1. Description of Proposal

1.1 Description of Site

The subject property is located on McLay Road, Dunback, and sits within the Waihemo (Shag) River valley on the foothills and south-west side of the Razorback Range. This range rises to approximately 600m. The property has a total site area of 1,264.7 hectares and is held in five certificates of title as follows:

- OT14B/446
- OT2D/1021
- OT12B/100
- 728791
- 33901

The property currently comprises a sheep and beef breeding and finishing operation and as such is a mix of feed crops, and high-quality pasture on the flatter south western aspect of the property (approximately 160 hectares), with the balance being rougher, over-sown pasture lands. Scattered native shrubs and trees, in particular Matagouri, Coprosma, Kowhai and Cabbage tree, are also present. On the slopes of the main Razorback Range there are rocky outcrops and some significant swathes of indigenous bush and shrublands, concentrated within the gullies and shady slopes.

The wider general location is what would be considered a normal rural New Zealand environment comprising of sheep and beef farms, amenity and shelter plantings, and plantation forestry blocks. Directly on the eastern boundary of this property is Graymont Quarry and Limeworks.

1.2 Proposed Activity

The applicant, Ngai Tahu Forest Estates Limited (NTFE), is undertaking a Forest Offsetting programme under the Climate Change Response Act 2002. The Climate Change Response Act 2002 puts in place a legal framework to enable New Zealand to meet its international obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. To offset carbon emissions arising from the conversion of forest land to farmland in the Canterbury region, NTFE is undertaking a 10-year afforestation programme in Otago, which involves the conversion of around 7,500 hectares of farmland to establish 6,500 ha of Pinus radiata. To date NTFE have purchased 2,800 hectares for this purpose and now have a contract on the subject property.

While the property has a total area of 1,264.7 hectares, NTFE propose to plant out only around 890 hectares of the property as illustrated in Figure 10 of Mike Moore's attachments. Approximately 182ha of farmland will be excluded from planting along with 155ha of the steeper area with natives on the Razorback Range area and 37ha for riparian and boundary setbacks

In developing its forest estate, NTFE adheres to the guidelines set out in the New Zealand Environmental Code of Practice for Plantation Forestry 2007, and the New Zealand Forest Accord. However, the National Environmental Standards for Plantation Forestry (NES-PF) will largely supersede these, particularly in relation to the development and operational aspects of plantation forestry activities. This forest will be developed under the NES-PF.

The Planting Plan identifies a number of areas that will be excluded from development. These include areas that contain indigenous vegetation, rocky outcrops, limestone outcrops, steeper land and riparian margins. To address the landform and provide a more natural appearance, trees will be planted around the contour, as opposed to rows running up and down the slope. Planting setbacks will be in accordance with the NES-PF rules for boundary fences and watercourses.

Prior to planting, some land preparation work may be required although it will be minimal given the relatively clean nature of the property. This work will be carried out under the NES-PF and may involve some spraying and continued grazing of scattered scrub areas that do not fall within the Districts Plans definition of indigenous vegetation or bush. Clean pasture areas are generally sprayed around planting time and there are three options for this. The first option involves using a pre-plant aerial blanket kill spray (using glyphosate with some metsulphuron) to kill all grasses and other weeds, allowing the seedlings sufficient time to establish and grow without the risk of grass overcrowding. The second option is a post-planting aerial blanket release spray (using Valzine) to kill the existing pasture and provide a germination withholding time to allow the seedlings time to establish. The third option is also a post planting spot spray treatment using Valzine but only treats a 1.5m diameter spots centred on the planted seedlings. This option would have least visual impact, and will be used on the front faces, if not throughout the property.

With respect to roading, the plantation will be accessed from McLay Road and Limekiln Road. No work will be required on these roads during the development of the plantation. Any work required to facilitate harvesting of the forestry will be discussed with the road owner of the time. Given that harvesting will not occur until 25 to 30 years into the future, it is difficult to predict what the impact may be at this time.

With respect to internal roading, the applicant estimates that around 10-12km of roading would be required. While the alignments and locations of these tracks are as yet unknown, they will respond to operational imperatives and also landscape values by ensuring they do not run across steep slopes or visually prominent slopes.

Initially these tracks will be formed to a relatively narrow width and will be widened closer to the first rotation harvest (likely to be in the years 2045-2050). It is estimated that on average, the cut and fill per lineal metre for

roading is likely to be 4m^3/m, giving a total of around 40,000 – 50,000 m^3. There will also be additional earthworks required for skidders and potentially forwarders, but this is unknown at this stage.

The applicant currently uses two main types of logging, ground-based and cable harvesting. Ground-based logging typically uses skidders to drag trees from where they have been felled to a processing site (skid or landing sites). The logs are then cut into lengths, stacked in piles according to their length and grade, and then loaded onto trucks for cartage to customers. Cable logging uses a hauler (a machine rigged with drums of wire rope and a pole), and a system of pulleys and a tail anchor, to drag trees off the steeper slopes. Generally, this is set up to drag logs to a skid site, but at times there may be an extra step where the trees are dragged from the hauler to the landing with a skidder (two-staging).

However, given that harvesting is some 25 to 30 years away in the future, changes in technology are likely to see new harvesting technologies developed. These new techniques are likely to be safer and have less disruption on the ground cover.

As is normal with such ventures, planting will be progressively staged over a period of several years. At this time, the applicant intends to plant the first 300 ha in 2019/20 and remaining 650ha in 2020/21. In the meantime, the property will continue to be grazed.

1.3 Status of Activity

Waitaki District plan

This site is zoned “Rural Scenic” under the operative Waitaki District Plan. No other planning notations affect the site.

While forestry in this zone is listed under Rule 4.3.3 as a Discretionary Activity, it is in fact a **Restricted Discretionary activity**. Rule 4.4.3 (9) a) states that Council has reserved discretion over the following matters:

- Effects on indigenous vegetation and associated habitat
- Effects on landscape and visual amenity
- Provision of a management plan to avoid or mitigate erosion during Harvesting

The rule also notes that it is subject to the Rules 4.4.7 (4), 4.4.8, 4.4.9 and 4.5.2 that apply to any exotic tree planting. We can confirm that the planting will comply with the setbacks in Rule 4.5.2 or those that apply under the NES-PF at the time of planting.

In terms of Rule 4.4.7 (4), we can confirm that no exotic tree planting, will occur in the following areas:

a) Areas of significant indigenous vegetation and habitat of significant indigenous fauna identified on the Planning Maps and listed in Appendix C.

b) Within 20m of any lake, river, stream or wetland or within any wetland.

c) Above 900m in altitude.

d) within areas identified on the Planning Maps as an Outstanding Natural Landscape; or an Outstanding or Significant Natural Feature; or a Significant Coastal Landscape.

e) within an area of Otago skink habitat or Grand skink habitat as shown on Appendix J1.

We are unsure why Rule 4.4.8 has been referred to in Rule 4.3.3(9) given the *"effects on indigenous vegetation and associated habitat"* are matters over which discretion has been reserved and significant areas must be avoided under Rule 4.4.7(4). This seems somewhat contradictory and we have dealt with this rule in our assessment on the effects of the proposal on indigenous vegetation and associated habitat below.

We also note that Rule 4.4.9 requires a 15m set back from property boundaries (unless neighbours approval is received). The NES-PF reduces this to 10m. The applicant will comply with whatever rule is in place at the time of planting.

National Environmental Standard for Plantation Forestry.

The National Environmental Standards for Plantation Forestry (NES-PF) were published on 3 August 2017 and will commence on 1 May 2018. As a consequence, the NES-PF is currently not operative. However, the key point to note here is that by the time the proposed activity takes place, the NES-PF will be in place.

The NES-PF will apply to any forest of at least 1 hectare that has been planted specifically for commercial purposes and will be harvested. It will provide a consistent set of regulations for plantation forestry activities across the country. It covers 8 core plantation forestry activities, allowing these to be carried out as permitted activities subject to conditions to manage potential effects on the environment. These activities are as follows:

- afforestation (planting new forest)
- pruning and thinning-to-waste (selective felling of trees where the felled trees remain on site)
- earthworks
- river crossings

- forestry quarrying (extraction of rock, sand, or gravel within a plantation forest or for operation of a forest on adjacent land)
- harvesting
- mechanical land preparation
- replanting.

Of importance in the context of this application are Regulations 13 and 15. Regulation 13 states that "*Afforestation must not occur within a visual amenity landscape if rules in the relevant plan restrict plantation forestry activities within that landscape."* The District Plan states that much of the Rural Scenic Zone can be considered to contain "visual amenity landscapes" in terms of section 7 of the Act.

While we do not consider all of this property to be a section 7 landscape, the zone effectively gives it visual amenity status and hence Regulation 13 is likely to apply. Regulation 15 (3) identifies afforestation as a controlled activity if regulation 13 is not complied with. Regulation 15(4) states that control is *"reserved over the effects on the visual amenity values of the visual amenity landscape, including any future effects from plantation forestry activities."*

Hence, by the time the applicants come to develop this property as proposed, the activity will be a **controlled activity**, for which consent cannot be refused.

The District Plan can only contain more stringent rules than the NES in certain circumstances. These include rules in relation to outstanding natural features and landscapes, significant natural areas and a range of unique and sensitive environments. None of these circumstances apply here.

Also of relevance here, is the need to carry out a Wilding Tree Risk assessment under the NES. To be a permitted activity under the NES, afforestation must comply with regulation 11, which requires a "wilding tree risk" score of 11 or less for the afforestation area. If regulation 11 is not met (the wilding tree risk score is 12 or more), then afforestation under the NES-PF becomes a restricted discretionary activity with territorial authority and regional council discretion under regulation 17 restricted to—

(a) the level of wilding tree risk;
(b) the mitigation proposed to restrict wilding conifer spread, including the species to be planted;
(c) the effects on the values of the significant natural area or outstanding natural feature or landscape;
(d) the information and monitoring requirements.

This assessment has been carried out and is attached. It confirms that the vast majority of the property (identified as Blocks A and B on the associated plan) do not reach the risk score of 12. However, Block C, which encompasses the base of Razorback Range, has a wilding tree risk score of 12 and under the NES-PF would become a restricted discretionary activity. Block C achieves a score of 12 because the Applicant proposed to cease grazing on the adjoining 155 hectares of depleted scrubland and manage this

area for native bush reversion. The Applicant does not propose to continue grazing the 155 ha simply to achieve a permitted activity status under the NES. As a consequecence, the issue is addressed here under landscape effects to pre-empt any requirement under the NES in the future.

2. Assessment of Effects

2.1 Introduction

Because the proposal is a restricted discretionary activity, Council's consideration of the proposal is limited to the following matters:

- Landscape and Visual Amenity effects.
- Effects on indigenous vegetation and associated habitat.
- A management plan to address erosion at harvesting.

In undertaking that consideration, Section 104(2)(b) of the Act provides Council with a discretion to disregard the effects of an activity if a rule permits an activity with that effect. The baseline is established by determining what can occur as of right on the site and determining the existing lawfully established development of the site. Any effects from an activity that is equivalent to or less than that need not be regarded.

In terms of the indigenous vegetation clearance, we note that a number of the clearance rules do not apply within areas deemed to be improved pasture. Improved pasture is defined as:

> *"Improved pasture means an area of pasture where species composition and growth has clearly been modified and enhanced for livestock grazing by cultivation with or without associated burning, or by topdressing and over-sowing with or without associated burning, or by direct drilling, and where exotic improved pasture species dominate (i.e. where either the coverage of indigenous species or the number of species present, as estimated on a per hectare basis, does not exceed 30%). Improved pasture includes species such as ryegrass and clovers but excludes sweet vernal and browntop."*

This particular property is essentially all improved pasture so Rule 4.4.8.2(a) (which restricts clearance of more than 5000m^2 of indigenous vegetation) and Rule 4.4.8.2 (b) (which restricts clearance of more than 1000m^2 or more of tall tussock grassland) create a baseline for clearance within this property prior to it being developed for production forestry.

Being improved pasture land also has connotations for landscape values. Much of the visible front faces of the property are subject to a cultivation regime that involves ploughed paddocks followed by various crops and re-grassing. Hence the visual amenity values of the property are not static.

2.2 Landscape and Visual Amenity Effects

The explanation to the landscape objectives and policies of District Plan advises that Council commissioned a landscape study (the Waitaki Landscape Study, Densem 2004) to identify important landscapes of the District, being areas containing outstanding natural features and landscapes and areas containing significant natural features and landscapes. The explanation indicates that the boundaries to the Rural Scenic Zone include both outstanding landscapes and other landscapes considered important. The explanation states that the "*Rural Scenic Zone continues to be recognised as having particular visual amenity associated with the dominance of open-space vistas and landforms and the lack of intensive subdivision and landuse and the overall absence of buildings and structures. Therefore, much of the Rural Scenic Zone can be considered to contain "visual amenity landscapes" in terms of section 7 of the Act."*

This site is not located within an "outstanding landscape" in terms of section 6(b) of the Act so is potentially part of what the District Plan refers to as a "visual amenity landscapes". Such landscapes are not afforded any particular status under the Act. Section 7(f) requires local authorities "to have particular regard" to the "maintenance and enhancement of amenity values". This imposes a duty to be "on enquiry" but does not require applicants "to recognise and provide for" such values as Section 6 requires. In the context of this particular part of the Rural Scenic Zone, being located within the Palmerston Land Unit (Densem, 2004), this is important because the Densem study rightly noted that the area is '*a general working rural landscape'.* Hence there are many other competing issues within this landscape and it is not appropriate to retain the status quo purely for landscape reasons.

This has in fact been recognised in the explanation to the policy framework where it says that *"… it is expected that ongoing landuse change may occur in the Rural Scenic Zone provided it is appropriately managed. For example, dairying has been introduced in parts of the Omarama Basin with the availability of water for irrigation, and could well expand further in the Basin within the Rural Scenic Zone."* Had this Plan been written now, the reference to dairying could well have been a reference to forestry given New Zealand's commitments under the Climate Change Response Act 2002.

Mr Moore has identified the landscape values of the site and has assessed the proposal against these values, along with assessing the visual effects of the proposal from various viewpoints.

With reference to Densem's Waitaki Landscape Study, Mr Moore agrees that the subject hills are *"a visually prominent backdrop to the north-eastern side of the Waihemo Valley"* and "*'in general, have moderate – high perceptual natural character values*." These values are based on a coherent natural landform which is modified by agricultural land use (although with limited built

elements) that retains some indigenous vegetation cover and rugged bluff features in places. He has assessed the landscape values of the property as of moderate significance only, with only the more natural areas on the Razorback Range itself at the back of the property having higher significance.

Mr Moore has concluded that a blanket of exotic forest cover will result in the loss of the subtle variation in vegetation cover in response to the topography, and as a consequence, landform coherence (at the finer scale) and apparent naturalness will be diminished somewhat. While he considers this to be an adverse effect on landscape character, he does not rate the magnitude of this as more than minor however, because:

- *The forestry will not extend onto the higher elevations that form the ultimate backdrop to the valley landscape, nor will it extend into areas with significant indigenous forest or scrub cover.*
- *Seen in the wider landscape context, forestry is already part of the land use mosaic and will integrate comfortably.*

With respect to visual effects, Mr Moore believes that local residents are likely to have more attachment to the landscape than travellers but that given *"forestry is a characteristic rural land use that is already part of the wider landscape mosaic…sensitivity toward its introduction on this property is likely to be relatively low"*. In this context it is also important to note that much of the site is screened by landform when viewed from the public roads, the township of Dunback, and dwellings in the area. Mr Moore notes that visibility will be greatest from the higher, more distant viewpoints such as MacRaes and Stoneburn Roads but it will be seen as part of a wider panorama from these locations.

In this context, Mr Moore has concluded that the forest *"will integrate comfortably in this setting"* and that visual effects, while adverse, will be minor. Mr Moore considers that the effects will be adverse *"because the existing subtle variation in vegetation cover and associated finer scale landform legibility will be lost under the forest cover"*. However, he rates these effects as minor *"because the area is already modified by farming activity, because the afforestation will not result in edges with adjacent pasture that relate unacceptably with the underlying landform, and because it will not extend to the higher more rugged and natural backdrop slopes."*

Mr Moore also address the issue of harvesting, noting *"that during the harvesting phase, adverse visual amenity effects will be significant but that this will be a temporary situation of relatively short duration (approx. 4 – 5 years)".* Mr Moore notes that *"the effects of harvesting are an accepted part of forestry in the rural landscape"* and we would add that Councils generally accept construction type effects as less than minor on the basis that they are temporary and are necessary to enable the development. In our view a similar approach should be adopted here, as it does take time for the second phase of planting to 'bed in' and remedy the effects of harvesting.

While we generally concur with Mr Moore's position, from a planning perspective, which requires the proposal to be considered in the wider sense, we are of the view that the landscape effects of the proposal could in fact have some positive characteristics as opposed to being seen as adverse (albeit only in a minor way). The forest will provide a well-balanced and integrated contrast in the current landscape. More importantly, when the ethic of using forestry offsetting to address climate change issues is understood, it is likely to be viewed in a positive way by the community. The current landscape character is derived from it being pasture land, devoid of taller vegetation but this is probably not its original state. Hence it is essentially a cultural landscape. However, with New Zealand needing to move towards more resilient landscapes, where the provision of renewable resources, and the contribution made by the landscape to climate change and long-term sustainability becomes paramount, we are likely to see more balance in our landscapes, where one land use (farming for example) does not dominate.

When these factors are taken into account, we are of the view that any adverse landscape effects of the proposal, in the wider sense, are less than minor and will eventually be seen as positive by the community.

As we noted above, part of the property scores 12 on the Wilding Tree Risk assessment test that will eventually be required under the NES. As we are dealing with the development of the property now, we consider it appropriate to deal with this matter through this process. The NES restricts discretion to four matters as follows:

> (a) the level of wilding tree risk;
> (b) the mitigation proposed to restrict wilding conifer spread, including the species to be planted;
> (c) the effects on the values of the significant natural area or outstanding natural feature or landscape;
> (d) the information and monitoring requirements.

With respect to matter (a), we note that the risk is very low, with a score of 12 being the lowest score that is considered to be a risk. In this case, a score of 12 has only been reached because the affected area will not be grazed but will be left to regenerate in native vegetation. Regulation 11(5) requires that all wilding conifers must be removed at least every 5 years after afforestation where established in wetlands or significant natural areas—

> (a) on the same property on which the afforestation activity occurs; and
>
> (b) on any other adjacent properties under the same ownership or management as that of the property on which the afforestation activity occurs.

In this instance, this is all the mitigation that is considered necessary given that the guidelines note that Pinus radiata is a reluctant spreader above 6-700m. This will ensure that the natural values of this area will not be adversely impacted on by wilding spread.

As this is management approach is required by the NES regulations, it is unnecessary to include it as a consent condition. However, the applicant would not be concerned if this was part of any conditions of consent.

2.3 Effects on indigenous vegetation and associated habitat

As we have highlighted above, the property is relatively 'clean' modified pasture land that does not contain significant areas of native scrub or vegetation. The District Plan does not identify any areas of significant indigenous vegetation or habitat of significant indigenous fauna within the property. Nor does the property lie within the areas identified as Otago Skink or Grand Skink habitat. The Planting Plan identifies a number of areas (totalling close to 200ha) that will be excluded from development. Areas that do contain a concentration of indigenous vegetation along with rocky outcrops, limestone outcrops, and riparian margins are to be avoided by all activities associated with the proposal.

In terms of the general impact of the proposal, we have assessed the development against Rule 4.4.8.1 of the District Plan. We can advise that no indigenous bush, as defined by the District Plan, will be cleared. Indigenous bush is defined as meaning *"trees or shrubs in which species indigenous to that part of New Zealand are greater than 3m in height and are important in terms of structural dominance and coverage. For these purposes, structural dominance is when the indigenous species are in the tallest stratum and are visually conspicuous and coverage by indigenous species exceeds 20% of the total area."* Given the other definitions contained within the rule itself, this clearly does not apply to one or two individual specimens or scattered individual outlier plants.

The only area that could be identified as *"indigenous bush"* on this property is located in the north-east corner of the property, shown on Figure 10 of Mike Moore's attachments We note that a large part of this area has recently been assessed as a Significant Natural Area by Wildland Consultants in a 2014 study of the area, although it is not yet included in the District Plan as such.

This 155ha area, which includes all the area identified in the Wildlands Report, will not be planted and will be retired from grazing. We anticipate that the entire area will revert back to native bush and the existing grassland may be registered as a "permanent" indigenous Post-1989 forest under the ETS when it obtains bush status. This will provide a significant positive benefit in terms of natural character and ecological values of the property.

The other areas where there is potentially vegetation that may meet the definition of indigenous bush is within a number of the steep gullies found across property. These areas will not be planted.

Rule 4.4.8.2 identifies other sites where, over any five-year continuous period, no clearance or exotic tree planting is permitted. Each of those 'sites' (defined as a single certificate of title in the District Plan), is discussed below.

a) *more than 5000 square metres of indigenous vegetation generally, except where the vegetation clearance is carried out within, and for the purposes of, maintaining an area of improved pasture; or:*

Indigenous vegetation is defined as meaning *"a plant community in which species indigenous to that part of New Zealand are important in terms of coverage, structure and/or species diversity. For these purposes, coverage by indigenous species or number of indigenous species shall exceed 30% of the total area or total number of species present, where structural dominance is not attained. Where structural dominance occurs (that is indigenous species are in the tallest stratum and are visually conspicuous) coverage by indigenous species shall exceed 20% of the total area".* We are unaware of any areas where there would be half a hectare of such vegetation that would be affected by this proposal. However, if such areas did exist, we note that pastoral farming will continue on the property until it is planted. The areas to be planted are improved pasture as defined by the plan and hence such areas can be cleared for the purposes of maintaining pasture.

b) *more than 1000 square metres or more of tall tussock grassland communities of the genus Chionochloa except where the vegetation clearance is carried out for the purposes of maintaining improved pasture; or:*

We are not aware of tall tussock grassland communities of the genus Chionochloa within the property, defined in the plan as *"tall tussock grassland is characterised by a density of tussock plants in which it would be difficult to avoid either standing on or touching the tussocks when walking through the majority of the area."* Again, the areas to be planted are improved pasture as defined by the plan and hence any areas of tall tussock can be cleared for the purposes of maintaining pasture until such time as planting occurs.

c) *more than 500 square metres of generally closed canopy matagouri (Discaria toumatou) dominated indigenous shrubland that has a canopy height of greater than 1.5 metres and is associated with river margins, fans, ridges and bluffs; or:*

While there are patches of matagouri shrubland within the property, this rule is aimed at matagouri shrubland located in specific environments. Within this property, the planted areas will generally not be in *"river margins, fans,*

ridges and bluffs and it is unlikely that matagouri shrubland that has a 1.5m canopy *and "is characterised by:*

> *a. A generally closed canopy (although there will be open patches within the shrubland); and*
> *b. A difficulty avoiding either standing on, or touching, the shrubs when walking through the majority of the area;*

No planting will occur in such areas on this property.

d) more than 500 square metres of diverse indigenous shrubland, where 'diverse' means three or more shrub species and includes at least one of the following species: Sophora prostrata Porcupine scrub (Melicytus alpinus) Turpentine scrub (Dracophyllum longifolium, Dracophyllum uniflorum) Tauhinu (Ozothamnus leptophyllus) Coprosma sp. Hebe sp. Carmichaelia sp. Olearia sp. Mountain wineberry (Aristotelia fruticosa) Corokia cotoneaster

Such shrubland does not occur on this property.

We also confirm that there will be no clearance of any of the vegetation listed in Rule 4.4.8.3. Of the vegetation listed, the only possibility on this property is vegetation associated with limestone outcrops. These areas will be avoided by the proposal.

Overall, it is considered that any adverse impact on indigenous vegetation and associated habitat resulting from this proposal will be less than minor and will in fact most likely be positive in the long term.

2.4 Erosion Management

One of the discretionary matters listed in the plan relates to the provision of a management plan to avoid or mitigate erosion during harvesting. However, earthworks and erosion management are now issues that are dealt with by the NES-PF. From a District Council perspective, earthworks are a permitted activity under the NES (See regulation 23).

The NES-PF establishes a regulatory framework for earthworks that only involves Regional Councils. It establishes a permitted activity threshold and requires notice be given to Regional Councils where earthworks exceed a certain volume. At that volume (500m^2 of soil disturbance in any 3-month period), a forestry earthworks management plan is required that identifies the environmental risks associated with the earthworks and the measures to avoid, remedy or mitigate any adverse effects.

This regulatory framework utilizes an Erosion Susceptibility Classification tool to manage the risk of erosion from plantation forestry activities and which will be used to determine the consent category for forestry earthworks. The

Erosion Susceptibility Classification tool assesses environmental risks and will be used to identify the erosion risk of land as a basis for determining where a plantation forestry activity:

- is permitted, subject to certain conditions being met, or
- requires resource consent because it's on higher-risk land.

While this tool will not be available until May 2018, it will be available and in force when this property is developed. The tool divides the New Zealand landscape into 4 erosion categories that are colour-coded according to risk. Categories are based on the local:

- topography (steepness of the slope)
- dominant erosion process (like wind or water)
- rock type
- climate data.

Areas identified as green (low) and yellow (moderate) comprise land less likely to erode. Plantation forestry activities are permitted within these zones. Areas identified as orange (high risk) or red (very high risk) comprise land more likely to erode. Most forestry activities cannot be carried out on red-zoned land without resource consent. Some activities, such as earthworks also require consent on orange-zoned land with steeper slopes.

Prior to developing this property for plantation forestry purposes, the applicant will work through the process established under the NES. As a consequence of this, it is not considered necessary nor appropriate to require a harvest management plan through the District Plan resource consent process, particularly given the fact that harvest is some 30 years away.

2.5 Conclusion Environmental Effects

When consideration is given to the permitted baseline of the Waitaki District Plan, and the effect of the NES-FP, the effects of the proposal on indigenous vegetation and erosion, are considered less than minor. In time, the effects of the proposal are likely to be positive in both respects.

With respect to landscape effects, Mr Moore concludes that they are adverse but only minor. However, when considered from a wider cultural point of view and in the context climate change issues, we believe the landscape effects of the proposal will eventually be seen as positive.

Overall, we consider any adverse effects of the proposal are less than minor.

3. District Plan Policy Framework

The policy section relevant to this proposal is found in Section 16 Rural, of the District Plan. This section deals with eight resource management

issues that affect the rural part of the district. Of those issues, the most relevant relate to rural amenity, landscapes and nature conservation values.

3.1 Rural Amenity

Issue 4 of the Rural zone relates to the protection of rural amenity. The issue recognises that rural farming activities have intensified and diversified in the last two decades for economic reasons. The issue goes on to say that Council is supportive of rural diversification, in that it enables people to provide for both their economic, social and cultural wellbeing but highlights activities that can impact on particular amenity and environmental values which are important to rural people. With respect to the Rural S (Scenic) Zone), these values are identified as "*qualities of open space, predominance of landform, remaining indigenous vegetation and low ambient noise levels."*

The rural amenity objective (Objective 4) seeks "*a level of rural amenity that is consistent with the range of activities anticipated in the rural areas, but which does not create unacceptably unpleasant living or working conditions for the District's residents and visitors, nor a significant deterioration of the quality of the rural environment."* The policy specific to the Rural Scenic zone is Policy 4.2 which is *"To limit the scale of rural subdivision and density of residential activity in the Rural Scenic Zones to large rural lots in order to retain the amenity of openness and to assist in protecting the quality of the water resources*." The more general policies tend to deal with intensive activities, rural residential living, and conflict between activities. However, Policy 4.7 is to encourage further research into identifying the trends between the state of the environment (e.g. water use, water quality, soil health) and changes in land use patterns or practices.

While plantation forestry is not provided for as a permitted activity within this zone, as it generally is in most rural zones, it is only listed as a restricted discretionary activity. This is a relatively low activity category threshold with only landscape issues setting it apart from other traditional rural activities. In that context, we note that there are significant forest blocks in the area, to the south east and north east, within 3 to 5km of the subject land. Hence, in terms of Objective 4 it cannot be said that this proposal is inconsistent with the range of activities anticipated within the area. Nor will the proposal, given the location of the property, create an unpleasant living or working environment. No neighboring properties could be said to be affected by the proposal. No dwellings on adjacent properties are located near the area proposed for planting (the closest being 320m away) while the appropriate setbacks to all legal boundaries will be maintained.

In terms of the specific Rural Scenic policy (4.2), while the policy relates to subdivision and density of residential activity, the intent of the policy is not compromised by this proposal. While the current open pasture of the subject property will be covered in trees, the plantings will largely conform with the natural landform and will not 'close in' the landscape. Although the proposal

covers a reasonably large area, it sits within the intermediate hills of a much larger landscape. Mr. Moore confirms that it integrates well with this landscape. The remaining areas of indigenous vegetation will be maintained and enhanced by the proposal.

Of particular significance to this proposal is the recognition in the issue of the need for diversification in the rural area of the district and the direction of policy 4.7, which makes the connection between the state of the environment and changes in land uses. This particular proposal is a direct response to one of the biggest environmental issues facing the planet, climate change, and New Zealand's obligations in dealing with that issue. That obligation requires New Zealand to reduce its carbon emissions to levels 30% below those emitted in 2005, by the year 2030. Over 50% of New Zealand's carbon emissions come from farmland and as a consequence of forest planting being one of the key mechanisms to achieve this reduction, we can expect to see significant changes in land use over the next few decades. This is likely to occur in lowland hill country areas of the country. In our view, the policy framework anticipates that changes such as this, will occur over the lifetime of the District Plan.

Overall, we are of the view that the proposal is consistent with the rural amenity policy framework of the District Plan.

3.2 Landscape Policy Suite

The landscape policy framework is set out in Section 16.8 of the Rural zone provisions. Objective 16.8.2 seeks to manage use and development so that:

- *the values identified for the outstanding or significant natural features, the outstanding landscapes, and the significant coastal landscapes are protected from inappropriate use and development; and*
- *the overall landscape qualities of the Rural Scenic Zone are retained.*

The first part of that objective is not relevant to this proposal. All that is required by use and development within the Rural Scenic zone is to ensure that overall landscape qualities are retained, which is reiterated by Policy 3. Policy 6 essentially provides the guidance as to how this should be achieved. Policy 6(a) requires production forestry to avoid outstanding areas but contains no such restriction in the Rural Scenic zone. However, Policy 6(c) indicates that generally, forestry should be limited to carefully sited and designed woodlots. That does not restrict larger forestry plantations but where and how they are developed becomes important. Policy 6(d) encourages exotic tree planting to:

i. be located on the lower portions of adjacent slopes, and to use natural features such as river terraces or drainage patterns to achieve a degree of visual coherence within the existing landscape where plantings are in valleys or basins;

ii. be located so that mature trees will not obstruct views from main roads or viewpoints;

iii. be shaped in sympathy with existing landforms, and where possible be tied to an existing landform or vegetation edge;

Mr Moore's assessment has confirmed that this proposal largely meets those parameters. In his opinion the proposed forest "*will largely conform to landform features with minimal artificial land use boundaries cutting across slopes*". Mr Moore also confirms that no views will be lost and that *the "areas of most visual interest and natural value are the rugged back country slopes and these will remain as they are now behind the forestry"*. He goes on to note that "*the proposed forestry avoids those parts of the property that have values that contribute most significantly to the Rural Scenic zone values – i.e. the higher most visually distinctive and natural areas."*

Having reviewed Mr Moore's assessment, we conclude that the overall landscape qualities of the zone will not be impacted on by this proposal. The planting will occur on the slopes of intermediate hills, that only have moderate landscape values, between intensively farmed flats and the more rugged, scenic and natural ranges beyond. While a large area will be planted, it is a small part of a significantly larger visual catchment. The plantings will integrate comfortably in this wider environment and will not detract from the wider landscape values.

Policy 7 seeks "*To manage siting, design, trees species and the management of tree planting within the Rural Scenic Zone in order to prevent wilding spread."* The risk of wilding tree spread has been assessed as very low under this proposal. Only the area to be set aside for native vegetation regeneration has been identified under the NES process as being at risk, but with the lowest risk score. The risk in this environment will be managed in accordance with the NES by undertaking eradication at least every 5 years.

Overall, we conclude that the proposal is consistent with the landscape policy framework of the District Plan.

3.3 Nature Conservation Values Policy Suite

The nature conservation policy framework is set out in Section 16.9 of the Rural zone provisions. Objective 16.9.2 (1) seeks to maintain of biological diversity, nature conservation values, and ecosystem functioning within the district. This is to be done by

- *The protection of areas assessed as having significant indigenous flora and significant habitats of indigenous fauna; and,*
- *The maintenance of other indigenous flora and fauna associated with wetland, riparian areas, alpine areas and other areas that have other particular nature conservation values.*

As we highlighted in the effects assessment above, no areas within this property have been assessed as having significant values while all areas that may have value are to be avoided by the proposed plantings.

The proposal is considered consistent with Policy 7, which promotes long-term sustainable protection of areas that have significant indigenous vegetation and significant habitats of indigenous fauna, and Policy 8 which promotes the retention of indigenous vegetation and habitat. As noted above, a 155-hectare area of rocky outcrops and indigenous bush/shrublands on the slopes of the main Razorback Range are to be retired from grazing and will be allowed to naturally regenerate. In terms of the Policy 8, *"effects of the activity on the natural character of the District's environment and on remaining indigenous vegetation and habitat"* are likely to be positive in the long term as a result of this.

Objective 16.9.2 (2) seeks to maintain or enhance *"the quality of water and the coastal environment, wetlands, lakes, rivers and their margins and the protection of these environments from inappropriate subdivision, use and development."* Again, the proposed plantings will avoid riparian areas. The forest will be developed and managed in accordance with the requirements of the NES-PF, which will ensure any adverse effects are addressed in accordance with Policies 6 and 9.

In summary, we consider the proposal to support all relevant nature conservation objectives and policies of the District Plan.

3.4 Conclusion – Objectives and Policies

Having considered the objectives and policy framework of the District Plan, we have concluded that this proposal is largely consistent with the relevant parts of that framework.

4. Other Relevant Matters

4.1 National Environmental Standards for Plantation Forestry

When considering an application for resource consent, Section 104(1)(c) of the Act requires Council to have regard to *"any other matter the consent authority considers relevant and reasonably necessary to determine the application."* As we noted in Section 1.3 above, significant in the consideration of this application is the fact that the National Environmental Standards for Plantation Forestry will commence on 1 May 2018, which is prior to the property being developed for plantation forestry purposes. As a consequence, the NES-PF will essentially take precedence over the District Plan when the property is actually developed.

Furthermore, the proposed activity would be a controlled activity under the NES-PF, which means this proposal could not be refused if lodged on 1 May

2018. We consider this a significant factor in the consideration of this proposal and any decision around how the application should be processed. The applicant could wait until that date for certainty around the outcome but the decision was made to lodge the application at this point in time to enable the current landowner to consider their options and make the appropriate decisions around property management moving forward.

4.2 Forest Offsetting programme under the Climate Change Response Act 2002

As Council will be aware, New Zealand is an active participant in international efforts to manage climate change and has obligations under the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC framework sets non-binding limits on greenhouse gas emissions for individual countries. Under the recent 2017 Paris climate agreement (an agreement within the UNFCCC), New Zealand has committed to reduce its carbon emissions to levels 30% below those emitted in 2005, by the year 2030. New Zealand intends to achieve this commitment by:

1) reducing emissions,
2) planting forests, and
3) purchasing international units to offset industrial and agricultural emissions.

As we highlighted above, the Climate Change Response Act 2002 puts in place a legal framework to enable New Zealand to meet these obligations. The Act establishes the New Zealand Emissions Trading Scheme (ETS) as an "all sectors, all gases" scheme (excluding agriculture). The forest sector was the first sector with obligations under the ETS.

Under the scheme, land is defined as either Pre-1990 forest land, Post-1989 forest land or non-forest land. Pre-1990 forest land is subject to deforestation liabilities if land is harvested and then converted to farmland.

Ngāi Tahu owns 16,000 hectares of irrigable Pre-1990 forest land on the Canterbury Plains. This land has been consented for conversion to irrigated pasture (which is consistent with the adjoining land use) and is now slowly being harvested to enable conversion.

As at 31 Dec 2016, 6,500 hectares remains as Pre-1990 forest land and subject to deforestation liabilities. Under the ETS, Ngāi Tahu has two options for the conversion of this land to pasture:

1) Surrender Carbon (NZU) to the NZ Government at the cost of around $10,000 per hectare; or
2) Undertake Forest Offsetting to avoid "deforestation".

Ngāi Tahu has elected to undertake Forest Offsetting and this requires Ngāi Tahu to purchase farmland and plant an area equivalent to the forest area in existence Pre-1990. In the South Island, Ngāi Tahu has identified Otago as

having the characteristics that favour forestry investment. To date, Ngāi Tahu has purchased 2,800 hectares of farmland in Otago for afforestation purposes and plans to purchase another 3,200 hectares over the next 5 years for conversion to forest.

This 'Forest Offsetting' tool has been included in the ETS to assist land use flexibility and reduce the cost of international climate change obligations on the New Zealand economy. It is therefore considered to have significant positive social, economic and environmental benefits. In terms of the resource consent process, Section 7(i) of the Act requires persons exercising functions and powers under it, to have particular regard to the effects of climate change. In this context, the proposal provides the benefit of enabling existing forestry land to be better utilised (from an economic standpoint) without losing the benefits of carbon sequestration.

This scenario is likely to become more common in New Zealand and will lead to a diversification of land use around the country. When it comes to landscape values, "natural" versus "monoculture" or the comparison between sheep farming versus forestry, there comes a point where the value of a landscape is moderated by broader issues such as ecological diversity, the provision of renewable resources, and the contribution made by the landscape to climate change and long-term sustainability.

Many New Zealanders have a concept that our landscape is natural when the reality is that much of New Zealand's landscape is highly modified, which is the case with this particular property. The original indigenous vegetation cover of this property would have been removed by fire (with the remaining remnants grazed by possums and domestic animals) and the resulting tussock lands, grazed and enriched with over sowing and phosphate top dressing. Plantation forestry which protects the indigenous remnants and allows regeneration of it within the forest, will provide biodiversity, ecological, climate and aquatic values that farmland cannot hope to match.

These factors are considered significant in the determination of this proposal.

4.3 The New Zealand Forest Accord.

The New Zealand Forest Accord is an accord among forestry associations and environmental groups that was signed in 1991. The applicant is a party to this accord and develops its forestry plantations in accordance with its objectives. Under its provisions, forest owners agreed not to clear native forests to establish plantations and to protect remnants of indigenous vegetation within their plantations. For their part, conservationists acknowledged the environmental benefits of sustainably managed plantation forests.

The Accord was reaffirmed in 2007 with an addendum that advanced a number of principles and policy positions that the parties believe should guide

climate change policy. This included recognition of the environmental benefits delivered by plantation forests (including storing carbon in reservoirs and sequestrating carbon in sinks) and the promotion of the expansion of plantation forestry and the use of wood products (as a renewable, reusable and recyclable resource) as a key mechanism to offset greenhouse gas emissions.

Again, these factors are considered significant in the determination of this proposal.

5. Affected Persons and Notification

Changes to the Resource Management Act 1991 that came into force on 18 October 2017 have introduced a new, formulaic approach to determining whether applications for resource consent require public or limited notification.

We have reviewed sections 95 and 95A – 95G as amended by the Resource Legislation Amendment Act, and have determined that the proposal does not require public notification pursuant to these sections. In particular, we note that:

- Public notification will not be required under section 95A (section 95A(3)(b));
- The application does not include a proposal to exchange reserve land (section 95A(3)(c));
- Notification of the application is not required by a rule or national environmental standard (sections 95A(5)(a) and 95A(8)(a);
- The application will not have adverse effects that are more than minor (section 95A(8)(b));
- There are no special circumstances that would warrant public notification (section 95A(9);

However, limited notification is required (section 95B) as there are likely to be people that are affected by the activity's minor adverse effects. Given the scale of the activity, it will be difficult to determine exactly who is affected. As a consequence, we consider it appropriate to publicly notify the application and accordingly, we request that the application is publicly notified.

6. Conclusion and Proposed Conditions

The applicant is undertaking a Forest Offsetting programme under the Climate Change Response Act 2002 and considers this property ideally suited for forestry development. While the activity is currently a restricted discretionary activity under the Waitaki District Plan (because of its Rural Scenic zoning), it will become a controlled activity in May 2018 when the NES-PF comes into effect. Under both documents, the key consent issue relates to landscape effects. We have determined that any adverse landscape

effects will be no more than minor and are likely to be positive in the future, particularly given that indigenous vegetation on the property will be enhanced.

As a consequence, we consider that the proposal promotes the sustainable management of the properties natural and physical resources and should be granted consent accordingly. Because the actual development and operation of the forest will occur under the rules of the NES, there is no need to impose any conditions on the consent with the exception of requiring development to occur in general accordance with the plan attached at as Figure 10 of Mike Moore's attachments, which identifies the plantable areas. The setbacks to boundaries and riparian margins will be guided by the NES.