RE: CONCESSION APPLICATION 53660 – Request for further information –

16 March 2018 **Attachment 1**

Visual Impact Assessment from Landscape Architect

McCullough's Creek Hydropower Scheme, Whataroa, West Coast.

Visual Impact Assessment Report_Rev2

Gary Marshall, 14 March 2018

To be read in conjunction with:

- *Appendix A_ McCulloughs Creek Hydropower Scheme, Whataroa, West Coast.*

CONTENTS

1. Introduction
   - 1.1. Overview
   - 1.2. Methodology
2. Site Location and Context
   - 2.1. Local Area
   - 2.2. The Site
3. Statutory Context
   - 3.1. Resource Management Act
   - 3.2. Conservation Act
   - 3.3. Reserves Act 1977
   - 3.4. West Coast Regional Policy Statement
   - 3.5. Westland District Plan
4. Proposed Development
5. Visual Catchment and Viewing Audience
6. Landscape and Visual Effects
7. Assessment of Landscape and Visual Effects
8. Assessment Against Relevant Statutory Criteria
9. Conclusion

Appendix A_ McCulloughs Creek Hydropower Scheme, Whataroa, West Coast.

1. INTRODUCTION

1.1. Overview

The following Landscape and Visual Effects Assessment has been prepared by Gary Marshall, Registered Landscape Architect, for No.8 Limited in support of their proposal to construct a hydropower scheme at McCullough's Creek, Whataroa.

1.2. Methodology

The following methodology was adopted in the preparation of this landscape and visual assessment:

- Desktop assessment of development proposal, statutory context and likely locations of representative viewpoints.
- Project team site visit:
  - To observe landscape character and values;
  - To assess the extent and scale of proposed development, potential landscape and visual effects, visual catchment, viewing audience and possible mitigation strategies; and
  - Ground truth viewpoint locations and take representative viewpoint photos.
- Preparation of draft Landscape and Visual Assessment report, including photo montages for proposed development.
- Preparation of final Landscape and Visual Assessment report.

2. SITE CONTEXT AND LOCATION

2.1. Local Area

The subject site is located on McCullough's Creek, Whataroa. McCullough's Creek is a deeply incised gully located 15 km inland from the West Coast of the South Island on the eastern edge of the Whataroa River Valley; a large enclosed alluvial plain that spans approximately 10 km across from east to west and 15 km from north to south. The Whataroa River is a braided river system that flows in a northwesterly direction toward the Tasman Sea, through pasture land flats with swathes of vegetation revealing the underlying flood patterns, with distributed farm houses, farm buildings, shelterbelts, specimen trees, roads, power lines and farm tracks. Small lakes, lagoons and wetland areas are also present in this catchment.

The surrounding mountains are thickly clad in native forest ranging from Kāmahi forest on steep slopes, to stands of rātā of similar ages on spurs, and scattered rimu emergent on slopes in the south and scrub and young forest on recent flats, stream beds[1].

In summary, the landscape character of the local area can be described as a low density alluvial plain and rural landscape with high amenity resulting from the high natural character of the Whataroa River system and the thickly vegetated mountains enclosing the Whataroa valley.

Refer Appendix A1 for Site Location; A2 for Whataroa Regional Landscape Context; A3 for Whataroa Landscape Context and A4 for Site Context; and A5 for a selection of photos demonstrating the above elements and characteristics.

2.2. The Site

The subject site can be broadly described in two parts; the alluvial floodplain associated with the Whataroa River system and McCullough's Creek and the incised gully and forested mountains associated with the Whataroa Scenic Reserve.

The alluvial plain is composed of pasture and indigenous riparian forest dominated by tree tutu andincludes other soecies such as patē, wineberry, tree fuchsia/kōtukutuku and pigeonwood.

---

[1] *Ecological Assessment for the Proposed McCullough's Creek Hydropower Project, Whataroa, Westland. Wildlands, 22-09-17.*

The steeply incised gully and mountain system is covered in dense native forest of podocarp-hardwood forest dominated by kāmahi, with southern rātā in the upper elevations and emergent podocarp - kahikatea, miro and rimu in lower elevations.

Refer Appendix A6 for a 1:5,000 site plan of the proposed development overlaid on an existing aerial.

3. STATUTORY CONTEXT

The proposed project is located on public conservation land in Whataroa Scenic Reserve, Waitangi Forest, and McCulloughs Creek Marginal Strip, which are all administered by the Department of Conservation. The relevant planning and resource consent documents in relation to the assessment of landscape and visual effects of this proposal are:

- Resource Management Act 1991 (RMA);
- Conservation Act 1987 (CA)
- Reserves Act (RA)
- West Coast Regional Policy Statement (WCRPS)
- West Coast District Plan (WCDP)

Refer Appendix A7 for planning map.

3.1. Resource Management Act

Part II (Purposes and Principles) of the Resource Management Act 1991 (RMA) addresses landscape considerations. Section 6 (Matters of national importance) stipulates that all persons exercising functions and powers under the Act shall recognise and provide for:

> *(a) "the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
>
> *(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:"*

The water intake and sections of the penstock pipes, access tracks and cableway will be located above 300m above sea level, passing through an area identified in the Westland District Plan as an Outstanding Natural Landscape (ONL). Regard should therefore be given to the clauses identified above.

3.2. Conservation Act

The Conservation Act (CA) has been developed *"to promote the conservation of New Zealand's natural and historic resources".*

The access track along McCulloughs Creek is located on land zoned marginal strip. It is therefore appropriate to give consideration to Part 4A - Marginal Strips of the CA. The sections relevant to this LVA are:

24C Purposes of marginal strips

Subject to this Act and any other Act, all marginal strips shall be held under this Act -

(a) for conservation purposes, in particular -

(iv) the protection of the marginal strips and their natural values.

3.3. Reserves Act

The Reserves Act (RA) has been developed *"to make further provision for their acquisition, control, management, maintenance, preservation (including the protection of the natural environment), development, and use, and to make provision for public access to the coastline and the countryside".*

The encroachment of the proposal into the Scenic Reserve mean that it is appropriate to give consideration to Section 19: Scenic Reserves.

Section 19: Scenic Reserves

(1) It is hereby declared that the appropriate provisions of this Act shall have effect, in relation to reserves classified as scenic reserves

(a) for the purpose of protecting and preserving in perpetuity for their intrinsic worth and for the benefit, enjoyment, and use of the public, suitable areas possessing such qualities of scenic interest, beauty, or natural features or landscape that their protection and preservation are desirable in the public interest;

(2) It is hereby further declared that every scenic reserve classified for the purposes specified in subsection (1)(a) shall be so administered and maintained under the appropriate provisions of this Act that

(a) except where the Minister otherwise determines, the indigenous flora and fauna, ecological associations, and natural environment and beauty shall as far as possible be preserved, and for this purpose, except where

the Minister otherwise determines, exotic flora and fauna shall as far as possible be exterminated.

3.4. West Coast Regional Policy Statement (WCRPS)

The character of the McCulloughs and Whataroa landscape determine that it is appropriate to give regard to Chapter 6 - Heritage; and Chapter 9 - Habitats and Landscape of the WCRPS .

Chapter 6 - Heritage

Objective 6 of the WCRPS aims *"to avoid, remedy or mitigate actual or potential adverse effects of resource use, development or protection on heritage and archaeological sites and values that contribute to the West Coast's distinctive character and sense of identity."*

Heritage Policy 6.1 aims to *"Promote the identification and protection of heritage values of the region"*, which include:

c) Places or areas of intrinsic, recreational or amenity value or of visual appeal.

3.6.2 Chapter 9 - Habitats and Landscape

Chapter 9 of the WCRPS (Habitats and Landscapes) indicates that, due to their inclusion in the Department of Conservation estate, most of the outstanding natural features and landscapes on the West Coast are already afforded adequate protection, however the WCRPS also identifies adverse effects on the natural character of outstanding natural features and landscapes arising from subdivision, use, and development as relevant issues relating to the Region.

3.5. Westland District Plan (WDP)

The introduction to the Westland District Plan outlines the Council's vision for the district, with features of the district including *"a distinctive and internationally recognised dramatic coast-to-alpine environment and vistas which are accessible for the enjoyment of both inhabitants and visitors."*

Section 3.10 – Landscapes

The key objectives of Section 3.10 are as follows:

Objective 3.10.1 - *To ensure development does not impinge on the integrity of landscapes in Westland.*

Objective 3.10.2 - *To maintain and protect the existing scenic and open and diverse character of Westland District, dominated by natural dynamic processes.*

Objective 3.10.3 - *To ensure that land uses, buildings and development have regard to the natural landscapes in which they are located or seek to be located.*

In seeking to protect and manage the distinctive landscapes which are characteristic of the Westland District, the WDP does not describe the process for deciding which natural features and landscapes are outstanding. However, the Plan does provide examples of outstanding landscapes within the district to help determine what could be considered "outstanding". Land above 300m is included in the listed examples of outstanding natural landscapes.

Section 4.8 - Landscapes Policies

The WDP has the following landscape policies:

> Policy A - *The continuity of the mountains to sea landscape in Westland particularly in the south of the District and significant landscape elements shall be protected by ensuring development takes into account the landscape setting.*
>
> Policy C - *Council will protect significant landscape areas, including natural features, in the District.*

4. PROPOSED DEVELOPMENT

4.1. Proposed Development Overview[2]

The proposal for the 1,890 kW McCullough's Creek Hydropower Project will divert water from McCullough's Creek approximately 520 metres above sea level and direct it through approximately 2,700m of above ground pipelines (penstock pipelines) to the powerhouse approximately 120 meters above sea level, after which the water will be returned to McCullough's Creek via a concrete discharge tailrace. The site will be accessed via a gravel access track from Whataroa State Highway. During the construction phase, support towers and cables will be installed and laydown areas for construction material will be created.

As part of the construction, a foot access track will run along the penstock pipe alignment to approximately 400 metres above sea level where an lookout area will be established, resulting in a 1.7 kilometres of track traversing the valley to the proposed intake site. This will enable easier access into Whataroa Scenic Reserve and Waitangi Forest for pest animal and weed control, ecological monitoring, and public enjoyment.

Although the exact locations of the access road, cableway, pipeline, penstock, intake, powerhouse and tailrace are to be confirmed on site, any variation will not affect the visibility of the proposal enough for the purposes of this LVA .

[2] *For a detailed description of the proposal and components refer to 20171020 Whataroa HPP - EIA revision 6.*

Construction of the cableway, foot access track, pipeline, penstock, and desander will require clearance of approximately 2,935m^2 of indigenous forest along a two metre-wide corridor. If canopy trees are cleared and substantial gaps are opened up in the canopy this will have a significant adverse effect on indigenous vegetation. The applicant intends to minimise damage to canopy vegetation during construction of the cableway, pipeline and penstock, and foot access track by avoiding destruction of trees >30 cm dbh as much as possible. It is understood that through the use of low-impact methods will be used for maintenance of the infrastructure (i.e. manual clearance of vegetation with hand tools and chainsaws, not mechanical excavation), the cableway and penstock will be installed without noticeable canopy gaps being created and the indigenous vegetation allowed to regenerate as much as possible, the canopy cover is likely to remain visually intact. Once construction is complete, land maintenance should be similar to that required for a typical tramping track.

Restoration planting is not required following removal for the construction laydown material; the indigenous vegetation will be left to regenerate naturally from local seed sources, as this will ensure that ecologically inappropriate species are not introduced to the project area.

For the purposes of this Landscape and Visual Effects Assessment, only those elements visible from Whataroa Highway are considered, as outlined in the table below:

Component	Description	Colour
Access Alignment	2.5 m wide unsealed, gravel access track.	Grey/black
Powerhouse	Steel 2 car garage	Black/grey
Penstock Pipe	HDPE Plastic	Black matt
Penstock Pipe	Glass Reinforced Plastic	Black
Penstock Pipe	Steel	Black/grey
Cableway: Support Tower; Laydown Area; Cable and Clamp (removed after construction)	Galvanised steel, steel cable, steel	Grey

4.2. Access Alignment

A permanent 2.5 meter wide unsealed vehicle access track similar to a typical farm race will be constructed to connect to the Whataroa State Highway. The track will run parallel to the state highway for approximately 120m before turning right, where it will run parallel to McCullough's Creek towards the Powerhouse for 300m through pasture, and then for

another 400m through cleared indigenous vegetation. The forest type in this area is tutu forest, which is subject to regular natural disturbance through flooding so the overall disturbance is expected to be minor. [3]

4.3. Powerhouse

The powerhouse is a 5 metre tall metal clad building with a footprint approximately 7 x 6 metres. It will be constructed approximately approximately 5 - 10 metres above the normal water level and above the 100-year flood level. A transformer will be built adjacent to the powerhouse and this will feed an 11 kV line to connect the scheme to the Westpower network. The powerline will be buried in a conduit beside the access road until it reaches the marginal strip where it will be installed on poles to interface with the Westpower system. A concrete tailrace will be constructed from the power house to allow water to flow back into McCulloughs Creek.

4.4. Penstock Pipes

Approximately 2,700m of above ground pipelines (penstock pipes) will be installed between the intake and power house and will be anchored with a combination of stakes and concrete anchors. The proposed width of the penstock footprint is 2.0 metres during construction and 1.5 metres during operation. The penstock supports are spaced at 12 metre centres and the supports and thrust blocks are 0.75 meters wide. A permanent 0.75 metre wide foot access track, similar to a typical Department of Conservation track, will be created along this alignment for construction and ongoing operation and maintenance of the infrastructure. It will also provide public access to Whataroa Scenic Reserve and Waitangi Forest. Understorey vegetation would be removed to construct the access and would be allowed to regenerate post-construction.

The penstock Pipes are in three parts; a 625 mm diameter high-density polyethylene (HDPE) pipe which will run for approximately 1,800m from the intake to the primary ridgeline before it tapers to a 550 mm diameter glass fibre reinforced plastic (GRP) pipe and runs down the ridge for approximately 550 meters toward the powerhouse. 300m from the power house the penstock pipe tapers to a 475 mm diameter steel pipe.

4.5. Cableway: Support Tower, Laydown Areas, Cable and Clamp (removed after construction)

A temporary aerial cableway will be constructed through the forest from the powerhouse up the ridgeline to an elevation of approximately 350 meters above sea level. The cableway will

---

[3] *Ecological Assessment for the Proposed McCullough's Creek Hydropower Project, Whataroa, Westland. Wildlands, 22-09-17. Construction of the road is expected to have a minor adverse effect on indigenous vegetation in the Reserve.*

be used to carry construction materials and equipment along the pipeline/penstock alignment. The construction access clearing will be between 1.5 to 2.0 metres wide. Construction of the supporting towers and thrust blocks will require vegetation clearance, however canopy vegetation will be avoided as much as possible. The support towers will be between 5 to 10 metres tall, and will be supported by guy ropes attached to trees and dead-man anchors. A number of intermediate supports secured to trees will be installed, to guide the cable along the penstock alignment and allow for changes in slope and direction. The support towers will be of a height that is the comparable, or lower than, the existing forest canopy. Once construction is complete the cableway will be removed and indigenous vegetation will be left to regenerate.

Construction laydown areas will be created at the support towers. This will require the clearance of 100m^2 of non-canopy vegetation at the lower site and 50m2 at the upper site.

4.6. In addition to *Appendix A6; see also Appendix A8 for images of the project components and Appendix A9 for sectional views of the proposal.*

5. VISUAL CATCHMENT AND VIEWING AUDIENCE

5.1. Visual Catchment

The extent of visibility of the site is limited to views from the Whataroa Highway.

5.2. *Refer Appendix A10_Viewpoint Locations and A11 through A13 for Viewpoint Visual Catchments.*

5.3. Viewing Audience

The viewing audience is likely to consist:

- Local residents; and
- Tourists and visitors to nearby attractions such as Franz Josef Glacier.

In both cases, it is likely that the views of the proposed development will be from a moving vehicle.

6. LANDSCAPE AND VISUAL EFFECTS

6.1. Overview

The extent of the visual catchment of the proposed development was investigated as a desktop exercise and then ground truthed by project team members during site visits. Three representative viewpoints were selected.

6.2. Viewpoint 01_ Whataroa Highway South

Viewing Audience

Local residents and tourists and visitors to nearby attractions.

Context

The view is taken from the Whataroa Highway adjacent to the entrance to the access track. The foreground includes the Whataroa Highway; where the proposed access is to be located there is a relatively small area of pasture enclosed by riparian vegetation to the north and forested mountains to the south. The middle ground has distributed shelter belts / specimen trees. The southern alps are to the east and north in the background of the view. The view will be the same during and after construction.

Landscape Character

A low density alluvial plan and rural landscape with high amenity resulting from the high natural character of the Whataroa River system and the thickly vegetated mountains enclosing the Whataroa valley.

Visual Effects

The access track of the proposal will be clearly visible in the foreground of the view. No other elements of the proposed development will be visible from this viewpoint. The location and scale of the track relative to the rural character of the landscape mean the proposal will have Low visual effect.

Landscape Effects

The proposed development will introduce a new unsealed gravel track into the landscape. The track will be similar to a typical farm race and in keeping with the existing rural character. As such, the proposed accessway will have a low effect on the existing landscape values.

Landscape Mitigation Measures

The materiality and colour of the access track will be the same or similar to other access tracks in the Whataroa landscape, which is of low reflectivity and in keeping with the local landscape character.

Summary of Effects

In summary, the effects on the landscape character and values are low.

6.3. Viewpoint 02_ Whataroa Highway

Viewing Audience

Same as viewpoint 01.

Context

The view is from the Whataroa Highway looking directly up the McCullough's Creek gully. The foreground includes the Whataroa Highway. The middle ground is composed of pasture with associated farm fences, gates, a specimen tree to the left and a partial shelterbelt to the north. The background of the view is characterised by densely forested steep mountain slopes.

Landscape Character

Alluvial plain and rural landscape with high amenity resulting from the high natural character of the thickly vegetated mountains enclosing the Whataroa valley.

Visual Effects

During construction the cableway and support towers, laydown areas, clamp and cables will be partially visible through the vegetation. The most signficant visual effect are likely to come from light reflecting off the support towers, clamp and cable, which will contrast with the natural character of the dense vegetative cover. It is also possible that the penstock pipeline, associated with the accessway and powerhouse will be visible through the vegetation during construction. Once construction is complete, the cableway is removed and the native vegetation has had a chance to regenerate it is unlikely that the proposed development will be visible from this viewpoint. The relative scale of the proposed development relative to the surrounding vegetation mean the proposal will have low to moderate visual effect during construction and a Negligible effect after construction.

Landscape Effects

The proposed development will introduce new constructed elements in a landscape with high natural value. However the scale of the elements relative to the landscape context are small

and discrete. As such, the proposed shed will have a low to moderate effect on the existing landscape values during construction and a Negligible effect on the existing landscape values after construction.

Landscape Mitigation Measures

In addition to the limited vegetation removal (i.e. avoiding destruction of trees >30 cm dbh), the recommended landscape mitigation measures for the proposed development are to ensure that the colour and reflectivity of all materials and surfaces are of dark and recessive tones, such as matt black or dark grey, including the support towers, cableway and clamp.

Summary of Effects

In summary, the effects on the landscape character and values are low to moderate during construction and negligible after construction.

6.4. Viewpoint 03_ Whataroa Highway Now

Viewing Audience

Same as viewpoint 01.

Context

Same as viewpoint 02.

Landscape Character

Same as viewpoint 02.

Visual Effects

Same as viewpoint 02.

Landscape Effects

Same as viewpoint 02.

Landscape Mitigation Measures

Same as viewpoint 02.

Summary of Effects

Same as viewpoint 02.

7. ASSESSMENT OF LANDSCAPE AND VISUAL EFFECTS[4]

7.1. A landscape is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations. Landscape and visual impacts result from natural or human induced change in the distinctive combination of attributes that collectively give a landscape its character. Typically these changes result from modification to landform or vegetation cover and/or the introduction of new structures, activities or facilities into the landscape.

7.2. Landscape value is derived from the associative meanings and importance that people and communities, including mana whenua, attach to particular landscapes and landscape attributes. or 'sense of place' of an area.

7.3. Landscape effects include effects on natural features such as landform, vegetation and hydrology as well as impacts on infrastructure and settlement patterns, historic and cultural features as well as the overall character of the landscape.

7.4. Adverse effects upon landscape can arise when a landscape change is more than minor and/or imposes a discontinuity or discord with the existing and/or proposed (i.e. district plan outcomes) character and values. Visual effects form a component of landscape effects. This assessment analyses the potential visual effects that may be generated by the proposal and is based on:

- The character and context within which the development would be viewed;
- The proportion of the proposal, including building, earthworks and access that will be visible,
- The observer's position relative to the landscape and objects being viewed;
- The number and type of viewers and their location in relation to the site;
- The sensitivity to which the character and values of a particular landscape are susceptible to change;
- The vulnerability to which the landscape character and values are at risk from a particular type of change;
- The potential to avoid, remedy or mitigate those changes that are deemed to be more than minor; and

[4] *The information from this section were derived from two primary sources:*

1. *NZILA Best Practice Note: Landscape Assessment and Sustainable Management 10.1; and*
2. *Evidence prepared by Bridget Gilbert Landscape Architecture Limited*

- The timeframes associated with the change and the establishment of any mitigation measures such as planting over the short term, medium term and long term.

7.5. Visual effects are ranked as follows:

Very High_ Corresponds to a situation where the proposed development will comprise a significant adverse effect on the character or quality of the existing visual landscape or outlook;

High_ Corresponds to a situation where the proposed development is likely to comprise an adverse effect on the character or quality of the existing visual landscape or outlook;

Moderate to High_ Corresponds to a situation where the proposed development is likely to comprise an adverse effect on the character or quality of the existing visual landscape or outlook albeit not to the extent expected in relation to a "high" visual effects ranking;

Moderate_ Corresponds to a situation where the proposed development may comprise an adverse effect on the character or quality of the existing visual landscape or outlook;

Moderate to Low_ Corresponds to a situation where the proposed development may comprise an adverse effect on the character or quality of the existing visual landscape or outlook albeit to a lesser extent to that expected in relation to a "moderate" visual effects ranking;

Low_ Corresponds to a situation where the proposed development is unlikely to comprise an adverse effect on the character or quality of the existing visual landscape or outlook; and,

Negligible_ Corresponds to a situation where the proposed development is barely discernible or will not comprise an adverse effect on the character or quality of the existing outlook.

7.6. Effects in relation to landscape values are rated as follows:

Very High_ Corresponds to a situation where the proposed development will cause a significant adverse effect on the character or quality of the existing landscape values;

High_ Corresponds to a situation where the proposed development is likely to cause an adverse effect on the character or quality of the existing landscape values;

Moderate to High_ Corresponds to situation where the proposed development is likely to cause an adverse effect on the character or quality of the existing landscape values albeit not to the extent expected in relation to a "high" landscape values effects ranking;

Moderate_ Corresponds to a situation where the proposed development may cause an adverse effect on the character or quality of the existing landscape values;

Moderate to Low_ Corresponds to a situation where the proposed development may cause an adverse effect on the character or quality of the existing landscape values albeit to a lesser extent to that expected in relation to a "moderate" landscape values effects ranking;

Low_ Corresponds to a situation where the proposed development is unlikely to cause an adverse effect on the character or quality of the existing landscape values; and,

Negligible_ Corresponds to a situation where the proposed development is barely discernible with respect to effects in relation to landscape values.

8. ASSESSMENT AGAINST RELEVANT STATUTORY CRITERIA

8.1. The key themes addressed in the statutes of relevance to an assessment of landscape and visual effects for this site can be summarised as follows:

- Maintain, protect and preserve the:
  - Outstanding natural landscapes from inappropriate subdivision, use, and development (RMA, WDP)
  - Natural character (RMA), values (CA marginal strip), and environment, or landscape (SR, WDP);
  - Scenic interest, beauty (SR, WDP), amenity value and visual appeal (WCRPS);
  - Distinctive character and sense of identity (WCRPR); and
  - Character dominated by natural dynamic processes (WDP).
- Any adverse effect of development does not impinge on the integrity of the landscape (WDP) and where development does occur it has regard to the natural landscapes in which they are located and avoids, remedies or mitigates any adverse effects (WDP, WCRPC)
- Provision for, and protection of, public access to countryside (RA) and recreational values (WCRPR)

8.2. Maintain, protect and preserve the character of the landscape, including outstanding natural landscapes

The assessment of landscape and visual effects demonstrates that the development will not generate adverse landscape effects once construction is complete, and that while there may some moderate to low effects generated during construction, these will be of a temporal nature of up to one years duration. The two cases which deserve additional explanations are the encroachment into the ONL, and the access track along the marginal strip.

As noted above, the water intake and sections of the penstock pipes, access tracks and cableway will be located higher than 300m above sea level, meaning they will pass through an area identified in the Westland District Plan as an ONL. The visual effects of most components of the project, such as the penstock pipes and access tracks, are likely to be negligible; however the visual effect of the cableway, in particular the support tower above 300m elevation, is likely to be moderate to low during construction. The primary effect will arise from the introduction of a man made material into a landscape with high natural character. The mitigation strategies proposed, particularly the limited vegetation removal and the use of dark and recessive tones, will both ensure that any visual effects on the landscape will be minimised. This in combination with the temporary nature of the activity mean that the character and values of the landscape, including outstanding natural landscapes, will be maintained and protected.

As described above, the first 420m of the access track will be visible from the Whataroa Highway and will run through the marginal strip of McCullough's Creek. The access track is considered appropriate for the following reasons:

- The visible section of the access track passes through modified pasture and is of a character analogous to a farm access track; and
- The marginal strip is within a floodplain, which reflects the dynamic processes of disturbance resulting from regular flooding. The access track does not fundamentally alter this underlying dynamic process.

While the development is likely to be visible during construction from the Whataroa Highway, the limited visibility (including the number of places the development is visible from; the visibility of the development itself; and the nature of viewing the development from a moving vehicle) and the temporal nature of any potential visual effects, combined with the proposed mitigation strategies to lessen the visual impact of steel structures mean that the effects on the *natural character, natural values, the natural environment, landscape, scenic interest, beauty, amenity value, visual appeal, distinctive character and sense of identity* will be low to negligible.

8.3. Appropriate Development

The proposed development is considered appropriate because:

- The footprint of the proposed development is physically small and visually discrete, relative to the scale and expanse of the local landscape context;
- Any adverse effects that are generated as a result of the proposal will be mitigated through the use of dark and recessive tones; and

- With the exception of the access track, any adverse effects arising from the proposed development will be of a temporal nature; and
- The access track is in keeping with the rural landscape character of the local landscape context and do not fundamentally alter this underlying dynamic process.

8.4. Public Access + Recreational Values

As noted above, part of the proposed development involves the creation a 1.7km long access track, *similar to a typical tramping track,* from the Whataroa Highway through to the intake site and lookout approximately 400 metres above sea level. With the exception of the access track discussed above, the track will have a negligible visual effect on the landscape. In providing public access into Whataroa Scenic Reserve and Waitangi Forest the proposed development will be giving effect to a core intent of the Reserves Act *" to make provision for public access to the coastline and the countryside" and the* Westland District Plan which seeks to make the *"dramatic coast-to-alpine environment and vistas... accessible for the enjoyment of both inhabitants and visitors."*

9. CONCLUSION

9.1. In conclusion, the proposed development will see the introduction of several man made artifacts into a site defined by the alluvial floodplain associated with the Whataroa River system and McCullough's Creek, and a steep ridgeline and gully system covered in dense native forest, which itself sits within a local landscape characterised by a alluvial plain and low density rural landscape with high amenity resulting from the high natural character of the Whataroa River system and the thickly vegetated mountains enclosing the Whataroa valley. The proposed development will be visible during construction with the access track being the only permanent visual record of the development from the Whataroa Highway once development is complete. The scale and temporal nature of the proposed development could have some moderate to low visual impacts during construction however these will be of a temporal nature and the enduring visual effect of the proposed development will be negligible.

9.2. The assessment of the landscape and visual effects demonstrates that the proposed development will be low to moderate during construction and negligible after construction.

Gary Marshall | Registered Landscape Architect

RESILIO STUDIO