

#### PRELIMINARY SITE INVESTIGATION

256 Paterson Road, Bolwarra Heights

9 September 2024

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## Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
1	First Issue to Client	ВС	03/06/2024	DS	03/06/2024	IGP	03/06/2024
2	Minor amendments	ВС	06/06/2024	DS	06/06/2024	IGP	06/06/2024
3	Amended Report to Reference Updated Plans	ВС	28/06/2024	DS	28/06/2024	IGP	28/06/2024
4	Amended Report to Reference Updated Plans	ВС	24/07/2024	DS	24/07/2024	IGP	24/07/2024
5	Amended Report to Reference Updated Plans	ВС	09/09/2024	DS	09/09/2024	IGP	09/09/2024

# Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

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## **Executive Summary**

Stantec have undertaken a Preliminary Site Investigation (PSI) for the proposed subdivision located at 256 Paterson Road, Bolwarra Heights, NSW. The PSI included a site inspection, desktop review of available historical data including a review of a Maitland City Council (MCC) Planning certificate, historical aerial photographs, title deeds and the NSW EPA database for the proposed development area.

The objectives of the investigation were to assess:

- The potential for past and present activities undertaken on and adjacent to the site to have affected soil and groundwater at the site.
- The need for any further assessment or remedial works before definitive conclusions could be made on the suitably of the site for use.

Review of the Maitland Local Environmental Plan 2011 indicates the site is situated within Class 5 Acid Sulfate Soils. Class 5 indicates that 'Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1,2,3 or 4 land.' There are Class 2 soils mapped 491m to the north of site. Class 2 indicates that 'Works below natural ground surface present an environmental risk; works by which the watertable is likely to be lowered present an environmental risk'.

No potential indicators of ASS or PASS were noted during the site walkover undertaken. The conclusions of the preliminary acid sulfate assessment indicate no acid sulfate is present at the site.

Based on the available historical data, Stantec site inspection and public searches, the southeastern portion of the site was developed into a residential dwelling between the years 1954 and 1967. Prior to this, the site was undeveloped. Minor domestic gardening was noted in the aerials and in the site inspection. In recent years (2007-2024), the southeastern portion of the site has been used for storage of farming machinery / equipment. The trotting track was first noted in the 1976 imagery and is still present at the time of writing (however no longer in use). Farming machinery such as tractors / plows were noted to have been transported to site from a farm that the property owner previously worked on. Based on review of the title deeds, it is understood that previous owners of the land were graziers and farmers.

In accordance with the State Environmental Planning Policy (Resilience and Hazards) which requires the planning authority to consider whether the Site is suitable for the proposed usage prior to approving and determining a development application, Stantec has undertaken a Preliminary Site Investigation (PSI). Based on the findings of the PSI, Stantec did not identify gross contamination or potentially contaminating activities previously undertaken on Site that would render the Site unsuitable for its proposed use.

The site can be made suitable for the proposed land use, based on the recommendations below:

An unexpected finds protocol has been developed (Appendix D) to address any potential
contamination if encountered during construction phase. Construction should be managed with the
unexpected finds protocol in place.



# Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

- If potential contamination is encountered, site works will be ceased, and a suitable environmental consultant will be engaged for assessment as per the unexpected finds protocol.
- Any soil to be excavated and transported off site for disposal requires classification in accordance with the NSW EPA Waste Classification Guidelines.
- Assessment of access tracks and building pads on site for either potential reuse or offsite disposal.
   This can be undertaken during construction phase of the development and under the unexpected finds protocol.
- Prior to demolition of any structures, structures should be assessed for hazardous materials. If hazardous materials are identified, the materials are to be managed accordingly.
- Removal of foreign materials to a licensed waste/ recycling facility.



### 1 Introduction

This report presents the findings of a Preliminary Site Investigation (PSI) undertaken by Stantec Australia Pty Ltd (Stantec) on 256 Paterson Road, Bolwarra Heights, NSW.

### 1.1 Background

Stantec Australia Pty Ltd (Stantec) was commissioned by HGBE Properties Pty Ltd ('the client'), to prepare a PSI report for the proposed residential subdivision, located at 256 Paterson Road, Bolwarra Heights, NSW (the 'site'). The site assessment area is shown in Figure 1, attached in Appendix A.

Stantec was provided with plans by the client, prepared by GCA Engineering Solutions Pty Ltd, titled: 'Proposed Subdivision' 256 Paterson Road Bolwarra, Drawing No. LD01, Project No. 24126LD, Rev 5, Dated 20.08.24. Based on the provided plans, it is understood that the proposed residential development will comprise subdivision of 14 lots and construction of an internal road. It is understood that the existing dwelling will be demolished to accommodate the proposed subdivision. The provided plans are attached in Appendix A.

The PSI included a site inspection, desktop review of available historical data including a review of a Maitland City Council (MCC) Planning certificate, historical aerial photographs, title deeds and the NSW EPA database for the proposed development area. The PSI has been commissioned to aid in the development application for the proposed subdivision.

The assessment was undertaken with reference to the following guidelines:

- 'NSW EPA (2020) guidelines for "Consultants Reporting on Contaminated Land, Contaminated land guidelines' [1]
- 'National Environment Protection Measure (NEPM) for the Assessment of Site Contamination, 1999' [2]
- 'State Environmental Planning Policy (Resilience and Hazards) [3]

## 1.2 Purpose & Objectives

The purpose of this PSI is to provide the client with preliminary advice on the contamination status of the site and subsequent implications for the intended use. The PSI reviews current and historical activities undertaken at the site and provides a preliminary environmental assessment of the potential for soil and /or groundwater contamination to be present on the site.

The objectives of the PSI are to:

- To the extent practicable, identify the potential for past or present activities on; and surrounding the site, to have impacted soil or groundwater at the site.
- Identify potential areas and contaminants of concern at the site.
- Identify potential receptors of concern and assess the potential for the protected beneficial uses of the land to be impacted due to contamination.



- To make a preliminary assessment of whether contamination is likely to affect the future use or development of the site.
- Assess the requirement, if any, for further environmental investigation to assess or make the site suitable for the proposed use.

### 1.3 Scope

Stantec carried out the following tasks in order to satisfy the purpose and objectives of the PSI assessment.

#### **Defined the Site, Features & Surrounds:**

- Obtained the property title description from a Land-data Property Report.
- Defined the site boundaries based on title information, available data and established a site base plan.
- Identified the site features.
- Defined the topography, surface water drainage of the site and its proximity to the nearest surface water body.
- Identified the location of nearby sensitive environments and receptors such as residential, primary schools, wetlands, streams or rivers.
- Identified the zoning of the site under the local Planning Scheme.

#### **Hydrogeology & Groundwater Resource Use**

 Ascertained the potential utilisation of groundwater at and near the site through a search of the NSW Groundwater Database at NSW Office of Water website.

#### **Review of Public Records on Site History**

Review publicly available documents relevant to the site including:

- · The historical chain of land titles.
- Historical and current maps of the area.
- Section 10.7 Certificates
- Selected historical aerial photos available from the Department of Lands.
- Undertake review of the NSW EPA Contaminated Lands Register to identify nearby contaminated sites reported to the NSW EPA (within a 2 km buffer).

#### Interview with Site Owner (Stuart Smith)

 Interview with current site owner to ascertain potentially contaminating activities that may have occurred on site.

#### Site Inspection & Surrounds

- Confirmed the site features and identified any visible evidence of fuel storage tanks (above or below ground) and other infrastructure with potential to act as a source of soil and/or groundwater.
- Confirmed the soil type and looked for evidence of site cutting and filling.



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 Assessed the surrounding area (to a radius of approximately 150 m) for potential sources of contamination of soil or groundwater at the site.

#### Reporting

- Preparation of this Preliminary Site Investigation (PSI) report to document the assessment activities and results to including findings and recommendations relevant to the objectives of the assessment.
- Developed a Conceptual Site Model (CSM) for the site, identifying complete and potential pathways between known and potential sources and receptors.

## 2 Site Inspection & Surrounding Environment

#### 2.1 Site Identification

The subject site details are presented in Table 2-1 below. For site location, refer to drawing 1 in Appendix A.

Table 2-1 Site Details

Item	Description
Site Address	256 Paterson Road, Bolwarra Heights, NSW
Lot Number and Deposited Plan	Lot C / DP163627
Site Area	7.19 ha
Local Government Area	Maitland LGA
Relative Zoning	R5 Large Lot Residential

### 2.2 Site Use & Infrastructure

A site inspection was undertaken by Stantec on 22<sup>nd</sup> May 2024, in order to identify and map salient feature of the site and the surrounding area. Site features and observations are detailed in Table 2-2 below.

Table 2-2 Site Features and Observations

Item	Observations
Site use	Residential.
Weather condition	Sunny.
Site slope and drainage features	<ul> <li>The site is situated within a gentle, undulating landscape, with a slight ridgeline evident in the centre of the site. Site slopes generally fall to the east, west and north from the centre of the site, in the order of 2° to 10° (locally steeper along the boarders of the site). The highest point on site is found in the southern portion of the site at 35 m AHD, and the lowest is found in the northeastern corner, at 26m AHD.</li> <li>Drainage features on site are varied in locations, with areas of ponding noted within minor surficial depressions in the eastern portion of the site. A drainage channel is present within the western portion of the site which feeds</li> </ul>
Nearby water bodies	into a dam, located on the western border.  • A northwest trending drainage channel is located along
	the western portion of the site, feeding into a dam, offsite.
	<ul> <li>Several dams are located within a 1km radius surrounding the site.</li> </ul>
	Large floodplain located further to the northeast, beyond Lang Drive.
	Gullys / drainage lines are located north, and east of site.

Item	Observations
Site surface coverings	A combination of mature trees and generally maintained grass cover occupies the majority of the site.
Surface soils	<ul> <li>Surface soils generally comprise natural topsoil materials (Silty Sands), with several areas on site exposing gravelly clay (i.e trotting and access tracks). Several minor instances of imported gravel were noted, to assist access tracks in periods of wet weather.</li> </ul>
Site cut and fill	<ul> <li>Minor cut located at the southern edge of the property and Paterson Road, likely due to reaching design levels during the construction phase of the road.</li> <li>Minor gravel fill associated with the access track entering</li> </ul>
	the site.
	<ul> <li>Access tracks and trotting tracks formed by localised cut and filling.</li> </ul>
	Current property owner moved material on site with a grader to form the trotting-track.
Buildings	Residential dwelling (Weatherboard), a garage and shed (corrugated iron) located in the southeastern portion of the site.
Potential asbestos in building materials	Fibrous sheeting was observed in the eaves of the dwelling and garage on site. The sheeting appeared to be intact and in good condition.
Manufacturing, industrial or chemical processes and infrastructure	Not observed.
Fuel storage tanks (USTs/ASTs)	Not observed.
Dangerous goods	Not observed.
Presence of stockpiles, fly tipping or anthropogenic materials	Several stockpiles are located in the northern portion of the site, wholly comprising felled trees and vegetation.
	<ul> <li>Anthropogenic materials comprised of inert materials such as old steel farm equipment, fencing, steel pipes, tyres etc primarily situated within the vicinity of the shed structure on site.</li> </ul>
Liquid waste disposal features	Sewerage service line noted in the southwestern portion of the site, heading offsite.
Evidence of previous site contamination investigations	Not observed.
Evidence of land contamination (staining or odours)	Not observed.
Evidence of groundwater contamination	Not observed.
Groundwater use	Not observed.
Vegetation	<ul> <li>Vegetation on site generally comprised maintained grass cover and scattered mature trees.</li> <li>Two domestic gardens comprising various fruits and</li> </ul>
	vegetables evident in the vicinity of the dwelling on site.
Site fencing	A mixture of perimeter fencing on site was observed, comprising of Colourbond, picket fencing and construction fencing.
	Fencing damaged / removed along the northern and western boundaries of the site.

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Item	Observations		
Additional Notes and Observations	<ul> <li>Stormwater line from a northern residential subdivision passes through the eastern border of the site.</li> <li>Minor depression noted on the eastern border of the site, potentially associated with poor backfilling practices following installation of the stormwater line.</li> </ul>		

## 2.3 Interview with Property Owner – Stewart Ronald Max Smith

An interview with the current property owner Stewart Smith was undertaken on the 22<sup>nd</sup> of May 2024. The interview revealed the following information:

- Stewart has lived at the property for approximately 60 years. In that time, he has had cattle, horses, and bees on site. The horses and cattle haven't been present on site since the ~1980s and were primarily utilised for grass maintenance.
- Stewart has maintained several domestic gardens since his occupancy. He noted to have never applied pesticides to his produce.
- There is various farming machinery / equipment located around the shed, which were brought to site from another farm that Stewart worked on. None of the agricultural practices have occurred on site.
- Various household chemicals / fuels associated with site maintenance (mowers and tractors) are stored in the shed.

## 2.4 Surrounding Environment & Land Uses

The site is located within residentially zoned land, with land uses around the site detailed in Table 2-3 below.

Table 2-3 Surrounding Land Use

Direction	Land Use or Activity				
North	Undeveloped land, followed by a residential subdivision.				
East	Large residential lots, followed by a residential subdivision.				
South	Residential properties, followed by Paterson Road and a residential subdivision.				
West	Large residential lots, followed by a residential subdivision.				

### 3 Published Data

## 3.1 Regional Geology

Review of the Lotsearch Report (LS056199\_EP), indicates that the site is underlain by the Branxton Formation (Pmtb). Pmtb is known to comprise conglomerate, sandstone and siltstone. The Lotsearch Report (LS056199\_EP is attached in Appendix C.

## 3.2 Hydrogeology

Review of the Lotsearch Report (LS056199\_EP), indicated that there are a total of nine (9) wells noted within a 2000 m radius of the site, and two (2) within 500 m. Lotsearch Report (LS056199\_EP is attached in Appendix C. Search results of the wells within 500m of the site, are summarised in Appendix C.

NSW Bore ID	Bore Type	Drill Date	Status	Bore Depth (m)	Salinity (mg/L)	SWL (mbgl)	Distance (m)
GW204724	Water Supply	07/05/2020	Functioning	72.00	-	-	387 northwest
GW200540	Water Supply	13/03/2002	Unknown	22.20	3500	1.00	493m west

#### 3.3 Acid Sulfate Soils

Review of the Maitland Local Environmental Plan 2011 indicates the site is situated within Class 5 Acid Sulfate Soils. Class 5 indicates that 'Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1,2,3 or 4 land.' There are Class 2 soils mapped 491m to the north of site. Class 2 indicates that 'Works below natural ground surface present an environmental risk; works by which the watertable is likely to be lowered present an environmental risk'.

#### 3.4 EPA Records Search

#### 3.4.1 Contaminated Land Record of Notice

The Contaminated Land Record of Notice is maintained by the Office of Environment and Heritage (OEH) in accordance with Part 5 of the Contaminated Land Management (CLM) Act 1997 ref and contains regulatory notices issued by the Environment Protection Authority (EPA) in relation to contaminated sites.

A search of the NSW EPA Record of Notices revealed no site notified to the EPA within a 1km buffer. The search results are detailed in Lotsearch Report (LS056199 EP), attached in Appendix C.

#### 3.4.2 PoEO Public Register

The PoEO Public Register under Section 308 of the Protection of the Environment Operations (PoEO) Act 1997 contains Environment Protection Licences (EPLs), applications and notices issued by the EPA.

The search revealed one (1) licensed activity within a 1km radius of the site. The search results are presented in Table 3-1 below and attached in Appendix C, as part of the Lotsearch Report (LS056199\_EP).

Table 3-1 Licensed activities under the PoEO Public Register

EPL	Organisation	Name	Address	Activity	Distance
10393	Maitland City Council	All Waterbodies In The Maitland Local Government Area	Maitland	Other Activities	0 m (onsite)

Furthermore, there were no delicensed or revoked activities revealed within a 1km radius of the site, however there were four (4) surrendered activities revealed. The search results are detailed in Table 3-2 below and attached in Appendix C, as part of the Lotsearch Report (LS056199\_EP).

Table 3-2 Delicensed, revoked, and surrendered activities under the PoEO Public Register

License No.	Organisation	Location	Status	Date Issued	Activity	Distance
4653	Luhrmann Environment Management Pty Ltd	Waterways throughout NSW	Surrendered	06/09/2000	Other activities/ non-scheduled activity – application of herbicides	0 m (onsite)
4838	Robert Orchard	Various Waterways throughout NSW – Sydney, NSW 2000	Surrendered	07/09/2000	Other activities/ non-scheduled activity – application of herbicides	0 m (onsite)
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	0 m (onsite)
12439	State of New South Wales (Department of Primary Industries – Lands)	Soil Conservation Service, Waterways within the Hunter Valley Flod Mitigation Scheme, Maitland	Surrendered	13/02/2007	Other activities - application of herbicides	389 m north

## 4 Site History

#### 4.1 General

The site history comprised review of the Lotsearch Report (LS056199\_EP), title deed searches, available published data, section 10.7 planning certificates, all attached in Appendix C, as part of the Lotsearch Report (LS056199\_EP). The site history is detailed herein.

#### 4.1.1 Historical Title Deeds Search

Historical Title Deeds were obtained to help determine previous land use of the site. A summary of the registered proprietors and occupations where available for Lot C / DP163627 (the site) is detailed in Table 4-1 below. Historical Title Deeds are attached in Appendix C.

Table 4-1 Historical Title Deeds – Lot C / DP163627

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
01.08.1913 (1913 to 1937)	John Horn (Occupation not noted)	Book 1006 No. 164
16.08.1937 (1937 to 1959)	James Wesley Horn (Grazier)	Book 1675 No. 344
02.07.1959 (1959 to 1961)	Ronald Chapman Smith (Farmer)	Book 2491 No. 306
18.04.1961 (1961 to 1989)	Susan Mary Smith (Widow) Now Susan Mary Burns (& her deceased estate)	Book 2567 No. 569
25.01.1989 (1989 to date)	# Stewart Ronald Max Smith # Rosalie Thomasina May Williams	Book 3792 No. 881 Now C/163627

#### 4.1.2 Maitland City Council (MCC) Planning Information

A Section 10.7 planning certificate search was provided to Stantec by HGBE Properties Pty Ltd for Lot C / DP163627. The certificate is summarised in Table 4-2, with the complete certificate attached in Appendix C.

Table 4-2 Summary of Section 10.7 Planning Certificate for Lot C DP163627

Matters Pursuant to Section 10.7(2)	Lot C DP163627
Zoning & Land Use	R5 Large Lot Residential
Development Control Plan (DCP)	Maitland DCP 2011 Applies to this land
Critical Habitat	Land is NOT identified as a critical habitat
Conservation Area & Environmental Heritage	Land is NOT identified as being a Conservation area or having an item of Environmental Heritage.
Coal Mine Subsidence Act 2017	Land is NOT within a proclaimed Mine Subsidence District
Road Widening & Realignment	Land is NOT affected by road realignment or road widening
Flood Related Development Controls	Development on this land is NOT subject to flood related development controls contained within MCC LEP 2011
Land Reserved for Acquisition	Land is NOT subjected to Land Reserved for Acquisition.

Matters Pursuant to Section 10.7(2)	Lot C DP163627	
Biodiversity Certified Land	Land is NOT biodiversity certified land.	
Bushfire Prone Land		Land IS identified as being bushfire prone land
Property Vegetation Plans	Council has NOT been notified of any property vegetation plan under the Native Vegetation Act 2003 that affects the land.	
Loose-fill asbestos information	There are no premises on the subject land listed to contain or have contained loose-fill asbestos insulation.	
Contaminated Land	<ul> <li>i) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.</li> <li>ii) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.</li> </ul>	
	iii) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.	
	iv)	The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.
	v) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.	

#### 4.1.3 Review of the Historical Aerial Photos

Stantec has conducted a review of historical aerial photographs or available aerial imagery, current site inspection, previous investigations, and knowledge of the area.

A summary of the interpreted site features is detailed in Table 4-3 below and aerial photographs are provided in Lotsearch Report (LS056199\_EP), attached in Appendix C.

Table 4-3 Historical Aerial Imagery Review

Date	Reference	Observations
	B & W	Onsite:
	Scale: 1cm = 30m	<ul> <li>Site appears to predominately comprise grass cover, with a large stand of mature trees occupying the central portion of the site. Portion of the mature tree stand extends over the northern boundary of the site, with tree clearing evident along the site boundary.</li> </ul>
4020		<ul> <li>Appears to be a drainage channel intersecting the southwestern portion of the site, with a small dam located on the western boundary.</li> </ul>
1938		Offsite:
		<ul> <li>Surrounding areas predominately comprise grass cover and sporadic mature tree coverage.</li> </ul>
		Paterson Road located south of the site.
		Drainage channel located east of the site.
		<ul> <li>Drainage channel located west of the site, with an associated dam located further north.</li> </ul>
		Dam located north of the site.
	B & W	Onsite:
1954	Scale: 1cm = 30m	Site appears to predominately comprise grass cover, with a large stand of mature trees occupying the central portion of the

Date	Reference	Observations
	- Kolololico	site. Portion of the mature tree stand extends over the
		northern boundary of the site, with tree clearing evident along
		the site boundary.
		Offsite:
		Several residential dwellings now situated beyond the southern boundary of the site.
		Portion of mature trees have been cleared to the east.
		James and Wesley Street have been constructed to the west.
	B&W	Onsite:
	Scale: 1cm = 30m	Site is generally consistent with the 1954 aerial imagery.
1958		Offsite:
		Surrounding areas are generally consistent with the 1954 aerial imagery.
	B & W	Onsite:
	Scale: 1cm = 30m	Residential dwelling and associated shed has been
		constructed in the southeastern portion of the site.
1967		Minor disturbance evident surrounding the dwelling on site.  Offsite:
		Further residential development located to the south and west
		of the site.
		Appears to be a garden area constructed at the residential dwelling immediately east of the site.
	Colour	Onsite:
	Scale: 1cm = 30m	Additional shed structure has been constructed north of the
		existing dwelling on site.
1976		Disturbance in the form of a trotting-track evident in the northeastern portion of the site.
1010		Disturbance from a neighbouring property to the west has
		slightly crossed over onto the site.
		Offsite:
		Further rural-residential development to the west.
		Onsite:
		Long structure now present adjacent the newly constructed shed on site.
		Racing-track on site appears to be more pronounced now.
	B&W	
1984	Scale: 1cm = 30m	Offsite:
		Further residential development to the south and west.
		Minor vegetation regrowth evident to the west.
		Paterson Road appears to have been upgraded.
		Disturbance noted around the dam to the north of the site.
		Onsite:
	Colour	<ul> <li>Access track connecting Paterson Road to the northern shed on site now evident.</li> </ul>
1993	Scale: 1cm = 30m	Land clearing evident north of the shed.
		Disturbance evident surrounding the dam on site, likely
		alterations.
		Bee-hives evident north of the shed on site.

Data	Poforonoo	Observations	
Date	Reference	Minor regrowth evident in sections of the trotting-track on site.	
		Million regrowth evident in sections of the trotting-track on site.  Offsite:	
		Further residential development evident to the south and west.	
		·	
		Onsite:	
	Colour	Minor vegetation regrowth evident on site.	
2001	Scale: 1cm = 30m	Richer vegetation evident east of the shed structures on site.	
		Offsite:	
		Further residential development evident to the southeast and west.	
		Onsite:	
	Colour	<ul> <li>Access track now barely visible, with revegetation evident on the track and surrounding areas.</li> </ul>	
2007	Scale: 1cm = 30m	Offsite:	
		Appears to be agricultural ridge planting to the west of the site.	
		Further vegetation growth evident in surrounding areas.	
		Onsite:	
	Colour	Multiple examples of stored machinery / general farming	
2010	Scale: 1cm = 30m	equipment evident surrounding the shed structures on site.	
		Offsite:	
		Further residential development evident to the south.	
		Onsite:	
		Evidence of grass cover maintenance evident in the southern	
		portion of the site.	
2015		Deterioration / partial removal of the long-shed structure on	
	Colour	site evident, now potentially appears to have been a former greenhouse.	
	Scale: 1cm = 30m	Potential cropping adjacent the greenhouse structure on site	
		evident.	
		Offsite:	
		Surrounding areas are generally consistent with the 2010	
		aerial imagery.	
		Onsite:	
		Evidence of rust noted on the roof of the northern shed	
	Colour Scale: 1cm = 30m	structure.	
		<ul> <li>Additional stored farming machinery / equipment (appearing to comprise: trucks, irrigation piping, tractors) evident on site.</li> </ul>	
2020		Fencing has been constructed around portion of the dwelling	
2020	Goale. Tolli = Sulli	on site.	
		Row tilling no longer observed.	
		Offsite:	
		Residential dwelling has been constructed northeast of the	
		site, with landscaping ongoing.	
		Onsite:	
2023		Tilling evident in the potential cropping area identified in 2015	
	Colour	aerial imagery.	
	Scale: 1cm = 30m	Grass cover on site has recently been maintained.	
		Mature tree cover now occupies majority of the site.	
		Offsite:	

## Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

Date	Reference	Observations	
		<ul> <li>Surrounding areas are generally consistent with the 2010 aerial imagery, with the exception of the landscaping around the residential dwelling to the northeast has been completed.</li> </ul>	

## 4.2 Summary of Site History

Based on the available historical data, Stantec site inspection and public searches, the southeastern portion of the site was developed into a residential dwelling between the years 1954 and 1967. Prior to this, the site was undeveloped. Minor domestic gardening was noted in the aerials and in the site inspection. In recent years (2007-2024), the southeastern portion of the site has been used for storage of farming machinery / equipment. The trotting track was first noted in the 1976 imagery and is still present at the time of writing (however no longer in use). Farming machinery such as tractors / plows were noted to have been transported to site from a farm that the property owner previously worked on. Based on review of the title deeds, it is understood that previous owners of the land were graziers and farmers.

At the time of the earliest aerial imagery (1938), the surrounding areas generally appeared to comprise undeveloped land, with the exception of Paterson Road. Over the period to 2024, the key changes comprised:

- Residential development in the surrounding areas from 1954 to 2023.
- Paterson Road upgrade between the years of 1976 and 1984.

## 5 Areas & Contaminants of Potential Concern

The assessment has identified several potential sources of contamination (and related Contaminants of Potential Concern – COPC), which are summarised in Table 5-1 below.

Table 5-1 Areas and Contaminants of Potential Concern

Area of Environmental Concern (AoEC)	Site Activi	ty / Potential Source	Contaminants of Potential Concern (CoPC)	Comments
		Ons	site Sources	
Overall Site	Machinery Use / Earthworks Grass Pasture - Cattle Grazing	<ul> <li>Clearing use for development</li> <li>Installation of service utilities</li> <li>Earthworks Operations (cut / fill)</li> </ul>	<ul> <li>8 Heavy Metals</li> <li>PAH, TRH BTEXN</li> <li>OCP/OPP</li> <li>Foreign materials</li> </ul>	<ul> <li>Potential machinery uses on Site.</li> <li>Potential cut / fill</li> <li>Potential uncontrolled filling</li> <li>Stored machinery.</li> <li>Site owner noted to have not used pesticides during his ownership.</li> </ul>
А	Access Track / Trotting Track	<ul><li>Potential isolated imported filling</li><li>Surficial clearing</li></ul>	■ TRH/BTEXN/PA Hs/Metals	<ul> <li>Trotting track in the northern portion of the site formed by a grader, between the years 1967 and 1976.</li> <li>Surficial disturbance onsite associated with access tracks. Appears to be of a combination of localised cut / fill and minor imported fill materials such as gravel.</li> </ul>
В	Buildings / Sheds Stored Farming Machinery	<ul> <li>Potentially imported fill associated with the building pad.</li> <li>Earthworks operations (cut / fill)</li> <li>Asbestos in construction materials (ACM)</li> <li>Chemical and fuel storage associated with machinery on site.</li> <li>Farming machinery brought to site to store after farming operations ceased at another property.</li> </ul>	<ul> <li>8 Heavy Metals,</li> <li>PAH, TRH, BTEXN</li> <li>OCP/OPP</li> <li>Foreign materials</li> <li>Asbestos</li> </ul>	<ul> <li>It is unlikely that a considerable amount of fill was imported to Site to form the building pad.</li> <li>Fibrous sheeting was noted in the dwelling and garage on site, however noted to be in good condition.</li> <li>Given the age of dwelling, it is likely that a lead-based paint was used to paint the exterior of the house.</li> <li>Chemicals and fuels noted in the shed on site. Low potential for minor spills in this area.</li> <li>No staining was observed within the vicinity of the sheds.</li> <li>Machinery confirmed by site owner to have not been used on site, purely for storage purposes.</li> </ul>
С	Dam / Drainage Channel	<ul> <li>Offsite migration of potential contaminants</li> </ul>	<ul> <li>8 Heavy Metals,</li> <li>PAH, TRH, BTEXN</li> <li>OCP/OPP</li> <li>Foreign materials</li> </ul>	<ul> <li>Drainage channel and dam is located in the western portion of the site, and forms part of a tributary of dams that flows into a floodplain to the northeast. Low potential for onsite and offsite migration of contaminants.</li> <li>No olfactory or visual signs were noted.</li> </ul>
D	Garden Areas	<ul> <li>Potential for use of pesticides within the gardens surrounding the dwelling.</li> </ul>	<ul><li>OCP/OPP</li></ul>	<ul> <li>Discussions with Site owner revealed that pesticides haven't been utilised on site.</li> </ul>

## 6 Conceptual Site Model

## 6.1 Preliminary Conceptual Site Model

Generally, a Conceptual Site model (CSM) provides an assessment of the fate and transport of COPCs relative to site-specific subsurface conditions regarding their potential risk to human health and the environment. The CSM considers site-specific factors including:

- Source(s) of contamination,
- Identification of contaminants of potential concern (COPCs) associated with past (and present) source(s),
- Vertical, lateral, and temporal distribution of COPCs,
- Site specific lithological information including soil type(s), depth to groundwater, effective porosity, and groundwater flow velocity,
- Actual or potential receptors considering both current and future land use for both the site and adjacent properties, and any sensitive ecological receptors.

Based on the information sourced in this report, a preliminary CSM has been developed and is outlined in the Table 6-1 below. Additional details are included in the sections that follow as necessary.

Table 6-1 Preliminary Conceptual Site Model

Conceptual Site Model Element	Description
Site History	The site was previously a residential property.
Site Current and Future Use	Proposed residential land use. The existing residential dwelling is proposed to be demolished to accommodate the proposed subdivision.
Site Geology	<ul> <li>Based on site geology and inspections the site appears to predominately comprise of natural conditions with minor areas of filling associated with access track.</li> </ul>
Site Hydrogeology	Groundwater assessment was not undertaken as part of the scope.
Area of Environmental Concern (AoEC) - Onsite	Areas of potential environmental concern are listed in table 5.
Media Potentially Impacted	<ul> <li>Potentially contaminated surficial soils onsite.</li> <li>Potentially contaminated underlying soils onsite.</li> <li>Potentially contaminated fill materials onsite.</li> <li>Potentially contaminated groundwater under the site.</li> </ul>
Potential Human Receptors	<ul> <li>Site users / workers / employees (onsite).</li> <li>Site Construction workers (onsite).</li> <li>Local rural residents and surrounding properties (offsite).</li> </ul>
Potential Environmental Receptors	<ul> <li>Flora and fauna.</li> <li>On-site and surrounding soils.</li> <li>Nearby waterbodies – i.e., drainage channel west of the site.</li> </ul>

# Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

Potential Exposure Pathways

- Air inhalation of dusts.
- Soil dermal / direct contact.
- Lateral migration via surficial runoff.

## 6.2 Data Gaps

Based on the inspection, the potential for contamination at this site is not considered to present a significant constraint on the proposed redevelopment of subject site. However, it must be appreciated that assessment was limited to review of historical data and observations within the subject site.

The following data gaps and uncertainties regarding the assessment are detailed below:

- > No intrusive investigation or soil sampling was undertaken.
- > No groundwater or surface water samples collected; however, groundwater contamination is considered unlikely.
- > Limited visual inspection of the sheds was undertaken, and as such exact contents are unknown.
- > No dangerous goods search was undertaken for the site; however they are unlikely to be present.

#### 7 Discussion

Based on the available historical data, Stantec site inspection and public searches, the southeastern portion of the site was developed into a residential dwelling between the years 1954 and 1967. Prior to this, the site was undeveloped. The trotting track was first noted in the 1976 imagery and is still present at the time of writing (however no longer in use). Minor domestic gardening was noted in the aerials and the site inspection. In recent years (2007-2024), the southeastern portion of the site has been used for storage of farming machinery / equipment. Based on review of the title deeds, it is understood that previous owners of the land have been graziers and farmers.

At the time of the earliest aerial imagery (1938), the surrounding areas generally appeared to comprise undeveloped land, with the exception of Paterson Road. Over the period to 2024, the key changes comprised:

- Residential development in the surrounding areas from 1954 to 2023.
- Paterson Road upgrade between the years of 1976 and 1984.

During the site inspection, no indication of staining or olfactory indication of hydrocarbons, nor fibrous sheeting materials were observed across the surface.

## 7.1 Summary of Contamination Potential

Based on the site history review and site inspection, Stantec identified the following potential sources of contamination at or adjacent the site:

- Small scale earthworks have likely occurred during formation of the access tracks and small
  localised operations for the building pads of structures. Minor row tilling of soil has occurred to
  improve the quality soil (associated with maintenance of domestic gardens. The minor
  earthworks on site are localised to access tracks and building vicinities on site, as such, the
  potential for gross, widespread contamination is considered unlikely.
- Given the healthy, abundant vegetation on Site (gardens and grass cover) with no visible signs of distress, it is likely that the previous land uses have not had a detrimental effect on the flora and fauna on site.
- The access track connecting Paterson Road to the shed on site contains a minor amount of imported quarry gravel, with potential contamination from this source unlikely. The trotting track in the northern portion of the site was created through use of a grader and site-won material. Overall, access tracks across the site were predominately formed by localised cut/fill.
- Based on site observations, the residential dwelling on site was noted to contain fibrous sheet cladding. Given the age of the building, there is a potential for ACM; however, the material was noted to be intact and in good condition at the time of inspection. Prior to demolition of any structures on site, structures should be assessed for hazardous materials (including asbestos, lead, etc) by an occupational hygienist.



# Preliminary Site Investigation 256 Paterson Road, Bolwarra Heights

- Limited chemical storage was noted in the shed on site, and generally comprised fuels and general household chemicals, associated with maintenance of machinery on site. No indication of spills or staining onsite was observed.
- Farming machinery such as tractors stored on site with old miscellaneous farm equipment
  and other inert anthropogenic materials (i.e. tyres, steel fragments, fencing and irrigation
  piping) scattered across the Site. These materials would be required to be removed prior to
  commencement of the proposed development. No indication of spills or staining onsite was
  observed in these areas.
- Given the lack of visual and olfactory evidence of gross contamination, the drainage channel and tributary dam are not considered sources or pathways for the migration of contamination offsite.

At the time of the site inspection, the shed was full, and access/vision was limited. As such, exact contents are unknown.

#### 8 Conclusions

Stantec have undertaken a Preliminary Site Investigation (PSI) for the proposed subdivision located at 256 Paterson Road, Bolwarra Heights, NSW. The objectives of the investigation were to assess:

- The potential for past and present activities undertaken on and adjacent to the site to have affected soil and groundwater at the site.
- The need for any further assessment or remedial works before definitive conclusions could be made on the suitably of the site for use.

Based on the desktop review, Site inspection and intrusive investigation, the potential contamination sources are considered to be low risk and could be dealt with by following the recommendations outlined in section 9 below. As the Site is considered to be low risk, an unexpected finds protocol (UFP) has been developed to address any potential contamination if encountered during the construction phase. The UFP is attached in Appendix D.

In accordance with the State Environmental Planning Policy (Resilience and Hazards) [4], which requires the planning authority to consider whether the site is suitable for the proposed usage prior to approving and determining a development application, Stantec has undertaken a Preliminary Site Investigation (PSI).

Based on the findings of the PSI, Stantec did not identify gross contamination or potentially contaminating activities previously undertaken on site that would render the site unsuitable for its proposed use as a residential subdivision.

### 9 Recommendations

Based on the review of the site history and site inspection, Stantec identified no indication of gross contaminating activities having been undertaken on or adjacent to the site. The site can be made suitable for the proposed land use, based on the recommendations below:

- An unexpected finds protocol has been developed (Appendix D) to address any potential
  contamination if encountered during construction phase. Construction should be managed with the
  unexpected finds protocol in place.
  - If potential contamination is encountered, site works will be ceased, and a suitable environmental consultant will be engaged for assessment as per the unexpected finds protocol.
- Any soil to be excavated and transported off site for disposal requires classification in accordance with the NSW EPA Waste Classification Guidelines.
- Assessment of access tracks and building pads on site for either potential reuse or offsite disposal.
   This can be undertaken during construction phase of the development and under the unexpected finds protocol.
- Prior to demolition of any structures, structures should be assessed for hazardous materials. If hazardous materials are identified, the materials are to be managed accordingly.
- Removal of foreign materials to a licensed waste/ recycling facility.

#### 10 Standard of Assessment & Limitations

This investigation has been undertaken in general accordance with the current "industry standards" for a site investigation for the purpose, objectives and scope identified in this report. These standards are set out in:

- National Environment Protection Council (NEPC) (1999) National Environment Protection (Assessment of Site Contamination) Measure, as amended (registered on 15 May 2013) [2]. This is referred to from here on as "the NEPM" or "NEPM".
- > Standards Australia (2005) AS4482.1- 2005: Guide to the investigation and sampling of sites with potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds. [5]
- > NSW EPA "Guidelines for Consultants Reporting on Contaminated Sites" [1].

The agreed scope of this investigation has been limited for the current purposes of the Client. The investigation may not identify contamination occurring in all areas of the site, or occurring after sampling was conducted. Subsurface conditions may vary considerably away from the sample locations where information has been obtained.

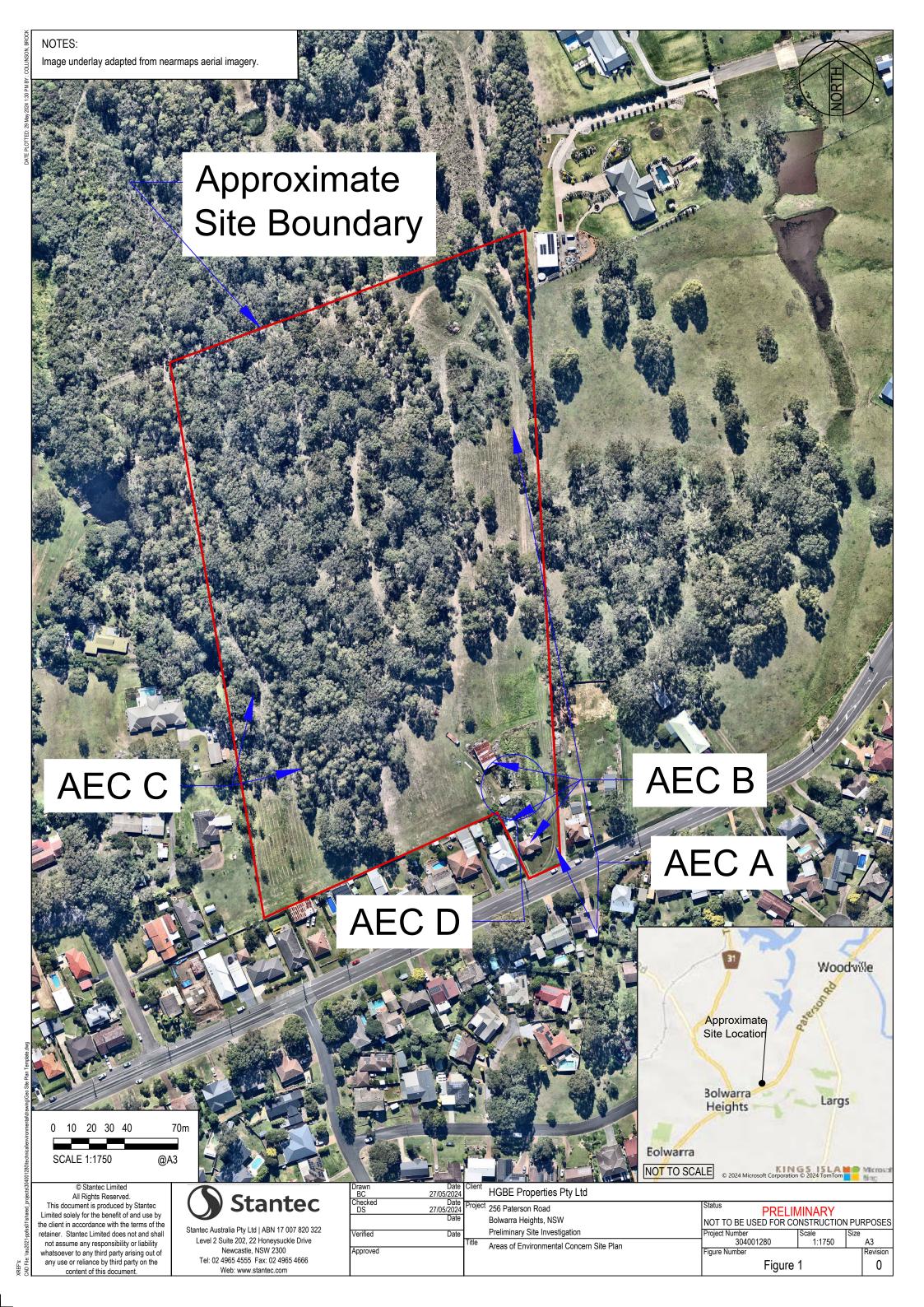
This site investigation report is not any of the following:

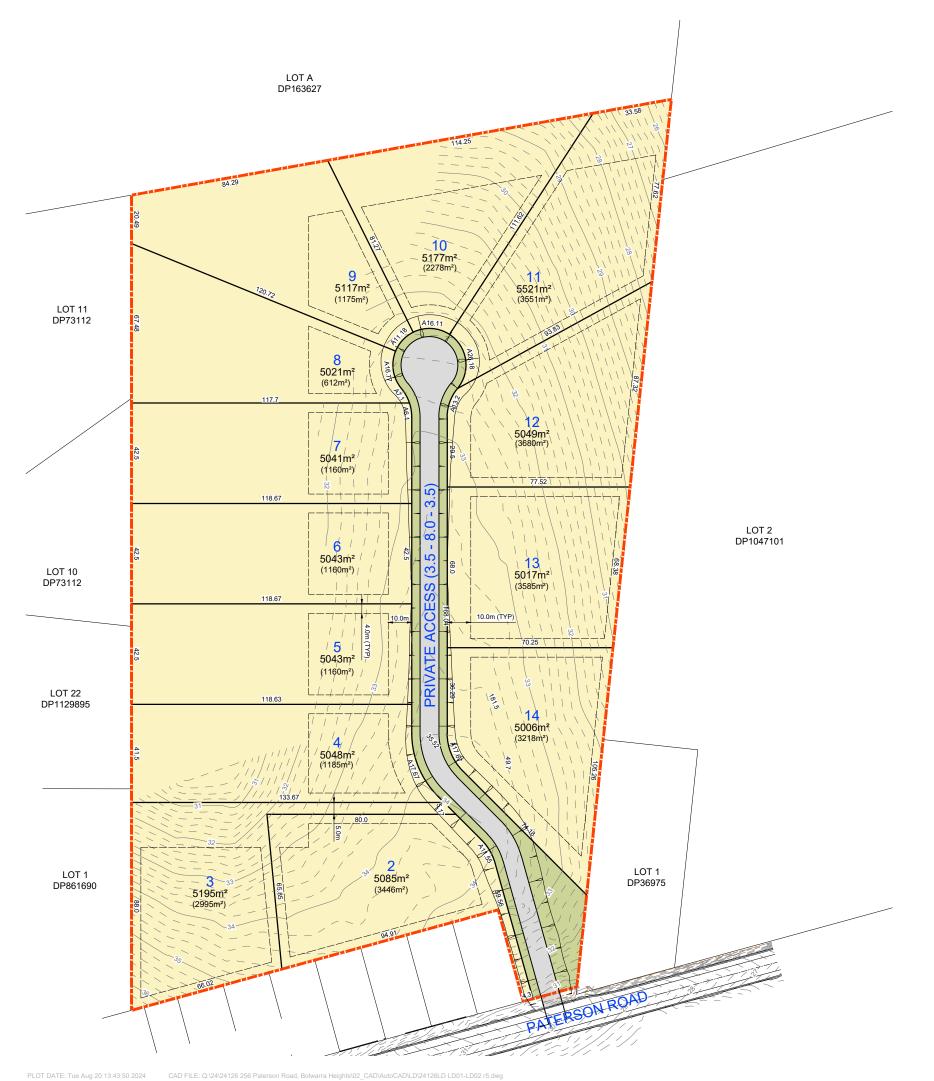
- > An Environmental Audit Report as defined under NSW Site Auditor Scheme [6].
- > A Detailed Site Investigation (DSI) report sufficient for an Environmental Auditor to be able to conclude a statutory or non-statutory environmental audit.
- A detailed hydrogeological assessment or an assessment of groundwater contaminants potentially arising from other sites or sources nearby.
- > A detailed waste classification report of soil analytical results from the site.

## 11 References

- [1] NSW EPA, Consultants reporting on contaminated land guidelines, NSW Environmental Protection Authority, 2020.
- [2] National Environment Protection (Assessment of Site Contamination) Measure 1999, Schedule B1 Guidelines on Investigation Levels for Soil and Groundwater, National Environment Protection Council (NEPC), 16 May 2013.
- [3] NSW Government, Stage of Environmental Planning Policy (Resilience and Hazards), 2021.
- [4] NSW Government, Stage of Environmental Planning Policy (Resilience and Hazards), 2021.
- [5] Standards Australia, Australian Standard Guide to the investigation and sampling of sites with potentially contaminated soils part one:non-volatile and semi-volatile compounds, 2005.
- [6] NSW DEC, Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd Edition), Department of Environment and Conservation NSW, 2017.

## Appendix A Drawings







EXISTING SURFACE CONTOUR - MAJOR (1m INTERVAL) EXISTING SURFACE CONTOUR - MINOR (0.2m INTERVAL)

PROPOSED SITE DEVELOPMENT

5	REVISED BUILDING ENVELOPES	DB	20.08.24
4	REVISED BUILDING ENVELOPES	DB	15.08.24
3	MINOR UPDATE	AS	13.08.24
2	DIMENSIONS ADDED	DB	12.08.24
1	ORIGINAL ISSUE	DB	07.08.24
Rev	Description	Drawn	Date





Project Title:

### PROPOSED SUBDIVISION

Project Address:

256 PATERSON ROAD, BOLWARRA

Client:

## HGBE PROPERTIES PTY LTD

Project Status:

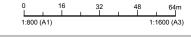
CONCEPT

Drawing Title:

#### SUBDIVISION PLAN

Project No	Revision	Drawing No
24126LD	5	LD01

Scale:



# Appendix B Photolog





Photograph 2: View of the dwelling's eaves.



**Photograph 3**: View of the fencing around the northern perimeter of the dwelling on site.



Photograph 4: View of the northern portion of the site, looking north.





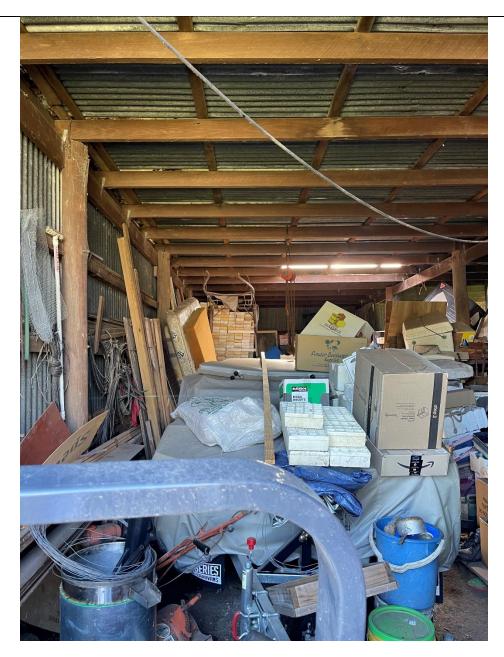
Photograph 6: View of the stored items around the shed on site, including: irrigation piping (unused on site), bathtub, tractor, and a shipping container.



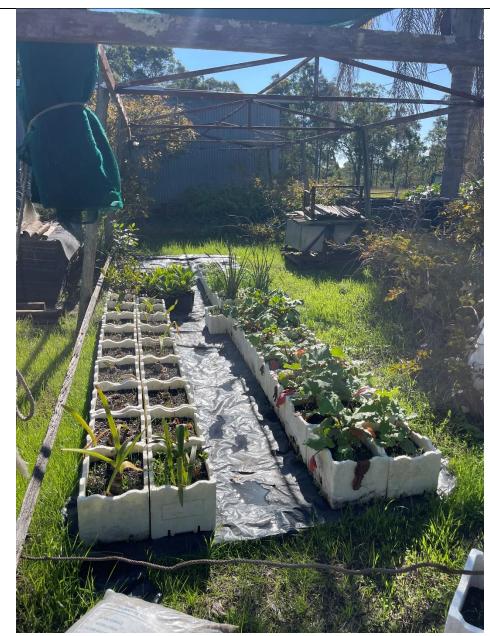
**Photograph 7**: View of the northern portion of the shed, contents primarily comprise beehives (no longer in use).



**Photograph 8**: View of some of the stored materials (timber, farming equipment) on site, looking north.



**Photograph 9**: View of the interior of the shed on site, looking north.



Photograph 10: View of domestic gardens adjacent the shed on site.



**Photograph 11**: View of the shipping container and stored materials on site, looking south.

## Appendix C Lotsearch Report



Date: 14 May 2024 14:40:17 Reference: LS056199 EP

Address: 256 Paterson Road, Bolwarra Heights, NSW 2320

#### 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 within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Customer Service - Spatial Services	17/04/2024	17/04/2024	Quarterly	-	-	-	-
Topographic Data	NSW Department of Customer Service - Spatial Services	22/08/2022	22/08/2022	Annually	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority NSW	09/04/2024	14/03/2024	Monthly	1000m	0	0	0
Contaminated Land Records of Notice	Environment Protection Authority NSW	09/04/2024	09/04/2024	Monthly	1000m	0	0	0
Former Gasworks	Environment Protection Authority NSW	28/04/2024	14/07/2021	Quarterly	1000m	0	0	0
Notices under the POEO Act 1997	Environment Protection Authority NSW	09/04/2024	09/04/2024	Monthly	1000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	26/05/2022	07/03/2017	Annually	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	20/09/2023	07/09/2020	Annually	1000m	0	0	1
EPA PFAS Investigation Program	Environment Protection Authority NSW	10/04/2024	21/11/2032	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Australian Department of Defence	15/04/2024	29/02/2024	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Australian Department of Defence	15/04/2024	29/02/2024	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	15/04/2024	15/04/2024	Monthly	2000m	0	0	0
Defence Controlled Areas	Australian Department of Defence	15/04/2024	15/04/2024	Quarterly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Australian Department of Defence	30/04/2024	02/09/2022	Quarterly	2000m	0	0	0
National Unexploded Ordnance (UXO)	Australian Department of Defence	15/04/2024	15/04/2024	Quarterly	2000m	0	0	1
EPA Other Sites with Contamination Issues	Environment Protection Authority NSW	13/11/2023	15/12/2022	Annually	1000m	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority NSW	10/04/2024	10/04/2024	Monthly	1000m	1	1	1
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority NSW	10/04/2024	10/04/2024	Monthly	1000m	0	0	0
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority NSW	10/04/2024	10/04/2024	Monthly	1000m	3	3	4
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150m	0	4	4
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150m	-	2	2
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500m	0	1	2
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500m	-	1	1
Points of Interest	NSW Department of Customer Service - Spatial Services	16/04/2024	16/04/2024	Quarterly	1000m	0	0	6
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	16/04/2024	16/04/2024	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	16/04/2024	16/04/2024	Quarterly	1000m	0	0	0
Major Easements	NSW Department of Customer Service - Spatial Services	06/05/2024	06/05/2024	Quarterly	1000m	0	1	3
State Forest	Forestry Corporation of NSW	12/12/2023	11/12/2023	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Geoscience Australia	17/04/2024	19/08/2019	Annually	1000m	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)		No. Features within 100m	No. Features within Buffer
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Housing and Infrastructure	09/05/2023	23/02/2018	Annually	1000m	0	0	0
National Groundwater Information System (NGIS) Boreholes	Bureau of Meteorology; Water NSW	18/04/2023	13/07/2022	Annually	2000m	0	0	9
NSW Seamless Geology Single Layer: Rock Units	NSW Department of Regional NSW	06/12/2023	31/05/2023	Annually	1000m	1	1	8
NSW Seamless Geology – Single Layer: Trendlines	NSW Department of Regional NSW	06/12/2023	31/05/2023	Annually	1000m	0	0	0
NSW Seamless Geology – Single Layer: Geological Boundaries and Faults	NSW Department of Regional NSW	06/12/2023	31/05/2023	Annually	1000m	0	0	0
Naturally Occurring Asbestos Potential	NSW Department of Regional NSW	26/04/2024	14/03/2024	Annually	1000m	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	12/01/2024	17/02/2011	Annually	1000m	1	2	2
Soil Landscapes of Central and Eastern NSW	NSW Department of Climate Change, Energy, the Environment and Water	12/12/2023	27/07/2020	Annually	1000m	1	1	3
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Housing and Infrastructure	03/05/2024	15/03/2024	Monthly	500m	1	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	12/01/2024	21/02/2013	Annually	1000m	1	2	3
Dryland Salinity - National Assessment	Australian Bureau of Agricultural and Resource Economics and Sciences	18/07/2014	12/05/2013	Annually	1000m	1	1	1
Mining Subsidence Districts	NSW Department of Customer Service	03/05/2024	03/05/2024	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Regional NSW	15/04/2024	15/04/2024	Monthly	1000m	0	0	0
Mining Title Applications	NSW Department of Regional NSW	15/04/2024	15/04/2024	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Regional NSW	15/04/2024	15/04/2024	Monthly	1000m	5	5	7
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Housing and Infrastructure	03/05/2024	08/09/2023	Monthly	1000m	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Housing and Infrastructure	03/05/2024	26/04/2024	Monthly	1000m	1	3	14
Commonwealth Heritage List	Australian Department of Climate Change, Energy, the Environment and Water	20/10/2023	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Department of Climate Change, Energy, the Environment and Water	20/10/2023	13/04/2022	Annually	1000m	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	26/04/2024	08/03/2024	Quarterly	1000m	0	0	0
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Housing and Infrastructure	03/05/2024	05/04/2024	Monthly	1000m	0	0	0
Bush Fire Prone Land	NSW Rural Fire Service	09/04/2024	12/03/2024	Monthly	1000m	3	3	3
NSW Native Vegetation Type Map	NSW Department of Climate Change, Energy, the Environment and Water	26/05/2023	12/12/2022	Quarterly	1000m	3	3	6
Ramsar Wetlands of Australia	Australian Department of Climate Change, Energy, the Environment and Water	09/05/2023	01/11/2022	Annually	1000m	0	0	0
Collaborative Australian Protected Areas Database (CAPAD) 2022 - Terrestrial	Australian Department of Climate Change, Energy, The Environment and Water	04/03/2024	30/06/2022	Annually	1000m	0	0	0
Collaborative Australian Protected Areas Database (CAPAD) 2022 - Marine	Australian Department of Climate Change, Energy, The Environment and Water	04/03/2024	30/06/2022	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	28/10/2022	26/10/2022	Annually	1000m	1	1	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	28/10/2022	26/10/2022	Annually	1000m	1	1	4
NSW BioNet Species Sightings	NSW Department of Climate Change, Energy, the Environment and Water	29/11/2023	29/11/2023	Weekly	10000m	-	-	-

## **Site Diagram**





#### **Contaminated Land**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### 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	Direction
N/A	No records in buffer								

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**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **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 © State of New South Wales through the Environment Protection Authority

#### **Contaminated Land**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **EPA Notices**

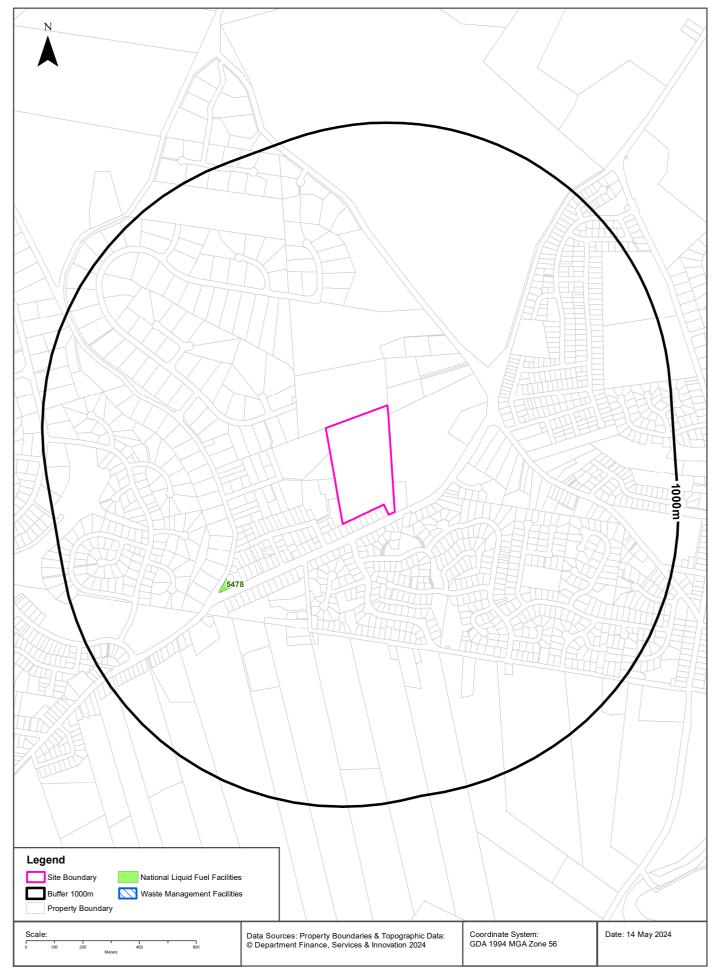
Penalty Notices, s.91 & s.92 Clean up Notices and s.96 Prevention Notices within the dataset buffer:

Number	Туре	Name	Address	Status	Issued Date	Act	Offence	Offence Date	Loc Conf	Dist	Dir
N/A	No records in buffer										

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

## **Waste Management & Liquid Fuel Facilities**





## **Waste Management & Liquid Fuel Facilities**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **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	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	Direction
5478	BP	BP BOLWARRA HEIGHTS	200 PATERSON ROAD	BOLWARRA HEIGHTS	PETROL STATION	OPERATION AL			Premise Match	453m	South West

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

### **PFAS Investigation & Management Programs**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **EPA PFAS Investigation Program**

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

Map ID	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

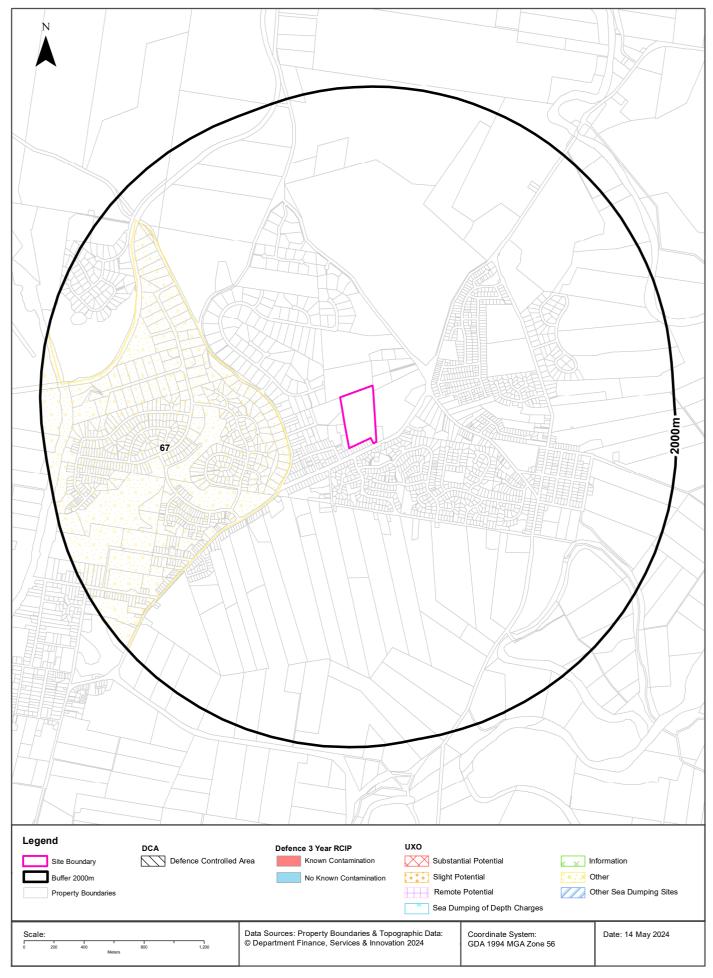
Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

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 and Unexploded Ordnance** 256 Paterson Road, Bolwarra Heights, NSW 2320





### **Defence Sites and Unexploded Ordnance**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Defence Controlled Areas (DCA)**

Defence Controlled Areas provided by the Department of Defence within the dataset buffer:

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

Defence Controlled Areas, Data Custodian: Department of Defence, Australian Government

#### **Defence 3 Year Regional Contamination Investigation Program (RCIP)**

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

#### **National Unexploded Ordnance (UXO)**

Sites which have been assessed by the Department of Defence for the potential presence of unexploded ordnance within the dataset buffer:

Site ID	Location Name	Category	Area Description	Additional Information	Commonwealth	Loc Conf	Dist	Dir
67	Maitland	Other	This site was used for Military Training and Camps during WWII.		Not Commonwealth Land	As Supplied	399m	West

National Unexploded Ordnance (UXO), Data Custodian: Department of Defence, Australian Government

#### **EPA Other Sites with Contamination Issues**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **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

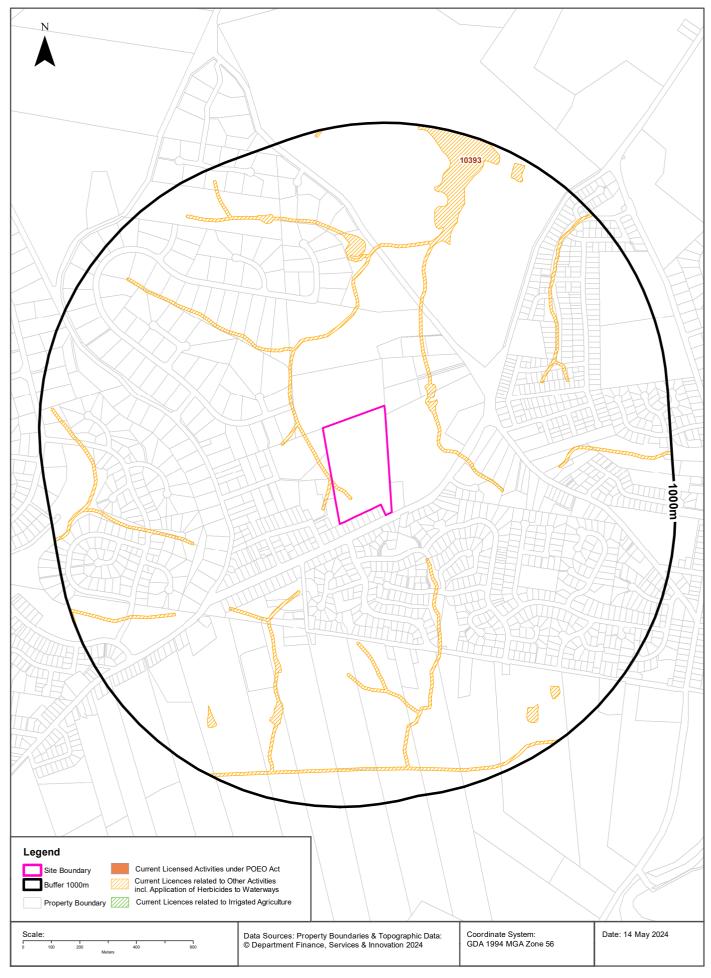
#### Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	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

#### **Current EPA Licensed Activities**





#### **EPA Activities**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Licensed Activities under the POEO Act 1997**

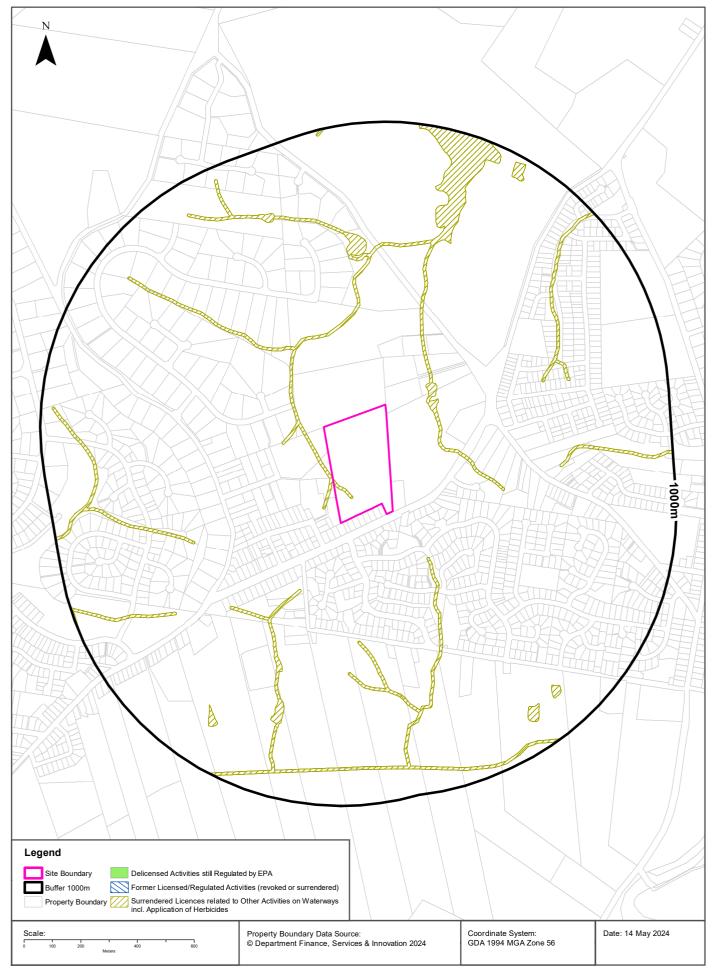
Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
10393	MAITLAND CITY COUNCIL	ALL WATERBODIES IN THE MAITLAND LOCAL GOVERNMENT AREA		MAITLAND	Other activities	Network of Features	0m	On-site

POEO Licence Data Source: Environment Protection Authority © State of New South Wales through the Environment Protection Authority

#### **Delicensed & Former Licensed EPA Activities**





#### **EPA Activities**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **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

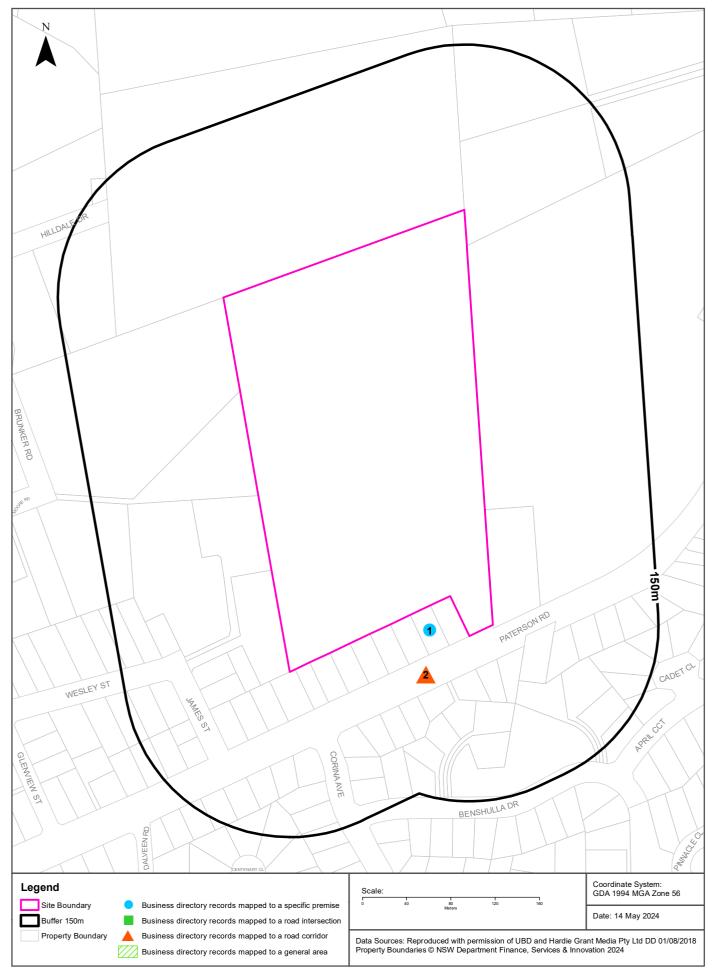
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

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	0m	On-site	
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	0m	On-site
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	DNEY WEED WATERWAYS Surrendered 09/11/2000 Other Activities / No Activity - Application NAGEMENT NSW - PROSPECT,		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	On-site	
12439	STATE OF NEW SOUTH WALES (Department of Primary Industries - Lands)	Soil Conservation Service, Waterways within the Hunter Valley Flood Mitigation Scheme, MAITLAND	Surrendered	13/02/2007	Other Activities - Application of Herbicides	Network of Features	389m	North

Former Licensed Activities Data Source: Environment Protection Authority © State of New South Wales through the Environment Protection Authority

#### **Historical Business Directories**





#### **Historical Business Directories**

256 Paterson Road, Bolwarra Heights, NSW 2320

# **Business Directory Records 1950-1991 Premise or Road Intersection Matches**

Potentially contaminative business activities extracted from Universal Business Directories 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	AIR CONDITIONING - AUTOMOTIVE.	Hometune (Australia) Pty Ltd., 252 Paterson Rd., Bolwarra Heights 2320	77338	1991	Premise Match	0m	South
	MOTOR ENGINEERS.	Hometune (Australia) Pty Ltd., 252 Paterson Rd., Bolwarra Heights 2320	78480	1991	Premise Match	0m	South
	MOTOR GARAGES & SERVICE STATIONS.	Hometune (Australia) Pty Ltd., 252 Paterson Rd., Bolwarra Heights 2320	78523	1991	Premise Match	0m	South
	MOTOR TUNING SPECIALISTS.	Hometune (Australia) Pty Ltd., 252 Paterson Rd., Bolwarra Heights 2320	78600	1991	Premise Match	0m	South

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# **Business Directory Records 1950-1991 Road or Area Matches**

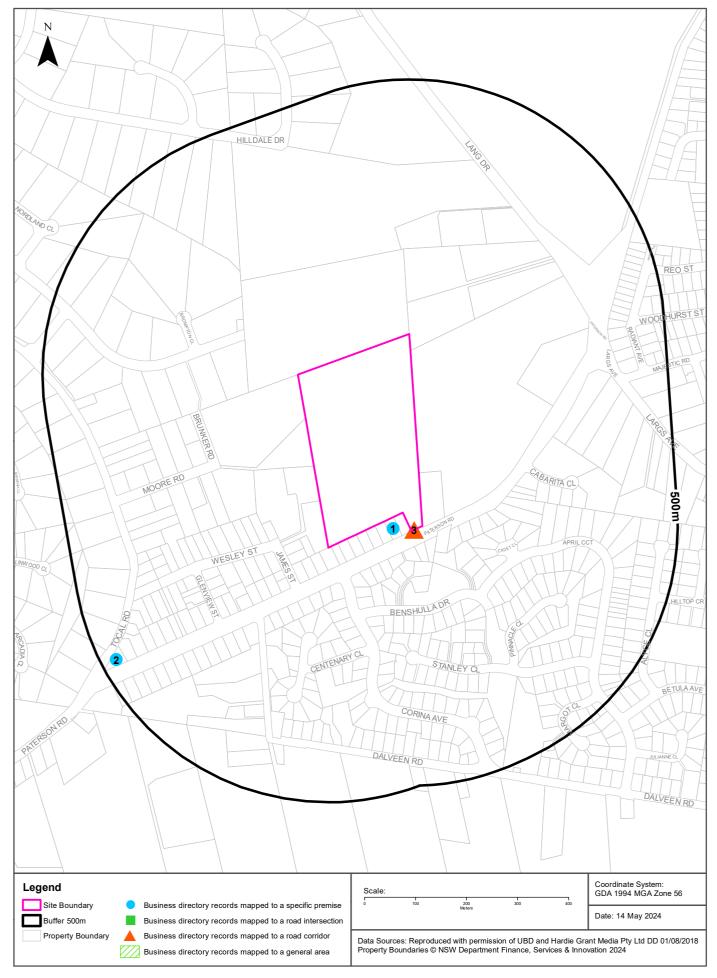
Potentially contaminative business activities extracted from Universal Business Directories from years 1991, 1982, 1970, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered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

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
2	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Sharpe, D. & J., Paterson Rd., Bolwarra Heights 2320	168623	1982	Road Match	0m
	PRODUCE MERCHANTS- GRAIN & SEED-RETAIL	Wilcher, R. A., Patterson Rd., Woodville	639057	1970	Road Match	0m

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## **Dry Cleaners, Motor Garages & Service Stations**





### **Historical Business Directories**

256 Paterson Road, Bolwarra Heights, NSW 2320

# **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
	MOTOR GARAGES & SERVICE STATIONS.	Hometune (Australia) Pty Ltd., 252 Paterson Rd., Bolwarra Heights 2320	78523	1991	Premise Match	0m	South
	2 MOTOR SERVICE STATIONS-PETROL, OILS, ETC.	Hillcrest Service Station, Local & Paterson Rds., Bolwarra Heights, Bolwarra	638962	1970	Premise Match	453m	South West

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

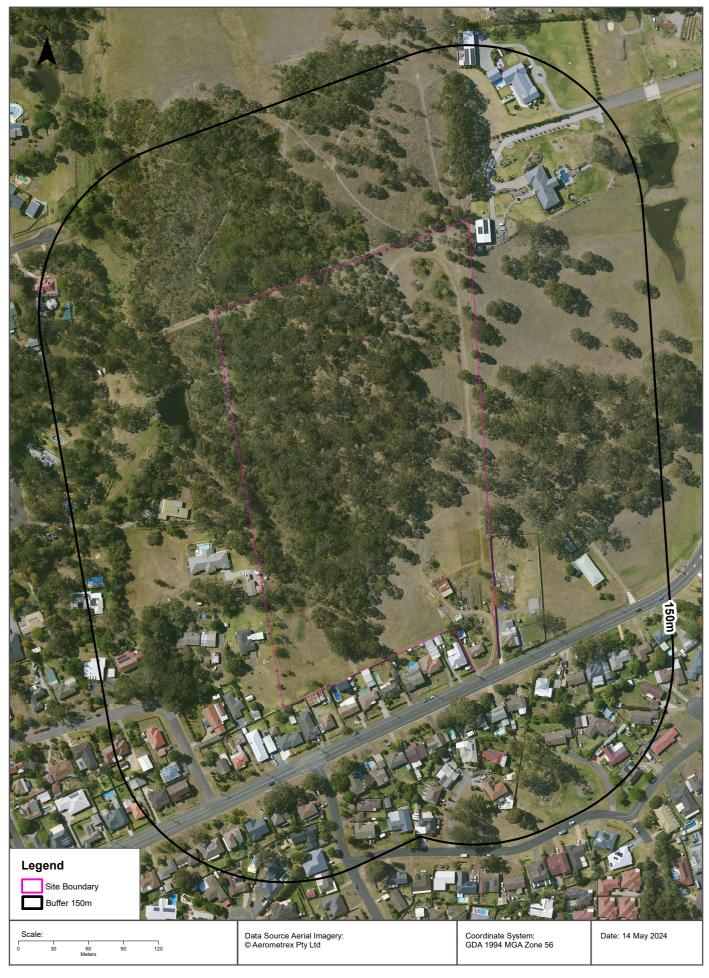
Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	<b>Business Activity</b>	Premise	Ref No.	Year	Confidence	Distance to Road Corridor or Area
3	MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS.	Sharpe, D. & J., Paterson Rd., Bolwarra Heights 2320	168623	1982	Road Match	0m

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## **Aerial Imagery 2023**





## **Aerial Imagery 2020**

















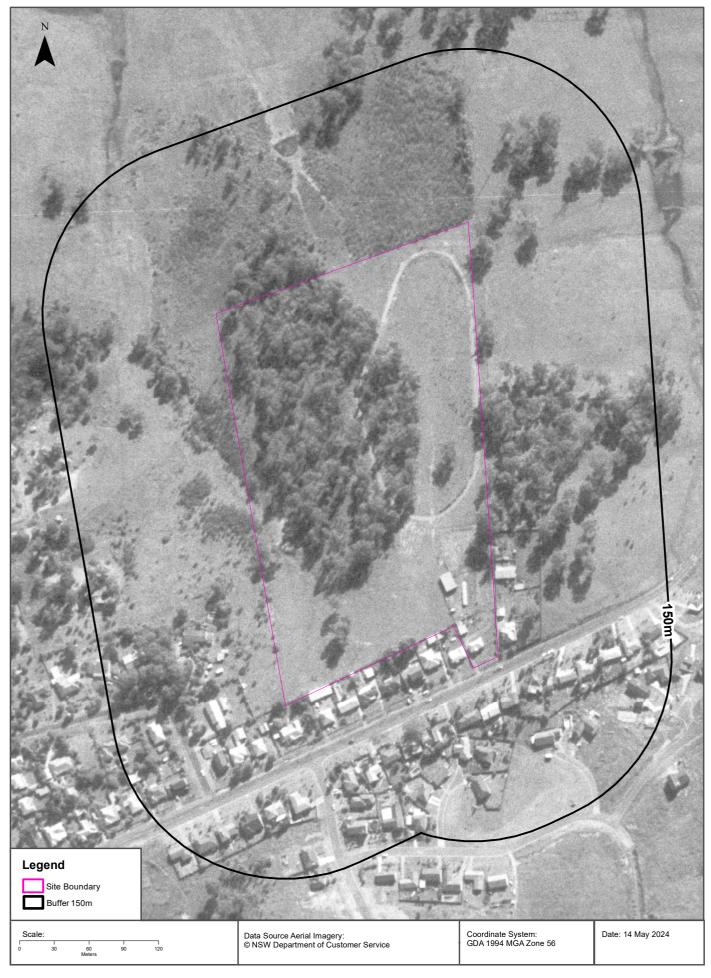




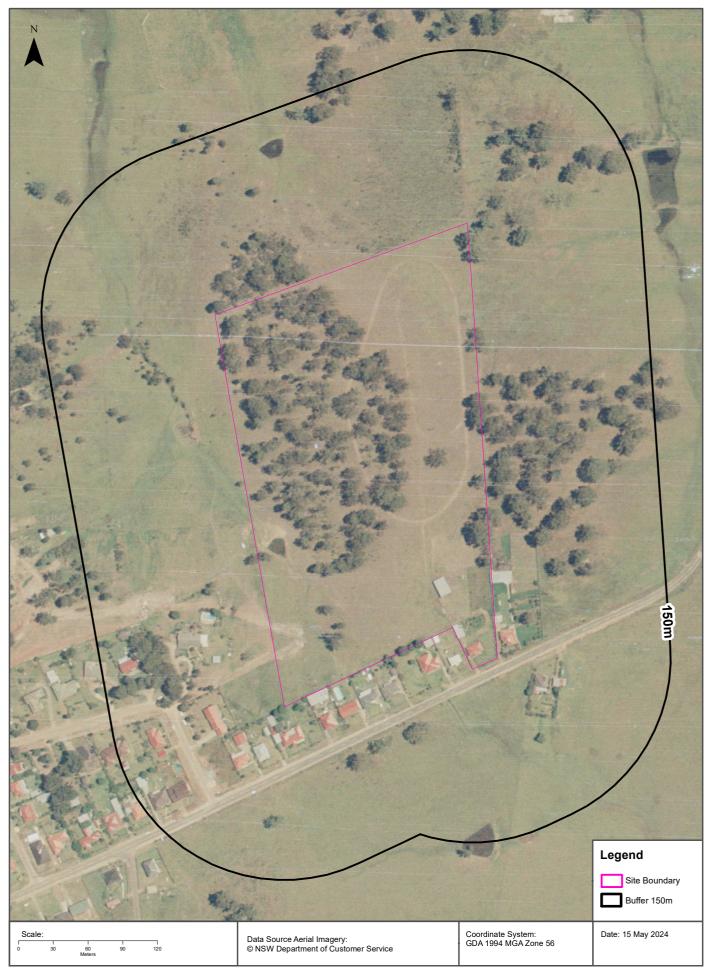




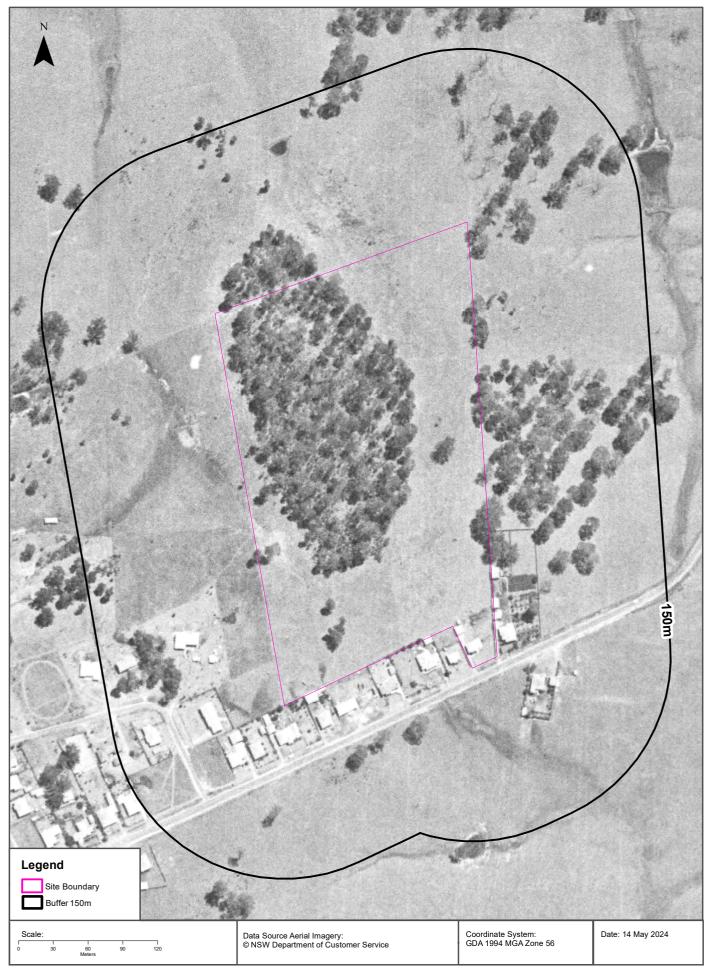




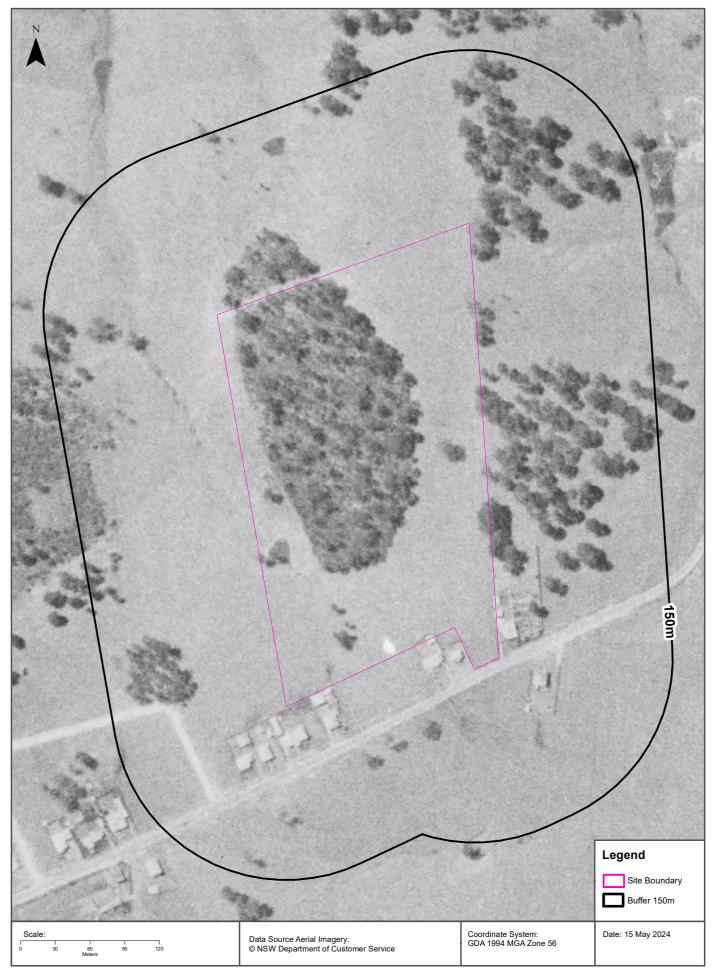




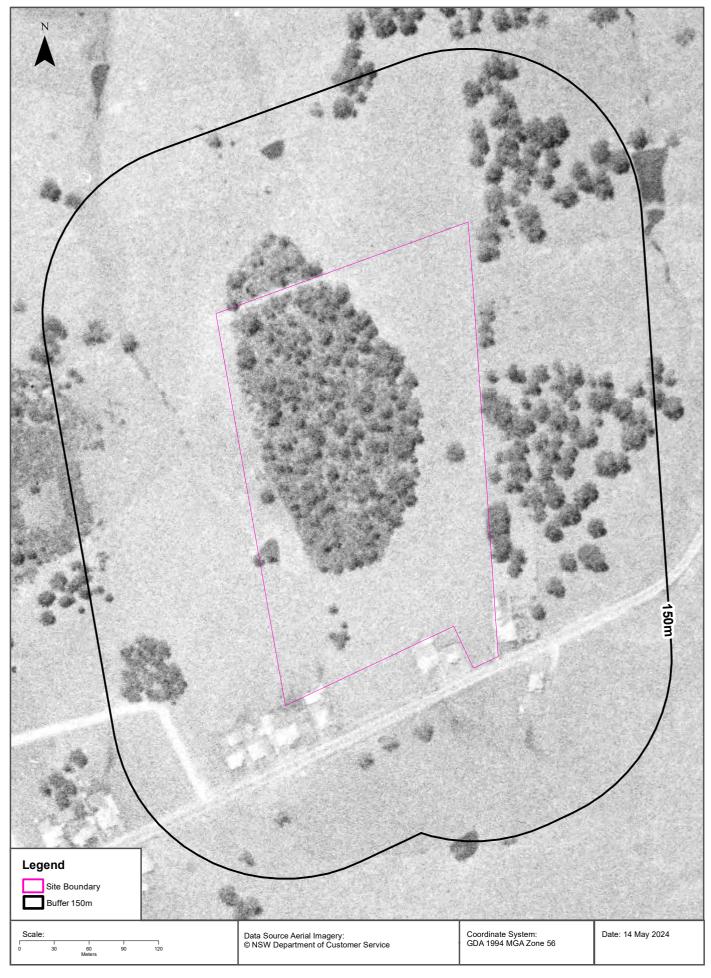










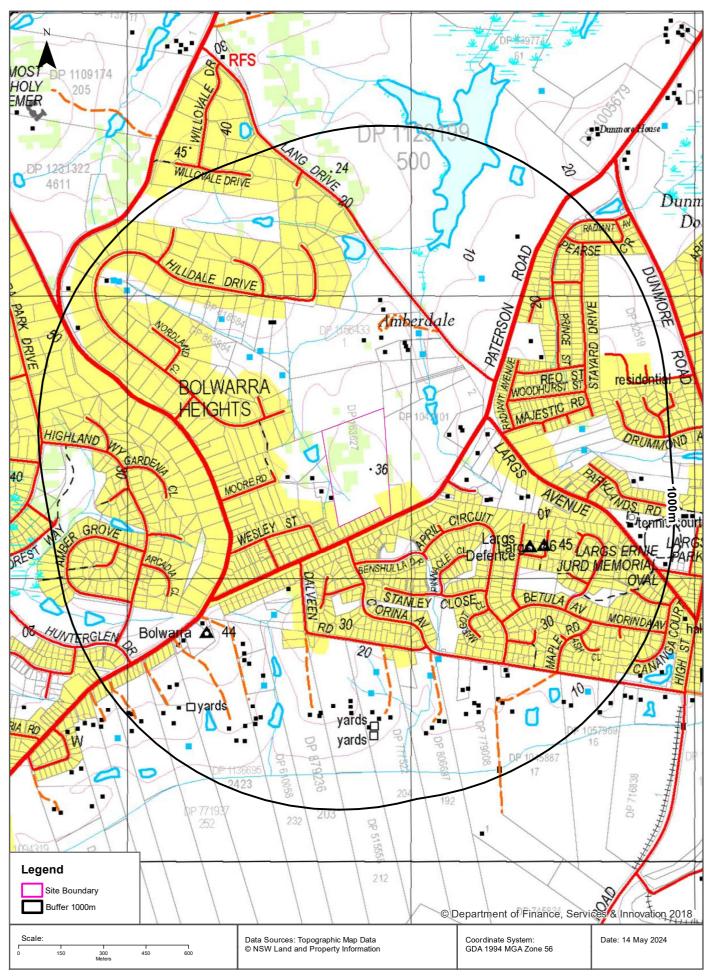






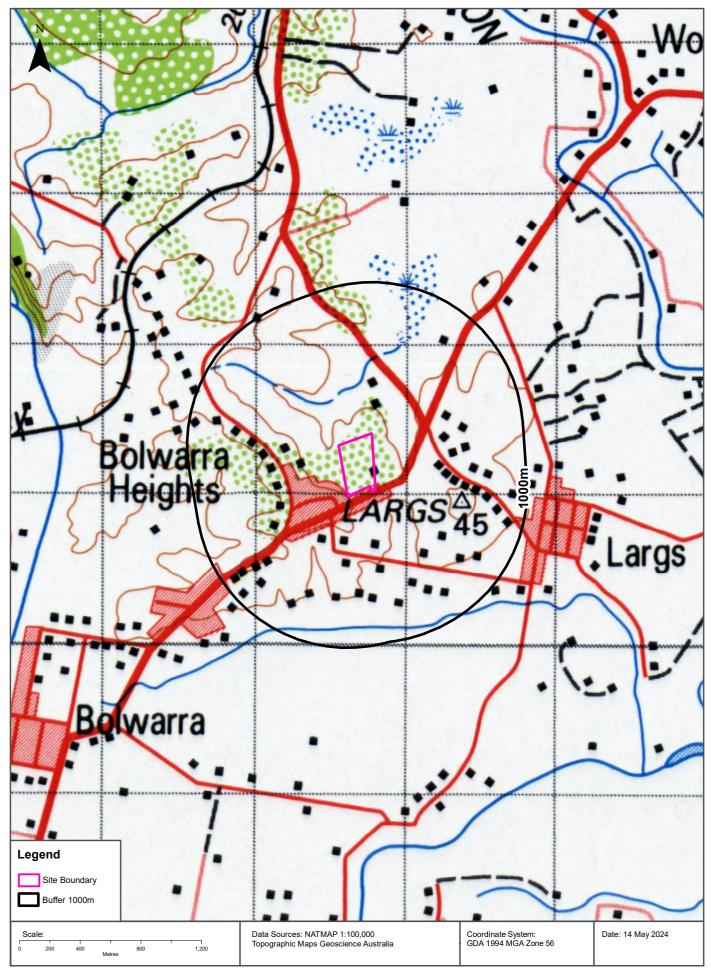
#### **Topographic Map 2015**





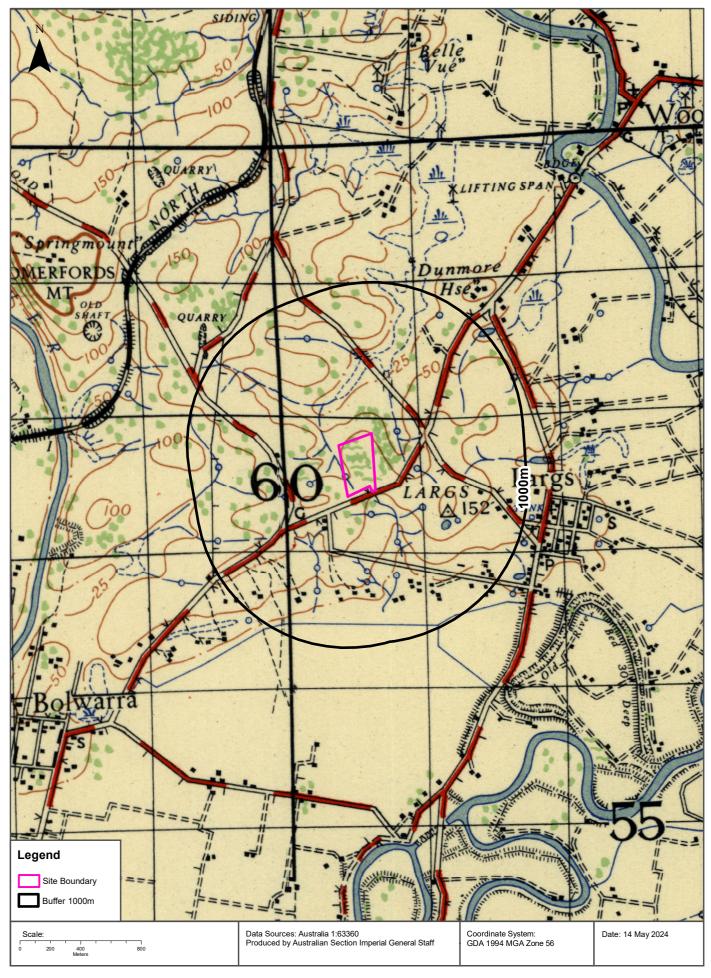
### **Historical Map 1981**





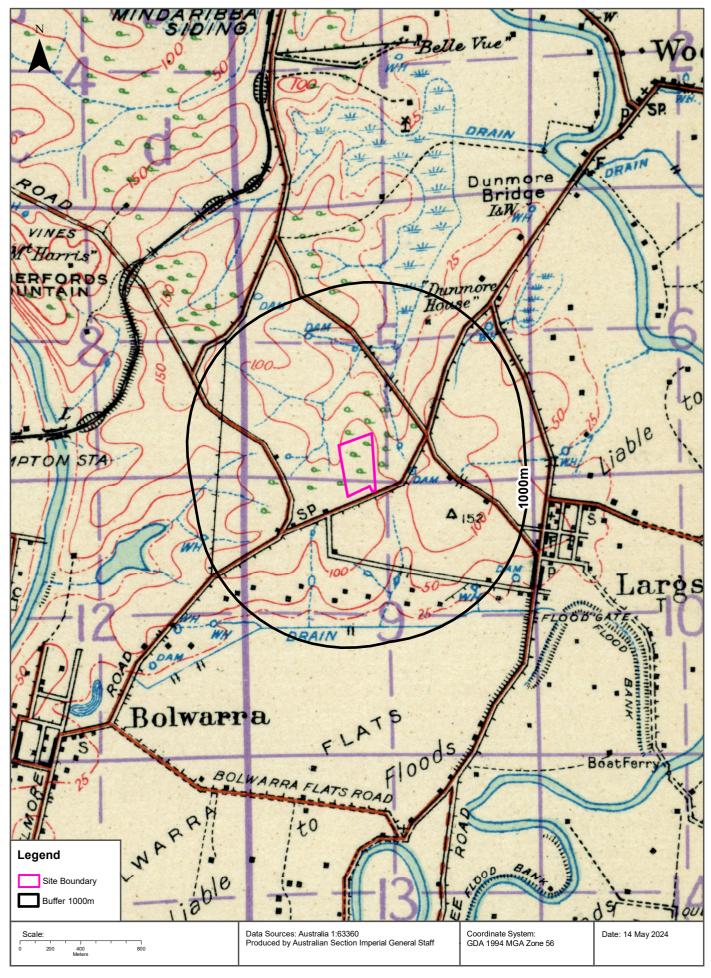
### **Historical Map c.1942**



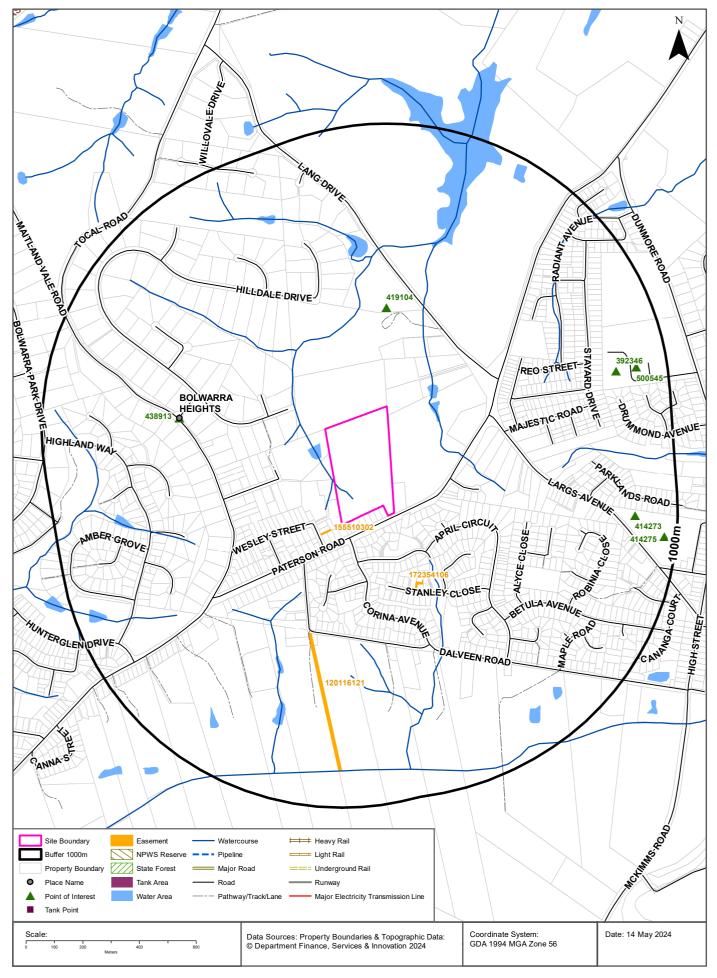


#### **Historical Map c.1925**









256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Points of Interest**

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
419104	Homestead	AMBERDALE	350m	North
438913	Suburb	BOLWARRA HEIGHTS	515m	West
392346	Nursing Home	THE WHIDDON GROUP-LARGS	819m	East
414273	Sports Court	TENNIS COURTS	849m	East
500545	Retirement Village	THE WHIDDON GROUP LARGS	891m	East
414275	Sports Field	LARGS ERNIE JURD MEMORIAL OVAL	957m	East

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

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256 Paterson Road, Bolwarra Heights, NSW 2320

#### **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
N/A	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
N/A	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
155510302	Secondary	Easement for Access		44m	South West
172354106	Primary	Right of way	Var	255m	South East
120116121	Primary	Undefined		400m	South

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

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256 Paterson Road, Bolwarra Heights, NSW 2320

#### **State Forest**

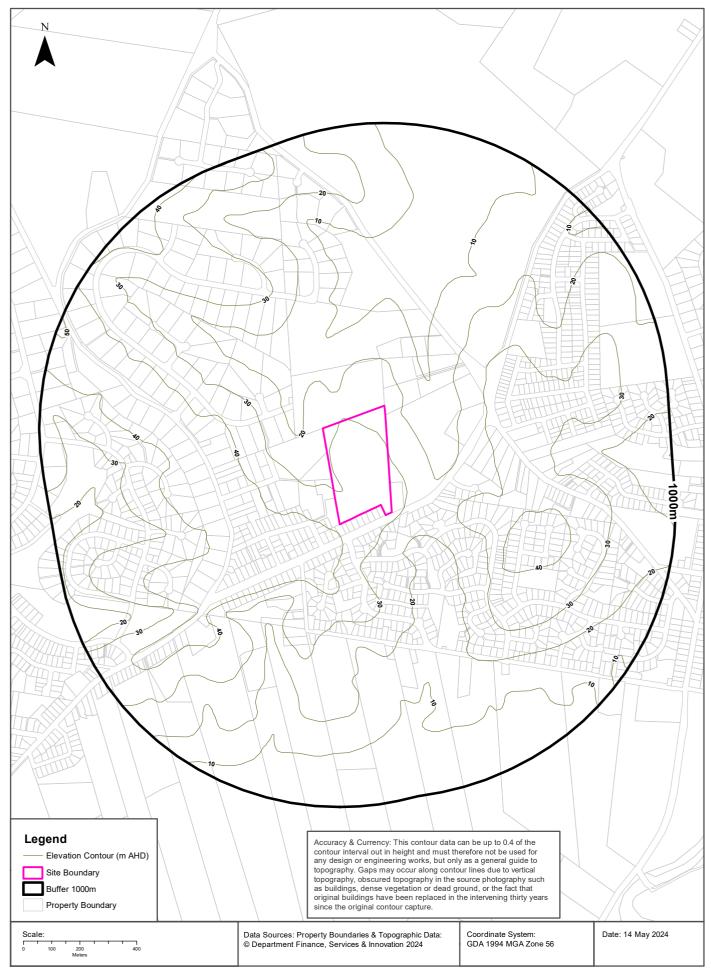
What State Forest exist within the dataset buffer?

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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# **Elevation Contours (m AHD)**





### **Hydrogeology & Groundwater**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive highly productive aquifers	0m	On-site

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**

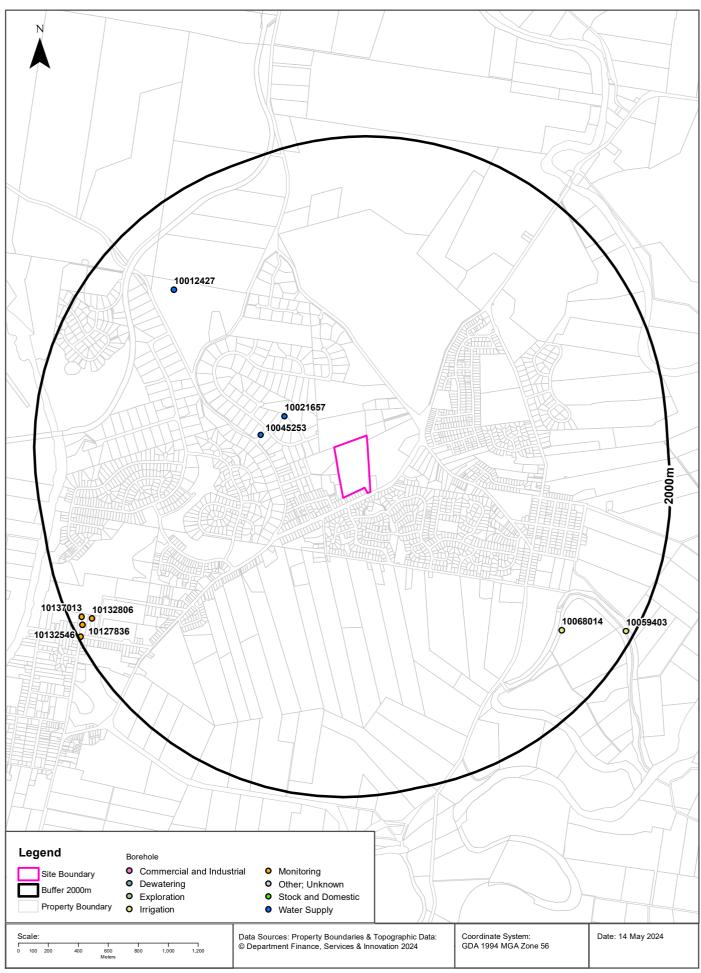
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

- 1	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**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Groundwater Boreholes**

Boreholes within the dataset buffer:

NGIS Bore ID	NSW Bore ID	Bore Type	Status	Drill Date	Bore Depth (m)	Reference Elevation	Height Datum	Salinity (mg/L)	Yield (L/s)	SWL (mbgl)	Distance	Direction
10021657	GW204724	Water Supply	Functioning	07/05/2020	72.00		AHD				387m	North West
10045253	GW200540	Water Supply	Unknown	13/03/2002	22.20		AHD	3500	0.725	1.00	493m	West
10012427	GW062573	Water Supply	Unknown	01/04/1986			AHD	3001- 7000 ppm			1499m	North West
10068014	GW200933	Irrigation	Functioning	28/10/2011	7.00		AHD				1579m	South East
10132806	GW200632	Monitoring	Functioning	21/11/2002	4.20		AHD			1.56	1858m	South West
10137013	GW200633	Monitoring	Functioning	21/11/2002	4.20		AHD	1418		1.70	1915m	South West
10127836	GW200631	Monitoring	Functioning	21/11/2002	6.80		AHD	1796		4.22	1933m	South West
10059403	GW201703	Irrigation	Functioning	01/07/1955	7.00		AHD		20.000	5.00	1944m	South East
10132546	GW200630	Monitoring	Functioning	21/11/2002	10.65		AHD			6.43	1979m	South West

Borehole Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0  $^{\circ}$  Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Hydrogeology & Groundwater**

256 Paterson Road, Bolwarra Heights, NSW 2320

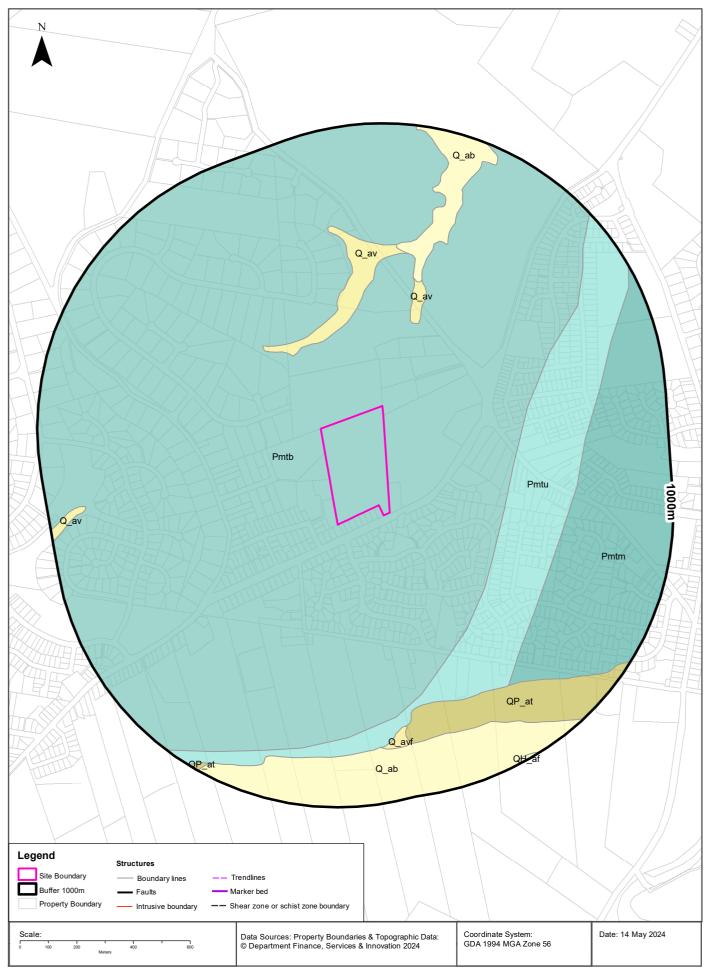
# **Driller's Logs**

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

NGIS Bore ID	Drillers Log	Distance	Direction
10045253	0.00m-0.10m topsoil 0.10m-0.50m clay (moist, brown) 0.50m-1.50m clay (tan) 1.50m-8.00m sandstone (grey and orange layers, approx 0.5, thick) 8.00m-9.00m sandstone (browney-orange) 9.00m-13.00m sandstone (grey) 13.00m-13.20m water cut 13.20m-16.00m sandstone (grey) 16.00m-16.30m water cut 16.30m-18.00m sandstone (grey) 18.00m-21.00m shale (grey) 21.00m-21.40m water cut 21.40m-22.20m shale (grey)	493m	West
10012427	0.00m-2.00m Clay 2.00m-45.00m Sandstone Water Supply	1499m	North West
10132806	0.00m-2.50m sand (gravelly, silty) 2.50m-4.20m clay (silty)	1858m	South West
10137013	0.00m-2.00m silt (sandy) 2.00m-4.20m clay (silty)	1915m	South West
10127836	0.00m-2.00m gravel (sandy) 2.00m-6.80m sandstone	1933m	South West
10132546	0.00m-2.50m sand (silty, gravelly) 2.50m-4.50m silt (sandy) 4.50m-10.65m sandstone	1979m	South West

Drill Log Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en





# Geology

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Geological Units**

What are the Geological Units within the dataset buffer?

Unit Code	Unit Name	Description	Unit Stratigraphy	Age	Dominant Lithology	Distance
Pmtb	Branxton Formation	Conglomerate, sandstone, siltstone.	\Maitland Group\ \Branxton Formation\\	Roadian (base) to Roadian (top)	Conglomerate	0m
Q_av	Alluvial valley deposits	Silt, clay, (fluvially deposited) lithic to quartz-lithic sand, gravel.	\Alluvium\\Alluvial valley deposits\\	Quaternary (base) to Now (top)	Clastic sediment	275m
Pmtu	Muree Sandstone	Fine- to coarse-grained sandstone, conglomerate, minor claystone.	\Maitland Group\\Muree Sandstone\\	Roadian (base) to Roadian (top)	Sandstone	391m
Q_ab	Alluvial backswamp deposits	Organic-rich mud, peat, silt, clay.	\Alluvium\\Alluvial backswamp deposits\\	Quaternary (base) to Now (top)	Organic rich sediment	457m
Pmtm	Mulbring Siltstone	Medium- to dark-grey siltstone, minor claystone, sporadic thin cherty beds (resistant), rare thin sandstone and limestone beds, sporadic marine fossils.	\Maitland Group\ \Mulbring Siltstone\\	Guadalupian (base) to Guadalupian (top)	Siltstone	598m
QP_at	Alluvial terrace deposits	Silt, clay, (fluvially- deposited) fine- to medium- grained quartz-lithic sand, polymictic gravel.	\Alluvium\\Alluvial terrace deposits\\	Quaternary (base) to Now (top)	Clastic sediment	683m
Q_avf	Alluvial fan deposits	Fluvially-deposited quartz- lithic sand, silt, gravel, clay.	\Alluvium\\Alluvial valley deposits\Alluvial fan deposits\	Quaternary (base) to Now (top)	Clastic sediment	750m
QH_af	Alluvial floodplain deposits	Silt, very fine- to medium- grained lithic to quartz-rich sand, clay.	\Alluvium\\Alluvial floodplain deposits\\	Holocene (base) to Now (top)	Clastic sediment	983m

### **Linear Geological Structures**

What are the Dyke, Sill, Fracture, Lineament and Vein trendlines within the dataset buffer?

Map ID	Feature Description	Map Sheet Name	Distance
No Features			

What are the Faults, Shear zones or Schist zones, Intrusive boundaries & Marker beds within the dataset buffer?

Map ID	Boundary Type	Description	Map Sheet Name	Distance
No Features				

Geological Data Source: Statewide Seamless Geology v2.1, Department of Regional NSW Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

# **Naturally Occurring Asbestos Potential**

256 Paterson Road, Bolwarra Heights, NSW 2320

# **Naturally Occurring Asbestos Potential**

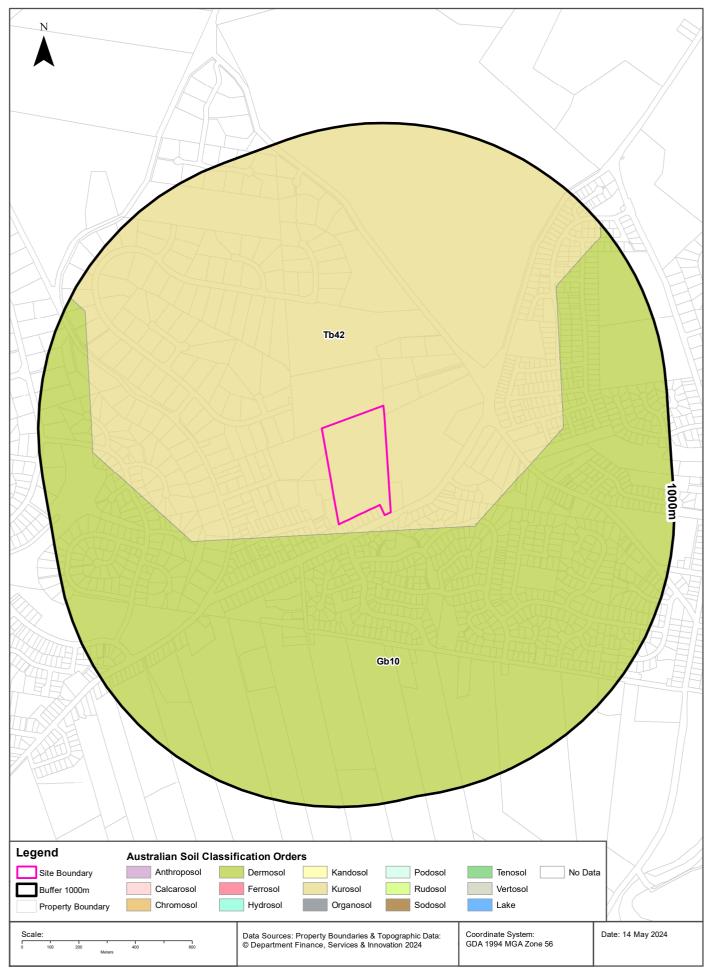
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

#### **Atlas of Australian Soils**





### Soils

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Atlas of Australian Soils**

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

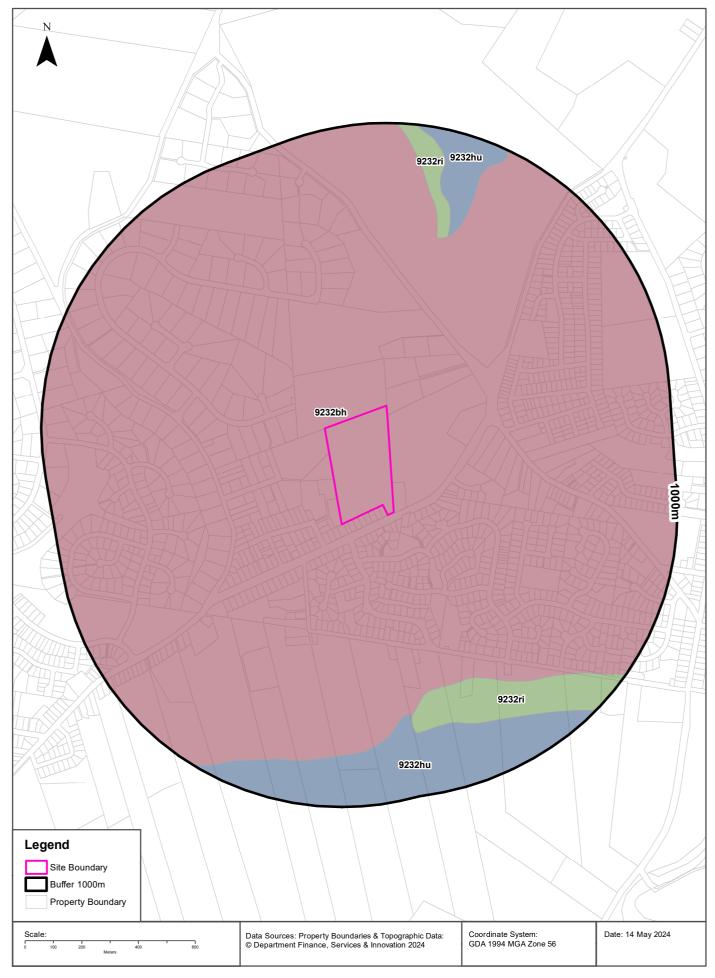
Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Tb42	Kurosol	Undulating to hilly with a general ridge, slope, and valley sequence throughout; some outcropping sandstone or conglomerate on the ridges, occasionally some escarpments: chief soils are hard acidic yellow mottled soils (Dy3.41), possibly with (Dy3.42). Associated are: narrow ridges of shallow (Dy3.41) and (Dr3.41) soils, both often containing ironstone gravel; (Dr2.41) soils on broader ridges some broad sandy flats of (Dy5.81) soils containing ironstone gravels; dunes of (Uc1.2) soils on local sand deposits; and various undescribed soils along the streams where salinity is a common local feature.	Om	On-site
Gb10	Dermosol	River terraces, levees, flood-plains, coastal swamps, and tidal flats: this unit contains the same land forms and soils as unit Gb9, but in addition has (i) swamps and levees of the lower river flood-plain of (Uf6.6), (Ug5), and other undescribed soils; (ii) estuarine flats of peaty or organic soils over acid clays; and (iii) tidal mud flats. The soils of these areas are not well known but probably have similarities with the soils of units J3, Mc4, NY1, and NN1. The smaller areas mapped as unit Gb10 consist mainly of areas of (i) and/or (iii) above.	32m	South

Atlas of Australian Soils Data Source: CSIRO

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# **Soil Landscapes of Central and Eastern NSW**





### Soils

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Soil Landscapes of Central and Eastern NSW**

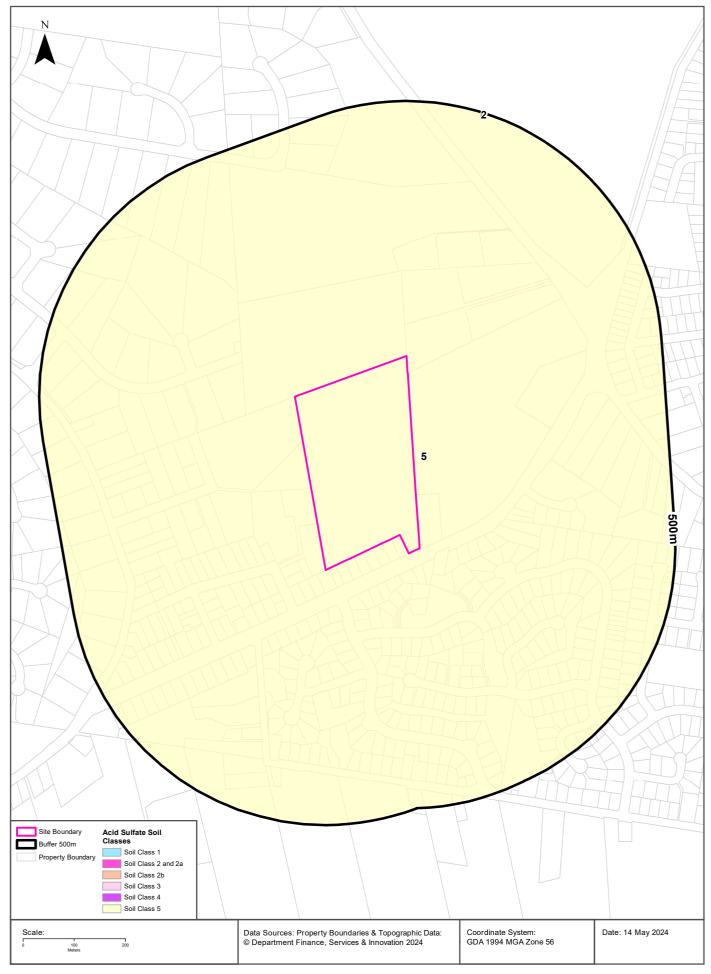
Soil Landscapes of Central and Eastern NSW within the dataset buffer:

Soil Code	Name	Distance	Direction
<u>9232bh</u>	Bolwarra Heights	0m	On-site
<u>9232ri</u>	Rivermead	620m	North
<u>9232hu</u>	Hunter	636m	South

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**





#### **Acid Sulfate Soils**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **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
5	Works within 500 metres of adjacent Class 1, 2, 3, or 4 land that is below 5 metres AHD and by which the watertable is likely to be lowered below 1 metre AHD on adjacent Class 1, 2, 3 or 4 land, present an environmental risk	Maitland Local Environmental Plan 2011

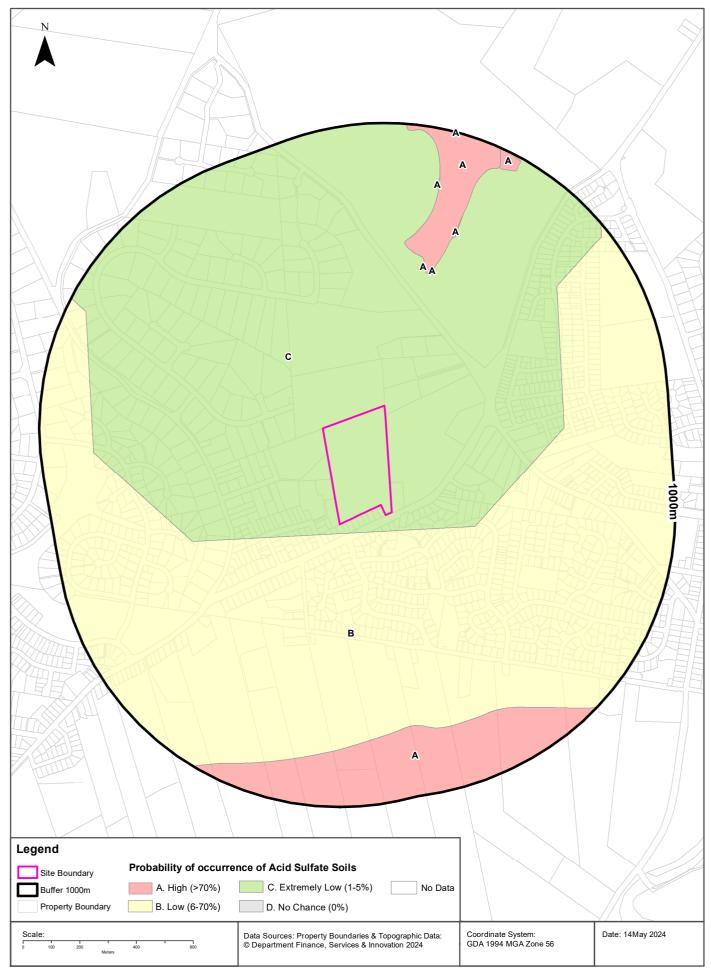
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
2	Works below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered present an environmental risk	Maitland Local Environmental Plan 2011	491m	North

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#### **Atlas of Australian Acid Sulfate Soils**





#### **Acid Sulfate Soils**

256 Paterson Road, Bolwarra Heights, NSW 2320

#### **Atlas of Australian Acid Sulfate Soils**

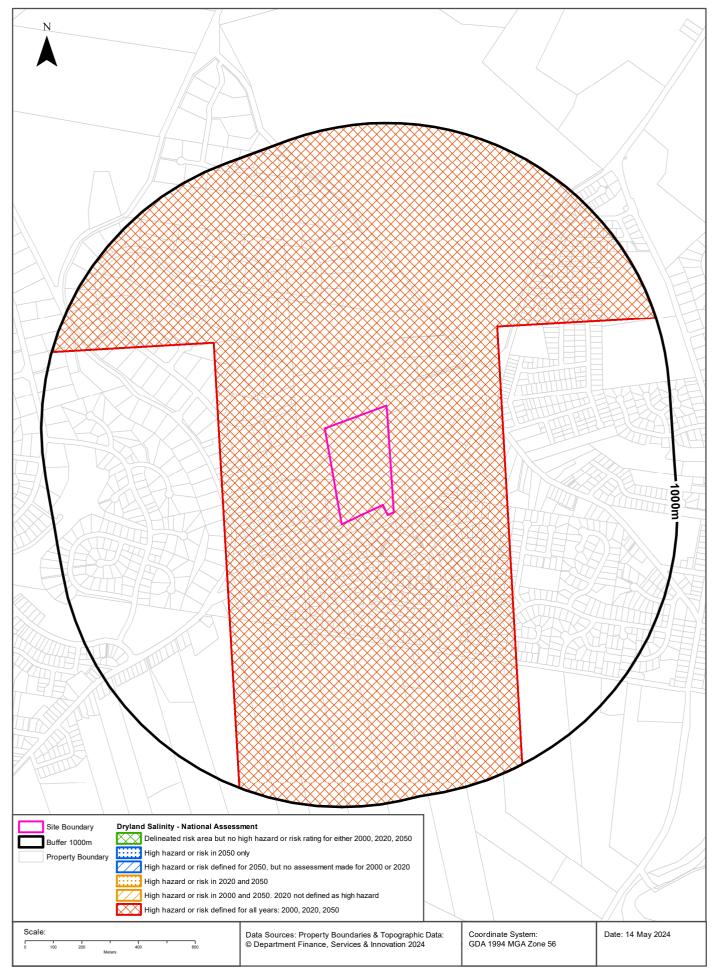
Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
С	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m	On-site
В	Low Probability of occurrence. 6-70% chance of occurrence.	33m	South
Α	High Probability of occurrence. >70% chance of occurrence.	750m	South

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

#### **Dryland Salinity**





### **Dryland Salinity**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Dryland Salinity - National Assessment**

Is there Dryland Salinity - National Assessment data onsite?

Yes

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

Yes

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
High hazard or risk	High hazard or risk	High hazard or risk	0m	On-site

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.

## **Mining**

256 Paterson Road, Bolwarra Heights, NSW 2320

## **Mining Subsidence Districts**

Mining Subsidence Districts within the dataset buffer:

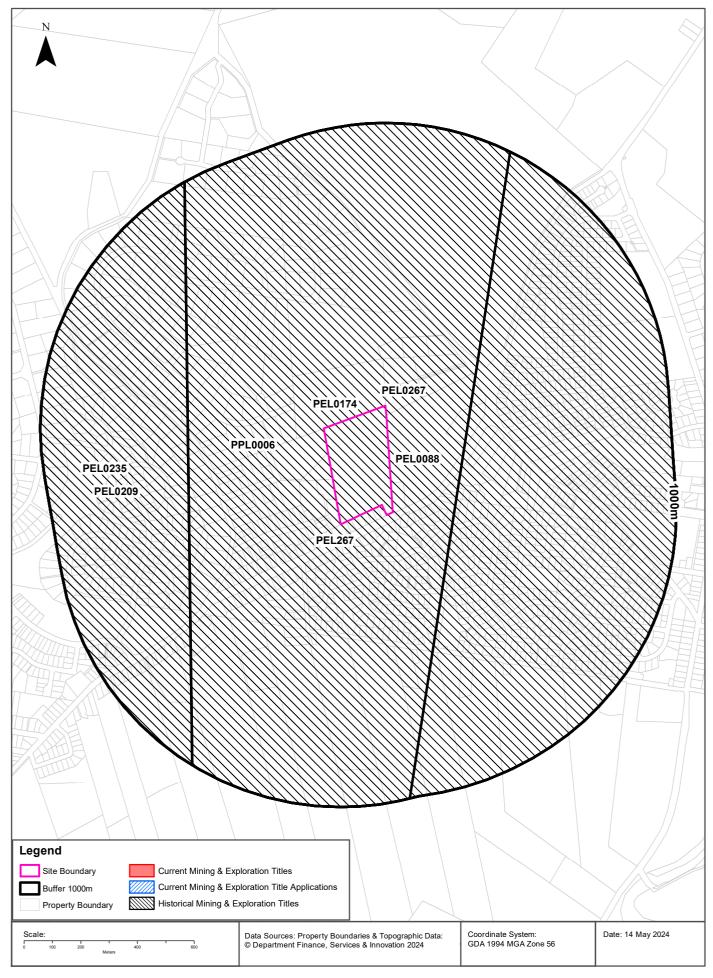
District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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### **Mining & Exploration Titles**

256 Paterson Road, Bolwarra Heights, NSW 2320





## **Mining**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Current Mining & Exploration Titles**

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	<b>Grant Date</b>	<b>Expiry Date</b>	Last Renewed	Operation	Resource	Minerals	Dist	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	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**

256 Paterson Road, Bolwarra Heights, NSW 2320

## **Historical Mining & Exploration Titles**

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
PEL267	AGL UPSTREAM INVESTMENTS PTY LIMITED	19930413	19991205	MINERALS		0m	On-site
PEL0174	NSW OIL AND GAS COMPANY NL			PETROLEUM	Petroleum	0m	On-site
PPL0006	PLANET EXPLORATION	19060305		PETROLEUM	Petroleum	0m	On-site
PEL0267	SYDNEY OIL CO (NSW) PTY LTD, MANVANE PTY LTD AUSTRALIA NL, BASE RESOURCES LTD, SEAHAWK OIL AUSTRALIA NL, READING & BATES	19850801	20150607	PETROLEUM	Petroleum	0m	On-site
PEL0088	PLANET EXPLORATION COMPANY PTY LTD			PETROLEUM	Petroleum	0m	On-site
PEL0209	EARTH RESOURCES AUSTRALIA PTY LTD			PETROLEUM	Petroleum	479m	West
PEL0235	EASTMET LTD	19810504		PETROLEUM	Petroleum	479m	West

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

## **State Environmental Planning Policy**

256 Paterson Road, Bolwarra Heights, NSW 2320

## **State Significant Precincts**

What SEPP State Significant Precincts exist within the dataset buffer?

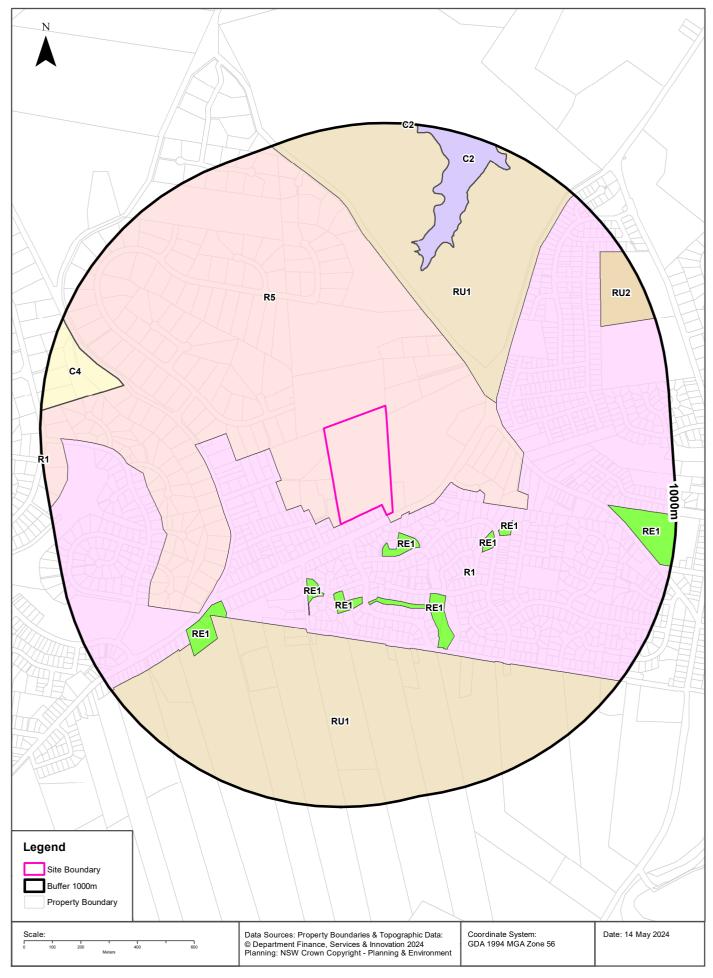
Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No records in buffer							

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

## **EPI Planning Zones**

256 Paterson Road, Bolwarra Heights, NSW 2320





## **Environmental Planning Instrument**

256 Paterson Road, Bolwarra Heights, NSW 2320

## **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
R5	Large Lot Residential		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	0m	On-site
R1	General Residential		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	0m	South East
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	73m	South East
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	218m	South
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	235m	South
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	287m	South East
RU1	Primary Production		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	313m	South
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	334m	South East
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	376m	South East
C2	Environmental Conservation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	494m	North
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	501m	South West
C4	Environmental Living		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	723m	West
RE1	Public Recreation		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	756m	East
RU2	Rural Landscape		Maitland Local Environmental Plan 2011	21/04/2023	26/04/2023	15/12/2023	Map Amendment No 4	809m	North East

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

### **Heritage**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **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?

M	ap 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?

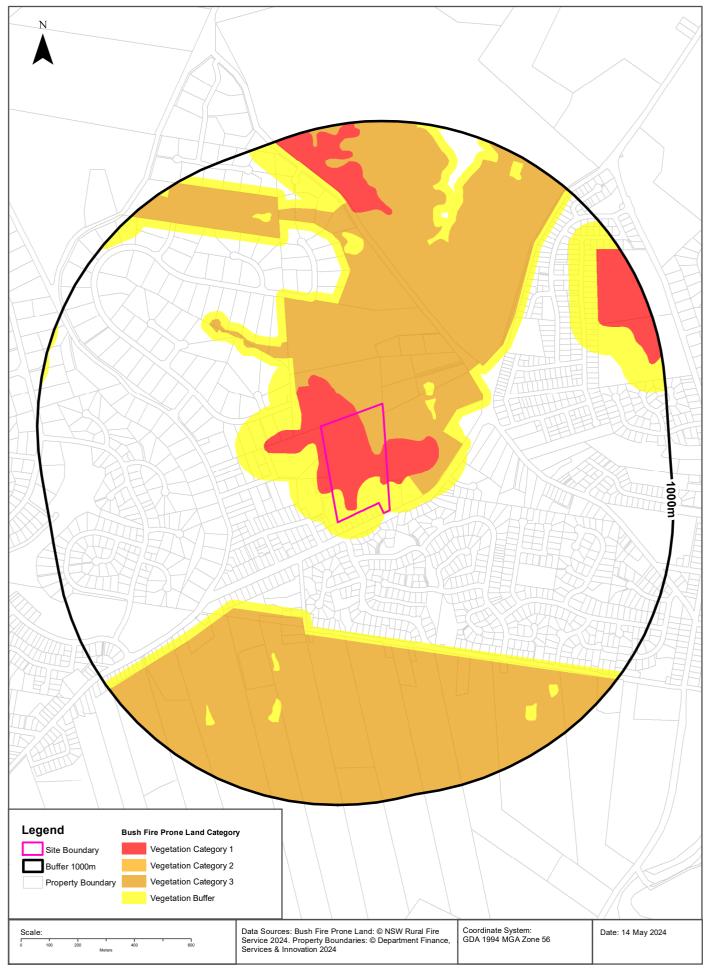
Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
N/A	No records in buffer								

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

### **Natural Hazards - Bush Fire Prone Land**

256 Paterson Road, Bolwarra Heights, NSW 2320





### **Natural Hazards**

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Bush Fire Prone Land**

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

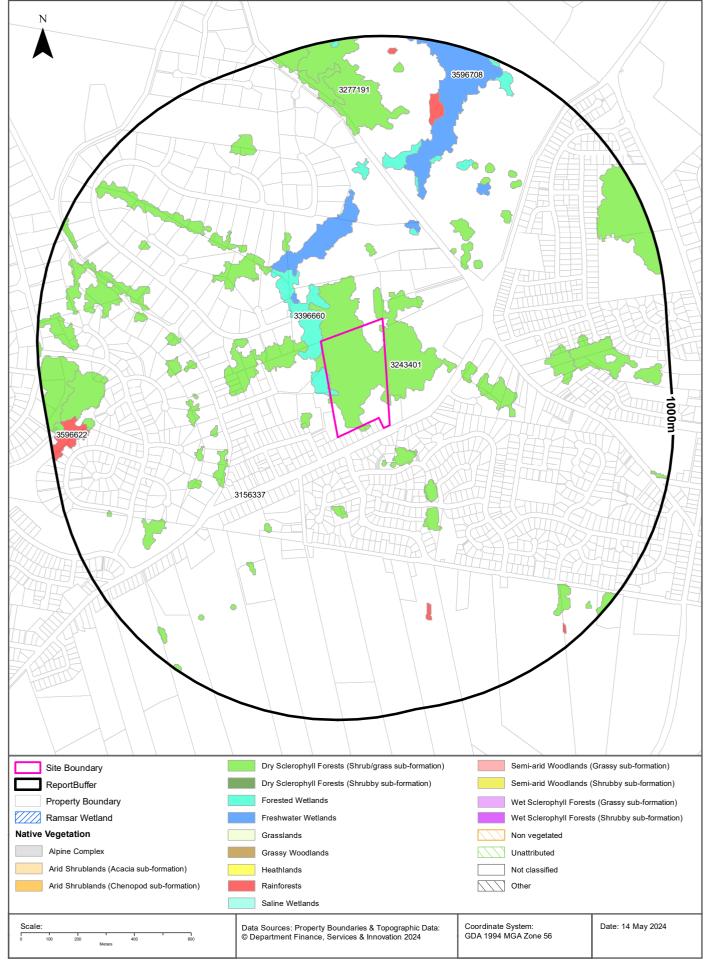
Bush Fire Prone Land Category	Distance	Direction
Vegetation Category 1	0m	On-site
Vegetation Category 3	0m	On-site
Vegetation Buffer	0m	On-site

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

### **Ecological Constraints - Vegetation & Ramsar Wetlands**

256 Paterson Road, Bolwarra Heights, NSW 2320





256 Paterson Road, Bolwarra Heights, NSW 2320

## **Native Vegetation**

What native vegetation exists within the dataset buffer?

Map ID	Vegetation Formation	Plant Community Type and Vegetation Formation	Vegetation Class	Dist	Dir
3156337	Not classified	(Not classified) Not classified	Not classified	0m	On-site
3243401	Dry Sclerophyll Forests (Shrub/grass subformation)	(Dry Sclerophyll Forests (Shrub/grass sub-formation)) Hunter Coast Foothills Spotted Gum-Ironbark Grassy Forest	Hunter-Macleay Dry Sclerophyll Forests	0m	On-site
3396660	Forested Wetlands	(Forested Wetlands) Lower North Riverflat Eucalypt- Paperbark Forest	Coastal Floodplain Wetlands	0m	On-site
3596708	Freshwater Wetlands	(Freshwater Wetlands) Southern Lower Floodplain Freshwater Wetland	Coastal Freshwater Lagoons	157m	North
3277191	Dry Sclerophyll Forests (Shrub/grass subformation)	(Dry Sclerophyll Forests (Shrub/grass sub-formation)) Lower North Foothills Ironbark-Box-Gum Grassy Forest	Hunter-Macleay Dry Sclerophyll Forests	309m	North West
3596622	Rainforests	(Rainforests) Lower Hunter Tuckeroo Riparian Rainforest	Dry Rainforests	637m	West

Native Vegetation Type Map: NSW Department of Planning and Environment 2022 Creative Commons Attributions 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Ramsar Wetlands**

What Ramsar Wetland areas exist within the dataset buffer?

Map ID	Ramsar Name	Wetland Name	<b>Designation Date</b>	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

256 Paterson Road, Bolwarra Heights, NSW 2320

### **Collaborative Australian Protected Areas Database - Terrestrial**

Protected areas in terrestrial environments identified by the CAPAD within the dataset buffer:

Map ID	Area Name	Area Details	Management Category	Authority	Jurisdiction	Dist	Dir
N/A	No records in buffer						

## **Collaborative Australian Protected Areas Database - Marine**

Protected areas in marine environments identified by the CAPAD within the dataset buffer:

Map ID	Area Name	Area Details	Management Category	Authority	Jurisdiction	Dist	Dir
N/A	No records in buffer						

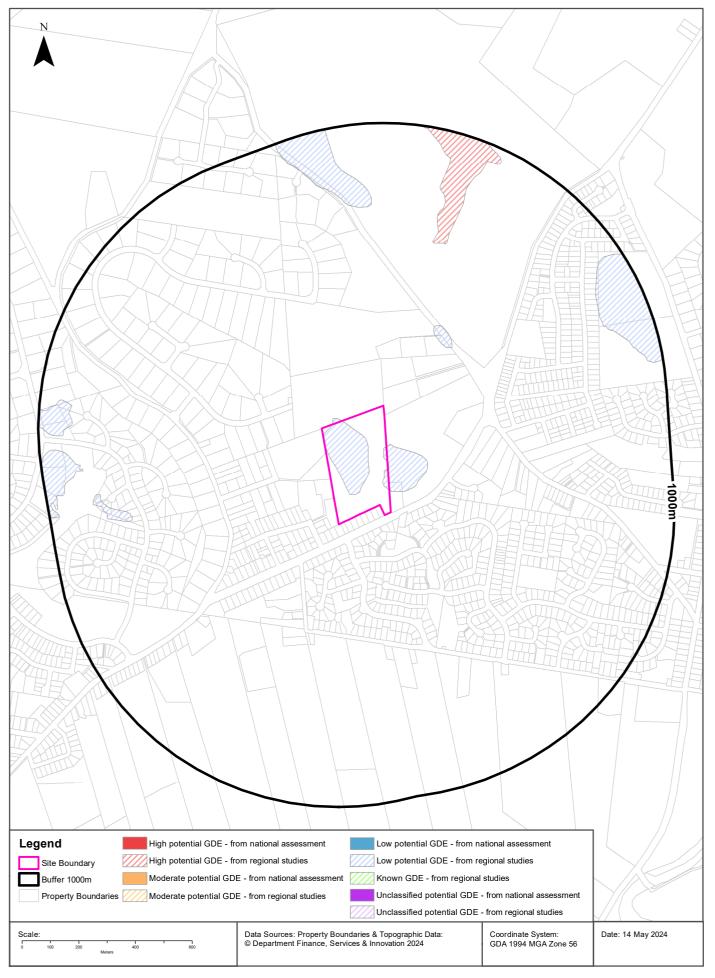
Source: Collaborative Australian Protected Areas Database (CAPAD) 2022

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### **Ecological Constraints - Groundwater Dependent Ecosystems Atlas**

256 Paterson Road, Bolwarra Heights, NSW 2320





256 Paterson Road, Bolwarra Heights, NSW 2320

## **Groundwater Dependent Ecosystems Atlas**

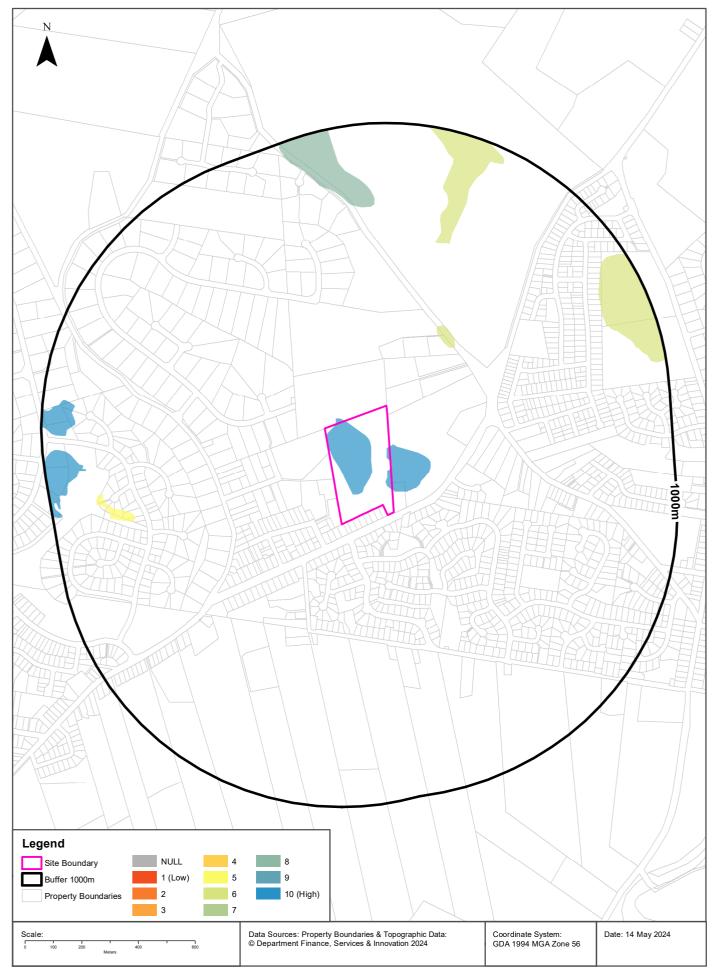
Туре	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	Low potential GDE - from regional studies	Undulating to low hilly country on weak rocks, with alluvial and sandy littoral plains.	Vegetation		0m	On-site
Terrestrial	Low potential GDE - from regional studies	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		299m	North East
Terrestrial	High potential GDE - from regional studies	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		601m	North

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Ecological Constraints - Inflow Dependent Ecosystems Likelihood**

256 Paterson Road, Bolwarra Heights, NSW 2320





256 Paterson Road, Bolwarra Heights, NSW 2320

## **Inflow Dependent Ecosystems Likelihood**

Туре	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	10	Undulating to low hilly country on weak rocks, with alluvial and sandy littoral plains.	Vegetation		Om	On-site
Terrestrial	6	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		299m	North East
Terrestrial	8	Plateau flank dissected into narrow strike ridges and valleys.	Vegetation		706m	North
Terrestrial	5	Undulating to low hilly country on weak rocks, with alluvial and sandy littoral plains.	Vegetation		713m	West

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

256 Paterson Road, Bolwarra Heights, NSW 2320

### **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	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria littlejohni	Littlejohn's Tree Frog	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Category 2	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 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	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 ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black- Cockatoo (inland subspecies)	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus lathami	South-eastern Glossy Black- Cockatoo	Vulnerable	Category 2	Vulnerable	
Animalia	Aves	Charadrius veredus	Oriental Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chthonicola sagittata	Speckled Warbler	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Cuculus optatus	Oriental Cuckoo	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
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	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Falco subniger	Black Falcon	Vulnerable	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
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	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	Hieraaetus morphnoides	Little 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	Not Sensitive	Critically Endangered	
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophochroa leadbeateri	Major Mitchell's Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Menura alberti	Albert's Lyrebird	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Motacilla flava	Yellow Wagtail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
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 minutus	Little Curlew	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; 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	Pachycephala inornata	Gilbert's Whistler	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	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	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	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	Ptilinopus magnificus	Wompoo Fruit- Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Stagonopleura guttata	Diamond Firetail	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
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	Thalasseus bergii	Crested Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Thinornis cucullatus cucullatus	Eastern Hooded Dotterel	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa glareola	Wood Sandpiper	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	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	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	Southern Greater Glider	Endangered	Not Sensitive	Endangered	
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 cinereus	Koala	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad- nosed 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	Tiliqua occipitalis	Western Blue- tongued Lizard	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Cymbidium canaliculatum	Tiger Orchid	Endangered Population	Category 2	Not Listed	
Plantae	Flora	Eucalyptus camaldulensis	River Red Gum	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus glaucina	Slaty Red Gum	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Maundia triglochinoides		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Pterostylis chaetophora		Vulnerable	Category 2	Not Listed	
Plantae	Flora	Rhodamnia rubescens	Scrub Turpentine	Critically Endangered	Not Sensitive	Critically Endangered	
Plantae	Flora	Rhodomyrtus psidioides	Native Guava	Critically Endangered	Not Sensitive	Critically Endangered	
Plantae	Flora	Rutidosis heterogama	Heath Wrinklewort	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	

Data does not include NSW category 1 sensitive species. NSW BioNet: © State of NSW and Office of Environment and Heritage

### **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LC" or "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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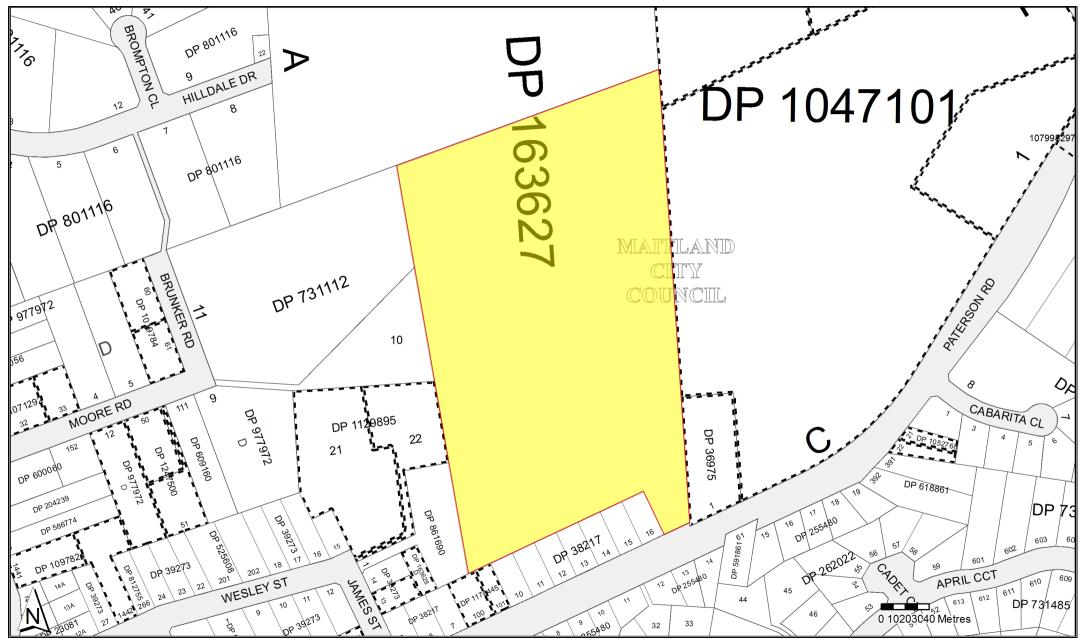


### Cadastral Records Enquiry Report: Lot C DP 163627

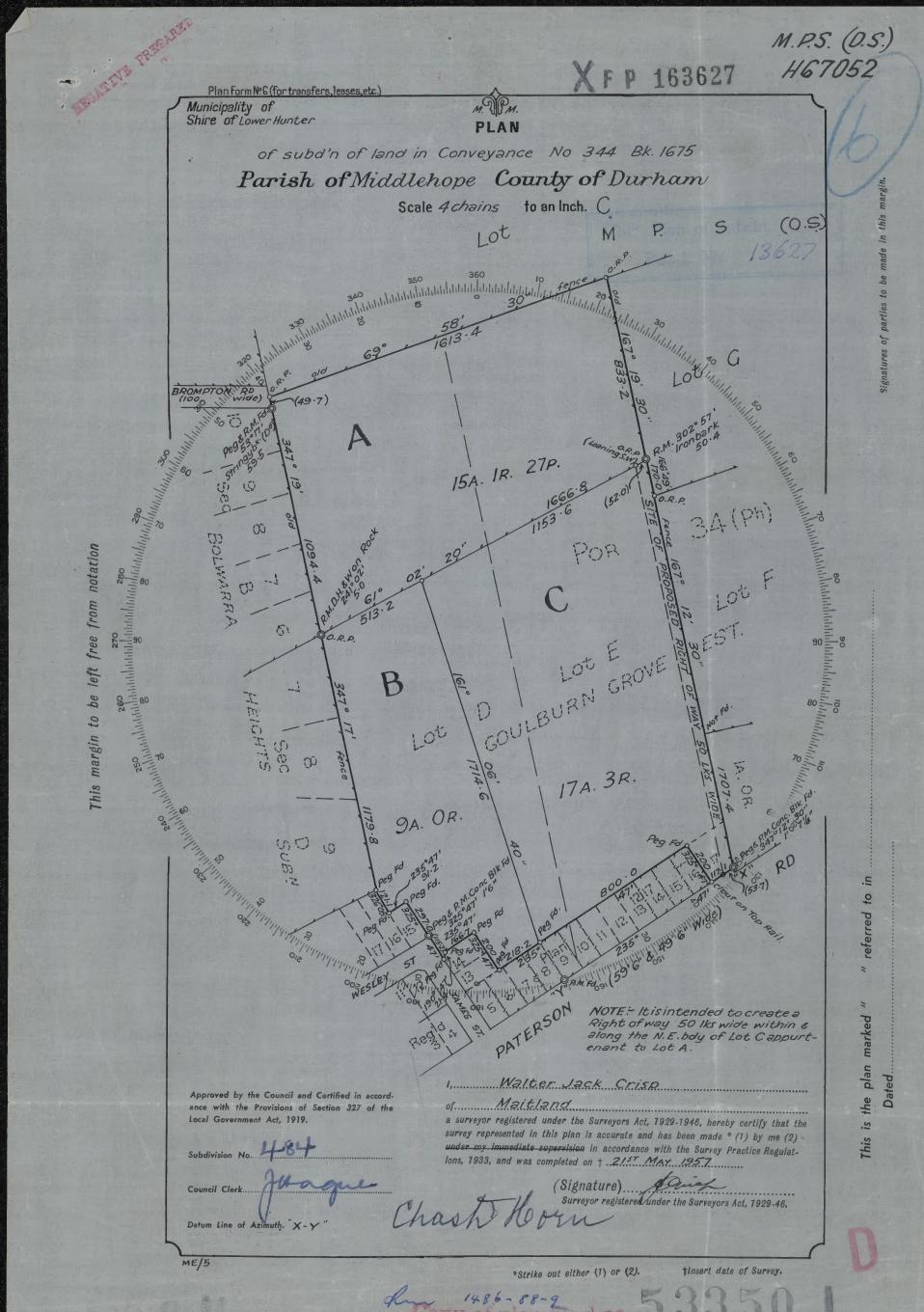
Locality: BOLWARRA HEIGHTS

Parish: MIDDLEHOPE

LGA : MAITLAND County : DURHAM



Ref: LS056199\_EP



Copy, 0/5, plan filed as 5335



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE ------15/5/2024 12:01PM

FOLIO: C/163627

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First Title(s): OLD SYSTEM
Prior Title(s): CA43490

Recorded	Number	Type of Instrument	C.T. Issue
9/3/1990	CA43490	CONVERSION ACTION	FOLIO CREATED EDITION 1
27/11/1990	Z357603	MORTGAGE	EDITION 2
23/6/1995	0326569	MORTGAGE	EDITION 3
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED

\*\*\* END OF SEARCH \*\*\*





NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: C/163627

\_\_\_\_

SEARCH DATE TIME EDITION NO DATE \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ 15/5/2024 12:01 PM 8/9/2018 4

LAND

LOT C IN DEPOSITED PLAN 163627 AT BOLWARRA HEIGHTS LOCAL GOVERNMENT AREA MAITLAND PARISH OF MIDDLEHOPE COUNTY OF DURHAM TITLE DIAGRAM DP163627

FIRST SCHEDULE

\_\_\_\_\_

STEWART RONALD MAX SMITH ROSALIE THOMASINA MAY WILLIAMS AS TENANTS IN COMMON IN EOUAL SHARES

SECOND SCHEDULE (7 NOTIFICATIONS)

- RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- QUALIFIED TITLE. CAUTION PURSUANT TO SECTION 28J(1) AND 28J(1A) OF THE REAL PROPERTY ACT, 1900. ENTERED 9.3.1990 BK 3792 NO 881
- LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.
- BK 2480 NO 437 RIGHT OF CARRIAGEWAY AFFECTING THE PART OF THE LAND ABOVE DESCRIBED SHOWN AS "SITE OF PROPOSED RIGHT OF WAY 10.06 WIDE" IN THE TITLE DIAGRAM
- BK 3521 NO 629 MORTGAGE TO WESTPAC BANKING CORPORATION
- Z357603 MORTGAGE TO NEW SOUTH WALES RURAL ASSISTANCE AUTHORITY
- MORTGAGE TO WESTPAC BANKING CORPORATION 0326569

NOTATIONS

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

LS056199 EP

PRINTED ON 15/5/2024

<sup>\*</sup> Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.



Certificate No.: PC/2024/1076 Certificate Date: 21/03/2024

Fee Paid: \$67.00

Receipt No.: 1850965 Your Reference: MRT:JLM:41655

## SECTION 10.7 PLANNING CERTIFICATE Environmental Planning and Assessment Act, 1979 as amended

**APPLICANT:** Tranter Lawyers

admin@tranterlawyers.com.au

**PROPERTY DESCRIPTION:** 256 Paterson Road BOLWARRA HEIGHTS NSW 2320

PARCEL NUMBER: 22577

**LEGAL DESCRIPTION:** Lot C DP 163627

#### IMPORTANT: Please read this Certificate carefully.

The information provided in this Certificate relates only to the land described above. If you need information about an adjoining property or nearby land, a separate certificate will be required.

All information provided is correct as at the date of issue of this Certificate. However, it is possible for changes to occur at any time after the issue of this Certificate.

For more information on the Planning Certificate please contact our Customer Experience team on 4934 9700.

#### **SECTION 10.7(2)**

The following matters relate to the land, as required by section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act") and clause 284 and Schedule 2 of the Environment Planning and Assessment Regulation 2021.

### ITEM 1 - Names of relevant planning instruments and development control plans

The following environmental planning instruments and development control plans apply to the carrying out of development on the land:

#### **State Environmental Planning Policies**

The Minister for Planning has notified that the following State Environmental Planning Policies (SEPPs) shall be specified on Certificates under Section 10.7 of the Environmental Planning and Assessment Act, 1979.

The land is affected by the following State Environmental Planning Policies:

- SEPP65 Design Quality of Residential Apartment Development
- SEPP (Biodiversity and Conservation) 2021
- SEPP (Industry and Employment) 2021
- SEPP (Primary Production) 2021
- SEPP (Planning Systems) 2021
- SEPP (Housing) 2021
- SEPP Building Sustainability Index: BASIX 2004
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Resources and Energy) 2021
- SEPP (Transport and Infrastructure) 2021
- SEPP (Resilience and Hazards) 2021

#### Local Environmental Plan (LEP)

Maitland LEP 2011, published 16 December 2011, applies to the land.

#### Development Control Plan prepared by Council

Maitland Development Control Plan 2011 applies to the land.

The following proposed environmental planning instruments and draft development control plans are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979, apply to the carrying out of development on the land and:

### Planning Proposal for a Local Environmental Plan

No draft local Environmental Plans that have been on public exhibition under the Act are applicable to the land.

Detailed information on draft environmental planning instruments is available at

the NSW Department of Planning and Environment Current LEP Proposals website; or Maitland City Council's website.

#### **Draft Development Control Plans**

No draft Development Control Plan(s) that have been on public exhibition under the Act are applicable to the land.

#### **Draft State Environmental Planning Policies**

No draft State Environmental Planning Policy(s) applying to the land is, or has been publicised the subject of community consultation or on public exhibition under the Act.

#### ITEM 2 - Zoning and land use under relevant planning instruments

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policies)

#### Zone and Land Use Table from Local Environmental Plan

#### **R5 Large Lot Residential**

#### 1 Objectives of zone

- To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality
- To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future
- To ensure that development in the area does not unreasonably increase the demand for public services or public facilities
- To minimise conflict between land uses within this zone and land uses within adjoining zones

#### 2 Permitted without Consent

Home occupations

#### 3 Permitted with Consent

Bed and breakfast accommodation; Building identification signs; Business identification signs; Dual occupancies; Dwelling houses; Home-based child care; Home industries; Neighbourhood shops; Oyster aquaculture; Pond-based aquaculture; Roads; Tank-based aquaculture; Any other development not specified in item 2 or 4

#### 4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies.

Detailed information on the land zone mapping is available at the NSW Department of Planning and Environment ePlanning Spatial Viewer website; or Maitland City Council's website.

**Note:** Detailed information on the local environmental plan is available at NSW Legislation – In force legislation.

Whether development standards applying to the land fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions.

For the land zoned R5 Large Lot Residential the Maitland LEP 2011 does not contain a development standard specifying the land dimensions required to permit the erection of a dwelling house on the land.

## Is the land in an area of outstanding biodiversity value under the Biodiversity Conservation Act 2016?

The land IS NOT identified in an area of outstanding biodiversity value under the Biodiversity Conservation Act.

#### Is the land within a conservation area, however described?

The land IS NOT in a Heritage Conservation Area.

# Is there an item of environmental heritage in a local environmental plan?

The land does NOT contain an item of Environmental Heritage.

**Note**: An item of environmental heritage, namely Aboriginal heritage, listed on the Aboriginal Heritage Information Management System (AHIMS), may be situated on the land. The Department of Planning and Environment, Biodiversity and Conservation Division.

### ITEM 3 - Contribution plans

The name of each contributions plan under the Act, Division 7.1 applying to the land, including draft contributions plans.

- Maitland S94A Levy Contributions Plan 2006
- Maitland City Wide Section 94 Contributions Plan 2016
- Maitland S94 Contributions Plan (City Wide) 2006

If the land is in a special contributions area under the Act, Division 7.1, the name of the area.

The land IS NOT in a special contributions area.

**Note:** In addition to the above developer contribution plans, Development Servicing Plans for water and sewer connection may be applicable, attracting additional contributions for the development, particularly where development will connect to water and/or sewer services.

#### ITEM 4 - Complying Development

If the land is land on which complying development may be carried out under each of the complying development codes under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, because of that Policy, clause 1.17A(1)(c)-(e), (2), (3) or (4), 1.18(1)(c3) or 1.19.

Complying development under the **Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Low Rise Medium Density Housing Code and Greenfield Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Rural Housing Code** may be carried out on the land.

Complying development under the **Housing Alterations Code** may be carried out on the land.

Complying development under the **General Development Code** may be carried out on the land.

Complying development under the **Commercial and Industrial Alterations Code** may be carried out on the land.

Complying development under the **Commercial and Industrial (New Buildings and Additions) Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Subdivisions Code** may be carried out on the land.

Complying development under the **Demolition Code** may be carried out on the land.

Complying development under the **Fire Safety Code** may be carried out on the land.

Complying development under the **Container Recycling Facilities Code** may not be carried out on the land.

Note: Despite the above provisions, if only part of a lot is subject to an exclusion or exemption under Clause 1.17A or Clause 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial Development and Other Matters) 2013, complying development may be carried out on that part of the lot that is not affected by the exclusion or exemption.

The complying development may not be carried out on the land because of the following provisions of Clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of the Policy.

The provisions of Clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 are not identified on the land. Complying development may be undertaken in accordance with the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 as amended.

**Note:** This information needs to be read in conjunction with the whole of the State Environment Planning Policy. If an identification, restriction or characteristic of land referred to above is not located on or does not comprise, the whole of the relevant land, complying development may be carried out on any part of the land not so identified, restricted or characterised.

**Note:** Information regarding whether the property is affected by flood related development controls or is bushfire prone land is identified in other sections of this certificate. If your property is identified as being impacted by bushfire or flooding, a specific technical assessment of these issues will be required as part of any Complying Development Certificate application under the State Environment Planning Policy, or a development application for any other type of development requiring consent from Council.

**Note:** Despite any references above advising that Complying Development may be undertaken on the land, certain Complying Development may be precluded from occurring on the land due to requirements contained in the remainder of State Environment Planning Policy (Exempt and Complying Development Codes) 2008. It is necessary to review the State Environment Planning Policy in detail to ensure that specific types of complying development may be undertaken on the land.

If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that

- (a) a restriction applies to the land, but it may not apply to all of the land,
- (b) and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

If the complying development codes are varied, under that Policy, clause 1.12, in relation to the land.

There are no variations to the exempt development codes within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 that apply in the Maitland local government area.

For further information on complying development, please refer to the Department of Planning and Environment.

## ITEM 5 - Exempt Development

If the land is land on which exempt development may be carried out under each of the exempt development codes under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, because of that Policy, clause 1.16(1)(b1)-(d) or 1.16A.

If exempt development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.

If the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land, a statement that

- a) a restriction applies to the land, but it may not apply to all of the land, and
- b) the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land.

If the exempt development codes are varied, under that Policy, clause 1.12, in relation to the land.

### ITEM 6 - Affected building notices and building product rectification orders

#### Whether the council is aware that -

The Council IS NOT aware of any affected building notice which is in force in respect of the land.

The Council is NOT aware of any building product rectification order which is in force in respect of the land and that has not been fully complied with.

The Council IS NOT aware of any notice of intention to make a building product rectification order being given in respect of the land and that is outstanding.

### ITEM 7 - Land Reserved for Acquisition

Whether an environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

#### ITEM 8 - Road widening and road realignment

Whether the land is affected by road widening or road realignment under -

- a) The land is NOT affected by road widening under Division 2 of Part 3 of the Roads Act 1993.
- The land is NOT affected by road widening under any environmental planning instrument
- c) The land is NOT affected by any road-widening or realignment under any resolution of the Council
- The land is NOT affected by road-widening or realignment under a resolution of the Council

Note: This item relates to Council's road proposals only. Other authorities, including the NSW Roads and Traffic Authority may have road widening proposals.

#### ITEM 9 - Flood related development controls

The land or part of the land IS NOT within the flood planning area and subject to flood related development controls.

The land or part of the land IS NOT between the flood planning area and the probable maximum flood and subject to flood related development controls.

The Maitland LEP 2011 identifies the flood planning level (FPL) as the level of a 1:100 ARI flood event plus 0.5m freeboard. The probable maximum flood has the same meaning as the Floodplain Development Manual.

Note in this section – **flood planning area** has the same meaning as in the Floodplain Development Manual. **Floodplain Development Manual** means the Floodplain Development Manual (ISBN 0 7347 5476 00) published by the NSW Government in April 2005. **probable maximum flood** has the same meaning as in Floodplain Development Manual

Note: The information provided in item 9 is based on the data and information presently available to the Council and on development controls in force as at the date of this certificate. The identification of land as not being subject to flood related development controls does not mean that the land is not, or may not be, subject to flooding or that the land will not in the future be subject to flood related development controls, as additional data and information regarding the land become available.

#### ITEM 10 - Council and other public authority policies on hazard risk restrictions

Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bush fire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.

All land within the Maitland Local Government Area has the potential to contain acid sulfate soils. Clause 7.1 of the Maitland Local Environmental Plan 2011 generally applies. Development consent is required where works described in the Table to this clause are proposed on land shown on the Maitland LEP 2011 Acid Sulfate Soils Map as being of the class specified for those works.

The Council has adopted by resolution a policy on contaminated land which may restrict the development of the land to which this certificate relates. This policy is implemented when zoning or land use changes are proposed on lands which:

- · are considered to be contaminated; or
- which have previously been used for certain purposes; or
- which have previously been used for certain purposes but Council's records do not have sufficient information about previous use of the land to determine whether the land is contaminated; or
- have been remediated for a specific use.

Consideration of Council's adopted policy and the application of provisions under relevant State legislation is warranted.

Note in this section -

adopted policy means a policy adopted -

- a) by the council, or
- b) by another public authority, if the public authority has notified the council that the policy will be included in a planning certificate issued by council.

## ITEM - 11 Bush fire prone land

If any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under the Act, section 10.3, a statement that all or some of the land is bush fire prone land.

The land is mapped as bushfire prone land and as such restrictions may apply to new development on this land.

**Note** – In accordance with the *Environmental Planning and Assessment Act 1979*, bush fire prone land, in relation to area, means land recorded for the time being as bush fire prone on a bush fire prone land map for the area. This mapping is subject to periodic review.

**Note** – The identification of land as not being bushfire prone does not mean that the land is not, or may not be affected by bushfire or that the land will not in the future be subject to bushfire related development controls, as additional data and information regarding the land become available.

## ITEM - 12 Loose-fill asbestos insulation

If the land includes residential premises, within the meaning of the Home Building Act 1989, Part 8, Division 1A, that are listed on the Register kept under that Division, a statement to that effect.

There are no premises on the subject land listed on the register.

#### ITEM - 13 Mine subsidence

Whether the land is declared to be a mine subsidence district, within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land has NOT been proclaimed to be within a Mine Subsidence District under the meaning of section 20 of the Coal Mine Subsidence Compensation Act 2017.

#### ITEM - 14 Paper subdivision information

There is no development plan that applies to the:

- 1) Land or that is proposed to be subject to a consent ballot
- 2) There is no subdivision order that applies to the land.

## ITEM - 15 Property vegetation plans

If the land in relation to which a property vegetation plan is approved and in force under the Native Vegetation Act 2003, Part 4, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

The Council has not received any notification from Hunter Local Land Services that this land is affected by a property vegetation plan under Part 4 of the Native Vegetation Act 2003 (and that continues in force).

### ITEM - 16 Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under the Biodiversity Conservation Act 2016, Part 5, a statement to that effect, but only if the council has been notified of the existence of the agreement by the biodiversity Conservation Trust.

The Council is not aware if the land is a biodiversity stewardship site under a biodiversity stewardship agreement under part 5 of the *Biodiversity Conservation Act 2016.* 

**Note** – Biodiversity stewardship agreements include biobanking agreements under the *Threatened Species Conservation Act 1995*, Part 7A that are taken to be biodiversity stewardship agreements under the *Biodiversity Conservation Act 2016*, Part 5.

#### ITEM 17 - Biodiversity certified land

If the land is biodiversity certified land under the Biodiversity Conservation Act 2016, Part 8, a statement to that effect.

The land is not biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016.

**Note** – Biodiversity certified land includes land certified under the *Threatened Species Conservation Act 1995*, Part 7AA that is taken to be certified under the *Biodiversity Conservation Act 2016*, Part 8.

#### ITEM 18 - Orders under Trees (Disputes Between Neighbours) Act 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land, but only if the council has been notified or the order.

Council has NOT received notification from the Land and Environment Court of NSW that the land is affected by an Order under Trees – (Disputes Between

Neighbours) Act 2006.

## ITEM 19 - Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

The owner (or any previous owner) of the land has NOT consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

**Note** - In this section existing coastal protection works has the same meaning as in the Local Government Act 1993, section 553B.

**Note** – Existing coastal protection works are works to reduce the impact of coastal hazards on land, such as seawalls, revetments, groynes and beach nourishment, that existed before 1 January 2011

#### ITEM 20 - Western Sydney Aerotropolis

The State Environmental Planning Policy (Precincts – Western Parkland City) 2021 does not apply to land within the Maitland City Council local government area.

#### ITEM 21 - Development consent conditions for seniors housing

If State Environmental Planning Policy (Housing) 2021, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

Clause 88(2) of the *State Environmental Planning Policy (Housing) 2021* restricts occupation of development approved for seniors housing to:

- a) Seniors or people who have a disability
- People who live in the same household with seniors or people who have a disability,
- c) Staff employed to assist in the administration and provision of services to housing provided under this Part.

## ITEM 22 – Site compatibility certificates and development consent conditions for affordable rental housing

Whether there is a current site compatibility certificate under State Environmental Planning Policy (Housing) 2021, or a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land and, if there is a certificate –

- a) the period for which the certificate is current, and
- b) that a copy may be obtained from the Department.

If State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, Division 1 or 5 applies to the land, any conditions of a development consent in relation to the land that are of a kind referred to in that Policy, section 21(1) or 40(1).

Any conditions of a development consent in relation to land that are kind referred to in State Environmental Planning Policy (Affordable Rental Housing) 2009, clause 17(1) or 38(1).

Note - No Seniors Housing development consent conditions apply to this land.

**Note -** In this section – Former site compatibility certificate means a site compatibility certificate issued under State Environmental Planning Policy (Affordable Rental Housing) 2009.

Council is unaware if a Site Compatibility Certificate (Affordable Rental Housing) has been issued in accordance with State Environmental Planning Policy (Affordable Rental Housing) 2009.

Note. The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate.

#### Contaminated Land

- a) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.
- b) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.
- c) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.
- d) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.
- e) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.

Jeff Smith General Manager



# HUNTER WATER CORPORATION ABN. 46 228 513 446

SERVICE LOCATION PLAN

Enquiries: 1300 657 657



APPLICATION NUMBER: 1935057

APPLICANT NAME: InfoTrack

APPLICANT REF; M 41655

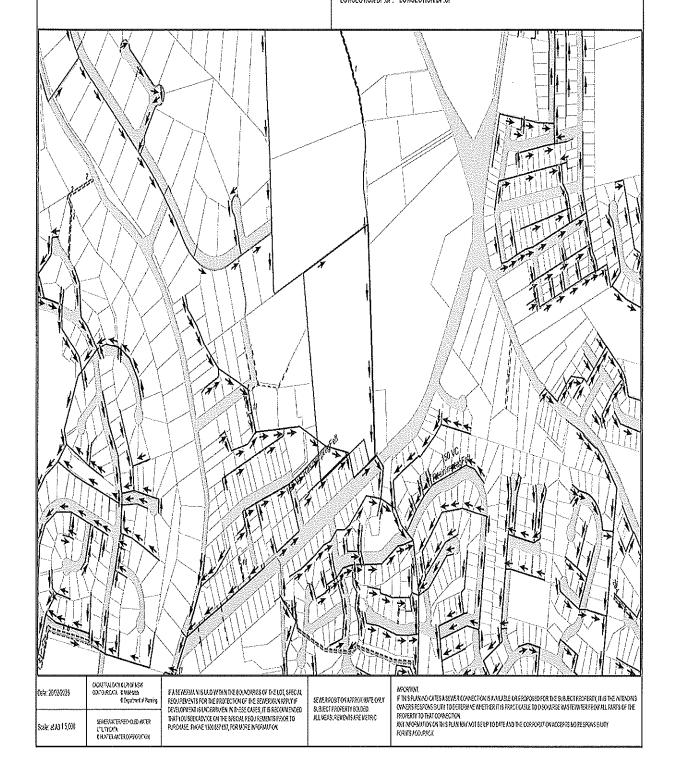
256 PATERSON

RATEABLE PREVISE NO.: 2457900643

BOLWARRA HEIGHTS NSW

PROPERTY ADDRESS: 255 PATERSON RD BOLWARRA HEIGHTS 2370

LOT/SECTION OP.SP: LOT/SECTION OP.SP



## **Appendix D** Unexpected Finds Protocol



# **UNEXPECTED FINDS PROTOCOL** 256 Paterson Road, Bolwarra Heights

03 June 2024

Prepared for: HGBE Properties Pty Ltd

Prepared by: Brock Collinson

Project Number: 304001820.001

## **Unexpected Finds Protocol**

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
1	First Issue to Client	ВС	27/05/2024	DS	27/05/2024	IGP	27/05/2024



Project Number: 304001820.001

#### **Unexpected Finds Protocol**

The conclusions in the Report titled Unexpected Finds Protocol are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from HGBE Properties Pty Ltd (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

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Prepared by:	Signature	
	Brock Collinson	
	Printed Name	
	Other	
Reviewed by:	Signature	
	Signature	
	Dimce Stojanovski	
	Printed Name	
Approved by:		
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	Ion Dinor	
	Ian Piper Printed Name	
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Project Number: 304001820.001

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## 1 Introduction

This Unexpected Finds Protocol (UFP) has been developed for the proposed residential subdivision, located at 256 Paterson Road, Bolwarra Heights, NSW.

The purpose of the Unexpected Finds Protocol is to document the process for evaluating any unexpected environmental finds during the project, and to specify safety measures to be implemented to manage such circumstances and prevent any adverse environmental and human health impacts.

## 1.1 Scope

This Unexpected Finds Protocol (UFP) is specific to the proposed residential subdivision, located at 256 Paterson Road, Bolwarra Heights, NSW. It provides guidance and procedures for dealing with any unexpected finds that may be encountered during the disturbance works carried out on Site.

## 1.2 References

The following documents have been reviewed in preparation of this Unexpected Finds Protocol:

- > National Parks and Wildlife Act 1974 (NSW)
- > Coroners Act 2009 (NSW)
- > Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)
- > Heritage Act 1977 (NSW)
- > National Environmental Protection Measure (1999)

## 2 Procedure

### 2.1 General

The following procedure must be used to assess any unexpected finds that are encountered throughout the duration of the project. Unexpected finds may include but are not limited to heritage items, unidentified filling, odorous or stained soils, and suspected asbestos materials. All Site personnel are required to report any unexpected finds to the site manager, if observed during the course of their works.

## 2.2 Training and Induction of Personnel

Personnel involved in the development of the Site and future Site users / owners are to be inducted to the unexpected finds protocol.

Site inductions must include making workers and site personnel aware of the possibility of unexpected finds, and the response procedures, including stopping work, notifying their supervisor immediately and completing the Incident Report forms.

## 2.3 Initial Response

If any unexpected/unidentified material is encountered, the following procedure should be followed.

- · Cease all works in the immediate area.
- Identify the category of the find (Contaminated Soils, Heritage, uncovering of Asbestos Materials etc).
- Delineate and restrict access to the area using fencing and /or appropriate barriers and signage.
- Document the nature of the find.
- Engage a suitably qualified consultant to assess the unexpected find.
- The consultant will assess the unexpected find and provide advice with reference to Sections 2.4 –
   2.8 below, which will include the following:
  - The need for further immediate management controls if required.
  - Further assessment and / or remediation works required in accordance with relevant guidelines.
  - Preparation of Remediation Action Plan (RAP) if required or provide clean up advice.
  - If required, clean up strategies of the affected area will be implemented.
  - If appointed, correspondence with a Site Auditor shall be undertaken.
- Ensure appropriate training and PPE is available for any persons required to enter the area.

Works within the affected area are not to recommence until it is deemed safe and suitable for works to continue. Written confirmation shall be undertaken by the appropriate consultant following appropriate advice and clean up procedures.



## 2.4 Skeletal Remains

In the event that skeletal remains are uncovered, and the remains are not immediately identifiable as non-human remains, a qualified archaeologist should be engaged to determine their origin.

If the skeletal remains are identifiable as human remains, the Local Police should be contacted to assess the discovery. Under no circumstances should the skeletal remains be disturbed without prior consultation with the relevant authorities which may include the police, coroner, Office of Environment & Heritage, aboriginal groups or a qualified anthropologist.

All human skeletal remains are subject to statutory controls and protections. All bones must be treated as potential human skeletal remains and work around them must stop while they are appropriately protected and investigated, the relevant authorities notified, and approvals received.

## 2.5 Aboriginal Heritage

In the event that any aboriginal object, relic, artefact or material that is suspected of being Aboriginal Heritage is uncovered, works must cease immediately in the area. Aboriginal object may include a shell midden, stone tools, bones, rock art, Aboriginal-built fences and stockyards, scarred trees and the remains of fringe camps.

The Office of Environment and Heritage (OEH) should be notified, as well as the National Parks and Wildlife Service, NSW Police and local Aboriginal Stakeholders.

The Office of Environment and Heritage requires notification and an Aboriginal Heritage Impact Permit (AHIP) permit is required prior to the removal of any Aboriginal artefacts. An AHIP permit is issued under the National Parks and Wildlife Act and applications can be made directly to the OEH.

## 2.6 Archaeological Heritage

Items of archaeological heritage may be uncovered during disturbance works. Items of archaeological heritage may include Aboriginal artefacts or remains,

European artefacts following settlement. European heritage may include items such as roadways (telford & corduroy timber road bases etc), kerbing, culverts, building foundations and tools. A suitably qualified archaeologist should be engaged to assess the find.

## 2.7 Potentially Contaminated Soils

If any odorous, stained, or otherwise potentially contaminated soils are encountered during the site works, a suitable qualified environmental consultant should be engaged to assess the material and the following procedures should apply:

- Excavation works where contaminated material is encountered should cease until an inspection by an environmental consultant conducted.
- Prior to the recommencement of works, the environmental consultant will provide:
  - guidance on health and safety requirements
  - Guidance on sampling and analysis; if considered necessary .
  - Soil storage and soil disposal requirements.



## 2.8 Asbestos Containing Materials

If potential asbestos containing material (ACM) is encountered, the following contingency measures are to be implemented:

- Where suspected ACM is encountered excavation works must cease until a report is provided by an appropriately trained environmental consultant is provided.
  - Following an inspection and sampling for laboratory testing (where required), works can continue following the consultant's written advice
  - Based on results of the visual assessment, sampling and analysis of representative samples may be required.
  - If ACM is encountered the report is to contain any measures required to excavate, store and dispose of ACM in accordance with relevant NSW legislation and guidelines.
- Any illegal dumping containing suspected asbestos bearing material or synthetic mineral fibres must be inspected by an environmental consultant.

## 2.9 Summary

When and unexpected find is encountered, works must cease in that area, and an inspection; and sampling if considered necessary, conducted by a suitable qualified consultant, in accordance with Sections 2.1 to 2.8.

Works within the area shall only recommence following the receipt of written advice from a suitably qualified consultant.

An Unexpected Finds Protocol procedure form is available attached to this UFP document.

## A.1 UNEXPECTED FINDS PROTOCOL FORM





## **UNEXPECTED FINDS PROTOCOL**

## **INCIDENT REPORT FORM**

Location of discovery (photographs, location map etc):				
Nature of find (contaminated soils, heritage,	asbestos etc.):			
Action Taken:				
Date:	Recorded By:			