

Before Hearing Commissioners
at Wigram Base, 14 Henry Wigram Drive, Wigram

under: the Resource Management Act 1991

in the matter of: application RMA/2019/373 for land use consent in
relation to a Quarrying Activities at 81 to 83
Conservators Road, Christchurch

by: **Sol Quarries Ltd**
Applicant

Statement of Evidence of Nicholas Peter Fuller

Dated: 18 November 2020

STATEMENT OF EVIDENCE OF NICHOLAS PETER FULLER

INTRODUCTION

- 1 My full name is Nicholas Peter Fuller. I am a Senior Transport Engineer at Novo Group Limited, which is a specialist traffic engineering and planning consultancy that provides resource management related advice to local authorities and private clients.
- 2 I have worked on resource management transport planning and engineering projects for 19 years. My experience during this time includes development planning, preparing Traffic and Transport Assessments for resource consents, preparation of Project Feasibility and Scheme Assessment Reports for Councils and the NZ Transport Agency. My qualifications include a Bachelor of Engineering (Honours) in Civil Engineering.
- 3 I am familiar with the application by SOL Quarries Ltd for land use consent in relation to quarrying activities at 81 to 83 Conservators Road, Christchurch. I prepared the Integrated Transport Assessment (*ITA*) that was submitted with the Application.

CODE OF CONDUCT

- 4 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 5 My evidence will provide a summary of the key parts of the ITA and changes to the transport environment that have occurred since the ITA was prepared. It will then go on to provide specific responses to issues related to traffic matters raised by submitters, and then discuss transport matters raised in the section 42A report (the *Officer's Report*).
- 6 In preparing this evidence I have reviewed:
 - 6.1 The Application;
 - 6.2 Proposed alterations to the Resource Consent Conditions;
 - 6.3 Submissions received in relation to the Application; and
 - 6.4 The Officer's Report.

SUMMARY OF THE ITA

- 7 The Applicant currently has resource consent to extract material at the application site, which permits a maximum of 300 heavy vehicle movements per day to use the Guys Road access. In addition, there is a maximum of 30 light vehicle movements per day that are permitted to use the Conservators Road access. There are a range of transport related conditions that cover the following matters:
- 7.1 The maximum permitted traffic generation of the activity;
 - 7.2 The accesses that vehicle types are permitted to use;
 - 7.3 The direction of travel permitted at the Guys Road access by time of day (i.e. no heavy vehicles are permitted to turn right out of the Guys Road access from 07:00 to 09:00 and 16:00 to 18:00);
 - 7.4 Sealing of the Guys Road access for a length of at least 100m into the site, as well as construction of the access in accordance with a specific design (which has been completed); and
 - 7.5 Off-site road improvements that were required to be implemented prior to the operation of the Quarry (which have been completed).
- 8 The purpose of the truck routing restrictions is to minimise the truck volumes that would use the Ryans Road / Pound Road intersection at these times, as well as minimising truck volumes on Guys Road (south of Ryans Road).
- 9 Key from a transport perspective is that the quarry extension will not lead to an increase in the daily traffic movements compared to the consented development, which is a maximum of 300 heavy vehicle movements per day. Similarly, the vehicle access arrangements and truck routing requirements will be consistent with the consented activity.

CHANGES TO THE TRANSPORT ENVIRONMENT

- 10 The speed limits on the surrounding road network have altered slightly since I prepared the ITA. These changes include a reduction in the speed limit on Ryans Road to 60km/hr between Guys Road and Pound Road, where it was previously 80km/hr. This reduced speed limit will lead to a safer road environment.
- 11 There is also a proposal to construct a roundabout at the Pound Road / Ryans Road intersection in 2022 to 2023. Construction of this roundabout would be expected to notably improve the safety

record of this intersection as well as reducing the delays on the Ryans Road approaches.

- 12 Further to the above, alterations have been proposed to the proposed Consent Conditions for the Quarry compared to those outlined in the ITA. These alterations are:
 - 12.1 Proposed Condition 22 includes further information requirements in the Quarry Management Plan, including:
 - (a) Details of the designated truck route to / from the Quarry to ensure that all drivers are aware that heavy vehicles shall not utilise Hasketts Road, School Road or the southern end of Guys Road (School Road to Ryans Road) when accessing or exiting the Quarry site at any time; and
 - (b) Implementation of a three-strike warning system for drivers observed to be taking incorrect routes, which is understood to be a written warning, a one month stand down and then a ban from accessing the Quarry.
 - 12.2 Proposed Condition 23 includes:
 - (a) a requirement to induct all heavy vehicle drivers to the site (prior to driving heavy vehicles to the site), during which process they will be made aware of the truck routing requirements and signed induction acknowledgement that they understand this requirement and the three strike warning system; and
 - (b) Signage at the weighbridge regarding the restriction on travel at the Guys Road access at certain times and the permanent restriction from using Hasketts Road, School Road or the southern end of Guys Road (School Road to Ryans Road).
- 13 I also understand the Quarry access road (the haul road) to Guys Road is sealed for the full length of approximately 1.5km from the Guys Road entrance to the Quarry Weighbridge Office, to eliminate fugitive dust related to truck movements on the haul road and to eliminate the potential for material from being deposited on the public road network.
- 14 The above alterations are beneficial with regards to the potential transport effects of the proposal.

REVIEW OF SUBMISSIONS

- 15 I have received the submissions received regarding the Resource Consent application. The key transport themes within my area of expertise are grouped together and discussed below. Overall, the key themes are considered to be:
- 15.1 A suite of suggested conditions, including additional measures with regards to transport matters;
 - 15.2 General concerns regarding the continued use of the surrounding road network by trucks;
 - 15.3 Degradation of the road surface and edge-break concerns;
 - 15.4 Loose material being deposited on the road and striking passing cars and passers-by;
 - 15.5 A request that trucks exiting the Quarry are required to turn left at all times, therefore avoiding the Pound Road / Ryans Road intersection, as well as avoiding Hasketts Road; and
 - 15.6 The enforcement of the limit of 300 truck movements per day.

Conditions Sought

Prohibited Truck Route Signage

- 16 The first suggested amendment to the proposed conditions sought is that the Quarry operator work with the Council to erect appropriate signage on the public road network that reinforces that heavy vehicle drivers are not to use Hasketts Road, School Road or the southern end of Guys Road (School Road to Ryans Road). This signage would be applicable to all heavy vehicles. As I understand, it is not possible to have signage that would only prevent Quarry trucks, but permit use as a through route by other heavy vehicles. As such, implementation of this signage would require public consultation and ultimately approval from the Community Board.
- 17 I support this concept and would envisage that this would include MOTSAM signage as per Figure 1.
- 18 The Applicant is also supportive of signage being installed as per this condition, although the installation of this (including consultation with the wider community) is a matter for the Council to resolve as it cannot be undertaken directly by the Applicant.



Figure 1: R5-3 No Heavy Vehicle Signage

- 19 I understand that an alternative method to the above could be a tonnage limit on the southern section of Guys Road, Hasketts Road & School Road (e.g. 6,000 kg), which would be enacted by a By-law. The By-law could be enforced, by NZ Police if necessary. Again, this would be a matter for Council to instigate and undertake the consultation on and the Applicant is willing to participate in this process.

Clarification of Heavy Vehicle Numbers

- 20 A further amendment has been proposed to Condition 40 that clarifies the 300 heavy vehicle movements per day equates to 150 in and 150 out per day.
- 21 I consider the above clarifies the requirements associated with this Condition and support its inclusion.

Continued Use of Surrounding Road Network

- 22 Concerns have been raised with regard to the continuation of trucks using the surrounding road network as a result of the Quarry extension. I note that the key location for safety concerns is the Pound Road / Ryans Road intersection, which is planned to be upgraded in 2022 / 2023. This will remove the key concern regarding road safety in this area.

- 23 In a wider context, I note that the existing road network has intersections that have poor crash records. That said, this is not directly attributable to traffic associated with the Application site and the continuation of traffic from this site will not noticeably lead to adverse traffic safety or efficiency effects.
- 24 It is reiterated that extension of the quarry will not lead to an increase in the daily traffic movements compared to the consented development, which is still restricted to a maximum of 300 heavy vehicle movements per day.

Degradation of Road Surface

- 25 Several of the submissions raise concerns regarding the degradation of the road surface and edge-break. I understand there have historically been some concerns regarding edge-break on Guys Road south of Ryans Road, although the changes that strengthen the truck routing requirements have addressed this by reinforcing that trucks are not to use this route.
- 26 The seal widening required as part of the original consent has been completed, as has the construction of the access. These are beyond the 'one-year defects' period and are now the responsibility of Council to maintain.

Loose Material

- 27 Concerns have been raised regarding material being deposited on the road network, particularly at the site access but also at other locations along the truck route. The site includes an extended length of sealed access to assist with removing material from the tyres that may be deposited on the road network. This should address some of the concerns regarding loose material, particularly at the access.
- 28 Judder bars have also been installed approximately 60m from the site boundary at the Guys Road access. This shakes loose material from the trucks on the approach to the site exit, which further reduces the potential for loose stones to be deposited on the road network.
- 29 Overall, the site has undertaken reasonable and practicable measures to reduce the potential for loose material to be deposited on the road network.
- 30 Furthermore, the Land Transport Act 1998 (clause 9) requires loads to be appropriately secured and contained in such a manner that it cannot fall or escape from the vehicle. Due to this legal requirement, I do not consider it necessary for any further provision

to be made in respect of the laden trucks. The applicant simply has a duty to ensure that their loads are safe and secure.

Truck Routing

- 31 This submission sought to close the right turn exit from the Guys Road access to permanently require heavy vehicles to travel via Savills Road and Pound Road when leaving the Quarry. I consider this to be an unnecessary restriction on trucks, particularly after the intersection improvements at the Pound Road / Ryans Road intersection have been completed. The provision of that roundabout will likely be safer than using the Savills Road / Pound Road T-intersection. The limitations on truck routing at during the weekday peak hours avoids turning out of Ryans Road at this intersection. This reduces the potential for crashes to occur and I consider this to be a pragmatic approach until such time as the intersection is upgraded.
- 32 It is again reiterated that the overall quantum of traffic using the quarry is not changing from the original application – nor are the intended access routes for trucks.
- 33 The Applicant has implemented additional measures to prevent truck drivers associated with this Quarry from using Hasketts Road, School Road or the southern end of Guys Road (School Road to Ryans Road). I consider these to be a practical measure for discouraging heavy vehicles from these roads.

Enforcement of Truck Numbers

- 34 One of the submissions queried how the limit on truck numbers is practically managed. I understand that the Quarry monitors the number of truck movements logged during the day and contacts the main clients if the daily limit is being approached. The purpose is to request that further trips to the Quarry be delayed until the following day so the Quarry can stay within the limits.
- 35 The Quarry is also required to maintain logs of the truck numbers and provide these to Council upon request for confirmation that the condition is being complied with.
- 36 I consider the above to be as much as can practicably be undertaken to ensure the Quarry remains within the traffic cap set out in the consent.

RESPONSE TO OFFICER'S REPORT

- 37 I have read Appendix 1 of the Council Officers report, which is the Transportation Planning review of the application. I note the following:

- 37.1 The proposed roundabout at the Ryans Road / Pound Road intersection is identified as being proposed for 2022 / 2023 and is acknowledged as being anticipated to notably improve the road safety at this location;
- 37.2 The proposed Ryans Road / Pound Road may also discourage Quarry traffic from using Hasketts Road, School Road or the southern end of Guys Road (School Road to Ryans Road) by reducing delays associated with the required route; and
- 37.3 The existing banning of turning right out of the Guys Road access from 07:00 to 09:00 and 16:00 to 18:00 is considered to work.
- 38 The Council transport engineer recommends that the Section 128 review condition becomes able to be enacted at any time, rather than on an annual basis for a limited time. I consider this to be a reasonable request, although I would assume that the key issue is to ensure compliance (and subsequent enforcement action) of the resource consent conditions rather than a review of the entire consent. In my opinion the strengthening of the consent conditions (as proposed) provides improved confidence that the transport related effects will be acceptable.

CONCLUSIONS

- 39 For the reasons set out above, I am satisfied that the effects of the proposed quarry extension remain less than minor and acceptable from a transport perspective.

Dated: 18 November 2020



Nicholas Peter Fuller