



Blakebrook Quarry Modification 3

Consolidation of Asphalt Plant Consent and Production Increase
State Significant Development Modification Assessment (MP 07_0020 MOD 3)

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1 Introduction

1.1 Background

The Blakebrook Quarry (the Quarry) is a basalt Quarry located approximately 7 kilometres (km) northwest of Lismore, in the Lismore local government area (see **Figure 1**). The Quarry is owned and operated by Lismore City Council (Council). A mobile asphalt plant, owned by Council and operated by RPQ Asphalt Pty Ltd, is located to the southwest and operates within the overall Quarry boundary. The Quarry is a key resource of hard rock and construction materials for the Lismore area and broader NSW North Coast region.

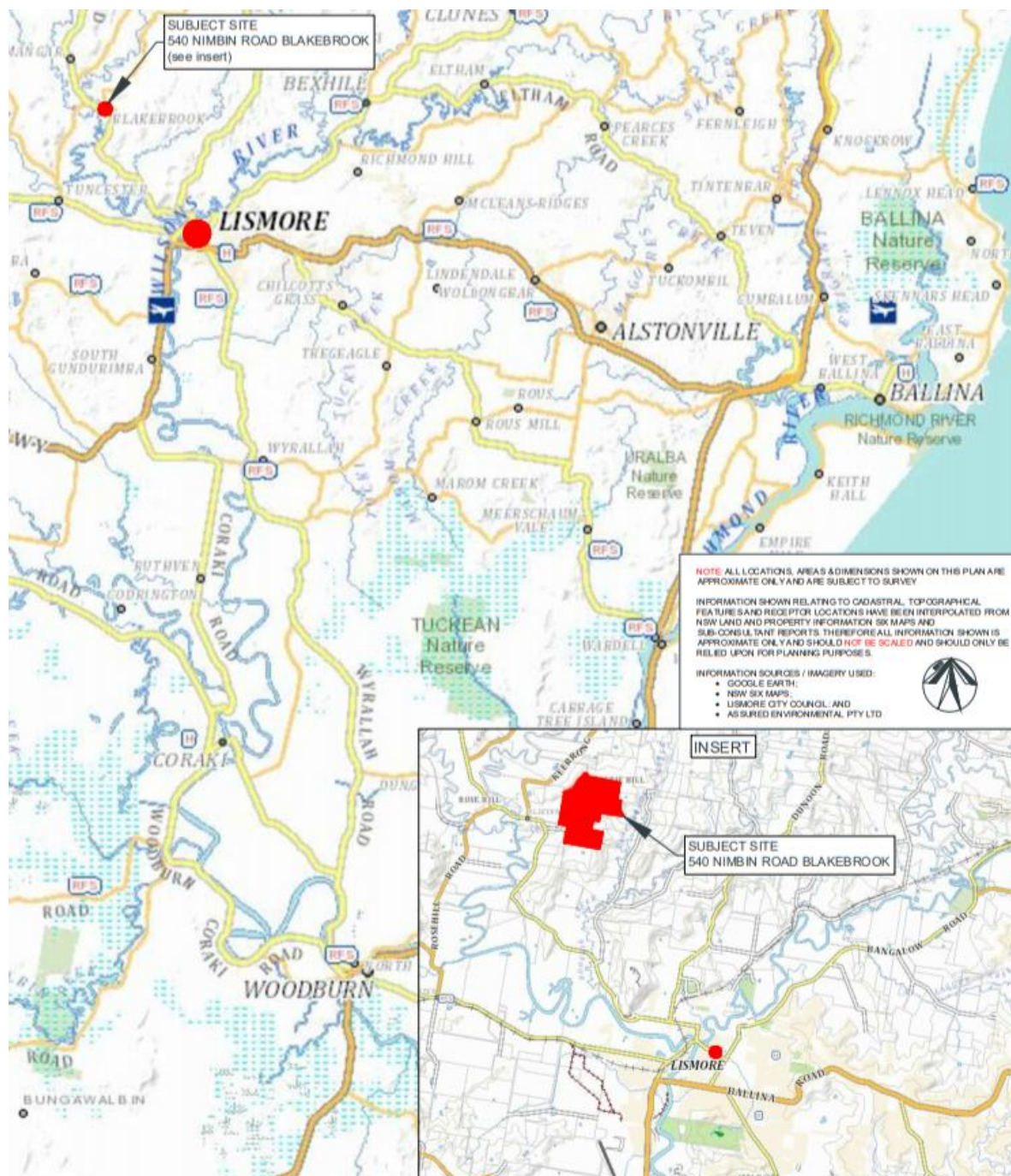


Figure 1 | Regional context map

The site boundary for the Quarry comprises an area of 126 hectares (ha). The Quarry is bounded by two existing ecological offset areas to the southwest and northeast, comprising a total of 62 ha. One of these offsets is located within the site boundary, while the other is situated on an adjoining property outside the site boundary (see **Figure 2** with the site boundary shown in yellow and offsets in green).

The Quarry is located in a rural setting and is bordered by a buffer of dense vegetation with nearby and adjoining land uses including agricultural and rural residential properties. Road Access to the Quarry site is via Nimbin Road, a local road that is owned and maintained by Council.

1.2 Approval History

MP 07 0020 – Blakebrook Quarry

The Quarry has operated since 1979, initially under a development consent granted by Council.

On 24 November 2009, the then Minister for Planning granted a new Project Approval (MP 07_0020) under the former Part 3A of the Environmental Planning & Assessment Act 1979 (EP&A Act), which the Quarry currently operates under. This approval allows for the:

- extraction (utilising drill and blast techniques) of up to 600,000 tonnes per annum (tpa) of hard rock material (basalt), over a 30-year period until 2039;
- processing of extracted material on site;
- transportation of up to 100 laden trucks per day of Quarry products from the site via public roads; and
- progressive rehabilitation of the Quarry.

The project approval has been subsequently modified on one occasion. Modification 1 was approved in September 2017, by the then Minister for Planning under the former section 75W of the EP&A Act, and permitted the extraction of cap rock in the existing south pit of the Quarry.

A second modification was lodged in March 2018 but was subsequently withdrawn in January 2019.

DA90/341 – Asphalt Plant

The operation of a mobile asphalt plant in association with the Quarry was granted approval by Council in December 1990 under DA90/341. DA90/341 has since been modified on four occasions.

The asphalt plant consent, as modified, allows for the:

- production of up to 15,000 tpa of asphalt; and
- operation from 6:00 am to 5:30 pm Monday to Saturday, with the exception of emergency or specific works related to traffic management.

The asphalt plant is currently a mobile plant, located to the southwest of the Quarry footprint, in a discrete 3.4 ha area which sits within the boundary of the Quarry site (**Figure 2**).

Operations associated with the asphalt plant include the importation of bitumen to the site, storage of bitumen on site in transport tankers and addition of aggregate material to the drum via hoppers and conveyor in the proportions required for the final use. Once dried and heated in the drum, binder material (bitumen) is added to produce the asphalt mix. The product asphalt is then dispatched to market.

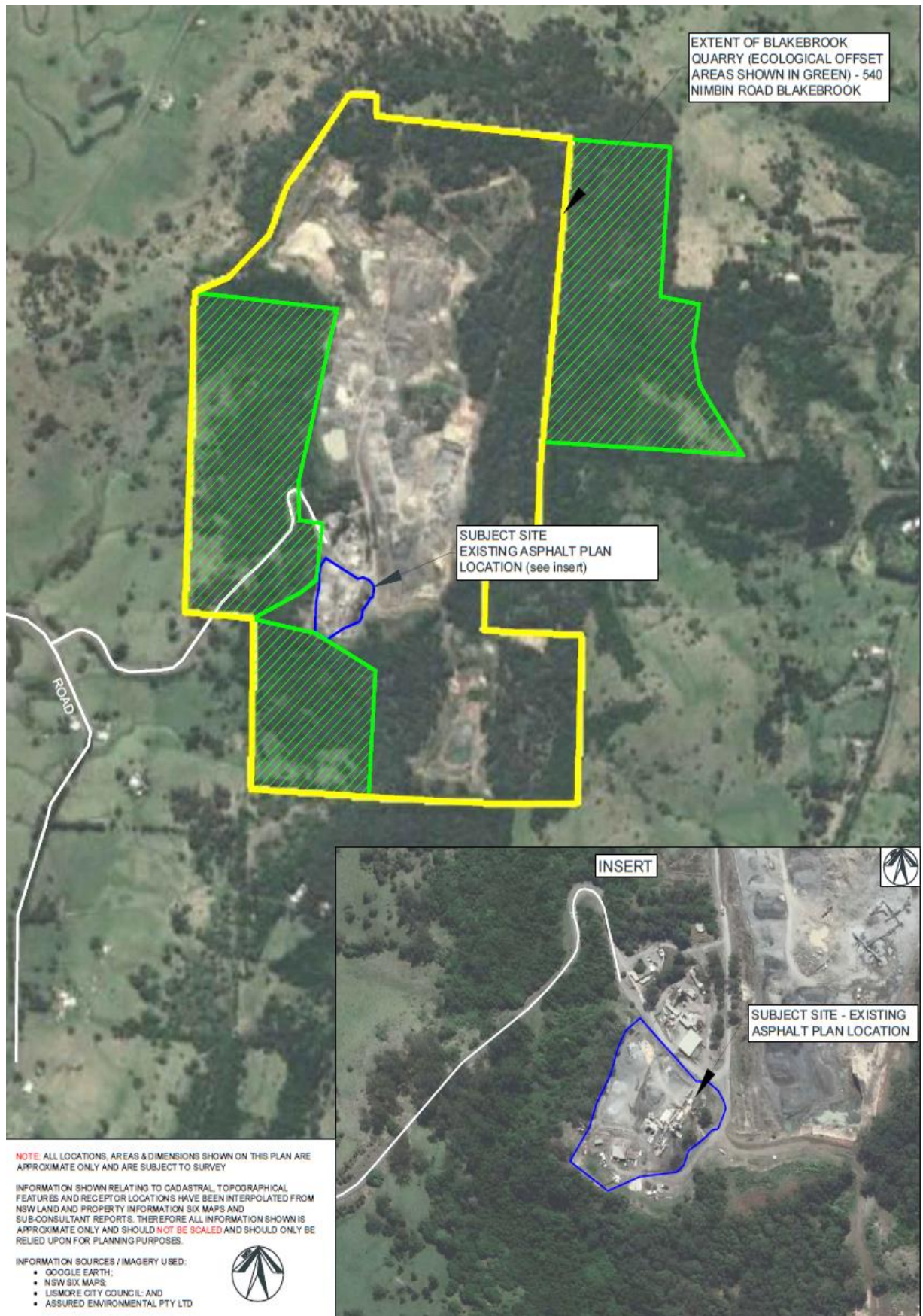


Figure 2 | Quarry site layout with existing asphalt plant

2 Proposed Modification

On 28 February 2019, Council submitted a modification application (MP 07_0020 MOD 3) under section 4.55(2) of the EP&A Act. The proposal involves:

- amalgamating the existing Council-approved asphalt plant into the NSW Project Approval (MP 07_0020) for the Quarry;
- increasing the asphalt plant's production limit from 15,000 tpa to 50,000 tpa;
- increasing the maximum daily trucking dispatch limit from 100 laden trucks (200 total movements) to 150 laden trucks on any one day (300 total movements); and
- modifying a number of administrative conditions.

The modification does not involve changes to the production rate of the Quarry, hours of operations, methods of extraction or processing. A detailed description of the proposed modification is provided in the Modification Report (see **Appendix A**).

Asphalt Plant

Council is seeking to consolidate DA90/341 into MP 07_0020, so that both the Quarry and the asphalt plant are regulated under a single development consent. The asphalt plant would be ancillary to the primary operation of the Quarry.

The asphalt plant is currently approved to produce 15,000 tonnes of asphalt per annum. Council is seeking to increase this to 50,000 tpa to meet increased demand for asphalt.

The asphalt plant has recently been updated with new machinery, allowing increased asphalt production of up 80 tonnes per hour with negligible changes to operations and minimal incremental environmental impacts. No changes are proposed to the current plant or equipment associated with the asphalt plant (see **Figures 3 and 4**).



Figure 3 | Asphalt plant equipment



Figure 4 | Asphalt plant equipment

The existing asphalt plant is located within a parcel of land on Lot 54 in DP1254990. As part of the lease agreement with the RPQ Group, Council is proposing to subdivide the lots associated with the Quarry following the determination of Modification 3. This would allow Council to retain ownership of both lots, but excise the lot containing the asphalt plant from the other lots and leased this newly subdivide lot to the operator the plant. All relevant lots would still be contained within the overall project boundary of the Quarry. The subdivision process is separate to the modification application and would be subject to a separate local development application process.

Increase in Trucking Limits

The existing Quarry is approved for a maximum of 100 laden trucks per day as shown in **Table 1**. In addition to this, truck movements associated with the asphalt plant average around 14-20 laden movements per day, subject to demand. Accordingly, the existing combined current truck movements leaving the site equates to approximately 120 laden movements per day.

To accommodate additional truck movements associated with the asphalt plant, Council is seeking to increase the combined daily truck limits under MP 07_0020 from 100 laden trucks per day (200 total movements) to 150 laden trucks per day (300 total movements). The Department notes that truck movements associated with the Quarrying operation are not proposed to increase and that the entirety of the increase in laden truck movements is associated with the proposed increase in asphalt production.

Table 1 | Existing and proposed trucking limits

	Quarry Truck Limits	Asphalt Plant Truck Limits
Current	100 laden trucks (200 total movements)	average 14-20 laden trucks (40 total movements)
Proposed	150 laden trucks (300 total movements), comprising 100 laden trucks for the Quarry and 50 laden trucks for the asphalt plant	

During the assessment of the modification, Council also requested the ability to undertake limited asphalt production campaigns for the purpose of supplying asphalt to public authorities (e.g. primarily Transport for NSW (TfNSW)) for night-time road works. The existing asphalt plant consent allows for similar night-time operations, with out of hours protocols in place to minimise associated impacts.

3 Statutory Context

3.1 Scope of Modifications

The modification application was lodged under section 4.55(2) of the EP&A Act. Recent amendments to the EP&A Act include provisions to wind up the transitional provisions of the former Part 3A, which was otherwise repealed in 2011. As part of this process, Part 3A project approvals are being transitioned to State Significant Development.

On 1 June 2018, MP 07_0020 was declared to be SSD under clause 6 of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*. Accordingly, this modification application has been lodged under section 4.55(2) of the EP&A Act.

Under section 4.55(2)(a), MP 07_0020 cannot be modified unless the consent authority is satisfied that the modified proposal is substantially the same as the development for which consent was originally granted. The Department has reviewed the scope of the modification and considers that it:

- would not significantly increase the environmental impacts of the project as approved;
- is substantially the same development as originally approved; and
- would not involve any further disturbance outside the have already been approved for disturbance.

The Department is therefore satisfied that the proposed modification is within the scope of section 4.55(2) of the EP&A Act and does not constitute a new project. Accordingly, the Department considers that the application should be assessed and determined under section 4.55(2) of the EP&A Act. The Department has also:

- considered advice provided concerning the proposed modification (see Section 4); and
- considered the relevant matters in section 4.15(1) of the EP&A Act, including;
 - the provisions of any relevant environmental planning instrument;
 - the likely impacts of the proposed modification, including environmental impacts on both the natural and built environmental, social and economic impacts in the locality;
 - the public interest, including any relevant objects of the EP&A Act; and
 - the reasons given by the approval authority for the grant of the original approval.

3.2 Consent Authority

The Minister for Planning and Public Spaces (Minister) is the consent authority for the application. However, the Director, Resource Assessments may determine the application under the Minister's delegations of 26 April 2021 as:

- there were fewer than 15 unique public objections;
- Council has not declared any reportable political donations; and
- Council did not object to the proposal (noting that Council is the Applicant).

3.3 Mandatory Matters for Consideration

The Department conducted a comprehensive assessment of the project against the mandatory matters for consideration as part of the original assessment of MP 07_0020. The Department considers that the

current modification application would not result in any significant changes that would alter the consideration of mandatory matters under section 4.15 of the EP&A Act or conclusions made as part of the original assessment.

3.4 Environmental Planning Instruments

A number of environmental planning instruments (EPIs) apply to the modification, including:

- *Lismore Local Environmental Plan 2012*;
- *State Environmental Planning Policy (State and Regional Development) 2011*; and
- *State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007*.

3.5 Other Approvals

Quarrying operations at the site are currently regulated under Environment Protection Licence (EPL) 3384, granted under the *Protection of the Environment Operations Act 1997*. The use of the asphalt plant is also authorised under this EPL as an ancillary activity to the operation of the Quarry. The Environment Protection Authority (EPA) has advised Council that this EPL would need to be varied to reflect the proposed modification.

4 Engagement

4.1 Department's Engagement

The Department publicly exhibited the application and supporting documents (see **Appendix A**) from Wednesday 7 August 2019 until Wednesday 21 August 2019. These documents were made available on the Department's website, at the office of Lismore City Council in Goonellabah, Lismore Library in Lismore and at the Nature Conservation Council's office in Sydney.

The Department advertised the exhibition in the *Lismore Northern Star* and the *Lismore Northern Rivers Echo* on 7 August 2019. The Department also notified parties who previously made submissions in relation to the original project. The modification application was also referred to relevant government agencies and infrastructure providers.

4.2 Summary of Submissions

The Department received a total of five submissions during the exhibition period including:

- four Government agency submissions; and
- one public submission in the form of an objection.

Copies of all submissions are included in **Appendix B**.

4.3 Public Submissions

One public submission, in the form of an objection, was received during the exhibition period (see **Appendix B**). The submission was made by a resident on Nimbin Road. The submission raised concerns regarding the proposed increase in truck movements and associated amenity impacts, the existing condition of the road and the accuracy of the traffic counts provided in the Modification Report.

The Department's consideration of these issues is included in **Section 5**.

4.4 Agency Advice

Transport for NSW (TfNSW) did not object to the proposal. However, TfNSW advised that the current intersection treatment at the Quarry entrance and Nimbin Road (a Regional Road) is no longer the

preferred intersection treatment in accordance with AustRoads standards. TfNSW advised that the intersection should be upgraded from the existing Auxiliary Right Turn (AUR) treatment to a Shortened Channelised Right-Turn (CHR-S) treatment. TfNSW also noted its support for the development of separate lanes for left and right-turning vehicles. This issue is discussed further in **Section 4.5** below.

The Biodiversity Conservation and Science Directorate (BCS) did not object to the proposed modification. However, BCS recommended that existing mitigation measures contained in the Quarry's Environmental Management Strategy (EMS), Aboriginal Heritage Management Plan (AHMP), Soil and Water Management Plan (SWMP) and Biodiversity Offset Strategy (BOS), continue to be employed to protect biodiversity, Aboriginal heritage and water resources associated with the Quarry.

The **Environment Protection Authority (EPA)** did not object to the proposal. The EPA provided advice on recommended conditions and noted Council will need to make a separate application to EPA to obtain its EPL. This is reflected in the Department's recommended conditions.

The **Water Group within the Department (DPIE Water)** did not raise any issues with the proposed modification.

4.5 Response to Submissions and Additional Information

On **4 November 2019** Council submitted its Response to Submissions (RTS - see **Appendix C**). The RTS provided additional information in response to concerns raised by BCS, EPA and TfNSW. The RTS also provided a response to the issues raised in the public submission.

On **19 November 2019**, the Department requested further information on the RTS, including:

- a revised Traffic Impact Assessment, including updated traffic modelling at the intersection of Nimbin Road and Wilson Street;
- a more detailed response to the issues raised in the public submission relating to the accuracy of the traffic counts, the condition of the road pavement of Nimbin Road and compliance with existing trucking limits;
- a revised Noise Impact Assessment, which appropriately addresses the requirements of the *Noise Policy for Industry (NPfI)*; and
- alternative options considered in relation to the proposed modification.

On **22 January 2020**, the Department received an Addendum to the RTS which sought to address the outstanding concerns regarding the preferred intersection treatment for the Quarry's access on to Nimbin Road.

On **10 March 2020**, TfNSW provided a response reiterating previous comments regarding the preferred intersection treatment as being a shortened channelised right hand turn (CHR-S). On 12 March 2020, TfNSW further noted that the intersection treatment could be upgraded by painting new line markings at the intersection, in order to upgrade it to the preferred CHR-S.

On **16 April 2020**, Council provided information indicating that the Quarry intersection has sufficient capacity to accommodate up to 150 laden truck movements per day. Council also advised the current road pavement is not wide enough to upgrade to a CHR-S treatment and expressed concern regarding the cost of the potential road upgrades.

On **30 April 2020**, the Department met with TfNSW, which advised that its advice was aimed at ensuring traffic safety, as well as intersection efficiency. The Department and TfNSW agreed that the intersection would need to be upgraded to a CHR-S to align with contemporary safety standards. Both parties also concluded that if there were to be elements of the proposed intersection treatment that did

not conform with AustRoad Guidelines, that an Independent Road Safety Audit should be undertaken to guide the consideration of road safety associated with the final design. The Department outlined this position in a letter to Council, dated 4 June 2020.

On **20 October 2020** Council provided a revised intersection design which incorporated a CHR-S treatment. TfNSW confirmed in an email dated 22 October 2020, that it is satisfied with the revised design and Council has met the TfNSW requirements. This issue is discussed further in **Section 5**.

5 Assessment

In assessing the merits of the proposal, the Department has considered the:

- Modification Report and RTS;
- agency and public submissions;
- existing conditions of consent, as previously modified;
- relevant EPIs, policies and guidelines; and
- requirements of the EP&A Act, including the objects of the Act.

5.1 Traffic and Transport

Under the existing consent, truck movements (arrival and dispatch) at the Quarry are limited to a maximum of 100 laden movements (200 total movements) between the hours of 7:00 am and 6:00 pm Monday to Friday, and between 7:00 am and 3:00 pm Saturday. No truck movements are permitted on Sundays or public holidays. The majority (80%) of Quarry products are transported via 30 tonne truck and dog trailer combinations with the remainder (20%) transported via 14 tonne single tippers. All trucks pass over the site's weighbridge, which is limited to 25 trucks exiting the site per hour.

DA 90/341 does not impose any specific limits on truck movements associated with the asphalt plant. Instead, the operation is limited by the capacity to produce 15,000 tonnes of asphalt per annum over any two-year period. Council has advised that truck movements associated with the asphalt plant currently average 14-20 laden movements per day. As such, the current Quarry and asphalt plant operations have a combined average total truck movement of approximately 120 laden trucks (24 total movements) per day.

At present, around 95% of outbound Quarry products are transported to the south of the site, towards Lismore with the remaining 5% transported north of the site. Existing truck movements associated with the asphalt plant follow a similar distribution pattern. Of the products delivered to Lismore, approximately 30% are transported via Terania Street, with 70% transported via Wilson Street to the Bruxner Highway or Ballina Road and deposited in the industrial area and the CBD.

The Modification Report included a Traffic Impact Assessment (TIA), prepared by SECA Solution Pty Ltd. The modification seeks to allow up to 150 laden movements (300 total movements) for the combined Quarry and asphalt plant operations. Council has advised that the site's existing weighbridge limits outbound (laden) truck movements to a maximum of 25 per hour. The weighbridge is not proposed to be upgraded as part of the modification.

The proposed increase in truck movements is intended to provide flexibility in operations, creating the potential to allow greater capacity to deal with peak supply requirements for both the Quarry and asphalt plant. There are no proposed changes to the existing transport routes or changes to light vehicle movements at the Quarry.

The TIA included traffic counts and intersection modelling based on a TIA conducted by Roadnet in 2008, indexed at a growth rate of 2.2% per annum to represent current day traffic counts (see **Table 2**).

Table 2 | Indexed traffic counts at key intersections

	Average Weekday Volume	Peak Hour Traffic Flows
Nimbin Road	3,300	330 per hour
Wilson Street Intersection	3,900	390 per hour

Using this data, the TIA calculated that the proposed increase of 100 truck movements (ie inbound and outbound) over the normal 11 hour working day would result in an average of 5-6 additional truck movements per hour and concluded that this would result in minimal increase on overall traffic volumes.

The TIA undertook observations of the intersection at Wilson Street and Nimbin Road and noted that during morning peak periods between 8:00 am to 8:30 am, there were minimal delays below 11 seconds and minimal queues, therefore operating at a level of service (LOS) A. The TIA also noted that during the afternoon peak between 4.30 and 5:30 pm, there would be minimal traffic impact from the proposal, as most of the demand for trucks is around the morning/midday.

The TIA also undertook a review of road safety, which included a review of sight lines and a review of accident data provided by TfNSW. The TIA identified that the transport route had only incurred a low level of incidents with no accidents relating to the transport of materials from the Quarry site.

As discussed in **Section 4.3**, a public submission raised concerns regarding the accuracy of the traffic counts shown in **Table 2**. In its RTS, Council provided a revised TIA incorporating updated traffic data collected from December 2019. Updated traffic counts at the intersection of Nimbin Road and Wilson Street during the morning and afternoon peak periods are shown in **Table 3**.

Table 3 | Traffic volumes at key intersections (vehicles per hour)

	Previously Estimated Peak Hour Traffic Flows	Updated AM Peak Traffic Flows	Updated PM Peak Traffic Flows
Nimbin Road	330	381	333
Wilson Street Intersection	390	395	306

The revised TIA concluded that:

- the intersection of Nimbin Road and Wilson Road was operating well with low delays and short queues;
- the intersection of Nimbin Road and Wilson Road is performing at level of service A;
- the additional trucks proposed under the modification (averaging around 5-6 per hour) would have a minimal impact on delays; and
- the intersection would continue to operate at a LOS A.

Overall, the revised TIA concluded that the proposal would not compromise road safety or impact on the performance and efficiency of the local road network.

In addition to this, the Department notes that existing conditions of consent require Council to prepare and implement a detailed Traffic Management Plan for the Quarry, including a Drivers Code of Conduct, to ensure that safe and quiet driving practices are maintained.

Nevertheless, both the Department and TfNSW have recommended the intersection between the Quarry access road and Nimbin Road be upgraded to a CHR-S to align with contemporary safety standards. Council has committed to upgrade the intersection from the existing AUR standard to the preferred CHR-S intersection treatment (shown conceptually in **Figure 3**). The Department's recommended conditions would require Council to complete this upgrade prior to any increase in daily truck movements under the modification (ie prior to increasing trucking beyond currently approved levels).

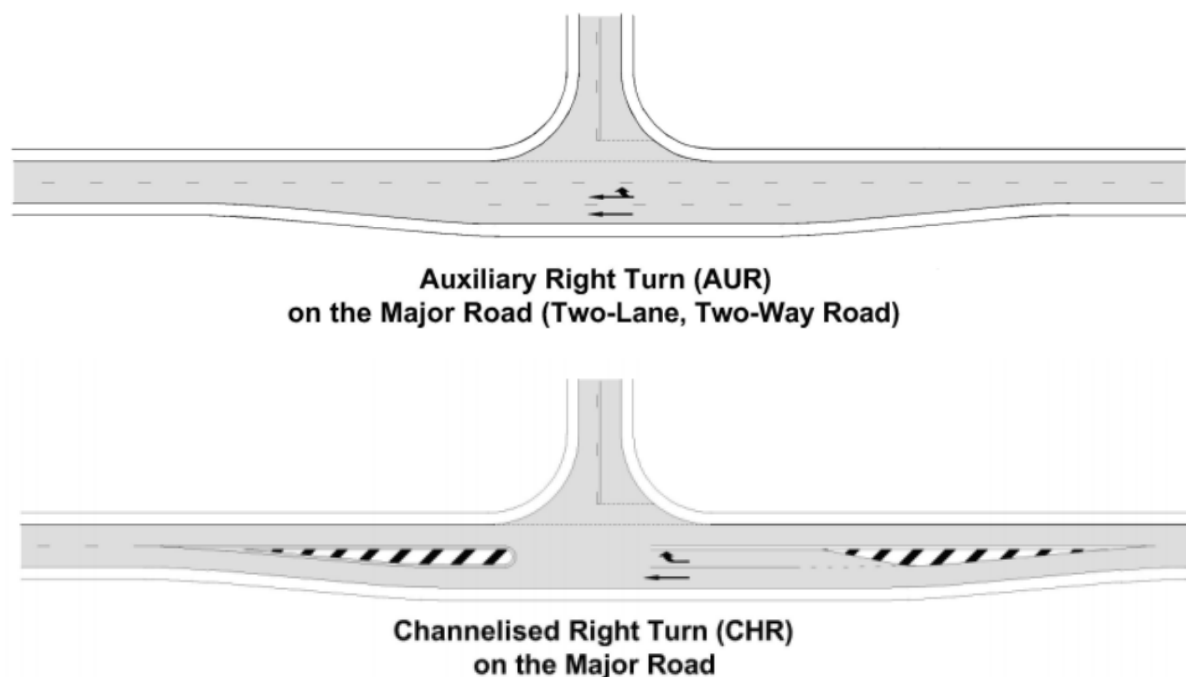


Figure 3 | An AUR intersection vs a CHR-S intersection

The Department considers the existing Drivers Code of Conduct would remain suitable for the proposed modification, but has recommended conditions that would require Council to update the current Traffic Management Plan to reflect the inclusion of the asphalt plant and its associated truck movements.

As part of its application, Council sought to update its statement of commitments to “limit” the use of compression breaking rather than “prohibit” the use of this break, to address concerns that the complete prohibition of compression breaking could result in safety issues for drivers and public road users. The Department has considered this request and agrees that modifying this reference would increase safety for truck drivers, road users and pedestrians. The Department has recommended conditions to this effect and considers that there will be minimal impact from this change, particularly given the Traffic Management Plan would still need to be updated following determination of the modification and already requires Drivers to adhere to a Code of Conduct which includes safe and quiet driving practices.

In addition to this Council sought further amendments to the consent definitions to exclude trucks carrying less than 5 tonnes from the definition of “laden trucks”. Council justifies that this exclusion provided greater flexibility to deliver small batches of product to particular sites and small scale road works (eg pothole management). However, the Department does not support the requested amendment as the potential additional vehicle movements have not been quantified in the Modification Report and any traffic impacts associated with these smaller truck movements have not been assessed.

The Department notes that this decision does not preclude Council from making a further modification application to seek additional small tonnage transport options in the future, provided that these impacts are appropriately quantified, justified and assessed.

5.2 Air Quality

The proposed modification has the potential to generate limited additional air quality impacts through the increase in asphalt production and associated trucking movements. The Modification Report included an Air Quality Impact Assessment (AQIA), prepared by Assured Environmental Pty Ltd, which assessed the potential air quality and odour impacts of the proposal.

The AQIA assessed the proposal in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016) and considered the impacts of dust deposition, total suspended particles (TSP) and particulate matter (PM). The AQIA also considered the impacts of odour, volatile organic compounds (VOCs) and combustion emissions including Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Sulphur Dioxide (SO₂) and odour concentrations (OU).

The AQIA modelled atmospheric dispersion of the above pollutants based on local meteorological data and terrain. The AQIA modelled the combined operation of the existing Quarry and asphalt plant under worst-case operations, compared with a worst-case operational scenario for the proposed modification. This assessment included predicted results at seven sensitive receivers located in close proximity to the Quarry (see **Figure 4**), with the closest receptor to the site located at a distance of 0.65 km.

Emissions from the asphalt plant were derived from monitoring data from the existing asphalt plant, which included CO, NO₂ and SO₂. The AQIA noted that PM₁₀ and OU from the asphalt plant had not been monitored at this site and therefore monitoring data of similar asphalt plants was used in the modelling. The results of the modelling are shown in **Tables 4** and **5**.

Table 4 | Air quality model predictions against project specific criteria within project consent

Modelling Parameter	Averaging Period	Maximum Criterion	Modelled Results (Against Max Criterion)	Compliant with All Sensitive Receivers
PM ₁₀	24 Hours	50 ug/m ³	<49%	Yes
	Annual	25 ug/m ³		
PM _{2.5}		25 ug/m ³	<20%	Yes
TSP	Annual	90 ug/m ³	<35%	Yes
Dust	Annual	2 g/m ² /month maximum increase	<10%	Yes
		4 g/m ² /month total dust level		

The Department notes that although the project consent does not specify criteria for PM_{2.5}, the air quality impact assessment outlines that no exceedances of PM_{2.5} or other the air quality criteria would occur at any sensitive receivers as a result of the modification.

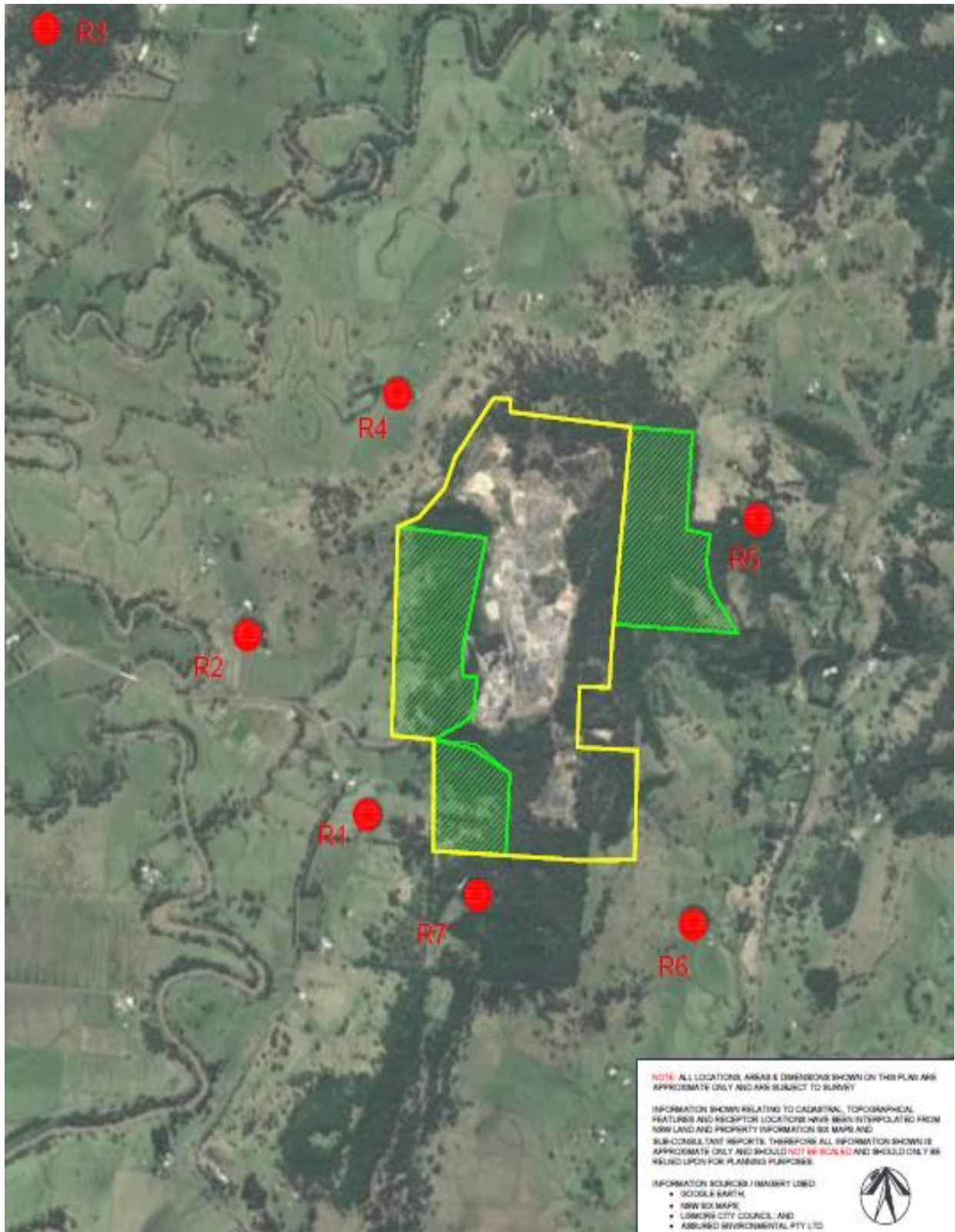


Figure 4 | Sensitive receivers in proximity to the operation

Table 5 | Air quality model predictions against EPA Criteria (EPA, 2016)

Modelling Parameter	Averaging Period	Maximum Criterion	Modelled Results (Against Max Criterion)	Compliant at All Sensitive Receptors
Nitrogen Dioxide (NO₂)	1 Hour	246 ug/m ³	<50%	Yes
	Annual	62 ug/m ³		
Carbon Monoxide (CO)	8 Hour	10,000 ug/m ³	<5%	Yes
Sulphur Dioxide (SO₂)	1 Hour	570 ug/m ³	<2%	Yes
	24 Hours	228 ug/m ³		
	Annual	60 ug/m ³		
Odour	NA	5.5 (OU)	<1%	Yes

The modelled results demonstrate that while there would be an increase in air quality impacts as a result of the proposal, the modified project air quality impacts would remain minimal and remain compliant with relevant assessment standards at all sensitive receivers.

In considering the reasonable and feasible operational controls implemented at the asphalt plant, the Department notes that the existing asphalt plant contains a number of stockpiles of varying capacities which contain a range of materials including medium sand, crusher dust, rock chips of varying size and glass. Current emission control measures in the stockpiling areas include wetting and crusting agents and the use of tarps to cover the finer material, such as the sand and crusher dust. The Department also notes that emissions mitigations associated with processing includes baghouse filters which capture processed fines.

Existing conditions of consent require Council to:

- implement best practice dust management for its quarrying operations;
- prepare and implement an Air Quality Management Plan; and
- monitor and report compliance with applicable air quality criteria.

These requirements would also extend to asphalt production, following the proposed modification.

Overall, the Department considers that the air quality impacts associated with the proposed modification are acceptable and can be appropriately managed through existing conditions of consent, established dust management practices and an updated Air Quality Management Plan for the combined operations.

5.3 Noise

The Modification Report included a Noise Impact Assessment (NIA) prepared by Assured Environmental Pty Ltd, in accordance with the NPfl. The NIA identified that the proposed increases in asphalt production and associated truck movements have the potential to change noise emissions from the Quarry site and impact surrounding receivers.

The NIA identified 7 sensitive receivers in the vicinity of the site and included monitoring undertaken in September 2018, which demonstrated that the existing background noise levels in the area surrounding the Quarry were higher than the noise limits currently imposed under the development consent and the

site's EPL (see **Table 6**). Notwithstanding, most of this increased background noise was attributed to local wildlife and does not represent an intrusive or industrial noise source.

The NIA indicated that Quarrying operations are typically inaudible at nearby receivers. The NIA also noted that the asphalt plant has recently been upgraded with new equipment to minimise noise output.

The NIA provided a comparison of approved Quarrying operations and proposed operational scenarios incorporated the Quarry, asphalt plant and 150 laden truck movements per day. The results of the modelling are shown in **Table 6**.

Table 6 | Comparison of noise impacts from existing and proposed operations (dB(A) L_{Aeq} (15min))

Receiver	Current Operation L_{Aeq} (15 min)	Proposed Operation L_{Aeq} (15min)	Existing Noise Criteria	Exceedance of Existing Noise Criteria
R1	29	32	35	No
R2	36	36	36	No
R3	<10	<10	35	No
R4	21	24	35	No
R5	34	34	35	No
R6	18	22	35	No
R7	35	36	35	1 dB

Modelled predictions in the NIA indicate that modified project would achieve compliance with the existing operational noise criteria at all sensitive receivers, with the exception of R7, where a minor 1dB exceedance is predicted (see **Table 6**).

The Department notes that an exceedance of 1 dB above the existing daytime criteria at R7 is unlikely to be discernible to the human ear and that the predicted noise levels at this receiver would remain well below 40 dB, which is the minimum daytime noise criterion applicable under the NPfI. Additionally, the existing conditions of consent require Council to implement best practice management of operational noise impacts and to modify or cease its operations, as required, in order to comply with the noise criteria, such that exceedances beyond those predicted do not occur. Accordingly, the Department considers that the operational noise impacts of the modification would be minimal and acceptable, and has recommended revised noise criteria for R7 that reflect the predictions contained in **Table 6**.

The NIA also included an assessment of road traffic noise against the noise assessment criteria contained in the *NSW Road Noise Policy* and modelled impacts on a worst-case scenario of 300 heavy vehicle movements per day. Predicted road noise impacts were based on a front setback of 50 m from the road, which was considered to be representative of the residences within the area. The results of this modelling indicate that the truck movements associated with project, as proposed to be modified, would be compliant with the relevant assessment criteria at all nearby sensitive residences.

Further to this, the Department notes that while DA 90/341 currently permits asphalt production to occur between the hours of 6 am and 5.30 pm, Monday to Saturday, the NIA did not assess the operational or road noise impacts of increased asphalt production during the morning shoulder period (between 6 am and 7 am), when night-time noise criteria would apply. Based on the information provided to date, the Department has recommended conditions that align the operational hours of the existing asphalt plant with that of the existing Quarrying operations, which commence at 7 am and conclude at 6 pm. Notwithstanding, this decision does not preclude Council from seeking a future application to permit asphalt plant operations before 7 am, subject to further justification and assessment (noting that the minimum contemporary night time criteria under the NPfl would be 35 dB(A)).

During the Assessment of the Modification, Council also requested the ability to undertake limited campaign asphalt plant operations outside of normal operational hours, when requested by public authorities (e.g. primarily TfNSW) to provide material for public safety reasons, emergency work and roadworks. These limited out-of-hours operations could also involve the import of material, asphalt batching and the road transport of asphalt products.

The Department notes that these forms of emergency works are commonly applied to quarry operations in NSW and considers that the nature of proposed campaign works is appropriate, subject to conditions. The Department has recommended conditions to enable campaign operations outside of the approved operational hours, subject to the submission of an out-of-hours noise protocol, to be prepared in consultation with affected landowners and the EPA and approved by the Secretary prior to operations.

Overall, the Department considers that the noise impacts associated with the proposed modification are acceptable and can be appropriately managed through existing and modified conditions of consent and an updated Noise Management Plan for the combined operations at the site.

5.4 Other Issues

Table 9 | Summary of other issues

Issue	Findings	Recommendations
<p>Hazardous Materials Handling and Storage</p>	<ul style="list-style-type: none"> The proposal does not seek to increase the quantity of materials currently stored onsite, however, to make up the additional asphalt product, the proposal would require deliveries of input materials during peak output periods. The Department considers that in accordance with SEPP 33, that the development is not hazardous and therefore a Preliminary Hazard Analysis is not required to support the modification as the modification is not considered to be a potentially hazardous development. The Department notes that the EPA did not raise any concerns regarding hazards or the storage of materials. The Department also notes that under the existing conditions of consent, Council is required to bund/contain all tanks and similar storage facilities and is required to storage, handling and transport any dangerous goods in accordance with the relevant Australian Standards. 	<p>No additional conditions required to manage hazardous materials impacts.</p>

<p>Water</p>	<ul style="list-style-type: none"> • The modification does not seek to change any surface water elements at the Quarry, including erosion and sediment control. Additionally, while it is recognised that there is connectivity between surface and groundwater, the modification is not expected to result in any material direct or indirect impacts on groundwater. • The Department considers that the modification is unlikely to result in any material surface water impacts, beyond those already approved. The management of potential impacts could be achieved by updating current management plans to reflect the proposed modification, specifically the inclusion of the asphalt plant. • The Department notes that the asphalt plant currently uses 0.2 kilolitres of water per day, resulting in an annual usage of 0.0616 megalitres (ML). Council has calculated that increasing asphalt production by a factor of 3.6, the annual water usage requirement for the asphalt plant would increase to 0.22 ML. • Site Water Balance modelling based on the approved Surface Water Management Plan (G&S, 2019), indicates that the main storage dam has the capacity to accommodate the increased water requirements. Council has indicated that it will obtain relevant water licences prior to increasing asphalt production. • The existing conditions of consent would require Council to revise the Site Water Balance within the Soil and Water Management Plan (SWMP) to reflect the proposed modification and adjust the scale of operations to match its available water supply. 	<p>No additional conditions required to manage water impacts</p>
<p>Waste</p>	<ul style="list-style-type: none"> • The proposal would not result in any additional construction, excavation or operational waste and existing management and mitigation measures would continue to be utilised on site. 	<p>No additional conditions required to manage waste impacts.</p>
<p>Social and Economic</p>	<ul style="list-style-type: none"> • The key issue of concern raised in community submissions was the increase to truck movements and associated impacts on local amenity. These issues have been considered in detail in this report. The Department considers that the amenity impacts of the proposed modification would be minimal and would comply with the relevant acceptable criteria for noise and air quality impacts. • The proposal is also expected to generate positive economic benefits. The modification would facilitate the increased supply of asphalt for the local construction market. It would also streamline environmental management and reporting requirements for both the asphalt plant and Quarry operation. 	<p>No additional conditions required to manage social and economic impacts.</p>

Heritage	<ul style="list-style-type: none"> The Department is satisfied there would be no impacts to Aboriginal or historic heritage, as there would be no additional site disturbance and no heritage items have been identified on-site. 	No additional conditions required to manage heritage impacts.
Biodiversity	<ul style="list-style-type: none"> As the modification does not involve any additional vegetation clearing, no impacts to biodiversity are expected. 	No additional conditions required to manage biodiversity impacts.

6 Evaluation

The Department has assessed the merits of the proposed modification in accordance with the requirements of the EP&A Act. The proposed modification involves relatively minor amendments to MP07_0020 to allow for the amalgamation of the existing and currently operational Council-approved asphalt plant into Blakebrook Quarry’s consent, increasing the asphalt plant’s production limit and increasing the site’s maximum daily trucking dispatch limits.

The Department is satisfied that the proposed modification would not substantially increase the environmental or amenity impacts, relative to the approved project and that any residual impacts could be appropriately managed under existing and modified conditions of consent and a comprehensive set of management plans for the site.

The proposal would enable the ongoing and increased supply of hard rock and asphalt for local roads and infrastructure projects and support continuation of a revenue stream for Council. Regulation of the Quarry and asphalt plant under a single, consolidated development consent would also improve the efficiency of environmental management and reporting at the Quarry.

Overall, the Department considers that the proposed modification is in the public interest and should be approved, subject to conditions.

The Department has drafted a recommended Notice of Modification (see **Appendix D**) and a consolidated version of the development consent (see **Appendix E**), as it is proposed to be modified. Council has reviewed and accepted the proposed conditions.

7 Recommendation

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

- **considers** the findings and recommendations of this report;
- **determines** that the application MP 07_0020 MOD 3 falls within the scope of section 4.55(2) of the EP&A Act;
- **accepts and adopts** all the findings and recommendations in this report as the reasons for making the decision to approve the modification;
- **modifies** the consent MP 07_0020; and
- **signs** the attached approval of the modification (**Appendix D**).

Recommended by:



Joel Herbert
Environmental Assessment Officer
Resource Assessments

Recommended by:



Robert Hodgkins
Team Leader
Resource Assessments

8 Determination

The recommendation is **Adopted** by:

Matthew Sprott
Director
Resource Assessments

as delegate of the Minister for Planning and Public Spaces

9 Appendices

Appendix A – Modification Report

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12906>

Appendix B – Submissions

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12906>

Appendix C – Submissions Report and Additional Information

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12906>

Appendix D – Notice of Modification

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12906>

Appendix E – Consolidated Consent

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12906>