APPENDIX F

DCM Urban Landscape and Visual Assessment



WHEATSHEAF QUARRY

WINSTONE AGGREGATES

A DIVISION OF FLETCHER CONCRETE AND INFRASTRUCTURE LIMITED

Landscape and Visual Impact Assessment

Project No. 2024_022



Landscape & Visual Impact Assessment

Project no: 2024_022

Document title: Landscape & Visual Impact Assessment

Revision: B

Date: 25 June 2024

Client name: Winstone Aggregates, a division of Fletcher Concrete and Infrastructure Limited

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File name: 2024_022 Winstone Wheatsheaf Quarry_LVIA_C

DOCUMENT HISTORY AND STATUS

REVISION	DATE	DESCRIPTION	BY	REVIEW	APPROVED
	4.4.00.400.4		=		D 014
Α	11/06/2024	LVIA for Comment	ASF	HB	DCM
В	25/06/2024	Updates as per comments	NK	HB	DCM

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1.INTRODUCTION AND PROPOSAL

DCM Urban Design have been commissioned by Winstone Aggregates, a division of Fletcher Concrete and Infrastructure Limited (hereafter referred to as 'the applicant' or 'Winstone') to assess the potential landscape and visual effects relating to the proposed quarry extension and operation at 668 Robinsons Road, Rolleston, in the Selwyn District.

The proposed quarry will cover an area of approximately 4Ha, with material being excavated down to a potential depth of approximately 10m below the current surface level. The quarry will be an extension of the existing adjacent Winstone Wheatsheaf quarry ('the existing quarry'), with material from the expansion area being transported to the processing plant on the existing quarry site. The site and surrounds have been visited several times over the last few weeks with a view to assessing the likely landscape and visual effects.

During the preparation of this report, we have worked closely with the applicant to develop mitigation measures to either avoid, remedy or mitigate any potential effects on the Landscape Character, Landscape Values and Visual Amenity.

This report is supported by an appendix of figures, Appendix 2, which includes a site location plan, photos of the existing site and surrounding areas, photos from external viewpoints, and illustrations and plans of the mitigation measures proposed.

METHODOLOGY

Refer to Appendix 1 for assessment methodology and terms used when assessing the potential landscape and visual effects of the proposal.

2.1 STATUTORY PROVISIONS

Relevant statutory documents relating to Landscape Values and Visual Amenity are referred to below:

- Resource Management Act 1991
- The Selwyn District Plan both the Operative & Partially Operative (Appeals version).

2.1.1 Resource Management Act 1991

Section 6 of the RMA identifies matters of national importance: "In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- **s.6 (b)** The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development;
- s.6 (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna."

Other matters are included under **Section 7**: "In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-



(c) The maintenance and enhancement of amenity values."

2.1.2 Selwyn District Plan

Under the operative Selwyn District Plan (SDP) and Partially Operative Selwyn District Plan (Appeals version) (POSDP), the site is located in the Inner Plains Zone and the General Rural zone respectively (Please refer to pages 2 and 3 in the attached figures for the relevant planning maps).

Both the SDP and POSDP recognise Outstanding Natural Landscapes (ONL) and Visual Amenity Landscapes (VAL), but the proposal is not located in an ONL or VAL in either iteration.

The POSDP is beyond the point of challenge on most but not all provisions relevant to visual and landscape matters pertaining to this proposal, and as such, this report has assessed the proposal against the relevant objectives and policies for both District Plans.

3. RECEIVING ENVIRONMENT

The site is located between the outer peripheries of the towns of Rolleston and Prebbleton (Please refer to page 1 of Appendix 2 for the proposal site's context). The receiving environment is characterised by the vast and flat topography of the Canterbury plains and predominance of agricultural fields lined with shelterbelts. The proposal site is framed by Robinson Road, which runs parallel to its southwestern boundary, the existing quarry operations along the northern and eastern boundary, and a mix of land uses and Selwyn Road along the southern boundary.

Land use in the wider receiving environment, along Robinsons Road and Selwyn Road, is a combination of pastoral farmland and rural production activities, including an agricultural contracting and feed supply business, poultry farming and a plant nursery, while also containing a number of rural residential dwellings. The overall area is characterised by large, grassed paddocks with boundaries often delineated by well-established shelterbelts consisting of predominantly exotic species (such as pine and macrocarpa), reflecting the productive agricultural character of the area.

The existing quarry and proposed extension area are located on relatively flat topography with only a minor variation in vertical height perceivable from eye level. Human development and modification within this rural landscape is generally spread out and low in density, related to farming, agricultural industry, and associated activities (sheds, commercial greenhouses, stockyards, and dwellings). Residential dwellings in the area are predominantly enclosed by shelterbelts, established vegetation and fencing, but some have open to partial views of the surrounding roads and neighbouring agricultural activities. There are no common styles, palettes, colours or materials unique to built form in the area, rather dwellings, buildings and the various other structures consist of an eclectic mix.

Vegetation types in the receiving environment are predominantly exotic species, with a lesser presence of native species. Taller vegetation in the receiving landscape consists largely of the shelter belts and screening vegetation mentioned above, running along paddock and property boundaries, while areas of grassed farmland otherwise predominate.

In terms of sensory qualities, wider views are mostly constrained by the tall existing shelterbelts present, which line road corridors and various internal and property boundaries. Where there are breaks in shelterbelts, views are generally over pastoral farmland, with distant glimpses of higher elevations, such as the Port Hills, available from some locations. The natural character of the environment is considered to be modified, with a highly legible rural character and land use.

Overall, the receiving environment is considered to have a moderate to low sensitivity to change owing to its modified rural character. The receiving environment is recognized as a working landscape, containing several existing land uses (quarrying, farming, agricultural industry), a variation in landscape and built structures (rural dwellings, barns, greenhouses, bunds) as well as clearly identifiable vegetation patterns (large areas of grassed paddocks, with taller vegetation clustered around buildings and along boundaries).

4. ASSESSMENT OF EFFECTS

Below is an assessment of effects relating to landscape character, landscape values and visual amenity. The proposal has also been assessed within the relevant statutory context, in accordance with the SDP and POSDP, which is consistent with the RMA. The proposal is deemed to be a **Discretionary Activity**.

4.1 EFFECTS ON LANDSCAPE CHARACTER

Landscape character is the combination and composition of various elements such as topography, vegetation, built form and sensory qualities, and how these are perceived by humans. Landscape character also includes spiritual, cultural and social associations. The proposed site is not within an outstanding natural landscape area or any areas of historical, spiritual and cultural significance.

The proposed site is located to the south of the existing quarry and is currently a grassy paddock, accessible by an informal internal access road branching off Robinsons Road. It is intended to be an extension of ongoing quarry operations, as outlined in the introduction of this report.

The site, including the immediate and wider surrounding area, falls within the flat expanse of the Canterbury plains. Regarding this aspect of landscape character, the proposed quarry extension will result in topographical change, which will largely take place below natural ground level, with the creation of irregular internal slopes and a lowered ground level as part of quarrying and excavation activity. This change in the site's terrain will be largely screened from external viewpoints however, by the existing planting present in the receiving environment. This includes shelterbelts along the local area's various internal, road and property boundaries, as well as established plantings associated with various buildings and structures. Existing and proposed bunding, softened by planting, will additionally help to mask these topographical changes from the north, and from neighbouring properties in close proximity (Please refer to Section 5 below, Mitigation Measures). With consideration of boundary planting and bunding, it is expected that the change in landform proposed will be indiscernible from locations external to the site.

Owing to the proposed location next to existing quarry operations, and the relatively small size and enclosed nature (through mitigation measures) of the expansion area, it is considered that the proposed extension will not adversely affect the sensory qualities or compromise any sensitive views from a landscape perspective.

The quarry extension is not expected to adversely affect any existing vegetation patterns in the receiving environment. The proposal does require the removal of an existing internal shelterbelt along the northeastern boundary of the extension area (please refer to page 12 of Appendix 2), however as this is required for functional reasons and consists of a commonly found exotic species, the removal of this shelterbelt is not considered unreasonable or inappropriate.

The anticipated effects of the proposed quarry extension on the receiving environment's rural landscape character and values will be largely indiscernible from locations external to the site. As the proposal centres around expanding



on an accepted existing rural activity and will be largely screened and distanced from surrounding dwellings, businesses and roads, overall effects on landscape character are assessed as **low (or less than minor).**

4.2 ASSESSMENT OF THE RELEVANT STATUATORY DOCUMENTS

The relevant statutory context in terms of Landscape Values and Visual Amenity has been assessed in accordance with the operative Selwyn District Plan (SDP) and Partially Operative Selwyn District Plan (Appeals version) (POSDP). As there are no landscape specific overlays across the site in either plan, the proposal has been assessed against the relevant Rural Objectives and Policies which relate to landscape values and amenity. The proposal has not been specifically assessed against the sections relating to Outstanding Natural Features and Landscapes, as it does not fall within or near these overlays. The effects on landscape values are considered in the context of the policy assessment below.

Operative Selwyn District Plan (SDP)

QUALITY OF THE ENVIRONMENT

Objective B3.4.2

A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.

Policy B3.4.3

Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.

The use of earth bunds and vegetation will largely mitigate the adverse effects of the proposed development from a landscape perspective. By visually screening the proposal's scale and works, any effects of substance are limited, regarding the surrounding visual amenity values. A full visual impact assessment has been undertaken in Section 4.3 of this report.

As described under Landscape Character, the area is characterised by low-density-built form, large pasture fields, shelterbelts and existing agricultural activities, including the existing quarrying activity. The proposed quarry expansion is not expected to impact the variety of activities which are provided for in the existing rural landscape, and no reverse sensitivity effects are expected from a landscape perspective, which cannot be mitigated through the measures outlined, or which have not already been considered given the presence of the existing quarry.

Policy B3.4.6

Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.

The proposal is for an extension of quarry operations and will utilise existing structures such as existing permitted buildings, offices, carparks, and accessways. It will remain within the permitted building density in the Rural Zone, adhering to bulk and location requirements.

During operation, the quarry will have a lower level of built form than if the site were to be developed to its full potential under the current District Plan standards, with the open character of the site retained.



Plant equipment will be positioned in the centre of the site, with large setbacks from the property edge, to ensure they are not visible from outside of the site.

The existing and proposed landscape plantings along the site boundaries will maintain a similar level of vegetation on the site, and the predominance of greenery will be retained when looking towards the site from external viewpoints.

Partially Operative Selwyn District Plan

Part 3 - Area Specific Matters / zones / Rual Zones / GRUZ - General Rural Zone

GRUZ - Objectives

GRUZ - 01 Subdivision, use, and development in rural areas that:

- 1. Supports, maintains, or enhances the function and form, character, and amenity value of rural areas:
- 2. Prioritises primary production, over other activities to recognise its importance to the economy and wellbeing of the district;
- 3. Allows primary production, those activities that directly support primary production and have a functional or operational need to locate with the General Rural Zone and important infrastructure, to operate without being compromised by incompatible sensitive activities and reverse sensitivity effects;
- 4. Retains a contrast in character to urban areas; and
- 5. Protects highly productive land.

The proposed quarry extension is consistent with the above objective. The screening planting and bunding proposed has been integrated into the proposal in order to maintain the wider amenity of the surrounding rural landscape, by limiting potential views of the quarry and associated activities. Quarrying is considered primary production defined by the National Planning Standards and the POSDP and defined as a rural activity under the Regional Policy Statement (RPS). As an extension of an existing quarry, the proposal is considered to be appropriately located within the General Rural Zone.

Given the presence and extent of the existing quarry no reverse sensitivity effects are expected to arise with the quarry expansion, which have not already been considered. The proposed quarry extension is not anticipated to compromise the existing contrast with the character of urban areas and will be rehabilitated as quarrying is completed with the land re-established for another rural/suitable activity.

GRUZ - Policies

GRUZ P1 General - Maintain or enhance rural character and amenity values of rural areas by:

- 1. retaining a low overall building density;
- 2. enabling primary production while managing adverse effects of intensive primary production, and mineral extractive industries;
- 3. managing the density and location of residential development;
- 4. retaining a clear delineation and contrast between the district's rural areas and urban areas; and

5. recognising that primary production activities can produce noise, dust, odour and traffic that may be noticeable to residents and visitors to the General Rural Zone.

The proposed quarry extension is consistent with maintaining the character and amenity of the receiving rural area. The proposal does not propose any changes regarding building density and is not a residential development. As outlined above, quarrying is considered primary production and rural activity, and any adverse effects on the surrounding landscape should be appropriately managed. The proposed quarry extension has thereby integrated the mitigation measures outlined below in section 5, planting and earth bunding, to restrict external views to the proposal site and hence limit adverse effects on visual amenity and rural character. The proposed quarry extension is consistent with retaining a clear delineation between the district's rural and urban areas.

GRUZ - Policies

GRUZ P4 Economic Activity - Provide for the economic development potential of the rural area by enabling a range of activities that:

- 1. have a direct relationship with, or are dependent on, primary production;
- 2. have a functional need, or operational need to locate in the rural area;
- 3. represent an efficient use of natural and physical resources; and
- 4. maintain or enhance the character and amenity values of the surrounding area.

As outlined above, the proposal is appropriately located within the general rural zone as a rural and primary industry activity, and extension of an established quarry. With implementation of the mitigation measures outlined, the proposed quarry extension is not expected to adversely affect the surrounding rural environment's character and amenity. Instead, the quarry will be screened from external viewpoints by planting and bunding, both of which are commonly accepted screening measures in rural areas and have proven successful as demonstrated by the existing quarry.

GRUZ P8 Mineral Extraction – Enable mineral extraction in the General Rural Zone to meet the District's and region's supply needs, including by recognising the need for mineral extraction to locate where the mineral resource exists, while:

1. managing the spatial extent and effects of mineral extraction activities in order to maintain the amenity values of sensitive activities and residential activities;

The proposed quarry extension appropriately manages the spatial extent and effects of mineral extraction though sufficient distancing of the proposed quarry extension from neighbouring public roads and dwellings, and compartmentalising effects by using bunding and screening planting along boundaries. It is therefore expected that, from a landscape perspective, the amenity values of the area will be maintained.

GRUZ-R21 – Mineral Extraction Matters for discretion:

- 2. The exercise of discretion in relation to GRUZ-R21.1 is restricted to the following matters:
- a. Effects on amenity values and rural character and highly productive land during the establishment, operation and rehabilitation of the site from the scale and intensity of the mineral extraction, including any cumulative effect, the location of buildings and plant.
- b. The preparation and implementation of a site rehabilitation plan. This shall include, but is not limited to:

- i. the end use of the site, which should be suitable for an alternative use that maintains or enhances the amenity of the surrounding area and methods used to achieve this;
- ii. measures to mitigate potential instability of land and susceptibility to subsidence and erosion;
- iii. duration and staging of rehabilitation to minimise the period of any adverse amenity affects, such as dust nuisance; and
- iv. The methods used to rehabilitate the site and any effects that may arise from the method and end use.

As noted above, potential adverse effects on amenity values and rural character are expected to be largely mitigated by the bunding and planting proposed as part of the quarry extension. Views of the quarry extension from external locations will be screened, as mentioned, to maintain pleasant views of greenery. Boundary planting and bunding are commonly accepted screening methods in rural areas, and so will not detract or appear out of place in the existing rural landscape. The proposed quarry extension is not of such a scale that the possible cumulative effects in regard to landscape and visual amenity (when considered along with the existing quarry and infrastructure) won't be able to be mitigated by the measures outlined. These measures are expected to remain effective when the existing quarry and proposed extension are considered cumulatively.

Please refer to section 5 below (Mitigation Measures) for greater detail around rehabilitation of the proposed quarry extension. Rehabilitation is intended to be progressive as each stage of extraction is complete, and centres around restoring land to a grassed, free draining and stable site, suitable for future permitted rural activities. The anticipated outcome of the quarry rehabilitation is expected to maintain the rural character and visual amenity values of the surrounding landscape, with the remediated pastoral nature consistent with the surrounding landscape. Although the ground levels of the site are unlikely to be returned to pre-extraction levels, this is not considered an adverse outcome, as despite the change in the terrain the land will still be functional for several rural activities, while visibility of this topographical change will be limited from external viewpoints.

Overall, the proposal is considered consistent with the Objectives and Policies relating to the character and amenities within the SDP and POSDP. With the implementation of the mitigation measures outlined, the aesthetic coherence and landscape character of the site will be maintained to be consistent with the receiving landscape context.

4.3 EFFECTS ON VISUAL AMENITY

The visual context of the receiving environment is considered to be a 1000m offset from the edge of the proposed quarry extension. This distance has been determined by the scale of the proposal and the flat topography of the receiving environment. At distances further than 1000m the proposed quarry extension is unlikely to be discernible, which is consistent with our observations of the existing quarry. A series of key viewpoints were selected to show a representative sample of the likely visual effects that could result from the proposal (refer to Appendix 2 for the relevant photos). Viewpoints are generally located on public land, and where possible located as close as possible to existing or proposed residential dwellings or other key viewpoints.

The viewpoints selected were as follows:

VP1- View north from 108 Selwyn Road (approximately 400m).

VP2 - View east from 679 Robinsons Road (approximately 170m).

VP3 – View northeast from 668 Robinsons Road (approximately 160m).

VP4 - View east from 693 Robinsons Road (approximately 200m).

VP5 - View west from 32 Selwyn Road (approximately 550m).

VP 6 – View northwest from 90 Selwyn Road (approximately 280m).

In assessing the potential effects on visually sensitive receptors, the key viewpoints outlined above have been used as a reference point where it is considered that the effects will be similar for a group of viewers.. The viewpoints are a representative view, as close as possible to the view likely to be experienced by those that are travelling along the Robinsons Road and Selwyn Road or residing in the surrounding area but obtained from a public location.

The following table outlines the potential visual effects each Visually Sensitive Receptor might receive and how the effects may potentially be mitigated. The effects take into account the likely magnitude of effects (a combination of distance from the proposal and degree of change) to determine what the likely residual effects from the proposal will be. Mitigation measures are outlined in Section 5 of this report.

Table 1: Assessment of Effects on Visually Sensitive Receptors

Viewpoint	Visually Sensitive Receptors (VSR)	Distance from Proposal (m)	Type of View (open, partial, screened)	Magnitude of Change	Mitigation Measures	Effects after mitigation
1	Vehicles users travelling northeast or southwest along Selwyn Rd. Residents at 108 Selwyn Rd.	400	SCREENED	Very Low		Less than Minor
2	Vehicle users travelling northwest or southeast along Robinsons Rd. Residents at 679 Robinsons Rd.	170	SCREENED	Very Low		Less than Minor
3	Vehicle users travelling northwest or southeast along Robinsons Rd. Residents at 668 Robinsons Rd.	160	SREENED	Low	MM1 MM2 MM3	Less than Minor

4	Vehicle users travelling northwest or southeast along Robinsons Rd. Residents at 693 Robinsons Rd.	200	SCREENED	Low	MM1 MM2 MM3	Less than Minor
5	Vehicles users travelling northeast or southwest along Selwyn Rd. Residents at 32 Selwyn Rd.	550	SCREENED	Very Low		Less than Minor
6	Residents at 90 Selwyn Rd.	280m	PARTIAL	Low	MM1 MM2 MM3	Less than Minor

VP1 – View north from 108 Selwyn Road

<u>Description of Existing View</u>—The view consists of a partially visible rural property, low post and rail fencing and a central section of tall hedging. The site is enclosed on its periphery with a dense shelter belt, supported by several established pine trees. A limited view of the shed located to the side of the dwelling is available, with visibility of both the shed and the dwelling obstructed/partially obstructed by varying vegetation types. Views are screened looking north towards the proposed quarry extension site.

<u>Description of Effects</u> – The proposed quarry will be screened from view for vehicle users travelling along Selwyn Road and the residents of 108 Selwyn Road, resulting in a very low magnitude of change and **Less than Minor** visual effects.

VP2 - View east from 679 Robinsons Road

<u>Description of Existing View</u>—The view consists of the access track entrance to the proposed quarry extension site from Robinsons Road, between two mature shelterbelts. It features low post and rail fencing with a permeable wire mesh gate, with tall shelterbelts either side. The ground surface transitions from the smooth asphalt of the road to coarse gravel, and eventually forming the rugged access track which features a younger line of screening vegetation (on the 668 Robinsons Road property) along the track boundary.

<u>Description of Effects</u> – When travelling along Robinsons Road and from the entrance to 679 Robinsons Road, views of the proposal will be screened largely by the mature shelterbelts present, with secondary screening provided by the more juvenile shelterbelts (located on 668 Robinsons Road) planted along the southeast boundary of the proposed quarry extension site, and along the access track. Given that views of the proposal site will be screened by the shelterbelts along Robinsons Road, and those more recent plantings along the access track and southeastern boundary, it is considered that the magnitude of change will be very low and visual effects considered **Less than Minor**.

VP3 – View northeast from 668 Robinsons Road

<u>Description of Existing View</u> – Views are restricted to the proposed quarry extension when looking northeast from 668 Robinsons Road. The view consists of the existing 668 Robinsons Road rural residential property, enclosed by vegetation which varies in type and scale. This includes a dense shelter belt on the southern boundary, situated to the right of the viewpoint, a low hedge along the street frontage, and a mixed hedge/planting along the northern boundary in front of a 1.8m solid fence, situated on the left of the image.

Although not clearly visible from the viewpoint photo, the dwelling at 668 Robinsons Road adjoins to a large grass field to the north, which has its northeastern and northwestern boundaries planted with a juvenile shelterbelt (please refer to page 12 of Appendix 2). This field provides separation from the proposed quarry extension site and access track, while the shelterbelt planting will provide an increasing level of additional screening as it matures.

<u>Description of Effects</u> – Both vehicle users of Robinsons Road, and the residents of 668 Robinsons Road are expected to experience limited views of the proposed quarry extension. The existing planting along this section of the road, and well-established planting surrounding the dwelling on all sides effectively restrict views to the proposal site. The shelterbelt planting along the access road and proposal site boundary (on the 668 Robinsons Road property), although currently not at full height, will provide a dense screen once allowed to mature. Bunding is also proposed along the boundary shared with the proposal site, further reinforcing screening. Given the scale, distance and anticipated limited visibility of the proposal, the magnitude of change is considered to be low and visual effects of the proposal are assessed as **Less than Minor**.

VP4 - View east from 693 Robinsons Road

<u>Description of Existing View</u> – Screened views of the proposal site are available when looking east from the driveway of 693 Robinsons Road towards the proposal. This view consists of the residential dwelling (692 Robinsons Road, owned by the applicant) behind which glimpses of the existing quarry operations' earth bund can be seen. Low vegetation helps define the gravel driveway while the taller vegetation provides some screening along street frontage. The post and rail fencing, and mesh wire gate delineates the property's boundaries.

<u>Description of Effects</u> – From their access road, residents of 693 Robinsons Road will have limited views of the proposed quarry extension. Views towards the site are already obstructed by the vegetation in the foreground and midground, while screening will increase as the young shelterbelt noted in the viewpoint image (located on 668 Robinsons Road) matures and increases in height, and the proposed bunding along the proposal boundary is implemented. Given the distance from the proposal, screening already in place and proposed, visual effects are assessed to be very low (**Less than Minor**).

VP5 - View west from 32 Selwyn Road

<u>Description of Existing View –</u> Views are screened looking west from 32 Selwyn Road towards the proposal site. This view consists of an existing residential property which neighbours the entrance to the existing operational quarry. It features established vegetation (native and exotic), varying in scale and type, at the street frontage and internal boundaries. This vegetation creates a tall and dense screen, effectively preventing views to both the existing quarry and quarry extension. The street front hedging, combined with brick and permeable fencing, helps delineate the property's residential nature.

<u>Description of Effects</u> – The proposed quarry extension will be screened from view for vehicle users and the residents of 32 Selwyn Road, resulting in a very low magnitude of change and **Less than Minor** visual effects.

VP6 - View northwest from 90 Selwyn Road

<u>Description of Existing View</u> – Views to the northeast from the driveway of 90 Selwyn Road are screened when looking towards the proposal site from Selwyn Road. A dense band of mixed, established planting and a shelterbelt lines the road in front of the 90 Selwyn Road property, with only very limited visibility available of the dwelling and beyond. Therefore, this viewpoint was selected, towards the eastern boundary of 90 Selwyn Road, where there is a gap in 90 Selwyn Road's shelterbelt, which gives us a better indication of possible visual effects.

This viewpoint shows the northern boundary of 90 Selwyn Road which adjoins to the proposed quarry extension site. The proposal site is partially visible through a large break in the established macrocarpa shelterbelt, and through the base of these trees.

<u>Description of Effects</u> — A bund and strip of native planting will be implemented along this boundary (please refer to Section 5, Mitigation Measures, and the page 12 of Appendix 2), to further screen the quarry from this viewpoint, and to maintain pleasant views for the residents at 90 Selwyn Road. When taking into consideration the existing Macrocarpa shelterbelt, combined with the proposed plantings and earth bund, effects on visual amenity are assessed to be low (**Less than Minor**).

4.4 SUMMARY OF EFFECTS ON VISUAL AMENITY

The proposed changes will likely only minimally affect road users from a visual amenity perspective. Due to the existing topography and vegetation, only partial views of the proposal will be available from small sections along Robinsons Road and Selwyn Road, where the proposal will generally be seen only from a distance. Given the implementation of the mitigation measures outlined however, it is expected that even these limited views of the proposed quarry extension site will become effectively screened. Overall, the proposal is anticipated to have a minimal impact on the visual and landscape amenity of vehicles and road users, with no significant disruptions expected from a landscape point of view.

The proposed quarry expansion is anticipated to have minimal impacts on the landscape and visual amenity of surrounding residents also. Existing screening measures, such as dense vegetation, shelterbelts, and fencing, already provide visual mitigation. Additionally, the mitigation measures outlined below in Section 5, are included as part of the proposal to diminish any adverse effects on visual amenity.

Overall, the levels of adverse effects on visual amenity, as a result of the proposed quarry extension, are considered to be low to very low (or **Less than Minor**).

5. MITIGATION MEASURES

The following mitigation measures are suggested to either avoid, remedy or mitigate any potential effects on Landscape Character, Landscape Values and/or Visual Amenity:

MM1 SCREENING BOUNDARY PLANTING

A prominent feature of the receiving environment is the large number of shelterbelts, most of which are densely planted and mature in height, although some newer more juvenile shelterbelts also exist (please refer to page 12 of the provided figures). The proposed quarry extension relies on the presence of these shelterbelts for screening and visual

mitigation, it should be noted however that many of these shelterbelts are not on the applicant's property. Therefore, it is proposed that screening boundary planting (in the form of fast-growing native species, or infill planting consistent with existing species) is implemented by Winstone for the life of the quarry (proposed to be five years) if any gaps in existing screening planting are identified, or if any critical screening shelterbelts on neighbouring properties were to be removed.

Winstone has already agreed with the owner of 668 Robinsons Road to be responsible for maintaining and enhancing the existing plantings on the mutual boundary with this site, and as mentioned above, would be happy to make a similar commitment to other adjoining neighbours, including undertaking planting on its own land as needed.

MM2 BUND AND LANDSCAPE PLANTING

A grassed 9m wide and 3m high earth bund is proposed along the proposed quarry extension site boundary shared with 90 Selwyn Road and 668 Robinsons Road, due to the proximity of these properties to the proposal. Bunding will be set back a minimum of 2m from the closest part of the existing shelterbelt trees or at least 4m from the tree trunks, whichever is the furthest, in order to avoid undermining shelterbelt species and/or damaging its roots.

A 1m wide landscape strip will be included on the outside face of the bund, to be planted with native species including *Pittosporum tenuifolium*, *Cordyline australis*, *Austroderia richardii* and *Phormium tenax* (and/or other appropriate native species). The grassed bunds and planting shall be maintained in a tidy condition, with any dead, diseased or damaged planting to be replaced with similar species throughout the duration of quarrying activity.

Rehabilitation of the site may result in the removal of the bunds, but it is likely that the bunds and planting will be retained once quarrying is complete.

MM3 REHABILITATION

Rehabilitation of the quarry extension area will focus on reestablishing the site to be suitable for future activities as appropriate and permitted in the rural zone, such as primary production. Extraction is proposed to take place in stages, with progressive rehabilitation taking place as extraction in each stage is complete. Rehabilitation will not restore the proposed quarry extension site back to its original ground levels, instead a minimum of 0.3m of topsoil will be placed and land recontoured to create a free draining and stable site. The site will also be re-grassed with an appropriate species, to allow for routine farming activities and the grazing of light stock to take place on the rehabilitated land.

The rehabilitation plan proposed will work to remediate the proposed quarry extension site post extraction, returning grass cover as consistent with the surrounding landscape, and restoring the land to be fit for alternate future rural land uses. Although the topography of the site will not be returned to its pre-extraction levels, this is not considered an adverse outcome. This change in ground level will not be highly visible from external viewpoints and



is considered acceptable as a reflection of the productive nature of rural areas and common practice in quarry rehabilitation.

6. CONCLUSIONS

In terms of the landscape character and values of the area, the proposal is expected to introduce a low magnitude of change to the receiving environment. The greatest change will be to the topographical character of the area, due to the required excavation and recontouring of the land as part of both quarrying excavation and rehabilitation. Given the widespread existing screening planting and subject to the mitigation measures proposed however, this topographical change will be largely screened from external viewpoints in the wider landscape. It is therefore considered that the effects on landscape character and values will be **less than minor.**

The proposal aligns well with the relevant statutory provisions of the RMA and both the operative and partially operative district plans. In terms of visual amenity, the proposal is screened from the majority of viewpoints in the receiving environment, with screening only expected to increase as juvenile shelterbelts mature and the mitigation measures outlined are implemented. With the implementation of the proposed mitigation measures and limited visibility of the proposal, any effects on visual amenity are assessed to be **Less than Minor**.



APPENDIX TWO - LANDSCAPE AND VISUAL IMPACT ASSESSMENT FIGURES

WHEATSHEAF QUARRY EXTENSION FOR WINSTONE AGGREGATES

25 June 2024 PROJECT NO. 2024_022 REVISION C



WHEATSHEAF QUARRY - SULLIVAN BLOCK

Project no: 2024_022

Document title: APPENDIX 2 - LVIA FIGURES

Revision: C

Date: 25 JUNE 2024

Client name: WINSTONE AGGREGATES

Author: Jeremy Ross I Dave Compton-Moen

File name: 2024_022 Winstone Wheatsheaf Quarry LVIA Figures_C

DOCUMENT HISTORY AND STATUS

REVISION	DATE	DESCRIPTION	BY	REVIEW	APPROVED
Α	30/04/2024	DRAFT ISSUE	JR	DCM	DCM
В	21/06/2024	RESPONSE TO COMMENTS	NK	НВ	DCM
С	25/06/2024	RESPONSE TO COMMENTS	HB		



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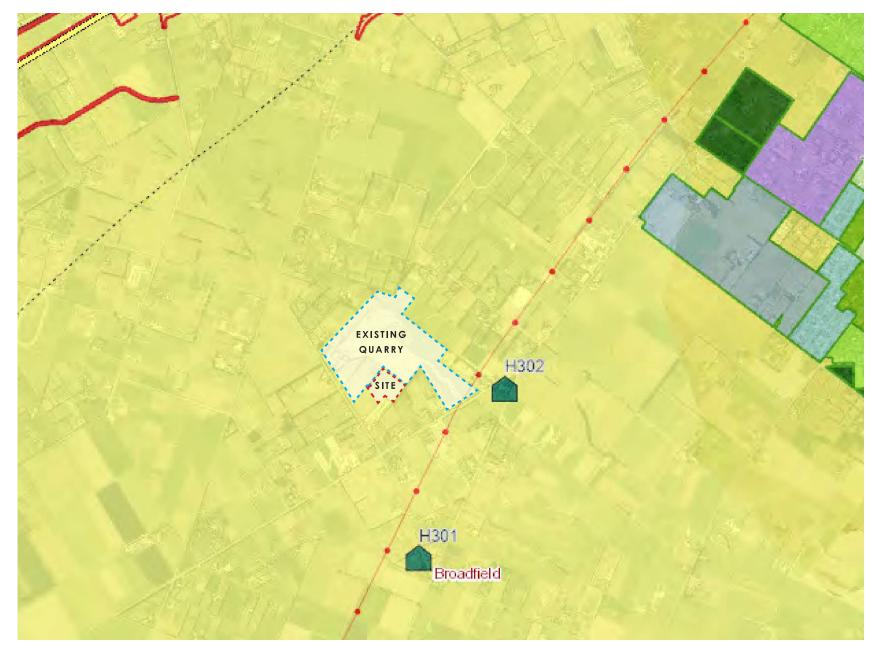
10/245 St Asaph Street Christchurch 8011

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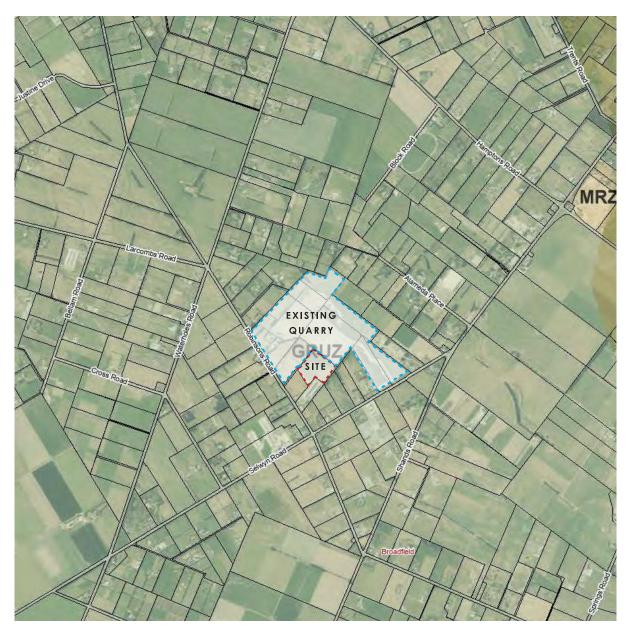


Living 1
Living 2
Living 3
Living X

Living West Melton (North)

Business 3
Inner Plains
Outer Plains

A. SELWYN DISTRICT PLAN MAP (1:20,000 @ A3) Map / image source: https://eplan.selwyn.govt.nz



A. PARTIALLY OPERATIVE SELWYN DISTRICT PLAN MAP

Map / image source: https://eplan.selwyn.govt.nz

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

CONTEXT -PARTIALLY OPERATIVE SELWYN DISTRICT PLAN MAP

2024_022 - PROPOSED WHEATSHEAF QUARRY EXTENSION

Map Legend

Appeals



Zones

- Large lot residential zone
- Low density residential zone
- General residential zone
- Medium density residential zone
- Settlement zone
- General rural zone
- Neighbourhood centre zone
- Local centre zone
- Large format retail zone
- Town centre zone
- General industrial zone
- Special purpose zone

Township Boundaries



Indicative Summit Road Protection Act Extent



Key Activity Centres



Surrounding TA's

LEGEND

CHARACTER PHOTOS

- Quarry extension proposal site
- B Bunding used to screen existing quarry
- 701 Robinsons Road Residential Character
- 679 Robinsons Road Residential Character
- Robinsons Road-Selwyn Road Intersection
- Existing Wheatsheaf quarry entrance

VIEWPOINT LOCATIONS

- VP1 View north from 108 Selwyn Road
- VP2- View east from 679 Robinsons Road
- VP3 View northeast from 668 Robinsons Road
- VP4- View east from 693 Robinsons Road
- VP5- View west from 32 Selwyn Road
- VP6- View northwest from 90 Selwyn



A. LOCATION PLAN (4,000@A3)

Map / image source: Canterbury Maps

0 60m 110m 170m 220m 1:4,000@A3



This image shows the proposed quarry extension site. It is currently a vacant grassed paddock enclosed on all sides to some extent by existing planting.



B This image shows one of the boundaries of the existing quarry, and the bund used to screen quarrying activities from external viewpoints.



This image shows a typical rural residential property front, featuring various vegetation types and scales for screening. Low semi-permeable fencing delineates the property boundary, setback from the roadside stormwater channel.



This image shows one of the residential dwellings neighbouring the proposal site.

Screening vegetation and fencing prevents views of living spaces from the street, while shelterbelts integrate with those of neighbouring properties.



This image depicts the Robinsons Road - Selwyn Road intersection, which features a dense shelterbelt and additional planting where there are gaps.



This image shows the entrance to the current quarry site, sloping gently downward with surrounding earth bunds. A parking area designated for smaller vehicles can be seen, which is separated from the access road frequented by heavy vehicles.

Shelterbelts (macrocarpa, pine) are located along the property front.

LANDSCAPE AND VISUAL IMPACT ASSESSMENT



PROPOSED SITE (SCREENED BY SHELTER BELT)

A. IMAGE LOCATION



B. EXISTING VIEW

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

VP1 - VIEW NORTH FROM 108 SELWYN ROAD 2024_022- PROPOSED WHEATSHEAF QUARRY EXTENSION

Image captured on Sony ILCE-6000 Focal length of 50mm Date: 27 March 2024 11:28am Height of 1.7 metres -43.596802"S,172.463749"E 5 photos merged together in Photoshop



PROPOSED QUARRY EXTENSION SITE ACCESS TRACK

PROPOSED SITE (SCREENED BY JUVENILE SHELTER BELT)





B. EXISTING VIEW

LANDSCAPE AND VISUAL IMPACT ASSESSMENT VP2 - VIEW EAST FROM 679 ROBINSONS ROAD

Image captured on Sony ILCE-6000 Focal length of 50mm Date: 27 March 2024 11:32am Height of 1.7 metres -43.593963"S, 172.460747"E 5 photos merged together in Photoshop



PROPOSED SITE (SCREENED BY PLANTING)



B. EXISTING VIEW

LANDSCAPE AND VISUAL IMPACT ASSESSMENT
VP3 - VIEW NORTHEAST FROM 668 ROBINSONS ROAD

2024 022 - PROPOSED WHEATSHEAF QUARRY EXTENSION

Image captured on Sony ILCE-6000 Focal length of 50mm Date: 27 March 2024 11:36am Height of 1.7 metres -43.594822"S, 172.461501"E 5 photos merged together in Photoshop



PROPOSED SITE (SCREENED BY PLANTING)



B. EXISTING VIEW

LANDSCAPE AND VISUAL IMPACT ASSESSMENT VP4 - VIEW EAST FROM 693 ROBINSONS ROAD

2024 022 - PROPOSED WHEATSHEAF QUARRY EXTENSION

Image captured on Sony ILCE-6000 Focal length of 50mm Date: 27 March 2024 11:43am Height of 1.7 metres -43.593039"S, 172.460009"E 5 photos merged together in Photoshop



PROPOSED SITE (SCREENED BY PLANTING)



B. EXISTING VIEW

LANDSCAPE AND VISUAL IMPACT ASSESSMENT
VP5 - VIEW WEST FROM 32 SELWYN ROAD

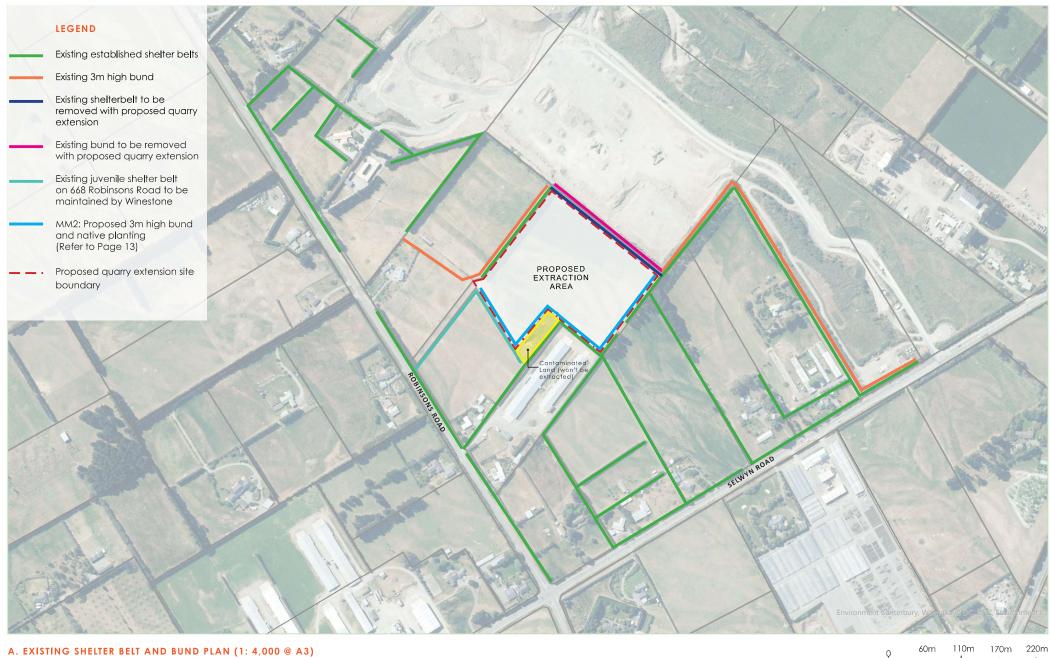
2024_022 - Proposed wheatsheaf Quarry Extension

Image captured on Sony ILCE-6000 Focal length of 50mm Date: 27 March 2024 11:45am Height of 1.7 metres -43.593074"S, 172.472299"E 5 photos merged together in Photoshop



PROPOSED SITE (PARTIALLY SCREENED BY PLANTING)





Map / image source: Canterbury Maps

1:4,000 @ A3

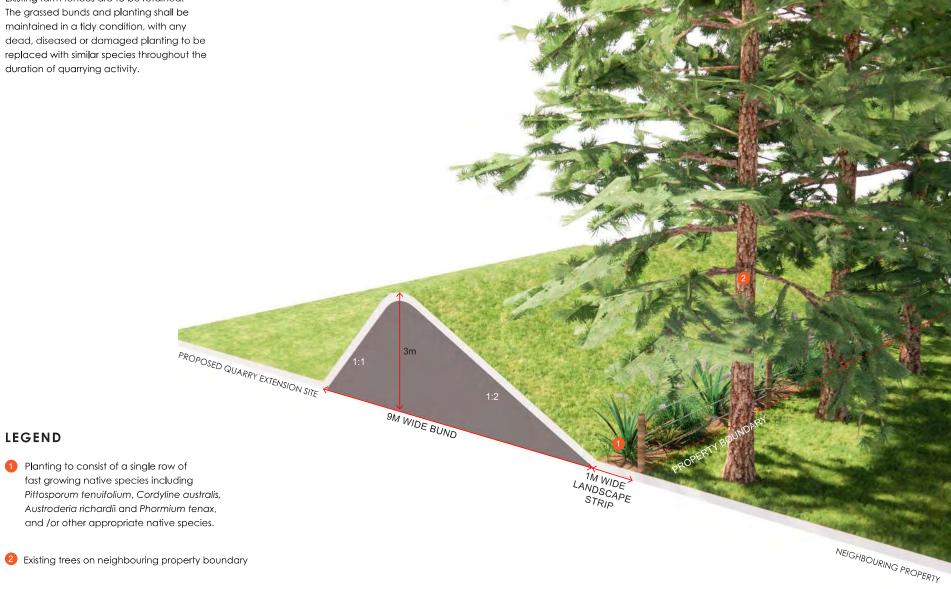
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

MITIGATION - EXISTING AND PROPOSED SCREENING

2024_022 - PROPOSED WHEATSHEAF QUARRY EXTENSION



Existing farm fences are to be retained. The grassed bunds and planting shall be maintained in a tidy condition, with any dead, diseased or damaged planting to be replaced with similar species throughout the duration of quarrying activity.



2 Existing trees on neighbouring property boundary