

APPENDIX 3
VEGETATION VALUES SURVEY REPORT 2018



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FLORA AND VEGETATION ENVIRONMENTAL VALUES SURVEY

Prepared for B & J Catalano Pty Ltd
Lot 4 Ludlow Road, Myalup
Shire of Harvey

1. INTRODUCTION

The purpose of this environmental values survey (flora and vegetation) is to support an extractive industry license (EIL) by proponent B & J Catalano Pty Ltd for Lots 4 and 5 Ludlow Road, Myalup.

This report documents the outcomes from an assessment of the flora and vegetation values of Lots 4 and 5 Ludlow Road, based on a desktop review and reconnaissance survey conducted on 19th April 2018.

Lots 4 and 5 Ludlow Road are located within the Shire of Harvey (Figure 1). The particular area that has been reviewed and surveyed is within the uncleared portions of Lots 4 and 5 and will be referred herein as the assessment area.

2. DESKTOP STUDY/BACKGROUND

2.1 APPROACH

The desktop review collected background information on the assessment, including flora and vegetation that may be present. This involved a search of the literature, public data, aerial imagery and maps of the physical and biological characteristics of the assessment area. This included analysis of the following resources:

- NatureMap (Department of Biodiversity, Conservation and Attractions, DBCA);
- DBCA Threatened Flora Database;
- DBCA Threatened Ecological Community Database;
- Florabase (Western Australian Herbarium);
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) List of Threatened Flora;
- EPBC Act List of Threatened Ecological Communities;
- EPBC Act Protected Matters Search Tool (Department of Environment and Energy, DoEE);
- Western Australian Local Government Association, Environmental Planning Tool (EPT); and
- Previous studies in the vicinity (i.e. Maunsell 2007 etc.).

Refer to Appendix 1 for definitions of Declared Rare and Priority ratings under the *Wildlife Conservation Act 1950* (WC Act).

2.2 BACKGROUND

Landuse/disturbance history

Mining for limestone and road base has occurred within Lots 4 and 5 over the last 20 years. Prior to this the site was used for grazing.

Geology, landform and soils

The assessment area is within the Swan Coastal Plain, which is characterised as a low-lying coastal plain, often swampy, with sand hills consisting mainly sandy, yellow soils (Beard 1990).

The soils of the assessment area are mapped within the Perth Coastal Soil Landscape Zone (211), which is described as coastal sand dunes of calcareous and siliceous sands and calcarenite, of late Pleistocene to Recent age (Purdie et al 2004). The Perth Coastal soil landscape is further divided into subsystems, of which the assessment area sits within the Spearwood S1a Phase (211Sp_S1a) subsystem. The Spearwood S1a subsystem is described as dune ridges with shallow to moderately deep siliceous yellow-brown sands, very common limestone outcrop and slopes up to 15% (Purdie et al 2004).

Acid Sulphate Soil

A search of the Acid Sulphate Soil (ASS) risk map for the Swan Coastal Plain identified no risk from ASS within the assessment area. The nearby Lake Preston (and approximately 100m buffer) is considered a high to moderate risk of ASS occurring within 3m of natural soil surface (Acid Sulphate Soil Risk Map, Swan Coastal Plain, DWER-055).

Hydrology

The assessment site is located with the Harvey Diversion Catchment of the Harvey River Basin. Surface water runoff from the assessment area currently runs into Lake Preston (Hydrographic Catchments – Subcatchments, DWER-030).

Wetlands

There are no geomorphic wetlands mapped within the assessment area. Lake Preston (approximately 500m west of assessment area) is mapped as a conservation category lake/wetland, and there are numerous multiple use category damplands approximately 2.5-3km east of the assessment area, running parallel to Lake Preston (Geomorphic Wetlands, Swan Coastal Plain, DBCA-019).

There is no Ramsar Site within the assessment area. Lake Preston, which is approximately 500m west of the survey area, is part of the “Peel – Yalgorup System” (Ref 36) Ramsar wetland (Ramsar Sites, DBCA-010). This wetland covers an area of approximately 26,500ha and comprises of a large system of shallow estuary and saline, brackish and freshwater lakes. Many tens of thousands of waterbirds, including large numbers of migrant shorebirds from the northern hemisphere, use the estuary and lakes each year (RIS 2003).

Environmentally Sensitive Areas

An Environmentally Sensitive Area (ESA) is an area where the vegetation has high conservation value and cannot be cleared. ESAs are declared by the Minister in the Environmental Protection (Environmentally Sensitive Areas) Notice 55 (2005) under section 51B of the Environmental Protection Act 1986.

There is no ESA within the assessment area. Lake Preston is listed as an ESA, and is located approximately 500m from the assessment area.

Vegetation

At a state level, the assessment area is situated in the Southwest Botanical Province of Western Australia (Beard 1990), and within the Swan Coastal Plain bioregion (Perth subregion) as described by the Interim Biogeographic Region of Western Australia (IBRA; DoEE 2018).

The Perth subregion (SWA2) is composed of colluvial and aeolian sands, alluvial river flats, and coastal limestone. It comprises of Heath and/or Tuart woodlands on limestone, Banksia and Jarrah-Banksia woodlands on Quaternary marine dunes of various ages, and Marri on colluvial and alluvials and also includes a complex series of seasonal wetlands (Mitchell et al. 2002).

At a regional level, the assessment area occurs within the Cottesloe-Central and South vegetation complex which is described as a mosaic of woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri); closed heath on the Limestone outcrops.

The Cottesloe Complex-Central and South has 32.2% of the pre-European extent remaining on the Swan Coastal Plain and 41.8% remaining within the Shire of Harvey (DBCA 2017) (Table 1).

The objective of the EPA-endorsed Natural Area Strategy is to achieve a standard level of native vegetation retention of at least 30% of the pre-clearing extent of the ecological communities on the Swan Coastal Plain (EPA 2003). As there is slightly more than 30% of the Cottesloe Complex-Central and South remaining on the Swan Coastal Plain, this complex is meeting this objective.

Conservation Significant Vegetation

No DBCA listed Threatened Ecological Communities (TECs) have been previously recorded within the assessment area. The closest recorded TEC is approximately 2km north of Lot 4 (Threatened Ecological Communities, DBCA-038).

According to a map of potential EPBC Act listed TECs, *Banksia Woodlands of the Swan Coastal Plain* may occur within the assessment area (DoEE 2018).

The assessment area is not within the Bush Forever mapping area (Bush Forever Areas 2000, DOP-071).

The assessment area lies within a Tuart Woodlands, as mapped by CALM (2003) in the “Tuart Atlas”, which maps and assesses data on tuart occurrence, overstorey density and understorey condition on the Swan Coastal Plain. The Atlas has classified the tuart woodland polygon within the assessment area as 10-19% canopy density and classified the visible native understorey condition as highly disturbed.

Table 1. Pre-European and Current Extent of the Cottesloe Vegetation Complex – Central and South, within the Swan Coastal Plan and the Shire of Harvey (Source: DBCA 2017).

Area	Vegetation Complex	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	Current extent in all DBCA managed land* (ha)	Current % remaining within DBCA managed land* (%)	Proportion of the Vegetation Complex within Shire of Harvey (%)
Swan Coastal Plain	Cottesloe Complex-Central and South	45299.6	14571.4	32.2	6591.8	14.6	-
Shire of Harvey	Cottesloe Complex-Central and South	1,332.7	557.6	41.8	-	-	2.9

* Excludes Crown Freehold Department Managed Lands that are managed under Section 8A of the CALM Act.

Flora

Database searches of NatureMap, the DBCA and the WA Herbarium Threatened Flora Databases were undertaken to determine whether any Threatened or Priority flora species are known from within a 5km radius of the assessment area. The literature review and database searches identified 13 conservation significant species with the potential to occur within proximity of the assessment area (1 Threatened Flora and 12 Priority Flora). The likelihood of each conservation significant species occurring within the Survey Area is summarised in Table 2.

Conservation Significant Flora

No Threatened and/or Priority Flora have been previously recorded within the assessment area. Priority flora (P3) were recorded approximately 1km north and 2km north east of the assessment area (Threatened and Priority Flora, DBCA-036).

Table 2. Vascular plant species recorded within the assessment area.

Species	WC Act/DBCA listing	Description (Source: Florabase)	Potential to occur (soil type/habitat within area)
<i>Alyogyne</i> sp. Rockingham (G.J. Keighery 14463)	P2	Shrubs (with a sparse to dense indumentum)	unlikely
<i>Blennospora doliiformis</i>	P3	Erect annual, herb, to 0.15 m high. Fl. yellow, Oct to Nov. Grey or red clay soils over ironstone. Seasonally-wet flats.	unlikely
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>	P4	Rhizomatous, stoloniferous perennial, grass-like or herb, 0.1-0.35 m high. Fl. yellow, Aug to Oct. Grey sand, limestone. Hillslopes, consolidated dunes.	possible
<i>Diuris micrantha</i>	T	Tuberous, perennial, herb, 0.3-0.6 m high. Fl. yellow & brown, Sep to Oct. Brown loamy clay. Winter-wet swamps, in shallow water.	unlikely
<i>Haloragis aculeolata</i>	P2	Slender, erect perennial, herb, to 0.4 m high. Fl. green, Sep or Dec. Black sand or clay over limestone. Winter-wet areas.	unlikely
<i>Haloragis scoparia</i>	P1	Perennial, herb, 0.3-0.6 m high.	unlikely
<i>Hibbertia spicata</i> subsp. <i>leptotheca</i>	P3	Erect or spreading shrub, 0.2-0.5 m high. Fl. yellow, Jul to Oct. Sand. Near-coastal limestone ridges, outcrops & cliffs.	unlikely
<i>Lasiopetalum membranaceum</i>	P3	Shrub. Stems hairy. Leaves 30-50 mm long, 14-40 mm wide. Calyx pink, blue or purple, 5.5-7 mm long, the lobes fused less than half their length. Flowering time September - December. Distribution Botanical Province South-West, IBRA Bioregion Swan Coastal Plain, Jarrah Forest or Warren.	unlikely

Species	WC Act/DBCA listing	Description (Source: Florabase)	Potential to occur (soil type/habitat within area)
<i>Pimelea calcicola</i>	P3	Erect to spreading shrub, 0.2-1 m high. Fl. pink, Sep to Nov. Sand. Coastal limestone ridges.	unlikely
<i>Pterostylis frenchii</i>	P2	Tuberous, herb, to 0.35 m high, with rosette leaves. Calcareous sand with limestone, laterite. Flatlands and gentle slopes.	possible
<i>Sphaerolobium calcicola</i>	P3	Slender, multi-stemmed, scandent or erect shrub, to 1.5 m high. Fl. orange-red, Jun or Sep to Nov. White-grey-brown sand, sandy clay over limestone, black peaty sandy clay. Tall dunes, winter-wet flats, interdunal swamps, low-lying areas.	unlikely
<i>Stylidium longitubum</i> (Jumping Jacks)	P4	Erect annual (ephemeral), herb, 0.05-0.12 m high. Fl. pink, Oct to Dec. Sandy clay, clay. Seasonal wetlands.	unlikely
<i>Stylidium maritimum</i>	P3	Caespitose perennial, herb, 0.3-0.7 m high, Leaves tufted, linear to narrowly oblanceolate, 10-40 cm long, 1-5.5 mm wide, apex acute to mucronate, margin involute, glabrous. Fl. white/purple, Sep to Nov. Sand over limestone. Dune slopes and flats. Coastal heath and shrubland, open Banksia woodland.	unlikely

3. RECONNAISSANCE SURVEY

A reconnaissance survey was undertaken to verify the information obtained from the desktop assessment, to briefly characterize the flora, and to describe the vegetation and its general condition within the assessment area.

3.1 APPROACH

A site visit was undertaken by Lundstrom Environmental Consultants Pty Ltd 19 April 2018, where a selective, low intensity survey of the flora and vegetation was undertaken to describe the general vegetation characteristics and conditions at an appropriate scale.

The entire area was traversed systematically to obtain an appropriate environmental assessment of the assessment area. The following information was recorded when vegetation changed or when a new or uncommon species was observed:

- GPS coordinates and photo reference points;
- Plant species and their abundance;
- Notes on vegetation structure using the method of Muir (1977);
- Vegetation condition score (Keighery, 1994 – Appendix 2); and
- Surface soil texture and condition.

3.2 FINDINGS

VEGETATION

Vegetation type

Two vegetation types were recorded within the assessment area:

- Vegetation Type 01: Open woodlands of *Eucalyptus gomphocephala*, *Eucalyptus decipiens* and *Agonis flexuosa* over very occasional *Kunzea ericifolia*, pasture grasses and various weeds, predominately *Gomphocarpus fruiticosus* and *Solanaum linneanum* in grey sands with occasional limestone outcrops. This vegetation type is present in the southern section of the assessment area, predominantly the portion of the assessment area within Lot 5.
- Vegetation Type 02: Closed low woodland of *Eucalyptus decipiens*, *Eucalyptus petrensis*, *Agonis flexuosa*, and isolated *Banksia attenuata*, and *Nuytsia floribunda* over *Melaleuca viminea* and *Templetonia retusa* and occasional *Rhagodia baccata* and *Hardenbergia comptoniana* on grey sands with numerous limestone outcrops. This vegetation type is predominately on either side of the ridge within the assessment area, which runs in a north-south direction through the portion of the assessment area within Lot 4.

Conservation significance

No Threatened or Priority Ecological Communities were identified within the assessment area.

The site has been mapped by CALM (2003) as a Tuart woodland. Tuart trees were present, but not in large numbers. The highest abundance of tuarts was southern portion of Lot 5 where there were a number of large individuals (i.e. greater than 20-30m).

The site was also mapped as an area that may contain *Banksia Woodlands of the Swan Coastal Plain*, however only isolated *Banksia attenuata* individuals were recorded throughout the assessment site.

Vegetation condition

According to the vegetation condition scale described in Keighery (1994, Appendix 2) the assessment area varies from "Completely Degraded" to "Good". In general, the vegetation condition was partially degraded, with degrees of variation depending on the vegetation type.:

- Vegetation type 01 (Open woodlands of various *Eucalyptus gomphocephala*, *Eucalyptus decipiens* and *Agonis flexuosa*) is considered "Degraded" to "Completely Degraded". This vegetation type was obviously cleared for grazing, with only tree (and the occasional tall shrub) species found in this area over various weeds. There is no native mid or lower stratum and weeds dominate the ground level. The mature Eucalypt and Agonis trees are in very good condition and in some cases there are large individuals present.
- Vegetation type 02 (Closed low woodland of *Eucalyptus decipiens*, *Eucalyptus petrensis* and *Agonis flexuosa*) is considered "Good" to "Degraded". This vegetation type is higher on the ridge with numerous limestone outcrops throughout, which has made the site less attractive for grazing. The site has an upper stratum and a limited mid stratum (2-3 species), which is dense in most parts. There is no native lower stratum and weed species dominate the ground level.

There was no evidence of dieback infestations at the site based on the apparent health of dieback susceptible species (i.e *Banksia* species)

FLORA

Number of taxa

A total of 16 vascular flora species were recorded within the assessment area. The full list of species recorded and the vegetation types they represented is present in Table 3.

Conservation status

No Threatened or conservation significant flora, as listed under the EPBC Act or the WC Act, or listed by the DBCA as Priority flora were recorded within the assessment area.

Significant trees

There were a number of very wide *Agonis flexuosa* trees scattered within the southern portion of the assessment area (Lot 5). Lot 5 also contained a number of large *Eucalypt gomphocephala* scattered throughout.

Weed species

Four weed species were recorded within the assessment area, of which *Gomphocarpus fruticosus* (narrow leaf cottonbush) and *Solanaum linneanum* (apple of Sodom) are listed as Declared Plant species in Western Australia pursuant to Section 22 of the *Biosecurity and Agriculture Management Act 2007* (BAM Act).

Table 3: List of Plant Species Recorded on Site

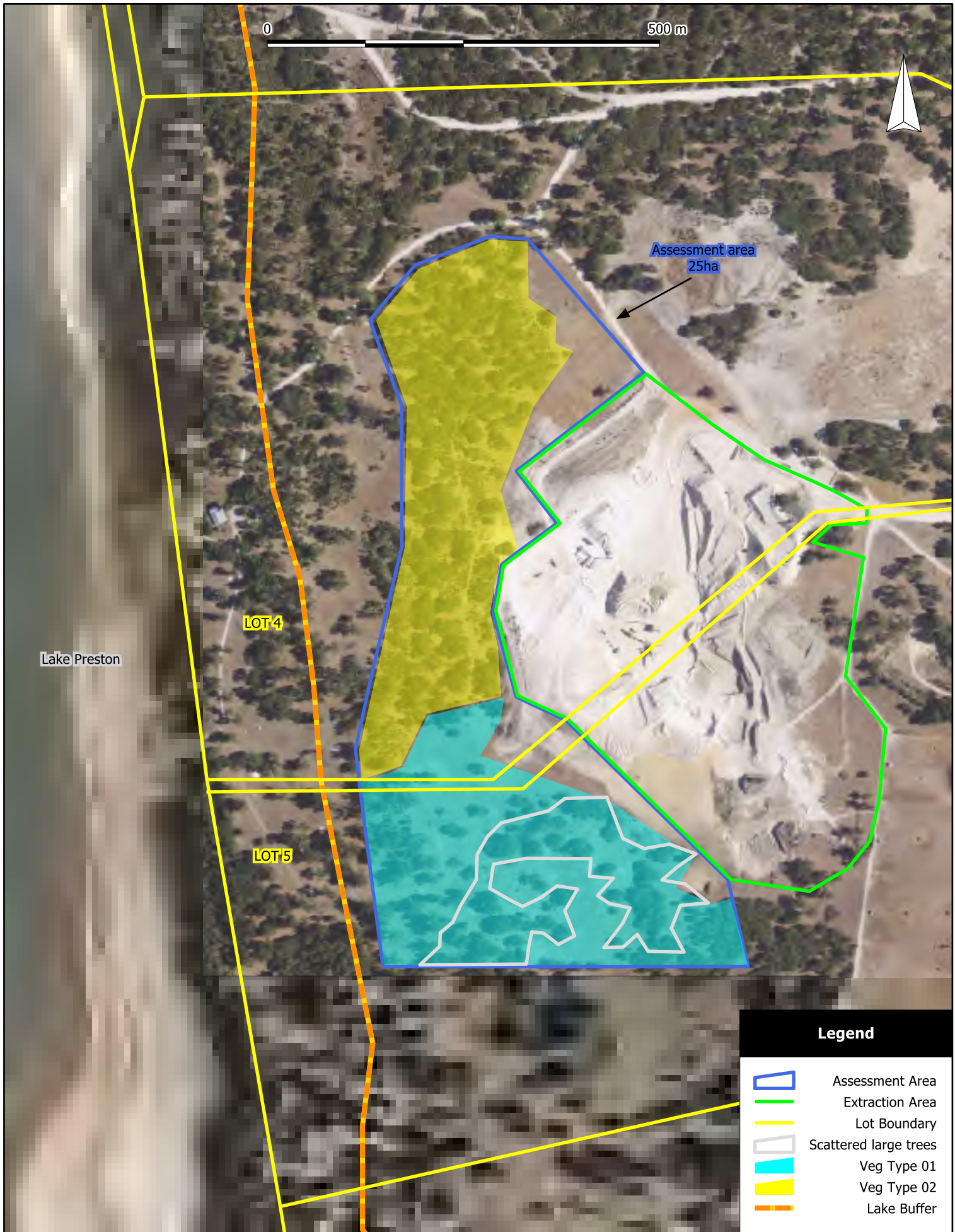
Species	Structure	Type 01	Type 02
<i>Agonis flexuosa</i>	Tree	x	x
<i>Eucalyptus gomphocephala</i>	Tree	x	x
<i>Eucalyptus decipiens</i>	Tree		x
<i>Eucalyptus petrensis</i>	Tree		x
<i>Banksia attenuata</i>	Tree		x
<i>Nuytsia floribunda</i>	Tree		x
<i>Hakea prostrata</i>	Tree/Shrub	x	x
<i>Melaleuca viminea</i>	Shrub	x	x
<i>Templetonia retusa</i>	Shrub		x
<i>Kunzea ericifolia</i>	Shrub		x
<i>Rhagodia baccata</i>	Shrub		x
<i>Hardenbergia comptoniana</i>	Climber		x
<i>Gomphocarpus fruticosus</i>	Weed	x	x
<i>Solanaum linneanum</i>	Weed	x	x
<i>Ehrharta calycina</i>	Weed	x	
<i>Hypochaeris glabra</i>	Weed		x

4. DISCUSSION

The area has been subjected to selective clearing and grazing in the past, however there are some large trees recorded, in particular individual *Eucalyptus gomphocephala* and *Agonis flexuosa* within Lot 5. The vegetation quality is generally degraded with no native ground cover and a prevalence of weed species. The vegetation type on the ridge (Lot 4) is in better condition than the portion of the assessment area within Lot 5.

5. REFERENCES

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Scale: 1:6100
 Original Size: A4
 Air Photo Date: Landgate February 2012
 Datum: Australian Geocentric 1994 (GDA94)

B & J Catalano Pty Ltd
Lots 4 & 5 Ludlow Rd, Myalup
Limestone Extraction

Assessment Area

Figure 1

Photos



Large *Agonis flexuosa* in southern portion (Lot 5)



Large tuart (*Eucalyptus gomphocephala*) in southern portion (Lot 5)

Vegetation Type 01



Vegetation Type 02



Appendix 1

Categories of Threatened Flora Species (*Environment Protection and Biodiversity Conservation Act 1999*)

Conservation Code	Category
	Extinct
Ex	Taxa which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
	Extinct in the Wild
ExW	Taxa which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
	Critically Endangered
CE	Taxa which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
	Endangered
E	Taxa which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
	Vulnerable
V	Taxa which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
	Conservation Dependent
CD	Taxa which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

APPENDIX 2

Vegetation Condition scale (Keighery 1994)

Score	Condition	Definition
1	Pristine	Pristine or nearly so, no obvious signs of disturbance.
2	Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
3	Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing
4	Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
5	Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
6	Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

APPENDIX 4
FAUNA ASSESSMENT **2018**

Please refer to the latest version of the Fauna Assessment 2018 within the Preliminary Documentation 'Additional Information Report (Revision B) March 2020.

APPENDIX 5
WEED MANAGEMENT PLAN

Please refer to the latest version of the Weed Management Plan within the Preliminary Documentation 'Additional Information Report (Revision B) March 2020.

APPENDIX 6
AHIS ABORIGINAL HERITAGE SITE SEARCH REPORT

List of Registered Aboriginal Sites

Search Criteria

No Registered Aboriginal Sites in Lot on Survey - Lot 5 on Plan or Deposited Plan 15419

Disclaimer

The *Aboriginal Heritage Act 1972* preserves all Aboriginal sites in Western Australia whether or not they are registered. Aboriginal sites exist that are not recorded on the Register of Aboriginal Sites, and some registered sites may no longer exist.

The information provided is made available in good faith and is predominately based on the information provided to the Department of Planning, Lands and Heritage by third parties. The information is provided solely on the basis that readers will be responsible for making their own assessment as to the accuracy of the information. If you find any errors or omissions in our records, including our maps, it would be appreciated if you email the details to the Department at heritageenquiries@dplh.wa.gov.au and we will make every effort to rectify it as soon as possible.

South West Settlement ILUA Disclaimer

Your heritage enquiry is on land **within or adjacent to** the following Indigenous Land Use Agreement(s): Gnaala Karla Booja People ILUA.

On 8 June 2015, six identical Indigenous Land Use Agreements (ILUAs) were executed across the South West by the Western Australian Government and, respectively, the Yued, Whadjuk People, Gnaala Karla Booja, Ballardong People, South West Boojarah #2 and Wagyl Kaip & Southern Noongar groups, and the South West Aboriginal Land and Sea Council (SWALSC).

The ILUAs bind the parties (including 'the State', which encompasses all State Government Departments and certain State Government agencies) to enter into a Noongar Standard Heritage Agreement (NSHA) when conducting Aboriginal Heritage Surveys in the ILUA areas, unless they have an existing heritage agreement. It is also intended that other State agencies and instrumentalities enter into the NSHA when conducting Aboriginal Heritage Surveys in the ILUA areas. It is recommended a NSHA is entered into, and an 'Activity Notice' issued under the NSHA, if there is a risk that an activity will 'impact' (i.e. by excavating, damaging, destroying or altering in any way) an Aboriginal heritage site. The Aboriginal Heritage Due Diligence Guidelines, which are referenced by the NSHA, provide guidance on how to assess the potential risk to Aboriginal heritage.

Likewise, from 8 June 2015 the Department of Mines, Industry Regulation and Safety (DMIRS) in granting Mineral, Petroleum and related Access Authority tenures within the South West Settlement ILUA areas, will place a condition on these tenures requiring a heritage agreement or a NSHA before any rights can be exercised.

If you are a State Government Department, Agency or Instrumentality, or have a heritage condition placed on your mineral or petroleum title by DMIRS, you should seek advice as to the requirement to use the NSHA for your proposed activity. The full ILUA documents, maps of the ILUA areas and the NSHA template can be found at <https://www.dpc.wa.gov.au/swnts/South-West-Native-Title-Settlement/Pages/default.aspx>.

Further advice can also be sought from the Department of Planning, Lands and Heritage at heritageenquiries@dplh.wa.gov.au.

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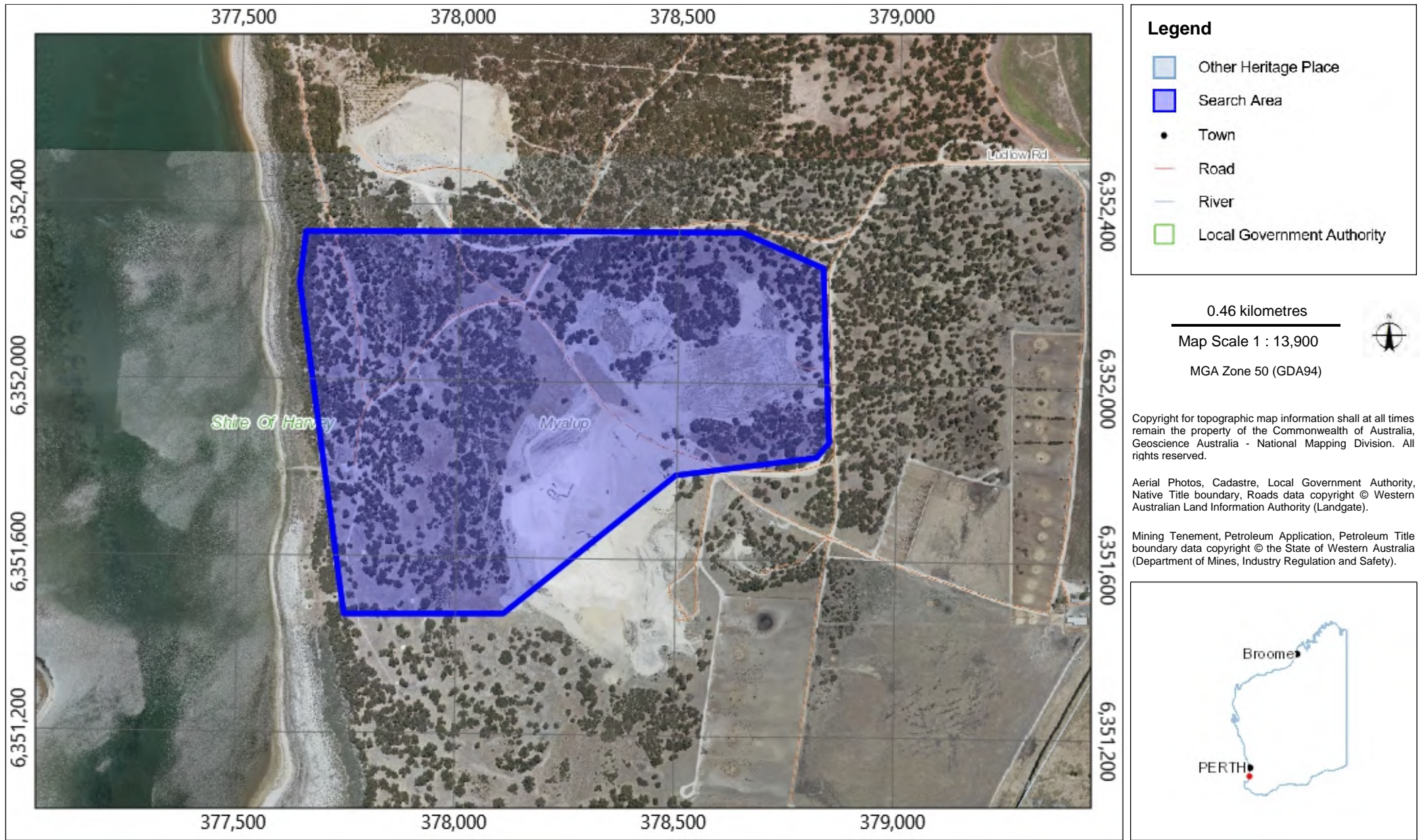
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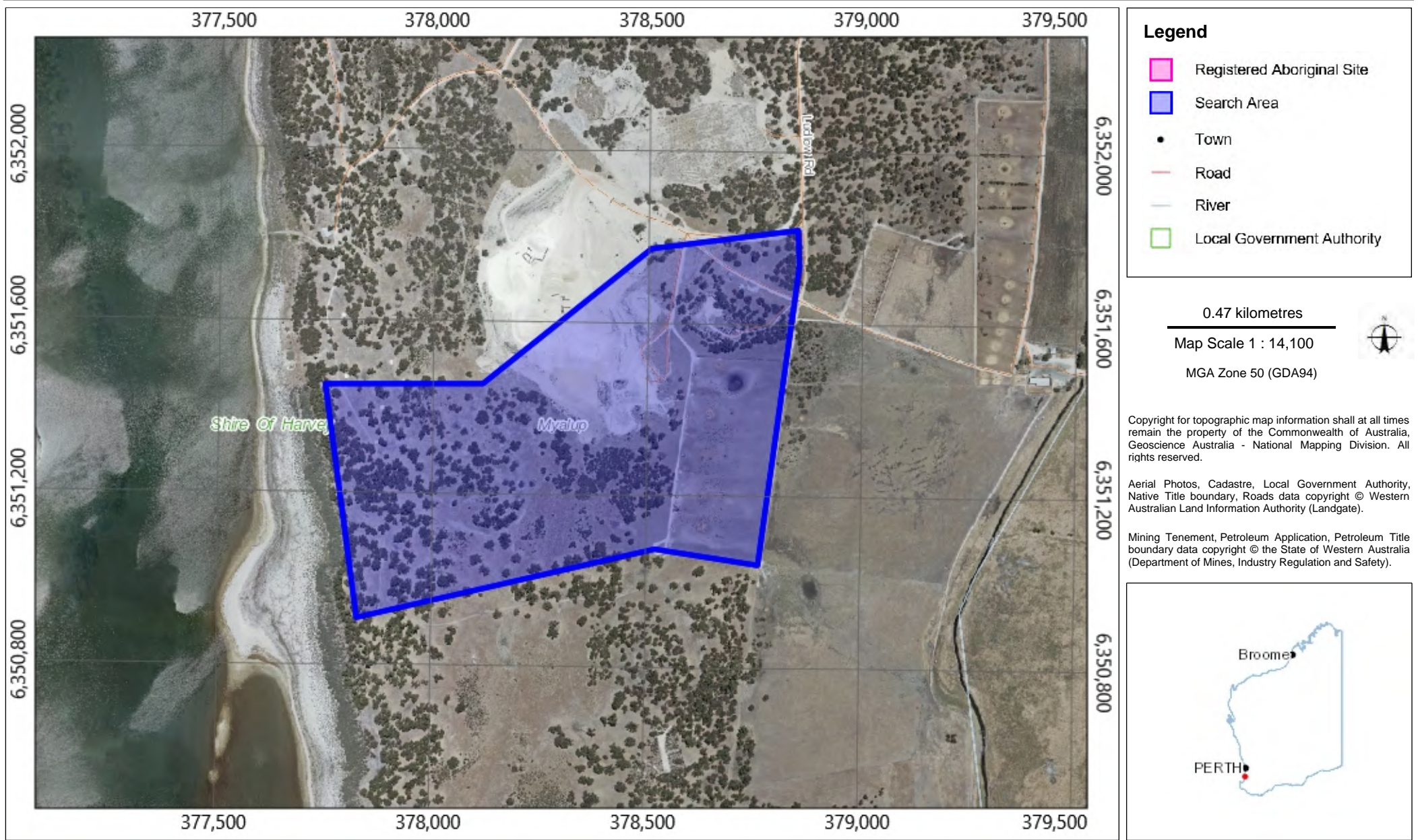
Aboriginal Heritage Inquiry System

Map of Other Heritage Places



Aboriginal Heritage Inquiry System

Map of Registered Aboriginal Sites



List of Other Heritage Places

Search Criteria

No Other Heritage Places in Lot on Survey - Lot 4 on Plan or Deposited Plan 15419

Disclaimer

The *Aboriginal Heritage Act 1972* preserves all Aboriginal sites in Western Australia whether or not they are registered. Aboriginal sites exist that are not recorded on the Register of Aboriginal Sites, and some registered sites may no longer exist.

The information provided is made available in good faith and is predominately based on the information provided to the Department of Planning, Lands and Heritage by third parties. The information is provided solely on the basis that readers will be responsible for making their own assessment as to the accuracy of the information. If you find any errors or omissions in our records, including our maps, it would be appreciated if you email the details to the Department at heritageenquiries@dplh.wa.gov.au and we will make every effort to rectify it as soon as possible.

South West Settlement ILUA Disclaimer

Your heritage enquiry is on land **within or adjacent to** the following Indigenous Land Use Agreement(s): Gnaala Karla Booja People ILUA.

On 8 June 2015, six identical Indigenous Land Use Agreements (ILUAs) were executed across the South West by the Western Australian Government and, respectively, the Yued, Whadjuk People, Gnaala Karla Booja, Ballardong People, South West Boojarah #2 and Wagyl Kaip & Southern Noongar groups, and the South West Aboriginal Land and Sea Council (SWALSC).

The ILUAs bind the parties (including 'the State', which encompasses all State Government Departments and certain State Government agencies) to enter into a Noongar Standard Heritage Agreement (NSHA) when conducting Aboriginal Heritage Surveys in the ILUA areas, unless they have an existing heritage agreement. It is also intended that other State agencies and instrumentalities enter into the NSHA when conducting Aboriginal Heritage Surveys in the ILUA areas. It is recommended a NSHA is entered into, and an 'Activity Notice' issued under the NSHA, if there is a risk that an activity will 'impact' (i.e. by excavating, damaging, destroying or altering in any way) an Aboriginal heritage site. The Aboriginal Heritage Due Diligence Guidelines, which are referenced by the NSHA, provide guidance on how to assess the potential risk to Aboriginal heritage.

Likewise, from 8 June 2015 the Department of Mines, Industry Regulation and Safety (DMIRS) in granting Mineral, Petroleum and related Access Authority tenures within the South West Settlement ILUA areas, will place a condition on these tenures requiring a heritage agreement or a NSHA before any rights can be exercised.

If you are a State Government Department, Agency or Instrumentality, or have a heritage condition placed on your mineral or petroleum title by DMIRS, you should seek advice as to the requirement to use the NSHA for your proposed activity. The full ILUA documents, maps of the ILUA areas and the NSHA template can be found at <https://www.dpc.wa.gov.au/swnts/South-West-Native-Title-Settlement/Pages/default.aspx>.

Further advice can also be sought from the Department of Planning, Lands and Heritage at heritageenquiries@dplh.wa.gov.au.

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Coordinate Accuracy

Coordinates (Easting/Northing metres) are based on the GDA 94 Datum. Accuracy is shown as a code in brackets following the coordinates.

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