



# Blakebrook Quarry Project Cap Rock Extraction (MP 07\_0020 MOD 1)

## Environmental Assessment Report

Section 75W of the *Environmental Planning and Assessment Act 1979*

### 1. BACKGROUND

Lismore City Council (Council) owns and operates the Blakebrook Quarry, located off Nimbin Road, Blakebrook, in the Lismore local government area (see **Figure 1**).

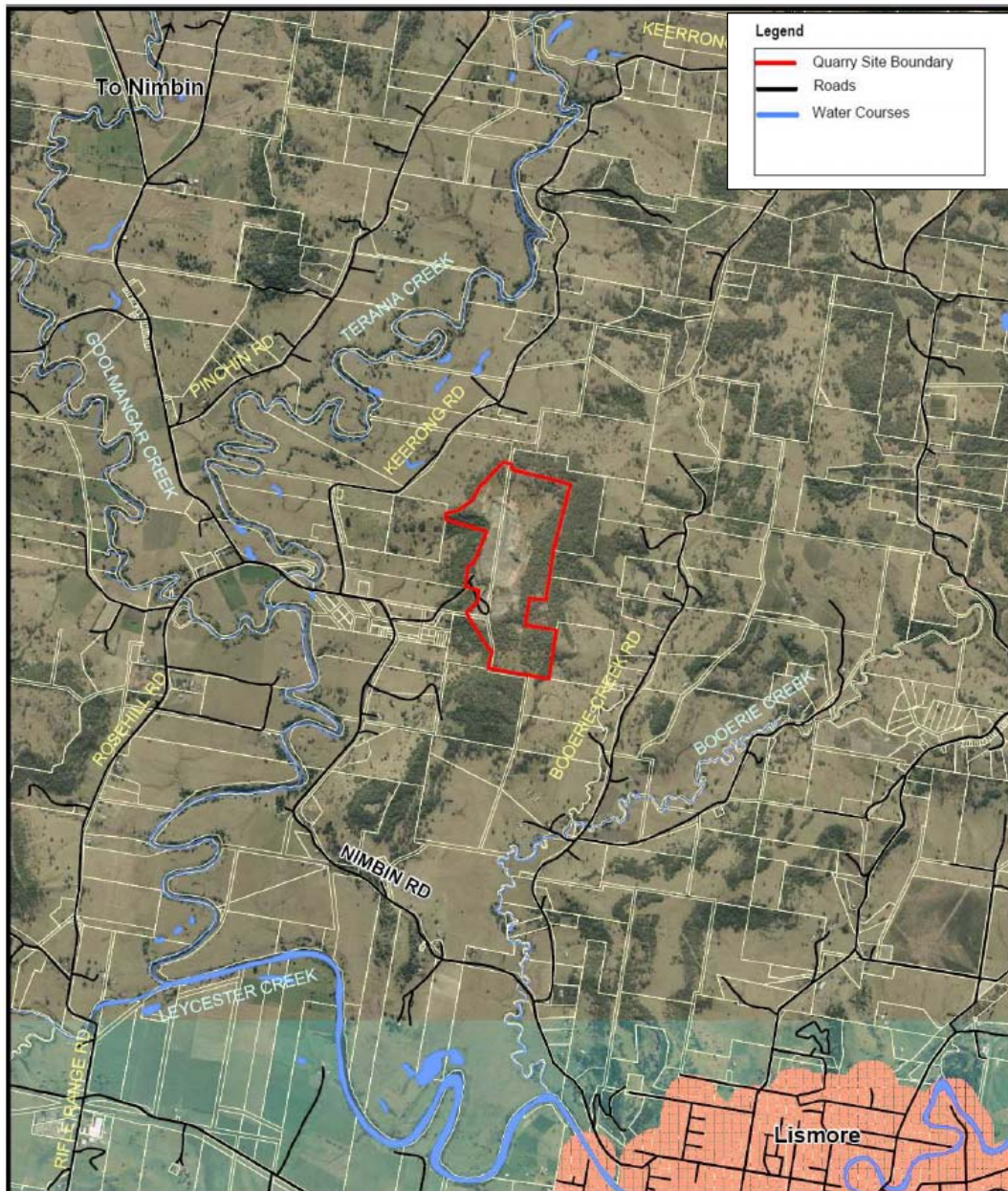


Figure 1: Location of the Blakebrook Quarry

The Blakebrook Quarry has operated since 1979 originally under a development consent granted by Council. On 24 November 2009, Ministerial approval was granted for the Blakebrook Quarry Project under MP 07\_0020. This approval allows for the:

- expansion of the north pit extraction area and the creation of the south pit extraction area (see **Figure 2**);
- extraction of up to 600,000 tonnes per annum (tpa) of hard rock material, over a 30 year period;
- processing of extracted material on site;
- transport of quarry products from the site via public roads; and
- progressive rehabilitation of the quarry.

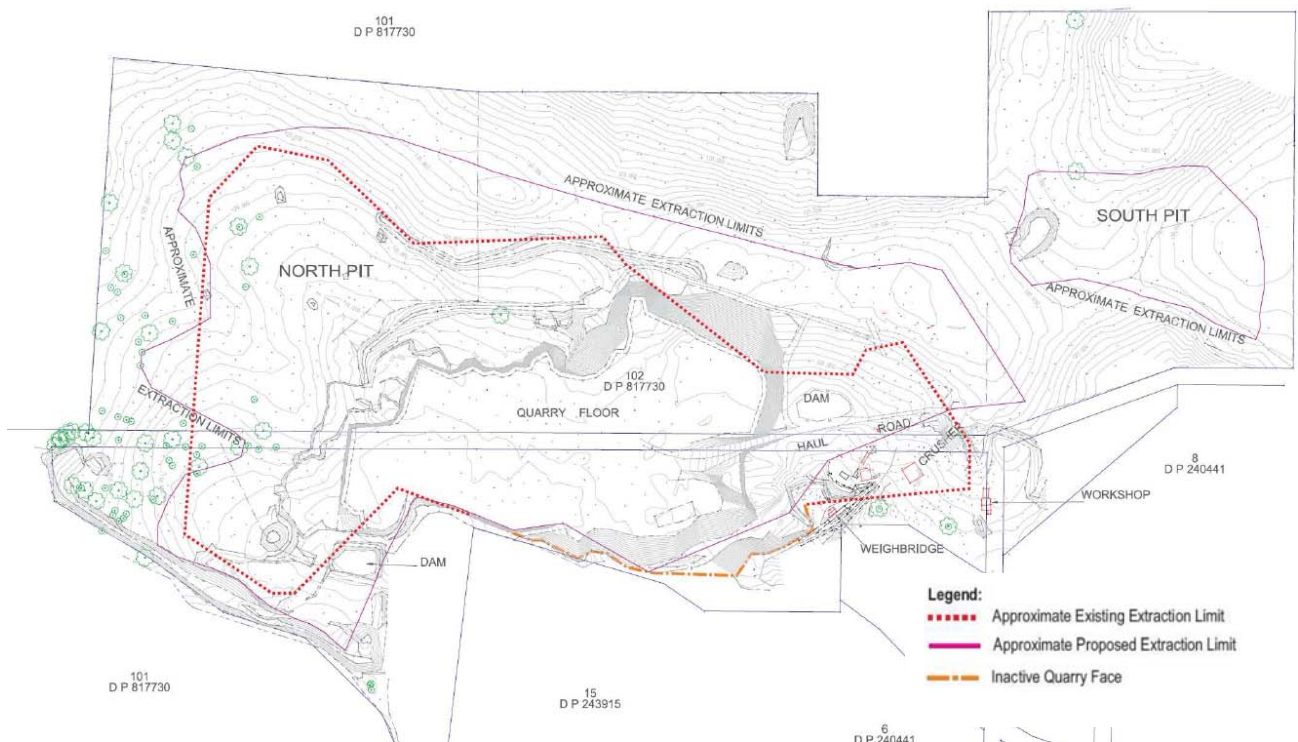
**2. PROPOSED MODIFICATION**

MP 07\_0020 requires Council to submit a detailed groundwater assessment before extraction occurs in the South Pit. However, prior to the submission of this assessment, in July 2014, Council commenced extraction of cap rock in the South Pit to provide oversize rock to the Coffs Harbour Northern Break Wall Rehabilitation Project. This extraction was considered to be non-compliant with MP 07\_0020 and the Department issued an Order for Council to install a groundwater monitoring network by 30 September 2016 and submit the detailed groundwater assessment prior to any further extraction in the South Pit.

The groundwater assessment requires the provision of at least two years of groundwater monitoring data. As monitoring of groundwater only commenced at the site in September 2016, this assessment will not be completed until after September 2018. This timeframe is problematic for the Coffs Harbour Northern Break Wall Rehabilitation Project, which has ceased operations due its reliance on the Blakebrook Quarry to supply the oversize rock required to complete the break wall.

On 3 August 2017, Council lodged a modification application under section 75W of the *Environmental Planning & Assessment Act 1979*. The application seeks to modify MP 07\_0020 to allow extraction of the first 10 metres (m) of cap rock in the South Pit, prior to the submission of the detailed groundwater assessment. Extraction of materials beneath the cap rock, to the approved depth of 105 m Australian Height Datum (AHD), would still not be permitted until the detailed groundwater assessment has been undertaken to the satisfaction of the Secretary.

The proposed modification does not seek to change any other aspect of the approved operations.



**Figure 2: Blakebrook Quarry Site Layout**

### 3. STATUTORY CONTEXT

#### 3.1 Section 75W

MP 07\_0020 was granted under Part 3A of the EP&A Act. In accordance with clause 8J(8) of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation) and the transitional arrangements under Schedule 6A of the EP&A Act, the modification must be determined under the former section 75W of the EP&A Act.

The Department is satisfied that the proposal can be characterised as a modification under section 75W.

The Department is satisfied that the proposed modification is within the scope of section 75W, and may be determined accordingly.

#### 3.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, the Director Resource Assessments may determine the application under the Minister's delegation of 16 February 2015, as no public objections were received, Council did not object to the proposal, and no political donations have been reported by Council.

### 4. CONSULTATION

Due to the minor nature of the proposed modification, the Department did not undertake public exhibition. However, the modification application and the accompanying Environmental Assessment (EA) was made available on the Department's website. The Department is satisfied that the notification process met the requirements of the EP&A Act and the EP&A Regulation.

The Department invited three government agencies to comment on the EA, including the Department's **Division of Resources and Geoscience** (DRG), the **Department of Primary Industries** (DPI) and the **Environment Protection Authority** (EPA). All three agencies provided submissions on the proposed modification. No public submissions were received.

**DRG** raised no objections to the proposed modification and noted the regional significance of the Blakebrook Quarry resource. DRG requested that Council continue to provide annual production data for the site.

**DPI** recommended that the risk of uncontrolled run-off or discharge from the quarry is minimised and managed in accordance with the site's Soil and Water Management Plan and Environment Protection Licence. Additionally, DPI recommended that Council continue to monitor groundwater levels and operate in accordance with the site's Groundwater Management Plan.

**EPA** commended that extraction of the South Pit cap rock not interfere with water bearing zones and recommended that monitoring of the exiting groundwater bores is continued. EPA also recommended that if any groundwater is detected in the South Pit, that quarrying activities cease until recommencement is authorised.

EPA also recommended that any approval authorising extraction of the cap rock lapse on 30 September 2018. The Department has addressed EPA and DPI's comments in **Section 5.1** below.

### 5. ASSESSMENT

The Department has assessed the merits of the proposed modification in accordance with the relevant objects and requirements of the EP&A Act. In assessing these merits, the Department has considered the:

- EA for the original project application;
- conditions of approval for the project as originally approved;
- modification application and associated EA; and
- relevant environmental planning instruments, policies and guidelines.

The Department considers the key potential impacts of the modification relate to groundwater. Consideration of this issue is provided below, with consideration of other impacts provided in **Table 1**.

## 5.1 Groundwater

The EA provided a Groundwater Impact Assessment (GIA) to assess potential groundwater impacts associated with the proposed quarrying of cap rock in the South Pit.

The proposed modification seeks to extract up to 10 m of cap rock in the South Pit, to a depth of 118.5 m AHD. To determine the height of groundwater in relation to the proposed extraction depth, the GIA reviewed groundwater monitoring data collected across this site between September 2016 and July 2017. These data were collected from three bore nests located on the site, one being approximately 85 m from the proposed cap rock extraction area.

The GIA provided a conceptual cross sectional model of maximum groundwater levels within the proposed area of cap rock extraction. This model indicated a maximum predicted groundwater level of 105.6 m AHD. The maximum depth for the proposed cap rock extraction would be 118.5 m AHD. Therefore, extraction of cap rock in this area is predicted to remain above the shallowest groundwater level by approximately 12 m.

DPI Water raised no issue with the proposed cap rock extraction, but requested that Council implement appropriate surface water management measures in accordance with the site's Soil and Water Management Plan, and that monitoring of groundwater levels and quality continue. The Department has recommended contemporary revised conditions in MP 07\_0020, including revising the requirements of the Water Management Plan. These revisions would require Council to update its existing management plans within three months of determination of the modification.

The EPA recommended that the modification approval lapse on 30 September 2018. This date reflects the timeframe required to submit the detailed groundwater assessment following the collection of two years of monitoring data. The proposed modification is seeking to mine the first 10 m of cap rock in the South Pit and, as discussed above, Council has provided a groundwater assessment for the proposed extraction area indicating that intersection of the groundwater table would be highly unlikely at this extraction depth. Consequently, the Department considers that a lapse date to extract to the proposed depth is unnecessary. However, to ensure that the detailed groundwater assessment is provided promptly while extractive activities are taking place in the South Pit, the Department has recommended that the detailed groundwater assessment be submitted within 3 months of approval of the modification application.

The EPA also recommended that should any groundwater be encountered during quarrying operations in the South Pit, quarrying operations cease until authorised to recommence. The Department agrees with this recommendation and has recommended a condition of approval to this effect.

In summary, the proposed extraction of cap rock is not predicted to interfere with underlying groundwater. The Department considers that any potential surface water and groundwater impacts could be appropriately managed under existing and proposed conditions of approval.

**Table 1: Assessment of Other Impacts**

<b>Issue</b>	<b>Consideration and Assessment</b>	<b>Recommendation</b>
<i>Surface Water</i>	<ul style="list-style-type: none"> <li>No additional surface water impacts to these currently approved are anticipated as a result of the modification.</li> <li>Council advised that surface water impacts would be managed in accordance with the site's Soil and Water Management Plan.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions necessary.</li> </ul>
<i>Traffic</i>	<ul style="list-style-type: none"> <li>The proposed modification does not seek to change the number of allowable truck movements from the site per day.</li> <li>MP 07_0020 allows Council to dispatch no more than 100 laden trucks from the site per day.</li> <li>The delivery of cap rock to the Coffs Harbour Northern Break Wall Rehabilitation Project would be included within this trucking limit.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions necessary</li> </ul>
<i>Noise and Air Quality</i>	<ul style="list-style-type: none"> <li>Extraction activities in the South Pit were approved under MP 07_0020.</li> <li>The proposed modification only seeks to extract some of the material in the South Pit earlier than prescribed in the approval (ie prior to submission of a detailed groundwater assessment).</li> <li>Consequently, the proposed modification would not result in changes to noise and air quality impacts from those approved under MP 07_0020.</li> </ul>	<ul style="list-style-type: none"> <li>The Department has recommended the noise and air quality conditions in MP 07_0020 are updated to contemporary standards.</li> </ul>

Issue	Consideration and Assessment	Recommendation
Rehabilitation	<ul style="list-style-type: none"> <li>The proposed modification would not result in changes to the approved conceptual final landform.</li> <li>Council note that oversized rock would otherwise end up as waste product for the site as it is unviable to resize after blasting.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions necessary.</li> </ul>

**6. RECOMMENDED CONDITIONS**

The Department has drafted a recommended notice of modification (see **Appendix C**). The Department has taken the opportunity to review the overall approval for the quarry and to include a fully revised and contemporary suite of conditions that are consistent with current practice and standards. Some key changes to the approval include:

- revision, update and consolidation of specific environmental conditions to align with the Department's contemporary standards for noise, air quality, blasting, biodiversity, water and traffic management;
- revision, update and consolidation of administrative and reporting conditions to align with the Departments contemporary standards; and
- update of the annual average PM<sub>10</sub> criteria to accord with those in the *Approved Methods for the Modelling and Assessments of Air Pollutants in New South Wales 2016*.

The Department considers that the environmental impacts of the project can be appropriately managed through the existing and recommended conditions of consent.

Council has reviewed and accepted the recommended conditions.

**7. CONCLUSION**

The Department has assessed the modification application, EA and submissions in accordance with the relevant requirements of the EP&A Act. The Department has carefully considered the likely impacts of the proposal on the natural and cultural environment, and on nearby residents. The Department is satisfied that the proposed modification would not result in additional environmental impacts to those originally approved. Moreover, the Department is satisfied that environmental impacts from the project can be appropriately managed by existing, modified and/or updated conditions of approval.

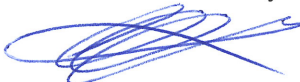
The proposed modification would also ensure an adequate supply of oversize rock to complete the Coffs Harbour Northern Break Wall Rehabilitation Project in a timely manner. The Department is therefore satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.

**8. RECOMMENDATION**

It is recommended that the Director, Resource Assessments, as delegate of the Minister for Planning:

- **consider** the findings and recommendations of this report;
- **determine** that the application falls within the scope of section 75W of the EP&A Act;
- **approve** the modification application MP 07\_0020 Mod 1, subject to conditions; and
- **sign** the attached notice of modification (**Appendix C**).

Recommended by:

 18/9/17

Genevieve Seed  
Senior Planning Officer  
Resource Assessments

Recommended by:

 18-9-17

Megan Dawson  
A/Team Leader  
Resource Assessments

**9. DECISION**

Approved by:

 18.9.17

Howard Reed  
Director  
Resource Assessments

## APPENDIX A: ENVIRONMENTAL ASSESSMENT

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See: [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=7907](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7907)

## APPENDIX B: SUBMISSIONS

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See: [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=7907](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7907)

## **APPENDIX C: NOTICE OF MODIFICATION**

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