

21 June 2018

Howard Reed
Manager Mining Projects
Department of Planning and Environment

Electronic Submission

Dear Howard,

Submission to Application SSD 6334 Sutton Forest Quarry Project

We write with regards to the abovementioned State Significant Development application.

Background

Coca-Cola Amatil (Aust) Pty Ltd (**Amatil**) are the owners of Lot 122 DP 802050 being 320 Hanging Rock Road, Sutton Forest. We have several water bores located on our land and extract such water in the production of a variety of bottled spring water products. These operations have been conducted continuously over the past 10 years and we consider such operations to continue over the long-term.

The availability, consistency, reliability and quality of the water extracted from below the land is integral to our business and our customers.

The land subject of the application, Lot 4 DP 253435 being 13302 Hume Highway, Sutton Forest (**Proposed Quarry Site**) essentially adjoins the Amatil site at their northern extents. Our water bore locations are located towards the southern extents of the Amatil land, approximately 2km south-west of the western most extent of the proposed quarry extraction area within the Proposed Quarry Site.

Amatil engaged Peter J Ramsay and Associates to review the subject application and provide advice. A copy of this is attached.

Operative Issues

The application proposes excavation of a proposed quarry to varying depths of between 700m and 660m AHD. Whilst the bores located within our land are located at levels below 660m AHD and therefore not contemplated to be directly compromised or threatened through ordinary excavation activities, the potential for a wide variety of groundwater impacts exist should these not take place in the required manner or upon extents, depths, nature of extraction, etc., changing.

The primary concerns are as follows:

1. Hydrological impacts relating from dewatering; and
2. The requirements (proposed or required) at the end of the life of the quarry project or its earlier prolonged cessation or termination as they relate to:
 - a. The practical and financial ability to source the required 9,700,000 cubic metres of fill;
 - b. Such sourced fill material is independently supervised and validated and purely VENM or ENM quality required; and
 - c. Potential future contamination of the regional aquifer given the contents of future fill, the fill being of different composition to the existing surrounds and placement method risk.

These concerns are identified and discussed in some further detail within the Peter J Ramsay & Associates report attached. At this time, it is considered the above issues have not been satisfactorily addressed and further information is required.

Requested Actions

There is no doubt many planning and environmental considerations relevant to this application.

It is requested the Department require the applicant to provide further information that satisfactorily addresses the above identified issues.

Following this, should the Department following due consideration and careful assessment of the proposal contemplate granting conditional approval to the application, we request that it only do so on the following basis:

1. Any modification to the application either before determination or upon any subsequent application to amend or new application must trigger a full public exhibition and consultation.
2. Specifically, the depths, extent, nature of, methods and period of any proposed or approved extraction are not further varied under any consent or approval without both a full assessment by the responsible authority and full public exhibition and consultation.
3. Should any testing and monitoring required to be undertaken after the commencement of any proposed activities provide findings which are:
 - i. inconsistent with the forecast outcomes and results stated with the application; or are
 - ii. less favourable or inconsistent with the prescribed levels per any authority approval ultimately granted;

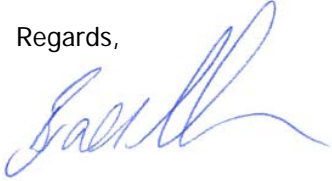
the development consent conditions should require:

 - iii. all relevant activities to immediately cease;
 - iv. notification to the relevant authorities and potential affected parties to be made; and
 - v. further assessment and direction from those relevant authorities to be made.
4. Provide detailed and specific conditions of consent to satisfactorily address the identified issues above and prevent any adverse environmental impacts that could arise to all nearby landowners and occupiers.
5. The applicant be directed that any future correspondence sought to be made with landowners (including ourselves) be made additionally to the registered owners of each lot (and not limited to occupiers at those physical locations)

We request the Department keep us informed of the progress of this application and provide any supplementary information in a timely manner.

Should you wish to discuss further please contact Brad McAndrew, Development Manager, Group Property on 0402 066 990.

Regards,



Brad McAndrew
Development Manager, Group Property

Encl.

Peter J Ramsay & Associates assessment dated 19 June 2018

20 June 2018

Mr Darrell Hobby
National Water Manager
Coca-Cola Amatil (Aust) Pty Ltd
128 Briens Road
NORTHMEAD NSW 2152
darrell.hobby@ccamatil.com

Environment, Health & Safety, and
Sustainability Consultants



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& ASSOCIATES**

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PJRA Reference: Ltr-002-764.44-Rev.00

Dear Darrell,

Re: Environmental Advice Regarding a Proposed Quarry Located in the Vicinity of the Groundwater Source at 'Tennyson Park', Hanging Rock Road, Sutton Forest, New South Wales

On 28 May 2018, Peter J Ramsay & Associates Pty Ltd was engaged by Coca-Cola Amatil (Aust) Pty Ltd (CCA) in accordance with our proposal (Ref.:Prp-764.44-Rev.00) to provide environmental advice regarding a proposed quarry. The quarry is located in the vicinity of CCA's Groundwater Source at 'Tennyson Park', 320 Hanging Rock Road, Sutton Forest, New South Wales (Lot 122, DP 802050, referred to hereafter as the 'CCA site'). We have reviewed the information provided and are pleased to provide our advice.

1. BACKGROUND

CCA's email of 26 March 2018 provided information for our review which indicated that Sutton Forest Quarries Pty Ltd intends to operate a quarry facility at 13302 Hume Highway, Sutton Forest, NSW (Lot 4, DP 253435, referred to hereafter as the 'proposed quarry'). The proposed quarry is located approximately 2 km to the north-east of the existing groundwater extraction infrastructure at the CCA site. The location of the proposed quarry in relation to the CCA site is shown in **Figure F1**, provided in **Attachment A** of this letter.

An Environmental Impact Study (EIS) for the proposed quarry was made available on the NSW Department of Planning and Environment's website for public review and comment. CCA has requested that we review the available information in relation to the proposed quarry (principally pertinent sections of the EIS) and provide environmental advice on the outcome of the review. In particular, our review is to consider the potential risk and impacts associated with the rehabilitation of the quarry (i.e. where the quarry void is filled with imported fill material).

The CCA site is currently used by CCA for the extraction of groundwater for supply to their bottling plant located in Northmead (by road tankers). CCA has been utilising the CCA site for groundwater extraction since circa June 2004 under the conditions of Water Access Licence (WAL) Number WAL24997. The location of the existing groundwater extraction bores at the CCA site is shown on **Figure F1** of this letter report. The site layout plan for the proposed quarry is shown in **Figure F2**. As shown in the figures, the existing extraction bores are positioned approximately 2 km from the proposed quarry pit.

2. INFORMATION SOURCES

Information sources for the environmental advice included:

- Sutton Forest Quarries 2018, *Sutton Forest Quarry Project, project Information Sheet* dated February 2018;
- NSW Department of Planning and Environment 2018a, *Sutton Forest Quarry Project (SSD 6334) Notice of Exhibition* dated 21 May 2018;
- NSW Department of Planning and Environment 2018b, *Sutton Forest Quarry Project, Exhibition of State Significant Development Application* dated 13 June 2018; and
- R.W. Corkery & Co 2018, *Environmental Impact Statement for the Sutton Forest Sand Quarry, Development Application No. SSD_6334* dated May 2018.

3. SUMMARY OF PROPOSED QUARRY OPERATIONS AND REHABILITATION

On the basis of our high-level review of the EIS, the proposed quarry operations are summarised as follows:

- Establishing a sand quarry to extract up to 1 million tonnes of friable sandstone per year for up to 30 years;
- Extracting material from an area covering 47 hectares, at depths to between 660 m AHD and 700 m AHD (that is up to approximately 70 m below the current ground level);
- Processing and dispatching up to 860,000 tonnes of sand products per year;
- Clearing approximately 63.2 hectares of native vegetation;
- Carrying out up to 12 blasts per year;

- Constructing associated on-site infrastructure, including internal roads, processing facilities, amenity barriers and water management structures;
- Transporting processed material to market by truck via the quarry access road to the Hume Highway;
- Constructing a new interchange between the quarry access road and the Hume Highway;
- Importing up to 1 million cubic metres of Virgin Excavated Natural Material (VENM) and/or Excavated Natural Material (ENM) for backfilling, over the life of the quarry; and
- Progressively rehabilitating the proposed quarry site (detailed further below).

The rehabilitation of the proposed quarry is described conceptually in Section 2.13 of the EIS as comprising of the following. The description is conceptual because the EIS indicates that a Landscape and Rehabilitation Management Plan is required to document specific timing, locations and methods of rehabilitation.

- Progressive profiling and revegetation of Fines Storage Area 1 (upon reaching capacity, after approximately 6 years) with suitable groundcover and native vegetation;
- Progressive revegetation of the earthen bunds (constructed to preserve visual and noise amenity) with a suitable groundcover and native vegetation;
- Decommissioning and removal of fixed plant and equipment upon completion of all quarry operations; and
- After 30 years of extraction, rehabilitation of the extraction area, extraction benches and all other disturbed areas using VENM and ENM, together with unsaleable materials and processing fines generated within the wash plant. The EIS indicates approximately 9 million cubic metres of backfill would be required.

4. KEY RISKS AND HYDROGEOLOGICAL IMPACTS TO SITE ASSOCIATED WITH THE PROPOSED QUARRY

On the basis of our high-level review of the EIS, together with our background knowledge of the CCA site, the key risks and hydrogeological impacts which the proposed quarry may pose to the CCA site are summarised in **Table 1** below.

Table 1 Summary of Key Risks and Hydrogeological Impacts

| Aspect | Risk | Recommendation |
|--|--|---|
| <u>Hydrogeological Impacts</u> | | |
| <p>The proposed quarry will include dewatering.</p> | <p>Modelling performed for the EIS indicates that the risk is low, however, this has not been substantiated by site specific data (i.e. direct hydrogeological investigations at the proposed quarry).</p> | <ul style="list-style-type: none"> The existing monitoring well network at the proposed quarry site should be appraised to determine suitability for monitoring of groundwater level impacts to surrounding properties (including the CCA site). <p>If necessary, new monitoring wells should be installed to adequate depths to monitor the effects of dewatering in the quarry pit. The new monitoring wells should be appropriately positioned to monitor for any groundwater level changes beyond the proposed quarry site boundary.</p> <p>The groundwater monitoring wells should be monitored as part of the EMP for the proposed quarry with monitoring conducted on at least a quarterly basis. The monitoring program should include long term monitoring of groundwater conditions including water levels and quality for any potential impacts to off-site receptors.</p> <p>The EMP should require that monitoring be performed by suitably qualified professional in accordance with Schedule B9, <i>Guidelines on Competencies and Acceptance of Environmental Auditors and Related Professionals</i> of the ASC NEPM (NEPC 2013). The results of monitoring should be reported annually. It is recommended that the EMP and results of monitoring be reviewed and approved by NSW EPA-accredited Site Auditor.</p> |
| <p>The proposed quarry is proposed to be filled with VENM or ENM for rehabilitation purposes</p> | <p>In view of the volume of the quarry void of 9.7 million m³, VENM or ENM will need to be sourced from thousands of source sites.</p> <p>The VENM or ENM is unlikely to come from a single homogenous site/source. In view of this, it is likely that the VENM or ENM will need to be sourced from a significant number of source sites. Due to the likely number of source sites, there is a heightened potential for contaminated material to be disposed of at the proposed quarry.</p> | <ul style="list-style-type: none"> A comprehensive and robust environmental management system will be required to ensure that the material deposited within the quarry void as part of rehabilitation is VENM or ENM. This should be developed in accordance with NSW EPA guidance for VENM classification and include the following requirements for any site from which VENM or ENM is proposed to be imported: |

| Aspect | Risk | Recommendation |
|--|---|--|
| | <p>It is our experience that for land rehabilitated using VENM or ENM won from off-site, a comprehensive and robust environmental management system is required to ensure that the material is suitable for deposition. Such systems are akin to those employed at licenced facilities (i.e. landfills).</p> | <p>To determine the potential for 'manufactured chemicals or process residues' to be present in the VENM or ENM in accordance with NSW EPA guidance, a preliminary site investigation (PSI) report should be completed by a suitably qualified professional, for each source site. The PSI should be completed in accordance with the requirements of the National Environment Protection Council 2013, National Environment Protection (Assessment of Site Contamination) Measure, 10 December 1999 (ASC NEPM), as amended 2013.</p> <p>In accordance the NSW EPA guidance, the PSI should include consideration of the presence of: manufactured chemicals or process residues; naturally occurring asbestos soils; any other waste, or be 'made' from processed soil.</p> <p>In addition to the PSI, confirmatory soil sampling and analysis may need to be performed on VENM/ENM (i.e. 'chemical assessment') to confirm the results of the PSI (i.e. that the material is not contaminated or whether is contains sulfidic ores etc.). The environmental management system should include sampling frequencies. It is noted that testing for ENM must be in accordance with 'The Excavated Natural Material Order 2014' issued by the NSW EPA and amended from time to time.</p> <ul style="list-style-type: none"> • The environmental management system should include a review and auditing component to ensure that it is followed during filling. |
| <p>Potential for 'mounding' of groundwater within backfill of proposed quarry.</p> | <p>The backfill of the proposed quarry may be more permeable than surrounding strata, resulting in the localised 'mounding' of groundwater within the quarry void (as a result of surface water and groundwater ingress). This may increase the risk of contamination of the regional aquifer where contamination or naturally elevated constituents are present in the VENM backfill or quarry void may be mobilised by water infiltrating the material.</p> | <ul style="list-style-type: none"> • It must be ensured that the proposed quarry is backfilled with suitably low permeable material, at a compaction rate and moisture content which minimises infiltration into the void backfill post filling. |

5. USE OF REPORT

The preparation of this report has been undertaken for the purpose of providing environmental advice regarding a proposed quarry located in the vicinity of the groundwater source at 'Tennyson Park', Hanging Rock Road, Sutton Forest, New South Wales and this report cannot be used for any other purpose.

This report is prepared solely for the benefit of Coca-Cola Amatil (Aust) Pty Ltd. This report is provided on the condition that it or any part of it, will not be made available to, or relied upon by any other party for any purpose except with the prior written consent of Peter J Ramsay & Associates Pty Ltd (which consent may or may not be given at its discretion). Peter J Ramsay & Associates Pty Ltd consents to Coca-Cola Amatil (Aust) Pty Ltd making this report available to other parties for the purpose of showing the scope of, and the recommendations provided in, this report, however those third parties cannot rely on the contents of this report .

6. DISCLAIMER

This report is provided on the condition that Peter J Ramsay & Associates Pty Ltd disclaims all liability to any person other than Coca-Cola Amatil (Aust) Pty Ltd in respect of the actions, errors or omissions of any such person in reliance, whether in whole or in part, upon the contents of this report.

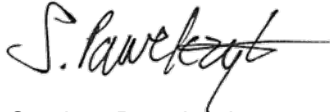
7. LIMITATIONS

Peter J Ramsay & Associates Pty Ltd has provided this environmental advice in relevant guidelines. The nature of environmental advice is influenced by factors such as professional judgement and the reliability of the information relating to the site which was obtained by the methodology described in this report. Reasonable care has been taken to verify the accuracy of the data and information available to Peter J Ramsay & Associates Pty Ltd.

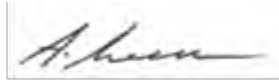
Our findings presented in this report are based on the information available to us during the investigation, and some of those findings could vary if the information upon which they are based is determined to be false, inaccurate, or incomplete. Peter J Ramsay & Associates Pty Ltd disclaims all liability to any person for events taking place after the time during which the investigation was undertaken.

Should you wish to discuss any aspect of this letter, please do not hesitate to contact Mr Stephan Pawelczyk or Mr Andrew Green on 02 8338 1655. Thank you.

Yours sincerely,



Stephan Pawelczyk
State Manager NSW
Primary Author

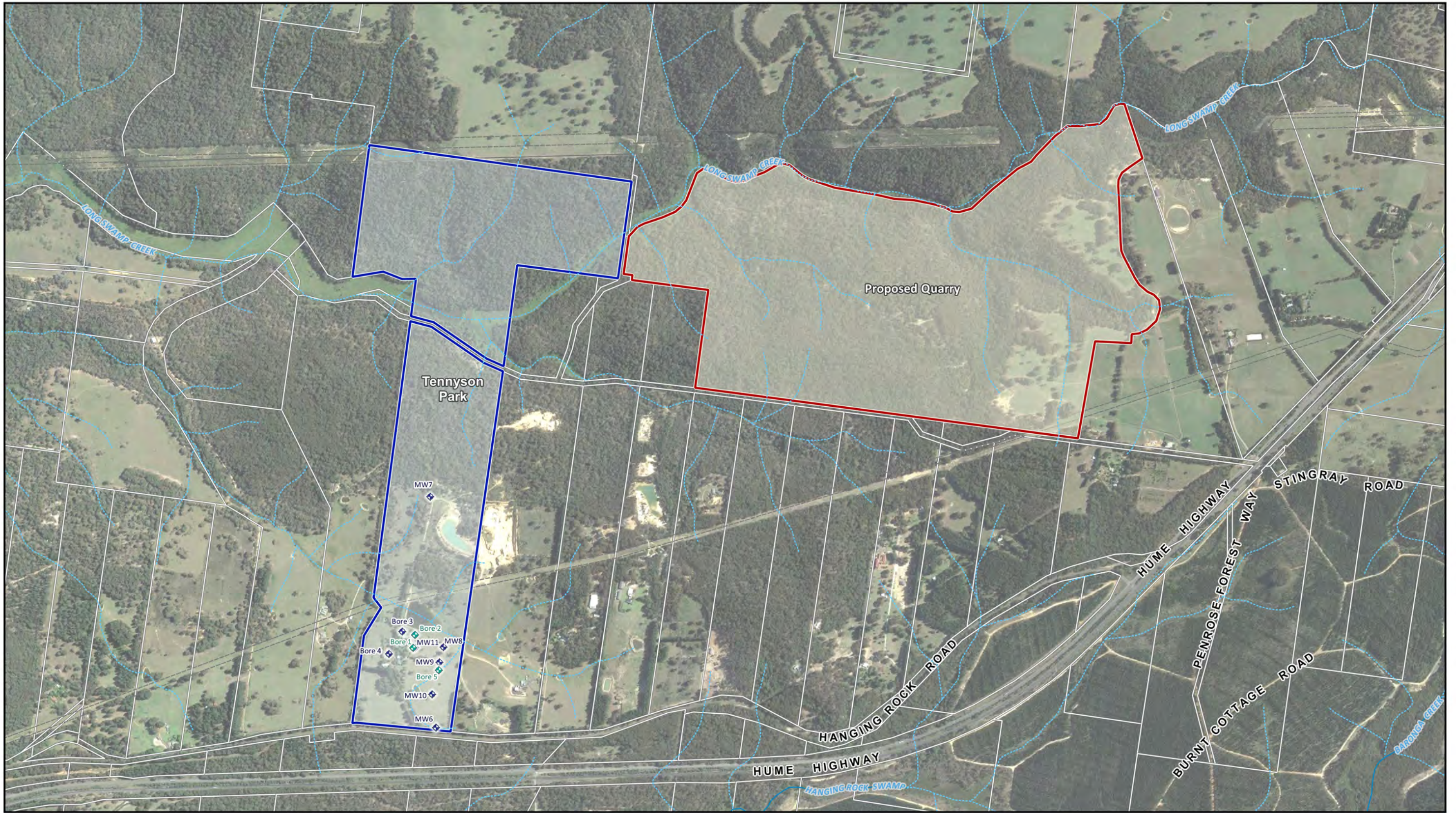


Andrew Green
Associate
Senior Review

Enclosed:

Attachment A Figure F1 and Figure F2

Attachment A



File: P:\Projects\764_CCA_Aus44_Prop_Quarry_Park\Maps\Rev_00\F1_Site_Location_Map_Rev00.qgs



**PETER J RAMSAY
& ASSOCIATES**

Project: 764.44
 Date: 19/06/2018
 Revision: Rev.00
 Designed: SAP
 Drawn: SJK
 Reviewed: ALG

0 100 200 300 400 500 m



Scale 1 : 15,000 @ A3

LEGEND

- | | | |
|-----------------------------|-----------------------------|---------------|
| Boundary of Proposed Quarry | Easement | Watercourse |
| Tennyson Park Site Boundary | Groundwater Monitoring Well | Perennial |
| Lot Boundary | Groundwater Extraction Bore | Non-Perennial |

Data Sources

Boundary of Proposed Quarry: Digitised from "Figure 3- The Site", Report No. 864/08 "Groundwater Impact Assessment for Sutton Forrest Quarries Pty Ltd" by Larry Cook Consulting Pty Ltd, March 2018
 Aerial imagery: Source- Google Earth Pro, © Google 2018, photograph dated 27/04/2016.
 Property Boundaries, Easements, and Watercourses: Source- Spatial Services, NSW Department of Finance and Services. Downloaded on 22/08/2017.

SITE LOCATION MAP

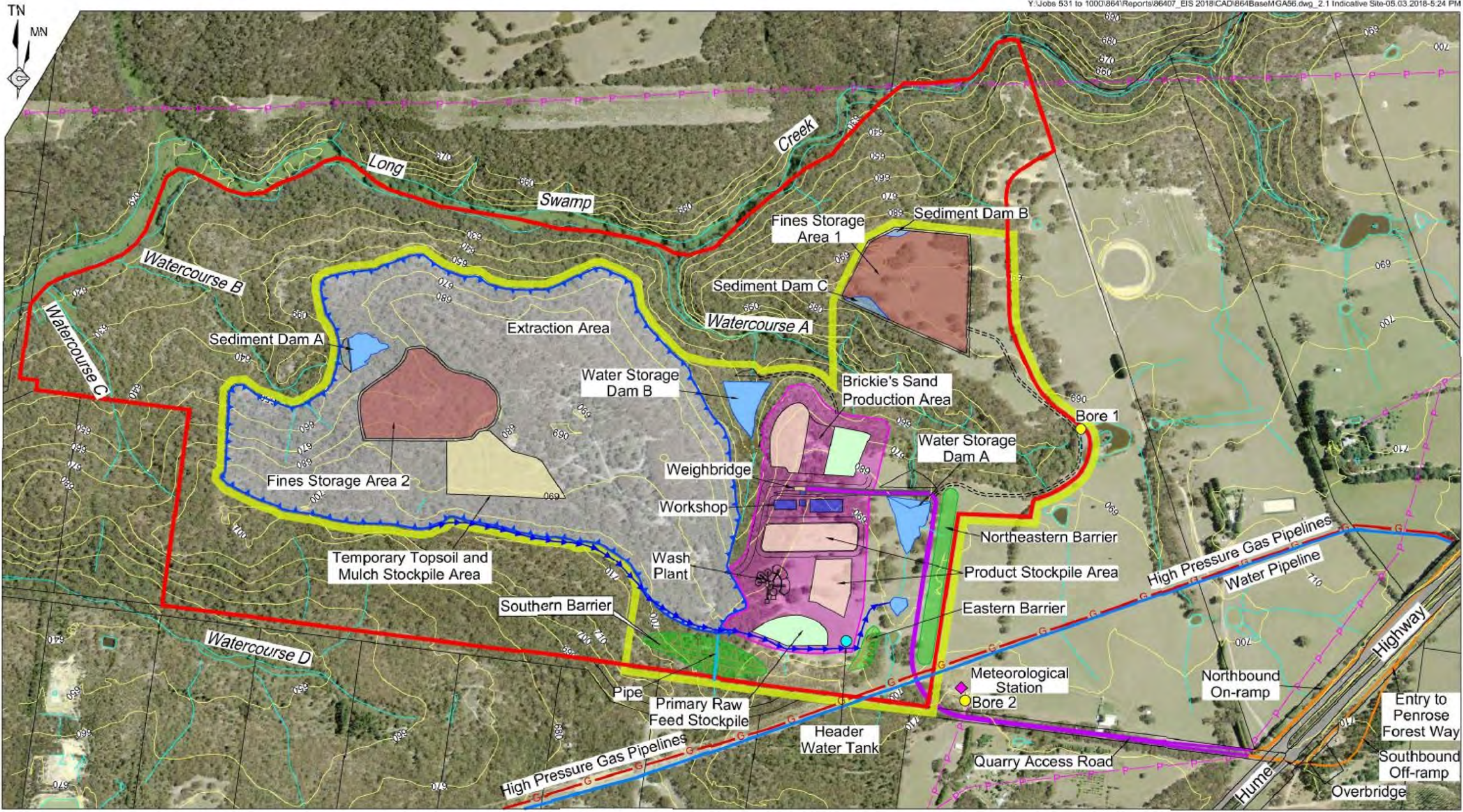
*Environmental Advice Regarding Proposed Quarry
 Near 'Tennyson Park' in Sutton Forest, NSW*

Sutton Forest, NSW

Coca-Cola Amatil (Aust) Pty. Ltd.

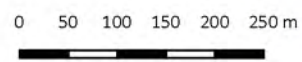
Figure

F1



PETER J RAMSAY & ASSOCIATES

Project: 764.44
 Date: 19/06/2018
 Revision: Rev.00
 Designed: SAP
 Drawn: SJK
 Reviewed: ALG



Scale 1 : 7,750 @ A3

LEGEND

- | | | | | | |
|-------------------------------|---------------------------------|------------------------------|---------------------------------|----------------------------------|------------------------|
| Site Boundary | Quarry Operations Area Boundary | Cadastral Boundary | Contour (m AHD)(Interval = 10m) | Watercourse | Meteorological Station |
| High Pressure Gas Pipelines | Water Pipeline | Bore 1 Production Bore | High Pressure Gas Pipelines | Power Line | Water Pipeline |
| Limit of Extraction | Quarry Access Road | Quarry Interchange | Internal Road | Access Road | Diversion Drain |
| Processing & Stockpiling Area | Barrier | Water Storage / Sediment Dam | Fines Storage Area | Mulch and Topsoil Stockpile Area | |

Cadastral Boundary Source: © NSW Department of Finance and Services
 Panorama Avenue Bathurst NSW 2795 www.lpi.nsw.gov.au
 Base Photography Source: LPI - 13 December 2013

Data Source
 This plan is reproduced from "Figure 3- The Site", Report No. 864/08 "Groundwater Impact Assessment for Sutton Forrest Quarries Pty Ltd" by Larry Cook Consulting Pty Ltd, March 2018

PROPOSED QUARRY PLAN

Environmental Advice Regarding Proposed Quarry Near 'Tennyson Park' in Sutton Forest, NSW

Sutton Forest, NSW

Coca-Cola Amatil (Aust) Pty. Ltd.

Figure
F2