

**From:** [REDACTED]  
**To:** [Hearings](#)  
**Cc:** [submissions@golder.co.nz](mailto:submissions@golder.co.nz)  
**Subject:** Notifications Consent Submission: Group 422  
**Date:** Saturday, 1 June 2019 6:51:58 PM  
**Attachments:** [Jennifer-Ross-Conditions.pdf](#)  
[Jennifer-Ross-Submission-AGAINST-the-Roydon-Quarry2.pdf](#)

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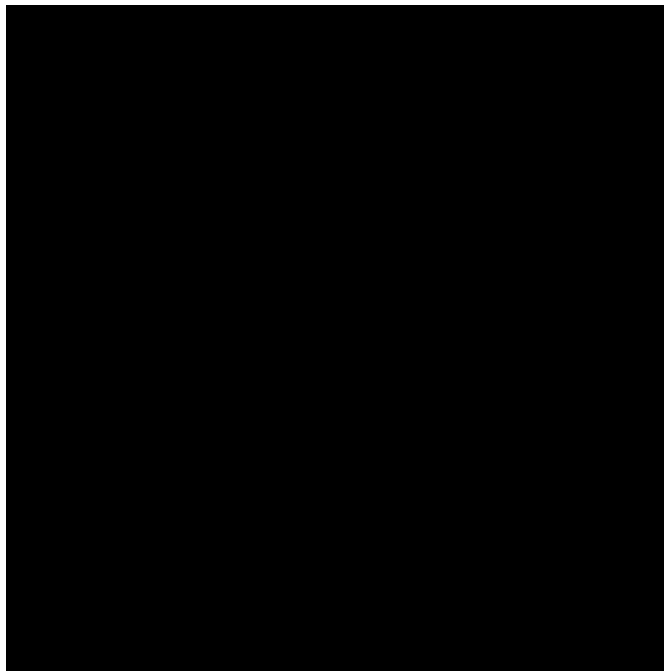
**Group ID: 422**

**Consent name:** Fulton Hogan - Roydon Quarry

**Consent number:** CRC192408, CRC192409, CRC192410, CRC192411, CRC192412, CRC192413, CRC192414, RC185627

**Name:** Jennifer Ross

**Care of:**



**Contact by email:** Yes

**Is a trade competitor:** No

**Directly affected:** No

**Consent support/hearing details**

- CRC192408: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192409: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192410: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192411: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192412: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192413: oppose | WANT to be heard | WILL consider a joint hearing
  - CRC192414: oppose | WANT to be heard | WILL consider a joint hearing
  - RC185627: oppose | WANT to be heard | WILL consider a joint hearing
-

**Reasons comment:**

- Health issues (including those related to dust) - Loss of amenity value and character - Traffic concerns - Noise and vibration impacts - Other impacts (including economic assessment and impact) These issues are elaborated in the attached document.

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**Consent comment:**

I with the consent authority to decline the application in full as I do not believe the impacts of the proposed quarry can be mitigated appropriately. However, if the proposed quarry is to go ahead, I have attached a list of conditions I seek below.

## Name of Submitter

This submission has been written by Jennifer Ross, on behalf of the Ross family. [REDACTED]  
[REDACTED] My husband and I have lived in Templeton 9 years this August [REDACTED]  
[REDACTED]

## Application to which this Submission Relates

This submission is regarding the application of Fulton Hogan's proposed "Roydon Quarry" in Templeton. Located at 107 Dawsons Rd & 220 Jones Road, Templeton. Fulton Hogan's application is to quarry the land at the above location and then rehabilitate the land after the quarrying.

## Summary

This submission is to object to Fulton Hogan's application to establish and operate the proposed at 107 Dawsons Rd and 220 Jones Rd. I object to this application as I believe the proposed quarry will have significant adverse effects on the local residents (including me and my family). These significant adverse effects include:

- Health issues (including those related to dust)
- Loss of amenity value and character
- Traffic concerns
- Noise and vibration impacts
- Other impacts (including economic assessment and impact; discharge of contaminants into air, water and land; water resources and reverse sensitivity)

We live [REDACTED] in Templeton, which is approximately 800meters from the boundary of the proposed quarry. Fulton Hogan's submission has given no consideration to the above impacts on the Templeton township despite its close location to the proposed quarry. Further, the size of the proposed quarry is 170 hectares, which is more than double the size of the adjacent Templeton Township, which is only approximately 70 hectares. It seems very remiss of Fulton Hogan to take no consideration of the impacts on a community which they are not only close to but will swamp in terms of size.

## Objection 1 – Health Concerns

As per section 5.2 of Fulton Hogan's report, the proposed quarry will discharge dust particles in to the air, this includes both fine (PM 10) and respirable (PM2.5) dust. Fulton Hogan suggest that this dust will only cause nuisance effects, however I believe the impact of this dust, would be more than minor.

The very fact that Fulton Hogan needs to provide dust mitigation strategies in their application goes to show that this dust is dangerous. The dust which will be coming from this proposed quarry will contain Crystalline Silica, as Canterbury rock is high in this. As per the WorkSafe document regarding Silica (<https://worksafe.govt.nz/topic-and-industry/dust-and-fumes/dust/silica-dust-in-the-workplace/>), the impacts of Silica include silicosis, lung cancer, chronic obstructive pulmonary disease (COPD) and kidney disease. Clearly these impacts are **significantly more than minor** and are of major concern to our family.

While Fulton Hogan have provided mitigation techniques in their application, there are gaps in what they are proposing. For a start, they are not proposing to use any dust removal systems, so the dust will continue to build up at the quarry. Therefore, on a high wind day, even if the quarry operations

have ceased, the build-up of dust around the site will blow around the surrounding area (even if there are suppression systems in operation, these will only be on a limited part of the site, i.e. the part currently being quarried at that time). Some of their dust mitigation techniques involve water (such as carts), but there is no indication that there is enough water allocated to the site to perform all water activities they intend to do (such as mitigation, washing trucks and operation). The part of Templeton that we live in is closest to the quarry (as mentioned above, approximately 800 meters away) and is partially downwind of the prevailing Norwest wind. This means that we are more likely to be subjected to fugitive dust emissions in the case of failure of dust suppression (which is likely given the comments made above).

Further, Dr Alistair Humphries (Medical Officer of Health for Canterbury District Health Board) has advocated for a 500m setback from people's homes when quarrying rock containing silica. Fulton Hogan's application indicates that quarrying activities will be undertaken as little as 90 metres from one dwelling (home) and more within 250 metres. Not only has the CDHB advocated for this setback, the Australian EPA guidelines have a 500-metre setback when dust containing silica is involved.

Fulton Hogan has said that they only intend on opening and quarrying 5 hectares at a time; however, they only say they will close the previous quarried sections once the aggregate has been sold. They have given no indication in their application how long they think it will take to sell each section of aggregate. As such, this could mean that there are many hectares (much more than 5) open at a time, also adding to the dust from the site, which I don't believe has been considered in their dust mitigation considerations.

There also appears to be no consideration given to the new cycletrack which is currently being laid/constructed by the Selywn District Council. The new cycle track runs directly adjacent to the proposed quarry site, next to the railway track on Dawsons Rd. The cycletrack is an excellent initiative to join up outlying suburbs/towns such as Rolleston and Templeton to the centre of Christchurch City. This cycle track will be used at all times of day and night and during all kinds of weather conditions. Fulton Hogan's application gives no indication that dust mitigation techniques will run 24/7 and as such, once the quarry has finished operating for the day, dust may still blow across the cycleway causing visual and health risks to those using it. As already discussed above, there will be residual/ambient dust on the site (e.g. coming off the stock piled aggregate, from the opened site areas), so this dust will remain an issue even if the quarry is not operating. The WorkSafe document noted above suggests that those working with/around this dust should be wearing breathing protection. Perhaps this will also need to be considered for all of those using the cycle track; what an awful thought that people cannot exercise in New Zealand's clean air but are required to use dust masks to protect their health.

Another health impact which has not been considered by Fulton Hogan at all in their proposal document is the impact on the surrounding resident's mental health. Health under the purpose of the Resource Management Act is not limited only to people's physical health and at the core of its purpose is also people and community's wellbeing; as such, I believe that mental health of those surrounding the proposed quarry also needs to be considered. Our current government's focus for their 2019 budget is wellbeing. At the core of this is a focus on people's wellbeing and the environment. They hope to look beyond purely economic and fiscal goals (<https://www.budget.govt.nz/budget/2018/economic-fiscal-outlook/budget-2019-focus-on-wellbeing.htm>). Jacinda Ardern reached worldwide spotlight at the beginning of the year speaking at Davos regarding this wellbeing budget and New Zealand's increased focus on mental health. The impact on the mental health of our community from the initial indication of this quarry cannot be underestimated. Personally, I have had sleepless nights and lack of focus in my everyday tasks due to

concerns over the impacts this quarry will have on me, my family and my community. I know that others in the community have experienced similar things and through my work with the Templeton Residents' Association, we have had people coming forward from surrounding areas that feel utterly helpless in this situation – it is totally overwhelming and daunting for them and they are struggling to know where to begin to be able to fight this. They know the impacts on their farms and businesses surrounding the proposed site will be **significantly adverse**. Many of these people have been on their family farms for decades. The toll this is taking on their mental health is extreme and the fact that Fulton Hogan can even apply to undertake such activities so close to their homes seems to totally fly in the face of what the government is trying to achieve.

## **Objection 2 - Amenity Value**

My husband and I purchased our first home in Templeton 9 years ago and shifted into a larger family home in the area [REDACTED]. We moved to Templeton because we enjoyed the quiet lifestyle that our semi-rural suburb offers. We also enjoyed the small-town feel, with lots of safe streets for walking in and a strong community focus and vibe. This is part of why we chose to stay in Templeton when looking for a family home, it was appealing that our son could attend the local primary school and be able to walk there on the quiet streets and that we would know the families of who he will attend school with.

When time allows, I enjoy walking around the large rural blocks, enjoying the sunshine, views to the alps, livestock and wildlife, and the open spaces. With the proposed quarry, walking around this area will become dangerous with the increased truck movements (the proposal document indicates 1,400 per day by the time you take account of in and out) and the dust as already discussed above coming from the quarry. I understand that Fulton Hogan is *proposing* a walking track to allow people to continue to walk in this area, but from the pictures which are available in the landscape management document, any walking now will be surrounded by trees and bunds, which will block the rural views that I enjoyed and shade the walking area. The trees proposed are evergreens, meaning the walking track would be shaded even in winter, which would also make it potentially dangerous and slippery. If the proposed quarry was to go ahead, this would not be the same sort of walking environment that I previously enjoyed, and it would not be possible to adjust this, as the trees (which shade the area and obscure the open views) are required as part of the dust mitigation.

Living in Templeton also provides us with a quiet lifestyle where we can enjoy outdoor living through summer. While there is train and aeroplane noise, and occasionally noise from Ruapuna, this is all noise that existed before we purchased here, and we were accepting that there may be some noise disturbance from them. Fulton Hogan's application would seem to suggest that because we already have this noise, we should be accepting of any further noise their operations will make. This is untrue; quarry noise was not in the area before we shifted here, and we are not simply willing just to accept it. Fulton Hogan's application wants to run 24-hour operations during certain times of the year. It is most likely that the times they will want to do this is during summer, when we are sitting outside; therefore, there is no noise barrier of the house to muffle either noise from the quarry OR the truck noise (see discussion on truck noise under traffic). We have a right to be able to enjoy (as is part of the kiwi way of life) our living both indoor and outdoor and quarry noise would be **a more than minor** impact on the way we currently enjoy this. Furthermore, I have concern that the proposed lighting around the site (to enable 24-hour work) will pollute the lovely dark night sky in the area that makes viewing the stars a wonderful pastime that we enjoy here. Beyond concerns for weekend and night-time disturbance to way of life, as a mum, I am frequently at home all day every day, and do not want my way of life and peace and quiet to be disturbed during the day either.

We know from watching other local quarries that any breaches of their conditions go unmonitored, uninvestigated and unsanctioned. Tania Harris who attended a Templeton Residents' Association meeting on 29<sup>th</sup> January 2018, as the ECan Senior Manager for Operational Support, stated that ECan does not have the resources available to be actively monitoring the actions of quarries and therefore ECan will rely on the community to act as watch dogs and advise Ecan when they think things are wrong. This can be seen at approximately minutes 44 to 45 in this recording (<https://www.star.kiwi/2018/02/watch-full-coverage-templeton-residents-association-no-quarry-meeting/>). If this quarry is to go ahead, my understanding is that my way of life should not need to change at all. It is quite clear from Tania Harris's statement here that I, along with my fellow residents, will now need to invest time and effort to acting as a watch dog to help police this quarry that is wanting to invade our community. Information provided by other residents at nearby quarries would suggest that dealings with ECan are difficult, drawn-out and ultimately do not result in any sanctioning action. Tania Harris's request for our help, is likely to be a waste of community member's time, and again, likely to impact on to our mental health as it is likely to become an ongoing saga. Again, I see this is a **significant adverse** change to the way of life our family currently enjoys.

### **Objection 3 - Traffic**

Fulton Hogan's application indicates an additional 1,500 truck movements (maximum) per day will result from this proposed quarry. They do not believe these trucks will be an issue to Templeton as they will only move through this area (down Jones Rd towards the Templeton township) for work in the immediate vicinity of Templeton. Immediate vicinity is not defined. Is Hornby in the immediate vicinity? What constitutes the "immediate vicinity"?

Jones Road (through Templeton) is currently used by quarry trucks who are looking to avoid the main Roads. They are dangerous (some have lost parts of their loads of rocks in the dog leg where Railway Terrace and Jones Road meet), they are noisy, and an empty quarry truck rattles and shakes with an immense amount of noise. I know this from having lived in the area for 9 years, and even set back from Jones Rd where we currently live, the truck noise can still be heard.

Fulton Hogan's application states that they are going to limit truck movements to Templeton to 3 to 5 heavy truck movements per day. Their method for doing this is to get non-Fulton Hogan controlled truck drivers to sign a code of practice. When I questioned this at the Fulton Hogan community tent, I was advised that there was absolutely nothing they could do to stop truck drivers using Jones Rd over any of the main roads. A code of practice can easily be broken, and a sign just as easily ignored. From the proposed roading layout, there is to be two roundabouts to get onto the Main South Road and also railway tracks in between to consider. We know that there is a steady stream of traffic which flows from Rolleston through this main road and that with 1,500 truck movements per day, the trucks leaving the quarry are going to be almost constant. As such, I believe there will end up being a lot of congestion around these roundabouts, which will see frustrated drivers taking the easy quick route down Jones Road (towards Templeton), resulting in far more than 3 to 5 heavy truck movements. As many of the truck drivers are not direct employees, Fulton Hogan is unlikely to even be aware of what routes they are using, unless of course we as the community police these operations and advise Futon Hogan when this is happening. As already discussed under amenity value, I do not expect to have to include this monitoring as part of my lifestyle. This increase in traffic is a **more than minor impact** on our community.

The roads in this area (this includes Jones Road towards Rolleston, Dawsons Rd, Maddisons Rd, Curraghs Rd and the other rural roads in this area) are not designed for heavy truck movements.

They were originally horse tracks which have had a thin road base. They are already crumbled along the edge and potholed from the truck movements already taking place. Jones Rd and Waterloo Roads are constantly being patched. When the patching can't happen quickly (which is generally the case), the roads are dangerous. It also causes major disturbances to our way of life when roads are constantly being patched and fixed. We end up having to detour or have slower journeys. This has got much worse over our time spent living in this area and we believe that the additional truck movements Fulton Hogan is proposing per day will have a cause the need for constant additional work to be done, causing **major disruptions** to our travel and way of life.

We currently use Jones Rd as a quick and safe way (no uncontrolled righthand turn onto the busy Main South Road) of getting to Rolleston. Rolleston is the closest point for us in terms of many amenities such as Plunket, recreational activities such as swimming pool, large playgrounds, supermarkets and other shops and is also where many in Templeton go to high school. If the proposed quarry was to go ahead, this would create **major disruptions** in terms of this transport route. Firstly, there is a proposed round-about, which will slow this route down, but of further concern is the additional 1,500 trucks. Fulton Hogan's application proposed the heavy vehicle access to be on Jones Road, so regardless of which way this traffic turns, we will be encountering these trucks turning in and out on this road, which is narrow and can be very dangerous. These truck movements will be a significant disturbance to the locals and commuter traffic using this route. Again, this is another **significant adverse impact** that will result on the local community which it would seem Fulton Hogan would have no way of mitigating, they are going to have to get the trucks out somehow.

Lastly, there are concerns for safety with regards to the traffic and mental health impacts of the increased danger on the roads. As already mentioned above, the extreme number of trucks which are going in and out of the Jones Road entrance along with the already heavy car use of this road can only increase the danger of this area. I appreciate that they have run models on turning and gaps and all sorts of things, but these models are surely based off the "rational human", which we know when it comes to traffic, running late and taking chances on the roads, humans are not rational (be they a truck driver or car driver). The information Fulton Hogan had available at their community test indicated peak traffic times at 9am and 3pm, which will be exactly the times of increased school traffic on the roads and more children on the roads walking and waiting for buses.

Mental health impacts with regards to traffic come not only from concern over safety of loved ones on the road, but the noise and vibration impacts from the traffic. Fulton Hogan's application states that there will not be any perceptible increase in road traffic noise. This seems very difficult to believe when there will be the addition of an additional 1,500 trucks. My understanding is that approximately half of these truck movements will be empty trucks returning to the quarries. Empty trucks rumble and vibrate in a similar manner to the low rumbling that comes at the beginning of an earthquake, like we experienced during the multitude of earthquakes here in Christchurch from 2011 onwards. Experiencing this same "heart -in-mouth" noise/ vibration 750 times per day will take a massive toll onto the mental health of those in our district who are still stressed, scared, emotional and very sensitive to noises like this post-quake. Even if we were only able to hear and feel a fraction of these truck movements, it will still be too many. Further, while Fulton Hogan's application notes that vibration generated from the quarry site will be below the residential building damage criterion, this would seem like quite an extreme threshold. Vibration may not be extreme enough to cause damage to houses, but it can still damage our sense of peace and security and cause major impacts onto people's wellbeing. This is particularly relevant when the residents of Brackenridge are taken in to account, as it is likely there are many noise sensitive people living there.

#### **Objection 4 – Other Comments and considerations**

In the application under the economic assessment it states that Fulton Hogan bears the financial risk for any operation and therefore the costs or benefits Fulton Hogan will receive are not relevant under the Resource Management Act. I find it difficult to believe that Fulton Hogan bears all financial risk. If the proposed quarry goes ahead and their mitigation techniques do not work, then surrounding business will also bear a financial impact (and therefore share in the financial risk of Fulton Hogan's operation); horse trainers may go out of business if dust cannot be mitigated and their horses are unable to run properly with deadly dust in their lungs; vegetable growers will not be able to sell vegetables if they are coated in toxic dust, residents will struggle to sell or have to sell houses at significantly reduced values if mitigation techniques do not work and noise, dust, vibration and traffic impact this area so that is it undesirable to live in. As far as I can see, much of the risk is borne by the local residents and not by Fulton Hogan at all. Particularly when you consider the proportionality – local residents stand to lose everything: health, homes, businesses. Fulton Hogan would only stand to have one small portion of their business not work out.

Fulton Hogan have stated that one of the reasons for their choosing this site is its location, which would help reduce transport costs and therefore the cost of aggregate to those who use it. It is noted that the application never quantifies this reduction in transport costs. We know that due to the way that Canterbury aggregate is quarried (not requiring blasting) it is already much cheaper to procure than other places in the country. Furthermore, Fulton Hogan have identified many other sites (which they show in their application) which would meet their requirements. These alternative sites are closer to much of the northern city work that they say they require aggregate for and are located away from existing communities. This would suggest that their chosen location is nothing more than corporate greed at its worst and it ***could not be argued to be the best location with the least impact onto the current existing environment.***

Further regarding the site location, the proposed quarry site is directly adjacent to a new overbridge on the Southern Motorway. While currently those travelling on the motorway (including many tourists entering/ leaving Christchurch) get to enjoy scenery of a pastoral site, if the proposed quarry is to go ahead, there would be no screening of the view of the proposed quarry from this angle: screening along the roadside would be completely ineffective from this viewpoint.

Consideration also needs to be given to value of soil resources. This area of the Selwyn District has rich soil which is proven to be excellent for farming and agricultural (animal and plant related) uses. This is what this area's history is based on. Selwyn Council's District Plan has objectives and policies aimed at protecting soil resource in the district. Approval of the quarry would be counter to this. Once these soils are gone, there is no getting them back. However, there are areas still within Fulton Hogan's proximities which they have identified meet their needs (as per the application) which fall into rocky areas which do not have good soil such as those found in the Templeton/Weedons districts. Protecting soil resource is so key to NZ, that there is a call to protect versatile land (<http://www.hortnz.co.nz/news-events-and-media/media-releases/horticulture-new-zealand-welcomes-call-for-protection-of-versatile-land/>) While this article talks about urban creep, surely anything that is destroying productive, versatile land needs to be considered a threat.

I have significant concern for the precedent approving this quarry would set. Approving a quarry 700 meters away from an existing township and 90 meters from an existing home will set a worrying precedent for the rest of the country. None of the suburbs on the outskirts of town or cities will be safe, and in Christchurch we run the risk of our entire west-side (where the good land is post-quake) turning into a quarry zone. I am already aware of other quarrying companies holding land nearby



awaiting the result of this application before they submit theirs. In Templeton's case we already have another quarry to our eastside (Barbers Rd quarry), approximately 1.3km on the other side of us (as the crow flies). This isn't even to mention Leggets Rd and Pound Rd. If this quarry is to go ahead, we would be becoming surrounded. Both quarries would have started operations after we moved here, and this is not the lifestyle we came here for.

Fulton Hogan's selection of land so close to an existing community seems to totally contravene their care of the community that they seem to be very proud of. Section 7 of the application covers "connecting and caring for communities" in which they go on to list the number of ways they have connected with the local community. As an active member of the Templeton Residents' Association (TRA), I know that Fulton Hogan was invited to numerous public community meetings that the TRA had organised. Our meetings were organised to best cater to our community – we are aware that we have many elderly people in our community, so we held meetings where speakers could present information and then there was a controlled question and answer time afterwards. This meant that everyone can listen to and benefit from the information shared from the questions, even if they have been unable to come up with questions themselves. It was a less confronting way for the community to receive information, particularly the older people in our community. Fulton Hogan declined to attend a meeting like this and instead organised a tent where you had to stand and read information presented on posters. There were then experts to talk to. This is a really confrontational way to receive information, particularly if you thought the expert might think your questions was silly and because Fulton Hogan is a large corporate we felt powerless next to them. If Fulton Hogan had wanted true engagement with our community, I believe they would have listened to the TRA on the best way to engage with our community.

A further way Fulton Hogan's lack of concern has been shown for the community is the blocking of a water-race. Fulton Hogan have already blocked one of the water-races on the proposed quarry site (which they have not yet received permission to do as it is part of this application which is still in progress). The impact of this is that one of the neighbouring properties has been flooding as a result. This shows arrogance that they can simply do what they want and a total disregard from processes to be followed and the local community.

I note that other considerations also include the discharge of contaminants into air, water and land; water resources and reverse sensitivity.

## **Conclusion**

In the High Court decision between Harewood Gravels Company and Christchurch City Council and Yaldhurst Quarries Joint Action Group, the judge said the cumulative effects of the impacts from the quarry need to be considered.

In Fulton Hogan's application each impact has been considered in isolation. They think traffic will only add a little more noise for example, which is then considered separately from the extra truck movements. However, the case mentioned shows that all these impacts must be considered together. These impacts that our community will experience will not be experienced one by one, in isolation and on different days. They will be cumulative, and they will be constant (at a minimum for 12 hours a day, 6 days a week, for the next 40 years, and worse if 24 hour a day operations are approved). While it is easy to think that slower travel time to Rolleston (for example) should be considered a minor impact, when this annoyance/impact becomes on-going for the next 40 years and is considered in conjunction with all the other impacts that will come from the quarry, the ***cumulative impacts go well beyond 'less than minor'***. The proposed quarry will have ***SIGNIFICANT***

**ADVERSE** effects on my family and community's health, wellbeing, and enjoyment of our lifestyle (amenity value).

Because we believe there is no way that Fulton Hogan will be able to successful mitigate the significant adverse and cumulative effects that will come from the proposed quarry, I request that the **FULTON HOGAN'S APPLICATION BE DECLINED IN WHOLE.**

While I (Jennifer Ross) request that the application from Fulton Hogan is declined in full, if it is to be approved in any part, I request that the following conditions be placed over the quarry:

**Operation:**

- That operations are 7am to 5pm, 5 days a week (Monday to Friday).
- At no point is operation ever to be 24 hours per day.

**Traffic:**

- No quarry truck traffic to be allowed to use Jones Road / Railway Terrace AT ANY TIME - IN EITHER DIRECTION. Queued traffic is not a reason to allow this condition to be waived.
- If there is a requirement to deliver aggregate to an address within Templeton, this is to be notified to the Templeton community with full details about when this is expected to happen and what they can expect (e.g. how long they should expect quarry trucks moving on this route).
- Any contracts with outside agencies to be revoked if trucks caught breaking the above rule.
- Site does not accept trucks before opening hours.
- All trucks go through a full truck wash before exiting the site.
- All trucks to and from the site must have covers.
- All trucks to exit to state highway 1 (e.g. signage such as no other turns from site.)

**Monitoring:**

- Monitors to be set up on site/ site boundary that upload information 24/7 to a publicly accessible website recording the following:
  - o Dust levels at the boundary
  - o Truck movements in and out
  - o Noise volumes at the boundary
- Full time compliance person on site to ensure all conditions always met and that preventative work is done to ensure future compliance.
- Random inspection checks to be completed quarterly throughout the year by an independent body (surprise visits).
- CCTV cameras recording key aspects of compliance
  - o E.g. trucks leaving site – covers on, washed, exiting to SH1
- On-line complaints log with actions to address complaints within 24 hours.
- Work to stop immediately when conditions are breached and fine to be enforced.

**Remediation**

- Remediation to start as soon as the first stage is complete.
- Remediation plan advised and agreed to by community before quarry starts.
- Rehabilitate in accordance with the intended final use of the land
- Rehabilitation bond held by SDC (maintained at \$2m, drawn as required for non-performance during operations).

**Dust management**

- Dust should be confined to the work area and not impact outside the site. With constant monitoring of this (see above) if any dust is picked up at the boundary, then work needs to be moved towards the centre of the site until the boundary shows pre-quarry levels of dust.
- Crusher plant in centre of site.
- Dust mist spray on at all times during operation (while keeping within water allocations).
- Pave all roads on sit.
- Keep stock piles damp.
- Dampen roads in agreed wind conditions with fixed in place (irrigation) systems.

**Noise**

- No noise above normal current background is to exceed beyond the site boundary. With constant monitoring of this (see above) if noise is beyond pre-quarry background noise at the boundary, work needs to be moved towards the centre of the site until noise at the boundary is at pre-quarry levels.
- Plant intensively – 100m of trees to boundary.
- Modern crusher plant which is maintained.

**Community**

- Community management group (same set up as Ruapuna with independent chair)