

20 April 2023

Jessie Evans
Director, Resource Assessments
Department of Planning and Environment

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Dear Jessie

**RE: Haerses Road Quarry Modification 6 (DA 165-7-2005) -
Relocation of Site Building Envelope and Site Office**

1.0 Introduction

Dixon Sand (No. 1) Pty Ltd (Dixon Sand) is seeking a minor modification to DA 165-7-2005 for the Haerses Road Quarry at Maroota in New South Wales (NSW). The Proposed Modification is sought pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and involves the relocation of the approved Site Building Envelope and the site office.

This Modification Report has been prepared in support of the Proposed Modification, having regard to the *State significant development guidelines – preparing a modification report* (October 2022).

1.1 Background and Approval History

Dixon Sand owns and operates the Haerses Road Quarry (the Quarry), an established sand quarry located off Wisemans Ferry Road, at Maroota (see **Figure 1.1**). The Quarry is wholly located within the Hills Shire Local Government Area (LGA).

Dixon Sand also owns and operates the Old Northern Road Quarry located to the north of the Quarry (refer to **Figure 1.1**). The combined operations of Dixon Sand supply concrete sand and specialty sands to the Sydney metropolitan market.

On 14 February 2006, the former Minister for Planning granted development consent for the Haerses Road Quarry under DA 165-7-2005. The development consent has been modified on five occasions, most recently on 29 June 2022.

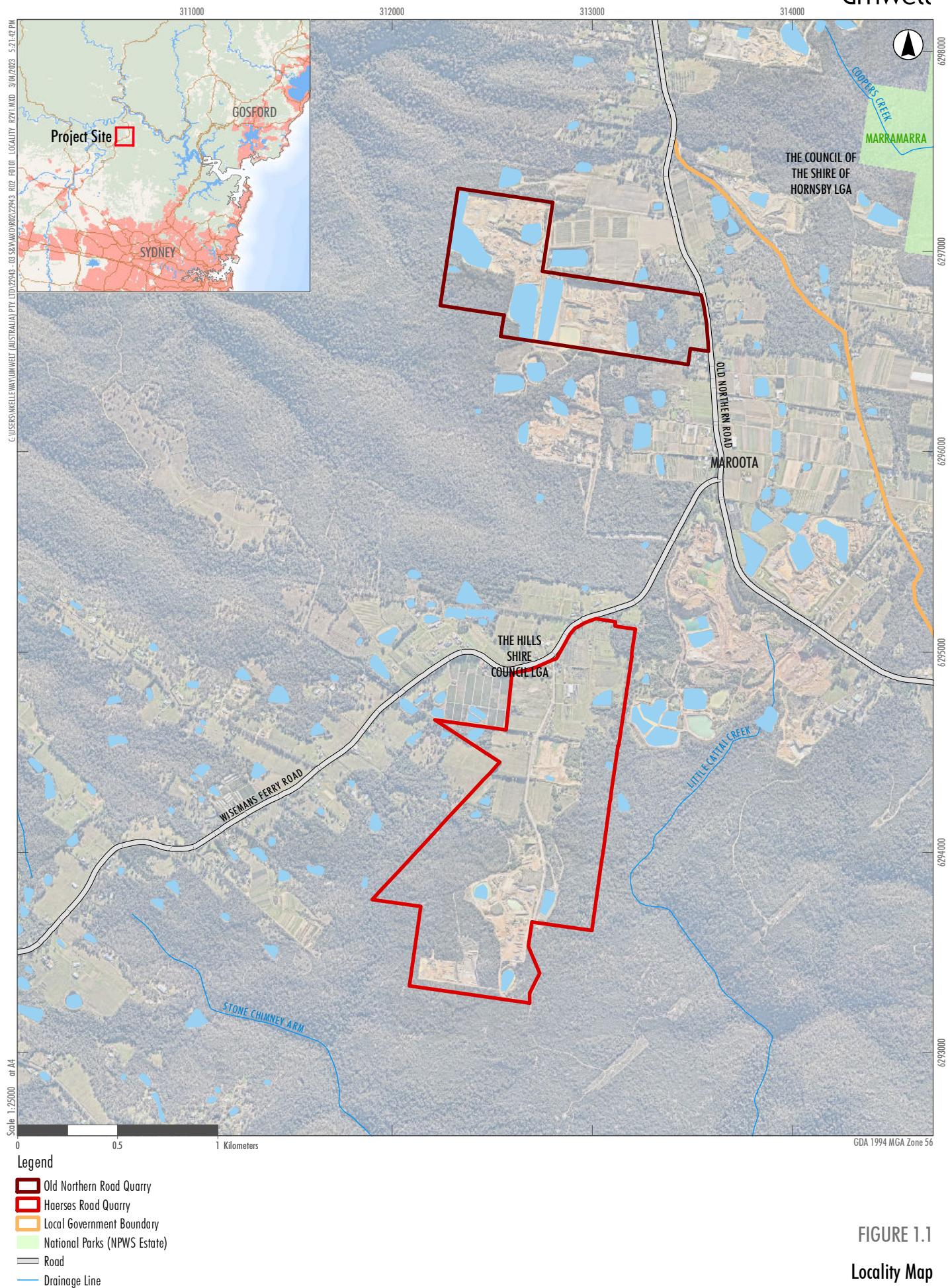
Modification 5 included approval for the relocation and establishment of the site office, workshop and weighbridge (referred to as the “Site Building Envelope”) to a new location further south on Lot 177. The approved location of the Site Building Envelope as per Mod 5 is shown on **Figure 1.2**. The Mod 5 approved Site Building Envelope is within Dixon Sand’s current Stage 2 extraction area.

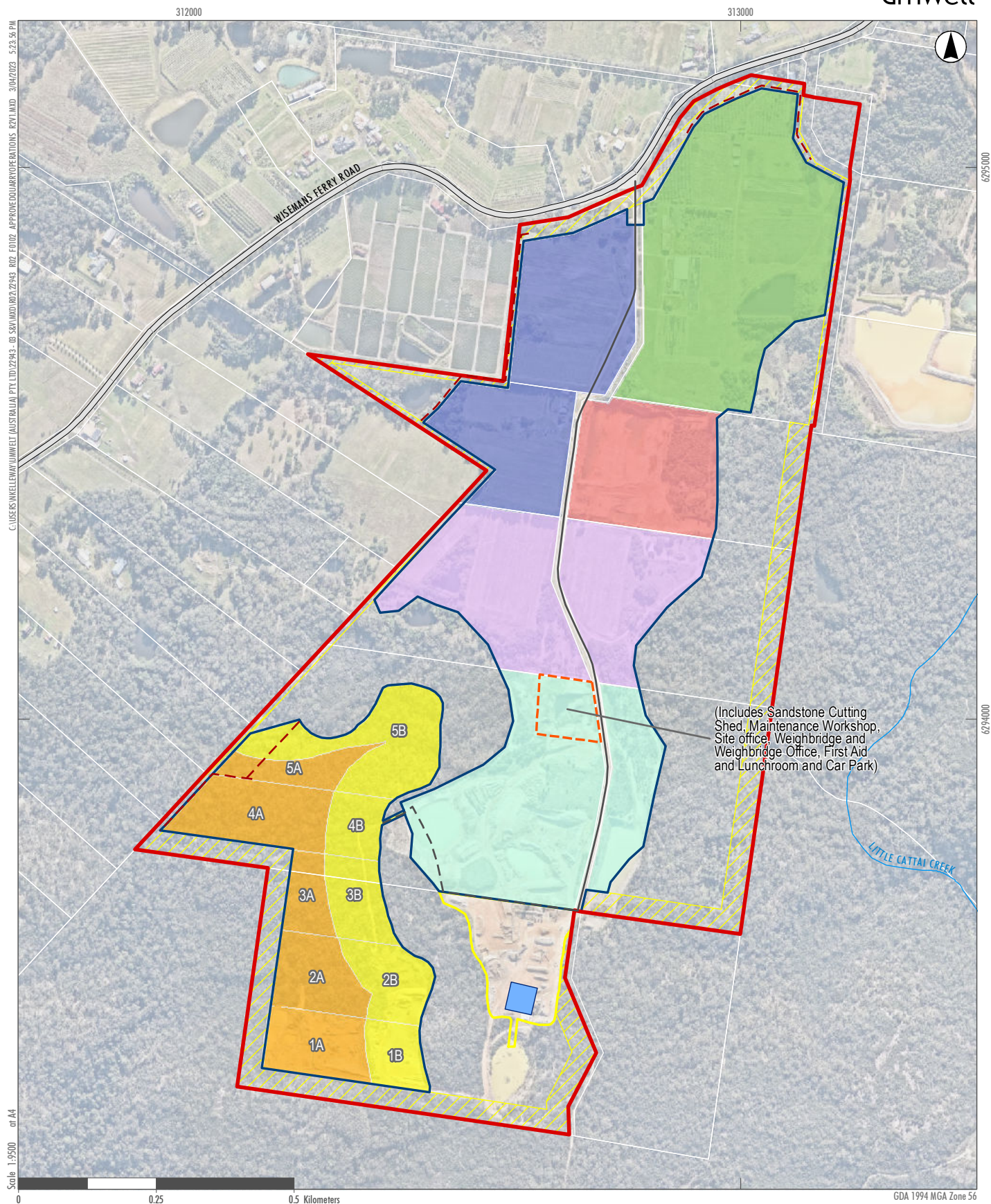
Table 1.1 below summarises the previous modifications to the development consent.

Table 1.1 Modifications to DA 165-7-200

Modification	Approval Date	Description
MOD 1	22 January 2018	<ul style="list-style-type: none"> Extending the life of the Quarry until 2046 Extending the approved extraction area into a new Friable Sandstone Extraction Area Importation of Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) for blending/re-sale and rehabilitation purposes Conversion of an existing house to a site office and construction of a new workshop, weighbridge and associated carparking area Use of mobile crushers and wet and dry processing plant Direct to market product transport
MOD 2	29 January 2019	Minor modification to buffer zone within the approved processing and stockpiling area
MOD 4*	30 June 2021	Revised extraction sequencing in the Friable Sandstone Extraction Area
MOD 3*	23 July 2021	<ul style="list-style-type: none"> Increasing the annual extraction rate to 495,000 tonnes per annum (tpa) Increasing daily truck movements to 180 per day Increasing VENM/ENM importation to 250,000 tpa A minor northern extension to the approved Tertiary Sand Extraction Area Changes to site plant and equipment Increasing the number of employees to 16
MOD 5	29 June 2022	<ul style="list-style-type: none"> Relocating the site office, workshop and weighbridge (referred to as "Site Building Envelope") from the approved location on the corner of Wisemans Ferry Road and Haerses Road (Lot 170 DP 664766) to the south, in an area adjacent to Haerses Road (Lot 177 DP 752039) Undertaking sandstone cutting activities, both within the approved Friable Sandstone Extraction Area and in the relocated workshop Installing and operating stone cutting saws within the workshop for final cutting

* MODs 3 and 4 were determined out of sequence





Scale 1:9500 at A4

Legend

- | | | |
|-----------------------------|----------------------|--|
| Acoustics Bund | Wet Processing Plant | Tertiary Extraction Area Stages |
| Road | Buffer Zone | Sandstone Extraction Area A |
| Drainage Line | Cadastre | Sandstone Extraction Area B |
| Haeres Road Quarry | Haulage Roads | Tertiary Sands Extraction Area Stage 1 |
| Site Building Envelope | Sealed haul Road | Tertiary Sands Extraction Area Stage 2 |
| Approved Extraction Area | Unsealed Haul Road | Tertiary Sands Extraction Area Stage 3 |
| Processing Stockpiling Area | | Tertiary Sands Extraction Area Stage 4 |
| | | Tertiary Sands Extraction Area Stage 5 |
| | | Extraction cell numbers |

FIGURE 1.2

Approved Quarry Operations

1.2 Approved Operations

The approved development, as modified, includes:

- carrying out quarrying operations until 14 February 2046
- extracting up to 495,000 tpa of Tertiary Sand and Friable Sandstone in stages
- dispatching a combined total of up to 495,000 tpa of quarry products by road, comprising:
 - up to 190,000 tpa dispatched to Old Northern Road Quarry, and
 - up to 495,000 tpa dispatched direct to market
- receiving up to 250,000 tpa of VENM and ENM for blending and rehabilitation purposes
- up to 180 truck movements per day (combined inbound and outbound), with no more than 20 between 6.00 am and 7.00 am
- establishment of a site building envelope (including sandstone cutting shed and maintenance workshop, site office, weighbridge and weighbridge office, first aid, lunchroom) in Lot 177 and associated carparking area construction and use of ancillary infrastructure, including internal haul roads, water management infrastructure and acoustic bunds
- on-site mobile crushing, screening and dry and wet processing
- upgrades to internal roads and the intersection of Haerses Road with Wisemans Ferry Road
- progressive rehabilitation of the Quarry site to either Class 4 agricultural land or native vegetation.

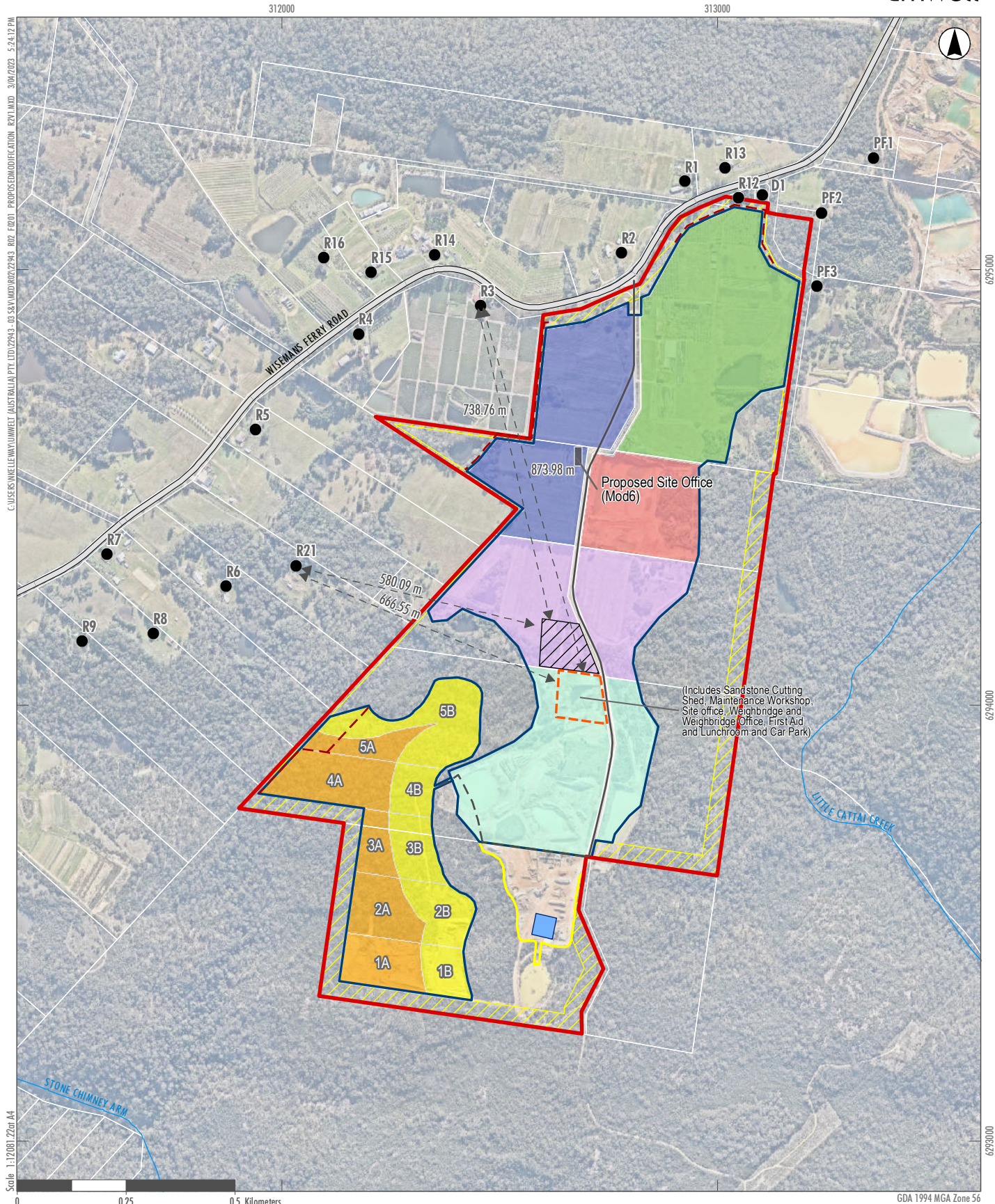
The key elements of the approved development described above are presented along with the Proposed Modification in **Figure 2.1**.

A consolidated description of the modified development (incorporating MOD 6) is provided in **Appendix A**.

2.0 Proposed Modification

Dixon Sand proposes to relocate the Site Building Envelope from the current approved location on Lot 177 (as per Mod 5) approximately 90 m north within Lot 176 (hereafter referred to as the 'Proposed Relocation Area'), as shown in **Figure 2.1**.

In addition, Dixon Sand proposes to relocate the site office to the existing residence on Lot A DP 407341, as shown on **Figure 2.1**.



Legend

- Sensitive Receptors
- - Acoustics Bund
- Road
- Drainage Line
- Haesers Road Quarry
- Approved Site Building Envelope (incl Site Office (Mod 5))
- Approved Extraction Area
- Processing Stockpiling Area
- Wet Processing Plant
- Buffer Zone
- Cadastre
- Proposed Site Building Envelope
- Proposed Site Office Relocation
- Haulage Roads
- Sealed haul Road
- - Unsealed Haul Road
- Tertiary Extraction Area Stage
- Sandstone Extraction Area A
- Sandstone Extraction Area B
- Tertiary Sands Extraction Area Stage 1
- Tertiary Sands Extraction Area Stage 2
- Tertiary Sands Extraction Area Stage 3
- Tertiary Sands Extraction Area Stage 4
- Tertiary Sands Extraction Area Stage 5
- 1A Extraction cell numbers

FIGURE 2.1

Proposed Modification

The sandstone cutting shed and maintenance workshop within the Site Building Envelope (as currently approved) is to be housed within a shed structure with a floor area of approximately 1,150 m² plus awnings. Following concept design during certification, Dixon Sand proposes to enclose cantilever awnings to satisfy code fire safety requirements, resulting in a reconfigured internal floor area (shed plus awnings) of approximately 1600-2000 m² for both sheds, subject to final design and certification. Overall, the areas of concrete foundation and shed areas will remain generally in accordance with the Approved Operations, with reconfiguration to satisfy fire safety codes. The buildings will remain wholly within the Proposed Relocation Area.

In addition, this modification is seeking an amendment to Figure 2 of Appendix 2 of the Development Consent to correct an administrative error in relation to the approved buffer from Wisemans Ferry Road, along the northern boundary of the Quarry. Under Mod 3, the northern buffer from Wisemans Ferry Road was reduced from 80 m to 30 m to allow for the extension of the Stage 5 sand extraction area. The approved extension of the extraction area is clearly illustrated on Figure 1 of Appendix 1 of the Development Consent, with the reduced 30 m buffer area shown on Figure 2 of Appendix 2. Whilst Figure 2 of **Appendix B** identifies the 30 m buffer area, a labeling error for the buffer zone reads '80 m'. It is therefore requested that this label be amended to '30 m', as per the amended Figure 2 provided in **Appendix A** of this report and in accordance with the amended buffer as approved under Mod 3.

No other changes to approved operations (as outlined in **Section 1.2** above) are proposed, including no changes to sandstone cutting activities, machinery and intensity, duration or number of machines in the sandstone shed.

The Proposed Relocation Area is wholly contained within the approved Tertiary Sand Extraction Area (Stage 3). As such, the Proposed Modification will not involve any additional surface disturbance. The Proposed Relocation Area will be constructed after the sand resource in this area has been extracted. The Proposed Relocation Area will then be backfilled and compacted to meet geotechnical engineering specifications.¹

The Proposed Modification is expected to result in minimal noise impacts associated with the construction and use of the workshop and weighbridge (predicted noise level increase of 1 dB(A) from the relocated Site Building Envelope), with the Proposed Relocation Area now approximately 95 m and 135 m closer to the nearest sensitive receivers on Wisemans Ferry Road (i.e., R21 and R3 respectively), as illustrated on **Figure 2.1** and discussed further in **Section 5.0**.

3.0 Statutory Context

3.1 Approval Pathway

The Proposed Modification is sought under section 4.55(1A) of the EP&A Act on the basis that the assessment of environmental impacts in this Modification Report (see **Section 5.0**) has concluded that the modification is of minimal environmental impact.

Additionally, the development as it is proposed to be modified is considered to be 'substantially the same' as the development that was originally granted consent, for the following reasons:

- no changes are proposed with respect to the key elements of the approved development, such as the approved quarry life, annual extraction rate, extraction methods, trucking movements or workforce

¹ Consistent with approved operations, this area may be backfilled with imported VENM/ENM, overburden and/or silt from the wet processing plant

- the Proposed Relocation Area for the Site Building Envelope is wholly located within the approved disturbance area of the Quarry
- the proposed relocation of the workshop and weighbridge is expected to have minimal noise impacts (predicted noise level increase of 1 dB(A) from the relocated Site Building Envelope) for nearest sensitive receivers along Wisemans Ferry Road, with the minor increase being able to be readily mitigated through building design and associated acoustic treatments
- the proposed modification does not seek any change to existing noise limits that apply to the site.

3.2 Mandatory Considerations

Under section 4.55(3) of the EP&A Act, in determining an application for the modification of a development consent, the consent authority must take into consideration such matters referred to in section 4.15(1) of the Act as they are of relevance to the development which is the subject of the application. These mandatory matters for consideration, and the sections where they are addressed in this Modification Report, are outlined in **Table 3.1**.

Table 3.1 Mandatory Matters for Consideration

Matters for Consideration	
the provisions of -	
(i) any environmental planning instrument	See Appendix B
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	See Appendix B
(iii) any development control plan,	Not applicable based on SSD provisions
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4	Not applicable
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	No additional mandatory considerations applicable to the Proposed Modification
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	See Section 5.0
(c) the suitability of the site for the development,	The Proposed Modification involves a minor reconfiguration of the internal layout of an approved State significant sand quarry, within an area characterised by extractive industry (amongst other land uses). The site is considered suitable for the development as it proposed to be modified.

Matters for Consideration	
(d) any submissions made in accordance with this Act or the regulations	This is a matter for consideration by the consent authority, in the event the application is publicly exhibited.
(e) the public interest	See Section 6.0

In addition, section 4.55(3) provides that a consent authority must take into consideration the reasons given by the original consent authority for the grant of the consent that is sought to be modified.

In granting consent for DA 165-7-2005, the Minister's delegate concluded that the likely cumulative impacts of the development and other extractive industries in the locality were acceptable, and the development was able to be operated in accordance with applicable environmental standards and criteria. Dixon Sand will continue to carry out the development, as it is proposed to be modified, in accordance with the modified conditions of consent and in compliance with existing noise and air quality criteria. Consequently, the Proposed Modification is considered to be consistent with the reasons for the granting of the consent.

3.3 Other Statutory Approvals

Building Certification

The structural adequacy of the relocated site buildings will be certified in accordance with the relevant requirements of Part 6 of the EP&A Act.

Local Government Act 1993

The proposed relocation of staff amenities will require the installation of an on-site sewage management facility (e.g., Biocycle septic or similar) in the vicinity of the Proposed Relocation Area. Dixon Sand will comply with all relevant Council requirements for the installation and maintenance of this system and will obtain any necessary approvals under section 68 of the *Local Government Act*.

No other statutory approvals are required for the Proposed Modification. A detailed statutory compliance table is included in **Appendix B**.

4.0 Engagement

4.1 Agency Consultation

Dixon Sand sought the Department's advice regarding the proposed approval pathway and approach to assessment for MOD 6 via email correspondence on 17 February 2023, followed with a meeting on 15 March 2023. The Department did not raise any concerns in this regard, however, the Department noted that further details may be required as part of the assessment process.

4.2 Community Consultation

Prior to lodgement, the Community Consultative Committee (CCC) representatives (including Hills Shire Council) will be provided with a link to this Modification Report that will be made available on the Dixon Sand's website as per normal CCC notifications. Furthermore, the Proposed Modification will be included in the News Section on Dixon Sand's website for public access.

Dixon Sand will then provide a follow up discussion on the Proposed Modification at the next CCC Meeting to be held on 3 May 2023.

5.0 Assessment of Impacts

The Proposed Modification will relocate the Site Building Envelope approximately 90 m north from that currently approved. The nearest sensitive receivers are R3 (to the north) and R21 (to the west) (**Figure 2.1**). R3 is located approximately 873 m and 738 m respectively from the approved and proposed Site Building Envelope (i.e., the Proposed Relocation Area will be approximately 135 m closer to R3). R21 is located approximately 666 m and 571 m respectively from the approved and proposed Site Building Envelope (i.e., the Proposed Relocation Area will be approximately 95 m closer to R21).

Table 5.3 below summarises the assessment of likely environmental impacts associated with the Proposed Modification.

Table 5.1 Environmental Impacts of Proposed Modification

Aspect	Comment	Predicted Impact (Relative to Approved Development)
Noise	<p>The Proposed Modification would relocate the approved Site Building Envelope slightly closer to sensitive receivers along Wisemans Ferry Road, as shown on Figure 2.1.</p> <p>The predicted noise level increase from the Site Building Envelope, attributed to the proposed relocation is approximately 1 dB(A) at the nearest receivers. Of the sources within the Site Building Envelope, the sandstone cutting shed is expected to have the highest noise emission.</p> <p>Given the sandstone cutting is occurring within a shed, it is expected that this operation is not likely to be the dominant noise source from site when external excavation machinery is operating within Extraction Areas 3 and 4 at much closer distances to the receivers (i.e., near the western site boundary) and haul trucks are utilising the Access Road.</p> <p>To mitigate the potential impact, Dixon Sand has committed to designing and constructing the shed and surrounding attenuation (e.g., bunds) if applicable with sufficient noise attenuation features to maintain compliance with the consent noise criteria at receptors.</p> <p>The additional 1 dB(A) increase in predicted noise level due to the sandstone cutting shed moving closer to residences, translates to an additional 1 dB(A) transmission loss requirement for the shed building. This is a level than can be readily achieved in the shed design and localised attenuation (e.g., bunds) which Dixon Sand has committed to.</p> <p>Based on the above, any potential acoustic impacts associated with the proposed relocation of the Site Building Envelope is considered low and any increases in site noise will be addressed with appropriate acoustic mitigation measures.</p> <p>Further, any potential noise impacts associated with the proposed relocation of the site office are anticipated to be negligible.</p>	Minimal impact
Air Quality	<p>The Proposed Modification will not increase dust emissions from the Quarry. Sandstone cutting undertaken in the relocated workshop will be limited to wet cutting only, which suppress dust.</p>	No change

Aspect	Comment	Predicted Impact (Relative to Approved Development)
	Dust generated by initial cutting activities within the extraction area will be indistinguishable from approved extraction and processing activities at sensitive receivers.	
Visual	<p>No change in visual impact is expected due to the Proposed Modification. The Proposed Modification does not involve any change to the height of the workshop shed or to the construction materials (Colorbond or similar, in green or brown colour).</p> <p>Due to intervening vegetation, the relocated Site Building Envelope is likely to be fully or almost fully screened from view at sensitive receivers to the west of the Quarry along Wisemans Ferry Road.</p>	No change
Surface Water	<p>Rainwater from the workshop shed will be collected in tanks and used for non-potable purposes on-site (e.g., wet cutting). Water used in wet cutting will be recycled and re-used through sediment ponds.</p> <p>The hardstand areas within the relocated Site Building Envelope will be incorporated into the surface water management system for Stage 3 (west of Haerses Road).</p> <p>During construction, Dixon Sand will implement established erosion and sedimentation control measures as detailed in the approved Surface Water Management Plan.</p> <p>Bottled drinking water will be delivered to the site for use in the relocated offices and workshop. Dixon Sand will manage wastewater in accordance with Council requirements (see Section 3.3)</p>	No change
Traffic and Transport	There would be no change to the type, volume or frequency of traffic entering and exiting the Quarry from Wisemans Ferry Road.	No change
Biodiversity	<p>A Biodiversity Development Assessment Report (BDAR) is not required under section 7.17 of the <i>Biodiversity Conservation Act 2016</i>, provided the consent authority is satisfied that the modification would not increase the impacts of the development on biodiversity values.</p> <p>The Proposed Modification does not involve any change to approved disturbance areas or increase the likelihood or severity of indirect impacts on threatened flora or fauna. Accordingly, it is submitted that a BDAR is not required.</p>	No change
Heritage	No changes to approved disturbance areas are proposed.	No change
Socio-economic	No changes to the nature, scale or intensity of approved quarrying operations are proposed.	No change
Rehabilitation	<p>No changes to approved conceptual final landform are proposed.</p> <p>Backfilling to establish a pad for the office, workshop and weighbridge area is consistent with the approved rehabilitation strategy for the site.</p>	No change

Based on the above, no new management and mitigation measures are proposed as part of the Proposed Modification.

6.0 Proposed Modification to Conditions of Consent

Table 6.1 sets out the proposed modifications to conditions of consent for DA 250-09-01 and provides a brief justification for the proposed changes (proposed changes in **bold**).

Table 6.1 Proposed Modifications to Conditions of Consent DA 250-09-01

Existing Condition	Proposed Change	Comment
TERMS OF CONSENT		
<p>2. The Applicant must carry out the development:</p> <ul style="list-style-type: none"> generally in accordance with the EIS, EA (Mod 1), EA (Mod 2), MR (Mod 4), MR (Mod 3) and MR (Mod 5); and in accordance with the conditions of this consent and the Development Layout Plans. <p><i>Note: The Development Layout Plans are shown in Appendix 1.</i></p>	<p>2. The Applicant must carry out the development:</p> <ul style="list-style-type: none"> generally in accordance with the EIS, EA (Mod 1), EA (Mod 2), MR (Mod 4), MR (Mod 3), and MR (Mod 5) MR (Mod 6) and the Site Building Envelope Plan (Appendix 7); and in accordance with the conditions of this consent and the Development Layout Plans (Appendix 1 – 6). <p><i>Note: The Development Layout Plans are shown in Appendix 1.</i></p>	<p>The Proposed Modification will:</p> <ul style="list-style-type: none"> result in minimal noise impacts (predicted noise level increase of 1 dB(A)) associated with the construction and operation of the relocated workshop and weighbridge facilities on sensitive receivers along Wisemans Ferry Road not increase the Quarry's approved disturbance footprint or result in any impacts to biodiversity or heritage values, relative to the approved development not increase dust impacts, relative to the approved development not increase visual impacts, relative to the approved development. <p>On this basis, it is considered that the Proposed Modification is of minimal environmental impact and is in the public interest.</p>

Furthermore, it is proposed that the figures appended to DA 250-09-01 be replaced with figures provided in **Appendix A** of this report.

7.0 Conclusion

Based on the assessment of impacts presented in **Section 5.0**, it is considered that the Proposed Modification is of minimal environmental impact and is in the public interest.

We trust this information meets with your current requirements. Please do not hesitate to contact the undersigned should you require clarification or further information.

Yours sincerely

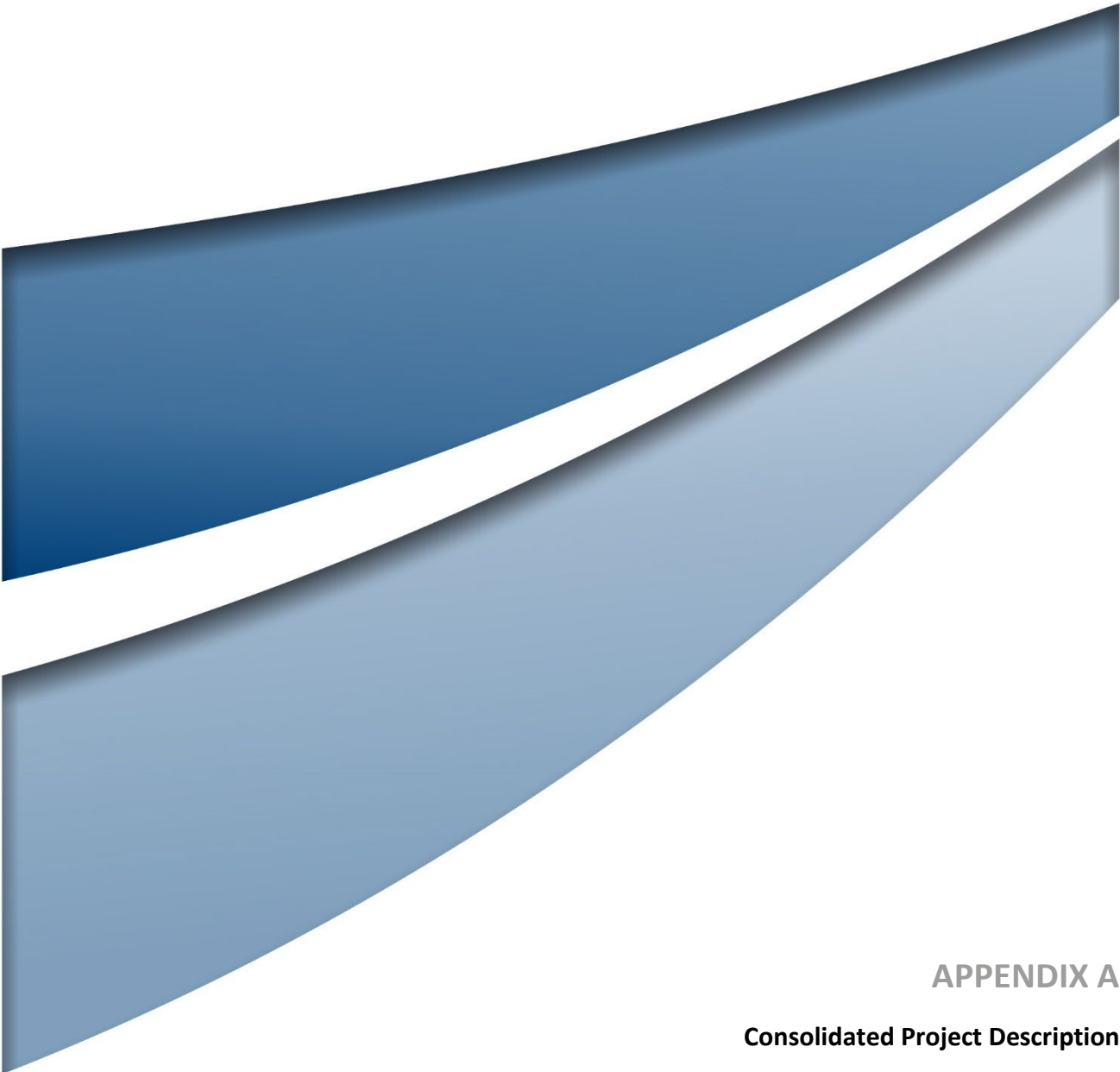
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Amanda Antcliff

Principal Environmental Consultant

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APPENDIX A

Consolidated Project Description

Consolidated Project Description

Table A1 below provides an updated summary of mitigation measures for DA 165-7-2005 as modified (incorporating MOD 6).

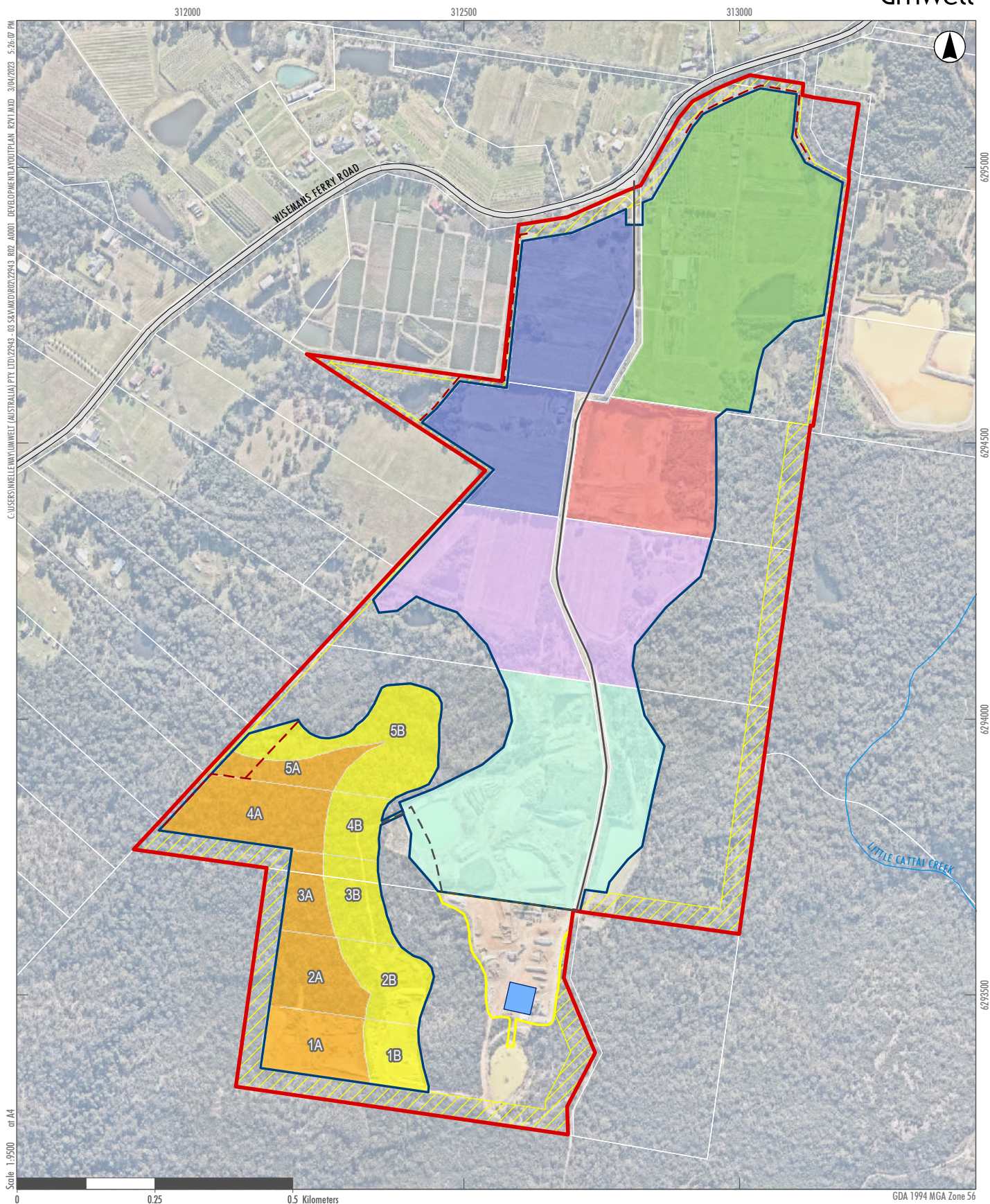
The approved development, as modified, includes:

- carrying out quarrying operations until 14 February 2046
- extracting up to 495,000 tpa of Tertiary Sand and Friable Sandstone in stages
- dispatching a combined total of up to 495,000 tpa of quarry products by road, comprising:
 - up to 190,000 tpa dispatched to Old Northern Road Quarry, and
 - up to 495,000 tpa dispatched direct to market
- receiving up to 250,000 tpa of VENM and ENM for blending and rehabilitation purposes
- up to 180 truck movements per day (combined inbound and outbound), with no more than 20 between 6.00 am and 7.00 am
- establishment of a site building envelope including sandstone cutting shed and maintenance workshop, site office, weighbridge and weighbridge office, first aid, lunchroom, carpark and associated facilities
- construction and use of ancillary infrastructure, including internal haul roads, water management infrastructure and acoustic bunds
- on-site mobile crushing, screening, dry and wet processing and sandstone cutting operations
- upgrades to internal roads and the intersection of Haerses Road with Wisemans Ferry Road
- progressive rehabilitation of the Quarry site to either Class 4 agricultural land or native vegetation.

Table A1 Key features of Approved Development (As Modified)

Aspect	Approved development (incorporating MOD 5)
Quarry life	14 February 2046
Extraction limit	495,000 tpa
Transport limit	Combined limit of 495,000 tpa, comprising: <ul style="list-style-type: none"> • Up to 190,000 tpa to Old Northern Road Quarry • Up to 495,000 tpa direct to market.
Truck movements	Up to 180 truck movements per day (total in and out), including up to 20 vehicle movements (total in and out) between 6.00 am and 7.00 am
Total disturbance footprint	Approximately 75.5 ha
Overburden	Used for acoustic barriers or stockpiled and used to fill voids
Importation of material	Receival of up to 250,000 tpa of VENM and ENM for landform construction or reprocessing and sale

Aspect	Approved development (incorporating MOD 5)	
Infrastructure	<ul style="list-style-type: none"> • Site office, sandstone shed and maintenance workshop, weighbridge and office amenities and gravel car parking area • Internal haul roads • Water management structures, including diversion banks and channels, contour banks and drains and sediment basins • Acoustic bunds (see Figure 3) • Upgrading of Haerses Road and the intersection of Haerses Road and Wisemans Ferry Road as required under Conditions 20 to 24 of Schedule 3 of the development consent 	
Plant & Equipment	<ul style="list-style-type: none"> • Front end loader (4) • 40 t excavator (2) • 40 t trucks (2) • water cart (1) • dozer • grader • service vehicle • mobile dry screen • mobile jaw and rotary crushers • wet and dry processing plant • hydraulic saw attachments • stone cutting saws (to be enclosed in workshop) 	
Hours of operation	Quarrying operations (excluding truck arrival, loading and dispatch)	<ul style="list-style-type: none"> • 7.00am to 6.00pm Monday to Saturday • At no time on Sundays or public holidays
	Truck arrival, loading and dispatch	<ul style="list-style-type: none"> • 6.00am to 6.00pm Monday to Saturday • At no time on Sundays or public holidays
	Acoustic bund construction and road and intersection works on Haerses Road and Wisemans Ferry Road	<ul style="list-style-type: none"> • 8.00am to 5.00pm Monday to Friday • At no time on Saturdays, Sundays or public holidays
	Maintenance	At any time, provided that these activities are not audible at any privately-owned residence outside of permissible hours for quarrying operations
Extraction depth	No extraction within 2 metres (m) of the highest recorded wet weather groundwater level of the Maroota Tertiary Sands Groundwater Source (MTSGS) or Sydney Central Basin Groundwater Source (SCBGS), as defined on the most recent Maximum Extraction Depth Map approved by the Secretary (see Conditions 19 to 22 of Schedule 2 of the development consent)	
Biodiversity Offset Strategy	Establishment of the Haerses Road Offset Area (see Figure 4), Porters Road Offset Area (see Figure 5) and staged retirement of residual credits as required under Conditions 30 to 33 of Schedule 3 of the development consent	
Employment	Up to 16 people full time	

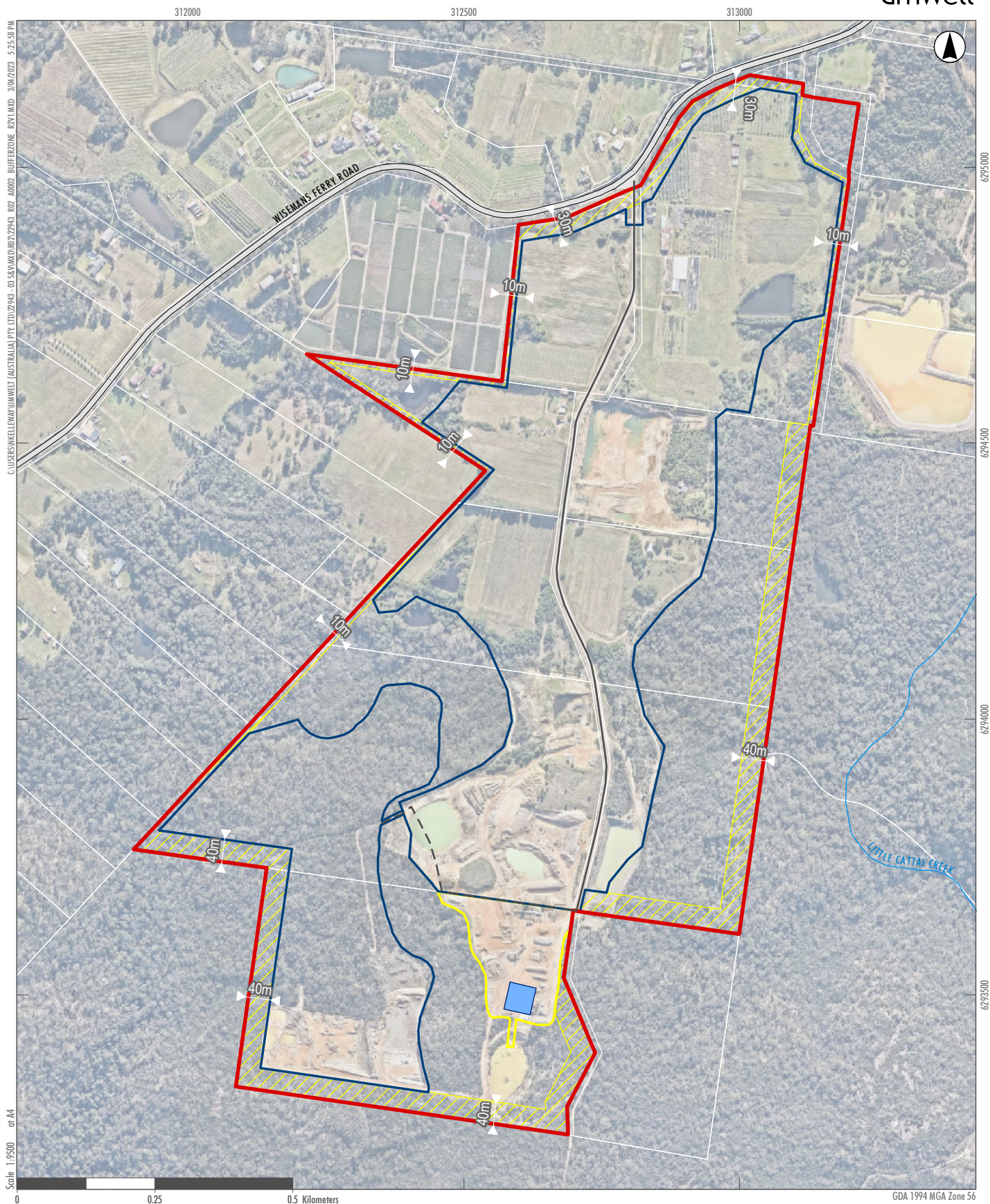


Legend

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|-----------------------------|----------------------|--|
| Acoustics Bund | Wet Processing Plant | Tertiary Extraction Area Stages |
| Road | Buffer Zone | Sandstone Extraction Area A |
| Drainage Line | Cadastre | Sandstone Extraction Area B |
| Haereses Road Quarry | Haulage Roads | Tertiary Sands Extraction Area Stage 1 |
| Approved Extraction Area | Sealed haul Road | Tertiary Sands Extraction Area Stage 2 |
| Processing Stockpiling Area | Unsealed Haul Road | Tertiary Sands Extraction Area Stage 3 |
| | | Tertiary Sands Extraction Area Stage 4 |
| | | Tertiary Sands Extraction Area Stage 5 |
| | | Extraction cell numbers |

FIGURE 1

Development Layout Plan



Legend

- | | |
|-----------------------------|----------------------|
| Road | Wet Processing Plant |
| Drainage Line | Buffer Zone |
| Haerses Road Quarry | Cadastre |
| Approved Extraction Area | Haulage Roads |
| Processing Stockpiling Area | Sealed haul Road |
| | Unsealed Haul Road |

FIGURE 2
Buffer Zones

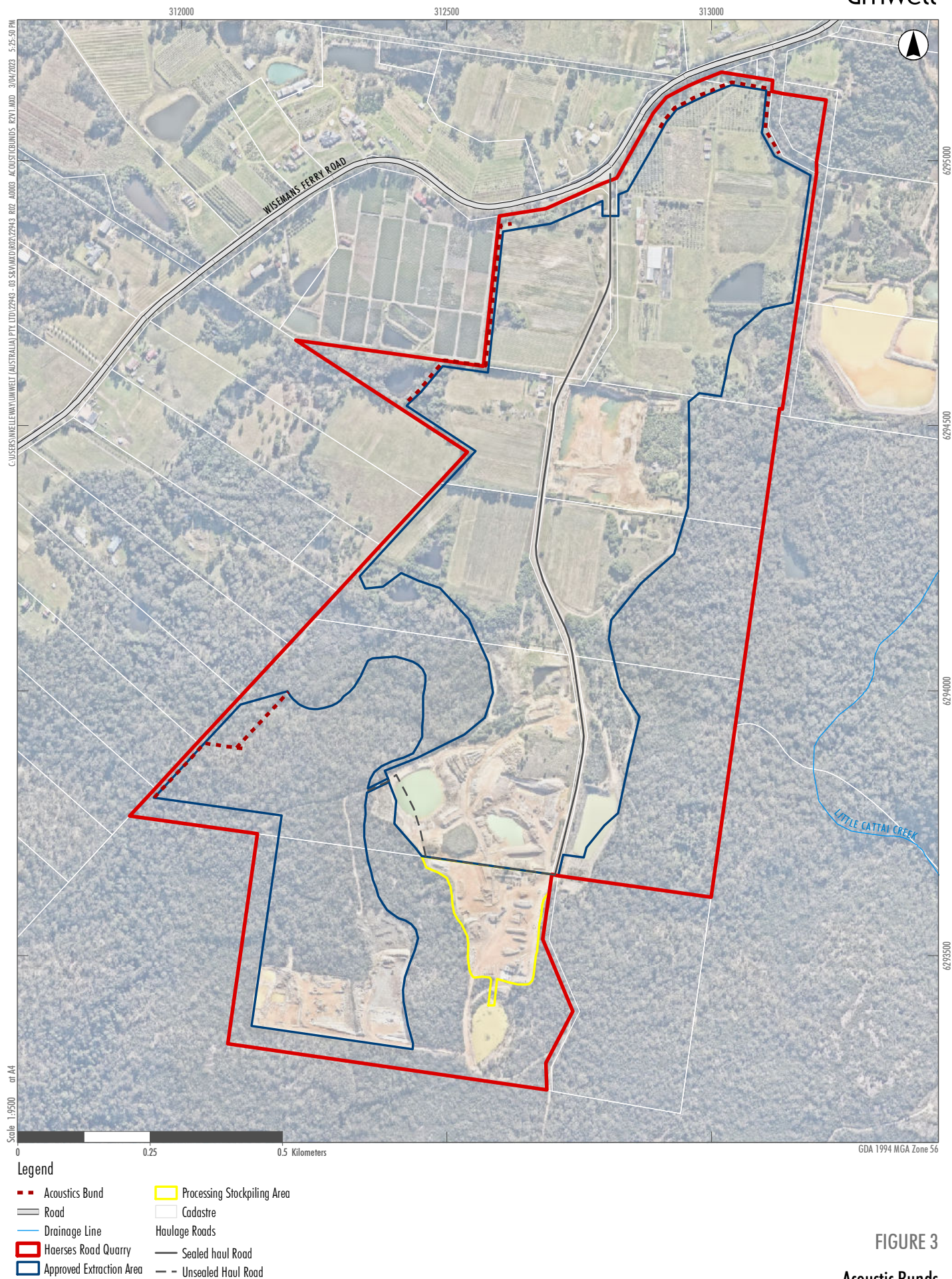
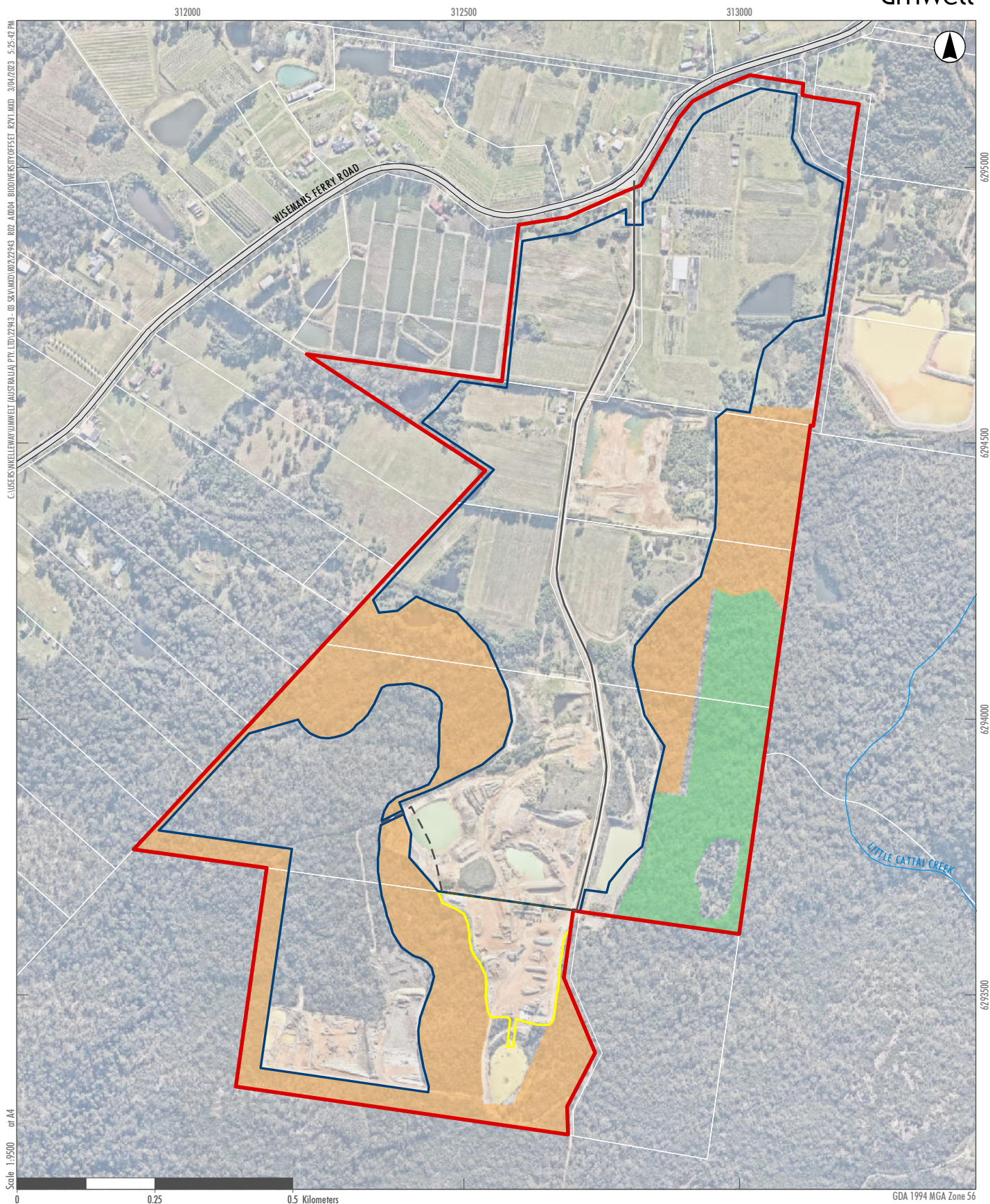


FIGURE 3

Acoustic Bunds



Scale 1:9500 at A4

- | | |
|-------------------------------|---|
| — Road | — Cadastre |
| — Drainage Line | — Biodiversity Offset Area for Haerses Road Quarry |
| — Haerses Road Quarry | — Biodiversity Offset Area for Older Northern Road Quarry |
| — Approved Extraction Area | — Haulage Roads |
| — Processing Stockpiling Area | — Sealed haul Road |
| | — Unsealed Haul Road |

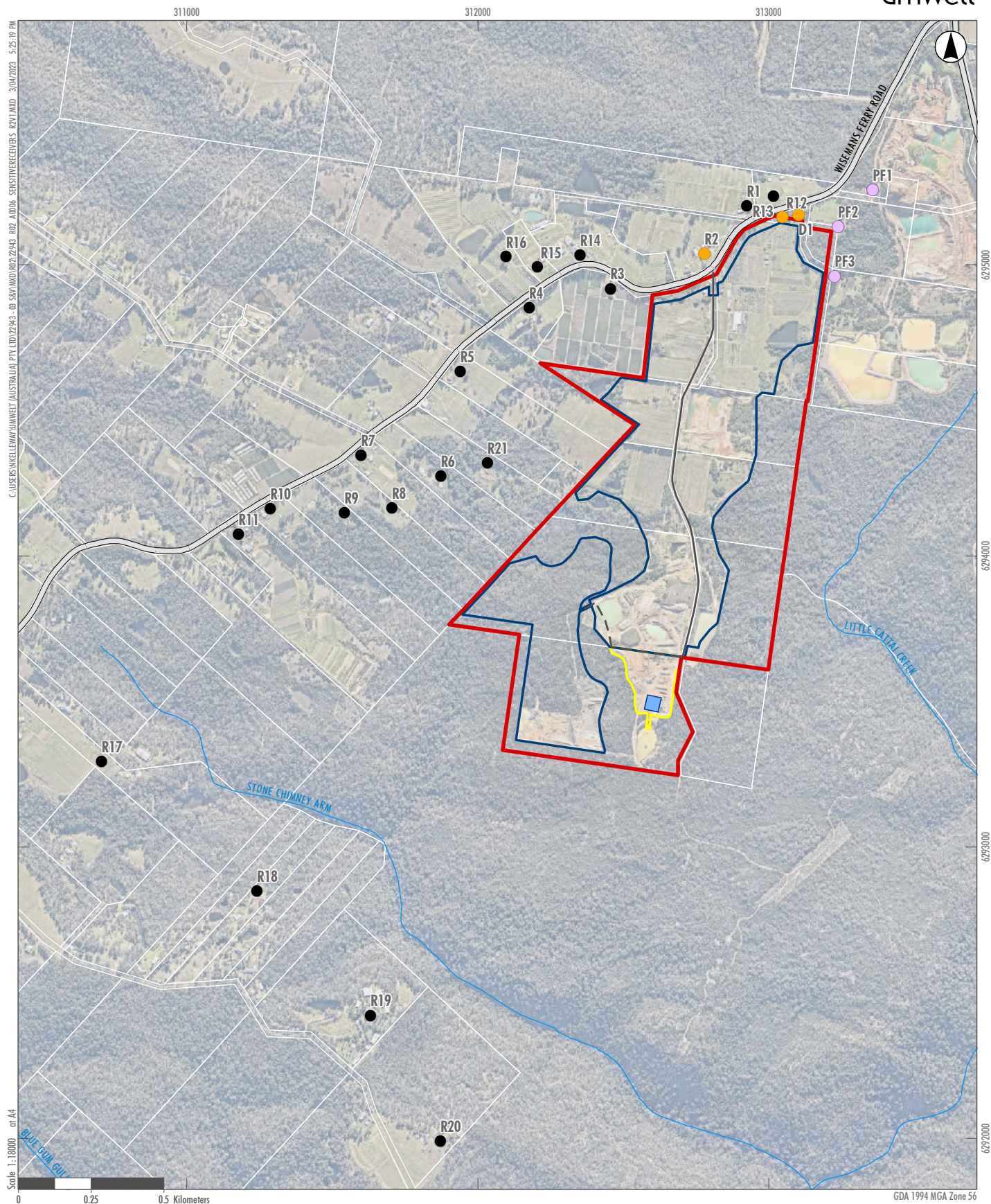
FIGURE 4

Haerses Road Biodiversity Offset Areas



FIGURE 5

Porters Road Biodiversity Offset Area

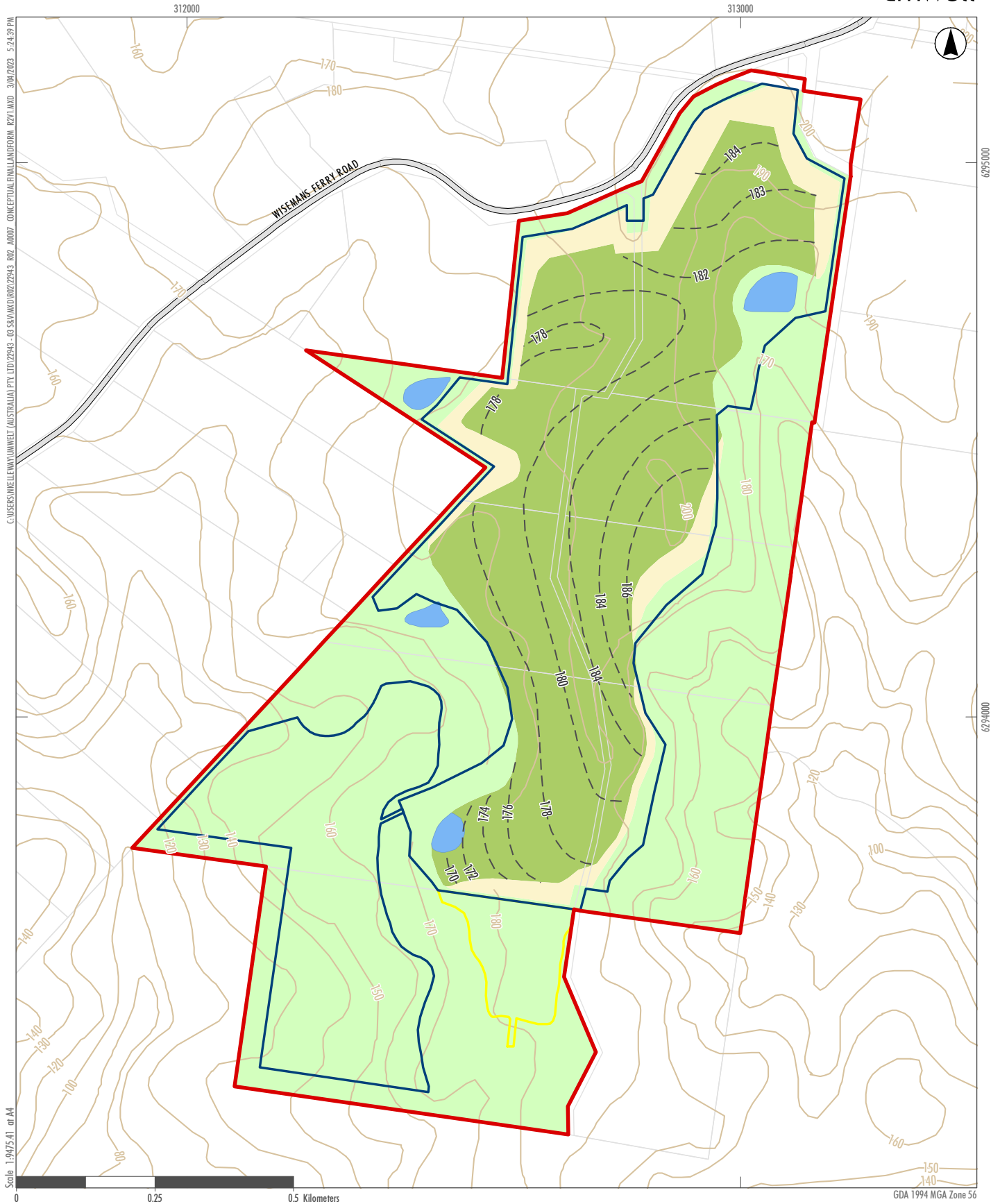


Legend

- Owned by or has agreement with Dixon Sands
- Owned by PF Formation
- Residential
- Road
- Drainage Line
- Haerses Road Quarry
- Approved Extraction Area
- Processing Stockpiling Area
- Wet Processing Plant
- Cadastre
- Haulage Roads
- Sealed haul Road
- Unsealed Haul Road

FIGURE 6

Sensitive Receiver Locations

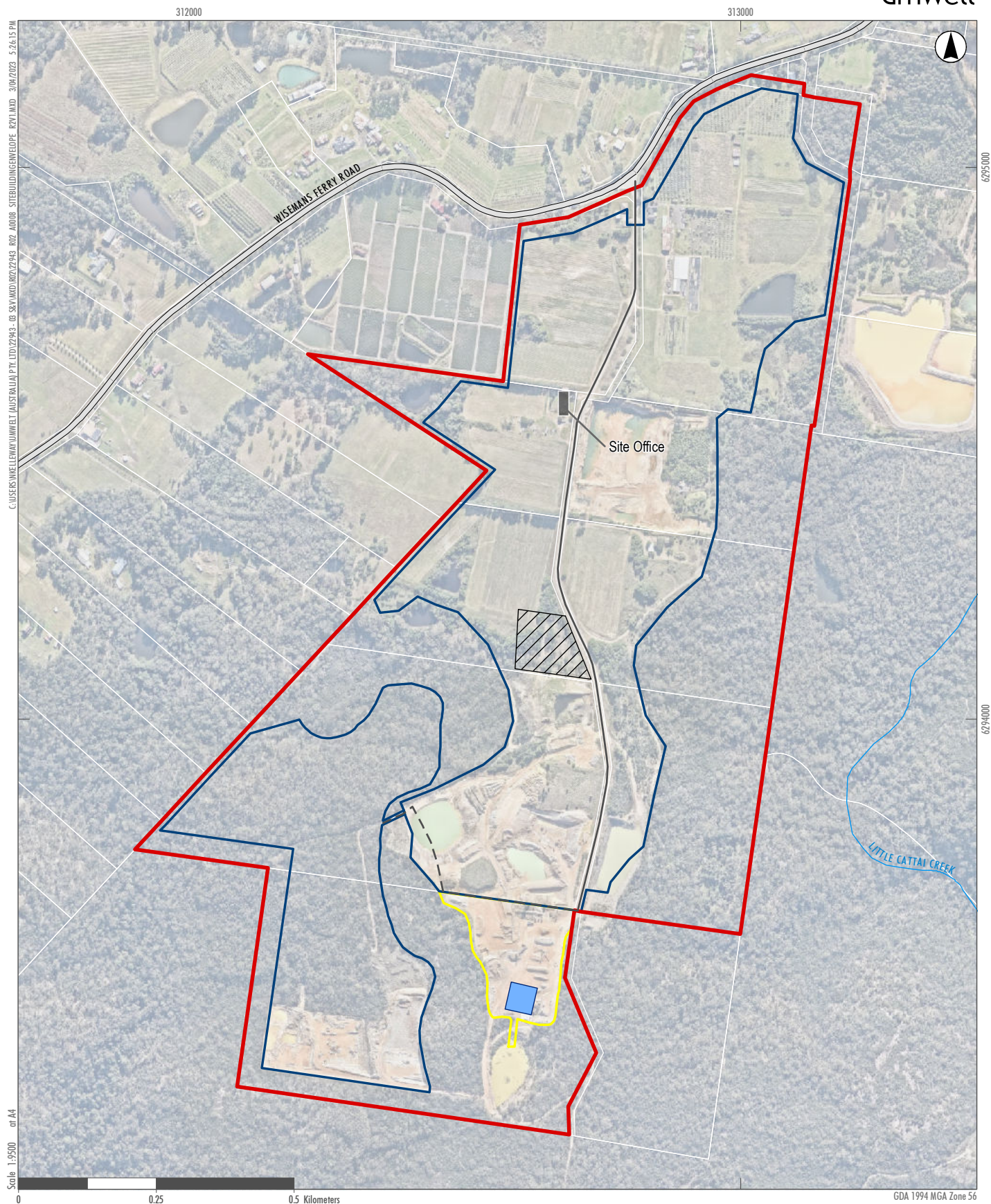


Legend

- Road
- Haesers Road Quarry
- Approved Extraction Area
- Processing Stockpiling Area
- Cadastre

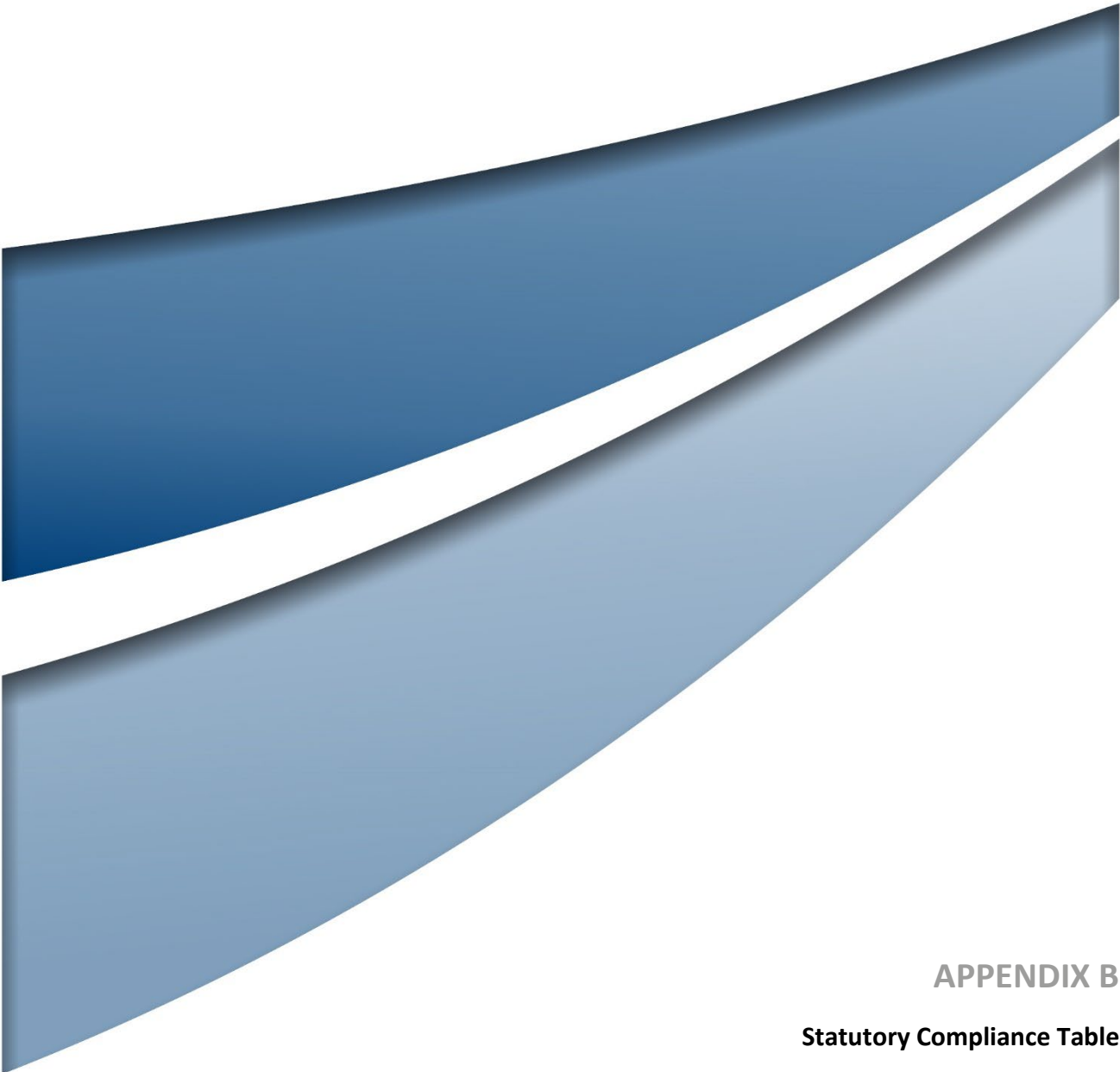
FIGURE 7

Modified Conceptual Final Landform



- Legend**
- Road
 - Drainage Line
 - Haerses Road Quarry
 - Approved Extraction Area
 - Processing Stockpiling Area
 - Wet Processing Plant
 - Cadastre
 - Site Building Envelope
 - Site Office
 - Haulage Roads
 - Sealed haul Road
 - Unsealed Haul Road

FIGURE 8
Site Building Envelope



APPENDIX B

Statutory Compliance Table

Table B1 Relevant State Legislation

Act	Comment	Further Approval Required?
<i>Heritage Act 1977 (the Heritage Act)</i>	All works associated with the Proposed Modification would be located within the Quarry's approved disturbance footprint. No further approvals under the Heritage Act are required.	No
<i>National Parks and Wildlife Act 1974 (NP&W Act)</i>	All works associated with the Proposed Modification would be located within the Quarry's approved disturbance footprint. No further approvals under the NP&W Act are required.	No
<i>Rural Fires Act 1997</i>	A bushfire safety authority is not required for the Proposed Modification.	No
<i>Water Management Act 2000</i>	The Proposed Modification will not require any approvals under sections 89, 90 or 91 of the WM Act	No
<i>Protection of the Environment Operations Act 1997 (POEO Act)</i>	The Proposed Modification will not require a variation to the site's existing Environment Protection Licence (EPL 12513)	No
<i>Biodiversity Conservation Act 2016 (BC Act)</i>	See Section 5.0	No
<i>Local Government Act 1993 (Local Government Act)</i>	Specified activities, including the operation of a system of sewage management, require approval under section 68 of the Local Government Act. Dixon Sand will consult with Council and obtain the necessary approvals under section 68 of the Local Government Act.	Yes – to be confirmed by Council

Table B2 Consideration of Environmental Planning Instruments

Matters for Consideration	
<i>State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)</i>	<p>The Planning Systems SEPP identifies development to which the SSD assessment and determination process under Part 4 of the EP&A Act applies. The Proposed Modification is for the purpose of extractive industry and is SSD as defined by the provisions of the SRD SEPP and requires development consent under Part 4 of the EP&A Act.</p> <p>By operation of section 4.5(a) of the EP&A Act and section 2.7 of the Planning Systems SEPP, the Minister of Planning is the consent authority for the modification application as Dixon Sand has not disclosed a reportable political donation.</p>
<i>State Environmental Planning Policy (Resources and Energy) 2021 (Resources and Energy SEPP)</i>	See separate table below

Matters for Consideration	
The Hills Local Environmental Plan 2012 (LEP)	The Proposed Modification is consistent with the aims and objectives of the LEP, and with the objectives of the RU1 Primary Production zone. Extractive industries are permissible with consent in the zone.

Table B2 Application of the Resources and Energy SEPP

Section	Description	Comment
2.16 Non-discretionary standards for mining	Not applicable to extractive industry	N/A
2.17 Compatibility of proposed extractive industry with other land uses	<ul style="list-style-type: none"> consider— <ul style="list-style-type: none"> the existing uses and approved uses of land in the vicinity of the development, and whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a)(i) and (ii), and evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii). 	The Proposed Modification is not expected to alter the compatibility of the Approved Operations at the existing Quarry with other land uses.
2.18 Voluntary Land Acquisition and Mitigation Policy (VLAMP)	The consent authority must consider the application of the VLAMP	No voluntary acquisition or mitigation rights are applicable in respect of the Proposed Modification.
2.19 Compatibility with extractive industry	The consent authority must consider the existing and approved uses of land in the vicinity of the development and whether the development is likely to affect the future recovery of resources	The Proposed Modification does not impact the recovery of extractive materials.

Section	Description	Comment
2.20 Natural resource management and environmental management	<p>The consent authority must consider whether consent should be granted subject to conditions to ensure the following:</p> <ul style="list-style-type: none"> that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable that greenhouse gas emissions are minimised to the greatest extent practicable 	<p>The development, as is it proposed to be modified, will be carried out in accordance with all existing conditions regulating impacts on water resources, threatened species and biodiversity and greenhouse gas emissions.</p>
2.21 Resource Recovery	<p>The consent authority must consider the efficiency of the development with respect to resource recovery</p>	<p>The Proposed Modification will not impact resource recovery</p>
2.22 Transport	<p>The following transport-related issues are considered:</p> <ul style="list-style-type: none"> the transport of some or all of the materials from the site by means other than public road limitation of the number of truck movements that occur on roads within residential areas or roads near to schools the preparation of a code of conduct for the transportation of materials on public roads 	<p>The Proposed Modification will not change approved transport arrangements</p>
2.23 Rehabilitation	<p>The rehabilitation of the land affected by the development is considered including:</p> <ul style="list-style-type: none"> the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated the appropriate management of development generated waste remediation of any soil contaminated by the development the steps to be taken to ensure that the state of the land does not jeopardize public safety, while being rehabilitated or at the completion of rehabilitation. 	<p>No changes to rehabilitation are proposed</p>