

APPENDIX 1: LANDSCAPE AND VISUAL IMPACT ASSESSMENT METHODOLOGY

The landscape and visual impact assessment considers the likely effects of the proposal in a holistic sense. There are three components to the assessment:

- 1. Identification of the receiving environment and a description of the existing landscape character, including natural character;
- 2. The landscape assessment is an assessment of the proposal against the existing landscape values;
- 3. The visual impact assessment is primarily concerned with the effects of the proposal on visual amenity and people, evaluated against the character and quality of the existing visual catchment.

The methodology is based on the Te Tangi a Te Manu - <u>Aotearoa New Zealand Landscape Assessment Guides</u> (July 2022)

1.0 LANDSCAPE ASSESSMENT

1.1 LANDSCAPE DESCRIPTION AND CHARACTERISATION

Landscape attributes fall into 3 broad categories: biophysical features, patterns and processes; sensory qualities; and spiritual, cultural and social associations, including both activities and meanings.

- Biophysical features, patterns and processes may be natural and/or cultural in origin and range from the geology and landform that shape a landscape to the physical artefacts such as roads that mark human settlement and livelihood.
- Sensory qualities are landscape phenomena as directly perceived and experienced by humans, such as the view of a scenic landscape, or the distinctive smell and sound of the foreshore.
- Associated meanings are spiritual, cultural, or social associations with particular landscape elements, features, or areas, such as tupuna awa and waahi tapu, and the tikanga appropriate to them, or sites of historic events or heritage. Associative activities are patterns of social activity that occur in particular parts of a landscape, for example, popular walking routes or fishing spots. Associative meanings and activities engender a sense of attachment and belonging.

Describing the landscape character is a process of interpreting the composite and cumulative character of a landscape, i.e. how attributes come together to create a landscape that can be distinguished from other landscapes. International best practice in characterisation has two dimensions of classification: the identification of distinctive types of landscape based on their distinctive patterns of natural and cultural features, processes and influences; and their geographical delineation. The characterisation of a landscape is not to rank or rate a landscape, as all landscapes have character, but determine what landscape attributes combine to give an area its identity, and importantly to determine an area's sensitivity, resilience or capacity for change.

Natural	Near-natural	Semi-natural (including pastoral agriculture and exotic forests)		Agricultural (arable and intensive cropping)		Near-cultural	Cultural
Very high- pristine	High	Moderate High	Moder	ate	Moderate-low	Low	Very Low-nil

Table 1: Continuum of Natural Character



1.2 LANDSCAPE VALUES

Following the descriptive phase of landscape assessment, an evaluative phase is undertaken whereby values or significance is ascribed to the landscape.

Where Planning Documents have identified Outstanding Natural Features or Landscapes, the objectives, policies and rules contained within the plan are used as the basis for landscape significance or value, and it is these values which the proposal is assessed against. Where there is some uncertainty of the landscape value, such as when the District Plan has a broad description of an Outstanding Natural Landscape (ONL), but it is not site specific, or the site neighbours an ONL, it is often necessary to complete an assessment against the values of the District Plan for completeness sake. Most district plans have policies or objectives which are relevant to Landscape and Natural Character if proposed in a rural or sensitive environment.

An accepted approach, where the landscape value of the site is not identified in the District Plan under Section 6(b) of the RMA, is to use criteria identified in Wakatipu Environmental Society Inc. & Ors v QLDC [2000] NZRMA 59 (generally referred to as the Amended Pigeon Bay criteria). The assessment criteria have been grouped into 3 broad categories or 'landscape attributes' which are to be considered:

- 1. Biophysical elements, patterns and processes;
- 2. Associative meaning and values including spiritual, cultural or social associations; and
- 3. Sensory or perceptual qualities.

2.0 VISUAL ASSESSMENT METHODOLOGY

In response to section 7(c) of the RMA, an evaluation is undertaken to define and describe visual amenity values. As with aesthetic values, with which amenity values share considerable overlap, this evaluation was professionallybased using current and accepted good practice. Amenity values are defined in 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."* The visual assessment looks at the sensitivity of receptors to changes in their visual amenity through the analysis of selected representative viewpoints and wider visibility analysis. It identifies the potential sources for visual effect resulting from the Proposal and describes the existing character of the area in terms of openness, prominence, compatibility of the project with the existing visual context, viewing distances and the potential for obstruction of views.¹

The visual impact assessment involves the following procedures:

Identification of key viewpoints: A selection of key viewpoints is identified and verified for selection during
the site visit. The viewpoints are considered representative of the various viewing audiences within the
receiving catchment, being taken from public locations where views of the proposal were possible, some
of which would be very similar to views from nearby houses. The identification of the visual catchment is
prepared as a desktop study in the first instance using Council GIS for aerials and contours. This

¹ Reference: NZILA Education Foundation - <u>Best Practice Guide – Landscape Assessment and Sustainable</u> <u>Management/ Best Practice Guide – Visual Simulations</u> (2.11.2010)



information is then ground-truthed to determine the key viewpoints and potential audience. Depending on the complexity of the project a 'viewshed' may be prepared which highlights the 'Theoretical Zone of Visual Influence' (TZVI) from where a proposal will theoretically be visible from. It is theoretical as the mapping does not take into account existing structures or vegetation so is conservative in its results.

- Assessment of the degree of sensitivity of receptors to changes in visual amenity resulting from the proposal: Factors affecting the sensitivity of receptors for evaluation of visual effects include the value and quality of existing views, the type of receiver, duration or frequency of view, distance from the proposal and the degree of visibility. For example, those who view the change from their homes may be considered highly sensitive. The attractiveness or otherwise of the outlook from their home will have a significant effect on their perception of the quality and acceptability of their home environment and their general quality of life. Those who view the change from their workplace may be considered to be only moderately sensitive as the attractiveness or otherwise of the outlook will have a less important, although still material, effect on their perception of their quality of life. The degree to which this applies also depends on factors such as whether the workplace is industrial, retail or commercial. Those who view the change whilst taking part in an outdoor leisure activity may display varying sensitivity depending on the type of leisure activity and a greater sensitivity to those commuting. For example, walkers or horse riders in open country on a long-distance trip may be considered to be highly sensitive to change while other walkers may not be so focused on the surrounding landscape. Those who view the change whilst travelling on a public thoroughfare will also display varying sensitivity depending on the speed and direction of travel and whether the view is continuous or occasionally glimpsed.
- Identification of potential mitigation measures: These may take the form of revisions/refinements to the
 engineering and architectural design to minimise potential effects, and/or the implementation of landscape
 design measures (e.g. screen tree planting, colour design of hard landscape features etc.) to alleviate
 adverse visual effects and generate potentially beneficial long-term effects.
- Prediction and identification of the effects during operation without mitigation and the residual effects after the implementation of the mitigation measures.

3.0 EFFECTS METHODOLOGY

Analysis of the existing landscape and visual environment is focused upon understanding the functioning of how an environment is likely to respond to external change (the proposal). In terms of the receiving environment, this is the environment upon which a proposed activity might have effects. It is permissible (and often desirable or necessary) to consider the future state of the environment upon which effects will occur, including:

- the future state of the environment as it might be modified by the utilisation of rights to carry out permitted activities
- the environment as it might be modified by implementing resource consents that have been granted at the time a particular application is considered, where it appears likely that those resource consents will be implemented.

The assessment evaluates the resilience of the existing character, values or views and determines their capacity to absorb change. The proposal is assessed in its 'unmitigated' form and then in its mitigated form to determine the likely residual effects. The analysis identifies opportunities, risks, threats, costs and benefits arising from the potential change.



Assessing the magnitude of change (from the proposal) is based on the Aotearoa New Zealand Landscape Assessment Guidelines (July 2022)² with a seven-point scale, being:

VERY LOW / LOW / LOW- MODERATE / MODERATE / MODERATE-HIGH / HIGH / VERY HIGH

The guidelines provide the following table which is a useful comparison for analysis of the magnitude of change (NZILA) with the likely effects (RMA). Table 2: Change and Effects comparison table, comparison, Te Tangi a te Manu Aotearoa New Zealand Landscape Guidelines, Page 151.

		SIGNIFICANT
LESS THAN MINOR MIN	NOR MI	ORE THAN MINOR
VERY LOW LOW LO	DW-MOD MODERATE MOD	-HIGH HIGH VERY HIGH

The Aotearoa New Zealand Landscape Guidelines however do not quantify 'what' the Magnitude of Change is. Below is a guide to how we have assessed the Magnitude of Change for this proposal:

- (a) Very Low the change is negligible or are not readily discernible. For example the proposal may not be visible to the receptor or the change in character is negligible when compared to the permitted baseline and/or receiving environment.
- (b) Low the change is discernible but do not adversely affect the viewer experience. For example it may be possible for the receptor to see the proposal but the effects are not considered adverse due to the quality of the current view or the oblique nature of the view.
- (c) Moderate Low the change is discernible and start to adversely affect viewer experience.
- (d) Moderate the change is discernible and have an effect on the quality of the view but with the main 'view qualities' still intact.
- (e) Moderate-High the change is discernible and changes the quality of the existing view, potentially with the loss of views.
- (f) High the change is discernible and there is a loss of views or the changes greatly affect the quality of the view so that the character of existing view is fundamentally changed.
- (g) Very High the change is discernible and there is a total loss of views or the changes significantly affect the quality of the view so that the character of existing view is fundamentally changed.

In determining the extent of adverse effects. taking into account the sensitivity of the landscape or receptor combined with the Magnitude of Change proposed, the level of effects is along a continuum to ensure that each effect has been considered consistently and in turn cumulatively.

² https://nzila.co.nz/media/uploads/2022_09/Te_Tangi_a_te_Manu_Version_01_2022_.pdf



This continuum may include the following effects (based on the descriptions provided on the Quality Planning website – Determining the Extent of Adverse Effects³):

- Indiscernible Effects No effects at all or are too small to register.
- Less than Minor Adverse Effects Adverse effects that are discernible day-to-day effects, but too small to adversely affect other persons.
- **Minor Adverse Effects** Adverse effects that are noticeable but will not cause any significant adverse impacts.
- More than Minor Adverse Effects Adverse effects that are noticeable that may cause an adverse impact but could be potentially mitigated or remedied.
- **Significant Adverse Effects that could be remedied or mitigated** An effect that is noticeable and will have a serious adverse impact on the environment but could potentially be mitigated or remedied.
- Unacceptable Adverse Effects Extensive adverse effects that cannot be avoided, remedied or mitigated.

4.0 PHOTOGRAPHY METHODOLOGY

All photos are taken using a SONY ALPHA A7 II digital camera with a focal length of 50mm. No zoom was used. In the case of stitched photos used as the viewpoint images, a series of 4 portrait photos were taken from the same position to create a panorama. The photos were stitched together automatically in Adobe Photoshop to create the panorama presented in the figures.

Reference: NZILA Education Foundation - <u>Best Practice Guide – Landscape Assessment and Sustainable</u> <u>Management/ Best Practice Guide – Visual Simulations</u> (2.11.10)

5.0 STATUTORY DOCUMENTS

Relevant statutory documents in terms of Landscape Values and Visual Amenity are referred to in the LVIA.

³ https://www.qualityplanning.org.nz/node/837