

Roydon Quarry

Transportation Management and Routing Plan

(Content source STANTEC)

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Next review due – Nov 2022 (following quarry operations starting)

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1 Introduction

1.1 Background

Various resource consents (listed below) have been granted permitting the development and operation of the Roydon Quarry including Selwyn District Council RC185627.

During the consenting process, neighbours raised significant concerns regarding the effects of heavy traffic generated by the quarry on the local amenity. To address these concerns various conditions of consent have been imposed which Fulton Hogan must meet. The primary method to ensure these conditions are complied with is the implementation of this Transportation Management and Routing Plan (TMRP).

1.2 Document Purpose

This Transportation Management and Routing Plan (TMRP) has been developed to provide the key elements to ensure that all operations will be in accordance with the conditions of RC185627 and the other consents, and will be implemented alongside various other Management Plans (listed below) covering such matters as the management of dust, noise, spills and landscaping. The Management Plans are 'living' documents, which will be regularly reviewed to ensure their effectiveness, and appropriateness as the quarry development and operations proceed to subsequent phases

The methods that will be used to mitigate the effects on the neighbourhood amenity will be

- Capped number of daily truck movements
- Controlling the use of engine brakes and other truck traffic on neighbouring roads
- Restricting the non-daytime quarry operations and truck operators (ref also Noise Management Plan)
- Prohibition of Fulton Hogan traffic associated with the quarry from using neighbouring roads
- Implementing strict dust and sediment control measures (ref also Spill & Dust Management Plans)
- Ensuring trucks are loaded safely
- Erecting road user signage to convey key messages
- Promoting considerate and safe driving
- Regular review of the effectiveness of the controls

The key to the successful implementation of these controls will be the restriction of access to only pre-approved drivers, who will be inducted to site, where the controls contained in this TMRP will be agreed to through a Drivers Code of Practice.

An expiry and re-induction programme will be established to ensure all users remain cogniscent of the requirements.

A 3-strike compliance structure will be included in the Code of Practice to manage non-compliant drivers.

1.3 Responsibility

The overall management of the site will be the responsibility of the Roydon Quarry Manager or delegated authority and will include:

- Ensuring only inducted truck drivers are permitted to access the site
- Ensuring the controls described in this TMRP are implemented at all times
- Leading staff to ensure neighbours are respected.
- Ensuring compliance with relevant resource consents conditions
- Investigating effectiveness of operating procedures and engaging any reviews
- Reviewing environmental incidents;

1.4 Relevant Consents

- ECAN CRC 192408, CRC 192409 – Excavate material & deposit cleanfill
- ECAN CRC 192410 – Discharge to air
- ECAN CRC192411, CRC 192412 –Discharge to land - Stormwater
- ECAN CRC192413 - Discharge to land - Cleanfill
- ECAN CRC 192414 – Water Permit
- SDC RC185627

2 Control Method Details

2.1 Capped number of daily heavy vehicle movements – ref condition 37

Daily heavy vehicle movements are capped as below

- 1,200 movements per day (600 entering and 600 exiting)
- 800 movements per day as an average over any consecutive 60 calendar day period

All trucks entering and exiting the quarry will pass over a weighbridge. The digital plant management system will record the data for any required retrieval and reporting. Quarry operations staff will monitor totals and ensure that when a maximum is approached alternatives are put in place to ensure compliance.

2.2 Controlling the use of engine brakes – ref condition 38

It is required that all practicable measures are taken to ensure that heavy vehicles associated with the quarry operations do not use engine brakes when in, approaching or leaving the quarry. The CPSA ring road and the lower section of the main access road will be designed effectively flat such that engine braking will not be required. The sloping section of the ring road has been designed with a curve approaching it to ensure that approach speeds are naturally kept to a minimum. Signs will also be erected prior to the sloping access road section and the roundabout advising drivers not to use engine brakes.

2.3 Restricting non-daytime truck operators – ref condition 39

Access to the quarry will be controlled by an Optical Character Recognition (OCR) system. During the induction process, the OCR system controlled access will only be granted for 6.00am to 6.00pm. Access out of these hours will only be granted to operators contracted to Fulton Hogan, and with the specific instruction that engine brakes are not permitted to be used.

2.4 Route Restrictions – ref conditions 40, 40A

The consent (and proposed variation) prohibits Fulton Hogan controlled heavy vehicles, and requires all practicable steps to be taken to prevent other heavy vehicles, from travelling on the following roads when leaving or accessing the quarry:

- Jones Road – both west to Rolleston and east to Templeton
- Dawsons Road north of the roundabout (to Maddisons Road/West Melton)

The proposal to shift the quarry heavy vehicle access point to the roundabout 4th leg is intended to simplify the implementation of this restriction. As well as being included in the Code of Practice, signs will be erected on the quarry exit that '**ALL TRUCKS MUST GO STRAIGHT AHEAD AT ROUNDABOUT**' and at the Jones/Dawsons corner '**QUARRY TRUCKS NO LEFT TURN**'

The presence of digital route monitoring systems (see detail below) will be included in the induction and Code of Practice to ensure that all drivers understand the significance of this requirement.

2.5 Dust and sediment/spillage control measures – ref conditions 42 – 44

A number of methods will be implemented to ensure that material is not dropped or tracked onto public roads

- Fulton Hogan and contracted trucks arriving loaded to site will have covers used, included in their contractual engagement
- The Code of Practice will specify to inducted drivers the requirement to ensure their load is not a nuisance, either by covering or other appropriate measures
- Monitoring of each incoming load for covering or other load security measures
- Convenient access provided within the quarry base to wheel/truck washing facilities
- Loader operators will be trained to understand best practice and high-risk loading practices
- Rumble strip on access road exit to dislodge any remaining material
- Spray bar on access road exit to dampen down uncovered loads
- At least daily monitoring of access road and roundabout to ensure no material has been spilt
- Any spillages on roundabout and top section of access road cleaned up that day

2.6 Heavy Vehicle Load Management

In addition to the measures above, a CCTV camera system will be installed at the weighbridge to enable a view of the heavy vehicle and load. The weighbridge operator will observe the camera footage to monitor compliance.

Where a load is insufficiently covered or dampened, or pose a risk of materials being deposited on the road, the driver will be required to pull aside and address the issues raised, before re-entering the weighbridge for further inspection. The proposed revised arrangement

of the weighbridge area will provide for the convenient return of trucks to the loading area for rectification

2.7 Signage

Prominent signs will be established at appropriate locations on-site reminding truck drivers of the route requirements outlined in the Trucking Code of Practice / driver induction information.

The access road is approximately 700m long. This provides excellent opportunity for a series of simple signs to ensure drivers recognize and adhere to the overall controls, i.e.

NO ENGINE BREAKING

IS YOUR LOAD COVERED OR DAMPED DOWN

ALL TRUCKS MUST GO STRAIGHT AHEAD AT ROUNDABOUT

2.8 Heavy Vehicle Safe Driving Practice

Details of the potential safety hazards present on roads in the vicinity of the quarry, including safe travel procedures across the Dawsons Road railway level crossing will be included in the truck operator induction

Key provisions of the Safe Driving Practice provisions are set out below:

- Be familiar with local road route restrictions, and obey any restrictions
- Follow all signage
- Travel at speeds appropriate for the conditions and slow down and give lots of space when passing cyclists, pedestrians and horses.
- Make sure you can clear the roundabout and railway crossing before you proceed – do not cross if you are unsure

3 Site Induction

The effectiveness of the Transportation Management and Routing Plan is reliant on all drivers accessing the site being aware of the contents, and their obligations. Fulton Hogan will establish site induction processes to enable implementation of the Transportation Management and Routing Plan.

The Roydon induction will comprise of four key elements

- standard Fulton Hogan company induction (history, culture, health, safety, wellbeing, quality, environment, sustainability)
- the requirements of this TMRP
- Roydon Quarry operating/traffic arrangements
- Code of Practice

Automatic access control will restrict entry to the quarry to only inducted drivers. The primary induction method will be by remote (online) based inductions before a driver departs for the quarry. The induction will also be available at the Miners Road Quarry Division Headquarters where drivers can attend in advance of heading to Roydon. A lay-by area will be included in the access road detailed design to allow the quarantining of any non-inducted drivers who may arrive at the quarry.

Following induction, drivers will be issued with a reference card setting out on-site arrangements and the COP/TMRP rules.

An annual expiry and re-induction programme will be established to ensure all users remain cogniscent of the requirements.

- Advice on enforcement procedures will also be included.
- A record of drivers inducted is to be kept, including:
 - Name
 - Company
 - Drivers licence number
 - Date Inducted
 - Contact Details
 - Date of Repeat Induction

A draft Driver Code of Practice intended to be used for driver inductions is contained in Appendix A. It outlines route restrictions as well as on-site requirements and information.

4 Compliance

4.1 Route Monitoring

Intelligent systems will be installed to allow monitoring of heavy vehicle transit routes, with an automated message forwarded to the quarry operations team should a heavy vehicle associated with the quarry not adhere to the route restrictions. The details of this are still in development, but these systems are presently in use elsewhere.

CCTV will be installed at key points to allow review of traffic actions, including at the weighbridge, the main entrance, the roundabout, and the railway crossing.

These recordings will allow vehicles to be identified against weighbridge records, in particular for responding to community feedback.

Fulton Hogan has capacity within parts of its fleet to analyse travel routes based upon GPS systems. This will provide an additional method to review the local routes taken to access the quarry, and compare with the routes in this TMRP.

4.2 Traffic Surveys

It is a recommendation of the Road Safety Audit that traffic behavior is monitored once the quarry is operational, in particular regarding the Railway Crossing and Roundabout.

The information gathered above will be the primary source for this work, augmented if necessary by additional observations. To allow such reviews, any independent verification, and any other process required as a part of consent review processes, all information will be retained for at least a period of 1 year.

4.3 Complaints

It is Fulton Hogan's desire that the implementation of this TMRP will prevent the need for any complaints to be made.

All complaints will be received and the process managed by the Fulton Hogan Communications Officer. This provides neutrality to the situation, and allows escalation

outside of the operational team should the need arise. The Quarry Manager will lead all responses to the complainant.

Fulton Hogan operates an incident management system (CAMs – Case and Action Management Systems) to allow recording and tracking of issues, any investigations and/or /actions, and the final closure when dealt with appropriately.

As well as the standard details recorded in CAMS, for complaints it will be ensured that the following details are recorded

- Complainant details;
- Information about the incident as described by the complaint including all photos and/or videos the complainant may have;
- Who received the complaint and how it was received;
- Weather conditions at the time of the complaint;
- Identification of the possible cause of the complaint following the investigation;
- Details of the corrective action taken at the time to resolve the incident;
- Details of the preventative actions to be taken to ensure the likelihood of such events occurring in the future are minimised.

An investigation of the complaint may require the site manager or delegated staff member to make visual observations about activities occurring on site. This may include going to the location where the complainant observed the impact.

4.4 Enforcement

Video of the weighbridge monitoring will be retained for four weeks to allow review of compliance checks and to address any complaints.

Where drivers do not follow the Code of Practice, in particular inbound vehicles are not loaded appropriately or do not follow route restrictions, the following education and enforcement process will be carried out:

- First offence: The driver will be advised of the breach, and referenced back to the Code of Practice and induction processes. An email will be sent to driver's employer;

- Second offence: Written warning, email sent to driver's employer and the driver's access to the quarry is 'turned off' for the day;
- Third offence: Written warning, email sent to the driver's employer; and the driver will be excluded from site for one month.

5 Document Review

This Transportation Management and Route Plan should be considered an active document. Management measures should be updated as necessary, ensuring that the objectives of the management plan are being achieved.

The reviews should at least coincide with assessment of data from the route monitoring surveys.

Amendments to the Plan are to be documented and made available on request to the Manager of Planning at the Selwyn District Council.

This document is intended to be a living resource, and will be regularly reviewed as below

- At the first CLG meeting following quarry operations commencing
- As requested during subsequent CLG engagements/meetings
- If recommended during any Fulton Hogan audit or incident investigation
- Consistent with the conditions of consent requirements.

Appendix A: Driver Code of Practice

Fulton Hogan prides itself in being a great corporate citizen, with our stated purpose including “being in, connecting and caring for communities”.

Our Community & Stakeholder Relations Policy states

Community and stakeholder engagement are fundamental to our business success.

We need to understand what matters to our stakeholders and communities, what impacts or affects them, and how best we can engage with them.

When we involve people in decisions that matter to them, and work with people to solve problems that affect them, we will achieve better outcomes for all.

Bringing 600 trucks a day to the area could make life pretty unpleasant for our neighbours.

As we’re all about walking the talk, we’ve been engaging with our neighbours for several years whilst we’ve been planning the quarry, and we’ve made some promises to them to minimise the effects of all those trucks (and digging the hole and processing the aggregates).

We now need you as a driver to walk our talk and follow the promises we’ve made. You’ll understand that this is a big thing for us and our neighbours, hence the cameras at the quarry entrance and our yellow & red card policy.

Operational Hours

The quarry is open for general business 6am to 8pm Monday to Saturday (excluding public holidays). Do not visit the quarry outside of these hours unless authorised in advance by Fulton Hogan.

All drivers must be inducted prior to accessing the quarry.

Driving on the Roads

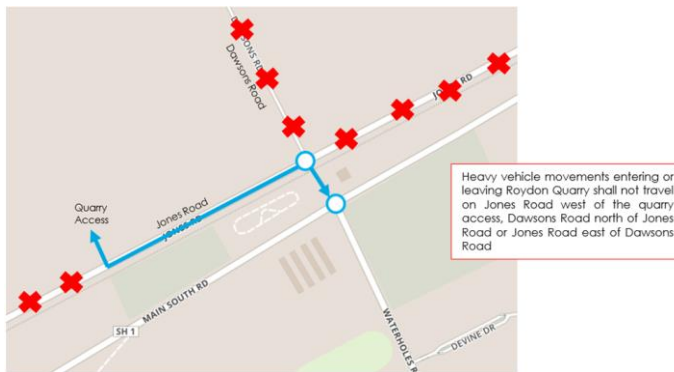
All trucks entering and leaving the quarry must travel to & from the SH1 roundabout – you must not use Jones Road or Dawsons Road.

Don't get stuck on the railway crossing – before you cross the tracks make sure there is enough space beyond it.

Don't use your engine brake after you leave the SH1 roundabout on the way in, whilst you're on site, or until you've left the SH1 roundabout on your way out.

Please be courteous

- Don't park on local roads – there's a parking area on site with a toilet for log book breaks etc
- Travel at speeds appropriate for the conditions (20kph when passing a school bus)
- Slow down and give lots of space when passing cyclists, pedestrians and horses.
-



Quarry Heavy Vehicle Access Route Restriction – requires updating to show final layout

Driving within the quarry

- Speed limit is 15km/h, or as otherwise signposted
- Do not use engine brakes
- Normal road rules apply – obey all signage
- Stay inside your truck whilst being loaded

Load Security

- Avoid leaving dirt or dust behind you - make sure your truck is properly loaded if you are bringing in cleanfill, and ideally covered
- We will only load your truck within safety guidelines, but you are ultimately responsible for your truck and its load
- All loads exiting the site are to be covered or dampened down by water spray
- All Fulton Hogan trucks and any directly contracted to us must cover their loads when entering or exiting the site
- If you have a spill, please let us know immediately. We have clean-up arrangements in place, and this is a lot easier if dealt to quickly.
- We have an obligation to clean up any spills. We are watching, so if you think you can sneak away from a spill un-noticed, we will clean up after you & send you the bill
-
- Permitted cleanfill

- There are strict rules on what we can accept as cleanfill
- Before you are permitted to dump cleanfill, you must have completed the required paperwork
- Every load will be checked prior to dumping – you will be turned away if your load does not comply
-
- Penalties, yellow cards & red cards
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- Penalty - First offence
 - The Quarry Manager will revisit with you this Code of Practice and your induction. An email will be sent your employer;
- Yellow card - Second offence
 - Your access to the quarry will be ‘turned off’ for the rest of the day (minimum 12 hours). A written warning will be sent to your employer
- Red card - Third offence
 - Your access to the quarry will be ‘turned off’ for one month. Your employer will be advised you must be re-inducted before your access is ‘turned on’