

30 May 2019

Attention: Mr Simon Hedley

Email: simon@landsandsurvey.co.nz

**RE: RFI FOR RESOURCE CONSENT APPLICATION – RMA/2019/373
EXTENSION TO SOL QUARRY, CONSERVATORS ROAD**

This report is prepared by Rough and Milne Landscape Architects in response to a request for further information (RFI) concerning the above application. Appendices A and B are provided with this RFI to define terminology, further illustrate and explain components of the proposal and identify the location of potentially affected parties.

In summary, the following information is sought by the Council:

- Consideration of the Harewood Gravels High Court decision, regarding:

The implications on the “amenity values” of the rural environment (e.g. para 76 through 91 & 92; 140 & 143)

The Seven Questions of Law – as they relate to “rural character” and “amenity values”.

- Landscape and visual effects assessment from the adjoining Harewood Gravels Property
- Landscape and visual effects assessment from the Emerson’s property at 113 Conservators Road

EXISTING RURAL CHARACTER AND AMENITY VALUES OF THE RECEIVING ENVIRONMENT

The receiving environment displays an overall generic rural character excepting the nearby residential enclave, which is an isolated cluster of rural residential properties. Noting that rural character and amenity differs across the district depending on the context, landcover and land use, in this particular locality rural character is contributed by expansive areas of dry grassland and pastoral vegetation, established clusters of trees, the presence of shelterbelts, (gorse) hedges, a water race, a general lack of built structures, and importantly, including ongoing productive and extraction activities. The variation in rural character and subsequent amenity is largely the product of the gravel resources prevalent in the area. For the most part, the receiving environment is a working landscape, rather than an idyllic rural landscape that displays an arcadian aesthetic. On the spectrum of naturalness, the site and surroundings are considered to be of moderate naturalness,

i.e. it is highly modified by the removal of indigenous vegetation for land improvement and cultivation and managed as a productive landscape, rather than naturally self-sustaining.

Amenity is largely derived from the generic rural character being a sense of spaciousness, a lack of buildings and abundant vegetation largely comprised of grassland and pasture. There are no significant or salient features such as water bodies or rock outcrops or native bush etc although the dryland plains are recognised as a significant feature in the Operative District Plan incorporating native herb vegetation and remnant river terraces.

The level of amenity that is relevant and appropriate is driven by the underlying zone provisions. It is noted that that some current or anticipated rural activities may detract from the level of amenity expected or desired by residents living in the rural zone but overall the existing amenity is appropriate for the rural zone as a working landscape. Overall, amenity is generic to a rural character and moderately low although local areas may vary in amenity due to the diverse land use.

RURAL CHARACTER AND VISUAL AMENITY EFFECTS

Rural character and visual amenity effects are those that ‘...derive from changes in the physical landscape, which may give rise to changes in its character and how it is experienced.’ Any natural or physical activity has the potential to alter the landscape. It is important to appreciate that change to a landscape is not necessarily adverse and maybe neutral, or beneficial.

Whether effects are adverse, neutral or beneficial or not depends on what is anticipated by the CDP and on the public expectation of what can be reasonably anticipated to occur in the landscape. The following assessment recognises that the sensitivity of visual receptors to the type of change proposed may be an issue. For example, a local resident is likely to perceive a proposed quarry differently to a quarry operator or farmer or someone visiting the area.

Although individuals will have different perceptions of landscapes, there will also be many similarities in relation to an appreciation of beauty and meaning. This suggests that it is possible to obtain some level of agreement on what is aesthetically special and why. These commonly held values in relation to rural character, landscape and amenity values are determined by this assessment as an expert opinion, without the benefit of a public consultation.

Amenity is also likely to differ depending on the existing values (natural and rural character) associated with the receiving environment and site. Or in other words the landscape context in terms of its degree of naturalness / modification, existing patterns, scale, and visibility.

The CDP informs the permitted baseline for the zone, so activities permitted in the rural zone and their (sometimes) adverse effects are considered acceptable and appropriate. The zone anticipates productive activities and although quarrying is defined as a productive activity it is a discretionary activity acknowledging that rural zones and their existing amenity differ widely across the District.

The existing rural character and amenity of the receiving environment is clearly derived from the presence of the gravel resources that are suitable for particular land uses.

Effects may include:

- Changes to or partial loss or complete loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape
- The additions of new elements or features that will influence the character and distinctiveness of the landscape

- Combined effects of these changes on overall character and / or visual amenity.

To clarify effects are described in terms of the:

- **Magnitude of Change** (arising from the proposal).

The magnitude of change on rural character needs to be assessed in terms of the susceptibility of the landscape to change, the value of the landscape, size or scale of the proposal, the geographical extent of the areas influenced, the duration of change and whether the change is reversible. Refer Appendix A, Table 1.

The magnitude of change on visual amenity which will result in views of the proposed development taking into account the susceptibility to change, the values attached to views, the size or scale of effects, and duration of visual change with consideration of the nature of the viewing audience. Refer Appendix A, Table 2.

- **Significance of Effect**

The significance of effect varies with the location and landscape context but generally speaking a major loss or irreversible negative effects over an extensive area, on elements and / or aesthetic and perceptual aspects that are key to the character of the landscape are likely to be of the greatest significance. Reversible negative effects of short duration, over a restricted area, on elements and / or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of pre-development landscape character or visual amenity are likely to be of less significance. Refer Appendix A, Tables 3 and 4.

The overall assessment of the likely level of landscape and visual effects takes into account the nature of effects and the effectiveness of any proposed mitigation.

ASSESSMENT OF EFFECTS ON RURAL CHARACTER

The description of the receiving environment above (and included in the Landscape and Visual Assessment to the Resource Consent application) emphasise the key attributes that contribute to the rural character and its quality.

The landscape context is not particularly vulnerable to the type of change resulting from the proposed quarrying activity given the detracting presence of productive activities and other quarries in the vicinity. The landscape context is of some local importance pertaining to the conservation areas and these will remain intact.

The contribution the site makes to the pastoral landscape is confined to distant views from a short section of Conservators Road at oblique angles to the light vehicle entrance where the site lies at a distance of over 230 m away, behind the Higgs farm property. The proposed Quarry will maintain a pastoral frontage along Conservators Road. In terms of the receiving environment, the magnitude of change to rural character is small scale, being an extension to an existing quarry activity, on a small site set back from Conservators Road and surrounded by expansive areas of the McLeans Grassland Park to the north, rehabilitated pasture to the west, the Higgs farm pasture to the east and the adjoining farmland to the south (being the Harewood Gravels property).

Of relevance is that the effect of change is confined to a specific duration of time and the site will revert back to pasture once each stage of extraction is completed. In other words, the proposed extraction will occur in a gradual pit that moves across the site. Once extraction ceases the infill to

the pit is not likely to fully reinstate the current landform resulting in an undulating landform. The effects on this aspect of landscape character will be enduring. Consequently, although the significance of effects on rural character will be adverse it will be to a minor degree.

A pastoral landcover is a key component of rural character. The removal of pastoral landcover and excavation of the underlying gravels by the quarrying activity will inevitably change the rural character of the site (rather than the receiving environment per se) towards one underpinned by quarrying rather than a pastoral activity.

However, in terms of the magnitude of change to rural character, it is noted that other rural activities, for example, the Ready Lawn activity currently undertaken on the site also results in a staged removal of a pastoral landcover before reinstating or restoring the grass cover and repeating the process. In fact, this typically occurs with productive activities where the land cover is removed or harvested and then reinstated as part of a cyclical process.

In other words, a pastoral landcover is not the only landcover anticipated in the rural zone but may include forestry, crops etc all of which essentially change the rural pastoral character of the landscape, although it will still be characterised as rural. According to policy 17.2.2.3 rural productive activities can have effects which may be considered adverse, such as farming, the management and harvesting of forest blocks and quarrying activities. So, it is evident that in a general sense some elements of rural activities do not contribute positively towards rural character.

Other aspects of rural character attributed to the site such as an open spaciousness and a lack of buildings will not change with the proposed quarrying activity. Taking into account the reinstatement of pasture once quarrying ceases, in terms of the significance of effect, by definition the site will remain generically rural in character because these aspects of rural character will remain and also because quarrying is defined as a productive activity that is provided for in a rural area. For these reasons the overall effects on rural character will be low or less than minor.

EFFECTS ON VISUAL AMENITY

Amenity values are defined under the Act as:

'Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes.'

Amenity values related to the rural environment include privacy, rural outlook (openness), spaciousness, ease of access and quietness. A place-specific determination of amenity is an important component on which to address district plan provisions recognising that rural character and amenity values vary across the district. For the purposes of assessing effects on amenity, the baseline amenity is established by the existing rural character present in the receiving environment and includes established and permitted activities.

As mentioned above, the rural activities currently occurring in the receiving environment are diverse and as a consequence the amenity is similarly diverse. Effects on amenity are considered in relation to the existing landscape context, rather than the expectation of an overall high visual amenity.

Under the CDP quarrying is a discretionary activity in some rural zones, accepting that quarrying may generate effects on rural amenity. It is noted that there may be a disconnect between what is expected by residents who reside in a rural zone and the amenity that will or may result from activities that are permitted to occur in a rural zone.

The question is where does the threshold of amenity desired by the DP lie and will it be exceeded by the proposed activity?

This assessment is confined to the visual aspect of amenity or in other words the amenity that is experienced visually. The change in rural character from pastoral to quarrying will not necessarily undermine visual amenity because visual amenity relies on the change to views that may be obtained from public places and / or adjoining properties.

The visual assessment concludes that changes to views arising from the proposed Quarry extension will be limited to the 1.0 m high 'pastured' bund within the site as it progresses in stages along the southern boundary immediately to the north of the light vehicle access road. Further bunds are proposed along the north-eastern boundary of the site with the adjoining Stock and Higgs properties. These bunds will be difficult to see from public places or residential properties in the vicinity (excepting those adjoining parties who have given approval).

The question is - does a view of a pastured bund affect the visual amenity associated with the existing rural character? Bunds are used for a variety of reasons and not exclusively to mitigate visual effects of a quarry. They are often used to mitigate noise arising from an activity, proposed to protect offsite and / or onsite visual or other amenity for various activities and in the vicinity of the site are constructed as stopbanks to prevent flooding. Bunds do not automatically mean a quarrying activity is occurring. Furthermore, bunds may be constructed on a rural site without need for consent if earthworks standards are met.

There is some debate as to whether the bunds should be planted or remain grassed. It is proposed that the bunds surrounding the proposed SOL Quarry extension be grassed because they will be temporary and eventually removed so the bund material can be used to rehabilitate the site. The bunds will be created using the topsoil overburden and will remain on site until each stage of the operations cease, at which time it will be respread over the site and pasture reinstated.

Although bunds planted with native tree / shrub vegetation may be considered desirable to enhance natural character, in reality there is little in the way of naturally occurring native shrublands in the vicinity. As a result, grassed bunds tend to be less visually intrusive than planted bunds simply because a grassed cover is consistent with the surrounding pasture. In this context the grass cover alone is sufficient to provide greenery consistent with a rural character.

Practically speaking the establishment of native vegetation on bunds is difficult because of the free draining nature of the bund material and the ability to keep the plants moist enough for good growth conditions. Once native shrubs are established on the bund, they will not tolerate being transplanted for rehabilitation purposes. For the reasons above it is considered that the bunds should be grassed to ensure an appropriate visual amenity and for the purpose of mitigation and rehabilitation.

No additional boundary planting is proposed for the reason that, while planting provides amenity it is not necessary for screening purposes. It is considered however that visual amenity may be improved by the planting of groups of fast growing exotic deciduous trees commonly associated with rural activities / shelter (such as alder or poplar) along the light vehicle access way. Trees would contribute to a high-quality rural character and in doing so provide an improved aesthetic coherence and pleasantness to views from Conservators Road.

Overall effects on visual amenity arising from the proposed Quarry extension will be low or less than minor.

The following assessment of effects is intended to provide additional detail of effects relating to specific private properties in the vicinity of the proposed SOL Quarry extension.

Landscape And Visual Effects Assessment From Harewood Gravels Property

The Harewood Gravels (HG) property lies to the south of and adjoins the existing light vehicle access road to SOL Quarry. The existing dwelling is located at the southern corner of the HG property, surrounded by established vegetation and over 450 m from the proposed SOL Quarry extension boundary. Refer Appendix A, Figure 1.

The proposed Quarry extension will extend for approximately 500 m from west to east along the northern edge of the light vehicle access road and with the site boundary some 200 m from Conservators Road. No changes are proposed to the existing light access road in terms of traffic flow – it will remain as a light vehicle entrance to the current SOL Quarry. The proposed Quarry pit will progress from west to east across the site in a series of stages. At the closest point it will be separated from the Harewood Gravels property by a distance of 7.5 m comprising the access road plus a 3.0 m buffer and 1.0 m high bund with an additional 1.0 m to the cut face. Refer Appendix B, Figure 3.

The only activities occurring in proximity to the Harewood Gravels property will be the extraction and rehabilitation to restore the site as pasture for grazing. The crushing plant will be located in excess of 350 m of the property boundary and there will be no increase in the nature and scale of traffic along the light vehicle access way.

The creation of the bund will inevitably remove and replace a view over open pasture and / or tilled soil and the harvesting of Ready Lawn currently occurring on the site. There is of course no requirement for property owners to provide views over open pasture to adjoining neighbours in the rural zone. Shelterbelts, hedges and fences may be established within and along property boundaries and will similarly remove views to open pasture. Farm sheds may be erected (subject to meeting DP standards) and views to permitted rural productive activities may occur that could potentially generate adverse effects. As mentioned above the grassed bund will be consistent with a rural character. The bund will effectively obscure the proposed Quarry extraction activity and therefore there will be no visual effects arising from quarrying activities on the adjoining HG property.

Landscape And Visual Effects Assessment From 113 Conservators Road

Refer Appendix B, Figure 1. The Emerson's property is part of the small enclave of residential properties located on Conservators Road. It is located between the Stocks and Higgs properties on the southwest side of Conservators Road facing northeast. The Emerson's property adjoins the Stock property to the southwest and the Higgs property to the east. The proposed SOL Quarry extension boundary will be over 145 m away from the Emerson's property separated by the collection of farm sheds, a paddock and an established shelterbelt, all of which are proposed to remain on the Stock property. In addition, there will be a 20.5 m buffer to quarry activities within the proposed Quarry

site parallel to the boundary. The buffer will include the relocated water race, maintenance access and bund. Refer Appendix B, Figures 1 and 2.

As above, the crushing plant will be located in excess of 350 m from the adjoining property boundaries so in total the plant may be established over a distance of 495 m from the Emerson's property boundary at 113 Conservators Road. The extensive physical and visual buffer of over approximately 165 m between the Emerson's property and the proposed Quarry pit ensures that there will be no visual amenity effects to 113 Conservators Road.

CUMULATIVE EFFECTS

There are currently four active quarries (Fulton Hogan, KB Contracting, Isaacs and Frews) operating within 2.0 km of the existing SOL Quarry. The proposed SOL Quarry activity is an extension to an already existing operation and the extension boundary will be within 1.5 km of the existing active quarries in the vicinity. There will be no new quarry and no additional increase in operational effects such as traffic, crushing plant etc. Overall effects are transient over a maximum period of 20 years during which the site will be excavated and rehabilitated in stages and returned to pasture. This is a maximum of 8-years longer than the period of the currently consented Quarry operations. The proposed Quarry extension will not increase the cumulative visual effects of the existing SOL Quarry in combination or sequentially with the existing quarries. For these reasons cumulative visual effects are avoided.

The restoration of the site to grazing pasture will ensure that a rural character is maintained in the long term. There may be enduring minor effects arising from minor changes to the rehabilitated landform, which is likely to differ from the pre-development landform. This will depend on the Rehabilitation Management Plan and the resulting landform. Consequently, given the proximity to other quarries in the vicinity, cumulative landscape effects relating to the landform may occur in the receiving environment but will be low or less than minor.

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Landscape Architect

ROUGH AND MILNE LANDSCAPE ARCHITECTS

APPENDIX A

TABLE 1: MAGNITUDE OF LANDSCAPE CHANGE

Contributing factors		Higher	Lower	Site - context
Nature of landscape Resource	Susceptibility to change	The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change which would result from the proposed development.	The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character.	The site and context sit at the lower end of the scale.
	The value of the landscape	The landscape includes important biophysical, sensory and associative attributes. The landscape requires protection as a matter of national importance (ONF/L).	The landscape lacks any important biophysical, sensory or associative attributes. The landscape is of low or local importance.	The landscape is of comparatively low importance given its current land use and contributes to a generic rural amenity
Magnitude of Change	Size or scale	Total loss of addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent.	The site is comparatively small scale. Changes will occur to the landform including a pastoral bund which will be apparent outside the site.
	Geographical extent	Wider landscape scale	Site scale, immediate setting.	Effects are confined to a site scale.
	Duration and reversibility	Permanent. Long term (over 10 years)	Reversible. Short term (0 – 5 years)	Term of effects will be 20-years (8-years longer than the currently consented Quarry activities) and reversible.

TABLE 2: MAGNITUDE OF VISUAL CHANGE

Contributing factors		Higher	Lower	Visual Effects arising from the proposal
Nature of the viewing audience	Susceptibility to change	Views from dwellings and recreation areas where attention is typically focussed on the landscape.	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.	There will be no views or changes visible outside the site from dwellings or recreation areas. Views from transport corridors are limited to a short distance along Conservators Road of a distant pasture covered bund.
	Value attached to views	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers.	Viewpoints are not important view shafts or scenic viewpoints. Viewpoints do not comprise shared and recognised values.
Magnitude of Change	Size or scale	Loss or addition of key features or elements. High degree of contrast with existing landscape elements (i.e. in terms of form, scale, mass, line, height, colour and texture) Full view of the proposed development.	Most key features or elements of the view are retained. Low degree of contrast with existing landscape elements (i.e. in terms of form, scale, mass, line, height, colour and texture) Glimpse / no view of the proposed development.	With the exception of the bund there will be no view of the proposed development.
	Geographical extent	Front on views. Near distance views Change visible across a wide area.	Oblique views Long distance views Small portion of change visible.	Oblique view of distant bund. A very small portion of change will be visible.
	Duration and reversibility	Permanent. Long term (over 10 years)	Transient / temporary. Short term (0 – 5 years)	Term of effects will be 20-years (8-years longer than the currently consented Quarry activities) and reversible.

TABLE 3 ADVERSE LANDSCAPE EFFECTS RATING SCALE

Effect Rating	Use and Definition
Very High	Total loss of key elements / features / characteristics, i.e. amounts to a complete change of landscape character and / landscape values
High	Major modification of or loss of most key elements / features / characteristics, i.e. little of the pre-development landscape character remains and amounts to a significant negative change in landscape character and / or landscape values. Concise Oxford English Dictionary Defn Adj. - Great in amount, values, size or intensity
Moderate - High	Modifications of several key elements / features / characteristics, i.e. the pre-development landscape character remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics i.e. the predevelopment landscape character and / or landscape values remains evident but is changed Concise Oxford English Dictionary Defn Adj. - Average in amount, intensity or degree
Moderate - Low	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not uncharacteristic within the receiving landscape and do not disturb the pre-development landscape character and / or landscape values.
Low	Very little material loss of or modification to key elements / features / characteristics. i.e. new elements integrate seamlessly into the pre-development landscape character and / or landscape values. Concise Oxford English Dictionary Defn Adj. - Below average in amount, extent or intensity
Very Low	Negligible loss of or modification to key elements / features / characteristics of the baseline. i.e. influence of new elements on landscape character and / or landscape values is barely discernible.

TABLE 4. ADVERSE VISUAL EFFECTS RATING SCALE

Effect Rating	Use and Definition
Very High	Total loss of key elements / features / characteristics, i.e. amounts to very significant negative change in visual amenity
High	Major modification of or loss of most key elements / features / characteristics, i.e. little of the pre-development visual amenity remains and amounts to a significant negative change in visual amenity values. Concise Oxford English Dictionary Defn Adj. - Great in amount, values, size or intensity
Moderate - High	Modifications of several key elements / features / characteristics of the baseline, i.e. the pre-development visual amenity remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics of the baseline, i.e. the pre-development visual amenity remains evidence but is changed Concise Oxford English Dictionary Defn Adj. - Average in amount, intensity or degree
Moderate - Low	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are uncharacteristic within visual environment and do not disturb the pre-development visual amenity.
Low	Very little material loss of or modification to key elements / features / characteristics. i.e. new elements integrate seamlessly into the pre-development visual environment. Concise Oxford English Dictionary Defn Adj. - Below average in amount, extent or intensity
Very Low	Negligible loss of or modification to key elements / features / characteristics of the baseline. i.e. visual influence of new elements is barely discernible.

'Minor' Test

For the purposes of notification determination, an adverse effects rating of Moderate- Low corresponds to a 'minor' adverse effects rating. An adverse effects rating of 'Low' or 'Very Low' corresponds to a 'less than minor' adverse effects rating.

APPENDIX B – A3 Graphic
FIGURES 1 - 3