

LOT 751

DONNYBROOK-BOYUP BROOK RD

**BEERLERUP WA 6239** 

**EXTRACTIVE INDUSTRY LICENSE** 

**AUGUST 2024** 

**FOR: SMITH SANDS PTY LTD** 





# **Revision Status**

Rev	Date	Author	Approved	Revision Comments			
Α	25/08/2024	P.Alebakis	P.Alebakis	Issued for Approval			





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#### **Contact Details**

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# 1 Introduction

#### 1.1 Site Location

The site is located at Lot 751 Donnybrook -Boyup Brook Road, WA 6239, Shire of Donnybrook, Balingup. Donnybrook-Boyup Brook Road lies to the North of the site and native bushland properties to the East and south with a sand quarry to the west.

The site is generally sloping from east to west, with light to dense vegetation across the property.



Figure 01: Site Plan

## 1.2 Purpose of Report

The property owners Smith Sands Pty Ltd have appointed Urbanise WA Pty Ltd to prepare report detailing supporting documentation to aid in the application of and approval of the proposed sand quarry for the above property.



# 2 Pit Operations and Management

## 2.1 Existing Land

The existing land is described on Certificate of Title Volume 2648 as lot 751 on Diagram 49008 with property boundary dimensions as noted in Figure 02. The Owner if this land is Smith Sands Pty Ltd. Refer to Appendix A for Certificate of Title details.

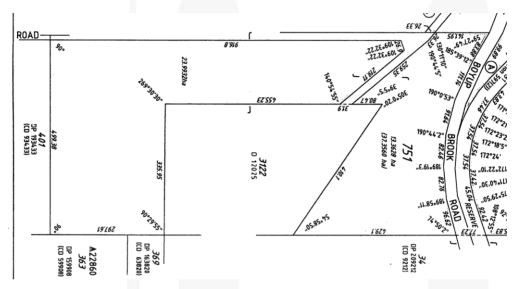


Figure 02: Property Site Dimensions

The land is currently zoned as general agriculture with support for sand extraction prior to industrial development subject to gaining relevant approvals.

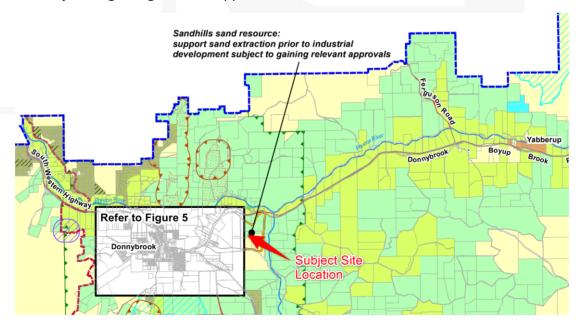


Figure 03: Planning Strategy Extract Plan



#### 2.2 Nature of Excavation

The nature of this excavation is for sand material to be used in a wide variety of construction works from backfill trenches, pipe bedding, house pads and other projects seeking to improve the development site soil conditions.

It is proposed that the extraction will be over a 10 year period with an annual excavation in the order of 80,000 to 100,000m3 (144,000 to 180,000 Ton's).

It is proposed to conduct the excavation staged over 5 zones where for each zone, it is proposed to clear the majority of the vegetation, then topsoil to be push to one side for rehabilitation respread once the sand excavation is total completed.

Once clearing and topsoil stockpiled, the sand will be excavated via a front end loader that will place the material directly into the trucks delivering the sand.

Refer to Appendix 2 for proposed staged zones and excavation details.

## 2.3 Management of Heritage

There are no registered Aboriginal Heritage Sites in this area.



Figure 04: Heritage Mapping



#### 2.4 Site Access Road

The Site's legal access is from Boyup Brook Road Located to the North of the existing lot, however the property is split between lot 3122 where the sand extraction area is proposed for the site. The access to this section of the lot will require to cross Lot 3122 owned by the Shire of Donnybrook-Balingup.

Discussions with the Shire have indicated that there are no objections with allowing access that involves crossing Lot 3122 (owned by the Shire of Donnybrook-Balingup) to provide access to Sandhills Road. It is understood that a formal access agreement with the Shire will be created to detail the terms under which Lot 751 can cross Lot 3122 property to reach the sand extraction site from Sandhills Road.

Sandhills Road is an approved MRWA Rav 4 access, and it is proposed that the access to the sand excavation will be located off Sandhills Road through the existing unnamed road reserve and across lot 3122 to reach the sand extraction works within lot 751. This unnamed road is currently a sand access track, and it is proposed to upgrade this road to provide safe access for LV's and HV vehicles. We proposed that the access road is graded as follows: -

- a) Intersection of Sandhills Road & this unnamed road is to be formalised as an intersection 10m wide formation with sweeps and an 8m wide by 50m long sealed pavement matching into Sandhills Road edge of seal. Refer to drg URB0766-SK012 for details.
- b) Remaining unnamed road to be construct with a gravel roadbase with a min 10m formation that is graded evenly following the existing surface as close as possible to minimise any clearing requirements within the existing road reserve. Refer to drg URB0766-SK011 & SK013 for profile and sections.
- c) Implementation of trucks entering warning signs to be located on Sandhills Road.

#### 2.5 Vehicle Movements

It is expected that the total amount of material to be excavated from this pit will be 80,000 to 100,000m3 per year. Vehicle movement will be restricted to:-

- Minor carting as required
- Movement of excavation equipment as required
- B-Double trucks as required
- Light vehicles as required

This is estimated that approximately 12-14 vehicles movements per day will be entering and exiting the site (2-3 per hour).

#### 2.6 Timber Recovery

The salvageable timber which will be removed from site will be purchased by a local timer mill for processing.



### 2.7 Noise Management

The nature of this operation will have minimal noise effects on the surrounding area. The closest residence is approximately 600metres from edge of sand extraction works area. The primary works will consist of excavation, loading and transportation of sand material. Screening of sand occurring during the operation is not expected, however potentially may be required pending material being excavated.

All operations will be during daylight hours, in spring/summer time of the year. Operations shall not occur on weekends or public holidays. The operation will comply with the Shire of Donnybrook Balingup's Environmental Health Services, Noise Information sheet.

Table 1 below is a list of machinery on site, and their associated noise levels:

	Octave Band Centre Frequency (Hz)							Overall	
Description	31.5	63	125	250	500	1k	2k	3k	db(A)
Dozer D10		115	114	111	112	1108	105	99	113
Grader	105	112	110	107	109	107	106	101	112
Loader	109	122	107	107	104	105	102	96	109
Water truck		103	105	102	102	103	101	96	107
Tip Truck		103	105	102	102	103	101	96	107
Mobile Gravel Screed		113	113	110	109	107	105	100	112

# 2.8 Dieback Management

The dieback management items will be implemented during the life of the project. The principal aim is to eliminate spread of Phytophthora by mechanic means (unclean machinery).

- Unauthorised entry signs to be erected at the property entrance and site to be fenced paddocks and lockable gates will be maintained to control unauthorised access.
- As far as practical haulage vehicles shall be cleaned of all loose soil and plant material prior to entry and exit from the extraction area via a drive through wheel bath or similar.
- Create buffer zones around sensitive areas to prevent machinery from entering or disturbing these zones and ensure water runoff is directed away from these areas.
- Any dieback management actions will be amended as required in response to any future issues raised by:
  - Site Supervisor regular inspections
  - Shire of Donnybrook Balingup
  - DER/DPaW
  - Members of the public



### 2.9 Dust Management

During the summer months and periods of high seasonal winds which can at times reach gust up to 35 knots, dust from extractive operations may become a health issue for any nearby resident. Measures shall be taken to minimise the amount of dust associated with the operation, such as:

- watering and covering truck loads,
- Use of water trucks to spray roads and work areas to keep dust down,
- stop operation during high winds,
- review applying approved dust suppressants or stabilizers to unsealed surfaces to reduce dust.
- where necessary any other specific requirements from the Shire of Donnybrook Balingup. Details of such to be agreed prior to commencement of works.

It is proposed to construct a small turkey's nest for the purpose of irrigation / dust suppression as required.

Also, for dust management a buffer of 20 with vegetation will be left on site. It is also noted that the excavation works will be more than 600m away from any existing residential property and 400m away from Donnybrook-Boynup Brook Hwy.

#### 2.10 Fire Management

During vegetation clearing, salvaged tree removal and sand extraction operations, the following fire management conditions will be complied with:

- All machinery to be shut down during period of extreme fire hazard as advised by the Chief Fire Control Officer form the Shire of Donnybrook Balingup.
- All machinery to be fitted with fire extinguishers
- The provision of a portable firefighting unit to be maintained onsite during pit operations.

#### 2.11 Pit and Topsoil Management

Once the salvageable timber has been removed the debris and remaining vegetation will be pushed to the side either to respread or to be burnt. The topsoil shall be stripped, and stockpile as shown below:

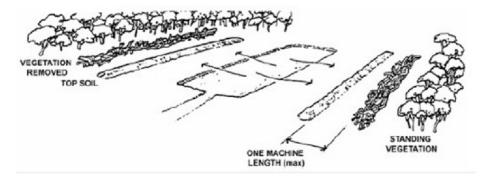


Figure 05: Typical Pit Topsoil Management



Prior to any extraction or rehabilitation earthworks the pit operator will:

- Remove and control all litter;
- No oil changes or servicing of plant and machinery in the pit. Take steps to minimise and close any oil or fuel spills by removing contaminated soil and disposing of this in an approved manner.
- Remove any potentially saleable log material from pit;
- Neatly stack on the pit all debris and bark that is to be burnt; and
- Stacks are to be no closer than 10m from any crop or habitat trees or other vegetation marked for retention;
- Batters are no greater than 1 vertical to 3 horizontal;
- Where non permeable material is encountered, the pit floors shall be shaped to direct water into permeable material area with at least 1:100 fall to prevent ponding;

The sand material will be excavation at approximately 80,000 to 100,000 cubic metres per year, in the following zoned order (Refer to Drg URB0766-SK001 for details:

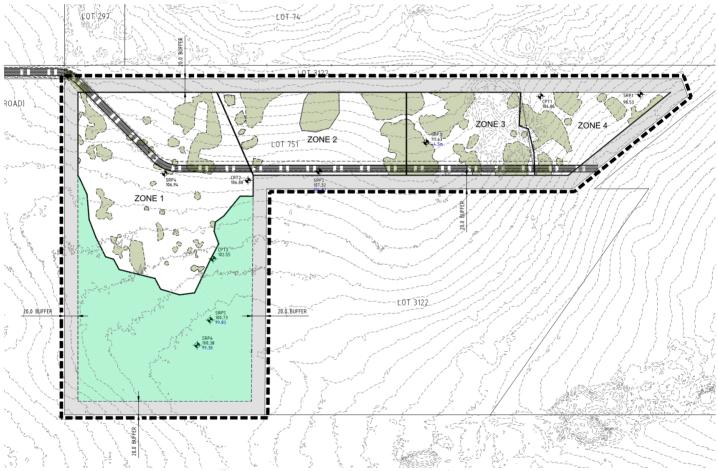


Figure 06: Sand Zoning Order Plan



### 2.12 Pit Drainage and Groundwater Management

It is a sand site with high infiltration, the pre and post development flows will be similar, and a detention basin will be provided at end prior to discharging into neighbouring properties to allow for silt trapping and erosion control in larger storm events.

Prior to any storm, a site inspection shall be conducted to ensure that water ways are not blocked and detention / silt trap zones are operational.

Groundwater for the site varies from 1.5m to over 12m from exiting surface. Throughout the sand mine's life, ground water will be recorded and logged monthly to obtain an accurate representation of the groundwater conditions across the site. Based on the Geotechnical reports provided, the proposed excavation zones have been located within areas that groundwater has not been encountered or at depths greater than 4.5m. As part of the ongoing investigation with groundwater levels, the operations of the pit shall review and ensure that the base of the sand pit shall maintain a min 1.2m above the recorded ground water levels f.

## 2.13 Weed Management

The site is regularly inspected and maintained free from introduced weeds both agricultural and environmental. Spraying weeds using recommended approved herbicides at prescribed rates should be undertaken as required. Equipment and trucks should be cleaned and inspected for potential sources of weeds, in conjunction with weed management prior to the commencement of clearing, carting or rehabilitation operations.

# 2.14 Decommissioning Programme

At the completion of sand excavation and stockpile operations, the pit area will be rehabilitated as described below:

- Pit walls will be battered to a slope no more than 1 in 4 by pushing material from the pit floor
- The pit floor will be shaped with a minimum of 1 in 500 fall to avoid water ponding with any drainage directed downslope towards natural flow path of the site.
- Any rocky material encounted within the pit floor will be ripped during summer at minimum 1m spacings across the contour a depth of at least 800mm.
- The pit will be shaped to conform and blend into the adjacent landform as far as practical.
- Topsoil and any over burden will be evenly spread over the pit area leaving a rough surface
- Any exposed rock shall be crushed or removed.



# **Appendix 1** Certificate of Title



WESTERN



AUSTRALIA

TITLE NUMBER

Volume Folio

2648 373

# RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGROberts
REGISTRAR OF TITLES

#### LAND DESCRIPTION:

LOT 751 ON DEPOSITED PLAN 49008

#### REGISTERED PROPRIETOR:

(FIRST SCHEDULE)

SMITH SANDS PTY LTD OF 64 STEERE STREET DONNYBROOK WA 6239

(T P825474) REGISTERED 15/12/2023

#### LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:

(SECOND SCHEDULE)

Warning:

A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

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-----END OF CERTIFICATE OF TITLE------

#### STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:

DP49008

PREVIOUS TITLE:

2174-198

PROPERTY STREET ADDRESS:

NO STREET ADDRESS INFORMATION AVAILABLE.

LOCAL GOVERNMENT AUTHORITY:

SHIRE OF DONNYBROOK-BALINGUP





# **Appendix 1** Civil Plans

