

Landscape Memorandum

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Attention: Des Corrie-Johnston

Company: C J Industries Ltd

Date: 30th April 2024

From: Liz Gavin Senior Principal Landscape Planner

Message Ref: Fast Track List Application

Summary of landscape and visual amenity effects

The following provides an assessment of landscape and visual effects of the CJ industries Peach Island Road gravel extraction application. The land affected by the application relates to the alluvial plains located between Motueka River West Bank Road (**MRWB Road**) and the Motueka River¹. Activities include gravel extraction, temporary stockpiling of extracted gravel (prior to its transportation to CJ Industries' separate processing site); and the reinstatement of site levels through placement of clean fill following gravel extraction. The gravel is excavated in tranches no greater than 1600m², with the land progressively revegetated to minimise effects and allow for sustainable productive landuse of the site on completion of quarrying.

The project proposes that quarrying would occur over a 15-year period. During that period there will be some changes to landscape character that will be visible from the MRWB Road as well as houses located in the visual catchment adjacent to this. These affected views are mostly on the western side of the valley, but also from a small number on the hillslopes above the Motueka Valley Road (east of the site), with Stage 1 being adjoining MRWB Road and closest to viewers, having a reduced level of existing mitigation in this view. The visual and landscape effect of changes to these views will be mitigated by delaying quarrying in Stage 1² and enabling time for mitigation planting located in Stage 1 area to grow and provide an appropriate level of screening from MRWB Road and neighbouring properties on the foothills

Appendix 1, Figure 1 shows the Site Plan with Landscape Mitigation. Figure 2 provides a restoration plan that increases native vegetation in part of the site, resulting in enhanced biodiversity values³. In response to feedback from submitters, a number of improvements have been made to the initial mitigation recommendations, including refining plant species in the River Terrace

¹ See Appendix 1 context map.

² Stage 1 mitigation planting needs to be an average height of 5m and achieve an 80% canopy cover before Stage 1 is quarried

³ Appendix 1 Figure 2: River Terrace Restoration

Restoration Plan⁴ and the use of more pest-resistant species for landscape mitigation of the wider site⁵.

In terms of surrounding residential views of land that looks across or down on to the site from adjoining foothills, I conclude that with mitigation measures outlined above, the effect will be no greater than **low-moderate**. In RMA terms, this equates to a minor adverse effect.

The stockpile, located in the Stage 2 area, is proposed to be screened by an existing berm and mitigation planting from views to the east; and from mitigation planting north and south. It will sit 1m below existing ground level and will be up to 4m high. This means that 1m of stockpile will be visible above the 2m high (existing) berm from the closest distance of 180m when on MRWB Road⁵. I note that there are already some established trees located along the base of this berm that will provide upfront mitigation. Without added mitigation this stockpile would have a **low** (adverse) visual effect. This will be added to with interplanting within the shelterbelts to create increased screening, that over 5-7 years will reduce the visibility of the stockpile area to a **very low adverse visual effect** from MRWB Road.

On completion of quarrying activities, the rural character and amenity values currently on site associated with an agricultural land use and its simple geometric patterns will be retained. There will be an enhancement of natural character and visual amenity values associated with the restoration of the Stage 1 alluvial area as outlined in Figure 2, as well as an increase in native plants in other areas of the site interplanted into the shelterbelts, that will also contribute positively to the natural character and amenity values within the site.

Overall, the project will have a **low-moderate** (adverse) effect on visual amenity associated with the stockpile and excavation activity. As no more than 1600m² excavated area would be allowed to be open at any one time, the location of this effect will progress through the site, depending on the location of excavation activity.

There will be an overall **low-moderate** adverse effect on landscape character and amenity values considering the type of rural activity that could occur within the site and the permitted activities that can occur associated with horticultural activity (1m disturbance across the whole site); and quarrying (50m³ within a one-year timeframe).

On completion of excavation activity and once restored, this effect will change to an overall **low positive effect** on landscape character and amenity values by completion of consent.

Signed



Senior Principal
Landscape Planner
Boffa Miskell Ltd

⁴ Appendix 1 Figure 2.

⁵ Appendix 1, Figure 1.

References

Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022

APPENDIX 1:

Context Map

Figure 1: Site Plan with Landscape Mitigation

Figure 2: Stage 1 River Restoration



APPENDIX 1 C J INDUSTRIES FAST TRACK APPLICATION

22ND APRIL 2024





LEGEND

- SITE BOUNDARY
- - -> ACCESS INTO THE SITE
- 20m SETBACK FROM STOPBANK

- ADJOINING MARGINAL CONSERVATION STRIP
- STOCKPILE + SERVICE AREA
- EXTRACTION PIT
- MAXIMUM SIZE = 80 x 20m
- PROPOSED EARTH BUND
- 3m HIGH

MITIGATION PLANTING
- NEW TREES TO BE PLANTED MINIMUM OF 5m FROM BOTTOM OF STOPBANK

(AREA A) ALL NATIVE SPECIES
- PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW (ONLY NATIVES), PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

(AREA B) NO POPULUS 'CROWS NEST'
- PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW MINUS POPULUS 'CROWS NEST', PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

(AREA C) INFILL UNDERSTOREY PLANTING
- PLANTING TO BE A MIX OF THE UNDERSTOREY SPECIES, PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

TALL TREES

EUCALYPTUS GLOBOIDEA - WHITE STRINGYBARK
DACRYCARPUS DACRYDIODES - KAHIKATEA
POPULUS 'CROWS NEST' - CROWS NEST POPLAR
POPULUS NIGRA - LOMBARDY POPLAR

UNDERSTOREY

ALECTRYON EXCELSUS - TITOKI
ARISTOTELIA SERRATA - MAKOMAKO
CARPODETUS SERRATUS - PUTAPUTAWETA
COPROSMA ROBUSTA - KARAMU
CORDYLINE AUSTRALIS - CABBAGE TREE
DODONAEA VISCOSA - AKEAKE
KUNZEA ERICOIDES - KANUKA
LEPTOSPERMUM SCOPARIUM - MANUKA
MELICYTUS RAMIFLORUS - MAHOE

MYRSINE AUSTRALIS - MAPOU
MYOPORUM LAETUM - NGAIO
PHORMIUM TENAX - SWAMP FLAX
PITTOSPORUM EUGENIODES - LEMONWOOD
PITTOSPORUM TENUIFOLIUM - KOHUHU
PLAGIANTHUS REGIUS - RIBBONWOOD
PSEUDOPANAX ARBOREUS - FIVE FINGER
SOPHORA MICROPHYLLA - KOWHAI

MAINTENANCE & ESTABLISHMENT PLAN

TIMING

1. Planting to be undertaken between the months of April and October to take advantage of optimum rainfall and climatic conditions best suited to plant growth.

PREPARATION

2. The contractor shall carry out the works to protect the existing subsoil structures and prevent excessive soil structure damage. Ensure at least 50mm of topsoil present.
3. Prepare planting area by spraying planting zone areas as required to reduce initial weed and grass growth.

4. Plants should be of the species on the drawings. Plants shall be vigorous, well established, hardened off, of good form consistent with the specie or varieties, not soft or forced, free from disease and insect pests, with large healthy root systems and no evidence of being restricted or damaged. The trees shall have a single leading shoot.

SETOUT

5. The planting hole shall be twice the root ball width and twice the root ball depth. Planting holes, except for wetland plants, shall be loosened for at least 75mm each side of the under plant prior to planting.

6. Each plant shall be watered thoroughly after planting, ensuring that the moisture has penetrated to the full depth of the root ball (initial watering is also important to settle the soil around the roots).

PEST MANAGEMENT

7. To minimise rabbit damage to plants apply telgrow foliage spray after planting and as required after heavy rain and install cardboard, biodegradable plant guards around plants.

8. Plant pests to be controlled by continual weeding and regularly monitored for a period of three years or until plant specimens become fully sufficiently established.

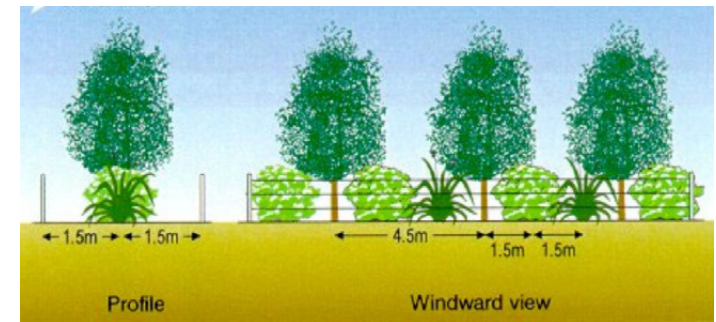
9. All planting next to stock paddocks to be fenced off.

MAINTENANCE

9. General maintenance shall include watering, weed removal, plant trimming, cultivation, insect and disease control, checking stakes and ties, pruning and other accepted horticultural operations to ensure normal and healthy plant establishment and growth.

10. Any plants that fail are to be replaced and planted during the next available planting season as defined above.

SHELTERBELT FORMATION TO BE USED

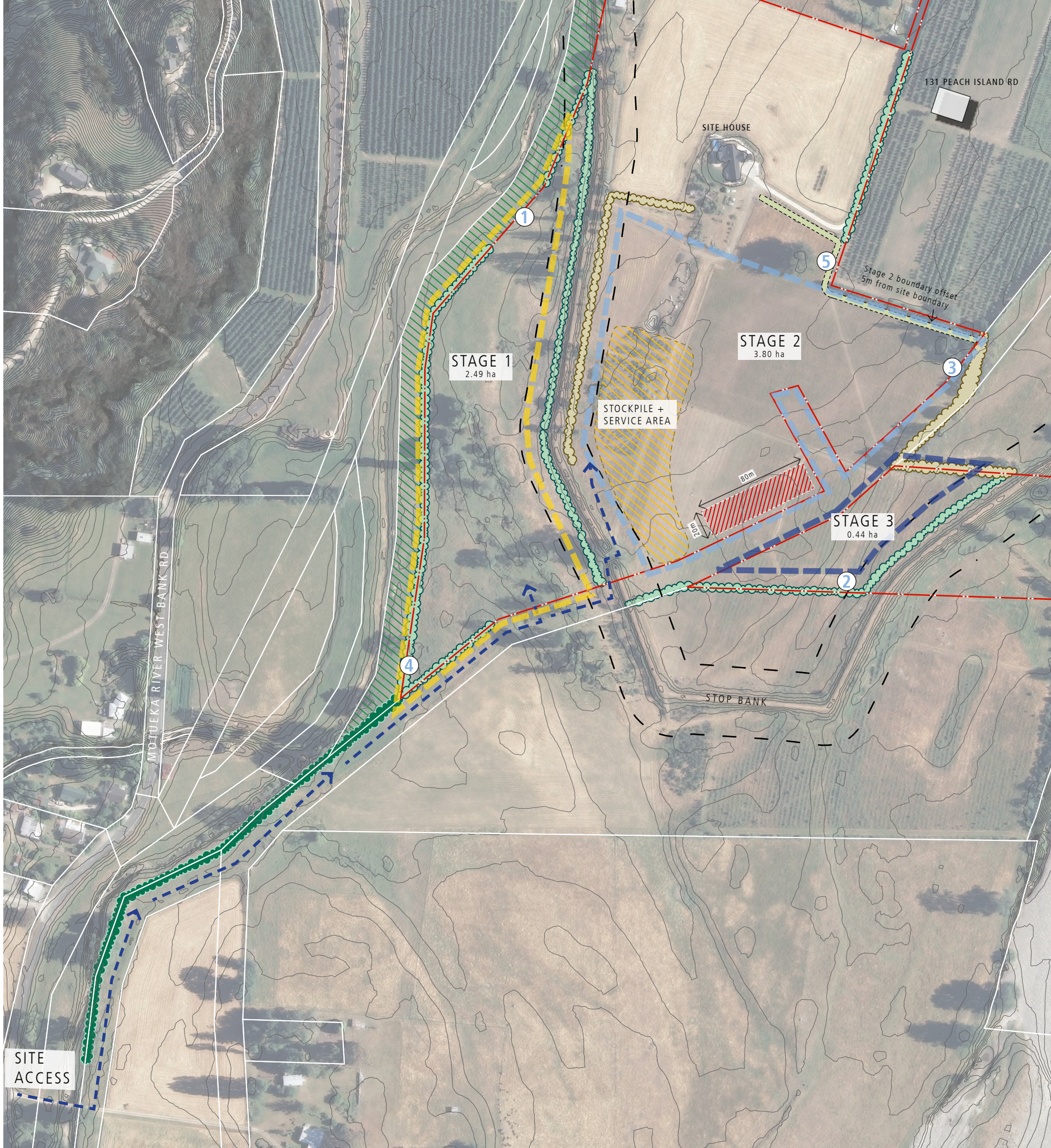


EXTRACTION SITES STAGE BOUNDARIES

- STAGE 1 BOUNDARY
- STAGE 2 BOUNDARY
- STAGE 3 BOUNDARY

BORE LOCATIONS

- 1 24543 Piezo1 15.89 masl
- 2 Proposed Replacement Bore 2
- 3 24545 Piezo3 15.9 masl
- 4 24546 Piezo4 16.93 masl
- 5 Proposed Location of Additional Monitoring Bore



Note: Contours shown are existing. Earthworks will be reinstated to be consistent with these contours

SITE PLAN WITH LANDSCAPE MITIGATION **FIGURE 1**

LEGEND

- SITE BOUNDARY
- PROPOSED FENCING FOR LIVESTOCK
- 20m SETBACK FROM STOPBANK
- ADJOINING MARGINAL CONSERVATION STRIP
- STAGE 1 EXTRACTION SITE BOUNDARY

MITIGATION PLANTING

- NEW TREES TO BE PLANTED MINIMUM OF 5m FROM BOTTOM OF STOPBANK



(AREA A) ALL NATIVE SPECIES

- PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW (ONLY NATIVES), PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.



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PLAGIANTHUS REGIUS - RIBBONWOOD
PSEUDOPANAX ARBOREUS - FIVE FINGER
SOPHORA MIRCROPHYLLA - KOWHAI

STAGE 1 RIVER TERRACE RESTORATION: TOTAL AREA = 1.35ha

NATIVE GRASSES / SEDGES

- PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW, PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT GRADE SOURCED LOCALLY.

COPROSMA PROPINQUA - MINGIMINGI
CORTADERIA RICHARDII - SOUTH ISLAND TOETOE
PHORMIUM TENAX - NZ FLAX



NATIVE TREES

- PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW, PLANTED AT 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

CORDYLINE AUSTRALIS - CABBAGE TREE
DACRYCARPUS DACRYDIOIDES - KAHIKATEA
HOHERIA ANGUSTIFOLIA - NARROW-LEAVED LACEBARK
PENNANTIA CORYMBOSA - KAIKOMAKO
PLAGIANTHUS REGIUS - LOWLAND RIBBONWOOD

STAGE 1 PASTURE LAND: TOTAL AREA = 1.66ha

- TO BE FENCED AND KEPT CLEAR OF NEW PLANTING



Note: Contours shown are existing. Earthworks will be reinstated to be consistent with these contours

STAGE 1 RIVER TERRACE RESTORATION

FIGURE 2