
- 39.7 The Landowner is to promptly do all things necessary, and consents to the Council doing all things necessary, to give effect to this clause 38, including without limitation:
- 39.7.1 signing any documents or forms;
- 39.7.2 giving land owner's consent for lodgement of any Development Application;
- 39.7.3 producing certificates of title to the Registrar-General under the Real Property Act; and
- 39.7.4 paying the Council's costs arising under this clause 38.
- 39.8 Notwithstanding clause 39.5, if, despite having used its best endeavours, the Landowner cannot ensure that the land to be dedicated is free from all encumbrances and affectations, then the Landowner may request that Council agree to accept the land subject to those encumbrances and affectations, but the Council may withhold its agreement in its absolute discretion.

12/07/2017

28



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**40 Enforcement in a court of competent jurisdiction**

- 40.1 Without limiting any other provision of this Deed, the Parties may enforce this Deed in any court of competent jurisdiction.
- 40.2 For the avoidance of doubt, nothing in this Deed prevents:
  - 40.2.1 a Party from bringing proceedings in the Land and Environment Court to enforce any aspect of this Deed or any matter to which this Deed relates,
  - 40.2.2 the Council from exercising any function under the Act or any other Act or law relating to the enforcement of any aspect of this Deed or any matter to which this Deed relates.

**41 Dispute Resolution – expert determination**

- 41.1 This clause applies to a dispute under this Deed which relates to a matter that can be determined by an appropriately qualified expert.
- 41.2 Any dispute between the Parties as to whether a dispute to which this clause applies can be determined by an appropriately qualified expert is to be referred to the Chief Executive Officer of the professional body that represents persons with the relevant expertise for determination, which is to be final and binding on the Parties.
- 41.3 Such a dispute is taken to arise if one Party gives another Party a notice in writing specifying particulars of the dispute.
- 41.4 If a notice is given under clause 41.3, the Parties are to meet within 14 days of the notice in an attempt to resolve the dispute.
- 41.5 If the dispute is not resolved within a further 28 days, the dispute is to be referred to the President of the NSW Law Society to appoint an expert for expert determination.
- 41.6 The expert determination is binding on the Parties except in the case of fraud or misfeasance by the expert.
- 41.7 Each Party is to bear its own costs arising from or in connection with the appointment of the expert and the expert determination.

**42 Dispute Resolution - mediation**

- 42.1 This clause applies to any dispute under this Deed other than a dispute to which clause 41 applies.
- 42.2 Such a dispute is taken to arise if one Party gives another Party a notice in writing specifying particulars of the dispute.
- 42.3 If a notice is given under clause 42.2, the Parties are to meet within 14 days of the notice in an attempt to resolve the dispute.
- 42.4 If the dispute is not resolved within a further 28 days, the Parties are to mediate the dispute in accordance with the Mediation Rules of the Law Society of New South Wales published from time to time and are to request the President of the Law Society, or the President's nominee, to select a mediator.

12/07/2017

29



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 42.5 If the dispute is not resolved by mediation within a further 28 days, or such longer period as may be necessary to allow any mediation process which has been commenced to be completed, then the Parties may exercise their legal rights in relation to the dispute, including by the commencement of legal proceedings in a court of competent jurisdiction in New South Wales.

**43 Registration of this Deed**

- 43.1 The Parties agree to register this Deed on the title to the Land.
- 43.2 Upon the commencement of this Deed, the Landowner is to provide the Council with the following documents to enable registration of this Deed:
- 43.2.1 an instrument requesting registration of this Deed on the title to the Land in registrable form duly executed by the Landowner, and
- 43.2.2 the written irrevocable consent of each person referred to in s93H(1) of the Act to that registration.
- 43.3 The Parties are to do such things as are reasonably necessary to remove any notation relating to this Deed from the title to the Land:
- 43.3.1 in so far as the part of the Land concerned is a Final Lot,
- 43.3.2 in relation to any other part of the Land, once the Landowner has completed its obligations under this Deed to the reasonable satisfaction of the Council or this Deed is terminated or otherwise comes to an end for any reason whatsoever.

**44 Assignment, Sale of Land, etc**

- 44.1 Unless the matters specified in clause 44.2 are satisfied, the Landowner is not to do any of the following:
- 44.1.1 sell or transfer the Land to any person, or
- 44.1.2 assign the Landowner's rights or obligations under this Deed, or novate this Deed, to any person.
- 44.2 The matters required to be satisfied for the purposes of clause 44.1 are as follows:
- 44.2.1 the Landowner has, at no cost to the Council, first procured the execution by the person to whom the Land or part is to be sold or transferred or the Landowner's rights or obligations under this Deed are to be assigned or novated, of an agreement in favour of the Council on terms reasonably satisfactory to the Council, and
- 44.2.2 the Council, by notice in writing to the Landowner, has stated that evidence satisfactory to the Council has been produced to show that the purchaser, transferee, assignee or novatee, is reasonably capable of performing its obligations under the Deed, and
- 44.2.3 the Landowner is not in breach of this Deed, and
- 44.2.4 the Council otherwise consents to the transfer, assignment or novation, such consent not to be unreasonably withheld.

12/07/2017

30





**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 44.3 This clause does not apply in relation to any sale or transfer of the Land if this Deed is registered on the title to the Land at the time of the sale.

#### **45 Review of this Deed**

- 45.1 The Parties agree to review this Deed if any party is of the opinion that any change of circumstance has occurred, or is imminent, that materially affects the operation of this Deed and requests a review.
- 45.2 For the purposes of clause 45.1, the relevant changes include (but are not limited to) any change to a law that restricts or prohibits or enables the Council or any other planning authority to restrict or prohibit any aspect of the Development.
- 45.3 For the purposes of addressing any matter arising from a review of this Deed, the Parties are to use all reasonable endeavours to agree on and implement appropriate amendments to this Deed.
- 45.4 If this Deed becomes illegal, unenforceable or invalid as a result of any change to a law, the Parties agree to do all things necessary to ensure that an enforceable agreement of the same or similar effect to this Deed is entered into.
- 45.5 A failure by a Party to agree to take action requested by the other Party as a consequence of a review of this Deed is not a dispute for the purposes of the dispute resolution provisions of this Deed.

#### **46 Notices**

- 46.1 Any notice, consent, information, application or request that is to or may be given or made to a Party under this Deed is only given or made if it is in writing and sent in one of the following ways:
- 46.1.1 delivered or posted to that Party at its address set out in the Summary Sheet,
- 46.1.2 faxed to that Party at its fax number set out in the Summary Sheet, or
- 46.1.3 emailed to that Party at its email address set out in the Summary Sheet.
- 46.2 If a Party gives the other Party 3 business days notice of a change of its address, fax number or email, any notice, consent, information, application or request is only given or made by that other Party if it is delivered, posted, faxed or emailed to the latest address or fax number.
- 46.3 Any notice, consent, information, application or request is to be treated as given or made if it is:
- 46.3.1 delivered, when it is left at the relevant address,
- 46.3.2 sent by post, 2 business days after it is posted,
- 46.3.3 sent by fax, as soon as the sender receives from the sender's fax machine a report of an error free transmission to the correct fax number, or

12/07/2017

31



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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46.3.4 sent by email and the sender does not receive a delivery failure message from the sender's internet service provider within a period of 24 hours of the email being sent.

46.4 If any notice, consent, information, application or request is delivered, or an error free transmission report in relation to it is received, on a day that is not a business day, or if on a business day, after 5pm on that day in the place of the Party to whom it is sent, it is to be treated as having been given or made at the beginning of the next business day.

**47 Costs**

47.1 The Landowner is to pay to the Council the Council's costs not exceeding \$3,900 of preparing, negotiating, executing and stamping this Deed, and any document related to this Deed within 7 days of a written demand by the Council for such payment.

47.2 The Landowner is also to pay to the Council the Council's costs of enforcing this Deed within 7 days of a written demand by the Council for such payment.

**48 Entire Deed**

48.1 This Deed contains everything to which the Parties have agreed in relation to the matters it deals with.

48.2 No Party can rely on an earlier document, or anything said or done by another Party, or by a director, officer, agent or employee of that Party, before this Deed was executed, except as permitted by law.

**49 Further Acts**

49.1 Each Party is to promptly execute all documents and do all things that another Party from time to time reasonably requests to effect, perfect or complete this Deed and all transactions incidental to it.

**50 Governing Law and Jurisdiction**

50.1 This Deed is governed by the law of New South Wales.

50.2 The Parties submit to the non-exclusive jurisdiction of its courts and courts of appeal from them.

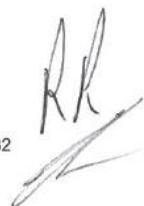
50.3 The Parties are not to object to the exercise of jurisdiction by those courts on any basis.

**51 Joint and Individual Liability and Benefits**

51.1 Except as otherwise set out in this Deed:

12/07/2017

32





**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

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51.1.1 any agreement, covenant, representation or warranty under this Deed by 2 or more persons binds them jointly and each of them individually, and

51.1.2 any benefit in favour of 2 or more persons is for the benefit of them jointly and each of them individually.

**52 No Fetter**

52.1 Nothing in this Deed is to be construed as requiring Council to do anything that would cause it to be in breach of any of its obligations at law, and without limitation, nothing is to be construed as limiting or fettering in any way the exercise of any statutory discretion or duty.

**53 Representations and Warranties**

53.1 The Parties represent and warrant that they have power to enter into this Deed and comply with their obligations under this Deed and that entry into this Deed will not result in the breach of any law.

**54 Severability**

54.1 If a clause or part of a clause of this Deed can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it is to be read in the latter way.

54.2 If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Deed, but the rest of this Deed is not affected.

**55 Modification**

55.1 No modification of this Deed will be of any force or effect unless it is in writing and signed by the Parties to this Deed.

**56 Waiver**

56.1 The fact that a Party fails to do, or delays in doing, something the Party is entitled to do under this Deed, does not amount to a waiver of any obligation of, or breach of obligation by, another Party.

56.2 A waiver by a Party is only effective if it:

56.2.1 is in writing,

56.2.2 is addressed to the Party whose obligation or breach of obligation is the subject of the waiver,

56.2.3 specifies the obligation or breach of obligation the subject of the waiver and the conditions, if any, of the waiver,

56.2.4 is signed and dated by the Party giving the waiver.

12/07/2017

33



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 56.3 Without limitation, a waiver may be expressed to be conditional on the happening of an event, including the doing of a thing by the Party to whom the waiver is given.
- 56.4 A waiver by a Party is only effective in relation to the particular obligation or breach in respect of which it is given, and is not to be taken as an implied waiver of any other obligation or breach or as an implied waiver of that obligation or breach in relation to any other occasion.
- 56.5 For the purposes of this Deed, an obligation or breach of obligation the subject of a waiver given in accordance with this clause is taken not to have been imposed on, or required to be complied with by, the Party to whom the waiver is given.

## **57 GST**

- 57.1 In this clause:

**Adjustment Note, Consideration, GST, GST Group, Margin Scheme, Money, Supply and Tax Invoice** have the meaning given by the GST Law.

**GST Amount** means in relation to a Taxable Supply the amount of GST payable in respect of the Taxable Supply.

**GST Law** has the meaning given by the *A New Tax System (Goods and Services Tax) Act 1999* (Cth).

**Input Tax Credit** has the meaning given by the GST Law and a reference to an Input Tax Credit entitlement of a party includes an Input Tax Credit for an acquisition made by that party but to which another member of the same GST Group is entitled under the GST Law.

**Taxable Supply** has the meaning given by the GST Law excluding (except where expressly agreed otherwise) a supply in respect of which the supplier chooses to apply the Margin Scheme in working out the amount of GST on that supply.

- 57.2 Subject to clause 57.4, if GST is payable on a Taxable Supply made under, by reference to or in connection with this Deed, the Party providing the Consideration for that Taxable Supply is to also pay the GST Amount as additional Consideration.
- 57.3 Clause 57.2 does not apply to the extent that the Consideration for the Taxable Supply is expressly stated in this Deed to be GST inclusive.
- 57.4 No additional amount is to be payable by the Council under clause 57.2 unless, and only to the extent that, the Council (acting reasonably and in accordance with the GST Law) determines that it is entitled to an Input Tax Credit for its acquisition of the Taxable Supply giving rise to the liability to pay GST.
- 57.5 If there are Supplies for Consideration which is not Consideration expressed as an amount of Money under this Deed by one Party to the other Party that are not subject to Division 82 of the *A New Tax System (Goods and Services Tax) Act 1999*, the Parties agree:
- 57.5.1 to negotiate in good faith to agree the GST inclusive market value of those Supplies before issuing Tax Invoices in respect of those Supplies;

12/07/2017

34



**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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- 57.5.2 that any amounts payable by the Parties in accordance with clause 57.2 (as limited by clause 57.4) to each other in respect of those Supplies will be set off against each other to the extent that they are equivalent in amount.
- 57.6 No payment of any amount pursuant to this clause 57, and no payment of the GST Amount where the Consideration for the Taxable Supply is expressly agreed to be GST inclusive, is required until the supplier has provided a Tax Invoice or Adjustment Note as the case may be to the recipient.
- 57.7 Any reference in the calculation of Consideration or of any indemnity, reimbursement or similar amount to a cost, expense or other liability incurred by a party, is to exclude the amount of any Input Tax Credit entitlement of that party in relation to the relevant cost, expense or other liability.
- 57.8 This clause continues to apply after expiration or termination of this Deed.

**58 Completion of Landowner's obligations under this Deed**

- 58.1 This clause applies when the Landowner has completed all of its obligations under this Deed to the satisfaction of the Council.
- 58.2 The Landowner may make an application to the Council in writing requesting the Council to certify in writing that the Landowner has completed all of its obligations under this Deed to the satisfaction of the Council.
- 58.3 The Council is to issue the certificate referred to in clause 58.2 within 28 days of receiving the Landowner's application referred to in that clause.

**59 Explanatory Note Relating to this Deed**

- 59.1 The Appendix contains the Explanatory Note relating to this Deed required by clause 25E of the Regulation.
- 59.2 Pursuant to clause 25E(7) of the Regulation, the Parties agree that the Explanatory Note in the Appendix is not to be used to assist in construing this Planning Agreement.

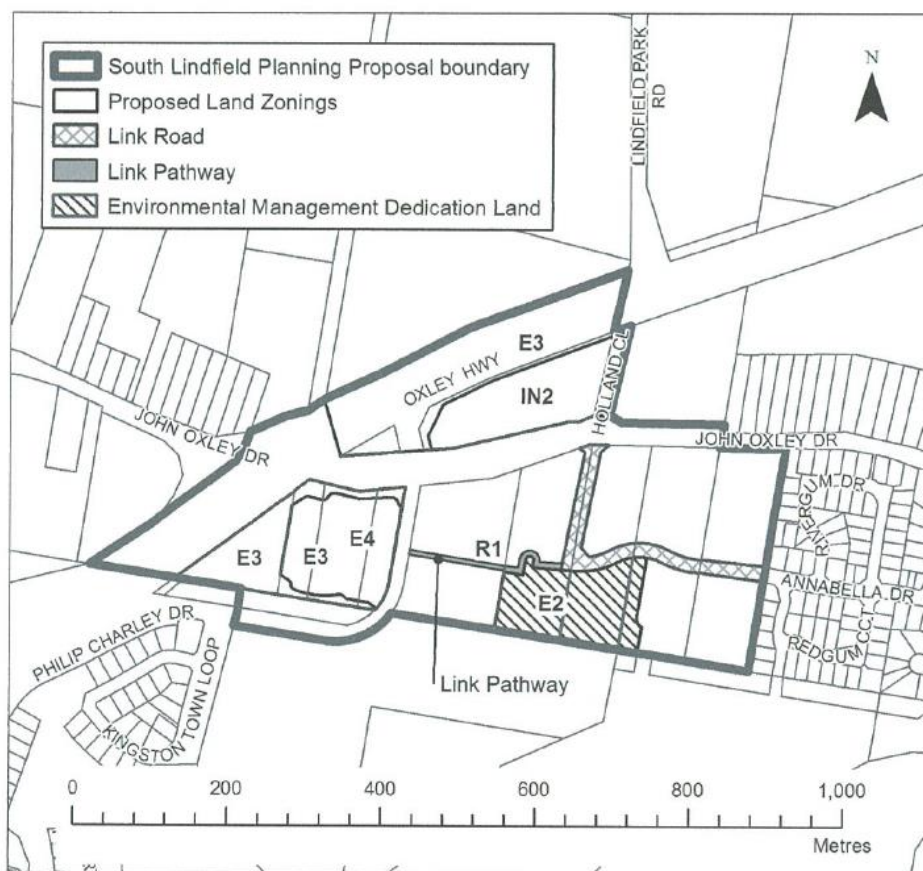




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Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

**Schedule 1**

(Clause 1.1)

**Map**

12/07/2017

36

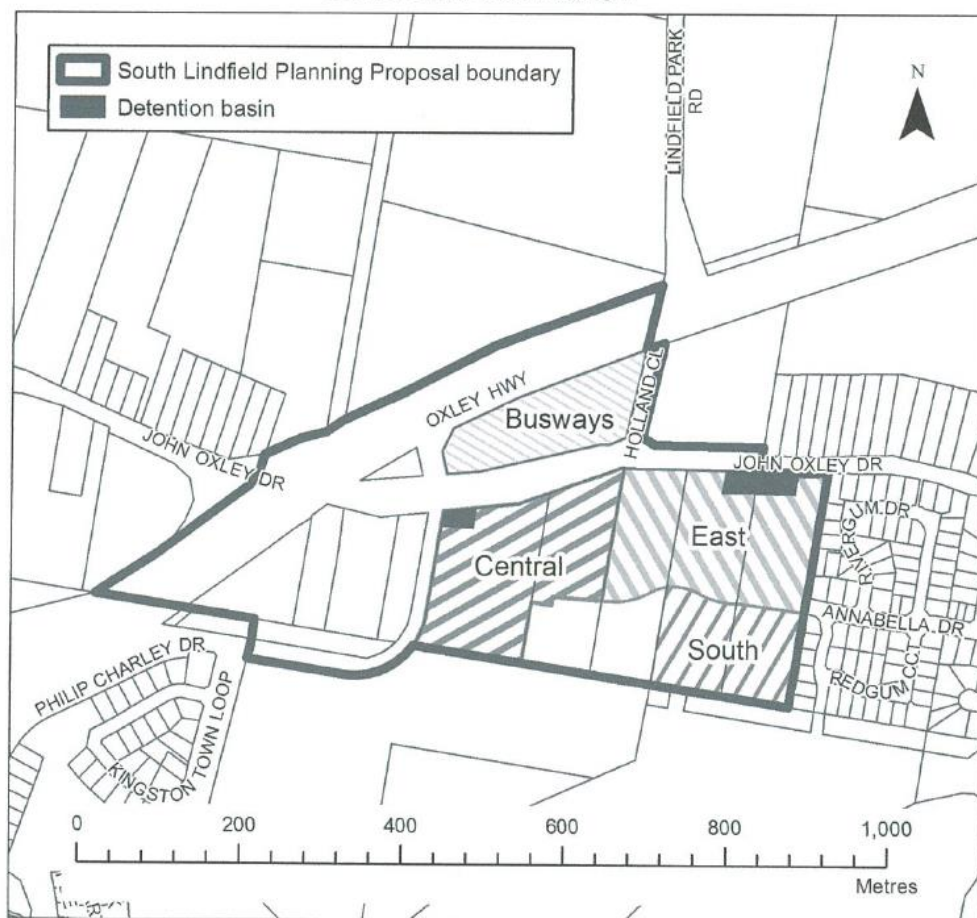
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Ross Wayne Ramm and Jennifer Maree Ramm

**Schedule 2**

(Clause 1.1)

**Stormwater Catchment Map**

See map on the following page.



12/07/2017

37

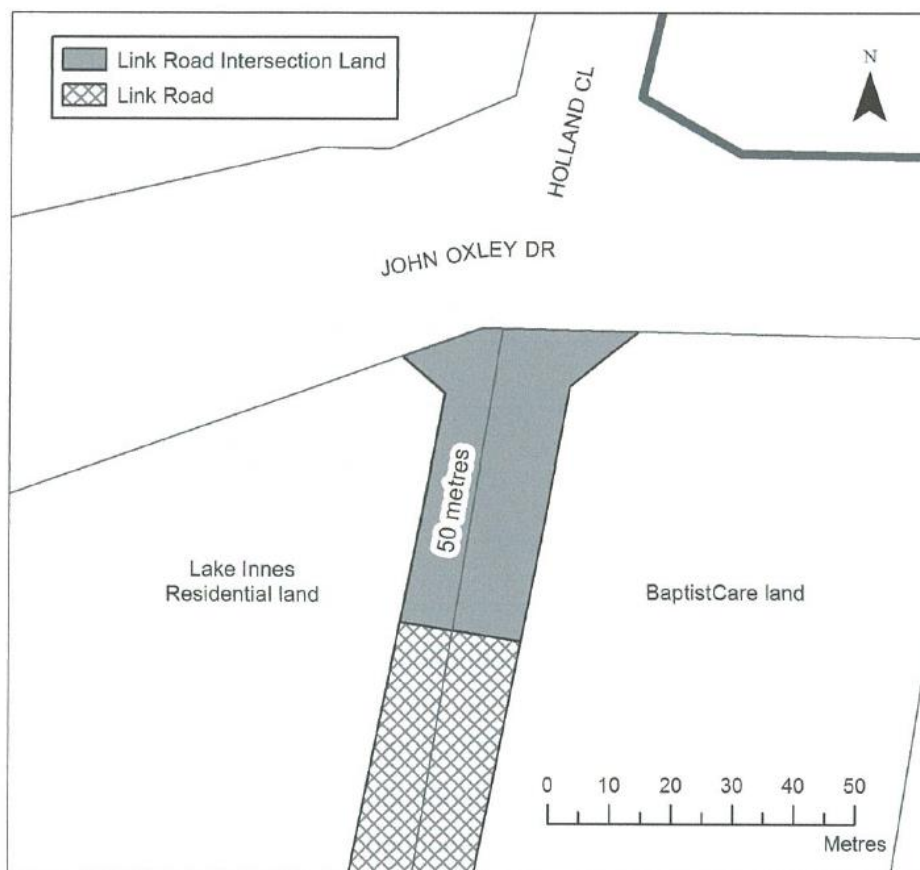


South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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**Schedule 3**

(Clause 1.1)

**Link Road Intersection Map**

12/07/2017

RR  
38

South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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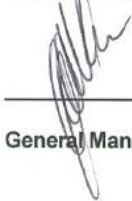
## Execution

Executed as a Deed

Dated: 16 January 2019

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Executed by the Council:



General Manager

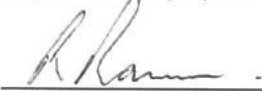


Witness/Name/Position:

EA to CM

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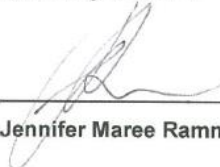
Executed on behalf of the Landowner in accordance with s127(1) of the  
Corporations Act (Cth) 2001



Ross Wayne Ramm



Witness/Name



Jennifer Maree Ramm



Witness/Name

12/07/2017



39

**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**Appendix**

(Clause 59)

*Environmental Planning and Assessment Regulation 2000*

(Clause 25E)

**Explanatory Note**

**Draft Planning Agreement**

Under s93F of the *Environmental Planning and Assessment Act 1979*

**Parties**

**Port Macquarie-Hastings Council** ABN 11 236 901 601 of Corner Lord and Burrawan Streets, Port Macquarie, New South Wales, 2444 (**Council**)

**Ross Wayne Ramm and Jennifer Maree Ramm** of 153 John Oxley Drive, PORT MACQUARIE NSW 2444 (**Landowner**)

**Description of the Land to which the Draft Planning Agreement Applies**

Land means part of the Land being Lot 1 DP 369206.

The Land is part of the land the subject of a resolution of the Council to prepare a draft local environmental plan to permit urban development on parts of that land. That local environmental plan once made is referred to in the planning agreement as the South Lindfield LEP.

**Description of Proposed Development**

The future development of the Land for urban purposes.



12/07/2017

40

**South Lindfield Urban Release Area Planning Agreement**  
**Port Macquarie-Hastings Council**  
**Ross Wayne Ramm and Jennifer Maree Ramm**

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**Summary of Objectives, Nature and Effect of the Draft Planning Agreement**

**Objectives of Draft Planning Agreement**

The objective of the Draft Planning Agreement is to secure funding, land and the carrying out of work for:

- the establishment, dedication and management of environmental lands in conjunction with the urban development that will be made permissible by the South Lindfield LEP,
- the provision of infrastructure to meet the Development that will be made permissible by the South Lindfield LEP,
- administration costs.

**Nature of Draft Planning Agreement**

The Draft Planning Agreement is a planning agreement under s93F of the *Environmental Planning and Assessment Act 1979 (Act)*. The Draft Planning Agreement is a voluntary agreement under which Development Contributions (as defined in clause 1.1 of the Draft Planning Agreement) are made by the Landowner for various public purposes (as defined in s93F(3) of the Act).

**Effect of the Draft Planning Agreement**

The Draft Planning Agreement:

- relates to the carrying out of the Development (as defined in clause 1.1 of the Draft Planning Agreement) on the Land by the Landowner,
- imposes obligations on the Landowner to make Development Contributions only if:
  - Development Consent is granted to the carrying out of the Development or any Stage, and
  - the owners of certain other participating land (other than the Land) also enter into a planning agreement in materially the same terms as the Planning Agreement.
- partly excludes the application of s94 of the Act to the Development,
- does not exclude the application of s94A of the Act to the Development,
- does not exclude the application of s94EF of the Act to the Development,
- makes provision for the dedication of the following land in conjunction with the urban development of the South Lindfield Land:
  - Environmental Management Land,
  - Link Road and Link Pathway
- makes provision for the Landowner to carry out of the following works in conjunction with the urban development of the Land in certain circumstances:
  - Stormwater Works,
  - Link Road and Link Pathway,



**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

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- Link Road Intersection Works,
  - Establishment of the Environmental Management Land, and
  - Management of the Environmental Management Land for 3 years after the land is dedicated to the Council or such other period or periods as the Parties agree.
- makes provision for the following additional monetary contributions to be made in conjunction with the carrying out of the Development:
  - for road works.
  - for administration of Development Contributions, and
  - towards the dedication of land and works which the Landowner does not dedicate or carry out itself.
- requires the Council to apply monetary Development Contributions made under the agreement towards the specified purpose for which they were made and at the location, in the manner and to the standard (if any) specified in the agreement except if the council considers that the public interest would be better served by applying those to another purpose,
- imposes obligations on the Landowner in relation to the carrying out of specified Works, the handing over of those Works to the Council and the rectification of defects in those Works,
- is to be registered on the title to the Land,
- imposes restrictions on the Parties transferring the Land or part of the Land or assigning, or novating an interest under the agreement,
- prohibits the Landowner from apply for, or causing suffering or permitting the issuing of a certificate under Part 4A of the Act unless and until Development Contributions are provided in accordance with the Draft Planning Agreement,
- provides for the provision of works as executed plans in respect of Works carried out by the Landowner,
- provides two dispute resolution methods for a dispute under the agreement, being expert determination and mediation,
- provides that the agreement is governed by the law of New South Wales, and
- provides that the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) applies to the agreement.

**Assessment of the Merits of the Draft Planning Agreement****The Planning Purposes Served by the Draft Planning Agreement**

The Draft Planning Agreement:

- promotes and co-ordinates the orderly and economic use and development of the Land to which the Agreement applies,
- provides land for public purposes in connection with the Development,
- provides and co-ordinates community services and facilities in connection with the Development,

12/07/2017

42





**South Lindfield Urban Release Area Planning Agreement****Port Macquarie-Hastings Council****Ross Wayne Ramm and Jennifer Maree Ramm**

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- provides for the protection of the environment and ecologically sustainable development, and
- provides increased opportunity for public involvement and participation in environmental planning and assessment of the Development.

**How the Draft Planning Agreement Promotes the Public Interest**

The draft Planning Agreement promotes the public interest by promoting the objects of the Act as set out in s5(a)(ii)-(vii) and 5(c) of the Act.

**For Planning Authorities:*****Development Corporations - How the Draft Planning Agreement Promotes its Statutory Responsibilities***

N/A

***Other Public Authorities – How the Draft Planning Agreement Promotes the Objects (if any) of the Act under which it is Constituted***

N/A

***Councils – How the Draft Planning Agreement Promotes the Elements of the principles for local government***

The Draft Planning Agreement promotes the principles for local government by:

- managing lands and other assets so that current and future local community needs can be met in an affordable way
- working with landowners to secure appropriate services and facilities for the local community,
- actively engaging the local community by providing a means that allows the community to make submissions to the Council in relation to the Agreement.

***All Planning Authorities – Whether the Draft Planning Agreement Conforms with the Authority's Capital Works Program***

The Draft Planning Agreement requires that specified Works to be carried out by the Landowner for the purposes of providing sewerage services and roads.

These Works are not included in the Council's relevant current capital works program. However, the Council's management plan identifies these types of Works in the relevant capital works program.

Accordingly, the provision of these Works under the Agreement is consistent and conforms with the capital works envisioned by the Council's management plan.

12/07/2017

43



South Lindfield Urban Release Area Planning Agreement  
Port Macquarie-Hastings Council  
Ross Wayne Ramm and Jennifer Maree Ramm

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***All Planning Authorities - Whether the Draft Planning Agreement specifies that certain requirements must be complied with before issuing a construction certificate, subdivision certificate or occupation certificate***

The Draft Planning Agreement specifies that certain obligations under the Agreement must be complied with before the issuing of Subdivision Certificates, Construction Certificates and Occupation Certificates.

12/07/2017

Handwritten signatures and the number 44.