4.0 SUMMARY OF ECOLOGICAL VALUES

Although the site has historically been subjected to significant disturbance, it has been found to support a number of ecologically significant flora and fauna species scheduled under the EPBC Act and NCA. Further detailed assessments will be necessary to identify the extent of these and other species, the likely impacts on species and appropriate mitigative measures where required. Given the proximity of species scheduled under the EPBC Act to the likely disturbance footprint it would be a prudent exercise to refer the project to the Department of Environment, Water, Heritage and the Arts.

Remnant 'Endangered' and 'Of Concern' regional ecosystems have been mapped and confirmed to affect the site. Furthermore, remnant regional ecosystems have also been mapped as Essential Habitat for the Koala for the purposes of the VMA. A PMAV applies to the non-remnant vegetation on site which is "locked in" as Category X. The disturbance footprint is located largely within areas mapped as Category X. Further detailed investigations will be necessary to identify appropriate vegetation to be used as offsets for the small area of Endangered vegetation impacted by the quarry footprint for the purposes of the VMA.

Subject to further field validation, it appears at this stage that offsets can be accommodated within the site.

At a State level, the site is located inside a State significant corridor. At a local level, the site includes a number of mapped waterways.

The proposed footprint has been designed to minimise impacts on known high value ecological features. Specifically, it avoids known locations of threatened species and limits impacts on mapped Endangered Regional Ecosystems to one minor crossing point at the site entry.

5.0 REFERENCES

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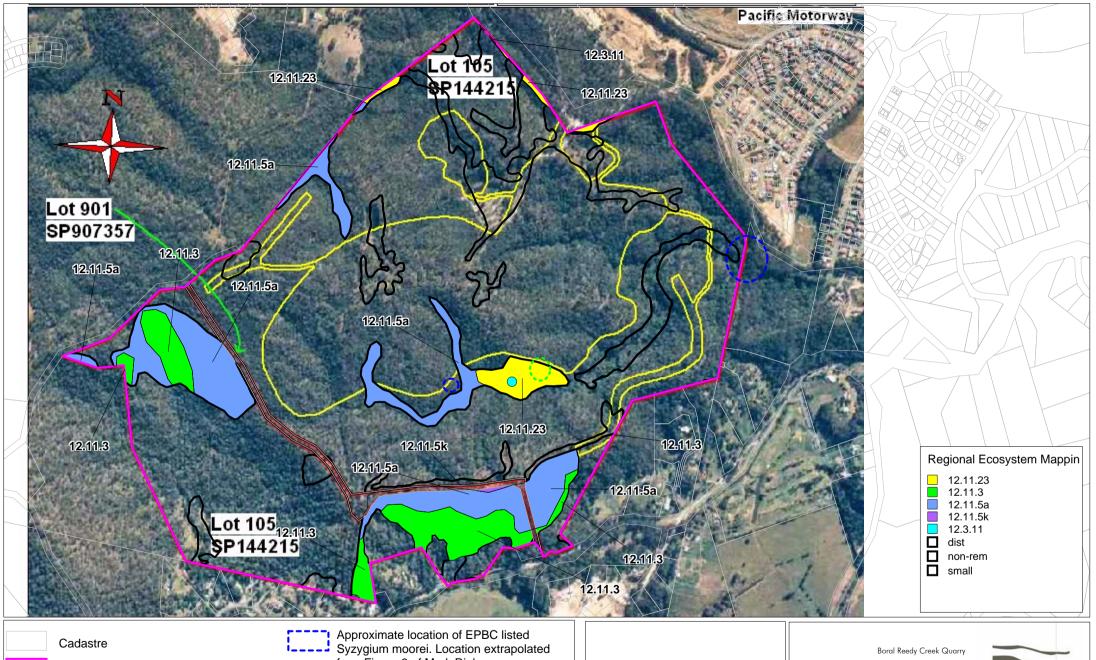
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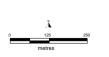
Site boundary

June 2009 Development Footprint

GPS location of Cupaniopsis newmannii by Chenoweth EPLA during preliminary site investigation.

from Figure 3 of Mark Rigby and Associates (2005)

> Approximate location of White Bellied Sea Eagle nest. Location extrapolated from Figure 3 of Mark Rigby and Associates (2005)



Ecological values and Disturbance Footprint



FIGURE 1

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Page 96 of 12 Date: 1/7/09
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Appendix D

Community and Stakeholder Engagement Strategy, prepared by Three Plus



Report to

Boral

COMMUNITY AND STAKEHOLDER ENGAGEMENT PROCESS FOR GOLD COAST QUARRY

5 June 2009

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1 COMMUNITY AND STAKEHOLDER ENGAGEMENT STRATEGY: OBJECTIVES, METHODS AND EXPERIENCE

1.1 BACKGROUND

Boral is intending to engage Brisbane-headquartered communications firm Three Plus to design and implement an independent Community and Stakeholder Engagement Program for the proposed Gold Coast quarry EIS process, should Declaration as a State Significant Project be forthcoming.

Three Plus has worked with the Office of the Coordinator-General on several occasions through the development and implementation of the Community and Stakeholder Engagement Programs for recent State Significant projects, including:

- Traveston Crossing Dam
- Wyaralong Dam
- North East Business Park (Caboolture)
- Shute Harbour Marina
- Gold Coast Notional Seaway

1.2 OBJECTIVES

The purpose of the EIS consultation will be to engage stakeholders in informed discussion about what the proposed project may mean to the local area and the surrounding region. This will require the provision of information about the project design and potential impacts, and the establishment of a number of opportunities and avenues for stakeholders to participate in consultation.

Community engagement objectives for the EIS will be to:

- Add value to the study's decision-making process;
- Inform stakeholders about the study objectives, drivers, processes and consultation opportunities;
- Provide easy and accessible ways for stakeholders to participate in the consultation process; and
- Inform the EIS project team.

1.2.1 Terms of Reference Phase

In addition to the community and stakeholder engagement activities planned for the EIS phase, Boral has determined that it will support the public comment phase on the Coordinator-General's draft Terms of Reference (TOR). Boral will undertake a dedicated round of pre-TOR stakeholder briefings, including a public Information Day during the TOR public advertising period, to provide information on the project and to encourage feedback on the draft TOR.

1.3 METHODS

The study's community engagement activities will be conducted in line with the Government's (DMR's) *Community Engagement Policy, Principles, Standards and Guidelines* (2004).

Commercial in Confidence





The study team will prepare a report on the community engagement activities and stakeholder feedback, including Information Days, for the EIS. Additionally, individual Information Day reports will be prepared and made available to the public via the Boral project website and upon request.

Components of the consultation process will include:

- TOR and EIS community engagement designed to ensure key stakeholders are consulted, and that the community has access to project information and an opportunity to provide comment on the project; and
- An ongoing community and stakeholder awareness program utilising newsletters, the project website and the media - to ensure the EIS is informed by a broader community understanding of the project.

1.4 COMMUNITY ENGAGEMENT STRATEGIES

The following strategies will underpin the project objectives:

- Establish a high level of project awareness in the local community
 - Conduct public Information Days to present project information and answer questions;
 - o Conduct key stakeholder (individual and established groups) project briefings;
 - Publish and distribute (via newsletters and the project website) project information/updates; and
 - o Ensure early and regular presentation of project related information.
- Use existing networks to promote community awareness and encourage input and feedback
 - o Establish contact with elected representatives and provide briefings; and
 - Use established community networks to encourage community participation in the project and to provide project information.
- Adopt an apolitical approach to the provision of project information
 - Provide project information to all elected representatives in the project area at all levels of government.
- Clearly identify opportunities for public comment and input
 - o Use all available opportunities to reinforce how the community and stakeholders can have their say; and
 - o Provide information on public comment periods and how the community can participate.
- Acknowledge community concerns and accurately reflect these in data and project reporting.

1.5 IDENTIFICATION OF THE COMMUNITY OF INTEREST

The key stakeholders who comprise the community of interest for the project will be identified, and are likely to include:

- Individuals directly affected by the project, including adjacent landholders and business people who may be affected by project activities;
- Organisations and groups in geographic proximity to the project;
- The Mayor, Councillors and Chief Executive Officer of the Gold Coast City Council;
- Relevant State and Federal Government agencies;



- State and Federal Members of Parliament relevant to the project (portfolio responsibility) and project area (local MPs);
- Federal Senators (located in the local area);
- Individuals and special interest groups who make comment about the project via formal avenues (draft TOR feedback) or informal comment via the media;
- Relevant industry sectors;
- Traditional owners and indigenous groups;
- Individuals and groups with historical or cultural heritage interests;
- Public utilities such as Telstra and Energex; and
- Media.

The project stakeholder list will be continually reviewed and updated as new stakeholders emerge or are introduced to the project team.

1.6 STAKEHOLDER DATABASE

Contacts received or made by the project team will be recorded into a secure web-based data management program.

As the central database, the program will be progressively updated and used by the project team to track and report inquiries, issues and team responses across all project interfaces, to minimise risk while enhancing transparency and accountability.

The database will also be used to create information distribution lists, with stakeholders encouraged to register at the Information Days or via other mechanisms.

1.7 COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN

A Community and Stakeholder Engagement Plan will be presented to COG for review prior to the draft TOR being advertised. The Plan will utilise a range of engagement techniques for the different stakeholder groups, and may include:

- All-of-Government presentations;
- Departmental presentations and forums;
- Elected member briefings;
- Key stakeholder focus groups;
- Feedback mechanisms, eg 1800, email and feedback survey/s;
- Newsletters and factsheets;
- Website:
- Information day/s and Information Day reports;
- Private briefings with individual stakeholders or community group organisation representatives;
- Local business opportunities register;
- Delivery of community feedback and comment to the EIS project team; and
- Reporting and evaluation.

A detailed Community and Stakeholder Engagement Plan report will be included as a key component in the EIS report.



1.8 BORAL EXPERIENCE

Boral has for some time been cognisant of the key issues required to be addressed to ensure the availability of a sustainable supply of construction aggregates to meet the forecast demand in SEQ, two of which include:

- Demographic trends fuelling encroachment of incompatible land uses (particularly residential) on extractive resource assets in SEQ; and
- Community expectations around existing or proposed extractive operations increasing.

The impacts of these issues on extractive resources can be severe, with potentially serious economic consequences increasing risk and uncertainty for investment. Boral therefore considers it essential that, for any strategy aiming to secure a long-term sustainable extractive resource position, these issues are fully considered and appropriate management practices are incorporated.

Implementation of such a strategy has been underway and evolving in SEQ since 2002, with Boral acquiring eight extractive resource assets at a cost of in excess of \$25 million (resource extensions, acquisitions or green field sites being purchased), in addition to leasehold interests.

Since 2002, Boral has been adding value to its extractive resource assets by ensuring (where possible) that they are designated in the relevant State Planning Policies, Local Government Planning Schemes and Regional Planning frameworks.

To better position these assets for development, Boral has committed significant time and resources to stakeholder engagement and management activities. At the Federal & State government level, thorough and regular briefings have been undertaken with elected representatives and senior bureaucrats. At the Local Government level, the development of relationships with Mayors, Councillors and officers to gain support for existing operations and future proposals has been essential.

At the local community level, Boral currently has seven community liaison groups and in excess of 15 community engagement projects running at key quarry operations across Queensland. Cultural heritage is also being managed by negotiating agreements and engaging with key groups.





Boral's open and transparent approach to engagement with local communities and interest groups is resulting in unprecedented support from local communities for the continuation and future development of Boral's extractive resource assets.

More recently, Boral embarked on the first wave of development applications to further improve Boral's resource position in Queensland, by converting un-consented resources to consented resources. All four of Boral's recent quarry resource extension development applications were approved (Petrie, Narangba, Dundowran & Warrians Quarries). This brings the total additional quarry resources recently approved to 127 million tonnes (120 million tonnes in SEQ).

Each of these recent development approvals received support from the respective local communities, Council's and elected members, particularly around the consultation efforts. The approach taken by Boral towards the applications (which included providing a comprehensive application with supporting technical reports and professional community consultation) allowed each Local Council to assess the applications in only 11 months (average) – a greatly reduced assessment time compared to other comparable quarry applications. Importantly, Boral has been able to avoid appeals to the Planning & Environment Court, with the associated costs and extended timeframes.

Boral in Queensland is raising the industry 'bar'. Boral's professional approach in respect of the management of its operations is evidenced by proactive environmental management and demonstrated commitment to sustainable development. Boral's 'Changing Perceptions' strategy provides a holistic approach to conducting sustainable business. Boral has been a finalist in both the 2007 and 2008 EPA Sustainable Industries Awards for this sustainable approach to its Queensland operations (Corporate Sustainability & Community Partnership categories).



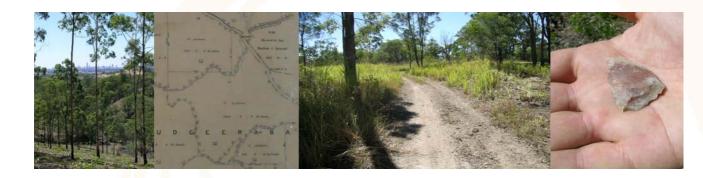
Notwithstanding Boral's recent successes, continued demand is placing pressure on quarry resource positions and Boral is continuing to focus on securing approvals at its long-term operations. Collectively, Boral is pursuing a further fifteen development applications across Queensland in respect of access to and/or extraction of quarry resources.

Appendix E

Review of Cultural Heritage Issues, prepared by Converge Heritage + Community

Review of Cultural Heritage Issues Gold Coast Quarry 09003C/2008

Boral





Converge Heritage + Community undertook this review and assessment.

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DOCUMENT VERIFICATION

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Quarry_Final BURLEIGH Gold Coast Quarry

Verification:

Revision	Date	Nature of revision	Prepared by	Authorised by
0 1 2	01/10/08 02/03/09 05/06/09	Draft Report Final Final with Amendments	CB AN AW	AW AW AW
3 4				

Executive Summary

Converge Heritage + Community was commissioned by Boral Resources (Qld) Pty Limited to undertake a Review of Cultural Heritage Issues associated with the proposed Gold Coast Quarry, Lot 105 on SP144215 (the study area), located near Burleigh in Southeast Queensland.

Historical records indicate that the study area has been heavily cleared in the past. For this reason, it is best described by category 4 of the Cultural Heritage Duty of Care Guidelines.

Comprehensive cultural heritage surveying was not carried out in this initial review of cultural heritage issues. Previous cultural heritage surveying in and around the study area indicates that Aboriginal cultural heritage exists in places. The levels of cultural significance associated with this material will only be ascertained through consultation with the Aboriginal Parties for the Burleigh area. This will occur during the development of a Cultural Heritage Management Plan agreement in due course.

In regard to historic heritage, contextual research was undertaken. The results of this research highlighted several major themes relating to the study area:

- Early Exploration and Surveying to 1842;
- Pastoralism and Logging, 1842-1868;
- Closer Settlement, 1869-1939;
- The Development of Road and Rail Infrastructure to 1939; and
- Making of a Suburb, 1939-present.

The 'Old Coach Road' that is outside of, but adjacent to, the study area may have levels of cultural heritage significance, and may also trigger Section 89 of the *Queensland Heritage Act*. Upgrades by Gold Coast Regional Council to the 'Old Coach Road' may result in an impact to the 'Old Coach Road', but this would be outside of both the study area and the Burleigh Quarry project. A closer inspection of the study area may also reveal other historic cultural heritage and archaeological places and artefacts not identified in previous reports.

The conclusions of this study are as follows:

 A CHMP pursuant to part 7 of the Aboriginal Cultural Heritage Act 2003 will be required if an EIS is commenced. Expectations are that endorsed Aboriginal Parties will require a cultural heritage survey and reporting to be conducted, as well as detailed consultation. From this

- process, an understanding of levels of cultural heritage significance should be a result, and discussions of an appropriate management program can be finalised into an agreed process.
- 2. A further field assessment will be necessary to determine whether or not there are any non-Indigenous archaeological sites present and what levels of significance are associated with the non-Indigenous values of the study area. The findings should be compiled into a suitably prepared Technical Report that satisfies the requirements of the upcoming EIS.

1.0 Introduction

Converge Heritage + Community was commissioned by Boral Resources (Queensland) Pty. Ltd. in July 2008 to undertake a Review of Cultural Heritage Issues associated with the proposed Gold Coast Quarry, Lot 105 on SP144215, located near Burleigh in Southeast Queensland (henceforth referred to as the study area – see Figure 1).

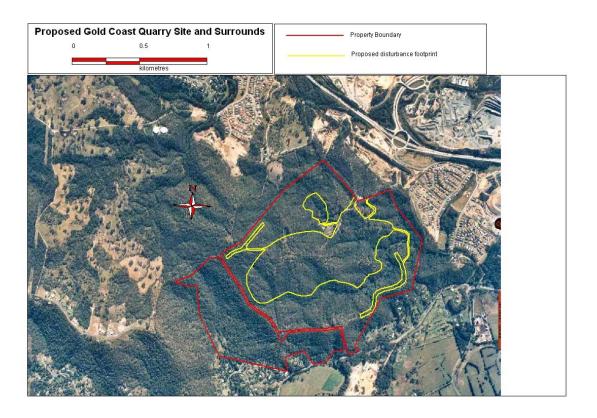


Figure 1 - Location map and study area.

Boral has requested advice on cultural heritage issues that may be associated with the proposed project area, to assist them with initial planning for the development of a hard rock quarry. This extract was derived from a report prepared by Converge with the aim to review both Indigenous and non-Indigenous cultural heritage issues associated with the development of a new quarry site at the proposed site, and to provide Boral with advice on appropriate management approaches to these matters.

2.0 Review of Previous Studies

A review of academic research and consultancy-based literature was undertaken as part of the Review of Cultural Heritage Issues. Several studies were found to be of relevance to the current study, with two being of critical importance to the current study area as discussed below.

2.1 Davies 1995

Davies' (1995) Cultural Heritage Assessment of a 600ha proposed residential development site at Reedy Creek resulted in the identification of both Indigenous and non-Indigenous heritage materials, a number of which were located in Lot 105 SP 144215. A variety of non-Indigenous items were identified during the survey, most related to the then use of the study area as a working cattle property. In addition to these isolated finds, two non-Indigenous site complexes were recorded during the survey.

A total of 29 locations exhibiting Indigenous archaeological material were identified over the broader 600 ha site during the survey. These locations included two scarred trees, two low density stone artefact scatters, six locations with two stone artefacts and 19 isolated stone artefacts.

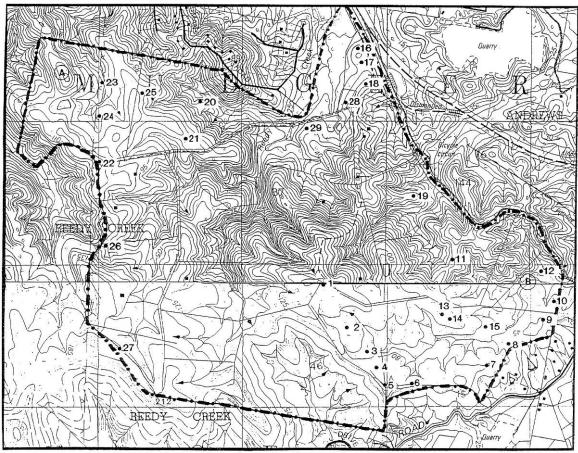


Figure 2 - Location map of sites found by Davies (1995)

No information about cultural significance is provided by the Davies report, and without consultation with the Aboriginal Parties, a discussion about cultural significance is not possible. Consultation will take place as part of the development of a Cultural Heritage Management Plan in due course.

2.2 ARCHAEO Cultural Heritage Services 2005

ARCHAEO (now part of ARCHAEO / Converge) conducted a study of the current study area in 2005, focussing primarily on a study of Aboriginal cultural heritage and assessing the study area's compliance with the *Aboriginal Cultural Heritage Act 2003* Duty of Care Guidelines. Results from this study included:

- The landscape had been heavily cleared since at least 1973 and consequently the study area consists of regrowth;
- The Ground Integrity (GI) of the study area was generally Poor (0-25%);
- It appears that some areas of remnant vegetation remain, providing a chance that Aboriginal cultural heritage remains in situ. These areas were recorded as having High GI;
- The density of vegetation across the study area resulted in Zero Ground Surface Visibility (GSV)
 recorded across almost all of the site. Exceptions to this were paths and tracks where High GSV
 was noted; and
- Despite the Poor GI and Zero GSV there remains potential for Aboriginal cultural heritage material to be present, as indicated by the findings of the Davies report.

In summary, the study area has been subjected to significant ground disturbance and is considered to be best described by Category 4 of the Duty of Care Guidelines for the *Aboriginal Cultural Heritage Act* 2003.

3.0 Register Searches

3.1 Aboriginal Site Searches

In addition to this review of previous studies relating to the study area, Converge conducted a search of the Department of Natural Resources and Water's site register and database for Aboriginal sites, areas and objects. A total of 20 sites located within Lot 105 SP144215 were identified.

3.2 Historic Register Searches

A search was conducted of the Australian Heritage Database (incorporating the National Heritage List, Commonwealth Heritage List, and Register of the National Estate) and the Queensland Heritage Register. No registered places were found in the present study area. Consultation with Gold Coast City Council cultural heritage officers also revealed that there are no places of local heritage significance previously identified in the study area.

4.0 Historical Research

4.1 Contextual History

Historical research was undertaken to provide a context for the identification and assessment of places, features, values of historic (non-Indigenous) cultural heritage significance in and around the study area. The results of this research highlighted several major themes relating to the study area:

- Early Exploration and Surveying to 1842;
- Pastoralism and Logging, 1842-1868;
- Closer Settlement, 1869-1939:
- The Development of Road and Rail Infrastructure to 1939; and
- Making of a Suburb, 1939-present.

The results of this research highlighted the potential significance of 'Old Coach Road' which was constructed in the 1870s and formed part of a Cobb & Co. coach run in 1886 (Burrows 1989: 41). The remains of this road, now bituminised, are adjacent to the entry to the proposed quarry.

5.0 Visual Inspection

A limited visual inspection was undertaken by representatives of Converge on 16 July 2008 in association with other consultants working on the study area. The intention of the inspection was only to provide a contextual understanding of the location of the study area and its association with the Reedy Creek area in general. Converge staff did not carry out a site assessment or physical inspection. Consequently there was no validation of previously located sites.

6.0 Compliance Initiatives

6.1 Potential Impacts of Future Development

While future quarrying operations would impact an area that is best described by Category 4 of the duty of care guidelines, the fact remains that Aboriginal cultural heritage is present and Boral would have a cultural heritage duty of care to provide appropriate management of its values.

The project may impact on historic (non-Indigenous) cultural heritage located within the study area. In addition, upgrades by Gold Coast Regional Council to the 'Old Coach Road' adjacent to the access road to the quarry site may also result in an impact. A closer inspection of the study area may also reveal historic cultural heritage and archaeological places and artefacts not identified in previous reports.

6.2 Compliance with the Cultural Heritage Duty of Care

Under the Aboriginal Cultural Heritage Act 2003, responsibility for cultural heritage duty of care is placed on the person or company that intends to conduct activities that, through modification of the landscape building up, could impact on Aboriginal cultural heritage, if it is present. Section 23(3)(a)(ii) states that compliance with the cultural heritage duty of care is in place if a person is acting under an approved cultural heritage management plan (CHMP) that applies to the Aboriginal cultural heritage in the study area. An EIS will be undertaken on the study area before development of a quarry proceeds, thus triggering the requirement of the Act that a CHMP be undertaken. In such circumstances the development of a CHMP pursuant to part 7 of the Aboriginal Cultural Heritage Act will provide compliance with Boral's cultural heritage duty of care and directions for appropriate

management of cultural heritage values.

6.3 Compliance with the Queensland Heritage Act

There is no building or place listed on the Queensland Heritage Register associated with the study area, so compliance with the Queensland Heritage Act 1992 is satisfied in this regard. Nonetheless, sites of potential State significance that are not listed on the Register may be present on or near the site and these should ideally be considered.

Section 89 of the Queensland Heritage Act, which offers protection for archaeological places or artefacts of potential State significance, must also be taken into consideration. The section of 'Old Coach Road' outside of the study area may come under this section of the Act. Following these measures will ensure compliance with the Queensland Heritage Act 1992.

6.4 Compliance with the Gold Coast Planning Scheme

Compliance with the Gold Coast Planning Scheme is satisfied as there are no places within the study area that are that are listed on the nominated registers, nor in the Local Area Plan adopted by the Gold Coast City Council.

7.0 Conclusion

The conclusions of this study are as follows:

- A CHMP pursuant to part 7 of the Aboriginal Cultural Heritage Act 2003 will be required if an EIS is commenced. Expectations are that endorsed Aboriginal Parties will require a cultural heritage survey and reporting to be conducted, as well as detailed consultation. From this process, an understanding of levels of cultural heritage significance should be a result, and discussions of an appropriate management program can be finalised into an agreed process.
- A further field assessment will be necessary to determine whether or not there are any non-Indigenous archaeological sites present and what levels of significance are associated with the non-Indigenous values of the study area. The findings should be compiled into a suitably prepared Technical Report that satisfies the requirements of the upcoming EIS.

8.0 References

ARCHAEO Cultural Heritage Services

2005 Due Diligence Study for Lot 105 SP144215 Reedy Creek Southeast Qld. Unpublished report prepared for Mark Rigby and Associates Pty. Ltd.

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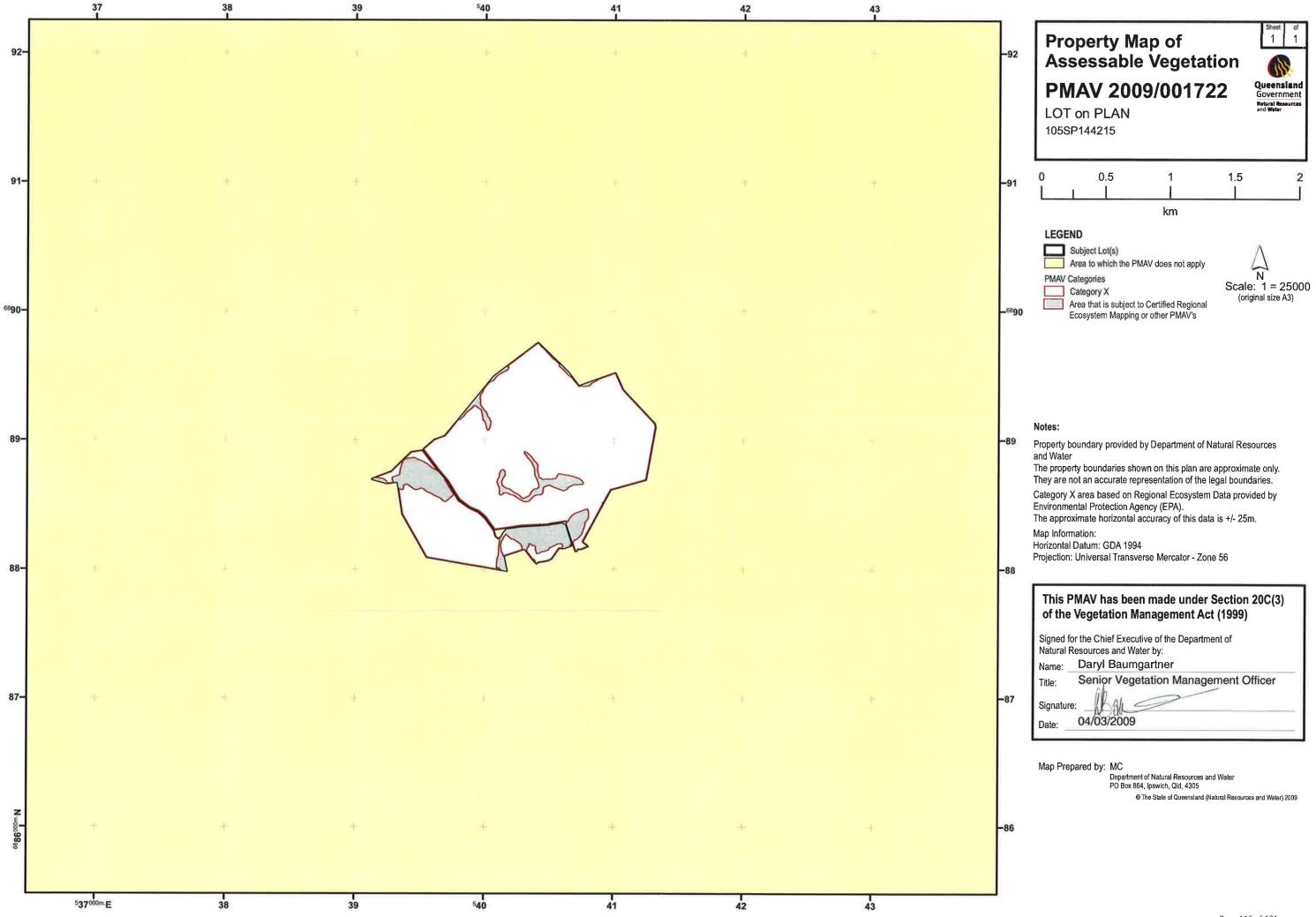
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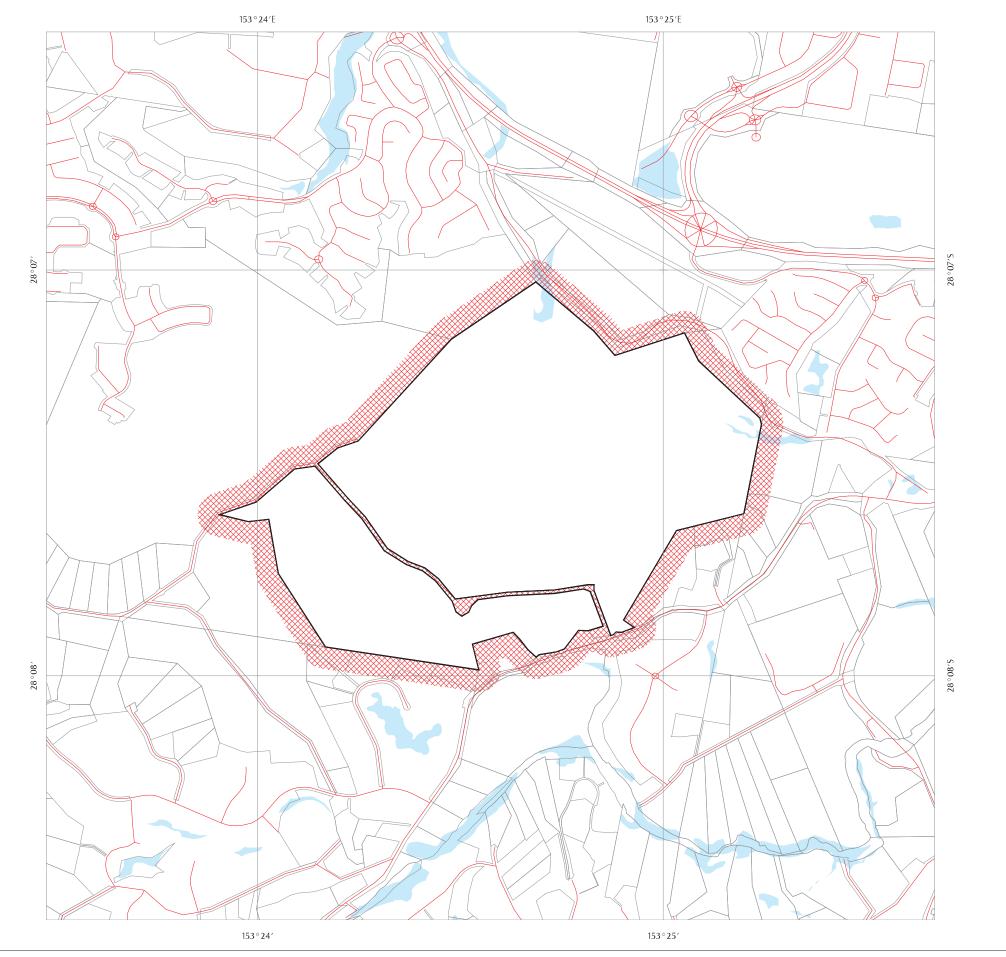
Appendix F

Copy of Certified Property Map of Assessable Vegetation (PMAV)



Appendix G

Referable Areas Map Extract



INTEGRATED PLANNING REGULATION 1998

MAP OF REFERABLE AREAS (ADVICE)

Requested By: MATTHEW.SCHNEIDER@HRPPC.COM.AU Date: 16 Sep 09 Time: 14.01.22

> Centered on Lot on Plan: 105 SP144215

Wetlands

Subject Lot
Roads

Towns

Conservation Estate Heritage Places

Cadastral Boundaries

as a locational aid only.

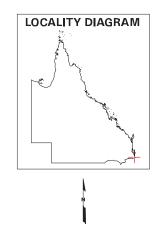
[©] MapInfo Australia Pty Ltd 2009

Property boundaries shown are provided

100 metre buffer



Queensland Government



Development applications made under the Integrated Planning Act 1997 must be referred to the EPA if the subject lot is identified as sharing a common boundary with a heritage place, or is in or within 100m of a wetland or conservation estate, and meets the criteria required under Schedule 2 of the Integrated Planning Regulation 1998.

Information shown on this map includes current data for referable wetlands, conservation estate and heritage places as required under Schedule 2 of the Integrated Planning Regulation 1998. Referable wetlands mapping has been taken from the 'Map of referable wetlands'. All datasets are updated as they become available to provide the most current information as of the date shown on this map.

Line work for the referable areas has been compiled at a variety of scales and should be used as a guide only. Consideration of the effects of mapped scale is necessary when interpreting the data. Buffer area shown is equivalent to approximately 100m from the boundary of the subject lot.

Disclaimer: Whilst every care is taken to ensure the accuracy of this product, the Queensland Government and Australian Government and MapInfo Australia Pty Ltd make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaim all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including direct or consequential damage) and costs which might be incurred as a consequence of reliance on the product, or as a result of the product being inaccurate or incomplete in any way and for any reason.

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This scale bar is approximate only Horizontal Datum: Geocentric Datum of Australia 1994 (GDA94) This product is unprojected and is not suitable for measuring distances

Appendix H

Preliminary Appraisal of Koala Habitat Values, prepared by Professor Frank Carrick AM

PRELIMINARY APPRAISAL OF KOALA HABITAT VALUES OF PROPOSED NEW BORAL GOLD COAST QUARRY SITE AT TALLEBUDGERA CREEK ROAD

10 SEPTEMBER 2009

FRANK N CARRICK AM EcoIndig Resources Pty Ltd

The following advice is based on a review of a basic fauna assessment conducted by **ddwfauna** in March 2005, a vegetation map of the site provided by **Chenoweth and Associates**, discussions with representatives of **Boral** (illustrated by various mapping products) and my inspection of the site (by vehicle and on foot) in August 2009.

From inspection of the maps that accompany the *Nature Conservation (Koala)* Conservation Plan 2006 and Management Plan 2006 – 2016, South East Queensland Koala State Planning Regulatory Provisions (July 2009) and the South East Queensland Regional Plan 2009 – 2031, no Koala conservation measures appear to be imposed for the site other than the requirements to protect the Koala as "Vulnerable Wildlife" under the *Nature Conservation Act* 1992.

However, it is my opinion that it is likely that the dramatic decline documented for South East Queensland (SEQ) Koalas is likely to result in the reclassification of Koalas in coastal SEQ as "Endangered Wildlife" under the *Nature Conservation Act* 1992 and possibly the Commonwealth's *Environment Protection and Biodiversity Conservation Act* 1999 in the near future. I believe it would be wise for applications for development of the proposed quarry to proceed on the basis of this contingency.

In broad terms I concur with the conclusions regarding Koala habitat values contained in the **ddwfauna** report: the areas of the site I inspected showed evidence of use by Koalas (ranging from recent to old) – the signs were consistent with moderate to low intensity use. However, an important caveat is that the entire site was not inspected and Koala habitat values are typically patchy. Thus patches may exist on the site that have higher carrying capacity than the areas actually inspected.

The previous rural and "commercial" activities on the site have produced a situation where it may be possible for Koala habitat rehabilitation to be undertaken as part of the proposed development that may assist the Queensland Government to meet its goal of achieving a net increase in Koala habitat in SEQ by 2020, even accounting for the inevitable impacts that the development of a new quarry operation will produce.

...../2

As noted in the **ddwfauna** report, the site is strategically situated to provide environmental connectivity between the Gold Coast hinterland and the coastal areas. There is an opportunity for the overall biodiversity management for the future **Boral** operations to incorporate the enhancement of the linkage values of the areas (including those operated by **Boral**, but also including other landholders). This provides the possibility of achieving overall net benefits to Koalas and other fauna despite the inevitable negative impacts of any future development (a new quarry or other forms of commercial or residential development) on the site. In my opinion, it is much more likely for a favourable Koala habitat outcome to result from a well designed and managed quarrying operation rather than most forms of commercial development and particularly conventional residential development (the latter usually having major direct and indirect deleterious impacts on Koalas).