



LUNDSTROM ENVIRONMENTAL CONSULTANTS Pty Ltd

ACN 600 398 945

21 Sellen Court
LEEMING
WA 6149

Mob: 0417934863
email: admin@lundstrom-environmental.com.au
www.Lundstrom-Environmental.com.au

PIT REHABILITATION AND MAINTENANCE MANAGEMENT PLAN

Prepared for Westwall Holdings Pty Ltd
For 2038 Donnybrook Boyup Brook Road, Yabberup,
Shire of Donnybrook-Balingup

1. INTRODUCTION

This Rehabilitation Management Plan (RMP) has been prepared to describe the measures that will be undertaken to rehabilitate the area of land impacted by the proposed EIL operations 2038 Donnybrook Boyup Brook Road, Yabberup, Shire of Donnybrook-Balingup. This RMP should be read in conjunction with the report entitled "*Extractive Industries Licence Application and Environmental Management Plan (EMP) 2038 Donnybrook Boyup Brook Road, Yabberup, Shire of Donnybrook-Balingup*", prepared for Westwall Holdings Pty Ltd by Lundstrom Environmental Consultants in November 2022.

1.1 Locality and Ownership

Locality: 2038 Donnybrook Boyup Brook Road, Yabberup, Shire of Donnybrook-Balingup
Ownership: Old Valley Pty Ltd

1.2 Development Proposal

Westwall Holdings intends to extract approximately 59,040 tonnes/year of gravel from the areas indicated on Figure 1 in Stages 1, 2, 3 and 4 of 4ha, 4.6ha, 4.6ha and 3.1ha respectively. The total area to be disturbed is approximately 16.4ha and excavation will proceed to a depth of approximately one metre. The EIL application is for 5 years.

The applicant intends to continue the extraction in possible future stages as shown in Figure 1, and a separate application will be submitted for that.

The proposed extraction licence is required for the purpose of undertaking the following activities on the site:

- The proposed extraction area will be cleared of vine plantation in stages, with only the stage being worked on, being cleared, ensuring the disturbed area exposed at any time to a practical minimum.
- Extraction of gravel from an area of 16.4ha in four stages as shown in Figure 2. Stages 1, 2, 3 and 4 will involve extraction of 295,200 tonnes of gravel in total but will be dependent on demand.
- Topsoil will be removed from the extraction area prior to the commencement of each stage, with only the area targeted for immediate extraction being open. Topsoil will be stockpiled separately along the edges of the extraction area, with stockpiles being no more than 2m high and 12m wide, with batters of 1:3 metres.

- Within the current stage of extraction, a bulldozer will rip and blade material to a raw material stockpile. This material is loaded into the crusher after which stacker creates a product stockpile. The product stockpile will be no more than 9m high and 50m wide, with batter of 1:3 metres.
- A mobile crushing and screening plant will be used on site for approximately three to four weeks per year, depending on the size of the campaign.
- Product stockpiles will be placed in such a way that they will act as a noise buffer between the crusher and the sensitive receptors.
- Crusher and stockpile positions have been identified for each stage and are illustrated in Figures 2.
- Extraction activity will result in the lowering of the ground level by approximately one metre.
- At a time, only one stage of up to 5ha will be extracted and will be progressively rehabilitated back to pasture after completion of extraction activities and before moving to next stage. This will ensure that the area of disturbed land is stabilized, and the disturbed area exposed at any time to a practical minimum.
- Trucks will enter the pit via an existing gravel access road off Donnybrook Boyup Brook Road and be loaded from the stockpile by a front-end loader.
- Measures to limit noise will be undertaken.
- There will be no blasting in this operation.
- Rehabilitation and stormwater management measures will be implemented.
- The lot boundary buffer of 20m will apply. However, the proposed extraction will excavate through the boundary between Lot 130 and 3671, thus avoiding the batter on both sides and an elevated boundary line.
- Batters of 1:6 metres will be maintained throughout the operation. Where possible, topsoil will be replaced and seeded with pastures on a progressive basis, in fully extracted areas, prior to the commencement of winter.

2. REHABILITATION

2.1 Proposed New Rehabilitation Measures

The proposed rehabilitation measures conform for the proposed EIL include:

- Completion of rehabilitation for each stage within three years of extraction being completed.
- Stormwater infrastructure is to remain post-extraction to assist in the control of flow velocity where downstream erosion problems are present, until pasture is sufficiently established.
- Detention ponds will be removed/ filled in once the rehabilitation is complete.

Table 1: Proposed Stages of Extraction

Stage	Action	2023	2024	2025	2026	2027	2028	2029
1	Strip, crush and stockpile							
1	Load and truck out							
1	Progressive rehabilitation of 4ha							
2	Strip, crush and stockpile							
2	Load and truck out							
2	Progressive rehabilitation of 4.6ha							
3	Strip, crush and stockpile							
3	Load and truck out							
3	Progressive rehabilitation of 4.6ha							
4	Strip, crush and stockpile							
4	Load and truck out							
4	Progressive rehabilitation of 3.1ha							
1-4	Monitoring and Maintenance							

2.1.1 Rehabilitation to Pastures

Progressive rehabilitation of the extraction areas will entail the following actions:

- Rip areas where compaction has occurred.
- Smooth batters to 1:6 metres and level out the base of the pit.
- Re-surface pit areas with stockpiled topsoil and overburden.
- Seed with pasture species and fertilize.
- Cut final contour drainage furrows.
- Monitor and maintain rehabilitated areas.

Timing for rehabilitation of the stages is detailed in Table 1.

2.2 Monitoring and Maintenance

Monitoring will be carried out on an annual basis to assess:

- The physical stability of the landform in the rehabilitated areas.
- Success of germination of pasture grasses.
- The emergence of weeds.

Monitoring will continue until the completion criteria presented in Section 2.4 have been fulfilled.

Maintenance procedures will be carried out where necessary and will include:

- Repair of any erosion damage.
- Replanting/seeding areas that may not regenerated.
- Weed control.

2.3 Completion Criteria

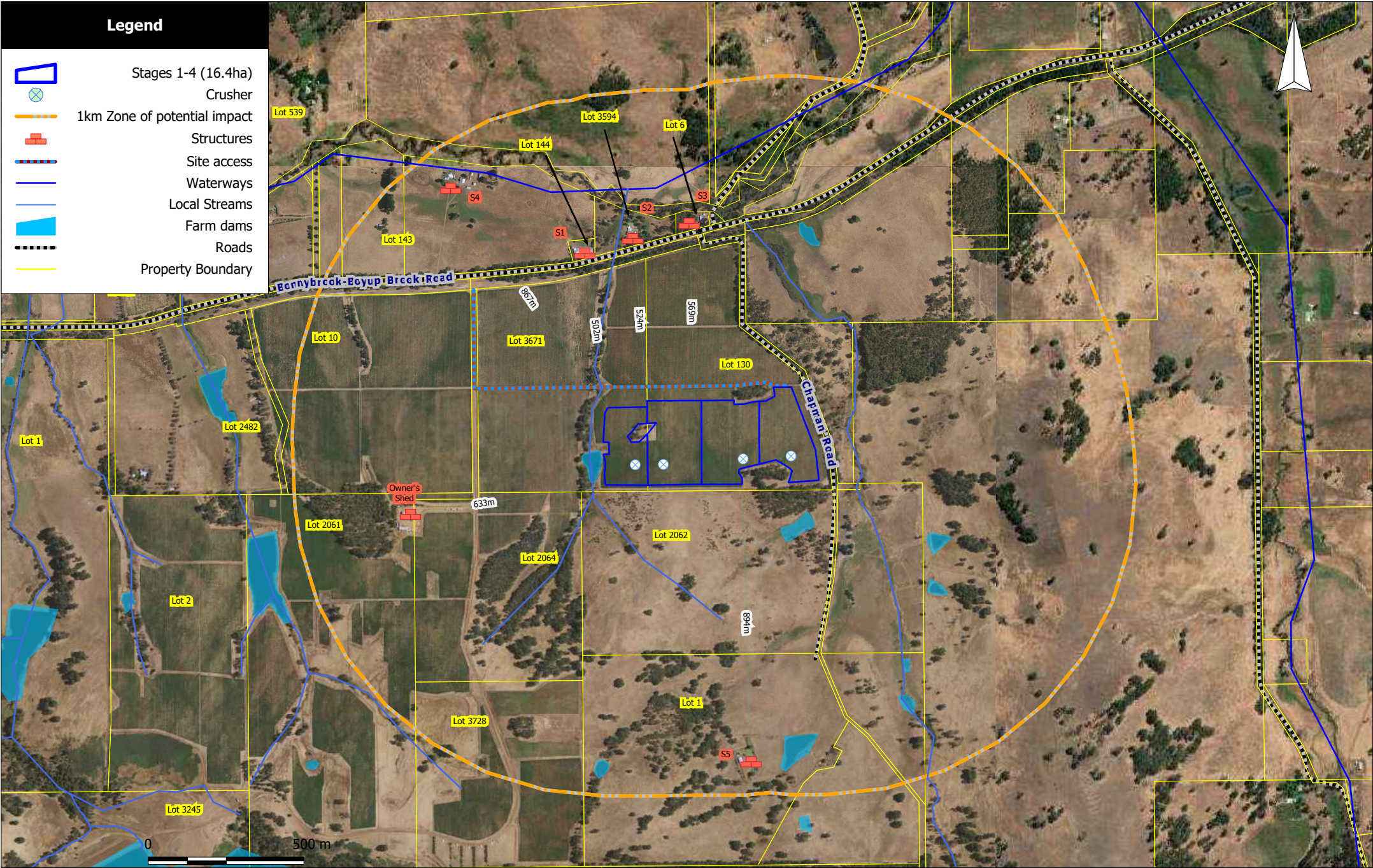
Completion criteria are identified to allow effective reporting and auditing and to define an endpoint for the rehabilitation activities.

The completion criteria proposed for extractive operations at 2038 Donnybrook Boyup Brook Road are presented in Table 2.

Table 2: Closure Criteria and Interim Targets

Criteria	Objective	Interim Targets
1. Safety	The site is safe to humans.	<ul style="list-style-type: none">• The site is safe to humans during operations
2. Sustainability	The site is sustainable in the long term without additional management inputs.	N/A
3. Suitability	The site is suitable for agricultural purposes.	N/A
4. Visual amenity and heritage	The rehabilitated extraction area blends into the surrounding environment.	N/A
5. Off-site impacts	Significant adverse off-site impacts are prevented.	N/A
6. Hydrology	<ul style="list-style-type: none">a. Site hydrology does not prevent the establishment of desired vegetation.b. Site hydrology does not reduce the stability of the landform.c. Stormwater is contained within the site.	<ul style="list-style-type: none">• Stormwater is contained within the site during operations.• Identification and mitigation of any hydrology related issues during operations.
7. Soils and stability	<ul style="list-style-type: none">a. Soil profiles and structures are sufficient to ensure vegetation establishment.b. The landform is stable.	<ul style="list-style-type: none">• Topsoil is respread in all rehabilitation areas.• Identification and mitigation of potential erosion scars and scours during operations.
8. Vegetation	<ul style="list-style-type: none">a. Pasture grasses cover the entire targeted area.b. Pasture grass cover is sufficiently resilient to sustain grazing pressure.	<ul style="list-style-type: none">• After one year pasture grasses cover 30% of target area increasing by 20% per annum thereafter.
9. Weeds	<ul style="list-style-type: none">a. Declared pest weeds are absent.b. The level of weed species should not be detrimental to the planted seedlings or pasture grasses.	<ul style="list-style-type: none">• Weed species removed systematically during operations.

FIGURES



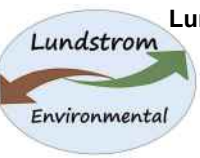
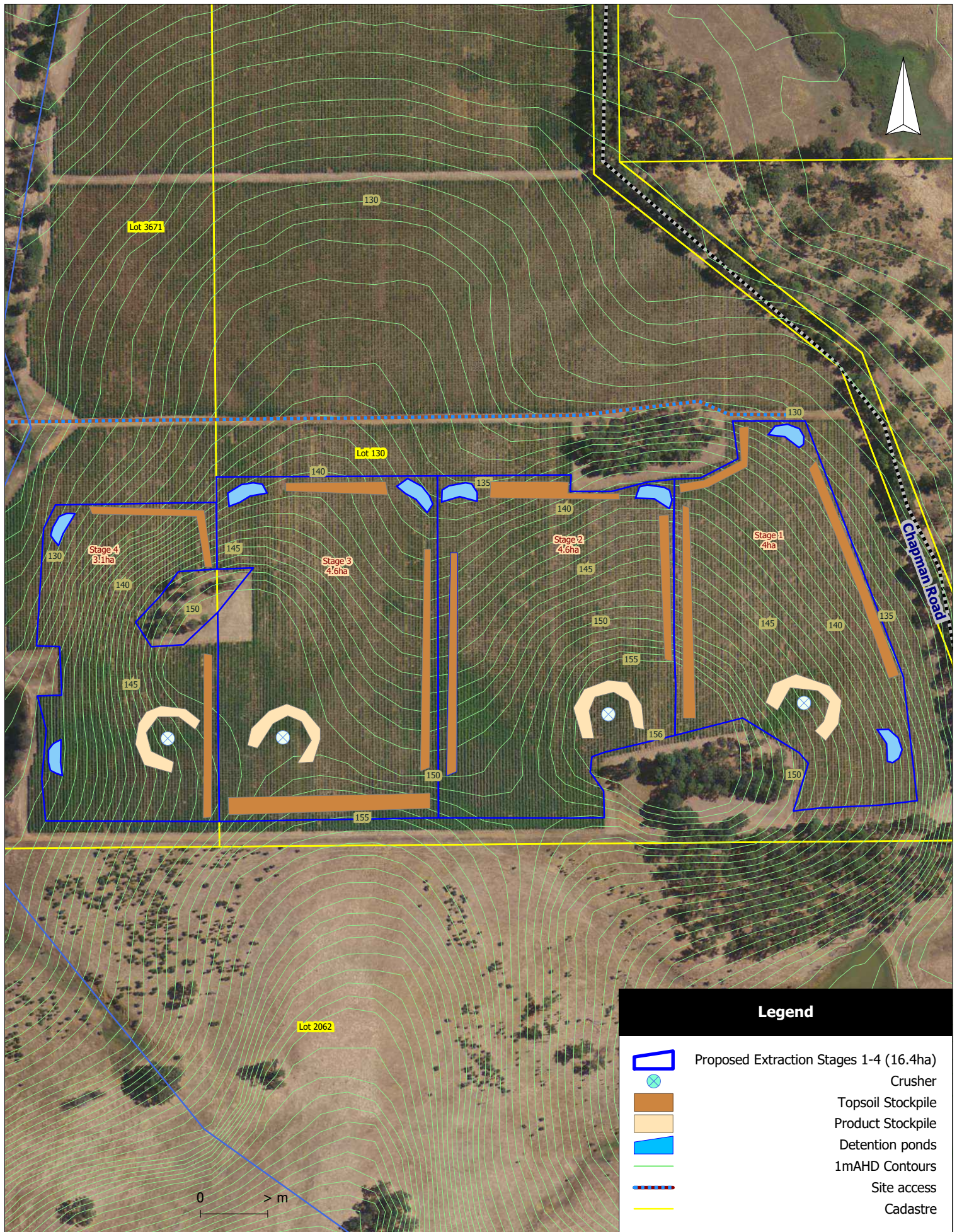
**Lundstrom Environmental
Consultants Pty Ltd**

Leeming WA 6149
Mob: 0417934863, admin@lundstrom-environmental.com.au

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Datum: GDA94
Projection: Australia MGA94 (50)

Client: Westwall Holdings
Project: Gravel Extraction
Location: 2038 Donnybrook Boyup Brook Road
Yabberup

**Figure 1:
Site and Surrounds**



Lundstrom Environmental Consultants Pty Ltd
 Leeming WA 6149
 Mob: 0417934863
 mikelund1@bigpond.com

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Figure 2:
Proposed Extraction