



ABN: 45 050 224 250

Annual Review 2019-2020

for

Possum Brush Quarry



Prepared in conjunction with:



R.W. CORKERY & CO. PTY. LIMITED

October 2020

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ABN: 45 050 224 250

Annual Review 2019-2020

for

Possum Brush Quarry

Prepared by:

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Table 1
Title Block

Name of operation	Possum Brush Quarry
Name of operator	Pacific Blue Metal Pty Ltd
Development consent / project approval #	DA283/97 (Mod 4)
Name of holder of development consent / project approval	Pacific Blue Metal Pty Ltd
Mining Lease #	Not Applicable
Name of holder of mining lease	Not Applicable
Water licence #	Not Applicable
Name of holder of water licence	Not Applicable
MOP/RMP start date	Not Applicable
MOP/RMP end date	Not Applicable
Annual Review start date	1 July 2019
Annual Review end date	30 June 2020
<p>I, Charlie Kennett, certify that this audit report is a true and accurate record of the compliance status of the Possum Brush Quarry for the period 1 July 2019 to 30 June 2020 and that I am authorised to make this statement of behalf of Pacific Blue Metal Pty Ltd.</p> <p><i>Note.</i></p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: Section 192G (Intention to defraud by false or misleading statement – maximum penalty 5 years imprisonment); Section 307A, 307B and 307C (false or misleading application/information/documents – maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Name of authorised reporting officer	Mr Charlie Kennett
Title of authorised reporting officer	Quarry Manager
Signature of authorised reporting officer	
Date:	6 October 2020

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LIST OF ACRONYMS

AHD	Australian Height Datum
CCC	Community Consultative Committee
DA	Development Application
DPIE	Department of Planning, Industry and Environment
EPL	Environment Protection Licence
IBIS	Irreplaceable Bush Regeneration Indigenous Services
IEA	Independent Environmental Audit
PBM	Pacific Blue Metal Pty Ltd

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1. STATEMENT OF COMPLIANCE

The Possum Brush Quarry (the Quarry) is operated by Pacific Blue Metal Pty Ltd (PBM) in accordance with Development Consents DA283/97, DA1127/2005 and DA769/2009 and Environment Protection Licence (EPL) 3393. PBM maintains all relevant documentation on site required to demonstrate compliance with each of the approvals and licences. **Figure 1.1** presents the location of the Quarry in relation to the Pacific Highway and the village of Nahiach.

The compliance assessment for DA 283/07, DA 1127/2005 (Asphalt Plant), DA 769/2009 (Recycling Plant) and EPL 3393 was undertaken by Nicholas Warren of R.W. Corkery and Co. Pty Limited during a site visit on 16 July 2020. The audit established compliance with all conditional requirements with the exception of Schedule 5 Condition 6 Community Consultative Committee (see Section 9.1 for details).

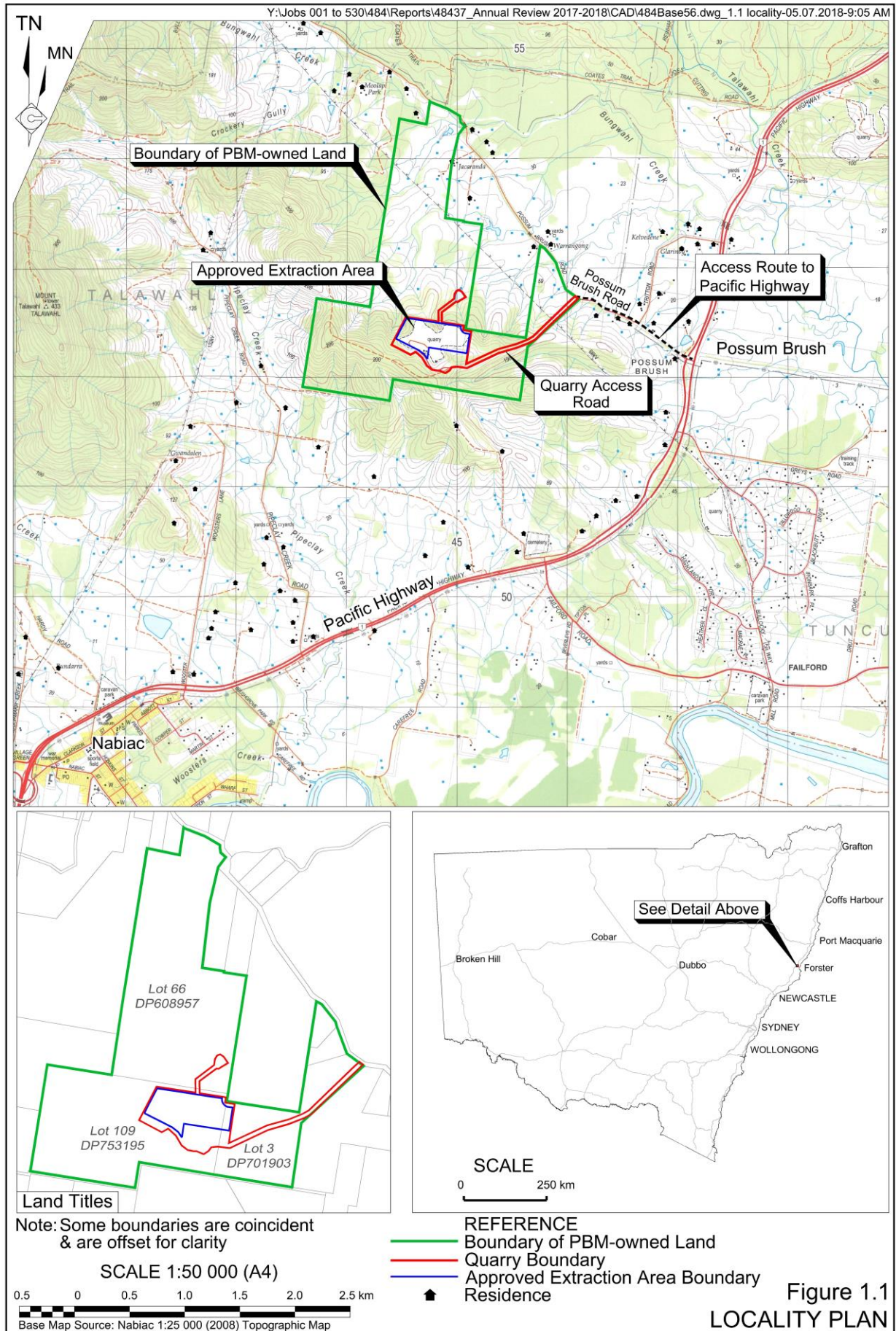
Appendix 1 presents four tables paraphrasing the conditions contained within these consent documents, together with a record of compliance and a brief comment recording the basis for assessing compliance or non-compliance.

An Independent Environmental Audit (IEA) was undertaken by James Hart of AQUAS Pty Ltd dated 24 September 2019 that assessed compliance for DA 283/07 and EPL 3393. This document covers the period from October 2016 to September 2019 and can be inspected on the PBM website. For the purpose of this annual review, the IEA is relevant to a portion of the reporting period (the period from 1 July 2019 to 25 September 2019). The outcomes of the IEA are discussed in more detail in Section 10, however all issues raised in the IEA were reviewed by PBM and addressed during the reporting period.

Table 2 presents a summary of the assessment of compliance for all conditional requirements included in development consents issued for the Quarry, asphalt plant and recycling plant and EPL 3393.

Table 2
Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	Yes / No
Possum Brush Quarry (DA 283/97) (Mod 4)	No
Possum Brush Asphalt Plant (DA 1127/2005)	Yes
Possum Brush Recycling Plant (DA 769/2009)	Yes
EPL 3393	Yes



2. INTRODUCTION

2.1 OVERVIEW OF OPERATIONS

Throughout the reporting period, the Possum Brush Quarry continued to supply a range of products, primarily for road construction, including the Pacific Highway upgrade and a variety of local road and construction projects. The bulk of the quarry products comprised road pavement materials which were generated within the state-of-the-art pugmill/wetmix plant given its superior quality control features.

Figures 2.1 and **2.2** indicate the areas in which activities were undertaken during the reporting period both outside and within the Quarry Area. **Plates 1** to **11** show various operations and/or features of the Quarry recorded on 16 July 2020. The locations of each photograph are displayed on **Figures 2.1** and **2.2**.

Throughout the reporting period, PBM continued to:

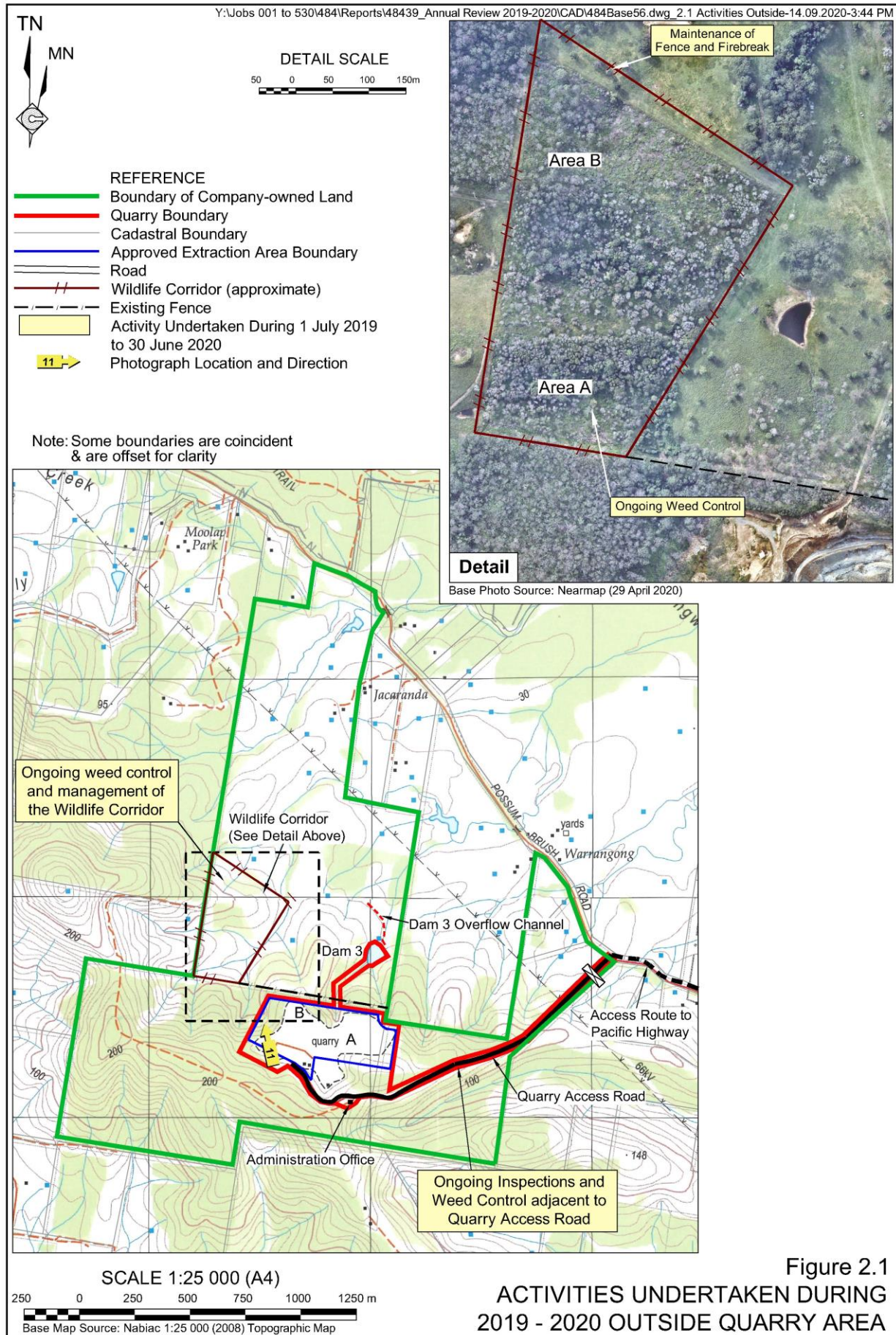
- produce asphalt at the on-site asphalt plant;
- accept materials imported for recycling/blending with quarry products; and
- refurbish and rationalise the existing processing plant to improve plant efficiencies and provide safer and more practical access around the plant.

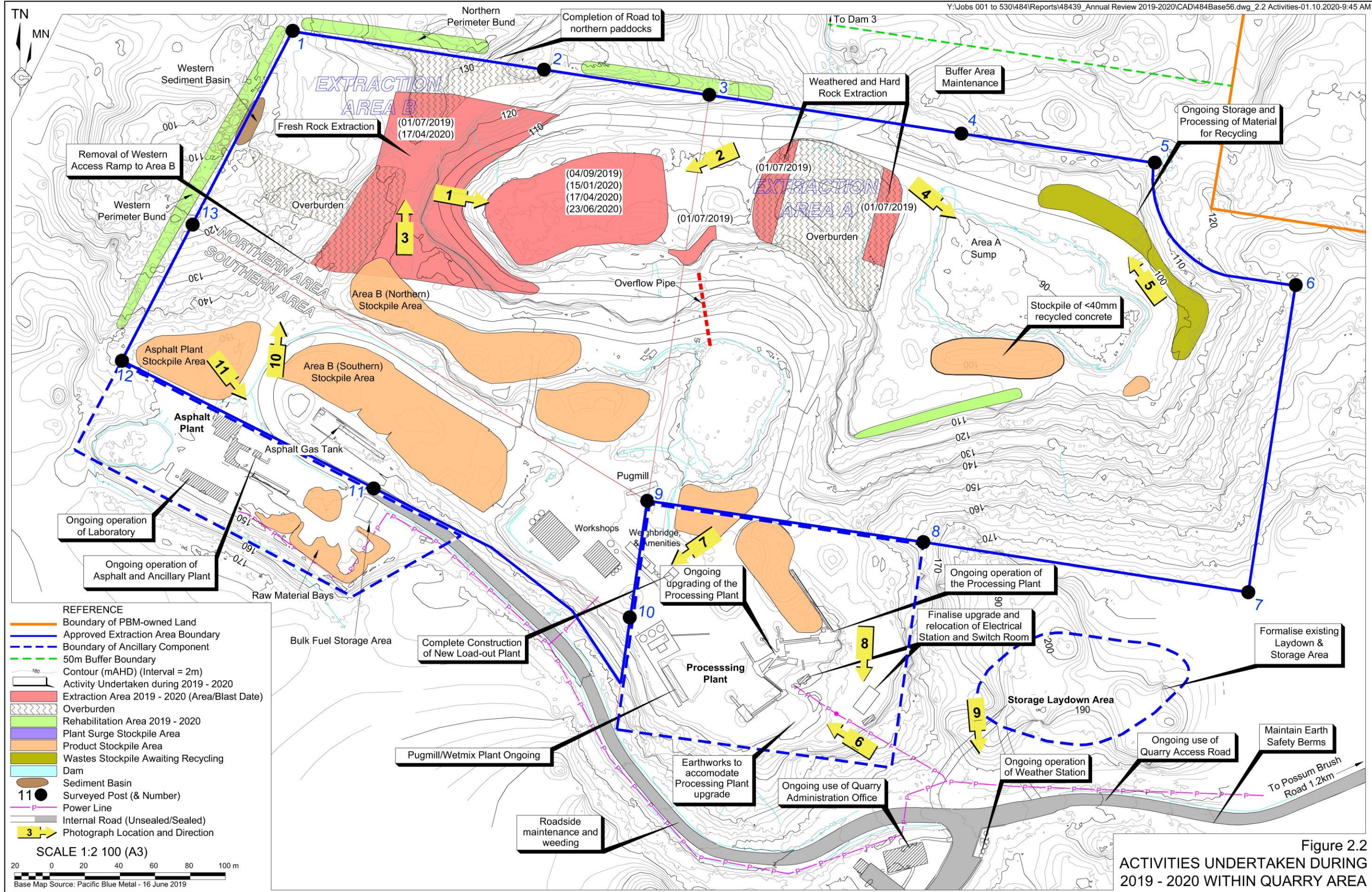
2.2 KEY PERSONNEL CONTACT DETAILS

The contact names, position and phone numbers of key personnel who are responsible for the environmental management of the Quarry are as follows.

Name	Position	24 Hour Contact
Mr Charlie Kennett	Quarry Manager	0428 684 115
Ms Stacey Tyack	QSE Manager	0428 684 547

The Environmental Complaints line for the Quarry is (02) 6554 3597.





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Plate 1: View to the east of the active extraction area
(Ref: E484R_024)

Plate 2: View to the west of the active extraction area
(Ref: E484R_001)



Plate 3: View to the north towards the farm and northwest of Extraction Area B.
Access was restricted at the time of the site visit.
(Ref: E484R_025)

Plate 4: View to the southeast of the Area A sump and rehabilitated benches in the background.
(Ref: E484R_022)





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Plate 5: View to the northwest of the storage area for material for recycling
(Ref: E484R_008)

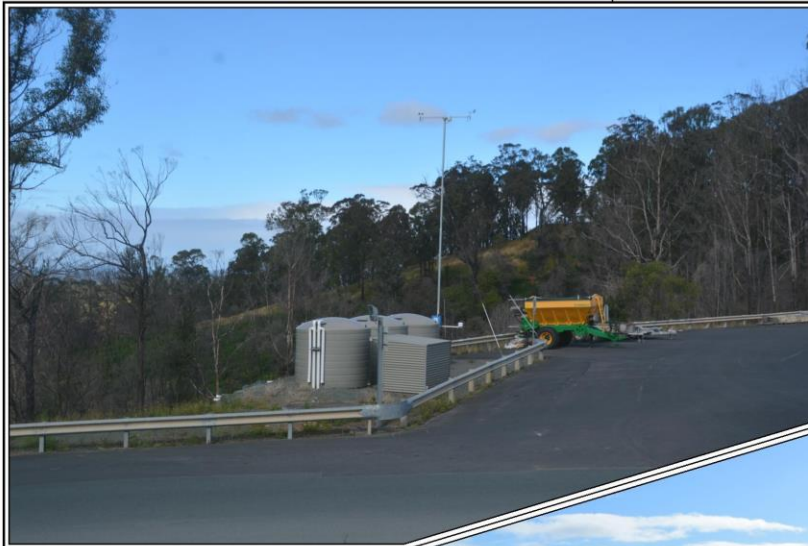
Plate 6: View to the southwest of processing plant and related buildings
(Ref: E484R_039)



Plate 7: View to southwest of loadout and weighbridge
(Ref: E484R_046)

Plate 8: Progress of the proposed new Electrical Station and Switch Room
(Ref: E484R_035)





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Plate 9: View of the meteorological station and some water tanks located to the east of the Quarry Administration Office
(Ref: E484R_059)

Plate 10: View to the north of the wildlife corridor from the asphalt plant
(Ref: E484R_057)



Plate 11: View to the southeast towards the Asphalt Plant
(Ref: E484R_052)

3. APPROVALS AND LICENCES

The following approvals and licences are currently held by PBM to operate the Possum Brush Quarry.

- Possum Brush Quarry DA 283/97 – Issued by the Department of Planning and Environment (DPE). DA 283/97 has been modified four times, with the last modification approved on 1 April 2016.
- Asphalt Plant DA 1127/2005 – Issued by Greater Taree City Council.
- Recycling Plant DA769/2009 – Issued by Greater Taree City Council.
- Environment Protection Licence (EPL) 3393 – Issued by EPA.

No modifications or variations to the above approvals were required or received during the reporting period.

The EPA undertook a statutory review of EPL 3393 in October 2019. As a result of this review, EPL 3393 was updated and reissued. The changes were largely administrative in nature, except for the addition of an Oil and Grease Concentration Limit of ‘10mg/L and/or non-visible’ when undertaking water quality monitoring at EPL Monitoring Point Number 2 (Dam 3). The EPA issued the updated EPL on 8 April 2020. This type of review is standard procedure for the EPA to ensure that conditions remain consistent with the authority’s expectations. PBM accepted all recommended conditional updates.

4. OPERATIONS SUMMARY

4.1 MINING OPERATIONS

Figure 2.2 displays the four areas within the approved Extraction Areas A and B where overburden and fresh rock were extracted during the reporting period.

All extraction throughout the reporting period was undertaken by either ripping with excavators and bulldozers or drill and blast followed by load and haul. **Plates 1** and **2** show the main extraction area of Area B.

Broken and fragmented rock suitable for processing was transported to the processing plant by off-road haul trucks. All oversize rock was sold as armour rock. No secondary breakage took place during the reporting period.

Table 3 presents the production summary for the extraction operations.

Table 3
Production Summary: 2019 – 2020

Material	Approved limit (specify source)	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
Waste Rock / Overburden	Not Applicable	0	0	0
ROM Coal Ore	Not Applicable	0	0	0
Coarse reject	Not Applicable	0	0	0
Fine reject (Tailings)	Not Applicable	0	0	0
Saleable Product*	500 000 tonnes / yr	148 800 tonnes	219 219 tonnes	200 000 tonnes
* Saleable product includes all quarry, asphalt and recycling products extracted/processed and sold.				

Modification 4 to DA 283/97 included a condition that limits the total extraction from the site to 16.2 million tonnes (Condition 8 of Schedule 2). Since Modification 4 was approved (1 April 2016), a total of 861 073 tonnes of saleable products have been extracted / processed and sold. This includes:

- 56 234 tonnes from 1 April to 30 June 2016;
- 272 460 tonnes in 2016-2017;
- 164 360 tonnes in 2017-2018;
- 148 800 tonnes in 2018-2019; and
- 219 219 tonnes in 2019-2020.

All extraction activities occurred between 6:30am to 6:00pm on weekdays and 7:00am to 3:00pm on Saturdays, public holidays excluded, i.e. in accordance with *Condition 2(11)* DA 283/97 (Mod 4) and *Condition L6.2* (a-g) EPL 3393.

The bulk of the fragmented rock was processed on site through the processing plant (see **Plate 6**) with the bulk of the products being produced within the state-of-the-art pugmill/wetmix plant.



4.2 OTHER OPERATIONS

Asphalt Production

Whilst the asphalt plant is approved to operate during the standard hours of operation for the Quarry, as permitted under *Condition 10* DA 1127/2005 and *Condition L6.2* (h-i) EPL 3393, PBM may operate the asphalt plant for 24 hours per day, from 6:30am Monday to 10:00pm Friday, for up to 60 days per year. This is so that PBM may supply asphalt to community infrastructure projects requiring night-time deliveries. **Plate 11** presents a view of the asphalt plant towards the south east.

During the reporting period, the asphalt plant operated within the nominated hours including 18 night time operations.

All product despatch activities were undertaken within either the nominated standard hours as detailed in *Condition 2(11)* DA 283/97 (Mod 4) and *Condition L6.2* (a-g) EPL 3393 or those outside of standard hours, as nominated in *Condition 10* DA 1127/2005 and *Condition L6.2* (h-i) EPL 3393.

Recycled Products

During the reporting period, PBM continued to receive concrete and other waste materials suitable for reprocessing and blending with other quarry products. **Figure 2.2** displays the location of the recycled material receival bays within Extraction Area A. The wastes received comprised:

- asphalt and asphalt profilings;
- clean concrete;
- concrete with minimal contamination; and
- unsorted concrete, brick and tile.

Plate 5 displays the waste concrete and brick stockpiled on site awaiting processing.

Condition L3.1 EPL 3393, requires that PBM must not receive more than 10 000 tonnes of waste materials per year i.e. for the year ending on the anniversary date of 17 August. During the reporting period, a total of 5 626.14 tonnes of waste materials were received by PBM for processing, the bulk of which was clean concrete. All activities associated with the receipt of waste materials and the transport of recycled product were undertaken within the nominated hours outlined in *Condition 2(a)* of DA 769/2009 and *Condition L6.3* EPL 3393 and *Condition 2(11)* DA 283/97 (Mod 4).

PBM operates the recycling facility in accordance with DA 769/2009 under a Quality Assurance program ensuring all operational conditions are met. This includes accepting only licenced uncontaminated wastes, documenting all loads, rejecting unlicensed or contaminated wastes and notifying MidCoast Council (Council) of such loads. During the reporting period, implementation of the Quality Assurance program ensured all operational conditions of DA 769/2009 were fully adhered to. No loads were rejected due to contamination during the reporting period.

Off-site Road Maintenance

Monthly payments were made to Council throughout the reporting period for the maintenance of Possum Brush Road in accordance with *Condition 2(20)* of DA 283/97 (Mod 4). A total of \$24,114.16 was paid to Council for the products despatched during the reporting period.

In accordance with *Condition 2(19)* DA 283/97 (Mod 4), extractive material is to be supplied to Council free of charge for the maintenance of Possum Brush Road between the quarry entrance and the Pacific Highway. During the reporting period, Council did not request any material for road repairs along Possum Brush Road. Further discussion regarding the maintenance of Possum Brush Road is provided in Section 11.

On-site Road Maintenance

No maintenance of the road pavement surface within the Quarry Site or along the access road was required given it has been surfaced with asphalt. PBM continued to undertake vegetation maintenance and weed control adjacent to the on-site roads.

Meteorological Monitoring

During the reporting period, the on-site a meteorological station near the Quarry Administration Office operated to record the parameters nominated in *Condition M4.2* of EPL 3393, namely:

- rainfall;
- wind speed and direction @ 10m;
- temperature @ 2m and 10m; and
- sigma theta @ 10m.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

Table 4 records actions arising from the 2018-2019 Annual Review.

Table 4
Actions from the Previous Annual Review

Action Required from Previous Annual Review	Requested by	Action Taken by the Operator	Where Discussed in Annual Review
Additional detail to be added to Section 6.6 Waste, to report on the effectiveness of waste management and minimisation, as per Schedule 3, Condition 31 of the Consent.	DPIE	Request issued 02/12/19. Waste data collected for the reporting period.	Section 6.6

6. ENVIRONMENTAL PERFORMANCE

6.1 INTRODUCTION

Within the Quarry Site itself, the standard of environmental management has remained high with an excellent standard of housekeeping. Such standards, and the compliant monitoring results, indicate that the adopted environmental controls set out in the various Management Plans are effective.

Sections 6.2 to 6.5 provide a summary of the environmental outcomes associated with the operation of the Quarry.

A summary of monitoring data collected to demonstrate PBM's environmental performance with respect to the Quarry is posted on PBM's website.

6.2 NOISE

Table 5 presents the results from the noise monitoring undertaken throughout 2019-2020. Noise monitoring covering the day, evening and night periods was undertaken on 24 September 2019 at the three locations (see **Figure 6.1**).

- Site R1: 5 St Peters Close;
- Site R2: 175 Possum Brush Road; and
- Site R3: 55 Possum Brush Road.

At all sites, birds, insects and distant traffic (on the Pacific Highway) were the main contributors to the noise levels recorded. The monitoring results demonstrated that noise emissions from the quarry did not exceed the relevant noise criteria at any monitoring location at any time during the survey. Night time monitoring also revealed that the measured noise, did not exceed the sleep disturbance criterion during the monitoring period.

In order to understand the status of noise monitoring over time, the noise monitoring data results over the previous 4 years together with the monitoring undertaken in 2019-2020 are presented in **Table 5**. Monitoring results for the reporting period remained consistent with historic results; that is, the Quarry remains largely inaudible at surrounding residences.

6.3 BLASTING

A total of five (5) blasts were initiated during the reporting period. All blasts were monitored at Site R1 (5 St Peters Close) and Site R2 (175 Possum Brush Road) (see **Figure 6.1**) and were all within the airblast overpressure and ground vibration criteria nominated within *Condition 3(4)* of DA 283/97 (Mod 4) and *Condition L5* of EPL 3393. As recorded in **Table 6**, Airblast levels recorded at Site R1 ranged from 94.4dB(L) to 102.8dB(L) with recorded ground vibration levels varying from 1.91mm/s to 4.82mm/s. Airblast levels recorded at Site R2 ranged from Nil Trigger to 111.1dB(L) with recorded ground vibration levels varying from Nil Trigger to 0.51mm/s. Blast monitoring results for the reporting period remained consistent with historic results.

No complaints were received regarding blasting throughout the reporting period.



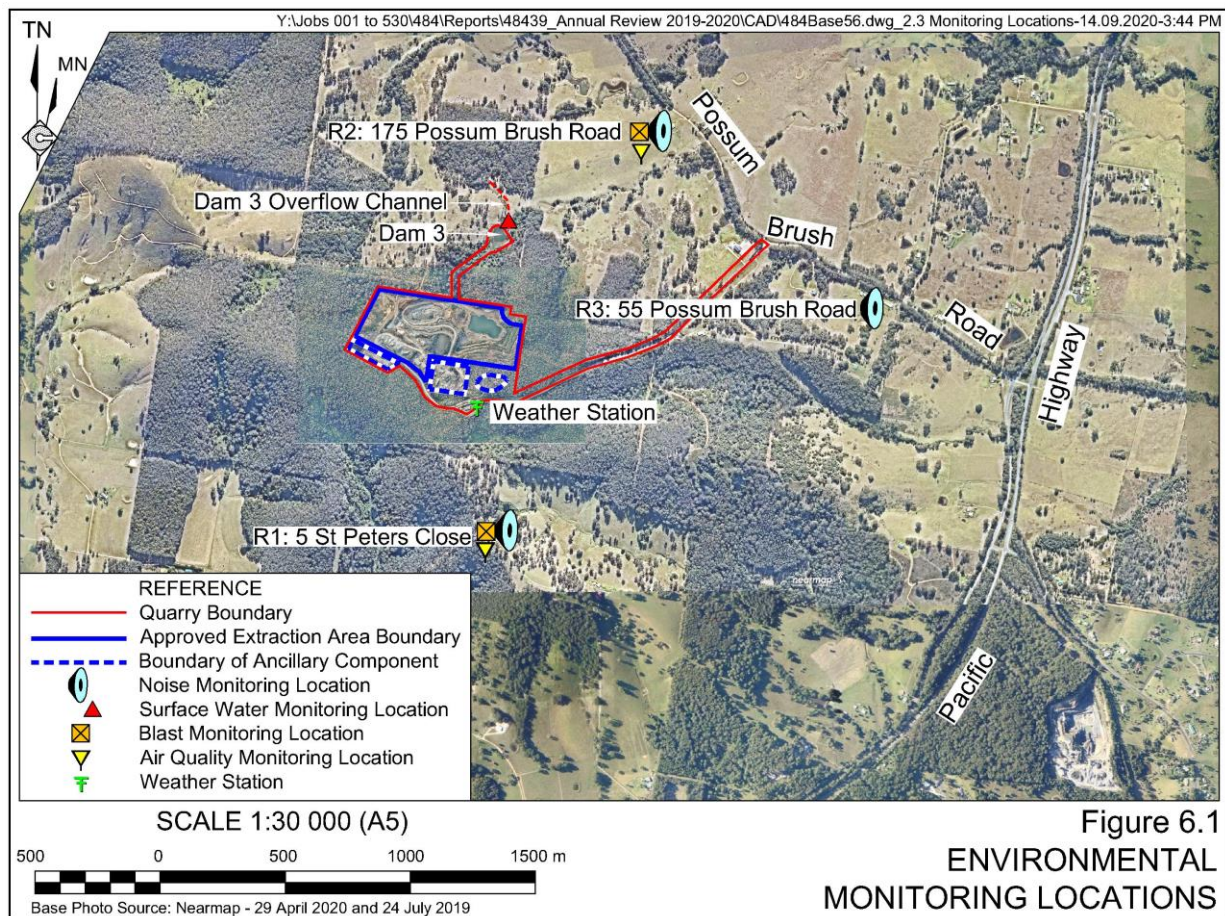


Table 5
Compilation of Noise Monitoring Data and PBM Contributions: 2014 – 2020

Page 1 of 2

Site / Year	Day		Evening		Night	
	dB(A) LA _{eq} (15 min)	PBM Contribution	dB(A) LA _{eq} (15 min)	PBM Contribution	dB(A) LA _{eq} (15 min)	PBM Contribution
Site R1: 5 St Peters Close (Criteria¹: 39dB(A))						
2014-2015	44	22 ²	-	-	44	Barely audible ²
2015-2016	44	Inaudible	44	26	43	Barely audible ²
2016-2017	41	31 ²	45	Inaudible	49	28 ²
18/07/17	49	<20	45	inaudible		inaudible
25/09/17	36	<23	40	27	39	29
29/03/18	43	28	44	inaudible	40	inaudible
29/06/18	43	29	38	inaudible	45	inaudible
15/08/18	34	32 ²	43	38	47	38
10/12/18	40	<20	40	28	48	<20
03/04/19	38	28	40	<25	42	inaudible
24/09/19	47	<20	39	<20	40	<20

Table 5 (Cont'd)
Compilation of Noise Monitoring Data and PBM Contributions: 2014 – 2020

Page 2 of 2

Site / Year	Day		Evening		Night	
	dB(A) LA _{eq} (15 min)	PBM Contribution	dB(A) LA _{eq} (15 min)	PBM Contribution	dB(A) LA _{eq} (15 min)	PBM Contribution
Site R2: 175 Possum Brush Road (Criteria¹: 38dB(A))						
2014-2015	45	26 ²	-	-	49	Inaudible
2015-2016	40	25	38	Inaudible	46	Inaudible
2016-2017	44	21 ²	41	<20	39	23
18/07/17	37	<20	51	<20	41	<20
25/09/17	38	<20	32	28	32	28
29/03/18	43	25 ²	41	inaudible	43	<25
29/06/18	53	<25 ²	44	inaudible	53	<25
15/08/18	40	<20	n/a ³	n/a ³	33	33
10/12/18	56	<20	46	<20	38	<20
03/04/19	41	<25	36	inaudible	38	<25
24/09/19	44	<20	53	30 ²	39	<20
Site R3: 55 Possum Brush Road (Criteria¹: 37dB(A))						
2014-2015	51	31 ³	-	-	46	Inaudible
2015-2016	49	Inaudible	46	Inaudible	46	Inaudible
2016-2017	52	Inaudible ³	57	Inaudible	51	Inaudible ³
18/07/17	56	inaudible	54	inaudible	57	inaudible
25/09/17	54	inaudible	47	inaudible	43	<20
29/03/18	42	<20	46	inaudible	46	25
29/06/18	52	<20	46	31	63	<25
15/08/18	30	<20	n/a ³	n/a ³	43	<20
10/12/18	38	<20	56	<20	58	<20
03/04/19	47	36	48	inaudible	44	<25
24/09/19	43	<20	46	<20	52	<20
1 Criteria for PBM contribution per <i>Condition 3(1)</i> of DA 283/97 (Mod 4) and <i>Condition L4.1</i> of EPL 3393 2 Noise from quarry trucks on Quarry Access Road 3 Only noise from quarry trucks on public road was audible						

Table 6
Ground Vibration and Airblast Overpressure Recorded: 2014– 2020

Measurement	Ground Vibration (mm/s)		Airblast Overpressure (dB(L))	
Site	Site R1	Site R2	Site R1	Site R2
Year				
2014-2015	0.56 – 4.03	0.2 – 0.47	91.9 – 107.0	84.2 – 111.4
2015-2016	1.00 – 2.66	Did not trigger – 0.67	98.8 – 105.5	Did not trigger – 111.3
2016-2017	0.14 – 2.61	Did not trigger – 0.50	96.3 – 101.8	Did not trigger – 107.0
2017-2018	0.88 – 4.29	Did not trigger – 0.45	98.3 – 105.1	Did not trigger – 108.3
2018-2019	0.59 – 1.34	Did not trigger – 0.27	100.3 – 105.0	Did not trigger – 113.4
01/07/19	1.91	Nil trigger	97.9	Nil trigger
04/09/19	2.79	Nil trigger	94.4	Nil trigger
15/01/20	2.76	0.56	101.7	105.3
17/04/20	3.00	Nil trigger	102.8	Nil trigger
23/06/20	4.82	0.51	102.3	111.1
Site R1: 5 St Peters Close Site R2: 175 Possum Brush Road				

6.4 AIR QUALITY

No complaints relating to air quality were received during the reporting period. Subsequently, no air quality monitoring was undertaken by PBM.

6.5 TRANSPORT

PBM records both the number of heavy vehicles transporting quarry products from the Quarry and the number of laden trucks entering the Quarry with either raw materials for the asphalt plant or waste materials for recycling. Information is recorded on an hourly and daily basis in order to demonstrate compliance with *Conditions 2(9) and 2(10)* of DA 283/97 (Mod 4).

Condition 2(9) of DA 283/97 (Mod 4) stipulates that a maximum of 500 000 tonnes of quarry products may be transported from the Quarry in any calendar year. In the 2019-2020 year, 219 219 tonnes of quarry products (including asphalt and recycled products) were transported from the Quarry. The additives to asphalt products (lime, bitumen, sand, flyash etc) amounted to 7 566.63 tonnes of the total 219 219 tonnes of material transported from the Quarry.

Condition 2(10) of DA 283/97 stipulates that PBM must ensure that no more than 36 truck movements occur per hour and no more than 420 truck movements occur per day. A truck movement is defined as a heavy vehicle one-way trip (i.e. either entering or leaving the Quarry), including trucks associated with the asphalt and recycling activities. During the reporting period, the maximum daily number of truck movements was 294, recorded on 19 June 2020. There were 12 occurrences throughout the reporting period when the maximum number of truck movements (36) were recorded. These were as follows.

- 07/05/2020: between 7:00am – 8:00am
- 12/05/2020: between 2:00pm – 3:00pm
- 16/06/2020: between 8:00am – 9:00am
- 17/06/2020: between 8:00am – 9:00am, 11:00am – 12:00pm, 1:00pm – 2:00pm and 3:00pm – 4:00pm
- 18/06/2020: between 11:00am – 12:00pm and 1:00pm – 2:00pm
- 19/06/2020: between 8:00am – 9:00am, 10:00am – 11:00am, 11:00am – 12:00pm, 12:00pm – 1:00pm and 1:00pm – 2:00pm

At no time did the hourly traffic movements exceed 36 movements, demonstrating the effectiveness of transport management procedures.

A summary of the maximum number of hourly and daily truck movements for each calendar month throughout the reporting period is presented in **Appendix 2**. The comprehensive records of all truck movements are held in the Quarry Administration Office.

6.6 WASTE

PBM's approach to waste management and minimisation is based upon three main principles, namely to:

1. minimise the quantity of waste generated;

2. maximise the quantity of waste recycled; and
3. effectively manage and correctly remove all waste from the Quarry.

The wastes generated within the Quarry include:

- domestic type wastes and workshop wastes that are stored in approved containers and transported regularly to either a recycling facility or approved waste disposal facility;
- tyres for recycling are stored on site and regularly transported to a licenced recycling facility;
- stormwater potentially contaminated with petroleum products which drains to a proprietary oil/water separator system in the workshop from which clarified water is allowed to drain to the sedimentation pond system. Oil-contaminated fluids are collected by a licensed recycling contractor for disposal; and
- scrap metal that is collected by licensed recycling contractor for disposal.

Quantities of measurable waste and recycling are provided in **Table 7**.

Table 7
Summary of Waste and Recycled Materials Recorded for 2019 – 2020

Waste Stream	Average Quantity	Frequency	Total Quantity 2019-2020	Comments
Tyres	80 tyres	1 – 2 times per year	4880kg (122 tyres)	All tyres are recycled through Tyrecycle Newcastle.
Motor Oils	1 500 litres	1 – 2 times per year	500 litres	All waste oils are recycled through Southern Oil.
Batteries	500 kilograms	1 – 2 times per year	0 kilograms	All used batteries for 2019 – 2020 are in storage awaiting transport to the recycler. All batteries are recycled through River City Recycling Taree.
Scrap Metal	5 tonnes	3-6 times per year	73.74 tonnes	This amount includes approximately 40 tonnes of plant and equipment damaged in the November 2019 bushfires. All scrap metal is recycled through South Wang Wauk Recycling.
Recycling Office /Crib Room	2 x 0.24m ³ *	Fortnightly	24m ³	Collected by JR Richards on behalf of Council.
General Waste Office / Crib Room	3 x 0.12m ³ *	Weekly	18m ³	Collected by JR Richards on behalf of Council.
General Waste – Quarry	1 x 1.5m ³ *	Weekly	75m ³	Collected by JR Richards on behalf of Council.

*These are maximum values.

The quantities of waste materials are closely aligned with operational requirements such as production demand, maintenance schedules and general wear on equipment. During the reporting period, the waste management and minimisation procedures were successful and consistent with previous years.

7. WATER MANAGEMENT

The PBM water monitoring point is located at the overflow of Dam 3 (see **Figure 2.1**). When an overflow event occurs, monitoring is required at this point in accordance with *Condition M2* of EPL 3393. *Condition L2.5* of EPL 3393 stipulates that the concentration limits for pollutants in water sampled at the overflow are:

- pH between 6.5-8.5
- TSS <50 mg/L
- Oil and Grease 10mg/L and/or non-visible

The EPA introduced a concentration limit of '10mg/L and/or non-visible' for Oil and Grease during a statutory review of EPL 3393 in October 2019. This new limit came into effect in April 2020 although no overflow events have occurred since that time.

Water quality monitoring was undertaken on two (2) occasions as a result of overflow events during the reporting period on 10 February 2020 and 27 March 2020.

Table 8 presents the water quality data for overflows from Dam 3 since 2012.

Table 8
Water Quality Data (Dam 3) 2012 – 2020

Dates tested	pH	Total Suspended Solids (mg/L)	Oil and Grease
Criteria	6.5 – 8.5	<50 mg/L	10mg/L and/or non-visible
2012 – 2013 (February 2013, March 2013 and June 2013)	7.0 – 7.3	9 – 39	Not Visible
2013 – 2014	No overflow events		
2014 – 2015 (21/01/15, 28/01/15, 23/03/15, 03/05/15 and 23/05/15)	6.7 – 7.4	8 – 37	Not Visible
2015 – 2016 (05/01/16 and 06/06/16)	7.6	7 and 32	Not Visible
2016 – 2017 (03/08/16 and 15/03/17)	7.0 and 7.1	7 and 19	Not Visible
2017 – 2018 (22/03/18)	7.3	6	Not Visible
2018 – 2019	No overflow events		
10 February 2020	7.4	23	<5
27 March 2020	7.5	23	<5

As shown in **Table 8**, the results of overflow sampling were within the limits specified in *Condition L2.5* of EPL 3393.

PBM is not required to hold a water access licence or works approval under the provisions of the *Water Management Act 2000*.

8. REHABILITATION

8.1 REHABILITATION PERFORMANCE DURING THE REPORTING PERIOD

Rehabilitation activities currently involve the maintenance of 18ha of land currently under rehabilitation. Given the current progress of extraction activities of quarry development, no new sites have completed and may be rehabilitated.

Rehabilitation activities are undertaken within a range of areas within the Quarry through Irreplaceable Bush Regeneration Indigenous Services (IBIS). **Table 9** provides a summary of the disturbance and rehabilitation areas, indicating no change to areas are expected in the next reporting period.

Table 9
Summary of Areas Disturbed and Rehabilitation

Quarry Area Type	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
Total quarry footprint	45ha	45ha	45ha
Total active disturbance*	27ha	27ha	27ha
Land being prepared for rehabilitation	0	0ha	0ha
Land under active rehabilitation	18ha	18ha	18ha
Completed rehabilitation	1ha	1ha	1ha

* Includes access road, Dam 3, approved extraction area, processing area and all quarry-related infrastructure.

Rehabilitation and Conservation Bond

PBM lodged the Rehabilitation and Conservation Bond for the Quarry on 18 May 2019 through execution of the Company's Bankers' undertaking for the Bond in accordance with *Condition 3(23)* of DA 283/97 (Mod 4). It is proposed that the quantum of the Bond is reviewed following the next Independent Environmental Audit due to be submitted within 6 weeks after 30 September 2022.

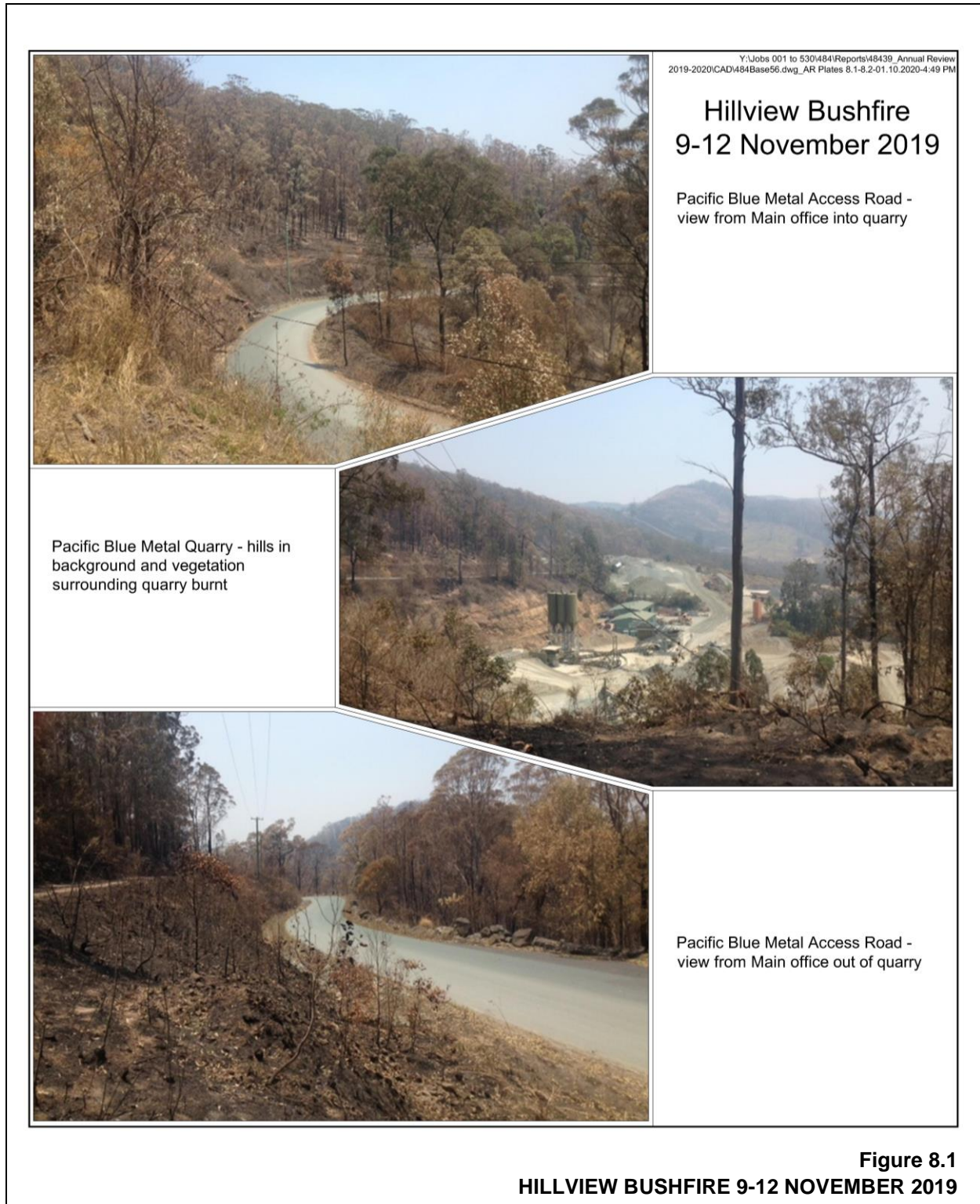
Rehabilitation Areas

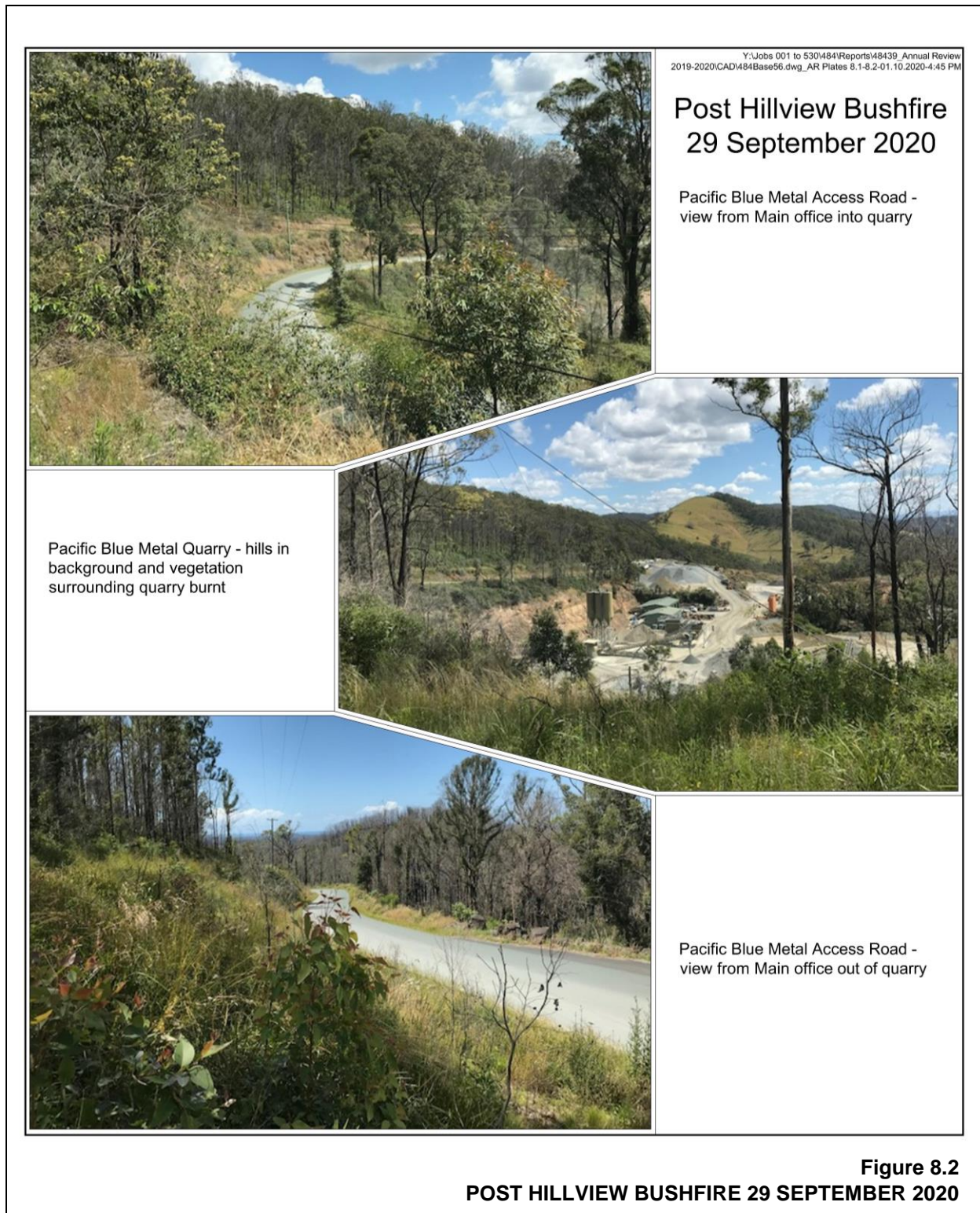
Shortly after the release of the 2018-2019 Vegetation Report, the bushfires of November 2019 burnt all vegetated areas of the quarry and surrounding land including:

- Quarry access road
- 50m buffer zone
- Final benches in Area A and Area B
- Wildlife corridor

Irreplaceable Bush Regeneration Indigenous Services (IBIS) undertook post bushfire monitoring and assessment of the Wildlife Corridor and other vegetated areas in January 2020. IBIS found that all vegetation within the Wildlife Corridor and other vegetated areas, including the planted Rudder Box trees were severely burnt. Stemming from January 2020 assessment, IBIS recommended that PBM wait for substantial rainfall to undertake further monitoring and assessment of survival, growth and loss of native vegetation and, if necessary, develop a weed control program. Whilst substantial rainfall events did occur in February and March 2020, COVID-19 restrictions placed on both IBIS and PBM restricted site visits. IBIS attended the Site in August 2020 and September 2020 to undertake the second post bushfire assessment and prepare a management plan for recovery. These recommendations and associated actions will be presented in the Annual Review for the next reporting period.

Figure 8.1 and **Figure 8.2** present views from within the Quarry immediately after the bushfires and in September 2020 and demonstrate the recovery of vegetation over the past 10 months.





Rehabilitation Actions for the Next Reporting Period

Rehabilitation actions in 2020-2021 will be guided by IBIS recommendations stemming from the post bushfire recovery assessment. These recommendations and actions will be presented in the Annual Review for the next reporting period.

9. COMMUNITY

9.1 COMMUNITY RELATIONS

No complaints were received during the 2019-2020 reporting period for Quarry-related incidents. Complaint numbers regarding quarry-related incidents for previous years are as follows.

2018-2019 No complaints

2017-2018 Seven (7) complaints regarding squealing brakes (same complainant)

2016-2017 Three (3) complaints; two (2) regarding squealing brakes (same complainant) and one (1) regarding plant noise.

PBM encourages local residents to contact the Quarry Manager directly in the event of a complaint to assist PBM to be more responsive to specific complaints and the local community.

Community Consultative Committee

The last meeting of the CCC was held in November 2017. PBM emailed Council in both November 2018 and December 2019 to request a meeting of the CCC. An affirmative response was not received.

Council has acted in the role of convenor of the CCC since its inception in 1998.

As DPIE had not appointed a Chairperson from the Department's Pool of Independent Chairpersons (as required by the CCC Guidelines), it has been assumed that this arrangement would continue.

However, recent correspondence from DPIE have made PBM aware that Council has been informed that it is no longer the convener of the CCC and that it is the Department's role to appoint a Chairperson.

PBM are awaiting appointment of a Chairperson from the Pool of Independent Chairpersons for the Quarry, which will enable PBM to advertise for registrations of interest in joining the CCC and recommencing meetings.

10. INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

10.1 INCIDENTS

As per Schedule 5 Condition 7, PBM submitted notification and a written report to the Department on 11 November 2019, regarding the Hillview Bushfire which impacted the Wildlife Corridor and vegetated 50m buffer zone within the quarry.

10.2 COMPLIANCE

An internal compliance assessment for DA 283/07, DA 1127/2005 (Asphalt Plant), DA 769/2009 (Recycling Plant) and EPL 3393 is presented as **Appendix 1** and notes compliance with all conditional requirements with the exception of Schedule 5 Condition 6 regarding the operation of the Community Consultative Committee. See Section 9.1 Community Relations for further details.

10.3 INDEPENDENT ENVIRONMENTAL AUDIT

An Independent Environmental Audit (IEA) was undertaken by James Hart of AQUAS Pty Ltd dated 24 September 2019 that assessed compliance for DA 283/07 and EPL 3393 for the period from September 2016 to September 2019. **Table 10** presents the audit outcomes in terms of the issues and recommendations presented in the IEA and the response from PBM. As noted in **Table 10**, PBM addressed each of the non-compliances during the reporting period.

The next audit will be undertaken by October 2022.

Table 10
Independent Environmental Audit Status Update

Page 1 of 2

Nbr	IEA Recommendation	PBM Response	Proposed Close out date	Actual Close out date
N-01	Update the site induction to include all required information on noise mitigation measures. Ensure all noise reports include all information required by the Noise Management Plan.	Employee and Contractor inductions amended to include <u>all</u> noise mitigation measure as specified in the NMP.	30/09/19	27/09/19
		Noise monitoring consultants provided with written instructions of the additional requirements to be included in all future noise reports. This will be checked for compliance by PBM staff.	30/09/19	05/09/19
N-02	Provide a blast notification board on the quarry website.	A Blast Noticeboard on the PBM website does not represent an effective communication tool between PBM and its neighbours. PBM has a long established relationship with our neighbours via more effective and direct methods including phone, face to face and email. PBM neighbours currently receive up to date information on blasts via these methods. It is proposed to remove the Blast Notification Board from the BMP during the next review (due December 2019).	30/12/19	19/12/19 Amended BMP submitted to DPIE

Table 10 (Cont'd)
Independent Environmental Audit Status Update

Page 2 of 2

Nbr	IEA Recommendation	PBM Response	Proposed Close out date	Actual Close out date
N-03	Update the Landscape and Rehabilitation Management Plan to clearly describe how rehabilitation of the final void will be conducted. Undertake inspections in accordance with the requirements of the Landscape and Rehabilitation Management Plan.	The L&RMP will be updated to describe the final void at the end of the current DA period. This will be undertaken in the next review of the plan (due December 2019). Inspections of rehabilitation areas after substantial rainfall are undertaken, however a record of inspections has not been kept. All such inspections will now be recorded on the Daily Toolbox Sheet.	30/12/19 08/10/19	19/12/19 Amended L&RMP submitted to DPIE. 26/09/19
N-04	Upload the complaints register to the Quarry website.	A Complaints register has been available on the PBM website since its inception. During the last upload of information our Website Consultant inadvertently uploaded the Environmental Monitoring Data twice (once under Environmental Monitoring Data and a second time under Complaints). On discovery of this it was immediately rectified and the current complaints register uploaded. Please note that the missing PBM complaints register did not contain any new complaints or information, as PBM has not received a complaint since May 2017.	08/10/19	28/09/19
N-05	Audit reports should be provided to the Secretary within 6 weeks of commissioning of the audit.	Noted – PBM is now aware of this requirement. The 2016 IEA was PBM's first IEA. PBM had incorrectly assumed that the auditor would submit the report to DPE. PBM has since submitted the report.	08/10/19	26/09/19
N-06	Quarry should implement a system to ensure that waste quantities are tracked and loads are not accepted which will result in exceedance of the maximum allowable quantity of waste on site.	Actioned November 2018. Waste quantities sufficiently tracked – the exceedance issue was due processing constraints. New processing procedures in place.	n/a Actioned 11/18	n/a Actioned 11/18
N-07	Ensure noise monitoring equipment is located in accordance with the requirements of the EPL.	Noise monitoring consultants provided with written instructions to ensure that noise monitors at each location are within 30 metres of the dwelling façade. Photographic evidence of such is to be supplied with each report. This will be checked for compliance by PBM staff.	30/09/19	05/09/19

11. ACTIVITIES TO BE UNDERTAKEN IN THE NEXT REPORTING PERIOD

The principal activities planned during 2020-2021 are listed below. The locations of these activities are shown on **Figures 11.1** and **11.2**.

Extraction Activities

PBM expects the demand for road pavement products will continue during 2020-2021, particularly given the high quality of products produced within the pugmill/wetmix plant. Fresh rock reserves will be removed from extraction faces in Areas A and B with sufficient weathered rock extracted for blending with the fresh rock to produce the required products.

Extraction will be focused in Area B with the removal of both overburden and fresh rock as extraction progresses westward. Some small areas are to be extracted within Area A to improve access and storage areas.

Processing Activities

PBM will continue to use the refurbished processing plant and pugmill/wetmix plant to produce its products. Further refurbishment will be undertaken during the 2020-2021 reporting period.

The progressive upgrade of the electrical substation and switch room will also continue to be undertaken throughout the 2020-2021 reporting period.

Asphalt Production

PBM intends to continue to operate the asphalt plant, at a higher output level to that produced during 2019-2020 reporting period, to supply asphalt products to a range of projects throughout the region.

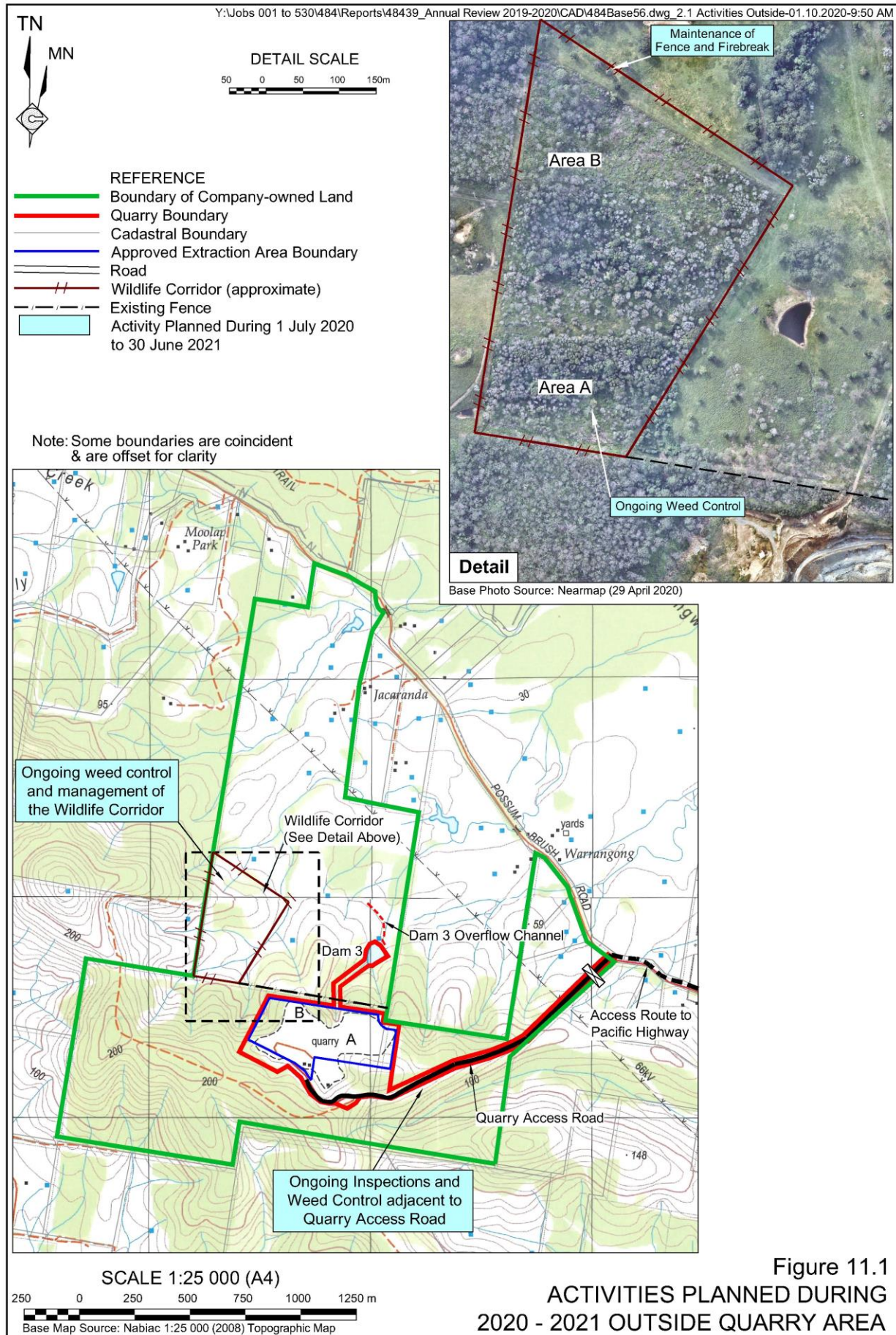
Product Despatch and Road Maintenance

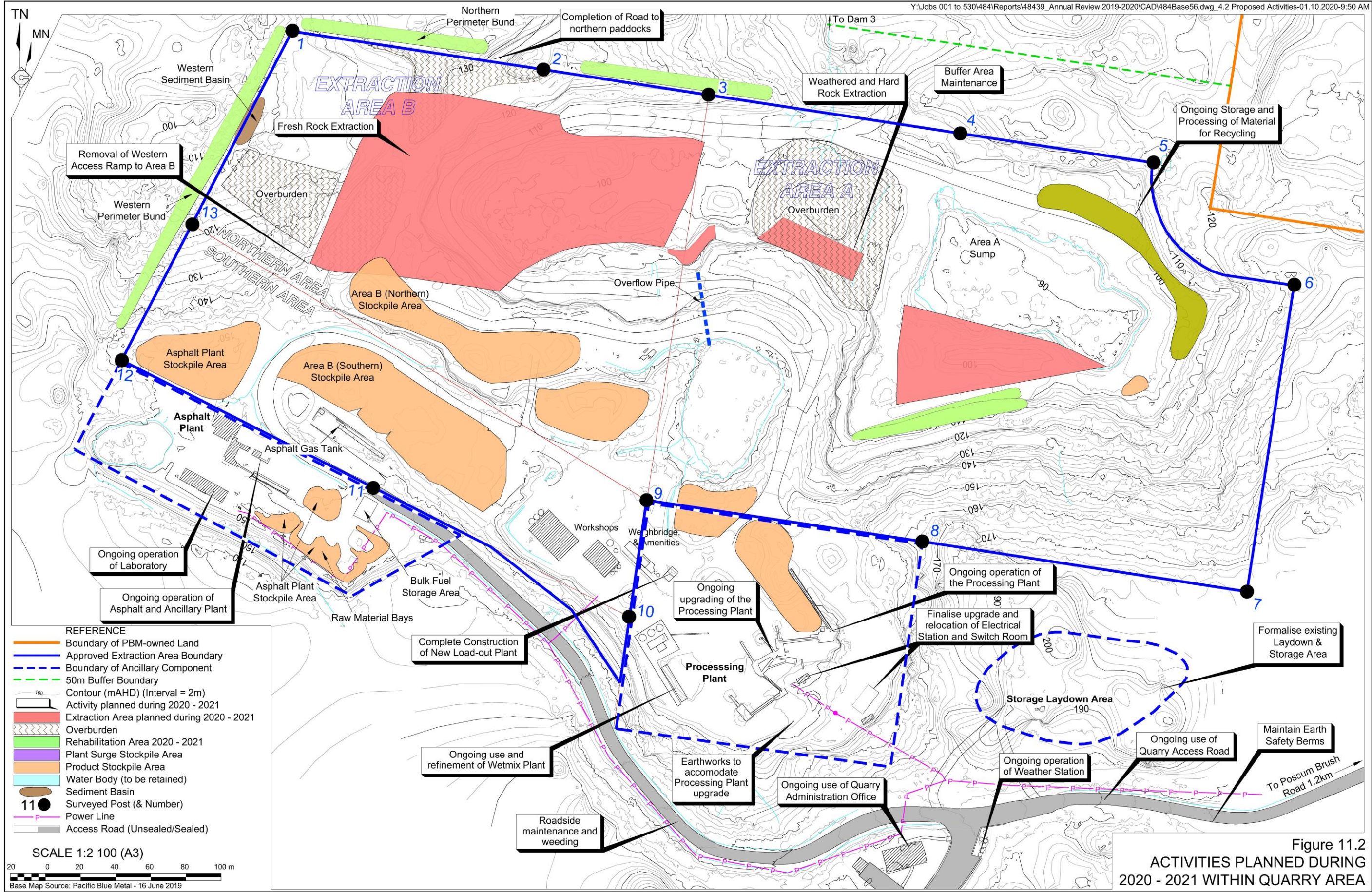
No substantial changes are planned to occur in the transportation of products from the Quarry during 2020-2021.

PBM will continue to draw Council's attention to areas requiring maintenance along Possum Brush Road.

Rehabilitation

In the 2019 Regeneration Report, IBIS stated the current regeneration within the wildlife corridor is progressing towards the goal of closed forest canopy that will minimise non-native flora resurgence. As such, IBIS recommended undertaking regeneration activities on a 12 monthly basis.





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Environmental Monitoring

The monitoring activities currently undertaken within and surrounding the Quarry will remain in place throughout 2020-2021. The monitoring proposed during 2020-2021 will include:

- blast monitoring (each blast);
- weather-related monitoring including rainfall levels (continuous);
- water quality (if Dam 3 overflows); and
- noise monitoring on an annual basis.

PBM proposes to continue to review all monitoring results as they are received to ensure the measured parameters are within the relevant limits or criteria. All monitoring results collected during 2020-2021 will be assembled in conjunction with all previous relevant results to provide the basis for an ongoing review of the environmental performance of the Quarry.

Maintenance of Possum Brush Road

PBM will continue to draw Council's attention to the need to undertake maintenance of Possum Brush Road to re-instate the hitherto high quality of the road pavement. Since May 2008, Council has received \$288,428.65 for maintenance of the 1.13km section of Possum Brush Road of which there is little evidence of any work having been undertaken.

PBM is concerned that, given the negligible maintenance undertaken on the section of road for over the past 10 years, its condition will progressively deteriorate. Since December 2018, PBM has been corresponding with Council and requesting road maintenance works.

In order to progress the road maintenance, PBM provided Council with a Quotation to undertake the required works. However, Council declined the offer, stating that Possum Brush Road is not a priority road within Council's road network. This response disregards the condition that the monthly contribution fee paid by PBM to Council be solely for the maintenance of Possum Brush Road (i.e. the local road used by Quarry operators).

Return of Bank Guarantee from Council

As outlined in Section 8 of this report, PBM finalised the Rehabilitation and Conservation Bond for the Quarry on 18 May 2019. PBM has since formally approached Council seeking Council's written acceptance that PBM's bank can cancel the Bank Guarantee in place under the former Council-controlled Development Consent (DA 431/1986) for the Quarry. PBM will continue to liaise with Council until this matter is resolved.

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