

BEFORE THE ENVIRONMENT COURT

Decision No. [2012] NZEnvC 021

IN THE MATTER of the Resource Management Act 1991 (**the Act**) and of an appeal pursuant to section 120 of the Act

BETWEEN MAINPOWER NZ LIMITED

(ENV-2009-CHC-100)

Appellant

AND HURUNUI DISTRICT COUNCIL

Respondent

AND

IN THE MATTER of a direct referral under section 87 of the Act

BY MAINPOWER NZ LIMITED

(ENV-2010-CHC-200)

Applicant

Court: Environment Judge J E Borthwick
Environment Commissioner D H Menzies
Environment Commissioner H M Beaumont
Environment Commissioner D J Bunting

Hearing: On the papers in Chambers at Christchurch

Date of Decision: 3 February 2012

Date of Issue: 7 February 2012



FINAL DECISION OF THE ENVIRONMENT COURT

REASONS

Introduction

[1] On 12 December 2011 we released our substantive decision in relation to an application by MainPower New Zealand Limited to establish and operate a wind farm at Mt Cass, Waipara.¹ We asked the parties to confirm the amendments made to the conditions by the court and, if changes were proposed, to give reasons for the same.

[2] By joint memorandum dated 16 December 2011, counsel for the applicant and the Hurunui District Council responded suggesting minor grammatical changes and the insertion of a footnote that had been inadvertently deleted. These changes were not opposed by any party to the proceedings and are approved.

[3] In reviewing the conditions we have found one minor cross-referencing error not referred to by the parties. Condition 66(d) wrongly refers to conditions [1] to [90], the correct reference should be conditions [85] to [91]. The conditions have been amended to record the correct reference.

[4] On 24 January 2012 the court received a memorandum from Mrs Katrina McLachlan seeking amendments as follows:

- to condition [134] (to remove reference to NZS6808:2010);
- to condition [134(a)] for three turbines to be tested for SACs (rather than two);
- to condition [135] (to specify action to be taken by MainPower should testing show that it is not complying with the conditions of the consent);
- for a new condition to stipulate the night time noise level to apply at Hamilton Glens;
- for a new condition that some turbines be removed in the vicinity of the McLachlan property.



¹ [2011] NZ EnvC 384.

[5] Mrs McLachlan also commented generally on the decision as it affects the McLachlan family and in particular the health of their child.

[6] MainPower replied to Ms McLachlan in a memorandum dated 27 January 2012.

[7] To the extent that we consider it necessary, we comment on one matter raised by Mrs McLachlan in relation to paragraphs [434] and [435] of the decision. In paragraph [435] we recorded “Importantly, MainPower did not indicate that these offers were conditional on any matter ...”. Mrs McLachlan says that this is incorrect, and that in discussions with representatives from another applicant for a wind farm in the general location an offer (jointly made with MainPower) to insulate the McLachlan’s house was made conditional upon the McLachlans entering a no-complaints covenant.

[8] In its memorandum of 27 January 2012 MainPower did not respond to this assertion from Mrs McLachlan. It may be that it had no knowledge of this.

[9] We should record that if MainPower’s offers of assistance to the McLachlans were conditional upon any matter then we would have expected counsel to have advised the court. Counsel for MainPower did not state that the offer was conditional, and instead the court commended MainPower for its “continued offer of assistance”. It is our expectation that the McLachlans may yet take up these offers. Secondly, we observe that a no-complaints covenant would be most unusual given that the McLachlans are residents and are not, as it were, coming to the effect – if in fact that proves to be the case. Such covenants often engender resentment from those who have entered into them or are asked to do the same, may be easily circumvented through the use of third parties or organisations and do not represent pro-active engagement with persons or communities who may be subject to adverse effects.

[10] We now turn to the amendments to the conditions requested by Mrs McLachlan.

[11] We decline to delete reference to New Zealand Standard 6808:2010 in condition [134] and [134a]. We recorded at paragraph [398] of the decision that the application of this standard was not disputed by any of the parties and that we accept that the New Zealand Standard should apply for assessing wind turbine noise. The management of



special audible characteristics is addressed in condition [136], and discussed from paragraph [407] in the Interim Decision. We do not understand how not referring to the standard would address the concerns raised by the Mrs McLachlan.

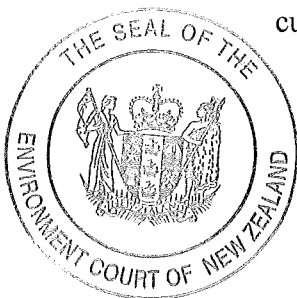
[12] Condition [134(a)] requires two turbines to be tested for special audible characteristics prior to the commissioning of the wind farm. The specific turbines to be tested are not defined. In its memorandum of 27 January 2012 MainPower records that Hurunui District Council's expert, Mr Camp has no issue with testing three turbines as opposed to two whereas Mr Hunt, MainPower's expert, does not consider that testing a third turbine offers any advantage over testing two.

[13] We confirm the condition as currently drafted for two turbines to be tested, but return below to consider the number of turbines which are not to be operated until this testing has been satisfactorily completed.

[14] In condition [135], Mrs McLachlan has requested time periods to be specified for the steps to be taken if the wind farm does not comply with the conditions of consent. The draft conditions of consent approved by the court include shutting down of turbines (as sought also by the McLachlans). In its memorandum of 27 January 2012 MainPower has proposed amendments to this condition to stipulate timeframes for the remedial actions to be undertaken for different levels of non-compliance. These respond to Mrs McLachlan's request and are approved.

[15] MainPower and Hurunui District Council do not agree to Mrs McLachlan's request that the night time sound level at Hamilton Glens should be specified in a condition. They consider that condition [132] provides adequate protection for sites with low background sound levels such as Hamilton Glens. We also add that condition [133] provides for the notional boundary of the McLachlan's dwelling to be considered as a high amenity area for as long as a person on the autism spectrum permanently resides at that dwelling.

[16] We conclude that there should not be any amendments to the conditions as currently approved for the sound level at Hamilton Glens.



[17] We were unsure if Mrs McLachlan had in mind whether the combined layout and operation of the three turbines 24/26, 25/26 and 26/26 in the R90 series would give rise to special audible characteristics. MainPower's memorandum refers to the advice received from Mr Hunt (acoustics expert) that the interaction of groups of turbines would not cause special audible characteristics. In any event this was not a matter on which we received any evidence.

[18] We have however, decided that condition [134(a)] should be amended to include turbine 26/26 as one of the turbines which is not to be operated until the SAC testing has been successfully completed in accordance with this condition.

[19] This is as far as we are prepared to go and we do not agree to Mrs McLachlan's request for turbines to be deleted from the approved layouts (if that is what she is seeking).

Outcome

[20] The final conditions (with the amendments discussed) are approved and **attached** to this decision.

Further directions

[21] Costs were reserved in the substantive decision. The District Council has filed an application for costs. Any other costs applications are to be filed and served by **17 February 2012** and at the same time Hurunui District Council is to file a memorandum clarifying what proportion of the costs it seeks were incurred in relation to the direct referral, as opposed to the appeal. When applying for costs the parties are to keep in



mind that the court was considering the mediation layout. Any replies to the application for costs are to be filed and served by **2 March 2012**.

For the court:



J E Borthwick
Environment Judge

Mt Cass Conditions

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Authorised Works and Lapse Date

1. The Consent Holder is authorised to construct and operate a windfarm on Mt Cass which comprises one only of the following alternative turbine layouts:

Layout	Maximum Height from ground level (m)	Maximum Number of Turbines
R33	55	67
R60	95	40
R90	130	26

2. At least six months prior to the start of any construction activities the Consent Holder shall advise the Manager Environmental Services of Hurunui District Council of the choice of turbine to be constructed on the site.
3. If the R33 turbine layout is constructed, the following aspects of the layout, construction and operation of the wind farm shall, subject to conditions **[8] to [11] and [13]** be in accordance with the Golder Associates Plan CG151.4 dated 27 May 2011:
- Location of roads and carparking areas
 - Location and extent of construction laydown areas other than those associated with turbine platforms
 - Extent of areas disturbed by earthworks
 - Location and extent of spoil disposal areas
 - Location of the exclusion zone.
4. If the R60 turbine layout is constructed, the following aspects of the layout, construction and operation of the windfarm shall, subject to conditions **[8] to [11] and [13]**, be in accordance with the Golder Associates plan CG152.4 dated 27 May 2011:
- Location of roads and carparking areas
 - Location and extent of construction laydown areas other than those associated with turbine platforms
 - Extent of areas disturbed by earthworks
 - Location and extent of spoil disposal areas
 - Location of the exclusion zone.



5. If the R90 turbine layout is constructed, the following aspects of the layout, construction and operation of the windfarm shall, subject to conditions **[8 to 11 and 13]**, be in accordance with the Golder Associates plan CG153.4 dated 27 May 2011:
- a. Location of roads and carparking areas
 - b. Location and extent of construction laydown areas other than those associated with turbine platforms
 - c. Extent of areas disturbed by earthworks
 - d. Location and extent of spoil disposal areas
 - e. Location of the exclusion zone.
6. No construction activities authorised by this consent shall occur within the exclusion zones identified in the Golder Associates plans referred to in conditions **[3], [4]** and **[5]**, except for fencing, the walking track referred to in condition **[143]** and any stabilisation of rocks.
7. Those parts of the boundaries of the exclusion zones identified on Golder Associates plans CG161.3-166.3 dated 20 December 2010 (being parts of those exclusion zones within 10 metres of proposed activities authorised by this consent) shall be physically identified and marked on the ground prior to any construction activities taking place within 50 metres of those areas.
8. The proposed turbine locations are shown on the Golder Associates plans referred to in conditions **[3], [4]** and **[5]**. The Consent Holder may change the final location of the turbines (a process known as micrositing) provided that:
- a. No turbine in the R90 layout shall be located more than 140 metres from the locations of the turbines shown on Golder Associates plan CG153.4 dated 27 May 2011;
 - b. No turbine in the R33 or R60 layouts shall be located more than 100 metres from the locations of the turbines shown on Golder Associates plans CG151.4 and CG152.4 dated 127 May 2011;
 - c. No turbine in the R60 or R90 layouts shall be located within the areas marked with a red hatch on CG161.3 and CG164.3; and
 - d. Subject to condition 13, the final placement of turbines shall avoid, but if unable to avoid, then shall minimise effects on indigenous

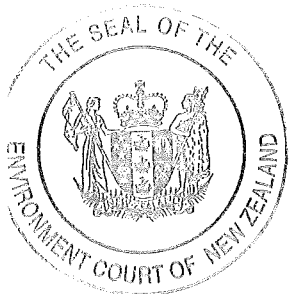


shrubland and forest¹ and on exposed limestone pavement² and boulderfield³ as provided for in condition [10].

9. The final position of the activities referred to in conditions [3], [4] and [5] may be the subject of minor adjustment (also known as micrositing) provided that any such adjustment shall not result in the maximum limits set out in condition [13] being exceeded.
10. In undertaking the micrositing process, the Consent Holder shall engage:
- A suitably qualified and experienced ecologist; and
 - A suitably qualified and experienced expert in karst landscapes

(both to be approved by the Manager Environmental Services of the Hurunui District Council) to advise (in consultation with a representative of the Department of Conservation) on the final placement of turbines and the final location of those activities referred to in conditions [3], [4] and [5].

11. In undertaking the micrositing process provided by condition [10] the Consent Holder shall have particular regard to any advice received from the ecologist and the expert on karst landscapes. In any instance where the Consent Holder is unable to follow the advice from the ecologist or the expert on karst landscapes due to other micrositing factors, the Consent Holder shall provide the reasons in writing in a report to the Hurunui District Council, 40 working days prior to construction commencing.



¹ The following forest and shrubland communities have been recorded and will be impacted by the project at Mt Cass and are identified on the Golder Associates plan Figure 1: Mt Cass Vegetation Communities, dated July 2011 attached as Appendix 1. Community 2: Mingimingi – pasture grass shrubland; Community 3: Broadleaf – (mingimingi) – (five-finger) – (kohuhu) scrub; Community 4: Kowhai – (broadleaf)/(ongaonga) forest; Community 5: Mahoe – (houhere)/Raukaua – ongaonga – climbing fuchsia forest; Community 6: Broadleaf – five-finger – (mahoe)/(ongaonga) forest; Community 7: (Matai)/mahoe – broadleaf – (lemonwood) forest; and matagouri shrubland. For the avoidance of doubt the reference to "communities" includes all species present within those communities.

² Exposed limestone pavement means those areas, in situ or otherwise, that consist of a continuous, relatively flat or moderately inclined surface with an organised system of open sub-vertical joints which fully penetrate the surface limestone bedding as identified on Golder Associates plans CG181.3, CG182.3, dated 27 May 2011 attached as Appendix 2.

³ Boulderfield means land in which the area of unconsolidated bare boulders (> 200 mm diam.) exceeds the area covered by any one class of plant growth-form. Boulderfields are named from the leading plant species when plant cover > 1%, as per ATKINSON, I. A. E. 1985: Derivation of vegetation mapping units for an ecological survey of Tongariro National Park, North Island, New Zealand. New Zealand Journal of Botany 23: 361-378. The extent of boulderfield is identified on Golder Associates plans CG181.3, CG182.3, dated 27 May 2011 attached as Appendix 2

12. Any indigenous vegetation or limestone features outside the exclusion zones which are able to be avoided as a result of the micro-siting process provided for in condition [8] shall be physically identified prior to construction activities taking place in that location.
13. The total area of indigenous shrubland and forest clearance and limestone pavement and boulderfield disturbance due to pre-construction geotechnical investigations and construction activities shall be minimised, but in any event must not exceed the following:

Vegetation Clearance (hectares)

	R33	R60	R90
Indigenous shrubland ⁴	0.71	0.71	0.71
Indigenous forest ⁵	0.09	0.09	0.08

Exposed limestone disturbance (hectares)

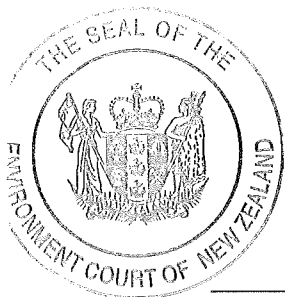
	R33	R60	R90
Pavement <u>and</u> boulderfield	1.99	2.29	2.04
Pavement	0.93	1.21	0.89

For the avoidance of doubt the limits set out in the above table do not include the impact from fencing and the construction of the walking track referred to in condition [143].

14. When constructing and maintaining fences within the exclusion zone and the walking track referred to in condition [143] the Consent Holder shall minimise effects on vegetation and limestone by adopting the following approaches:
- a. Finalising the detailed alignment of the walking track by providing an outline plan to be certified by the Manager Environmental Services of

⁴ Shrubland impacted by the project comprises the following communities, identified on the Golder Associates plan Figure 1: Mt Cass Vegetation Communities dated July 2011, Community 2: Mingimingi – pasture grass shrubland; and matagouri shrubland.

⁵ Indigenous forest impacted by the project comprises the following communities, identified on the Golder Associates plan Figure 1: Mt Cass Vegetation Communities dated July 2011: Community 3: Broadleaf – (mingimingi) – (five-finger) – (kohuhu) scrub; Community 4: Kowhai – broadleaf) / (ongaonga) forest; Community 5: Mahoe – (houhere)/Raukaua – ongaonga – climbing fuchsia forest; Community 6: Broadleaf – five-finger – (mahoe)/(ongaonga) forest; Community 7: (Matai)/mahoe – broadleaf-(lemonwood) forest.



- the Hurunui District Council at least one month prior to any construction activities occurring;
- b. Hand cutting of indigenous vegetation;
 - c. Avoiding the use of wheeled mechanical equipment or tracked vehicles (such as tractors or excavators) on in situ limestone pavement; and
 - d. Otherwise minimising disturbance to limestone surfaces.

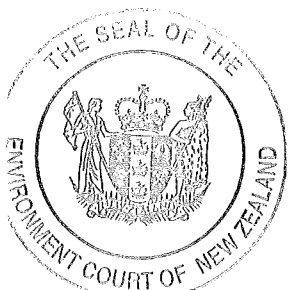
But in any event

The maximum extent of vegetation clearance for the construction of the walking track referred to in condition **[143]** shall not exceed 0.25 ha of indigenous shrubland and 0.05 ha of indigenous forest.

15. Any concrete batching on the wind farm site shall be located in the area identified on the Golder Associates plans referred to in conditions **[3]**, **[4]** and **[5]**.
16. The substation buildings shall be designed generally in accordance with the Noordanus Architects' plans RC02, RC05 and RC06 dated April 2010. The exterior cladding, guttering, downpipes and roof of the substation buildings shall be painted in recessive colours drawn from the background colours of the landscape of the area. A copy of the plans and elevations including suggested colours shall be provided by the Consent Holder to the landscape experts panel, for its consideration, prior to application for building consent.
17. All turbines shall, in all external parts, including turbine towers, nacelles and turbine blades, be finished in the same neutral (off-white or light grey) and non-reflective colour scheme.
18. The Consent Holder shall maintain the turbines in good condition at all times and shall undertake appropriate regular servicing in accordance with industry practice.

Reporting during construction

19. Every two weeks during construction the Consent Holder shall provide written confirmation to the Hurunui District Council of the total extent of clearance of indigenous shrubland and forest and impacts on limestone pavement and



boulderfield and confirmation that the limits set out in condition [13] have not been exceeded. If required the Consent Holder shall facilitate site inspections and provide access to relevant GIS information to assist the independent assessment of compliance with condition [13].

Post construction reporting

20. Following the completion of the works authorised by this consent, the Consent Holder shall provide the Hurunui District Council with as-built plans showing the location of all constructed turbines, access roads, substations, buried cables, transmission lines and all other works. The Consent Holder shall also provide the Hurunui District Council with independently verified written confirmation that the maximum limits of shrubland and forest clearance and disturbance of limestone landforms set out in condition [13] have not been exceeded, and the areas identified in accordance with condition [12] have been avoided.

Lapsing

21. In accordance with section 125(1) of the Resource Management Act 1991, this consent shall lapse if not given effect to within eight years of the date of commencement of this consent.

Advice Note: For the avoidance of doubt, commencement of consent shall have the meaning ascribed by section 116 of the Act.

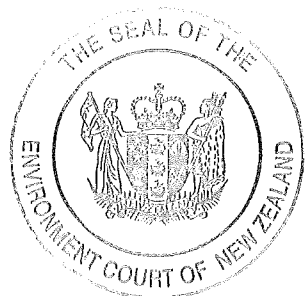
Management Plans – General (Preparation and Review)

22. Each management plan and review thereof shall be reviewed and certified by a suitably qualified, independent and experienced expert approved in writing by the Hurunui District Council to confirm that the activities undertaken in accordance with the management plan will achieve compliance with the relevant consent conditions. All such certification along with any reviews of the management plans shall be provided to the Hurunui District Council.

- 22[a] Within 6 months of the date of grant of consent, the Consent Holder shall provide to the Manager Environmental Services of the Hurunui District Council a draft Environmental Management Plan required by condition [66].



23. At least 3 months prior to undertaking any activities authorised by this consent, the Consent Holder shall provide to the Manager Environmental Services of the Hurunui District Council for review acting in a technical certification capacity the following management plans:
 - a. Construction Management Plan
 - b. Environmental Management Plan.
24. The outcome of this review shall be provided to the Consent Holder in writing within 30 working days of receipt of the Plans.
25. Subject to any other conditions of this consent, all activities shall be undertaken in accordance with the latest version of the management plans referred to in condition **[23]**.
26. The Construction Management Plan shall be reviewed by the Consent Holder annually during the continuation of construction activities (including rehabilitation).
27. The Environmental Management Plan shall be reviewed by the Consent Holder at least once every three years for the first nine years, and thereafter at least once every five years and shall be amended taking into account any required actions identified as a result of monitoring under this consent, the annual report prepared under condition **[67]** and any recommendations from the peer review required by condition **[161]**.
28. The review by the Consent Holder shall assess whether management practices are resulting in compliance with the conditions of these consents, and whether the objectives of the management plans are being met through the actions and methods undertaken. The Consent Holder shall amend the plans where that is necessary to better achieve the objectives of the management plans and the conditions of this consent. The Consent Holder shall provide any amended plan to the Hurunui District Council for certification that it will achieve compliance with the relevant consent conditions. The management plans shall not be amended in any way that contravenes the objectives set out for the respective plans.



29. Copies of the management plans shall be lodged in the Hurunui Memorial Library in Amberley and the Christchurch Public Library so that there is public access to them. In addition, copies shall be publicly available on the Consent Holder's website.

Construction

Construction Management Plan

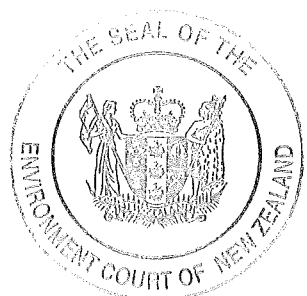
30. The Construction Management Plan shall apply to all works up to and including the completion of commissioning of the wind farm and the rehabilitation of construction activities.
31. The objective of the Construction Management Plan shall be to set out the practices and procedures to be adopted to ensure compliance with consent conditions and to meet the following objectives:
- a. To minimise the overall area of disturbance (by cuts, fills and placement of cover) of karst limestone features and indigenous vegetation, but in any event to ensure compliance with the maximum levels of indigenous shrubland and forest clearance and disturbance of limestone pavement and boulderfield set out in condition **[13]**;
 - b. Avoid disturbance of vegetation and limestone features within the exclusion zone as set out in condition **[6]**;
 - c. To minimise sediment generation and sediment laden runoff in accordance with condition **[37]**;
 - d. To maintain existing surface and subsurface drainage patterns and pathways;
 - e. To ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with these conditions;
 - f. To ensure that the earthworks and spoil disposal areas are contoured so that, to the greatest extent practicable, the finished landform will blend with the surrounding landscape so as not to be visually dominant from any public viewing point (excluding unformed legal roads);
 - g. To ensure that, the earthworks are undertaken in a manner which provides for final surfaces which are suitable for rehabilitation and/or recolonisation by native vegetation;



- h. To ensure that only those areas identified in the Golder Associates plans referred to in conditions **[3]**, **[4]** and **[5]** are used as spoil disposal areas;
- i. To ensure matters relating to the extent and timing of construction traffic, and the traffic management provisions to be put in place during this time, achieve a safe and efficient road network;
- j. To ensure that conditions of this consent relating to visual effects mitigation can be met;
- k. To identify threatened indigenous flora within the construction zone and provide for their relocation as required by condition **[32.n]**;
- l. To identify Canterbury gecko and other lizard species within the construction zone and provide for their relocation as required by condition **[79]**;
- m. Minimise potential for disruption to any active New Zealand falcon nest identified within 200 m of any construction or earthwork area; and
- n. To minimise the introduction and spread of weeds.

32. The Construction Management Plan shall include, but not be limited to:

- a. The methods and techniques to achieve the above objectives.
- b. Assigning roles and responsibilities, including appointment of a representative to be the primary contact person in regard to construction matters relating to this consent.
- c. Details of a training programme for machinery operators working on the site who will be involved in indigenous vegetation or limestone pavement or boulderfield disturbance. The training programme will include, but not be limited to, education on using least impact techniques when disturbing or clearing limestone or indigenous vegetation.
- d. Limits of disturbance to indigenous vegetation and karst land forms in accordance with condition **[13]**.
- e. Location of soil stockpiles and spoil disposal areas.
- f. Construction staging and sequencing over the whole site.
- g. A description of the sources of noise and the methods to be used to meet condition **[131]**.
- h. Management of construction traffic as provided for in condition **[63]**.



- i. Procedures for earthworks, erosion and sediment control, stabilisation of the site (including the removal or stabilisation of any unstable boulders) and revegetation of existing vegetation sites with locally eco-sourced indigenous species and non-invasive, low stature grasses such as perennial ryegrass (*Lolium perenne*) and annual poa (*Poa annua*) grass species only. Aggressive exotic grasses such as browntop (*Agrostis caprillaris*), cocksfoot (*Dactylis glomerata*) and brome (*Bromus* spp.) shall not be used.
- j. Contouring of all spoil disposal sites to visually integrate into the natural landform.
- k. Procedures for management, control and maintenance of runoff processes and patterns
- l. Procedures for the management of dust.
- m. Procedures for the management of weeds.
- n. Methods for the relocation of threatened indigenous flora (as defined by de Lange et al (2009))⁶ identified within the construction zone, and where practicable, At Risk indigenous flora (defined by de Lange et al (2009)) identified within the construction zone.
- o. Methods for location and relocation of lizards as required by condition **[79]**.
- p. Procedures for management of fire risk and for fire suppression.
- q. Adoption, if appropriate, of the principles identified in the Ministry for the Environment publication "A Cultural Health Index for Streams and Waterways, June 2003, Technical Paper 75".
- r. Spill contingency measures and procedures for the management of hazardous substances.
- s. Procedures for rehabilitation of the areas directly affected by the construction and roading activities and the ongoing maintenance of the rehabilitation work.
- t. Monitoring, record-keeping and reporting requirements.
- u. Procedures for minimising the visual effect of any removal or stabilisation of unstable boulders for safety reasons during construction and operation.

⁶ de Lange PJ, Norton DA, Courtney SP, Heenan PB, Barkla JW, Cameron EK, Hitchmough R, Townsend AJ 2009 Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47:61-96.



- v. Procedures to ensure compliance with conditions **[45]** and **[46]** for the treatment of identified areas of limestone pavement.

General - Pre Construction Plan Lodgement

33. At least 20 working days prior to any construction works commencing the Consent Holder shall provide to the Manager Environmental Services of the Hurunui District Council:

- a. A plan showing the final turbine locations, turbine choice, final turbine platform locations and final roading layout, together with confirmation that:
 - i. With the exception of fencing, the walkway, and rock stabilisation, no construction activity authorised by this consent shall occur in the exclusion zones identified in condition **[6]**;
 - ii. Any areas identified in accordance with condition **[12]** are avoided;
 - iii. The maximum disturbance limits set out in condition **[13]** are not exceeded; and
 - iv. No turbine platform creates a notch in or “daylights” the Mt Cass ridge as viewed from SH1 between Waipara and Omihi.
- b. Engineering design plans of the roads, including erosion and stormwater controls. These engineering design plans shall incorporate:
 - i. Final road layouts, having completed detailed assessments relating to geotechnical, engineering, wind energy, visual impact and any proposed mitigation and ecological matters;
 - ii. Details of locations and quantities of cuts and fills.
- c. Results of prior drilling and ground penetrating radar traverses undertaken to ascertain occurrences of subsurface cavities.
- d. The relationship of the construction works to known karst features and details on how construction activities have been planned to minimise potential adverse effects on karst features and to demonstrate compliance with conditions **[6]** and **[13]**.

34. The Consent Holder shall provide written notification to the Hurunui District Council at least five working days prior to works commencing.

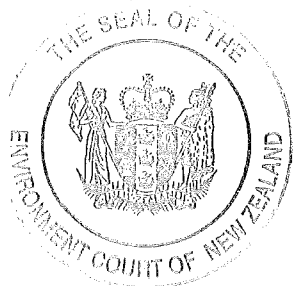


Implementation of mitigation measures – Construction Phase

35. There shall be no objectionable or offensive dispersal or deposition of dust beyond the boundary of the site.
36. Any concrete batching plant on the wind farm site shall be removed within six months of completion of the wind farm construction.

(a) Erosion and Sediment Control

37. The Consent Holder shall undertake erosion and sediment control measures, the purpose of which is to:
 - a. Minimise disruption, and interruption to the natural drainage pattern;
 - b. Minimise the amount of sediment that is discharged as a result of construction works into subterranean karst features and the water courses, both surface and subsurface, that drain the site; and
 - c. Minimises the discharge of silt or sediment into the exclusion zones indicated on Golder Associates plans CG161.3-166.3 dated 20 December 2010.
38. All erosion and sediment control measures shall remain the responsibility of the Consent Holder, and be installed, operated and maintained in accordance with these conditions of consent.
39. The design storm for detention features for runoff and sediment control shall be 5% AEP of the appropriate design duration. The design storm for runoff and sediment control for permanent roads shall be 2% AEP.
40. The Consent Holder shall ensure that appropriate construction contract provisions are included within the contract documents to allow construction contractors to tender accurately for the scope of the proposed erosion and sediment control measures.
41. Prior to construction activities commencing the Consent Holder shall undertake water quality monitoring at the main springs (NZMG coordinates: 2497333E, 5791621N; 2497679E, 5791558N; and 2499314E, 5791997N), and at the Smothering Gully stream, draining the proposed development site, for a period sufficient to establish baseline conditions. This shall include at least two winter wet seasons unless more frequent occurrence of storms



permits baseline data to be acquired, to the satisfaction of Hurunui District Council, more quickly. Samples taken over a range of spring flows generated by the four largest runoff events recorded shall be used to establish baseline water quality in terms of:

- a. Aquatic indicator species; and
- b. Suspended and dissolved water quality measures, including hydrocarbon indicators which detect the presence of fuel, hydraulic oils and lubricants.

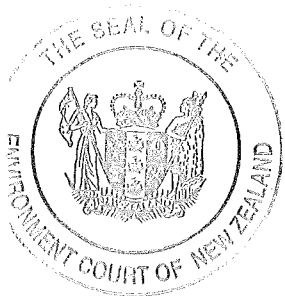
42. Each year during construction activities and for a period of one year following completion of construction activities, the Consent Holder shall undertake similar water quality monitoring during large rainfall events at the sites identified in condition [41] and using the same parameters listed in that condition.

43. The results of the water quality monitoring required by conditions [41 and 42] shall be forwarded to the Hurunui District Council within 5 working days of the analytical results of sampling being received by the Consent Holder. Should sample results indicate adverse environmental impacts then an immediate review shall take place to better achieve the objectives of the Construction Management Plan or Oil Spill Contingency Plan as required under conditions [25], [34] and 110].

44. The Consent Holder shall engage an independent and appropriately qualified person in consultation with the Manager Environmental Services of the Hurunui District Council to audit the design of the erosion and sediment control measures against the Construction Management Plan required by condition [23], to audit the procedures for stabilisation as required by condition [32.i], and to audit bulk earthwork activities on an as-required basis to ensure that the sediment and erosion control measures are being constructed and maintained in accordance with the plan. The Consent Holder shall be responsible for the reasonable direct costs associated with this engagement.

(b) Treatment of Identified Limestone Pavement Areas

45. Limestone pavement within the areas marked on Golder Associates plan CG161.3 and CG163.3 shall be covered to a sufficient depth with crushed



limestone or other appropriate material as necessary so as to avoid cuts to limestone pavement.

46. Limestone pavement in the areas identified in condition [45] shall be partially rehabilitated to a width for the running surface of the road of 3.5 metres in accordance with the Chris Glasson Plan, dated 15 November 2010, and the plan titled 'Indicative Cross Section of the Completed Road Formation and Mitigation Measures', dated 24 July 2011, attached as Appendix 3. The Consent Holder may at any time for maintenance or decommissioning reasons reinstate full access in these areas for so long as that access is required. Once full access is no longer required the Consent Holder is to partially rehabilitate the area to the standard required by the Chris Glasson Plan dated 15 November 2010.

47. If a road is constructed to access t6/75 at NZMG coordinates 2496126E, 5792235N or thereabouts, it shall be no wider than 3.5m for the running surface.

(c) *Roading*

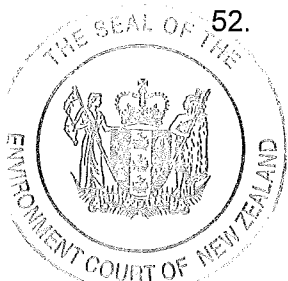
48. The running surface of the access road shall, in the first instance, be provided using selected material excavated from the turbine sites, roads and incidental building and construction areas. Should this excavated material be insufficient or unsuitable, then suitable road surface material, including seal if necessary, shall come from off site.

49. The Consent Holder shall provide designated parking areas on site for staff and contractors.

50. Structural fill required for forming roads shall, wherever practicable, be constructed of the soils and crushed rock excavated from the site.

51. As soon as reasonably practicable after final road levels are achieved, all roads shall be covered with selected basecourse to provide a running surface and avoid surface and scour erosion.

52. The discharge from any temporary diversion channels shall be controlled so as to prevent scour at the outlet of the channel.

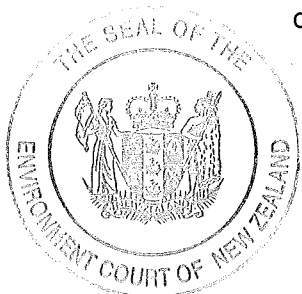


(d) Turbine Platforms

53. Turbine platforms shall be designed to provide for erosion and sediment control measures, as detailed in the Construction Management Plan.

(e) Spoil Disposal Sites

54. All spoil disposal sites shall be located in accordance with the Golder Associates plans referred to in conditions [3], [4] and [5] and subject to condition [10], and be managed to ensure that:
- a. Suitable locations for clean-water cut-off drains can be provided;
 - b. A sediment control measure appropriate to the size of the disposal area can be provided to treat all run-off from the disposal area.
55. All spoil disposal sites shall be designed, constructed and managed in accordance with the following:
- a. The toe bund shall be a structural fill;
 - b. The amount of surface area within the spoil site that is exposed at any one time shall be minimised;
 - c. Exposed areas shall be stabilised to the greatest extent practicable at the end of each day, and temporarily covered if possible prior to any storm event that is likely to cause erosion or mobilise sediment;
 - d. All sediment ponds shall be constructed to provide for retrofitting of flocculation if needed;
 - e. Contouring of all spoil disposal sites to visually integrate into the natural landform.
56. A clean water diversion shall be constructed around each spoil site where there is a significant catchment above the spoil disposal site.
57. Each spoil site shall be stabilised and planted over including being grassed (non-invasive species) or re-vegetated with silver tussock to no less than 20% cover, as soon as practicable after it has been fully utilised, in order to prevent scour and avoid sediment being washed into adjacent watercourses. Stabilisation may be staged, and stabilised areas diverted to a clean water diversion, to maintain a suitably small working catchment area.



58. Any topsoil stockpile that is intended to remain in situ for more than 4 consecutive weeks shall be subject to erosion and sediment control in accordance with condition [37] and be hydroseeded if intended to remain for more than 4 months.
59. All topsoil stockpiles shall be bunded on the uphill side to divert clean water runoff away from the stockpile.

(f) Rehabilitation of disturbed areas

60. Prior to undertaking any construction activities, the Consent Holder shall engage a suitable qualified and experienced ecologist to undertake a survey of the vegetation in the areas which are to be disturbed for construction purposes as detailed in condition [61]. The results of this survey shall be provided to the Hurunui District Council.
61. Site areas disturbed for pre-construction geotechnical investigations and construction purposes, but not necessary for the ongoing wind farm operation, being the concrete batching area, laydown areas, spoil disposal areas, road batters, and parts of turbine platforms, shall be rehabilitated progressively, and in any event within 12 months of the completion of construction in accordance with the Construction Management Plan. The objective shall be to rehabilitate those areas to a similar condition to the condition identified in the pre-construction survey required by condition [60], or as otherwise agreed with the Hurunui District Council.
62. Within 3 months of completion of the construction of the wind farm (including the rehabilitation required by condition [61]), the Consent Holder shall advise the Manager Environmental Services of the Hurunui District Council in writing that all relevant conditions of this consent relating to construction activities have been complied with.

Construction Traffic

63. The Construction Management Plan shall set out in detail matters relating to the extent and timing of construction traffic activity, and temporary traffic management provisions to be put in place during construction, and shall:



- a. Be prepared after consulting with Transwaste Ltd, The Hurunui District Council and the New Zealand Transport Agency and shall implement the outcome of that consultation;
- b. Set out the nature and timing of local physical improvement works, if necessary, to be undertaken on Mt Cass Road at the Consent Holder's expense or as otherwise agreed with the Hurunui District Council;
- c. Set out in detail the sharing of maintenance costs for the section of Mt Cass Road between State Highway 1 and the entrance to the Kate Valley Landfill site during wind farm construction. This cost sharing arrangement will be negotiated by the Consent Holder and Transwaste Ltd and the outcome forwarded to Hurunui District Council;
- d. Detail the intended traffic arrangements and provisions for the delivery of over-weight and over-dimensioned major components to the site, including any time restrictions for the movement of over-weight and over-dimensioned vehicles; and
- e. Detail the management of construction traffic (other than component delivery by over-dimension and over-weight vehicles) during the construction phase. This shall include as a minimum:
 - i. Identifying all roads within the Hurunui District that are to be used by heavy construction traffic.
 - ii. The provision for dust suppression, if necessary, on the routes used for the transport of goods to the site so that safe stopping sight distance is maintained at all times.
 - iii. Ensure that all heavy construction traffic within the Hurunui District shall utilise those roads which have been identified to be used by heavy construction traffic in the certified Construction Management Plan.
 - iv. Identify the management practices to be adopted to avoid conflict with other users on the affected roads, including the safety of pedestrians and cyclists.

64. If any road vesting is required to implement the Construction Management Plan all the costs of road vesting shall be met by the Consent Holder and survey plans of the land to be vested are to be provided to the Hurunui District Council.



65. The Consent Holder shall take the best practicable option to avoid the deposit of debris on to public roads during the construction period. Any debris shall be removed as soon as possible, but at least 2 hours before dark on each occasion.

Terrestrial Ecology

Advice Note: Activities involving protected wildlife consequent on the exercise of this consent will require prior approval under the Wildlife Act from the Department of Conservation.

Environmental Management Plan

66. An Environmental Management Plan shall be prepared that sets out the practices and procedures to be adopted to ensure compliance with consent conditions relating to:
- a. Avifauna management (conditions **[68] to [76]**);
 - b. Herpetofauna management (conditions **[77] to [79]**);
 - c. Weed control (conditions **[82] to [84]**);
 - d. Habitat Enhancement and Pest Control (**[85] to [91]**);
 - e. Fire Management (conditions **[119] to [121]**).
67. The Consent Holder shall provide an annual report to the Hurunui District Council, by the date of the anniversary of the commencement of this consent, which:
- a. Details all environmental monitoring and studies undertaken as part of the exercise of this consent;
 - b. Outlines any changes to the monitoring programme that may be required to allow compliance to be determined;
 - c. Reports on the extent to which activities are meeting the objectives of the Environmental Management Plan and are achieving or maintaining the performance indicators set out in condition **[91]**. Where the report identifies that the performance indicators have not been achieved or maintained, the Report shall include:
 - i. The reasons why the performance indicators have not yet been achieved and/or are not being appropriately maintained; and
 - ii. Advice as to specific measures the Consent Holder has either already implemented, or intends to implement to address the



- failure to achieve or appropriately maintain the performance indicators.
- d. Reports on consistency of activities with the Management Plan procedures and methods, and whether there should be amendments made to those methods and procedures which would better assist the Consent Holder in meeting the objectives of the Plan.

Avifauna Management

68. The Consent Holder shall undertake a programme of avifauna monitoring and management, the objectives of which are:
- a. To monitor for potential adverse effects of the wind farm on avifauna, and to manage those effects if necessary; and
- b. To achieve a net gain in the relative abundance of indigenous species present at Mt Cass.

Pre- Construction Monitoring

69. The Consent Holder shall engage a suitably qualified and experienced avian ecologist to undertake a pre-construction survey of avifauna populations and species abundance at the site⁷ in order to assess potential avifauna displacement and future population trends. The monitoring shall include measures of species abundance across the wind farm site and within all habitat types present within the wind farm footprint. Monitoring methods shall be standardised between pre-construction and post-construction surveys.
70. The monitoring shall:
- a. be carried out seasonally, during the months of October (as soon as possible after lambing), January, March and June;
- b. include visiting each bird count station five times each season to give a measure of variation around the data;
- c. include two years' data to account for annual variation and provide robust baseline data;
- d. include a survey of internally migrant shorebird species using observers with suitable identification skills positioned along the Mt Cass ridgeline during at least one period of summer migration

⁷ For the purpose of this condition, "the site" means the length of ridgeline over which any construction activity occurs, extending down the dip-slope to include all major tracts of bush and down the scarp to the bottom of the scarp.



(January-February) and at least one period of winter migration (July and August). If significant numbers of migratory shorebirds are recorded to cross the proposed wind farm then a further more in depth monitoring program will need to be established to identify the risks posed to internal and internationally migrant shorebirds and how best to avoid, remedy or mitigate these.

Post Commissioning Monitoring

71. Following commissioning of the wind farm, the Consent Holder shall:
- a. Undertake an annual survey for a minimum of two years of avifauna populations, which includes measures of species abundance across the wind farm and within all habitat types present within the wind farm footprint, to assess potential avifauna displacement post commissioning.
 - b. Undertake a mortality monitoring programme at least once a season, during the same months that the avifauna population surveys are carried out (consent condition [68]) for a minimum of two years that includes:
 - i. Carcass searches
 - ii. Searcher efficiency trials
 - iii. Carcass decomposition and/or removal rates
 - iv. Extended searches of some turbines (especially on forest pasture margin)
 - v. Calculation of mortality rates adjusted by estimates of error from the above protocols.
 - c. The mortality monitoring programme outlined in condition 71(b) shall be repeated after a period of 5 years of operation of the wind farm.
72. If evidence is found of injury and/or mortality of Kereru, New Zealand Falcon or New Zealand Pipit through interaction with wind farm infrastructure then the Consent Holder shall, as soon as practicable, provide a report to the Hurunui District Council detailing a suitable monitoring and management regime to be implemented to address any net negative impact at the local population level.



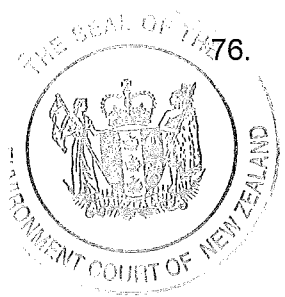
Falcon monitoring

73. The Consent Holder shall undertake falcon monitoring as follows:
- a. Surveys for breeding falcons shall be carried out during the breeding season throughout the construction period and for two years post-commissioning. This shall include surveys of the Mt Cass ridgeline and all areas of suitable breeding habitat adjacent to the wind farm footprint.
 - b. If at any time pre, during or post construction there is evidence of falcon breeding on or neighbouring the wind farm footprint, or there is evidence of falcon being adversely impacted by the wind farm, then a more intensive monitoring programme for falcon needs to be initiated and continued for at least two years post commissioning. The monitoring programme shall include breeding success, measures of habitat use and the survival of fledglings and adult falcons (through radio-tracking).
 - c. If during construction, a falcon nest is identified on the site, the Consent Holder will ensure that, where practicable, a 200m setback of construction activity from the nest is maintained while it is still active.
74. The monitoring programmes required by conditions [69] to [73] shall be designed in consultation with the Department of Conservation, and the results of all monitoring shall be provided to the Hurunui District Council and the Department of Conservation annually. Whether any additional mitigation is required will be determined in consultation with the Department of Conservation and shall consider whether the effect will result in a net negative impact at the local population level of any threatened or non-threatened species.

Management Plan

75. The Consent Holder shall engage a suitably qualified and experienced avian ecologist to prepare an avifauna monitoring and management section of the Environmental Management Plan, in consultation with the Department of Conservation.

76. The avifauna section of the Environmental Management Plan shall include, but not be limited to:



- a. The survey methodologies and reporting mechanisms for the surveys required by conditions [69] to [73], and in particular the mechanisms in relation to:
 - i. Incidental avifauna behaviour observations
 - ii. Reporting incidental injury and mortality events (i.e. events that occur outside of the official survey)
 - iii. How to manage avifauna and whom to contact should injured avifauna be found
 - iv. Reporting of injury or mortality of threatened, at risk, regionally rare and/or banded avifauna. This shall also include details of the persons to whom any carcasses should be supplied, either for research or as taonga.
- b. A protocol that outlines what steps to take if a Threatened or At Risk species is found to be using the site (including injured or dead) that has not been previously recorded. Additional mitigation is only required if there is a net negative impact, due to the wind farm, on the population within the Motunau Ecological District.
- c. Identification of additional mitigation options that may need to be implemented if adverse effects occur (e.g. including but not limited to avifauna corridor enhancement, off-site habitat protection or enhancement (for species that use the site but do not breed there), on or off site breeding programmes, nest protection, captive breeding, or changes in the operation of the wind farm to reduce impacts).

Herpetofauna Management

77. The Consent Holder shall undertake a programme of lizard management, the objectives of which are to:
 - a. Identify methods to avoid or minimise any adverse effects on lizards arising from the construction and operation of the wind farm;
 - b. Maintain Canterbury gecko, common skink and McCann's skink populations at the same or greater abundances than those present at the wind farm site prior to development of the wind farm; and
 - c. Maintain habitats of Canterbury gecko, common skink, and McCann's skink populations at the wind farm site in the same or better condition than that present prior to the development of the wind farm.

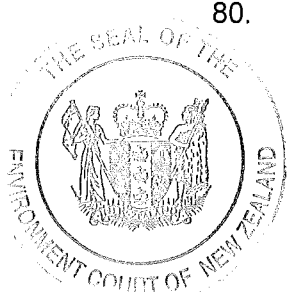


Management Plan

78. The Consent Holder shall engage a suitably qualified and experienced ecologist to prepare a herpetofauna management section of the Environmental Management Plan, in consultation with the Department of Conservation.
79. The herpetofauna management section of the Environmental Management Plan shall include, but not be limited to:
- a. Methods for searching for Canterbury gecko by an appropriately qualified and experienced ecologist in areas to be directly impacted by construction activities.
 - b. Methods for the relocation prior to the commencement of construction of Canterbury gecko and other lizard species encountered during searches for Canterbury gecko from areas of the site directly impacted by construction activity to suitable alternative habitats on site. (Note – this is likely to require a period of at least 6 months prior to construction activities commencing which may affect lizard habitat).
 - c. Procedures to be followed in the event that other threatened herpetofauna species are found during construction. The procedures shall identify methods to avoid, remedy, and mitigate any adverse effects of the wind farm on the threatened herpetofauna species.
 - d. Pest control methods which target possums, feral deer, feral goats, rabbits, hares, cats, mustelids, hedgehogs and rats.
 - e. The utilisation of an 'adaptive management' approach, in which the herpetofauna management programme is modified in accordance with the latest results of the monitoring programme, with specific reference to the effectiveness of pest control (including, if necessary, the control of irruptions of mice) as measured against the responses of populations.
 - f. Procedures for ongoing monitoring by a suitably qualified and experienced ecologist to assess population abundance.

The Mt Cass Conservation Management Area

80. No later than 3 months after commissioning of the wind farm, the Consent Holder shall register a legally binding covenant in a form approved by the Manager Environmental Services of the Hurunui District Council, which



provides legal protection in perpetuity of the area identified on Golder Associates plan CG221 as the Mt Cass Conservation Management Area.

81. The Mt Cass Conservation Management Area shall be managed in accordance with, and the Consent Holder shall comply with, the conditions of this consent.

Weed Monitoring and Control

82. The Consent Holder shall undertake a weed monitoring and control programme within the Mt Cass Conservation Management Area and other areas subject to physical disturbance by the wind farm, the objective of which is to reduce the invasion of exotic weeds and ensure that any which do invade are controlled to acceptable levels.

Management Plan

83. The Consent Holder shall engage a suitably qualified and experienced ecologist to prepare a weed monitoring and control plan as part of the Environmental Management Plan, in consultation with the Department of Conservation.
84. The weed monitoring and control section of the Environmental Management Plan shall include, but not limited to:
- a. The details of a weed control strategy which shall include as a minimum:
 - i. An inventory of the baseline of weed infestation at the Mt Cass wind farm site including assessment of exotic grasses and herbs that are adversely affecting indigenous ground layer plants;
 - ii. Assessment of weeds of ecological importance at the Mt Cass site; and
 - iii. Detail of methods to be used for weed removal and/or control; and contingency plans for high level infestations resulting from the construction operation.
 - b. The details of measures to minimise the effects and introduction of weeds that shall include, but not be limited to:



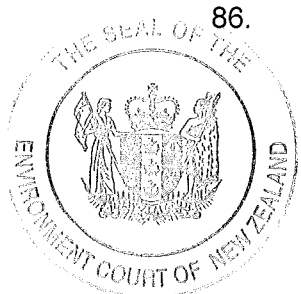
- i. Undertaking annual monitoring of site works to ensure new weed infestations are detected and removed before they have an opportunity to establish and spread;
- ii. Ensuring construction vehicles are cleaned of adhering soil before first entering the project site, and that weed-free sources of aggregate are used;
- iii. Ensuring that prior to weed control being undertaken, the control site is searched by a suitably qualified ecologist and any Threatened and At Risk plant species occurring within the site are identified; and
- iv. Post-construction weed control (e.g. targeted herbicide spraying and, where appropriate, hand weeding). Spraying is not to occur within 10m of any Threatened and At Risk plant species which has been identified, unless part of a specific management initiative.

Habitat Enhancement and Pest Control

85. The Consent Holder shall establish and implement a Habitat Enhancement and Pest Control programme, the overall objective of which is to achieve, a net gain in the biodiversity values within the Mt Cass Conservation Management Area. The specific purposes of the Habitat Enhancement and Pest Control programme are to:

- a. Encourage and/or facilitate the natural recovery of and to increase the area of native woody vegetation present and to increase connectivity between remnant patches of woody vegetation within the Mt Cass Conservation Management Area;
- b. Reduce predation pressure on avifauna, invertebrate and lizard populations;
- c. Reduce browsing damage to existing and regenerating indigenous vegetation;
- d. Manage pest levels in accordance with specific targets, as measured by residual trap catches, or other pest density indices;
- e. Protect and enhance populations of threatened plant species.

86. Habitat enhancement and pest control within the Mt Cass Conservation Management Area, and seasonal pest control in the remainder of the wind

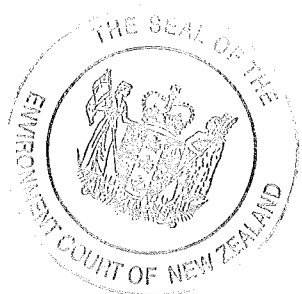


farm site, shall endure for the operational duration of the wind farm, and must include as a minimum the following:

- a. The erection (or maintenance or upgrading of existing farm fencing) of a continuous deer fence around the Mt Cass Conservation Management Area. No cattle shall be grazed within the fenced area. Sheep may only be grazed within the fenced area in accordance with a grazing regime provided for as part of the Environmental Management Plan.
- b. Pest control for the Mt Cass Conservation Management Area as outlined in condition **[89[a]]**, and in the rehabilitation areas described in condition **[61]**, and in the remainder of the wind farm for possums, mustelids, rats, hedgehogs and cats.
- c. Restoration planting of at least 1 ha (and up to 7 ha depending on natural rates of regeneration) of land shown on the areas of land shown on Golder Associates Plan CG221.
- d. All actions listed in conditions **[89] – [93]**.

Management Plan

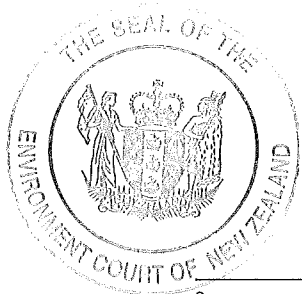
87. The Consent Holder shall engage a suitably qualified and experienced restoration ecologist to prepare, in consultation with the Department of Conservation, a Habitat Enhancement and Pest Control section of the Environmental Management Plan in respect of the Mt Cass Conservation Management Area.
88. The Habitat Enhancement and Pest Control section of the Environmental Management Plan which is submitted for certification shall set out a detailed programme of activity to be carried out in the first five years from commencement of activities authorised by this consent.
89. The Habitat Enhancement and Pest Control section of the Environmental Management Plan shall include a research and monitoring programme, developed in consultation with the Department of Conservation, that assesses whether the Habitat Enhancement and Pest Control Programme is successful in meeting the objectives and purposes outlined in condition **[85]**. The monitoring programme shall include appropriate measurable and time bound performance targets in relation to:



- a. A pest animal control programme including deer, goats, pigs, rabbits, hares, possums, mustelids, rats, hedgehogs, cats and mice.⁸
- b. The effect of reduced levels of domestic stock grazing on both forest regeneration and the potential increase in competition from exotic grasses and weeds. The programme shall include provision for annual monitoring of the effect of different sheep grazing intensities on:
 - i. Forest understory vegetation composition
 - ii. Limestone wheatgrass distribution and abundance, and
 - iii. The abundance of indigenous shrubs and ground layer species typical of open limestone pavement sites
 - iv. Natural regeneration processes in shrubland and open limestone habitats.
- c. Vegetation condition measured by monitoring permanent vegetation plots established in forest and scrub vegetation. The cover abundance of all vascular plants will be measured within each plot with tree diameter, and seedling number and height recorded. The plots will be measured every three years and compared to the performance indicators set out in condition [91].
- d. Herpetofauna population abundance, as required by condition [79.f].
- e. Avifauna abundance, including kereru, falcon and pipit, as required by conditions [69], [72] and [73].
- f. Weed monitoring and control, as required by condition [82].
- g. Threatened plant species, as required by condition [90].

90. The Habitat Enhancement and Pest Control section of the Environmental Management Plan shall also include measures for threatened plant species management including:

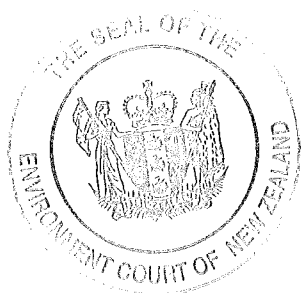
- i. Monitoring programme for *Heliohebe maccaskillii*
- ii. Surveys, propagation of and habitat management for *Australopyrum calcis* subsp. *optatum* populations on site.



⁸ The control of mice to <15% tracking tunnel index is to be achieved primarily via a combination of underlying Rat Control Programme and managed grazing in accordance with Habitat Enhancement Pest Control Section of the Environmental Management Plan. Mice control need not be continually or regularly undertaken because it is expected that general rodent management, along with grazing management will be effective in suppressing mice population.

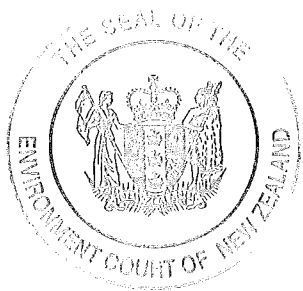
91. The Habitat Enhancement and Pest Control section of the Environmental Management Plan shall also include the following performance indicators, which are to be used to establish whether the Habitat Enhancement and Pest Control programme is successful in meeting the objective and purposes of the programme outlined in condition **[85]**.

- a. All fencing around and within the Mt Cass Conservation Management Area has been constructed or maintained to a standard that enables effective control of domestic and feral animals within the area including:
 - i. The boundary of the Mt Cass Conservation Management Area has been securely fenced in accordance with condition **[86]**.
 - ii. Internal fences are maintained to a standard that permits effective control of sheep within the area as required for management purposes.
 - iii. Cattle have been removed from the entire Mt Cass Conservation Management Area, and if they do enter the area, they have been quickly and efficiently removed and the reasons for their ingress (e.g. damaged fence) has been remedied.
- b. The research and monitoring programme required by condition **[89] and [90]**, has been developed by MainPower, in consultation with the Department of Conservation, and has been implemented.
- c. The plant pest control programme required by condition **[80]**, with regular surveillance surveys for new records, has been implemented.
- d. No plants of wilding conifers, European broom, hawthorn, barberry, wild rose, elderberry, cherry plum and old-man's beard (or any other species deemed to threaten biodiversity values such as wild thyme) are known to be alive within the Mt Cass Conservation Management Area, with any plants found eliminated within 3 months of their first record.
- e. A nassella tussock control programme is undertaken each year through the Mt Cass Conservation Management Area.
- f. The vegetation restoration programme required by condition **[86.c]** has been established including propagation, site preparation, planting, appropriate post-planting maintenance and with appropriate outcome monitoring.



- g. A minimum of 1 ha has been planted within 3 years of commissioning of the wind farm with more areas planted depending on rates of natural regeneration of vegetation.
- h. Plant survival of planted areas is >75% after 2 years, with replanting being undertaken where survival is <75% after 2 years.
- i. The condition of the eight biodiversity attributes⁹ used in the biodiversity offset model have not deteriorated at the end of 5 years from the commencement of activities authorised by this consent within the Mt Cass Conservation Management Area relative to the condition of these attributes at comparable sites that are not subject to the management actions being implemented through the plan.
- j. The condition of the eight biodiversity attributes used in the biodiversity model are meeting the targets set out in the Environmental Management Plan in accordance with condition [89], measured at the end of 10 years from the commencement of activities authorised by this consent, and at 5 yearly intervals thereafter.
- k. The establishment of a liaison protocol with the Department of Conservation in accordance with condition [156] whereby the Department of Conservation meets with MainPower at least once each year to review and comment on the conservation management achievements and proposed work as per its terms of reference.
- l. Monitoring results are reported to the Department of Conservation in accordance with the liaison protocol in time for them to review and provide comment to the independent peer reviewer and the Hurunui District Council each year.
- m. To enable annual reporting to the Department of Conservation and the peer reviewer, a GIS with associated databases has been established with appropriate documentation, and is updated on a regular basis where required.
- n. The composition of planted vegetation contains only those species that are found naturally within the limestone ecosystem at Mt Cass.

⁹ Composed of: Vegetation structure and composition (canopy cover; understory cover; ground cover) and species abundance (falcon; kereru and bellbird; small birds (fantail, grey warbler, brown creeper); Canterbury gecko; limestone wheatgrass).



Tussock Grassland Management

92. Where silver tussock is disturbed for pre-construction geotechnical investigations or construction purposes, but not necessary for the ongoing wind farm operation it shall be rehabilitated in accordance with condition **[61]** Rehabilitation of the area shall be to the standard identified in the pre-construction survey.
93. Where areas of silver tussock of a median greater than 10% density as identified on Golders Associates Plan CG241 dated 17 November 2010 are permanently removed as a result of wind farm development, an equivalent quantity of silver tussock shall be established and maintained on the wind farm site using direct vegetation transfer, planting, or other appropriate method.

Visual Effects Mitigation

Road construction mitigation and remediation

94. All surplus limestone and other excavated material shall be disposed of in locations indicated on the Golder Associates plans referred to in conditions **[3], [4]** and **[5]**.
95. Areas containing spoil disposal and surplus earthworks shall be finished in accordance with conditions **[31.f and 31.g]**.
96. Uphill edges of cut faces for roads built through Amuri limestone shall be finished in an irregular pattern.
97. Straight line interfaces between cut faces and original surfaces shall be avoided.
98. Cut faces in Amuri limestone shall be finished so as to emulate naturally occurring limestone faces. Techniques for this purpose shall reference naturally occurring patterns in local limestone faces and may include:
- a. Cut faces shall be scarified to achieve a surface texture commensurate with naturally occurring surface textures in weathered Amuri limestone. Scarification shall be done with a tyned tool in the direction of the bedding plane or 'grain' in the limestone.



- b. Continuous, sheer limestone cut faces shall be avoided through the creation of surface variations that emulate naturally occurring patterns. Shallow vertical and diagonal fissures, narrow rills and shallow pockets shall be cut into limestone faces in an irregular pattern at 3—5 m intervals.
 - c. In cuts over 2 m in height, shallow benches approximately 200-400mm deep shall be cut into the face at approximately 2 m (but irregular) intervals, parallel to the bedding plane or 'grain' of the rock. These benches will provide locations for the accumulation of sediments and the products of natural erosion, which will in turn form a substrate for the establishment of plants.
99. During the construction of Northern Terrace Road and associated ramp roads to the main ridgeline, cut material shall not be sidecast down-slope of the road, but shall be removed from the work areas and disposed of at disposal sites indicated on the Golder Associates Plans CG151.4-153.4.
100. Mitigation techniques on the outside edges of roads referred to in Condition [99] shall include, but not be limited to, the following:
- a. Where these roads are cut through Amuri limestone, at irregular intervals along the outer edges of roads, top soil shall be removed from the edge of the road to expose patches of underlying limestone.
 - b. Indigenous tussock and grey scrub species shall be established sufficiently close to the outer edge of the road to grow above the level of the roads formation.
101. Limestone boulders within boulderfields derived from Weka limestone that will be displaced through the construction of the Northern Terrace Road and spur roads or displaced through stabilisation measures, shall be relocated locally in naturalistic patterns on the downhill side of the roads. To the extent practicable, boulders shall be located in ground to a similar depth and orientation as they were in their natural state.
102. The finish of cut limestone faces and fill surfaces, the establishment of replicated boulder fields, the design of spoil disposal areas and the establishment of plants for mitigation and remediation shall be guided by the preparation (by the Consent Holder in consultation with the Hurunui District



Council) of a site 'landscape pattern book' of graphic examples drawn from the locality. The pattern book will provide a source book of examples that should be used to guide the visual appearance of landscape mitigation and remediation works.

Landscape expert guidance and oversight

103. During excavation associated with the construction of roads, the construction of the fence required by condition [86[a]] on the northern side of the escarpment, and the implementation of landscape mitigation and remediation works, including the disposal of surplus material to spoil disposal areas, a landscape experts panel shall be available as necessary to provide guidance on the implementation of the landscape conditions described in this section. The panel shall be comprised of two landscape architects; one nominated by Hurunui District Council, and one by the Consent Holder.
104. The landscape expert panel shall liaise with geomorphological, geotechnical and ecological experts as necessary.

Rehabilitation of visually prominent cut limestone surfaces

105. Within 3 months of the commencement of consent the Consent Holder shall commence a trial of methods for the remediation of freshly cut, un-weathered Amuri limestone surfaces to determine whether accelerated or simulated weathering can be achieved within a shorter time frame than that of natural biofilm establishment.
106. Methods for trialling shall be developed in consultation with the Hurunui District Council and the landscape panel referred to in condition [103], and may include:
- a. The application of organic materials to initiate natural biofilm colonisation; or
 - b. The application of organic or inorganic sprays for the purpose of temporary staining of freshly cut rock surfaces.
107. At the same time as providing the Hurunui District Council with the information required by condition [33], the Consent Holder shall notify the Council of the method that shall be used to remediate Amuri limestone at the site both immediately after cutting and in the long term, providing that any



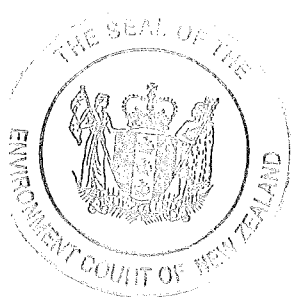
such method will not jeopardise the natural process of biofilm colonisation. The Consent Holder shall implement the identified method as soon as is practicable but no later than six months after cutting.

Planting for mitigation and remediation of cut and fill batters

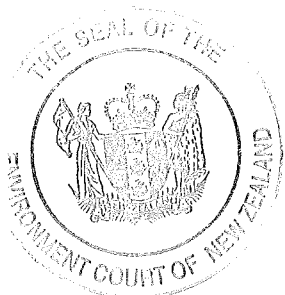
108. Other than on cut limestone faces, cut and fill surfaces shall be rehabilitated in accordance with condition **[61]**.
109. Locations for the establishment of woody plants and silver tussock within the wind farm site for visual mitigation shall be determined through consultation between landscape and ecology experts nominated by Hurunui District Council and the Consent Holder. The location of mitigation planting shall take into account the effects arising as a consequence of visibility from important public viewpoints agreed upon by the landscape experts.
110. The pattern of plantings undertaken for visual mitigation and remediation shall reflect natural patterns of plant distribution and association, as illustrated in the site landscape pattern book (see condition **[102]**).
111. The use of plants for mitigation and remediation of visual and landscape effects associated with cut and fill excavations shall be subject to conditions specified for habitat enhancement, ecological restoration and weed management.

Hazardous Substances Management

112. The Consent Holder shall ensure that all contaminant storage shall be bunded or contained in such a manner so as to prevent the discharge of contaminants. All contaminant storage areas with the exception of turbines and transformers are to be located in accordance with MVH plan Z1357201-C103.
113. Site refuelling shall be controlled by the development of operating procedures to minimize the risk of spills. Those procedures shall be incorporated in a Site Oil Spill Contingency Plan for mobile refuelling which shall be submitted to the Hurunui District Council for certification. This plan shall address:
 - a. Purpose and Policy
 - b. Safety



- c. Description of the wind farm site
 - d. Characteristics of oils and hydrocarbons used at the site
 - e. Potential spill sources and risks
 - f. Preventative measures
 - g. Training
 - h. Spill response organisation
 - i. Equipment and operators
 - j. Equipment available off site
 - k. Immediate response
 - l. Media releases
 - m. Debriefing
 - n. Points to consider
 - o. Document review
 - p. Appendix 1 : Telephone numbers
 - q. Appendix 2 : Pollution Report and Incident Forms
 - r. Appendix 3 : Material Safety Data Sheets
114. All machinery and plant shall be regularly maintained in such a manner so as to minimise the potential for leakage of contaminants.
115. Spill kits shall be available on site to deal with any accidental spillage beyond the bunded area.
116. All contaminants (e.g. fuel, hydraulic oils, lubricants etc) shall be removed at the end of the construction period except for those required for ongoing maintenance of the wind farm and operational activities.
117. All storage and use of hazardous substances shall be in accordance with the provisions of the Hazardous Substances and New Organisms Act 1996 (HSNO), including compliance with any required emergency management plan, site test location certificate, and stationary container test certificate.
118. Any transformer erected on site shall be accompanied by containment measures sufficient to ensure that no transformer oil will be released into the environment in the event of spillage.



Management of Fire Risk

119. The Consent Holder shall prepare a Fire Management Plan (FMP) that establishes procedures for the management of the risk of fire and for fire suppression. The FMP shall be part of the Environmental Management Plan. The FMP shall be in general accordance with the Forest and Rural Fire Act 1977 and any regulations thereunder.
120. The Consent Holder shall ensure that the FMP, including any amendments, are available for viewing by the Consent Authority on request in writing. The Department of Conservation, the Ashley Rural Fire Authority and the Principal Rural Fire Officer of the Hurunui District Council, or such authority as may replace any one of these authorities as parties responsible for the management of rural fires within and on land adjoining the footprint, shall be consulted during the development of the FMP.
121. The Fire Management Plan shall include, but not be limited to:
- a. The names and contact details for the Ashley Rural Fire Authority;
 - b. Other relevant contact details (of the organisations set out in appendix G of the Ashley Rural Fire District Plan 2009 – 2011);
 - c. A description of the sources of water to be used in fire fighting;
 - d. A requirement for the provision on site of a water point of at least 30,000 litres of water;
 - e. Requirements for at least one vehicle with a minimum capacity of 200 litres onsite during periods of extreme fire risk;
 - f. Ensuring adequate protection is in place prior to undertaking any activities authorised by this consent, including any preliminary geotechnical investigations.

Accidental Discovery Protocol

122. In the event of the accidental discovery of any archaeological remains the following shall occur:
- a. All activity affecting the immediate area will cease and the New Zealand Historic Places Trust be notified.
 - b. The site shall be secured to ensure the archaeological remains are not further disturbed.



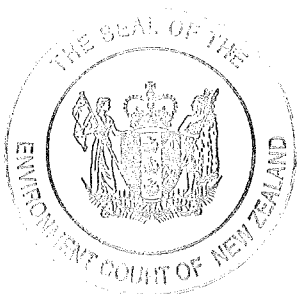
- c. Works affecting the archaeological remains shall not recommence until the necessary authorities under the Historic Places Act 1993 are obtained.
- d. If human remains/koiwi tangata are located, in addition to the steps above the NZ Police shall be contacted.
- e. Wahi Tapu, Wahi Taonga and Urupa Protocol shall be implemented if relevant.

123. The Consent Holder shall offer to enter into a Discovery Protocol for Wāhi Tapu, Wāhi Taonga and Urupā jointly with Te Runanga o Ngāi Tahu and Te Ngāi Tūāhuriri Runanga. The purpose of a "Discovery Protocol for Wāhi Tapu, Wāhi Taonga and Urupā shall be to:

- a. Manage and protect the integrity of known and unknown archaeological sites from damage and loss;
- b. Maximise the opportunity to retrieve physical and archaeological evidence from disturbed sites;
- c. Obtain quality information on the lives of people , their activities, food, resource use, trails and habitation areas of Ngāi Tahu ancestors from archaeological sites; and
- d. Ensure Te Ngāi Tūāhuriri Runanga is satisfied with the management of any koiwi tangata.
- e. The Protocol shall include the following requirements:
 - i. An offer to engage a representative of Te Ngāi Tūāhuriri Runanga trained in the discovery and recognition of archaeological sites to advise, oversee and where necessary be present during site preparation, excavation and construction, to act as advisor to the Consent Holder on identification of Wāhi Tapu, Wāhi Taonga, Urupā or historic cultural sites.
 - ii. The Consent Holder shall consult with Te Runanga o Ngāi Tahu and Te Ngāi Tūāhuriri Runanga to determine in accordance with tikanga Maori if there are any matters of protocol which tangata whenua wish to undertake in relation to the commencement of any development works, significant events or the commissioning of the completed works.
 - iii. The Consent Holder shall ensure that contractors involved with earthmoving activities have received appropriate training and



- are aware of the requirement to undertake and monitor earthmoving activities in a way that enables the identification of Wāhi Tapu, Wāhi Taonga, Urupā or historic cultural sites. Te Runanga o Ngāi Tahu and Te Ngāi Tūāhuriri Runanga shall be offered a contract to provide appropriate training to contractors.
- iv. Immediately it becomes apparent that a Wāhi Tapu, Wāhi Taonga, Urupā or historic cultural site has been discovered, earthmoving activities shall stop in the location of the discovery. The contractor shall shut down all machinery or activity immediately, leave the location and advise the Consent Holder of the occurrence.
 - v. In cases other than where suspected Koiwi Tangata (human remains) are suspected:
 - 1. The representative of Te Ngāi Tūāhuriri Runanga shall be consulted by the Consent Holder of the site to determine what further actions are required to safeguard the site or its contents, and to avoid, remedy or mitigate any damage to the site.
 - 2. Work in the area of the discovery may only continue once all the necessary authorities under the Historic Places Act 1993 are obtained.
 - vi. Where Koiwi Tangata (human remains) are suspected:
 - 1. The Consent Holder shall take steps immediately to secure the site of the Koiwi Tangata in a way that ensures the koiwi tangata are untouched.
 - 2. The Consent Holder shall be responsible for notifying the Te Ngāi Tūāhuriri Runanga, the Police and the Historic Places Trust that suspected Koiwi Tangata have been uncovered.
 - 3. The Consent Holder of the site shall make its staff available to meet and guide Kaumatua, the Police and Historic Places Trust staff to the site, assisting with any requests that they may make.
 - 4. Earthmoving operations in the vicinity of the Koiwi Tangata shall remain halted until the Kaumatua; Police and Historic Places Trust staff have marked off the area around the



affected area and given approval for earthmoving operations to begin.

- vii. Work in the affected area may only continue once:
 - 1. if the Koiwi Tangata are not of Maori origins, all the necessary legal authorisations are obtained.
 - 2. if the Koiwi Tangata are of Maori origins, all the necessary legal authorisations are obtained and with the express agreement of the Kaumatua.

124. The Consent Holder shall comply with any Discovery Protocol for Wāhi Tapu, Wāhi Taonga and Urupā jointly entered into with Te Runanga o Ngāi Tahu and Te Ngāi Tūāhuriri Runanga, to the extent necessary to give effect to the mandatory requirements in the above condition.

125. The Consent Holder shall provide Te Runanga o Ngāi Tahu, Te Ngāi Tūāhuriri Runanga and the Historic Places Trust with the following information no less than 10 working days prior to any earthmoving activities:

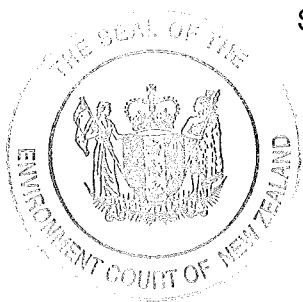
- a. A schedule of the dates of all significant earthmoving events, their sequence and duration.
- b. The Consent Holder shall invite Te Runanga o Ngāi Tahu and Te Ngāi Tūāhuriri Runanga to attend any episode of significant earthmoving activity.

126. Prior to commencing construction, the Consent Holder shall consult with the three Hapu of Waitaha to ensure that up to six Kaumatua representatives are provided with sufficient opportunity to visit the site at a mutually agreed time to inspect:

- a. All areas of the site that have been identified for excavation; and
- b. Any other locations of interest to Waitaha ki Waitaha within the wider outline area.

127. Following the visit to the site by the Kaumatua representatives under condition [126] the Consent Holder shall prepare a *Site Cultural Sensitivity Protocol* (SCSP) to be included in the Construction Management Plan. The SCSP shall:

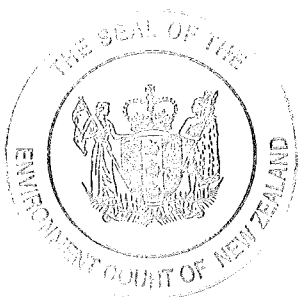
- a. Be prepared in consultation with Waitaha ki Waitaha;



- b. Include protocols and process for dealing in a culturally safe manner with all sites identified under condition [126] as being of potential cultural concern or significance to Waitaha ki Waitaha;
- c. Provide for a procedure whereby a nominated representative of Waitaha ki Waitaha is able to receive regular updates of the construction programme and the implementation of the SCSP;
- d. Require the Consent Holder, in consultation with Waitaha ki Waitaha, to place Interpretative Panels (signs) on all sites or features of cultural significance to ensure that the cultural and historical significance of each site can be recognised and understood; and
- e. Include an appropriate procedure whereby:
 - i. The representative described in condition [127.c] and up to six Kaumatua are able to visit the site during the construction period to inspect all of the sites described in condition [126] as required by Waitaha Ki Waitaha; and
 - ii. All of Waitaha Ki Waitaha and Its associates are, after construction, able to access the site to observe and celebrate significant cultural events and occurrences on an ongoing basis.

128. The Consent Holder shall prepare an Accidental Discovery Protocol (ADP) as part of the Construction Management Plan prior to construction of the wind farm. The ADP shall be prepared in consultation with Waitaha ki Waitaha and the New Zealand Historic Places Trust, the ADP shall be put in place for any earthmoving or ground modification that occurs during the construction and operation of the wind farm:

- a. The ADP shall set out the steps to take should any prehistoric (Māori) or historic archaeological site be found as a result of any earthmoving or ground modification that occurs during the construction and operation of the wind farm at any time.
- b. In the event that koiwi tangata (human skeletal remains), taonga or artefact material are discovered during site construction, the Consent Holder shall, without delay:
 - i. Cease all work within the immediate vicinity of the discovery;
 - ii. Notify their nominated Archaeologist, the Consent Authority, Waitaha ki Waitaha and the New Zealand Historic Places Trust;



- iii. Enable a site inspection by, Waitaha ki Waitaha and their advisors, and the New Zealand Historic Places Trust who shall determine the nature of the discovery and the further action required, including whether an Archaeological Authority is required under the Historic Places Act 1993.
 - iv. In the case of accidental discovery of an archaeological site a programme of archaeological site investigation shall be carried out by the Consent Holder Any such site shall be properly excavated, recorded, analysed and reported upon under the supervision of an appropriately qualified archaeologist. All archaeological work shall be carried out to the best professional standards.
 - v. Any koiwi tangata or taonga shall be handled and removed by Waitaha ki Waitaha responsible for the tikanga (custom) appropriate to its removal and preservation.
- c. Upon completion of tasks [128.b.i] to [128.b.v] above, and provided all statutory permissions have been obtained, the Consent Holder may recommence site construction following consultation with the Consent Authority, Waitaha ki Waitaha, and the New Zealand Historic Places Trust.

Noise

Definitions

129. The following definitions shall apply for the purposes of these conditions:
- a. Where noise measurement or assessment is required, these shall be undertaken in accordance with NZS 6801:2008 "Acoustics— Measurement of Sound", and NZS 6802:2008 "Acoustics— Environmental Noise". Wind turbine sounds shall be measured and assessed in accordance with NZS 6808:2010 "Acoustics – Wind farm Noise".
 - b. Reference to "dwelling" shall mean any dwelling existing at the time of granting of this consent.
 - c. Notional boundary shall have the meaning set out in NZS 6802:2008.
 - d. "Noise Sensitive Activities" shall have the meaning set out as "Residential Activity" in paragraph 2.2 of NZS 6802:2008.



Construction Activities

130. All construction, earthworks, site remediation and decommissioning, shall be designed and carried out in accordance with the New Zealand Standard NZS 6803:1999 "Acoustics - Construction Noise" and shall comply with Table 2 of that standard for "long term duration".

Operational noise (Non-Turbine)

131. Noise from all other activities on the site (other than wind turbine generator operation and construction activities) shall not exceed the following limits at or within the notional boundary of any dwelling existing at the date of granting of consent (for the avoidance of doubt, this shall include dwellings on Mt Cass, Dovedale and Hamilton Glens):

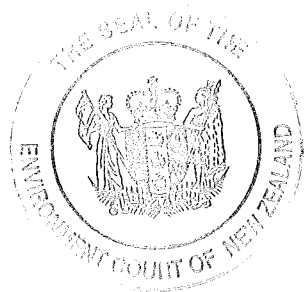
- a. 7.00am to 7.00pm 50dB $L_{Aeq(15 \text{ minute})}$
- b. 7.00pm to 7.00am 40dB $L_{Aeq(15 \text{ minute})}$
- c. 7.00pm to 7.00am 70dB L_{Amax}

Operational noise (Turbines)

132. At any wind speed wind farm sound levels ($L_{A90}(10 \text{ min})$) shall not exceed the background sound level by more than 5 dB, or a level of 40 dB $L_{A90}(10 \text{ min})$, whichever is the greater, at any point within the notional boundary of any dwelling or building housing noise sensitive activities existing at the date of granting of consent, when measured and assessed in accordance with New Zealand Standard NZS6808:2010 "Acoustics – Wind farm Noise" (for the avoidance of doubt, this shall include dwellings on Dovedale and Hamilton Glens and at 666 Mt Cass Road (Tiromoana Homestead) whether or not those houses exist at the time of the grant of consent).

133. Notwithstanding condition [132], the notional boundary of the dwelling located at NZMG coordinates 2500630E 5796970N shall be considered as a high amenity area for the purposes of NZS6808:2010 for as long as, but no longer, as a person on the autism spectrum permanently resides at that dwelling.

133[a] Prior to commissioning of any turbine, the Consent Holder shall provide the Hurunui District Council's Environmental Services Manager with an Acoustic Emissions Report which details the sound power level of the selected turbines, and confirms the selected turbines do not have special audible characteristics.



Post Installation Testing

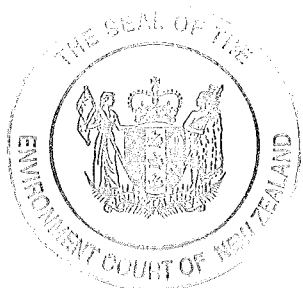
134. For the purposes of assessing compliance with conditions [132] and [133], detailed testing shall be undertaken in accordance with section 7.5 of NZS6808:2010. Post installation testing shall be carried out at no fewer than 3 dwellings, and shall include the dwelling located at NZMG coordinates 2500630E 5796970N, Tiromoana Homestead and Hamilton Glens unless otherwise approved by Council. A report setting out the measurement details and results shall be provided to Hurunui District Council no later than 3 months after the Mt Cass Wind Farm commences operation, or if the Wind Farm is commissioned in stages, within 3 months of each stage commencing operation.

134[a] The sound from at least two wind turbines shall be measured prior to commissioning the wind farm. These measurements shall be conducted at a location within 1000m from the turbines. A compliance assessment report for the turbines shall be submitted to the Hurunui District Council's Environmental Services Manager in accordance with Section 8.4.1 of NZS6808:2010. Turbines 61/75 to 69/75 in the R33 layout, 36/42 to 39/42 in the R60 layout, or 24/26 to 26/26 in the R90 layout shall not be operated until a report on this test has been submitted and it shows that no special audible characteristics are present, when assessed in accordance with NZS6808/2010. The reference test method for tonality shall be that prescribed as Annex C to ISO 1996 – 2:2007.

Note: the intention is that testing is carried out prior to operating the turbines closest to the McLachlan property.

135. If, at any time, testing shows that the wind farm does not comply with the noise conditions of this consent, the Consent Holder shall undertake remedial measures to achieve compliance at all dwellings in accordance with the following timeframes:

- Remedial measures for non-compliance of 3dB or less shall be undertaken within 10 working days;
- Remedial measures for non-compliance of between 3dB-8dB shall be undertaken within 5 working days;



- Remedial works for non-compliance of more than 8dB shall be undertaken within 24 hours.

The remedial measures may include de-rating turbines, or shutting down turbines. If turbines are shut down, such turbines shall remain off (other than for testing) until such time as any necessary remedial work to achieve compliance is complete. On completion of any remedial work, an additional report shall be submitted to Council demonstrating compliance .

Special Audible Characteristics

136. For the avoidance of doubt, wind farm sounds containing a special audible characteristic such as impulsiveness, tonality and/or an amplitude modulation, shall be assessed in accordance with NZS6808: 2010. Where modulation of wind farm sound is detected, the application of the 5dB penalty for special audible characteristics is to apply to the measured sound level where the measured peak to trough level exceeds 6dBA on a regularly varying basis or if the spectral characteristics, one-third octave band levels, exhibit a peak to trough variation that exceeds 6dB on a regular basis in respect of the blade pass frequency.

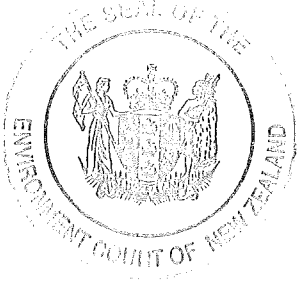
Additional Monitoring

136 [a] Additional monitoring and reporting of the type required by condition 134 and 135 may be required of the Consent Holder by the Hurunui District Council where in the opinion of an enforcement officer appointed by the Council, wind farm sound received at any noise sensitive location as defined by NZ6808.2010 is considered to have become objectionable, or where the enforcement officer has reasonable grounds to believe that the noise limits in condition [132] are being exceeded.

Radio Interference

137. Cables linking the turbines and any substations shall be installed in accordance with industry standard practices and protocols in order to avoid Earth Potential Rise (EPR) interference with existing communication facilities.

138. Within 12 months of the Mt Cass Wind Farm becoming operational, if requested by a property owner or occupier, the Consent Holder shall remedy any television interference that is a direct result of the installation and

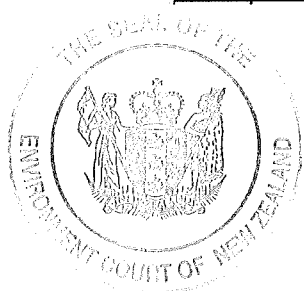


operation of the wind turbines as soon as practicable. This remedy will be the restoration of reception for free to air channels at the Consent Holder's cost to a level of reception quality in existence at each point of interference prior to the wind farm construction. The Consent Holder's obligation under this condition is limited to a single remediation of a loss of reception.

139. Prior to the erection of wind turbines in close proximity to Mt Cass, if requested by an operator of fixed radio linking service located on Mt Cass, the Consent Holder shall ensure that any turbine is located outside of the 'first Fresnel Zone'. For the purposes of clarification, this may be achieved by either relocating the fixed radio linking service or through the siting of a wind turbine.

140. Within 12 months of the Mt Cass Wind Farm becoming operational, if requested by the provider of one of the fixed radio linking services set out in the table below, the Consent Holder shall investigate any reflection (or scattering) effect of the Wind Farm on that service, and if any loss of service is occurring, remedy this by offering to undertake any work necessary.

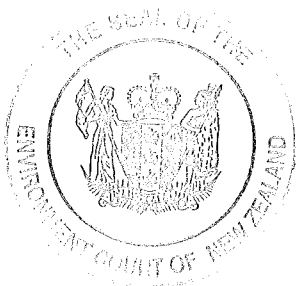
Licence No.	Client	Freq (MHz)	Licence Type	TxLoc	TxE	TxN	RxLoc	RxE	RxN
155126	MAINPOWER NEW ZEALAND LTD	454.925	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	RANGIORA	2476800	5767000	MT CASS	2495690	5792150
155127	MAINPOWER NEW ZEALAND LTD	459.962	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	RANGIORA	2476800	5767000
155128	MAINPOWER NEW ZEALAND LTD	459.097	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	BELTANA	2539200	5832200
155129	MAINPOWER NEW ZEALAND LTD	454.05	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	BELTANA	2539200	5832200	MT CASS	2495690	5792150
177635	MAINPOWER NEW ZEALAND LTD	453.8	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	WALLACE PEAK	2494100	5846000	MT CASS	2495690	5792150
177636	MAINPOWER NEW ZEALAND LTD	458.837	Fixed Bi-directional Point-to-Multipoint	MT CASS	2495690	5792150	BELTANA	2539200	5832200
177636	MAINPOWER NEW ZEALAND LTD	458.837	Fixed Bi-directional Point-to-Multipoint	MT CASS	2495690	5792150	WALLACE PEAK	2494100	5846000



177637	MAINPOWER NEW ZEALAND LTD	453.8	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	BELTANA	2539200	5832200	MT CASS	2495690	5792150
177638	MAINPOWER NEW ZEALAND LTD	454.275	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	RANGIORA	2476800	5767000	MT CASS	2495690	5792150
177639	MAINPOWER NEW ZEALAND LTD	459.313	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	RANGIORA	2476800	5767000
174826	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	424.663	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	CHRISTCHURCH	2480900	5740700	MT CASS	2495690	5792150
174827	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	429.675	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	CHRISTCHURCH	2480900	5740700
175167	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	420.113	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	BELTANA	2539200	5832200
175171	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	425.125	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	BELTANA	2539200	5832200	MT CASS	2495690	5792150

Licence No.	Client	Freq (MHz)	Licence Type	TxLoc	TxE	TxN	RxLoc	RxE	RxN
175219	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	426.575	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	ETHELTON	2514100	5815000	MT CASS	2495690	5792150
175220	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	421.563	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	ETHELTON	2514100	5815000
175506	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	424.663	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MIDDLETON RAILYARDS	2476200	5740800	MT CASS	2495690	5792150
175507	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	429.675	Fixed < 1GHz; BW >12.5kHz & <=50kHz (Bi-d)	MT CASS	2495690	5792150	MIDDLETON RAILYARDS	2476200	5740800
201011	TAIT ELECTRONICS LTD	1429.38	Fixed >=1GHz & <14GHz (Bi-directional)	MT CASS	2495690	5792150	MARLEYS HILL (TAIT)	2480430	5732990
201012	TAIT ELECTRONICS LTD	1523.88	Fixed >=1GHz & <14GHz (Bi-directional)	MARLEYS HILL (TAIT)	2480430	5732990	MT CASS	2495690	5792150

141. Within 12 months of the Mt Cass Wind Farm becoming operational, if requested by the provider of one of the wide area coverage services set out in the table below, the Consent Holder shall investigate any scattering interference effect of the Wind Farm on that service, and if any loss of service is occurring, remedy this by offering to undertake any work necessary.



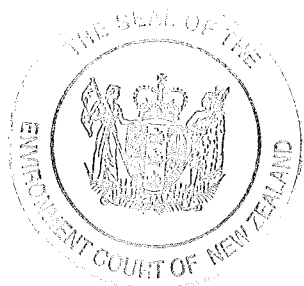
Licence No.	Licence Type	Client	Licence ID	Freq (MHz)	Loc Name	Easting	Northing
176984	Land Repeater >5W; BW <=12.5kHz	CANTERBURY WASTE SERVICES LTD	81552	164.675	MT CASS	2495690	5792150
155118	Land Repeater >5W; BW >12.5kHz	MAINPOWER NEW ZEALAND LTD	491	461.925	MT CASS	2495690	5792150
177572	Land Repeater >5W; BW <=12.5kHz	MAINPOWER NEW ZEALAND LTD	82761	164.225	MT CASS	2495690	5792150
125595	Land Repeater NZ Wide; BW >12.5kHz	NEW ZEALAND RAILWAYS CORPORATION (ONTRACK)	2486	152.05	MT CASS	2495690	5792150
200998	Land Repeater >5W; BW <=12.5kHz	TAIT ELECTRONICS LTD	101365	418.012	MT CASS	2495690	5792150
207409	Land Repeater >5W; BW <=12.5kHz	TAIT ELECTRONICS LTD	111459	858.038	MT CASS	2495690	5792150

Aviation

142. Any navigational lights to be located on the turbines or meteorological masts, as required by the Civil Aviation Authority (CAA), shall be installed and operated in such a way to minimise their visibility when viewed from the ground, while meeting CAA requirements. The Consent Holder shall provide a copy of the written advice from the Civil Aviation Authority identifying the relevant turbines to Council within seven days of receiving such advice.

Public Access

143. The Consent Holder shall provide a walking track for public access over the site, generally in accordance with the indicative route identified on Golder Associates plan CG191.1 dated 17 December 2010. The Consent Holder shall finalise the route and standard of the walking track following consultation with the Department of Conservation.
144. Public access to the route shall be secured in perpetuity by means of an appropriate legal instrument to be registered on the relevant certificate of title within 60 working days of the completion of wind farm construction.
145. Access restrictions may occur under the following circumstances:
- For farm management (e.g. lambing)
 - Maintenance of roads and tracks when machinery is operating on site or open excavations are present



- c. During major turbine maintenance when heavy machinery is operating on site
- d. During times of high fire risk
- e. At any time that the public safety is at risk due to either wind farm or farm operations (at the sole discretion of the Consent Holder).

146. The Consent Holder shall provide interpretative signage along the walking route, following consultation with the Department of Conservation.

Community Liaison Group

147. The Consent Holder shall, prior to undertaking any activities authorised by this consent, publicly offer to establish (by way of community newsletter and public notice) a community liaison group for the Mt Cass Wind Farm project.

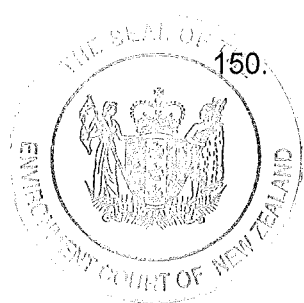
As a minimum the following shall be invited to participate in this group:

- a. A maximum of two representatives of property owners, comprising one from within each of the Amberley and Glenmark Wards;
- b. One representative of Mt Cass Road residents;
- c. One representative of the Consent Holder; and
- d. A representative of the Hurunui District Council shall be invited to attend meetings in an observer capacity.

148. The Consent Holder shall offer the opportunity for regular meetings during the construction of the wind farm and at least annually during the operation of the wind farm.

149. The objective of the community liaison group is to facilitate information flow between the Consent Holder and the community and to be an ongoing point of contact between the Consent Holder and the community. The functions of the group may also include acting as a forum for relaying any community concerns about the construction and ongoing operation of the wind farm and reviewing the implementation of measures to resolve and manage community concerns. MainPower is to advise the Community Liaison Group of the final choice of turbine to be used, as soon as reasonable after it has made that decision.

150. In particular, the Consent Holder shall provide an opportunity for the Community Liaison Group to:



- a. Provide input and feedback into the initial preparation and review of the management plans; and
 - b. Receive and discuss the results of all monitoring and reports as required by the conditions of these consents.
151. The Consent Holder shall be responsible for convening the meetings of the group and shall cover the direct costs associated with the establishment and operation of the group. The Consent Holder shall be responsible for the keeping and distribution of the group's minutes to all participants of the group.
152. The Consent Holder shall not be in breach of the above conditions if any one or more of the above parties specified above do not wish to be members of the group or to attend any particular meeting.

Contact Procedure

153. The Consent Holder shall establish and publicise contact details for a liaison officer, so that members of the local community have a specified and known point of contact should they wish to raise any issues that may arise during construction and operation of the wind farm. A log book detailing all calls and any action taken shall be kept, and made available to Hurunui District Council on request.

Complaint Register

154. The Consent Holder shall maintain and keep a Complaints Register for any complaints about the construction activities and operation of the wind farm received by the Consent Holder including complaints in relation to traffic, noise, dust, shadow flicker or blade glint. The Register shall record, where this information is available:
- a. The date, time and duration of the incident that has resulted in a complaint;
 - b. The location of the complainant when the incident was detected;
 - c. The possible cause of the incident;
 - d. Any corrective action undertaken by the Consent Holder in response to the complaint, including timing of that corrective action;
 - e. The date and details of the response given to each complainant.



The Complaints Register shall be available to the Council and the Community Liaison Group at all reasonable times upon request.

155. Within 5 days of receipt of any complaint in accordance with condition [154], the Consent Holder shall advise the Hurunui District Council of the details of any complaint received and, where appropriate, of any remedial or corrective action taken, including the response provided to the complainant.

Statutory Liaison Protocol – Department Of Conservation

156. Prior to undertaking any activities authorised by this consent, the Consent Holder shall offer to establish a Statutory Liaison Protocol with the Department of Conservation.

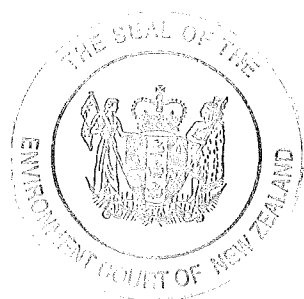
157. A representative of the Department of Conservation shall be offered the opportunity to visit the site at regular intervals during construction and to offer comment on the construction process, to attend an annual meeting, and the provision of any information to which the Hurunui District Council is entitled by virtue of these consents.

158. The purposes of the annual meeting are to:
- a. Provide input and feedback on the preparation, implementation, review and adaption of the management plans required by condition [23];
 - b. Receive from the Consent Holder, and discuss with the Consent Holder and the Hurunui District Council, the results of all monitoring and reporting required by the conditions of this consent.

Independent Peer Reviewer

159. Prior to undertaking any activities authorised by this consent, the Consent Holder shall engage, at its cost, a Peer Reviewer who is independent of the Consent Holder, and who is approved in writing by the Hurunui District Council.

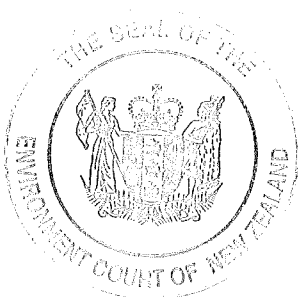
160. The Peer Reviewer shall be experienced in the field of terrestrial ecology and restoration ecology.



161. The Peer Reviewer shall provide an annual report to the Hurunui District Council which:
- a. Addresses the adequacy of the actions and methods set out in the Environmental Management Plan required by condition [23] and the Decommissioning Management Plan required by condition [180] to achieve their purposes and objectives, and whether or not the actions and methods are in accordance with good practice;
 - b. Reviews the annual report prepared by the Consent Holder under condition [67] and assesses whether the purposes and objectives of the Environmental Management Plan are being achieved
 - c. May make recommendations for improvements.
162. Where the independent Peer Reviewer considers that he / she does not have the required expertise in any area of ecology in order to fulfil the functions set out in [161] above, he/she may, following consultation with the Consent Holder engage the services of an appropriate expert to report on the relevant matter to the Independent Peer Reviewer. Any report from such an expert shall form part of the annual report as required by these conditions.

Review of Conditions

163. In accordance with section 128 of the Resource Management Act 1991, the Council may at one year after the commencement of this consent and at yearly intervals thereafter, serve notice on the Consent Holder of its intention to review any of the conditions of this consent for any of the following purposes:
- a. To deal with any unanticipated adverse effects on the environment which may arise from the exercise of the consent, which is appropriate to deal with at a later stage; or
 - b. To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or
 - c. Ensuring that the conditions are effective and appropriate in managing the effects of activities permitted by this consent.
 - d. To deal with any lack of achievement of the objectives of the Environmental Management Plan, and to require the Consent Holder to undertake further adaptive management measures to better implement the objectives of the Plan.



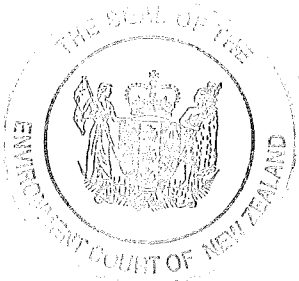
- e. To address any unanticipated adverse effect that is identified through the peer review process under condition **[161]**, and in the monitoring reports required by condition **[67]**.

Costs Associated with Monitoring and Review

164. The Consent Holder shall pay to the Hurunui District Council the actual and reasonable costs associated with the monitoring of conditions, or review of consent conditions, or supervision of the resource consent as set in accordance with section 36 of the Resource Management Act 1991. These costs may include site visits, correspondence and other activities, the actual costs of materials or services, including the costs of consultants or other reports or investigations which may have to be obtained.

Performance Bond

165. At all times, the Consent Holder shall provide and maintain in favour of the Hurunui District Council a financial assurance (Performance Bond) to:
- a. Secure compliance by the Consent Holder with the conditions of the consent and to enable any adverse effects on the environment caused by activities of the Consent Holder to be avoided, remedied or mitigated;
 - b. Secure completion of the Habitat Enhancement and Pest Control Management Plan;
 - c. Secure the completion of rehabilitation and decommissioning in accordance with the Decommissioning Management Plan; and
 - d. Ensure that, where necessary, the Hurunui District Council has appropriate resources to remedy any failure (whether deliberate or otherwise) or inability on behalf of the Consent Holder to comply with the conditions of consent.
166. The amount (quantum) of the Performance Bond may vary from time to time but at any given time shall be sufficient to cover the estimated cost at that time (including any contingency) of compliance with all conditions as detailed in conditions **[167]** to **[173]**.
167. The Consent Holder shall not give effect to the consent until the Performance Bond is executed by the Consent Holder and guarantor and deposited with the Hurunui District Council.



168. The performance of the conditions of the Performance Bond shall be guaranteed by a guarantor acceptable to the Hurunui District Council. The guarantor shall bind itself to pay for all works associated with the carrying out and completion of all conditions of consent and avoiding, remedying or mitigating any adverse effects on the environment caused by the activities of the Consent Holder and carrying out and completion of the Habitat Enhancement and Pest Control Management Plan in the event of any default of the Consent Holder.
169. If the Consent Holder is unable at any time to arrange a guarantor for the quantum as set out in condition **[168]** the Consent Holder will provide a cash bond.
170. The Performance Bond shall be in a form acceptable to the Hurunui District Council and shall be consistent with conditions **[164]** to **[175]**.
171. The Performance Bond shall provide that the Consent Holder remains liable under the Resource Management Act 1991 for any breach of the conditions of the consent.
172. The Consent Holder shall provide the Hurunui District Council with a report which recommends the amount of the initial Performance Bond at least 6 months prior to the anticipated commencement of activities authorised by the consent.
173. The amount of the Performance Bond shall be reviewed and fixed by the Hurunui District Council, within 30 days of receipt of the report required by condition **[172]**. Notification of the amount of the Performance Bond under this condition shall be advised by written notice (the "review date") by the Hurunui District Council to the Consent Holder, within the timeframes specified above.
174. Should the Consent Holder not agree with the amount of the Performance Bond fixed by the Hurunui District Council under condition **[173]** then the matter may be referred to arbitration in accordance with the provisions of the Arbitration Act 1996. Arbitration shall be commenced by written notice ("notice



of arbitration”) by the Consent Holder to the Council advising that the amount of the bond is disputed, such notice to be given within 14 days of the review date under condition **[173]**. If the parties cannot agree upon an arbitrator within 7 days of the notice of arbitration, then an arbitrator shall be appointed by the President of the Institute of Professional Engineers of New Zealand. Such arbitrator shall give an award in writing to the parties within 30 days after his or her appointment (the “date of arbitration decision”), unless the parties agree that the date of arbitration decision shall be extended. The Consent Holder shall bear the full and reasonable costs of the parties in connection with this arbitration. In all other respects, the provisions of the Arbitration Act 1996 shall apply.

175. If the decision of the arbitration is not made available by the date of arbitration decision referred to in condition **[170]**, then the amount of the Performance Bond shall be the sum fixed by the Hurunui District Council under condition **[169]**, until such time as the arbitration does give an award in writing to the parties. At that time, the amount of the Performance Bond shall be adjusted in accordance with the arbitration decision.
176. The amount of the Performance Bond shall be reviewed within 30 days of each third anniversary of the date of commencement of construction activities authorised by the consent. Conditions **[173]** and **[174]** will apply with any necessary modifications. Pending the outcome of the review, but subject to condition **[175]**, the existing bond shall continue in force. That sum shall be adjusted in accordance with the arbitration decision.
177. If the amount of the bond is to be increased as a result of a review by the Hurunui District Council under condition **[176]** or as a result of the decision of an arbitrator under condition **[174]**, the Consent Holder must lodge a new bond or a variation of the bond with the District Council within 30 days. The existing Performance Bond shall continue in full force and effect until the new bond is lodged with the Hurunui District Council.
178. The Performance Bond may be varied, cancelled, or renewed at any time by agreement between the Consent Holder and the Hurunui District Council provided that cancellation will not be agreed to unless a further or new bond



acceptable to the Hurunui District Council is available to replace immediately that which is to be cancelled.

179. The consent authority shall release the Performance Bond on the Completion of Closure of the Site. "Completion of Closure of the Site" means completion of the Decommissioning Plan under condition **[180]**.

Decommissioning

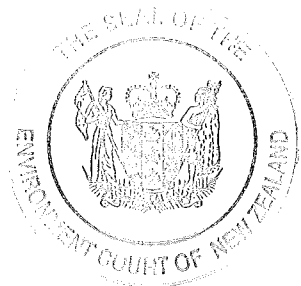
180. If the wind farm or any group of 4 adjacent turbines ceases operation for a continuous period of 24 months, or for any other reason determined by the Consent Holder, the wind farm or block of turbines shall be decommissioned.

181. The Consent Holder shall provide written notice to the Hurunui District Council of the intent to decommission the site and shall prepare and submit a Decommissioning Management Plan to the Manager Environmental Services of the Hurunui District Council for endorsement (acting in a technical certification capacity) three months prior to any decommissioning work.

182. The plan is to include, but not be limited to, details of the following matters:
- a. Procedures for dismantlement and removal of turbine structures (but not the removal of sub-surface components);
 - b. Methodology for earthwork site rehabilitation and revegetation, including rehabilitation of and reduction in the width of, roads; and where appropriate, re-creation of original landform contours;
 - c. Rehabilitation of the areas dealt with in conditions **[45]** and **[46]**;
 - d. Traffic management for any overweight and over-dimension vehicles;
 - e. Other matters relating to facilities and signage for public viewing and access.

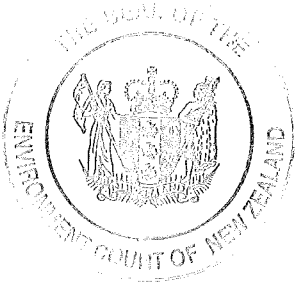
183. The Consent Holder shall provide written notice to the Manager Environmental Services of the Hurunui District Council within 3 months of completion that all decommissioning works has been completed.

184. At least one year prior to the closure of the wind farm, the Consent Holder shall provide and maintain in favour of the Hurunui District Council a bond, or such other financial instrument as approved by the Consent Authority, to cover the estimated costs in perpetuity of the ongoing management of the Mt



Cass Conservation Area in accordance with the Mt Cass Conservation
Management Area section of the Environmental Management Plan required
by condition [89].

***Advice Note: Further resource consents associated with the
development of a wind farm at Mt Cass may be required from the
Canterbury Regional Council.***



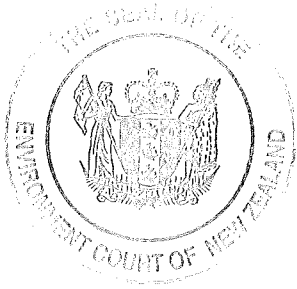
Appendix 1

Figure 1: Mt Cass Vegetation Communities dated July 2011



Appendix 2

Golder and Associate Plan CG181.3, CG182.3 Geomorphological mapping



Appendix 3

1. Chris Glasson Plan, 15 November 2010
2. Cross section of completed road formation with mitigation 24 July 2010

