



Document Purpose

Hanson Construction Materials Pty Ltd has prepared this document in response to the request from the NSW Department of Planning on 21 June, 2010. The request was for the proponent to respond to all issues raised in submissions.

Context

By way of context the Wagga Wagga quarry on Roach Road quarry provides approximately 50 % of the sand and aggregate demand for the Wagga Wagga region and supplies the construction markets as far north as Canberra, throughout the Riverina and into country Victoria in the south. This quarry is the source of raw materials for concrete production in Hanson's concrete plants and numerous third party batching plants; raw materials for asphalt production; and for general sand and aggregate supply for other commercial and domestic consumers in the Region.

The closure of the quarry due to the immanent exhaustion of the operating quarry's resource will result in a significant loss in local employment as well as creating a major constraint on the continued economic development of the southern region of NSW. Other aggregate suppliers in the region are not able to double production - which would be required to replace the Wagga Wagga quarry's output. The result would be either concrete and asphalt production would cease (with obvious serious economic impacts) or there would be for greatly increased demand for aggregates to be imported from outside of the region. This would result in considerable additional road freight (with costs to infrastructure as well as additional greenhouse emissions) and subsequent increases in cost of rare materials and produced asphalt and concrete.

Proposal Modification

The following alteration to the project proposal, as detailed in the Environmental Assessment lodged with DoP, is made in response to submissions and further consultation with Department of Planning and NSW Office of Water

- 1. <u>Groundwater Recharge Basins proposed for the floodplain area to the south of the existing quarry operations are to be deleted from the proposal.</u>
- 2. Water produced from licensed groundwater dewatering operations shall be treated on-site (settled to < 50 ppm suspended solids) then discharged to the Murrumbidgee as is the current site practice.

Additional Commitments

Further to the statement of commitments provided in the EA document Hanson Construction Materials Pty Ltd makes the following additional commitments:

- 1. The quarry operator shall ensure that all necessary surface water and groundwater licenses are in place prior to the extraction of surface waters from regulated waterways and groundwater from any aquifer.
- 2. <u>Continual monitoring of surface and groundwater extraction in accordance with license conditions shall be undertaken.</u>

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Submission by Andrew Bryant, (Rorrison's Engineering), 12 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> The quarry extension will:

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
- Not significantly change the nature of the quarry's current operations
- Minimise environmental impacts as it utilises highly disturbed adjoining land
- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

<u>Proponent's response:</u> Andrew Bryant's comments are noted.

<u>Submission by Greg Lawson, (Total Electrical Control Solutions), 12</u> May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> The quarry extension will:

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Greg Lawson's comments are noted.

Submission by John Hart, (Pirtek), 12 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

<u>Proponent's response:</u>

John Hart's comments are noted.

Submission by Steven Linberger (Rivercrete Pty Ltd), 14 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
- Not significantly change the nature of the quarry's current operations
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- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Steven Linberger's comments are noted.

Submission by Robert Pascall, (Wagga Truck Electrics), 19 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Robert Pascall's comments are noted.

Submission by W. Mullins, (Riverina Crane Service), 19 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

W. Mullins' comments are noted.

Submission by Steve Mullins, (Riverina Crane Service), 19 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Steve Mullins' comments are noted.

Submission by Greq de Bruyn, 20 May 2010

1. The impact of increase in traffic cannot be determined because the current traffic counts were not taken in the correct location.

Proponent's response:

A Supplementary Report has been produced which concluded that the current and future level of service of the intersection of Roach Road and Riverview Drive on a scale of A (very good) to F (very poor) is at least B (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The future increase on quarry generated traffic does not alter the level of service at this intersection.

2. The impact of noise estimates are determined on the estimated increase in traffic. The estimated increases in traffic have not been reliably estimated and as such we do not know what these impacts will be.

Proponent's response:

A supplementary report has been produced which indicates that the noise impact on Riverview Estate from traffic generated by the quarry both currently and at future traffic levels do not exceed the criteria noise level of 60dBA in accordance with the DECCW's Environmental Criteria for Road Traffic Noise.

3. The hours of operation have not been clarified so we do not know what the impacts of these will be.

Proponent's response:

In terms of the of the quarry's impacts on the Riverview Estate the EAR and the Supplementary report have demonstrated that the site can generally operate between 7am and 5pm Monday to Friday and 8am to 1pm Saturday. It is expected that operations will mainly occur during daylight hours, while operations outside these times will be dependent on customer demands.

4. Q1- Information on past annual production data not adequately addressed.

Proponent's response:

Tables 2.1 and 2.2 in the EAR list the current and future production levels.

5. <u>Q2- While the landholders may have been identified what communication has</u> been made with all these landholders?

Proponent's response:

This has been addressed in section 1.7.2 of volume 1 of the EAR.

6. Q3- Where (sic) the owners of the Subdivision advised that they should make purchasers of the Lots aware of the impending expansion plans of the quarry?

Proponent's response:

Normally it is the responsibility of purchaser to conduct the necessary enquiries and due diligence on a product or service they are interested in acquiring. It is also the seller's responsibility to disclose all information relating to the product or service they are selling.

7. Q4- Why was such a mall radius used for the distribution of newsletters?

Proponent's response:

A 1 kilometre radius is a typical catchment size for neighbouring properties to a quarry. The impact assessment also confirms that the impacts outside this are negligible.

8. <u>Q5- Why weren't the newsletters delivered to all residents in close proximity to Roach Road?</u>

Proponent's response:

The initial environmental impact modelling usually narrows down the scope of the projects impacts. This enables a targeted approach to managing the consultation process. Usually a 1

kilometre radius is more than sufficient in most circumstances to capture potentially impacted areas. It should also be noted that in the case of the Wagga-Wagga quarry the EAR commence at the very early stages of the development of the Riverview Estate.

9. Q6- The developer has made a statement that it may need to consider weekend practices not including load and haul. The developer has made no statement that it would not laud (sic) and haul on the weekends. Will this be a condition of approval.

Proponent's response:

In terms of the of the quarry's impacts on the Riverview Estate the EAR and the Supplementary report have demonstrated that the site can generally operate between 7am and 5pm Monday to Friday and 8am to 1pm Saturday. It is expected that operations will mainly occur during daylight hours, while operations outside these times will be dependent on customer demands.

10. Q7- Can the developer please explain why it would be necessary to load and haul outside of normal working hours of 8:00 a.m. to 5:00 p.m. and weekends when the majority of the product being transported from the quarry is a raw material for a further process? (i.e. product used in concrete batching plant). In periods of peak demand it would be less intimidating on the residential occupants on the collector road if there were more truck movements during normal working hours with the product being stockpiled at the destination in lieu of truck movements outside of normal working hours.

Proponent's response:

Normal working hours for the construction industry are 7am to 6pm. At times raw materials need to be at the work site prior to commencement of work at 7am otherwise productivity of the labour force will suffer.

11. Q8- What will the weekday hours of laud (sic) and haul be and will these be an approval condition?

Proponent's response:

In terms of the of the quarry's impacts on the Riverview Estate the EAR and the Supplementary report have demonstrated that the site can generally operate between 7am and 5pm Monday to Friday and 8am to 1pm Saturday. It is expected that operations will mainly occur during daylight hours, while operations outside these times will be dependent on customer demands.

12. <u>Q9- What is the current demand for high quality aggregates in the Wagga Wagga Region?</u>

Proponent's response:

According to the former NSW Department of Primary Industry now known as NSW Department of Industry and Investment the average annual consumption of aggregates per capita is 2.86 tonnes per year. The population of the Wagga Wagga Riverina area was approximately 155,000 in 2006. The corresponding annual consumption of quarry aggregates is 443,300 tonnes. The Hanson Wagga Wagga quarry currently supplies around 34% of the demand.

13. <u>Q10- What is the expected demand for high quality aggregates in the Wagga Wagga Region for the next 25 years?</u>

Proponent's response:

It is anticipated that populations will grow by at least 0.6%pa over the next 20 years. Therefore by 2026 the population increase from 2006 will be at least 19,000. This will increase the annual demand to approximately 500,000 tonnes per annum. The Hanson Wagga-Wagga quarry supply around 46% of the demand.

14. <u>Q11- Can the current and future expected demand be met by other quarries in the Wagga Wagga region?</u>

Proponent's response:

As the Wagga Wagga quarry current provides nearly half the areas construction aggregates and sand, the projected increase in aggregate demand is unlikely to be met by other quarries in the Wagga Wagga region.

15. Q12- Where are the potential development areas?

Proponent's response:

Wagga-Wagga City Council has published a document titles Wagga-Wagga Economic Profile October 2008, which provides further information. This document can be downloaded from their website.

16. Q13- If 80% of the product is concrete aggregate, will the product first have to be transported to concrete batching plants before it can be utilised by the development areas?

Proponent's response:

Aggregates that are to be used in the manufacture of concrete need to be transported to a concrete batch plant for this to occur.

17. <u>Q14 – What tonnage of truck is used in the determination of estimated trucks leaving the site?</u>

Proponent's response:

The average truck tonnage varies from quarry to quarry and time-to-time, for example for the Wagga-Wagga quarry the period from 1 January 2010 to 25 June 2010 the average truck payload was 21.63 tonnes. Generally the payload of 30 tonnes for a semi-trailer is often adopted.

18. <u>Q15 – Can more detailed workings be provided on how the average number of trucks leaving the site daily is calculated?</u>

Proponent's response:

Refer to the Supplementary Report.

19. Q16 – What would be the average number of trucks estimated to be leaving the site, based on the capacity of the trucks that are currently used to load and haul?

Proponent's response:

Refer to the Supplementary Report.

20. Q17 – Is our assumption correct that the actual number of truck movements will be double the estimated number to allow for empty trucks entering the site daily to pick up the product?

Proponent's response:

Truck movements are double the number of deliveries ex-quarry. Refer to the Supplementary Report.

21. <u>Q18 – Are the estimated peak periods 250,000 tonnes as indicated in the EA or 400,000 tonnes per annum as per above?</u>

Proponent's response:

The annual production demand is expected to increase to 250,000 tonnes per annum.

22. <u>Q19 – What are the estimated truck movements daily (i.e. trucks entering and exiting the site based on a peak of up to 400,000 tonnes per annum?</u>

Proponent's response:

A production level of 400,000 tonnes per annum is outside the scope of the EAR and Supplementary Report.

23. <u>Q20 – Does this road have the design capacity and load bearing capacity for a B Double payload? If not will the developer be required to pay for any upgrades before introducing trucks of this capacity?</u>

Although the Gross Vehicle Mass for a B-Double may be higher the effective axle/wheel loading is less than a truck & dog trailer combination currently being used on the transport route due to the significant increase in the number of axles. The load bearing on the road is effectively less than a truck & dog combination.

24. Q21 – The EA has left a blank in the comment section of this. Please make comment on this as there will be considerably more truck movements in the new residential area?

Proponent's response:

This section of the table identifies Clause 16 (1b) of SEPP (Mining, Petroleum Production, and Extractive Industries) 2007, which states;

- "(1) Before granting for consent for development for the purpose of mining, petroleum production or extractive industry that involves the transport of materials, the consent authority must consider whether or not the consent should be issued subject to conditions that do any one or more of the following:
- (b) limit or preclude truck movements, in connection with the development, that occurs on roads in residential areas or on roads near to schools,"

The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas.

- 25. Q22 Can the developer please provide more detail with regard to the assumptions used in the calculation of the estimated noise levels in the vicinity of the new residential subdivision. In particular can the developer please provide the following:
 - the tonnage of the heavy truck used in estimating the noise levels
 - · whether the heavy trucks are fully laden or empty
 - the configuration of the heavy truck
 - a reading of the actual noise level of current trucks passing the new residential subdivision for a reasonable sample period

Proponent's response:

- The average truck tonnage varies from quarry to quarry and time-to-time, for example for the Wagga-Wagga quarry the period from 1 January 2010 to 25 June 2010 the average truck payload was 21.63 tonnes. Generally the payload of 30 tonnes for a semi-trailer is often adopted.
- Heavy trucks are treated as empty entering the quarry and fully laden when leaving.
- Heavy truck combinations are as per RTA specifications. These combinations typically
 consist of light rigid, heavy rigid, semi-trailer, truck & dog, and B-Double for quarry
 tipper trucks.
- The noise assessment has been adequately addressed in the EAR and the Supplementary Report. Noise monitoring occurred from 23 November 2007 to 12 December 2007.

Comment – The new residents on Roach do not currently experience any significant heavy truck movements from the Hanson Quarry. New Residents who have resided in the new subdivision for the last 18 months have indicated that current truck movements from the quarry are negligible and would be less than a handful each on most days.

26. <u>Q23 – Can more current data be supplied by the quarry in this regard to gauge the true impact of the expanded quarry operations?</u>

Proponent's response:

The above comment reflects the findings from the project's EAR and Supplementary Report. The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas.

27. Q24 – Can you please provide more detail as to how you calculated the existing Light Traffic created by the Quarry to be 410 per day as this number appears to be totally erroneous. To estimate the number of Light Traffic created by the quarry data will need to be taken from Roach Road and not McNickle Road as McNickle Road also services the public golf course, a number of residences, a motel entrance and access to a river reserve which is independent of the traffic created by the Quarry.

Proponent's response:

The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas. The current transport Route along Roach and McNickle Roads is route the quarry has enjoyed prior to the Riverview Estate subdivision and most efficient means of accessing the Sturt Highway.

28. Question 25 – Has the development of alternative collector roads been considered that would not impinge on the new residential subdivision?

Proponent's response:

The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas. The current transport Route along Roach and McNickle Roads is route the quarry has enjoyed prior to the Riverview Estate subdivision and most efficient means of accessing the Sturt Highway.

Submission by Lisa Pascall, (Wagga Truck Electrics), 21 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
- Not significantly change the nature of the quarry's current operations
- Minimise environmental impacts as it utilises highly disturbed adjoining land
- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Lisa Pascall's comments are noted.

Submission by K. Pascall, 21 May 2010

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Proponent's response:

K. Pascall's comments are noted.

Submission by V. Pascall, 21 May 2010

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

V. Pascall's comments are noted.

Submission by David Lawrence, (Bursons Automotive), 21 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

David Lawrence's comments are noted.

Submission by Steve Nuttall, 21 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Steve Nuttall's comments are noted.

Submission by Anthony Edwards, 21 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

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I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Anthony Edward's comments are noted.

Submission by Adam Sullivan, 21 May 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Wagga Wagga and the Riverina District
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- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Wagga Wagga and the Riverina District at reasonable prices with minimal impact on the environment.

Proponent's response:

Adam Sullivan's comments are noted.

Submission by Anthony Ivey, 25 May 2010

1. As most of the data collected in the report dates back to 2007, will a new impact and consultation process need to be undertaken with the residents of Riverview drive?

Proponent's response:

Although some of the data was collated in 2007 the experts consultants responsible for each document has verified the currency of their report prior to submission to the NSW Department of Planning (DoP) as a complete Environmental Assessment Report (EAR). The DoP in conjunction with other government agencies were required to review the EAR, prior to public exhibition to ensure the document adequately addresses the Director General's Requirements for the Project.

Notwithstanding the above the DoP has directed the proponent to provide a Supplementary Report to address potential impact concerns on the Riverview Estate subdivision in relation to noise, traffic, and air quality. The Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision.

In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

Submission by Linda De Bruyn, 25 May 2010

I am extremely concerned about the substantial heavy traffic increase and the impact it will have on the "peaceful rural subdivision" of which there will be approximately 40 lots.

Proponent's response:

Under the Wagga-Wagga City Council draft LEP the Riverview Estate is zoned R5, Large Lot Residential. The Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision. In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

If the quarry expansion goes ahead, there will obviously be very little tranquillity (sic) as trucks will be rumbling along Roach Road over which our home looks.

Proponent's response:

As Greg De Bruyn has commented on in his submission:

"The new residents on Roach do not currently experience any significant heavy truck movements from the Hanson Quarry. New Residents who have resided in the new subdivision for the last 18 months have indicated that current truck movements from the quarry are negligible and would be less than a handful each on most days."

The above comment reflects the findings from the Project's EAR and Supplementary Report. The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas.

The fact that this is a relatively new residential subdivision clearly indicates the Councils intended future plans for land use in this area.

Proponent's response:

The proponent is not aware that Council is intending to develop land in the area. In most circumstances land developments are proposed by landowners or other interested parties who lodge applications to Council or the relevant approval authority seeking permission for a particular land use. This may or may not include re-zoning of the land. In the circumstance of the Riverview Estate, the Wagga-Wagga City Council Draft LEP 2010 land zoning map shows that the Riverview Estate is bounded by land zoned:

- RU1- Primary Production (extractive industries are mandated permitted with consent)
- RE1- Public Recreation
- E2- Environmental conservation

Any future plans for residential subdivision outside of the Riverview Estate is not supported by the Wagga-Wagga City Council Draft LEP 2010 land zoning map.

It should be noted that the Wagga-Wagga quarry provides nearly half of the areas' construction aggregate needs. Without this valuable resource it is unlikely that further development in the immediate or greater area will be achieved without significant economical implications.

Submission by Pete & Kym Treharne, 28 May 2010

1. Safety

Having lived at the new and growing Riverview Estate for the past year, we have witnessed first hand Hanson Trucks hurtling down Roach and McNickle Rds. This reality coupled with the diverse mix of people using these roads – nearby residents; children on bikes; horse riders; motorbike riders; cyclists, joggers and walkers on the Wiradjuri track; and the unfortunate presence of drag racers – is already a cause for concern. Serious injury or death is likely to result if more trucks frequent these roads.

Proponent's response:

As Greg De Bruyn has commented on in his submission:

"The new residents on Roach do not currently experience any significant heavy truck movements from the Hanson Quarry. New Residents who have resided in the new subdivision for the last 18 months have indicated that current truck movements from the quarry are negligible and would be less than a handful each on most days."

The above comment reflects the findings from the Project's EAR and Supplementary Report. The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas.

The existing sight distance from Roach Road on to the McNickle Road is greater than 160 metres in each direction as required under the RTA Road Design Guide for the sign posted speed of 80km/h.

The existing sight distance from Roach Road to the quarry gate is greater than 160 metres in each direction as required under the RTA Road Design Guide for the sign posted speed of 80km/h.

2. Noise Pollution

Truck noise will undoubtedly reduce the value of properties in the area, and spoil the tranquil appeal of Riverview Estate, which we have paid a premium to enjoy; Coming from the noise of Sydney we desperately wanted peace.

Proponent's response:

The Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

3. Protection

The rights of residents in the area need to be protected. The current submission does not sufficiently address how residents will be affected or what is being done to mitigate concerns and negative consequences from the development.

Proponent's response:

The Project's EAR and Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision.

In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

Submission by John and Sharon Dare, 28 May 2010

We were assured that the quarry (delaneys)would be closed (this happened before we completed building) and at no time were we told that a new quarry would be opened out here.

Proponent's response:

The current quarry operates under following existing approvals granted by the City of Wagga-Wagga:

- D/A No. 46/86
- Approved 08/01/1987 for extractive industry.
- D/A No. 46/86
- Approved 07/12/1990 for extractive industry.
- ADA04/0045
- Approved 06/07/2004 for proposed extractive industry amended application.
- ADA08/0121
- Approved 13/03/2009 for modification to areas of extraction of existing sand and gravel quarry.

The Wagga-Wagga quarry has been in operation decades prior to the commencement of the Riverview Estate subdivision.

I shudder to imagine 50 or 80 truck trips past our property each day and the effect this will have on our quality of life.

Proponent's response:

As Greg De Bruyn has commented on in his submission:

"The new residents on Roach do not currently experience any significant heavy truck movements from the Hanson Quarry. New Residents who have resided in the new subdivision for the last 18 months have indicated that current truck movements from the quarry are negligible and would be less than a handful each on most days."

The above comment reflects the findings from the Project's EAR and Supplementary Report. The EAR and the Supplementary report have adequately shown that the current and future quarry generated traffic will not significantly impact the nearby residential areas.

The existing sight distance from Roach Road on to the McNickle Road is greater than 160 metres in each direction as required under the RTA Road Design Guide for the sign posted speed of 80km/h.

The existing sight distance from Roach Road to the quarry gate is greater than 160 metres in each direction as required under the RTA Road Design Guide for the sign posted speed of 80km/h.

The prevailing wind is from the west which would place us directly in line with dust and noise created by such a massive enterprise. We believe our properties will be devalued by this operation and our peace and tranquillity (sic) will be shattered by continuous truck movements and noise and dust.

Proponent's response:

The Project's EAR and Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision.

In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

Submission by NSW Office of Water (NoW), 3 June 2010

The proposal to receive credits for recharging the aquifer to reduce the volume of groundwater that requires licensing cannot be considered by the NSW Office of Water.

Proponent's response:

Martens and Associates Pty Ltd (Martens) were consulted to conduct the hydro-geological assessment of the proposed Wagga-Wagga quarry extension. According to Martens, at the commencement of this project Martens contacted the (then) NSW DWE to discuss opportunities for the recharge of groundwater resources as an off-set for new extraction licensing. Discussion at the time with the Department's Mr Mark Mitchell (April 23, 2009) indicated that NSW DWE had no policy on the recharge of aquifers as an offset to new licensing. DWE advised this was a policy 'grey area' which would be considered on a merits basis once the application was submitted.

On the basis of this advice the applicant developed the groundwater strategy provided in the application presently before the NSW DoP. This prior consultation and DWE feedback is at odds with comments in NoW's correspondence of CW10/123 which states there is 'no regulatory mechanism' to consider such a scheme.

Accepting NOW's position with regards to aquifer licensing the proponent shall not proceed with the groundwater recharge basins as proposed in the EA. Excess water extracted from the quarry pits (under license) shall be treated to agreed levels then discharged to the Murrumbidgee River as is the current site practice.

<u>Licences under the Water Act 1912 are required for current and proposed excavations into groundwater and associated dewatering activities, aquifer reinjection and embankment construction,</u>

Proponent's response:

An order under Section 113A of the Water Act (1912) has been gazetted (Number 159A of December 2008). The effect of this order is to embargo new Water Act (1012) Pt 5 licenses for groundwater supply within an area of the state including the site. It is noted that this order includes the following specific exemptions (Number 11 in Schedule 2):

 Water supply for a person where the Minister determines that failure to supply the water would cause a prohibitively high social, economic or national security cost and the supply of water will cause no more than minimal environmental harm to the aquifer, or its dependent ecosystem.

Given the regional significance of the proposed quarry expansion and the social and economic cost of it not proceeding it is considered that the proposal satisfies the requirements for the Minister to consider this application under Exemption 11 of the Embargo. Given the proposed recharge of treated water to the aquifer the resultant impact on the aquifer is considered to satisfy the exemption's requirement that the water supply will have 'minimal environmental harm'.

Given NoW's now stated position that all groundwater supply shall require licensing regardless of the proposed recharge, it is recommended that Hanson apply to the Minister under Schedule 2 exemption 11 of the Embargo for the Minister to approve the required licenses to allow for the total site groundwater take (2845 ML/year at Stage 3) in excess of the existing 360 ML/year groundwater license.

Where new licenses are not made available to Hanson under the exemption Hanson shall, prior to extracting greater than presently licensed groundwater take, ensure that appropriate groundwater licenses are secured for the site. Where adequate licenses are not in place Hanson shall cease groundwater dewatering operations.

The retention of open voids is not supported due to the ongoing evaporation loss contamination potential. Where open voids are unavoidable, the evaporative loss must be accounted for by licensed groundwater entitlement and mitigation strategies must be implemented to prevent water quality impacts.

Proponent's response:

NoW has noted that the proposed final site form is not acceptable due to evaporative losses from the quarry voids. Review of documentation provided in the application indicates that Stage 5 of the project, the final stage prior to completion, results in total evaporative losses from the open water bodies of the order of 199 ML/year. Existing site groundwater licences provide for the removal of 360 ML/year of water. Therefore, in this regard the presence of permanent quarry voids on the site is consistent with existing site licensing.

It is understood that the final use of the open water bodies would be minimal with possible future use for passive recreation (i.e. picnic areas). With the proposed revegetation of the site following completion of extraction operations and with no formal use of these water bodies proposed the risk of groundwater contamination resulting is considered to be acceptably low.

Conflict between rehabilitation timelines and outcomes detailed in the final EA and those set by Wagga-Wagga Council in DA Modification Number ADA08/0121. NSW Office of Water requests consistency with previous Council approved rehabilitation requirements which were supported by the former Department of Water and Energy (DWE). If consistency cannot be achieved then a justification is requested.

Proponent's response:

Council's required rehabilitation works were only required as the proposed extraction was a small 'piece meal' expansion of site operations. The integration of these activities into the large site scheme means that, provided the overall site outcome is acceptable to DoP, the Council's condition can appropriately be set aside as part of the whole of site solution offered.

<u>Submission by NSW Depart of Environment, Climate Change and Water,</u> 10 June 2010

DECCW has reviewed the information provided and determined that it is able to issue a licence amendment for the proposal subject to a number of conditions. The proposed conditions are provided in Attachment A. The applicant will need to make a separate application to DECCW to obtain this licence variation.

Proponent's response:

The proponent currently has an existing DECCW licence under which it operates the Wagga-Wagga quarry. This licence is current and due for renewal on 21 June, 2014. From the commencement of this licence the proponent has not received a single complaint in relation to air or noise emissions.

In respect of the proposed amendments as provided in Attachment A to DECCW's submission, the proponent suggests the following:

L6. Noise Limits

The Night-Time Intrusive LAeq(15 minute) project specific assessment criteria be included for the residences.

Noise Limits (dBA)

110130 Ellillit (ubit)			
Location	Night (L _{Aeq, 15min)}		
Kullaroo 1	35		
Kullaroo 2	35		
Sweetwater	41		
Riverglen	35		
Globine	35		
Pomingalarna	35		

Hours of Operation

L6.4 Delete. The current development consent issued by Wagga-Wagga City Council does not limit the hours of operation. The EAR has demonstrated that current operations will not impact on the nearest receivers in terms of noise or dust emissions above night and day time criteria.

L6.5 Delete. The current development consent issued by Wagga-Wagga City Council does not limit the hours of operation. The EAR has demonstrated that current operations will not impact on the nearest receivers in terms of noise or dust emissions above night and day time criteria.

Submission by Jocelyn Dyde, 10 June 2010

I strongly object to the extension of Wagga Wagga Quary! My fiancé (sic) and I have recently brought a 'lifestyle' 7 acre block on the corner of Riverview Drive and Roaches Rd. We brought this block beacuase (sic) of the quiteness (sic) of the location and peacefullness (sic) of the area to live and raise a family. Trucks coming alonf (sic) Raoches (sic) road at all hours of the day will certainly not allow this 'lifestyle'.

Proponent's response:

The Project's EAR and Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision.

In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

Submission by Holly Casson, 11 June 2010

We are very displeased at the thought of any extra traffic (especially heavy vehicles) driving along Roach Road. One of the main reasons for us purchasing our block at Riverview Estate was to build in a safe area for our children to grow up and get away from the traffic and noise of Wagga City. Therefore we strongly object the Extension of Wagga Wagga Quarry and the extra traffic and noise pollution it will bring.

Proponent's response:

The Project's EAR and Supplementary Report demonstrates that the proposed extension to the existing sand and gravel quarry at Roach Road, Wagga-Wagga, and increase in annual production levels from 150,000 tonnes to 250,000 tonnes will not result in a significant change to the current environment of the Riverview Estate subdivision.

In terms of traffic impacts on the intersection of Roach Road and Riverview Drive a conservative assessment has concluded that this intersection will not be detrimentally affected by current or future levels of quarry traffic movement, and continue to provide a level of service rated at least "B" (stable flow with manoeuvring traffic stream only slightly restricted with the possibility of slight delays). The air quality of the Riverview Estate will not be impacted by the quarry and the Estate will continue to enjoy a level of air quality comparable with the greater Wagga-Wagga area. The noise emitted by the quarry operations will not be heard at the Riverview Estate which will continue to enjoy ambient noise levels equivalent to a quite library or a quite location in the country.

Submission by John Owens, 15 June 2010

<u>I support the proposed expansion. Site is significant for both commercial and academic reasons</u>

Proponent's response:

John Owen's comments are noted.

<u>Submission by NSW Department of Industry and Investment, 16 June</u> 2010

This quarry provides essential, quality materials to a growing, local market. It uniquely provides asphalt aggregate to a local region with a paucity of this resource available from alternative sources. I&I NSW considers the environmental assessment of the Wagga Wagga Quarry proposal adequate and supports the ongoing development of this regionally important resource.

Proponent's response:

The NSW DII comments are noted.

Submission by Roads and Traffic Authority, 18 June 2010

The RTA notes that the site does not have frontage to a classified road however it is within close proximity to the Sturt Highway (which is Classified Road) and ultimately all access to the site is via the intersection of the Sturt Highway and McNickle Road. It is considered that the current treatment at this intersection is appropriate to accommodate the additional traffic proposed to be generated by the expanded development.

Proponent's response:

The RTA's comments are noted.

The RTA is aware that dust generated by the movement of vehicles accessing site along Roach Road is an issue relating to the operation to the existing quarry. It is considered that this issue should be addressed for road safety reasons along this local road.

Proponent's response:

Roach Road is a sealed rural road that was constructed by the proponent and required to be maintained by Council. However the proponent is willing to work with Council and the RTA to develop a plan that addresses the review of the standard of maintenance of the roads and intersections that service the development site.

The RTA has assessed the development application and the supporting information supplied and notes the "Statement of Commitments" of the Environmental Assessment report, dated April 2010, prepared by Hanson Construction Materials Pty Ltd and would raise no objection to the development as proposed. The following may be considered as conditions in the development consent:

- 1. A transport management plan shall be prepared in consultation with the Consent Authority and the RTA, to outline measures to manage traffic related issues from the operation of the development. The plan shall detail the potential impacts associated with the development, the measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to;
 - the review of the standard of maintenance of the roads and intersections that service the development site, including the intersection of the Sturt Highway and McNickle Road.
 - The management of dust generated by guarry vehicles accessing site.

Proponent's response:

The proponent is willing to work with Council and the RTA to develop a plan that addresses the review of the standard of maintenance of the roads and intersections that service the development site.

2. The quarry operator is to record and maintain a log book of the extraction quantities and traffic movement in and out of the subject site. This log is to be kept on site and be available for inspection at the request of the consent authority, Local Council or the RTA.

Proponent's response:

The proponent is willing to work with Council and the RTA by maintaining a log book of the extraction quantities and traffic movement in and out of the subject site.

3. Any works associated with the proposed development shall be at no cost to the RTA.

Proponent's response:

The RTA's comments are noted.

Submission by Christopher J Rutledge, (Elvin Group), 22 June 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Canberra Region
- Not significantly change the nature of the guarry's current operations
- Minimise environmental impacts as it utilises highly disturbed adjoining land
- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Canberra at reasonable prices with minimal impact on the environment.

Proponent's response:

Christopher J Rutledge's comments are noted.

Submission by Jason Hall, (Fulton Hogan Pty Ltd), 28 June 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Canberra Region
- Not significantly change the nature of the quarry's current operations
- Minimise environmental impacts as it utilises highly disturbed adjoining land
- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Canberra at reasonable prices with minimal impact on the environment.

Proponent's response:

Jason Hall's comments are noted.

Submission by WT Roberston, (Robbo's Sand Pty Ltd.), 7 July 2010

<u>I support Hanson's application for the sand quarry at Roach Road, Wagga Wagga.</u> <u>The quarry extension will:</u>

- Secure the supply of much needed sand and gravel for Canberra Region
- Not significantly change the nature of the guarry's current operations
- Minimise environmental impacts as it utilises highly disturbed adjoining land
- Have a very limited impact on groundwater in the immediate area

I urge you to approve the quarry to secure the supply of sand and gravel to Canberra at reasonable prices with minimal impact on the environment.

Proponent's response:

WT Robertson's comments are noted.

<u>Submission by Land and Property Management Authority, 11 August</u> 2010

It is noted that the proposed development will involve truck usage along Roach Road and McKnickle Street in Wagga Wagga. The Wiradjuri Walking Track traverses this area for 163 metres then continues into the Golf Course. There is limited opportunity for walkers to walk off the road to a safer area along this stretch of the Wiradjuri Walking Track. It is requested that the proponent and staff be advised of the location of the Wirdajuri Walking Track and trucks driving these areas to look out for walkers.

Proponent's response:

The proponent will develop and submit a Truck Driver Code of Practice for approval. Hanson employee truck drivers and subcontractors will be conditioned to adhere to the approved Truck Driver Code of Practice.

The proponent is also willing to enter an agreement with LPMA and Wagga Wagga City Council on the installation of suitable road side signage to increase awareness of the location of the Wirdajuri Walking Track along Roach Road.