

Development Consent

Section 80 of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the Development Application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the on-going environmental management of the development.

Frank Sartor MP
Minister for Planning

Sydney, 14 February 2006 File No: 9039217

SCHEDULE 1

Development Application:	DA 165-7-2005.
Applicant:	Dixon Sand (Penrith) Pty Limited.
Consent Authority:	Minister for Planning.
Land:	Lot 170 DP 664766; Lot 170 DP 664767; Lots A and B DP 407341; Lots 176 and 177 DP 752039 and Lot 216 DP 752039; Haerses Road; and the intersection of Wiseman's Ferry Road and Haerses Road.
Proposed Development:	Sand quarry
State Significant Development:	The proposal is classified as State significant development under section 76(A)(7) of the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) as it is an extractive industry that meets the criteria for State significance under the <i>State Environmental Planning Policy (State Significant Development) 2005</i> .
Integrated Development:	The proposal is classified as integrated development under section 91 of the EP&A Act as it requires additional approvals under the: <ul style="list-style-type: none">• <i>Protection of the Environment Operations Act 1997</i>; and• <i>Roads Act 1993</i>.
Designated Development:	The proposal is classified as designated development under Section 77A of the EP&A Act as it is an extractive industry that meets the criteria of Schedule 3 of the <i>Environmental Planning and Assessment Regulation 2000</i> (EP&A Regulation).

Note:

- To find out when this consent becomes effective, see section 83 of the EP&A Act;
- To find out when this consent is liable to lapse, see section 95 of the EP&A Act; and
- To find out about appeal rights, see section 97 of the EP&A Act.

(Schedules 2-5 updated in entirety during Modification 1, dated 22 January 2018)

Blue Text – January 2019 Modification

Green Text – June 2021 Modification

Red Text – July 2021 Modification

Purple Text – June 2022 Modification

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DEFINITIONS

Aboriginal item or object	Any item or object that provides evidence of the use of an area by Aboriginal people, as defined under the <i>National Parks and Wildlife Act 1974</i>
Annual Review	The review required by condition 12 of Schedule 5.
AHD	Australian Height Datum
Applicant	Dixon Sand (Penrith) Pty Limited, or its successors in title
BC Act	<i>Biodiversity Conservation Act 2016</i>
BCA	Building Code of Australia
BCD	Biodiversity & Conservation Division within the Department
Biodiversity Offset Strategy	The conservation and enhancement program as described in EA (Mod 1) and Appendix 4
CCC	Community Consultative Committee
Council	The Hills Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	NSW Department of Planning and Environment
Development	The development as described in the documents listed in condition 2(a) of Schedule 2
DP	Deposited Plan
DPE	Department of Planning and Environment
DPE Water	Water Group within the Department
EA (Mod 1)	Environmental Assessment titled <i>Dixon Sand Haerses Road Quarry Extraction Area Modification</i> dated October 2016, including the Response to Submissions dated June 2017, supplementary Response to Submissions dated October 2017, and additional information dated 11 December 2017, prepared by Umwelt (Australia) Pty Ltd
EA (Mod 2)	<i>The Environmental Assessment titled Application to modify DA 165-7-2005 for Haerses Road Quarry under Section 4.55(1) of the Environmental Planning & Assessment Act 1979, prepared by Umwelt (Australia) Pty Ltd, dated 28 November 2018</i>
EIS	Environmental Impact Statement titled <i>Dixon Sand (Penrith) Pty Limited Haerses Road Sand Quarry EIS</i> , dated June 2005, and prepared by Environmental Resources Management Australia Pty Limited
ENM	Excavated Natural Material
Environment	<i>Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings</i>
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6 pm to 10 pm
Heritage NSW	The Heritage Group within the Department
Incident	<i>An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance</i>
Laden trucks	Trucks transporting quarry products from the site and/or trucks transporting extractive material to the site
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
M	Metres
Material harm	<p>Is harm that:</p> <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) <p>This definition excludes "harm" that is authorised under either this consent or any other statutory approval</p>
MEG	Mining, Exploration and Geoscience, within the Department of Regional NSW
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development
Mod 1 Extraction Area	The area identified as the Modification Disturbance Area in Figure 2 of Appendix 1
MR (Mod 3)	<i>The Modification Report titled Haerses Road Quarry Modification 3 Statement of Environmental Effects, prepared by Umwelt (Australia) Pty Ltd, dated December 2019, including the Response to Submissions dated 9 April 2020, and additional information accompanying the Response to Submissions</i>

MR (MOD 4)	The Modification Report titled <i>Haerses Road Quarry Modification 4 Statement of Environmental Effects</i> , prepared by Umwelt (Australia) Pty Ltd, dated September 2020
MR (Mod 5)	The Modification Report titled <i>Haerses Road Quarry Modification 5 Relocation of Site Office, Workshop and Weighbridge</i> prepared by Umwelt (Australia) Pty Ltd, dated 4 January 2022, Additional Information Letter Report prepared by Umwelt (Australia) Pty Ltd, dated 17 March 2022, Additional Information Letter Report prepared by Umwelt (Australia) Pty Ltd, dated 19 May 2022.
MTSGS	Maroota Tertiary Sands Groundwater Source
MTSGS buffer zone	The area identified as Extraction Area B in Figure 2 of Appendix 1
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10 pm to 7am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
Non-Compliance	An occurrence, set of circumstances or development that is a breach of this consent
Old Northern Road Quarry	The development approved under development consent DA 250-09-01
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary) or another quarrying company
Quarrying operations	The: <ul style="list-style-type: none"> • extraction, processing, stockpiling and transportation of extractive materials carried out on the site and the associated removal of vegetation, topsoil and overburden; and • processing, stockpiling, blending and transportation of VENM and ENM carried out on the site
Quarry products	Includes all saleable quarry products, but excludes tailings, other wastes and rehabilitation material for use on the site or at the Old Northern Road Quarry
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
Sandstone cutting	Method of sandstone extraction from the Sandstone Extraction Areas A and B (Figure 1, Appendix 1) using an excavator fitted with a hydraulic saw attachment or the processing of the extracted sandstone block using stone cutting saws
Sandstone cutting shed	A building situated in the Tertiary Sands Extraction Area Stage 2 (Figure 1, Appendix 1) within an infrastructure area envelope described in MR (Mod 5) for processing of extracted sandstone block using stone cutting saws
Secretary	Planning Secretary under the EP&A Act, or nominee
Shoulder	The period from 6.00 am to 7.00 am on Monday to Saturday
Site	The land referred to in Schedule 1
SCBGS	Sydney Central Basin Groundwater Source
TfNSW	Transport for NSW
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
VENM	Virgin Excavated Natural Material

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS, EA (Mod 1), EA (Mod 2), MR (Mod 4), MR (Mod 3) and MR (Mod 5); and
 - (b) in accordance with the conditions of this consent and the Development Layout Plans.

Note: The Development Layout Plans are shown in Appendix 1.

3. If there is any inconsistency between the documents in condition 2(a), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant must comply with any written requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);
 - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

5. The Applicant may carry out quarrying operations on the site until 14 February 2046.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional requirements and undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all respects other than the right to conduct quarrying operations until the rehabilitation of the site and those requirements and undertakings have been carried out to the standard required by the applicable conditions.
6. **The Applicant must not:**
 - (a) extract more than 495,000 tonnes of quarry products per year from the quarry; and
 - (b) process (through on-site crushing and screening activities) more than 320,000 tonnes of quarry products per year.
7. The Applicant must not transport more than 190,000 tonnes of quarry products per year to the Old Northern Road Quarry for processing.
8. Truck movements at the site (i.e. either arrival or dispatch), including truck movements between the site and the Old Northern Road Quarry, must not exceed:
 - (a) 180 per day; and
 - (b) 20 between 6.00 am and 7.00 am.

Note: Operating hours for arrival and dispatch of trucks are also controlled under condition 1 of Schedule 3.
9. The Applicant must not receive more than 250,000 tonnes of VENM and ENM (in total) at the site in any calendar year. No other materials classified as waste under the EPA's *Waste Classification Guidelines 2009* (or its latest version) may be received or processed on the site.
10. The Applicant must:
 - (a) maintain accurate records of all VENM and ENM received at the site (including the date, time and quantity received); and
 - (b) include a copy of this data in the Annual Review.

STRUCTURAL ADEQUACY

11. The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

 - Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any proposed building works;
 - The Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 sets out the requirements for the certification of the development.

DEMOLITION

12. The Applicant must ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

13. Unless the Applicant and the applicable authority agree otherwise the Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition 15 below.

OPERATION OF PLANT AND EQUIPMENT

14. The Applicant must ensure that all the plant and equipment used at the site, or to monitor the performance of the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

SECTION 94 CONTRIBUTIONS

15. The Applicant must pay Council a monthly financial contribution toward the maintenance of local roads used for haulage of quarry products. The contribution must be determined in accordance with *The Hills Shire Council Contributions Plan No. 6 Extractive Industries*, or any subsequent relevant contributions plan adopted by Council.

PRODUCTION DATA

16. The Applicant must:
- (a) provide calendar year annual quarry production data to MEG using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review.

COMPLIANCE

17. The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.

LIMITS OF EXTRACTION

Buffer Zones

18. Within 6 months of the determination of [Modification 2](#), the Applicant must:
- (a) engage a registered surveyor to mark out the boundaries of the:
 - approved limits of extraction;
 - buffer zones shown in Appendix 2; and
 - MTSGS buffer zone;
 - (b) submit a survey plan of these boundaries to the Secretary; and
 - (c) ensure that the boundaries of each operational extraction area are clearly marked on site in a permanent manner that allows operating staff and inspecting officers to clearly identify these limits, to the satisfaction of the Secretary.

The Applicant must not undertake any quarrying operations within the buffer zones shown in Appendix 2.

Note: This condition does not prevent the construction or maintenance of acoustic bunds shown in Appendix 3.

Maximum Extraction Depth

19. The Applicant must not undertake any extraction within 2 metres of the highest recorded wet weather groundwater level of both the MTSGS and the SCBGS.
20. Within 6 months of the determination of [Modification 1](#), the Applicant must:
- (a) establish the highest recorded wet weather groundwater levels for the site based on all available local and site-specific groundwater monitoring data; and

- (b) engage a suitably qualified and experienced person to prepare a Maximum Extraction Depth Map (contour map or similar) for the development to ensure compliance with condition 19 above and submit this map to the Secretary for approval.

Within 14 days of the approval of the Maximum Extraction Depth Map, the Applicant must submit a copy of the approved map and the supporting groundwater monitoring data to [DPE Water](#).

- 21. The Applicant must comply with the extraction depths specified in the approved Maximum Extraction Depth Map, to the satisfaction of the Secretary.
- 22. The Applicant must review and update the Maximum Extraction Depth Map:
 - (a) annually, for the duration of the baseline groundwater monitoring program (see condition 17 of Schedule 3); and
 - (b) within 3 months of the completion of each Independent Environmental Audit (see condition 13 of Schedule 5),
to the satisfaction of the Secretary.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

NOISE

Hours of Operation

- The Applicant must comply with the operating hours set out in Table 1.

Table 1: Operating hours

Activity	Permissible Hours
Quarrying operations (excluding truck arrival, loading and dispatch)	7.00 am to 6.00 pm Monday to Saturday
	At no time on Sundays or public holidays
Truck arrival, loading and dispatch	6.00 am to 6.00 pm 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	8.00 to 5.00 pm 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

- The following activities may be carried out outside the hours specified in condition 1 above:
 - delivery or dispatch of materials as requested by the NSW Police Force or other public authorities; and
 - emergency work to avoid the loss of lives, property or to prevent environmental harm.

In such circumstances, the Applicant must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

- The Applicant must ensure that operational noise generated by the development (excluding acoustic bund construction) does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Operational noise criteria dB(A)

Receiver	Day	Shoulder (6.00 am to 7.00 am)	
	<i>L_{Aeq} (15 minute)</i>	<i>L_{Aeq} (15 minute)</i>	<i>L_A(max)</i>
R05, R06	41	35	52
R03	40	37	
R13, R14	40	36	
All other receivers	40	35	

Noise generated by the development **must** be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry*.

However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Notes:

- Should an agreement with a landowner be terminated for any reason, the Applicant must comply with the noise criteria in Table 2.
- Receiver locations are shown in Appendix 5

- The Applicant must manage noise from construction activities (including acoustic bund construction) in accordance with the noise management levels defined in Table 2 of the *Interim Construction Noise Guideline*, except where the Applicant has an agreement with the relevant landowner to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of the agreement.

Acoustic Bund Construction

5. The Applicant must:
 - (a) design, construct and maintain the acoustic bunds shown in Appendix 3 to the satisfaction of the Secretary; and
 - (b) limit all bund construction activities to a period of not more than four weeks in any calendar year, unless otherwise approved by the Secretary.
6. Prior to the construction of any acoustic bunds, the Applicant must prepare an Acoustic Bund Construction Noise Management Plan, which details the procedures that would be undertaken to:
 - (a) keep surrounding residents informed of the proposed timing and duration of bund construction;
 - (b) minimise and mitigate the noise impacts generated by the works; and
 - (c) receive, handle and respond to complaints relating to the works.

The Applicant must implement the Acoustic Bund Construction Noise Management Plan as approved by the Secretary.

Sandstone Cutting Shed Construction

- 6A. The Applicant must design and construct the sandstone cutting shed with adequate noise attenuation measures to ensure that it will achieve compliance with the noise criteria in this consent at all times.

Operating Conditions

7. The Applicant must:
 - (a) take all reasonable steps to minimise the construction, operational, low frequency and road transportation noise of the development;
 - (b) take all reasonable steps to minimise the noise impacts of the development during **noise-enhancing meteorological conditions**;
 - (c) operate a noise management system to guide the day to day planning of quarrying operations and the implementation of noise mitigation measures to ensure compliance with the relevant conditions of this consent;
 - (d) carry out regular **attended** noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and
 - (e) modify or stop operations on the site to comply with the relevant conditions of this consent.

Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.

Noise Management Plan

8. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval within 6 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
 - (c) describe the measures to be implemented to ensure:
 - compliance with the noise criteria and operating conditions of this consent;
 - best practice management is being employed; and
 - the noise impacts of the development are minimised during **noise-enhancing meteorological conditions**;
 - (d) describe the proposed noise management system;
 - (e) include a noise monitoring program that:
 - is capable of evaluating the performance of the development;
 - includes a protocol for determining any exceedances of the relevant conditions of this consent; and
 - effectively supports the noise management system;
 - (f) **include a program to either:**
 - **attenuate the dump trucks prior to commencing quarrying operations in Stages 4 or 5; or**
 - **identify alternative mitigation measures and demonstrate that these measures will be implemented to achieve compliance with the noise criteria in this consent at all times; and**
 - (g) describe the noise mitigation measures that will be implemented in the operation of plant and equipment to minimise noise emissions from sandstone cutting to ensure compliance with the noise criteria in this consent at all times.

The Applicant must implement the Noise Management Plan as approved by the Secretary.

AIR QUALITY

Air Quality Impact Assessment Criteria

9. The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.

Table 3: Air quality criteria

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³
^c Deposited dust	Annual	b 2 g/m ² /month a,d 4 g/m ² /month

Notes to Table 3:

a Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).

b Incremental impact (ie increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development).

c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

Operating Conditions

10. The Applicant must:
- implement best practice management to minimise the dust emissions of the development;
 - operate a continuous monitoring system to minimise air quality impacts at sensitive sites such as the Maroota Public School, including:
 - a monitoring device that is connected to an alarm system at the site;
 - trigger level(s) as agreed with the EPA; and
 - procedures to cease or modify operations in the event that the trigger level(s) are reached, to ensure compliance with the criteria in condition 9 above,
 - regularly assess meteorological and air quality monitoring data on an ongoing basis and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;
 - minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 3);
 - monitor and report on compliance with the relevant air quality conditions in this consent; and
 - minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.

Air Quality Management Plan

11. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the EPA;
 - be submitted to the Secretary for approval within 6 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
 - describe the measures to be implemented to ensure:
 - compliance with the air quality criteria and operating conditions of this consent;
 - best practice management is being employed; and
 - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
 - describe the proposed air quality management system; and
 - include an air quality monitoring program that:
 - is capable of evaluating the performance of the development and informing day to day operational decisions;
 - includes a protocol for determining any exceedances of the relevant conditions of this consent; and
 - effectively supports the air quality management system;

- (f) include a program to implement the air quality emissions controls detailed in MR (Mod 3), including the sealing of internal haul roads. Relevant controls must be implemented before:
 - any increase in extractive operations above 250,000 tonnes of product per year; and
 - the commencement of quarrying operations in Stages 4 or 5;
- (g) describe the mitigation measures that will be implemented in the sandstone cutting shed during the processing of extracted sandstone and detail how these measures will achieve compliance with the air quality criteria in this consent at all times; and
- (h) describe the mitigation measures that will be implemented in the operation of plant and equipment to minimise dust emissions from sandstone cutting to ensure compliance with the air quality criteria in this consent at all times.

The Applicant must implement the Air Quality Management Plan as approved by the Secretary.

Meteorological Monitoring

12. For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of Maroota Public School that:
- (a) complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007); and
 - (b) is capable of measuring meteorological conditions in accordance with the *NSW Noise Policy for Industry* (EPA, 2017),
- unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

Greenhouse Gas Emissions

13. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary approvals and/or water licences for the development.

Water Supply

14. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary.

Water Discharges

15. The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.

Groundwater Management

16. Prior to the commencement of quarrying operations within the Mod 1 extraction area, the Applicant must:
- (a) install additional monitoring bores in accordance with EA (Mod 1);
 - (b) install one additional monitoring bore in the south-western corner of the Mod 1 extraction area;
 - (c) install loggers in each on-site bore to enable continuous groundwater level monitoring;
 - (d) install water level loggers in all existing on-site quarry dams and in new quarry dams when constructed; and
 - (e) carry out an aquifer pumping test within the SCBGS, to the satisfaction of DPE Water.
17. Prior to commencing quarrying operations within the MTSGS buffer zone, the Applicant must complete a baseline groundwater monitoring program, in consultation with DPE Water and to the satisfaction of the Secretary. The program must include monthly monitoring of groundwater levels and quality within the MTSGS buffer zone for a period of not less than 2 years.

The Applicant must not commence quarrying operations within the MTSGS buffer zone without the prior approval of the Secretary.

18. The Applicant must ensure that groundwater in the regional groundwater sources managed under the *Water Sharing Plan for the Greater Metropolitan Groundwater Sources 2011* is not intercepted or contaminated by its operations. In the event of this groundwater being intercepted or contaminated, operations are to cease within the vicinity of the affected area and the Applicant must consult with the Secretary and DPE Water to determine the basis upon which extraction may recommence.

Note: Perched groundwater lenses that are above the regional groundwater source may be intercepted, however Water Access Licences must be held to account for all groundwater taken.

Soil and Water Management

19. The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and [DPE Water](#);
 - (c) be submitted to the Secretary for approval prior to the commencement of quarrying operations within the Mod 1 extraction area, unless otherwise agreed by the Secretary; and
 - (d) include a:
 - (i) Site Water Balance that includes:
 - details of:
 - sources and security of water supply;
 - water use and management on site;
 - any off-site water transfers; and
 - reporting procedures; and
 - measures to be implemented to minimise clean water use on site;
 - (ii) Surface Water Management Plan, that includes:
 - a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development;
 - a detailed description of the surface water management system on site including the:
 - clean water diversion system;
 - erosion and sediment controls;
 - dirty water management system; and
 - water storages, including the area, depth and capacity of any in-pit sumps; and
 - a program to monitor and report on:
 - any surface water discharges;
 - the effectiveness of the water management system;
 - the quality of water discharged from the site to the environment; and
 - surface water flows and quality in local watercourses; and
 - (iii) Groundwater Management Plan that:
 - includes detailed management measures to ensure that quarrying operations do not intercept the highest recorded wet weather groundwater level of the MTSGS and/or the SCBGS;
 - includes a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the quarry from the quarry face or floor; and
 - includes a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:
 - monitoring of groundwater inflows into the quarry from the quarry face or floor, or into any in-pit sumps;
 - identification of a methodology for determining threshold water level criteria;
 - contingency measures in the event of a breach of thresholds; and
 - a program to regularly report on monitoring.

The Applicant must implement the Soil and Water Management Plan as approved by the Secretary.

TRANSPORT

Road Works

20. Prior to carrying out any development, the Applicant must upgrade Haerses Road to meet the requirements for 'internal haul roads', under Baulkham Hills *Development Control Plan No. 16 – Extractive Industries*, to the satisfaction of Council.
21. The Applicant must:
- (a) maintain safe access to the site for the public and emergency services for the duration of the development; and
 - (b) reinstate the extracted length of Haerses Road to the satisfaction of Council.

Notes:

- The Applicant must ensure that the final alignment and design of Haerses Road is approved by Council prior to the commencement of the development.
- The Applicant must bear the full costs associated with the design, survey and construction of the road works, including the relocation of utilities, if required.
- All works are to be in accordance with Council's Design Guidelines and Work Specifications for Subdivisions and Developments.

- Following the reconstruction of Haerses Road, the Applicant must rehabilitate any temporary access roads that were established on site.
22. Prior to carrying out any development, the Applicant must:
- (a) provide for appropriate sight distances at the intersection of Haerses Road and Wisemans Ferry Road, by clearing and/or lopping vegetation along the eastern approach of Wisemans Ferry Road; and
 - (b) provide warning signage ("Truck Turning") on the eastern and western approaches of Wisemans Ferry Road, to the satisfaction of TfNSW.
23. Within 12 months of the commencement of the development, the Applicant must construct a Type 'AUR' treatment at the intersection of Haerses Road and Wisemans Ferry Road to the satisfaction of TfNSW. Until the intersection works have been completed to the satisfaction of TfNSW, the Applicant must limit the number of trucks entering the site to 15 truck movements per day.
- Notes:*
- Prior to the Construction Certificate being released the Applicant must:
 - enter into a Memorandum of Understanding with the TfNSW that the Type 'AUR' intersection treatment shall be fully constructed and handed over to the TfNSW within 12 months of the commencement of the development; and
 - issue a bank guarantee in favour of the TfNSW for the total cost of the intersection works (the cost to be determined following the approval of detailed design plans by the TfNSW).
 - The Applicant shall ensure that the intersection works comply with the TfNSW Road Design Guide.
 - The Applicant shall bear the full costs associated with the design, survey and construction of the works, including the relocation of utilities, if required.
24. Prior to transporting any quarry products derived from quarrying operations within the Mod 1 extraction area, the Applicant must construct a channelised right-turn 'CHR' treatment at the intersection of Haerses Road and Wisemans Ferry Road to the satisfaction of TfNSW. The Applicant must:
- (a) submit detailed design plans to TfNSW for approval prior to the issue of a construction certificate by Council or the commencement of road works; and
 - (b) design and construct the intersection treatment in accordance with the Austroads Guide to Road Design.
- 24A. The Applicant must monitor trucks queuing within the right turn bay at the quarry intersection on Wisemans Ferry Road and, in the instance that there are trucks regularly queuing at the intersection, extend the length of the right turn bay to the satisfaction of TfNSW.

Construction Traffic Management

25. Prior to commencement of the works referred to in condition 24 above, the Applicant must prepare and implement a Traffic Control Plan for the development to the satisfaction of the TfNSW.

Monitoring of Product Transport

26. The Applicant must keep accurate records of all laden truck movements to and from the site (including time of arrival and dispatch) and publish a summary of these records on its website every 6 months.

Operating Conditions

27. The Applicant must:
- (a) ensure that all laden trucks have their loads covered when arriving at or leaving the site;
 - (b) ensure that all laden trucks are cleaned of material that may fall from vehicles, before leaving the site; and
 - (c) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the development so they can be easily identified by road users.

Traffic Management Plan

28. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the TfNSW and Council;
 - (b) be submitted to the Secretary for approval within 6 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
 - (c) describe the processes in place to control the arrival and dispatch of trucks;
 - (d) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers travelling to and from the site, particularly in the vicinity of Maroota Public School;
 - (e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;

- (f) include specific measures to minimise the impact of heavy vehicles, including restrictions on routes and times (particularly in relation to peak hours, holiday periods and times immediately before and after school hours, i.e. 8.30 am – 9.00 am and 3.00 pm – 3.30 pm);
- (g) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry; and
- (h) include a protocol to monitor truck queuing behaviour in the right turn bay at the quarry intersection on Wisemans Ferry Road, and trigger points for implementing the intersection upgrade required under condition 24A.

The Applicant must implement the approved Traffic Management Plan as approved by the Secretary.

ABORIGINAL HERITAGE

29. If any suspected object or place of Aboriginal heritage significance is identified on site, the Applicant must ensure that:
- (a) all work in the immediate vicinity of the suspected Aboriginal object or place ceases immediately;
 - (b) a 10 m buffer area around the suspected Aboriginal object or place is cordoned off; and
 - (c) the [Heritage NSW](#) is contacted immediately.

Work in the immediate vicinity of the suspected Aboriginal object or place may only recommence in accordance with the provisions of Part 6 of the *National Parks and Wildlife Act 1974*.

BIODIVERSITY AND REHABILITATION

Biodiversity Offset Strategy

30. The Applicant must retire the biodiversity credits specified in Table 4 to the satisfaction of the Secretary and [BCD](#). The Applicant must retire the credits prior to commencing any vegetation clearing within the Mod 1 extraction area, except the minimum clearing required to comply with condition 16 of this Schedule.

Table 4: Biodiversity credits to be retired prior to the commencement of vegetation clearing

Credit type	Number of Credits
Ecosystem Credits	
HN560 Needlebush – Banksia Wet Heath on Sandstone Plateaux of the Sydney Basin Bioregion	3
HN566 Red Bloodwood – Scribbly Gum Heathy Woodland on Sandstone Plateaux of the Sydney Basin Bioregion	377
HN582 Scribbly Gum – Hairpin Banksia – Dwarf Apple Heathy Woodland on Hinterland Sandstone Plateaux of the Central Coast, Sydney Basin Bioregion	181
HN586 Smooth-barked Apple – Red Bloodwood – Sydney Peppermint Heathy Open Forest on Slopes of Dry Sandstone Gullies of Western and Southern Sydney, Sydney Basin Bioregion	44
Species Credits	
<i>Darwinia biflora</i>	360
Dural Land Snail (<i>Pommerhelix duralensis</i>)	98
Eastern Pygmy Possum (<i>Cercartetus nanus</i>)	148
<i>Grevillea parviflora</i> subsp. <i>supplicans</i>	338
<i>Tetratheca glandulosa</i>	288

31. The Applicant must retire the biodiversity credits specified in Table 5 to the satisfaction of the Secretary and [BCD](#). The Applicant must retire the credits prior to commencing any vegetation clearing in extraction cells [2A](#), [2B](#) or [3B](#) (as shown in Figure 2, Appendix 1), except the minimum clearing required to comply with condition 16 of this Schedule.

Prior to commencing vegetation clearing in any of extraction cells 2A, 2B and 3B, the Applicant must demonstrate that the proportionate credits required in respect of that cell have been retired, to the satisfaction of the Secretary.

Table 5: Biodiversity credits to be retired prior to vegetation clearing in extraction cells 2A, 2B or 3B

Credit type	Number of Credits
<i>Species Credits</i>	
Dural Land Snail (<i>Pommerhelix duralensis</i>)	132

32. The Applicant must retire the biodiversity credits specified in Table 6 to the satisfaction of the Secretary and BCD. The Applicant must retire the credits prior to commencing any vegetation clearing in extraction cells 2A, 2B, 3A, 3B, 4A, 4B and 5B (as shown in Figure 2, Appendix 1), except the minimum clearing required to comply with condition 16 of this Schedule.

Prior to commencing vegetation clearing in any of extraction cells 2A, 2B, 3A, 3B, 4A, 4B and 5B, the Applicant must demonstrate that the proportionate credits required in respect of that cell have been retired, to the satisfaction of the Secretary.

Table 6: Biodiversity credits to be retired progressively

Credit type	Number of Credits
<i>Ecosystem Credits</i>	
HN582 Scribbly Gum – Hairpin Banksia – Dwarf Apple Heathy Woodland on Hinterland Sandstone Plateaux of the Central Coast, Sydney Basin Bioregion	357
<i>Species Credits</i>	
Eastern Pygmy Possum (<i>Cercartetus nanus</i>)	75

33. In retiring the ecosystem and species credits set out in conditions 30 to 32 above, the Applicant may apply the Biodiversity Offset Strategy (see Appendix 4) or, with the agreement of the Secretary, may use other land, the NSW Biodiversity Conservation Fund or alternate mechanisms permitted under the Biodiversity Offsets Scheme of the BC Act.

The credits identified in Tables 4, 5 and 6 were calculated in accordance with *Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects* (OEH, 2014) and may need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, if the credits are to be retired in accordance with the Biodiversity Offsets Scheme of the BC Act.

Rehabilitation Objectives

34. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the final landform shown in Appendix 6 and must comply with the objectives in Table 6.

Table 6: Rehabilitation Objectives

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> Safe Hydraulically and geotechnically stable Non-polluting Fit for the intended final land use(s) Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land
Surface infrastructure	<ul style="list-style-type: none"> Decommissioned and removed, unless otherwise agreed by the Secretary
Quarry benches and pit floor	<ul style="list-style-type: none"> Landscaped and vegetated using native tree and understorey species
Final void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void

Progressive Rehabilitation

35. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance.

Biodiversity and Rehabilitation Management Plan

36. The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by a suitably qualified expert;
 - (b) be prepared in consultation with BCD and Council;
 - (c) be submitted to the Secretary for approval within 6 months of the approval of Modification 1, unless otherwise agreed by the Secretary;
 - (d) provide details of the conceptual final landform and associated final land use(s) for the site;
 - (e) describe how the implementation of the Biodiversity Offset Strategy will be integrated with the overall rehabilitation of the site;
 - (f) describe the short, medium and long term measures to be implemented to:
 - manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - (g) include a detailed description of the measures described in paragraph (f) to be implemented over the next 3 years (to be updated for each 3 year period following initial approval of the plan) including the procedures to be implemented for:
 - maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;
 - restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;
 - protecting vegetation and fauna habitat outside the approved disturbance area on-site, paying particular attention to any occurrences of *Hibbertia superans* adjacent to the approved extraction areas;
 - minimising the impacts on native fauna, including undertaking pre-clearance surveys and avoiding clearing activities during sensitive hibernation and breeding periods;
 - establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;
 - ensuring minimal environmental consequences for threatened species, populations and habitats;
 - collecting and propagating seed;
 - controlling weeds and feral pests;
 - controlling erosion; and
 - managing bushfire risk;
 - (h) include a program to monitor the effects of the development on flora and fauna;
 - (i) include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and the rehabilitation of the site (including progressive rehabilitation), including triggers for any necessary remedial action;
 - (j) include a program to monitor and report on the effectiveness of the measures described in paragraphs (f) and (g), and progress against the performance and completion criteria;
 - (k) identify the potential risks to the successful implementation of the plan, and include a description of the contingency measures to be implemented to mitigate against or address these risks, including specific measures to be implemented in the event that the performance and completion criteria are not satisfied; and
 - (l) include details of who is responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the Biodiversity and Rehabilitation Management Plan as approved by the Secretary.

Biodiversity and Rehabilitation Bond

37. Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and

completion criteria set out in the Biodiversity and Rehabilitation Management Plan and the relevant conditions of this consent. The sum of the bond must be determined by:

- (a) calculating the full cost of implementing the Biodiversity Offset Strategy;
- (b) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and
- (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

Notes:

- *Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by BCD as part of a BioBanking Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the Biodiversity and Rehabilitation Bond.*
- *If capital and other expenditure required by the Biodiversity and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*
- *If the Biodiversity Offset Strategy and/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Secretary, then the Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.*
- *Any redundant rehabilitation or biodiversity bonds currently held by the Department in relation to the development may be released following acceptance of the Biodiversity and Rehabilitation bond required under this condition.*

38. The Biodiversity and Rehabilitation Bond must be reviewed and (if required), an updated bond must be lodged with the Department within 3 months following:
- (a) an update or revision to the Biodiversity and Rehabilitation Management Plan;
 - (b) the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the Biodiversity Offset Strategy and/or rehabilitation of the site have been made; or
 - (c) in response to a request by the Secretary.

VISUAL

39. The Applicant must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.

WASTE

40. The Applicant must:
- (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;
 - (b) minimise the waste generated by the development;
 - (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - (d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.
41. Except as expressly permitted in an EPL and/or the conditions of this consent, the Applicant must not receive waste on the site for storage, treatment, processing, reprocessing or disposal.

LIQUID STORAGE

42. The Applicant must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.

DANGEROUS GOODS

43. The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

BUSHFIRE

44. The Applicant must:
- (a) ensure that the development is suitably equipped to respond to any fires on site; and
 - (b) assist the Rural Fire Service and emergency services to the extent practicable if there is a fire in the vicinity of the site.
45. Within 6 months of the determination of Modification 1, the Applicant must prepare a Bushfire Management Plan for the site in consultation with Council and to the satisfaction of the Rural Fire Service.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable, and no longer than 7 days, after obtaining monitoring results showing:
 - (a) an exceedance of any criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the development is again complying with the relevant criteria; and
 - (b) an exceedance of any air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).

INDEPENDENT REVIEW

2. If a landowner considers the development to be exceeding the relevant criteria in Schedule 3, they may ask the Secretary in writing for an independent review of the impacts of the development on their land.

If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the Secretary is satisfied that an independent review is warranted, within 3 months, or as otherwise agreed by the Secretary and the landowner, of the Secretary's decision, the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and
 - if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria;
- (b) give the Secretary and landowner a copy of the independent review; and
- (c) comply with any written requests made by the Secretary to implement any findings of the review.

SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the approval of Modification 1, unless otherwise agreed by the Secretary;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures to be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, record, handle and respond to complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved by the Secretary.

Evidence of Consultation

2. Where consultation with any State or local agency is required by the conditions of this consent, the Applicant must:
 - (a) consult with the relevant agency prior to submitting the required document to the Secretary for approval;
 - (b) submit evidence of this consultation as part of the relevant document;
 - (c) describe how matters raised by the agency have been addressed and any matters not resolved; and
 - (d) include details of any outstanding issues raised by the agency and an explanation of disagreement between any agency and the Applicant.

Management Plan Requirements

3. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
 - (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Application of Existing Strategies, Plans and Programs

4. The Applicant must continue to apply existing management plans, strategies or monitoring programs approved prior to the approval of Modification 1, until the approval of a similar plan, strategy or program following the approval of Modification 1.

Revision of Strategies, Plans & Programs

5. Within 3 months of the submission of an:
 - (a) incident report under condition 10 below;
 - (b) Annual Review under condition 12 below;
 - (c) Independent Environmental Audit report under condition 14 below; and
 - (d) any modifications to this consent,the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. The Applicant must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.

Updating and Staging of Strategies, Plans or Programs

6. To ensure that strategies, plans or programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

The Secretary may approve a revised strategy, plan or program required under this consent, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Applicant may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.

While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times.

If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.

Adaptive Management

7. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement reasonable remediation measures as directed by the Planning Secretary.

COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. The CCC must be established by 30 June 2018 and operated in general accordance with the Department's *Community Consultative Committee Guidelines, November 2016* (or later version).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.*
- *The CCC established and operated prior to the approval of Modification 1 must continue to be operated in accordance with the procedures required by the consent prior to the approval of Modification 1 until such time as the CCC required by this condition is established.*
- *The Applicant may, with the approval of the Secretary, combine the function of this CCC with the functions of other CCCs in the area.*

REPORTING

Incident Notification

9. The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

Non-Compliance Notification

10. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Regular Reporting

11. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

Annual Review

12. By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant must submit a review to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:
 - (a) describe the development (including any progressive rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - requirements of any plan or program required under this consent;
 - monitoring results of previous years; and
 - relevant predictions in the documents listed in condition 2(a) of Schedule 2;
 - (c) evaluate and report on:
 - the effectiveness of the air quality and noise management systems; and
 - compliance with the performance measures, criteria and operating conditions in this consent.
 - (d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;
 - (e) identify any trends in the monitoring data over the life of the development;
 - (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 8 of Schedule 5) and any interested person upon request.

INDEPENDENT ENVIRONMENTAL AUDIT

13. By the end of November 2019, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies and the CCC;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);
 - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;
 - (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
 - (f) be conducted and reported to the satisfaction of the Secretary.
14. Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Applicant must implement these recommendations, to the satisfaction of the Secretary.

ACCESS TO INFORMATION

15. Within 3 months of the determination of Modification 1, until the completion of all works, including rehabilitation and remediation the Applicant must:
- (a) make the following information publicly available on its website:
 - the documents listed in condition 2(a) of Schedule 2;
 - current statutory approvals for the development;
 - all approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, updated monthly;
 - the annual reviews of the development;
 - any independent environmental audit as described in condition 13 above, and the Applicant's response to the recommendations in any audit; and
 - any other matter required by the Secretary; and
 - (b) keep this information up-to-date, to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT LAYOUT PLANS

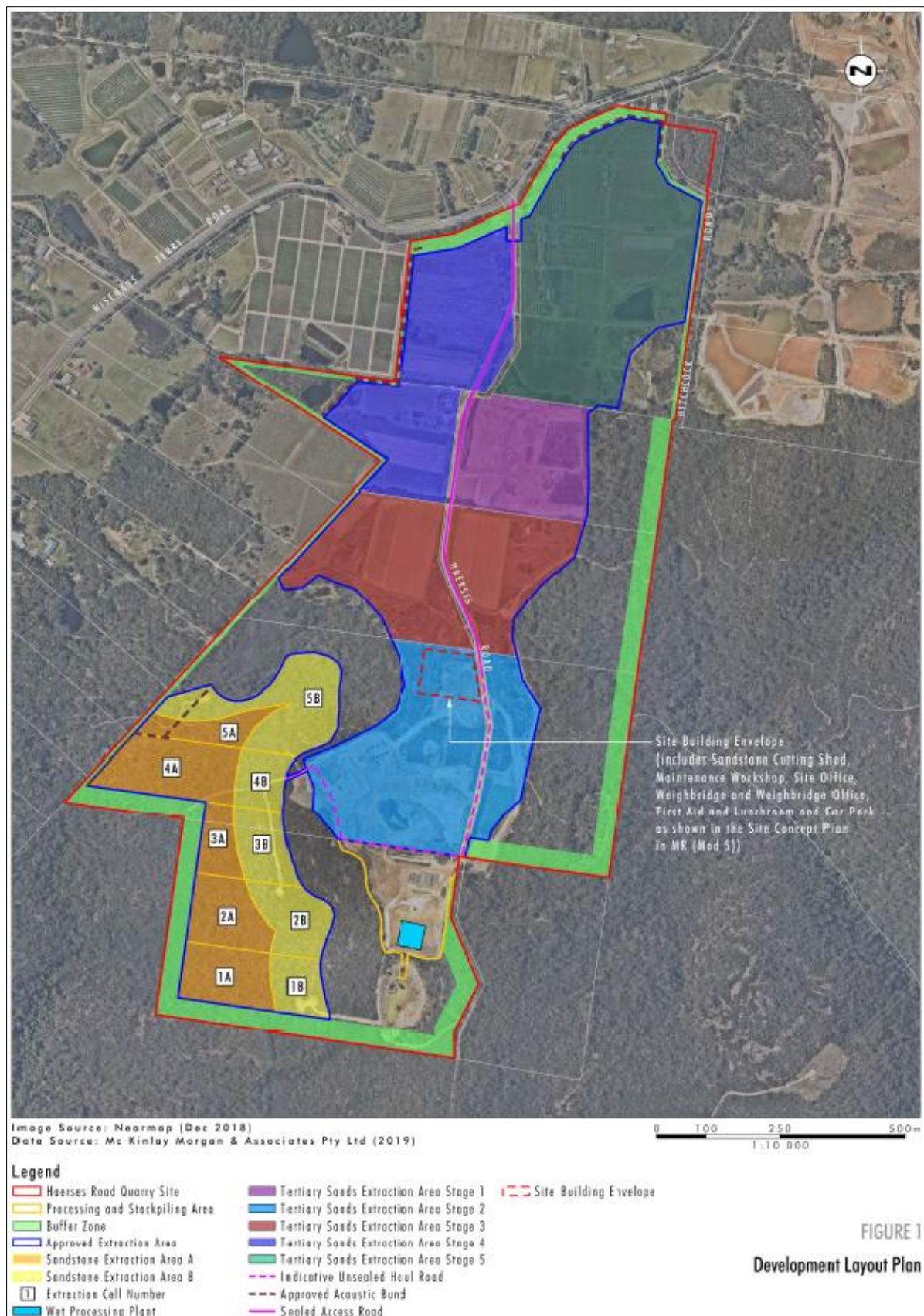


Figure 1 – Tertiary Sands and Friable Sandstone Extraction Areas

APPENDIX 2 BUFFER ZONES

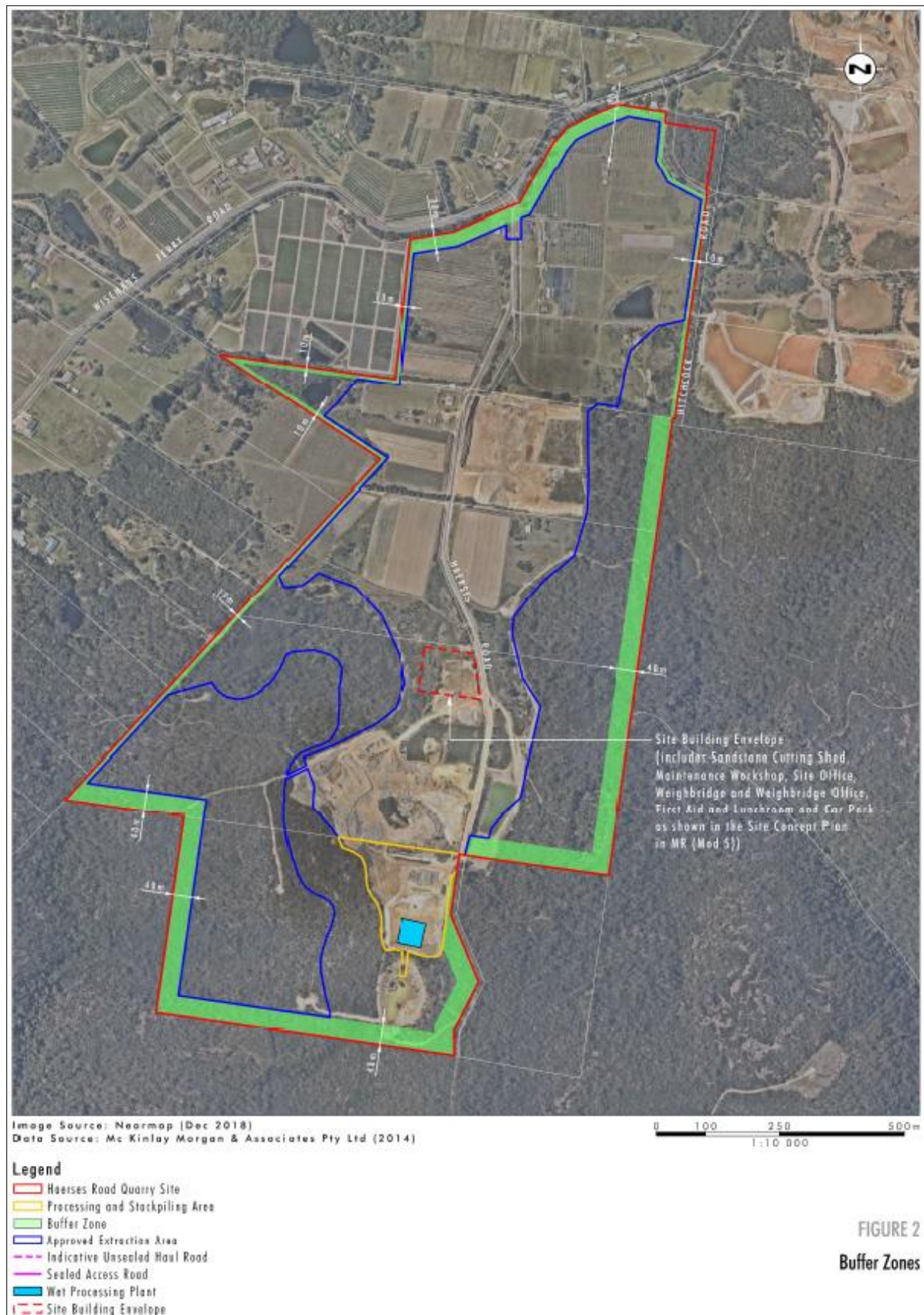
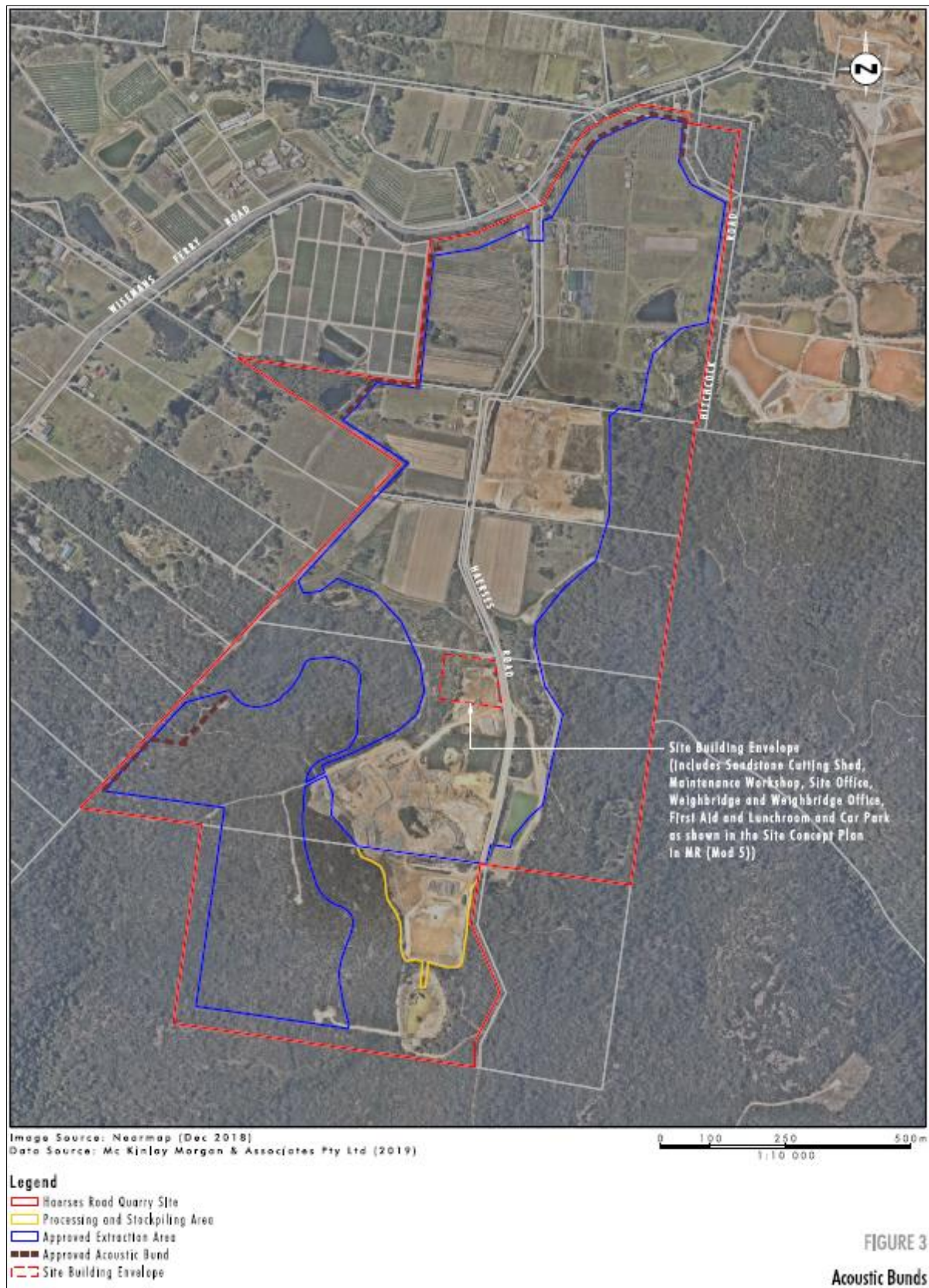


FIGURE 2
Buffer Zones

APPENDIX 3 LOCATION OF ACOUSTIC BUNDS



APPENDIX 4 BIODIVERSITY OFFSET STRATEGY



Figure 1– Haerses Road Offset Area

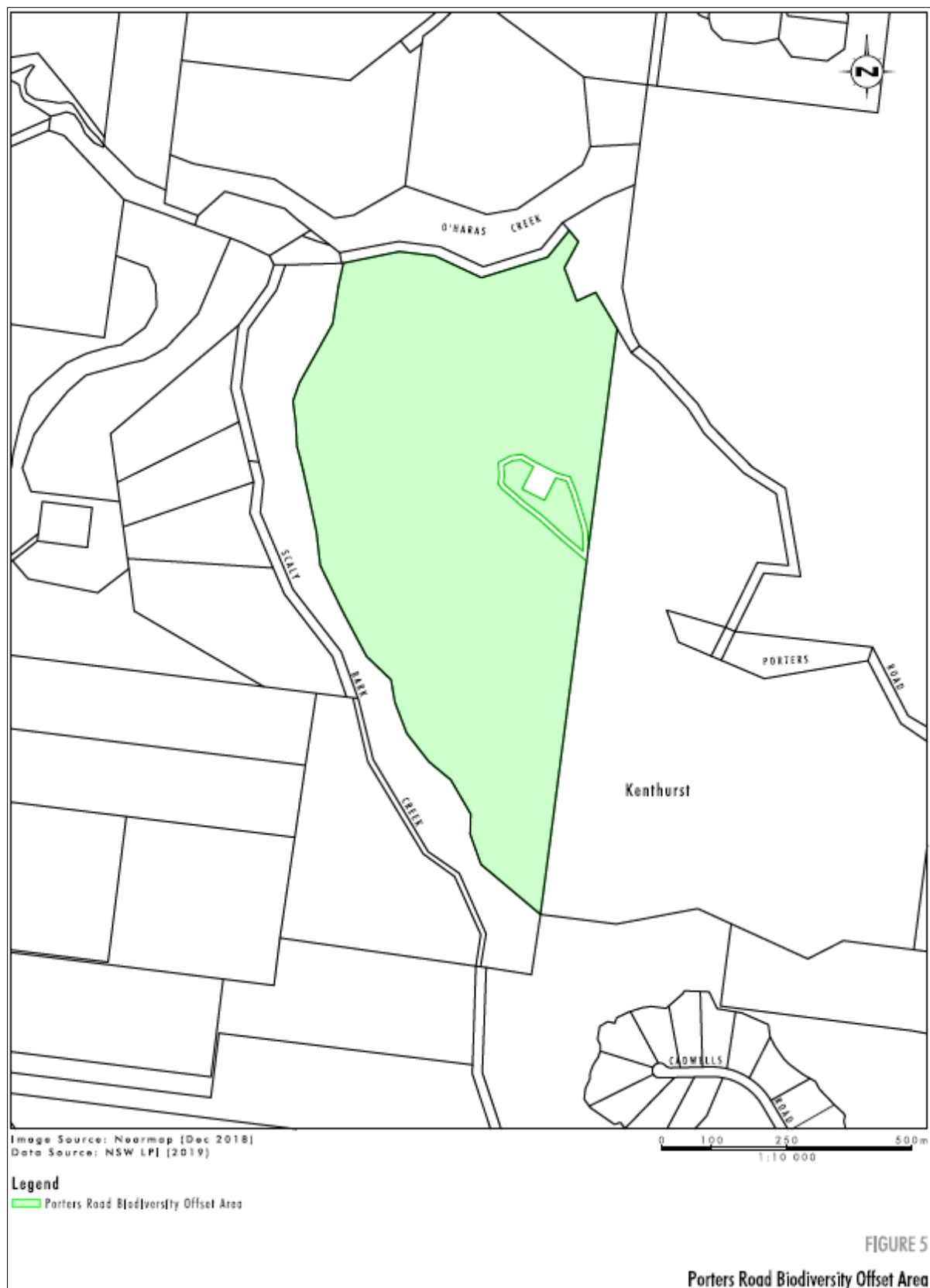


Figure 2– Porters Road Offset Area

APPENDIX 5 RECEIVER LOCATIONS

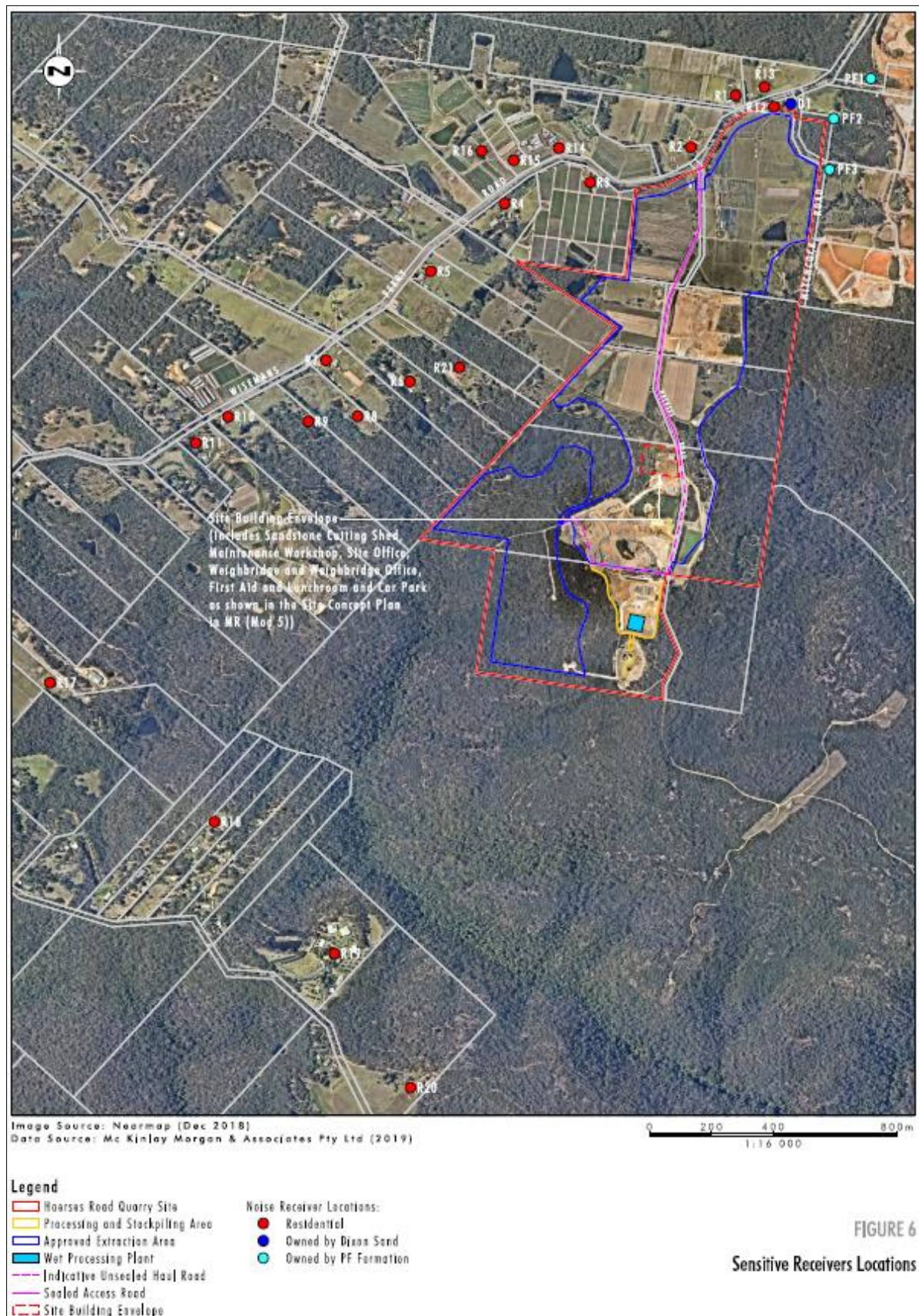


Figure 1 – Residential Receiver Locations

APPENDIX 6 FINAL LANDFORM

