

PACIFIC DRIVE PTY LTD



Preliminary Site Investigation

10-16 Pacific Drive, Port Macquarie, NSW

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Copies		Recipient	
1	Soft Copy (PDF – Secured, issued by email)	Mr Karam Tobiah Pacific Drive Pty Ltd Suite 1, Level 3, 51 Pitt Street SYDNEY NSW 2000	
2	Original (Saved to Digital Archives)	El Australia Suite 6.01, 55 Miller Street, PYRMONT NSW 2009	

Author

Technical Reviewer

Mag.

LUIZA BARBOSA Civil / Environmental Engineer		WARWICK HAYES Environmental Scientist	
Revision	Details	Date	Amended By
0	Original	16 December 2020	-

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Executive Summary

Pacific Drive Pty Ltd engaged EI Australia to conduct a Preliminary Site Investigation (PSI) for the property located at 10-16 Pacific Drive, Port Macquarie, NSW ('the site').

Objective

The objective of this PSI was to provide a qualitative assessment of the environmental condition of the site, by appraising the potential for site contamination on the basis of field observations, historical land uses and anecdotal and documentary evidence.

Key Findings

The key findings of this PSI were as follows:

- The site was a roughly rectangular block of land, covering a total area of 3437.3m². It was occupied by a two-storey, brick building on the northern portion, being used for temporary residential accommodation (i.e. a motel). A concrete driveway and open car park occupied the southern portion of the building. Remaining areas were vacant.
- Based on the historical information, the northern portion of the site had continuously been used for temporary residential accommodation (i.e. a motel) from about 1974 up to the present time. Prior to 1974, the land was expected to be vacant (undeveloped). The site surroundings had been used for mixed general residential, environmental conservation and public recreation purposes.
- The site was free of statutory notices and licensing agreements issued under the Contaminated Land Management Act 1997 and Protection of the Environment Operations Act 1997. It was not included on the List of NSW Contaminated Sites Notified to the EPA.
- Visual evidence of gross contamination, including fragments of fibre cement sheeting (FCS), was not observed on any part of the site. No suspicious odour was detected during the site inspection.
- There was no evidence that an underground storage tank (UST) was observed on the site. No above-ground storage tank (AST) was present.
- The subsurface was generalised as a shallow (<0.5m thickness) layer of silty sand, topsoil/fill, overlying natural, residual silty clay. The potential for acid sulfate soils (ASSs) to be present on the site was low.
- The conceptual site model (CSM) identified several potential contaminating sources at the site, those being fill soils of unknown origin and quality, pesticide use, leakage from parked vehicles and weathering of structures containing hazardous materials. However, it was considered that the risks associated with (possible) site contamination were low with respect to the identified sensitive receptors.

Based on the findings of this PSI, and with consideration of El's Statement of Limitations (**Section 7**), it was concluded that the potential for contamination to exist on the site was low. The site was deemed to be suitable for the proposed development, in accordance with Clause 7 of *State Environmental Planning Policy 55 - Remediation of Land.*



1. Introduction

1.1 Background

Pacific Drive Pty Ltd (client) engaged El Australia Pty Ltd (El) to undertake a Preliminary Site Investigation (PSI) for 10-16 Pacific Drive, Port Macquarie, NSW (herein referred to as 'the site').

The site is located 1.5km east of the Port Macquarie town centre (**Figure 1, Appendix A**), within the Local Government Area (LGA) of Port Macquarie - Hastings Council. It was roughly rectangular in shape, comprised of several land (cadastral) parcels, identified as:

- Lots 1 and 2 in DP538077;
- Lot A in DP441800; and
- Lot 101 in DP1244390.

The total area is 3437.3m² (Figure 2, Appendix A). At the time of this PSI, the site was occupied by a two storey motel (*Rocky Beach*) in the north-western portion, with the remainder being vacant land.

A geotechnical investigation of the site was completed by EI concurrently with this DSI (EI Reference E24947.G03). Relevant findings from the corresponding report, relating to the subsurface conditions and groundwater levels, are summarised herein.

Note: El was not aware of any other environmental investigation previously conducted at the site.

1.2 Proposed Development

Based on the supplied plans (**Appendix B**), the proposed development involved the demolition of all existing structures, followed by the construction of a seven-storey, residential (apartment) building, overlying a single-level basement. Bulk excavation for the basement would be to a relative level of 28.10m Australian Height Datum (AHD) across the northern portion of the site, equating to 11.00m below existing ground level (BEGL), although locally deeper excavations may be required for footings, service trenches, crane pads and lift overrun pits. Minimal excavation was proposed for the southern end of the site.

Note: the basement will be setback 6m from the northern and western site boundaries, with increased setbacks along the southern and eastern boundaries.

1.3 Regulatory Framework

The following regulatory framework and guidelines were considered during this PSI:

- Contaminated Land Management Act 1997 (CLM Act 1997);
- Protection of the Environment Operations Act 1997 (POEO Act 1997);
- NSW Environmental Planning and Assessment Act 1979 (the EP&A Act 1997); in particular
- State Environmental Planning Policy 55 (SEPP 55) Remediation of Land;
- Port Macquarie Hastings Local Environmental Plan 2011;
- NEPC (2013) Schedule B(2) Guideline on Site Characterisation;
- EPA (2017) Guidelines for the NSW Site Auditor Scheme; and
- EPA (2020) Consultants Reporting on Contaminated Land: Contaminated Land Guidelines.



The objective of this PSI was to provide a qualitative assessment of the environmental condition of the site, by appraising the potential for site contamination on the basis of field observations, historical land uses and anecdotal and documentary evidence.

1.5 Scope of Works

In order to achieve the above objective and in keeping the project cost-effective while generally complying with the EPA (2020) guidelines for consultants reporting on contaminated sites, the scope of works was as follows:

- Review of relevant (hydro)geological and soil landscape maps for the project area;
- Detailed site walkover inspection, including a search for existing underground services;
- Review of an environmental risk and planning report compiled by Lotsearch Pty Ltd, which included historical aerial photographs and business directories, as well as searches of databases maintained by various statutory authorities;
- Review of property files archived by Port Macquarie Hastings Council, for information relating to operational site history and/or relevant environmental incidents; and
- Data interpretation and reporting.

This PSI report was completed with reference to the EPA (2020) *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines.* It documents the investigation works, with discussion of the findings in regards to human health, the environment and the aesthetic condition of the land. It concludes with statements concerning the potential for contamination to exist on the land and the site's suitability for the proposed residential land use.

2. Site Description

2.1 Property Identification

The site identification details and associated information are presented in **Table 2-1**. Site locality and layout plans are shown in **Figures 1** and **2** (**Appendix A**).

Table 2-1 Site Identification, Location and Zoning

Attribute	Description	
Street Address	10-16 Pacific Drive, Port Macquarie, NSW	
Location Description	1.5km east of the Port Macquarie town centre. Bound by Pacific Drive to the east and residential dwellings to the north, west and south.	
Site Coordinates	Coordinates of the north-east corner (under GDA2020-MGA56): Easting: 492826.203; Northing: 6522098.485. (Source: <u>https://maps.six.nsw.gov.au/</u>)	
Site Area	3437.3m ²	
Lots and DPs	Lots 1 and 2 in DP538077, Lot A in DP441800 and Lot 101 in DP1244390.	
State Survey Marks	 Two State and two Permanent Marks are situated close to the site: SS24534: approximately 20m south, on the northern corner of Home Street and Pacific Drive. SS12122D: approximately 48m east, on the southern corner of Home Street and Pacific Drive. PM15617D and PM44148F: approximately 50m and 42m north-west, respectively, on the eastern side of Pacific Drive. (Source: https://maps.six.nsw.gov.au/) 	
LGA	Port Macquarie - Hastings Council	
Current Zoning	R3 – Medium Density Residential (<i>Port Macquarie - Hastings Local Environmental Plan</i> 2011)	
Site Description	At the time of this investigation, the site was occupied by a two-storey, brick building on the northern portion, being used for temporary residential accommodation (i.e. a motel). A concrete driveway and open car park occupied the southern portion of the site. Remaining areas were vacant.	

2.2 Local Land Use

The site is situated within a mixed use area, including general residential, environmental conservation and public recreation. The land uses and receptors immediately surrounding the site are described in **Table 2-2**.

Table	2-2	Local	Land	Use
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Direction	Land Use Description	Sensitive Receptor (distance from site)
North	Low to medium density residential Hastings Secondary College and Oxley Beach	Residents (approximately 5m) Oxley Beach reserve (approximately 325m)
South	Low to medium density residential	Residents (approximately 5m)
East	Pacific Drive and Windmill Hill Reserve Rocky Beach	Windmill Hill Reserve (approximately 20m) Rocky Beach (approximately 150m)
West	Low to medium density residential	Residents (approximately 5m)



2.3 Regional Setting

Local topography, (hydro)geology and soil landscape information is summarised in Table 2-3.

Table 2-	3 Regional	Setting	Information
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Attribute	Description
Topography	Southwest dipping topography, with levels varying from RL 39.6m in the north- eastern corner to RL 28.5m in the south-western corner (Appendix B).
Site Drainage	Site drainage is likely to be consistent with the general slope of the site. Runoff expected to be collected by pit and pipe drainage in Home Street, then released into the municipal stormwater system and on to the Wrights Creek (730m west).
Regional Geology	Information on regional sub-surface conditions, referenced from the <i>Port Macquarie 1:100,000 and 1:25,000 Coastal Quaternary Geology Map Series</i> (Hashimoto and Troedson, 2007) indicates the site to be underlain by Cambro-Ordovician, Devonian and Carboniferous sedimentary and minor volcanic rocks and/or Cambrian serpentinised ultramafic rocks.
Soil Landscape	According to the DPIE (2020) <i>eSPADE v2.0 Portal</i> , the site overlies a Thrumster (<i>th</i>) residual landscape. This landscape is characterised by undulating and rolling rises of 30-60m elevation, with broad crests and sideslopes, and tall, open dry sclerophyll forest with rainforest in protected gullies. The natural soils are deep (>300cm), well-drained Krasnozems and Euchrozems, with some Laterites on crests.
Acid Sulfate Soil (ASS) Risk	The site is not classified on the <i>Port Macquarie / Hastings LEP - Acid Sulfate Soils Map</i> (Sheet ASS_013FA). With reference to the <i>Wauchope / Port Macquarie ASS Risk Map</i> (1:25,000 scale; Atkinson, 1997), the subject land lies within the class description of <i>'No Known Occurrence.'</i> In such cases, ASSs are not known or expected to occur and "land management activities are not likely to be affected by ASS materials". Therefore risk of ASS presence on-site was considered to be low.
Nearest Water Feature	Pacific Ocean (approximately 95m east)
Groundwater Flow Direction	Anticipated to be south-west, towards Wrights Creek (730m west), which joins Kooloonbung Creek, then Hastings River, before draining into the Pacific Ocean.

2.4 Site Walkover Inspection

Observations recorded during a walkover inspection of the site, conducted on 8 December 2020, are summarised below. Refer also to photographs attached in **Appendix C**.

- The northern portion of the site was occupied by a two-storey, brick building. A concrete
 paved driveway and car parking area was south of the building.
- The building structure appeared to be in good to fair condition. Materials with the potential to contain asbestos and/or lead-based paints were observed.
- The concrete pavement was in fair condition; major cracking was not observed.
- Remaining parts of the site were vacant, covered by grass and trees.
- No visual evidence of land contamination was observed on any part of the site at the time of the inspection (including fragments of fibre cement sheeting (FCS)).
- No visual evidence of infrastructure associated with an underground storage tank (UST) was observed on the site. No above-ground storage tank (AST) was present.
- No unusual odour was detected on any part of the site during the inspection.
- Surrounding properties were residential in nature, including those up-slope of the site.
- Pacific Drive was a two lane, asphalt-paved road, situated along a ridgeline that slopes to the south. The highest elevation of Pacific Drive is at the corner of Widmill Street. Beyond the cliff side was the Pacific Ocean.



3. Site History and Searches

3.1 Lotsearch Report

Lotsearch Pty Ltd compiled *Enviro Professional Report LS016530 EP* (dated 4 December 2020), in response to a request (application) by EI for historical information relating to the site. It included historical aerial photographs (one from each of the years 1956, 1965, 1974, 1979, 1989, 1997, 2010, 2016 and 2020), business directories (covering the period 1954-1991) and searches of various environmental resources and plans archived by statutory authorities. A summary of the relevant (historical) information follows. The report is presented in full in **Appendix D**.

3.1.1 Aerial Photographs

Aerial photography dating back to 1956 is summarised in Table 3-1.

Year	Site	Surrounding Area
1956	The site was predominantly vacant land.	Surrounding lands appeared to be used for residential purposes, with properties occupying mostly the north and south. Few properties were observed at the west.
1965	The site remained vacant, although a street crossing from east to west was observed at the northern portion.	Surrounding area remained predominantly unchanged from the 1956 aerial photograph.
1974	The site remained unchanged from the 1965 aerial photograph; however the previous street is not evident anymore.	Surrounding lands within a 150m radius have undergone through minor changes, such as more residential properties and construction of new roads and/or roundabouts.
1979	A building with associated concrete driveway was constructed in the north-west portion of the site. The structures have similar shape to the current existing.	More residential properties was constructed and enlargement of the roads is observed.
1989	The site remained primarily unchanged.	Evidence of medium density building at the north was observed. Few residential dwellings were constructed at the south and west.
1997	The site remained primarily unchanged.	The surrounding land remained unchanged, except for few residential properties at the north- west.
2010	The site remained primarily unchanged.	The surrounding land remained unchanged, except for other medium density buildings constructed at the north. Two houses existent a the north-east of the site (east of the Pacific Drive) was demolished.
2016	The site remained primarily unchanged.	The surrounding area remained primarily unchanged
2020	The site remained primarily unchanged.	The surrounding area remained primarily unchanged

In summary, the site was vacant land until at least 1974. Structures (building and concrete pavement) on the northern portion were constructed between 1974 and 1979, which remained unchanged until the present day. Surrounding land was comprised of residential structures since 1956, the density of which increased with time.



3.1.2 Business Directories

The Universal Business Directory (UBD), covering the period 1950-1991, was reviewed in the *Enviro Professional Report LS016530 EP.* Commercial activities which occurred on the site are identified below.

Premise Intersection or Roads Matches

1950 - 1960:

No records from the 1950-1960 UBD were available for the site and its surroundings (suggesting no commercial activity was in operation).

1961 -1970:

No records from the 1950-1960 UBD were available for the site. Records for surrounding properties indicated that a pest control business was in operation at 4 Home Street (49m south and down gradient of the site).

1971 - 1980:

No records from the 1971-1980 UBD were available for the site. A motor bus service was identified at Burrawan Street, Port Macquarie (103m north and down gradient of the site).

1981 - 1991:

The records indicated a motel was in operation on-site. Activities on the surrounding properties were related to motels at 20 Burrawan Street, Port Macquarie (128m north-west) and builders and/or building contractors at 5 Pacific Drive, Port Macquarie (57m north).

Dry Cleaners, Motor Garages and Service Stations

Records of motor garages and services within the vicinity of the site are presented in **Table 3-2**. No dry cleaning business was present within a 500m radius.

Period	Business Activity	Location
1961-1967	Motor Service Stations - Petrol, Oils	Business present on the same road as the site.
1961	Motor Garages and/or Engineers	Business present on Home Street, 21m south- west of the site (down gradient).
1961-1982	Motor Garages and/or Engineers and/or Service Stations-Petrol, Oils	Business present on Owen or Gordon Street, 498m north-west of the site (down gradient).

 Table 3-2
 Summary of Motor Garages and Service Stations

Overall, commercial use of the site was limited to a motel, which was registered as being in operation from 1981. With respect to the surrounding properties, no activity of significance was expected to have operated up-gradient of the site.

3.1.3 Database Searches

Searches of public registers maintained by the EPA for statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997* were conducted by Lotsearch. These searches <u>did not</u> identify any records relating to the site 10-16 Pacific Drive, Port Macquarie, NSW. However the following property was included on the *List of NSW Contaminated Sites Notified to the EPA* under Section 60 of the CLM Act 1997:

 Caltex Port Macquarie Service Station - 29 Lord Street, Port Macquarie (662m north-west and downgradient of the site). Management Class: Regulation under CLM Act not required.



Additional findings from searches of other environmental resources and plans recorded in *Enviro Professional Report LS016530 EP* (**Appendix D**) were as follows:

- No former gasworks were present within a 1km radius of the site.
- No waste management and liquid fuel facilities were present within a 1km radius of the site, except that a petrol station (Caltex Port Macquarie Service Station) was located 662m north-west.
- The site and the surrounding area with a radius of 1km did not form part of the EPA PFAS investigation / management program (PFAS being per- and poly- fluoroalkyl substances).
- There were no major AST areas or points within a 1km radius of the site.
- The site and surroundings were not recorded as having "naturally occurring asbestos potential", nor were there any known "asbestos manufacturing and/or waste disposal sites".
- The site and surroundings were not under radiological investigation, or within a lead abatement strategy area.
- Based on the salinity assessment data, the site and surrounding area (<1km radius) were not regarded as saline.
- No mining subsidence district was present within the surveyed area.

3.1.4 Groundwater Bore Records and Local Groundwater Usage

The search for groundwater bores registered with WaterNSW identified multiple bores within a 2km radius of the site. This indicated that the local groundwater resource was being utilised. Data for the three closest bores is summarised in **Table 3-3**.

Bore	Drilled Date / Bore Depth (m BEGL)	SWL (m BEGL) / Yield (L/s)	Authorised Bore Purpose	Distance and Direction
GW065478	1991 / 39.60	3.0 / 8.850	Irrigation, recreation (groundwater)	530m north-west
GW303216	-	-	Domestic	585m north-west
GW300047	1995 / 21.00	6.00 / 0.500	Industrial	628m north-west

Table 3-3 Summary of Registered Groundwater Bores Within 700m of the Site

3.2 Council Information

An application to access property files held by Port Macquarie - Hastings Council was initiated on 26 November 2020. Available documents related to development / building applications for 10 Pacific Drive, Port Macquarie are summarised in **Table 3-4**.

Table 3-4 Summary of Pi	roperty Files Held by	y Port Macquarie-Hastin	gs Council
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Application	Application Type	Date	Details
5.1989.131.1	Development Application	03/04/1989	Additions to existing motel building
6.1989.813.1	Building Application	01/06/1989	Additions to motel building
10.2009.188.1	Development Application	19/06/2009	Change of use: motel to boarding house/hostel
11.2009.188.1	Construction Certificate	08/10/2009	Stage 1 Change of use: motel to boarding house/hostel
12.2009.188.1	Occupation Certificate	17/11/2009	Stage 1 Change of use: motel to boarding house/hostel
10.2009.188.1	S96	16/03/2010	Modification to Conditions of Consent - Change of use from motel to boarding house/hostel



4. Conceptual Site Model

In accordance with NEPC (2013) Schedule B2 – Guideline on Site Characterisation, EI developed a preliminary conceptual site model (CSM) that assessed plausible linkages between potential contamination sources, migration pathways and receptors. The CSM also identifies data gaps in the existing site characterisation.

4.1 Rationale

The primary purpose of this PSI was to appraise the potential for site contamination and, if there was such potential, evaluate the associated environmental and human-health risks. These risks were defined as the probability that the utility of the site would be diminished by the presence of soil, soil vapour and/or groundwater contamination.

This appraisal did not involve intrusive sampling and laboratory analysis of soils, soil vapours or groundwater. Instead, the potential for contamination was based on a desktop study, collating information from available maps, historical record searches and government-maintained databases, as well as a walkover inspection. Professional judgement was then applied, based on experience.

4.2 Summary of Site History

Based on the historical information, the site had continuously been used for temporary residential accommodation (i.e. a motel) from about 1974 up to the present time. Prior to 1974, the land was expected to be vacant (undeveloped). The site surroundings had been used for mixed general residential, environmental conservation and public recreation purposes.

4.3 Predicted Subsurface Conditions

Based on the logs for four boreholes, mechanically auger drilled to depths of 20.2m BEGL as part of the EI (2020) *Geotechnical Investigation,* the subsurface was generalised as a shallow (<0.5m thickness) layer of silty sand, topsoil/fill, overlying natural, residual silty clay. No groundwater inflow or seepage was observed during or after drilling of the boreholes.

4.4 Potential Contamination Sources

The potential contamination sources were as follows:

- Imported fill soils of unknown origin and quality (used to grade the site and provide seating for pavements);
- Application of pesticides beneath the building footprints and around footings;
- Leakage from vehicles in the parking areas; and
- Weathering of exposed building fabrics containing hazardous substances (including bonded asbestos-containing materials (ACM), lead-based paints and metallic surfaces) and/or deposition of such in near-surface soils.

PFAS Assessment

EPA (2017) requires that PFAS are considered when investigating land contamination. The probability of PFAS occurrence, which was based on considerations outlined in the *PFAS National Environmental Management Plan* (NEMP 2020), as well as the EnRisk (2016) decision tree, is reviewed in **Table 4-1**. In this instance, the potential for PFAS to be present on-site was low and subsequently PFAS sampling / analysis of soil and water was unwarranted.



Preliminary Screening					
Has an activity listed in NEMP (2020) ² as being associated with PFAS contamination occurred on-site? If so, list activity.	L				
Has an activity listed in NEMP (2020) ² as being associated with PFAS contamination occurred up-gradient or adjacent to the site? If so, list activity.	L				
Did fire training involving the use of suppressants occur on-site between 1970 and 2010?	L				
Did fire training occur up-gradient or adjacent to the site between 1970 and 2010? ³	L				
Have "fuel" fires ever occurred on-site between 1970 and 2010? (e.g. ignition of fuel (solvent, petrol, diesel, kero) tanks?)	L				
Have PFAS been used in manufacturing or stored on-site? 4	L				
Could PFAS have been imported to the site in fill materials from a site with an activity listed in NEMP (2020)?	L				
Could PFAS-contaminated groundwater or run-off have migrated on to the site?	L				
Is the site or adjacent sites listed in the NSW EPA PFAS Investigation Program? 5	L				
If the probability is medium or high in any of the rows, does the site analytical suite need to be optimised to include preliminary sampling and testing for PFAS in soil (incl. ASLP testing) and waters?	No				
Note 1 Probability: L – low (all necessary documentation has been reviewed and there is no recorded instance rationale); M – moderate (all necessary documentation has been reviewed and there is potential evider instance with compelling rationale); H – high (all necessary documentation has been reviewed and there is potential evider instance with compelling rationale); H – high (all necessary documentation has been reviewed and there is no recorded instance).	nce of a recorded				

recorded instance with compelling rationale). Note 2

Activities listed in Appendix B of the NEMP (2020). (https://www.oecd.org/env/ehs/risk-management/PFC_FINAL-Web.pdf)

Note 3 Runoff from up-gradient PFAS use may impact surface water, soil, sediment and groundwater.

PFAS is used wide range of industrial processes and consumer products, including in the manufacture of non-stick cookware, Note 4 specialised garments and textiles, Scotchguard™ and similar products (used to protect fabric, furniture, leather and carpets from oils and stains), metal plating and in some types of fire-fighting foam. (https://www.nicnas.gov.au/chemical-information/factsheets/chemical-name/perfluorinated-chemicals-pfas)

Note 5 Refer to https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program.

Refer also to Lotsearch Enviro Professional Report LS016530 EP for additional search information relating to PFAS (Appendix D).

Emerging Chemicals

The EPA uses Chemical Control Orders (CCOs) as a primary legislative tool under the Environmentally Hazardous Chemicals Act 1985 to control chemicals of concern and limit their potential impact on the environment. Considerations for chemicals controlled by CCOs, and other potential emerging chemicals, are outlined in Table 4-2. In this instance, the potential for an emerging chemical of concern to be present on-site was low, with the possible exceptions of polychlorinated biphenyls and pesticides in imported fill and near surface (building footing) soil.



Table 4-2 Emerging or Controlled Chemicals

Decision	
No	
No	
No	
Possibly in imported fill	
Possibility for pesticides / PCB to have been applied to footings and/or present in imported fill	
No	
N/A	
-	

Note 1 From burning of certain chemicals, smelting or chemical manufacturing or fire on or near the site.

Note 2 From anti-fouling paints used or removed at boat and ship yards and marinas.

Note 3 From older transformer oils and electrical capacitors

Note 4 Twenty-four mostly organochlorine pesticides and industrial by-products

Note 5 Other chemicals considered as emerging (e.g. 1,4 dioxane; associated with some CVOC).

4.5 Contaminants of Potential Concern

The COPC at the site were considered to be:

- Priority Metals (PM; arsenic, cadmium, chromium copper, lead, mercury, nickel, zinc);
- Total Recoverable Hydrocarbons (TRH);
- Volatile Organic Compounds (VOC); including
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAH);
- Organochlorine and Organophosphorus Pesticides (OCP / OPP);
- Herbicides;
- Polychlorinated Biphenyls (PCB); and
- Asbestos.

4.6 Risk Assessment

An assessment of the potential contamination risks for the site is outlined in **Table 4-3**. Overall, the potential for contamination derived from the identified sources was considered to be low.

Potential Source	Impacted Medium	COPC	Likelihood (Risk) of Contamination
Imported fill soils of unknown origin and quality	Near-surface soil (<0.5m)	PM, TRH, BTEX, PAH, OCP, OPP, PCB and asbestos	Low Filling expected beneath the building sub-floor and surface slabs (for seating / levelling purposes). However, geotechnical bore logs indicate the extent of filling is shallow.
Application of pesticides	Surface soil (building footings)	PM (arsenic and copper in particular), OCP and OPP	Low If present, expected to be limited to shallow, building footing soils, due to the nature of their application (or present in the near-surface filling). Metals and OCP are highly persistent in soils, however.

Table 4-3 Assessment of Potential Contamination Risk



Potential Source	Impacted Medium	COPC	Likelihood (Risk) of Contamination
Leakage from vehicles in parking areas	Surface soil	PM, TRH, BTEX and PAH	Low Contamination, if present, likely to be localised and restricted to surface (shallow) soils. The concrete driveway / parking areas on the site were in good condition (not stained). Surface slabs would restrict vertical movement.
Hazardous building materials	Surface soil	PM (lead in particular), PCB and asbestos	Low Given the age of the building (≥1974), hazardous building products may be present in the existing structures. ACM and lead-based paints were observed on external surfaces (e.g. walls and eaves), although fragments of such were not observed on the ground surface; Section 2.4.

4.7 Identified Receptors

The following potential receptors of site contamination were identified:

- Current site users / occupiers;
- On-site demolition / construction workers (during future redevelopment);
- Users of the adjacent land during the demolition / construction works;
- Future site users; and
- Ecological receptors in areas of exposed soil / landscaping, as well as local groundwater.

Given the assessment conducted in **Section 4.6**, the risks to these receptors were considered to be low.

4.8 Summation

A summary of EI's CSM, identifying the potential contamination sources, exposure pathways and human and environmental receptors, is presented in **Table 4-4**. Overall, EI considered the likelihood for on-site contamination to be low.



Table 4-4 Conceptual Site Model

Potential Source	Impacted Area	COPC	Medium	Sensitive Receptor	Transport Mechanism	Exposure Pathway	Likelihood of Exposure Pathway
Imported fill soils of unknown origin and quality	Site wide	HM, TRH, VOC (BTEX), PAH, OCP, OPP, PCB and asbestos	Surface soil	Current occupiers Site workers during construction Adjacent site users Future site residents Landscaping and groundwater	Site earthworks Environmental erosion Surface runoff	Inhalation of asbestos fibres Dermal contact Ingestion Vapour intrusion	Low
Historical application of pesticides	_	PM (arsenic and copper), OCP, OPP and herbicides	Surface soil	Current occupiers Site workers during construction Adjacent site users Future site residents Landscaping and groundwater	Direct spraying Leaching Site earthworks Environmental erosion	Dermal contact Ingestion	Low
Leakage from vehicles	_	PM, TRH, BTEX and PAH	Surface soil	Current occupiers Site workers during construction Adjacent site users Future site residents Landscaping and groundwater	Direct spraying Leaching Site earthworks Environmental erosion	Dermal contact Ingestion	Low
Hazardous building materials	_	Lead and asbestos	Soil	Current occupiers Site workers during construction Adjacent site users Future site residents Landscaping and groundwater	Environmental erosion Wind dispersion	Inhalation of asbestos fibres Dermal contact Ingestion	Low



5. Conclusion

The property identified as 10-16 Pacific Drive, Port Macquarie, NSW was the subject of a Preliminary Site Investigation, conducted in order to appraise the potential for on-site contamination. The key findings were as follows:

- The site was a roughly rectangular block of land, covering a total area of 3437.3m². It was occupied by a two-storey, brick building on the northern portion, being used for temporary residential accommodation (i.e. a motel). A concrete driveway and open car park occupied the southern portion of the building. Remaining areas were vacant.
- Based on the historical information, the northern portion of site had continuously been used for temporary residential accommodation (i.e. a motel) from about 1974 up to the present time. Prior to 1974, the land was expected to be vacant (undeveloped). The site surroundings had been used for mixed general residential, environmental conservation and public recreation purposes.
- The site was free of statutory notices and licensing agreements issued under the Contaminated Land Management Act 1997 and Protection of the Environment Operations Act 1997. It was not included on the List of NSW Contaminated Sites Notified to the EPA.
- Visual evidence of gross contamination, including fragments of FCS, was not observed on any part of the site. No suspicious odour was detected during the site inspection.
- There was no evidence that a UST was present on the site. No AST was present.
- The subsurface was generalised as a shallow (<0.5m thickness) layer of silty sand, topsoil/fill, overlying natural, residual silty clay. The potential for ASS to be present on the site was low.
- The CSM identified several potential contaminating sources at the site, those being fill soils
 of unknown origin and quality, pesticide use, leakage from parked vehicles and weathering
 of structures containing hazardous materials. However, it was considered that the risks
 associated with (possible) site contamination were low with respect to the identified
 sensitive receptors.

Based on the findings of this PSI, and with consideration of El's Statement of Limitations (**Section 7**), it was concluded that the potential for contamination to exist on the site was low. The site was deemed to be suitable for the proposed development, in accordance with Clause 7 of *State Environmental Planning Policy 55 - Remediation of Land.*



6. Recommendations

El provide the following recommendations in relation to the proposed site development:

- Before commencement of any demolition works, a Hazardous Materials Survey (HMS) should be completed by a suitably qualified consultant, to identify any hazardous materials present within the existing building fabrics.
 - If present, all identified hazardous materials must be appropriately managed, to maintain worker health and safety during demolition works and prevent the spread of hazardous substances.
 - An asbestos clearance inspection and certificate should be completed by a suitably qualified professional (SafeWork NSW Licensed Asbestos Assessor) following the removal of all ACM from the site.
 - Where clearance inspection indicates the presence of hazardous materials remaining on the site, further removal and validation works must be undertaken.
- Following demolition and removal of associated wastes, an inspection of the exposed surface should be performed by a suitably qualified environmental consultant.
- Under the proposed development (Section 1.2 and Appendix B), bulk excavation of site soils will be performed, in order to construct the basement facility. All (fill) soil materials that are designated for off-site disposal, including any virgin excavated natural material (VENM), must be pre-classified in accordance the EPA (2014) Waste Classification Guidelines. In designing the sampling, analytical and quality plan (SAQP) for waste classification, the EPA (1995) Sampling Design Guidelines should be referred to and the analytical suite should include the identified COPC (Section 4.5).
- Any material being imported to the site should be validated as suitable for the intended use in accordance with EPA guidelines.

El note that these recommendations can be managed through the development application process, in accordance with SEPP 55 – Remediation of Land.



7. Statement of Limitations

This report has been prepared for the exclusive use of Pacific Drive Pty Ltd, whom is the only intended beneficiary of El's work. The scope of the investigation carried out for the purpose of this report was limited to that agreed with Pacific Drive Pty Ltd.

No other party should rely on this document without the prior written consent of EI, and EI undertakes no duty, or accepts any responsibility or liability, to any third party who purports to rely upon this document without EI's approval.

El has used a degree of care and skill ordinarily exercised in similar investigations by reputable members of the environmental industry in Australia, as at the date of this document. No other warranty, expressed or implied, is made or intended. Each section of this report must be read in conjunction with the whole of this report, including its appendices.

The conclusions presented in this report are based on a limited assessment of historical and current uses of the site. Due to the preliminary nature of this investigation, findings are not based on actual samples collected or testing conducted. El has relied upon information provided by the Client and other third parties to prepare this document, some of which could not be verified by El due to the anecdotal or historical nature of the information.

EI's professional opinions are reasonable and based on its professional judgment, experience and training.

El's professional opinions contained in this document are subject to modification if additional information is obtained through the data searches that have been initiated with government authorities.

Technical opinions may also be amended in the light of further investigation, observations, or validation testing and analysis during remedial activities. In some cases, further testing and analysis may be required, which may result in a further report with different conclusions.



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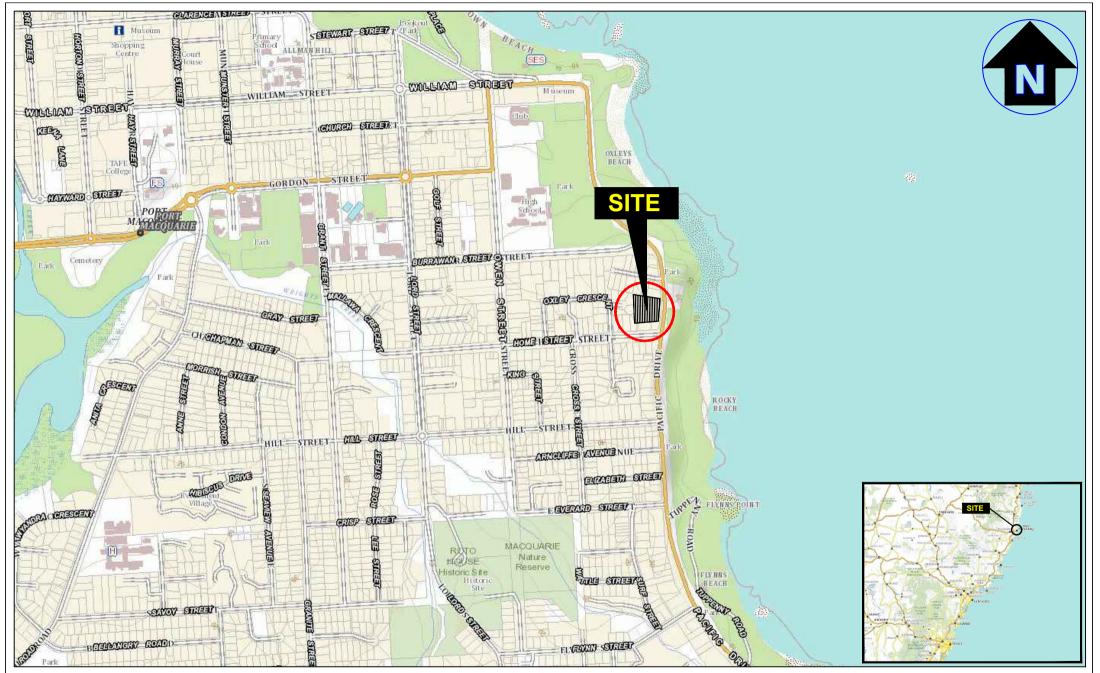


Abbreviations

	Ashastas Cantaining Materiala
ACM	Asbestos Containing Materials
AHD	Australian Height Datum
ASS	Acid Sulfate Soil
AST	Above-ground Storage Tank
B(a)P	Benzo(a)Pyrene
BEGL	Below Existing Ground Level
BTEX	Benzene, Toluene, Ethyl benzene, Xylene
CCO	Chemical Control Order
CLM	Contaminated Land Management
COPC	Contaminants of Potential Concern
CSM	Conceptual Site Model
CVOC	Chlorinated Volatile Organic Compounds (a sub-set of the VOC suite)
	č 1 (, , , , , , , , , , , , , , , , , ,
DA	Development Application
DP	Deposited Plan
DSI	Detailed Site Investigation
EI	El Australia Pty Ltd
EPA	Environment Protection Authority (of New South Wales)
EP&A	Environmental Planning and Assessment
FCS	Fibre Cement Sheeting
FFL	Finished Floor Level
HM	Heavy Metals
km	Kilometres
L	Litres
LEP	Local Environmental Plan
LGA	Local Government Area
m	Metres
NATA	National Association of Testing Authorities, Australia
NEPC	National Environmental Protection Council
NEPM	National Environmental Protection Measure
NSW	New South Wales
OCP	Organochlorine Pesticides
OPP	Organophosphate Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PFAS	Per- and Poly-Fluoroalkyl Substances
PM	Priority Metals
POEO	Protection of the Environment Operations
PSI	Preliminary Site Investigation
SEPP	State Environmental Planning Policy
SIL	Soil Investigation Level
TRH	Total Recoverable Hydrocarbons
UBD	Universal Business Directory
UPSS	Underground Petroleum Storage System
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
	5 5
VENM	Virgin Excavated Natural Material
VOC	Volatile Organic Compounds



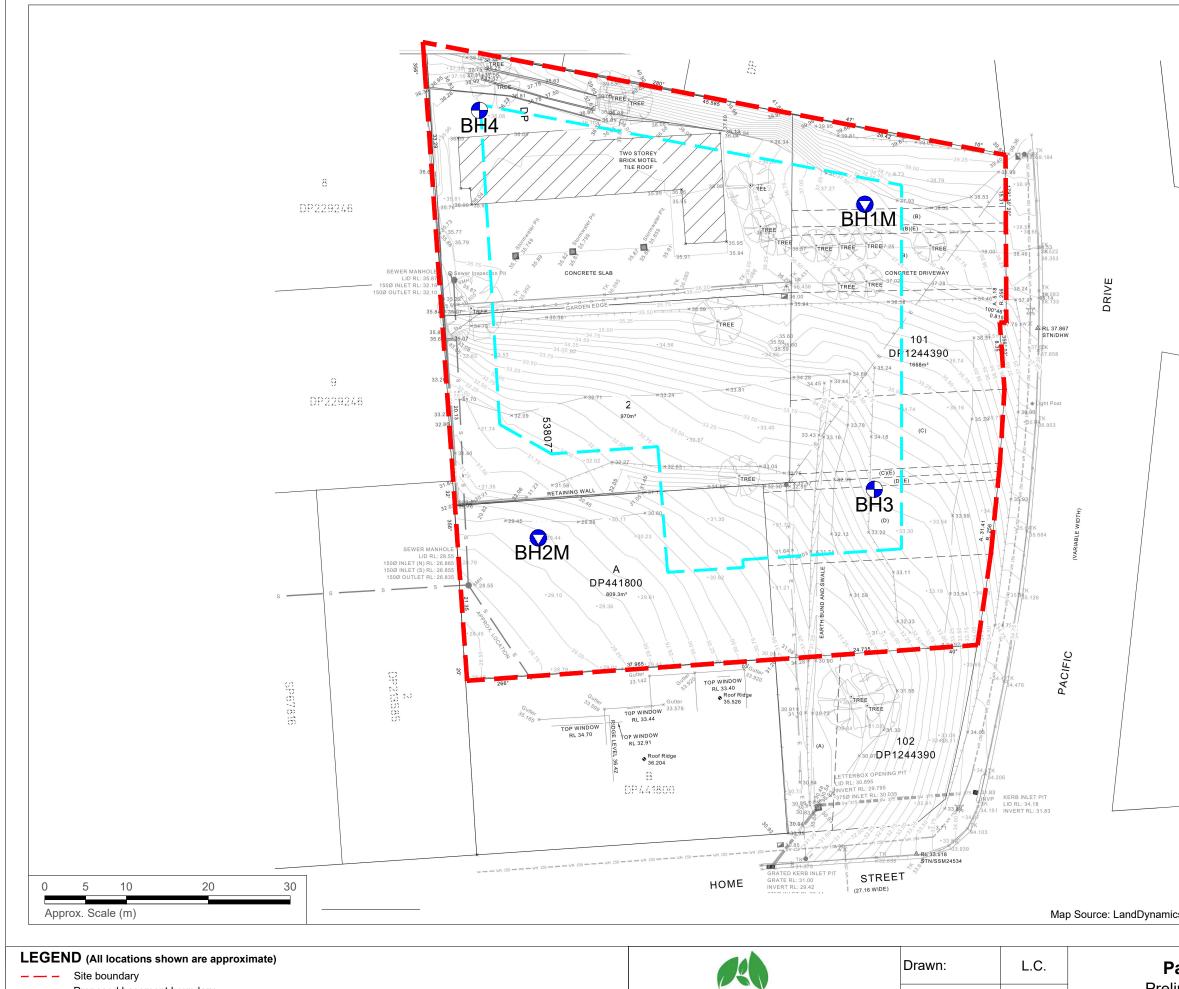
Appendix A - Figures





Drawn:	L.C.
Approved:	L.B.
Date:	16-12-20
Scale:	Not To Scale

Pacific Drive Pty Ltd Preliminary Site Investigation 10-16 Pacific Drive, Port Macquarie, NSW Site Locality Plan Figure: 1 Project: E24947.E01_Rev0



- Proposed basement boundary
- \bigcirc Geotechnical borehole location
- Õ Geotechnical monitoring well location



Drawn:	L.C.	F
Approved:	L.B.	Pre 10-16 Pac
Date:	16-12-20	5



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ROAD



Map Source: LandDynamics Australia, Job number: 5115, Drawing number: 0001, Dated 14-09-2020

Pacific Drive Pty Ltd

reliminary Site Investigation acific Drive, Port Macquarie, NSW

Sampling Location Plan

Figure:

Project: E24947.E01_Rev0

2

Appendix B – Site Development and Survey Plans

DA Drawing Register

P1

A-00 TITLE PAGE A-0000 TITLE PAGE A-10 SITE ANALYSIS A-1001 SITE ANALYSIS A-1050 STREETSCAPE ANALYSIS A-1060 UNIT SCHEDULE A-11 SURVEY PLAN A-1101 SURVEY PLAN A-12 FLOOR PLANS A-1202 BASEMENT 01 A-1205 LEVEL 02 A-13 ELEVATIONS A-1301 EAST ELEVATION A-1302 WEST ELEVATION A-1303 NORTH ELEVATION A-1304 SOUTH ELEVATION A-14 SECTIONS A-1401 SECTION AA A-1402 SECTION BB A-20 STATISTICS & DIAGRAMS A-2001 GFA CALCULATIONS SOLAR ACCESS DIAGRAM 3D 1/2 P1 A-2011 A-2012 SOLAR ACCESS DIAGRAM 3D 2/2 P1

A-23 3D A-2301 3D

SHADOW DIAGRAM

A-2031

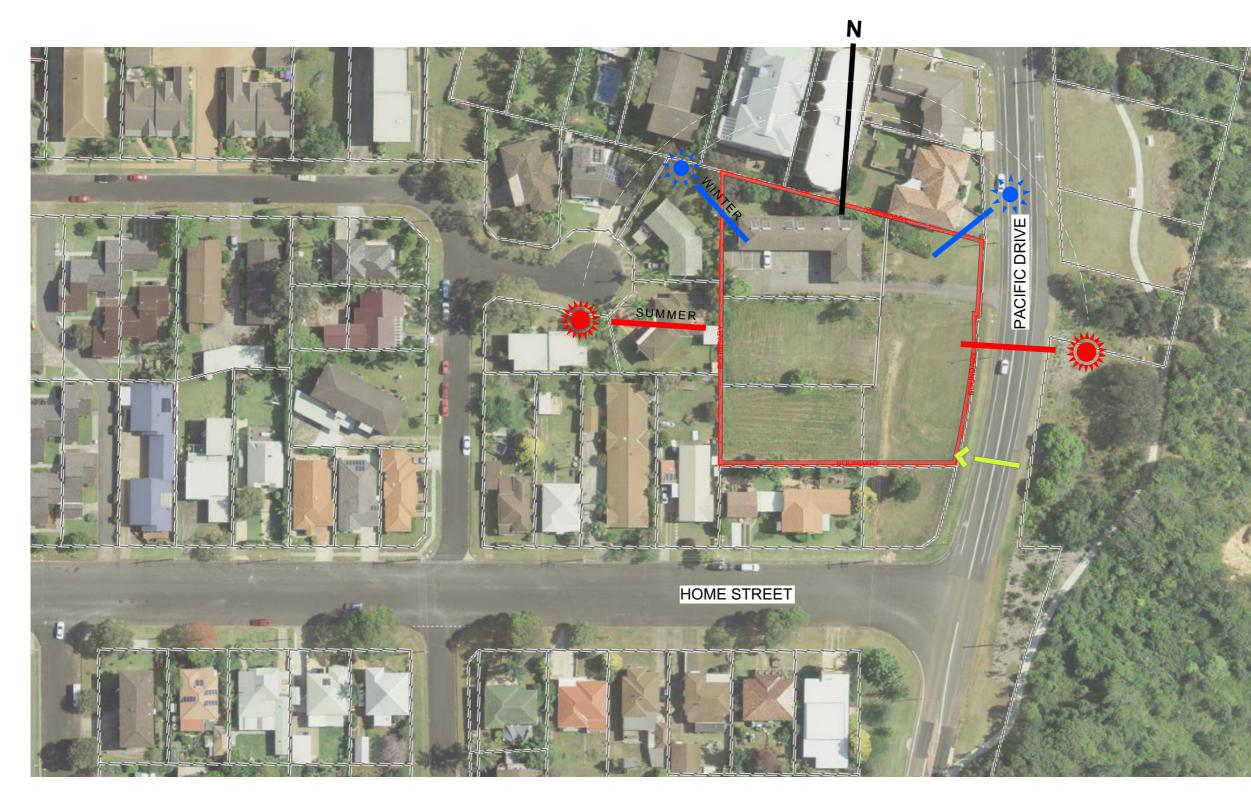


3D EAST



PROPOSED BOARDING HOUSE **PACIFIC DRIVE**

10-16 Pacific Drive, Port Macquarie







DRAWING LEGEND



PROPOSED DEVELOPMENT

CAR PARK ENTRY

PEDESTRIAN ACCESS

MAIN TRAFFIC DIRECTION

SUMMER SUN

WINTER SUN SOLSTICE

BUS STOP

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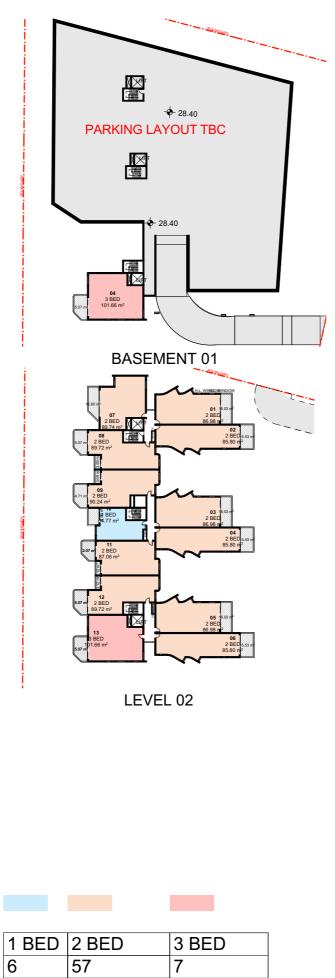
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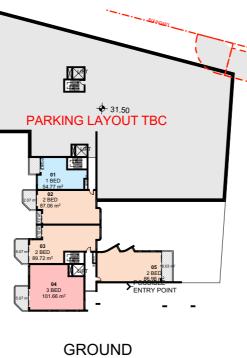


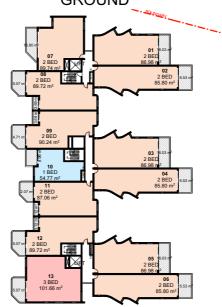
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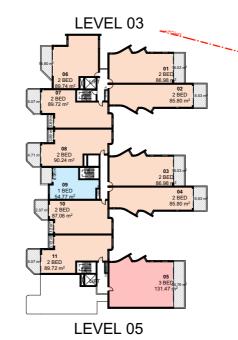
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Home Story Name	ROOM TYPE	ROOM NO.	INTERNAL ARE
BASEMENT 01	04	3 BED	101.66
GROUND	01	1 BED	54.77
GROUND	02	2 BED	87.06
GROUND	03	2 BED	89.72
GROUND	05	2 BED	86.98
GROUND	04	3 BED	101.66
LEVEL 01	07	1 BED	54.77
LEVEL 01	08	2 BED	87.06
LEVEL 01	01	2 BED	86.98
LEVEL 01	05	2 BED	89.72
LEVEL 01	03	2 BED	86.98
LEVEL 01	02	2 BED	85.80
LEVEL 01	06	2 BED	90.24
LEVEL 01	04	2 BED	85.80
LEVEL 01	09	2 BED	89.72
LEVEL 01	10	3 BED	101.66
LEVEL 02	10	1 BED	54.77
LEVEL 02	11	2 BED	87.06
LEVEL 02	12	2 BED	89.72
LEVEL 02	06	2 BED	85.80
LEVEL 02	01	2 BED	86.98
LEVEL 02	09	2 BED	90.24
LEVEL 02	08	2 BED	89.72
LEVEL 02	07	2 BED	89.74
LEVEL 02	02	2 BED	85.80
LEVEL 02	04	2 BED	85.80
LEVEL 02	03	2 BED	86.98
LEVEL 02	05	2 BED	86.98
LEVEL 02	13	3 BED	101.66
LEVEL 02	10	1 BED	54.77
LEVEL 03	04	2 BED	85.80
LEVEL 03	05	2 BED	86.98
LEVEL 03	02	2 BED	85.80
LEVEL 03	08	2 BED	89.72
LEVEL 03	01	2 BED	86.98
LEVEL 03	11	2 BED	87.06
LEVEL 03	12	2 BED	89.72
LEVEL 03	07	2 BED	89.74
LEVEL 03	09	2 BED	90.24
LEVEL 03	06	2 BED	85.80
LEVEL 03	03	2 BED	86.98
LEVEL 03	13	3 BED	101.66
LEVEL 04	09	1 BED	54.77
LEVEL 04	06	2 BED	89.74
LEVEL 04	07	2 BED	89.72
LEVEL 04	03	2 BED	86.98
LEVEL 04	01	2 BED	86.98
LEVEL 04	11	2 BED	89.72
LEVEL 04	12	2 BED	84.45
LEVEL 04	04	2 BED	85.80
LEVEL 04	08	2 BED	90.24
LEVEL 04	10	2 BED	87.06
LEVEL 04	02	2 BED	85.80
LEVEL 04	05	3 BED	131.47
LEVEL 05	09	1 BED	54.77
LEVEL 05	01	2 BED	86.98
LEVEL 05	06	2 BED	89.74
LEVEL 05	07	2 BED	89.72
LEVEL 05	10	2 BED	87.06
LEVEL 05	03	2 BED	86.98
LEVEL 05	02	2 BED	85.80
LEVEL 05	08	2 BED	90.24
LEVEL 05	04	2 BED	85.80
LEVEL 05	11	2 BED	89.72
LEVEL 05	05	3 BED	131.47
LEVEL 06	02	2 BED	86.98
LEVEL 06	03	2 BED	85.40
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LEVEL 06	04	2 BED	89.72
LEVEL 06	05	2 BED	90.24
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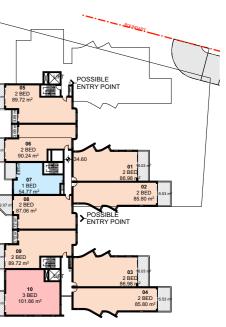


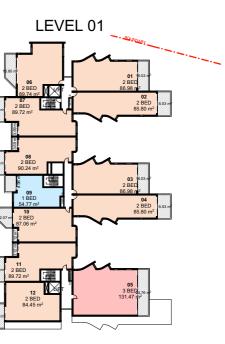


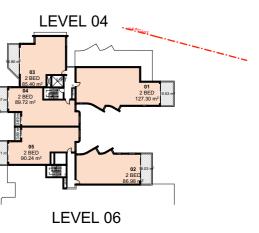
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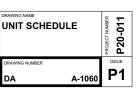
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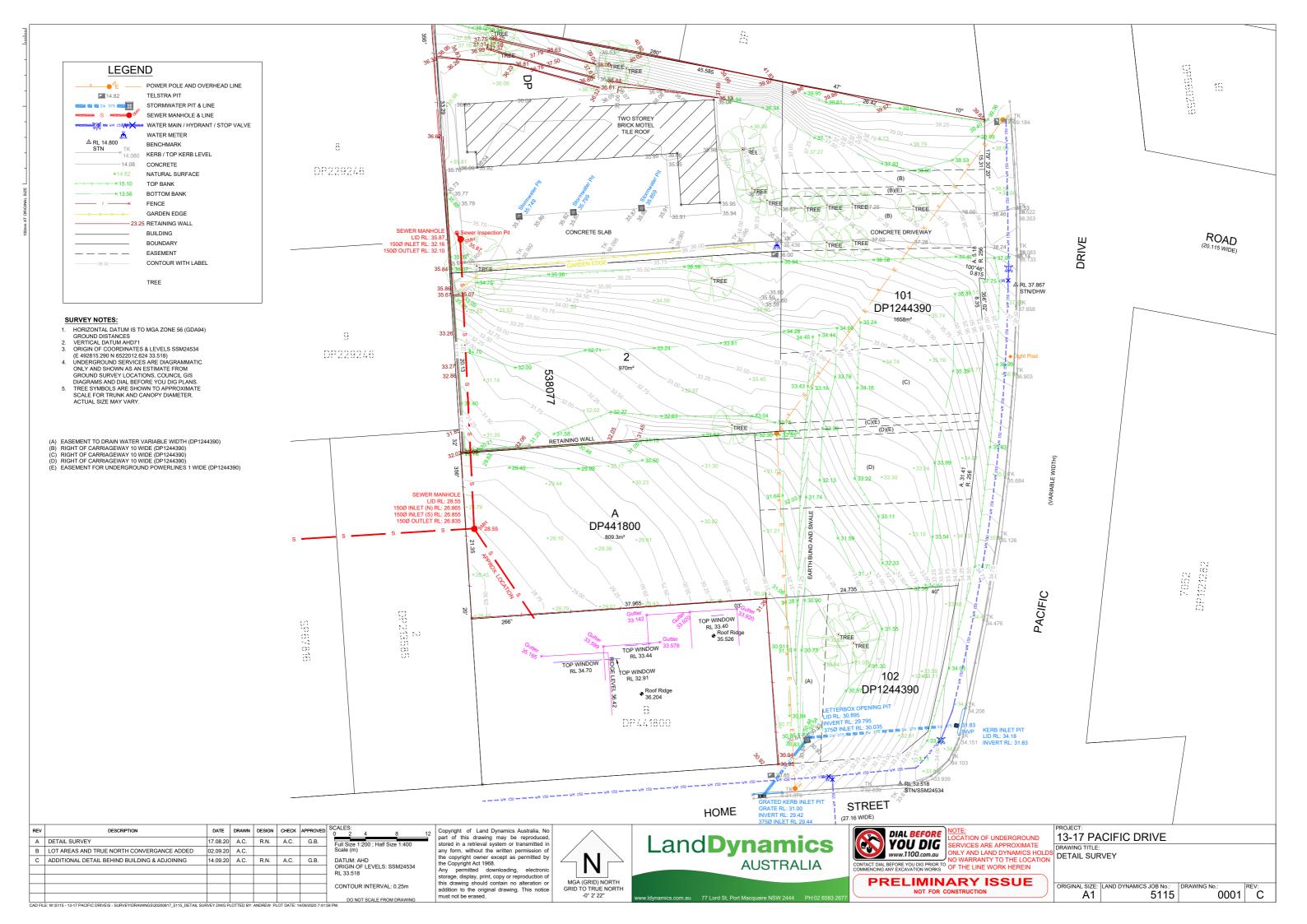


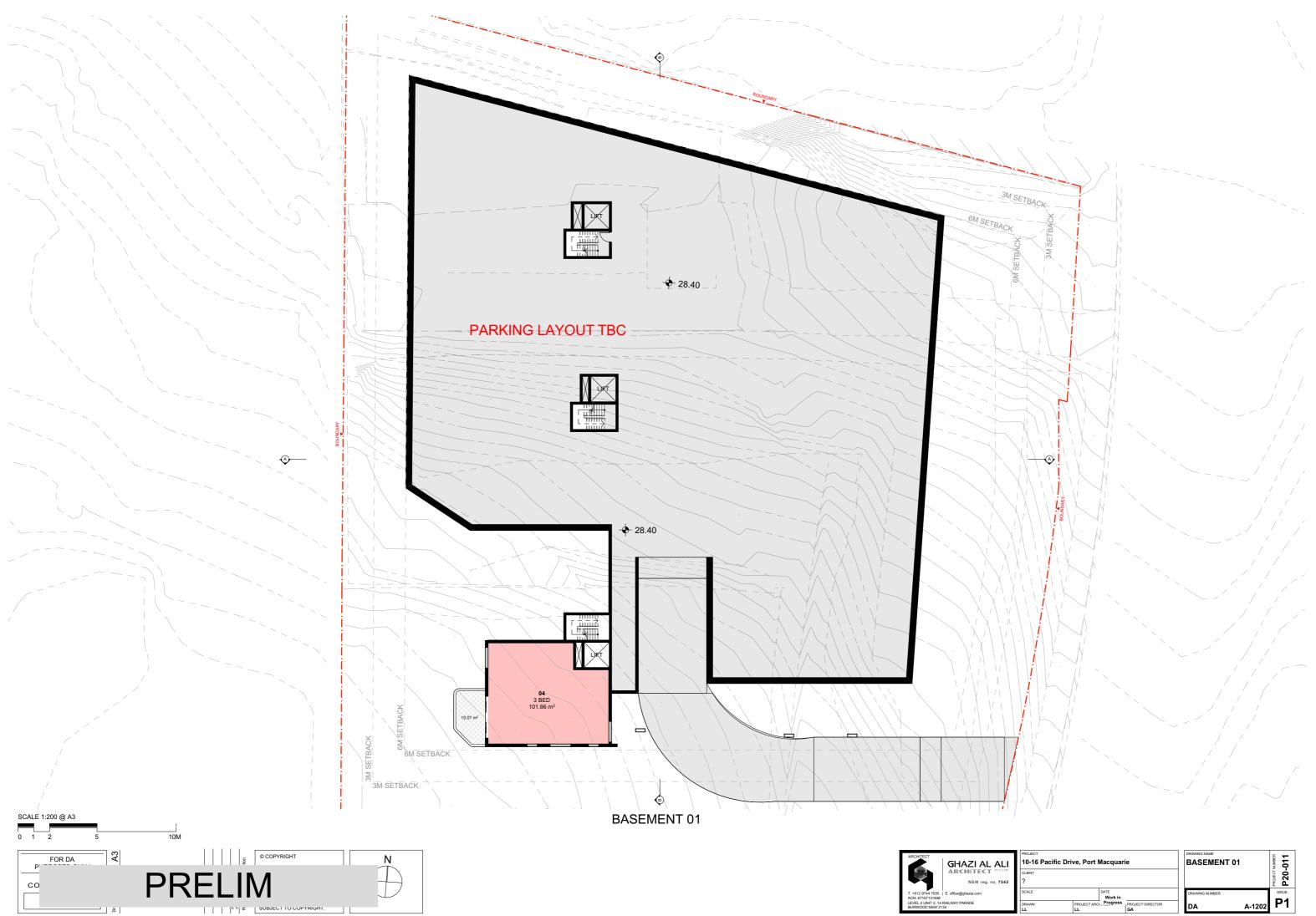




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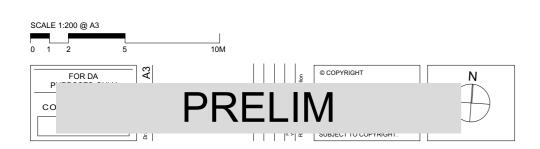
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EAST ELEVATION



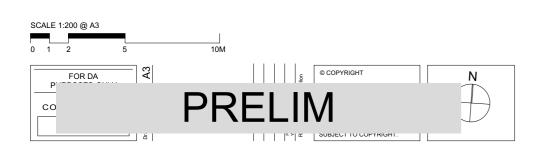


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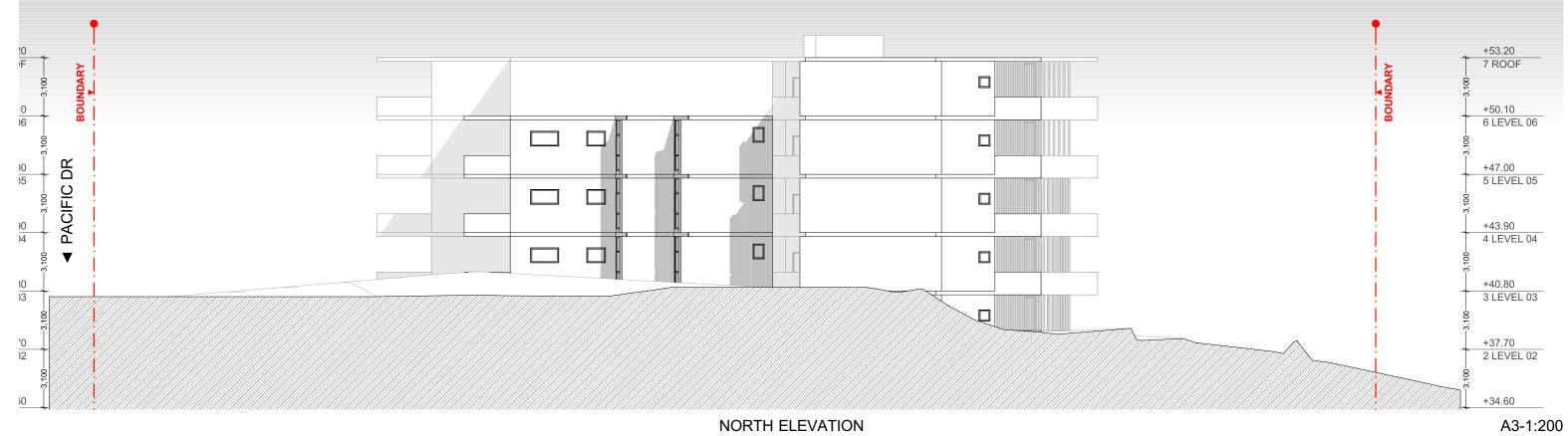


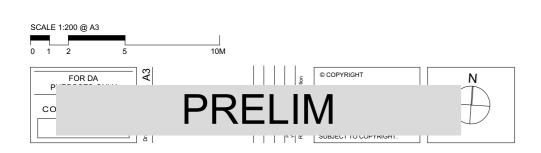
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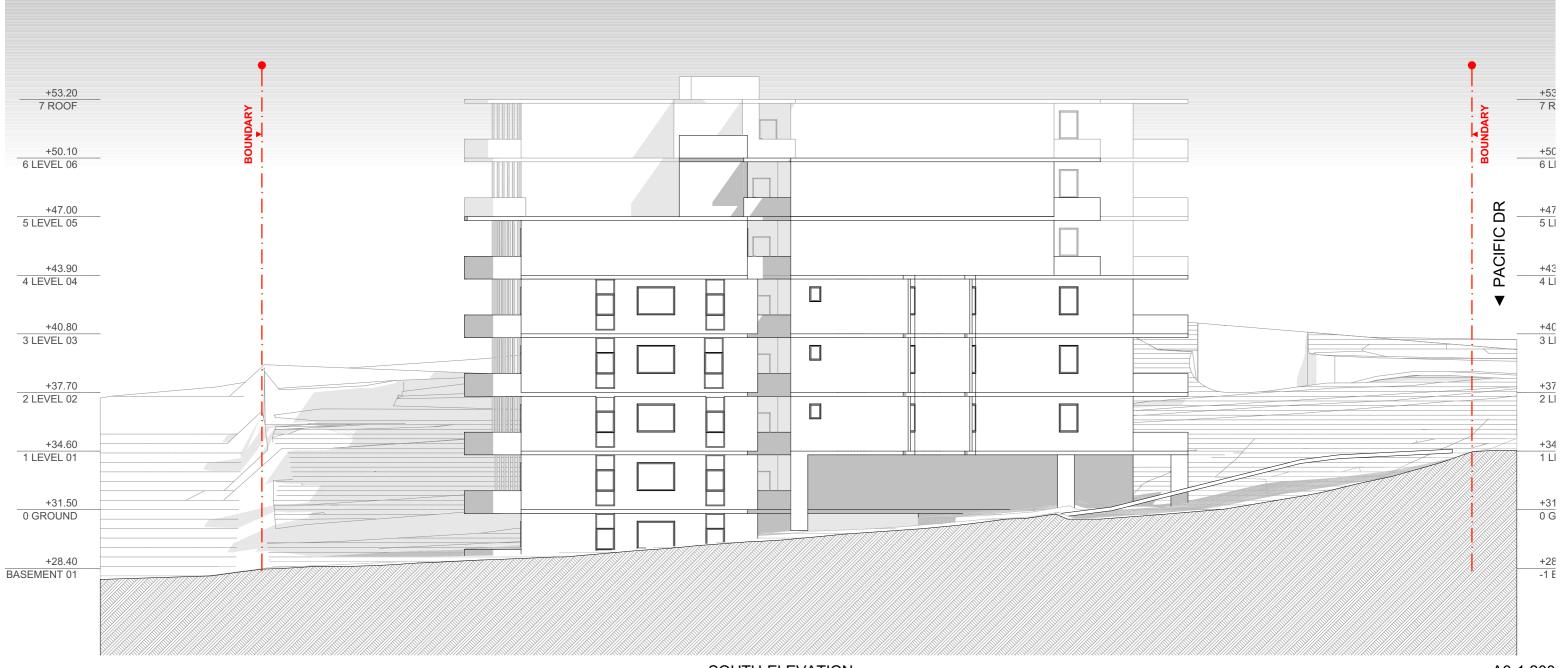
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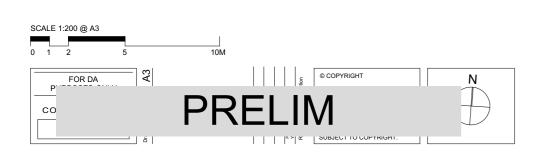




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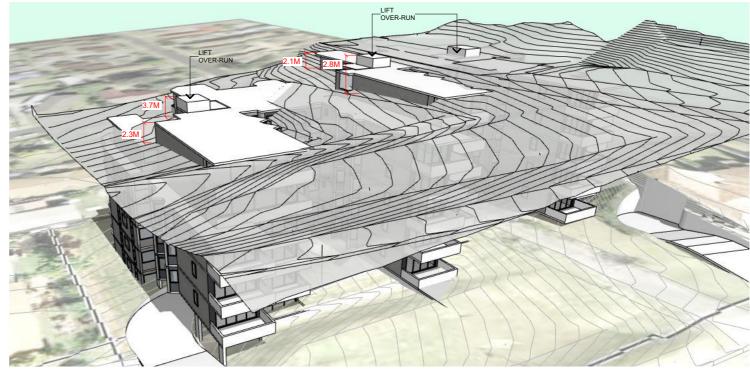
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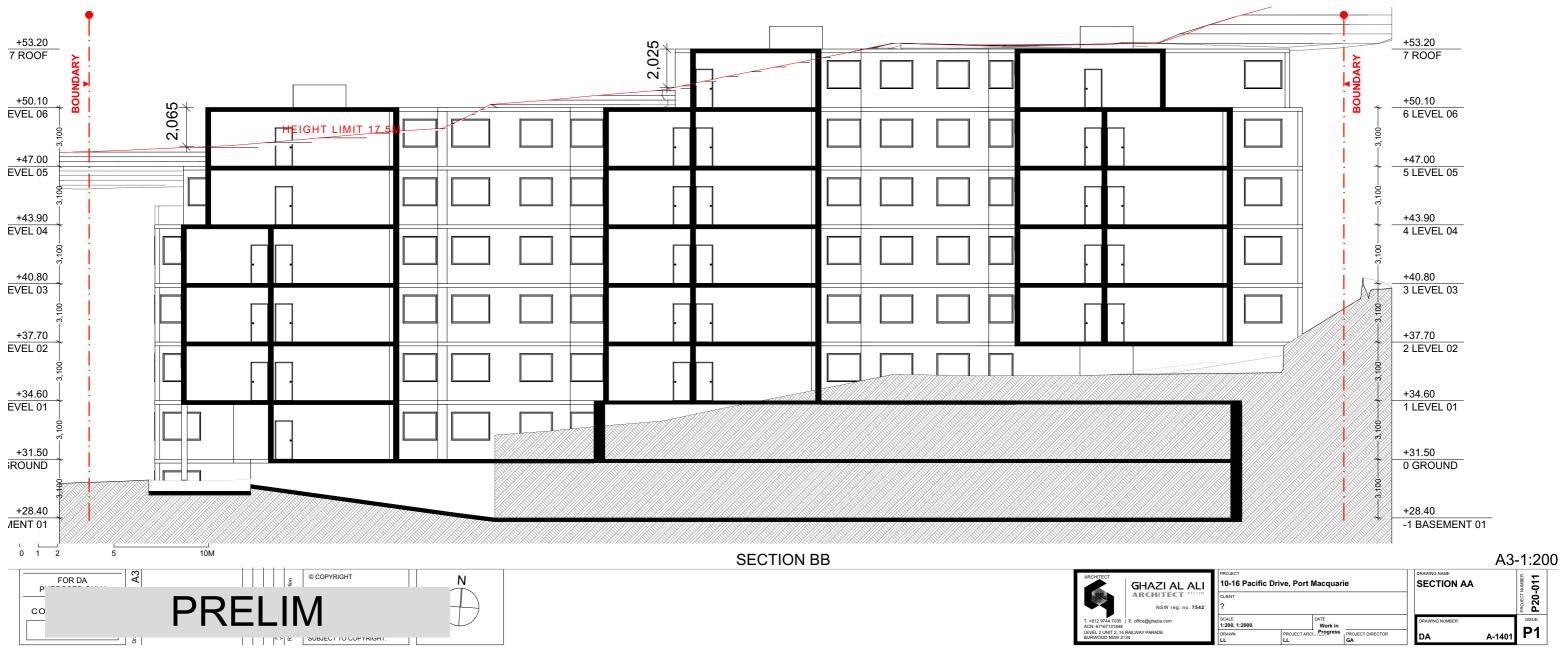


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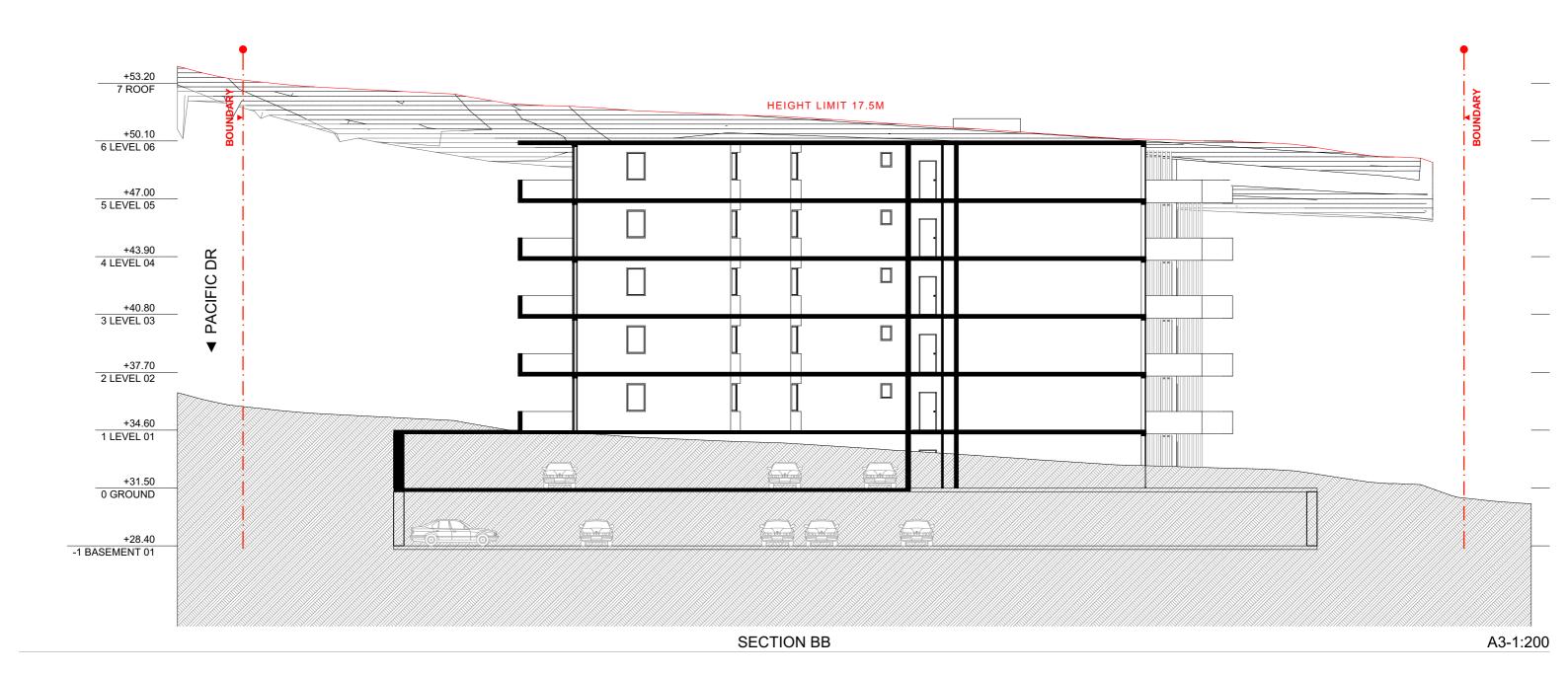


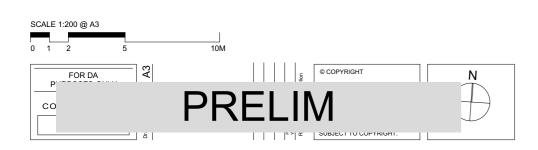




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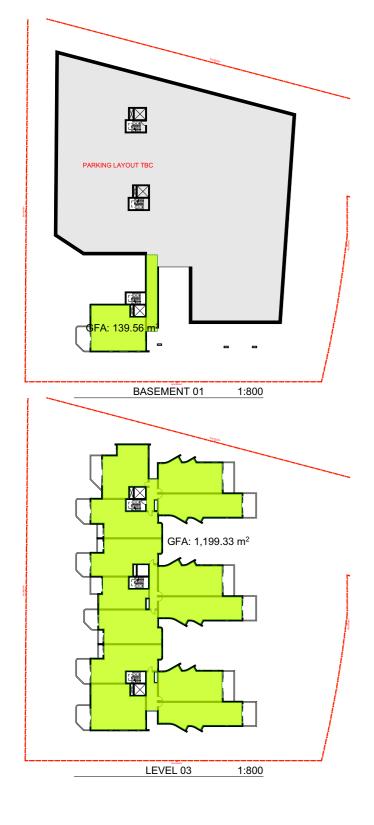
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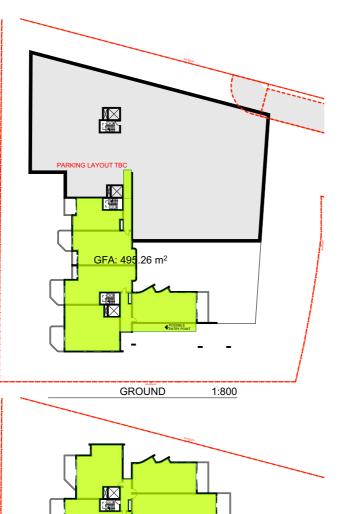






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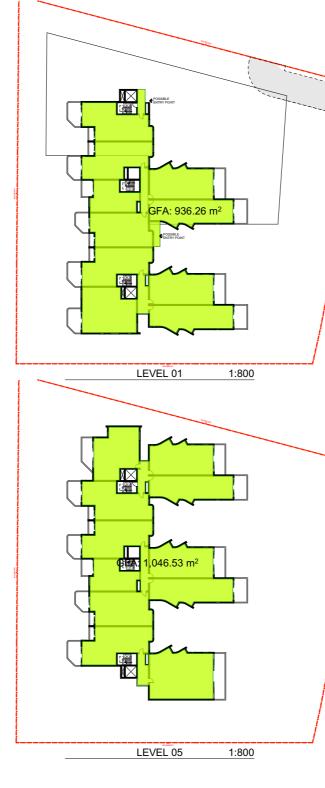




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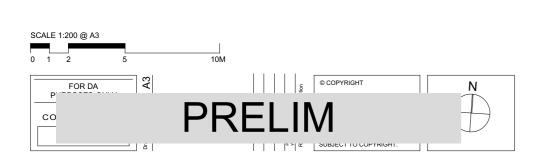
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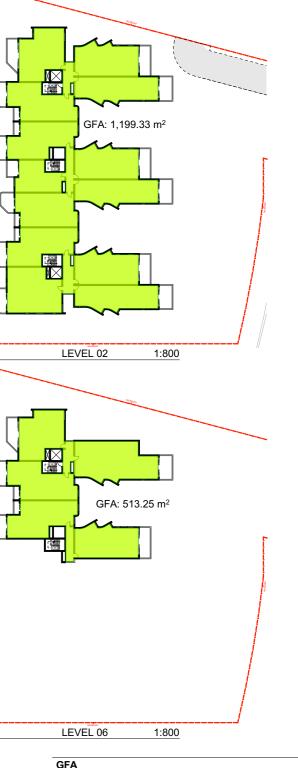


GFA CALCULATION

SITE AREA: 4637.3 SQM LEP PERMISSIBLE FSR: 1:1.5 LEP PERMISSIBLE GFA: 6955.95 SQM TOTAL FSR: 1:1.44







GIA		
Home Story Name	Measured Area	Calculated Area
BASEMENT 01	139.56	139.56
GROUND	495.26	495.26
LEVEL 01	936.26	936.25
LEVEL 02	1,199.33	1,199.32
LEVEL 03	1,199.33	1,199.32
LEVEL 04	1,137.34	1,137.34
LEVEL 05	1,046.53	1,046.53
LEVEL 06	513.25	^{513.25} 6,666.83 m

PROJECT 10-16 Pacific Drive, Port Macquarie				GFA CAL	NUMBER -011	
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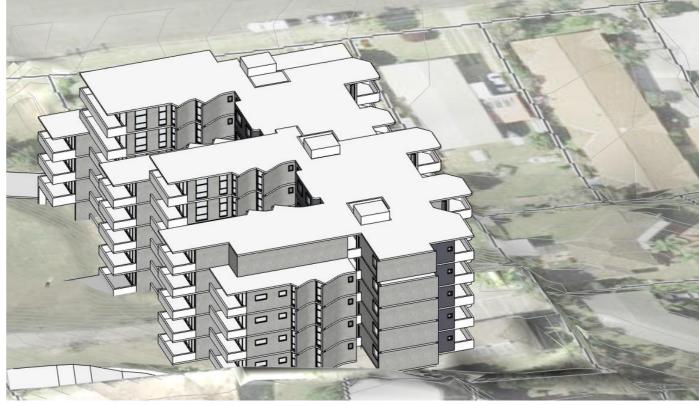
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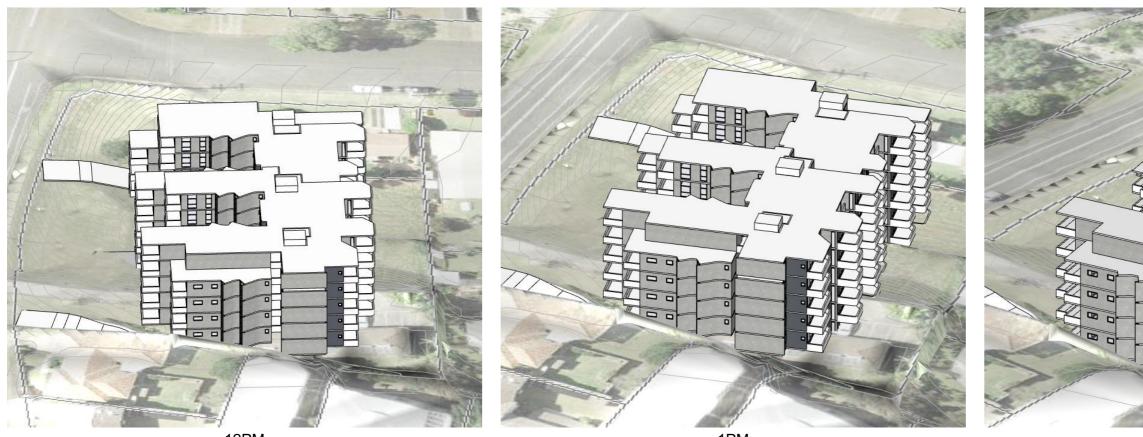


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PROJECT 10-16 Pacific Drive, Port Macquarie		DRAWING NAME	4UMBER 011			
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SCALE		DATE Work in		DRAWING NUMBER		ISSUE.
DRAWN	PROJECT ARC	Progress	PROJECT DIRECTOR	DA	A-2012	P1



Ċ – WINTER SOLSTICE 12PM SHADOW



WINTER SOLSTICE 3PM





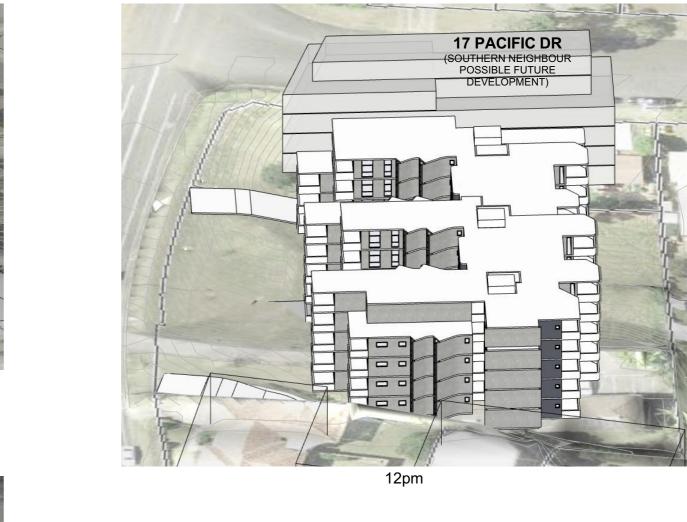


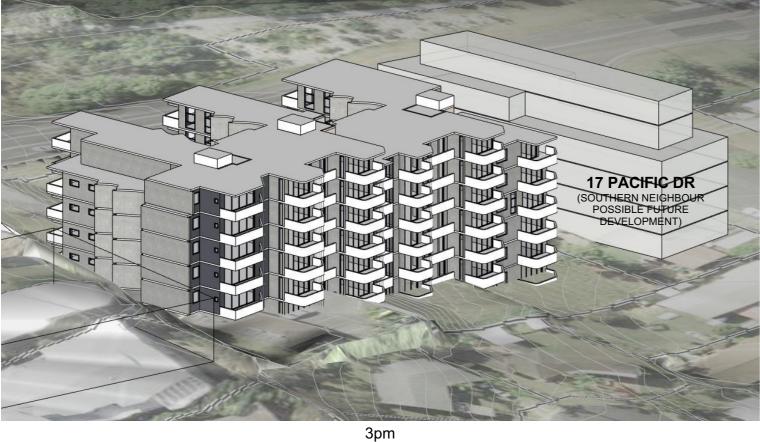
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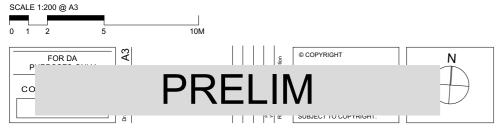


9am











PROJECT 10-16 Paci	≞ਾ 16 Pacific Drive, Port Macquarie				UMBER 011	
CLIENT				NEIGHBO SOLAR A		РЕОЛЕСТИ Р20-(
SCALE		DATE Work in		DRAWING NUMBER		ISSUE.
DRAWN	PROJECT ARC	Dreamen	PROJECT DIRECTOR	DA	A-2032	P1

Appendix C – Photographs (taken 8-9 December 2020)



Photograph 1: Overview of the northern portion of the site; view towards north-west.



Photograph 2: Building overview; view towards east.





Photograph 3: Building and car parking overview; view towards north.



Photograph 4: Overview of site remainder; view towards south-west



Appendix D – LotSearch Report



Date: 04 Dec 2020 12:28:20 Reference: LS016530 EP Address: 10-16 Pacific Drive, Port Macquarie, NSW 2444

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features. You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Finance, Services & Innovation	13/11/2020	13/11/2020	Quarterly	-	-	-	-
Topographic Data	NSW Department of Finance, Services & Innovation	25/06/2019	25/06/2019	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	18/11/2020	13/11/2020	Monthly	1000	0	0	1
Contaminated Land Records of Notice	Environment Protection Authority	03/12/2020	03/12/2020	Monthly	1000	0	0	0
Former Gasworks	Environment Protection Authority	10/11/2020	11/10/2017	Monthly	1000	0	0	0
National Waste Management Facilities Database	Geoscience Australia	12/11/2020	07/03/2017	Quarterly	1000	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	12/11/2020	13/07/2012	Quarterly	1000	0	0	1
EPA PFAS Investigation Program	Environment Protection Authority	12/11/2020	07/05/2020	Monthly	2000	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	14/10/2020	14/10/2020	Monthly	2000	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	14/10/2020	14/10/2020	Monthly	2000	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	10/11/2020	10/11/2020	Monthly	2000	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	16/11/2020	16/11/2020	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	04/02/2020	13/12/2018	Annually	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	10/11/2020	10/11/2020	Monthly	1000	0	0	0
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	10/11/2020	10/11/2020	Monthly	1000	0	0	0
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	10/11/2020	10/11/2020	Monthly	1000	0	0	3
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150	2	4	8
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150	-	12	20
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	3	9
Points of Interest	NSW Department of Finance, Services & Innovation	30/03/2020	30/03/2020	Quarterly	1000	0	1	37
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	30/03/2020	30/03/2020	Quarterly	1000	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	30/03/2020	30/03/2020	Quarterly	1000	0	0	0
Major Easements	NSW Department of Finance, Services & Innovation	30/03/2020	30/03/2020	Quarterly	1000	0	1	3
State Forest	Forestry Corporation of NSW	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	21/01/2020	30/09/2019		1000	0	0	2
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Industry and Environment	26/10/2020	21/02/2018	•	1000	0	0	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	24/07/2018	23/07/2018	Annually	2000	0	0	28
Geological Units 1:250,000	NSW Department of Planning, Industry and Environment	20/08/2014		None planned	1000	1	-	2
Geological Structures 1:250,000	NSW Department of Planning, Industry and Environment	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	1	1	1
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000	1	1	2
Soil Landscapes of Central and Eastern NSW	NSW Department of Planning, Industry and Environment	14/10/2020	27/07/2020	Annually	1000	1	-	5
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	29/10/2020	03/07/2020	Monthly	500	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	1	1	2
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Department of Planning, Industry and Environment	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	30/03/2020	30/03/2020	Quarterly	1000	0	0	0
Current Mining Titles	NSW Department of Industry	04/11/2020	04/11/2020	Monthly	1000	0	0	0
Mining Title Applications	NSW Department of Industry	04/11/2020	04/11/2020	Monthly	1000	0	0	0
Historic Mining Titles	NSW Department of Industry	04/11/2020	04/11/2020	Monthly	1000	5	5	10
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	29/10/2020	07/12/2018	Monthly	1000	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	29/10/2020	23/10/2020	Monthly	1000	1	4	33
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	24/11/2020	20/11/2019	Quarterly	1000	0	0	0
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	24/11/2020	20/11/2019	Quarterly	1000	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	12/11/2020	02/07/2020	Quarterly	1000	0	0	0
Environmental Planning Instrument Heritage	NSW Department of Planning, Industry and Environment	29/10/2020	23/10/2020	Monthly	1000	0	0	15
Bush Fire Prone Land	NSW Rural Fire Service	03/12/2020	28/11/2020	Weekly	1000	1	3	4
Vegetation of Port Macquarie - Hastings LGA	NSW Office of Environment & Heritage	28/06/2016	01/05/2010	As required		0	2	8
Ramsar Wetlands of Australia	Department of the Agriculture, Water and the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	7
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	30/11/2020	30/11/2020	Weekly	10000	-	-	-

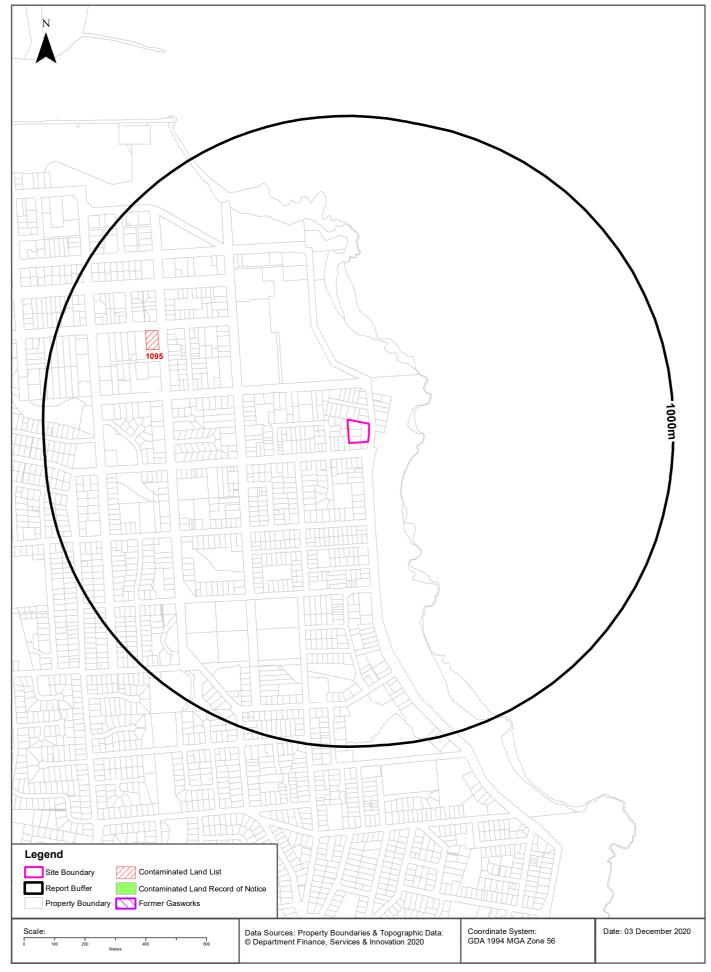
Site Diagram





Contaminated Land





Contaminated Land

10-16 Pacific Drive, Port Macquarie, NSW 2444

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1095	Caltex Port Macquarie Service Station	29 Lord Street	Port Macquarie	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	662m	North West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority © State of New South Wales through the Environment Protection Authority

Contaminated Land

10-16 Pacific Drive, Port Macquarie, NSW 2444

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
N/A	No records in buffer							

Contaminated Land Records of Notice Data Source: Environment Protection Authority © State of New South Wales through the Environment Protection Authority Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

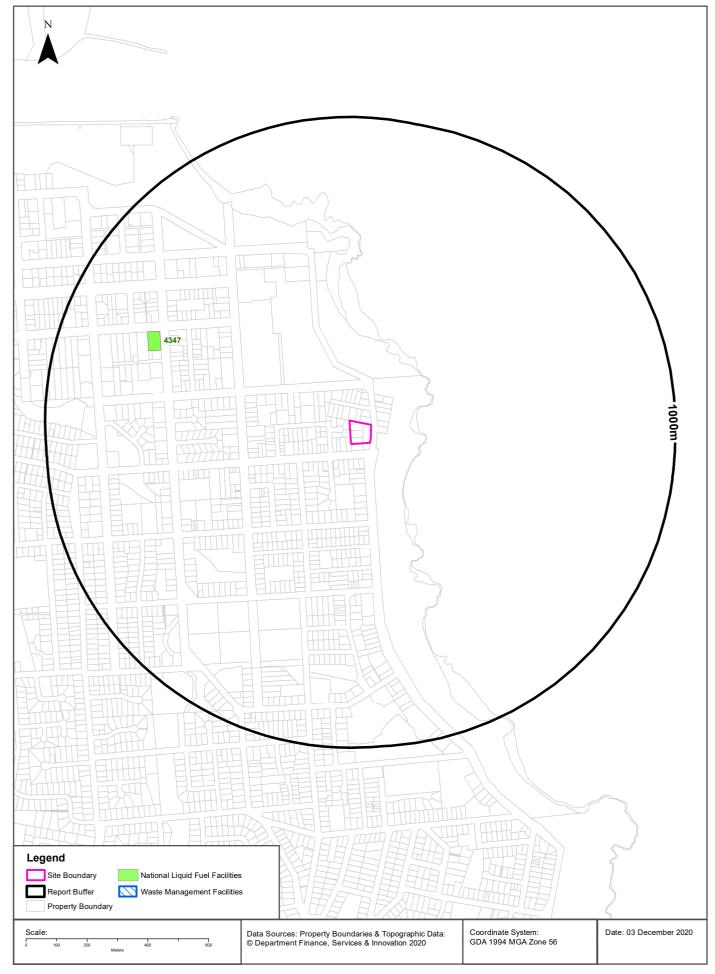
Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority

 $\ensuremath{\mathbb{C}}$ State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities





Waste Management & Liquid Fuel Facilities

10-16 Pacific Drive, Port Macquarie, NSW 2444

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Liquid Fuel Facilities

National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist (m)	Direction
4347	Caltex	Caltex Port Macquarie	29 Lord Street	Port Macquarie	Petrol Station	Operational		25/07/2011	Premise Match	662m	North West

National Liquid Fuel Facilities Data Source: Geoscience Australia

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PFAS Investigation & Management Programs

10-16 Pacific Drive, Port Macquarie, NSW 2444

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

ld	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority © State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

10-16 Pacific Drive, Port Macquarie, NSW 2444

Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

10-16 Pacific Drive, Port Macquarie, NSW 2444

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	 Direction
N/A	No records in buffer					

EPA Other Sites with Contamination Issues: Environment Protection Authority © State of New South Wales through the Environment Protection Authority

EPA Activities

10-16 Pacific Drive, Port Macquarie, NSW 2444

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

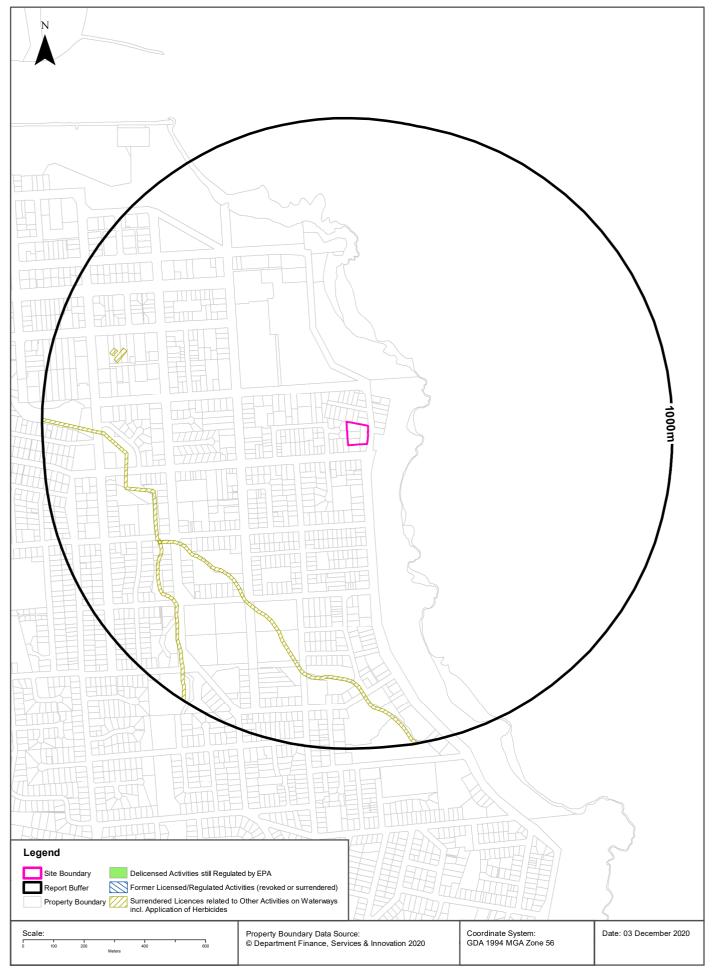
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
N/A	No records in buffer							

POEO Licence Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities





EPA Activities

10-16 Pacific Drive, Port Macquarie, NSW 2444

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
N/A	No records in buffer							

Delicensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

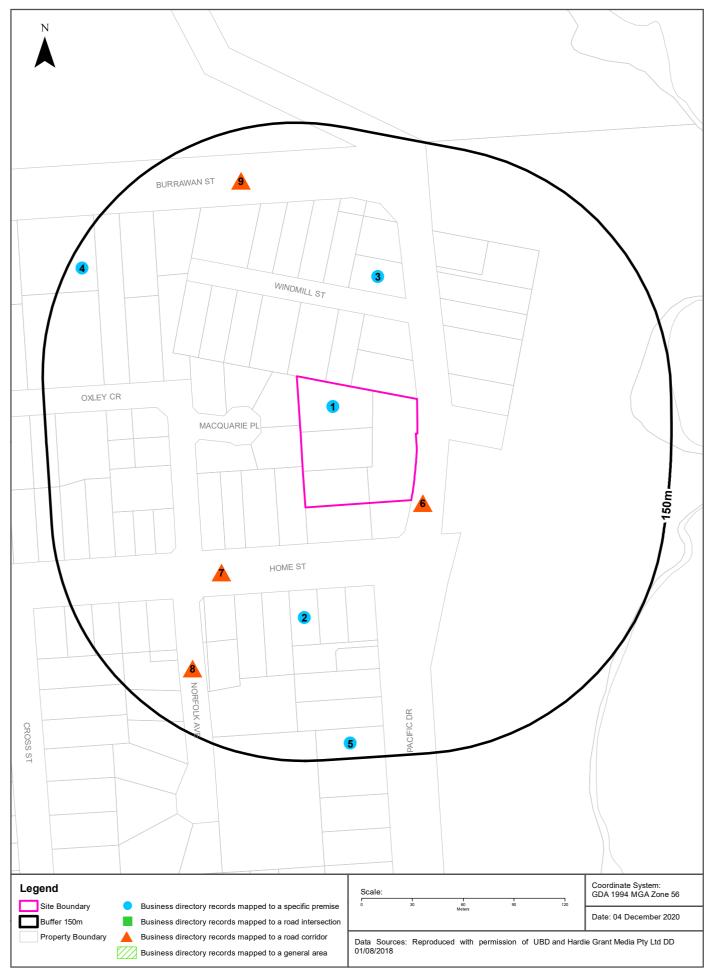
Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	575m	-
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	575m	-
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	575m	-

Former Licensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Historical Business Directories





Historical Business Directories

10-16 Pacific Drive, Port Macquarie, NSW 2444

Business Directory Records 1950-1991 Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	Motels	Rocky Beach Motel., 10 Pacific Dr. Port Macquarie. 2444	195064	1991	Premise Match	0m	On-site
	MOTELS.	Rocky Beach Motel, 10 Pacific Dr., Port Macquarie	95518	1982	Premise Match	0m	On-site
2	PEST CONTROL	Bowen, T. and Co., 4 Home St., Port Macquarie	167722	1961	Premise Match	49m	South
3	Builders &/Or Building Contractors	Turner. M. W. & M. D., 5 Pacific Dr. Port Macquarie. 2444	192742	1991	Premise Match	57m	North
4	Motels	Windmill Motel., 20 Burrawan St. Port Macquarie. 2444	195073	1991	Premise Match	128m	North West
	MOTELS.	Windmill Motel, 20 Burrawan St., Port Macquarie	95526	1982	Premise Match	128m	North West
5	MOTELS.	Ocean Front Motel, 23 Pacific Dr., Port Macquarie	95513	1982	Premise Match	132m	South
	HOLIDAY ACCOMMODATION	Pines (The), 23 Pacific Dry., Port Macquarie	167554	1961	Premise Match	132m	South

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Business Directory Records 1950-1991 Road or Area Matches

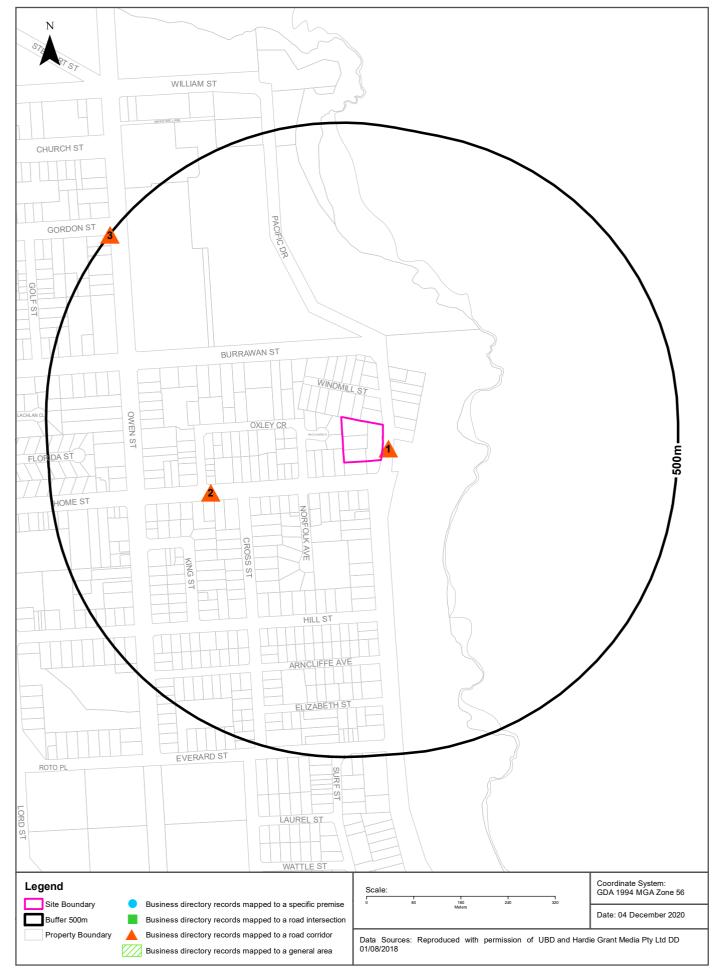
Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
6	Gift Shops	Sea Acres Sanctuary., Pacific Dr. Port Macquarie. 2444	193987	1991	Road Match	0m
	Tourist Attractions	Sea Acres Sanctuary., Pacific Dr. Port Macquarie. 2444	196342	1991	Road Match	0m
	GIFT SHOPS.	Sea Acres Sanctuary, Pacific Dr., Port Macquarie	95317	1982	Road Match	0m
	TOURIST ATTRACTIONS.	Sea Acres Sanctuary, Pacific Dr., Port Macquarie	95827	1982	Road Match	0m
	MOTOR SERVICE STATIONS- PETROL, OILS, ETC.	Turner, S.,& E., Pacific Drve., Shelley Beach, Port Macquarie	619169	1970	Road Match	0m
	GUEST HOUSES	"The Pines," Pacific Dr., Port Macquarie	167509	1961	Road Match	0m
	MOTOR SERVICE STATIONS- PETROL, ETC.	Turner, S. and E., Pacific Drive, Port Macquarie	167703	1961	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Turner, S. and E., Pacific Dry., Port Macquarie	167503	1961	Road Match	0m
7	MOTOR GARAGES &/OR ENGINEERS	Barnes, A. C., Home St., Port Macquarie	167668	1961	Road Match	21m
	PAINTERS, PAPERHANGERS & DECORATORS	Kwanten, N., Home St., Port Macquarie	167720	1961	Road Match	21m
	SIGNWRITERS	Kwanten, N., Home St., Port Macquarie	167757	1961	Road Match	21m
8	HOLIDAY ACCOMMODATION.	El Greco Flats, Norfolk Ave., Port Macquarie	95372	1982	Road Match	80m
9	Associations &/Or Societies	Masonic Hall., Burrawen St. Port Macquarie. 2444	192607	1991	Road Match	103m
	ASSOCIATIONS, SOCIETIES, CLUBS &/OR SPORTING BODIES.	Masonic Hall, Burrawan St., Port Macquarie	95000	1982	Road Match	103m
	MOTOR BUS SERVICES.	Port Macquarie Bus Service, Burrawan St., Port Macquarie	95537	1982	Road Match	103m
	MOTOR BUS SERVICES	Bailey Bus Service, Burrawan St., Port Macquarie	619127	1970	Road Match	103m
	MOTELS	Burrawan Motel, Burrawan St., Port Macquarie	619095	1970	Road Match	103m
	TAXIS & HIRE CARS	Radio Cab Service, Burrawan St., Port Macquarie	619253	1970	Road Match	103m
	MOTELS	Windmill Motel, Burrawan St., Port Macquarie	619118	1970	Road Match	103m
	MOTELS	"Burrawan," Burrawan St., Port Macquarie	167639	1961	Road Match	103m

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Dry Cleaners, Motor Garages & Service Stations





Historical Business Directories

10-16 Pacific Drive, Port Macquarie, NSW 2444

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer						

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Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR SERVICE STATIONS-PETROL, OILS, ETC.	Turner, S.,& E., Pacific Drve., Shelley Beach, Port Macquarie	619169	1970	Road Match	Om
	MOTOR SERVICE STATIONS-PETROL, ETC.	Turner, S. and E., Pacific Drive, Port Macquarie	167703	1961	Road Match	0m
2	MOTOR GARAGES &/OR ENGINEERS	Barnes, A. C., Home St., Port Macquarie	167668	1961	Road Match	21m
3	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Mid Pacific Caravan Park, 174 Oxley Highway., Port Macquarie	95564	1982	Road Match	498m
	MOTOR GARAGES &/OR ENGINEERS	Meldrum Motors Pty. Ltd., 56 Gordon St, Port Macquarie	619143	1970	Road Match	498m
	MOTOR SERVICE STATIONS-PETROL, OILS, ETC.	Motel Park Service Station & Cafe, Gordon St., Port Macquarie	619168	1970	Road Match	498m
	MOTOR GARAGES &/OR ENGINEERS	Total Service Station, Gordon St., Port Macquarie	619147	1970	Road Match	498m
	MOTOR GARAGES &/OR ENGINEERS	Meldrum Motors Pty. Ltd., 56 Gordon St., Port Macquarie	167678	1961	Road Match	498m
	MOTOR SERVICE STATIONS-PETROL, ETC.	Motel Park Service Station & Cafe, Gordon St., Port Macquarie	167699	1961	Road Match	498m

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Aerial Imagery 2020 10-16 Pacific Drive, Port Macquarie, NSW 2444





Aerial Imagery 2016



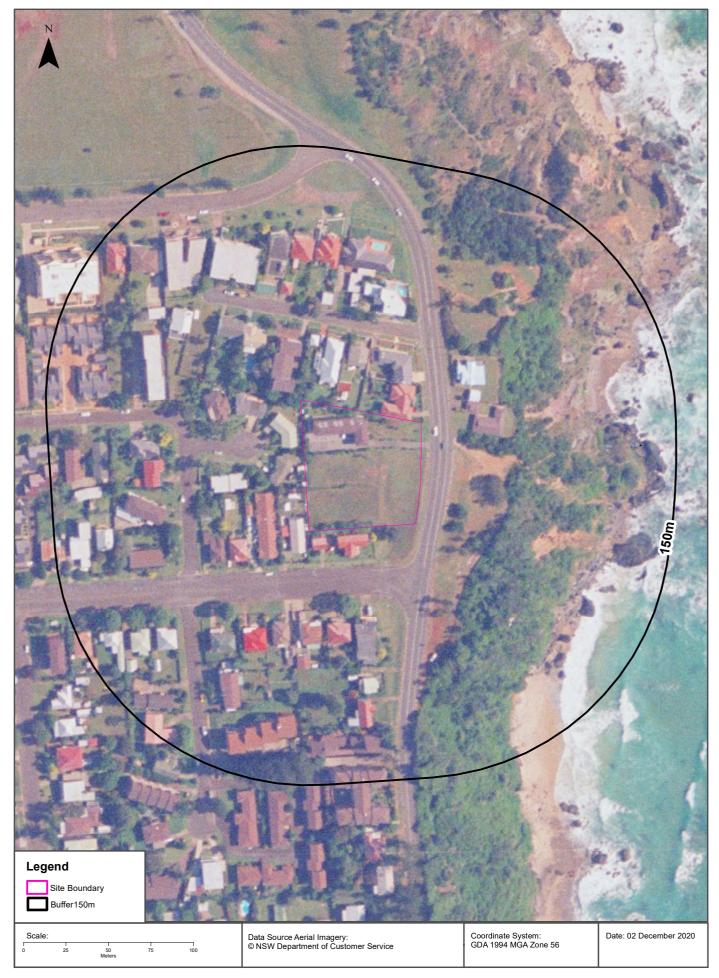


Aerial Imagery 2010

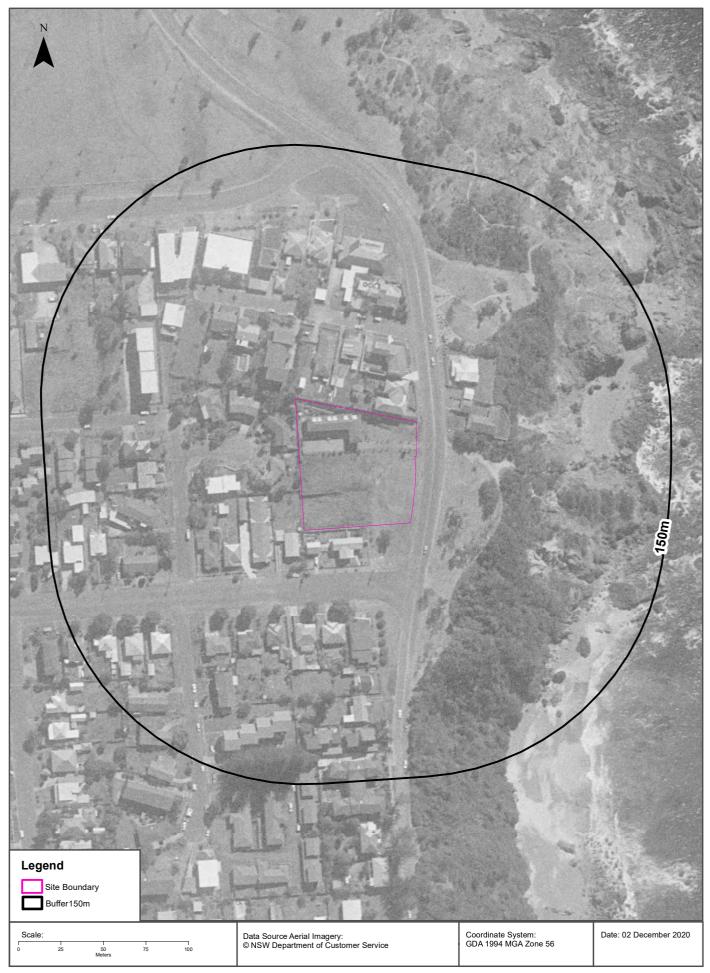








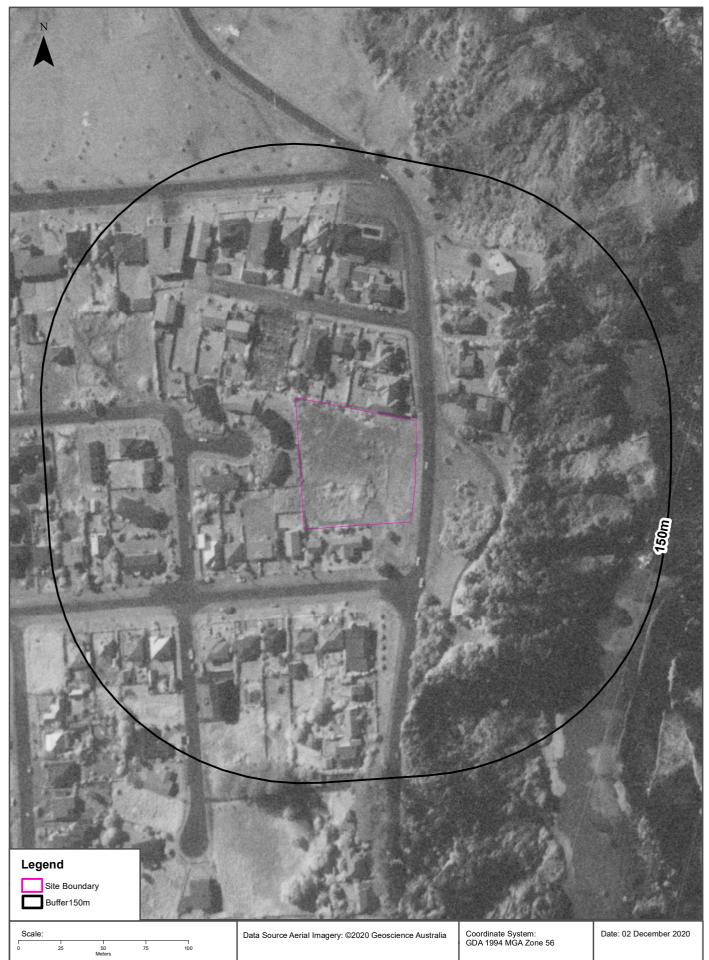




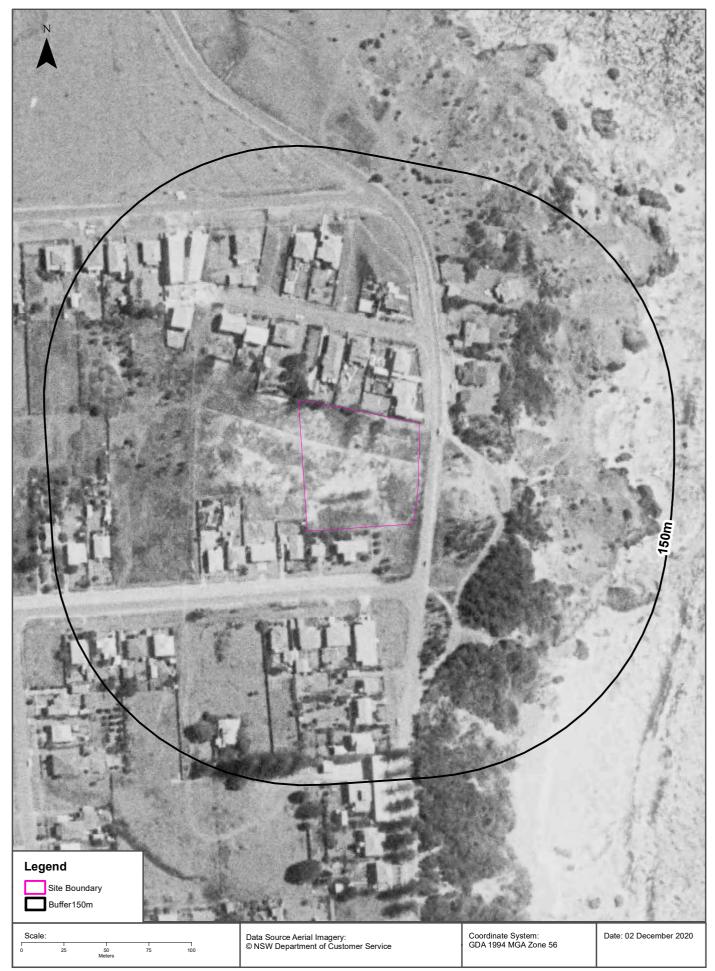




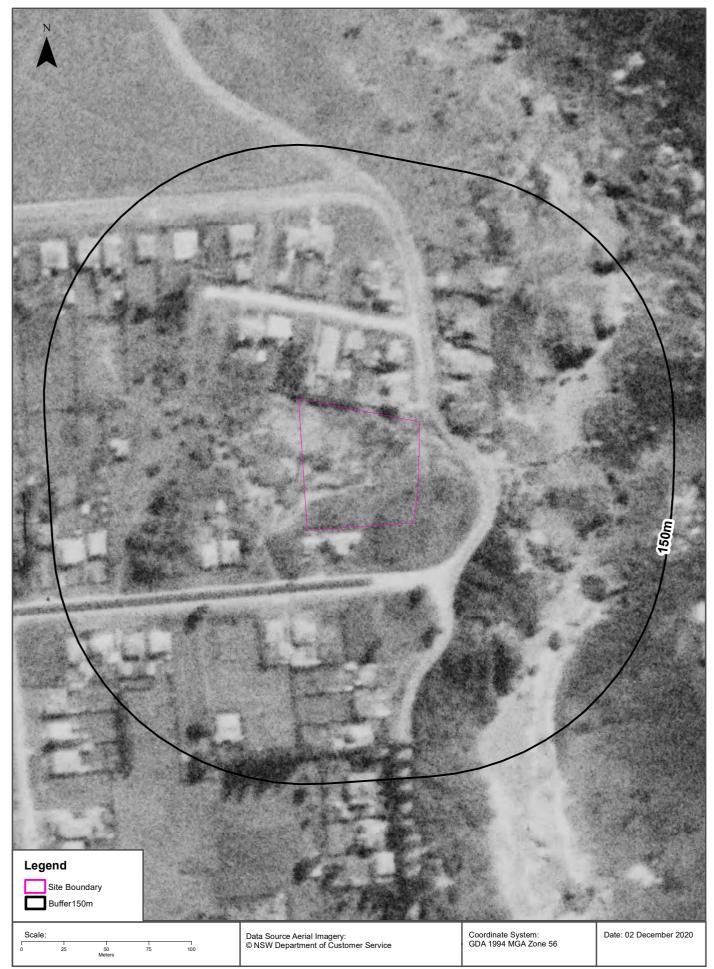












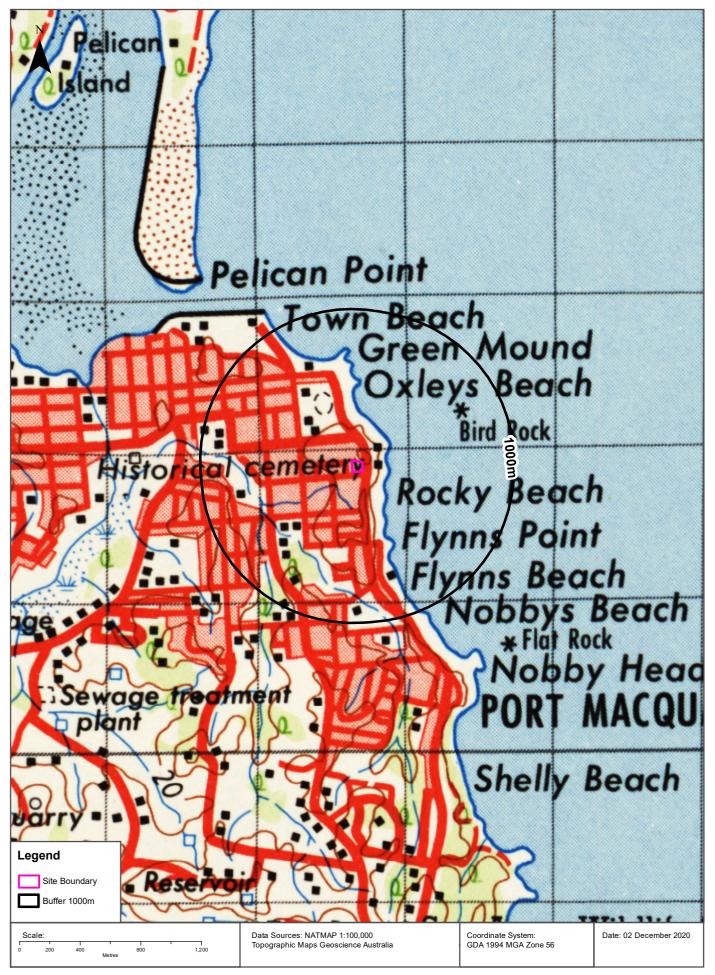
Topographic Map 2015



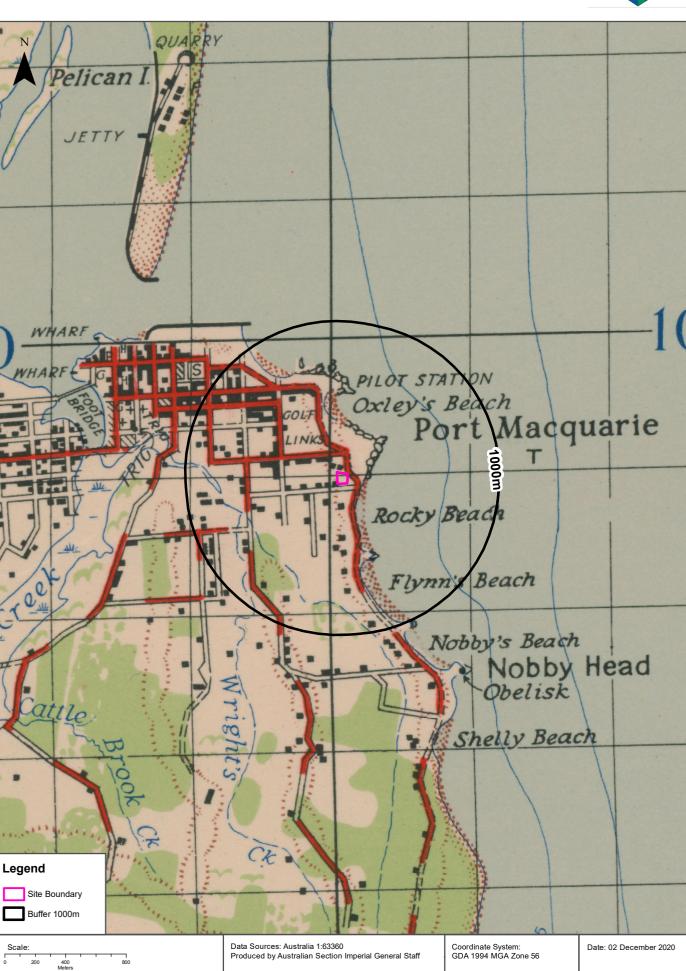


Historical Map 1972



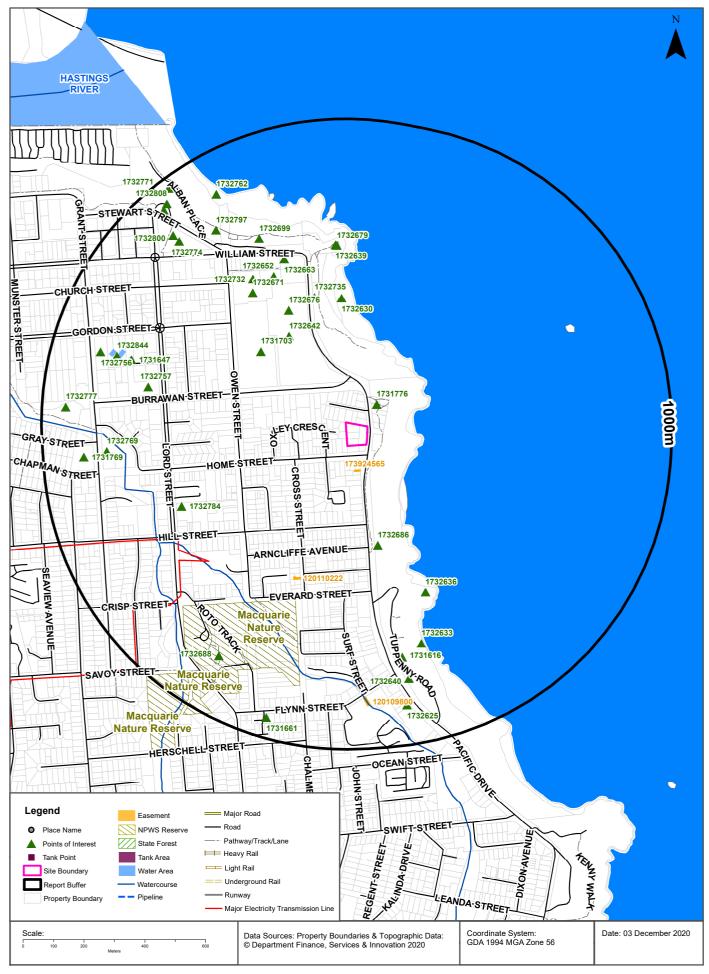


Historical Map c.1942



Topographic Features





Topographic Features

10-16 Pacific Drive, Port Macquarie, NSW 2444

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
1731776	Park	WINDMILL HILL	79m	North East
1732686	Park	ROCKY BEACH LOOKOUT	333m	South
1732642	Park	PORT MACQUARIE PARK	340m	North West
1731703	High School	HASTINGS SECONDARY COLLEGE PORT MACQUARIE CAMPUS	364m	North West
1732630	Beach	OXLEYS BEACH	410m	North
1732676	Sports Field	OXLEY OVAL	414m	North West
1732735	Park	OXLEY BEACH RESERVE	425m	North
1732636	Headland	FLYNNS POINT	523m	South East
1732671	Sports Field	BOWLING GREENS	525m	North West
1732652	Sports Court	TENNIS COURTS	537m	North West
1732732	Club	PORT CITY BOWLING CLUB	563m	North West
1732663	Museum	MID NORTH COAST MARITIME MUSEUM	575m	North
1732784	Place Of Worship	SALVATION ARMY CHURCH	579m	West
1732679	Lookout	Lookout	583m	North
1732639	Mountain/Hill/Peak	GREEN MOUND	586m	North
1732757	Local Government Chambers	PORT MACQUARIE-HASTINGS COUNCIL	659m	West
1732699	SES Facility	MARINE RESCUE PORT MACQUARIE	669m	North West
1732633	Beach	FLYNNS BEACH	679m	South
1731616	Community Facility	PORT MACQUARIE SLSC	710m	South
1731647	Community Facility	CC MAC ADAMS MUSIC CENTRE	734m	West
1732797	Park	JAMES MARTIN RESERVE	763m	North West
1732844	Swimming Pool	PORT MACQUARIE SWIMMING POOL	783m	West
1732640	Park	HOLMES RESERVE	783m	South
1732769	Park	Park	789m	West
1732774	Park	ROTARY PARK	809m	North West
1732688	Historic Site	ROTO HOUSE	810m	South West
1732800	Tourist Attraction	PORT MACQUARIE OBSERVATORY	837m	North West
1732756	Library	PORT MACQUARIE LIBRARY	838m	West
1732762	Beach	TOWN BEACH	864m	North West
1731769	Nursing Home	BETHANY AGED CARE PLUS CENTRE	865m	West
1732625	Post Office	FLYNNS BEACH POST OFFICE	868m	South

Map Id	Feature Type	Label	Distance	Direction
1732793	Park	LIONS PARK	920m	North West
1732777	Sports Court	NETBALL COURTS	921m	West
1732808	Lookout	PORT MACQUARIE LIONS LOOKOUT	930m	North West
1731661	Tourist Park / Home Village	PORT MACQUARIE HOLIDAY CABINS	932m	South
1732764	Headland	GAOL POINT	965m	North West
1732771	Park	MRS YORKS GARDEN	986m	North West

Topographic Data Source: © Land and Property Information (2015)

Topographic Features

10-16 Pacific Drive, Port Macquarie, NSW 2444

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?

Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id Tank Type	Status	Name	Feature Currency	Distance	Direction
No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer? Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
	No records in buffer					

Tanks Data Source: © Land and Property Information (2015)

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Major Easements

What Major Easements exist within the dataset buffer?

Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
173924565	Primary	Right of way	3.5m	81m	South
120110222	Primary	Undefined		459m	South
120109800	Primary	Undefined		828m	South

Easements Data Source: © Land and Property Information (2015)

Topographic Features

10-16 Pacific Drive, Port Macquarie, NSW 2444

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)

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National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N0448	NATURE RESERVE	Macquarie Nature Reserve	07/04/1966	535m	South West
N0221	HISTORIC SITE	Roto House Historic Site	01/10/2010	702m	South West

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)

Elevation Contours (m AHD)





Hydrogeology & Groundwater

10-16 Pacific Drive, Port Macquarie, NSW 2444

Hydrogeology

Description of aquifers on-site:

Description

Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description

Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

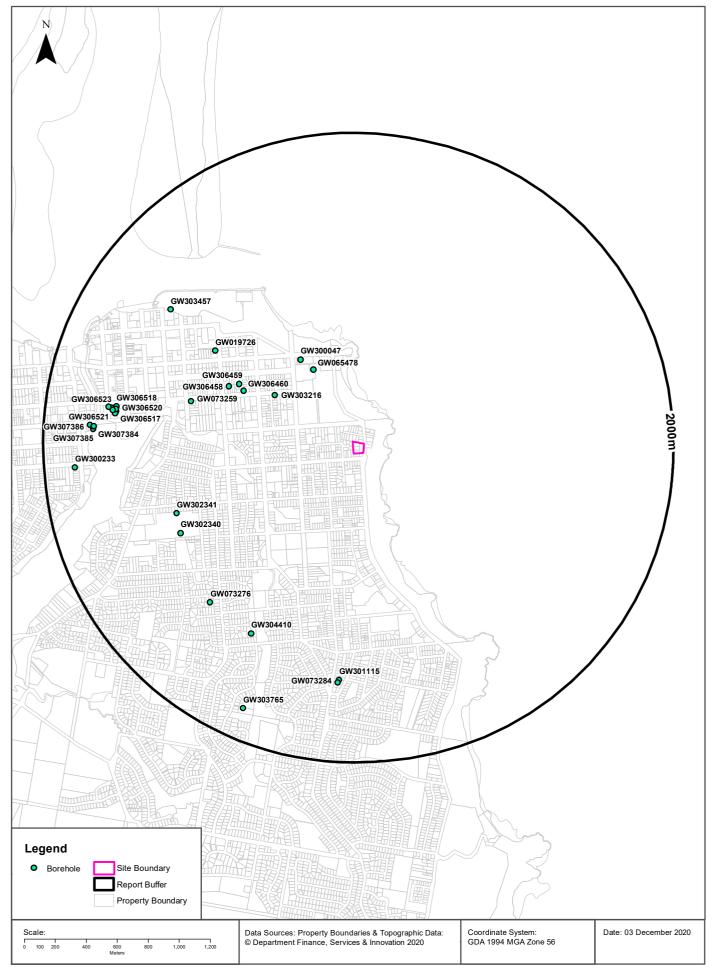
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries

Groundwater Boreholes





Hydrogeology & Groundwater

10-16 Pacific Drive, Port Macquarie, NSW 2444

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)		Elev (AHD)	Dist	Dir
GW065 478	30BL144 764, 30BL145 042	Bore	Private	Irrigation, Recreation (groundwater)	Recreation (groundwate r)		03/12/1991	39.60	39.60	Very Good	3.00	8.850		530m	North West
GW303 216	30BL180 018	Excav ation	Private	Domestic	Domestic									585m	North West
GW300 047	30BL176 601	Bore		Industrial	Commercial		21/12/1995	21.00	21.00	500	6.00	0.500		628m	North West
GW306 460	30BL185 193	Piezo meter	Other Govt	Monitoring Bore	Monitoring Bore		15/01/2009	6.00	6.00					776m	North West
GW306 459	30BL185 191	Piezo meter	Other Govt	Monitoring Bore	Monitoring Bore		19/01/2009	7.50	7.50					822m	North West
GW306 458	30BL185 192	Piezo meter	Other Govt	Monitoring Bore	Monitoring Bore		15/01/2009	9.00	9.00					875m	North West
GW019 726		Well	Federal Govt		Waste Disposal		01/03/1963	7.00	7.00					1064m	North West
GW073 259	30BL176 358	Bore		Industrial	Commercial		29/11/1994	16.60	16.60	300	3.00	0.600		1076m	West
GW302 341	30BL176 969	Bore		Industrial	Commercial , Industrial		27/09/1995	41.00	41.00					1205m	West
GW302 340	30BL176 969	Bore		Industrial	Domestic		26/09/1995	24.00		400	3.00	0.400		1231m	South West
GW073 276	30BL176 404	Bore	Private	Domestic	Domestic		10/01/1995	8.00		Potable	3.00	0.750		1336m	South West
GW304 410	30BL182 214	Well	Private	Domestic	Domestic		23/10/2003	5.00			2.50	0.600		1342m	South West
GW303 457	30BL177 620	Bore		Industrial	Industrial		14/12/2001	22.50	22.50	1200	3.00	0.750		1453m	North West
GW301 115	30BL176 437	Bore		Domestic	Domestic		15/06/1995	32.00	32.00					1470m	South
GW073 284	30BL176 417	Spear	Private	Domestic	Domestic		14/03/1995	34.00			14.0 0			1487m	South
GW306 517	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.05	3.05		1.40			1541m	West
GW306 518	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.00	3.00		1.40			1542m	West
GW306 520	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.20	3.40		1.40			1545m	West
GW306 521	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.20	3.20		1.40			1546m	West
GW306 522	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.20	3.20		1.40			1561m	West
GW306 523	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.20	3.20		1.40			1572m	West
GW306 519	30BL185 313	Bore	Private	Monitoring Bore	Monitoring Bore		15/07/2009	3.60	3.60		1.40			1591m	West
GW307 384	30BL207 083	Bore	Private	Monitoring Bore	Monitoring Bore	BH1	14/10/2013	4.60	4.60		3.80			1674m	West
GW300 021	30BL155 142	Bore		Industrial	Commercial		07/07/1994	23.00	23.00	350		0.900		1676m	West
GW307 385	30BL207 083	Bore	Private	Monitoring Bore	Monitoring Bore	BH2	14/10/2013	3.90	3.90					1677m	West
GW307 386	30BL207 083	Bore	Private	Monitoring Bore	Monitoring Bore	BH3	14/10/2013	3.35	3.35					1700m	West

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)		Salinity (mg/L)			Elev (AHD)	Dist	Dir
GW303 765	30BL180 225	Bore	Private	Domestic	Domestic		14/10/2002	34.50	34.50	335	17.0 0	0.300		1798m	South West
GW300 233	30BL144 831	Bore	Private	Domestic, Stock	Domestic, Stock		07/12/1991	45.70	45.70	Very Good	9.10	3.770		1801m	West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

10-16 Pacific Drive, Port Macquarie, NSW 2444

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

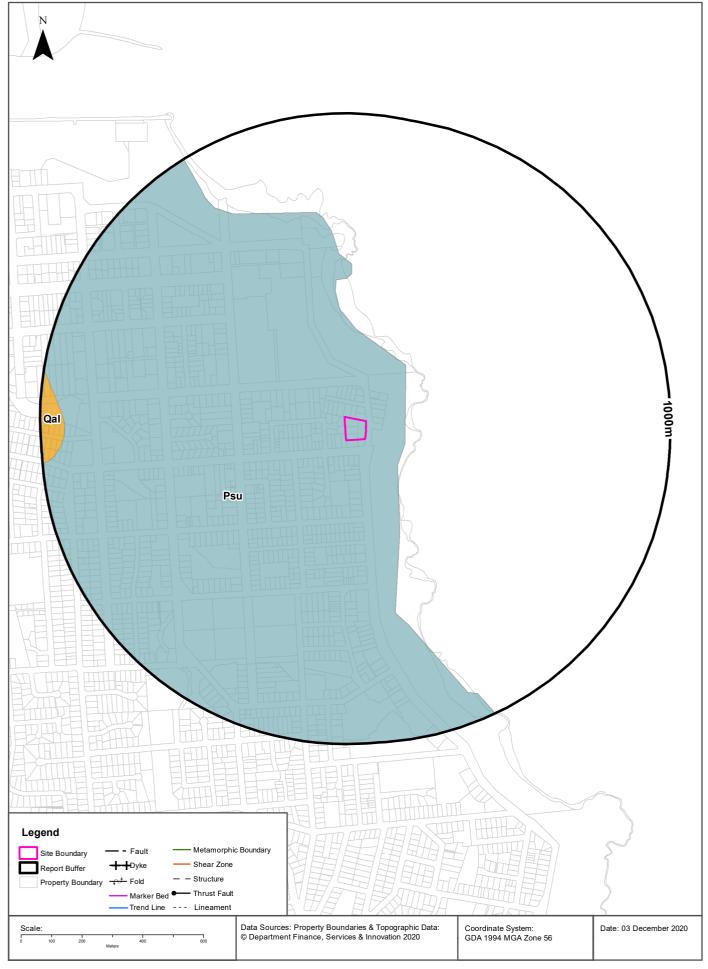
Groundwater No	Drillers Log	Distance	Direction
GW065478	0.00m-0.30m TOPSOIL 0.30m-9.10m CKAY 9.10m-15.20m SHALE 15.20m-18.30m WEATHERED BLACK SHALE 18.30m-39.60m BASALT WITH SEAMS OF QUARTZ	530m	North West
GW300047	0.00m-0.10m Soil 0.10m-4.00m Clay - red 4.00m-16.60m Clay - yellow 16.60m-19.90m Shale - yellow 19.90m-21.00m Basalt - decomposed	628m	North West
GW306460	0.00m-0.25m Topsoil 0.25m-1.50m Clay, brown/red, trace Gravel 1.50m-3.10m Clay, grey, trace Sand & Gravel 3.10m-6.00m Clay, light brown, trace fine-medium Sand	776m	North West
GW306459	0.00m-0.45m Topsoil 0.45m-2.00m Clay, high plasticity, dark brown, trace Sand & Gravel 2.00m-5.80m Clay, grey, high plasticity, trace Sand & Gravel 5.80m-7.50m Clay, grey, trace Sand, trace Silt	822m	North West
GW306458	0.00m-0.35m Topsoil 0.35m-4.00m Clay, red, trace Sand & Gravel 4.00m-9.00m Clay, grey, iron stained, some fine Sand, low plasticity, possible weathered rock	875m	North West
GW019726	0.00m-3.66m Clay Red Plastic 3.66m-7.01m Clay Red Water Bearing 3.66m-7.01m Pebbles Ironstone	1064m	North West
GW073259	0.00m-7.60m fill 7.60m-16.60m Shale - yellow interbedded with quartz	1076m	West
GW302341	0.00m-2.00m RED TOPSOIL 2.00m-41.00m RED/WHITE CLAY	1205m	West
GW303457	0.00m-0.10m topsoil 0.10m-3.00m sandy gravelly fill 3.00m-4.50m red dry clay 4.50m-13.00m weathered silt stone 13.00m-13.50m weathered basalt 13.50m-14.00m water cut 14.00m-18.00m weathered basalt 18.00m-18.30m water cut 18.30m-22.50m hard basalt	1453m	North West
GW306517	0.00m-0.30m Fill, grey gravel ROADBASE 0.30m-2.20m Fill, brown/yellow sand, some shells 2.20m-2.80m Sand, grey, fine to medium grained 2.80m-3.05m Sand, peaty, dark grey, some organics	1541m	West
GW306518	0.00m-0.20m Fill, Roadbase, grey gravel 0.20m-2.10m Fill, brown/yellow sand, some shells 2.10m-2.60m Sand, grey, fine to medium grained 2.60m-3.00m Clay, organic, dark grey	1542m	West
GW306520	0.00m-0.40m Fill, Roadbase, grey gravel 0.40m-2.90m Fill, brown/yellow sand, some shells 2.90m-3.20m Sand, grey, fine to medium, some shell grit 3.20m-3.40m Sand, peaty, dark grey some organics, clayey	1545m	West
GW306521	0.00m-0.30m Fill, Roadbase, grey gravel 0.30m-2.90m Fill, brown/yellow sand, some shells 2.90m-3.20m Sand, grey fine to medium, some shell grit	1546m	West
GW306522	0.00m-0.30m Fill, Roadbase, grey gravel 0.30m-2.70m Fill, brown/yellow, sand, some shells 2.70m-3.20m Sand, grey, fine to medium grained, some shell grit	1561m	West

Groundwater No	Drillers Log	Distance	Direction
GW306523	0.00m-0.30m Fill, Roadbase, grey gravel 0.30m-1.90m Fill, brown/yellow, sand, some shells 1.90m-2.80m Sand, brown, fine to medium grained, some shell grit 2.80m-3.20m Sand, peaty, dark grey, some organics, clayey	1572m	West
GW306519	0.00m-0.40m Fill, Roadbase, grey gravel 0.40m-2.00m Fill, brown/yellow sand, some shells 2.00m-2.40m Sand, grey, fine to medium grained, some shell grit 2.40m-3.60m Sand, peaty, dark grey, some organics, clayey	1591m	West
GW307384	0.00m-0.40m Fill; Sand 0.40m-2.20m Clay; residual - green/brown 2.20m-3.80m Serpentine; extremely weathered 3.80m-4.60m Serpentine; moderately weathered, gree/black, foliated	1674m	West
GW300021	0.00m-0.20m soil 0.20m-1.00m shale 1.00m-6.00m clay - grey & white 6.00m-12.00m basalt - decomposed - lots of quartz	1676m	West
GW307385	0.00m-0.40m Fill; Sand 0.40m-1.50m Clay; residual, green/brown 1.50m-3.30m Serpentine Clay; extremely weathered 3.30m-3.90m Serpentine; moderately weathered, black/green	1677m	West
GW307386	0.00m-0.90m Fill; mixed sand 0.90m-2.00m Clay; residual, green/brown 2.00m-3.35m Serpentine Clay; extremely weathered, some bands of rock	1700m	West
GW303765	0.00m-0.15m TOP SOIL 0.15m-6.00m ORANGE CLAY 6.00m-9.00m SILTY WHITE CLAY 9.00m-13.00m SOFT SILT STONE 13.00m-21.00m BLUEY QUARTZ HARD 21.00m-21.40m WATER CUT 21.40m-34.50m HARD QUARTZ	1798m	South West
GW300233	0.00m-0.30m TOPSOIL 0.30m-29.30m RED CLAY 29.30m-32.90m YELLOW SHALE 32.90m-45.70m BROEKN DYARITE	1801m	West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:250,000





Geology

10-16 Pacific Drive, Port Macquarie, NSW 2444

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	Melange				Palaeozoic			1:250,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	Melange				Palaeozoic			1:250,000
Qal	Outwash eluvium, coastal stream alluvium and estuarine deposits				Cainozoic			1:250,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:250,000

What are the Geological Structures within the dataset buffer?

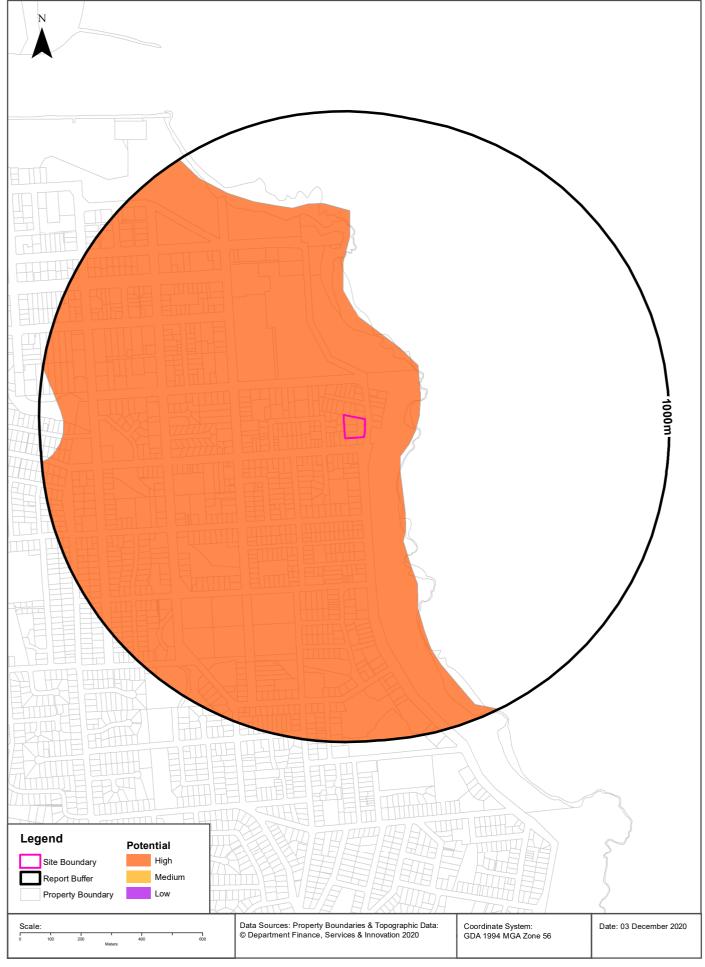
Feature	Name	Description	Map Sheet	Dataset
No features				1:250,000

Geological Data Source : NSW Department of Industry, Resources & Energy

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Naturally Occurring Asbestos Potential 10-16 Pacific Drive, Port Macquarie, NSW 2444





Naturally Occurring Asbestos Potential

10-16 Pacific Drive, Port Macquarie, NSW 2444

Naturally Occurring Asbestos Potential

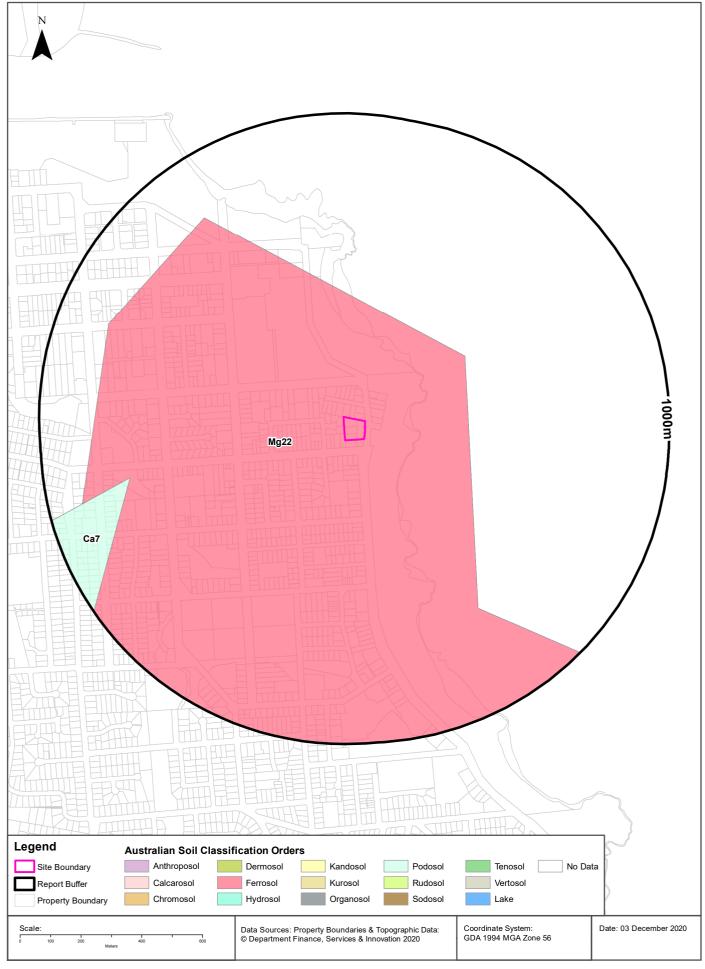
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
High	- CPxp	melange 75701		melange 75701	1000000	Cambrian	Cambrian	igneous mafic intrusive	Dolerite	Melange of the Port Macquarie Complex; dolerite, gabbro, diorite, basalt, chert, jasper, toanlite, trondhjemite, quartz feldspar porphyry.	Om	Onsite

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils





Soils

10-16 Pacific Drive, Port Macquarie, NSW 2444

Atlas of Australian Soils

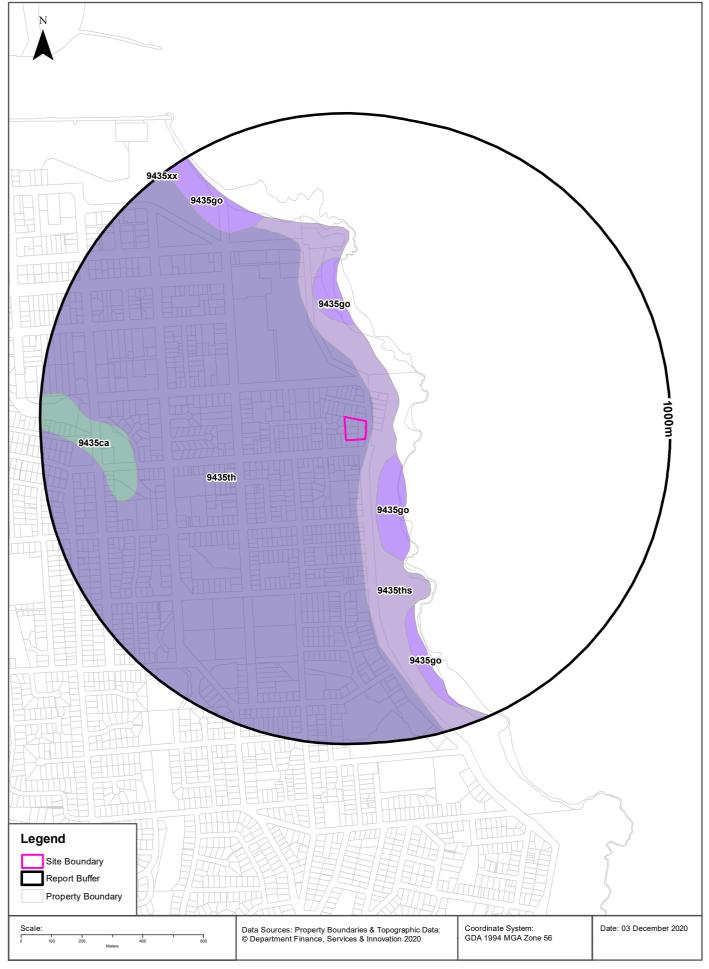
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Mg22	Ferrosol	Flat to low rolling hills at low elevation (< 1000 ft): chief soils are red friable porous earths (Gn4.11) sometimes with hard ferruginous material below the solum. Data are limited.	0m
Ca7	Podosol	Old sand dune and swamp system of gently undulating dune-swale succession: dunes of leached sands (Uc2.21 and Uc2.22) with extensive undulating areas of leached sands, such as (Uc2.2), (Uc3.2), and (Uc2.3). Associated are swamplands of (Uc2.2) sands with variable peaty and/or clayey layers on the surface, some acid peats (O) and plastic clays (Uf6.61) also with variable peaty surfaces in the lower-lying portions. As mapped, small areas of neighbouring units are included. Often this unit is separated from unit A9 by an elongate swamp.	718m

Atlas of Australian Soils Data Source: CSIRO

Soil Landscapes of Central and Eastern NSW





Soils

10-16 Pacific Drive, Port Macquarie, NSW 2444

Soil Landscapes of Central and Eastern NSW

What are the on-site Soil Landscapes?

Soil Code	Name
<u>9435th</u>	Thrumster

What are the Soil Landscapes within the dataset buffer?

Soil Code	Name
<u>9435ca</u>	Cairncross
<u>9435go</u>	Goolawah
<u>9435th</u>	Thrumster
<u>9435ths</u>	Thrumster Variant S
<u>9435xx</u>	Disturbed Terrain

Soil Landscapes of Central and Eastern NSW: NSW Department of Planning, Industry and Environment Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

10-16 Pacific Drive, Port Macquarie, NSW 2444

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
N/A		

If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

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Atlas of Australian Acid Sulfate Soils





Acid Sulfate Soils

10-16 Pacific Drive, Port Macquarie, NSW 2444

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
С	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m
В	Low Probability of occurrence. 6-70% chance of occurrence.	695m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

Dryland Salinity

10-16 Pacific Drive, Port Macquarie, NSW 2444

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit

The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.

In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining

10-16 Pacific Drive, Port Macquarie, NSW 2444

Mining Subsidence Districts

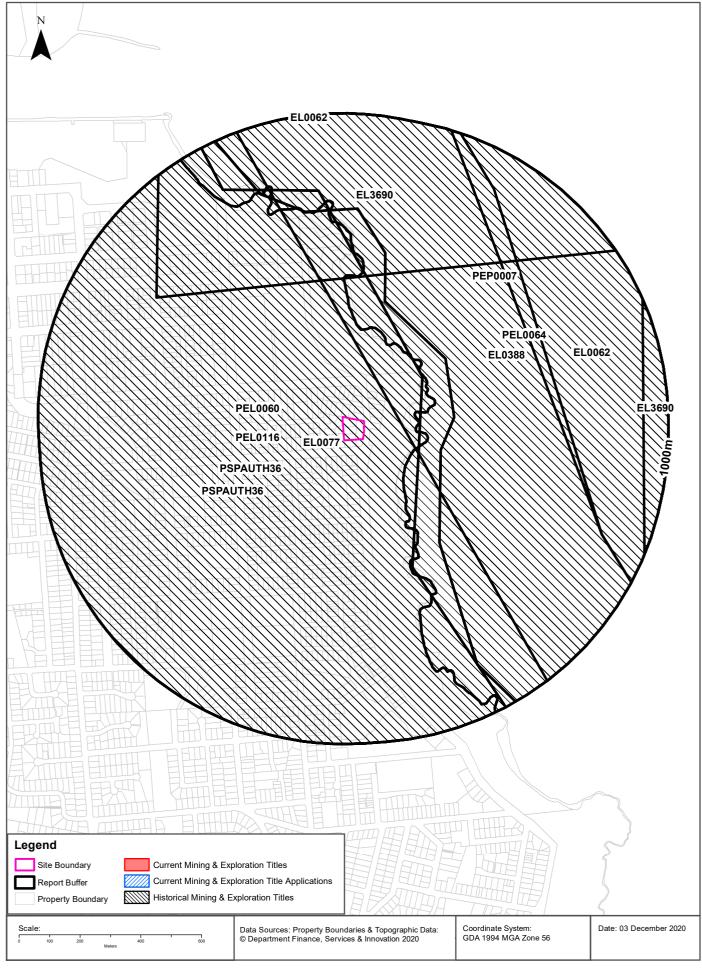
Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016) Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining & Exploration Titles





Mining

10-16 Pacific Drive, Port Macquarie, NSW 2444

Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist (m)	Dir'
N/A	No Records in Buffer								

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist (m)	Dir'
N/A	No Records in Buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

10-16 Pacific Drive, Port Macquarie, NSW 2444

Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist (m)	Dir'
EL0077	NICKEL LEACH PTY LIMITED	01 Feb 1967	01 Feb 1968	MINERALS	Mo Cu Zn Pb Ni	0m	Onsite
PEL0060	L H SMART OIL EXPLORATION CO. LTD			PETROLEUM	Petroleum	0m	Onsite
PEL0116				PETROLEUM	Petroleum	0m	Onsite
PSPAUTH36	PANGAEA OIL & GAS PTY LIMITED			MINERALS		0m	Onsite
PSPAUTH36	PANGAEA OIL & GAS PTY LIMITED	11/11/2009	11/11/2010	PETROLEUM	Petroleum	0m	Onsite
EL0388	PLANET MINING COMPANY PTY LIMITED	01 Jan 1971	01 Jan 1975	MINERALS	Heavy mineral sands	103m	North East
PEL0064	L H SMART OIL EXPLORATION CO. LTD			PETROLEUM	Petroleum	258m	East
PEP0007				PETROLEUM	Petroleum	258m	East
EL3690	CABLE SANDS HOLDINGS PTY. LIMITED	01 Nov 1990	01 Dec 1994	MINERALS	Heavy mineral sands	454m	North
EL0062	PLANET MINING COMPANY PTY LIMITED	01 Sep 1966	01 Sep 1968	MINERALS	Heavy mineral sands	635m	East

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

State Environmental Planning Policy

10-16 Pacific Drive, Port Macquarie, NSW 2444

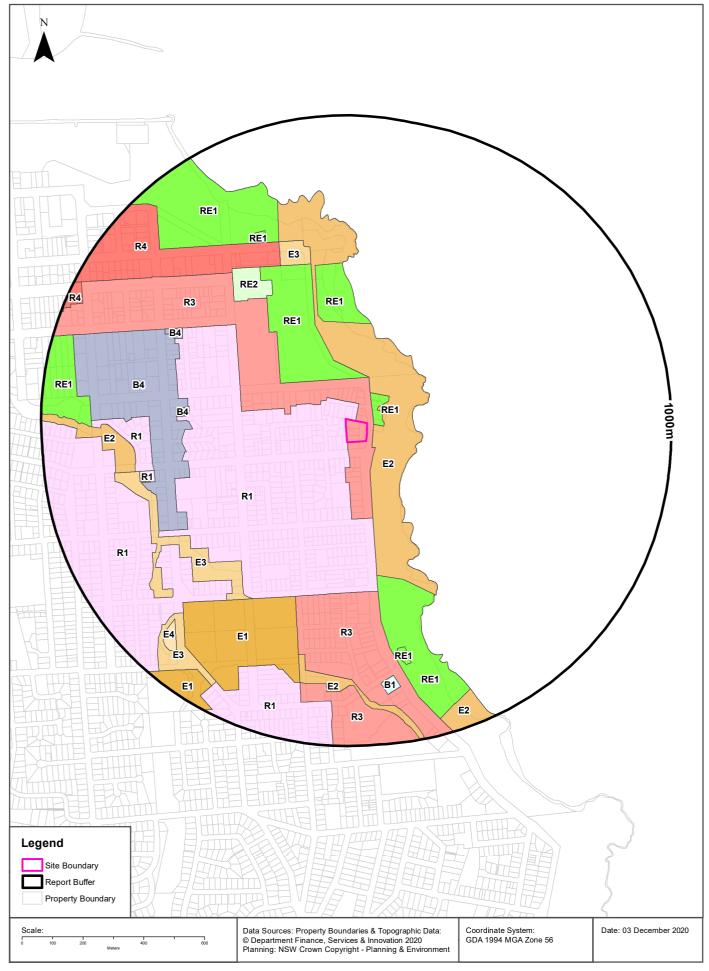
State Significant Precincts

What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No Records in Buffer							

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Environmental Planning Instrument

10-16 Pacific Drive, Port Macquarie, NSW 2444

Land Zoning

What EPI Land Zones exist within the dataset buffer?

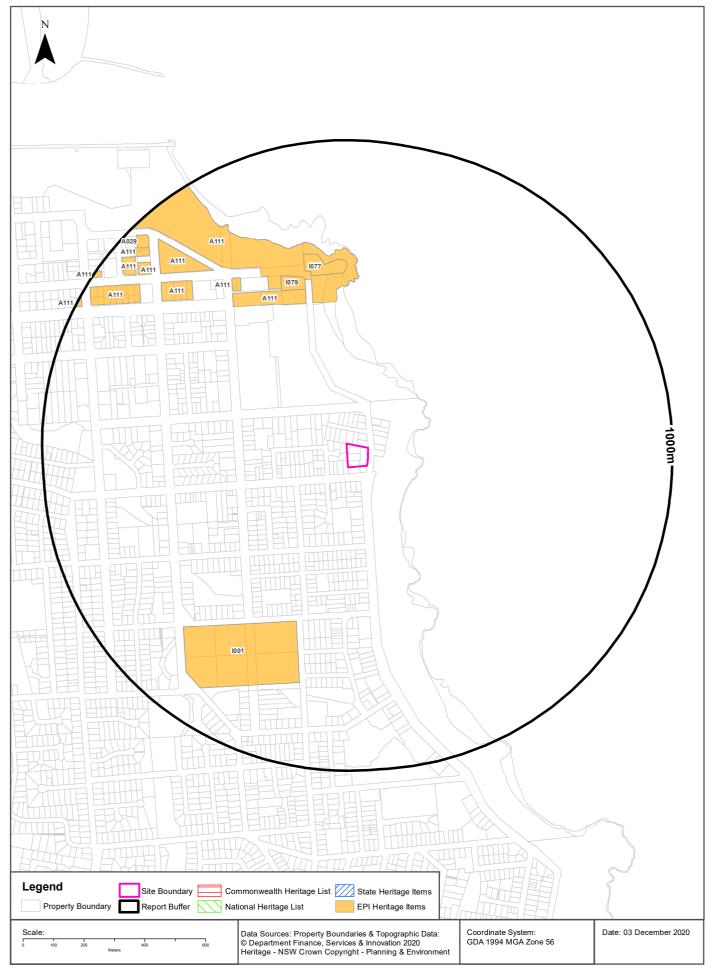
Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R3	Medium Density Residential		Port Macquarie-Hastings Local Environmental Plan 2011	20/07/2018	20/07/2018	10/09/2020	Amendment No 47	0m	Onsite
R1	General Residential		Port Macquarie-Hastings Local Environmental Plan 2011	20/07/2018	20/07/2018	10/09/2020	Amendment No 47	0m	South West
E2	Environmental Conservation		Port Macquarie-Hastings Local Environmental Plan 2011	22/06/2018	22/06/2018	10/09/2020	Amendment No 29	18m	North
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	22/06/2018	22/06/2018	10/09/2020	Amendment No 29	20m	North East
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		133m	North West
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		317m	North
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		442m	South
RE2	Private Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		475m	North West
R3	Medium Density Residential		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		494m	South
B4	Mixed Use		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		504m	West
B4	Mixed Use		Port Macquarie-Hastings Local Environmental Plan 2011	04/03/2016	04/03/2016	10/09/2020	Amendment No 33	513m	West
E3	Environmental Management		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		522m	South West
E3	Environmental Management		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		524m	North
E1	National Parks and Nature Reserves		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		535m	South West
R4	High Density Residential		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		548m	North West
R1	General Residential		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		591m	South West
B4	Mixed Use		Port Macquarie-Hastings Local Environmental Plan 2011	04/03/2016	04/03/2016	10/09/2020	Amendment No 33	597m	North West
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	01/06/2018	01/06/2018	10/09/2020	Amendment No 51	623m	North West
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	13/04/2017	13/04/2017	10/09/2020	Amendment No 42	637m	North West
R1	General Residential		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		641m	West

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R1	General Residential		Port Macquarie-Hastings Local Environmental Plan 2011	04/03/2016	04/03/2016	10/09/2020	Amendment No 33	641m	West
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	13/04/2017	13/04/2017	10/09/2020	Amendment No 42	688m	South
E2	Environmental Conservation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		697m	West
E2	Environmental Conservation		Port Macquarie-Hastings Local Environmental Plan 2011	22/09/2017	22/09/2017	10/09/2020	Amendment No 41	711m	South
R1	General Residential		Port Macquarie-Hastings Local Environmental Plan 2011	21/12/2018	21/12/2018	10/09/2020	Amendment No 52	770m	South
B1	Neighbourhood Centre		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		777m	South
E3	Environmental Management		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		777m	South West
R3	Medium Density Residential		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		796m	South
E4	Environmental Living		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		811m	South West
RE1	Public Recreation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		834m	West
E2	Environmental Conservation		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		883m	South
E1	National Parks and Nature Reserves		Port Macquarie-Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	10/09/2020		894m	South West
R4	High Density Residential		Port Macquarie-Hastings Local Environmental Plan 2011	02/04/2015	02/04/2015	10/09/2020	Amendment No 31	944m	West

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Heritage Items





Heritage

10-16 Pacific Drive, Port Macquarie, NSW 2444

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch Creative Commons 3.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/3.0/au/deed.en

National Heritage List

What are the National Heritage List Items located within the dataset buffer? Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch Creative Commons 3.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/3.0/au/deed.en

State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

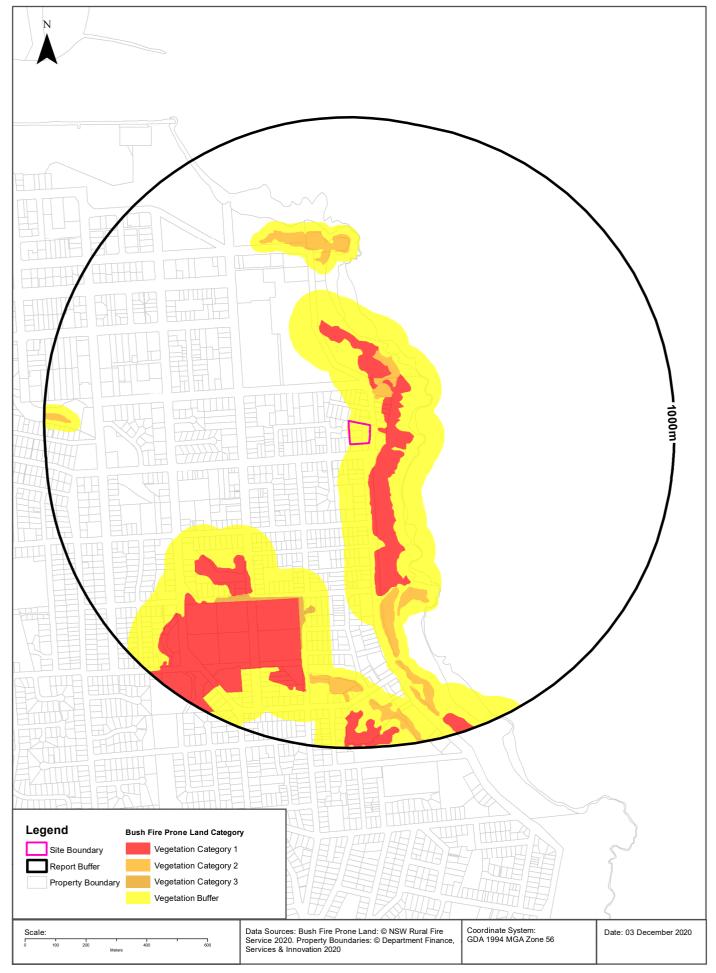
Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
A111	Port Macquarie - early European settlement	Item - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	470m	North West
A111	Port Macquarie - early European settlement	Item - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	483m	North West

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
1079	Three Dwelling houses	Item - General	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	528m	North
1001	Roto House	Item - General	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	534m	South West
1077	Pilots memorial	Item - General	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	562m	North
A111	Port Macquarie - early European settlement	Item - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	613m	North West
A111	Port Macquarie - early European settlement	Item - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	694m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	720m	North West
A111	Port Macquarie - early European settlement	Item - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	822m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	853m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	888m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	895m	North West
A029	Well	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	917m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	975m	North West
A111	Port Macquarie - early European settlement	ltem - Archaeological	Local	Port Macquarie- Hastings Local Environmental Plan 2011	23/02/2011	23/02/2011	08/11/2019	981m	North West

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Natural Hazards - Bush Fire Prone Land





Natural Hazards

10-16 Pacific Drive, Port Macquarie, NSW 2444

Bush Fire Prone Land

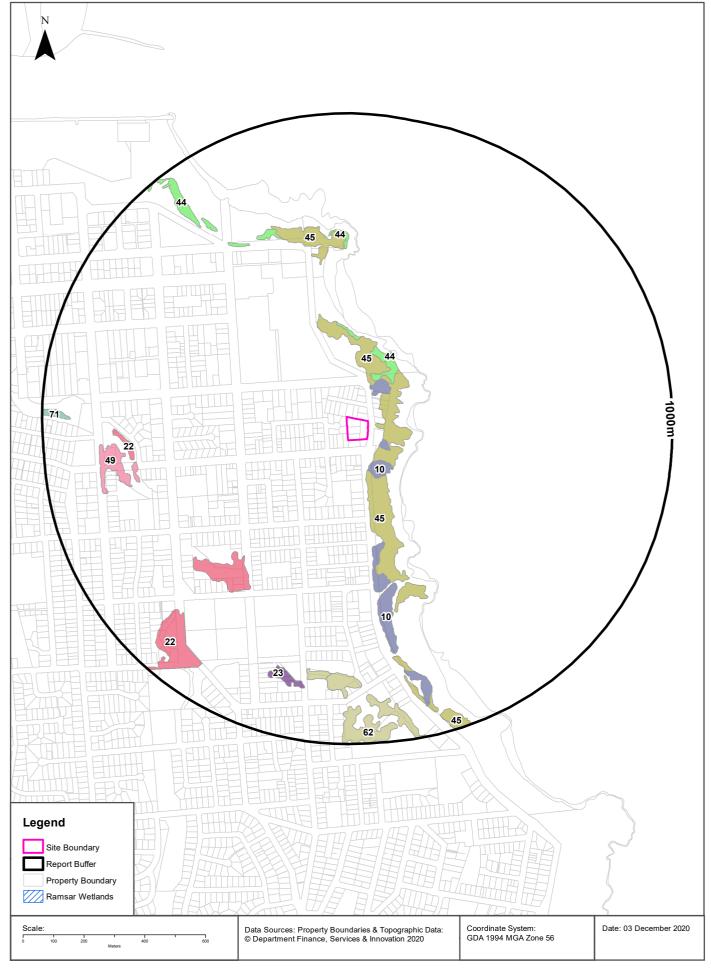
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Buffer	0m	Onsite
Vegetation Category 1	22m	South East
Vegetation Category 2	84m	North East
Vegetation Category 3	524m	South West

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & Ramsar Wetlands





Ecological Constraints

10-16 Pacific Drive, Port Macquarie, NSW 2444

Vegetation of Port Macquarie - Hastings LGA

What Vegetation exists within the dataset buffer?

Veg Code	Community	Formation	Class	Broad Type	Distance	Direction
45	Coast Banksia - Coastal She-oak Headland Woodland	Heathlands	Coastal Headland Heaths	Banksia integrifolia - Casuarina equisitifolia	21	East
10	Coastal Headland Brushbox Littoral Rainforest	Rainforests	Littoral Rainforests	Lophostemon confertus	42	South East
44	Themeda Headland Grassland	Grasslands	Maritime Grasslands	Themeda australis	134	North East
22	Flooded Gum Moist Riparian and Gully Forest	Wet Sclerophyll Forests	North Coast Wet Sclerophyll Forests	Eucalyptus grandis	508	South West
49	Coast Banksia - Wattle Wallum Shrubland	Heathlands	Wallum Sand Heaths	Banksia integrifolia - Acacia sophorae	695	West
62	Broad-leaved Paperbark - Mixed Eucalypt Swamp Forest Complex	Forested Wetlands	Coastal Swamp Forests	Melaleuca quinquenervia	761	South
23	Blackbutt Shrubby Moist Forest	Wet Sclerophyll Forests	North Coast Wet Sclerophyll Forests	Eucalyptus pilularis	775	South
71	Swamp Oak - Mixed Eucalypt Coastal Floodplain Wetland Forest Complex	Forested Wetlands	Coastal Floodplain Wetlands	Casuarina glauca	905	West

Vegetation Data Source: NSW Office of Environment and Heritage

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Ramsar Wetlands

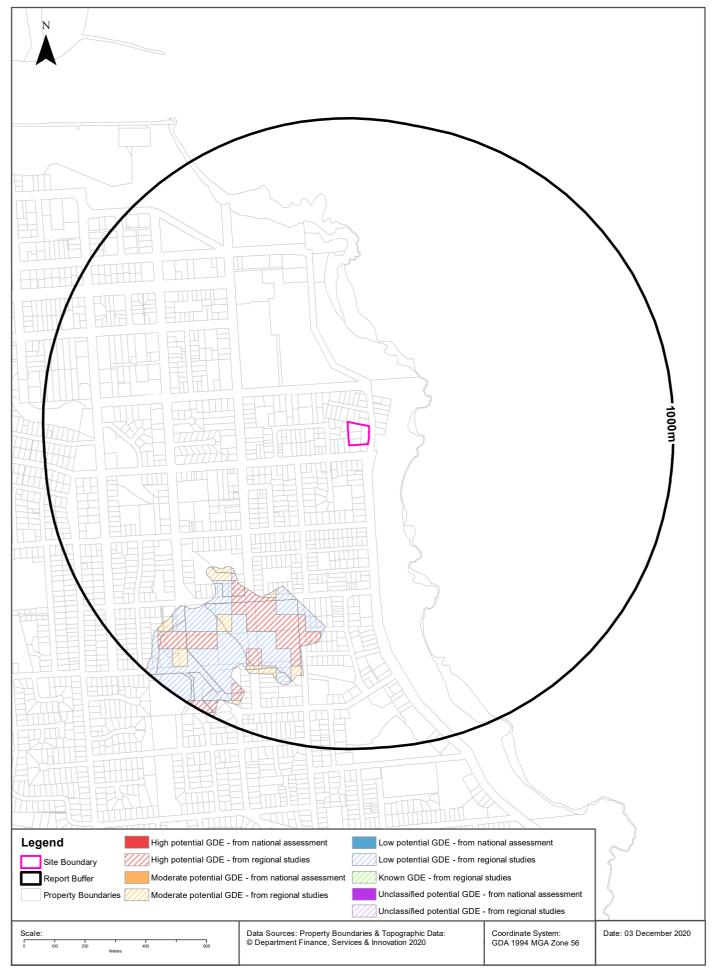
What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas





Ecological Constraints

10-16 Pacific Drive, Port Macquarie, NSW 2444

Groundwater Dependent Ecosystems Atlas

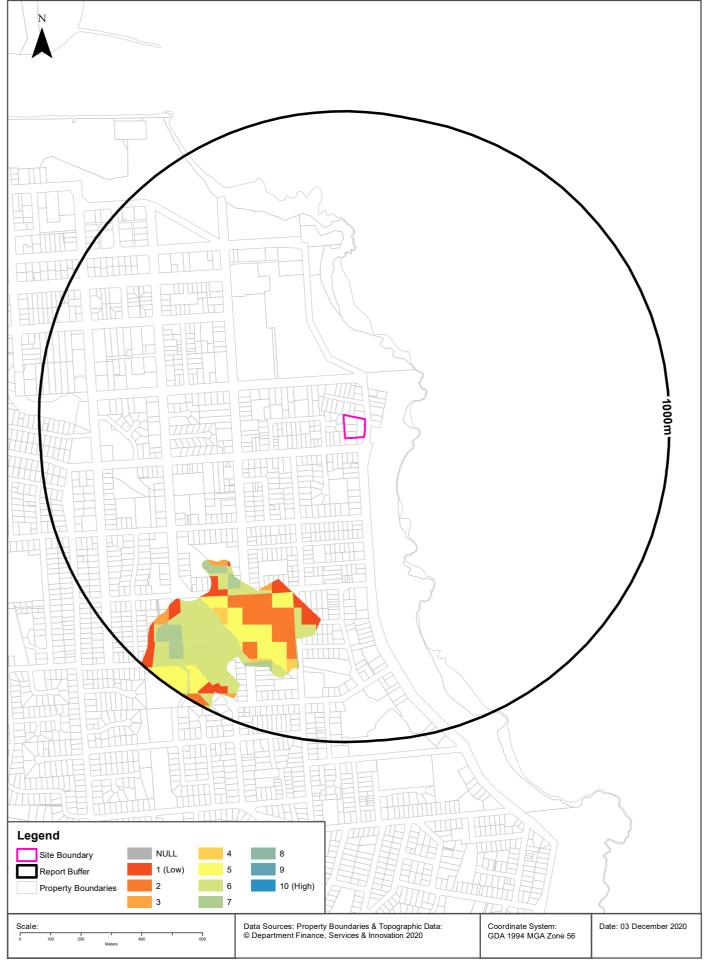
Туре	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	Low potential GDE - from regional studies	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		511m
Terrestrial	Moderate potential GDE - from regional studies	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		531m
Terrestrial	High potential GDE - from regional studies	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		554m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology

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Ecological Constraints - Inflow Dependent Ecosystems Likelihood





Ecological Constraints

10-16 Pacific Drive, Port Macquarie, NSW 2444

Inflow Dependent Ecosystems Likelihood

Туре	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	1	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		511m
Terrestrial	3	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		531m
Terrestrial	5	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		534m
Terrestrial	6	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		554m
Terrestrial	2	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		563m
Terrestrial	7	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		569m
Terrestrial	4	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		648m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

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Ecological Constraints

10-16 Pacific Drive, Port Macquarie, NSW 2444

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Crinia tinnula	Wallum Froglet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Acrocephalus orientalis	Oriental Reed- Warbler	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna pacifica	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Burhinus grallarius	Bush Stone- curlew	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	Rokamba;camba; Jamba
Animalia	Aves	Calyptorhynchus lathami	Glossy Black- Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Charadrius mongolus	Lesser Sand- plover	Vulnerable	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Coracina lineata	Barred Cuckoo- shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Dromaius novaehollandiae	Emu	Endangered Population	Not Sensitive	Not Listed	
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Esacus magnirostris	Beach Stone- curlew	Critically Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Gelochelidon nilotica	Gull-billed Tern	Not Listed	Not Sensitive	Not Listed	CAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Grus rubicunda	Brolga	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Irediparra gallinacea	Comb-crested Jacana	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensi s	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Oceanites oceanicus	Wilson's Storm- Petrel	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pezoporus wallicus wallicus	Eastern Ground Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pomatostomus temporalis temporalis	Grey-crowned Babbler (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Pterodroma solandri	Providence Petrel	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit- Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Thalassarche cauta	Shy Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thalasseus bergii	Crested Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto longimembris	Eastern Grass Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Insecta	Argynnis hyperbius	Laced Fritillary	Endangered	Not Sensitive	Critically Endangered	
Animalia	Insecta	Petalura gigantea	Giant Dragonfly	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Aepyprymnus rufescens	Rufous Bettong	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Cercartetus	Eastern Pygmy- possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Chalinolobus	Hoary Wattled Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Eubalaena australis	Southern Right Whale	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Micronomus	Eastern Coastal Free-tailed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent- winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Petaurus australis	Yellow-bellied Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petaurus norfolcensis	Squirrel Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascogale tapoatafa	Brush-tailed Phascogale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Planigale maculata	Common Planigale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pseudomys gracilicaudatus	Eastern Chestnut Mouse	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pseudomys oralis	Hastings River Mouse	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad- nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Syconycteris australis	Common Blossom-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Vespadelus troughtoni	Eastern Cave Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Aspidites ramsayi	Woma	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Reptilia	Eretmochelys imbricata	Hawksbill Turtle	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Acronychia littoralis	Scented Acronychia	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Allocasuarina defungens	Dwarf Heath Casuarina	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Allocasuarina thalassoscopica		Not Listed	Not Sensitive	Endangered	
Plantae	Flora	Asperula asthenes	Trailing Woodruff	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Callitris baileyi	Bailey's Cypress Pine	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Chamaesyce psammogeton	Sand Spurge	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Dendrobium melaleucaphilum	Spider orchid	Endangered	Category 2	Not Listed	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Lindsaea incisa	Slender Screw Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Maundia triglochinoides		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Melaleuca biconvexa	Biconvex Paperbark	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Oberonia titania	Red-flowered King of the Fairies	Vulnerable	Category 2	Not Listed	
Plantae	Flora	Peristeranthus hillii	Brown Fairy-chain Orchid	Vulnerable	Category 2	Not Listed	
Plantae	Flora	Rhodamnia rubescens	Scrub Turpentine	Critically Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Rhodomyrtus psidioides	Native Guava	Critically Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Sophora tomentosa	Silverbush	Endangered	Not Sensitive	Not Listed	

Data does not include NSW category 1 sensitive species.

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LC Code	Location Confidence
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General area or suburb match	Georeferenced with the confidence of the general/approximate area
Road match	Georeferenced to the road or rail
Road intersection	Georeferenced to the road intersection
Feature is a buffered point	Feature is a buffered point
Land adjacent to geocoded site	Land adjacent to Georeferenced Site
Network of features	Georeferenced to a network of features

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