BEFORE THE COMMISSIONERS APPOINTED ON BEHALF OF CENTRAL OTAGO DISTRICT COUNCIL

Under	The Resource Management Act 1991 (the **Act**)
In the Matter	of an application for Resource Consent for the purpose of mining at Sandy Point, Queensbury
Between	**AWA KOURA MINING LIMITED** **Applicant**
And	**CENTRAL OTAGO DISTRICT COUNCIL** **Respondent**

BUNDLE OF AUTHORITIES ON BEHALF OF AWA KOURA MINING LIMITED

DATED 22 OCTOBER 2026

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BUNDLE OF AUTHORITIES

Tab	Description
Secondary Legislation	
1.	Code of Conduct for Expert Witnesses, clauses 8 and 9
Case Law	
2.	*Shell New Zealand Ltd v Auckland City Council* CA102/95, 28 February 1996
3.	*LRG Investments Ltd v Christchurch City Council* ENC Christchurch C064/98, 11 June 1998
4.	*Port Otago Ltd v Dunedin City Council* ENC Christchurch C004/02, 22 January 2002
5.	*Norwood Lodge v Upper Hutt City Council* CA37/06, 4 July 2006
6.	*Re Meridian Energy Ltd* [2013] NZEnvC 59
Local Government Decision	
7.	Road Metals Company Limited Central Otago District Council decision RC 250044 dated 11 June 2026
Granted CODC quarry consents	
8.	RM250044 – Road Metals Consent
9.	RC150052 – Amisfield Quarry Consent

10.	RC070216 – Parkburn Quarry Consent

Court. Such additional matters should not be included in a draft consent order but may be recorded in a separate agreement that could be enforceable in another forum.

(g) Refer to section 5.8 of this Practice Note for the provisions relating to consent orders.

7.6. Plan/Plan Change ADR processes

(a) ADR processes relating to appeals on statutory planning documents under the Act are logistically complex. The Court Registry and the mediator or facilitator will work closely with the relevant planning authority to manage the timetabling, information exchange, programming and other logistics of these events. This may include acting on the Court's directions in any particular case. Environment Commissioners have developed guidelines and techniques which can assist the parties. The Court anticipates that, as technology improves, these will continue to be developed collaboratively.

8. Evidence

8.1. General law applies

(a) The provisions of the Evidence Act 2006 apply to proceedings in the Environment Court. Attention is drawn to ss 6–9, 23–26 and 53 and 57 of the Evidence Act in particular.

(b) The provision in s 276(2) of the Act, that the Environment Court is not bound by the rules of law about evidence that apply to judicial proceedings, is an enabling provision for the Court and not an exemption for parties, counsel or witnesses.

8.2. Co-operation in the preparation of evidence

(a) The Court expects every party to co-operate with others in preparing evidence for a hearing.

(b) Parties are encouraged, and the Court may direct parties, to prepare a statement of agreed issues and facts including agreed expert opinions together with an agreed bundle of exhibits and an agreed bundle of relevant provisions of statutory planning documents or other relevant documents.

(c) Bundles of evidence and bundles of exhibits or common documents are normally to be filed in both hard copy form (four copies) and electronic form (preferably as portable document format or .pdf files). Both forms of bundle must be organised, tabbed or bookmarked, paginated and indexed consistently and identically.

(d) The content of a bundle of common documents should be carefully reviewed by counsel to exclude irrelevant or unhelpful material and to avoid unnecessary repetition of material.

(e) The proponent in a proceeding (the applicant for consent or the requiring

authority or the party seeking a plan change) will normally be directed to lead the process of preparing the bundles of evidence, exhibits and common documents and file them with the Court in accordance with its directions.

8.3. Statements of evidence

(a) Every written statement of evidence must include:

i. the intituling for the proceeding or another form of heading which identifies the proceeding in which the evidence is being given;

ii. the full name and occupation of the witness;

iii. for any witness who is being called to give expert evidence, the matters of qualification and adherence to the code of conduct for expert witnesses in section 9 of this Practice Note;

iv. a summary of the principal issues that the witness addresses in the statement; and

v. evidence set out in numbered paragraphs on numbered pages.

(b) As a written statement of evidence will normally be presented by the witness at a hearing in Court, the statement does not need to be signed.

(c) Every written statement of evidence must:

i. be set out and formatted in a way that is easy to read and refer to;

ii. be in the words of the witness and not in the words of a lawyer or other person involved in drafting the statement;

iii. not contain evidence that is inadmissible in the proceeding;

iv. not contain any material in the nature of a submission;

v. be succinct and avoid repetition;

vi. avoid the recital of the contents or a summary of documents that are to be produced in any event; and

vii. be confined to and focused on the matters in issue.

(d) Counsel for or other representative of a party is responsible for ensuring that every statement of evidence of a witness called by them complies with the Evidence Act 2006, this Practice Note and any directions of the Court.

(e) Where no specific direction has been given for the filing and exchange of evidence, statements of evidence are to be filed and served:

i. by any proponent or applicant in the proceeding no less than 10 working days before the hearing is to start; and

ii. by any opponent or respondent in the proceeding no less than 5 working days before the hearing is to start.

(f) Failure to comply with this Practice Note or any directions of the Court as to the filing and exchange of evidence may result in leave of the Court being required to call the witness whose evidence is in default or in the hearing being adjourned and the party in default being ordered to pay costs to other parties and the Court arising from any delay.

(g) The Court will normally read the statements of evidence prior to the hearing in which they will be presented.

(h) The presentation of evidence by each witness in a hearing normally proceeds by the witness:

i. being called and going into the witness box;

ii. making an oath or affirmation to tell the truth, administered by the Registrar or hearing manager;

iii. confirming their name, occupation and authorship of the statement or statements of evidence they are giving in the proceeding;

iv. stating any correction to be made to their statement of evidence or presenting a supplementary statement setting out any correction;

v. confirming that, subject to any correction that they may have made, their statement of evidence is true to the best of their knowledge and belief;

vi. answering any supplementary questions in chief relating to other evidence already presented or matters raised by the Court during the hearing;

vii. answering any questions in cross-examination;

viii. answering any questions in re-examination;

ix. answering any questions from the Court; and

x. answering any questions arising from the Court's questions.

(i) Where matters of primary fact are in issue, the Court may require the evidence-in-chief of any witness to be given orally by question and answer.

8.4. Rebuttal evidence

(a) Rebuttal evidence may only be called in response to evidence that could not reasonably have been anticipated. That may include:

i. addressing a matter which could not reasonably have been foreseen before the witness was called or exchanged their statement of evidence; or

ii. where a party or witness is otherwise taken by surprise.

(b) Rebuttal evidence must be strictly limited to statements addressing the evidence-in-chief sought to be rebutted and must not repeat evidence already presented or introduce any new matter.

(c) The admission of rebuttal evidence is a matter for the Court's discretion, to be

exercised in the interests of fairness to the parties and ensuring that the Court is as fully informed about relevant matters as is reasonably practicable.

8.5. Exhibits

(a) Parties are encouraged to confer and agree where possible on any exhibit, including any document or any map, photograph, diagram or other visual material, to be produced in evidence or put to a witness in cross-examination.

(b) Exhibits should be presented in a practical and manageable form at sufficient size and scale to be able to be clearly understood.

(c) Individual exhibits must be separately identified.

(d) A bundle of exhibits should be presented in a paginated, tabbed and indexed folder.

(e) Maps and plans must state their scale and include a scale measure and a north point.

(f) Photographs must be accompanied by a map showing the locations from which each photograph was taken.

(g) Exhibits for the purpose of making or understanding any assessment of visual effects should be prepared in a manner consistent with the best practice guidelines of the New Zealand Institute of Landscape Architects.

(h) Where an exhibit, including a model, is of a size or kind that is impractical to file in Court or provide a copy to other parties, the party intending to produce it at the hearing must notify other parties at the time the evidence referring to the exhibit is due for exchange as to where it may conveniently be inspected.

8.6. Statutory planning documents

(a) Each local authority which is a party to a proceeding must provide the Court with either:

i. an assurance to the Court that the relevant statutory planning documents which are available on its website are accurate copies of the documents as approved by its governing body and in force at the time of the hearing; and

ii. appropriate hyperlinks to those documents on its website; or

iii. true copies of the approved documents which are in force at the time of the hearing in accordance with s 276A of the Act.

(b) In any hearing where it is not practicable to access the relevant statutory planning documents (including any relevant maps, plans or other large files) electronically, each local authority which is a party to the proceeding should bring to the hearing sufficient copies of the relevant documents for the use of members of the Court. Four copies will usually be required.

(c) The Court may retain a copy of such a document for reference during its

deliberations and the preparation of its decision.

8.7. Witness summonses

(a) To avoid the late summonsing of witnesses and to allow a reasonable opportunity for statements of evidence to be prepared, the Court expects any request for a witness summons to be made to it in ample time to enable the summons to be served no later than 15 working days before the start of the hearing at which the witness is to give evidence.

(b) The Court will not normally issue a witness summons less than 10 working days before the start of a hearing unless the purpose of the summons is only for the formal production of a document which is already known and available to all parties.

(c) The Registrar or a Deputy Registrar may issue a witness summons in Form 40 of the Regulations unless the request is made less than 10 working days before the start of a hearing.

(d) Any person served with a witness summons is expected to prepare a written statement of evidence complying with section 8.3(a)–(d) of this Practice Note.

9. Code of conduct for expert witnesses

9.1. Requirement to comply

(a) The matters in this section of the Practice Note apply in addition to and not in place of the matters in section 8 relating to evidence generally.

(b) A party who engages an expert witness must either:

i. give the expert witness a copy of this Code of Conduct; or

ii. be satisfied that the expert witness has seen the Code of Conduct and is familiar with it.

(c) An expert witness must comply with the Code of Conduct in preparing any written statement of evidence or in giving any oral evidence to the Court.

(d) The evidence of any expert witness who has not read or does not agree to comply with this Code of Conduct may be given only with leave of the Court.

(e) The relevant provisions of the Evidence Act 2006 apply, particularly including the definitions in s 4 of "expert" and "expert evidence" and the provisions in relation to statements of opinion and expert evidence in ss 23 – 26, as well as the provisions of this Practice Note. In the event of any conflict, the provisions of the Evidence Act prevail.

9.2. Duty to the Court

(a) An expert witness has an overriding duty to impartially assist the Court on matters within the expert's area of expertise. This duty to the Court overrides any duty to a party to the proceeding or other person engaging the expert.

(b) An expert witness is not and must not behave as an advocate for the party who engages them.

(c) An expert witness must declare to the Court any relationship with the party calling them or any interest they may have in the outcome of the proceeding including under any conditional fee agreement which depends on the outcome of the proceeding.

(d) Every expert witness must treat the evidence of other expert witnesses with the respect due to the opinions of a peer, even if there is fundamental disagreement between the views expressed by the expert witnesses. Any criticism should be moderate in tone and directed to the evidence and not to the person.

9.3. Evidence of an expert witness

(a) In giving any evidence, an expert witness must:

i. acknowledge that they have read this Code of Conduct and agree to comply with it;

ii. state their qualifications, relevant experience and any other basis for their expertise;

iii. describe the ambit of their evidence, listing the issues addressed by them and stating either that the evidence is within their area of expertise or that they are relying on the evidence of another witness;

iv. identify the data, information, facts and assumptions considered in forming their opinions;

v. state the reasons for the opinions they express, including why other alternative interpretations of data are not supported;

vi. state that they have not omitted to consider any material fact known to them that might alter or detract from any opinion expressed;

vii. specify any literature or other material used or relied on by them in support of any opinion expressed;

viii. describe any examination, test or other investigation on which they have relied and identify who carried those out with details of that person's qualifications, experience and expertise;

ix. identify the nature and extent of uncertainties in any scientific information and analyses relied on and the potential implications of any uncertainty;

x. if relying on a mathematical model, include appropriate or generally accepted

sensitivity and uncertainty analyses for that model; and

xi. apply any technical terminology as used in this clause (including uncertainty, sensitivity, confidence and likelihood) or as used in their evidence according to its generally accepted meaning among experts in the witness's field of expertise.

(b) If an expert witness considers that their evidence or any part of it may be incomplete or inaccurate without some qualification, that qualification must be stated in their evidence.

(c) An expert witness must identify any knowledge gap that they are aware of and its potential implications in their evidence.

(d) If an expert witness considers that their opinion is not firm or concluded because of insufficient research or data or for any other reason, that must be stated in their evidence.

(e) An expert witness must provide an assessment of the level of confidence, and the likelihood of any outcomes specified, in their conclusion.

(f) If after the exchange of evidence has occurred, an expert witness changes any of their opinions or conclusions on a material matter, that must be communicated without delay to all parties to the proceeding in a supplementary statement including the reason or reasons why the opinion or conclusion has changed and such of the information in section 9.3(a)-(e) above as is relevant.

(g) The evidence of an expert witness will normally include any joint witness statement produced at a conference at which they were a participant.

9.4. Duty to confer

(a) To enhance the efficiency of the hearing process the Managing Judge may direct expert witnesses in a proceeding to confer through an expert conference. Any such conference may be held in person or remotely or by some combination of methods.

(b) Except as expressly authorised by the Managing Judge, only experts (being persons who have specialised knowledge or skill based on training, study, or experience) may attend an expert conference. Parties and counsel will normally not be authorised to attend. Lay observers may be authorised to attend where that is in the interests of justice being seen to be done.

(c) An expert conference is confidential to the experts who participate in it. There shall be no communication of what took place during the expert conference or of its outcome other than the joint witness statement produced by the experts.

(d) The Court's preference is for the Managing Judge to appoint an Environment Commissioner to act as facilitator for an expert conference. No fee is payable for this service. In some circumstances, parties may wish to proceed with expert

conferences with alternative or no facilitation. The Court is to be advised accordingly and these Practice Note provisions apply.

(e) An expert conference may occur at any stage of a proceeding, including at the direction of the Court during a hearing, but the expectation is that conferencing will occur prior to a hearing.

(f) Where an expert conference occurs before the exchange of evidence-in-chief in a particular case the Managing Judge may direct that it proceeds based on "will say" briefs being exchanged beforehand. Except as otherwise directed by the Court, that is expected to be by way of an expert witness:

i. confirming any evidence given at an earlier hearing in relation to the same matter; or

ii. as a minimum:

1. setting out the key facts and assumptions relied upon;

2. identifying the methodology and standards used in arriving at their opinion; and

3. clearly explaining the opinion arrived at.

(g) An expert witness must comply with any direction of the Court to:

i. confer with another expert witness;

ii. try to reach agreement with the other expert witness on matters within the field of expertise of the expert witnesses, to narrow any points of difference between them and to identify any remaining points of difference; and

iii. prepare and sign a joint witness statement addressing the matters listed in section 9.5 below.

(h) In conferring with another expert witness and in preparing a joint witness statement, an expert witness must exercise independent and professional judgment and must not act on the instruction or direction of any person to present an opinion or to withhold or avoid agreement.

(i) An expert conference is an evidential process and not an ADR process. While the experts participating in the expert conference may agree on matters within their fields of expertise, their agreement will not bind any party to a particular overall outcome or to the wording of any condition.

9.5. Joint witness statements

(a) A joint witness statement must include confirmation that, in producing the statement, the experts have read and complied with the Code of Conduct for Expert Witnesses.

(b) A joint witness statement must also include the following matters so far as the experts and the facilitator consider they may be relevant to the expert conference:

i. identification of all material regarded by the experts as primary data;

ii. the key facts and assumptions that are agreed upon by the experts;

iii. identification of any methodology or standards used by the experts in arriving at their opinions and any reasons for differences in methodology and standards;

iv. identification of published standards or papers relied upon in coming to their opinions;

v. the issues that are agreed between the experts and the reasons for those agreements, including an assessment of their level of confidence in the likelihood of any outcome or conclusion in those agreements;

vi. the issues on which the experts cannot agree and the reasons for those disagreements;

vii. identification of any issue which the experts agree is not adequately addressed by the evidence lodged to that point in the proceeding and the reasons for that inadequacy; and

viii. any reservation by any expert about a matter of substantive law or procedure on which they are uncertain (for example, the application of any permitted baseline).

(c) The joint witness statement produced from an expert conference should be completed, signed and dated on the day of that conference or as soon as possible after that.

(d) The Court may limit cross-examination of experts on the matters agreed to at the expert conference as recorded in a joint witness statement and may restrict the calling of any further evidence, particularly where a witness attempts to introduce an issue or issues which the participants in the conference agreed did not need to be considered.

9.6. Party responsibility for expert conference

(a) Parties (through their counsel where counsel have been engaged) have obligations to assist in preparation for expert conferencing, including to:

i. provide experts with all relevant application and appeal documentation updated as appropriate, and pre-circulated evidence (if available) and reports necessary to enable them to thoroughly understand the issues in the proceeding, together with an agreed statement of facts. All documentation referred to above is to be with the experts and the facilitator at least 10 working days prior to the conference;

ii. liaise, including with conferencing experts, to prepare an agreed conference agenda addressing the key issues and pre-circulate it in electronic form to all conference participants, including the facilitator, at least 48 hours prior to

the conference;

iii. liaise on the provision of a suitable recorder to attend the conference and prepare the joint witness statement under the direction of the experts and facilitator;

iv. liaise with the Registry on a suitable, appropriately equipped venue or logistics for remote attendance; and

v. in the event the expert conference is not facilitated by an Environment Commissioner, counsel are to agree and arrange for one of them to be responsible for circulation of the joint witness statement to the parties, the facilitator and the Court.

(b) If an Environment Commissioner is appointed to facilitate the conferencing:

i. parties and experts shall abide any additional instructions the Commissioner may provide to assist managing and the efficiency of the expert conference; and

ii. it will be at the Commissioner's discretion as to whether the conference is held face to face, by remote attendance or a hybrid of these methods. Where remote attendance is directed, the relevant provisions of section 7.4 of this Practice Note apply.

10. Procedure at hearings

10.1. Order of parties

(a) The Court normally conducts an appeal as a fresh hearing. The extent to which issues will need to be heard by the Court may be subject to the extent to which facts are admitted or matters are agreed between parties or in any joint witness statement.

(b) On a directly-referred application, the hearing will be the first occasion on which the proposal has been heard and able to be challenged by opposing parties.

(c) The Court will normally hear first the party who applied for consent or is promoting a policy statement, plan or plan change, followed by any party who supports the grant of consent or the policy statement, plan or plan change. The Court will then hear the consent authority, followed by any party who opposes the grant of the consent or the policy statement, plan or plan change. The party who went first then has a right of reply.

(d) In a proceeding where there is a burden of proof on a particular party, for instance in an application for an enforcement order, the Court will usually hear that party first.

(e) The order of parties in complex cases can vary depending on the number and range of parties and issues and is a matter for directions by the Managing Judge

IN THE COURT OF APPEAL OF NEW ZEALAND CA 102/95

BETWEEN SHELL NEW ZEALAND LIMITED

Appellant

AND AUCKLAND CITY COUNCIL

First Respondent

AND BP OIL (NEW ZEALAND) LIMITED

Second Respondent

Coram	Richardson P Henry J Thomas J
Hearing	28 February 1996
Counsel	G M Harrison for Appellant W S Loutit for Respondent
Judgment	28 February 1996

JUDGMENT OF THE COURT DELIVERED BY RICHARDSON P

The appellant, Shell New Zealand Limited, applied for planning permission to establish a service station on the corner of Dominion Road and Carrick Place, Auckland. Following a hearing before a Commissioner appointed for that purpose the first respondent, the Auckland City Council, declined the application. On appeal the Planning Tribunal confirmed the Council's decision and dismissed the appeal.

A further appeal to the High Court on four specified questions of law was dismissed on 3 April 1995. Those four questions were:

(a) Did the Tribunal have regard to the policy stated in s.71.3 of the Transitional District Plan as required by s 104 of the Resource Management Act 1991?

(b) If the answer to question (a) is "Yes", did the Tribunal interpret the policy correctly?

(c) Does the Resource Management Act 1991 require a proposal for resource consent to enhance the amenity?

(d) Are the compliance certificates invalid?

The third question involved consideration of the inter-relationship between s 105(2)(b)(i) and s 7(c) of the Resource Management Act 1991. Section 105(2)(b)(i) as it read at the relevant time provided:

> A consent authority shall not grant a resource consent -
>
> (a) [not relevant];
>
> (b) For a non-complying activity unless, having considered the matters set out in s 104, it is satisfied that -
>
> (i) Any effect on the environment (other than any effect to which subsection (2) of that section applies) will be minor; or
>
> (ii) Granting the consent will not be contrary to the objectives and policies of the plan or proposed plan.

And s 7 requires that all persons who are exercising functions and powers under the Act in relation to managing the use, development and production of natural and

physical resources "shall have particular regard to" a specified list of eight matters, one of which is:

> (c) The maintenance and enhancement of amenity values.

In its decision the Tribunal had concluded:

> Diminution of amenity may be considered as an effect under 105(2)(b)(i) and it is also a requirement that amenity be maintained and enhanced under s 7(c). We will consider both together. We hold that "*the maintenance and enhancement of amenity*" is a conjunctive phrase so that it is not sufficient if a proposal simply maintains amenity. It must also enhance the amenity.

On appeal Temm J rejected that interpretative approach for reasons which he expressed as follows:

> The appellant's argument is that the Tribunal is wrong in law to hold (as it did) that an application is required by the general policy factors in s 7(c), not only to maintain the amenity in question but also to enhance it. Taken literally, that is what s 7(c) says but it cannot mean that every application must be declined if it fails both to maintain and to enhance as well.
>
> I say that because the words of a paragraph in an Act must be interpreted against the section in which they are found and the part of the act in which the section is placed and the scheme of the Act as a whole.
>
> There seems to me no doubt that the Act contemplates applications for consent that not only do not enhance an amenity but also do not even maintain it, see for example s 105(2)(b)(i) which empowers a consenting authority to give consent to an application if "the adverse effects on the environment will be minor". Plainly adverse effects will not "enhance" the environment because they are judged to be adverse to it and if they are adverse those effects cannot even be said to "maintain" the environment because the adverse effect must be inimical to that maintenance. Perhaps the Legislature intended to convey that if the adverse effects are minor they can be treated as inconsequential and so, broadly speaking, the environment is "maintained" in the sense that a minor incursion upon it is not significant.

> It seems difficult to argue that when the Act provides for adverse effects to be ameliorated by conditions, as in s 108, and contemplates management of resources by "avoiding, remedying or mitigating any adverse effects of activities on the environment" (as in s 5(2)(c)) that there must be both maintenance and enhancement of the amenity in question before a resource consent can be granted.

The Judge went on to consider the Tribunal's decision and concluded that the passage from its decision stated above was a general statement, not central to its decision and not tainting its final conclusion on the facts.

Shell sought leave to appeal to this Court, raising the same four questions. Section 144(2) of the Summary Proceedings Act 1957 provides that the High Court may grant leave "if in the opinion of that Court the question of law involved in the appeal is one which by reason of its general or public importance or for any other reason ought to be submitted to the Court of Appeal for decision".

Temm J refused leave in respect of the proposed questions (a), (b) and (d). As to (c), the Judge noted the differing views of the Tribunal and the Court in the decisions in the case. What weighed with him in granting leave to appeal was that he had been given to understand that the Tribunal had interpreted s 7(c) in that conjunctive way in other cases and it seemed to the Judge very undesirable that such a fundamental factor for consideration as one of the matters listed in that section should be subject to a divergence of view.

Temm J posed the question of law for this Court: "Does the Resource Management Act 1991, s 7(c), require a proposal for resource consent both to maintain and enhance amenity values?"

On the argument today it became clear that no party was arguing against Temm J's interpretation and accordingly that the answer to the question posed must be

"No". It is not a live issue on the appeal. It calls for no further comment. However, Mr Harrison sought to raise a further issue and framed the proposed further question as follows:

> If the answer to the question posed by the High Court is "No", did the Court properly conclude that the Tribunal had applied the correct interpretation to the facts?

Mr Harrison's submission is that the Judge erred in describing the Tribunal's observation as to s 7, which was under challenge on the appeal to the High Court, as a general statement not central to its decision and that the Tribunal had misdirected itself. We are satisfied that the posed question is not a question of law satisfying the criteria under s 144.

Special leave provisions, as in s 144, recognise that public interest considerations of finality, certainty and costs, including the efficient and economic use of judicial and other public resources, require an early end to litigation and that to justify further appeal to this Court the proposed question of law must satisfy the high threshold reflected in the statutory criteria.

Despite everything Mr Harrison has said, we are satisfied that this issue is not appropriate for consideration by way of further appeal. At most it is an argument that the Judge incorrectly interpreted the Tribunal's application of the relevant law to the facts. The Judge's conclusion in that regard, which incidentally was repeated as part of the narrative in his judgment on the leave application, involved an analysis of the Tribunal's assessment of the facts and its conclusions from the facts. At that point it required no more than an examination of the Tribunal's reasoning in this case. It did not require determination of any significant legal questions. And on the material before us there was not, and could not be, any challenge to the process the

Court followed as itself raising a question of law appropriate for consideration by this Court under s 144.

For the reasons given the question of law posed for our consideration by the High Court is answered in the negative and leave to raise the further proposed question is refused with costs to the respondents on the appeal of $3,500, together with all reasonable disbursements as fixed by the Registrar, including the travel and any accommodation expenses of counsel.

Solicitors

Rennie Cox Garlick & Sparling, Auckland, for appellant
Simpson Grierson, Auckland, for respondents

ORIGINAL

Decision No: C 64 /98

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an appeal under section 120 of the Act

BETWEEN **L R G INVESTMENTS LIMITED**

Appeal : RMA 534/97

Appellant

AND **CHRISTCHURCH CITY COUNCIL**

Respondent

BEFORE THE ENVIRONMENT COURT

His Honour Judge Skelton - (presiding)
Mr I.G.C. Kerr

HEARING at CHRISTCHURCH on the 3rd and 4th day of March 1998

APPEARANCES

Miss C Robinson for the appellant
Mr A Prebble for the respondent
Mrs N J Dawson in person
Mr C J Alfrey representing R & J McMillan
Mrs Margaret Keats in person

DECISION

This appeal under section 120 of the Resource Management Act 1991 arises out of a decision issued by a Commissioner appointed by the respondent on 30 June

1997 refusing the appellant's application for land use consent to establish a motel complex on land at 287 to 289 Riccarton Road, Christchurch. This land hereinafter referred to as "the appeal site" has a total area of 1922 m^2. 289 Riccarton Road - Lot 1 D P 18193 has an area of 799 m^2 and 287 Riccarton Road - Lot 2 D P 18193 has an area of 1123 m^2. Until recently the appeal site contained a dwelling on Lot 1 and 3 flats under a cross-leasing arrangement on Lot 2. All these buildings have been removed and the appeal site is currently vacant. It is 19.75 m wide and has a depth of 96.53 m. Along the southern or rear boundary there is a boxed drain known as the Riccarton Main Drain.

The appeal site is located in a mature suburban residential area. There are 7 residential properties adjoining the site. The properties to the west and south are a mixture of older residential dwellings and a few new residential dwellings. To the east there is a dwelling at 285 Riccarton Road which is occupied by a dental technician, both as a place of residence and employment, in other words a home occupation. Further east at 283 Riccarton Road there is a day-care centre for the elderly with no residential component. Further east again at 281 Riccarton Road there is a three storey block of flats which are probably about 15 years old. The land on the northern side of Riccarton Road is largely residential apart from some motel complexes, one of which was recently constructed at 280-282 Riccarton Road. The Bush Inn shopping centre is located some 500 m to the west, along Riccarton Road and a small group of local shops are located some 300 m to the east of the appeal site.

The appellant's proposal (which has been modified since it was publicly notified) is to establish a motel complex containing 16 units in two buildings together with a separate manager's unit. The two motel buildings would be two storied with a maximum height of 7.5 m. The main building would be situated in the centre of the appeal site and would contain 8 units. These would be a mixture of one and two bedroom units. The second motel building would be

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

situated towards the rear of the site and would contain 8 single units. The manager's unit would be situated towards the front of the site. It would contain a three bedroom residential unit together with double garage, laundry and office. It would have a maximum height of 6.5 m.

Access would be provided via an entrance situated along the western boundary of the appeal site, some 40 m from Field Terrace. Parking for 22 vehicles would be provided in two areas, one between the manager's unit and the main building and the other between that building and the rear block of motels with two garage spaces in the manager's unit. Landscaping would also be provided covering some 450 m^2 or 23% of the site.

In the Waimairi Section of the Christchurch City Transitional District Plan, the appeal site is zoned Residential G and travellers' accommodation is provided for as a discretionary activity provided certain pre-conditions relating to location are satisfied. This is the case here. Rule 22 in the Transitional Plan contains several criteria by which an application for consent is to be judged and we will consider these shortly.

The respondent publicly notified a proposed review of the Transitional Plan on 24 June 1995. In this plan the appeal site is zoned Living 1 and it is common ground that once again, because of certain non-compliances with development standards and community standards, the appellant's proposal is a discretionary activity.

The proposed plan has reached the stage where all relevant submissions have been heard by the respondent but no decisions have been issued. These are expected before October of this year. Ms N A Cowley, an assistant planner with the respondent who gave evidence at the hearing of this appeal summarised the relevant submissions relating to non-residential activities in the Living 1

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

zone, none of which, were they to be adopted by the respondent, would alter the status of the appellant's proposal.

The Transitional Plan contains several overall residential objectives, two of which have been identified by both Mr I D Dalton, the appellant's planning consultant and Ms Cowley as being relevant in this case, these are:

> *"(m) to allow a wide variety of uses into residential areas where these benefit both the individual and the community but do not detract from the amenities of the area"*

and:

> *"(n) to protect residential areas from the intrusion of incompatible uses which may affect the safety, health and amenity of the inhabitants".*

Mr Dalton also referred to an objective for the Residential G zone which reads as follows:

> *"(2) Provision for freedom of development within a framework that preserves the definable amenity standards for neighbouring properties".*

Rule 22 to which we referred earlier, requires the minimum site size for travellers' accommodation to be 900 m^2; the site area for every unit to be 150 m^2: 225 m^2 for manager's accommodation; a shape factor of a square with a minimum side dimension of 20 m on any part of the site except over the front yard; minimum yard requirements of 4.5 m for the front yard and 1.8 m for all other yards, a recession plane compliance; maximum site coverage of 55 m^2; on-site privacy; requirements for access parking manoeuvring; and a minimum of 10% of the site to be permanently planted.



In this case it was Mr Dalton's opinion that all the relevant criteria are met except for the site area requirement which for this complex should be 2625 m^2 rather than 1922 m^2. Ms Cowley was also of the opinion that the proposal failed to comply with the shape factor because the maximum width of the appeal site is 19.75 m. She also drew attention to a further requirement in the Transitional Plan for a setback from open water courses. In the Transitional Plan buildings are to be setback 7 m from any open stream, open water course or open drain and in this case the rear units would be 4 m from the Riccarton Main Drain. This failure to comply also renders the appellant's proposal a discretionary activity.

In the proposed plan there are several relevant objectives and policies that were identified either by Mr Dalton or Ms Cowley as follows:

"Objective 11.3 Non Residential Activities

Non-residential activities located within living areas which meet community needs, but do not detract from the amenity values of the area"

"Policy 11.3.4 Travellers' Accommodation

To provide for the accommodation needs of travellers and visitors to the City in limited, defined locations and on arterial roads in medium density living areas, while safeguarding the amenity values of adjoining residential areas"

"Objective 11.4 Adverse Environment Effects

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

A living environment that is pleasant and within which adverse environmental effects are minimised, while still providing the opportunity for individual and community expression"

"Policy 11.4.3 Privacy and Outlook

To ensure that the design and citing of development does not unduly compromise outlook, privacy and views of adjoining development, having regard to the character of the area and reasonable expectations for development"

"Policy 11.4.4

To ensure that the outdoor component of non-residential activity is screened to protect the privacy and outlook of adjoining sites"

"Policy 11.4.5

To ensure that the hours of operation of non-residential activity does not unduly compromise amenity values, in particularly privacy and security of adjoining development"

Policy 11.4.8 Noise

To ensure that noise levels associated with non-residential activities are consistent with maintaining a high standard of amenity within living areas"

"Policy 11.4.12 Scale

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

To ensure that the scale of non-residential activities is compatible with the scale of those of the surrounding living environment".

Mr Dalton also referred to a policy about outdoor advertising but this is not relevant for present purposes because if the appellant's proposal proceeds, advertising will be dealt with separately.

Rule 2.2.12 which, in the plan as publicly notified, constituted a development standard for non-residential activities in the Living 1 zone, controls the scale of such activities by requiring that the maximum gross floor area of buildings plus the area of any outdoor storage used for non-residential activity shall be 40 m^2 or 30% of the gross floor area of all buildings on the site whichever is the larger except where the activity is an educational, spiritual, day-care or health facility. It also provides that no more than one full-time equivalent person who permanently resides elsewhere than on the site may be employed in undertaking any activity.

By variation 35 to the proposed plan which was publicly notified on 28 February 1998, it is proposed to change these requirements concerning scale from being a development standard to a community standard but for present purposes even though we must treat the plan as having been varied accordingly - see Clause 16B(2) of the First Schedule to the Act - it makes no difference to the way we should assess the appellant's proposal as a whole, because it also fails to comply with other community standards, thus making it an unrestricted discretionary activity. Failure to comply with a development standard only renders a proposal a restricted discretionary activity.

Rule 2.3.2 is a community standard requiring a maximum net area for an activity other than a residential activity to be 1100 m^2 except in certain

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

circumstances that are not applicable here. As we have said already the appeal site is 1922 m^2.

Rule 2.3.3. also a community standard, requires the maximum total number of hours that that site is to be open to visitors, clients or deliveries, to be 50 hours per week and the hours of operation to be from 7.00 am to 9.00 pm Monday to Friday and from 8.00 am to 9.00 pm Saturday, Sunday and Public Holidays except in certain circumstances which again do not apply in this case. The motel complex will be available to the public outside the hours stipulated by this rule but Mr Dalton said the office would only be open during the hours specified in the rule.

In Part 11 of the proposed plan there are rules controlling noise and relevantly in Rule 1.3.2 (c)(ii) there is a standard for fluctuating sound which requires that at the boundary of a site, in this case the appeal site, the sound level is not to exceed 50dBA L_{eq} measured or assessed on a hourly basis between the hours of 0700 and 2200 and 41dBA L_{eq} measured or assessed on an hourly basis between the hours of 2200 and 0700. Rule 1.3.2 (c)(iii) also provides that the maximum sound level at the boundary of the site for an activity on that site shall not exceed 75dBA L_{max} measured or assessed between the hours of 0700 and 2200 and 65dBA L_{max} measured or assessed during the hours of 2200 and 0700.

Finally, Rule 5.2.4 in the proposed plan requires a setback of 5 m from what is there described as a tributary waterway (utility) and a building located closer than this becomes a discretionary activity. It is common ground in this case that the Riccarton Main Drain is a tributary waterway (utility) and recognised as such by variation 21 to the plan which was publicly notified on 8 November 1997.



The proposed plan also provides several criteria for assessment when considering applications for resource consent. Relevantly these are set out in Volume 3 paragraph 6 commencing at page 2/38. In her evidence Ms Cowley addressed these in some detail but Mr Dalton took a broader approach to the aspects of the appellant's proposal that require consideration because of non-compliances.

Regarding site size, Mr Dalton began by pointing out that the standard required by the Transitional Plan is met in this case. Then so far as the proposed plan is concerned he expressed the opinion that the appellant's proposal would not be out of character with other developments in the area because it is already dominated by a large block of flats to the east and the character of the area is changing as evidenced by the recent motel development on the northern side of Riccarton Road. Then because of landscaping the second assessment criteria in respect of site size is also met. As for giving primacy to residential activities, there are already a number of non-residential activities in the locality and the proposed buildings have been designed to merge with the character of the area.

Regarding the scale of the proposed activity Mr Dalton considered it was necessary to have regard to the fact that the proposal complies with several of the other standards relating to site coverage, building height, yard spaces and recession planes as well as screening from other properties, landscaping, access and parking and that the total site coverage is 26.4% compared with the maximum of 55% allowed under the Transitional Plan and 35% under the proposed plan. Landscaping also exceeds standards.

In his opinion the proposed development does not involve over utilisation of the site and motels are one of the least offensive non-residential activities that might be permitted in a locality such as the one the subject of these proceedings.



Mr Dalton also pointed out that the site could be sub-divided into 4 residential allotments as a controlled activity or 5 such allotments as a discretionary activity with each allotment being developed to the point where there would be some 166 m^2 more development than with the present proposal. There could also be 10 elderly persons housing units. He referred again to the other non-residential developments in the locality including the dental technician's business on the land adjoining the eastern boundary of the site.

Regarding noise the appellant called evidence from Mr Stuart Camp, an acoustic consultant. Mr Camp visited the appeal site on 24 February 1998 at approximately 5.30 pm and undertook brief noise measurements. It was his opinion that the noise environment is dominated by traffic using Riccarton Road. At the centre of the appeal site, the then existing traffic noise level was around 54dBA L_{eq} and this dropped to 47dBA L_{eq} at the rear of the site. The background noise levels were 48dBA and 43dBA L95 (respectively). He did not expect these would vary significantly during the course of a normal day. He went on to say that although the site is currently vacant, the measured noise level at the rear of the site is almost identical to the level at the rear of the developed site immediately to the east, which suggested to him that the noise environment on the appeal site would not change significantly when it is developed.

Mr Camp pointed out that there are no noise requirements for residential zones in the Transitional Plan and he then referred to the relevant provision in the proposed plan. He went on to say that the dominant source of noise from a motel complex is vehicle and people movements to and from the site. Noise from within the motel units is generally only normal speech and television, neither of which are likely to cause disturbance to neighbouring properties.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

The proposed development includes a 1.8 m high boundary fence around the perimeter and to act as a noise barrier this fence would need to be an airtight construction. His measurements and calculations have allowed for the effect of such a fence.

Using a worse case scenario of all 16 units being occupied with 16 vehicles departing within a 1 hour period in the morning and another 16 vehicles arriving within a 1 hour period in the afternoon, Mr Camp's measurements and calculations showed that the proposed development would comply with the relevant noise controls in the proposed plan. In the evenings assuming 2 to 3 vehicle movements per hour after 10.00 pm, his measurements showed that 3 vehicle movements per hour would result in a noise level of less than 38dBA Leq and 62 dBA L_{max} at the worst affected site boundary, being the western boundary of the appeal site. This too would comply with the relevant noise controls. It was his opinion that the likelihood of sleep disturbance from vehicle movements on the appeal site would be very small, and no greater than if 4 townhouses were built on the site, as a permitted activity.

Mr Camp's overall opinion was that the effects of noise from the proposed development would be less than minor.

Again on noise, the respondent called evidence from Mr G D Pulley its Environmental Health Officer. Mr Pulley acknowledged that traffic flows on Riccarton Road for the majority of the day are very high and during busy traffic periods, ambient noise levels close to the road will be relatively high for a residential area. He concluded from this that the effect of noise from one of the carparking areas in the proposal, that is the one closest to Riccarton Road, would be minor at neighbouring properties.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

However noise levels recorded at 26A Field Terrace which is to the west of and adjacent to the southern or rear of the appeal site where it is proposed to have some 11 carparks, showed that the influence of traffic on the noise climate dropped significantly in that area. Results of noise monitoring which had been undertaken by him, showed that there is considerable variation between day and night noise levels at this part of the appeal site. The night-time background levels went below 30dBA L95 which Mr Pulley said is not uncommon in most residential areas of Christchurch away from the direct influence of arterial roads.

Mr Pulley also said that noise from individual vehicle movements on the site and within the rear carpark, while likely to be of short duration and infrequent occurrence, are predicted to be around 65dBA L_{max} at neighbouring properties. This would be clearly noticeable against the low night-time background noise. It was his opinion that little could be done to mitigate this particularly in the case of adjoining first floor bedrooms, largely because of the narrowness of the site.

In cross examination Mr Camp agreed that townhouses could have a different layout from the proposed motel complex in this case and it was more likely there would be noise nuisance emanating from the latter than from the former. Also in cross-examination Mr Dalton agreed the potential adverse effects of manoeuvring cars and people activity had been mitigated to some extent in the new complex on the northern side of Riccarton Road by reason of its layout which is in effect a hollow square, so that adjoining residential properties are shielded by the motel building itself.

When he was cross-examined Mr Pulley agreed that the background noise at 26A Field Terrace was below 30dBA L95 from 2.00 am to 5.00 am only but he would not agree with Mr Camp about single event noise. He said he had

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

measured cars in a carpark at 65dBA L_{max} and it was his opinion that it is this noise that would be of particular significance for residential properties.

The respondent also called evidence from Mr Andrew Craig, a landscape architect employed by the respondent's Environment Policy and Planning Unit. He expressed the opinion that if additional landscaping were provided along the western boundary, this would mitigate adverse effects from the expansiveness of the driveway and the carparks and would help to screen the proposed complex from neighbours and ensure privacy. If this were done the overall visual amenity would be of sufficient quality to uphold the character and environmental results anticipated for the Living 1 zone from a visual point of view. It was his opinion that the proposed buildings are not out of scale taking into account the context of neighbouring dwellings.

Mr M G Calvert, a transport planning engineer with the respondent, gave evidence that the appellant's proposal complies with all traffic related requirements in both the Transitional Plan and the proposed plan. Applying an Australian guideline for motels, he estimated traffic generation to be approximately 48 trips per day assuming full occupancy. This can be contrasted with Mr Dalton's assessment as a witness for the appellant of some 60 trips per day. There is a rule in the proposed plan providing a threshold of 50 trips per day before the activity, being a non-residential activity, becomes a discretionary activity by reason of a failure to comply with this community standard.

Mr Calvert also pointed out that there is likely to be some delay for traffic turning right out of the appeal site which could be significant although this needed to be balanced against the amount of traffic likely to perform the manoeuvre. This would be a low exiting volume and the opportunity to turn left out of the site and return east via Middleton Road meant that any effects of the

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

delay on the safe and efficient operation of Riccarton Road are likely to be no more than minor.

The minimum separation of access from the nearest intersection is 30 m in the transitional plan and 35 m in the proposed plan. The proposed access in this case will be 9 m from the Balgay Street intersection - on the northern side of Riccarton Road - and 49 m from the Field Terrace intersection. Owing to the location of the site boundaries, Mr Calvert said it is not possible to provide vehicle access to the site that is a minimum of 30-35 m from the Balgay Street intersection. In this situation both the transitional plan and the proposed plan permit vehicle access to be located in the *"most complying"* position. That position in this case is alongside the site's western boundary as proposed by the appellant. The proposed 5.5 m width of the access allows for two-way flow.

Mr G N Speechly is an engineering officer in the respondent's Water Services Unit and gave evidence about the failure to comply with the setback requirements relating to the Riccarton Main Drain. As a result of enquiries made following his evidence in chief, Mr Speechly was recalled to tell us that proposals he had earlier outlined for enhancing the drain through conditions to be attached to any consent granted to the appellant, could not be implemented because the respondent does not have the necessary resource consents from the Canterbury Regional Council for this work. Consequently he produced a revised planting plan which he said would have to be implemented by the appellant before he could agree to the intrusion into the setback area which in terms of the proposed plan we recall is 1 metre. This planting plan which was produced as Exhibit '4' shows quite intensive planting in that area including some trees that Mrs Keats a submitter who lives at 20B Field Terrace immediately to the south of the Riccarton Main Drain, had some concerns about, particularly as regards loss of northern sun and a sense of space.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Mrs N J Dawson also gave evidence as a submitter in opposition to the appellant's proposal. She owns a townhouse at 28B Field Terrace which adjoins the appeal site to the west. She purchased this property in 1992. When selecting the property important aspects for her were privacy, safety, all day sunshine, a sense of space and a quiet environment. She said that these elements are present now but they will be at risk if the appellant's proposal proceeds. She is particularly concerned about people in vehicles coming and going to and from the proposed motel complex at night.

Similar concerns were expressed by Mr C J Alfrey, an architectural draftsman, representing Mr and Mrs McMillan who are the owners of properties at 26 and 26A Field Terrace. This is the land from which Mr Pulley took his noise measurements.

Mr Alfrey expressed concern about the physical scale of the buildings when compared with surrounding properties, recognising at the same time the three storey apartment complex at 281 Riccarton Road. He also expressed concern about potential loss of privacy. If the motel units were assessed as being residential units in terms of the proposed plan they would fail to comply with regard to the positioning of ground floor living room windows.

Mr Alfrey also pointed out that if the appeal site were sub-divided for residential purposes into 4 or 5 allotments, new internal boundaries would be created each requiring setbacks and recession planes to be applied to them controlling in particular location of buildings, and thus providing a more open aspect than that proposed by the appellant. In addition there would be fewer vehicles, something like a maximum of 9.

Earlier we referred to the evidence of Ms Cowley and her analysis of the proposal having regard to the relevant criteria particularly in the proposed plan.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

She pointed out that these criteria include such matters as the extent to which the activity would result in a loss of residential activity on the site; the extent to which the activities on the site remain dominated by residential activity rather than by activities which are not associated with or incidental to residential activity; the extent to which the activity provides a local function by meeting the needs of residents principally within the surrounding living environment; the extent to which additional employment will result in levels of traffic generation or pedestrian activity; and the ability to mitigate adverse effects of the increased scale of activity. There are similar criteria in respect of site size and criteria relating to hours of operation.

Ms Cowley said there would be adverse effects of the appellant's proposal that could not be mitigated and would result in a loss of overall enjoyment and amenity to residents of this area. She concluded that these effects would be more than minor.

Because the appellant's proposal is a discretionary activity in terms of both the transitional plan and the proposed plan, it is necessary, having considered the relevant matters in section 104 of the Act, to exercise an overall judgment when deciding whether to grant consent. This is to be informed by the relevant matters in Part II of the Act.

The relevant matters in section 104 of the Act are any actual and potential effects on the environment of allowing the activity, and any relevant objectives, policies, rules or other provisions of the transitional plan and the proposed plan. No reference was made by any party to the regional policy statement or any regional plan and none of the other matters in this section could have any relevance in the context of this case.



On Part II of the Act no matters of national importance in section 6 were referred to but the efficient use and development of natural and physical resources in section 7(b); the maintenance and enhancement of amenity values in section 7(c); and the maintenance and enhancement of the quality of the environment in section 7(f) are all relevant.

In her submissions on behalf of the appellant, Miss Robinson referred to two cases where the Court has held that where a particular activity is recognised as a discretionary activity in a plan this implies that the activity is an efficient use and development of resources - see ***Swindley v Waipa District Council*** Decision No. A75/94 and ***Hill v Christchurch City Council*** Decision No. C123/97. Miss Robinson also referred to ***Shell New Zealand Limited v Auckland City Council*** [1996] NZRMA 198 where the Court of Appeal said that section 7(c) - the maintenance and enhancement of amenity values - does not require a proposal to both maintain and enhance. She also reminded us that in deciding whether adverse effects are minor, it is appropriate to take into account any proposed mitigation measures and the effect of imposing conditions - see ***Bethwaite v Christchurch City Council*** Decision No. C85/93.

In his submissions Mr Prebble referred to another case involving Shell Oil New Zealand Limited namely ***Shell Oil New Zealand Limited v The Wellington City Council*** 2NZRMA 80 where this Court held that the words "amenity values" place strong emphasis on present neighbourhood character. It was submitted that in placing emphasis on the three storey apartment block and the recently constructed motel complex on the northern frontage of Riccarton Road, the appellants advisers and Mr Dalton in particular, have failed to take into account the amenity values enjoyed by the residents of Field Terrace.

Mr Prebble also referred to this Court's decision in ***Ngataringa Bay 2000 Incorporated v The Attorney General*** and ***North Shore City Council*** decision



A16/94 for the proposition that district rules on noise control usually have general application and are not necessarily responsive to the circumstances of a particular locality. He submitted that compliance with a noise standard in the proposed plan will not necessarily mean that noise does not exceed a reasonable level when the particular circumstances are taken into account and this could be the case here.

Both counsel referred to cases that have discussed the weight to be given to transitional plans and proposed plans still in the course of preparation. Reference was made to ***Hanton v Auckland City Council*** [1994] NZRMA 289 and ***Lee v Auckland City Council*** [1995] NZRMA 241.

At the conclusion of the hearing and with the consent of the parties, we made a site inspection which has enabled us to gain a better understanding of the evidence given at the hearing and this has assisted us in our assessment of this evidence.

In both the transitional plan and the proposed plan but with more emphasis in the latter, it is clear that travellers' accommodation motels are recognised as an appropriate land use provided they do not detract from the residential area in which they are to be located.

The proposed plan in particular, makes it clear in policy 11.3.4 that motels are to be limited to defined locations on arterial roads and in medium density living areas and the plan makes specific provision for this activity in the Living 5 zone. It is true that both plans contain site criteria which this proposal meets.

It is also true that in recent times the respondent has granted consent to a similar sized motel complex almost opposite the appeal site on the northern side of Riccarton Road and Ms Cowley acknowledged that she provided a favourable



assessment of that proposal for the purposes of the resource consent application. However she sought to draw a distinction between that case and the present one on the basis that in the former the neighbours most likely to be affected had consented to the proposal so that any potential adverse effects on them could not be considered. This is quite an important distinction as is the distinction made by Mr Calvert relating to the on-site layout of the buildings in that complex.

In our opinion because the outcome of the relevant submissions on the proposed plan are unlikely to have any significant effect on the status of the appellant's proposal and indeed on the criteria by which it is to be assessed, we think in this case, the proposed plan should be given more weight than the transitional plan which was made operative almost 10 years ago.

Notwithstanding the compliances earlier referred to, it is our judgment that the appellant's proposal is likely to give rise to at least one and possibly two adverse effects of some significance for the adjoining residential neighbours.

The first and most obvious one is noise particularly from the rear carpark during night-time hours and we accept the respondent's evidence that this is unlikely to be adequately mitigated. The second is the potential adverse effects of the proposed landscaping including the landscaping that Mr Speechly considers to be necessary at the rear of the property. We think there is some force in the concerns expressed by Mrs Dawson and Mrs Keats about this landscaping which of course is being suggested for purposes of mitigation but which may very well aggravate rather than mitigate adverse effects so far as loss of sunlight and additional shading are concerned.

Then too, we have regard to the fact that the proposed plan limits the site size for non-residential activities to 1100 m^2 which seems to be consistent with the



objective for non-residential activities in the living zones requiring them to meet local community needs and at the same time not detract from amenity values of the area. The appellant's proposal is not intended to meet local community needs. On the contrary, it is intended to meet the needs of those who do not form part of the local community and have no commitment to it. This we also think is an important matter when it comes to assessing the likelihood of noise nuisance arising from the proposal.

We accept that provision of an activity as a discretionary activity in the proposed plan could lead to the inference that the activity is an efficient use of resources, although we would not go so far as to say that such an inference is irrebutable. We also agree with the decision in the Ngataringa Bay case that environmental standards such as noise standards tend to be of general application and one has to have regard to the particular circumstances of the case in deciding whether such standards will provide adequate protection for the amenities that the plan seeks to protect. In this case we have already concluded that the noise standard in the proposed plan is unlikely to do this.

The principal reason for this conclusion is that the site is narrow and indeed in our view, too narrow for a development of the size shape and layout proposed by the appellant. While the failure to comply with the shape factor in the transitional plan is not itself particularly important as Ms Cowley acknowledged, the fact that this motel proposal cannot be established with a layout similar to the one on the opposite side of Riccarton Road, is a factor that points to the inadequacy of the appeal site for the proposed activity.

For these reasons we think the residential amenities which include, importantly in our view in the scheme of the proposed plan, lower density living will be placed in jeopardy if the appellant's proposal is allowed to proceed and



consequently the sustainable management of physical resources will not be promoted.

For all the foregoing reasons but only after careful consideration and weighing of the positive effects of allowing this activity against the adverse effects which we have just been discussing and the relevant objectives and policies of both plans and in particular the proposed plan we have concluded that this appeal should be disallowed.

In the result therefore the Court now determines these proceedings in the following way:

1. The appeal is disallowed and the respondent's Commissioner's decision refusing the appellant's application for consent is confirmed.

2. All questions of costs are reserved. Any applications for costs are to be filed with the Registrar's office at Christchurch within 20 working days of the date of this decision. Any replies are to be filed within 20 working days thereafter.

DATED at CHRISTCHURCH this 11th day of **June** 1998



P.R. Skelton

Environment Judge

lrg.doc

DOUBLE SIDED ORIGINAL

Decision No. C 4 /2002

IN THE MATTER of the Resource Management Act 1991 ("**the Act**")

AND

IN THE MATTER of reference pursuant to Clause 14 of the First Schedule of the Act

BETWEEN **PORT OTAGO LIMITED**

(RMA 902/99, RMA 904/99 RMA 907/99, and RMA 908/99)

Referrer

AND **DUNEDIN CITY COUNCIL**

Respondent

BEFORE THE ENVIRONMENT COURT

Environment Judge J A Smith – (presiding)
Environment Commissioner I G C Kerr
Environment Commissioner N Burley

HEARING at **DUNEDIN** on 17-21 September and 24 September 2001

APPEARANCES

Mr L A Andersen and Mr P J Page for Port Otago Limited
Mr S W Christensen for the Dunedin City Council
Ms J Duff for Te Runanga Otakau (in relation to RMA 902/99)
Mr C J Hilder for himself, Careys Bay Association Incorporated and D and A Knewstubb
Ms N Wilson in person (in relation to RMA 902/99)

DECISION

Introduction

[1] These are four discrete references relating to the Port of Otago. They are 902/99 Shipping channels; 904/99 Storage of logs; 907/99 Wording of Issue 11.1.4 and Policy 11.3.6 Protection of Careys Bay; and 908/99 Height rules at Careys Bay Boiler Point extension and Back Beach.



Shipping Channels

[2] At the commencement of these proceedings the parties produced a consent memorandum in relation to RMA 902/99. In this reference Port Otago Limited (**Port Company**) is seeking that the rules relating to areas of significant conservation value be amended to provide for the excavation of Goat Island and Quarantine Island for widening of the shipping channel as a permitted activity. After a discussion the Port Company have revised its position seeking acknowledgement in the Plan of the importance of the shipping channel but no specific provisions in the rules for channel widening. In a consent memorandum the parties have agreed to minor changes to policy 11.3.1. The referrer also specifically records its acknowledgement of the cultural importance of Rakiriri (Goat Island) and the role of Kai Tahu as kaitiaki. The referrer acknowledges that this means it needs to make full disclosure to Kai Tahu of any works it intends to undertake which affect Rakiriri and that Kai Tahu must be consulted and its views are to be taken into account concerning any such proposals.

[3] Accordingly we direct the following amendments be made to policy 11.3.1 in the Ports Section of the Proposed District Plan:

> ***Recognise and provide for the use of land and facilities to enable ports to serve the City and the region.***
> ***Explanation Port facilities contribute to the ability of the City and Otago to provide for their social and economic wellbeing. Ports are a physical resource of the City and it is necessary to provide for their future use and management. That includes providing for the maintenance and development of facilities associated with ports such as breakwaters, the Aramoana Mole, and the shipping channel passing between Quarantine and Goat Islands.***

[4] In all other respects that reference is to be disallowed. There is no issue of costs arising in respect of RMA 902/99.

The Three Remaining Issues Requiring Hearing

RMA 904/99 Storage of logs

[5] The referrer seeks a provision in the Plan that the storage of logs be a permitted activity in the south-eastern part of the Port 1 (Port Chalmers) zone. The parties have agreed that woodchip storage and log storage should be a discretionary (restricted) activity in the north-western part of the Port 1 (Port Chalmers) zone.

[6] In respect of woodchip and log storage as a discretionary (restricted) activity in the north-western part of the Port 1 zone, we understand the existing provisions of the Plan can remain unchanged. The zone is divided by an imaginary line extending George Street to the sea. To the south of this line the Council have now agreed that woodchip storage should be a permitted activity subject to compliance with performance standards. No party objected to this

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

course and accordingly we direct that the Plan be modified to include woodchip storage as a permitted activity in this portion of the Port 1 zone.

[7] The only remaining issue is whether or not log storage should be a permitted or controlled activity in the south-eastern part of the Port 1 zone. The Council's primary concern related to log storage and the noise associated with handling the logs. The Council's position was that if the resolution of the noise reference to be heard by this Court was satisfactory, then the Council would accept the storage of logs as a permitted activity. In final reply counsel for the Council went on to say that the rules as they are currently promulgated by the Council and included in the Plan are inappropriate and hence their reason for seeking controlled activity status.

RMA 907/99 Wording of Careys Bay Issue 11.1.4 and Policy 11.3.6

[8] Several issues arise in respect of this reference, the first being that the Port Company made submissions in respect of Policy 11.3.6. In determining that submission the Council decided to consequently alter the underlying Issue 11.1.4. For the Port Company, Mr Andersen says this is a matter of the tail wagging the dog. More substantively the Port Company argues that Policy 11.3.6 appears to give a special status to the existing character of Careys Bay without a full consideration of all of the issues which arise in terms of the Resource Management Act and Part II in particular. More specifically, the Port Company is concerned that the Policy could raise expectations of Careys Bay residents to unrealistic levels that amount to a guarantee by the Council that the community will not suffer adverse effects from Port activities. Finally the Port Company says that the Anticipated Environmental Result 11.8.4 affects the protection language of Policy 11.3.6 and a consequential amendment to that should follow from a change to Policy 11.3.6.

RMA 908/99 Height Rules

[9] Although this matter was originally presented to the Court on the basis of height limits for buildings, structures and stored goods (Rule 11.5.2(ii)(a)), it became clear through the witnesses that the particular concern did not relate to buildings themselves but rather to the height to which containers could be stacked on both Boiler Point and Back Beach. In final reply, Mr Page for the Port Company made this clear by noting that the limits they sought for both Boiler Point and Back Beach were up to 5 containers high, and buildings, structures and other stored goods to 12 metres. Their evidence however related specifically to problems with container handling and the need for flexibility in stacking heights for containers. Having discussed the scope of the various matters before the Court we now address the background.

Background

The development of Boiler Point and Back Beach

[10] The Port of Otago Limited has developed the Port Chalmers complex in response to demand for deeper berthage and facilities. Over recent years there

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

has been a shift to both containerisation of cargoes and to berthage requirements of 12.5 metres draught. We were told that this has led to a significant shift in the percentage of shipping lines visiting Port Chalmers to such an extent that Port Chalmers is now the major container port in the Lower South Island. It has the only two fully equipped deep draught container and multi-purpose berths in the lower South Island, together with two deep draught forestry berths. Dunedin still handles some general cargo, LPG, petroleum and deep sea fishing boats. There was no dispute between the parties that Port Chalmers has undergone significant expansion in the early to mid-1990's. This has led to greater demand on its facilities and has led to two reclamations - being Back Beach and Boiler Point (which adjoins Careys Bay). This has involved excavating part of Flagstaff Hill which is between Back Beach and Port Chalmers in order to extend the operational areas. There has been significant litigation relating to these issues with a series of decisions from the Planning Tribunal (as it then was), the High Court and the Court of Appeal. In Decision A184/96 it was determined that the Port of Otago Ltd was able to rely on the Otago Harbour Board designation included in the first review of the Port Chalmers district scheme (made operative in 1992) to carry out its activities in part of the operational area of the Port until the Proposed District Plan becomes operative. In this area the Port Company is not subject to the controls in the transitional plan or the proposed plan.

[11] In respect of the reclamation consents there were some relevant conditions inserted as part of the conditions of consent. These included:

Back Beach Reclamation Consent

B Following completion of construction ...

(2) The use of the area shall be restricted to the following ...

(b) The storage of goods and materials (except the bulk storage of woodchips and fertiliser) and the consolidation and distribution of these goods and materials ...

(5) Storage of any materials or goods on the site shall be so ordered that there shall be no contamination of adjacent sites, roads and water areas ...

(10) Stored goods and other materials or parts thereof may not exceed a height of 8 metres above ground level.

(11) No buildings, structures or parts thereof may exceed a height of 10 metres above ground level ...

Boiler Point Reclamations (Inner and Outer)

B Following completion of construction ...

(2) The use of the area shall be restricted to the following ...

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(c) *The storage of goods and materials and the consolidation and distribution of those goods and materials except that the following goods and materials are excluded:*

(i) Woodchips;
(ii) Fertiliser;
(iii) Logs ...

(5) Storage of any materials or goods on the site shall be so ordered that there shall be no contamination of adjacent sites, roads and water areas ...

(10) No buildings, structures, stored goods and other materials or parts thereof may exceed a height of 8 metres above ground level ...

[12] The current position is shown relatively clearly in maps 22 and 23 of the district plan. The heights shown are those imposed as a result of the plan process which adopted a height of 10 metres in respect of Back Beach (the same as the height for structures in the original consent) and 8.5 metres in respect of Boiler Point (0.5 metre higher than the structures under the original consent).

Log handling

[13] Log handling has been traditionally associated with the operation of log ship berths which are situated below Flagstaff Hill adjacent to Back Beach. Woodchip has traditionally been stored near to the berthage itself in the wind shadow of Flagstaff Hill. Logs have been stored throughout the Back Beach area into the log ship berthage area. Logs generally arrive by rail or road and are then moved using large log loaders. The loaders are used to load and unload logs from the truck/train or vessel. They are then stored in stacks at various points in the Port 1 zone around Back Beach. Various other operations appear to include restacking the loads for particular orders; sorting logs; moving logs for operational requirements and the like.

[14] It was clear to us having heard the evidence that the issue is not the storage of the logs per se (which is silent) but the noise generated in handling these logs while in storage especially when they are sorted, stacked, restacked and loaded onto vessels.

Policy issues in relation to Careys Bay

[15] In respect of the policy issue there is some considerable background to the reclamation of Boiler Point. It was clear through the progress of this hearing that there is a real concern by residents that the Port Company may at some time in the future seek to reclaim a further area of Careys Bay for port related purposes. The original application by the Port Company for development of Boiler Point included a much greater reclamation than that eventually undertaken. The Port Company officers however stated quite clearly that there were no proposals for expansion of the Port into Careys Bay at this stage, nor

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

had any design or initiative been commenced in this regard. After some considerable argument between counsel it was agreed by all parties that the application for reclamation of the Port zone into Careys Bay would require not only District Council but Regional Council consents.

Container Storage

[16] In relation to the storage of containers on Boiler Point and Back Beach evidence made it clear that the demand for increased storage of containers related to the development of "super shipping" (a vessel around 280 metres or more in length) and its potential impact upon Port Chalmers. This would involve much higher "exchange rates" of containers than had occurred in the past, with peak demand for container space close to the berthage for the container vessels. We were advised that the containers are of varying heights at 2.44 metres, 2.6 metres and 2.9 metres. They vary in length from 20 feet to 40 feet long.

Operational background

[17] Much evidence was given by the Port as to its economic importance to the region. No party disputed this evidence which was at best marginally relevant to the issues before the Court. It is also not disputed by the parties that there is significant demand on the Port resources and that the Port has limited land area available for its activities. Mr Bakx indicated that the Port really requires around 10 hectares to support the type of operation and cargo volumes as they exist at the site to date. It has currently available to it 9.5 hectares. However it is unclear from the evidence whether this includes the containerisation activities (packing goods into containers for customers) undertaken by the Port on site.

[18] From the evidence given the Port Company operates very much a ***one stop shop*** for customers providing storage and packing facilities, marshalling, handling and loading facilities in respect of containerised goods. This has enabled the Port Company to develop what we consider, having heard the evidence, very effective methods for stock control and allocation of resources generally within the Port.

[19] The operations have also been constrained by the fact that the Back Beach area is approximately 1.5 km from the main container berthage. It is accessed past the woodchip piles and the forestry berthage areas. Accordingly, the Back Beach area itself has to date been largely undeveloped and not utilised to the same extent as the container berthage area.

[20] No party disputed that the Port Company is an effective and efficient competitor for shipping services. From the evidence we have no reason to doubt that the Port Company will continue to offer an efficient and effective shipping service for the foreseeable future. Although the Port Company tried to approach the matters (particularly relating to height restrictions in Careys Bay at Boiler Point and Back Beach) on the basis of greater heights being essential for their operation, we have concluded that this significantly overstates the position

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

for the Port Company. In our view the test to be applied in respect of the provisions to be adopted for the Plan relate to that which is necessary in the sense of desirable or expedient – see ***Countdown Properties (Northlands) Ltd v Dunedin City Council***[1].

[21] We accept that the Port Company is going to be faced with the demand to provide a high rate of exchange of containers at peak periods in the season. This is driven in part by the fact that there are significant numbers of empty containers to be unloaded from ships. Port Chalmers is a net exporter of full containers. The other major influence is the size of the super ships with a move to 4,100 TEUs (standard container unit equivalents) and 1300 reefer (refrigerated containers). Currently the largest existing vessels visiting the port have a capacity of some 2,800 TEUs and 1100 reefer slots. Mr Bakx opines that this may lead to an extra 1000 TEUs being exchanged at the peak periods.

The Legal Position

[22] The parties did not appear to be in contention that sections 9 and 32 of the Act read together oblige a Council or the Court in respect of land use controls to satisfy themselves that imposing the rule restricting the use of the land is necessary in achieving the purpose of the Act and in addition is the most appropriate means of exercising the Council's function. In respect of such land use control the Port Company submits, and we do not understand other parties to demur, that there is a presumption in favour of a less restrictive method over a more restrictive method - unless that more restrictive method can be shown to be necessary in a section 32 sense. We note that although those comments hold in respect of RMA 904/99 storage of logs and 908/99 height rules, the issues in RMA 907/99 relating to Policy 11.3.6 are more broadly based.

[23] In respect of policy 11.3.6 it is our view that there is no presumption as to the form of the policy and Part II of the Act is the overriding consideration. Sections 74 and 75 particularly identify that that policy *"in regard to issues and objectives"* must be included in the plan. Where the rules can be seen as achieving or implementing the policies and objectives of the plan the policies and objectives themselves are intended to achieve the purpose of the Resource Management Act.

[24] In ***Terrace Tower v Queenstown Lakes District Council***[2] the Court suggested a method of simplifying the complexities and peculiarities of section 32 and the evaluation was expressed in the following terms at paragraph 49 of the decision:

> *Carry out an evaluation of:*
> - *benefit and costs (whether monetary or not)*
> - *effectiveness in achieving objectives and policies*
> - *whether the proposed provisions are appropriate to the circumstances.*

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1 ***Countdown Properties (Northlands) Ltd and Ors v Dunedin City Council & Ors*** [1994] NZRMA 145 at 178-179.

2 ***Terrace Tower (NZ) Pty Ltd v Queenstown Lakes District Council*** C111/2000.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[25] It was suggested by Mr Andersen for the Port Company that there was overwhelming argument against any measures which would interfere with the efficient operation of the Port. This was on the basis of the economic value of the container terminal being at least 10 times greater than the total capital value of properties in the vicinity affected by its operation.

[26] With respect, we consider such an approach to be a misunderstanding of the evaluation proposed in ***Terrace Tower.*** To suggest that the evaluation of benefit is measured only in monetary terms on equivalent land values in our view significantly overstates the position. A significant number of non-monetary benefits and costs are involved in most resource management matters. A financial approach would suggest that other matters recognised in section 5(2) relating to social, cultural wellbeing, health and safety, have less relevance in comparison to the economic matters under section 5. Similarly it would afford a primacy to economic matters which are simply not sustainable by reference to the provisions of Part II as a whole. Although many (if not all) of the issues in section 5(2) can be restated in economic terms this involves fixing values to subjective issues i.e. cultural wellbeing or the value of a view. Such an approach is fraught and leads to a restatement of section 5(2) in other ways without advancing the essential balancing test required. In this case the comparison of property values highlights the dangers of this economic approach.

[27] In the end we conclude that the tests in section 32 should be read in the context of Part II of the Act and in particular the enabling provisions of section 5(2). We cannot accept that the consideration of this matter by economic reductionism becomes a comparison of the value of the Port as compared with the value of the surrounding properties. We now turn to each of the relevant references for consideration.

RMA 904/99 Status of log storage and handling

[28] Rule 11.5.1 specifies permitted activities under the plan. It notes relevant to the question of log storage and handling:

> *The following are permitted activities within the Port 1 Zone, provided that they comply with the relevant conditions in Rule 11.5.2:*
>
> *(i) The storage of cargo passing through the port, except for the open air storage of fertiliser, woodchips and logs. ...*
>
> *(iii) Loading and unloading of goods and materials to and from ships and associated handling, consolidation and distribution. ...*

[29] The only issue before this Court on reference RMA 904/99 is the status of log storage in the portion of the Port 1 zone to the south-east of the George Street line. Ms S J McIntyre a planner for the Council, although initially identifying the status of log storage as the issue, then deals in her evidence with the question of handling of logs and the noise associated with moving, stacking

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

and loading logs. She also identifies several activities relating to log storage and handling as sources of noise.

[30] Mr D R Anderson, a planner called by the referrer noted that the primary difficulty is that the activity of loading and unloading of logs to and from ships and their associated handling, consolidation and distribution is difficult to distinguish in practical terms from the activities associated with the storage of logs. Having regard to the wording of the two provisions above, it could be argued that all activities which involve the loading and unloading of logs from vessels are permitted activities, as is their associated handling, consolidation and distribution, whereas the storage of logs is not.

[31] The reason for the importance of this distinction is that the controls are not in fact being sought in respect of the storage of the logs in itself, although this is how the evidence has been presented. Rather controls are being sought in relation to work associated with the handling of the logs particularly by the log loaders. These are large machines capable of handling a number of logs at one time and are particularly noisy, especially when involved in close manoeuvring to consolidate or sort logs. Dropping of logs is noticeably noisy.

[32] The Council's position is further compromised by their acceptance that if appropriate standards were in place relating to noise generally for the area then they would accept that the storage of logs should be permitted. Noise standards are the subject of a reference before this Court which if they are not resolved by the parties will require to be heard by the Court. In our view it is not appropriate to use these proceedings to address concerns that the Council now has about its own Plan provisions relating to noise at the Port.

[33] Furthermore we are strengthened in our view that control of effects occurring outside the zone by use of the status of the activity is inappropriate by reference to the provisions of the Plan itself. The Plan recognises zoning as a method intended to provide for uses and developments which are compatible within identified areas. The explanation of Policy 4.3.7 notes:

> *People and communities within Dunedin City seek a high degree of certainty as to the amenity within different parts of the City. This necessitates the adoption of zoning as a technique to provide such certainty and to ensure that the adverse effects of incompatible activities are avoided, remedied or mitigated.*

Further, under Policy 4.3.9 the explanation includes:

> *The District Plan provides for permitted activities where the effects of those activities and anticipated demand are known and can be managed by appropriate conditions applying to those parts of the City which are considered suitable for those activities ...*

[34] We accept the submission of counsel for the Port Company that although the policy does not directly distinguish between whether such effects are intra or inter zone, the zoning technique would be seriously undermined if activity status

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

within zones was determined by activities in other zones. The purpose of the zoning as noted in Policy 4.3.7 is to group compatible activities within identified areas. There is no evidence as to conflict between the activities within the Port 1 zone. The issue therefore, is the performance criteria that should be adopted in respect of this zone as it relates to the nearby residential zones.

[35] We accept the evidence and submissions of counsel for the Port that residents would not be able to distinguish whether noise received at their homes was the result of handling of logs to and from berthage (which is a permitted activity) or from the handling of logs associated with storage. We doubt that such a distinction can even properly be drawn in any realistic and enforceable way. In our view the proper course of action is to examine the performance standards of the Plan in terms of the references still to be dealt with by this Court relating to noise. We can see no proper basis to classify this activity as a controlled activity in order to exercise a level of control over performance standards not already incorporated in the Plan or covered in terms of decisions yet to be made by this Court in due course. In our view the proper place for the Council and other parties to argue the question of the performance standards for log handling and/or storage is in terms of the noise references.

[36] Accordingly, we conclude that the referrers must succeed on this reference 904/99 and we direct that the Plan be altered to reflect the status of the activity of woodchips and log storage as permitted for the south-east part of the Port 1 zone.

RMA 907/99 Policy 11.3.6

[37] It was the position of the Port Company that it was inappropriate for the Council to adopt Policy 11.3.6 to:

> *Protect the existing character of Careys Bay from the adverse effects of port activities at Port Chalmers.*

There are a number of complaints by the referrer relating to this policy which can be summarised as follows:

1. That the general obligation under section 5 to avoid, remedy or mitigate is limited by the use of the word "protect";
2. That the word "character" has no particular meaning in terms of the Resource Management Act and is adopted from particular meanings given in terms of the Plan;
3. That Careys Bay has been singled out for particular treatment not afforded to any other coastal area on the peninsula;
4. That the policy structure seeks to limit the Port in favour of protecting adjacent residential amenity values.

Finally, and in summation of this, the Port Company says it is implicit in the adoption of the policy that the Council and/or residents may assume that if there are to be any adverse effects of development in Careys Bay then the activity

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

should be directed elsewhere. This gives a pre-eminence to Careys Bay which may not be justifiable on a proper assessment of an application for resource consent under the full provisions of the Resource Management Act.

[38] A further submission which is contradictory with the previous is that the policy may not have any particular meaning. It appears to be argued that it may have no particular meaning beyond the meaning of Part II of the Act. To that extent it may be otiose.

[39] Mr Andersen for the referrers submitted that **protection** was a matter addressed under section 6(b) of the Act but not under section 7. Further he believes the substitution of the word **character** for **amenity** removes the provision from the statutory meaning of amenity values in section 7. He and others also noted that the policy itself did not refer to the preservation of natural character of the coastal environment under section 6. Although the explanation of Policy 11.3.6 refers to amenity, there is no explicit or implicit reference to section 6(b) of the Act.

[40] Mr Hilder in helpful submissions addressed at some length the wording of the policy which he supported. His position is that the Council is entitled particularly under section 7 to recognise the amenity of this area and to provide for it in terms of the Plan. He says the Council is entitled, if it considers an area is under particular threat because of the Port of Otago nearby, to make provision for it where it has not made provision elsewhere in the Peninsula.

Meaning of 'protect'

[41] Mr Hilder was of the view, supported by the District Council, that the use of the word 'protect' was a sub-meaning used in section 7(c) and section 7(f). He referred to the ***Environmental Defence Society Inc v Mangonui County Council***[3] which noted that protection, or keeping safe from injury, did not have as strong a meaning as prevention or prohibition. He notes the use of the word 'protection' in section 5(2) *'... protection of natural and physical resources ...'* and under section 6(a). We adopt the ***keep safe from harm or injury*** meaning of ***protect***. In our view this does not carry with it maintenance of the continuing original or existing state in perpetuity. ***Maintain*** on the other hand has meanings in The New Oxford Dictionary of English 1998 to *'cause or enable to continue, keep at the same level or rate, and keep in good condition'*. The Collins Concise Dictionary Plus 1990 meanings are to *'continue or retain, keep in existence, to keep in proper or good condition'.*

[42] We accept Mr Hilder's submission that the word **maintain** includes the meaning of protect. In consequence and having concluded that the Proposed Plan should maintain or enhance amenity values the Council may determine that it will protect those rather than preserve or enhance them. Whether the wording in Part II is used with the degree of precision suggested by counsel in this case is a matter on which we do not wish to express a final opinion. Even if the word is used with that level of precision, the use of the word **protect** by the

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[3] [1989] 3 NZLR 257 at 262.

Council is a method by which the Plan can have regard to amenity values under section 7(c). It may be that the words used in sections 6 and 7 particularly are not intended to be used with the level of chancery draughtsmanship suggested by the parties in this case. The words *preserve*, *protect*, *maintain* may be referable to the overall purpose of the Act contained in section 5(2) of sustainable management. On either approach the Council is able to seek to ***protect*** as a policy to achieve the purpose of the Act.

[43] Similarly Mr Hilder suggests that ***character*** is defined in the Dunedin district plan as a specific subset of the section 2 meaning of amenity values. He submits that it identifies the specific qualities and characteristics that make the place distinct and further limits the definition to physical qualities and characteristics as opposed to the full range of meaning given to amenity values under the Resource Management Act.

[44] ***Character*** as defined in the definition section of the proposed Dunedin City district plan means:

> *The combination of traits and qualities, including buildings, the spaces between buildings, structures, trees, landforms and other elements of natural topography, which makes one place distinct from another.*

[45] ***Amenity values*** as defined in the Act means:

> *Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.*

[46] We have no hesitation in concluding that the use of the word *character* is within the meaning of amenity values and is likely to be more restrictive than that referred to in the Act. It was also accepted by the parties that *character* as defined in the Plan would include the built environment at Careys Bay, including the existing port activities, and the activities conducted on the Port Company site. Accordingly, we again conclude that the use of the word *character* in itself does not create a difficulty for the Council and that in terms of preparing the Plan they are entitled to adopt a more restrictive meaning than that in the Act.

[47] The question then is whether the provisions of Policy 11.3.6 better meet the purpose of the Act than those suggested by the referrer. Mr Andersen for his part provisionally recommended a Policy 11.3.6:

> *To manage the effects of port activities should that activity be expanded further into Careys Bay.*
>
> *Explanation*
> *It is recognised that Careys Bay together with its adjoining residential areas has existing amenity values arising from the area's relationship to the Bay, small scale maritime uses, its aspect, and its topography. Careys Bay is presently generally less affected by port activities than other residential areas closer to the operational port area. These amenity*

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

values would change if port development was ever to extend further into Careys Bay. Council will be actively involved in any future proposals to reclaim additional land within Careys Bay for port purposes, in order to manage the resultant effects on the environment.

[48] Mr Andersen accepted that there were problems with the change in the Policy as proposed. Firstly by using the word ***manage*** there is no presumption that the matters will be managed to meet the purpose of the Act. It could be argued that fulfillment of the policy could be undertaken by managing it for the maximum advantage of the Port Company. There is also an implicit assumption that the Port activity may be expanded into Careys Bay. Furthermore, Mr Andersen accepts that the new suggested wording has not recognised any change to the activities conducted at Boiler Point as having potential to impact on residents at Careys Bay.

[49] In the end we conclude that the suggested amendments by Mr Andersen go significantly too far. We conclude that the wording of the Plan provisions as they stand are appropriate in general terms in considering the relevant policies of the Act, section 5 and Part II generally. The policy recognises that the existing Port activity is an important contributor to the existing character of Careys Bay and would need to be considered if and when the policy came to be considered. We agree with Mr Christensen that the provision is not a line in the sand. It does not preclude in appropriate circumstances changes to the activities conducted at the Port or even applications for consent for other works at or near Careys Bay. The policy will require careful consideration of the impact of any such activity on the existing character of the area and how that existing character may be maintained.

[50] The Port Company also argued that the consequential amendments to Issue 11.1.4 were not appropriate. In the circumstances we cannot agree. The only amendment required is to the explanation to the Issue to provide a linkage between that provision and the Policy now adopted. The change is minor and inconsequential and we agree with the Council that it should properly be made.

[51] In further discussion with the parties we understand that the purpose of the Policy may be more explicitly recognised by a slight re-wording of it, although no particular change in our view is necessary to the explanation. Accordingly we propose that Policy 11.3.6 be changed to read:

Protect the character of Careys Bay from the adverse effects of change of use or development of the Port activities at Port Chalmers.

We direct that any comment on this change be made to the Court within 15 working days of this decision.

[52] In our view this would make it clearer that the Policy is aimed at any change in activities or development of the Port in the future.



RMA 908/99 Height Controls

[53] Conditions of consent for Boiler Point imposed an 8 metre limit at the time of reclamation on buildings or storage of goods. There has been a large shed constructed over part of the reclamation which is less than 8 metres in height. The balance of the site has been used for the storage of containers which are currently stacked to three high. The proposed district plan in Rule 11.5.2(ii)(a) imposes a maximum height for all permitted activities at Boiler Point of 8.5 metres. The stacking of three "high cubed" containers would come to some 8.7 metres, slightly in excess of the 8.5 metre height limit. On Back Beach the resource consent limited the height for stored goods or materials to 8 metres above ground level and buildings to 10 metres. The proposed district plan has imposed a maximum height for all permitted activities of 10 metres. We are told that the applicant has obtained a building consent and let the contracts for the construction of a building at Back Beach to a height of 10 metres and it is not intended to build higher. The balance of the Port has a 15 metre height restriction for all permitted activities.

[54] The Port Company originally sought the 15 metres maximum height limit over the entire Port 1 zone. However, in final submissions counsel for the Port Company accepted a distinction in respect of these two areas with containers to be five high at Boiler Point and Back Beach, and buildings 12 metres.

[55] The first question is whether these sites should receive separate treatment or be treated in common with the rest of the Port 1 zone. We have concluded that the two sites do need separate treatment because they are effectively extensions which protrude into the visual amenity areas of the respective residential areas nearby. The Planning Tribunal in considering both the original consents clearly came to the same view in imposing the limits. We conclude that there is considerable merit in maintaining a lower height limit than the 15 metres used in the balance of the Port - for both the Back Beach area and Careys Bay area.

[56] Evidence given for the submitters by Mr Tim Heath, a landscape architect, opined that the vertical cut off point on the edges of horizontal landscapes created a particular demarcation. Although in practical terms this might be good reason for a recession plane from boundaries, this is not before this Court on reference nor do we believe in practical terms it would be appropriate. It is however appropriate for the Court to consider a lower height limit for both Boiler Point and Back Beach than elsewhere in the Port. As we have said, this has been acknowledged by the Port Company when suggesting lower heights for both.

[57] In light of the operational requirements of the Port and its witnesses positions before this Court, we are not satisfied that there is any evidence to support a greater height limit in respect of buildings. We have concluded that these should be treated separately to other stored goods because of their permanence and solidity of their structure. Accordingly we have concluded that Back Beach should have a height limit of 10 metres for buildings and structures as in the original resource consent, and that the Back Beach provision should



have included in it that no building, structures (or parts thereof) or stored goods or other materials (excepting containers) may exceed a height of 10 metres above ground level.

In respect of Boiler Point, the Council has adopted a figure of 8.5 metres which we accept along with the additional amendment that no buildings, structures, (or parts thereof) or stored goods or other materials (excepting containers) may exceed a height of 8.5 metres above ground level.

[58] This does not deal with the stacking of containers which we conclude should be dealt with separately. We again direct that any comment by the parties be made within 15 working days as to final wording in the plan.

Containers

[59] The majority of evidence given to this Court related to the question of the stacking of containers. This is the critical issue for the Port Company. It relates firstly to the storage for the exchange period at berthage to enable the maximum number of containers to be stored on Boiler Point (and elsewhere) to five containers high. There is also an operational requirement to stack containers at Back Beach adjacent to the container packing shed to be constructed. To gain operational efficiency the Port Company seeks to stack up to five high when necessary for their operational requirements. That is based on the maximum safe stacking height and the maximum ability of their container lifts.

[60] There was significant evidence given on this matter by landscape and other witnesses. It transpired that certain of the witnesses were mistaken in their evaluation as to the heights of the containers shown stacked in certain photographs. Although it was assumed that they were stacked to around 14.5 metres, evidence indicated that the containers were probably of the smaller variety stacked to around 12.2 metres high. We prefer the evidence as to height of containers of Mr Tim Heath, landscape architect for the residents, who prepared photo montages which were not challenged by the other parties as to height. Mr Heath's depictions of the stacking at Careys Bay however showed a solid block in a single colour appearing as the wall of an industrial building and are misleading in that respect. For this reason we prefer the evidence on visual effect of the witnesses for the Port Company and the photographic evidence of Mr Compton-Moen showing that there is a considerable mosaic of colours constantly changing in dimensions depending on shipping requirements.

[61] In particular we accept the evidence of the Port Company that maximum stacking at Boiler Point or Back Beach is unlikely to continue for longer than one week, being a period prior to and immediately after an exchange with a super ship. In practical terms the Port Company or the shipping companies are unlikely to leave a large number of containers stacked for lengthy periods because of the necessity to repack and export them as soon as possible. To that extent the stacking up to five containers high is likely to be transitory in nature and to have limited impact on residents above that already experienced with the current height limits. In that regard we accept that a provision in the Plan allowing container stacking up to five high is desirable or expedient for the

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

proper functioning of the Port, is sustainable in terms of section 5 of the Act, and that the adverse effects are short term.

[62] In respect of Back Beach Mr Heath's montages showed a solid building covering the entire reclaimed area. In light of the decision of this Court to limit the building height to 10 metres (as is the building being constructed) the impact of the extra stacking height of containers would be minimal. In particular it would only constitute an impact to residents in the Back Beach area if they are situated above the 10 metre height of the building. The impact on residents who have a line of sight above the 10 metre line would be limited. To persons using the Back Beach bay area itself it is unlikely that they would have a clear view of the container areas which are stacked on the seaward side of Back Beach behind the proposed 10 metre storage building. In any event such persons would voluntarily be able to shift their focus elsewhere compared to residents who have static views.

We make the same comments in respect of the transitory nature of any effect. In the end we conclude that the effects from the increase in height for container stacking would be minimal on the residents in Careys Bay and Back Beach. We accept however, there would be significant operational advantages to the Port Company in being able to operate the Port to the maximum efficiency allowed by machinery at times of peak demand.

Assessment of potential changes

[63] In respect of the changes to building height and storage of goods to 10 metres for Back Beach and 8.5 for Boiler Point, these seem to have little practical impact. Existing and proposed buildings seem to be within these height limits and it was not indicated to us that storage of goods in the open occurred beyond these heights. The issue effectively turns on the stacking height of containers. Particularly we recognise issue 11.1.2 as recognition of the shortage of suitable land adjacent to the Port's objective 11.2.1 and managing Port's resources to sustain the future potential use. More particularly policies 11.3.1:

> *Recognise and provide for the use of land and facilities to enable ports to serve the City and the region.*

Policy 11.3.2:

> *Provide flexibility in the use of port facilities where these do not give rise to adverse effects on amenity values.*

Particularly the explanation:

> *The efficient operation of port areas relies on multi-purpose utilisation of available areas, particularly for storage and cargo aggregation. Where no differences arise from the effects of storing and aggregating different cargos, there is no justification for differentiating the areas where such*

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

activities are undertaken. Where effects differ, some control may be warranted, for example in terms of visual impacts or noise.

In relation to Back Beach we are unable to conclude that allowing containers to be stacked up to five high will make any appreciable difference to neighbouring residences in terms of visual amenity or noise. The interpolation of the building for which a building consent has been issued, the distance of the houses from the stacking area, and the fact that the houses are built on the escarpment rather than at sea level (with one exception) are factors reducing the visual impact.

[64] The plan recognises the tension inevitable in the port having the flexibility and space demands that it has. We take the view that the changing mosaic of the containers constitutes a significant visual difference between that and a solid building of the same height. There are likely to be long periods where there are few containers stacked and those that are there would be stacked well below the five container limit. The build up of containers is likely to be focused around the key exchange periods, particularly when the new super ships become operative through the Port of Otago.

[65] Accordingly in recognising the balance between potential visual impacts in this case and the need for space and flexibility by the Port, a practical limit must be given to the height at which containers can be stacked. We are minded to adopt five containers as the limit for the following reasons:

(1) This is the maximum height to which containers can be stacked in terms of safety and with the container lifts that are available;
(2) The height seems to vary between 12 and 14.5 metres;
(3) The period during which stacking at this height would be likely to be limited to those periods when exchange with super ships was occurring, otherwise the logistical difficulty of reorganising containers from five high would militate against them being stored to this height. By preference they appear to be stored on the site at around two to three containers high;
(4) Permanent buildings or other stored goods would be at a lower maximum height than stacked containers;
(5) We accept that there is demonstrable need for the ability to stack containers to maximum heights during periods of peak demand.

Viewing this matter in another way the benefits of the port being able to maximise the use of its space is significant over several peak periods. On the other hand, the cost of doing so is a visual intrusion for a limited period of time without any other permanent or demonstrable impacts on the environment. It also maximises the use of the existing land area available, giving rise to visual impacts which because of their temporary nature are acceptable.

Conclusion as to height rules

[66] Accordingly we conclude in respect of both Back Beach and Careys Bay the provision should be amended. We suggest the following wording:

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

That containers may be stacked on a short term basis to five high or 15 metres high whichever is the lesser.

[67] Rule 11.5.2 in its final form with amendments we propose will read:

Rule 11.5.2 Conditions Attaching to Permitted Activities ...

(ii) Height

The maximum permitted height as shown on District Plan Maps 22 and 23 is as follows:

(a) Building, structures (or parts thereof) or stored goods or other materials other than containers:

Back Beach	*10.0 m above ground level*
Boiler Point	*8.5 m above ground level*
Other areas	*15.0 m above ground level*

(b) Containers:

All areas	*5 high or 15.0 m whichever is the lesser on a short term basis*

Maps 22 and 23 will also need to be altered accordingly.

Achieving the Purpose of the Act

[68] Finally under section 32 we consider whether as a whole the suggested provisions achieve or better achieve the purpose of the Act. This involves a balancing exercise between the key issues here of the amenity of residents in Careys Bay and Back Beach compared with the economic and other benefits we have identified.

[69] In our view the district plan has undertaken a balancing in respect of the various items identified under Part II of the Act. The proposed plan has acknowledged the critical nature of the port activity to the economy of Otago in the Port Chapter 11 introduction where it says in part:

The deep draught berths are a critical factor in respect to the nett return to the region's primary producers. These berths provide the means for container vessels, log carriers and woodchip vessels to depart fully laden from a single port of call.

The operational requirements for port areas are changing. There needs to be some flexibility in the amount and type of space that is available for port operations. Ports require a high level of accessibility by both roads and railways.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[70] In respect of log handling, we conclude that noise issues are best dealt with directly in the plan by way of performance standards rather than activity status. It is clear that the handling of logs is an integral and recognised part of the port activities and should be permitted as such.

[71] In respect of policy issues we agree that the Council in policy 11.3.6 recognised the particular inter-relationship of Careys Bay and the port. Policy 11.3.6 is sufficiently flexible in its application and meaning to reflect intentions inherent in the development of the port close to residential activities.

[72] In looking at the height rules, we conclude that the recognition of Back Beach and Boiler Point as having different rules as to height, is one method of seeking to mitigate adverse visual effects on residents in the area. To that extent the previous consent decisions, the Council decisions, and our own view reflect an approach to reduce the visual bulk on the periphery of the port areas, particularly when viewed from residential areas. We conclude that the special rule for container stacking to 5 high recognises that intention while accepting that for short-term periods there may be some impact which is similar to that of the general port area maximum height rules. On the other hand for the more substantive periods and in respect of permanent structures the impact is likely to be significantly less than that for the balance of the port areas in visual terms.

Directions

[73] We direct that the Council is to prepare, file and serve the proposed plan provisions for consideration by the Court along with any explanatory memorandum within fifteen working days.

[74] If that is not a joint memorandum other parties have ten working days for comment. The Council are to file any final reply within 5 working days thereafter.

[75] Costs have not been raised by any party in relation to this reference. In our view the Court has indicated that costs are generally not appropriate in respect of references. We tentatively see no reason to depart from that view in this case. Furthermore we note that all parties have been partly successful in respect of matters before the Court on the references. Accordingly, we tentatively conclude this is not an appropriate case to consider the award of costs and that costs should lie where they fall. Any applications are to be filed within fifteen working days, replies ten days thereafter, and final reply five working days thereafter.

DATED at CHRISTCHURCH this 22nd day of January 2002.

For the Court:

J A Smith
Environment Judge

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Issued: 23 JAN 2002

IN THE COURT OF APPEAL OF NEW ZEALAND

CA37/06

	BETWEEN	NORWOOD LODGE Applicant
	AND	UPPER HUTT CITY COUNCIL Respondent

Hearing: 19 June 2006

Court: Robertson, Arnold and Ellen France JJ

Counsel: P J Radich and J K Hodgson for Applicant
J D Lynch for Respondent
N Kean on behalf of Fairleigh Properties Ltd [interested party]
S Feary [interested party]

Judgment: 4 July 2006

JUDGMENT OF THE COURT

Leave to appeal out of time is refused.

REASONS OF THE COURT

(Given by Arnold J)

Introduction

[1] The applicant applied to the Upper Hutt City Council for consent to subdivide its four hectare property into two lots of roughly equal size. The Council declined the application. The applicant appealed against the Council's decision to the Environment Court, which rejected the appeal. The applicant appealed against that decision to the High Court where, in a decision dated 9 September 2005, Wild J

dismissed the appeal. The applicant then sought leave from the High Court to appeal to this Court under s 144 of the Summary Proceedings Act 1957. On 14 December 2005 Wild J declined to grant leave.

[2] On 24 February 2006 the applicant applied to this Court for special leave to appeal under s 144(3). The applicant also sought leave to file out of time as its application for leave to appeal was filed some six weeks after the expiration of the 21 day period provided for in s 144(3).

[3] A range of factors may be relevant to the determination of an application for leave to file an appeal out of time. Examples are the period of delay, the reasons for the delay, the extent of any prejudice to the parties and the underlying merits of the proposed appeal. In the present case we are conscious that two parties who appeared before us in person claimed prejudice arising from the continuing uncertainty caused by the applications before the Court. On the other hand, we note that the appeal period ran across the Christmas/New Year holiday period and expired on 4 January 2006. This provides at least a partial explanation for the delay in filing the application for leave. In such circumstances we would be cautious about denying a party the opportunity to pursue a meritorious appeal by a rigid enforcement of the appeal period.

[4] Accordingly, we consider the merits of the application for leave to appeal, on the basis that if the intended appeal does not raise any arguable point of law, a detailed examination of the other relevant factors will be unnecessary.

Grounds of appeal

[5] The applicant seeks leave to appeal in respect of two questions:

(a) Whether, in considering a subdivision proposal classified as a discretionary activity by a plan, the degree of departure of the proposal from the standard for permitted and/or controlled activities cannot itself, in the absence of consequential effects on the

environment, be relevant to whether the proposal meets the objectives and policies of the plan; and

(b) Whether, in circumstances where the Environment Court accepted that there were no adverse environmental effects that it considered relevant to justify rejection of a proposal for subdivision as a discretionary activity there is, however, a precedent effect or threat to the integrity of the plan that alone provides sufficient justification for refusal to grant consent.

These questions differ, at least in form, from those which Wild J was asked to consider.

Discussion

[6] We consider that neither formulation raises a question of law suitable for consideration by this Court.

[7] The first question focuses on the "degree of departure" of the proposal from the standard for permitted and/or controlled activities, and asks whether that can be a relevant factor in one particular situation. That situation is where there is an "absence of consequential effects [of the proposal] on the environment."

[8] There are two difficulties with this proposed question.

[9] First, as Mr Lynch submitted, it is based on a false premise. The Environment Court was obliged to assess the application against the criteria set out in s 104 of the Resource Management Act 1991. Contrary to the assumption underlying the question, the Environment Court did not find that the proposal had no significant adverse effects on the environment. In its discussion of the s 104(1)(a) criterion (actual and potential effects on the environment) the Environment Court said:

> [46] When we consider the potential adverse effects (of this proposal in isolation) we consider the loss of amenity values for the eastern neighbours

> to be the most significant. Other potential adverse effects such as loss of productive soils and loss of rural character due to increased density of built development, loss of openness and spaciousness we consider minor.
>
> …
>
> [48] We find this proposed subdivision would create significant adverse effects (loss of amenity) on the Lendrums' eastern neighbours – Mr and Mrs Feary. We make no finding as to whether the adverse effects on the neighbours would by themselves be so significant that we would turn down the proposal.

[10] There is, then, a clear finding of significant adverse effects on the environment. The fact that the Environment Court did not determine whether the adverse effects were, in themselves, so significant as to justify the rejection of the proposal does not mean that the Court's finding that there were significant adverse effects can be ignored. Accordingly, the proposed question is not raised on the facts of this case.

[11] Second, the question posed is not capable of being dealt with in the abstract. The phrase "degree of departure" encompasses both minor and significant departures from the objectives and policies of a plan. Where an application involves a departure from a plan the extent of the departure will almost invariably be a relevant factor in the determination of the application. What weight is given to the extent of the proposed departure is a matter for evaluative assessment by the decision-maker, in light of all the circumstances. Given the importance of the factual context, the proposed question is not capable of a generalised answer. Accordingly, it is not suitable for consideration by this Court as a question of law.

[12] The other proposed question suffers from similar defects.

[13] First, it refers to there being "no adverse environmental effects that [the Environment Court] considered relevant to justify rejection of the proposal for a subdivision." However, the Environment Court did find serious adverse effects on the environment, but did not find it necessary to determine whether they justified, without more, rejection of the proposal. This was because there was an additional, and to the Environment Court more important, factor, namely the threat to the integrity of the plan posed by the proposal.

[14] Second, to the extent that the applicant's proposed challenge goes to the "precedent effect" of a decision to grant consent for a proposal, it is impossible to argue that such effect is irrelevant. As we understand it, Mr Radich did not suggest that it was irrelevant. Rather, he argued that "precedent effect" was more relevant to consideration of applications for non-complying activities than to applications involving discretionary activities. Accordingly, the effect of his submission is simply that the Environment Court gave that aspect too much weight in this instance.

[15] It is important to note the meaning of "precedent effect" in this context. Plainly individual applications must be considered on their merits. A decision on one application will not create a legally binding precedent in respect of a similar application. However, an earlier decision may be relevant to the determination of a later application. Consistency of treatment, in the absence of a reason justifying inconsistency, is generally regarded as an important aspect of good public administration. In that sense "precedent effect" may be relevant.

[16] This Court held in *Manos v Waitakere City Council* [1996] NZRMA 145 that precedent effect was a legitimate consideration under s 104(1)(d) (now s 104(1)(b)(iv)) in respect of what was treated as a discretionary activity. In *Dye v Auckland Regional City Council* [2002] 1 NZLR 337 this Court held that the precedent effect of granting a resource consent (in the sense of like cases being treated alike) was a relevant consideration for a consent authority to take into account under s 104(1)(d) when considering an application for consent to a non-complying activity. Those decisions have been applied subsequently by the High Court and the Environment Court. As *Manos* deals with a consent application for a discretionary activity it is directly on point. We do not accept that *Manos* has been misunderstood, nor has any case been made out that it should be re-examined.

Conclusion

[17] Accordingly, neither of the proposed questions raises a question of law suitable for adjudication by this Court. The proposed appeal is without merit. In those circumstances we would not grant special leave to appeal and accordingly refuse leave to file the application out of time.

[18] The applicant must pay the respondent costs of $1,500 and usual disbursements.

Solicitors:
Izard Weston, Wellington for Applicant
Upper Hutt City Council (B Dodson)

BEFORE THE ENVIRONMENT COURT

Decision No. 2013 NZEnvC 59

IN THE MATTER of resource consent applications directly referred to the Court under Section 87C(1) of the Resource Management Act 1991

BY MERIDIAN ENERGY LIMITED
(ENV-2011-CHC-000090)
Applicant

Hearing dates: 27, 28 August, 2012;
3 – 7, 10 – 14, 24 – 28 September, 2012;
1 – 5, 15 – 17, 23 October, 2012.
Site visits: 29 August, 19 September (Te Uku), 14 & 24 October, 2012

Court: Judge M Harland
Commissioner MP Oliver
Deputy Commissioner B Gollop

Date: 15 April 2013



INTERIM DECISION

A. The applications for resource consent are granted subject to amended conditions.

B. We record for the avoidance of doubt, that this decision is final in respect of the confirmation of the grant of the resource consents (on amended conditions) but is interim in respect of the precise wording of the conditions, and in particular the details relating to the Community Fund condition(s).

C. We direct the Hurunui District Council and the Canterbury Regional Council to submit to the Court amended conditions of consent giving effect to this decision by 17 May 2013. In preparing the amended conditions the Councils are to consult with the other parties, particularly in relation to the condition(s) relating to the Community Fund.

D. If any party wishes to make submissions in relation to the Community Fund conditions, these are to be filed by 17 May 2013.

E. Costs are reserved.



Hurunui District Council	Respondent
Canterbury Regional Council	Respondent

Appearances:

Mr A Beatson, Ms N Garvan and Ms E Taffs for Meridian Energy Ltd
Mr K Smith and Ms J Silcock for the Hurunui District Council
Ms M Dysart for the Canterbury Regional Council
Mr E Pyle for Wind Energy Association
Mr H Turnbull for himself
Mr M Wallace for Glenmark Community Against Wind Turbines Incorporated
Mr M Archbold for himself
Mr A Baxter
Mr J Carr for Tipapa Limited
Mr G Higginson for himself
Mrs K Fitzimmons for herself
Mrs A Marr for herself
Mrs K McLauchlan for herself
Mr G and Mrs M McLean for themselves
Ms B Meares for herself
Mr D Meares for himself and Mrs V Meares
Mrs E Messervy for herself
Mr M Messervy for himself
Mrs H Pankhurst for herself
Mrs J Symonds for herself
Mr G Thomas for himself
Ms P Vincent for herself



Contents

Introduction 5

The proposal 6
- What is proposed? 6
- Where is the wind farm to be situated? 8
- What is the extent of opposition to the proposal? 10

Legal framework 14
- Consents sought 14
- The RMA and relevant statutory instruments 15

The actual and potential effects of the proposal on the environment 23

What are the potentially positive effects on the environment? 24
- Renewable energy 24
- The demand for electricity and the need for security of supply 28
- Economic benefits 31
- Conservation initiatives and other technologies 33

What are the potentially adverse effects on the environment? 33
- Landscape and visual amenity 34
- Noise 52
- Health 69
- Traffic and access 85
- Construction, Erosion, Sediment Control and Groundwater, and Fire 96
- Ecology 100
- Recreation and Tourism 122
- Property values 130

Proposed conditions of consent 139

Part 2 matters – Exercise of discretion 146

Result 147

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

INTRODUCTION

[1] Centre Hill and its surrounding ridgelines in the Hurunui District in North Canterbury are landmarks of some significance to those who live locally, particularly at Glenmark, Greta Valley, Omihi and Scargill. They also attract a world-class wind resource, which makes the area attractive for wind energy generation, a form of electricity generation favoured by national policy because it is renewable. Recognising this, and after a number of years of investigation, Meridian Energy Limited ("**Meridian**") has applied to construct, operate and maintain a 33 turbine wind farm in the area near to the recently consented (but not yet constructed) Mt Cass wind farm, but to do so, it requires a number of resource consents from the Hurunui District Council ("**the HDC**") and the Canterbury Regional Council ("**the CRC**"). Meridian successfully applied to directly refer the applications for resource consent to the Environment Court for hearing.[1] Accordingly there were no first instance hearings before the HDC and CRC. As a result, there was a high level of direct local community and resident involvement at this hearing. Many of the parties were self-represented, and many issues were raised.

[2] The local opposition to Meridian's proposal was largely coordinated through the Glenmark Community Against Wind Turbines Incorporated ("**the Society**"). A number of the members of the Society, however, also appeared as individual submitters during the hearing to advance matters specific to their individual interests. The other main opposition came from Tipapa Limited ("**Tipapa**"), represented by Mr John Carr, its director and shareholder. As well as owning land which is grazed, Tipapa's renovated homestead, gardens and woolshed at Greta Valley operate as a high-end tourist destination and functions centre, and it is increasingly popular as a wedding venue. All of those in opposition asked the Court to decline Meridian's applications for resource consent.

[3] It was common ground that Meridian's proposal should be assessed as a discretionary activity under s104 of the Resource Management Act 1991 ("**the RMA**"). Broadly speaking, we are required to consider any actual and potential effects on the environment of allowing the activity and any relevant provisions of a number of listed statutory planning documents. Overall we must assess whether the proposal will meet the purpose of the Act, which is to promote the sustainable management of natural and physical resources.

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[1] pursuant to s87C (1)of the Resource Management Act 1991

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[4] Those opposed to the wind farm referred to it as an industrial activity that did not fit within the local rural environment, which they described as tranquil, peaceful and quiet. They were concerned that their amenity values would be adversely affected and their property values diminished should the wind farm proceed. Specifically, they were concerned that the wind farm would generate adverse effects relating to landscape and visual amenity, noise, health, traffic and ecological values. Tipapa was concerned that its business activities would be adversely affected and others were concerned that recreation and tourism activities nearby would also be adversely affected. The cumulative effect of having two wind farms (Hurunui and Mt Cass) nearby was a particular focus for some. It was contended that these potentially adverse effects would all be unable to be avoided, remedied or properly mitigated.

[5] Meridian highlighted the positive benefits to the local, regional and national economies arising from the proposal, including the fact that the energy sought to be generated is from a renewable source. Whilst acknowledging there might be some adverse effects, Meridian contended they could all be satisfactorily avoided, remedied or mitigated. The Councils agreed.

[6] We heard and read a large volume of submissions and evidence. Many of the witnesses were cross-examined at some length. A list of the submitters who did not appear is included as Appendix 1. Because of the large volume of material, it is just not possible to refer to all that was said and presented. We have taken all of the evidence and submissions into account in coming to our decision.

[7] We signal at the outset that, for the reasons outlined in this decision, we have decided to grant the applications for resource consent subject to conditions.

[8] The structure of this decision will be to first outline the proposal and then the statutory and regulatory framework that applies to it. We will then evaluate the actual and potential effects on the environment that will or could arise from the proposal.

THE PROPOSAL

What is proposed?

[9] Meridian is New Zealand's single largest generator of renewable energy, with assets predominantly in New Zealand, but also Antarctica and South Australia. Its asset

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

base includes hydro[2] and wind generation facilities. It operates a number of wind-generation facilities[3] with one under construction[4] and holds resource consent for two North Island projects.[5] Since 2004 Meridian has committed to only developing new generation from renewable resources.[6] Meridian's position is that wind and hydro generation are an ideal combination which, when run in tandem, can ensure reliable electricity supply.

[10] The proposal, referred to by Meridian as "*Project Hurunui Wind*", is to construct, operate and maintain up to 33 wind turbines and associated facilities. The potential combined generation capacity for the project is 75.9MW. The principal components of the wind farm proposal include:

- Up to 33 wind turbine generators configured around a turbine envelope that is designed for a rotor diameter of up to 101 metres and a rotor hub height up to 80 metres. This means that the maximum height from the ground to the top of the rotor arc would be no greater than 130.5 metres. Each turbine is to be located within a 100 metre radius of the positions indicated on the construction plans. The average annual production from the wind farm (approximately 270 GWh per year) will supply the annual electricity requirements of around 34,000 average homes.
- Individual transformers at the base of each wind turbine.
- An internal road network of approximately 22 kilometres in length.
- Electrical works including a transmission and internal network (either 22kV or 33kV) of underground cables; a site substation; and overhead 66kV transmission line connecting the substation to an existing MainPower transmission line located alongside the site.
- An operations and maintenance building.

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2 The Waitaki power scheme except Tekapo A and B (upper Waitaki catchment); the Manapouri power scheme (Fiordland)

3 The Brooklyn wind turbine (Wellington), the Te Apiti wind farm (Manawatu), the White Hill wind farm (northern Southland), three turbines on Ross Island (Antarctica), project West Wind (Wellington), the Te Uku wind farm in partnership with WEL Networks Limited (Raglan), Mt Millar (South Australia)

4 Project Mill Creek (Wellington)

5 Central Wind and Hawkes Bay Wind farm

6 Mr Muldoon, evidence-in-chief, paragraph [12]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

- Two permanent wind meteorological monitoring towers up to 80 metres high.

[11] Access to the site is to be from Motunau Beach Road, a local road situated approximately 3.2km from the SH1 ("**SH1**") and Motunau Beach Road intersection.

[12] The construction timeframe is estimated at between 18 and 24 months.

[13] A consent lapse period of 10 years is sought for all consents.

[14] Proposed conditions of consent were presented and as is usual in these cases several iterations of the conditions occurred during the hearing. By the end of the hearing Meridian and the two Councils had reached agreement on all of the proposed conditions, with the Society, Tipapa and others submitting conditions which they thought acceptable should the Court decide to grant consent.

Where is the wind farm to be situated?

The site and its surrounding environment

[15] The wind farm site comprises parts of properties owned by six landowners used primarily to graze sheep and cattle. Collectively these six landowners manage 3,400 hectares, but the turbine development footprint will use up to 63.3 hectares. The site is on one of a series of hills aligned approximately northeast-southwest in North Canterbury and is centred on an existing 80 metre high wind monitoring mast located close to the site's highest point known as Centre Hill.

[16] The properties immediately surrounding the site are also used for pastoral farming, mainly sheep, cattle and deer, and are relatively sparsely populated with farm/lifestyle dwellings.

[17] The site is located southeast of, and roughly parallel to, SH1, approximately 66km north of Christchurch between the Waipara and Hurunui Rivers. It is within the Hurunui District, between the local Greta Valley and Omihi settlements, which are located close to the SH1. Both of these settlements include primary schools and a number of small businesses and tourist and recreation activities including Tipapa at Greta

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Valley. Motunau Beach Road provides access to the coastal settlement and holiday area of Motunau Beach.

[18] The Waipara winegrowing area is to the south, with vineyards now occupying much of the valley floor and lower slopes either side of SH1. Waipara is the southernmost tip of the Alpine Pacific Triangle Touring Route Map,[7] which includes the tourist destinations of Kaikoura to the north and Hanmer Springs to the west.

The Mt Cass consent – to what extent should we take it into account?

[19] The proposed Mt Cass wind farm site is just over 4km to the southwest. The substantive decision approving the Mt Cass wind farm was issued on 12 December 2011,[8] with the final decision following on 7 February 2012.[9] Consent was approved authorising one of three different turbine layouts as follows:

Layout	Maximum height from ground level (m)	Maximum number of turbines	Maximum installed capacity (MW)
R33	55	67	34
R60	95	26	78
R90	120	26	78

[20] The Hurunui turbine layout proposed is similar to the R90 layout option contained in the Mt Cass decision. A number of the submitters were concerned about the cumulative effect of two wind farms in such close proximity. As a matter of law, we are able to take into account the effects of any unimplemented consents provided that they are likely to be implemented.[10] We did not receive any evidence about what is to happen with the Mt Cass consent, but Meridian did not contend that it is unlikely to be implemented. Accordingly we have decided to take it into account in our assessment where relevant.

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[7] An official New Zealand Transport Agency approved touring route with road signage throughout the route. Mr Pearson, evidence-in-chief, paragraph [9]

[8] ***Mainpower NZ Limited v Hurunui District Council*** [2011] NZEnvC 384

[9] [2012] NZEnvC 021

[10] ***Queenstown-Lakes District Council v Hawthorne Estates Limited,*** [2006] NZRMA 424

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

What is the extent of opposition to the proposal?

[21] Meridian undertook a large amount of public consultation prior to the proposal being publicly notified. In response, Project Hurunui was amended to that first consulted on. In particular, in response to the comprehensive consultation with Mr Carr, two turbines (A12 and D15) were removed, and turbines A10 and A11 were shifted. [11] Mr Rough advised that another turbine (A13) was also deleted as it was considered too dominant.[12]

[22] The applications were publicly notified on 9 April 2011, with submissions closing 30 days later on 24 May 2011. Of the 132 submissions received, 78 opposed the proposal, 50 were in support and 4 were neither in support nor opposition.

[23] We were told that there was considerable opposition to Meridian's proposal from "*the community*". Who exactly "*the community*" is and who was authorised to speak for it became an issue.

Who is the community?

[24] Although "*the community*" was spoken about very generically at the outset, we accept that the local community comprises Greta Valley, Omihi, Glenmark, Scargill and to a lesser extent Motunau Beach and Waipara. The regional community comprises the rest of the Hurunui District and the wider Canterbury Region. The opposition to the proposal was almost without exception from those within the local community.

Who is authorised to speak for the community?

[25] The Society, as its name suggests, was specifically formed to oppose Meridian's proposal. It comprises a number of members and addressed matters of collective concern. There were also members of the Society who in their personal capacities addressed matters of individual concern, but Mr Carr for Tipapa also took it upon himself to speak for "*the community*" from time to time.

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11 See evidence-in-chief of Mr McKinney
12 Mr Rough, evidence-in-chief, paragraph [364]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[26] Mr Carr has chosen to live in New Zealand, having emigrated here several years ago. He bought Tipapa about eight years ago and has extensively renovated and rejuvenated it. His interest in the history of Tipapa and the surrounding area is extensive and it was very clear that this is the place where his heart resides. He spoke of Tipapa as representing his "*mauri ora*"; it is his place of peace and rest. He has spent money on Tipapa and his business there is emerging. Mr Carr is passionately fierce about protecting what he has worked to achieve. He is convinced that Meridian's proposal will destroy his home, his business and his future.

[27] Mr Carr is also a very articulate, engaging and charismatic man. He has embraced the Greta Valley community, employs local people at Tipapa, and has been generous in providing Tipapa's premises as a venue for meetings about Meridian's proposal. However, at times the way Mr Carr has spoken about Meridian, the HDC, and their consultants, his tenacious approach and his colourful use of superlatives has been less than helpful. He has been inclined to rush into action, when a more measured and considered approach was advisable. This has helped contribute to a polarisation of views within the community, which in the calm of the hearing had the opportunity to become more measured, reasoned and reasonable.

[28] We acknowledge that Mr Carr has had many important things to say and issues to raise, so that where appropriate we have separated these from the manner in which they were presented, but we note that when Mr Carr had the opportunity to reflect on some of his past approaches and benefit from hindsight, he did not resile from any position he had taken.[13]

[29] We do not agree that Mr Carr speaks for the community. Mr Carr speaks for Tipapa and himself. The Society represents its members' collective concerns relating to landscape, amenity, noise, health, traffic and avifauna, and those individuals who presented speak for themselves on the various issues of specific interest to them.

Community opposition

[30] Mr Carr's actions are, however, important because they create a backdrop to the community opposition. This is because Mr Carr was instrumental early on in providing the local community with information about wind farms and their purportedly adverse

[13] Transcript cross-examination of Mr Carr by Mr Beatson commencing at p2645

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

effects. There are three examples which we have decided to mention; the meeting held at Tipapa woolshed on 17 June 2010, Mr Carr's survey of those purportedly against the proposal, and the letters he sent to hosting landowners.

[31] Initially Mr Carr was neutral about the proposal, but as he researched matters on the internet, and saw photo montages of how some of the proposed turbines might appear from Tipapa, he became concerned. Mr Carr's considerable energy became devoted to opposing the proposal.

[32] Tipapa hosted a public meeting[14] on 17 June 2010 ("**the woolshed meeting**") at which Professor Dickinson and Mr Rapley spoke. Both are opponents of wind farm developments and neither gave evidence in this case. The meeting was attended by about 125 members of the local community.[15] There was a suggestion that Meridian representatives were invited but told not to comment.[16]

[33] At this point, Mr Carr's opposition to the proposal was entrenched. He decided to survey the local community about their views. Two survey forms were sent out under cover of two separate letters dated 1 and 8 July 2010 respectively by Mr Carr.[17] Both letters contained emotive language and referred negatively to Meridian's proposal, at times in an exaggerated and incorrect way. The first letter named the hosting landowners.

[34] The results of the survey indicated a large amount of opposition to the proposal.[18] Early on in the hearing Mr Carr presented a pin map[19] he had prepared showing the results of the survey, and he contended that this showed that the whole community, not just a group of malcontents, significantly opposed the proposal.[20]

[35] Mr Carr sent a number of letters to the six hosting landowners.[21] Most were sent after the survey was undertaken. These letters when viewed as a whole can be said

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[14] Meridian Exhibit 16
[15] Transcript p2652 lines 21-24, Mr Carr
[16] Transcript p2652 lines 21-24- p2653 lines 1-10, Mr Carr
[17] Meridian Exhibit 17(a) and (b)
[18] Meridian Exhibit 17 (c)
[19] Tipapa Exhibit 4
[20] Mr Carr Opening Statement
[21] Meridian Ex 18 (a)-(d)

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

to be unpleasant and at times contained threatening overtones. Mr Turnbull, one of the recipients of these letters, regarded the letter of 9 July 2010 as "*almost... blackmail.*"[22]

[36] Hosting landowners received anonymous, abusive notes in their letterboxes, and some similar emails.[23] The tyres of a Meridian vehicle were anonymously slashed at an open day.[24] At one open day those present were vocally hostile to Meridian staff and their consultants.[25] It is, however, not difficult to see how, in this climate, those in support or neutral about the proposal might be tentative about making their views known to others in the community.

[37] We give the survey little weight, but in the end that matters little. The best that can be said is that a number of local people oppose the proposal. Most, but not all, of these people have formed a Society to present their views to this Court. The Society represents its members' views. Individuals who oppose (including Mr Carr for Tipapa) have appeared to represent their views. There are other views and not all are in opposition.

[22] Transcript, p 2316, lines 9-14
[23] Transcript p2314, lines 1-6
[24] Transcript p2314, lines 18-19
[25] Transcript p2500, lines 21-25

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

LEGAL FRAMEWORK

Consents sought

[38] The proposal requires the following consents under the relevant regional and district documents:

A. Canterbury Regional Council – the Transitional Regional Plan ("**the TRP**"); the operative Canterbury Natural Resources Regional Plan ("**the CNRRP**") and the recently notified (11 August 2012) proposed Canterbury Land and Water Regional Plan ("**the PCLWRP**"). At the regional level there are four consents[26] sought relating to discharges to air associated with concrete batching, discharges to land (stormwater/contaminants), and the storage of diesel. Earthworks are a component of these applications.

B. Hurunui District Council – the operative District Plan ("**the District Plan**"). At the district level, land use consent is required in relation to the height, scale and visibility of the proposed turbines, transmission and monitoring mast structures, construction duration, earthworks, building scale and location, signage, screening of buildings, and vehicle numbers (during construction).

[39] The consents sought under the District Plan, the TRP and the CNRRP are either restricted discretionary or discretionary activities. Under the new PCLWRP the applicable rule relating to the discharge of stormwater (Rule 5.72) has a non-complying activity status. Section 88A of the Act provides that an application continues to be processed and decided as an application for the type of activity that it was at the time it was lodged, even if a proposed plan is subsequently notified and alters the type of activity that would apply.

[26] The Regional Council referenced the applications as: CRC111342 - to discharge contaminants to air from a concrete batching plant; CRC111343 – to discharge stormwater onto land where it may enter a river, lake or artificial watercourse (This includes stormwater from roads and turbine platforms; and sediment laden water from the construction phase of the development); CRC111344 – to use land to store a hazardous substance in an above ground storage tank; and CRC111354 – to discharge contaminants onto land from a concrete batching plant

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[40] It was agreed that the overall status of the proposal remains as a discretionary activity.

The RMA and relevant statutory instruments

[41] The relevant statutory considerations for a discretionary activity are set out in section 104 of the RMA, with section 104B providing for the exercise of overall discretion to grant or refuse the application. Further specific matters relating to discharges are set out under sections 105 and 107. Where consent is to be granted, then conditions may be imposed under sections 107 and 108. Of particular relevance is section 104(1) which states:

> **s104 Consideration of applications**
> (1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to–
>
> (a) any actual and potential effects on the environment of allowing the activity; and
>
> (b) any relevant provisions of—
>
> (i) a national environmental standard:
>
> (ii) other regulations:
>
> (iii) a national policy statement:
>
> (iv) a New Zealand coastal policy statement:
>
> (v) a regional policy statement or proposed regional policy statement:
>
> (vi) a plan or proposed plan; and
>
> (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

[42] The RMA has a single purpose (section 5) which is as follows:

> **5 Purpose**
> (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
>
> (2) In this Act, *sustainable management* means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
>
> (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

[43] Under section 5 we are required to make a broad overall judgment as to whether or not a proposal promotes the sustainable management of natural and physical resources. In making that judgement we are to be informed and assisted by the other sections in Part 2: being sections 6 - 8. In this case the relevant provisions are: s7(b) - the efficient use and development of natural and physical resources; s7(c) - maintenance and enhancement of amenity values; s7(f) - maintenance and enhancement of the quality of the environment; and s7(j) - the benefits to be derived from the use and development of renewable energy. Under the RMA these are all matters to which we are required to have particular regard.

[44] There are also a number of relevant statutory planning instruments to which we must have regard under s104(1)(b) of the RMA. They include the National Policy Statement for Renewable Electricity Generation 2011 ("**the NPS – Renewable Electricity**"), the National Policy Statement – Electricity Transmission 2008 and the National Policy Statement – Freshwater Management 2011[27], the operative Natural Resources Regional Plan ("**the NRRP**") and the proposed Land and Water Regional Plan ("**the proposed LWRP**"), the operative and proposed Regional Policy Statements ("**the RPS**") and the Hurunui District Plan ("**the District Plan**").

[45] It is necessary at the outset of this decision to provide an overview of the regional and district planning instruments to provide a context to the factual issues we need to consider.

Canterbury Regional Documents

Regional Policy Statements

[46] The **operative RPS** (June 1998), as to be expected of such a high level document, provides a regional overview of resource management issues. Relevant provisions:

[27] The National Environmental Standard for Sources of Human Drinking Water and the National Environmental Standard for Assessing and Managing Contaminated Soil for the Protection of Human Health are also relevant

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

- Provide for the relationship of Tangata Whenua with resources (Chapter 6);
- Safeguard the life-supporting capacity of soils, seek to prevent induced soil erosion and minimise the irreversible effects of land use activities on land comprising versatile soils (Chapter 7);
- Protect or enhance: natural features and landscapes that contribute to Canterbury's distinctive character and sense of identity; indigenous biodiversity (including the survival of threatened species, communities or habitats, and those unusual in, or characteristic of ,Canterbury) (Chapter 8);
- Enable the benefits from the use of water and water bodies (quality and quantity) whilst safeguarding the values and life-supporting capacity of the water (Chapter 9);
- Enable provision of network utilities while avoiding, remedying or mitigating adverse effects on the environment (Chapter 12);
- Avoid, remedy or mitigate the adverse effects of discharges of contaminants into the air (Chapter 13);
- Seek to reduce Canterbury's dependence on non-sustainable energy sources (Chapter 14);
- Enable a safe, efficient and cost-effective transport system and avoid, remedy or mitigate the adverse effects on the environment of transport (Chapter 15);
- Prevent or mitigate the adverse effects of hazardous substances (Chapter 17).

[47] The decisions on the **proposed RPS** were notified on 21 July 2012. Those decisions take effect from that date; however, in accordance with section 66 of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010, appeals could be made to the High Court on points of law up until 10 August 2012. Four appeals were lodged. On the last day of this hearing Ms Dysart for the CRC advised the Court that all of the appeals had been settled and settlement documents had been filed with the High Court.

[48] A number of the objectives and policies of the PRPS broadly seek the same outcomes as the corresponding provisions in the operative document. In the proposed

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

RPS there are more specific provisions relating to natural character values of waterways and the management of freshwater generally. There is also more direction given to identifying and protecting significant natural areas, providing for ecological enhancement and restoration, and managing biodiversity offsets. There are specific provisions seeking the identification and protection of outstanding natural features and landscapes. There are new provisions relating to the identification and management of other important landscapes (other than outstanding natural landscapes), having regard to natural character, amenity, historic and cultural heritage.[28] Chapter 16 relates to the resource management issues associated with energy. Policy 16.3.5 enables new electricity generation with a particular emphasis on renewable energy, however this is to be done while avoiding adverse effects on significant natural and physical resources, or where that is not practical, mitigated.

The operative Natural Resources Regional Plan and the proposed Land and Water Regional Plan

[49] The NRRP covers all regional planning provisions. Key objectives and policies applicable to this proposal are contained in Chapter 3 "Air Quality", Chapter 4 "Water Quality" and Chapter 5 "Water Quantity".

[50] As the proposed LWRP period for submissions closed on 5 October 2012, limited weight can given to it at this early stage. The objectives and policies are focussed on the management of water quality and quantity and seek to protect water resources. The provisions of the proposed LWRP are similar to those contained in the operative NRRP, with most of the rules setting the same environmental standards, and the objectives and policy framework seeks the same or similar outcomes for protecting the environment.

The District Plan

[51] The District Plan was initially made operative in August 2003 and was last amended in June 2012. The site is within the General Rural Management Area. There are no other planning notations affecting the site. In this regard it is relevant that the site is not identified in the District Plan as an Outstanding Landscape, nor are there any identified Significant or Potentially Significant Natural Areas within the site. The site is

[28] Proposed RPS Objective 12. 2. 2 and associated policies.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

outside the identified Coastal Environment Management Area. No notable trees, heritage features or archaeological sites are identified on land that is subject to the applications. SH1 and the main trunk rail line are both designated alongside the site. SH1 is classified as a Strategic Arterial Road and Motunau Beach Road is classified as a Collector Road.

[52] Relevant provisions in the District Plan include general provisions (under Objectives 1, 2 and 3) relating to safeguarding soils, ecosystems, natural resources and the quality of the environment. Provisions under Objective 4 relate to protecting and enhancing freshwater resources, including managing the adverse effects of land use activities on water quality and quantity (Policy 4.1). Of particular relevance to this proposed wind farm are the provisions relating to Important Landscapes under Objective 7, and Environmental Amenity under Objective 10.

[53] Provisions under Objectives 11, 12 and 15 relate to Energy Production and Use, Infrastructure, and Hazardous Substances. These sections are consistent with the corresponding provisions in the regional documents. They seek to promote opportunities for the use of renewable energy resources, and the efficient production and use of energy, whilst also managing the adverse effects. Policy 12.10 seeks to promote the safe and efficient use and development of the transportation network. The management of hazardous substances is recognised as a shared-agency responsibility.

[54] Only the district wide rules in Section A of the District Plan apply to this proposal.

[55] We will refer in detail to the relevant statutory and planning provisions as they arise during our decision in the context of the issue to which they relate.

Other relevant legal principles

Burden and standard of proof

[56] Traditionally the Environment Court adopts a civil burden of proof, but in a slightly different way than might be applied in the civil courts. It has been said that there is no burden on any party, but an evidentiary burden rests on a party who makes an allegation to present evidence tending to support that allegation.[29] We agree that how the

[29] ***McIntyre & Bellsouth v Christchurch City Council*** **(1996) 2 ELRNZ 84**

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Environment Court should approach the burden and standard of proof was best expressed by Judge Jackson in ***Shirley Primary School v Christchurch City Council***,[30] where he said at paragraph [136]:

> To summarise on the issues of onus and burden of proof under the Act:
>
> (1) In all applications for a resource consent there is necessarily a legal persuasive burden of proof on the applicant. The weight of the burden depends on what aspects of Part 2 of the Act apply.
>
> (2) There is a swinging evidential burden on each issue that needs to be determined by the Court as a matter of evaluation.
>
> (3) There is no one standard of proof: if that phrase is of any use under the Act. The Court can simply evaluate all the matters to be taken into account under section 104 on the evidence before it in a rational way, based on the evidence and its experience; and give its reasons for exercising its judgment the way it does.
>
> (4) The ultimate issue under section 105(1) is a question of evaluation, to which the concept of a standard of proof does not apply[31].

What about the precautionary principle?

[57] There was some discussion during the hearing by submitters about the approach that the Court should take when predicting future environmental risk, particularly in relation to the topics of noise, health[32], avifauna[33] and tourism.[34] "*The precautionary principle*" was referred to, but within the context of the RMA, we prefer to describe it as "*a precautionary approach*". Certainly in ***Shirley Primary School v Christchurch City Council*** the RMA itself was described by Judge Jackson as "*preventive, precautionary and proactive,*"[35] a statement with which we agree.

[58] The definition of "*effect*" in s3 of the RMA supports this view:

> In this Act, unless the context otherwise requires, the term *effect* includes—
> (a) any positive or adverse effect; and

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[30] [1999] NZRMA 66

[31] s105 was substituted on 1 August 2003 by s44 RMA. The relevant section now is s104B RMA

[32] Ms Meares, Final submission, 15 October 2012, paragraphs [12]-[15]; Glenmark, Transcript, page 1319, lines 23-28; Mrs McLachlan, Transcript, page 1352, lines 2-4; and Mrs Messervy, Transcript, page 159, line 5

[33] Ms Meares, Transcript, page 1848, lines 1-15

[34] Mr Pearson, Transcript, page 2140, lines 18-23

[35] [1999] NZRMA 66, page 51, paragraph [114]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(b) any temporary or permanent effect; and
(c) any past, present, or future effect; and
(d) any cumulative effect which arises over time or in combination with other effects—

regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

(e) any potential effect of high probability; and
(f) any potential effect of low probability which has a high potential impact.

[59] The assessment we are required to undertake under the RMA requires us to consider:

(a) how likely it is that there will be an effect (positive or adverse); and

(b) if an effect is likely, what the nature and impact of that effect will be.

In the overall analysis, the weight that will be given to the evidence will depend in part on the nature and impact of the effect.

What weight should be afforded to expert and lay witnesses?

[60] Under s276 of the RMA, the Environment Court may receive any evidence it considers appropriate, but that does not mean that "anything goes". A considerable amount of latitude was permitted to the submitters representing themselves to admit otherwise inadmissible evidence on the basis that the Court would be able to effectively sift the wheat from the chaff and determine what weight should be given to the evidence in contention on a particular topic.

[61] In this case, as is typical of many cases in this field, there was a significant amount of expert evidence. There was also a considerable amount of lay evidence. Bearing in mind that a large number of those who read this decision will be lay people, it is important to set out briefly the well-known principle now enshrined in the Evidence Act 2006 that a statement of opinion is not admissible in a proceeding unless it comes within the exceptions provided for in ss24 and 25 of the Evidence Act.[36] Section s25 is most relevant to this case and provides[37] that an opinion by an expert that is part of expert evidence offered in a proceeding is admissible if the fact-finder is likely to obtain

[36] s23 Evidence Act 2006
[37] s25(1) Evidence Act 2006

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

substantial help from the opinion in understanding other evidence in the proceeding, or ascertaining any fact that is of consequence to the determination of the proceedings.[38]

[62] In the Evidence Act, an "*expert*" is defined as a person who has specialist knowledge or skill based on training or experience in a particular field of endeavour or study, and "*expert evidence*" means the evidence of an expert based on the specialised knowledge or skill of that expert and includes evidence given in the form of an opinion. An "*opinion*" in relation to a statement offered in evidence, means a statement of opinion that tends to prove or disprove a fact.[39]

[63] We accept that s276 in the RMA allows wider scope than the Evidence Act for the admission of evidence. However, we see no reason why the provisions regarding expert evidence, and in particular the definition we have referred to, should not apply

[64] Some of the parties (not represented by the Society) sought to minimise aspects of the opinions of the experts on the basis that they were theoretical, and not practical or experiential. As already outlined, many of the matters with which the Environment Court must grapple (and this case is no exception), are those that are helped by expert opinion evidence. Over the years a great number of rules have developed to ensure that the opinions expressed have a factual basis, and are not speculative, but are reasoned and sound, and can therefore be relied upon even though they are expressions of opinion.

[65] Some of these submitters also sought to present to the Court their own opinions or the opinions of others expressed in articles they had obtained off the internet, on the contested topics. There seemed to be a view that providing these articles were sourced and a copy provided, that constituted "*evidence*". The weight that should be attached to these documents is, however, a question for the Court. Many of them were arguably inadmissible in a strict sense, because they were simply expressions of a particular perspective (e.g. newspaper articles), the factual source of which was certainly able to be challenged.

[66] In ***Rangitaiki Gardens Society Ltd v Manawatu-Wanganui Regional Council,***[40] Judge Dwyer said the following in the context of that case:

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[38] s25(1) Evidence Act 2006
[39] s4(1) Evidence Act 2006
[40] 2010 NZEnvC 14 at paragraph [11]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

> The evidence of lay witnesses identifying those aspects of the environment which are appreciated by them, the reasons for that appreciation, and expressing their views as to how their appreciation might be reduced by a particular proposal, are legitimate subjects of lay evidence. We have had due regard to such evidence. That consideration does not extend to information sourced from the internet that went into areas such as technical noise issues and health effects.

[67] We will deal specifically with the more significant articles that were relied on by some of the witnesses under the technical topics to which they refer, but generally we agree with and adopt Judge Dwyer's approach. This is not to say, however, that the end decision is determined solely by expert evidence. Where there is a need for risk assessments to be made about future effects on the environment, both expert and lay evidence can often assist the Court to predict how likely it is that these effects might eventuate, and if they are likely, what the nature and impact of them is likely to be, but the weight to be given to expert and lay evidence depends on the issue in contention.

THE ACTUAL AND POTENTIAL EFFECTS OF THE PROPOSAL ON THE ENVIRONMENT

[68] Section 104(1)(a) requires us to have regard to any actual and potential effects on the environment of allowing the activity. We have already outlined how the RMA defines "*effect*". "*Environment*" is defined in s2 of the Act as:

> In this Act, unless the context otherwise requires,—
>
> *environment* includes—
>
> (a) ecosystems and their constituent parts, including people and communities; and
>
> (b) all natural and physical resources; and
>
> (c) amenity values; and
>
> (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters

[69] We have outlined in the Introduction the positive and potentially adverse effects on the environment arising from this proposal that were raised by the parties. We will deal with each in turn.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

What are the potentially positive effects on the environment?

[70] Meridian contended that a number of benefits would accrue from the development of the proposal at local, regional and national levels. In general terms, these included:

- the national benefit of meeting predicted electricity demand from a reliable renewable energy source.
- economic benefits to the local and regional economies,

Some submitters challenged the predicted economic benefits to the local and regional economies, the demand predictions presented to the Court by Meridian, and the reliability of wind generation.

Renewable energy

[71] Meridian submitted that the legislative framework favours renewable energy projects, and the fact this is one, is a positive effect. This is correct in the sense that s7(j) of the RMA requires us to have particular regard to the "*benefits to be derived from the use and development of renewable energy.*"[41]

The NPS – Renewable Electricity Generation 2011

[72] The importance of renewable energy has been highlighted in *The NPS – Renewable Electricity* which came into effect in May 2011 and which, as we have outlined, is a statutory planning instrument under s104(1)(b) to which we must have regard. It recognises renewable electricity generation activities, and the benefits of renewable electricity generation, as matters of national importance under the RMA.[42]

[73] The Preamble to the NPS - Renewable Electricity states the central government has reaffirmed the strategic target that 90 percent of electricity generated in New Zealand should be derived from renewable energy sources by 2025. It also states that in some instances the benefits of renewable electricity generation can compete with matters of

[41] s7(j) was inserted into the RMA as from 2 March 2004, by s 5(2) Reserve Management (Energy and Climate Change) Amendment Act 2004 (2004 No. 2)
[42] The NPS - Renewable Electricity, p. 4 and Explanatory Note p. 8.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

national importance as set out in section 6 of the RMA, and with matters to which decision-makers are required to have particular regard to under section 7. Further, it states that development that increases renewable electricity generation capacity can have environmental effects that span local, regional and national scales, often with adverse effects manifesting locally and positive effects manifesting nationally.

[74] The NPS - Renewable Electricity has a sole objective, being:

> To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's target for renewable electricity generation.

[75] The NPS – Renewable Electricity objective and policies, where relevant, are required to be considered by decision-makers in determining resource consent applications.

[76] The NPS - Renewable Electricity policies relevant to this proposal include:

> **A. Recognising the benefits of renewable electricity generation activities**
>
> POLICY A
>
> Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include, but are not limited to:
>
> a) Maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
> b) Maintaining or increasing security of supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
> c) Using renewable natural resources rather than finite resources;
> d) The reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
> e) Avoiding reliance on imported fuels for the purposes of generating electricity.
>
> **B. Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable sources.**
>
> POLICY B
>
> Decision-makers shall have particular regard to the following matters:

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

...

c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable sources will require the significant development of renewable electricity generation activities.

C. Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities.

POLICY C1

Decision-makers shall have particular regard to the following:

a) The need to locate the renewable electricity generation activity where the renewable energy resource is available;

b) Logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;

c) The location of existing structures and infrastructure including but not limited to, roads, navigation and telecommunication structures and facilities, the distribution network and the national grid in relation to the renewable electricity generation activity, and the need to connect renewable electricity generation activity to the national grid;

d) Designing measures which allow operational requirements to complement and provide for mitigation opportunities; and

e) Adaptive management measures.

POLICY C2

When considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation including measures or compensation which benefit the local environment or community affected.

The New Zealand Energy Strategy 2011-2021

[77] We were referred to the ***New Zealand Energy Strategy 2011-2021: Developing our energy potential, New Zealand Government, August 2011*** (**"the Strategy"**). This is not a statutory document, but because it refers to renewable energy targets and because Policy B(c) of the NPS – Renewable Electricity requires us to have regard to the Government's national target for renewable electricity generation, it is a relevant document to which we should have regard under s104(1)(c). No party contended otherwise.

[78] The Strategy identifies energy security and response to climate change as two significant global energy challenges which have ramifications for New Zealand's energy

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

future. In relation to response to climate change, two of the government's four priorities identified in the Strategy are to diversify resource development, and to be environmentally responsible. We will discuss energy security shortly.

The evidence

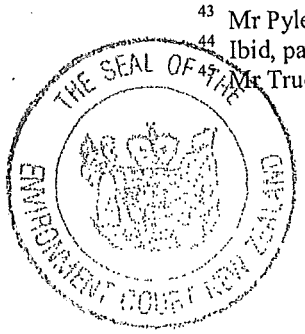
[79] Mr Pyle, the chief executive of the New Zealand Wind Energy Association ("**NZWEA**") gave evidence on this topic. NZWEA is a membership-based industry association. Its activities are funded by its members and it is a non-profit organisation. It does not have any financial involvement in the proposal or any other wind farm development but Meridian is a member of NZWEA, as are all of the major electricity generator-retailers, independent electricity generators, Transpower and several lines companies, a number of major international and domestic wind turbine manufacturers, and a range of other companies with interests ranging from site evaluation through to operations and maintenance of wind farms.

[80] Even though NZWEA is an industry-based organisation, Mr Pyle's evidence was helpful to assist our understanding of, among other things, renewable energy and the demand for electricity and the need for security of supply. Mr Pyle told us that the energy sector has been identified as a key action area for reducing New Zealand's greenhouse gas emissions.[43] Developing renewable energy resources and reducing energy-related greenhouse gas emissions are two specific areas of focus.[44]

[81] We were told that the wind farm would not emit greenhouse gases, and with very low variable operating costs, and a requirement to offer generation electricity into the electricity market at $0.01/MWh, would operate ahead of thermal power stations. Mr Truesdale also told us that renewable options for electricity generation are more commercially attractive because, under the Emissions Trading Scheme, thermal generators face increased operating costs because they pay for carbon emissions.

[82] The evidence also established that in order to meet the government's target of 90% renewable generation and to meet future demand growth, a substantial amount of new renewable generation needs to be developed.[45] We were told that under central

[43] Mr Pyle, evidence-in-chief, paragraphs [6.2] and [6.11]
[44] Ibid, page 5
[45] Mr Truesdale, evidence-in-chief, paragraph [11]



demand forecasts prepared by the Ministry of Economic Development ("**MED**") and the Electricity Commission (now the Electricity Authority), new renewable generation capable of contributing around 18,400 and 21,000 GWh to annual supply requirements would need to be developed to attain this target by 2030.[46]

[83] NZWEA has estimated the requirement for renewable electricity by 2025 at around 13,000GWh, or an average of around 900GWh per year. Mr Pyle told us that this represents an increase in total renewable generation of around 40% in just 14 years.[47] He noted that over the past 15-20 years New Zealand's total renewable generation has only increased by around 3,000-4,000GWh in total (or around 15%), demonstrating the challenge of the target and the importance of all the projects that will contribute towards it.[48] Mr Pyle referred to Meridian's calculation that this proposed wind farm could generate up to 260GWh per year, which he noted represents just less than 30% of one year's estimated annual new renewable generation requirement.[49]

[84] Given the evidence we heard, and the lack of any substantive challenge to it, we are satisfied that a positive effect arising from this proposal is that this it involves electricity generation from a renewable source.

The demand for electricity and the need for security of supply

[85] We were told that developing additional generation opportunities in the upper South Island will reduce the amount of supply that would otherwise need to be imported through the national grid. We were told (and it was not substantively challenged) that the demand for electricity in the upper South Island exceeds generation by a substantial margin, with electricity having to be imported at all times through the grid from the Waitaki area, with corresponding transmission losses. The argument was that developing generation locally would reduce transmission losses (in effect generation from elsewhere that is otherwise wasted during transmission),[50] the cost of which is reflected in the spot market electricity prices. Meridian contended that if local generation is increased, the gap between regional spot market prices and prices in other regions is likely to reduce.[51]

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[46] Mr Truesdale, evidence-in-chief, paragraph [11]
[47] Mr Pyle, evidence-in-chief, paragraph [6.19]
[48] Mr Pyle, evidence-in-chief, paragraph [6.19]
[49] Mr Pyle, evidence-in-chief, paragraphs [6.18] and [6.22]
[50] Mr Truesdale, evidence-in-chief, paragraph [17]
[51] Section 6.3 of the Concept Report

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[86] Mr Truesdale, a consultant to Meridian with engineering qualifications and extensive experience in the electricity industry, oversaw the preparation of the report "*Hurunui Wind Farm Project – Electricity-related Benefits*" dated February 2011 which formed a part of Meridian's Assessment of Environmental Effects.

[87] Mr Truesdale's analysis, which was not substantively challenged, suggested that by reducing the flow of electricity into the upper South Island, the proposed wind farm could on average reduce the cost of purchasing electricity from the spot market in 2020 at the Waipara and Culverden grid connection points compared to Benmore by around 0.8%.[52] Assuming an average Benmore spot price of around $100 in 2020, this analysis indicated the reduction in the combined costs of purchasing electricity from the market at the Waipara and Culverden grid connection point compared to Benmore of around $120,000 per annum. The impact of this across all grid connection points in the Canterbury region would be around $3.5m per annum.[53]

[88] At the outset of the hearing there was some publicity about the Tiwai Point aluminium smelter, and whether the plant would be closed if a solution to the pricing of electricity supply to it could not be resolved. Some submitters contended that if this occurred, it would obviate the need for further generation opportunities for Meridian, as demand would reduce. Mr Muldoon told us that should this occur it would have no bearing on demand in the upper South Island, given that the electricity supplied to Tiwai Point does not connect to this part of the grid.

[89] Mr Pyle referred to the MED forecast that electricity demand will continue to grow at an average rate of approximately 1.5% per year (compounding) through to 2030, despite the expectation of significant energy efficiency gains.[54]

[90] Mr Pyle also addressed the topic of security of electricity supply. As part of the establishment of the Electricity Authority, the Electricity Industry Participation Code 2010 came into force on 1 November 2010. Under the Code, Transpower is responsible for forecasting and publishing information on the level of security and supply, and for

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[52] Mr Truesdale, evidence-in-chief, paragraph [19]
[53] Mr Truesdale, evidence-in-chief, paragraph [20]
[54] Mr Pyle, evidence-in-chief, paragraph [6.18] Mr Pyle acknowledged that Transpower uses a slightly lower growth estimate. NZWEA has estimated the requirement for new renewable energy electricity by 2025 at around 13,000GWh, or an average of around 900GWh per year.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

managing supply emergencies. The Code specifies a winter energy margin of 17% for the overall New Zealand system.[55]

[91] Dry year events can create risks to the security of electricity supply. We were told that dry years have occurred in 2001, 2003 and 2008, and frequently in previous decades. Because of this, Mr Pyle identified a need for investment in new electricity generation projects and for diversification away from the current reliance on hydro-generation.[56]

[92] Several submitters were concerned about the reliability of wind generation and used this as a basis to challenge Meridian's predictions about the electricity that would be able to be generated from it. At its most simplistic, the argument was that if the wind is not blowing, electricity is not being generated, and furthermore it cannot, unlike hydro, be stored.

[93] We heard a reasonable amount of evidence about the superior quality of the wind resource on the proposed site. This evidence established that the turbines would be able to generate 87% of the time.[57] Whilst accepting that wind generation is intermittent, the significant point highlighted by Meridian's evidence was that, given New Zealand's high proportion of hydro capacity, it is better placed than many countries to integrate intermittent wind generation.[58]

[94] Mr Pyle also noted that wind energy is a reliable source of generation because it varies little on a long-term basis. He noted that the available energy from the wind typically only varies by around 5-10% annually, compared to around 20% for hydro-generation. Accordingly, wind energy, by displacing sources of generation that can store their fuel (e.g. gas, coal, hydro), and by having a relatively low annual output variation, makes an important contribution to ensuring that the energy margin component of security of supply can always be achieved.[59]

[95] We are satisfied that the reliability of the resource is not really a serious issue in this case.

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[55] Mr Pyle, evidence-in-chief, paragraphs [9.3] – [9.4]
[56] Mr Pyle, evidence-in-chief, paragraph [9.8]
[57] Mr McKinney, evidence-in-chief, paragraph [8]
[58] Mr Truesdale, evidence-in-chief, paragraph [27]
[59] Mr Pyle, evidence-in-chief, paragraph [9.5]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[96] Mr Pyle also focussed his evidence on what he described as an "*even more pressing need for new generation in Canterbury*".[60] He referred to Transpower's Annual Planning Report, which identifies that maximum demand in Canterbury is currently 843 MW (estimated to increase to 981 MW by 2020); yet local generation is only 77.1 MW. We were told that this shortfall must be imported into the region via the transmission network, leaving the region vulnerable to faults or constraints in that network, and increasing total generation demand due to the losses that occur as the electricity is transported into the region.

[97] Mr Pyle's evidence was that if the proposal was granted, it would improve the security of supply to the region and would enable water used for hydro generation to be stored for future use, a factor that is particularly important in dry years.

[98] We are satisfied that the evidence establishes that there is significant demand for additional electricity generation in this area, and that there is also a need to improve the security of supply to this region and elsewhere.

Economic benefits

[99] There was no challenge to the fact that economic benefits will flow from the proposal; the question was to whom. [61]

[100] Mr Muldoon, an engineer who is Meridian's Wind Development Manager, told us that the anticipated economic benefits include:

(a) local economy expenditure, both during the construction and operation stages as follows:

(i) an estimated NZ$54 million (25% of the total budget for the project) to be spent directly within the North Canterbury region;[62]

(ii) during the 18-24 month construction period, employment is anticipated to peak at approximately 100-150 people with

[60] Mr Pyle, evidence-in-chief, paragraph [9.9]
[61] Mr & Mrs McLean, evidence-in-chief, paragraph [6.4]; Ms Barnes, evidence-in-chief, paragraph [23]; Ms Meares, evidence-in-chief, paragraph p [34]
[62] Mr Muldoon, evidence-in-chief, paragraph [58]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

approximately 600 people inducted onto the site during the course of construction,[63] and

(iii) after construction, 4 full-time staff members will be employed. We were told that Meridian's experience of other wind farms located in rural environments is that a number of these staff base themselves close to the site;[64]

(b) farmers who are hosting wind turbines will receive income;[65] and

(c) a community fund is proposed to be established to provide direct benefits to the local community once the wind farm is operational.

[101] Some submitters were sceptical that the local and regional community would benefit much at all, particularly given that the construction industry within the region is stretched by the Christchurch rebuild. Whilst this may be the case, there is no requirement that any benefits should directly accrue to the local or even regional community. The proposal if granted will still generate employment and cash into the economy.

[102] The community fund was to directly benefit the local community. Whilst we will say more about this later in this decision, the offer by Meridian is to contribute $100,000 towards the fund over a three year period from when construction commences, but thereafter any annual contribution would be at Meridian's discretion. We were asked to infer that the fund is likely to be ongoing, given that Meridian has reviewed community funding arrangements for its other wind farms and has extended their operation, sometimes by contributing higher amounts than that which was originally offered.[66]

[103] We agree that should the wind farm be consented there will be economic benefits flowing from it.

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[63] Mr Muldoon, evidence-in-chief, paragraph [58]
[64] Mr Muldoon, evidence-in-chief, paragraph [59]
[65] Mr Muldoon, evidence-in-chief, paragraph [72]
[66] Transcript, page 91, lines 10-13

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Conservation initiatives and other technologies

[104] Some submitters contended that demand could be affected by conservation initiatives and/or that other technology such as solar generation could also impact on it. We are satisfied from the evidence we heard that, even if conservation and efficiency gains are made, there is still a shortfall of generation capability to meet the predicted increased demand.

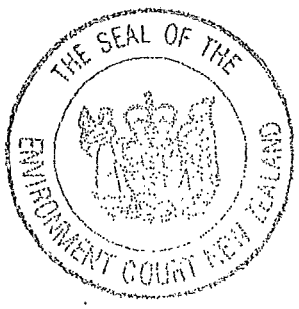
[105] As to alternative technology, Meridian is not required to assess or include alternatives of this kind as part of its proposal. Furthermore, we did not hear any evidence that enabled us to rely on with confidence that other generation technologies were available to meet the predicted demand within the estimated time frame it is required.

What are the potentially adverse effects on the environment?

[106] As signalled in our introduction, most of the contested evidence focussed on potentially adverse effects arising from the wind farm. These effects related to:

- landscape and visual amenity;
- noise;
- health;
- traffic and construction;
- ecology including avifauna;
- recreation and tourism; and
- property values.

[107] We heard the evidence about these matters as "topics", meaning that the evidence from each of the parties about the particular potentially adverse effect was heard consecutively, with the witnesses being cross-examined as required. This had the benefit of all information (both submissions and evidence) on a particular topic being able to be presented and challenged in a cohesive way, and the issues under each topic were able to be more clearly focussed and defined.



[108] We will deal with each of these topics in turn, and where appropriate the conditions proposed by Meridian (and HDC and CRC) to mitigate any adverse effects will also be analysed.

[109] The primary position for those opposed to the wind farm was that adverse effects could not be appropriately mitigated, but as a backstop position the Society and Mr Carr proposed alternative conditions on some topics.

Landscape and visual amenity

Overview

[110] Under ss7(c) and (f) of the RMA we are required to have particular regard to "*the maintenance and enhancement of amenity values ... and the quality of the environment*" when considering whether or not to approve the proposal. A key issue in this case was whether the introduction of wind turbines to the landscape would change it to such an extent that there would be an adverse effect on "*the maintenance and enhancement of amenity values ... and the quality of the environment*". The cumulative effect of the Mt Cass wind farm on visual amenity was also an issue for some.

[111] "*Amenity values*" are defined in s2 of the RMA as:

> ...those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

The definition of "*environment*" in s 2 also includes amenity values. In this section we will refer to the potential impact on "*visual amenity*", understanding that "*amenity*" incorporates other factors as well.

[112] When dealing with landscape and visual amenity issues several basic legal principles need to be remembered. The first is that there is no right to a view.[67] Even though we must have particular regard to the maintenance and enhancement of amenity values, this is not the same thing as saying there is a right to a view.[68] The second is that a landowner is permitted to use their land as they see fit, providing that the use of it does

[67] ***Anderson v East Coast Bays City Council*** (1981) 8 NZTPA 35, page 37 (HC)
[68] W73/98, 2 September 1998, Kenderdine EJ, paragraph [104]



not breach any legal requirement.[69] It follows that the use of land by a neighbour in some circumstances can lawfully change an existing view.

[113] The significance of a particular landscape to people who live near it and are thereby affected by any change to it (and the interrelated effect on visual amenity) require us to carefully consider both local and expert views. An analysis of the District Plan provisions relating to landscape and visual amenity is also important because this is the framework against which local expectations about amenity must be measured.

[114] We heard a considerable amount of evidence about this topic from those who live locally and from the expert witnesses. The expert landscape witnesses were Mr Rough for Meridian, Mr Craig for HDC and Ms Steven for the Society. [70] Visual simulations showing how the turbines will most likely appear in the landscape were prepared by Truescape (for Meridian) and BuildMedia (for the Society). These simulations were separated into private and public viewpoints.

[115] We also undertook four site visits during the hearing:

(a) The first was undertaken shortly after opening addresses. From this we gained an overview of the area said to be affected by the proposal, and we considered the public viewpoints potentially affected by the proposal.

(b) We then requested and undertook a site visit to Meridian's Te Uku wind farm near Raglan, to gain an understanding of the size of the turbines, given that the turbine proposed in this case is similar to that used at Te Uku.

(c) We then undertook two separate site visits to a number of private addresses in order to understand better the submitters' concerns about the impact on their visual amenity.

[116] We will first outline the relevant provisions in the District Plan before evaluating the change to the landscape that will occur if the proposal is granted, with specific reference to the identified public and private viewpoints. The evaluation will

[69] Meridian, legal submissions on landscape and visual amenity effects, paragraph [45]
[70] The landscape experts participated in expert conferencing before the hearing, and their joint witness caucusing statement outlined the relevant issues, including those agreed, and those which were not.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

also consider whether or not any cumulative visual amenity effects arise as a result of this proposal and the Mt Cass wind farm.

How does the District Plan address landscape and visual amenity?

[117] As we have already outlined, the provisions in the District Plan relating to *Important Landscapes* under Objective 7 and *Environmental Amenity* under Objective 10 are relevant.

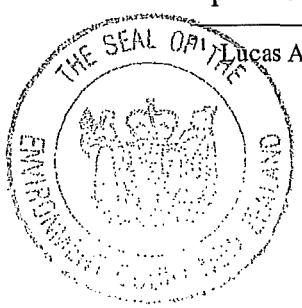
[118] The District Plan states that the starting point for defining the landscape resource is a 1995 report ("**the Lucas report**"),[71] and that further work will be ongoing. The Plan acknowledges that landscape as a resource is not static, and that a large proportion of the Hurunui landscape is a working landscape used for a range of legitimate pastoral, horticultural and forestry activities. The District Plan recognises distinctions between "*outstanding*" landscape areas and the remainder of the district. Relevant provisions include:

> **Objective 7**
>
> To protect and enhance the natural features and landscapes of the Hurunui District which are valued by the community by managing change in the landscape in a manner that has particular regard to natural processes, features, elements, and the heritage values, which contribute to this resource's overall character and amenity.
>
> **Policy 7. 2**
>
> To encourage subdivision, use and development activities to be undertaken in such a way that the natural features and landscapes which contribute to the amenities of the District are protected and enhanced.
>
> **Policy 7. 3**
>
> To control subdivision, use and development where there would be an adverse effect on outstanding natural features or landscapes and to avoid or mitigate the effects on areas which have a high degree of naturalness, visibility, aesthetic value or expressiveness.
>
> **Policy 7. 4**
>
> To promote the restoration and enhancement of important natural features and landscapes.

[119] Although these provisions refer to natural features and landscapes that might be valued by the community and those classified as "*outstanding*" or "*important*", the rules in Section A2 specifically apply only to "*outstanding landscape areas*" that are shown on a plan at Appendix A2 and the Planning Maps.

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[71] Lucas Associates, February 1995, "Landscapes of the Hurunui District".



[120] The provisions relating to *Environmental Amenity* centre on Objective 10, but there is some overlap between this section and others in the District Plan, particularly those relating to landscapes. Objective 10 states:

> **Objective 10**
>
> A healthy and safe environment within the District and maintenance and/or enhancement of amenity values which the community wishes to protect.

[121] The various policies listed under this objective relate to avoiding, remedying or mitigating adverse effects of activities on amenity values (refer to Policies 10.1, 10.3, 10.5, 10.5a, and 10.9). Of particular relevance to this topic are the following two policies:

> **Policy 10.5**
>
> To avoid, remedy or mitigate the adverse effects of activities on amenity values.
>
> **Policy 10.5a**
>
> To avoid, remedy or mitigate the adverse visual effects of buildings and structures sited on prominent ridges or immediately adjacent to strategic arterial, district arterial and collector roads or to Lake Sumner Road

[122] The main methods to implement these provisions are the standards or development controls set out in the district-wide rules (particularly Section A1 – Environmental Amenity), which seek to support a healthy and safe living environment. These include setbacks and separation distances, minimum areas, height limits (eg maximum height 10 metres), noise standards, screening, controls on signs and earthworks, and vehicle movements.

What are the values that attach to this landscape and the changes that will result from the proposal?

[123] We will first outline the landscape values relative to the site and whether or not this landscape is an important or amenity landscape. We will then analyse the evidence about the change the proposal will bring to the landscape; first dealing with the experts' opinions on this topic, and then outlining the locals' perspectives.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[124] The landscape experts first described the landscape values relative to the site, and agreed[72] that:

- the site is typical of a working pastoral farm landscape, with very few built elements on it and no particular natural or cultural features of note;
- the ecology of the site is highly modified, but the current degree of visual modification to the landscape is moderate;
- the site has moderate visual quality and general amenity value and significance as a backdrop and visual focus;
- the site has value as being recognisable and creating a sense of place;
- in New Zealand, electricity generation is an expected element in rural areas.

Landscape classification - Is the landscape an important or amenity landscape?

[125] Ms Steven contended that the landscape of Centre Hill is an important landscape, akin to a "*visual amenity landscape*" as that term is understood in relation to the Queenstown-Lakes District Plan. Mr Rough disagreed, contending that if Centre Hill is important, it is more akin to an "*other landscape*" as defined in the Queenstown-Lakes District Plan, that being a category of less importance in terms of protection and enhancement than a "*visual amenity landscape*".

[126] With respect to the experts, this debate somewhat misses the point. The concepts "*visual amenity landscape*" and "*other landscape*" categories in the Queenstown-Lakes District Plan are classifications adopted by it, and cannot simply be transported to other district plans where such categorisations do not occur. The Hurunui District Plan does not provide either for "*visual amenity landscapes*" or "*other landscapes*," but it does contain Objectives 7 and 10, and supporting provisions dealing with the topic.

[127] In the context of this debate we were referred to the Lucas report,[73] which, whilst we acknowledge is somewhat dated, identified "*important*" landscapes in the

[72] Joint Caucusing Statement - Landscape, 1 June 2012,
[73] Mr Rough, Rebuttal evidence, paragraph [14]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Hurunui District. A map[74] in the Lucas report categorised the important landscape units in a legend as either "*outstanding*" or "*significant*" and these were shown on the map as coloured red and orange respectively. Other landscape units that were not categorised as important were left white or uncoloured on the map. Centre Hill and its immediate surrounds are uncoloured and therefore were not classified as "*important*", being neither "*outstanding*" nor "*significant*".

[128] Whilst the Court on occasion has been prepared to determine that certain landscapes are outstanding, or that they are outstanding natural features (a classification the Court was prepared to make in the ***Mt Cass*** decision), in our view this is not something that should be undertaken lightly. There is force in the submission made by Mr Beatson for Meridian, and supported by Mr Smith for HDC, that a district-wide study would need to be undertaken in order to properly conclude, by way of comparison, what landscapes afford special planning recognition. Importantly in this case, the expert witnesses were agreed that the landscape is not an outstanding natural feature or landscape in terms of s6(b) of the RMA. We agree.

[129] We find that Centre Hill and its surrounds are neither "*visual amenity landscapes*" nor "*other landscapes*" as contended by the experts and as those terms are used in other plans. We find that Centre Hill and the site do not attract enhanced landscape recognition and protection within the provisions of the District Plan, as they do not qualify to be described as "*important*", "*outstanding*" or "*significant*". We agree with the experts that this area is of general amenity value.

Change to the landscape – the experts' opinions

[130] The experts agreed[75] that, should the wind farm proceed, the changes to the landscape will be caused by the presence of turbines and roads and:

- the turbines will have the most significant effect, followed by the roads to a considerably less degree, with the other elements of the wind farm either having localised or relatively minor effects;

[74] A copy was included in Mr Rough's Rebuttal evidence, Appendix 1.
[75] Joint Caucusing Statement - Landscape, 1 June 2012

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

- the turbines would be very significant structures in the landscape, potentially striking a strong visual focus, but the use of one turbine model would give better visual unity than using a variety of models
- from many views the proposed roads would not be seen.

[131] The experts also agreed[76] that:

- although turbines have an industrial character, the resulting landscape character would not change to be industrial;
- the generic rural character of the landscape will be maintained;
- the following aspects will be maintained on the site:
    - the presence of distinctive natural features;
    - the ability to enjoy panoramic framed views, albeit the subject of the view would be affected;
    - the effect of changing light, weather and atmosphere;
    - the ability to appreciate the detail of landform and vegetation generally.
- the landscape character will change, although it would remain generically rural (as opposed to urban or industrial);
- it is difficult to mitigate the effects of the turbines on the landscape.

[132] The experts did not agree about the nature of the change to the landscape. Ms Steven's opinion was that the landscape would change to an "*energy production landscape*," rather than a "*rural landscape*", but Mr Rough and Mr Craig did not agree. Their opinion was that pastoral farming would still remain the dominant land use, with the character of the landscape reflecting this.[77]

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76 Joint Caucusing Statement - Landscape, 1 June 2012

77 Mr Craig, supplementary evidence, paragraphs [2. 11] and [2. 14]

THE SEAL OF THE ENVIRONMENT COURT OF NEW ZEALAND

[133] Mr Craig's opinion was that the better landscape outcome would be the status quo to remain, but he recognised that electricity generation is necessary and inevitably comes at a cost to the landscape. His overall opinion was that this landscape is not an inappropriate one to accommodate a wind farm.[78]

Change to the landscape – the locals' perspectives

[134] Not surprisingly, the submitters who live near to Centre Hill and the site view the landscape as significant and important to them. Mr Wallace for the Society submitted that, in particular, Centre Hill is significant for:

- a more natural character in contrast to the more intensely farmed valley floors;
- its long open natural skyline;
- a constant significant backdrop to six landscape settings arrayed around it;
- it is a widely visible hill;
- it has a typical pastoral farm landscape character with many appealing elements;
- it is a large part of the SH1 and railway visual corridor;
- it is part of the enclosing backdrop to the wider Waipara wine growing area.[79]

[135] Many of those local people who gave evidence referred in very strong terms to what they felt would be the effect of the proposed wind turbines, describing them in some cases as not only industrial in character, but contending that the landscape character would change to an industrial landscape.

[136] We were referred to some research which shows that there is a diversity of views about how people find wind turbines. It was clear to us that most of the submitters did not find wind turbines attractive or elegant (as contended by Mr Rough),[80] but dominant and overbearing. But we also note that not all local people were necessarily of

[78] Mr Craig, evidence-in-chief, paragraph [7. 7]
[79] The Society, Opening Submissions on Landscape, paragraph [4. 5]
[80] Mr Rough, evidence-in-chief, paragraph [102] and rebuttal, paragraphs [31] and [32]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

this view. We heard from Mr Turnbull (a hosting landowner) who clearly did not feel the same way.

[137] We agree that there will be changes to the landscape as a result of the proposal, but we do not agree that the landscape will become an energy production or industrial landscape. We also agree that changes to the landscape *can*, but not necessarily *will* affect visual amenity.

The assessment of visual amenity effects

How should visual amenity be assessed?

[138] Meridian accepted that the real question is whether the degree of change to amenity is so intrusive that it requires turbines to be removed from the project. Whilst the evidence of Mr Rough and Mr Craig was that this threshold has not been reached, and that the proposal is acceptable from a landscape and visual amenity perspective, Ms Steven presented a different view.

[139] At the hearing Mr Rough amended his evidence to describe the consequence of the change to the landscape as contributing to the effect on visual amenity from specific viewpoints.[81] In his amended assessments he described the degree of landscape and visual change from specific viewpoints on a scale ranging from "*negligible*" to "*very substantial*", and he described the visual amenity consequence using a scale of terms: "*negligible – slight – moderate – significant*".

[140] We agree with Mr Rough that identifying the change to the landscape is a useful basis for a visual amenity assessment. But Mr Rough also contended that an assessment that there was a substantial change to the landscape did not necessarily equate to substantial adverse effect on visual amenity values.[82] We were referred to ***Meridian Energy Limited v Wellington City Council***,[83] a case in which Mr Rough was also involved where the Court seemed to adopt this submission, but do not agree that in so doing the idea has evolved into a principle of law. In our view the degree of change to a landscape is a factor to be taken into account when assessing the effect on visual amenity.

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[81] Mr Rough, second statement of supplementary evidence
[82] Mr Rough, evidence-in-chief, paragraph [179]
[83] [2011] NZEnvC 232, paragraph [354]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

The degree to which that change has occurred (a matter for the Court to assess), may or may not result in a finding that the effect is adverse, depending on the facts of the case.

[141] Ms Steven contended that a visual amenity assessment must begin with an understanding of what visual amenity values are important to those affected by the proposed change to the landscape. Consequently, Ms Steven surveyed members of the Society, asking them what they valued or like most about the landscape.[84] Ms Steven identified eleven key characteristics and/or attributes from which the local community derives its visual amenity. These values include tranquillity, clean natural skylines and open uncluttered landscape.[85] Because of the methodology Ms Steven employed to obtain these views, Meridian challenged her conclusions about these characteristics. Meridian submitted that by only interviewing the members of the Society, the responses obtained were not independent or representative enough of the community, because the community also includes people who are not members of the Society. We were asked to bear in mind that the Society was formed for the sole purpose of opposing the proposal, a factor which inferentially could have distorted the independence of the results.

[142] There is some force in Meridian's argument. As we have already outlined, there are members of the local community who are neutral, or indeed supportive of the proposal. As we have already identified, given the behaviour of some at the public meetings held to impart information about the proposal, it is reasonable to infer that members of the community not necessarily opposed to the wind farm would be tentative about expressing their views. There was no opportunity for these parties to contribute to the questionnaire prepared by Ms Steven.

[143] We agree that the evidence provided by Ms Steven is evidence of how those members of the Society who completed the questionnaire identify the characteristics and/or attributes that they believe contribute to their sense of visual amenity. We take this into account, but do not reach the conclusion that these are the only opinions that members of the local community have about what contributes to their sense of visual amenity.

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[84] Ms Steven, evidence-in-chief, paragraph [12.30] and Appendix E
[85] Ms Steven, evidence-in-chief, paragraph [19.3]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[144] In addition, the provisions of the District Plan dealing with amenity and landscape are important, as they provide the framework against which expectations about visual amenity must be considered.

The visual simulations

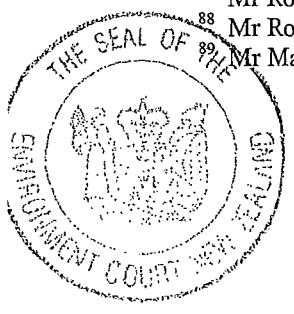
[145] The public and private viewpoints Mr Rough identified as representative were selected using a combination of desktop studies, investigations of the area, and computer modelling. All of the landscape experts agreed with this approach, with Ms Steven for the Society considering that all but one of the private viewpoints showed a fair representation of the nature of the view from the selected properties.[86] We note that several submitters raised issues about the accuracy of the visual simulations depicting their properties, but after hearing all of the evidence and attending the site visits we are satisfied that have an accurate picture of what is proposed and where.

[146] Photo simulations, digital terrain model ("**DTM**") simulations and animated time-lapse simulations were prepared by Truescape as aids to conveying the wind farm's varying level of visibility and assessing landscape and visual effects.[87] For the Society, BuildMedia were instructed to prepare a series of DTM simulations. The BuildMedia DTM images provided a greater selection of private viewpoints than those which had been selected by Mr Rough and incorporated into the Truescape material, but they only presented what is colloquially know as the "*scorched earth*" view, because the context of the image is lacking, with vegetation not consistently shown and structures in existing views omitted.[88]

[147] Mr Beatson submitted that, as the DTM simulations are generated entirely from contour data, they do not represent the primary field of view, but did accept that they provided guidance in very general terms to assist the viewer to understand the location and visibility of the proposed wind farm.[89]

[148] Part of the BuildMedia brief was to include visual simulations that incorporate the consented Mt Cass wind farm. Mr Rough challenged the BuildMedia modelling because the Mt Cass decision enables a choice of three turbine envelope options of

[86] Ms Steven, paragraph [16.4] in relation to the viewpoint 41
[87] Mr Rough, evidence-in-chief, paragraph [11(k)]
[88] Mr Rough, rebuttal, paragraph [65]
[89] Mr Maunder, evidence-in-chief, paragraph [2.7]



varying heights, and the BuildMedia model used the largest of the envelope options. In other words, the BuildMedia images are the worst case scenario in terms of the size of the turbines. Whilst this point was an important one to draw to our attention, we think it sensible that the BuildMedia images did present a worst case scenario, and we understand that the two smaller envelope options were not included for cost reasons. We do not think that for this reason the BuildMedia images should be disregarded.

[149] A more significant problem with the BuildMedia images was their presentation to the Court. It did not become evident until this part of the evidence was sought to be presented by Mr Meares, who was assisting with this part of the presentation of the Society's case. Mr Meares sought to enlarge the BuildMedia images by the use of "*five clicks*" of the computer mouse. This was done to enable the Court to purportedly see the proper scale of the proposed turbines. We accept that Mr Meares was probably unaware of Court protocols in this regard, but we were left with considerable unease about the proper scale that should apply to the Build Media images.

[150] The Truescape material included TruView™ photo simulations prepared in A3 format. The evidence establishes that these photo simulations provide a geometrically accurate representation of scale when viewed at 0.8m from the image. A reference photograph showing the full primary human field of view, that is 124° horizontal and 55° vertical at each viewpoint location, was provided with each simulation.

[151] The time-lapse simulation depicts how the proposed wind farm will be experienced during the course of an entire day, and reflects accurately the exact sunlight and climatic conditions experienced at the time of the photography.[90]

[152] The Truescape images were particularly helpful to us, but the BuildMedia ones were as well. We accept that there are more limitations to the BuildMedia images, but nothing much turns on this.

[153] As we have already outlined, on our site visits we were able to view the exact points from which the simulations had been prepared, and we were therefore able to gain a sense of the scale of what is proposed.

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[90] Mr Maunder, evidence-in-chief, paragraph [3.5.1]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Visual amenity effects from public places

[154] Mr Rough chose 19 land-based public viewpoints.[91] He accepted that from five of the viewpoints the proposed turbines would appear to be highly prominent. These are:

(a) Greta cafe and bar carpark (Viewpoint 04)

(b) SH1 lay-by near Glenmore (Viewpoint 06)

(c) Motunau Beach Road near Greta Valley School (Viewpoint 09)

(d) Motunau Beach Road 4km from SH1 (Viewpoint 11)

(e) Reeces Road, opposite Serrat Downs (Viewpoint 15)

[155] Mr Rough accepted that there will be a substantial change to the landscape from these five viewpoints,[92] but he considered that it would result in a moderate visual amenity consequence. In his opinion the turbines would not adversely affect visual amenity values to the degree that would necessitate the removal of specific turbines.[93]

[156] At Ms Steven's request, BuildMedia prepared a number of DTMs from public viewpoints which she then assessed. Ms Steven also prepared a photo book ("***Photobook – public places***"). Ms Steven prepared a number of additional public viewpoints. She challenged Mr Rough's assessment on the basis that it appeared to analyse visual effects from particular viewpoints rather than taking a more holistic overview. Ms Steven concluded[94] that "*there are very few public places where it was said the two wind farms together, or even Project Hurunui Wind on its own would not be visually prominent and distinctive.*"

[157] Overall, Ms Steven's view was that the "*character of the valley would change from a typical pleasant pastoral landscape to an energy production landscape where moving wind turbines are a prevalent feature.*"[95] As well, her opinion was that adverse cumulative effects would arise, with the Mt Cass wind farm and this proposal being

[91] Mr Rough, evidence-in-chief, Graphic Attachment, 23 January 2012
[92] Mr Rough, evidence-in-chief, paragraph [11(y)] and second supplementary, Appendix 1, sheet 1
[93] Mr Rough, evidence-in-chief, paragraph [217] and second supplementary, paragraph [13]
[94] Ms Steven, evidence-in-chief, paragraph [22.50]
[95] Ms Steven, evidence-in-chief, paragraph [22.63]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

collectively so prominent and dominating that the existing rural character of the landscape will no longer prevail.[96] Mr Craig did not agree with Ms Steven that cumulative visual effects will be significant in every location; rather, his view was that they would vary from location to location.[97] Meridian submitted that dominance may be mitigated by alternative views (views constrained by topography); vegetation (complex or otherwise); complex foreground; and house design and use.[98]

[158] Our site visits were instructive. We agree with Mr Rough that there will be a substantial change to the landscape by the introduction of the turbines to the five public viewpoints identified. We also agree that in the overall context of each of these views no significant adverse visual amenity effects will arise. This is because these viewpoints will be visible in passing. The exception to this is viewpoint 9 (outside the Greta Valley School), but as the school is not completely oriented towards that viewpoint for significant parts of the day, and as there are few turbines visible, we agree that the effect on visual amenity can be described as moderate.

Visual amenity effects from private places

[159] Mr Rough assessed a number of viewpoints from private properties.[99] He assessed the degree of landscape and visual change and the visual amenity consequence.

[160] Mr Rough considered that only one of the private viewpoints resulted in a very substantial change to the landscape and a significant consequential effect on visual amenity.[100] He identified the following properties to the north of the wind farm as experiencing significant visual amenity consequences, and as needing careful consideration. These were:

(a) the Barrington property at 1689 Omihi Road,

(b) the Sloss new dwelling at 1837 Omihi Road,

(c) the Marr property at 2000 Omihi Road,

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[96] Joint Caucusing Statement – Landscape, 1 June 2012, paragraph [59]
[97] Mr Craig, supplementary evidence, paragraph [2.15]
[98] ***Meridian Energy Limited v Wellington City Council***, W031/07, 14 May 2007, Judges Kenderdine & Thompson, paragraph [517]
[99] Mr Rough, evidence-in-chief, paragraphs [201] and [202] and second supplementary
[100] Sloss property Viewpoint 34

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(d) the Heslop property at 1661 Omihi Road.

[161] For Tipapa, Mr Rough assessed seven viewpoints. He considered that for two of those viewpoints (One Tree Hill walkway and One Tree Hill) there would be a substantial degree of change to the landscape but that the consequence to visual amenity would be moderate. For the other five Tipapa viewpoints he considered the effect on visual amenity to be slight or negligible.

[162] For the balance of the private viewpoints Mr Rough considered the effect on visual amenity to be moderate, slight or negligible. There were various reasons advanced depending on the property, but in some vegetation screening the visible turbines was a factor, with Mr Rough overall assessing the visibility of the turbines on the basis of dominance. Mr Rough's reliance on the concept of dominance was supported by reference to the ***Mill Creek*** decision.[101]

[163] We were referred to ***Moturimu Wind farm Limited v Palmerston North City Council***[102] where the Court accepted that vegetative screening was a matter to be taken into account when assessing the effects of a wind farm on visual amenity, but it was accepted by Meridian that this is something that cannot necessarily be relied upon. This idea met with some resistance from some submitters, including Mr Meares and Mr Carr.

[164] Ms Steven assessed 36 properties. Her opinion was that the visual amenity of 31 out of 36 private properties she assessed would be significantly adversely affected by the proposal. Ms Steven challenged (as did Mr Craig) Mr Rough's view that the test for determining whether or not there is a significant adverse effect is whether the turbines can be said to be dominating.[103] Ms Steven described turbines as being "*a dominating landscape element wherever they are sufficiently large and/or numerous enough to be a significant feature which would constantly draw visual attention, ie be visually dominant in the view.*"[104]

[165] Mr Craig conducted a peer review of Mr Rough's evidence for the HDC. He did not break down his evidence into a specific analysis of private and public viewpoints, as Mr Rough and Ms Steven did. He agreed in the main with Mr Rough, but in his view

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[101] ***Meridian Energy Limited v Wellington City Council***, [2011] NZEnvC 232, paragraph [356]
[102] W067/08, 26 September 2008, paragraph [229]
[103] Ms Steven, evidence-in-chief, paragraph [17.3] and Mr Rough, evidence-in-chief, paragraph [367]
[104] Ms Steven, evidence-in-chief, paragraph [17.6]



there would still be some viewpoints where there were significant adverse effects arising, and these more or less corresponded with the degree of physical change to the landscape, notwithstanding the presence of circumstantial factors such as screening vegetation.[105] His opinion was that these adverse landscape and visual effects are very difficult to mitigate due to the fact that turbines are large and require elevated locations.

[166] Despite this, Mr Craig's overall opinion was that the site was suitable for a wind farm because:[106]

- It is a working rural one that is modified, mainly with regard to its land cover
- It has not attracted RMA s6(b) status and is therefore not regarded by the District and Region to be an outstanding natural landscape and does not contain any outstanding natural features such as prominent rock outcrops, water bodies or significant indigenous vegetation
- It has no coastal association, and nor with any other significant natural feature such as a major river or lake
- It does not display character that is particularly rare or distinguished and so as a finite resource it is not unduly threatened
- As a consequence of avoidance and following remediation and mitigation the application site is able to absorb associated effects arising from earthworks and such like
- The landform will remain fundamentally intact, as will the underlying land cover.

[167] We have carefully considered the large amount of material that was presented on this topic by both the experts and the submitters.

[168] Many of the submitters' properties were included in the list of private viewpoints. From the evidence presented by the submitters it was clear that many of them have lived in the locality for a considerable period of time and/or have family associations with the

[105] Mr Craig, evidence-in-chief, paragraph [6.13]
[106] Mr Craig, evidence-in-chief, paragraph [7.5]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

locality over several generations. The submitters opposing the wind farm made it clear that they preferred the existing landscape.

[169] Because of the polarised positions of the experts, principally Mr Rough and Ms Steven, our site inspections were useful in assisting us to evaluate the evidence and submissions.

[170] We have identified two groups of adversely affected properties: those which are affected by a few turbines that are in close proximity; and those which are further away from the wind farm and have a larger number of turbines in their panoramic views.

[171] Examples of the former include the properties of Sloss, Barrington, and Marr. These properties are adversely affected by the dominant, overbearing proximity of Turbines F1 and G1 in particular. These two turbines are located on two high points to the north of one of the main ridgeline rows of turbines and closer to SH1. We find that the adverse effect of these two turbines on visual amenity of some properties is very significant.

[172] Other properties at the eastern end of the wind farm, on Motunau Beach Road, are affected principally by the proximity of Turbine A11. Examples of these properties include Symonds and Archbold. However we find that the turbine is not as dominant and overbearing, and there are other mitigating factors including vegetation screening, and orientation of the dwellings such that the wind farm is not the sole or principal outlook from the main living areas. At Tipapa, we consider that the principal visitor attractions, being the house, woolshed and garden areas, will not be adversely affected and the turbines will not be nearly as visible as from other properties.

[173] For the second group of properties, the Truescape simulations show more than 20 turbines from the viewpoints, and examples of these properties include those of McLean, Baxter, Lynnette and Belinda Meares, and David and Vivienne Meares. The effect on this group of properties is somewhat similar to the public viewpoints although it is acknowledged that for residents the impact is more permanent depending on the orientation of the dwelling and the main living areas. We find that there would be a significant adverse effect which is due to the large number of turbines on the skyline across the panorama of these viewpoints. Because they are further away from the viewer

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

it is the combined effect of all of the visible turbines rather than individual turbines that create the significant adverse effect.

Conclusion – landscape and visual amenity

[174] In this case we are not dealing with outstanding natural features or landscapes in terms of s6(b) of the RMA or any of the planning documents. Rather, the evaluation is primarily against the District Plan and particularly some of the provisions under Objectives 7 and 10 as they relate to amenity. These provisions are consistent with the broader regional planning framework but are more relevant as they better reflect the local circumstances.

[175] The District Plan provisions refer to protecting and/or enhancing landscapes and amenity values valued by the community, but these Objectives are then to be given effect to through subsequent provisions in the Plan. In other words, areas or values that are "*valued by the community*" or "*which the community wishes to protect*" should be identified publicly in the Plan. Centre Hill and its surrounds have not been so identified in the Plan.

[176] The District Plan recognises that the Hurunui landscape is a working landscape used for a range of legitimate pastoral, horticultural and forestry activities, and also that the landscape will not be static. It follows that changes to the landscape resulting from these activities are generally considered to be acceptable and to be expected. This includes forestry plantations and the often significant changes that result from harvesting. Similarly, the conversion of pastoral land, including hillsides, to vineyards with their associated structures, and also the increased use of large scale irrigation structures. Against this background it is acknowledged that wind farms have a wider visual catchment because of the height of the turbines and the need for an elevated location to best use the wind resource.

[177] In this case we have found that for some of the properties in the local community the proposed wind farm will have a significant adverse effect on visual amenity. We have found that removing Turbines F1 and G1 will go some way towards reducing the very significant adverse effect on properties close to those proposed turbines. To the extent that the whole wind farm, rather than individual turbines, will

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

have a significant adverse effect on local visual amenity, we find the proposal to be inconsistent with Policies 10.5 and 10.5(a) of the District Plan.

Noise

Overview

[178] In this section of our decision, we examine the effects of noise arising from the operation[107] of the wind farm. This is important because noise or "unwanted sound" at unreasonable levels can adversely impact on people's health and amenity.

[179] The topic was of considerable importance to many submitters, including members of the Society who were concerned that noise from the wind farm would impact on their ability to enjoy the quiet and tranquil ambience they perceived they currently experienced, and some were concerned that their sleep would be disturbed. There was debate about how any potentially adverse noise effects could be mitigated, with some submitters contending that this could only be met by the imposition of a 2 km setback, with provision for more should there be residents who could be described as vulnerable and more particularly affected by noise.

[180] Mr Carr from Tipapa, was particularly passionate about his ability to "unwind" at his property and his ability to "hear the silence" in tranquil surroundings. He contended that noise from the turbines would have a devastating effect on Tipapa's business, which is specifically marketed to reflect the peace and tranquillity he believes his property enjoys. Mr Carr described noise as an effluent, no different from trade waste, and toxic, as it has the ability to affect health.[108]

[181] Meridian's case was that the predicted sound levels for all operational sources from the wind farm will comply with NZS6808:2010 Acoustics-Wind farm Noise ("**NZS 6808:2010**") which it argued has been set to protect health and reasonable amenity and contains specific guidelines for the prediction, measurement and assessment of sound from wind farms. It contended and the HDC agreed that the predicted sound levels will be below 40dB at all noise sensitive receivers and under 35dB for all apart from three

[107] The effects of construction noise will be dealt with later on in this decision with other construction effects.
[108] Mr Carr - Opening: Noise Topic

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

"noise sensitive receivers".[109] Meridian was confident that the proposed suite of conditions agreed between it and the HDC would satisfactorily address any noise effects, but the Society and a number of the submitters including Mr Carr for Tipapa disagreed.

[182] We heard from three noise/acoustic experts; Dr Chiles for Meridian[110], Mr Camp for the HDC and Mr Huson for the Society. All of these witnesses were extensively cross-examined. Prior to the hearing, Dr Chiles, Mr Camp and Mr Huson attended two expert witness conferencing sessions.[111] Some matters were agreed and the areas of disagreement were outlined. There was some overlap between the matters covered by these witnesses and those experts called by the parties concerning health effects. In this section we deal with the issues dealing with the acoustics of the sound predicted to be emitted from the wind turbines, rather than the effects of it on sleep and/or health. These issues will be covered in the next section of this decision.

[183] Mr Carr's written evidence appended material from Professor Dickinson,[112] various articles and a report dated November 2011 from Dr Thorne. Dr Thorne has a professional background in the measurement of low background sound levels and his report is entitled "*Hurunui Wind Farm Noise Assessment for Mr J Carr – A Review.*" At the beginning of the review Dr Thorne noted that he has read the evidence-in-chief prepared by Dr Chiles and Mr Camp. He also made it clear that he agreed for the review to be tendered by Mr Carr to the Court, on the specific understanding that he was not available to attend the hearing. [113] Dr Thorne expressed the opinion that there is potential for audible noise and low frequency noise and infrasound at Tipapa. He then outlined the issues he believes lead to uncertainty in the noise contours from the noise prediction models. He stated his opinion that there is a significant risk of adverse health effects for those "*people out to at least 2000m away from an industrial wind turbine installation*". The potential health issues with which he is concerned have been reviewed by the World Health Organisation ("**WHO**") and are discussed elsewhere in our decision.

[184] As Dr Thorne and Professor Dickinson were not made available for cross-examination, their opinions were unable to be properly tested and for this reason can be

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[109] Properties at 1689, 1949 & 2000 Omihi Road. Dr Chiles, evidence-in-chief, Appendix A, Acoustics Assessment, Table 4-7, page 17.

[110] Dr Chiles was also the chairperson of the committee of the Standards Council established under the Standards Act 1988 that supervised the preparation of NZS 6808:2010.

[111] Mr Carr attended the first session, but not the second.

[112] Professor Dickinson and Mr Rapley spoke at the woolshed meeting held at Tipapa on 17 June 2010

[113] Hurunui Wind Farm Noise Assessment from Mr J Carr – A Review, November 2011, page 5

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

given little weight.[114] Nonetheless, Dr Chiles and Mr Camp were cross-examined by Mr Carr and others about the opposing views expressed by Professor Dickinson and Dr Thorne.

[185] The broad issues we need to determine under this section are:

(a) What are the predicted noise levels and how accurate /reliable are they?

(b) How should operational noise be measured and monitored?

(c) Should certain properties be treated as high amenity areas?

We will deal with each of the above issues in turn.

What are the predicted noise levels and how accurate /reliable are they?

Overview

[186] Whilst Dr Chiles, Mr Camp and Mr Huson agreed that a specific methodology is required for wind farm noise, they did not agree on the methodology that should apply.[115] Mr Huson was concerned that NZS 6808:2010 does not provide the level of predictive certainty that Dr Chiles and Mr Camp contend it does. Specifically the experts disagreed about the place at which the sound source was modelled (at blade tip or hub height), the ground attenuation factor used in the model and whether or not an increase in noise levels would be created by turbulence created by upwind turbines. There was also an issue about low frequency noise and infrasound as well as how special audible characteristics ("**SAC's**") should be dealt with.

[187] Mr Carr argued that we should not use NZS6808:2010 as an assessment or measurement tool at all. He submitted that the standard was "*corrupted,*" and that because of their involvement in the promulgation of the standard the experts for Meridian (particularly Dr Chiles and Mr Botha) "*are so conflicted that their evidence must be given little credibility*". He also asked the Court to disregard Mr Camp's evidence contending that he was biased, because he was the President of the New Zealand Acoustical Society for part of the time when it was also involved on the committee tasked to prepare the

[114] This matter was specifically raised in a pre-trial Minute dated 19 July 2012.
[115] Joint Witness Caucusing Statement –Noise, paragraphs [3] and [4]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

standard, and also because five years ago Dr Chiles had worked for Marshall Day Acoustics, a firm in which Mr Camp is a principal. We do not accept that there is any substance to Mr Carr's submission that Mr Camp's evidence is biased because of these matters.[116]

[188] We will first consider the existing noise environment and then outline the nature of the predicted noise arising from the wind turbines, as that is the operational noise source of most concern. We will then analyse the specific issues to do with the model used to predict the noise contours relied on by Meridian, low frequency noise and infrasound, as well as SAC's.

The existing noise environment

[189] Whilst many of the submitters talked about the quiet, tranquil environment they experience, these expressions of belief must be seen in context of the particular environment and what is perceived by the listener as pleasant and/or acceptable sound. As Dr Black one of the health experts for Meridian noted (and we agree), rural environments are far from quiet in the sense of there being no sound. The sounds in a rural environment can be "natural" in the sense of "arising from nature" (e.g. birdsong, the sound of animals), but they can also be "unnatural" in the sense of "being manmade" (e.g. the sound of tractors and farm machinery). Whilst Mr Carr talked about "*hearing the silence*" at his property, there are times when the functions at his property, even if they are within his resource consent provisions, may produce sound which could be viewed by some as unwanted and unnatural in this environment. All this goes to show is that a person's reaction to sound and whether they view it as noise and unreasonable, depends on the person who is hearing it.

[190] It is important to note that changes to noise levels in the existing environment are permitted as long as they are not unreasonable. Accordingly just as there is no legal right to a view, there is no legal right for an existing quiet and tranquil environment to remain so. Whether or not a sound can be heard is not the issue. The issue is whether or not the sound is unreasonable. The RMA recognises this in s16 by requiring every occupier of land to adopt the best practicable option to ensure that the emission of noise from that land does not exceed a reasonable level.

[116] Mr Carr – Opening: Noise Topic, and cross-examination of Mr Camp, Transcript, pages 1155-1156

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[191] What level of noise can be reasonably expected in an environment is typically outlined in District Plan provisions. In this case, the relevant part of Rule A1.2.9 of the District Plan sets out the noise levels permitted in the rural area as being:

> All activities shall be designed and conducted so as to ensure that the following noise limits are not exceeded, at or outside the boundary of the site:
>
> | | |
> |---|---|
> | 55 dBA L_{10} | 7am – 7pm daily |
> | 45 dBA L_{10} | 7pm – 7am daily |
> | 75dBA L_{max} | All days between 10pm and 7am |
>
> In the case of residential dwellings and/or zones, noise is to be measured at any point at or within the boundary of any residential zone, or the notional boundary of any habitable residential building in any other zone.
>
> The notional boundary is defined as a line 20 metres from the façade of any rural dwelling or the legal boundary where this is closer to the dwelling.

[192] This rule is a key method implementing Policy 10.9 which states:

> **Policy 10.9**
>
> To control noise emissions at levels acceptable to the community and where they exceed those levels, generally maintain a separation distance between those noise-emitting activities and sensitive receivers.

The nature of the predicted noise from the turbines

[193] Adverse noise effects can potentially be created by a single turbine or turbines in combination. Turbines are known to emit noise, which various witnesses described as a "*low hum*" or like "*surf rolling in on a beach*", but could also include "*- whoomp, whoomp as sails pass, a sea noise – rhythmic ... a jet engine taking off but never takes off.*"[117]. It was said that such sounds can be heard from "*3, 4, 5 km away.*" [118]

[194] Wind turbine noise can be problematic for those who live near to them and some people find the noise emitted from them annoying. The characteristics of wind turbine noise are complex, and the circumstances when it arises (day and night) can make

[117] Mr Carr – Opening: Noise Topic
[118] Mr Carr – Opening: Noise Topic

THE SEAL OF THE ENVIRONMENT COURT

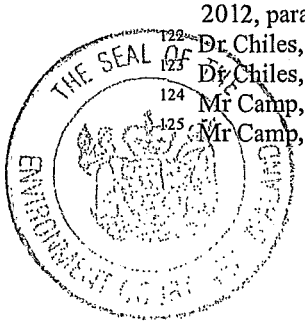
it difficult to avoid, remedy or mitigate in a timely way if problems arise and it becomes unreasonable to the person experiencing it.

[195] In this case, particular mention was made of complaints about noise from residents near to wind farms at Makara (also known as "West Wind") and Te Uku, both operated by Meridian. Meridian did not accept that unreasonable noise is generated by these wind farms, citing that they complied with their conditions of consent, but it did accept that difficulties arose at Makara with one turbine that did not comply with its factory specifications and agreed that the problem took some time to resolve. To avoid a similar problem arising in this case, Meridian has proposed a condition to require pre-commissioning testing of each turbine. When cross-examined about noise complaints arising from these wind farms, Mr Botha accepted that in the case of Makara, in August and September 2010 there were a large number of complaints (between 100-180), but in the few months preceding this hearing there were only 4 or 5.[119] In relation to Te Uku, Mr Botha said there were two complaints in two years.[120] We note also that both these wind farms were consented before NZS6808:2010 was promulgated.

[196] NZS6808:2010 sets a standard noise limit of 40dB L_A90 or the background sound level + 5dB (whichever is higher). Dr Chiles and Mr Camp agree that this will provide reasonable noise levels for residents.[121] The modelling, undertaken by Dr Chiles and peer-reviewed by Mr Camp, shows that of the 73 "*noise sensitive receivers*" only three will receive noise levels above 35dBA.[122] The modelling of the expected wind farm noise also complies with the District Plan noise limits to the extent that they are applicable to wind farm noise.[123] Mr Camp described a level of 35dBA from wind turbines as being "*very quiet, and as a level which will ensure that any adverse noise effects are minor*,"[124] provided that there are appropriate conditions to ensure that unusual noise issues such as tonality and amplitude modulation do not exist.[125]

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[119] Transcript, pages 1051-1052
[120] Transcript page 1106
[121] Mr Camp, evidence-in-chief, paragraph [3.4], Joint Caucusing Statement – Noise, 15 June 2012, paragraph [4]
[122] Dr Chiles, evidence-in-chief, paragraph [2.3]
[123] Dr Chiles, evidence-in-chief, paragraph [7]
[124] Mr Camp, evidence-in-chief, paragraph [2.3]
[125] Mr Camp, evidence-in-chief, paragraph [4.2]



NZS6808:2010

[197] New Zealand standards are not statutory documents under the RMA which *require* a consent authority to have regard to them; nonetheless a consent authority *may* decide to do exactly that. Reference to a standard is often considered to be best practice when dealing with technical matters and often conditions of consent will include reference to relevant standards.

[198] Meridian and the HDC contended that NZS 6808:2010 provides the best, most workable noise assessment and compliance framework for wind farms. It follows on from its precursor NZS6808-1998 and has been refined to reflect experience in the field since then. The document was developed by a committee of experts, representing a wide range of organisations brought together by Standards New Zealand. The committee was chaired by Dr Chiles who gave evidence that the committee followed the usual process of developing a draft, distributing it for comment, then agreed on a final draft that was approved by the Council of Standards New Zealand.

[199] The Forward to NZS6808:2010 provides:

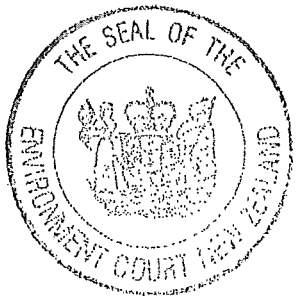
> "...Guidance is provided on noise limits that are considered reasonable for protecting sleep and amenity from wind farm sound received at noise sensitive locations" and ..."The consensus view of the committee, including numerous experienced acoustic experts, is that the Standard provides a reasonable way of protecting health and amenity at nearby noise sensitive locations without unreasonably restricting the development of wind farms. "

[200] The Outcome Statement provides:

> This Standard provides suitable methods for the prediction, measurement and assessment of sound from wind turbines. In the context of the Resource Management Act, application of this Standard will provide reasonable protection of health and amenity at noise sensitive locations.

Under the scope section these comments are however tempered by the statement that:

> The noise limits recommended in this Standard provide a reasonable rather than an absolute level of protection of health and amenity.



Was the process associated with the promulgation of NZ68080-2010 so flawed that we should disregard it?

[201] As outlined above, Mr Carr contended that the review process was flawed, extending his submission to include an allegation that the process was corrupted.

[202] It was clear that Mr Carr had extensively researched the background to the committee's deliberations, including obtaining copies of the minutes of meetings and he cross-examined Dr Chiles about these. He asserted that the committee[126] did not engage a health expert to have input to the standard and that it was inappropriate for Dr Chiles to write an initial draft of the standard for consideration by the committee stating:

> We have a standard here whereby the fox was asked to put the padlock on the hencoop, the fox was given the key, and then allowed into the hen coop to eat the chickens in accordance with the way he wished to do so.[127]

[203] We agree with Meridian that Mr Carr's allegations that the review process was flawed and corrupted are unfounded. Even bearing in mind Mr Carr's tendency to use colourful language, an allegation that a process is corrupted is a serious allegation to make and requires the party asserting it to assume an evidential burden close to the higher sliding civil standard of proof. Mr Carr's assertions do not come anywhere near that requirement and were at times inaccurate. For example, Mr Carr contended that no health expert had input into the standard, but Mr Goodwin, a public health expert, represented the Ministry of Health[128] on the committee. The standard, as the preface to it indicates, was the result of a committee collaboration, the members of whom were from a number of different representative bodies.

[204] The Court does not have the power to judicially review the process that was undertaken to reach the standard; its consideration is limited to whether or not the standard should be applied. In this case these two matters were confused and conflated by Mr Carr. Because of this, but mindful that we cannot judicially review the

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[126] The representatives on the committee are listed at the beginning of the standard and include Energy Efficiency And Conservation Authority, Executive of Community Boards, Local Government NZ, Massey University, Ministry for the Environment, Ministry of Health, NZ Acoustical Society, NZ Institute of Environmental Health Inc, NZ Wind Energy Association, Resource Management Law Association, University of Auckland. We were also advised that Ms Paul, a party in opposition to the West Wind wind farm was the local government representative (see Transcript page 797, lines 22-25)

[127] Transcript, page 1083, lines 19-23

[128] Transcript, p879, line 1

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

committee's processes, we have covered the topic in more detail than it warrants from a legal perspective.

[205] We conclude that we *can* use the standard as a basis for the assessment, but whether we *should* rely on it depends on the accuracy of its predictions. We now turn to analyse this topic.

Can we rely on NZS6808:2010 to accurately predict the sound emitted from wind turbines?

[206] Dr Chiles outlined the general approach to predicting the noise emitted and received at various locations from a wind farm and the considerable experience that he and Meridian have in using an international computer model to predict noise contours for wind farms constructed in New Zealand. Inputs to the computer model are the sound power emitted from each turbine, the number and location of each turbine together with topographical ground factors a few hundred meters adjacent to each turbine and also adjacent to each receiving residence or location.

[207] Meridian witnesses including Dr Chiles and Dr Black, emphasised that, in their view, there is significant built-in conservatism to the prediction of the noise contours. The model assumes that all turbines are facing and delivering full sound power to any given location for a given wind velocity – a physical impossibility as the turbines are spread over a significant physical distance and for a given wind direction they cannot all be facing and delivering sound to any given receiving location. The conservatism built into the model was said to be appropriate when compared to measured sound levels at actual wind farms.[129]

[208] Mr Huson was critical of some aspects of the standard, although he admitted that he had no previous experience of how it is applied in New Zealand or what the practical success of it has been[130]. He challenged some of the assumptions used in the model, namely the use of the blade tip height for the sound source, the ground attenuation factor used, and the lack of allowance for an increase in noise level to occur due to turbulence created by upwind turbines.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

129 Dr Chiles, rebuttal evidence , paragraph17
130 Transcript p817 line 26- p818 line 6

Sound source height measurement

[209] Mr Huson contended that rather than using blade tip height for the sound source, hub height should be used. In evidence Dr Chiles explained that he has run the model with the sound source at both the tip and hub heights and that there was no significant difference in outputs, with data changing by decimal places of decibels.[131] Dr Chiles' evidence was that blade tip height was used in the final model because it was more conservative, effectively reducing the screening effect of land cover and topography.[132]

[210] Dr Chile's findings were not significantly challenged by cross-examination. We are satisfied that it was appropriate to use blade tip height for the sound source, but in any event there is no major difference between the measurements being taken from the sound source at blade tip or hub height.

Ground attenuation

[211] Mr Huson's opinion was that the ground attenuation factor of 0.5 used by Dr Chiles is too high, and that a value of 0.0 (representing a highly reflective surface) should have been chosen.[133] Dr Chiles explained that any value over 0.5 has been shown through experience to be too high for the purposes of wind farm noise.[134] Dr Chiles' opinion was that NZS6808:2010 is conservative specifying 0.5 as the default value for soft ground,[135] because in his view it is more likely that more sound would be absorbed in this situation.[136]

[212] Mr Huson referred to a paper by Tickell, which shows an increase of 4dB in predicted sound levels where G = 0.0 was used as an input to the model rather than G = 0.5. Dr Chiles agreed that this could occur, but identified that the Tickell study was based in Australia, where wind farms are generally located on flat terrain. In Dr Chile's opinion more hilly terrain would result in a greater scatter of sound.[137] Dr Chiles' opinion was, further, that although the ground might be frozen at some periods, he would

[131] Transcript, pages 748-749
[132] Transcript, page 749, lines 14-15
[133] Mr Huson, evidence-in-chief, paragraph [16]
[134] Transcript, page 752, lines 1-9
[135] Transcript, page 752, lines 2-3
[136] Dr Chiles, evidence-in-chief, paragraph [27]
[137] Transcript, page 763, lines 14-19

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

not use G = 0 in a prediction model, unless this were the case over a significant portion of the year,[138] because the approach taken for all noise modelling (not only that undertaken for wind farms), is to choose a representative scenario, rather than a worst case scenario.[139] In this case the site for the proposed wind farm would not be frozen for a significant portion of the year. Dr Chiles also explained that colder conditions do not necessarily mean that the ground surface is more reflective, as vegetative land cover, undulating terrain, and the absorption properties of fresh melting snow would require in his opinion a higher ground attenuation factor than 0.0.[140]

[213] We accept that Dr Chiles has satisfactorily explained and justified the G=0.5 input into the model. Accordingly we are satisfied that the ground attenuation factor used in the model is conservative and appropriate.

Noise levels due to turbulence created by upwind turbines

[214] Mr Huson referred to this as being a matter that should be considered. Dr Chiles' opinion was that turbulence per se does not generate noise,[141] and disagreed that there was evidence to support the hypothesis that turbulence from upwind turbines would enhance the propagation of sound. Mr Botha told us that upwind turbulence has the potential to decrease the power output of downstream turbines and for this reason the wind turbines are relatively widely spaced in the wind farm layout.

[215] We are not satisfied that turbulence from upwind turbines will increase noise levels and we are satisfied that the layout of the turbines is such that even if it was an issue, it is very unlikely to arise in this case.

Conclusion

[216] The above matters were properly raised by Mr Huson and have resulted in us being provided with more information about the modelling undertaken by Dr Chiles. As a result of this additional scrutiny and based on monitoring from other wind farms, we are satisfied that the assessment process outlined in NZS6808:2010 followed by Dr Chiles is

[138] Transcript, page 760, line 31 – page 761, line 2
[139] Transcript, pages 760 - 763
[140] Transcript, page 762
[141] Transcript, page 957, line 2

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

conservative to a sufficient degree for us to be satisfied that it is very likely to be accurate and therefore reliable. [142]

[217] The result is that we accept Dr Chiles evidence (supported by Mr Camp), that the predicted sound levels from the wind turbines will be below 40dB at all noise receivers and specifically, will be below 35dB for all but three locations. Robust compliance monitoring will however, be required to validate these predictions. Whilst Meridian contended that sufficient monitoring had been done at other wind farms to validate the model, our view is that more needs to be done. We will return to that topic shortly.

Special audible characteristics

[218] A further aspect of noise from wind farms is the potential to emit special audible characteristics ("**SACs**") that include tonality, impulsiveness and amplitude modulation which is produced by the wind turbine blades passing in front of a support tower. In amplitude modulation there is a greater than normal degree of fluctuation as a function of the blade passing frequency (typically about once per second for larger turbines).

[219] In their caucus statement the noise experts agreed the assessment of special audible characteristics should be in accordance with Appendix B of NZS 6808:2010. We agree.

[220] The tests for SACs and the penalties to be applied are contained within NZS6808:2010.[143] Meridian and the HDC's proposed condition 18 requires that all measurement of wind farm sound must include an assessment of SACs.[144]

Low frequency noise and infrasound

[221] Mr Huson considered that low frequency noise should be accounted for in noise modelling, and monitoring of G-weighted noise levels as well as A-weighted levels

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[142] Transcript, page 700-701, 1013, lines 1-3, lines 1017, Dr Chiles, evidence-in-chief, paragraphs [29] and [85], Mr Botha, rebuttal evidence, paragraph [39]

[143] Paragraph 4.2

[144] Exhibit HGR1, version 4

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

should be required.[145] To support this argument, Mr Huson referred to a graph from a report produced by Hayes MacKenzie Partnership, which purportedly shows that wind turbines produce high levels of infrasound. Mr Botha disputed that this conclusion was able to be drawn from the figure provided. Mr Huson conceded during cross-examination that the Hayes MacKenzie Partnership report itself concludes that there is no issue with low frequency noise or infrasound at the levels emitted from wind turbines.[146]

[222] The HDC submitted that the monitoring of G-weighted noise is notoriously difficult, and would add considerable complexity to any monitoring process with no demonstrable benefit.[147] Meridian favoured A-weighted sound level limits. It and Dr Black contended that compliance with those levels would also result in a restriction of the low frequency wind farm noise.[148]

[223] We prefer the approach of Meridian and the HDC. We are satisfied that the conclusions in the paper relied upon by Mr Huson, given that they are different from his assertion of what the graph in the paper contends, are sufficient to persuade us that G-weighted noise levels is not required.

How should operational noise be measured and monitored?

[224] Prior to and during the hearing, Meridian and the HDC worked on a proposed suite of conditions. For operational turbine noise the conditions:

(a) supported the use of NZS6808:2010 for measurement and assessment (Condition 16); and

(b) required the consent holder must ensure that wind farm operational sound levels do not exceed a noise limit of 40dB $L_{A90(10\ min)}$ except that when the background sound level is greater than 35dB $L_{A90(10\ min)}$ the noise limit must be the background sound level $L_{A90(10\ min)}$ plus 5dB (Condition 17).

[225] Conditions 17-25 covered further detail including submitting an updated noise production report to the consent authority and confirming the predictions by measuring

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[145] Joint Witness Caucusing Statement – Noise, paragraphs [26] – [28]
[146] Transcript, pages 822-823
[147] Mr Camp, supplementary evidence, paragraph [7.4]
[148] Dr Chiles, Rebuttal, paragraph [24]

THE SEAL OF THE ENVIRONMENT COURT

noise in at least one location chosen by the consent holder in consultation with the consent authority provided that the site is no more than 1,000 m from the turbines which are being tested (Condition 19).

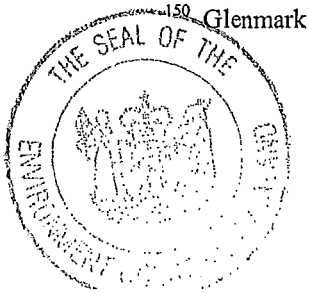
[226] Validating the noise predictions was an issue very much alive during the hearing. Earlier versions of the proposed conditions (submitted by Meridian and the HDC) involved one specified location at 2000 Omihi Road. Early in the hearing the single measurement location at 2000 Omihi Road was shifted on to a neighbouring property in order to avoid the probable interference by a plantation of trees that would present difficulties in obtaining an accurate noise measurement.

[227] Using one location to confirm the computer modelling is permissible under NZS6808:2010, but was opposed by the Society, Tipapa and other submitters. Mr Huson considered that 8 locations (representing the cardinal points) would be appropriate. Dr McBride (a health expert for HDC) thought as many as possible would be desirable. Mr Wallace, counsel for the Society, pushed for measurement at any residence where the house owner requested such measurements, but by the end of the hearing, the Society submitted a set of draft conditions[149] that proposed compliance measurements at all dwellings identified in the noise prediction report to be exposed to 35dB L_{Aeq} outside and in at least 8 locations. [150]

[228] Further cross-examination of Dr Chiles indicated that, although the computer model is a sophisticated one, it is not able to accurately model the effects of valleys and the reflections from the sides of the valleys. Mr Carr was particularly concerned about this issue in his proposed draft conditions, and he wished to have two noise measuring locations fixed at Tipapa. The final version of proposed Condition 23 requires monitoring of the completed wind farm to be undertaken at three (3) locations.

[229] We see utility in using the standard, but with a minor adjustment to require some additional monitoring locations to validate the noise prediction modelling. Although we accept that Meridian's modelling has proved to be accurate in relation to other wind farms, each wind farm site has its own unique topographical features and in our view a more site specific approach is required. It is hard to see how any significant detriment arises from this approach, although we accept that it will involve additional, but

[149] Glenmark Exhibit 10
[150] Glenmark Ex 10, Condition 18



not major, cost for a period of time. Balancing this against the importance of the accuracy of the prediction model to amenity, we think that actual noise measurements need to be carried out at a minimum of four (4) locations to validate the model and confirm compliance. The HDC is well placed to determine these locations. We are also mindful that our earlier direction to delete turbines F1 and G1 will alter the noise predictions and this revision should be taken into account in selecting the four (4) monitoring locations.

[230] We direct the HDC to determine the location of a minimum of four (4) suitable post construction noise testing locations, after taking into account the following factors:

- wind turbine layout;
- wind direction and strength;
- topography;
- number and location of residences and noise sensitive locations; and
- noise predictions.

[231] Currently proposed condition 23 provides for monitoring of the completed wind farm. It would also be appropriate to provide for monitoring in case the proposal is staged or completion is delayed. We note that NZS6808:2010 Section 8.4.1 provides for staging, but we consider it appropriate to signal it overtly in the conditions and provide for the HDC to require monitoring once any turbine has begun generating electricity.

What monitoring if any should there be at Tipapa?

[232] Mr Carr presented his proposed conditions to the Court on 23 October 2012.[151] These proposals were not based on a firm technical basis and did not adequately address the issues to the Court's satisfaction. The general flavour of the proposed conditions is captured by the opening sentence of proposed condition 11:

> In the event that the perceived wind farm noise at any time is causing the owner of the Tipapa property, or any overnight guests, visitors for events, or tourists visiting Tipapa to complain about annoyance, stress or sleep deprivation, the Consent holder cannot claim compliance with the noise standard...

[151] Tipapa Exhibit 27



[233] The proposed conditions lack balance and would not allow ongoing operation of the wind farm. We do not agree that such a condition would be sufficiently certain or enforceable and in any event does not accord with our findings.

[234] The predicted noise levels at Tipapa are not within the group of properties described as the most sensitive receivers. In fact the predicted noise level is 31dB, well within the District Plan provisions either for day or night noise.

[235] Although Tipapa is included as a noise monitoring location in the latest version of the Meridian/HDC conditions we do not expect it to be one of the four (4) sites we have required unless it is justified given the factors listed. We have no concerns if it is included as an additional site for other reasons.

Should certain properties be considered high amenity areas within the NZS6808:2010 definition?

[236] A number of residents, including Mr Carr for Tipapa, maintained that if the Court accepted the modelled sound predictions by Meridian based on NZS6808:2010, their properties should be treated as high amenity areas within the definition appearing in that standard. This would justify the use of a lower noise limit.

[237] NZS6808:2010 provides that in special circumstances at some noise sensitive locations, a more stringent noise limit may be justified to afford a greater degree of protection of amenity during evening and night time.[152] The standard provides:

> A higher amenity noise limit should be considered where a plan promotes a higher degree of protection of amenity related to the sound environment of a particular area, for example where evening and nighttime noise limits in the plan for general sound sources are more stringent than 40dB $L_{Aeq\ (15min)}$ or 40dBA L_{10}. A high amenity noise limit should not be applied in any location where background sound levels, assessed in accordance with section 7, are already affected by other specific sources, such as road traffic sound.

[238] In a high amenity area the level set by the standard is 35dB $L_{A90(10min)}$ or background + 5dB, whichever is the greater.

[152] Paragraph 5.3.1, NZS6808:2010

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[239] Ms Belinda Meares contended that the area around her home is an exceptional location, and would justify being treated as a high amenity area.[153] Mrs Marr and Tipapa also asked for their properties to be treated as high amenity areas.

[240] The District Plan enables noise in this zone of up to 45dB L_{10} at night. The area around the proposed site is not identified through particular noise standards in the Plan or otherwise, and accordingly the first limb of the description in the standard is not met.

[241] Meridian submitted that all of the houses that are in the prevailing winds and near SH1 in particular (ie all the houses where predictions are over 35dB but under 40dB) do not have an existing noise environment that could justify additional protection.

[242] Ms Meares' property is well outside the 35dB contour and we agree that there is nothing to justify this property being treated as a high amenity area.. In relation to Mrs Marr's property, background sound levels at 2000 Omihi Road show that sound levels during the night do not drop below approx 23dB, and could be as much as 43dB in certain wind conditions.[154] We have already outlined that the predicted sound levels at Tipapa are 31dB.

[243] For the reasons expressed above, we are not satisfied that Tipapa, Ms Meares' or Mrs Marr's properties, or any other property should be treated as high amenity noise limit areas.

Conclusion - noise

[244] We are satisfied that NZS6808:2010 provides the most workable noise assessment framework for this proposed wind farm. It was developed as a result of the input from a number of experts and representatives from different backgrounds, who considered in much more detail than we were able to, the literature, experience and scientific evidence available relating to wind farm noise.

[245] We are satisfied that the inputs to the model used by Dr Chiles are such that the predicted sound levels at the modelled locations are likely to be conservative. As a result, the noise from the wind turbines is predicted to be well within acceptable levels. We have

[153] Ms Meares, final submission, 15 October 2012, paragraph [14]
[154] Dr Chiles, evidence-in-chief, Appendix A, Figure A-11

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

determined that turbines F1 and G1 should be removed for reasons relating to visual amenity and this decision will mean that the noise contour modelling will need to be redone for some properties (including the Marr property which was suggested by Meridian and the HDC to be the most appropriate place to undertake monitoring).

[246] We are not satisfied than any property should be treated as a high amenity area for the purposes of NZS6808:2010.

[247] The conditions proposed by Meridian and HDC concerning SAC's are appropriate and the proposed monitoring of A-weighted noise levels are also appropriate to meet any concerns about low frequency noise or infrasound. We have determined that monitoring for the purposes of validating the model and general compliance with the noise conditions should include a minimum of four monitoring sites.

[248] With the amendments we have suggested, we are satisfied that these conditions will adequately mitigate any potentially adverse noise effects and will ensure that amenity values as they relate to noise, are maintained.

Health

Overview

[249] The main concern expressed under this topic by the Society, Tipapa and local residents was the impact wind turbine noise would have on human health.[155] The key issue was whether or not adverse health effects from the wind farm (particularly sleep disturbance) can reasonably be anticipated, but the debate encompassed how wind turbine noise might affect the health of vulnerable groups such as the young and the elderly and those with special needs, whether secondary or indirect health effects were able to be considered, and whether annoyance over a period of time and community anxiety could be considered a health effect, or affect wellbeing. These concerns were premised on the assumption that there would be adverse noise effects, even if the noise from wind turbines was within the limits set out in NZS6808:2010, and were informed by material that had been obtained off the internet, information that had been provided at the

[155] Although some nearby farmers were concemed about the effect of noise and infrasound (i.e. low frequency sound below the threshold of human hearing) on their farm animals and the potential for the lambing percentage to be reduced as a result, these concerns did not have any evidential basis and were not significantly advanced at the hearing.



woolshed meeting by Professor Dickinson and Mr Rapley, and information gained from some people who lived near to wind farms, particularly at Te Uku and Makara, and do not like them. Most of those opposed to the wind farm submitted that, to avoid any adverse noise and therefore health effects, there should be at least a 2 km setback between any residence and any wind turbine.

[250] Meridian and HDC disagreed, contending that if NZS6808:2010 is used there will be no adverse noise effects. Meridian and HDC also supported the use of NZS6808:2010 to provide the framework for compliance monitoring and disagreed that a 2km setback was necessary or appropriate.

[251] We heard from several expert witnesses on this topic; for Meridian - Dr Black (a specialist medical practitioner and public health expert), Professor Petrie (a professor of health psychology) and Ms Breen (a psychologist specialising in the treatment of people with autistic spectrum disorder), for HDC - Dr McBride (an occupational physician), and for the Society - Dr Shepherd (an academic with a doctorate in psychoacoustics and a masters degree in experimental psychology). The experts had undertaken expert witness caucusing which helpfully outlined the areas of agreement and disagreement between them.

[252] We will address the following issues:

(a) Will there be direct, secondary or indirect health effects caused by the operation of the wind farm?

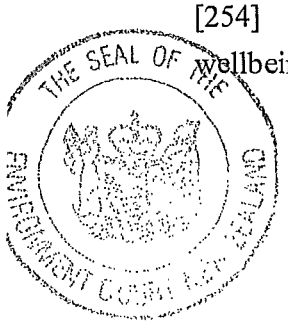
(b) Is a 2km setback required to mitigate adverse effects?

(c) How should hypersensitive individuals (including those with autism spectrum disorder) and those with atypical noise sensitivity be dealt with?

[253] We will first consider how the RMA deals with health and wellbeing generally, before turning to consider each of the above issues.

Health, wellbeing and the RMA

[254] The question arises as to whether or not there is a difference between health and wellbeing, and if so whether in the context of this case it makes any difference. Mr



Wallace for the Society submitted that amenity is something different from health and wellbeing, and that wellbeing is not necessarily part of amenity. To support this argument, Mr Wallace referred to the definitions in section 2 of "*amenity values*" and "*environment*", and correctly identified that the definition of "*environment*" includes amenity values, but does not specifically mention wellbeing.

[255] Whilst adverse noise effects might affect amenity and can therefore be considered under s7(c) and potentially s7(f) of the RMA, how health effects can be considered under the RMA was less clear. Section 5(2) identifies social wellbeing as a separate matter from health, but both are referred to as part of what needs to be put into the balance when considering managing the use, development and protection of natural and physical resources in a way or at a rate that enables people and communities to provide for them while (relevantly here) avoiding, remedying or mitigating any adverse effect on the environment.

[256] Mr Smith's submission for HDC was that the distinction between health and wellbeing in s 5(2) is conceptually fraught. Mr Smith submitted that for the purpose of the Court's inquiry in respect of this application, whether health and wellbeing are seen as distinct or one and the same is largely irrelevant because if the Court is of the view that the proposal will have adverse effects on either health or wellbeing, those effects will need to be addressed by way of appropriate consent conditions, or by declining the application.

[257] Our view is that there is a distinction, and that whilst health might be part of wellbeing, the concept is wider than that. But we agree with Mr Smith that the legal effect of that distinction is not important to our overall conclusion in the context of the facts of this case. For this reason it is not necessary for us to develop the distinction between the concepts any further at this time.

Will there be direct, secondary or indirect health effects arising from the operation of the wind farm?

[258] Dr Black concluded that the level of wind farm noise allowed by NZS6808:2010 is not sufficient to cause changes in health status, although he accepted it may affect amenity,[156] and Professor Petrie concluded that enough quality research has

[156] Transcript, page 1301, lines 1-6

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

been done to show that there are no *direct* health effects caused by wind turbines.[157] Whether or not *indirect* health effects might arise was a topic of much debate. Indirect health effects said to be relevant were sleep disturbance caused by wind turbine noise, and annoyance caused by noise or the very presence of a wind farm.

The research

[259] The experts referred to a number of overseas reviews that examined the connection between alleged adverse health effects and wind farms. Dr Shepherd also referred to a study he and Professor McBride had undertaken at Makara.

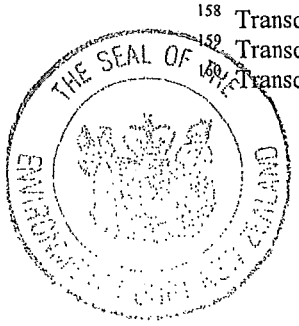
The reviews

[260] Professor Petrie referred to 17 reviews that had been undertaken, which conclude that there is no causal connection between adverse health effects and wind turbines.[158] Professor Petrie's evidence focussed in part on negative expectations leading to mis-attribution of symptoms. Professor Petrie was careful not to characterise those who complain about turbines as unstable or dishonest, but rather that such mis-attribution can be put down to how humans interpret symptoms. Professor Petrie noted that this is a concept which holds true generally in medicine, and is by no means confined to wind farms. To illustrate this point, Professor Petrie referred to medical students' disease, where students, after learning of the symptoms of various diseases, will consider that they may suffer from them.[159]

[261] Ms Meares submitted that the studies which state there are no health effects caused by turbines are "*not exactly a good place to start.*"[160] She submitted that more studies should be undertaken first, particularly given the experience of residents who have lived close to other wind farms.

[262] Dr Shepherd contended that health effects can arise from wind turbine noise. Meridian submitted that Dr Shepherd's opinions are out of step with the other scientific opinion on the topic, and that the evidence of Dr Black and Professor Petrie should be preferred. Meridian submitted that we should give weight to the fact that Dr Shepherd's

[157] Transcript page 1594, lines 30-33, page 1595, lines 5-7
[158] Transcript page 1594, lines 30-33
[159] Transcript, page 1555, lines 17-32
[160] Transcript page 1595, lines 8-10



opinion has not been followed in other wind farm cases, but we disagree that this is a significantly relevant factor we should take into account in this case. This Court is a Court of first instance and is entitled to make its own assessment of the weight it should give to any particular piece of evidence, particularly where there are highly qualified and experienced experts who disagree with the conclusions of each other. In this field there are often differences of expert opinion and the Court should be cautious to completely dismiss opinions that do not accord with the mainstream view just because of that fact.

[263] Dr Shepherd referred to papers by Pierpont and Harry to support his theory that health effects can arise from turbine noise, but Mr Beatson submitted that some of Dr Pierpont's work in this area has been criticised and should not be considered reliable. Overall Meridian submitted that we should not accept Dr Shepherd's evidence as either reliable or persuasive, with Mr Beatson going so far as to submit that Dr Shepherd has been selective, biased, misleading and evasive.[161] In the main the challenges to Dr Shepherd's evidence by Meridian centred on his failure to reference or to give context to papers,[162] or inaccurately asserting facts[163] he relied upon and relying on hearsay.[164] In addition, Meridian submitted that Dr Shepherd's evidence should be given little weight because it failed to mention the studies that conclude that there are no adverse health effects arising from wind turbine noise. Specifically Mr Beatson referred to the Knopper and Ollson 2011 paper[165] and the Massachusetts review[166] that Dr Shepherd was aware of, but did not refer to in his evidence. Dr Shepherd dismissed the other reviews as being "*all just reviews commissioned by wind turbine companies or particular authorities*".[167] Mr Beatson submitted that this statement was "*blatantly incorrect*",[168] as many of the reviews are papers that are published in academic journals and entirely regardless of authorship are part of the scientific literature.

[264] We do not agree that this amounts to bias or that Dr Shepherd's evidence was misleading, but we agree that Dr Shepherd's approach to the above matters was too loose, and not entirely in accordance with the provisions of the Court's Practice Note. We will

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[161] Meridian closing submissions paragraph [183].
[162] Pedersen 2007 paper, van den Berg's 2005 dissertation
[163] Overestimating how many wind turbines in Europe are offshore
[164] Berglund discussion, Pedersen discussion
[165] Meridian, Exhibit 9,
[166] Meridian exhibit 10
[167] Transcript, page 1434, lines 17-19
[168] Mr Beatson, Closing submission, Paragraph [183](b)



return to the significance of this shortly when we evaluate the weight that should be given to the competing expert opinions.

The Makara study

[265] Whilst accepting that a lay person is not always the best judge of their state of health,[169] Dr Shepherd relied on a survey of Makara residents he and Professor McBride (and others) undertook in 2010, which Dr Shepherd contended supported his views. The Makara study was a health survey, which Dr Shepherd told us did not specifically purport to be about wind turbines or wind farm noise. He explained that it was a study to investigate the correlation between wind turbine noise and health.[170]

[266] Meridian challenged the conclusions Dr Shepherd drew from the Makara survey. It contended that he was selective about the parts of the study that he reported on in his evidence, and contended that the survey in fact showed no difference in self-rated health or illness, social or psychological wellbeing. Meridian also contended that the Makara study was flawed for the following reasons:

(a) If the purpose of the study was to establish a correlation between noise from wind turbines and health, to have any real benefit such a study should have been done before and after a wind farm is operating.

(b) Whilst the survey was described as a health survey, Meridian submitted that it was almost inevitable that the study participants would have suspected that it was aimed at wind farm noise.[171]

(c) The cover sheet sent out to participants had Dr Shepherd's name and contact details on it, and he took at least one phone call from a survey participant which was specifically about wind turbine noise. Dr Shepherd cannot recall whether he identified himself to the caller or not, but Meridian submitted he is well known in anti-wind farm circles, and he is a scientific advisor for the Society for Wind Vigilance, and has been involved in setting up the New Zealand branch of the Noise Abatement Society.

[169] Transcript, page 1495, lines 26-33
[170] Transcript, page 1495, lines 17-20
[171] Transcript, page 1489, lines 25-28

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[267] We agree that the problems associated with the Makara study mean that we should not place significant weight on it and the conclusion suggesting that noise from wind turbines can negatively impact facets of health-related quality of life.[172]

Weight to be given to competing expert opinions

[268] We accept that there have been a number of reviews undertaken, and those opposing Dr Shepherd's view should have been referred to by him in his evidence,[173] but this does not necessarily mean that the reviews should be regarded as determinative of what is clearly a complex issue with subjective elements involved in the assessment of it. What was abundantly clear to us is that there is a current debate in the scientific community about wind farm noise, how it should be predicted and measured, and how the noise from turbines affects people, be it within consent conditions or not. Wind farm technology has only been introduced to New Zealand in relatively recent times, and whilst Meridian contended otherwise, in our view there is room for more independent research to be conducted about this very topic. It is important that alternative expert views are able to be robustly discussed and debated, because this will encourage additional studies that eventually will provide more certainty for everyone.

[269] We are, however, required to deal with the state of the scientific research as it appeared before us, and determine whether or not it establishes that adverse health effects are likely. We have concluded that, of the reviews done, the current weight of scientific opinion indicates that there is no link between wind turbine noise and adverse health effects. Dr Shepherd challenges this, but we are not satisfied that Dr Shepherd's critique of the reviews (as presented to us) is sufficiently robust to outweigh their conclusions. Neither are we are satisfied that the Makara study is sufficiently robust in its methodology for us to give it the kind of weight that would be required to counterbalance the weight of the other scientific opinion expressed in the reviews.

[270] Overall we are satisfied that the research establishes that adverse health effects are not likely to arise from the operation of the wind farm.

[271] We now turn to evaluate whether noise from the wind turbines will cause sleep disturbance.

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[172] Dr Shepherd, evidence-in-chief, Appendix A

[173] Environment Court Practice Note – Expert Witnesses, Code of Conduct, paragraph [5.3.1(f)]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Sleep disturbance

[272] The experts agreed that wind farm noise can disturb sleep, with the result that it is important to ensure that it does not.[174] We heard from Dr Black and Professor Petrie that sleep disturbance and difficulties in getting to sleep are normal in the general population.[175] We also heard that there is no strong evidence to suggest that normal sleep disturbance is associated with adverse health outcomes,[176] however if sleep problems become chronic (to the extent that they are better termed insomnia), then this can lead to adverse health effects.[177]

[273] We have already determined that the methodology outlined in NZS6808:2010 is appropriate to use to predict the level of sound that will be generated from the wind turbines. We have found that, provided conditions in accordance with that standard are imposed, there should be no adverse noise effects. This is significant because, at the levels predicted, wind turbine noise is likely to be at a very low level and sleep disturbance is not expected.[178]

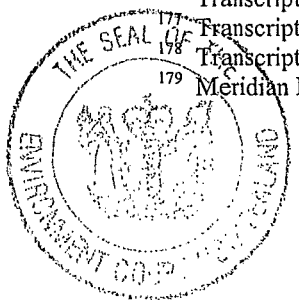
[274] Meridian referred to two World Health Organisation ("**WHO**") Guidelines on noise and health, namely the Guidelines for Community Noise (WHO April 1999) and the Night Noise Guidelines for Europe (WHO 2009). We found the WHO publications to be particularly useful and relevant to this case. The WHO publications were formulated by an international committee of experts and then endorsed by the WHO.

Guidelines for Community Noise (WHO April 1999)[179]

[275] To avoid negative effects on sleep this guideline recommends, for continuous noise, that the equivalent sound pressure level should not exceed 30dB(A). It recommends an indoor guideline for bedrooms of 30dB L_{Aeq} for continuous noise, and 45dB L_{Amax} for single sound events. The recommendation assumes that the bedroom windows are open and the noise reduction from outside to inside is 15dB.

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[174] Joint Witness Caucusing Statement – Health, paragraph [76]
[175] Transcript, page 1539, lines 13-15
[176] Transcript, page 1539, lines 32-34
[177] Transcript, page 1539, line 9
[178] Transcript page 1548, lines 3-5
[179] Meridian Exhibit 3



Night Noise Guidelines for Europe (WHO 2009)[180]

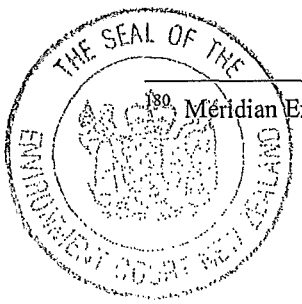
[276] This guideline updated the WHO 1999 Guidelines, and was produced by a working group of experts who carried out an extensive review of the scientific evidence on the health effects of night noise, and derived health–based guideline values. The guideline makes it clear that it is sleep disturbance that gives rise to potential health effects e.g. hypertension, cardiovascular disease, and not noise per se. It concluded that an L night outside of 40dB should be the target of the night noise guideline ("**NNG**") to protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly. An outside value of 55dB was recommended as an interim target for the countries where the NNG could not be achieved in the short term for various reasons and where policy-makers chose to adopt a stepwise approach.

[277] The extensive review reiterated that to avoid negative effects on sleep the equivalent sound pressure level should not exceed 30dBA indoors for continuous effects. A notable feature in this Hurunui case was that all health and noise experts agreed that 30dB(L_{Aeq}) inside a bedroom was the target to prevent sleep disturbance and thereby prevent health effects.

[278] The Meridian and HDC experts supported the WHO assumption of 15dB attenuation from outside to inside, but the experts for the Society believed there would be a lower attenuation. We now turn to evaluate this issue.

Noise attenuation of buildings from outside to inside

[279] The experts during caucusing agreed that 30dB L_{Aeq} was generally appropriate to provide protection from sleep disturbance for an average person inside a bedroom. They disagreed about the allowance that should be made for attenuation from outside to inside a dwelling.



[180] Meridian Exhibit 7

[280] Mr Camp (HDC) and Dr Chiles (Meridian) agreed that 40dB $L_{A90(10_{min})}$ was an appropriate level for outside a residence, and acknowledged that NZS 6808:2010 assumes a 15dB reduction from outside to inside when windows are partially open. Mr Huson thought 15dB was an overestimate and that the attenuation could be as low as 6dB.[181]

[281] In Dr Chiles's rebuttal evidence he appended a report from Mr George Bellhouse entitled "*Testing of the sound insulation of the external envelope of six houses*". The investigation was commissioned by the Building Industry Authority, Wellington and was conducted in March/April 2000. Six houses were tested; two were near the Auckland International Airport while the other four were 10-15 metres away from a busy highway. All houses were tested with windows partially open by100mm. The study concluded that the A weighted level of attenuation obtained was between 14 and 17dB for road traffic noise and between 15 and 18dB for air traffic noise.

[282] We acknowledge that attenuation will show variation depending on the width of window opening and type of construction materials, but on the basis of the WHO Guidelines and the Bellhouse study we are satisfied that 15dB is a reasonable assumption for attenuation of noise between outside and inside. We are satisfied that it is not practical or necessary to undertake noise level testing inside bedrooms. It is therefore reasonable and appropriate in our view to measure noise levels (outside residences) in accordance with NZS6808:2010.

Conclusion – sleep disturbance

[283] The WHO is a specialised agency of the United Nations and has gone through an extensive and robust process to arrive at recommended community levels of night noise to protect public health. The design of the wind farm and the proposed conditions are in line with the WHO guidelines. We are satisfied that the design of the wind farm and the conditions of consent agreed between Meridian and HDC (with the amendments we have required) are appropriate and will protect the health of the public in the general

[181] Professor Dickinson's paper "*Nonsense on Stilts*," published in Acoustic 2009, raised a number of technical issues and difficulties in accurately measuring noise from wind farms and questions the assumption of a 15dB reduction (attenuation) from outside a house to inside a bedroom with the window partially open. He proposed that "*no wind farm shall be situated less than say 10 kilometres away from any residence unless the occupant agrees in writing for this condition to be waived*".



sense and avoid sleep disturbance, provided, as Dr Black and Professor McBride emphasised, there is strict compliance with the conditions of consent.

Is annoyance a health effect?

[284] Dr Shepherd contended that annoyance caused by a noise source should be the basis for determining effects on health and that a 2 km setback between a wind turbine and a noise-sensitive receiver is therefore required as a starting point.

[285] Meridian acknowledged the potential for people to be annoyed by wind farms, but it submitted that annoyance is not necessarily related to a noise level and should not be considered a health effect or outcome in and of itself, although it was accepted that it could lead to adverse health outcomes if not appropriately managed by the person experiencing it. Meridian submitted that to the extent that it can and should be considered, it is really an amenity issue, "*something to be assessed in the frame of what values a person or a community draws from the local environment*".[182] Dr Shepherd appeared to agree with this approach.[183]

[286] This issue was partially considered in the context of airport noise in ***Cammack v Kapiti Coast District Council.***[184] It was contended that annoyance experienced by some people when exposed to airport noise may lead to chronic impairment of wellbeing. In that case the Court preferred the evidence of Dr Black, who considered as he does here that annoyance refers to effects on amenity and does not necessarily equate to effects on public health.[185]

[287] Ultimately, whilst it might be conceptually important for annoyance to be analysed as a health or amenity effect, a more fundamental issue is whether annoyance should be considered as a separate effect at all. In this case it is likely to arise as a *consequence* of an unwanted noise or visual effect and therefore could arguably be double counted (either as a noise, visual or amenity effect) if it is treated as a separate effect. On a more practical level there are real difficulties in measuring annoyance with any degree of certainty given the subjective nature of it and the fact that it is unable to be objectively assessed or measured and is unpredictable. Dr Shepherd accepted this, and

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[182] Meridian, Closing, paragraph [135]
[183] Transcript, page 1462, lines 29-33
[184] W069/09, 3 September 2009, Dwyer EJ, paragraph [98]
[185] Ibid at paragraph [133]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

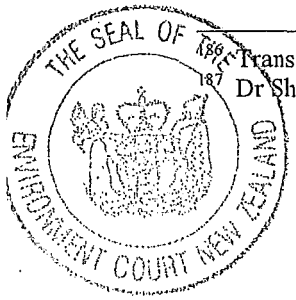
also accepted that annoyance has to be measured by self-reporting.[186] We also agree with Meridian that compliance with NZS6808:2010 would not necessarily avoid annoyance, and even if a setback were to be imposed those outside a setback could also remain annoyed by the presence of a wind farm. It is difficult to see what measures outside declining consent outright could guarantee that annoyance is able to be avoided, remedied or mitigated.

[288] In conclusion, we are not satisfied that annoyance can and should be taken into account by us as a separate effect. But if we are wrong on this issue, our determination on the facts of this case is that there is insufficient evidence to establish that annoyance could lead to an adverse health or amenity effect.

Is a 2km setback required to mitigate adverse effects?

[289] The Society and local residents sought to prohibit any turbines being located within 2km of a dwelling, primarily for noise reasons but also as a way of reducing community anxiety. This was reflected in the amended proposed conditions of consent submitted by the Society and Tipapa. In support of the 2km setback or separation distance, reference was made to several overseas documents and planning guidelines, including ones from Australia and the United Kingdom.

[290] Dr Shepherd recommended a 2km setback, or buffer zone, rather than using NZ6808:2010. In his opinion the noise standard failed to correctly conceptualise the relationship between noise and health. He considered that a better and simpler regime was for turbines more than 2km from a dwelling to be approved, and where turbines were less than 2km from a dwelling then the owner's consent would be required. He said that at around 2km the audibility of the noise should not affect health or amenity.[187] His recommendations were based on his personal experience of staying at a house in the Manawatu at 2.2km from a turbine, as well as his survey work at Makara, near Wellington. Dr McBride was also involved in carrying out the survey at Makara, and that formed the basis of his support for a 2km setback, although he recognised that it was not effects-based.



186 Transcript, page 1462, line 1
187 Dr Shepherd, evidence-in-chief, paragraph [9.11] and Transcript pages 1514 & 1515.

[291] We do not accept that the Makara survey is relevant to evaluating the significance of a 2km setback, as it included only houses closer than 2km to a turbine. There was no information from houses at Makara more than 2km from a turbine from which to make any comparisons. In response to questions from the Court, Dr McBride acknowledged that the Makara survey did not provide a basis for selecting the 2km distance in preference to any other distance.

[292] Dr Shepherd also referred to research by Nissenbaum and included figures[188] of dose response curves relating a health variable such as annoyance or disturbed sleep, and distance. He said that these figures "*clearly demonstrate(s) that adverse effects are substantially greater below two kilometres*". In response to questions from the Court, Dr Shepherd agreed that in these figures there were data clusters at around 1.5km and 3.5km. We fail to see how this evidence supports a cut-off distance of 2km. Indeed Dr Shepherd also referred to other research which he said proposed various setbacks of 1.5km, 2km and 2.4km.

[293] Overall we did not find Dr Shepherd's and Dr McBride's evidence helpful on this matter and it certainly did not support 2km as a relevant setback distance.

[294] Both Mr Camp and Dr Black were critical of the concept of a 2km setback. They said it was not effects-based and in essence considered it to be a blunt and primitive approach. Dr Black made it clear on a number of occasions that exposure and dose were the key variables to consider, not simply separation distance.

[295] For some of the local residents their initial support for a 2km set-back seemed to change during the hearing. Ms Meares' own house is 2.8km from the nearest turbine and she expressed a personal preference for a 3km setback.[189] For Mr Archbold 2km was not enough as he sought the removal of turbines A9, A10 and A11 (the latter turbine being the closest to his dwelling at 2.16km).[190] For Tipapa, Mr Carr, although advocating for a 2km setback, sought removal of turbine A9 which he acknowledged was 2.35 km away, but he said the extra distance was so minimal the effects from it would be the same as if it was within 2km.[191]

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[188] Dr Shepherd, evidence-in-chief, Figures 8A, 8B and 12.
[189] Ms B Meares, Submissions dated 15 October 2012, para 14.
[190] Mr Archbold, evidence-in-chief, paragraph [4] and Transcript page 2619.
[191] Mr Carr, Submissions, Tipapa Exhibit 25.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[296] With reference to the overseas documents that were cited as supporting a 2km setback, we start by noting that care needs to be taken when transferring overseas examples into New Zealand as different countries usually have different legislation and planning frameworks. Having read some of these overseas documents we note that in most cases where they use a separation distance, such as 2km, it is as a trigger to then require a case specific evaluation process to be carried out and/or require the consent of affected householders. They do not prohibit turbines within 2km of dwellings *per se*, but rather use a separation distance as a "process trigger". We do not see any benefit in adopting such an arbitrary approach here when under the RMA we are required to carry out an effects-based evaluation of the whole project, regardless of the distance between turbines and existing dwellings.

[297] For the reasons expressed above, we do not agree that a 2km setback is appropriate or required to mitigate any adverse noise effects given the predicted levels of noise and the existing District Plan provisions relating to the levels of noise that are permitted in this rural area both during the day and at night.

How should hypersensitive individuals, including those with autistic spectrum disorder be dealt with?

[298] In public health terms, a population of individuals will have individual noise sensitivity that falls on a normal distribution (Gaussian bell curve). It would be a reasonable expectation that the population that falls within the curve defined by plus or minus 2 standard deviations of the mean would be protected. This represents 95% of the population, but 5% of the population remains and these people *may* be particularly sensitive to an environmental stressor.

[299] In ***Motorimu Wind Farm Ltd v Palmerston North City Council***[192] the Court accepted, in dealing with annoyance that might give rise to sleep deprivation, anxiety and possible consequential health effects, which "*ultimately, consideration of noise effects must be based on normal physiological responses, and cannot seek to protect those whose sensitivities might be at the higher end of the scale*"[193]. We agree with this approach, because the RMA is not a "*no effects*" statute. The 5% of the population who are either hyper or hyposensitive to noise may attract an individual assessment and

[192] W067/08 26 September 2008
[193] Ibid, paragraph [327]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

arrangements to avoid a potential health effect, but any arrangements reached will need to be by agreement outside the requirements of the RMA

Autism Spectrum Disorder

[300] In this case it came to the notice of Meridian that there are three children (from different families) who are diagnosed as having Autism Spectrum Disorder ("**ASD**").

[301] We heard from Ms Tanya Breen, a consultant clinical psychologist who has been retained by Meridian to develop and implement a programme to ameliorate any adverse effects of the wind farm on neighbouring children. Neither Ms Breen nor Dr Black could say with certainty that there would be an effect on the ASD children, but were of the opinion that there was a potential health effect in that, although there are no peer-reviewed papers published on the specific subject of potential effects of wind farms on people with autism, there is literature suggesting people with autism often exhibit unusual responses to sensory inputs such as noise, touch, smell and visual stimuli. The lack of research that had been done in this area was highlighted during the questioning of Ms Breen.

[302] Meridian has offered assistance to the three known ASD children. It is to be commended for its approach, which will involve the assessment of the individual children before, during and after construction of the wind farm and will result in an individually tailored and supported response depending on the needs of the child.

[303] It was submitted that Meridian's assistance should be widened to cover any adults or children in the community who subsequently are diagnosed with ASD or have such a diagnosis and move into the area. We do not agree that this approach accords with the RMA for the reasons expressed above.

[304] The conditions proposed by Meridian and HDC contain the offer made by Meridian. We consider that these conditions need to be amended to increase their certainty so that they can be understood and implemented in the future as it may be some years before this wind farm is constructed. For example, we consider that the conditions need to be more precise about when the process is to commence and how the three individuals should be identified as they may not reside near to the wind farm in the future.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[305] At the request of the families concerned and without opposition an order was made at the hearing suppressing the names and addresses of the individuals diagnosed with ASD who were referred to in the hearing. We now make that order final and extend it to incorporate a prohibition on publishing any information that might lead to the identity of these individuals being revealed.

Community anxiety

[306] Dr Black accepted that community anxiety about potential health effects caused by wind turbine noise was a valid health concern, but one that would only be experienced by a very small percentage of the population.[194] The evidence in this case did not establish whether there would be any such people in this community. We can reasonably infer that if the numbers are small they are likely to be within the 5% of people not within the bell curve to which we have already referred.

[307] As to the general community concerns expressed, Dr Black contended that actual monitoring assists in providing a level of comfort to a community, to those who are sceptical of modelling, and particularly if the actual monitoring confirms the model's predictions. Dr Black expressed his confidence in NZS6808:2010 as being more than adequate to protect public health, and further intimated that in his experience, predicted effects are often proved subsequently to have been over-estimated. In the context of discussing a setback (which he did not favour), Dr Black expressed the view that he did not think it would deal with community anxiety. He said that in his experience, what does help is to make commitments about compliance (with standards) and then demonstrate that they are met.[195]

[308] We accept Dr Black's opinion. We do not accept that general community anxiety should be treated as a health effect.

Conclusion - health

[309] In summary, we do not consider that a 2 km setback is required, or is appropriate. We find that if the conditions, proposed by Meridian and the HDC relating to noise and as amended in this decision, are imposed and complied with, there will be no

194 Transcript, page 1335, line 12
195 Transcript, page 1,294, lines 31-34

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

direct or indirect adverse health effects for all but a very small percentage of the population. In relation to hypersensitive people, an individual approach is required as the RMA would not necessarily provide the level of protection that might be desirable. In this case Meridian has responsibly acknowledged that special assistance on an individual basis needs to be provided to those with ASD. We have no evidence to suggest that anyone in this community is likely to suffer from the kind of anxiety response that Dr Black indicated might occur in a very small percentage of the population.

Traffic and access

Overview

[310] The proposal is for a single access point to the wind farm site to be used during construction and then retained for ongoing use during the operational stage. An indicative construction period of 18-24 months has been estimated, and this period will include most of the increased traffic volume and the heavy and over-dimensioned vehicles. The period of greatest activity is between months 3 to 6, when some 310 vehicle movements per day are anticipated. This period coincides with the transportation of material for internal roading. For the remainder of the construction period, vehicle generation is expected to range between 80 - 190 movements per day. Once the project is operational then a much reduced traffic volume of mainly service vehicles will be required. Meridian considered the relative merits of nine alternative access options before committing to the option included in the application, which proposes an access point off Motunau Beach Road, 3.2km south of State Highway 1 (Northern Access Option 4).

[311] Expert evidence on this topic was presented by Mr Andrew Carr for Meridian and Mr R A Chesterman, for the HDC. For the submitters, Mr John Carr, Mr Messervy and Mr Archbold presented statements. Mr Messervy appeared also for the Society and Tipapa. In addition there were three Joint Witness Statements. Mr John Carr attended only the first conference. Messrs Andrew Carr, Chesterman, and Messervy attended all three conferences.

[312] The weight to be given to the evidence, particularly that of and for the submitters, was raised as a matter to be considered. At this stage we record in summary the experience of those appearing before us.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

- Mr Andrew Carr has a Masters in Transport Engineering and 22 years experience as a traffic engineer;

- Mr Chesterman has a Masters of Engineering and Transportation and 12 years experience in traffic engineering;

- Mr John Carr has no academic qualifications of relevance to transport and traffic related matters. His experience comes from using his own property on Motunau Road, where he has lived for eight years;

- Mr Messervy is a Certified Automotive Engineer, NZQA Certified for emergency vehicle driving, a certified automotive vehicle inspector, and has done some study in civil engineering. He has 40 years experience in the repair and maintenance of vehicles and owned the Greta Valley garage business for 32 years.[196] He was an AA contractor (vehicle recovery (tow truck) operator) for 36 years, an Emergency Services Driver for the Rural Fire Brigade for 20 years, and a school bus driver in 1975 and 1976 and currently since 2002. He lives at Tipapa Place in the Greta Valley village;

- Mr Archbold lives at 368 Motunau Beach Road. He has been a member of the Scargill Fire Brigade for 16 years (currently the Rural Fire Chief), and the rural mail contractor for 12 years for the Amberley RD3.

[313] A wide range of traffic-related matters was canvassed in the submissions and statements and during the hearing. The two expert traffic witnesses (Mr Andrew Carr and Mr Chesterman) were agreed on all matters and considered that the proposed access route was appropriate, subject to conditions including management plans for controlling traffic safety and management generally. The main issues of contention related to the safety and suitability of the proposed access route (Northern Access Option 4). The submitters considered the proposed route to be unsafe and unsuitable and nominated an alternative route further to the south using Reeces Road (Southern Access Option 1 via Reeces Road (Stevenson Property)).

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[196] Transcript p. 1803

[314] The other remaining areas of concern to the submitters which we will consider here are:

(a) the sight lines for vehicles turning right from SH1 into Motunau Beach Road;

(b) the safety of SH1, particularly at the Omihi Saddle;

(c) the assessment of alternative access routes to the site; and

(d) proposed conditions of consent.

Sight lines – SH1 and Motunau Beach Road

[315] At the T-junction with Motunau Beach Road, the north-bound side of SH1 has been widened to provide a through-traffic lane and a dedicated right turn/stopping lane for vehicles turning right into Motunau Beach Road. The two lanes are marked out on the road surface. Past Motunau Beach Road (to the north) SH1 veers to the left around a bend. The area has a 100km per hour speed limit with a speed advisory limit of 75km per hour. The District Plan Map G (Greta Valley) shows a New Zealand Transit Agency ("**NZTA**") designation (D-42 Proposed Road Widening) on the inside curve of the State Highway at this location but the land has not been taken. We note that NZTA was not a party to the hearing. The debate centred around the safety of the intersection geometry, particularly the adequacy of the sight distance for right-turning vehicles to on-coming vehicles travelling south on SH1.

[316] Mr Andrew Carr and Mr Chesterman stated that the industry-wide accepted guideline for assessing such intersections is "Austroads: Guide to Road Design, Part 4A – Unsignalised and Signalised Intersections" ("**Austroads**"). Austroads defines the stopping sight distance as "*the distance travelled by a vehicle between the time when a driver receives a stimulus signifying a need to stop, and the time the vehicle comes to a rest*". Mr Chesterman's evidence was that the Austroads Guide suggested that the required stopping distance for a vehicle travelling 100km per hour is 179 metres. This assumes that the driver of the on-coming vehicle has a reaction time of 2.5 seconds and that the vehicle has an operating speed of 100km per hour. He considered that vehicle speed at this intersection was likely to be lower because of the advisory 75km per hour speed limit posted for the area.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[317] Mr Andrew Carr initially estimated the sight distance at SH1/Motunau Beach Road at 250 metres and then subsequently measured it on site. Mr Andrew Carr and Mr Chesterman were agreed that a revised distance of 225 metres was in accordance with the Austroads guide. Mr Messervy did not consider that the Austroads Guide provided an appropriate location from which to measure. He did not consider it to be a credible position at which an oncoming vehicle first becomes visible. Mr Messervy maintained that based on common sense the forward sight distance was 180 metres. Mr Andrew Carr and Mr Chesterman did not agree that Mr Messervy's location was the appropriate point from which to measure in accordance with the Austroads Guide.[197]

[318] All of the witnesses agreed that vegetation on the inside of the SH1 curve restricted the forward sight distance. This vegetation included a substantial "pine tree" hedge which overhangs the boundary fence, and a wilding pine growing on the grass of the SH reserve. We were advised that the overhanging hedge is cut back to the boundary line every two years or so. During the hearing the offending wilding pine was removed, and Mr Messervy confirmed that the sight distance had increased: using his measurement methodology he stated that the amended distance was 215 metres, which he still maintained was inadequate.[198]

[319] Mr Andrew Carr and Mr Chesterman both analysed the reported accident records for the intersection for the past five years (2007 to 2011). Three accidents were recorded, all involving a single vehicle only, where the driver had lost control when negotiating the curve in the road. None involved vehicles turning to or from Motunau Beach Road. We consider that it is relevant to note that during this period there were traffic-generating attractions along Motunau Beach Road such as the school, Tipapa and the Motunau Beach residential area and boating facilities. Mr Messervy's and other local residents' concerns about the safety of the intersection do not appear to be supported by events and accident records to date.

[320] Mr Andrew Carr used the equations set out in the NZTA Economic Evaluation Manual to calculate the number of injury accidents that could normally be expected at this location. His calculations showed that 0.8 injury accidents would normally be expected over a five-year period arising from turning movements, whereas none had been

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197 Second Joint Statement by Transportation Planning Witnesses, 1 June 2012, paragraphs [5] and [6], A Carr Rebuttal paragraphs [26] and [46], and Transcript page 1821.

198 Mr Messervy, Personal Submission dated 5 October 2012, para 34(c).

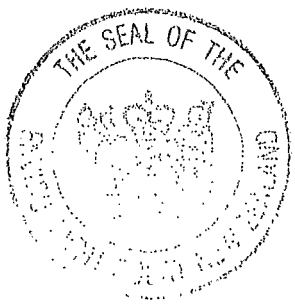
THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

reported. He also calculated the change in the number of injury accidents that the presence of construction vehicles associated with the wind farm could cause. This showed that an additional 0.08 injury accidents may occur for each year of construction. In his view, the accident records do not indicate a particular issue at this location despite the limited sight distance, and that the increase in accident risk associated with the wind farm construction is not significant.

Conclusion – sight lines

[321] We accept that the Austroads Guide is the accepted standard for analysing sight distances at intersections such as this. The existing sight distance is acceptable in terms of the guidance provided by Austroads. The accident records and predictions confirm that the intersection operates within acceptable standards. Having said that we recognise that the existing intersection has some limitations, and this is no doubt the reason for the posted reduced advisory speed limit of 75km per hour. The regular maintenance and removal of road side vegetation on the inside of the SH1 curve is an obvious and reasonably simple measure that will assist to maximise the available sight distance, regardless of the proposed wind farm. We also accept that Mr Messervy has considerable personal experience from living in the area and using the SH1/Motunau Beach Road intersection. His local knowledge confirms that some caution on the part of motorists is advisable at this intersection, and again this is consistent with the reduced advisory speed limit.

[322] We are satisfied that the intersection does not pose an adverse safety risk such that consent to the proposed wind farm should be refused. The main period of concern with the proposed wind farm is during the estimated 18 month construction period, when traffic volumes will be highest and there will be an increase in heavy and over-sized vehicles. A Construction Traffic Management Plan ("**CTMP**") is proposed as part of the conditions of consent. It is to be a comprehensive document and we are satisfied that this can be used to appropriately manage the changed volume and mix of traffic and promote road safety.



State Highway 1 - safety

[323] Mr Messervy was concerned about the safety of the last eight kilometres of the access route from just south of the Omihi saddle on SH1 through to the entrance to the wind farm site. Mr Messervy relied on Mr Archbold's analysis of fire brigade call outs (January 2006 to May 2012) to motor vehicle accidents on SH1 from Reeces Road to the Hurunui Bridge to support his view that there is a significant increase in the number of accidents on the lengths of road before and after crossing the railway line to the south of the Omihi saddle. The Omihi saddle is identified by an increase in gradient, and includes a 300 metre length of additional "slow vehicle" lane. Mr Messervy had described this as an accident blackspot *"including deaths"*. In Mr Messervy's opinion, any increased risk of crash potential should be avoided, hence he promoted the use of Reeces Road as the access route, being to the south of the Omihi Saddle. Similar views relating to general road safety issues on SH1 were expressed by other submitters, including Mr and Mrs McLean and Mrs V Meares. Mr John Carr promoted a "zero tolerance" to any and all risks over the route from Omihi Saddle to the site.

[324] Both Mr Andrew Carr and Mr Chesterman analysed the NZTA Crash Analysis System between 2002 to 2011 for SH1 from Motunau Beach Road to the Omihi railway crossing. They identified two fatal accidents on this section of highway, and in their view neither were attributable to a deficiency in the road environment. In the context of the construction traffic effects of the wind farm, they considered it was relevant to note that both accidents involved just a single vehicle, and both occurred at times of day when traffic flows were low.

[325] While acknowledging that Mr Archbold's calculations were numerically correct, Mr Andrew Carr was critical of Mr Archbold's approach, in that the baseline for the comparison was solely the accident rate on the straight section of highway to the immediate east of (before) the Omihi railway crossing. Mr Andrew Carr considered this to be an arbitrary point of reference, and that it was not valid to conclude that another section of highway was "hazardous" by comparison. He considered that it was more appropriate to use the accident prediction equations published by NZTA.

[326] Mr Andrew Carr's application of the NZTA Economic Evaluation Manual equations to the section of SH1 between the Omihi railway crossing and Motunau Beach

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Road shows that over a five-year period, 5.6 accidents could be expected, and the records show that 6 injury accidents were recorded. On this basis, he concluded that this slightly higher rate was well within expected parameters and could not be described as a "blackspot". Similarly, Mr Chesterman concluded that the Omihi saddle is not significantly more hazardous than the flatter and straighter section of road that precedes it.

[327] In response to Mr Messervy's concerns that long and over-dimensioned vehicles would result in overtaking vehicles being pushed across the centreline at the top of the saddle, near where the "slow vehicle lane" ends, Mr Andrew Carr clarified that the movement of such vehicles is subject to a permit system including the use of pilot vehicles to control the extent and location of overtaking vehicles. These are all matters included in the CTMP, and if necessary specific mention could be made of the potential hazard.

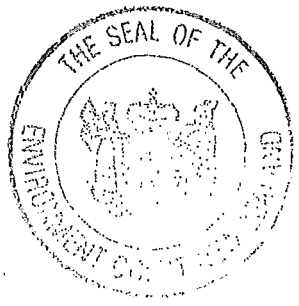
Conclusions - safety

[328] We agree with Mr Andrew Carr that it is neither practical nor reasonable to expect that there be no increase at all in the level of risk of vehicle accidents from the present situation. We agree that this portion of SH1 does not have a poor accident record, and that the likely change in road safety risk due to the proposed wind farm is negligible. The State Highway network is designed, and is expected, to be the main vehicle transport route in the country.

[329] The main traffic concerns relate to the increased volume and change to the vehicle mix, with more heavy and over-dimensioned vehicles in the construction-related traffic. The combination of the proposed CTMP and the standard requirement for permits for over-dimensioned loads and vehicles provides adequate means to control and manage any adverse traffic safety effects.

Assessment of alternative access routes

[330] As outlined above, the case for many of the submitters was that an alternative access route using Reeces Road, further to the south, should be required.



[331] Meridian's position was that the focus of the present proceedings should be on whether or not the access that is proposed, and is the subject of the application, causes unacceptable adverse effects, rather than whether some other access that does not form part of the application is better. Meridian also submitted that the RMA only requires an assessment of alternatives where adverse effects are significant. To the extent that an assessment of alternative access is relevant, it was submitted that the issue to be resolved is whether or not Meridian has given sufficient consideration to these matters. We were reminded that it is not the role of the Court to select the "best" access option. For Meridian it was submitted that the question for the Court is essentially whether the effects of using the proposed access route, including SH1 and Motunau Beach Road, are so significant that it is unacceptable for the applicant to look to use this access option.

[332] We agree with Meridian's submissions. In the circumstances we have found that the likely adverse traffic effects of the proposed wind farm are primarily limited to the construction-related traffic estimated to occur over an 18 month period and that these effects, as managed through the proposed conditions of consent, will not be significant. We are satisfied that Meridian has given sufficient consideration to any possible alternatives, and this was set out in the application documents and the evidence of Mr Wiles, including the Construction Effects and Management Report ("**CER**").

[333] We find the proposed access route including SH1 and Motunau Beach Road to be appropriate and acceptable.

Proposed conditions of consent - traffic

[334] Both the Society and Tipapa filed proposed amendments to the traffic-related conditions of consent with their closing submissions. In response, Meridian presented, with its closing submissions, a final revised draft dated 23 October 2012 (Version 4).[199] Counsel for Meridian submitted that a great deal of what had been sought by the Society for traffic management was either unworkable, or unnecessary as it was already required to be part of the CTMP.

[335] Both the Society and Tipapa sought to reduce the maximum speeds on portions of SH1 and Motunau Beach Road to 70km/hr for construction traffic. Mr Andrew Carr considered that this could create a hazard for other road users, who might not expect the

[199] Exhibit HGR1, Revised Draft 23 October 2012, Draft Conditions of Consent Version 4.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

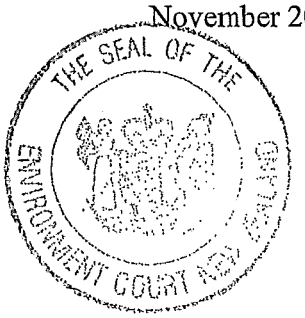
reduction in speed. We note that NZTA and the HDC control the speed restrictions on these roads. In the circumstances, we do not consider that mandatory speed reductions are appropriate or necessary as consent conditions. We find that the provisions in the CTMP are sufficiently broad to allow for discussions between all parties on speed restrictions, should they be considered appropriate for some limited and defined circumstances. We do not find it appropriate to predetermine such matters and include them as specific conditions of consent. Similarly, in relation to the Society's suggested prohibition at all times against exhaust brakes, we agree with the submissions for Meridian that it is not appropriate to specify any further measures in the CTMP, or other conditions of consent.

[336] The Society also sought a large number of detailed changes to the CTMP conditions identifying local noise sensitive activities and including involvement of the Community Liaison Group. In response, Meridian's final Version 4 proposed conditions included many of these matters. Some of them were included in a more generic manner than the specific wording proposed by the Society. Given that the CTMP may not be prepared for some years, we are satisfied that the Meridian/HDC Version 4 conditions appropriately identify and "flag" matters that should be considered in the CTMP, and they also provide sufficient flexibility for the parties to recognise the local environment closer to the time of construction.

[337] For Tipapa, Mr John Carr also sought that there be "*no construction activity whatsoever on Centre Hill and no construction traffic along Motunau Beach Road*" during the following times: weekdays from 6pm to 7am; weekends from 12 noon Saturday until 7am Monday; and on public holidays. These restrictions were sought to avoid any possible noise disruption to the weddings and social functions held at Tipapa.

Resource Consent – extending the Tipapa function venue

[338] During the hearing we were advised that Mr John Carr had lodged a resource consent application to increase the capacity of the Tipapa function venue from 50 persons to 150 persons at any one time, and to provide for a single event in any 12 month period of up to 230 persons, and to operate a tourist retail shop. The Council considered that application on a non-notified basis and granted consent, subject to conditions, on 14 November 2012, after the close of the wind farm hearing.



[339] Mr Carr forwarded the consent to the Court. The parties were asked to advise the Court whether or not it should have regard to the consent as the hearing of evidence had finished. In response, the s274 parties supported the Court having regard to the consent. The CRC had no issue with the consent being taken account of, provided it did not lead to the hearing being reopened, and the HDC advised it would abide the decision of the Court.

[340] Meridian advised that it was neutral on the issue, provided that it did not lead to reopening the hearing, but it requested that if the Court decided to have regard to the consent then it should also have regard to the relevant planner's report, and accordingly enclosed a copy. Meridian repeated its offer to include a condition in the CTMP including protocols for liaising with the operator of Tipapa in order to avoid construction traffic movements at times when wedding ceremony vows are to be exchanged, and offered to extend this to also cover the additional single large event per annum authorised by the resource consent.

[341] Mr Carr responded, rejecting Meridian's offered condition, and described the offer to limit construction traffic during the taking of vows as "*disingenuous* (sic) *and absurd*". He maintained that his conditions, as presented to the Court hearing, seeking wider limits to construction activity, were essential and fundamental to being able to operate his business at Tipapa.

[342] We have read the Council decision and the planning report relating to the extended operations at Tipapa. We note that a traffic assessment in support of the application estimated 60 vehicle trips per day as being realistic, but that a maximum of 120 vehicle trips per day could be generated if the venue was operating at capacity. The traffic assessment concluded that even 120 vehicle trips per day could be easily accommodated on Motunau Beach Road without affecting its safety and efficiency. The traffic assessment noted that the visibility at the Motunau Beach Road/SH1 intersection meets relevant guidelines. The planning report states that NZTA had confirmed that they had no concerns in relation to the proposal.

[343] The documentation in support of Tipapa's application, and the Council's decision, are consistent with the experts' evidence presented to this Court. In the circumstances we have no reason to change our finding that the proposed access route,



including SH1 and Motunau Beach Road, is appropriate and acceptable. The route can accommodate additional traffic without resulting in any significant adverse effects.

[344] In relation to the CTMP, Version 4 of the proposed conditions includes in condition 71 as some of the objectives of the CTMP to:

> (e) minimise disruption to the surrounding community, school, farming operations and rural services; and
>
> (g) encourage the participation of the surrounding community in maximising safety and minimising disruption, including liaison with the Community Liaison Group.

[345] These objectives are to be given effect to through subsequent conditions, including condition 73 which lists out matters which the CTMP must include, but is not limited to. There follows a list of 15 matters, including:

> (m) protocols for liaising with the operator of Tipapa to avoid construction traffic movements at times when wedding ceremony vows are to be exchanged.

We understand that Meridian has offered to extend this condition to also include the single event in any 12 month period when the number of people at Tipapa is allowed to exceed 150 but be limited to a maximum of 230 people (excluding staff).

[346] The Meridian/HDC Version 4 proposed conditions contain a table of noise limits for construction activities. These follow the standard format of Table 2 of NZS6803:1991 – Acoustics – Construction Noise for works of 'long term' duration. Additionally, as we have outlined above, there are provisions in the CTMP which recognise certain sensitive activities in the local community and provide an opportunity for the parties to consider any specific measures.

[347] We consider Mr John Carr's proposed prohibitions on construction activities and construction traffic using Motunau Beach Road to be excessive and unwarranted. The proposed conditions require the CTMP to limit heavy vehicles associated with construction work during public holidays, before 6am or after 8pm Monday to Friday inclusive, or before 7am and after 5pm Saturday and Sunday, with exemptions for staff carrying out sediment control works, vehicles and staff associated with pouring of cement and emergency works. We consider these provisions to be an appropriate balance



between the desire for efficient construction timetabling and the protection of the amenity of the local area.

[348] Mr Carr's rejection of the offer to also include the annual large event at Tipapa in the CTMP would seem to be rather hasty. In our view it is reasonable to include this annual event in the "agenda" for discussions between the relevant parties as part of the CTMP procedure. It may well be that someone other than Mr Carr is operating Tipapa in the future when the wind farm is being constructed, and we are fairly certain that any future operator would appreciate the opportunity to liaise in relation to limiting any adverse effects of construction traffic on the event.

[349] We direct that the Meridian/HDC Version 4 proposed condition 73(m) is to be amended to include the annual large event allowed at Tipapa. We do not find it appropriate to make any other amendments to the conditions relating to construction noise (Version 4, conditions 12 & 13) or traffic management (Version 4, conditions 71 to 79).

Construction, Erosion, Sediment Control and Groundwater, and Fire

[350] Expert witnesses presenting evidence on this topic were called by Meridian and CRC.

[351] The submitters concerns related to the potential for additional erosion from the construction of the roads and turbine platforms, the discharge of sediment and the effectiveness of sediment control measures, the potential for oil spills, and the potential to impact on the Tipapa Stream. For the submitters, Mrs Messervy and Mr John Carr questioned the experts during the hearing.

[352] It was accepted that the proposed wind farm will involve considerable volumes of earthworks, and consequently erosion and sediment control will be a major part of the project's construction programme. Construction effects will result in some large cuttings, soil disturbance and vegetation clearance, as well as associated discharges to land and water. Also, there can be potential nuisance effects such as dust and noise. Other activities during the construction phase, such as concrete batching and the storage of hazardous substances, may also give rise to adverse effects. Accordingly, many of the potential effects associated with the wind farm relate to the construction period.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[353] The applicant proposed the adoption of best practice measures to avoid erosion and sediment generation, as well as best practice methods to treat run-off that contains sediment. For Meridian it was submitted that all avoidance and treatment measures accord with Environment Canterbury's Erosion and Sediment Control Guidelines 2007. The applicant proposed, as conditions of consent, the use of management and monitoring plans. These included an overarching Environmental Management Plan ("**EMP**"), Supplementary Environmental Management plans ("**SEMP**") and a Flocculation Management Plan ("**FMP**"). The Regional Council agreed with this approach and these plans. Mr Breese for Meridian explained that this type of framework and suite of consent conditions has evolved through a number of wind farm projects, including Te Apiti, White Hill, West Wind, Tararua 3 and Mill Creek.[200]

[354] Mr B Handyside, for the Regional Council, had raised a number of concerns relating to erosion and sediment control. At caucusing, the experts considered these matters further and reached agreement on including additional provisions in the proposed conditions of consent. They then agreed that the potential adverse effects arising from the construction activities could be adequately avoided or mitigated if the proposed wind farm was undertaken in accordance with the proposed EMP and SEMP method and the proposed conditions of consent. At the commencement of the hearing there was one outstanding issue as to whether or not the Flocculation Management Plan should require all high risk sediment works, including the main access road to Turbine A11, to be treated with chemical flocculation. The experts for CRC and Meridian subsequently reached agreement, and a proposed method and condition of consent was presented.

[355] In relation to groundwater and the storage of hazardous substances, a condition of consent was proposed requiring that the bulk fuel facility not be located in an area where the groundwater is shallower than 30 metres below natural ground level. An additional condition controlling ponding also provides groundwater protection by preventing the discharge from the concrete batching plant from resulting in pools of liquid containing contaminants on the ground surface.

[356] The final proposed conditions of consent, as agreed between CRC and Meridian, were presented for the four consents sought from the CRC (referenced as CRC 111342, 111343, 111344 and 111354, and including Schedule 1 General Conditions applicable to all four consents).

[200] Transcript pages 291 and 292.

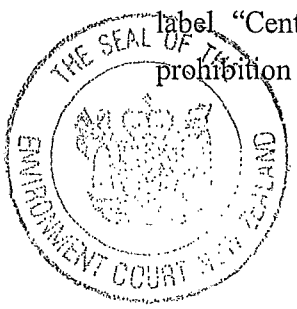
THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[357] The Meridian/HDC proposed conditions also contain conditions, under a heading "Environmental Management Plans," which require an EMP for construction works. These proposed EMP conditions are similar to, but not the same as, the CRC's conditions. We believe that in reality one EMP document will be prepared to meet the requirements of both Councils. We certainly do not consider it necessary for two documents dealing with construction activities. This could result in unnecessary confusion for all parties, including other operators and contractors undertaking works. We consider that a common or duplicate set of conditions should be prepared relating to the EMP and construction activities, where the requirements of the two Councils overlap. We accept that it will be appropriate for CRC's consents to contain additional conditions, as the primary responsibility for controlling and managing the construction activities arise under the regional consents.

[358] The Society's revised draft conditions only addressed the Meridian/HDC set of proposed conditions relating to the EMP. Several of the Society's amendments were accepted by the HDC and Meridian. Meridian did not accept the Society's request that the EMP be reviewed annually by the consent holder. We agree with submissions made for Meridian that, as the projected construction period is for around 18 months, it is unnecessary for there to be annual reviews. We consider that the proposed conditions adequately address the need for implementation and compliance with the EMP, and other subsidiary management plans, and there are provisions to amend the EMP. Taken together these conditions allow sufficient flexibility to respond to events and or changes.

[359] We note that the Meridian/HDC EMP conditions were amended to provide for the Society's request that the EMP be publicly available at two of the local public libraries and electronically via the web. We consider it is important that the full sets of consent conditions be also available in order to provide the necessary context to the EMP.

[360] For Tipapa, Mr John Carr requested a number of conditions relating to construction. We have commented already on the traffic-related ones. Consistent with his requirement that there be no construction traffic along Motunau Beach Road on all weekday evenings, on Saturday afternoons and Sundays of all weekends, and on all public holidays, Mr Carr also sought for the same prohibitions to apply to all construction activity on "Centre Hill". Even aside from the uncertainty about the area affected by his label "Centre Hill", we find that this request is unreasonable. The reason for the prohibition relates to noise, and there are other conditions which limit the noise levels



through standard conditions usually applied to construction activities. There is also a balance to be struck in the interests of the wider community, with construction being completed in a timely manner so that the period for potential for nuisance effects is not prolonged.

[361] Mr Carr also sought to define the exact location of the concrete batching plant, primarily so that it was not near the Tipapa boundary. Mr Wiles, for Meridian, explained that the location of the concrete batching plant was worked out later when the detailed construction strategy had been finalised, usually done in conjunction with the contractors. Mr Wiles was satisfied that any adverse effects relating to the concrete batching plant were controlled by the proposed conditions of consent, regardless of the precise location. We accept that to be the case. In addition to the Meridian/HDCVersion 4 construction noise conditions, there are a number of conditions in the Regional Council conditions relating to the concrete batching plant. We find that the proposed conditions allow the consent holder flexibility to select an efficient location for the concrete batching plant whilst at the same time set controls for managing any adverse effects.

Fire

[362] Two submitters, Mrs Messervy for the Society and Mr Higginson (an adjacent landowner to the wind farm), in particular, were concerned that the turbines would increase the risk of fire hazard. Mr Higginson asked who would be liable for loss or damage incurred as a result of fire. Evidence from Mr Breese, and submissions for Meridian, were that the actual risk of fire was very low, and the fire safety measures and equipment were outlined. The submissions also addressed the provisions and agencies outside of the RMA which are relevant where property is damaged by fire.[201]

[363] In answer to questions from Mrs Messervy, Mr Breese confirmed that it was usual practice to prepare a fire management plan in conjunction with the local fire brigade.

[364] We are satisfied that the risk of fire is appropriately recognised in the proposed conditions of consent: it is identified as a matter to be included in the EMPs in both the Meridian/HDC Version 4 and CRC's suite of proposed conditions.

[201] Closing submissions for Meridian, paragraph [291].

THE SEAL OF THE ENVIRONMENT COURT

Conclusion - construction

[365] To summarise in relation to the construction topic, we find that the proposed conditions, being Meridian/HDC Version 4 and the CRC suite (as amended in this decision), will appropriately address the potential effects of the construction-related activities through construction noise conditions, and the use of management plans and monitoring plans. Implementation of, and compliance with, these plans is also addressed through measures including inspections, maintenance, audits, reporting, monitoring and resourcing.

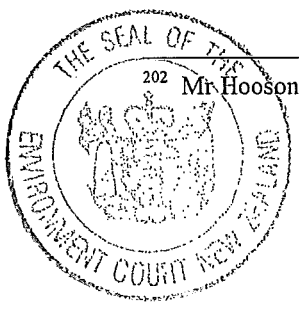
Ecology

Overview

[366] The potential adverse effects to ecological values on the site were identified as those relating to terrestrial ecology (with a focus on indigenous vegetation and habitats for indigenous fauna); aquatic ecology; herpetofauna (lizards and geckos), and avifauna (birdlife). Two ecological reports formed part of Meridian's Assessment of Environmental Effects; the "Ecological Values and Assessment of Effects Report" ("**the Ecology Report**"), prepared by Mr Hooson and Dr Keesing, and the "Assessment of Effects on Avifauna Report" ("**the Avifauna Report**") prepared by Mr Hooson.[202] In relation to avifauna, Meridian also obtained additional assistance from Dr Barea, an expert on the NZ falcon.

[367] Other ecologists with specific areas of expertise were engaged by both the HDC and CRC to peer review the work done by the experts retained by Meridian. The Society called evidence from Mr Onley, an experienced ornithologist and illustrator to present evidence on avifauna.

[368] All of the experts participated in expert conferencing before the hearing and a large number of matters were resolved and others further refined during the hearing itself. Overall the approach of all the experts under this topic was constructive, and where issues were unable to be resolved there were genuine differences of opinion about what might be required.



[202] Mr Hooson, evidence-in-chief, paragraph [12] and Appendices A and B

[369] Whilst various submitters raised issues concerning the effect of the proposal on other ecological values, the main focus in the hearing was on avifauna and in particular, the potential for birds to collide with the turbines and the effect this would have on specific species.

[370] We will first outline the ecological context relevant to the site and then consider each of the ecological values likely to be impacted by the proposal in turn.

Ecological context

[371] The site is contained within the Motunau Ecological District, which from an ecological perspective has been highly modified by pastoral farming. Only 1% of this Ecological District is protected either within public conservation land or by QEII covenants. We were told that pre-European settlement, the vegetation of much of the Ecological District would have been short tussock lands, cabbage tree tree land and mixed shrublands on the drier hills and ridges. Extensive areas of coastal mixed podocarp/hardwood forest are also thought to have been present along with kanuka forest, mixed hardwood forest and areas of riparian black beech forests. Little of the podocarp forests remain, but remnant broad leaf hardwood forests are still present, and shrublands are still extensive, though often confined to slopes and gullies.[203]

[372] There are three named waterways and a number of unnamed tributaries near the site. The streams draining the site flow into the Motunau River (to the east and south), into the Omihi Stream (to the south-west), and into the Tipapa Stream (to the north), and Cave Creek (to the north-east).[204] The Ecology Report noted that all of the aquatic systems that were surveyed have been modified by surrounding farming practices, removal of riparian vegetation, higher than natural nutrient status and sedimentation. It was noted that most of the streams are incised, turbid, have highly embedded substrates, marginal to sub-optimal aquatic habitat diversity and abundance, and poor to marginal riparian condition. Some of the streams on the south-eastern side of the site have more intact riparian cover, but despite this the ecologists observed these streams to be in similarly poor condition.[205]

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[203] Mr Hooson, evidence-in-chief, paragraphs [45] – [47]
[204] Mr Hooson, Appendix B, paragraph [3.2]
[205] Mr Hooson, Appendix B, paragraph [3.2]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[373] Our observations during our various site visits confirmed the ecologists' view. We observed as we drove around the area that, unlike some other farming communities in other parts of the country, there appeared to be little fencing of waterways and the waterways were in some parts choked with willows. We observe that, whilst some of the submitters might contend that the waterways are pristine, that is unlikely to be the case where stock has access to them.

[374] In the main, those submitters who wished to be heard on this topic did not appear to fully appreciate that the natural environment in this area is highly modified from an ecological perspective. We do however acknowledge the efforts of Mr and Mrs Symonds, Mr Leslie and Mr & Mrs D & V Meares to improve the ecological values on their properties.

Terrestrial ecology

[375] Mr Hooson (for Meridian) and Dr Lloyd (for the Councils) gave evidence on this topic. Both experts attended expert conferencing, and agreed on certain mitigation measures which were finally resolved during the hearing. These measures are represented in proposed conditions 68 – 70.[206]

[376] Due to various refinements in the placement of turbines and road, almost all but 4.17ha of indigenous vegetation and habitat for indigenous fauna on the site will be avoided.[207] The 4.17ha comprises three indigenous vegetation habitat types being: silver tussock grassland; rock outcrop habitats; and indigenous shrubland containing small numbers of "At Risk" plants (namely *Aciphylla subflabellata* and *Einadia allanii*).[208]

[377] Meridian has agreed to the following conditions:

(a) To register a legally binding covenant which provides legal protection in perpetuity of at least the three areas of rock outcrop habitat labelled as 0.7, 0.9 and 0.3 ha on the map attached to the proposed conditions (proposed condition 68);

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[206] Exhibit HGR1, 23 October 2012
[207] Mr Hooson, evidence-in-chief, paragraph [130]
[208] Joint statement of Dr Lloyd and Mr Hooson relating to Terrestrial Ecology, May 2012, paragraph [1]; Mr Hooson, evidence-in-chief, paragraph [130]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(b) Where the consent holder has to disturb or remove any of the "At Risk" plants as a result of the wind farm development, to establish and maintain an equivalent quantity of these plants on the site using direct vegetative transfer, planting or other appropriate methods (proposed conditions 69 and 70).

[378] No other party challenged these proposed conditions.

[379] We are satisfied that the proposed conditions will satisfactorily mitigate any potential adverse effects on the remaining 4.17ha of indigenous vegetation and habitat for indigenous fauna on the site that is unable to be avoided by the proposal. However, we direct the HDC to amend the conditions to provide for appropriate monitoring and reporting. Accordingly, we are satisfied that all potentially adverse effects on terrestrial ecology can either be avoided or mitigated.

Aquatic ecology

[380] Dr Lloyd (for the Councils) and Dr Keesing (for Meridian) agreed at expert conferencing that the potential for adverse aquatic effects arising from the proposal were generally negligible and required no mitigation, other than water discharges which might occur during construction. For this reason, Mr Wiles and Mr Breese (both of whom are involved for Meridian in the construction aspect of the proposal) also attended expert conferencing on this topic.

[381] Despite the above, the experts agreed that the catchments of the Tipapa Stream and upper catchments of the Motunau River have comparably higher aquatic ecological values than their neighbouring catchments. They agreed that it would be preferable to use spoil fill areas outside these catchments, but where that was not possible a process was agreed whereby discharges into those areas could be minimised. Conditions were proposed and agreed upon to meet any potentially adverse effects on these two catchments.

[382] The experts also agreed that the monitoring framework for aquatic values should incorporate a number of elements.[209] These provisions have also been

[209] Joint Witness Caucusing Statement (Mr Wiles, Mr Breese, Mr Keesing and Dr Lloyd) – Construction, Erosion & Sediment and Aquatic Ecology, 15 June 2012, paragraph [3]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

incorporated in proposed conditions. We have already discussed some of these matters in the earlier section on construction.

[383] Mrs Symonds was concerned about the potential for discharged sediment or silt to fill up local pools, including an in-line pond in Cave Creek.[210] Meridian offered to measure the volume and amount of sediment accumulated in the pond on the Symonds' property before commencing earthworks and then again at the conclusion of the earthworks. Meridian also agreed to remove any deposited material which is an issue, nonetheless contending that the pond is expected to receive minimal additional suspended sediment.[211] We are satisfied that these measures would resolve any potential adverse effects of concern to Mrs Symonds, however we are not certain that Meridian's offer is reflected in the proposed conditions. We direct the CRC to amend the conditions, if necessary, to include this matter.

[384] Mrs Messervy was concerned that the construction of the wind farm would result in degradation of streams due to runoff from the roading associated with the project.[212] She was also concerned that fragile stream beds would be damaged. Mr Breese's evidence for Meridian, which was not significantly challenged in cross-examination, was that there is no risk of this occurring given the erosion and sediment controls proposed. This is particularly so given that the discharge of water from the existing farm track network will be improved by the replacement roading, and because there are no stream crossings associated with the proposal and therefore no work required directly in streams.[213] We accept this evidence. We are satisfied that these measures resolve any potential adverse effects of concern to Mrs Messervy.

[385] Mr Carr for Tipapa was concerned about the Tipapa Stream, which runs through his property. He described this stream as pristine. We do not doubt that Mr Carr genuinely believes the stream to be pristine, but we noted during our site visit to Tipapa that the part of the stream which we could see was unfenced, therefore enabling stock direct access to it. Mr Carr wished to secure a separate monitoring site in the Tipapa Stream near to where the stream enters his property. Dr Keesing was not averse to this suggestion. We deduce that this is provided for in the CRC's Schedule 1 General

[210] Dr Keesing, rebuttal evidence, paragraph [31]
[211] Dr Keesing, rebuttal evidence, paragraph [47] and Meridian submissions on ecological effects, paragraph 44.
[212] Mr Breese, rebuttal evidence, paragraph [32]
[213] Mr Breese, rebuttal evidence, paragraph [32] and Mr Wiles, rebuttal evidence, paragraph [61]

THE SEAL OF ENVIRONMENT COURT NEW ZEALAND

Conditions (condition 19(a)) but we direct the CRC to amend the conditions, if necessary, to provide for this matter.

[386] We conclude that the proposed conditions (as amended in this decision) satisfactorily mitigate the risk of adverse effects on aquatic ecology.

Herpetofauna (lizards and geckos)

[387] In his initial ecological survey of the site, Mr Hooson undertook a visual search for lizards at eleven different places[214] considered to be suitable habitat areas for herpetofauna. Early on in the survey, it became clear that Canterbury gecko were abundant in the greywacke outcrops on the plateau tops at the site.[215] The Canterbury gecko is described as a species "At Risk", being in gradual decline, and is a winsome animal, hiding in deep crevices in rock outcrops during the day and coming to life at night. Mr Hooson recommended that potential areas of habitat for the Canterbury gecko should be avoided, and if not possible, mitigated by implementing a trap and transfer programme in conjunction with the construction of long-term artificial habitat. The common skink was also recorded at the site, but it is not threatened.

[388] Dr Tocher (for HDC) reviewed Mr Hooson's evidence. She identified the main potentially adverse effects on herpetofauna as habitat disruption,[216] habitat fragmentation,[217] and ongoing disturbance through use of machinery on the roads and during construction.[218]

[389] Dr Tocher and Mr Hooson participated in expert conferencing and continued their dialogue during the hearing. Proposed conditions 62-67[219] now record the agreement between the experts about how any adverse effects on herpetofauna will be managed. Proposed condition 62 provides that the consent holder will, where possible, avoid adverse effects on rocky habitat by seeking advice from a suitably qualified and experienced herpetologist during the detailed design phase. Proposed condition 64(c) provides that there must be a survey prior to construction to identify appropriate

[214] Mr Hooson, evidence-in-chief appendix B, paragraph [2.7]
[215] Mr Hooson, evidence-in-chief, paragraph [60]
[216] Dr Tocher, evidence-in-chief, paragraph [4.11]
[217] Dr Tocher, evidence-in-chief, paragraphs [4.12]-[4.17]
[218] Dr Tocher, evidence-in-chief, paragraphs [4.18]-[4.23]
[219] Exhibit HGR1 23 October 2012

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

translocation sites for the Canterbury gecko and the Herpetofauna Management Plan must include both methods for the provision of alternative Canterbury gecko habitat at the relocation site, and relocation success criteria (proposed conditions 64(d) and (e)).

[390] We are satisfied that the proposed conditions satisfactorily mitigate any adverse effects on the Canterbury gecko and other herpetofauna.

Avifauna

Overview

[391] The potential risks for avifauna are:

(a) the loss of habitat, and

(b) the risk of death[220] from collision with wind turbines (known as "collision mortality").

The real issue was the risk of collision mortality rather than loss of habitat and the evidence focussed on this.

[392] To assess the extent of collision mortality risk, Mr Hooson for Meridian completed two studies (referred to in his evidence as the "Level 1 study" and the "Level 2 study") which included surveying the species of birds present at the site. These studies showed that most of the birds frequenting the site are introduced species. Of the native bird species observed to be present, Mr Hooson's opinion was that only a small proportion of them are active at heights that put them at risk of collision mortality and with the exception of the black-fronted tern, NZ pipit and NZ falcon, are not threatened species, but are widespread and abundant.

[393] Given the presence of a breeding pair of NZ falcon at the site, Dr Barea, an expert on this species was retained by Meridian to advise it on how best to protect this species. It has been assessed as being "*Nationally Vulnerable.*"

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[220] Injury is less likely but included under this heading as well

[394] Dr McClellan (for the HDC) reviewed Meridian's evidence on the effects on avifauna. Her evidence focussed particularly on the potential risks to the NZ falcon and the black-fronted tern. Her view was that generally speaking the mitigation proposed for the NZ falcon was suitable, but she did not think that sufficient information had been provided by Meridian on the black-fronted tern. She recommended further survey work be undertaken.

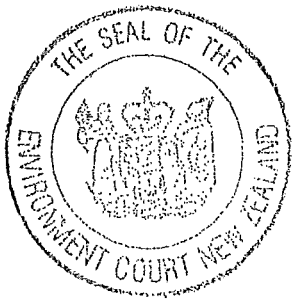
[395] Mr Onley, an ornithologist, and illustrator gave evidence for the Society. Mr Onley disagreed with methodology used for the risk assessment (specifically the use and application of avifauna survey methods and the timing of the surveys), the conclusions that could be reached from it given the amount of data obtained (he thought more surveys including nocturnal surveys needed to be done), and the extent of post-construction monitoring proposed.

[396] Several individual submitters were also concerned about the effects of the proposal on avifauna. Mr Meares and Mr Messervy asked selected questions of the expert witnesses. Mr Carr expressed concern about the impact on the birdlife he has observed to be present at Tipapa, including the paradise duck (which we were told mates for life), the Australian harrier, the NZ falcon and the pied-oystercatcher.

[397] The experts participated in expert conferencing and with the exception of Mr Onley had, by the end of the hearing, agreed on proposed conditions that in their view would avoid and mitigate any potentially adverse effects on avifauna. Essentially the proposed conditions require an Avifauna Panel to be convened of not less than three suitably qualified and experienced independent avifauna experts (proposed conditions 41 and 42) to make assessments and recommendations to the consent holder about:

(a) whether the adverse effect on any bird species listed as "*Threatened*" (*nationally critical, nationally endangered or nationally vulnerable*) or "*At Risk*" (*declining, recovering, relict or naturally uncommon*) is more than minor, and if so any remediation or mitigation measures to reduce that effect so that it is no more than minor; and

(b) the adequacy of the bird monitoring required by conditions 49-60.



[398] The consent holder will be required to implement any recommendations of the Avifauna Panel (proposed condition 46), and if it fails to do so then the HDC may review any or all avifauna-related conditions (proposed condition 47).

[399] There was an issue about what was meant by "*more than minor*". Meridian referred us to ***Foodstuffs (South Island) Limited v Queenstown Lakes District Council***[221] where the Court held that:

> ...whether adverse effects are "minor" or "more than minor" depends on the circumstances and context. ... any adverse effect which changes the quantity or quality of a resource by under 20% may, depending on context, be seen as minor.

[400] The Court recognised that:

> ... where a significant habitat of a threatened indigenous species is at risk in a region where the species' population has already reduced to 20% of its former population, even a small (say 1%) reduction in its habitat or population may be more than minor. It depends on the species, the factors on which its population viability depend and the margins of error in the analysis.[222]

[401] In answer to questions, however, it was accepted that this case concerned an application for a non-complying activity where one of the threshold tests under s104D is whether the adverse effects of the activity on the environment will be minor. This case does not require an assessment under s104D as the activity we are considering is not non-complying. We agree that the question of measuring an adverse effect depends on the quantity or quality of the resource, but we do not necessarily accept the percentage referred to in ***Foodstuffs*** as being definitive across the board in all situations. Each case will depend on the facts that are presented.

[402] There was an issue about whether or not the Avifauna Panel might be required to determine matters that offended against the principle of non-delegation of judicial powers.[223] We accept that the case law confirms that the Court may confer upon some other person the function of settling matters of detail in a condition imposed, where the matter is to be settled according to that person's own standards based on that person's own skill and experience as a certifier. We agree that the proposed conditions require the Avifauna Panel to exercise a judgment rather than to resolve a dispute, and for this reason

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221 [2012] NZEnvC 135, paragraphs [72] and [74]
222 Ibid, paragraph [72]
223 ***Olsen v Auckland City Council*** [1998] NZRMA 66 (HC) page 10

THE SEAL OF ENVIRONMENT COURT NEW ZEALAND

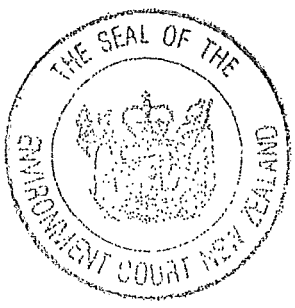
the proposal does not in our view offend the principle of non-delegation of judicial powers. We also agree that as the effect on each species will be different depending on a number of factors relevant to that species, it would be unwise to seek to define "*more than minor*" in the conditions. We are satisfied that the Avifauna Panel is well placed to exercise this judgment.

[403] We deal next with the general issue relating to the sufficiency of pre-construction data, before moving on to consider the specific risk assessments for the NZ falcon, NZ pipit, black-fronted terns and shorebirds. We will then consider the adequacy of the proposed post-construction monitoring conditions.

Has sufficient pre-construction data been obtained?

[404] There is a risk of collision mortality to the bird species frequenting the site. As Mr Onley pointed out, the post- monitoring data obtained from the West Wind site shows a collision mortality rate of 5-6 birds per turbine per year. No doubt some people will find any loss of birdlife in this manner to be unacceptable but the RMA is not a "no effects" statute. The question for us is whether or not in the end analysis the effect of collision mortality from wind turbines on a particular bird population can be said to be adverse.

[405] The key question for us is whether we can rely on the bird surveys and monitoring undertaken so far, and the further monitoring proposed, to provide adequate data to support the predictions about collision mortality. Mr Onley made a number of very good points about the paucity of general bird census information in New Zealand. He was well placed to do so, because before coming to New Zealand in the 1970s, he lived in England where he studied geography at Cambridge University before working for the British Trust for Ornithology, and then at the Edward Grey Institute for Field Ornithology at Oxford. We acknowledge Mr Onley's evidence that, compared to Britain, in New Zealand there are fewer volunteers participating in bird surveys. As well, until recently the official (as opposed to volunteer) data collection for avifauna has typically been undertaken by the Department of Conservation or those studying at universities. It is not surprising, therefore, that the data collected has focussed on indigenous species and more particularly on those that may be at risk.



[406] The bird survey methodology used by Mr Hooson was set out in detail in the Avifauna Report. Mr Onley thought that more frequent point counts should have been used and a more robust bird census to establish the birds frequenting the site both during the day and at night. Essentially Mr Onley's point was that not enough data has been collected to enable reliable predictions about effects on bird species to be made. He also considered that the risk assessment should take into account the proportion of the population of each species that are present at the site,[224] cautioning that widespread and common species should not be dismissed as being beyond risk.[225] He was wary of averaging out the predicted mortality rates and interpreting the significance of them to national rather than local populations.[226]

[407] Mr Hooson argued that the methodologies upon which the avifauna surveys were based are specifically designed for assessing the impacts of wind farms on birds, and are well-developed both in New Zealand and overseas.[227] During the Level 2 study fixed period counts were used and Mr Hooson told us that these are a standard bird utilisation method used at wind farm sites.[228] He told us that these methods are based on guidelines developed in Australia and Canada, and are the most common method employed for generating quantitative data on bird use at a potential wind farm site.[229]

[408] Whilst Mr Hooson disagreed that the methodology used was insufficient,[230] proposed conditions 49-50 now provide for an additional year of pre-construction monitoring and include the bird breeding season of August, September and October. Further pre-construction monitoring can be required by the Avifauna Panel if this monitoring shows that local or national populations are likely to be adversely impacted in sufficient numbers by mortality from collisions.

[409] In relation to the common species observed at this site, the effect cannot be described as adverse, but we accept this depends on the accuracy of the predicted mortality rate. We are satisfied that the proposed conditions establishing the Avifauna

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224 Mr Onley, evidence-in-chief, paragraph [31]
225 Mr Onley, evidence-in-chief, paragraph [28]
226 Mr Onley, evidence-in-chief, paragraphs [29].
227 Mr Hooson, rebuttal evidence, paragraph [70]
228 Mr Hooson, rebuttal evidence, paragraph [74]
229 Mr Hooson, rebuttal evidence, paragraph [74]
230 Mr Hooson, rebuttal evidence (Dr McClellan), paragraphs [53]-[68];Joint statement of avifauna experts, 13 June 2012, paragraph [9]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Panel means that any bird species that is found to be represented in the collision statistics is able to be addressed by them.

[410] We agree that in an ideal world there would be more data available about bird populations in particular parts of New Zealand, but we observe that the responsibility for improving this is a collective responsibility. We do not agree that this should be the task of Meridian to the extent proposed by Ms Meares, Mr Onley or Mr Carr, but it is certainly open to those in the community to do something about the lack of data should they choose to do so. Overall, we are satisfied that the data collated by Mr Hooson is adequate for us to reach an informed view about the risk of collision, and we are also satisfied that the proposed conditions are nimble enough to respond should there be unanticipated adverse effects on any non- threatened population species.

[411] The more particular focus should however be on indigenous species and it is appropriate that those threatened or at risk populations receive closer scrutiny and attention than those that are not. Mr Messervy referred to morepork and the shining cuckoo at Greta Valley, but neither species are threatened or at risk. Mr Onley suggested nocturnal surveys, but Dr McClellan and Mr Hooson did not think these were required. Dr McClellan's view was that a well-designed and thorough collision mortality monitoring programme is the preferred manner for detecting the mortality of all bird species that use the site.[231] We agree with Dr McClellan. We are persuaded that nocturnal surveys are not required at this point.

NZ falcon

[412] The initial assessment by Mr Hooson identified a resident breeding pair of falcons on the site. Because they are a threatened species, Dr Barea a falcon expert was retained to advise Meridian on this topic.

[413] Dr McClellan brought her expertise to bear on the topic for the HDC and Mr Onley also did so for the Society. The experts attended expert conferencing before the hearing, and by the end of it Drs Barea and McClellan had reached agreement that any adverse effects arising from the proposal on the NZ falcon could be successfully mitigated by conditions. The proposed conditions contain specific provisions relating to the NZ falcon.

[231] Dr McClellan, supplementary evidence, paragraph [13 (c)]

SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[414] Mr Onley described the data obtained for the breeding pair on the site as a step up from that which had been done for other wind farm sites, but he was not convinced that enough data had been collected for other non-resident falcons using the site. He referred to information from the Ornithological Society which suggested that falcons move around a lot in the autumn and his understanding that a breeding pair of falcons at the White Wind site have continued to nest on the site, despite one of their nests having been removed.

[415] In relation to the NZ falcon we will deal first with whether there has been enough data collected to predict the risk of collision mortality and then with our assessment of the adequacy or otherwise of the proposed mitigation.

Has enough data been collected to predict the risk of collision mortality for the NZ falcon?

[416] The initial assessment by Mr Hooson, later aided by Dr Barea, identified the resident pair of NZ falcons had successfully nested within the proposed site for the 2009/2010 and 2010/2011 breeding seasons. The pair was monitored over both years to assess their breeding success, and they were radio-tracked over the 2010 winter and subsequent breeding season to assess their use of habitat and home range within the context of the site. Based on this data and his knowledge of falcons, Dr Barea described the potential for loss of habitat for the falcons to be inconsequential. The real risk related to the potential for the falcons or their offspring to collide with the turbines. The data collected about the movement patterns of this pair was used in a collision-risk model, to estimate the probability of this risk eventuating.[232]

[417] The collision risk modelling undertaken by Dr Barea estimated that, on average, the time between potential collisions for the resident adult falcons would be approximately 4-5 years, and every 50 years for juveniles during a 3-month pre-dispersal period, after which they are expected to disperse from the site. If there was a collision, Dr Barea's opinion was that it would constitute a local adverse effect, but not a significant effect at an overall population level.[233] Drs Barea and McClellan agreed that the risk of collision is likely to be low, with Dr Barea considering it to be very low based

[232] Dr Barea, evidence-in-chief, paragraph [1]
[233] Dr Barea, evidence-in-chief, paragraph [5]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

on the available literature on falcon home-range size, and frequency of long distance movements.[234]

[418] Mr Onley did not think that the assessment went far enough to address the use of the site by non-resident falcons particularly breeding pairs,[235] but Dr Barea did not support Mr Onley's view, that a wider survey area was required. Dr Barea thought that such a survey beyond the hill country into the wider landscape would be ineffective, as in his view, the wider landscape is unlikely to contain suitable falcon nesting habitat due to the conversion of indigenous vegetation to pasture, and the absence of landscape features such as hill country gullies that falcons usually select for nesting.[236] Dr McClellan noted that the use of the site by non-resident falcon remains unknown.[237]

[419] Whilst not wishing to derogate from Mr Onley's considerable expertise as an ornithologist of many years, and despite Dr McClellan's view, we are satisfied that we can rely on Dr Barea's opinion on this issue, given his specialised expertise in relation to falcons. We accept, however, that the predictions made by the modelling would need to be closely assessed against the actual experience of the monitored site when the wind farm is operational.

Is the proposed mitigation sufficient?

[420] Dr Barea proposed, and Meridian has accepted, that a specific Construction Falcon Management Plan is required (proposed condition 52(b)).[238] This requires a report to be prepared by a suitably qualified independent ecologist familiar with falcon reproductive behaviour that:

(a) details the monitoring of the falcons in the season that construction will occur to determine whether they are nesting or not;

(b) outlines a process for transferring falcon eggs or nestlings to an appropriate facility, and the subsequent release of fledglings within the Motunau

234 Joint Statement of Avifauna Experts, 13 June 2012, paragraph [7]
235 Mr Onley, evidence-in-chief, paragraph [38]
236 Dr Barea, rebuttal evidence, paragraph [14]
237 Dr McClellan, supplementary evidence, paragraph[8]
238 Exhibit HGR1, 23 October 2012

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Ecological District if falcons are found to be nesting within 500m direct line-of-sight of any locations where construction activity is visible; and

(c) outlines the process for restricting construction to distances 200m beyond any nest while active, where it is less than 500m from construction activities but not within direct line-of-sight.

[421] The proposed conditions also require a Falcon Release Management Plan (proposed condition 52(c)) again to be prepared by a suitably qualified independent ecologist familiar with falcon reproductive biology and falcon release programmes which details the release programme, and makes provisions for eight juvenile falcons to be released by the hack method in the Motunau Ecological District every ten years from the date any wind turbine first generates electricity.

[422] Drs Barea and McClellan agreed that the release programme is sufficient to offset any mortality caused by the turbines,[239] thereby providing a conservation gain rather than simply a no-net-loss approach.

[423] Mr Onley disagreed with Drs Barea and McClellan that the Construction Falcon Management Plan provisions provided a suitable avoidance option.[240] His main concern was that the release of juvenile falcons would place them at risk from turbine strike.[241] Whilst we accept it was legitimate to raise this as an issue, the intent of the Construction Falcon Management Plan is to release the fledglings in a suitable location away from the site, but in the Motunau Ecological District, and we are mindful of Dr McClellan's evidence that the captive rearing and release of falcon is a proven technique for establishing or augmenting populations. We refer to Dr McClellan's opinion that the birds released away from the wind farm site will be at lower risk of collision.[242] We are mindful of what Mr Onley told us about a breeding pair at White Wind, but we were not provided with any context to this statement that means we are able to give it much weight.

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239 Joint Statement of evidence Avifauna Experts, 13 June 2012, paragraph [8].
240 Mr Onley, evidence-in-chief, paragraph [40]
241 Mr Onley, evidence-in-chief, paragraph [40]
242 Dr McClellan, supplementary evidence, paragraph [9]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[424] Meridian submitted that it has adopted a very conservative approach, by assuming that loss will actually occur, but it of course may not.[243] We accept that the establishment of a pair in the absence of loss would represent an enhancement to the falcon population.[244] The evidence from Dr Barea establishes that even if, during any 10 year period, the resident falcons are lost from the site, the outcome is expected at a minimum to be one of "*no net loss*".[245] If this proves to be incorrect, then the proposed conditions permit the Avifauna Panel to make recommendations to ensure any effects are "*not more than minor*". We agree that this addresses Mr Onley's concern about the accurateness of the risk assessment for non-resident falcon that occasionally use the site, although we also agree with Dr McClellan that this situation needs to be carefully monitored.

[425] Overall, we are persuaded by the evidence of Drs Barea and McClellan that the proposed mitigation measures deal responsibly and appropriately with any potential adverse effects of the proposal on the NZ falcon and in particular the breeding pair resident on the site. We are satisfied that the intent of the proposed conditions is at the least to provide a "*no net loss*" to this species, but there is a strong possibility, in our view, that it will in fact result in a conservation gain for the species.

[426] We are satisfied that any adverse effects on the NZ falcon can be mitigated by the proposed conditions, subject to amendments to provide further clarity in relation to the implementation, monitoring and reporting of the management plan. As we read the proposed conditions: condition 53 requires the consent holder to implement the "construction and post-construction avifauna monitoring and management plan" (of which the falcon management plans are a part); and conditions 54 and 55 require monitoring and reporting of bird strike; but we do not understand there to be a condition requiring monitoring and reporting of the falcon management plans. We direct the HDC to amend the proposed conditions, if necessary, to provide for monitoring and reporting in relation to all parts of the avifauna plan required under condition 52. We also consider that it would be helpful if the bird collision matters listed in condition 52(a) were linked (or cross referenced) to the bird strike requirements under conditions 54 and 55.

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[243] Dr Barea, rebuttal evidence, paragraph [9]
[244] Dr Barea, rebuttal evidence, paragraphs [9] and [30]
[245] Dr Barea, rebuttal evidence, paragraph [9]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[427] At this point we record that in general there needs to be some rationalisation of the avifauna conditions in particular, and some more consistency in the conditions overall. For example, monitoring and reporting is required of the herpetofauna management plan under conditions 66 and 67, and similar provisions should apply to other management plans. There is also some confusing overlap/duplication between the numerous avifauna conditions: for example amongst the groups of conditions (49, 50, 51) and (52, 54, 55) and (56 – 60). Accordingly, we direct the HDC to review all of the conditions (and in particular those relating to avifauna) and to amend them to rationalise them and to provide consistently for monitoring and reporting.

NZ pipit

[428] The NZ pipit is a species that has been assessed as *At Risk (Declining)*. During Mr Hooson's surveys this species were recorded as being present over the turbine footprint at turbine blade height for 21% of the observations. [246] Mr Hooson's opinion was that this represents a moderate collision risk for this species at the site, which may have an impact at the local population level. His overall view was that this is unlikely to result in adverse effects for the overall New Zealand population.[247]

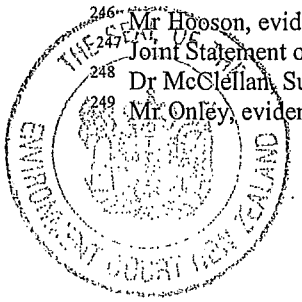
[429] Dr McClellan in her supplementary evidence specifically dealt with the NZ pipit.[248] Whilst accepting that the local population level might be impacted by collision with turbines, in her view there is unlikely to be any population effect. This is because, while birds resident or moving through the site are fairly at risk of collision, the species is widespread throughout much of New Zealand and is relatively common.

[430] Mr Onley was not convinced. He was concerned that the approach by the other experts was an example of the danger of assuming that the numbers of a species recorded in a survey is necessarily a good indication of the total population using the site.[249]

[431] We accept the evidence of Mr Hooson and Dr McClellan that there are unlikely to be adverse effects on the national NZ pipit population should some species mortality occur as a result of turbine collisions, but we cannot ignore that there could be a local population impact and that the status of this species is *At Risk (Declining)*. In our view, it

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246 Mr Hooson, evidence-in-chief, paragraph [94]
247 Joint Statement of Avifauna Experts, 13 June 2012, paragraph [18]
248 Dr McClellan, Supplementary evidence, paragraph [13b]
249 Mr Onley, evidence-in-chief, paragraph [29]-[31]



is unclear whether or not the NZ pipit at a local level is potentially at risk of being adversely impacted by the proposal. Nonetheless we think that careful monitoring of this species by the Avifauna Panel will be sufficient to mitigate any adverse effects on this species. The current proposed conditions (conditions (49, 50 and 51) coupled with proposed conditions 43 and 44) enable the Panel to require further pre-construction monitoring and/or make recommendations should the additional monitoring in proposed condition 49 reveal a risk that sufficient number of NZ pipit might be impacted by collision mortality. Given the evidence we have heard we consider it is necessary to identify the NZ pipit by specifically listing it as a species to be addressed in the conditions included under the heading "Avifauna Management". We direct the HDC to so amend the conditions.

The black-fronted tern

[432] The black-fronted tern has been assessed as *Threatened (nationally endangered)*. At expert conferencing Mr Onley and Dr McClellan expressed the view that insufficient data had been provided about the presence of this species at the site to determine the potential impact of the proposal on it.[250] Since then, an interim Pre-Construction Avifauna Monitoring Report has been prepared which presents the findings of all the survey data collected between November 2009 to January 2010, and November 2010 to July 2011, and this includes detailed information on the use of the site by black-fronted tern.[251]

[433] Based on the information currently available, Mr Hooson considers that the risk to the black-fronted tern population is likely to be low because:

(a) black-fronted terns are not resident at the site, but appear to be infrequent seasonal visitors;

(b) black-fronted terns were not recorded during 179 hours of formal point count surveys;

(c) no birds were observed during the six-month period of surveys between February and July;

250 Joint Statement of Avifauna Experts, 13 June 2012, paragraph [19]
251 Mr Hooson, Rebuttal evidence, paragraph [55]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(d) the majority of the observations during the roaming counts were away from proposed turbine locations;

(e) black-fronted terns generally have excellent flight manoeuvrability;

(f) internationally, terns have suffered low rates of mortality at wind farms, with the exception of three sites in Belgium;[252] and

(g) in a recent review of the potential impacts of New Zealand wind farms on New Zealand birds, the Department of Conservation concluded that it is likely that the black-fronted tern population would be compromised if wind turbines were erected within or adjacent to nesting colonies or where terns congregate to forage.[253]

[434] We are satisfied given this additional information that the risk to the black-fronted tern population is likely to be low. However as an additional safety measure in our view it should be specifically addressed and listed, in the same way as we have directed for the NZ pipit, in the further monitoring and management required in the conditions under the heading "Avifauna Management".

Migrant shorebirds

[435] Proposed conditions 56-60 now provide specifically for additional monitoring of migrant shorebirds prior to construction. Essentially, the proposed conditions require the following:

(a) the monitoring programme for migrant shorebirds must have its methodology approved by the Avifauna Panel, and the programme must be supplied to it;

(b) monitoring must be undertaken during one northward (summer) migration (January-February) and one southward (winter) migration (July-August);

(c) monitoring must be undertaken from a sufficient number of locations to ensure adequate average of the site (as determined by a suitably qualified and experienced avian ecologist) to record the flight paths of birds moving across the site;

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252 It was noted that one of these sites turbines were sited close to gull and tern nesting colonies.

253 Mr Hooson, Rebuttal evidence, paragraph [56]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

(d) if migrant shorebirds are recorded crossing the proposed wind farm site in sufficient numbers to indicate that mortality from collisions could impact regional or national populations, as determined by the Avifauna Panel, then a further monitoring programme must be undertaken prior to construction activities commencing, to identify any potential adverse effects on migrant shorebirds and how to appropriately avoid, remedy or mitigate them;

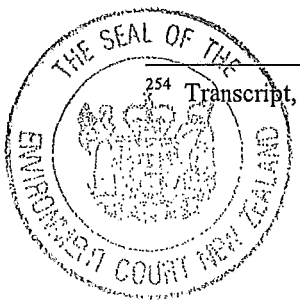
(e) the consent holder must supply the consent authority and the Avifauna Panel with a report prepared by a suitably qualified and experienced avian ecologist on the monitoring undertaken pursuant to conditions 56-69, and the report must be submitted within 3 months of completion of the monitoring.

[436] As a result, Dr McClellan agreed that her concerns about migrant shorebirds had been addressed. Mr Onley, whilst pleased to see the improvements to the proposed conditions, did not think sufficient detail had been provided to deal with different migrant shorebirds patterns such as the North/South migrations in August/September and the coastal/inland migration that might involve nesting inland from July- September.[254] In his view the type of monitoring needed to be more detailed. He recommended sound recording which in his view was quite cost effective.

[437] We are satisfied that the proposed conditions for migrant shorebirds are a step in the right direction. Whilst we tend to agree that more work needs to be done about the detail of the monitoring required, in our view the Panel will be in a good position to review the proposed monitoring programme and make recommendations about what might be required. The proposed conditions provide for such a process.

Is the monitoring proposed post-construction adequate?

[438] All of the experts agreed that bird strike monitoring needs to done regularly and thoroughly. The disagreement was about the frequency of the checks. Proposed condition 52(a) requires monitoring protocols for bird collision to be included in the avifauna management plan, and condition 54 specifies in further detail that the consent holder must monitor the instances of bird strike at the wind farm as follows:



[254] Transcript, 1 October 2012, page 1919.

(a) within the first two years of operation (commencing from the date all wind turbines are generating electricity, or within six months of any wind turbine first generating electricity, whichever is earlier), retrieving any bird carcases or other signs of bird strike, including feather spots or partial carcases, on a fortnightly basis;

(b) recording the retrieval of any sign of bird-strike, including feather spots and partial or whole carcases at the site, including the date and location on a New Zealand map grid coordinate;

(c) recording the identification of and if possible the age class (ie juvenile or adult) of any injured bird, including the date and its location on a New Zealand map grid coordinate; and

(d) recording of any injured bird or carcases of the bird species listed as "*Threatened*" or "*At Risk*" and assuring that, if it is on such a list, it is assessed by a suitably qualified and experienced independent veterinarian to, where possible, record each specimen's species, age class (ie. juvenile or adult) and probable cause of injury or death.

[439] A detailed annual report on the bird strike monitoring under condition 54 must also be provided to the consent authority and the Avifauna panel under condition 55.

[440] Ms Meares, in her cross-examination of Mr Hooson, challenged how effective fortnightly monitoring would be, given that it does not necessarily take into account the removal of bird carcasses by predators. Mr Hoosen thought that the fortnightly monitoring was adequate and more frequent than that which was undertaken at most wind farm sites. We agree with Ms Meares that absence of evidence is not evidence of absence. Nonetheless, a balance must be achieved. The conditions provide for the monitoring protocols and reporting to be prepared by an avifauna expert and for it to be reviewed by the Avifauna Panel. Again we consider that this Panel will be well placed to recommend any changes that may be considered appropriate.

[441] Mr Onley suggested that the monitoring results should be made more public, so as to provide more of a data base on the overall effect of wind farms on avifauna. Whilst a laudable idea, we are not certain whether or not Meridian had concerns about making detailed information publicly available, particularly if other consent holders may not be

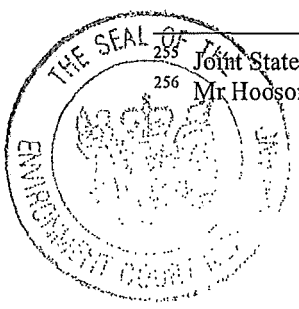
THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

so required. It is unclear whether or not this is already provided for in the proposed conditions. It seems to us that the combination of the reporting to the Avifauna Panel and to the consent authority, along with the operation of the Community Liaison Group may already provide for this, at least during early years. We direct the HDC to consult with Meridian and to clarify the conditions relating to making reports and information publicly available.

Other proposed avifauna conditions

[442] Mr Onley's opinion was that Meridian's resource consent conditions should specify blade strike mortality thresholds for species of concern.[255] Dr McClellan and Mr Hooson disagreed that this requirement is needed until it is known what actual effects there are (if any).[256] We agree. Proposed condition 46 requires the consent holder to implement any recommendation by the Avifauna Panel so as to ensure the effects of the wind farm on any bird species listed as "*Threatened*" or "*At Risk*" are not more than minor. We are satisfied that these proposed conditions are a better way to deal with any effects as they are revealed.

[443] We must note that proposed condition 48 provides that the Avifauna Panel will be disbanded if, after five consecutive years (starting on the date any wind farm turbine first generates electricity) the monitoring of any conditions 49-60 demonstrates that there are not more than minor effects on bird species listed as "*Threatened*" or "*At Risk.*" The exception to this is if proposed condition 61 applies. Proposed condition 61 enables reduced monitoring to occur in certain circumstances. It provides that if two years of monitoring, in accordance with conditions 49-60 shows that the operation of the wind farm in the opinion of the Avifauna Panel is having no or a minimal effect on "*Threatened*" or "*At Risk*" species, monitoring may be reduced in frequency to the level as advised by the Panel, or discontinued following agreement with the consent authority. We agree that it is appropriate to provide for such conditions in the event that the effects do not warrant continued monitoring. However it would be more helpful if these two conditions were scheduled together in the suite of conditions. This is a matter that the HDC is to consider as a part of the overall rationalisation of the conditions that we have directed them to undertake.



[255] Joint Statement of Avifauna Experts, 13 June 2012, paragraph [23]
[256] Mr Hooson, Rebuttal evidence, paragraph [99]

Conclusion - avifauna

[444] Overall, we are satisfied that the proposed conditions with the amendments we have directed will appropriately avoid, remedy or mitigate any potentially adverse effects on avifauna.

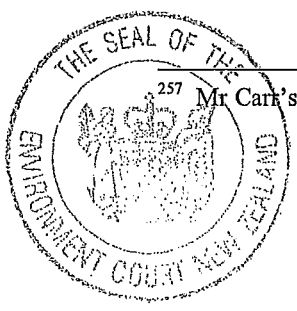
Recreation and Tourism

Overview

[445] Some submitters, in particular the Society, Mr Thomas and Ms Vincent (vineyard owners from Waipara) and Mr Carr for Tipapa, argued that the wind farm would have an adverse effect on recreation values and tourism activities near the site. This opposition was based on the premise that the visual and/or noise effects arising from the proposal would impact to such a degree on the amenity of the area that potential tourists and users of recreation facilities nearby would be deterred from participating in what the area has to offer. Mr Thomas contended that the combined effect of the Mt Cass wind farm and this proposal would impede Waipara's ability to develop fine wine tourism. Mr Carr contended that the impact on his business at Tipapa would be "so *great and so disastrous that it will damage the entirety of my business and my investment*".[257] Meridian and the HDC disagreed.

[446] The evidence on this topic was given by: Mr Greenaway, a consultant leisure and open space planner (for Meridian); Mr Burns, an independent tourism sector director and advisor with a commerce background (for HDC); Mr Pearson, a tourism manager with a resource management and tourism background (for the Society); Mr Carr for Tipapa; and Mr Thomas.

[447] We will first outline what tourism and recreation activities are available near the site, before analysing the potential effects of the proposal on these activities, with specific reference to the Waipara area and Tipapa.



[257] Mr Carr's mini-opening on Tourism

What are the current recreation and tourism activities near the site?

[448] The proposed site is within the Alpine Pacific Triangle, a marketing area designed to delineate the main centres of tourist activity within the Hurunui District. The main tourist destination is Hanmer Springs, with the northern-most tip of the triangle offering tourism activities at Kaikoura and the southern-most tip of the triangle comprising the Waipara region. Of the three, the Waipara region is nearest to the site and the least developed as a tourist destination.

[449] The Waipara region is promoted for its vineyards, wineries and other local produce.[258] It is also associated with the Weka Pass Railway, walking tracks and a nature reserve.[259]

[450] Nearer to the site, the recreational activities included Motunau Beach (popular for camping, fishing, surfing and diving activities),[260] the Scargill Golf Course and Domain, and the Omihi Reserve (a social and sporting facility that hosts the Glenmark Rugby Club). In Greta Valley there is the Cafe and Bar and several accommodation options including the Greta Valley Camping Ground and bed and breakfast-style services.

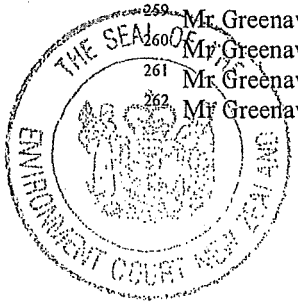
[451] There is also Tipapa, which offers the activities previously described on a seasonal basis from October to April.[261]

What does the research say about the relationship between tourism and wind farms?

[452] As part of his evidence, Mr Greenaway reviewed the available international research on the effects of wind farms on tourism and recreation activities. He was the only expert to do so. This literature review indicated that there is a mix of reactions to wind farms from a tourism perspective, but the trend was generally neutral, and is often positive.[262] In his opinion this was because wind farms are rarely built in areas with high tourism profiles. Of the international studies, Mr Greenaway referred to a number of surveys, mostly undertaken in England, Wales and Scotland, with one study being undertaken in Australia.

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[258] Mr Greenaway, evidence-in-chief, paragraphs [44]-[45]
[259] Mr Greenaway, evidence-in-chief, paragraph [45]
[260] Mr Greenaway, evidence-in-chief, paragraph [42]
[261] Mr Greenaway, evidence-in-chief, paragraph [43]
[262] Mr Greenaway, evidence-in-chief, paragraph [60]



[453] He also referred to a UMR research study (UMR 2007) completed for Meridian Energy in 2007 based on a telephone survey of 500 Otago residents, and information from Destination Manawatu about visitors in one weekend in 2004 at the Te Apiti wind farm visitors' area.

[454] In relation to recreational settings Mr Greenaway referred to the Stevenson and Ioannou 2010 study, which indicated that more than 81% of New Zealanders were supportive or very supportive of wind energy, and a similar proportion (80%) support wind farms in New Zealand.[263] Mr Greenaway was careful not to infer from this that there was a correlation with a positive or negative effect on recreation and tourism satisfaction or uptake, but in his view it shows that amongst the domestic market there is a high level of support for wind farms as elements of the national landscape, and they should not be considered purely as a negative addition to a recreational setting.[264]

[455] In summary, Mr Greenaway's conclusion from the research was that while there is a segment of the tourism and recreation population who may consider wind farms have an adverse effect on their experience, there is no evidence to suggest that a wind farm will have negative effects on tourism and recreational activity generally. Mr Greenaway was, however, careful to note that his assessment was partly dependent on the intentional findings being transferable to this setting.

What are the potential effects on recreation values and tourism activities?

[456] Mr Greenaway accepted that the visibility and audibility of the turbines had the potential to adversely affect amenity and thereby recreation and tourism activities.[265]

[457] Mr Greenaway's opinion relied in part on the evidence of Dr Chiles and Mr Rough about noise and visual effects. But an important factor also, in Mr Greenaway's assessment, was his view that there is little tourism or recreation activity in the area which defines itself by the landscape setting of Centre Hill. Compared to Kaikoura and Hanmer Springs, which are attractive destinations because of the landscape, Mr Greenaway's opinion was that the landscape in this area was an addition to the visitor

263 Mr Greenaway, evidence-in-chief, paragraph [61] and Appendix A
264 Mr Greenaway, evidence-in-chief, paragraph [61]
265 Mr Greenaway, evidence-in-chief, paragraph [80]

THE SEAL OF THE ENVIRONMENT COURT OF NEW ZEALAND

experience, rather than the purpose of it.[266] Mr Greenaway did, however, accept that Tipapa treated its setting as a destination in itself.

[458] Mr Burns' evidence focussed primarily on the tourism sector, that being his particular area of expertise. He agreed with Mr Greenaway that there will be no adverse effects in the overall perception of Hurunui District as an attractive destination to visit for domestic and international tourists. He did not think there would be any impact on visitors previously unaware of the wind farm travelling past it; proffering the opinion that it is likely to be neutral from a tourism perspective.[267] Neither did Mr Burns believe there would be a cumulative effect arising from the Mt Cass wind farm, and this proposal. He did accept that there is likely to be minor impact on quiet recreation and enjoyment for some Greta Valley and Centre Hill residents, but not to the extent it would impact on tourism.[268]

[459] Mr Burns did not consider Centre Hill and Greta Valley as visitor destinations for Hurunui District, referring to the Hurunui Tourism Strategy 2015 completed in June 2011. He noted that there are no attractions or accommodation in these areas that feature in the official 2011 Visitor Guide for Hurunui District.

[460] Mr Pearson (for the Society) was previously the Hurunui Tourism Manager (Alpine Pacific Tourism) from May 2004 to July 2009. He considered that the wind farm would have adverse effects on the recreation values and tourism activities in the Hurunui District.

[461] Given the different characteristics of the Waipara region and Tipapa, we will focus on the evidence in relation to each of these separately.

The Waipara region

[462] The two issues for the Waipara winegrowing area were expressed as the visual impact from turbines from this proposal, and the cumulative effect of this when considered in conjunction with the turbines recently consented for Mt Cass. Mr Burns' opinion was that the Mt Cass wind farm would have more of an impact on visitors to

[266] Mr Greenaway, evidence-in-chief, paragraph [80]
[267] Mr Burns, evidence-in-chief, paragraph [9]
[268] Mr Burns, evidence-in-chief, paragraph [12]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Waipara than this proposal because of the wider range of views of it heading north or south on SH 1, on SH 7 and within the Waipara Valley.[269]

[463] Mr Burns acknowledged that the Waipara Valley is considered a growing visitor destination that would be compromised by a much larger cumulative wind farm footprint. He acknowledged, as was a theme in Mr Thomas' evidence that wine tourism experiences are as influenced by the distinctive dedicated landscape the vineyards often occupy, as by the food and the wine tasting elements.[270] Nonetheless, in cross-examination he somewhat mediated the view that appeared in his written evidence by expressing the opinion that those interested in a fine wine experience will be more influenced by the quality of the wine than other factors, although still maintaining that these would have some influence.[271] Mr Burns also said that an established wine industry does not mean that wine tourism will establish in a region. He saw other barriers preventing this from occurring in Hurunui District, not the least of which was infrastructure and human capital restrictions.

[464] Mr Thomas and Ms Vincent were particularly passionate about the importance of terroir on the fine wine experience. Their vineyard has recently been planted and is not yet in production. We visited it, and it is situated on the slopes of the hills below the Mt Cass ridgeline off SH1. Mr Thomas explained that the fine wine value was to be obtained from cellar door sales and, whilst not saying as much, it seemed to us that this was the direction in which he and Ms Vincent were planning to head, but that will be some years away.

[465] Whilst not doubting Mr Thomas' passion, or indeed his experience, knowledge and ability as a winemaker, it is too early in the life of the vineyard for us to draw any real conclusions about whether Mr Thomas and Ms Vincent are likely to find themselves in the market to which they aspire. What we did observe was some fairly established vineyards in the Waipara region and we were told, and accept, that some of the wine from this region is indeed fine wine. We did not hear from any other vineyard owners or operators.

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269 Mr Burns, evidence-in-chief, paragraph [26]
270 Mr Burns, evidence-in-chief, paragraph [26]
271 Transcript, pages 2169-2170

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[466] To put a balance on the visual impact of wind turbines, however, we must bear in mind the consented Mt Cass wind farm and, to a limited degree, the existence of other structures in the landscape including the use by some vineyards of frost fans. We accept that the frost fans are used intermittently, but we observed a number of them as permanent fixtures in the landscape as we were driving along SH1. Ms Rigg (the planner for HDC) told us that there were approximately 100 frost fans in the Waipara region. She told us that Rule A1.2.9(i) now controls new frost fans, and that this rule became operative on 13 July 2011. She explained that there have been three consents issued for three frost fans, but 97 are not controlled. Up to 12 metres, frost fans are exempt. Whilst we do not place a great deal of weight on the presence of frost fans, and accept that they are nowhere near the size of the proposed turbines, they do have some impact on visual amenity.

[467] Mr Pearson (for the Society) told us that the Waipara Valley has over 75 vineyards and 26 wineries, of which 8 have commercial cellar doors and the remainder by appointment.[272] The valley is a producer of high quality wines and is especially well known for its award-winning Rieslings and Pinot Noirs. The region now produces more than 250,000 cases of wine each year. We were also told that there are excellent opportunities for walking, cycling, restaurants, cafes (the Weka Railway) and a variety of accommodation available. There is also, Mr Pearson stressed, cycle trails that could eventuate, and referred us to the Hurunui Walking and Cycling Strategy 2009 and the Hurunui District Tourism Strategy of 2015.[273] The thrust of Mr Pearson's evidence was that the proposed turbines would impact on tourism and recreation experiences because they would not enhance the visitor experience.

[468] Mr Pearson's real concern was that Messrs Greenaway and Burns had based their assessment on current effects, heavily weighted towards present day use, but did not give enough consideration to the growth and development potential of the Waipara wine region, wine tourism and other visitor activities and events in the region.[274]

[469] Whilst there is clearly great potential and existing success for wine growing in Waipara there is insufficient independent evidence for us to accept that Mr Thomas'

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272 Mr Pearson, evidence-in-chief, paragraph [15]
273 Mr Pearson, evidence-in-chief, paragraph [15]
274 Mr Pearson, evidence-in-chief, paragraph [28]

view, or indeed Mr Pearson's view of where the Waipara Valley might head is correct. Where HDC will head with its marketing and tourism strategies in this regard is up to it.

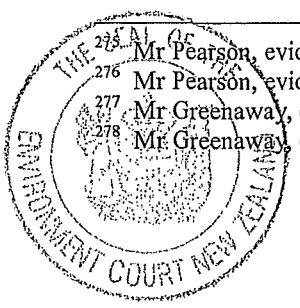
Greta Valley and Motunau Beach

[470] Mr Pearson identified the Greta Valley Restaurant and Bar as a focal point for residents and a stopping point for travellers. Whilst acknowledging that the effects on the present experience at the cafe would not be as substantial as those at Tipapa, Mr Pearson's opinion was that the introduction of the wind turbines would result in "*a dramatic change to the Greta Valley environment, particularly when outdoors*".[275] Whilst this is one of the five publicly accessible viewpoints that Mr Rough assessed as being substantially affected, we do not agree that this will deter potential customers.

[471] So far as Motunau Beach is concerned, Mr Pearson agreed with Mr Burns that the most obvious disturbance to the visual values of the Motunau Beach area will be on the return trip from Motunau Beach to SH1. We do not agree with Mr Pearson's conclusion that the rural character of this area will be dramatically altered.[276] This view was at odds with the expert landscape witnesses, and is not an opinion that is within Mr Pearson's expertise. We do not think there will be any direct adverse effects on tourism or recreation activities undertaken at Motunau Beach from the wind farm.

Tipapa

[472] Mr Greenaway acknowledged that Tipapa's commercial activities could be adversely affected in a minor way during the construction of the wind farm and he also noted that upon completion, some viewpoints on the property will change. He did not necessarily think that this would translate into a reduction in the number of people who chose to undertake the farm walk or stay at the property.[277] Overall, Mr Greenaway accepted that there could be some minor adverse effect, considering Tipapa is promoted as being based in a setting with historic values.[278] He also acknowledged that the soundscape at Tipapa is an important value for luxury accommodation, but relying on Dr Chile's assessment he did not think this was likely to be a problem.



[275] Mr Pearson, evidence-in-chief, paragraph [50]
[276] Mr Pearson, evidence-in-chief, paragraph [51]
[277] Mr Greenaway, evidence-in-chief, paragraph [23]
[278] Mr Greenaway, evidence-in-chief, paragraph [84]

[473] Mr Carr emphasised that Tipapa is exceptional and unique in the district. His opinion is that its business relies exclusively on the visual beauty around it, and the sounds experienced at it. He also highlighted that Tipapa is marketed for international visitors and he talked about the discerning visitor. He contended that the wind farm would not enhance tourism, but that the turbines would obliterate the skyline. He described the wind farm as:

> ... visual and noise desecration of this property... the antithesis of everything Tipapa is – a majestic beautiful place.

[474] He referred to the turbines as "*monstrous*", and the landscape at the top of One Tree Hill as "*outstanding*". He said the experts "*haven't a clue what they are talking about*". He described the impact on Tipapa as being so great and so disastrous that it would damage the entirety of his business and his investment. He highlighted, from his visitor's book, comments of those who remarked on the beauty and silence of its surroundings.

[475] Whilst accepting that the view from One Tree Hill was very pretty, Mr Greenaway did not accept Mr Carr's proposition that it was majestic. He described the view as having very little natural character, and being modified farmland. Mr Greenaway accepted that, were the wind farm to be constructed, Tipapa would need to change its marketing expectations and promotional material. He did not accept that this would result in Mr Carr having to close down his business. He did not agree that there would be a big shift in the experience of Tipapa in its wider context, and in his view, if any noise effects from the turbines were barely audible it would not cause any concern to the soundscape from the tourism or recreation perspective. He did accept that if there were discernible noises during, for example, a wedding ceremony, this would be an effect, but he referred to the District Plan noise limits.

[476] Mr Carr repeated on a number of occasions his concern that noise from the proposed wind farm would interfere with his ability to offer a peaceful and tranquil wedding venue. The homestead gardens are near to Motunau Beach Road. Our visits to Tipapa was instructive (we visited it on two occasions). We were able to hear traffic travelling down the road on what was a quiet peaceful sunny day. From a common sense perspective, visitors to events at the woolshed are less likely to be quiet. Apart from weddings, and particularly the garden weddings at times when vows are exchanged, the only other real activity at Tipapa that we need to consider is overnight visitor

THE ENVIRONMENT COURT NEW ZEALAND

accommodation. Based on our findings in relation to noise we do not accept that these will be impacted. We accept that during the construction period noise could potentially cause some limited concern, but we are satisfied that this can be managed appropriately by conditions. We have discussed this already in the construction section.

[477] Mr Burns' opinion, based on his business experience, was that Tipapa currently was diverse to the extent that this, in itself, was likely to be problematic. Mr Burns' view was that the business would be better managed if it concentrated on fewer activities, and he highlighted wedding events as being one that might be a better option than others. Mr Burns' view was that, should the wind farm be constructed, Tipapa might need to manage its response more appropriately in marketing material, commenting that all business owners need to be responsive to reasonable change.

[478] We do not agree with Mr Carr that his business will be ruined if the wind farm is consented and constructed. We accept that there may well need to be some modification to his marketing material, but not to a significant degree. We accept Mr Burns' evidence that such a response is reasonable, given that all business owners need to be responsive to change.

Conclusion – recreation and tourism

[479] Overall we are satisfied that the wind farm would cause few, if any, adverse effects on tourism and recreational opportunities in the area.

Property values

Overview

[480] A number of the residents (including Mr Carr for Tipapa) [279] were concerned that their property values would reduce if the wind farm is approved,[280] and some who are already in the market to sell contended that prospective buyers aware of the proposed

[279] Mr John Carr, evidence-in-chief, undated

[280] Mr Archbold, evidence-in-chief, paragraph [8]; Mr Earl, evidence-in-chief, paragraph [8]; Mr Higginson, evidence-in-chief, paragraph [8]; Mrs McLean, evidence-in-chief, paragraph [5]; Mr & Mrs McLean, joint evidence, evidence-in-chief, paragraph [5]; Mr Meares, evidence-in-chief, paragraph [6. 3]; Mrs Symonds, evidence-in-chief, paragraph [70]; Mrs Messervy, evidence-in-chief, paragraph [5]; Mrs Forrester, evidence-in-chief, paragraph [5]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

wind farm had already been deterred because of it.[281] The contention that property values would reduce was predicated on the assumption that there would be adverse noise and visual effects to such an extent that the properties of the complainants would become less desirable, leading to a drop in value.

[481] We heard evidence and submissions from the residents about their concerns, which for most of them, particularly those nearing retirement, were keenly felt and a source of worry. We heard from two experts, Mr Manning (a registered valuer) for Tipapa and Mr Crighton (a registered valuer and chartered accountant) for Meridian. At the hearing, the expert evidence focussed on whether or not there would be a loss to the value of Tipapa, but Mr Crighton's evidence contained material of general relevance to the other residents.

[482] The issues we need to consider are:

(a) Is there a correlation between wind farms and property values?

(b) If the wind farm is approved will there be a reduction in the value of Tipapa?

Before we evaluate each of these issues, we will outline how the RMA and other cases deal with this issue.

Property values and the RMA

[483] Section 104(1)(a) requires us to have regard to any actual and potential effects of a proposed activity on the environment. There are difficulties associated with treating a potential reduction in property value as a separate effect under s104(1)(a). If property values are reduced as a result of activities on another property, the argument is that the loss in value is the *result* of the effect of that activity on the environment, not an effect itself. The objection is to the prospect of effects being double-counted.

[484] As well, establishing that an activity is likely to cause a diminution in property values is problematic. How does one factor in the vagaries of the property market and the various other factors that can contribute to a potential loss in property value? Coupled with this, the Environment Court is almost invariably dealing with activities that are



281 Ms Barrington, evidence-in-chief, paragraph [4]; Ms Copeland, evidence-in-chief, paragraph [13]

proposed to occur in the future (sometimes some distance away in the future, as may be the case here), and therefore there is a significant predictive element to the Court's assessment. How certain and therefore reliable can future predictions about the property market be in this context?

[485] The question of adverse effects on property values has been addressed by the Court on several occasions. Some of the case law articulates the idea that if it occurs at all, the diminution in property value is simply another measure of adverse effects on amenity values.[282] In one case, [283] the Court noted that a potential purchaser takes the situation as it exists at the time of purchase and may not be influenced by matters which may be of great moment to a present owner and occupier. There are inherent difficulties in trying to assess whether or not a proposed activity under the RMA is likely to result in a drop in property values.

Is there a correlation between wind farms and property values?

[486] Mr Crighton's evidence contained some helpful references to studies done both in New Zealand and internationally on the relationship between wind farms and property values. These studies show that there is no statistically significant or measurable effect on house sale prices caused by the view of, or the distance to, wind farm developments.[284] Mr Crighton also visited Te Uku and West Wind wind farms and spoke to some residents there.

The McCarthy study

[487] Mr Crighton referred to the McCarthy Study,[285] the purpose of which was to investigate the impact of a developed wind farm on property values in the Manawatu and Tararua regions. Wind farm construction along the Tararua and Ruahine ranges began in 1998, and by 2011 three wind farms[286] comprising a total of 286 turbines had been established there.[287] Mr Crighton told us that the region in which the study was

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[282] ***Foot v Wellington City Council***, W73/98, 2 September 1998, paragraph [256]
[283] ***Hudson v New Plymouth District Council*** W138/95, 9 November 1995, page 6
[284] Mr Crighton, rebuttal evidence, paragraph [39]
[285] The study adopt an Hedonic pricing approach, ie certain characteristics often influence market prices, so in real estate the use of a hedonic regression equation treats these characteristics (or attributes) separately. This can be used to construct a price index or a more statistically robust form of the sales comparison approach
[286] Tararua, Te Apiti and Te Rere Hau
[287] Mr Crighton, rebuttal evidence, paragraph [43]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

undertaken was one where there was ample data to enable the study to evaluate sales transactions that occurred within an 8-kilometre view shed of the wind turbines, and provide suitable comparable localities which were used for control purposes.

[488] The study was undertaken over a three year timeframe, commencing before any wind farm was constructed and finishing one and a half years after the completion of the wind farms. The results from the study show that trends in property sale prices over this time increased in a similar way to those within the control group. In other words, there were no obvious impacts on average sale price immediately prior to, during the construction phase, or on completion of any of the wind farms.[288]

[489] Mr Carr challenged the findings of the study on the basis that it had been commissioned by Mainpower, the owner of the resource consent for the Mt Cass wind farm. Mr Carr made no other substantive challenge to the research undertaken either to its methodology or conclusions, apart from seeking to distinguish the applicability of the conclusions to his property on the basis that the value of the properties studied were significantly less than his.

[490] There is no rational or evidential basis to suggest that because the study was commissioned by Mainpower that the results of it are biased or distorted somehow by that fact. We have found the study to be of use to us in a general way, although its findings are not determinative. We will return to the applicability of the study to Mr Carr's property shortly.

Other studies

[491] Mr Crighton also referred to a number of other studies noting that "*extensive international research has been undertaken into the potential for wind farm developments to affect property values*".[289] He summarised this research as concluding that there is no statistically significant or measurable effect on home sale prices caused by the view of, or distance to wind farm developments.[290] This evidence was not significantly challenged and we found it helpful by way of background.

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[288] Mr Crighton, rebuttal evidence, paragraphs [44] and [45]
[289] Mr Crighton, rebuttal evidence, paragraph [38]
[290] Mr Crighton, rebuttal evidence, paragraph [39]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Ms Meares' material

[492] Ms Meares' supplementary appendices included two articles with photographs that were appended to the internet versions of the articles. Mr Crighton commented on the two articles, one which had appeared in the *Daily Mail UK* on 22 July 2012 and another dated 21 July 2012 depicting various photographs from Scotland of scenery and landmarks that were said in the article to be "*blighted forever by turbines*". The first article reported that a government agency had finally admitted that thousands of dollars could be wiped off the value of homes as a result of nearby wind turbines. Mr Crighton's supplementary evidence contended that these examples were not useful to us because there was no way to validate their content or determine what level of effect the turbines in the examples had on houses in terms of their distance from houses, visual dominance and noise levels.[291] We agree with Mr Crighton on this point. Mr Crighton relied on surveys based on market transactions and expert opinions on noise and visual issues and these should be preferred to newspaper articles.

Conclusion –valuation general

[493] We accept that limited research has been done on the topic in New Zealand, but there are a number of international studies that conclude that property prices do not necessarily reduce solely as a result of a nearby wind farm development. Based on the evidence we have heard it cannot be assumed that there will be a drop in property values if the proposal is consented and proceeds, but accept that this will depend largely on their being no adverse noise and visual effects. We have already determined that with appropriate mitigation there will be no adverse noise effects, but we have found that from some viewpoints there will be adverse visual effects that are unable to be mitigated. We are not however persuaded that this will result in a drop in property values. Many of the properties affected are farm properties, the value of which is affected by their productive value rather than just their residential value.

[494] Mr Crighton initially accepted that there *could* be a *limited* impact on *some* property values during the consent lapse period, particularly if it was to be 10 years, but after some reflection he said that *overall* he did not think that a consent lapse period of 10 years would be a problem.[292] This is because for some people the prospect of a nearby

[291] Mr Crighton, supplementary evidence, paragraph [4]
[292] Transcript, page 2,261, line 29 – page 2,262

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

wind farm would not be a detraction. Mr Crighton referred to a local resident whose property had been placed on the market and had received 20 expressions of interest only one of which was deterred by this proposal. In these circumstances Mr Crighton considered there was a significant enough pool of prospective buyers to establish a realistic market value of the property. Mr Crichton's opinion was not significantly challenged through cross-examination.

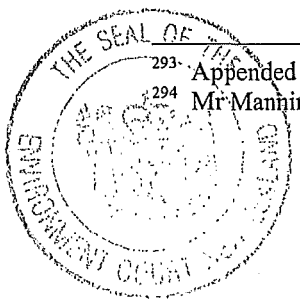
[495] We accept that the research done so far does not establish that there is a link between a consented wind farm and a drop in property values. We accept that this will depend largely on the property in issue, whether or not any potentially adverse noise effects are able to be mitigated and the extent of the visibility of wind turbines from a particular property. The visual effect of wind turbines is problematic, because the research establishes that there are those who like wind farms and those who do not, but it cannot be assumed that all prospective purchasers will regard wind turbines, if visible, as a negative factor. As a result, there can be no safe conclusion drawn that this proposal will result in a diminution of property values.

If the wind farm is approved, will there be a reduction in the value of Tipapa?

[496] Mr Carr contended that Tipapa was in a unique situation given the value of it and the niche market in which it operates. He further submitted that the general findings of the research should not be applied to Tipapa because they did not include any property quite like it either in terms of quality, use and/or value. Mr Carr was understandably concerned about his investment in the property and he described feeling as if he was fighting for his life's work.

[497] Initially Meridian agreed that Tipapa required a more tailored-made approach and it arranged (with Mr Carr's agreement) for Mr Crighton to prepare a valuation report for Tipapa. The report (dated 21 January 2011)[293] found that there would not be a loss of value. It was not accepted by Mr Carr. Mr Carr then briefed Mr Manning to provide a report for him, which concluded that there will be a loss in the value of Tipapa if the proposal proceeds.[294]

[498] Both valuers attended caucusing and agreed that:



[293] Appended to Mr Carr's evidence
[294] Mr Manning's valuation, page 5, attached to Mr John Carr's evidence-in-chief

(a) there has been extra investment in facilities at Tipapa over and above that which could be expected at a normal farm property;[295]

(b) the character, heritage factors and improvements form the basis of their valuation rather than the farm itself; and

(c) cost does not necessarily equal value.[296]

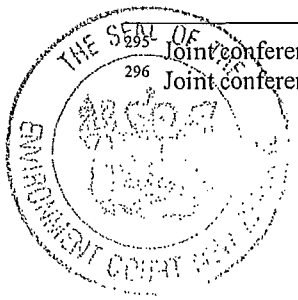
[499] This latter point is important because it is evident that Mr Carr has spent a significant amount of money on Tipapa. Both valuers were reasonably agreed about the value of the improvements, with Mr Crighton identifying them at $1.4 million and Mr Manning identifying them at $1.45 million. We agree that this fact does not mean that this expenditure has increased the value of Tipapa by an equivalent amount.

[500] Tipapa did not call any evidence to establish the value of the goodwill in its business. The valuation evidence centred solely on the value of the buildings and land and how that might be diminished (if at all) should consent be granted.

Areas of expert disagreement

[501] There was disagreement about the highest and best use of the property. Mr Crighton's view was that its highest and best use was as a rural lifestyle property, whereas Mr Manning's view was that because Tipapa is part of North Canterbury's rural history, the assets that have been developed (a high end lodge, separate visitor centre, events centre based on the heritage facilities) mean that the property comprises four income streams: a farm which is leased, events, lodge income, and casual visitors for six months of the year. Mr Manning also emphasised the benefits of living in the homestead which are enjoyed by Mr Carr.

[502] The business operation of Tipapa is currently as Mr Manning described. However there was some evidence from Mr Burns that this was not a sensible business model. Because of this, Mr Crighton's market assessment regarding the highest and best use of the property may well be right. In the event, nothing significant turns on this distinction.



295 Joint conferencing statement - valuation
296 Joint conferencing statement - valuation, paragraphs [4] and [5]

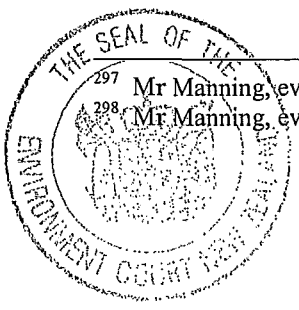
[503] The experts disagreed about whether or not Tipapa would suffer "*injurious affection*" if the wind farm proceeded. Whilst both valuers undertook this evaluative exercise, there is no statutory requirement, nor indeed imperative, for us to consider matters relating to injurious affection. Whilst we received no submissions from anyone on this point, it seems to us that the experts have simply transported concepts relevant to the Public Works Act and the Electricity Act, which have no legislative basis in this case. This is beyond the scope of our functions under the RMA.

Mr Manning's valuation

[504] In an extremely brief report, Mr Manning assessed the added value of the improvements in existing use were $630,000. In estimating the effect on value he said this:[297]

> It is my opinion that the cumulative effect of the proposed wind farm with current knowledge to date and subject to the actual outcome effects is as follows:
>
> | | | |
> |---|---|---|
> | 80% of $630,000 (added value of existing use) | $504,000 | |
> | 5% on rural farm value of $2,170,000 | $108,500 | |
> | Loss and potential for potential lifestyle subdivision development on rural farm value 2% on land value | $ 27,000 | |
> | Cumulative effect | | $639,500 |
>
> This equates to approximately 22.83% of the value in existing use

[505] Mr Manning accepted that it is extremely difficult to place an estimate of loss or value on the Tipapa property, largely due to the fact that "*it is equally difficult to predict what the actual effects of the proposed wind farm, both during the construction phase, and the operational phase will be*".[298]



[297] Mr Manning, evidence-in-chief, paragraph [14]
[298] Mr Manning, evidence-in-chief, paragraph [15]

Mr Crighton's opinion

[506] Mr Crighton did not accept Mr Manning's methodology. In fact he described Mr Manning's valuation and report as falling "*woefully short of our profession's reporting and valuation standards*".[299] In his opinion, Mr Manning had failed to provide his methodology and did not cite references to support his conclusions. In particular, Mr Manning did not set out why he had assessed 80 per cent of added value as being an appropriate figure. When cross-examined, Mr Manning was unable to substantiate this figure apart from stating that it was a matter for his opinion.

[507] Mr Crighton disagreed with there being any deduction for the loss of potential for lifestyle subdivision development. The evidence established that Mr Carr currently has two small lifestyle blocks on the market. Mr Crighton noted that there were a number of smaller blocks and houses on the market in this location, and that at the time of writing his evidence the current market was described as being very slow. Mr Crighton also noted that this location is "*in the middle of nowhere*" for small lifestyle blocks.[300]

[508] There was some argument mounted that Tipapa is a "*special value*" property. Mr Crighton disagreed because its location is in his view not unique, and other rural blocks in the area have the same degree of tranquillity.[301] We agree that Tipapa is likely to be a special value property, but for reasons we express below we do not think this has a bearing on our conclusion.

Conclusions - Tipapa

[509] We agree that Mr Manning's methodology was not particularly sound, and his report did not provide any real analysis of the rationale for the effect on value that he outlined in paragraph [14] of his evidence and report. We found Mr Crighton's evidence to be more thorough and methodologically sound. In fairness to Mr Manning, we have had considerably more evidence than that which would have been made available to him about potentially adverse noise and visual effects. We prefer and accept the evidence of Mr Crighton that there will not be a loss of value to Tipapa.

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299 Mr Crighton, rebuttal, paragraph [73]
300 Mr Crighton, Rebuttal, evidence, paragraph [56]
301 Mr Crighton, Rebuttal evidence, paragraph [24]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

PROPOSED CONDITIONS OF CONSENT

[510] At the close of the hearing we had four sets of proposed conditions.[302]

[511] We have already recorded that the proposed conditions changed throughout the hearing, as is usually the case with large and complex applications. The Court explained to the parties, particularly the submitters who were less familiar with these processes, that the proposed conditions are an integral part of any application.

[512] The proposed conditions from Tipapa and the Society principally addressed an earlier version of the Meridian/HDC agreed conditions. They did not specifically address the CRC's conditions relating to the regional consents. The final version of the Meridian/HDC conditions included modifications accepting several of the Society's requests. Meridian submitted that many of the other details proposed by the Society are not necessary; such as to operate within site boundaries. We agree.

[513] In relation to the Tipapa conditions, we agree with Meridian's submissions that many are either vague, unworkable or unreasonable. Many of the proposed conditions reflected the positions put forward by Mr Carr and would have effectively prevented the wind farm from operating.

[514] We have already addressed many of the proposed conditions of consent in the sections of this decision dealing with the main issues. In some cases we have directed changes to be made.

[515] We now turn to consider some of the other conditions. Before doing so we record that in general we find the sets of conditions proposed by Meridian/HDC and the CRC to be appropriate. For that reason we do not address every alternative detail proposed by the Society and Tipapa as we have found some of those to be inappropriate alternatives. To assist the parties to amend the conditions we have compiled our directions in Appendix 2 to this decision. In this appendix we have provided cross references to relevant paragraphs of this decision. We have also included some additional

[302] Meridian/HDC – Exhibit HGR1 Version 4, 23 October 2012; CRC – CRC Exhibit 1 Version 2, 26 September 2012 and including CRC Attachment 3, 4 October 2012; Tipapa – Tipapa Exhibit 27, 23 October 2012; and the Society – Glenmark Exhibit 10, 12 October 2012.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

detailed minor amendments to improve workability and which we consider do not require further explanation in the main text of the decision.

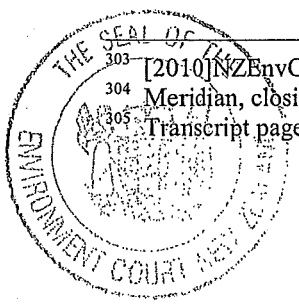
Consent lapse period

[516] Meridian seeks a 10 year lapse period for all consents and 35 year duration term for the discharge consents. The 10 year lapse period was contested by the Society and local residents who were concerned about the effects of an extended period of uncertainty. They sought the default period of 5 years. However we are certain that Mrs Marr and Ms Meares reflected the sentiments of the other submitters and local residents (and probably Meridian too) when they said that they would not like to have to go through a re-run of this consent and hearing process again in five or six years time.

[517] In submissions for the Society, Mr Wallace referred to the decision in ***Contact Energy Limited v Manawatu-Wanganui Regional Council***[303] where a wind farm was granted consent with a five year lapse period. For Meridian it was submitted that since that decision, various divisions of the Environment Court and Boards of Inquiry had held that a 10 year lapse period was appropriate for a number of wind farms, including Turitea, Hauauru ma Raki and Te Waka. Further, other wind farms (Mill Creek, Mt Cass and Makara) had been consented with lapse periods longer than five years.[304] In the case of Mt Cass the applicant sought and was granted an 8 year lapse period.

[518] Mr Muldoon, for Meridian, explained that the 10 year lapse period was sought to provide the necessary flexibility to respond to market uncertainties, including the exchange rate, commodity pricing and electricity demand.[305] It was submitted for Meridian that the 10 year lapse period was wholly appropriate given the scale and national importance of the project. They also contended that there was no evidence to suggest that the existing environment of the site would change to such an extent over the next five years to warrant a reconsideration of the effects of the proposal at that time.

[519] Both Councils agreed to the 10 year lapse period and this was reflected in the sets of agreed proposed conditions.



303 [2010]NZEnvC406
304 Meridian, closing submissions, para 293
305 Transcript page 16, lines 15-23.

[520] We are of a clear view that five years is too short for a project of this nature and scale. The alternative sought by the applicant was ten years. We note that a 10 year lapse period does not mean that a consent holder can do nothing for ten years if they wish to keep a consent "alive". Section 125 provides that before the lapse date, a consent is to be given effect to, or an application be made to extend the period. This means that some actions have to be taken before, and often well-before, the 10-year date.

[521] After taking into account the submitters' desire not to be engaged in a re-run of these resource consent procedures in the near future we have concluded that a 10-year lapse is appropriate and recognises the requests of all of the parties.

Community Liaison Group and Complaints

[522] The Community Liaison Group (GLG) is a mechanism designed to provide for communication between the consent holder and the local community, particularly if there are problems. In the final set of proposed conditions (23 October) Meridian had accepted most of the changes proposed by the Society in respect of the CLG, except the suggestions that it be established within 3 months of the granting of consent, and that it should be maintained for the life of the wind farm. Meridian proposed that the CLG be initiated no less than three months prior to construction commencing and that the first meeting be no less than two months prior to construction commencing. They also proposed that it could be discontinued if a 75% majority of the CLG voted that it is no longer necessary. Related conditions require the consent holder to maintain a complaints register which is to be available to the consent authority and the CLG upon request.

[523] In general we consider that the CLG-related conditions, as set out in Exhibit HGR1 23 October 2012, are appropriate although we require that they be modified to provide for both of the consent authorities (HDC and CRC) to be involved as appropriate to their responsibilities. We also consider that conditions 88(a) and (b) need to be more certain by identifying the management plans and reports that are to be provided to the CLG.

[524] One area where we are not satisfied that the proposed conditions are appropriate relates to the community fund.



Community Fund

[525] Meridian proposed the establishment of a fund to support projects in the local community. Mr Muldoon outlined Meridian's proposal and also described similar funds operating at some other existing wind farms. In the final set of proposed conditions (23 October) Meridian proposed to contribute $100,000 over a three-year period from when construction commences; thereafter any annual contribution was to be at the consent holder's discretion. It was also proposed that the CLG determine where, how and when the fund be spent.

[526] For Meridian it was initially submitted that the fund was offered on an *Augier* basis and that funding over a 3-year period was all that was technically offered, although to date Meridian had in practice extended such funding at other wind farm sites. We note that the final proposed conditions, as agreed to by Meridian, include a consent condition in relation to a community fund (condition 89).

[527] There was considerable discussion about the fund during the hearing and we were assisted by Mr Baxter, a local resident and Chairman of the Kate Valley Landfill Community Liaison Group for the past 7 years. We were also supplied with a copy of the procedure for meetings of that group.[306] It appears that this document is not a condition of consent but from experience we have with similar groups it is to be highly recommended as a way of clarifying the details of such a group's day-to-day operations.

[528] In the Society's conditions (12 October) they proposed that a separate Community Trust be set up to administer the fund rather than the CLG. They also proposed that the contributions be increased to an initial amount of $150,000 at the commencement of works, and thereafter an annual contribution of $50,000 for the life of the wind farm. The payments were to be indexed to the CPI from the date at which the consent is granted. For Tipapa, Mr Carr, sought similar conditions. However no basis for these amounts was provided.

[529] The Joint Statement of Planning Experts records that whether or not the fund needs to be a condition of consent was an unresolved issue. Ms Rigg, for the HDC, supported a condition and sought to link the fund to electricity generation.[307] Mr

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

[306] Glenmark, Exhibit 9.
[307] Ms Rigg evidence-in-chief, paragraphs [4.27] & [4.28], and Transcript page 2801.

Gimblett, for Meridian, said that in his opinion it depended on whether or not it is required to provide mitigation of effects or is in some way an essential element of the application. He agreed with Ms Rigg that if, in making an overall decision on the proposal, a fund of that type is to be relied upon in providing some benefit and/or generic mitigation, then it merits a condition and the certainty that provides.[308]

[530] In determining whether or not a fund is to be part of the consent conditions we note the provisions in the statutory document the NPS – Renewable Electricity Generation, 2011. Section C, headed "*Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities*" contains two policies. The first, Policy C1, addresses locational, logistical and technical practicalities, mitigation opportunities and adaptive management measures. Policy C2 then goes on to state:

> When considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation including measures or compensation which benefits the local environment and community affected.

[531] We have already found that many of the adverse effects relate to the construction phase of the wind farm; predicted to be 18 – 24 months duration. These effects are localised and include traffic effects (with the period of greatest activity between 3 – 6 months after commencement), and effects associated with the considerable volumes of earthworks. We have also found that there are some on-going adverse effects once the wind farm is operational that cannot be avoided, remedied or mitigated. Most particularly this relates to the adverse effects on visual amenity for some of the nearby properties. Therefore we find that it is appropriate that a fund to benefit the local environment and community be required as a condition of consent. We consider that such a condition is consistent with Policy C2 of the NPS – Renewable Electricity.

[532] We did not receive any submission from any party about Policy C2 and how it might relate to such a condition. We set out below our thoughts about how much the fund should comprise, the period over which payments are to be made and the way in which it is to be administered, but we have decided that the parties should have the ability to make further submissions about the breakdown of the payments over the first three years and

[308] Mr Gimblett, Rebuttal, paragraphs [24] & [25]

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

the period over which payment should extend before we reach a final view on the matter. To be clear, we are not inviting further submissions on the total amount to be paid over the three year period.

[533] Turning then to some of the details of such a condition, we agree with the Society that the fund should be administered by a Community Trust, or similar entity, that is separate from the CLG. We were influenced in reaching this position by the information and experience from the nearby Kate Valley Landfill.

[534] We also consider that the payments should be staged to recognise the likely timing of the adverse effects: those occurring during construction; and those on-going for the life of the wind farm due to its existence and operation. For these reasons we consider that it would be appropriate for some of the contribution to be paid prior to, or at the date of, construction commencing, and thereafter annually for the life of the wind farm as follows:

- Prior to or at the date of construction commencing = $50,000;
- Second year = $35,000;
- Third year = $15,000.
- For all subsequent years of operation, a contribution of $15,000 per year be payable.

However we do acknowledge that there have been cases when Meridian has agreed to alter the timing of payments and extended funding, sometimes with higher amounts.[309] Therefore we consider that it would be appropriate for the Trust and the consent holder to have the flexibility to agree on alternative payment schedules. Also it may be that the consent holder would decide to contribute more, so the amounts could be the minimum.

[535] We agree with the Society that the amounts should be indexed against the CPI as at the date on which these consents are granted.

[536] Given the HDC's experience with the Kate Valley Landfill fund we consider them to be well placed to prepare alternative conditions and we direct them to do so, but

[309] Mr Muldoon, Transcript page 667, lines 2-17

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

also invite further submissions on the breakdown of the $100,000 payment and the additional $15,000 annual payment.

Decommissioning, performance bond and covenant

[537] The proposed consent conditions include provisions for turbines to be decommissioned and dismantled if they cease to operate for a continuous period of 18 months. A management plan is to be prepared and to include removal of above ground structures and site rehabilitation and revegetation.

[538] The Society proposed an additional comprehensive suite of conditions requiring a performance bond in favour of the HDC for securing compliance with the conditions of consent and securing the completion of decommissioning and rehabilitation. The Society also sought a condition (covenant) to preclude the consent holder extending the wind farm at any time in the future.

[539] In submissions Meridian rejected the Society's proposed conditions relating to a performance bond for three reasons: that remediation of a wind farm does not give rise to significant environmental effects or health and safety concerns such as may occur with mining activities or sanitary landfills; that the residual value in copper and steel is generally commensurate with the cost of its removal so that there is a commercial incentive to remove turbines; and that Mt Cass is the only wind farm with such conditions, possibly as a result of similar provisions applying to the Kate Valley Landfill. In the alternative, Meridian proposed that the consent be made personal to Meridian, or if the Court disagreed with that suggestion then any bond should be limited to the difference between the intrinsic value of the turbines and other components (scrap) and the cost of removal. A monetary value for the latter was not provided.

[540] As for Meridian's suggestion that the consent be made specific to Meridian, we do not consider that to be appropriate, and no real justification was provided. We consider that the usual practice of, for example, land use consents running with the land should apply.

[541] In our view there are some significant differences between the Mt Cass proposal and this Hurunui wind farm proposal, including the landscape classification of Mt Cass and the establishment and management of the "Mt Cass Conservation Management



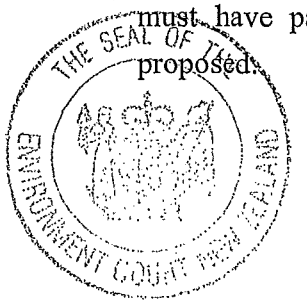
Area". We are satisfied that it is not necessary to require a performance bond as proposed by the Society. There are adequate powers under the Act to enforce the conditions of consent. However, we do require the wording of the decommissioning conditions to be amended so that it is clear that the consent holder has responsibility for carrying out any decommissioning and that the consent holder can be required to prepare and execute a Decommissioning Management Plan. The current proposed wording leaves it to the consent holder to advise the consent authority of its intention to decommission the site. We require the conditions to provide for the implementation of the Decommissioning Management Plan.

[542] We also comment that although we understand that the Society's suite of proposed conditions relating to a performance bond reflect those in the Mt Cass proposal, we consider that they are not written with an appropriate degree of certainty, particularly in relation to the amount (quantum) and its review.

[543] On the Society's proposed condition seeking a covenant to preclude any extension of the wind farm in the future: we do not consider that to be appropriate and it was not justified by the Society.

PART 2 MATTERS – EXERCISE OF DISCRETION

[544] In making our overall judgement, as we outlined at the beginning of this decision, we are required to consider whether or not granting consent achieves the purpose of the Act under section 5, namely the promotion of the sustainable management of natural and physical resources. We have concluded that all potentially adverse effects, apart from those relating to the visual amenity from certain private viewpoints, can be effectively mitigated by the conditions proposed by Meridian/HDC and CRC and as modified by this decision. So far as visual amenity is concerned, we are satisfied that the removal of turbines F1 and G1 will avoid *very significant* adverse visual amenity effects for certain properties, including for example the Sloss, Barrington and Marr properties, and we have determined that this should occur. This leaves our finding that there remain *significant* adverse visual amenity effects that are unable to be mitigated from certain properties. Accordingly the provisions of sections 7(c) and (f) of the RMA, to which we must have particular regard, are unable to be completely provided for by what is proposed.



[545] Against this, we must balance the positive effects we have found will arise from the proposal. There are economic benefits, particularly during the construction period; benefits associated with meeting the local and regional demand for electricity (for which there is a shortfall) and the need for security of supply. There is also the overwhelming benefit that the proposal is one which involves electricity generation from a renewable source. This is a matter to which we must have particular regard under s7(j) of the Act. In its explanatory note, the NPS – Renewable Electricity outlines that the matters contained within it are matters of national significance, however within the Part 2 hierarchy renewable energy does not appear under s6 but is a matter to which we must have particular regard under s7. The efficient use and development of the wind resource occurring in this area is also relevant in terms of s7(b). Accordingly, in this case there are competing s7 matters which we must weigh in the balance.

[546] Inevitably, as has been noted in a number of wind farm cases, and as is signalled in the NPS- Renewable Electricity, decisions often come down to weighing up the national level benefits and the adverse effects at a local level. In this case we are persuaded that the regional and national benefits associated with the proposal outweigh the remaining significant adverse visual amenity effects that are unable to be mitigated from certain nearby properties. Accordingly we are persuaded to approve the proposal with amended conditions.

[547] We have earlier in this decision stated that we found the conditions proposed by the two Councils to be generally appropriate, subject to amendments outlined in this decision. We expect those suites of conditions to be used as the basis for finalising the amended conditions.

RESULT

[548] The applications for resource consent are granted subject to amended conditions.

[549] We record for the avoidance of doubt, that this decision is final in respect of the confirmation of the grant of the resource consents (on amended conditions) but is interim in respect of the precise wording of the conditions, and in particular the details relating to the Community Fund condition(s).



[550] We direct the Hurunui District Council and the Canterbury Regional Council to submit to the Court amended conditions of consent giving effect to this decision by **17 May 2013**. In preparing the amended conditions the Councils are to consult with the other parties, particularly in relation to the condition(s) relating to the Community Fund.

[551] If any party wishes to make submissions in relation to the Community Fund conditions, these are to be filed by **17 May 2013**.

[552] Costs are reserved.

DATED this 15th day of April 2013

For the Court

M Harland
Environment Judge

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Appendix 1

Submitters who did not appear:[310]

D Baxter
RD Liddell
BA Christensen
T McBree
SC Batchelor
SA Bonnafoux
DJ Bears
F Loe
PI Croft
PH Rogal
EJM Wezenburg
JM Cottle
A Black
AJ Goodship
SJ Swarbrick
A Fox
EAC Batchelor
REH Nicholls
S Pearson
CS Batchelor
HM & RS Sharpe
CJ & TW Adler
J & J Megaw
S Hughes-Games
N Stanley
CF MacKenzie
C Herbert
DW King
DC Heslop
W Hughes-Games
AJ & LJ Lowry
M Fitzsimmons
H and M Vanstone
ACA Askin
JAA Ryan
AM Taggart
DB and MM Collett
DG Stanley
LF Meares
D & P Rennie
G and J Higginson

AJ Hamilton
MP Foster
PO & NM Greenwood
HJ Kent
JE & PC Blatchford
T Burnside
MA & RJ Lowry
JN Petrie
DG Maxwell
RT Abbott
JM McLachlan
N Ross
DC Curtis
REF Sloss
KP Stills
PFW Boag
W Gardener
J Gardener
BJ Sowden
K Sowden
HS McLachlan
HS & YR Turnbull
SM & RB Copeland
FA Reid
SR & SJ Barnes
L Love
JM & JA McKone

MM Eaton
EM Eaton
L Atkinson
DB Rich
H Savill
C Savill
P & E Schofield
A Humphrey
BM & NJ Burgham
LC Burton
SW Bennett
M Jones
G Rowe

R & J Forrester
T Holden
KS Dunford
BRG Yates
G McWhinnie
L Lormans
JW Fisher
JC Gardner
M Ashton
PG Lormans
G Bianchet
R O'Brien
P & Y Devine
T McLean
A & W Harris
F Clark
AJ Sloss
BA McLachland
P & P Macfarlane
A Wilson
RM Anderson
GP Gillman
MJ Steel
NC Schultz
RA Hunt
F & C Hicks
BC Griffiths
L Batchelor
LT Platt
S Hamilton
D & M Fotherington & Owen
K Hamilton
T Donaldson
N McKellow

[310] Section 87F Report, Helena Gerarda Rigg, Appendix 1.

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

Appendix 2

Environment Court Interim Decision No: 2013 NZEnvC
Project Hurunui Wind Farm - Schedule of Conditions of Consent to be amended.

Table 1

Exhibit HGR1, Version 4, 23 October 2012 Condition Number	Summary – Directions/ Comments	Decision paragraph reference, where applicable
2	Delete	540
6	Amend to provide for no more than 31 turbines and the deletion of turbines labelled F01 and G01	177, 245
19 (text after 19(c)) 20	Should the paragraph of text after condition 19(c) be part of condition 20? It all seems to relate to turbine testing.	515
23	Provide for a minimum of 4 monitoring locations and for staged wind farm monitoring.	229, 230, 231, 235, 247
26	Clarify when this process is to commence. Identify the individuals and/or addresses, or a mechanism to do so in case these people do not live in the locality in the future.	304, 305
28 - 40	Ensure that these EMP related conditions are the same as, or compatible with, the CRC's conditions. Provide for any appropriate monitoring and reporting of the EMP. Rationalise the two references to weed management in 28(g) & (i).	356, 357, 359
41 - 61	Review and rationalise conditions relating to avifauna. Link 52(a) with 54 & 55. Use consistent wording if appropriate, eg avifauna expert (55) and avian ecologist (60). Provide for appropriate monitoring and reporting (eg. similar to condition 66).	426, 431, 434, 441
45	Amend to include reference to condition 44 as well as condition 43	515
48 & 61	List these two conditions together	443
69 & 70	Provide for any appropriate monitoring and reporting.	379
73(m)	Provide for annual large event at Tipapa	349

THE SEAL OF THE ENVIRONMENT COURT NEW ZEALAND

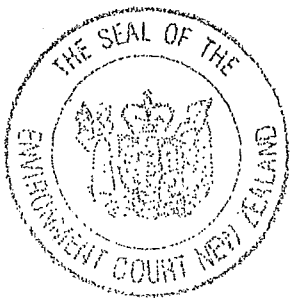
87(c)	Provide for all "consent authorities". For example, there may be provision for separate representatives or a combined representative for HDC and CRC.	523
88(a) & (b)	Clarify and list the management plans and reports that are to be provided to the CLG.	523
89	Relocate this condition to be before the heading "Review Conditions". Provide a new heading: "Community Fund". Amend the condition.	531-536
100	Provide for implementation eg. amend to read: "The consent holder must implement the Decommissioning Management Plan and must provide written notice ..."	541
All conditions	Review and in particular provide for monitoring and reporting. Any consequential amendments.	427

Table 2

CRC Exhibit 1 Version 2, 26 September 2012 and CRC Attachment 3, 4 October 2012.	Summary Directions/Comments	Decision paragraph reference, where applicable
	Clarify Meridian's offer to clear in-line pond in Cave Creek.	383
Schedule 1 General Condition 19(a)	Confirm if monitoring in Tipapa Stream provided for.	385
All conditions	Any consequential amendments	

Table 3

Exhibit HGR1 Version 4, 23 October 2012 and **CRC Exhibit 1 Version 2, 26 September 2012 and CRC Attachment 3, 4 October 2012.**	Check for consistency where conditions relate to the same or similar topics. Provide one document of consent conditions for the proposal. Where appropriate this can be divided into separate and/or common sections to relate to separate consents and/or separate consent authority responsibilities.	356, 357, 359, 515, 547



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2842110703
RC250044

11 June 2026

Road Metals Company Limited
PO Box 2341
Christchurch 8140

Via email

Dear Road Metals Company Limited

Decision Notification: RC 250044 – Road Metals Company Limited – 2004 Luggate-Cromwell Road (SH 6), Cromwell

I enclose a copy of the Council's decision on the above application as required by section 114(1) of the Resource Management Act 1991.

I also draw your attention to Section 120 of the Act which provides for the right to appeal a decision, or part of a decision, under certain circumstances. Please note that there is no right of appeal against the whole or any part of a decision to the extent that the decision relates to a boundary activity unless the boundary activity is a non-complying activity.

Appeals must be lodged with the Environment Court and served on the consent authority within 15 working days of notice of the decision being received in accordance with Section 121 of the Resource Management Act 1991."

Yours faithfully

Tarryn Lines
Team Leader - Planning Support

Road Metals Company Limited

Decision

Central Otago District Council

11 June 2026

Contents

1.0 Introduction 4
1.1 Appointments 4
1.2 Description of the proposal 4
2.0 Process matters 5
2.1 Written approvals and notification 5
2.2 Submissions received 6
2.3 Evidence exchange 6
2.4 Site visit 7
2.5 Hearing 7
3.0 Consents Required 8
4.0 STATUTORY REQUIREMENTS 9
4.1 Effects assessment 9
4.1.1 Structure and Approach 9
4.1.2 Permitted baseline 9
4.1.3 Landscape and visual effects 10
4.1.4 Ecology 11
4.1.5 Access and transport 12
4.1.6 Cumulative effects 13
4.1.7 Duration of consent 14
4.1.8 Bond 14
4.1.9 Other effects including those that were not in contention 15
Natural hazards, land stability and sedimentation 15
Noise and Dust 15
Storage and stockpiling 15
Effects on water quality 15
Cultural and heritage values 16
4.1.10 Positive Effects 16
4.1.11 Overall findings on effects 17
4.2 National environment standards and other regulations 17
4.3 National policy statements 17
4.4 Regional policy statements 18
4.5 Central Otago District Plan 19
4.6 Offsetting or compensation measures 20
4.7 Section 104(1)(c) other matters 20
4.8 Part 2 matters 20

4.9 Consent conditions 20
4.10 Determination 21

Appendix A – Appearances
Appendix B – Conditions of Consent

1.0 Introduction

1.1 Appointments

[001] This is the Decision report from the Hearings Panel (the Panel) of the Central Otago District Council (the Council) on the application lodged by Road Metals Company Ltd for land use consent to operate a quarry and to construct an access road at 2004 Luggate-Cromwell Road (SH6), Queensbury.

[002] Rosalind Day-Cleavin, an independent RMA hearing commissioner, was duly appointed by the CEO of Council on 9 March 2026 as Acting Chair of the Panel. The other members of the Panel were Councillors Tracy Paterson, Sarah Browne and Martin McPherson.

1.2 Description of the proposal

[003] The application as notified was described in the Applicant's AEE[1], the Section 42A Report[2] and the evidence of Carey Vivian[3]. We adopt those descriptions, and some of the more salient points of the proposal, **as notified**, include:

- Proposal to undertake a staged quarrying operation:
  - *Stage 1 (years 1 to 3) – approximately 50,000 tonnes per annum;*
  - *Stage 2 (years 3 to10) – approximately 100,000 tonnes per annum;*
  - *Stage 3 (year 10+) – approximately 720,000 tonnes per annum*.
- The operations are proposed to commence on the lower terrace, where it is proposed to quarry to a depth of about 30m.
- The Applicant proposes to operate two portable crushers for 4-5 months per-annum. It is proposed to operate the activity with one full-time employee, and up to 4 temporary employees when the crushers are in operation.
- After 10 years it is proposed to increase the scale of operations, resulting in the installation of stationary plant and the introduction of new products such as, sealing chip, concrete aggregate and sand. The proposed upscaling of the activity would require 4-6 full-time staff members.
- The Applicant proposes to expand extraction operations onto the upper terrace after 15 years and for extraction to occur to a greater depth. The actual depth is not specified, but the application states that suitable gravel exists to a depth of about 90m.
- In the long-term, the proposal seeks to extract gravel over much of the flat area of the upper terrace.
- The Applicant proposes to expose no more than 10ha of land at any given time and to progressively rehabilitate the site with the introduction of clean fill.
- It is proposed to retain existing shelter belts and a plantation to the south-east to maintain screening of the extraction operations, processing and stockpiling.
- Additional planting of rows of substantial trees are proposed in the southwest and northwest of the site to provide screening and mitigation of the proposed activities on the northern terrace.
- It is proposed to restrict processing to between 7am and 6pm Monday to Friday and 7am to 1pm Saturdays, and loadout and haulage to between 6.30am and 6pm Monday to Friday and 6.30am to 1pm Saturdays.
- The Applicant seeks an exception to these timeframes for emergency works involving up to 600 truck movements per annum.
- A new access road is proposed from State Highway 6 (SH6). This access will pass over Lot 2 DP 605264. A written approval has been provided by that party. The

[1] Application and Assessment of Environmental Effects prepared for Road Metals Company Ltd, Vivian+Espie, Updated 19 March 2025.
[2] RC 250044 Section 42A Report, Tim Anderson, 24 March 2026.
[3] Statement of Evidence, Carey Vivian, undated.

vehicle crossing design has been approved by New Zealand Transport Agency (NZTA) by way of a letter.

[004] We include a site plan below which shows the location of the site in the context of the State Highway, and the key components of the proposal:

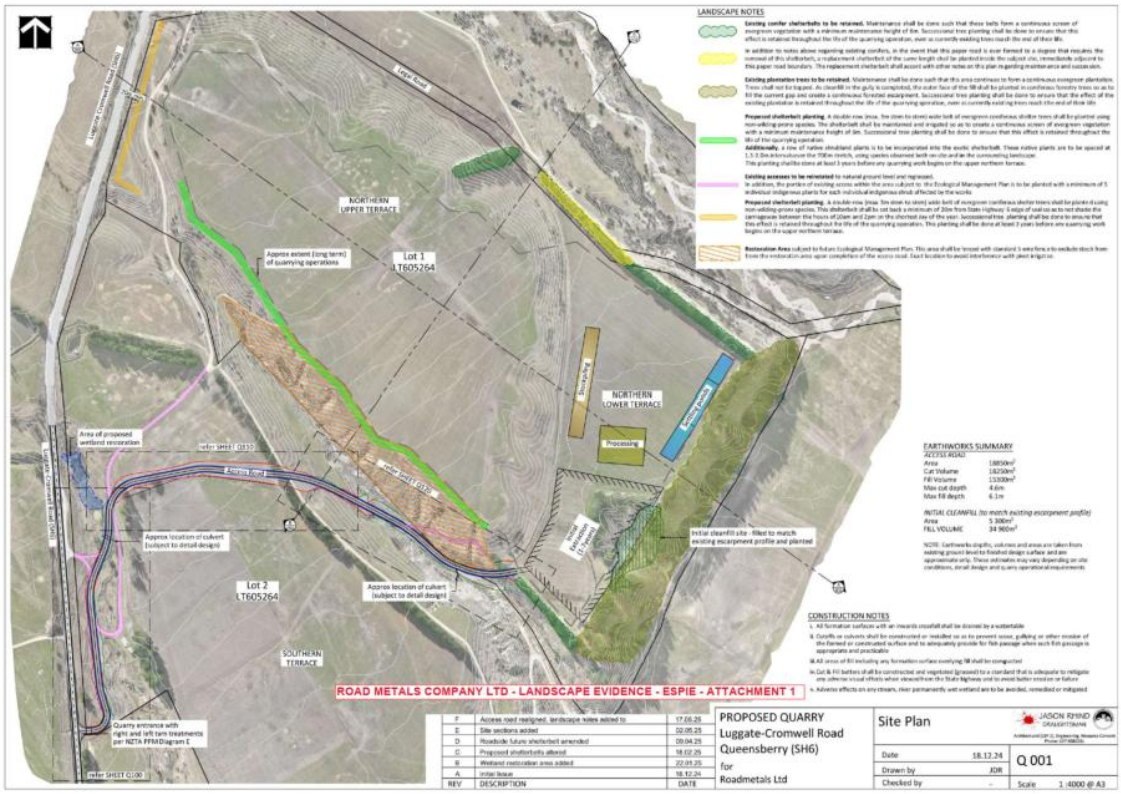


Figure 1 Landscape Plan for RC250044 (Source: Attachment 1, Statement of Evidence, Ben Espie).

[005] Further details of the proposal (**including as amended by the Applicant prior to and during the Hearing**) are set out in the effects assessment sections of this Decision and broadly relate to the following matters:

- The addition of a new shelterbelt on the northern side of the quarry after consultation with submitter Gravelly Gully Limited (GGL);
- Provision of a 30-hectare area between the proposed quarry and the land owned by GGL to remain as an undisturbed landform when viewed from GGL (including the additional shelterbelt planting);
- Updated operational controls;
- Updates to the Quarry Management Plan (QMP) to include staging of the quarry operations;
- Updated access arrangements;
- Updated details of the third stage of extraction;
- Outcome of further consultation with DoC;
- Updated Proposed Consent Conditions.

2.0 Process matters

2.1 Written approvals and notification

[006] The application was received by the Central Otago District Council (the Council) on 4 March 2025, superseded by an updated Application and AEE on 19 March 2025. Three written approvals were submitted from New Zealand Transport Agency (NZTA); Nick Davison (Davison Agricultural Limited) (landowner) and Chris Wise (Gravell Gully Limited).

[007] The application was publicly notified on 30 October 2025. The submission period closed on 3 November 2025.

2.2 Submissions received

[008] The Council received 10 submissions within the submission period including one neutral, five in support, and three in opposition. The submission from Gravelly Gully Limited was subsequently withdrawn and written approval provided.

[009] We were provided with full copies of all submissions. We record that we have read and had regard to all the submissions that were lodged, regardless of whether or not the submitter appeared before us at the Hearing.

2.3 Evidence exchange

[010] A procedural matter arose prior to the Hearing concerning the Council's circulation of three briefs of expert evidence following the issuing of the s42A Report. On 13 April 2026, the Panel received a Memorandum of Counsel[4] for the Applicant seeking that the Panel decline to waive the requirements of s42A(3), and, accordingly, reject the evidence filed by the Council on that date.

[011] We subsequently requested that the Council advise the basis on which it sought to have that evidence received[5]. A response from Mr Anderson was received on 8 June 2026[6] confirming that:

- the Council sought that the briefs of expert evidence be received by the Panel as late supplementary Council evidence; and
- the Council sought a waiver of the timetable requirements in respect of that late supplementary evidence; and
- the late evidence is broadly aligned with the content of the s42A and does not alter Mr Anderson's effects assessments or his recommendation.

[012] Having considered the nature and content of the late evidence, the Council's response to Panel Minute 1, and the memorandum of Counsel for the Applicant, we agreed with the Applicant's position, finding that:

- Pursuant to s103B of the Resource Management Act (Act) the consent authority must provide their s42A report and any other briefs of evidence to the Applicant at least 15 working days before the Hearing;
- There was nothing in the s42A Report that signalled any intention to provide any additional evidence. The statements filed on 13 April are not referred to or relied on up at all in the 42A report;
- The Applicant relied on the 42A report as being a complete record of the evidence for the recommendation in that report and prepared and filed its evidence on Friday 10 April in accordance with section 103B(3); and
- The Applicant is materially prejudiced by the late filing of the Council's expert evidence.

[013] However, as recorded in Panel Minute 2, the Panel also considered the content and nature of the late evidence to be relevant and important to its assessment of the Application. Accordingly, the Panel granted the requested waiver under s42A(3)(a) to receive the late evidence and is satisfied that doing so falls within the scope of our delegated powers under ss34 and 34A. The remaining issue, given the fairness

[4] Memorandum of Counsel on behalf of Road Metals Company Ltd objecting to Council evidence, dated 13 April 2026.
[5] Panel Minute 1, 15 April 2026.
[6] Memorandum, Tim Anderson, 8 June 2026

considerations,[7] is whether any prejudice arising from its late circulation could be addressed through appropriate adjustments to the Hearing timetable. We made directions inviting the Applicant to indicate whether it wished to proceed with the Hearing as scheduled or seek an adjusted timetable (including the option of postponement) to allow time to respond to any new matters arising from the late evidence.

[014] On 17 April 2026 we received a Memorandum from Counsel confirming that the Applicant wished to proceed with the Hearing as scheduled and sought a minor amendment to the timetable to allow the filing of supplementary evidence. That timetable amendment was subsequently approved via Panel Minute 3.[8]

2.4 Site visit

[015] We visited the site, and surrounding area, on the afternoon of Tuesday 21 April 2026, one week prior to commencement of the Hearing. We were accompanied by Richard Hardwick (Otago Area Manager), who is familiar with the site and the key features of the proposal. Mr Hardwick transported us around the site and identified relevant features of the proposal. We confirm that no evidence or matters relating to the merits of the proposal were discussed in his presence.

[016] Commencing at the existing access way from SH6, we traversed the perimeter of the site, observing the approximate location of the proposed culvert and area of proposed wetland restoration. We viewed the site from the adjoining land to the east, looking back toward the existing and proposed shelterbelt planting on the site's perimeter; and then from the northern site boundary, noting the location of the legal paper road, the 1.8ha farmland area to be retained and the western extent of the site. We then drove onto the upper terrace portion of the site, viewing the lower terrace area and approximate location of the proposed clean fill on the escarpment, as well as the settling ponds, stockpiling and processing areas. From there we walked to the southern boundary to view the proposed route of the proposed access road across the landscape and gully area.

[017] The site visit enabled us to gain a better understanding of the existing environment, the nature and scale of the proposal - including the key components of the staged construction/operation - and the issues before us.

2.5 Hearing

[018] We conducted a Hearing at the Five Stags Conference Centre in Cromwell on Tuesday 28 April 2026.

[019] Copies of the evidence and legal submissions that were presented are held by the Council. We do not summarise that material here, but we refer to it in the remainder of this Decision where appropriate.

[020] There were no submitters in attendance at the Hearing.

[021] We adjourned the Hearing on Tuesday 28 April 2026 and directed further comments from Mr Anderson[9] on matters relating to activity status and the National Environmental Standard for Electricity Transmission (NES-ET). Once this information was received, submitters were invited to comment on any matter should they wish to do so. No submitter comments were received.

[022] We also directed in Panel Minute 5 that the Applicant provide a final set of proposed conditions and quarry plans, together with any comment on Mr Anderson's response (and any submitter responses received). We received the Applicant's final proposed conditions and plans on Monday 11 May 2026. The Applicant

[7] As set in the Memorandum of Counsel on behalf of Road Metals Company Ltd objecting to Council evidence, dated 13 April 2026
[8] Panel Minute 3, 20 April 2026.
[9] Panel Minute 5, 29 April 2026.

elected not to provide a written Right of Reply, instead addressing key matters verbally at the conclusion of the Hearing.

[023] We closed the Hearing on 18 May 2026 having concluded that we required no further information from any of the participants and that we had sufficient information to enable us to make our decision.

3.0 Consents Required

Central Otago District Plan

[024] We were informed that the subject site is located within the Rural Resource Area of the CODP and that a flood annotation applies to the western edge of the site due to potential inundation from the Clutha River. We note that this annotation does not extend to any areas where extraction activities are proposed. No other overlays or annotations apply to the site.

[025] In his s42A Report, Mr Anderson advised that consent is required under the Plan for the following:

- A discretionary (restricted) activity pursuant to Rule 4.7.3(vi) for a breach of standards listed in 4.7.6I in respect of excavations within 10m of a waterbody and 4.7.6 J in respect of access tracks. It is proposed to undertake over 20m^3 of earthworks within 10m of a waterbody;

- A discretionary activity pursuant to Rule 4.7.4 for a breach of the standards listed in 4.7.6J(b)(i-iv)(Extractive Activities), whereby the displacement of materials proposed shall exceed 2000m^2 in area and 3000m^3 of volume.

- A discretionary (restricted) activity pursuant to Rule 4.7.3(i) for a breach of standards listed in 4.7.6F(Storage), whereby the storage of materials and stockpiling will occur for over 6 months.

- A discretionary activity pursuant to Rule 4.7.4(i) for an activity that breaches standard 7.6B(b) relating to traffic generation and characteristics of activities on the basis that it is proposed to have more than three people engaged in the activity.

[026] During the Hearing, it became clear that the proposal also breaches Rule 12.7.1(3) of the District Plan[10] and therefore requires consent as a restricted discretionary activity. In response to Minute 5, Mr Anderson confirmed - based on the transport evidence of Mr Copland - that the separation distance between the proposed access and an existing crossing point will be 140m, whereas the District Plan requires a 200m setback from other accesses on a highway. Mr Anderson did not raise any concerns regarding scope and confirmed that Mr Copland had appropriately addressed this breach in evidence.[11] We are satisfied that this aspect of the proposal falls within the scope of the Application and confirm that consent is required as a restricted discretionary activity under the Plan.

[027] We accept and adopt the consistent planning evidence from Mr Vivian (for the Applicant) and Mr Anderson (for the Council) which states that the subject site is not identified as having any hazardous or industrious activities. Accordingly, the National Environmental Standards for Assessing and Managing Soil to Protect Human Health (NES-CS) does not apply.

[028] We are satisfied there are no other National Environmental Standards relevant to this application.

[029] In accordance with the 'bundling principle', we find that the proposal requires consent as a discretionary activity under the CODP. No contrary evidence was presented on this matter.

[10] Relating to Access to Rural State highways
[11] RC250044 Road, Council response to Minute 5, 4 May 2026.

4.0 STATUTORY REQUIREMENTS

[030] Given the proposal has an overall status as a discretionary activity, the proposal must be considered under sections 104 and104B of the RMA.

[031] Section 104B enables us to grant or refuse consent to a discretionary activity and if granted, to impose conditions of consent. Section 104(1) of the RMA outlines the matters that we must have regard to when making our decision. The following sections address these matters.

4.1 Effects assessment

4.1.1 Structure and Approach

[029] We have focused our assessment of effects on the key issues in contention between the parties, based generally upon the topics outlined in the s42A report. For completeness we also provide a summary of the issues not in contention, concluding with positive effects. We start with a discussion of the permitted baseline concept.

4.1.2 Permitted baseline

[032] When forming an opinion for the purposes of section 104(1)(a) of the RMA we may disregard an adverse effect of an activity on the environment if a national environmental standard or a plan permits an activity with that effect.[12] In this case, quarrying activities meeting the relevant District Plan standards—including earthworks of up to 2,000m² and 3,000m³ per annum, and involving no more than three staff—are permitted. Outdoor stockpiling for periods of up to six months is also permitted.

[033] Mr Anderson considered the permitted baseline to be of limited relevance, noting that the scale and duration of the proposed quarrying activity significantly exceed what is permitted as of right. On that basis, he did not apply the permitted baseline in his assessment. We accept Mr Anderson's observation that the earth worked areas and volumes proposed here significantly exceed those thresholds, and that the permitted activity envelope is narrow.

[034] However, we do not accept that this renders the permitted baseline wholly irrelevant. The District Plan expressly anticipates mineral extraction within the Rural Resource Area, and permitted quarrying and stockpiling activities form part of the existing and reasonably foreseeable receiving environment. As Mr Vivian noted in his Evidence[13], and Mr Page in his legal submissions[14], small-scale quarrying and associated landform modification are contemplated activities in this zone. This context is relevant when considering the extent to which changes in landform, visual amenity and rural character may arise independently of this proposal.

[035] We accept that the District Plan anticipates mineral extraction activities within the Rural Resource Area. However, the permitted activity thresholds for quarrying—limited to 2,000 m² of earthworks, 3,000 m³ of material, and no more than three staff— are of a wholly different scale to the proposal before us. We find that the permitted baseline does not provide a realistic or meaningful comparator for the effects in issue. While quarrying is anticipated in policy terms, the permitted baseline remains narrow. We therefore find that the permitted baseline is relevant in a limited way: it informs the extent to which some degree of extraction activity and associated landform change is anticipated in the Rural Resource Area.

[12] Section 104(2) of the RMA.
[13] Statement of Evidence, Carey Vivian, para 4.4
[14] Submissions of Counsel on behalf of Road Metals Company Limited, 22 April 2026.

4.1.3 Landscape and visual effects

[036] Submissions[15] from Oliver Road residents raised concerns about landscape, rural and visual amenity effects, while other submitters[16] considered that that landscape effects would be minor.

[037] The Applicant's landscape assessment[17] was peer-reviewed by Hannah Wilson (Boffa Miskell) for the Council. Both experts agreed on the key viewing locations - including SH6, the Lochburn Track/Scenic Reserve, the Clutha River, unformed legal roads, and nearby dwellings - and their aligned assessments conclude that the visual effects of the proposal are minor. We accept this evidence, noting that no contrary expert evidence was presented.

[038] However, the experts initially differed on landscape character effects. Ms Wilson considered that the quarry and access road would substantially modify a legible glacial terrace, resulting in moderate adverse effects (more than minor) during operation, reducing to low following rehabilitation. Mr Espie considered that the working rural context, topography and vegetative containment, and the progressive rehabilitation meant effects would be low, localised, and not more than minor**,** with additional mitigation further reducing perceptibility.

[039] During the Hearing, the Panel directed the landscape experts to confer on this matter. Following conferencing, Ms Wilson agreed with Mr Espie that adverse effects on landscape character and values will be low and that visual effects will be minor. She also confirmed her comfort with the revised proposed conditions relating to the Quarry Management Plan, landscape management, rehabilitation and shelterbelt screening. This resolved the earlier divergence in expert opinion and provided the Panel with a consistent and reliable evidential basis for its findings on landscape effects.

[040] Having considered the landscape evidence, conferencing outcome, and submissions, we accept that the proposal will introduce further human modification into an already modified valley-floor landscape. However, the site's topography, existing vegetation, and the additional mitigation now proposed provide a high degree of containment, such that the quarry will be difficult to perceive from most public and private viewpoints. We also accept the experts' consensus that visual effects will be minor.

[041] On landscape character, we note the following factors:

- the working rural character of the receiving environment, which already contains substantial modification and instances of quarrying;
- the maximum 10-hectare limit on exposed ground at any one time;
- the progressive rehabilitation that will return land to pasture in a naturalistic form;
- the additional mitigation introduced since the peer review, including further shelterbelt planting, ecological restoration, indicative cross-sections guiding final landform, and clearer staging and depth limits; and
- the experts' agreement that post-rehabilitation effects will be low.

[042] We accept Mr Espie's evidence that the duration of the quarry does not, in itself, give rise to greater landscape effects, given the defined maximum disturbed area and the progressive reinstatement. We therefore do not consider that cumulative landscape effects will arise. We further accept his evidence that visibility from Oliver Road is very limited, with quarrying forming only a small part of a broad landscape scene, and that the activity is not discordant within an ORL farming landscape. On this basis we are satisfied that any visual effects for the Oliver Road submitters will be very low.

[043] For these reasons, the Panel finds that adverse effects on landscape character and values will be low, and that the proposal will maintain the rural landscape values anticipated for an Other Rural Landscape under

[15] Submissions including: T & S Crook [#4]; T & S Brodie, [# 5].
[16] Submissions including: S Johnstone [#7]; T Chapman [#8]; M Springer [#9].
[17] Landscape and Visual Effects Assessment Report, 24 January 2025. Attachment F to AEE.

the District Plan. We therefore adopt the agreed expert position as the basis for our findings on landscape and visual effects.

4.1.4 Ecology

[044] The Applicant provided detailed information on the effects of the proposed quarrying operation and associated access in an ecology report prepared by Reuben Rorrison of Restore NZ. This report addressed the relevant matters of discretion relating to Rule 4.7.3(vi). The assessment by Restore NZ was peer reviewed for the Council by independent ecologist, Mr Mike Harding.

[045] The submission of Te Ao Mārama Inc on behalf of the Waihōpai Rūnaka sought clarification and additional detail in relation to ecological management, particularly with respect to site rehabilitation and lizard survey requirements.

[046] The Panel has considered the ecological evidence of Mr Rorrison, including his supplementary brief responding to Mr Harding's evidence[18]. We accept that while the central gully contains ecologically significant values**,** including indigenous shrubs and potential lizard habitat, it is not identified as a Significant Natural Area**,** and cannot be identified as one through this consent process due to the operation of s78 RMA and the temporary suspension of NPS-IB clause 3.8(6). We note that during the Hearing Mr Harding confirmed he now agreed with this interpretation, having initially stated that the entire central gully met the NPS-IB criteria for an SNA. Our assessment therefore focuses on the actual ecological values affected and the effects of the proposed works**.**

[047] We accept the evidence that the access alignment has been subject to detailed survey and iterative refinement**,** resulting in the avoidance of higher-value vegetation and habitat wherever practicable. Fewer than 20 indigenous shrubs are expected to be affected, and the proposal includes targeted reinstatement planting along the redundant farm track, with a replacement ratio of approximately 15–20:1. We find that these measures appropriately remedy the limited residual effects on indigenous vegetation.

[048] We also accept that the proposal appropriately applies the effects management hierarchy. Avoidance and minimisation have been prioritised, and remediation measures are proportionate to the scale of effects. We agree with Mr Rorrison that the threshold for ecological offsetting or compensation is not reached, and we do not consider a legal covenant over the remainder of the gully to be necessary or justified.

[049] We note the additional ecological measures proposed, including fencing approximately 2.96 hectares of the gully to exclude stock and allow natural regeneration, enhancement of the existing wetland, and installation of a low-head fish barrier to protect upstream populations of Clutha flathead galaxiid. While not relied upon to mitigate effects, these measures represent positive ecological outcomes that will improve indigenous biodiversity values over time.

[050] We are satisfied that alternative access routes were appropriately considered at a multidisciplinary level, and that the selected route is the most suitable when landscape, engineering, and ecological constraints are considered together. Further ecological survey of alternative routes is not required.

[051] During the Hearing, the Panel directed the ecology experts to confer on any remaining points of difference. Following conferencing, the Applicant provided a revised condition suite reflecting the changes sought by Mr Harding, including:

- replacing the proposed exotic hedgerow with indigenous species;
- amending the EMP condition to ensure both plant and animal pests will be managed;
- ensuring indigenous vegetation within the Central Gully will be retained and managed; and
- requiring a Pest Plant and Pest Animal Control Programme within the Central Gully for the life of the consent.

[18] Statement of evidence, 9 April 2026 (this being the late circulated evidence)

[052] Overall, having considered the ecological evidence, the outcome of conferencing, and the updated conditions, we find that the ecological effects of the proposal are low, are appropriately managed through the proposed design, mitigation, and the Project Ecological Management Plan, and that the proposal has the potential to deliver long-term ecological benefits within the Central Gully.

4.1.5 Access and transport

[053] In his evidence, Mr Copland summarised the proposed activity from a transport perspective, noting that the key elements include construction of a sealed internal road, upgrades to an existing vehicle crossing on SH6, and traffic generation associated with quarry operations.[19]

[054] Submitters Tim and Sheryl Crooks[20] raised concerns about traffic safety on the highway. Submitters on Oliver Road[21] expressed concern about increased truck noise and highway safety.

[055] The Panel has considered the transport evidence, the written approval of the New Zealand Transport Agency[22] (NZTA), and the submissions raising concerns about traffic, noise and safety. The proposal includes a new, purpose-built access from SH6 constructed to the appropriate standard, with the existing access to be disestablished. The access is located on a straight section of highway and meets the District Plan sight-distance requirements. The design has been peer reviewed by Mr Von Solms (for Council) who accepts the proposed formation, and NZTA has confirmed its approval.

[056] The Panel accepts Mr Copland's evidence that any adverse traffic effects of the proposal will be localised and concentrated around the site access itself, and that the proposed access design is appropriate such that any adverse effects can be suitably mitigated. Beyond the site access, the additional approximately 200 vehicle movements per day represents a very small increase relative to existing average annual daily traffic flows on SH6. We further accept that SH6 is appropriately designed to safely and efficiently accommodate the anticipated Stage 3 number of heavy vehicle movements.

[057] We note NZTA's written approval, the expert assessment confirming compliance with relevant standards, and the proposed traffic management measures during construction. We also accept the conclusion that the proposal will not result in undue effects on the wider transport network, particularly as other gravel sources in the area are expected to reduce operations over time.

[058] In respect of the non-compliance with Rule 12.7.1(iii)(b) of the District Plan regarding access spacing on SH6 - where the existing access at 1971 Luggate–Cromwell Road is approximately 140–145 metres from the proposed quarry access, less than the required 200 metres for a 100 km/h rural state highway - Mr Copland's evidence was that this reduced spacing does not create a practical safety issue. He noted the low traffic volume at the existing access and the sufficient separation to accommodate the proposed Diagram E intersection treatment without conflict. The Panel finds that this non-compliance does not generate adverse transport safety or efficiency effects and is therefore acceptable.

[059] For these reasons, the Panel finds that adverse effects relating to access and transport will be acceptable, and that the proposed access design and traffic generation are appropriate in the context of SH6 and the surrounding rural environment. For completeness, we address noise impacts in section 4.1.9 where we find that the noise from the proposed quarry (including truck movements) will not exceed a reasonable level or cause unreasonable disruption to activities on neighbouring properties.

[060] In relation to the proposed conditions of consent, we noted at the Hearing that the condition addressing the design specifications of the culvert appeared to duplicate a condition of RM25.438.02, which would be *ultra vires* for a district-level consent. In response to a Panel question on this matter, Mr Vivian agreed that the

[19] Statement of Evidence, Logan Copland, 10 April 2026 para 22
[20] Submitter [#5]
[21] Submitters including J Taylor [#1]; T & S Crook [#4] and T&S Brodie [#5].
[22] NZ Transport Agency Waka Kotahi, written approval, dated 22 April 2025. Appended to the evidence of Logan Copland.

proposed culvert-design condition duplicates a matter already regulated through ORC Consent RM25.438.02, although he considered it useful for integration and clarity.

[061] Having considered this matter, we find it unnecessary and inappropriate to impose a district-level condition that duplicates the regional consent. However, we can see merit in including a condition for integration purposes. We have amended the condition to ensure that the culvert is constructed in accordance with the ORC-approved design, that the physical works are completed as part of the land-use activity, and that no conflict/duplication arises between district and regional functions.

4.1.6 Cumulative effects

[062] Mr Anderson considered the proposed quarry to be a large-scale activity capable of generating a wide range of effects, including on landscape, rural character, ecology, the road network, and amenity factors such as noise and dust. He stated that while some components – such as noise levels and transport requirements - can comply with District Plan standards, the activity as a whole is not anticipated by the Plan. In combination, he considered these effects generate cumulative effects beyond those expected from anticipated rural activities.

[063] Mr Anderson concluded that, due to its scale, the quarry will be a noticeable addition to the environment. In his view, Stages 1 and 2 would result in minor cumulative effects that could be appropriately managed through mitigation. However, at the time of preparing the s42A Report, he considered that it had not been demonstrated that cumulative effects associated with Stage 3 would be appropriately addressed.

[064] The Panel has considered the evidence of Mr Vivian on cumulative effects. We accept his view that some degree of cumulative landscape change is already anticipated and enabled in the Rural Resource Area through the District Plan's permitted activity framework for quarrying, extraction, and stockpiling. While the permitted baseline does not replicate the scale of the current proposal, it does demonstrate that progressive modification of landform is an expected component of the rural environment and may occur without the environmental safeguards that accompany a consented operation.

[065] We accept the Applicant's legal submissions that cumulative effects must arise from effects that will occur, not from hypothetical or uncertain future scenarios, and must involve either a gradual build-up over time or a combination of effects that together create a tangible, evaluable outcome. We also accept the submission that quarrying is an anticipated activity in the Rural Resource Area, as reflected in Issue 4.2.4 and the Plan's explicit recognition that mineral extraction must locate where the resource occurs. This context is relevant to determining the level of cumulative change reasonably expected in this landscape.

[066] We also accept the expert landscape evidence of Mr Espie, supported by Ms Wilson's peer review, that the cumulative landscape and visual effects of the proposal will be contained, temporary, and well-mitigated. The site benefits from substantial existing screening, and the additional shelterbelt planting, the 30-hectare undisturbed landform buffer, and the staged extraction approach ensure that only up to 10 hectares will be exposed at any one time. Progressive rehabilitation will follow behind active extraction, meaning that disturbed areas will be returned to pasture and naturalistic landform as the quarry advances. We agree that this approach materially limits the potential for cumulative degradation of landscape character.

[067] We further accept that quarrying is a typical and established activity in this wider landscape, and that the proposal is smaller in exposed area than other quarries in the vicinity. The retention of a perimeter of undisturbed landform and the adoption of the recommended landscape conditions provide additional assurance that cumulative effects will remain within acceptable bounds.

[068] In relation to ecological, dust, noise, and sedimentation effects, we accept Mr Vivian's evidence that the Quarry Management Plan, Environmental Management Plan, and the conditions of both district and regional consents provide an integrated and robust management framework. These measures will ensure that cumulative environmental effects are appropriately avoided, remedied, or mitigated over the life of the quarry.

[069] Overall, the Panel finds that, the proposal does not give rise to cumulative effects that are more than minor. With the proposed mitigation, staging, and rehabilitation, cumulative effects of the proposal on landscape character, visual amenity, ecology, and environmental quality will be acceptable and will reduce to low over time. We record that, in his verbal review of his recommendation, Mr Anderson confirmed that with the benefit of further information supplied by the Applicant, he now agrees that cumulative effects associated with Stage 3 are appropriately addressed.

4.1.7 Duration of consent

[070] Mr Anderson noted in the s42A report that the ORC, in its notification determination for RM25.438, recommended consent durations of up to 35 years for the associated regional activities. The discharge to air and discharge to water permits were ultimately granted for a 25-year term, expiring on 20 November 2050. He initially recommended that the proposed activity should be subject to a commensurate duration condition, aligning its expiry with the ORC permits. In his view, this would provide clarity about the overall timeframe and extent of effects, ensure the land-use activity remained tied to the mitigation measures imposed through the ORC consents, and allow for a future reassessment of effects should the Applicant seek to operate beyond that period.

[071] Mr Page submitted that the district-level consent should not be limited to the 25-year term of the ORC discharge permits. While the ORC recommended durations of up to 35 years and ultimately granted 25-year terms for air and water discharges, he argued that:

- district and regional consents serve different purposes, and there is no requirement that their durations align.
- the quarry is a long-life resource, expected to operate for several decades, and a shorter term would undermine operational certainty and investment.
- the proposal already includes robust management plans and review conditions, which provide appropriate safeguards and allow the Council to address unforeseen effects without imposing an artificially short duration.

[072] Having considered the s42A report, planning evidence and the Applicant's legal submissions, we accept that there is no statutory requirement for district and regional consents to share the same duration, and that the two consent regimes serve different purposes. We do not consider it necessary or appropriate to limit the duration of the district-level consent to the 25-year term of the ORC permits. We are satisfied that a longer duration is appropriate given the nature of the resource, the staged life of the quarry, and the ability to manage effects through conditions and review provisions. We record that, in his verbal review of his recommendation, Mr Anderson confirmed that he no longer pursued a condition restricting the duration of consent.

4.1.8 Bond

[073] The s42A report and Mr Harding's ecological evidence recommended a bond condition be included in the consent. As noted in the Applicant's legal submissions, this recommendation appears to respond to the submission made by Te Ao Mārama Inc. which sought a bond as a mitigation measure in relation to rehabilitation of the site post quarry closure. The s42A report does not otherwise explain why a bond is considered necessary in the circumstances of this application.

[074] Mr Page submitted that the Applicant did not oppose the inclusion of a bond in principle, but emphasised that any bond condition must be lawful, necessary and proportionate. Noting that bonds are commonplace for quarry operations, the Applicant proposed a mechanism whereby the bond amount would be calculated by a suitably qualified and independent quantity surveyor, assessing the cost of complying with reinstatement conditions arising from extraction undertaken in the first 10 year period. The bond would then be reviewed at 10 year intervals by an independent quantity surveyor to reflect progressive reinstatement. Each assessment, including all supporting assumptions and calculations would be provided to the Council for approval.

[075] We accept the condition and are satisfied that it ensures the bond is limited to the actual cost of respreading stockpiled topsoil, re-establishing contours sufficient to achieve the intended post-quarry land use, applying grass seed, and covering any required professional fees. The mechanism ensures the bond remains proportionate and responsive throughout the life of the quarry. Mr Anderson verbally confirmed at the Hearing that he accepted this condition.

4.1.9 Other effects including those that were not in contention

Natural hazards, land stability and sedimentation

[076] We accept the consistent planning evidence that any adverse effects related to natural hazards will be acceptable and the proposed quarry will not exacerbate any known hazard risk. We agree and adopt that conclusion.

[077] Mr Harding in his evidence recommended that the Applicant review the geotechnical assessment to confirm that the physical and ecological integrity of the terrace risers will not be adversely affected by the long-term quarrying operation. Mr Rorrison confirmed in his evidence that the engineering geologist had assessed the stability and hydrological context of the terrace risers and concluded that the proposed quarrying will not adversely affect their physical or ecological integrity. We accept this evidence and are satisfied that no further geotechnical input is required.

Noise and Dust

[078] We accept the consistent acoustic evidence of Mr Walton (for the Applicant) and Mr Exeter (for Council) that, with the proposed noise mitigation and the recommended conditions, the adverse effects of noise will be appropriately managed. We accept the evidence that noise from the proposed quarry will be similar in level, character, frequency, and timing to noise that is permitted in the existing environment, and that it will not exceed a reasonable level or cause unreasonable disruption to activities on neighbouring properties. We agree with this assessment, noting we received no contrary evidence on this matter.

[079] We further accept the consistent planning evidence that the proposed dust management measures and monitoring will appropriately mitigate effects of dust. Having regard to the ORC peer review and the conditions imposed through the ORC discharge permit, we are satisfied that dust effects will be appropriately mitigated.

Storage and stockpiling

[080] We accept the consistent planning evidence that the adverse effects of the proposal resulting from stockpiling and storage will be acceptable and will be appropriately mitigated. We agree with that conclusion.

Effects on water quality

[081] We record that while water quality and aquatic ecology are primarily regional council functions under s30 RMA, the Panel may consider the extent to which land-use activity could give rise to effects on water bodies. Our findings are confined to those land-use effects.

[082] As addressed in his s42A Report, Mr Anderson noted that water quality issues have been considered in Mr Rorrison's ecology report. He recorded that the presence of the Clutha Flathead Galaxiid in the stream is an important consideration and a specifically designed culvert, including a fish barrier to protect this species' habitat from the threat of exotic species, is proposed. Mr Anderson further notes these measures are supported by Mr Harding. He concluded that, with the mitigation measures as outlined in the ecology assessments, any adverse effects on water quality will be less than minor. We agree with this conclusion.

Effects on rural productivity

[083] We agree that the specific details about the storage and stockpiling of the topsoil are able to be reviewed through Council's certification of the Quarry Management Plan. We accept Mr Anderson's conclusion that adverse effects on the productive use of the site are likely to be acceptable, subject to conditions. We

assess the proposal against the National Policy Statement for Highly Productive Land in section 4.3 of this Decision.

[084] We accept Mr Patterson's evidence for the Applicant that the loss of rural productive capacity from the proposal is very small. Only 9 hectares of LUC 3 highly productive land is present within Lot 1, and just 1.8 hectares of this fall within the quarry footprint. His evidence was that the economic output associated with this land is modest, estimated at approximately $11,000 of GDP per annum for the full 9 hectares, and only around $2,000 per annum attributable to the 1.8 hectares directly affected. We are satisfied that the loss of this limited area of productive land will have a negligible effect on rural productivity in the District. No contrary evidence was presented by any party.

Cultural and heritage values

[085] As addressed in the s42A Report, Mr Anderson considered that the scale and extent of the proposed excavations could pose a potential risk to cultural and heritage features, although Council's GIS identifies no known sites within the area. He noted the importance of waterways to Kāi Tahu ki Otago, and that, despite the site being approximately 300 metres from the Mata-Au/Clutha River, the ORC consent processes and proposed mitigation – including riparian planting and a culvert designed to protect Clutha flathead galaxiid habitat – provide appropriate safeguards. He supported conditions requiring adherence to Accidental Discovery Protocols, and a remediation bond, both of which the Applicant accepted. Overall, his conclusions on cultural, heritage and waterway matters align with the Applicant's planning evidence, which similarly identifies no known cultural features and considers the proposed mitigation and consent framework sufficient to address potential effects. We agree and accept this evidence and are satisfied that the matters raised in the submission of Te Ao Mārama Inc. are appropriately addressed. No contrary evidence was presented.

4.1.10 Positive Effects

[086] Mr Jared Johnston, General Manager at Road Metals Company Limited spoke to us about the rational for the quarry proposal, the process undertaken in determining site suitability, and the positive effects of the proposal for the Central Otago and Queenstown Lakes communities. His evidence demonstrated a number of positive effects, including:

- Providing a long-term reliable supply of aggregate resource for the region responding to population growth and demand for construction materials in the Central Otago and Queenstown Lakes districts;
- The site's strategic location between Cromwell and Wānaka will reduce transport distances to key markets, thereby lowering construction costs and reducing vehicle emissions associated with aggregate haulage;
- the proposal will contribute positively to regional development, housing delivery, and infrastructure resilience;
- the establishment of a new long-term quarry will enhance the resilience of the regional aggregate supply network at a time when existing quarries are being displaced by competing land uses, particularly residential development.

[087] We also heard evidence from Mr Benje Patterson, economist, for the Applicant. We accept Mr Patterson's unchallenged economic evidence that the proposal will generate substantial economic benefits at both the local and regional scale. The quarry is projected to contribute between $0.4 million and $5.7 million of direct GDP per annum to the Otago Central Lakes economy, and between $0.6 million and $8.8 million per annum in total GDP effects across Otago once multiplier effects are included. These benefits significantly outweigh the modest economic loss associated with the small area of highly productive land affected, estimated at approximately $11,000 of GDP per annum, with only $2,000 attributable to the 1.8 hectares within the extraction footprint. We are satisfied that the proposal will make a meaningful contribution to meeting existing and future aggregate demand in a rapidly growing region, and that the economic benefits of the quarry are considerable.

[088] Overall, we accept the evidence[23] that the proposal will result in positive effects for the community by securing a high-quality aggregate resource and providing long term economic and community benefits. We received no evidence to the contrary from any party.

4.1.11 Overall findings on effects

[089] In light of the preceding assessments, our overall finding is that effects are either no more than minor or can be suitably avoided, remedied, mitigated by the imposition of appropriate conditions of consent. We find that the proposal is likely to result in positive effects for the community by securing a high-quality aggregate resource and providing long term economic and community benefits.

4.2 National environment standards and other regulations

[090] We accept and adopt the consistent planning evidence for the Applicant and the Council which states that the subject site is not identified as having any hazardous or industrious activities. Accordingly, the National Environmental Standard for Assessing and Managing Soil to Protect Human Health (NES-CS) is not engaged.

[091] In response to a Panel question, it became evident that the National Environment Standards-Electricity Transmission may be relevant to our assessment, given our understanding that the overhead transmission lines traversing the site may be placed underground in the future. We directed Mr Anderson to provide written comment following the Hearing.[24] In response, Mr Anderson confirmed that no specific consents are required under the NES-ET in relation to the present proposal. However, he recommended the inclusion of an advice note to address any future permit that may be required from Aurora in respect of the power poles and overhead lines[25]. We accept this advice.

[092] We are satisfied there are no other National Environmental Standards (NES) relevant to the application.

4.3 National policy statements

[093] The NPS-HPL took effect on 17 October 2022 and was amended on 15 January 2026. It requires Regional Councils to map highly productive land, with provisional mapping applying until that work is completed. Mr Anderson's evidence was that, under Clause 3.5.7, the recent amendments removed restrictions of land within LUC 3, other than for Rural Lifestyle purposes. On that basis, he concluded that the use of LUC 3 land is not a matter that is relevant to the NPS-HPL.

[094] Mr Vivian disagreed. He noted that "quarrying activities" under the NPS-HPL adopts the Planning Standards definition, which is broader than extraction alone and includes a wide range of ancillary activities such as processing, storage, rehabilitation, landscaping, and associated buildings. He considered that only land falling within this defined area is relevant to the NPS-HPL analysis. Based on the site plan, he identified that only 1.8 hectares of HPL falls within the area defined as "quarrying activities." In relation to that small area, he considered that clause 3.9(2)(j) applies, requiring both a functional or operational need to locate on HPL and evidence of significant regional or national benefit. He considered the functional and operational need to have been demonstrated in Mr Johnston's evidence, and the significant regional benefit to have been demonstrated in Mr Patterson's evidence. On that basis, he concluded that the small area of HPL used for quarrying activities is excluded from further consideration under clause 3.9(2).

[095] Having considered the evidence, we find Mr Vivian's interpretation and assessment to be more accurately aligned with tests required under the NPS-HPL. We are satisfied that the NPS-HPL is relevant to our assessment, but that in respect of the small part of HPL land within the quarry footprint, both the functional

[23] Statement of evidence, Jared Johnson, 10 April 2026.
[24] Panel Minute 5, 29 April 2026.
[25] CODC Memorandum, Tim Anderson, 8 June 2026.

and operational need to locate on HPL, and the significant regional benefit of the activity, have been clearly demonstrated.

[096] The NPS-IB seeks to maintain indigenous biodiversity through a precautionary approach, with particular emphasis on the identification and protection of Significant Natural Areas (SNAs). No SNAs are identified on the site. Ecological assessments have been undertaken, and the recommended measures—including exclusion of sensitive areas, discovery protocols, and progressive rehabilitation and replanting—are secured through consent conditions. These measures appropriately avoid, remedy, or mitigate potential effects on indigenous vegetation and fauna. Having regard to the absence of SNAs and the conditions imposed to manage ecological effects, we find that the proposal is consistent with the NPS-IB**.**

[097] The NPS-FM requires decision-makers to give effect to Te Mana o te Wai, prioritising first the health and wellbeing of water bodies, then the essential needs of people, followed by other uses. The proposal has been subject to specialist freshwater ecology assessment, and the recommended mitigation and management measures are incorporated into consent conditions. The activity is also subject to Otago Regional Council consents, where the potential effects on waterways have been assessed in detail. With the proposed conditions in place and the regional consenting framework addressing freshwater effects, we are satisfied that the proposal is consistent with the NPS-FM**.**

[098] There are no other National Policy Statements relevant to the application.

4.4 Regional policy statements

[099] The Operative Regional Policy Statement for Otago 2019 (RPS 2019) became fully operative 4 March 2024.

[100] The Proposed Otago Regional Policy Statement 2021 was notified on 26 June 2021. Decisions on submissions were notified on 30 March 2024. This policy statement is still subject to appeals and is therefore considered partially operative (PORPS).

[101] In terms of RPS 2019, Mr Anderson considered the proposal to be consistent with Objective 1.1[26] and Objective 5.3[27] for the reasons that the proposal will provide a key resource without notably detracting from the long-term productive uses of the zone, and that the proposed management and rehabilitation of the quarry will provide mitigation of effects on primary production. However, his overall view was that the proposal is inconsistent with the RPS 2019.[28]

[102] We have difficulty accepting Mr Anderson's advice on this matter and prefer the evidence of Mr Vivian. Policies 5.3.1 and 5.3.4 give guidance as to what activities are compatible or in harmony with Objective 5.3. Specifically, Policy 5.3.1 seeks to manage activities within rural area to support the region's economy and communities by, among other things, providing for mineral exploration, extraction and processing, minimising the loss of significant soils and providing for activities that have a functional need to locate in rural areas. Policy 5.3.4 likewise recognises the functional needs of mineral exploration, extraction and processing activities to locate where the resource exists. These provisions acknowledge that mineral extraction may need to occur in areas containing significant values.

[103] In terms of the PORPS, we note the consistent planning evidence that the relevant objectives and policies are high-level and broadly framed, intended to guide the development and implementation of district plans. We are satisfied that the CODC District Plan provides equivalent provisions that have been addressed directly in this Decision.

[26] Objective 1.1 of the RPS 2019 reads: "Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities:

[27] Objective 5.3 of the RPS 2019 reads: "Sufficient land is managed and protected for economic production"

[28] We assume Mr Anderson was referring to the RPS 2019 which he stated to be fully operative, and not the Partially Operative Regional Policy Statement for Otago referred to at the end of his assessment on the RPS 2019.

[104] Overall, given our findings on the effects of the proposal, we consider it to be consistent with all relevant provisions of the RPS 2019 and the PORPS.

4.5 Central Otago District Plan

[105] In assessing the proposal under section 104(1)(b) of the Act, we have considered the relevant objectives and policies of the Central Otago District Plan. We have had regard to the assessments of both Mr Anderson (s42A) and Mr Vivian (for the Applicant).

[106] A central point of divergence between the planning assessments concerns the extent to which quarrying is an anticipated activity within the Rural Resource Area under the Central Otago District Plan. The tension arises not from disagreement about the factual effects of the proposal, but from differing interpretations of the policy framework and how it should be applied to a large-scale, long-duration extractive activity.

[107] We understood Mr Anderson's reading of the Plan as anticipating quarrying only at a small scale, with larger operations constituting an inconsistency with landscape and amenity policies. Conversely, Mr Vivian's reading of the Plan is that quarrying is anticipated as a category of rural activity, with scale managed through conditions, staging, and rehabilitation rather than through policy exclusion.

[108] The Panel accepts that the Rural Resource Area is intended to accommodate a range of productive and extractive activities, and that the policy framework does not impose a scale-based ceiling on quarrying. The discretionary activity status for quarrying reflects this intent: it enables proposals of varying scale to be assessed on their merits through an effects-based lens rather than through prescriptive limits. The Plan anticipates that rural activities may modify landforms, generate noise and traffic, and temporarily displace productive uses, provided these effects are appropriately managed. The comprehensive mitigation and rehabilitation measures proposed give the Panel confidence that the activity remains within the ambit of what the District Plan anticipates.

[109] With respect to Objective 4.4.2, Mr Anderson concluded that the proposal is inconsistent with (but not contrary to) Policy 4.4.2 in so far as effects on the landscape are concerned which we understand is primarily due to his uncertainty with Stage 3 of the proposal. Those uncertainties have now been addressed through an update to the Quarry Management Plan (including conditions on certification). We acknowledge that the quarry will result in noticeable landscape modification during active extraction. However, we accept Mr Vivian's evidence, supported by Mr Espie and Ms Wilson, that the site is well-contained, well-screened, and subject to a comprehensive suite of mitigation measures. These include additional shelterbelts, a 30-hectare undisturbed landform buffer, defined maximum excavation depths, and staged rehabilitation. We are satisfied that these measures ensure that effects on landscape character are temporary, reversible, and reduce to a low level following rehabilitation. In this context, we find the proposal consistent with Policy 4.4.2.

[110] The temporary removal of topsoil is an inherent component of quarrying, and we accept Mr Vivian's evidence that it will be stockpiled and progressively reinstated, ensuring long-term productive capacity is maintained and that the proposal is consistent with Policy 4.4.6.

[111] While the activity will generate noise, traffic, dust and visual effects, the expert evidence demonstrates that these effects are appropriately mitigated through operational controls, hours of operation, screening, and the Quarry Management Plan, with separation distances and site containment ensuring acceptable amenity outcomes for neighbouring properties. We therefore find the proposal consistent with Policy 4.4.8.

[112] We also accept the unchallenged evidence that the proposal is supported by NZTA, that effects on water quality and riparian margins are appropriately managed, and that ecological effects are avoided, remedied or mitigated through conditions. The proposal is accordingly consistent with the relevant policies addressing these matters.

[113] Having considered the objectives and policies in their entirety, we find that the proposal is consistent with the strategic and enabling framework of the Central Otago District Plan. It is clear to us that quarrying is an anticipated activity within the Rural Resource Area, and the proposal incorporates a robust suite of mitigation and rehabilitation measures that ensure effects are appropriately managed. We therefore accept Mr Vivian's conclusion that the proposal is not inconsistent with, and in fact aligns with, the relevant objectives and policies of the District Plan.

[114] We also accept the conclusion reached by both planners that the proposal is consistent with the objectives and policies of Section 3 – Manawhenua. The activity avoids known wāhi tapu and wāhi taoka, incorporates wetland restoration to address potential effects on mahika kai, and includes an accidental discovery protocol. These measures appropriately respond to the matters raised in the submission of Te Ao Mārama Inc. We find the proposal consistent with Objectives 3.3.4 and 3.4.1.

[115] For these reasons, and in light of our findings with regard to adverse effects of the proposal on the environment under section 104(1)(a), we are satisfied there is sufficient evidence to conclude that proposal is consistent with all relevant CODP objectives and policies.

4.6 Offsetting or compensation measures

[116] Under s104(1)(ab) we are required to have regard to any measure proposed or agreed to by the Applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity.

[117] In this case there are no offsetting or compensation measures proposed or agreed to by the Applicant that need consideration.

4.7 Section 104(1)(c) other matters

[118] The policies contained within the Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 was addressed in the submission of Te Ao Mārama Inc.

[119] Given our previous findings on effects including cultural values, and in the absence of any evidence to the contrary, we find that the proposal is consistent with this iwi management plan.

[120] There were no other relevant s104(1)(c) matters for us to consider.

4.8 Part 2 matters

[121] Mr Anderson considered the proposal is consistent with Part 2 of the Act given the nature of the activity and the proposed conditions of consent.

[122] We are aware of the case law which outlines that if the lower order statutory instruments appropriately deal with Part 2 matters, then no further assessment of Part 2 matters is required. In this case, we received no evidence to suggest that there is a deficiency, gap, or uncertainty in the District Plan that would justify such recourse. The Panel therefore applies the District Plan provisions directly.

[123] In any event, to the extent that Part 2 remains relevant, given our findings in this Decision report, the Panel is satisfied that the proposal is consistent with its purpose and principles.

4.9 Consent conditions

[124] We have generally accepted the Conditions recommended by the Applicant lodged as part of the Right of Reply, noting the reporting officers have substantially agreed with those conditions.

[125] However, we have made some refinements to Condition 26 to ensure that the culvert is constructed in accordance with the ORC-approved design, that the physical works are completed as part of the land-use activity, and that no conflict/duplication arises between district and regional functions.

4.10 Determination

[126] For the reasons set out above, under sections 104 and 104B of the Resource Management Act we grant the consent sought by Road Metals Company Limited from the Central Otago District Council to operate a quarry and to construct an access road at 2004 Luggate-Cromwell Road (SH6), Queensbury, subject to the Conditions of Consent in Appendix B to this Decision.

[127] Our reasons are detailed in the body of this Decision, but in summary they include:

i. Potential adverse effects of the proposal are either minor; minimised to the extent practicable or are otherwise suitably avoided, remedied, or mitigated by the imposition of appropriate conditions of consent; and
ii. The proposal is consistent with the relevant statutory instruments.



Rosalind Day-Cleavin – Chair
10 June 2026

Appendix A - Appearances

Name	Company/Organisation	Role
Jared Johnston	Road Metals Company Limited	Applicant
Carey Vivian	Vivan and Espie	Applicant Planner
Phil Page	Gallaway Cook Allan	Applicant Counsel
Hannah Perkin	Gallaway Cook Allan	Applicant Counsel
Ben Espie	Vivian and Espie	Applicant Landscape Expert
Reuben Rorrison	Restore NZ	Applicant Ecologist
Gary Walton	Marshall Day Acoustics	Applicant Acoustics Expert
Donovan Van Kekem	NZ Air	Applicant Expert
Logan Copland	Abley	Applicant Transportation Planner
Jonny Francis	Road Metals Company Limited	Observer
Richard Harding		Observer
John Stewart		Observer
Matt	Fulton Hogan	Observer
Sophia	Fulton Hogan	Observer
CODC Team		
Tim Anderson		Planning Officer
Rosalind Day-Cleavin		Independent Commissioner (Chairperson)
Tracy Paterson		Hearings Panel Member
Martin McPherson		Hearings Panel Member
Sarah Browne		Hearings Panel Member
Tarryn Lines		Minutes Secretary / Hearings Administrator
Jessie Dick		Minutes Secretary / Hearings Administrator
Hannah Wilson	Boffa Miskell	Landscape Architect
Mike Harding	Independent Consultant	Ecologist
Jamie Exeter	Styles Group Acoustics	Acoustic Specialist

Appendix B – Conditions of Consent

Consent type:	**Land use**
Consent number:	**250044**
Purpose:	**Land use consent to operate a quarry and construct an access road.**
Location of Activity:	**2004 Luggate-Cromwell Road, Cromwell**
Legal Description:	**Lot 2 DP 605264**
Lapse Date:	**11 June 2031**

Conditions:

1. The quarrying activity must be undertaken in general accordance with the approved plans attached to this certificate as Appendix One, and the information provided with the resource consent application received by the Council on 5 March 2025, and the further information provided on 25 June 2025 and the 24 February 2026 except where modified by the following conditions.

2. The consent holder must pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
   a) Administration, monitoring and inspection relating to this consent; and
   b) Charges authorised by regulations.

Operational Conditions

3. The following stages will apply to the quarrying operation and annual extraction must not exceed the following tonnages.
   - Stage 1 (years 1 to 3) 50,000 tonnes per annum;
   - Stage 2 (years 3 to 15) 100,000 tonnes per annum;
   - Stage 3 (year 15+) 720,000 tonnes per annum.

4. The maximum active quarry area, including excavation area, backfilling areas, active rehabilitation area and unsealed haul roads must not exceed 10 hectares at any time.

5. The hours of operation for operation of the processing plant shall be 7:00am to 6:00pm Monday to Friday and 7:00am to 1:00pm on Saturdays. No processing or extraction is to occur outside these hours or on Sundays or public holidays.

6. The normal hours of operation for load-out and haulage operations are proposed to be restricted to between 6.30am and 6pm Monday to Friday and 6.30am to 1pm Saturdays. No load-out and haulage operations outside these hours, or on Sundays and public holidays, are permitted (except in exceptional circumstances for infrequent emergency works and short-term infrastructure works as detailed in condition 8 and 8A below).

7. Load-out and haulage operations for infrequent emergency works are proposed outside the normal hours of operation outlined in condition 7 above (including Sundays and public holidays) provided truck movements do not exceed more than four truck movements per hour within those time periods (including Sundays and public holidays). Infrequent emergency works shall mean urgent and unplanned repair or maintenance activities needed for infrastructure systems (like roads, bridges, utilities, or buildings) that occur rarely or unexpectedly. These emergencies typically arise from sudden failures, damage, or natural hazards that need immediate attention to prevent safety risks, further damage, or disruption of services.

8. Load-out and haulage operations for short-term infrastructure works are proposed outside the normal hours of operation outlined in condition 7 above (excluding Sundays and public holidays) provided truck movements do not exceed more than two truck movements per hour within those time periods. Short-term infrastructure works shall mean temporary or brief projects aimed at addressing infrastructure needs or problems. These works are typically planned for a short duration, often lasting from a few days to a few months, and are designed to quickly improve, repair, or maintain infrastructure systems like roads, bridges, utilities or buildings.

9. Infrequent emergency works and short-term infrastructure works enabled by conditions 8 and 8A shall not exceed a total of 600 truck movements per calendar year.

10. No more than 200 truck movements associated with the quarry (including infrequent emergency works and short-term infrastructure works enabled by conditions 8 and 8A) shall occur each day. The Consent Holder shall keep a heavy vehicle traffic log for the quarry which must be provided to a Council Officer upon request.

    Advice note: A "truck movement" in conditions 7 to 10 above shall mean an ingress and egress from the access road onto State Highway 6A.

11. Vehicle and heavy machinery speeds within the site shall not exceed 30 km/h.

Quarry Management Plan

12. A Quarry Management Plan (QMP) must be prepared by a suitably qualified person and submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Thereafter, all quarry operations must be undertaken in accordance with the certified Quarry Management Plan (QMP). The objective of the QMP is to set out the practices and procedures to be adopted at the Site and for the Project to ensure compliance with key operational and landscape rehabilitation requirements.

13. The QMP must address:
    (a) Quarry Operation and Management;
    (b) Consents and permits;
    (c) The stages of quarry development;
    (ca) Landscape Management, including:
        i. Rehabilitation actions and objectives to assimilate the final landform back into the landscape including the treatment of pit benches and their rehabilitation timelines.
        ii. Final batter profiles and contouring, when these will be achieved, and the final RL of the pit.
    (d) Noise;
    (e) Air quality;
    (f) Water quality;
    (g) Emergency Management and Spill Response;

(h) Cleanfill Management;
(i) Monitoring and reporting;

14. The certified QMP must be updated at least every five years by the applicant or prior to the start of each stage, whichever comes first. The updated QMP shall only come into effect when the consent holder has received Council certification to the amendments. However, if the consent holder has not received a response from the Council within 30 working days of the date of submission of the amended QMP, the amended QMP is deemed to be certified.

Advice Note: If there is any inconsistency between the certified QMP landscape management rehabilitation and final batter profiles and any other conditions in this consent, then the certified QMP shall take precedence.

Otago Regional Council Consents

15. The quarrying activities authorised by this land-use consent must not be commenced or continued unless and until the consent holder holds, and at all times continues to hold, all necessary resource consents issued by the Otago Regional Council for the activity, including (without limitation):

    a. any resource consent or certificate of compliance authorising the taking of water; and
    b. any resource consent authorising the discharge of contaminants to land, water or air.

16. If any such Otago Regional Council resource consent expires, lapses, is surrendered, cancelled, or is not renewed, all quarrying activities authorised by this consent must cease immediately and may recommence only once replacement Otago Regional Council consent(s) have been obtained.

Prior to the commencement of quarrying

17. A Shelterbelt Planting and Maintenance Plan (**SPMP**) must be prepared by a suitably qualified person and submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Certification is limited to confirming compliance with the proposed shelterbelt

plantings as detailed on the Jason Rhind Site Plan approved under this consent and the conditions of this consent.

18. The objective of the SPMP is ensure the successful establishment and long-term success of the proposed shelterbelt plantings. To achieve the objective, the SPMP must include:
    a) Planting plans and written specifications detailing the plant species, plant sizes at time of planting, plant locations, density of planting, and timing of planting that responds to the various stages and timing of the quarrying.
    b) A programme of post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering (if any) to maintain soil moisture, length of maintenance programme and pest control).
    c) Details and the locations of stockproof fencing to protect the shelterbelt plantings.

19. Quarrying activities must not commence until the consent holder has received written certification from the Council to the SPMP. However, if the consent holder has not received a response from the Council within 20 working days of the date of submission of the SPMP, the SPMP is deemed to be certified.

20. Wetland Restoration must be undertaken in accordance with the recommendations contained within the following documents prepared by Reuben Rorrison at Restore NZ Limited must be implemented:
    - Section 7 of the Queensberry Quarry Ecological Values Assessment dated 21 February 2025
    - Response to Peer Review dated 24 June 2025,
    - Freshwater Impact Assessment dated 21 September 2025.

21. An Ecological Management Plan (**EMP**) must be prepared by a suitably qualified person and be informed by a suitably qualified herpetologist's lizard survey of the site prior to construction. The EMP must be submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Certification is limited to confirming compliance with the proposed Restoration Area (red hatched) as detailed on the Jason Rhind Site Plan approved under this consent and the conditions of

this consent. The EMP must implement the relevant recommendations contained in the following documents prepared by Reuben Rorrison at Restore NZ Limited:

- Queensberry Quarry Ecological Values Assessment dated 21 February 2025
- Response to Peer Review dated 24 June 2025,
- Freshwater Impact Assessment dated 21 September 2025; and
- Include indigenous planting on the restored contours of the redundant farm track required by condition 27.

22. For the avoidance of doubt, the proposed shelterbelt along the southern boundary of Stage 3c and 3d (as shown on the Jason Rhind Draughtsman Plans Q001 and Q004, Quarry Development Stages – 15+, Rev A dated 02/04/2026) shall consist of a double-row band of native shrub planting, consisting of a mix of Leptospermum scoparium, Pittosporum tenuifolium and Olearia paniculata or similar suitable native shrub species able to reach 4m height or more. This band shall be maintained and irrigated so as to create a continuous screen of evergreen vegetation and shall not be trimmed or topped. Successional planting shall be done to ensure that this effect is retained throughout the life of the quarrying operation.

23. The objective of the EMP is to ensure the successful establishment and long-term success of the proposed EMP plantings. To achieve the objective, the EMP must include:

a) Planting plans and written specifications detailing the plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting that responds to site plan layout. All indigenous planting must prioritise eco-sourced native species from within the Ecological District.

b) Written specifications for soil preparation to ensure appropriate growing conditions for plants.

c) A programme of post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering (if any) to maintain soil moisture, length of maintenance programme and plant/animal pest control).

d) Details and the locations of stockproof fencing and the use of pest animal barriers (e.g. plant guards) to protect the plantings.

e) Details regarding lizard management with proposed minimisation and remedial measures.

24. Quarrying activities must not commence until the consent holder has received written certification from the Council of the EMP. However, if the consent holder has not received a response from the Council within 30 working days of the date of submission of the EMP, the EMP is deemed to be certified.

25. No quarrying activities (excluding construction of the access road) may commence under the certified SPMP, EMP, Wetland Restoration have been implemented.

Access Road / <u>Culvert Construction</u>

26. The culvert required to form the access road must be constructed in accordance with the culvert design approved under Otago Regional Council Consent RM25.438.02. No additional requirements relating to fish passage, aquatic ecology, or water-quality performance are imposed by this consent.

Advice Note: This condition ensures integration between the district land-use consent and the regional consent. Matters relating to fish passage, aquatic ecology, and discharges to water are regulated by the Otago Regional Council under RM25.438.02.

27. Except as expressly provided below, no clearance, disturbance, damage, or removal of indigenous vegetation shall occur within the Central Gully, as identified on the approved Site Plan stamped as part of this resource consent.

The only exception to this condition is the removal or disturbance of indigenous vegetation necessary for the construction of the access road, strictly within the footprint and alignment shown on the approved Restore Plan stamped as part of this consent. No vegetation clearance shall occur outside this defined area.

All remaining indigenous vegetation within the Central Gully area shall be retained and protected for the duration of construction and thereafter.

In addition:

a) A Pest Plant and Pest Animal Control Programme (**PP&PAP**) shall be implemented within the Central Gully for the life of the consent. The programme shall include:

- Identification of pest plant and pest animal species present within the Central Gully;
- Methods for ongoing control and/or eradication of identified pest plant and pest animal species; and
- Measures to prevent re-establishment or spread of plant pest species as a result of construction activities.

b) Pest plant and pest animal species control shall be undertaken using best practice methods appropriate to the site and surrounding environment and shall avoid adverse effects on retained indigenous vegetation.

c) Evidence of implementation of the **PP&PAP** shall be made available to the CODC on request.

28. The redundant farm track, shown on the Restore NZ refined access route through to Central Gully, shall be restored to natural ground level.

Noise

29. Noise generated by the operation of the quarry must comply with limits of 53 dB LAeq between 07:00 and 22:00, and 38 dB LAeq and 70 dB LAmax between 22:00 and 07:00 at the notional boundary of any dwelling where written approval was not provided. Operational noise must be measured and assessed in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound and NZS 6802:2008 Acoustics – Environmental noise.

30. Tonal reversing alarms (‘beepers’) must not be used on quarry plant and vehicles. Broadband alarms (‘squawkers’) may be used.

Lighting

31. All fixed exterior lighting must be directed away from any adjacent roads, residential properties and the Clutha River.

32. All outdoor lighting (excluding mobile equipment) must:

(a) be shielded from above the light in such a manner that the edge of the shield is below the light source; and
(b) have automated timing controls, dimming functions, and movement sensors to reduce unnecessary luminance.

Reinstatement

33. The site reinstatement following completion of each quarrying stage shall be undertaken in accordance with the method and timing specified in the application. On completion of each quarry stage the cut faces adjacent to the external boundaries of the site shall progressively be battered to a maximum slope no greater than 2H:1V and finished in a profile to reflect existing profile (but not necessarily levels) as much as possible using cleanfill or in situ material. All unused haul roads and face benching within that reinstatement stage shall also be removed.

34. The irrigation of grass-seeded areas shall be undertaken as required to ensure establishment.

35. At the completion of quarrying on the site, all bunds, haul roads (not including road access) and face benching are be removed, top-soiled and re-vegetated.

36. The proposal is undertaken in alignment with Jason Rhind Draughtsman ‘Q001 Site Plan’ including accompanying notation regarding the timing of planting to ensure views are adequately mitigated.

37. The final form of batters within the Site should not exceed 1V:2H as outlined above, to enable the re-establishment of pastoral activity, and reintegration with the surrounding landscape. In addition to this, it is also recommended that the final landform does not reflect an engineered/uniform batter and should include a variation in gradient to reflect the natural topography of the adjacent gullies.

Erosion and Sediment Control

38. Prior to the commencement of quarry operations, the Consent Holder must prepare and submit an Erosion and Sediment Control Plan (ESCP) to council's monitoring officer. The ESCP must be prepared by a suitably qualified person and submitted to Council's monitoring officer and submitted to the Consent Authority for certification prior to the commencement of quarry operations. The ESCP must contain sufficient detail to address the following matters:
    a) Area of quarry operations;
    b) Specific erosion and sediment control works (locations, dimensions, capacity etc);
    c) Supporting calculations and design drawings;
    d) Catchment boundaries and contour information;
    e) Details relating to the management of exposed areas; and
    f) Monitoring and maintenance requirements.

39. Works must not commence until the consent holder has received written certification from the Council of the ESCP. However, if the consent holder has not received a response from the Council within 20 working days of the date of submission of the ESCP, the ESCP is deemed to be certified.

Access

40. The access road shall be constructed in accordance with the Geotago report Ref: GL-159 QT 003 RGA REV 1, dated 24 February 2025 with the following requirements.

    - All Fill areas are to be benched/tied in.
    - Appropriate lift height and compaction commensurate for the material being used as fill (e.g., size, grading and moisture content).
    - Guidance for the fill placement and compaction must be sought from appropriate NZ standards such as NZS4431:2022 if required.
    - Appropriate shallow graded sediment control measures should be installed during construction where rainwater and drainage run-off over exposed soils is likely.

41. The existing vehicle crossing (Crossing Place 71A) located on the southwestern corner of the property boundary of Lot 2 Deposited Plan 605264 is to be upgraded in accordance with New Zealand Transport Agency Diagram

E standard as outlined in the Planning Policy Manual (2007). In addition to the Diagram E standard the vehicle crossing must include line marking, a curve radius of 15 metres and must be give way controlled and be formed to the satisfaction of the New Zealand Transport Agency Network Manager.

42. Prior to the operation of the quarry the consent holder shall provide to Council, correspondence from New Zealand Transport Agency confirming that works to the state highway, including vehicle crossing, have been constructed to New Zealand Transport Agency standards.

43. In areas where ice can form on roads, vegetation shall not be planted or allowed to grow in a position which will shade the carriageway between the hours of 10 am and 2 pm on the shortest day of the year.

44. The consent holder shall take all steps to prevent any material from the consented quarry activity to deposit on the road reserve. This shall include aggregate loaded on to the trucks or residual material (mud and sediment) within the wheel guard and underbody of vehicles entering and exiting the site. Any material that inadvertently spills onto the road shall be removed and the carriageway cleaned immediately.

Bond

45. Prior to the commencement quarrying operations, the consent holder must enter into an enforceable agreement with the Council for a bond pursuant to section 108A(2) to secure compliance with the reinstatement conditions for the first 10 years of extraction. The agreement and bond are to ensure compliance with reinstatement conditions detailed in this consent. This bond is to meet the cost re-spreading stockpiled topsoil, re-establishment of contours sufficient to meet post quarrying land use; application of grass seed and the cost of any required professional fees. The bond amount will be calculated by a suitably qualified and independent quantity surveyor to assess the bond amount required to secure compliance with the reinstatement conditions arising from quarry extraction for the first 10 year period.

46. The bond is required in terms of section 108(2)(b) of the Resource Management Act 1991 and must be prepared by the Council's solicitors at the expense of the consent holder. Pursuant to Section 108A (2) the bond is required to be given

prior to the exercise of this land use consent, the liability of the holder of the resource consent must not be limited to the amount of the bond.

47. Every 10 years thereafter, calculated from the date of first extraction, the consent holder must engage a suitably qualified and independent quantity surveyor to reassess the bond amount required to secure compliance with the reinstatement conditions arising from quarry extraction for the following 10 year period.

48. The quantity surveyor's assessment, including all supporting assumptions and calculations, must be provided to the Council for approval. Any increase in the bond required by the assessment must be provided within 30 working days of written confirmation from Council.

49. The bond referred to in Condition 23 above must be either:

    a) Guaranteed by a guarantor acceptable to the Council, which guarantor must bind itself to pay for the carrying out of the work referred to in Condition 23 above in the event of any default by the consent holder; or
    b) The consent holder must provide the Council with such security that is acceptable to the Council for the performance of the works referred to in Condition 23 above.

50. The Council shall release the bond upon:
    a) The consent holder providing verification that reinstatement for the previous 10 year period has been completed in accordance with condition 23; or
    b) The replacement of the bond with a new bond acceptable to the Council, including if the consent is transferred to another party.

Review

51. The Council may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent on and within the period six (6) months upon each anniversary of the date of this consent, or within two (2) months of

any enforcement action taken by the Council in relation to the exercise of this consent or the purpose of:

a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;

b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant district plans, and/or the Otago Regional Policy Statement;

c) Reviewing the frequency of monitoring or reporting required under this consent;

d) Reviewing the bond amount required by Condition 23 that is likely to differentiate from the original sum by 10% or more due to a result of inflation and/or extenuating circumstance that might impact the likely cost of the remediation works.

Monitoring

52. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the Consent Holder's expense.

53. The Consent Holder shall maintain a record of any complaints alleging adverse effects arising from, or related to, the works activities authorised by this consent; the "Complaints Register".

a) The Complaints Register shall include:
   (i) The date, time, location, and nature of the complaint;
   (ii) The date, time, location and nature of any incident related to the complaint;

(iii) The name, phone number, email and address of the complainant, unless the complainant elects not to supply this information;

(iv) Details of actions taken by Consent Holder to remedy the situation, including actions taken on site to remedy the issue, correspondence with the complainant and any policies or methods put in place to avoid or mitigate the problem occurring again;

b) The Complaints Register shall be provided to Council on request;

c) Upon receipt of any complaint that alleges non-compliance with the conditions of this consent, the Consent Holder shall promptly investigate the complaint, and take necessary action to ensure the activity is compliant with the conditions of this consent.

Accidental Discovery

54. In the event that an unidentified archaeological site is located during works, the following will apply;

a) Work must cease immediately at that place and within 20 metres around the site.

b) All machinery must be shut down, the area must be secured, and the Heritage New Zealand Pouhere Taonga Regional Archaeologist and the Consent Authority must be notified.

c) If the site is of Maori origin, the Consent Holder must also notify the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, as long as all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act 2014, Protected Objects Act 1975).

d) If human remains (koiwi tangata) are uncovered the Consent Holder must advise the Heritage New Zealand Pouhere Taonga Regional Archaeologist, NZ Police, the Consent Authority and the appropriate iwi groups or kaitiaki representative and the above process under (c) will apply.

e) Remains are not to be disturbed or moved until such time as iwi and Heritage New Zealand Pouhere Taonga have responded.

f) Works affecting the archaeological site and any human remains (koiwi tangata) must not resume until Heritage New Zealand Pouhere Taonga gives written approval for work to continue. Further assessment by an archaeologist may be required.

g) Where iwi so request, any information recorded as the result of the find such as a description of location and content, must be provided for their records.

ADVICE NOTES

General

1. In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.

2. Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.

3. It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.

4. The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.

5. This is a resource consent. Please contact the Council's Building Services Department, about the building consent requirements for the work.

6. The site is traversed by Aurora owned power poles and overhead lines. The requirements of NZECP-34 apply with regard to safe electrical distances, and any contractor working near the lines is required to hold an approved close approach permit from Aurora Energy Limited.

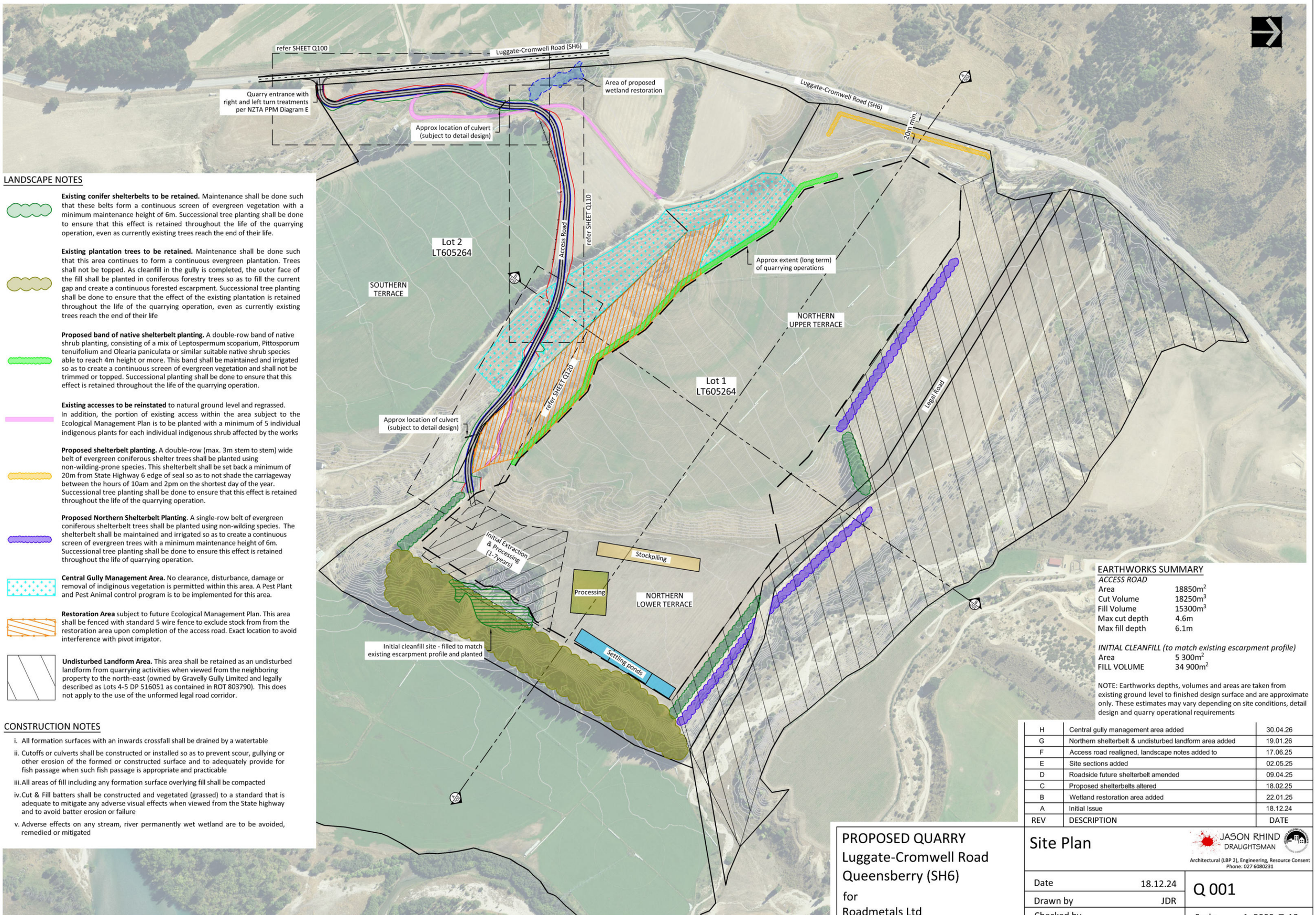
Issued at Central Otago 11 June 20226



Tarryn Lines
Team Leader – Planning Support

Appendix 1 Approved Plans

- Jason Rhind Draughtsman, Drawing Q001, Site Plan, Rev H, dated 30/04/2026.
- Jason Rhind Draughtsman, Drawing Q002, Entrance Treatment & Typical Cross Section, Rev B, dated 02/05/2025.
- Jason Rhind Draughtsman, Drawing Q003, Quarry Development Timeline, Rev B, dated 17/06/2025.
- Jason Rhind Draughtsman, Drawing Q004, Quarry Development Stage 15yr +, Rev A, dated 02/04/2026.
- Jason Rhind Draughtsman, Drawing Q100, Roading Cut and Fill, Rev B, dated 22/01/2025.
- Jason Rhind Draughtsman, Drawing Q110, Roading Cut and Fill, Rev C, dated 17/06/2025.
- Jason Rhind Draughtsman, Drawing Q120, Roading Cut and Fill, Rev B, dated 17/06/2025.
- Jason Rhind Draughtsman, Drawings Q200, Q201 and Q202, Roading Cross Sections, Rev A, dated 18/12/2024.
- Jason Rhind Draughtsman, Drawings Q203, Q204, Q205 and Q206, Roading Cross Sections, Rev B, dated 17/06/2025.
- Jason Rhind Draughtsman, Site Overview, Drawing Q300, Rev B, dated 17/06/2025.
- Restore NZ, Figure 4: Native scrub in/around the proposed access road alignment;
- Restore NZ, Figure 7: Recommended plants and spacings for the enhancement planting zones of the wetland.
- Restore NZ, Figure 13: The proposed planting zones for the wetland.



LANDSCAPE NOTES

Existing conifer shelterbelts to be retained. Maintenance shall be done such that these belts form a continuous screen of evergreen vegetation with a minimum maintenance height of 6m. Successional tree planting shall be done to ensure that this effect is retained throughout the life of the quarrying operation, even as currently existing trees reach the end of their life.

Existing plantation trees to be retained. Maintenance shall be done such that this area continues to form a continuous evergreen plantation. Trees shall not be topped. As cleanfill in the gully is completed, the outer face of the fill shall be planted in coniferous forestry trees so as to fill the current gap and create a continuous forested escarpment. Successional tree planting shall be done to ensure that the effect of the existing plantation is retained throughout the life of the quarrying operation, even as currently existing trees reach the end of their life

Proposed band of native shelterbelt planting. A double-row band of native shrub planting, consisting of a mix of Leptospermum scoparium, Pittosporum tenuifolium and Olearia paniculata or similar suitable native shrub species able to reach 4m height or more. This band shall be maintained and irrigated so as to create a continuous screen of evergreen vegetation and shall not be trimmed or topped. Successional planting shall be done to ensure that this effect is retained throughout the life of the quarrying operation.

Existing accesses to be reinstated to natural ground level and regrassed. In addition, the portion of existing access within the area subject to the Ecological Management Plan is to be planted with a minimum of 5 individual indigenous plants for each individual indigenous shrub affected by the works

Proposed shelterbelt planting. A double-row (max. 3m stem to stem) wide belt of evergreen coniferous shelter trees shall be planted using non-wilding-prone species. This shelterbelt shall be set back a minimum of 20m from State Highway 6 edge of seal so as to not shade the carriageway between the hours of 10am and 2pm on the shortest day of the year. Successional tree planting shall be done to ensure that this effect is retained throughout the life of the quarrying operation.

Proposed Northern Shelterbelt Planting. A single-row belt of evergreen coniferous shelterbelt trees shall be planted using non-wilding species. The shelterbelt shall be maintained and irrigated so as to create a continuous screen of evergreen trees with a minimum maintenance height of 6m. Successional tree planting shall be done to ensure this effect is retained throughout the life of quarrying operation.

Central Gully Management Area. No clearance, disturbance, damage or removal of indiginous vegetation is permitted within this area. A Pest Plant and Pest Animal control program is to be implemented for this area.

Restoration Area subject to future Ecological Management Plan. This area shall be fenced with standard 5 wire fence to exclude stock from from the restoration area upon completion of the access road. Exact location to avoid interference with pivot irrigator.

Undisturbed Landform Area. This area shall be retained as an undisturbed landform from quarrying activities when viewed from the neighboring property to the north-east (owned by Gravelly Gully Limited and legally described as Lots 4-5 DP 516051 as contained in ROT 803790). This does not apply to the use of the unformed legal road corridor.

CONSTRUCTION NOTES

i. All formation surfaces with an inwards crossfall shall be drained by a watertable

ii. Cutoffs or culverts shall be constructed or installed so as to prevent scour, gullying or other erosion of the formed or constructed surface and to adequately provide for fish passage when such fish passage is appropriate and practicable

iii. All areas of fill including any formation surface overlying fill shall be compacted

iv. Cut & Fill batters shall be constructed and vegetated (grassed) to a standard that is adequate to mitigate any adverse visual effects when viewed from the State highway and to avoid batter erosion or failure

v. Adverse effects on any stream, river permanently wet wetland are to be avoided, remedied or mitigated

EARTHWORKS SUMMARY

ACCESS ROAD

Area	18850m^2
Cut Volume	18250m^3
Fill Volume	15300m^3
Max cut depth	4.6m
Max fill depth	6.1m

INITIAL CLEANFILL (to match existing escarpment profile)

Area	5 300m^2
FILL VOLUME	34 900m^2

NOTE: Earthworks depths, volumes and areas are taken from existing ground level to finished design surface and are approximate only. These estimates may vary depending on site conditions, detail design and quarry operational requirements

REV	DESCRIPTION	DATE
H	Central gully management area added	30.04.26
G	Northern shelterbelt & undisturbed landform area added	19.01.26
F	Access road realigned, landscape notes added to	17.06.25
E	Site sections added	02.05.25
D	Roadside future shelterbelt amended	09.04.25
C	Proposed shelterbelts altered	18.02.25
B	Wetland restoration area added	22.01.25
A	Initial Issue	18.12.24

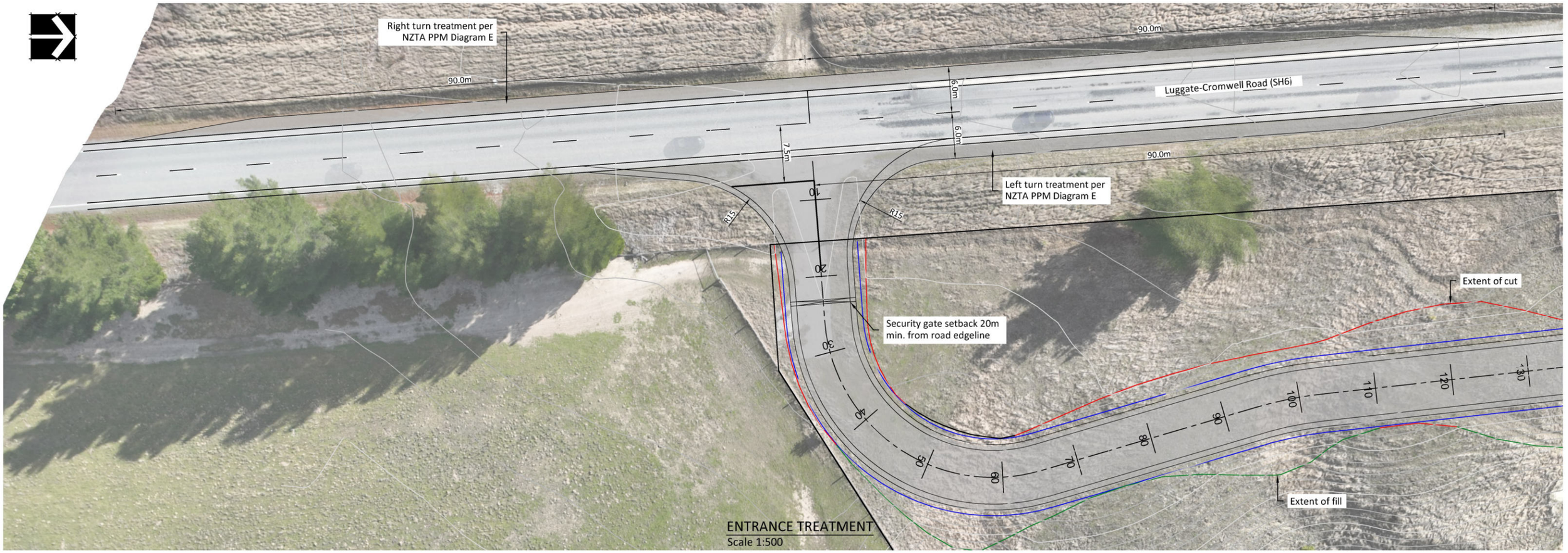
PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Site Plan

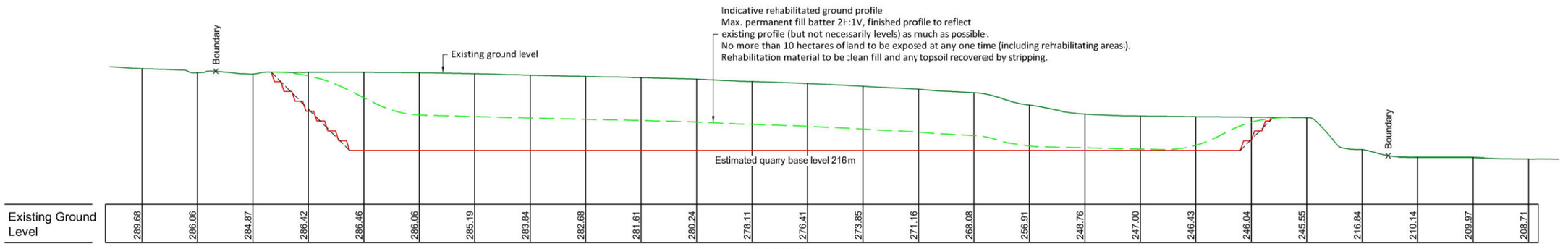
JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-
Scale	1 :5000 @ A3

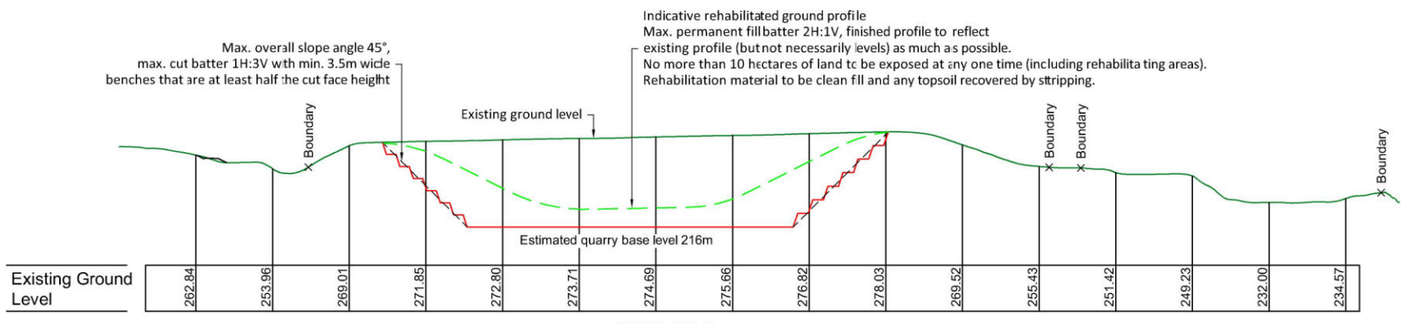
Q 001



ENTRANCE TREATMENT
Scale 1:500



SECTION A
Scale 1:4000



SECTION B
Scale 1:4000

REV	DESCRIPTION	DATE
B	Sections added	02.05.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

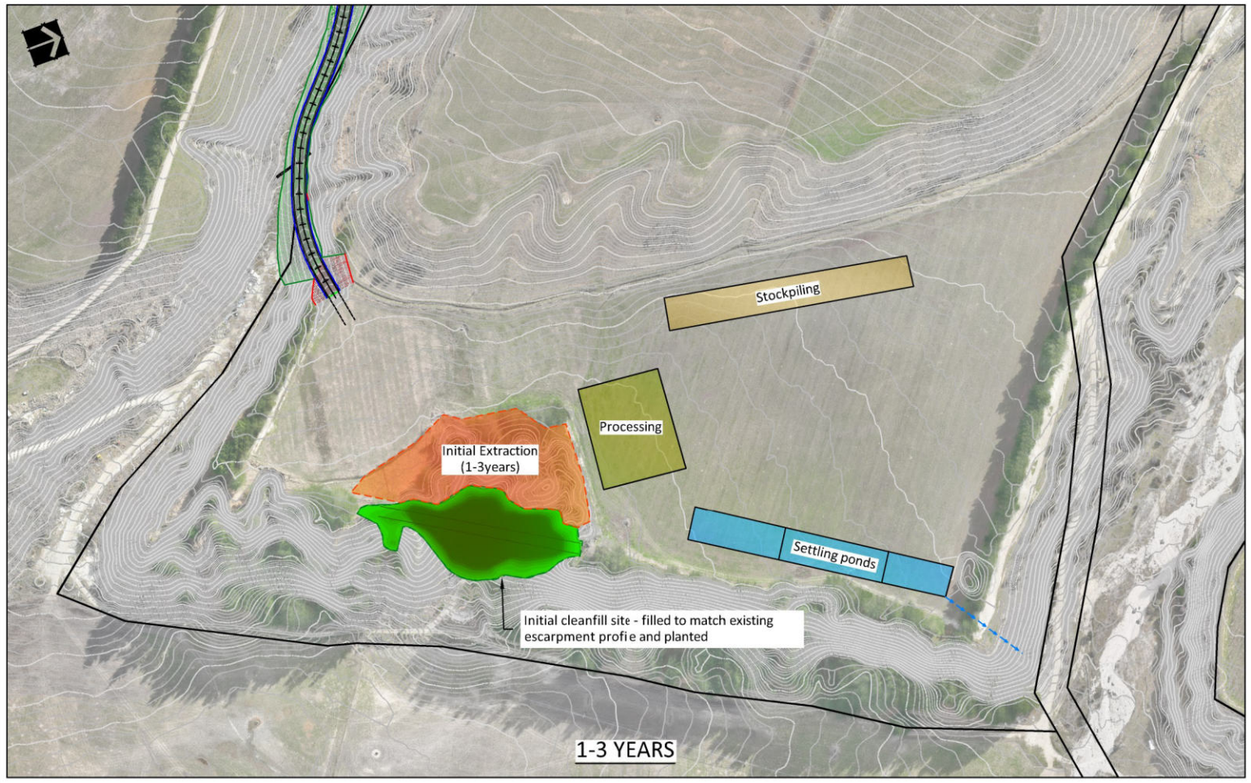
Entrance Treatment & Typical Cross Section

JASON RHIND DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 002

Scale As Shown



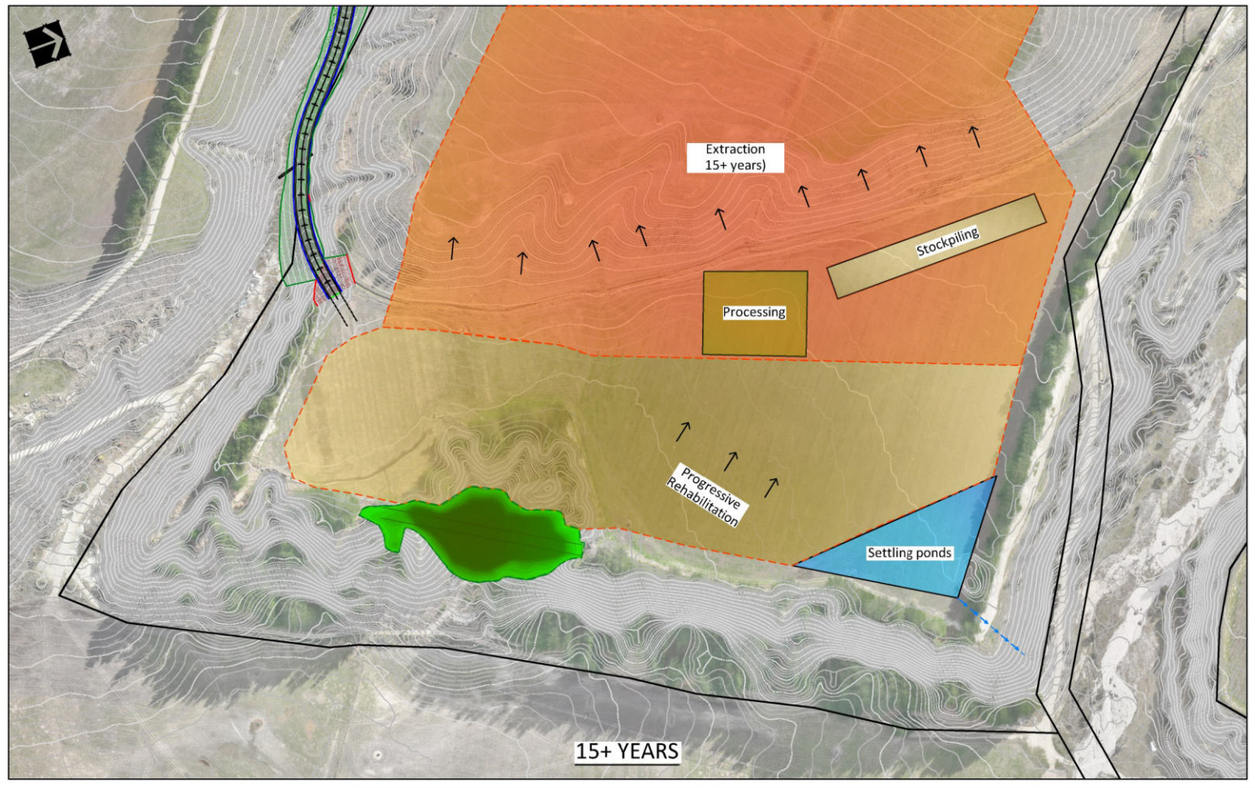
1-3 YEARS



3-7 YEARS



7-15 YEARS



15+ YEARS

REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Quarry Development Timeline

JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 003

Scale 1:4000 @ A3

Extraction 15+ years STAGE 3d

Extraction 15+ years STAGE 3b

Extraction Haul Road

Extraction 15+ years STAGE 3c

Extraction 15+ years STAGE 3a

Progressive Rehabilitation 7-15 years

Processing

Stockpiling

Progressive Rehabilitation 15+ years

Settling ponds

Refer Sheet Q003 for 0-15year Quarry development

REV	DESCRIPTION	DATE
A	Initial Issue	02.04.26

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Quarry Development Stages - 15yr +

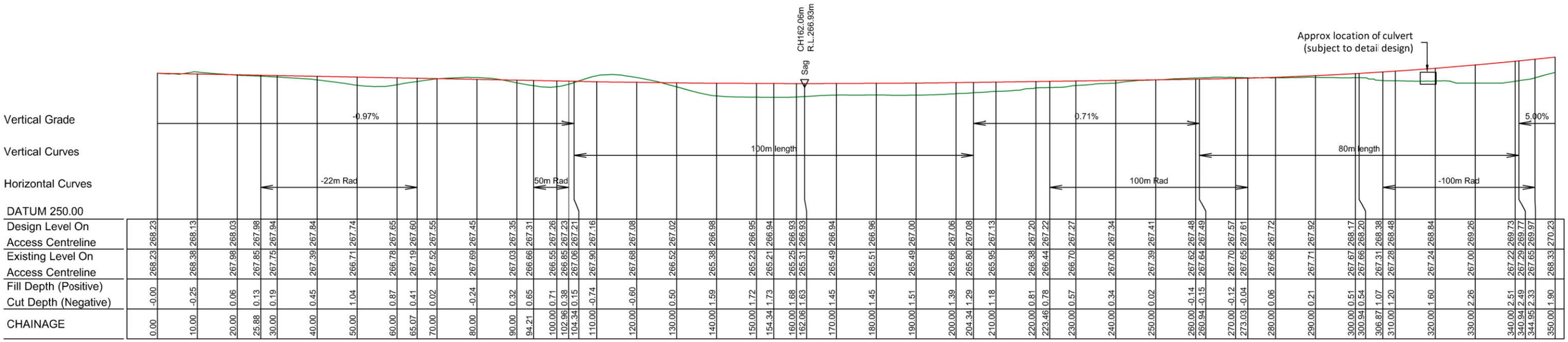
JASON RHIND DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	02.04.26
Drawn by	JDR
Checked by	-

Q 004

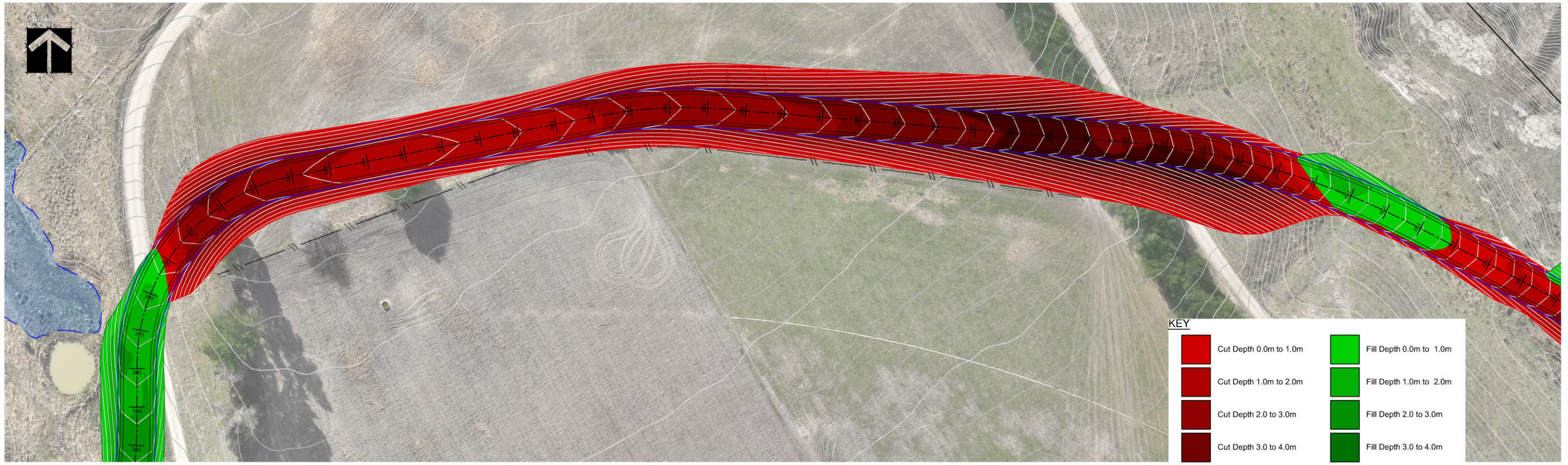
Scale 1:4000 @ A3

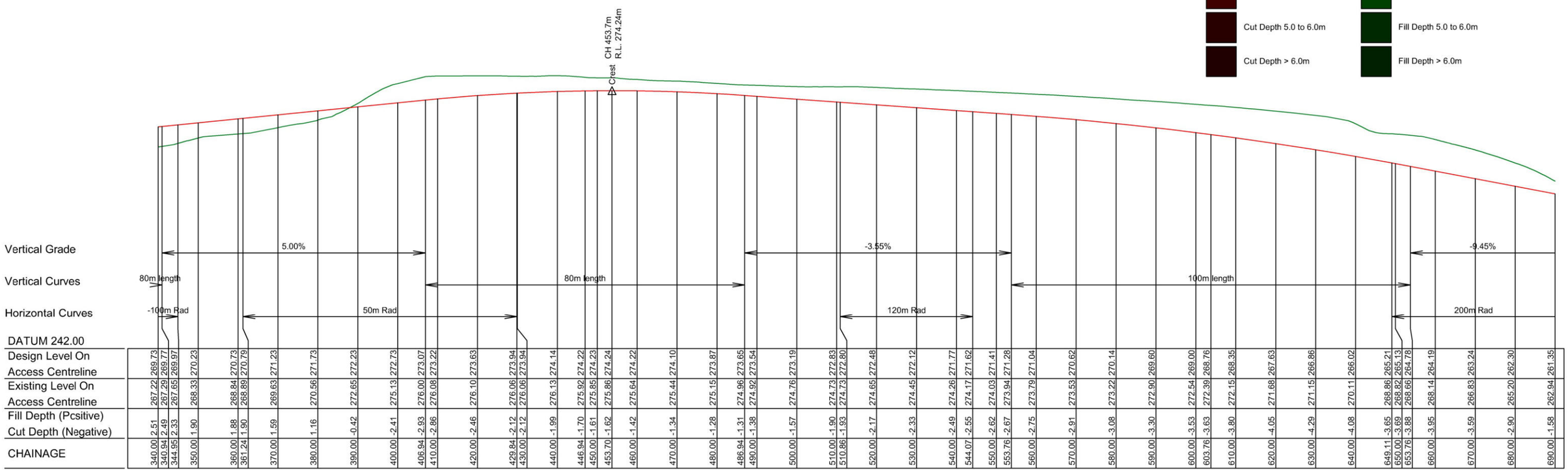

KEY
Cut Depth 0.0m to 1.0m
Cut Depth 1.0m to 2.0m
Cut Depth 2.0 to 3.0m
Cut Depth 3.0 to 4.0m
Cut Depth 4.0 to 5.0m
Cut Depth 5.0 to 6.0m
Cut Depth > 6.0m
Fill Depth 0.0m to 1.0m
Fill Depth 1.0m to 2.0m
Fill Depth 2.0 to 3.0m
Fill Depth 3.0 to 4.0m
Fill Depth 4.0 to 5.0m
Fill Depth 5.0 to 6.0m
Fill Depth > 6.0m
Approx location of culvert
(subject to detail design)


CH162.06m
R.L.266.93m
Sag
Approx location of culvert
(subject to detail design)
Vertical Grade
-0.97%
0.71%
5.00%
Vertical Curves
100m length
80m length
Horizontal Curves
-22m Rad
50m Rad
100m Rad
-100m Rad

DATUM 250.00

| | | |





ACCESS ROAD LONGITUDINAL SECTION
Horizontal Scale 1:1000 Vertical Scale 1:500
NOTE: 2x Vertical Exaggeration

REV	DESCRIPTION	DATE
C	Access road realigned	17.06.25
B	Wetland restoration area added	22.01.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Roading Cut & Fill

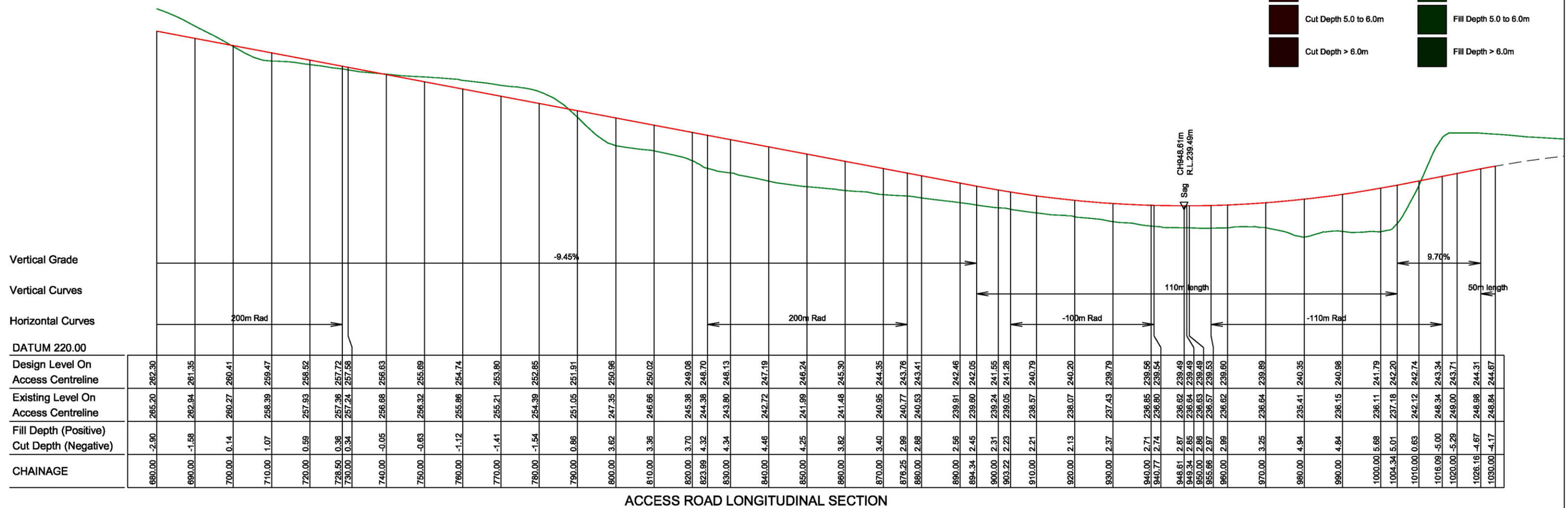
JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 110

Scale 1:1000 @ A3





CHAINAGE	Design Level On Access Centreline	Existing Level On Access Centreline	Fill Depth (Positive) Cut Depth (Negative)
680.00	262.30	265.20	-2.90
690.00	261.35	262.84	-1.58
700.00	260.41	260.27	0.14
710.00	259.47	258.39	1.07
720.00	258.52	257.93	0.59
728.50	257.72	257.36	0.36
730.00	257.58	257.24	0.34
740.00	256.63	256.68	-0.05
750.00	255.69	256.32	-0.63
760.00	254.74	255.86	-1.12
770.00	253.80	255.21	-1.41
780.00	252.85	254.39	-1.54
790.00	251.91	251.05	0.86
800.00	250.96	247.35	3.62
810.00	250.02	246.66	3.36
820.00	249.08	245.38	3.70
823.99	248.70	244.38	4.32
830.00	248.13	243.80	4.34
840.00	247.19	242.72	4.46
850.00	246.24	241.99	4.25
860.00	245.30	241.48	3.82
870.00	244.35	240.95	3.40
876.25	243.76	240.77	2.99
880.00	243.41	240.53	2.88
890.00	242.46	239.91	2.56
894.34	242.05	239.60	2.45
900.00	241.55	239.24	2.31
903.22	241.28	239.05	2.23
910.00	240.79	238.57	2.21
920.00	240.20	238.07	2.13
930.00	239.79	237.43	2.37
940.00	239.56	236.85	2.71
940.77	239.54	236.80	2.74
948.61	239.49	236.62	2.87
949.34	239.49	236.64	2.85
950.00	239.48	236.63	2.86
955.66	239.53	236.57	2.97
960.00	239.60	236.62	2.99
970.00	239.89	236.64	3.25
980.00	240.35	235.41	4.94
990.00	240.98	236.15	4.84
1000.00	241.79	236.11	5.68
1004.34	242.20	237.18	5.01
1010.00	242.74	242.12	0.63
1016.09	243.34	248.34	-5.00
1020.00	243.71	249.00	-5.29
1026.16	244.31	248.98	-4.67
1030.00	244.67	248.84	-4.17

ACCESS ROAD LONGITUDINAL SECTION
Horizontal Scale 1:1000 Vertical Scale 1:500
NOTE: 2x Vertical Exaggeration

REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

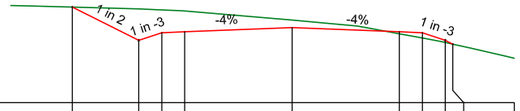
Roading Cut & Fill

JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-
Scale	1:1000 @ A3

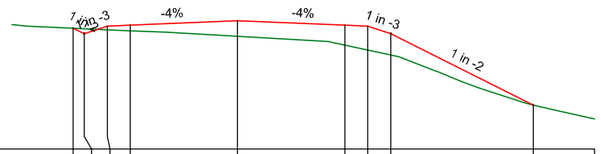
Q 120

Centreline Data
X = 386817.72
Y = 784158.52
Z = 267.45
Datum 265



| | | |

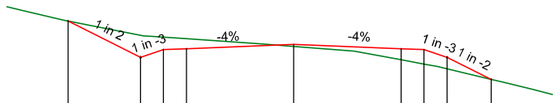
Centreline Data
X = 386815.45
Y = 784374.08
Z = 268.17
Datum 264



DESIGN HEIGHT	267.93	267.75	268.00	268.03	268.17	268.03	268.00	267.75	265.43
Original Ground	267.93	267.92	267.89	267.85	267.67	267.38	267.22	267.06	265.43
DESIGN OFFSET	-5.36	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	9.65

CHAINAGE 300

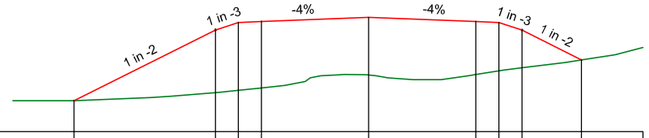
Centreline Data
X = 386807.95
Y = 784355.55
Z = 267.72
Datum 265



DESIGN HEIGHT	268.48	267.30	267.55	267.58	267.72	267.58	267.55	267.30	266.58
Original Ground	268.48	268.01	267.95	267.90	267.66	267.22	267.08	266.93	266.58
DESIGN OFFSET	-7.36	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.44

CHAINAGE 280

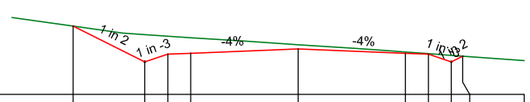
Centreline Data
X = 386825.4
Y = 784432.64
Z = 270.73
Datum 267



DESIGN HEIGHT	268.00	270.31	270.56	270.59	270.73	270.59	270.56	270.31	269.33
Original Ground	268.00	268.27	268.34	268.42	268.84	268.86	268.98	269.08	269.33
DESIGN OFFSET	-9.61	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.94

CHAINAGE 360

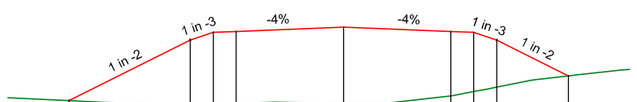
Centreline Data
X = 386801.24
Y = 784336.72
Z = 267.48
Datum 266



DESIGN HEIGHT	268.23	267.06	267.31	267.34	267.48	267.34	267.31	267.06	267.25
Original Ground	268.23	267.95	267.90	267.85	267.62	267.38	267.33	267.27	267.25
DESIGN OFFSET	-7.34	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	5.37

CHAINAGE 260

Centreline Data
X = 386825.2
Y = 784412.64
Z = 269.73
Datum 266



DESIGN HEIGHT	267.33	269.31	269.56	269.59	269.73	269.59	269.56	269.31	268.14
Original Ground	267.33	267.17	267.16	267.21	267.22	267.49	267.62	267.77	268.14
DESIGN OFFSET	-8.95	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	7.34

CHAINAGE 340

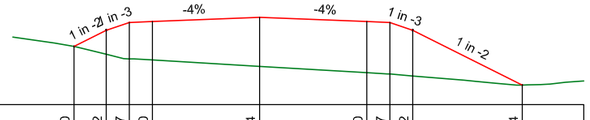
Centreline Data
X = 386798.17
Y = 784317
Z = 267.34
Datum 266



DESIGN HEIGHT	268.11	266.92	267.17	267.20	267.34	267.20	267.17	266.92	266.78
Original Ground	268.11	267.72	267.58	267.45	267.00	266.85	266.82	266.79	266.78
DESIGN OFFSET	-7.38	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	5.28

CHAINAGE 240

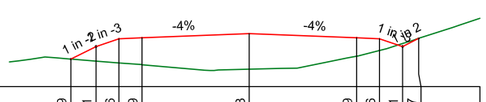
Centreline Data
X = 386822.15
Y = 784392.91
Z = 268.84
Datum 266



DESIGN HEIGHT	267.90	268.42	268.67	268.70	268.84	268.70	268.67	268.42	266.64
Original Ground	267.90	267.64	267.49	267.45	267.24	267.04	266.99	266.93	266.64
DESIGN OFFSET	-6.05	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	8.57

CHAINAGE 320

Centreline Data
X = 386828.96
Y = 784452.19
Z = 271.73
Datum 270



DESIGN HEIGHT	270.89	271.31	271.56	271.59	271.73	271.59	271.56	271.31	271.57
Original Ground	270.89	270.83	270.77	270.71	270.56	270.99	271.18	271.40	271.57
DESIGN OFFSET	-5.82	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	5.53

CHAINAGE 380

REV	DESCRIPTION	DATE
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Roading Cross Sections

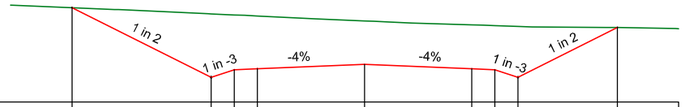
JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 201

Scale 1:200 @ A3

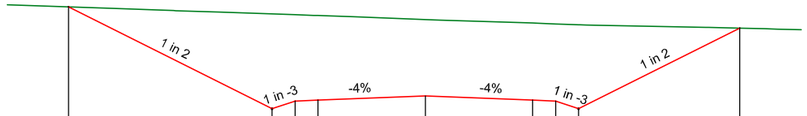
Centreline Data
X = 386895.32
Y = 784488.57
Z = 274.22
Datum 273



DESIGN HEIGHT	276.07	273.80	274.05	274.08	274.22	274.08	274.05	273.80	275.42	
Original Ground	276.07	275.87	275.84	275.80	275.64	275.51	275.49	275.46	275.42	
DESIGN OFFSET	-9.54	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	8.25	

CHAINAGE 460

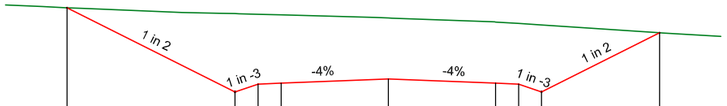
Centreline Data
X = 386974.2
Y = 784500.55
Z = 271.77
Datum 270



DESIGN HEIGHT	274.67	271.35	271.60	271.63	271.77	271.63	271.60	271.35	273.97	
Original Ground	274.67	274.44	274.41	274.39	274.26	274.14	274.11	274.09	273.97	
DESIGN OFFSET	-11.64	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	10.26	

CHAINAGE 540

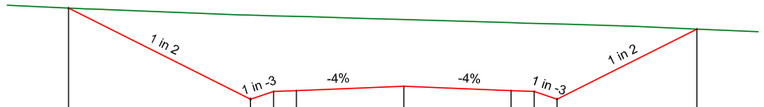
Centreline Data
X = 386875.7
Y = 784484.7
Z = 274.14
Datum 273



DESIGN HEIGHT	276.46	273.72	273.97	274.00	274.14	274.00	273.97	273.72	275.65	
Original Ground	276.46	276.27	276.25	276.23	276.13	276.00	275.95	275.90	275.65	
DESIGN OFFSET	-10.48	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	8.85	

CHAINAGE 440

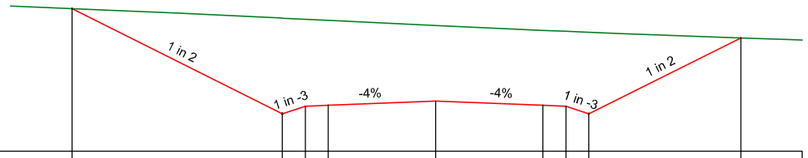
Centreline Data
X = 386954.24
Y = 784499.85
Z = 272.48
Datum 271



DESIGN HEIGHT	275.03	272.06	272.31	272.34	272.48	272.34	272.31	272.06	274.34	
Original Ground	275.03	274.79	274.77	274.75	274.65	274.55	274.53	274.51	274.34	
DESIGN OFFSET	-10.94	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	9.56	

CHAINAGE 520

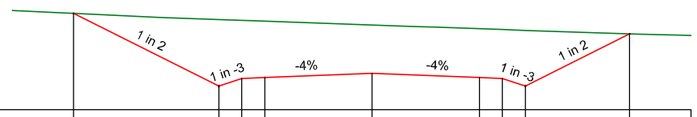
Centreline Data
X = 386856.32
Y = 784479.89
Z = 273.63
Datum 272



DESIGN HEIGHT	276.65	273.21	273.46	273.49	273.63	273.49	273.46	273.21	275.69	
Original Ground	276.65	276.33	276.30	276.26	276.10	275.94	275.90	275.87	275.69	
DESIGN OFFSET	-11.86	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	9.96	

CHAINAGE 420

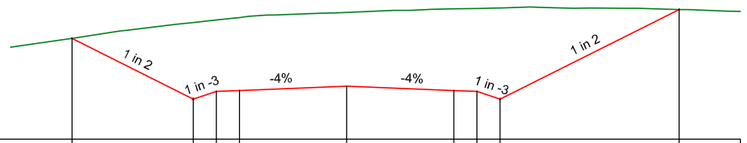
Centreline Data
X = 386934.56
Y = 784496.32
Z = 273.19
Datum 272



DESIGN HEIGHT	275.14	272.77	273.02	273.05	273.19	273.05	273.02	272.77	274.47	
Original Ground	275.14	274.93	274.91	274.88	274.76	274.64	274.61	274.58	274.47	
DESIGN OFFSET	-9.74	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	8.40	

CHAINAGE 500

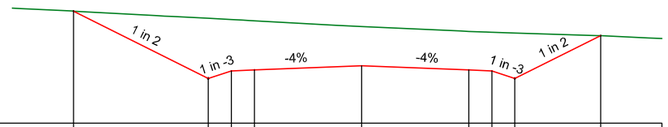
Centreline Data
X = 386839.83
Y = 784468.82
Z = 272.73
Datum 271



DESIGN HEIGHT	274.29	272.31	272.56	272.59	272.73	272.59	272.56	272.31	275.23	
Original Ground	274.29	274.80	274.88	274.96	275.13	275.24	275.26	275.28	275.23	
DESIGN OFFSET	-8.96	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	10.84	

CHAINAGE 400

Centreline Data
X = 386914.94
Y = 784492.44
Z = 273.87
Datum 272



DESIGN HEIGHT	275.65	273.45	273.70	273.73	273.87	273.73	273.70	273.45	274.85	
Original Ground	275.65	275.41	275.38	275.34	275.15	274.99	274.96	274.94	274.85	
DESIGN OFFSET	-9.40	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	7.79	

CHAINAGE 480

REV	DESCRIPTION	DATE
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

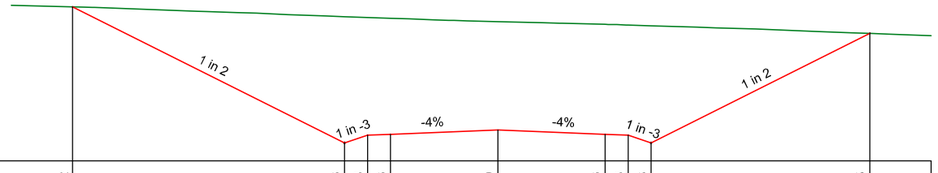
Roading Cross Sections

JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 202

Scale 1:200 @ A3

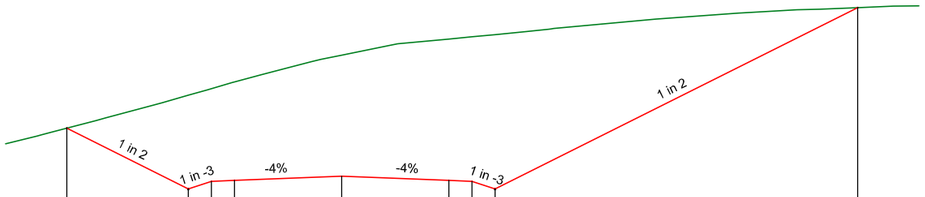


Centreline Data
X = 387034.01
Y = 784495.71
Z = 269

Datum 268

DESIGN HEIGHT	273.02	268.58	268.83	268.86	269.00	268.86	268.83	268.58	272.15		
Original Ground	273.02	272.70	272.67	272.65	272.54	272.45	272.43	272.40	272.15		
DESIGN OFFSET	-13.87	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	12.14		

CHAINAGE 600.000

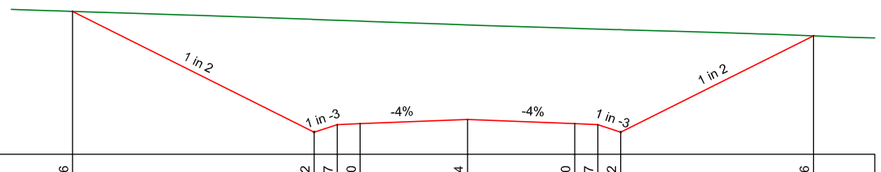


Centreline Data
X = 387093.78
Y = 784490.51
Z = 264.19

Datum 263

DESIGN HEIGHT	265.75	263.77	264.02	264.05	264.19	264.05	264.02	263.77	269.68		
Original Ground	265.75	266.83	267.04	267.26	268.14	268.66	268.73	268.80	269.68		
DESIGN OFFSET	-8.96	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	16.83		

CHAINAGE 660.000

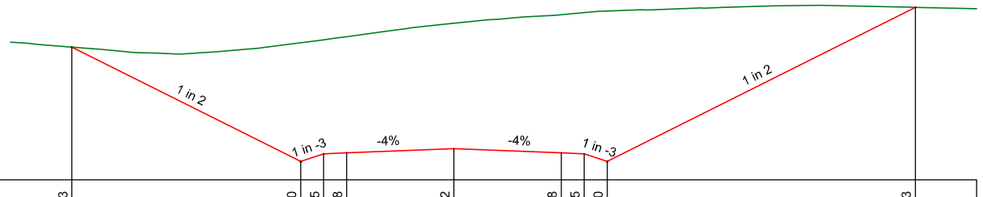


Centreline Data
X = 387014.08
Y = 784497.35
Z = 270.14

Datum 269

DESIGN HEIGHT	273.66	269.72	269.97	270.00	270.14	270.00	269.97	269.72	272.86		
Original Ground	273.66	273.40	273.37	273.35	273.22	273.11	273.08	273.06	272.86		
DESIGN OFFSET	-12.88	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	11.29		

CHAINAGE 580.000

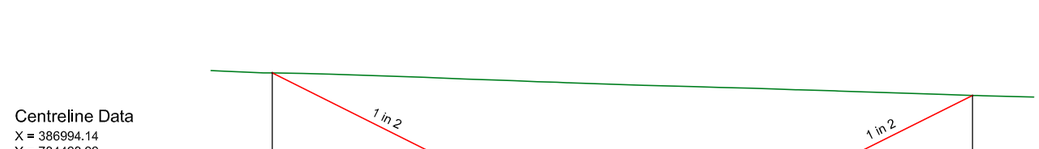


Centreline Data
X = 387073.87
Y = 784492.44
Z = 266.02

Datum 265

DESIGN HEIGHT	269.33	265.60	265.85	265.88	266.02	265.88	265.85	265.60	270.63		
Original Ground	269.33	269.47	269.57	269.67	270.11	270.38	270.46	270.51	270.63		
DESIGN OFFSET	-12.46	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	15.05		

CHAINAGE 640.000

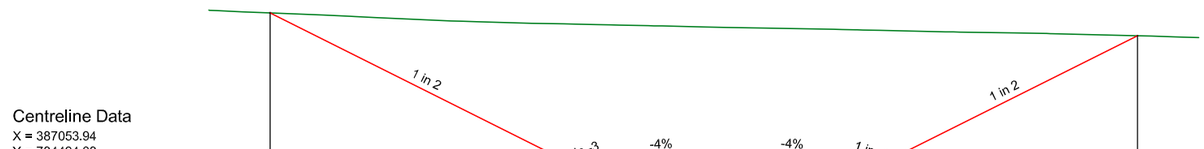


Centreline Data
X = 386994.14
Y = 784498.99
Z = 271.04

Datum 270

DESIGN HEIGHT	274.20	270.62	270.87	270.90	271.04	270.90	270.87	270.62	273.47		
Original Ground	274.20	273.97	273.94	273.92	273.79	273.70	273.67	273.65	273.47		
DESIGN OFFSET	-12.15	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	10.69		

CHAINAGE 560.000



Centreline Data
X = 387053.94
Y = 784494.08
Z = 267.63

Datum 266

DESIGN HEIGHT	272.15	267.21	267.46	267.49	267.63	267.49	267.46	267.21	271.41		
Original Ground	272.15	271.79	271.78	271.76	271.68	271.62	271.60	271.59	271.41		
DESIGN OFFSET	-14.89	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	13.40		

CHAINAGE 620.000

REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Roading Cross Sections

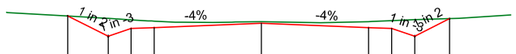
JASON RHIND
DRAUGHTSMAN
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Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 203

Scale 1:200 @ A3

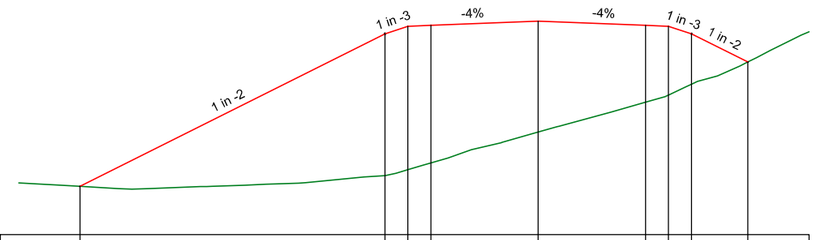
Centreline Data
X = 387168.95
Y = 784464.57
Z = 256.63
Datum 255



DESIGN HEIGHT	256.87	256.21	256.46	256.49	256.63	256.49	256.46	256.21	256.78
Original Ground	256.87	256.79	256.75	256.70	256.68	256.69	256.72	256.75	256.78
DESIGN OFFSET	-6.31	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.14

CHAINAGE 740.000

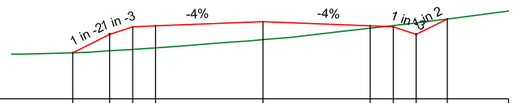
Centreline Data
X = 387222.2
Y = 784436.92
Z = 250.96
Datum 244



DESIGN HEIGHT	245.57	250.54	250.79	250.82	250.96	250.82	250.79	250.54	249.63
Original Ground	245.57	245.92	246.12	246.34	247.35	248.32	248.55	248.91	249.63
DESIGN OFFSET	-14.94	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.83

CHAINAGE 800.000

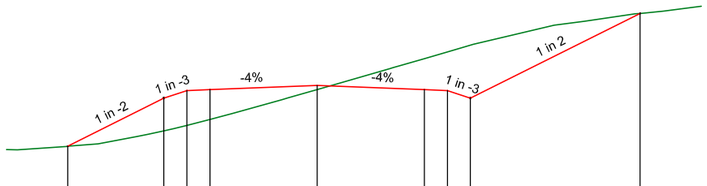
Centreline Data
X = 387151.12
Y = 784473.62
Z = 258.52
Datum 256



DESIGN HEIGHT	257.50	258.10	258.35	258.38	258.52	258.38	258.35	258.10	258.61
Original Ground	257.50	257.57	257.62	257.66	257.93	258.31	258.39	258.48	258.61
DESIGN OFFSET	-6.20	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.01

CHAINAGE 720.000

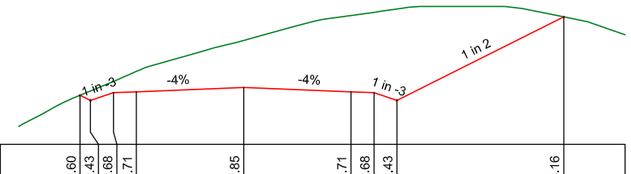
Centreline Data
X = 387132.6
Y = 784481.16
Z = 260.41
Datum 257



DESIGN HEIGHT	258.42	259.99	260.24	260.27	260.41	260.27	260.24	259.99	262.76
Original Ground	258.42	258.93	259.11	259.30	260.27	261.28	261.50	261.72	262.76
DESIGN OFFSET	-8.13	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	10.53

CHAINAGE 700.000

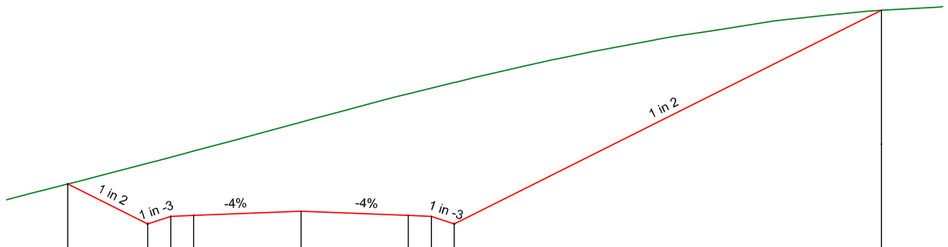
Centreline Data
X = 387204.45
Y = 784446.14
Z = 252.85
Datum 251



DESIGN HEIGHT	252.60	252.43	252.68	252.71	252.85	252.71	252.68	252.43	255.16
Original Ground	252.60	252.74	253.06	253.38	254.39	255.20	255.31	255.42	255.16
DESIGN OFFSET	-5.34	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	10.44

CHAINAGE 780.000

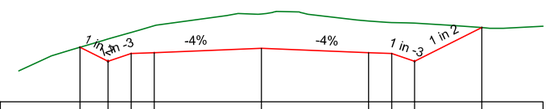
Centreline Data
X = 387113.42
Y = 784486.81
Z = 262.3
Datum 261



DESIGN HEIGHT	263.18	261.88	262.13	262.16	262.30	262.16	262.13	261.88	268.85
Original Ground	263.18	263.86	264.06	264.26	265.20	266.13	266.31	266.49	268.85
DESIGN OFFSET	-7.61	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	18.94

CHAINAGE 680.000

Centreline Data
X = 387186.7
Y = 784455.36
Z = 254.74
Datum 253



DESIGN HEIGHT	254.78	254.32	254.57	254.60	254.74	254.60	254.57	254.32	255.42
Original Ground	254.78	255.05	255.26	255.48	255.86	255.63	255.58	255.56	255.42
DESIGN OFFSET	-5.91	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	7.19

CHAINAGE 760.000

REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

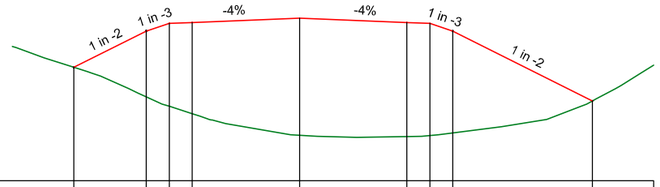
Roading Cross Sections

JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 204

Scale 1:200 @ A3

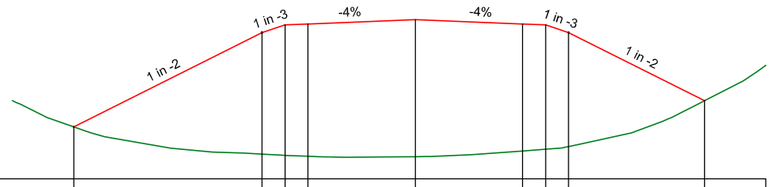


Centreline Data
X = 387273.79
Y = 784406.5
Z = 245.3

Datum 240

DESIGN HEIGHT	243.69	244.88	245.13	245.16	245.30	245.16	245.13	244.88	242.60
Original Ground	243.69	242.74	242.42	242.18	241.48	241.44	241.47	241.56	242.60
DESIGN OFFSET	-7.37	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	9.55

CHAINAGE 860.000

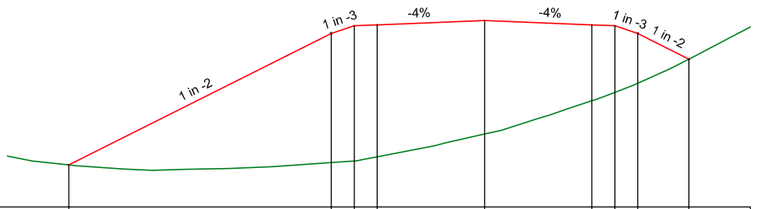


Centreline Data
X = 387257.39
Y = 784417.93
Z = 247.19

Datum 242

DESIGN HEIGHT	243.70	246.77	247.02	247.05	247.19	247.05	247.02	246.77	244.55
Original Ground	243.70	242.81	242.76	242.73	242.72	242.91	242.97	243.05	244.55
DESIGN OFFSET	-11.14	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	9.44

CHAINAGE 840.000

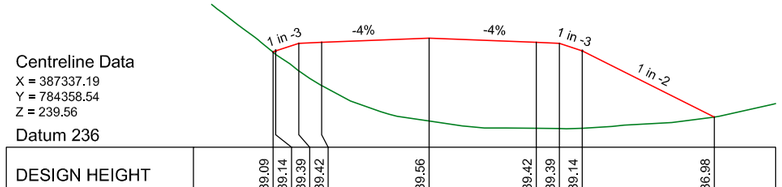


Centreline Data
X = 387239.95
Y = 784427.71
Z = 249.08

Datum 243

DESIGN HEIGHT	244.37	248.66	248.91	248.94	249.08	248.94	248.91	248.86	247.82
Original Ground	244.37	244.45	244.50	244.64	245.38	246.46	246.74	247.03	247.82
DESIGN OFFSET	-13.56	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	6.67

CHAINAGE 820.000

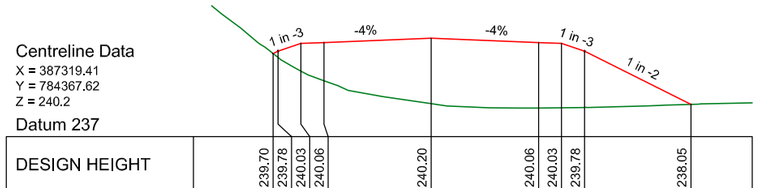


Centreline Data
X = 387337.19
Y = 784358.54
Z = 239.56

Datum 236

DESIGN HEIGHT	239.09	239.14	239.39	239.42	239.56	239.42	239.39	239.14	236.98
Original Ground	239.09	239.02	238.49	238.01	236.85	236.61	236.60	236.61	236.98
DESIGN OFFSET	-5.09	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	9.31

CHAINAGE 940.000

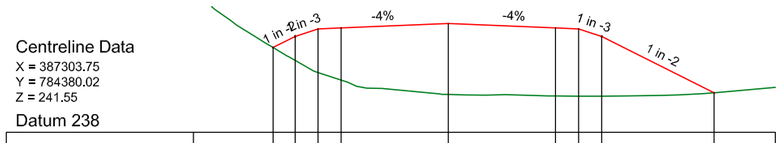


Centreline Data
X = 387319.41
Y = 784367.62
Z = 240.2

Datum 237

DESIGN HEIGHT	239.70	239.78	240.03	240.06	240.20	240.06	240.03	239.78	238.05
Original Ground	239.70	239.58	239.13	238.82	238.07	237.93	237.94	237.95	238.05
DESIGN OFFSET	-5.16	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	8.47

CHAINAGE 920.000

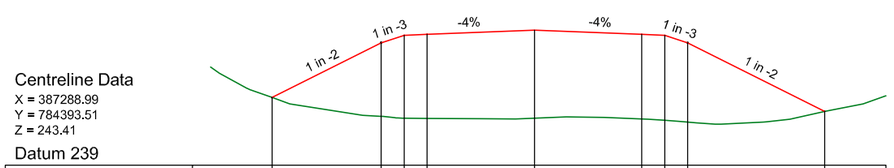


Centreline Data
X = 387303.75
Y = 784380.02
Z = 241.55

Datum 238

DESIGN HEIGHT	240.77	241.13	241.38	241.41	241.55	241.41	241.38	241.13	239.29
Original Ground	240.77	240.35	239.95	239.71	239.24	239.19	239.18	239.18	239.29
DESIGN OFFSET	-5.72	-5.00	-4.25	-3.50	-0.00	3.50	4.25	5.00	8.67

CHAINAGE 900.000



Centreline Data
X = 387288.99
Y = 784393.51
Z = 243.41

Datum 239

DESIGN HEIGHT	241.21	242.99	243.24	243.27	243.41	243.27	243.24	242.99	240.75
Original Ground	241.21	240.60	240.54	240.53	240.53	240.51	240.47	240.41	240.75
DESIGN OFFSET	-8.56	-5.00	-4.25	-3.50	0.00	3.50	4.25	5.00	9.47

CHAINAGE 880.000

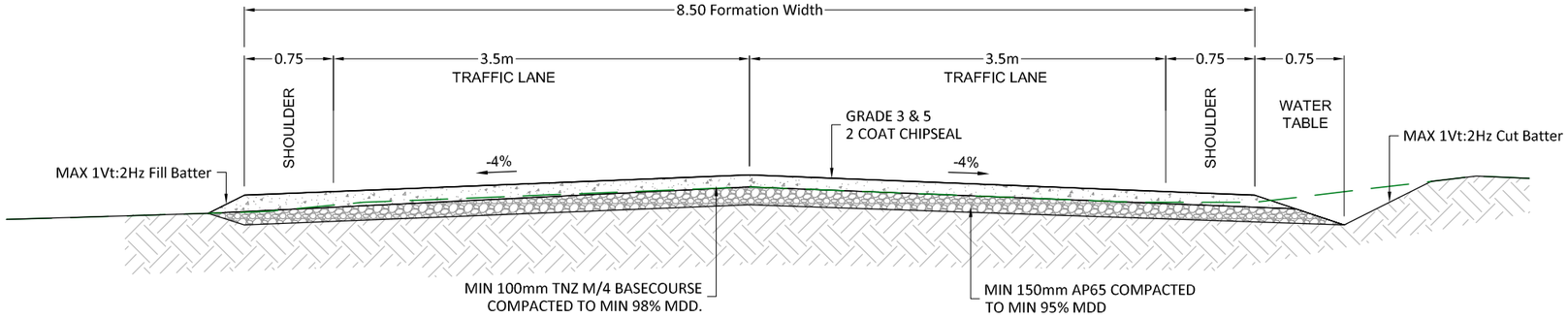
REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Roading Cross Sections

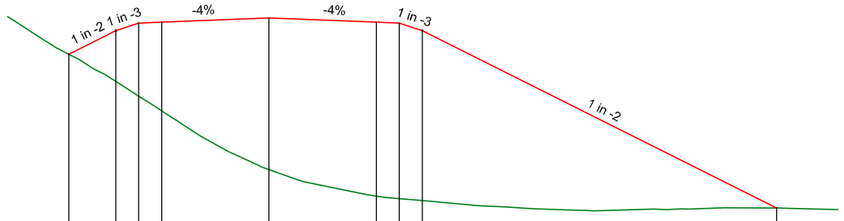
JASON RHIND
DRAUGHTSMAN
Architectural (LBP 2), Engineering, Resource Consent
Phone: 027 6080231

Date	18.12.24	Q 205
Drawn by	JDR	
Checked by	-	Scale 1:200 @ A3



TYPICAL ACCESS ROAD CROSS SECTION - CROWNED FORMATION

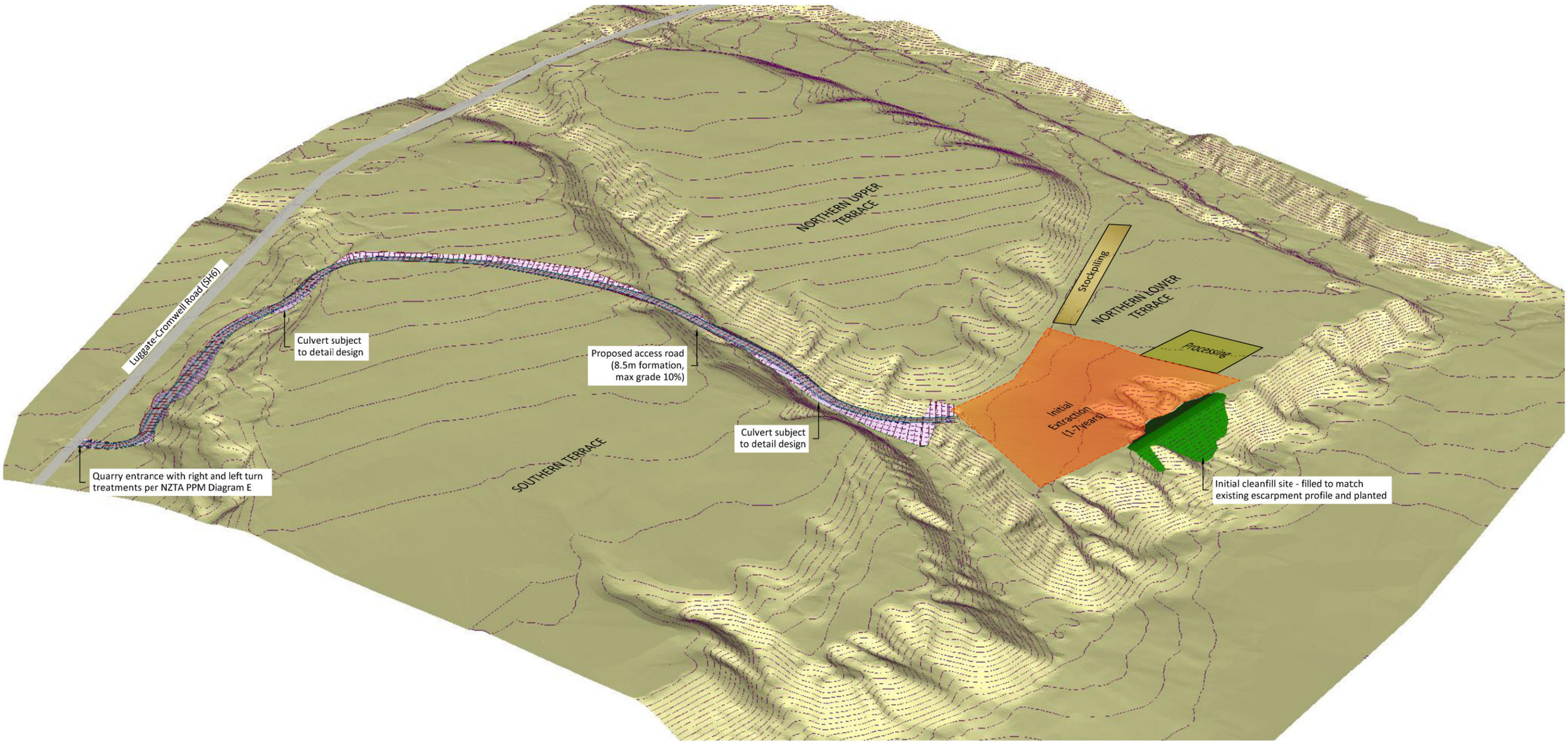
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Centreline Data
X = 387375.33
Y = 784346.84
Z = 240.35

Datum 233

| | | |



REV	DESCRIPTION	DATE
B	Access road realigned	17.06.25
A	Initial Issue	18.12.24

PROPOSED QUARRY
Luggate-Cromwell Road
Queensberry (SH6)
for
Roadmetals Ltd

Site Overview

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Phone: 027 6080231

Date	18.12.24
Drawn by	JDR
Checked by	-

Q 300

Scale 1:200 @ A3

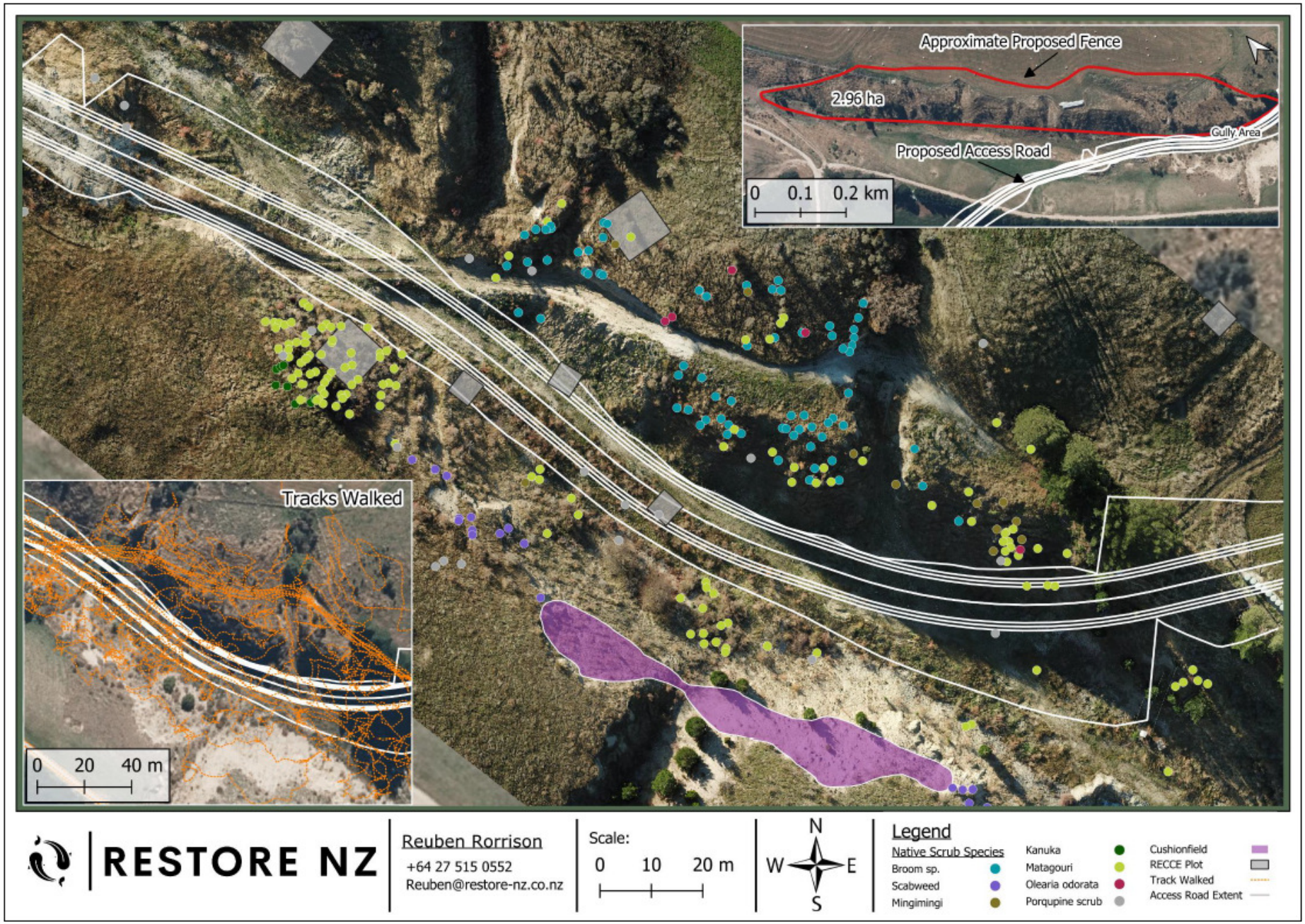


Figure 4: Native scrub in/around the proposed access road alignment.

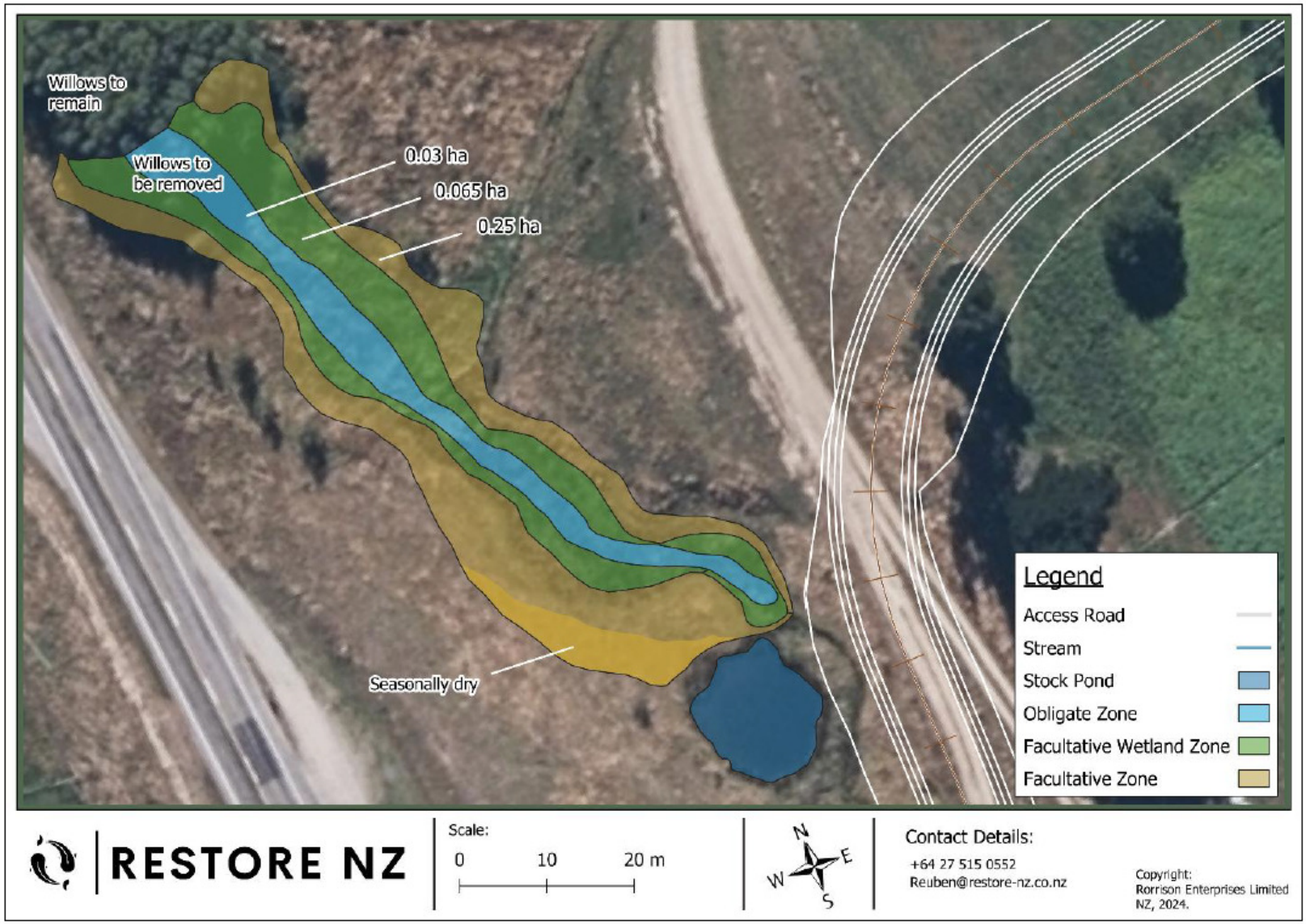


Figure 13: The proposed planting zones for wetland enhancement.

Table 7: Recommended plants and spacings for the enhancement planting zones of the wetland.

Zone	Plant	Wetland Indicator Status*	Spacing	Notes	Total
Obligate zone	**Purei** *Carex secta*	OBL	1 m	These plants require permanently saturated soils and are to be planted in the wettest areas.	100
Obligate zone	**Sinclair's sedge** *Carex sinclarii*	OBL	1 m		100
Obligate zone	**Sharp spiked sedge** *Eleocharis acuta*	*OBL*	1 m		100
Facultative Wetland Zone	**Swamp sedge** *Carex virgata*	FACW	1.5 m	Plant these three species on the inner side of the facultative wetland zone	60
Facultative Wetland Zone	**Edgar's rush** *Juncus edgariae*	FACW	1.5 m		60
Facultative Wetland Zone	**Bog Rush** *Schoenus pauciflorus*	FACW	1.5 m		30
Facultative Wetland Zone	**Harakeke / flax** *Phormium tenax*	FACW	1.5 m	Plant flax around the outer edge of the facultative wetland zone	150
Facultative Zone	**Cabbage tree** *Cordyline australis*	FAC	1.5 m	These should be distributed throughout the inner edge of the facultative zone	450
Facultative Zone	**Mingimingi** *Coprosma propinqua*	FAC	1.5 m		110
Facultative Zone	**Weeping mapou** *Myrsine divaricata*	FAC	1.5 m		110
Facultative Zone	**Twiggy tree daisy** *Olearia virgata*	FAC	1.5 m		110
Facultative Zone	**Koromiko** *Veronica salicifolia*	FACU	1.5 m	These plants prefer drier soils but can tolerate temporary inundation. Plant along the outer edges and where the wetland is likely to be seasonally dry	160
Facultative Zone	**Glossy karamu** *Coprosma robusta*	FACU	1.5 m		160
Total Plants					**1,700**

* Plants are classified based on their capacity to tolerate growing in / dependence on various hydrological conditions. These classifications include Obligate (OBL), Facultative Wetland (FACW), Facultative (FAC), Facultative Upland (FACU), and Upland (Upland).

Consent type: **Land use**
Consent number: **250044**
Purpose: **Land use consent to operate a quarry and construct an access road.**
Location of Activity: **2004 Luggate-Cromwell Road, Cromwell**
Legal Description: **Lot 2 DP 605264**
Lapse Date: **11 June 2031**

Conditions:

1. The quarrying activity must be undertaken in general accordance with the approved plans attached to this certificate as Appendix One, and the information provided with the resource consent application received by the Council on 5 March 2025, and the further information provided on 25 June 2025 and the 24 February 2026 except where modified by the following conditions.

2. The consent holder must pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
   a) Administration, monitoring and inspection relating to this consent; and
   b) Charges authorised by regulations.

Operational Conditions

3. The following stages will apply to the quarrying operation and annual extraction must not exceed the following tonnages.
   - Stage 1 (years 1 to 3) 50,000 tonnes per annum;
   - Stage 2 (years 3 to 15) 100,000 tonnes per annum;
   - Stage 3 (year 15+) 720,000 tonnes per annum.

4. The maximum active quarry area, including excavation area, backfilling areas, active rehabilitation area and unsealed haul roads must not exceed 10 hectares at any time.

5. The hours of operation for operation of the processing plant shall be 7:00am to 6:00pm Monday to Friday and 7:00am to 1:00pm on Saturdays. No processing or extraction is to occur outside these hours or on Sundays or public holidays.

6. The normal hours of operation for load-out and haulage operations are proposed to be restricted to between 6.30am and 6pm Monday to Friday and 6.30am to 1pm Saturdays. No load-out and haulage operations outside these hours, or on Sundays and public holidays, are permitted (except in exceptional circumstances for infrequent emergency works and short-term infrastructure works as detailed in condition 8 and 8A below).

7. Load-out and haulage operations for infrequent emergency works are proposed outside the normal hours of operation outlined in condition 7 above (including Sundays and public holidays) provided truck movements do not exceed more than four truck movements per hour within those time periods (including Sundays and public holidays). Infrequent emergency works shall mean urgent and unplanned repair or maintenance activities needed for infrastructure systems (like roads, bridges, utilities, or buildings) that occur rarely or unexpectedly. These emergencies typically arise from sudden failures, damage, or natural hazards that need immediate attention to prevent safety risks, further damage, or disruption of services.

8. Load-out and haulage operations for short-term infrastructure works are proposed outside the normal hours of operation outlined in condition 7 above (excluding Sundays and public holidays) provided truck movements do not exceed more than two truck movements per hour within those time periods. Short-term infrastructure works shall mean temporary or brief projects aimed at addressing infrastructure needs or problems. These works are typically planned for a short duration, often lasting from a few days to a few months, and are designed to quickly improve, repair, or maintain infrastructure systems like roads, bridges, utilities or buildings.

9. Infrequent emergency works and short-term infrastructure works enabled by conditions 8 and 8A shall not exceed a total of 600 truck movements per calendar year.

10. No more than 200 truck movements associated with the quarry (including infrequent emergency works and short-term infrastructure works enabled by conditions 8 and 8A) shall occur each day. The Consent Holder shall keep a heavy vehicle traffic log for the quarry which must be provided to a Council Officer upon request.

    Advice note: A "truck movement" in conditions 7 to 10 above shall mean an ingress and egress from the access road onto State Highway 6A.

11. Vehicle and heavy machinery speeds within the site shall not exceed 30 km/h.

Quarry Management Plan

12. A Quarry Management Plan (QMP) must be prepared by a suitably qualified person and submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Thereafter, all quarry operations must be undertaken in accordance with the certified Quarry Management Plan (QMP). The objective of the QMP is to set out the practices and procedures to be adopted at the Site and for the Project to ensure compliance with key operational and landscape rehabilitation requirements.

13. The QMP must address:
    (a) Quarry Operation and Management;
    (b) Consents and permits;
    (c) The stages of quarry development;
    (ca) Landscape Management, including:
        i. Rehabilitation actions and objectives to assimilate the final landform back into the landscape including the treatment of pit benches and their rehabilitation timelines.
        ii. Final batter profiles and contouring, when these will be achieved, and the final RL of the pit.
    (d) Noise;
    (e) Air quality;
    (f) Water quality;
    (g) Emergency Management and Spill Response;

(h) Cleanfill Management;
(i) Monitoring and reporting;

14. The certified QMP must be updated at least every five years by the applicant or prior to the start of each stage, whichever comes first. The updated QMP shall only come into effect when the consent holder has received Council certification to the amendments. However, if the consent holder has not received a response from the Council within 30 working days of the date of submission of the amended QMP, the amended QMP is deemed to be certified.

Advice Note: If there is any inconsistency between the certified QMP landscape management rehabilitation and final batter profiles and any other conditions in this consent, then the certified QMP shall take precedence.

Otago Regional Council Consents

15. The quarrying activities authorised by this land-use consent must not be commenced or continued unless and until the consent holder holds, and at all times continues to hold, all necessary resource consents issued by the Otago Regional Council for the activity, including (without limitation):

    a. any resource consent or certificate of compliance authorising the taking of water; and
    b. any resource consent authorising the discharge of contaminants to land, water or air.

16. If any such Otago Regional Council resource consent expires, lapses, is surrendered, cancelled, or is not renewed, all quarrying activities authorised by this consent must cease immediately and may recommence only once replacement Otago Regional Council consent(s) have been obtained.

Prior to the commencement of quarrying

17. A Shelterbelt Planting and Maintenance Plan (**SPMP**) must be prepared by a suitably qualified person and submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Certification is limited to confirming compliance with the proposed shelterbelt

plantings as detailed on the Jason Rhind Site Plan approved under this consent and the conditions of this consent.

18. The objective of the SPMP is ensure the successful establishment and long-term success of the proposed shelterbelt plantings. To achieve the objective, the SPMP must include:
    a) Planting plans and written specifications detailing the plant species, plant sizes at time of planting, plant locations, density of planting, and timing of planting that responds to the various stages and timing of the quarrying.
    b) A programme of post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering (if any) to maintain soil moisture, length of maintenance programme and pest control).
    c) Details and the locations of stockproof fencing to protect the shelterbelt plantings.

19. Quarrying activities must not commence until the consent holder has received written certification from the Council to the SPMP. However, if the consent holder has not received a response from the Council within 20 working days of the date of submission of the SPMP, the SPMP is deemed to be certified.

20. Wetland Restoration must be undertaken in accordance with the recommendations contained within the following documents prepared by Reuben Rorrison at Restore NZ Limited must be implemented:
    - Section 7 of the Queensberry Quarry Ecological Values Assessment dated 21 February 2025
    - Response to Peer Review dated 24 June 2025,
    - Freshwater Impact Assessment dated 21 September 2025.

21. An Ecological Management Plan (**EMP**) must be prepared by a suitably qualified person and be informed by a suitably qualified herpetologist's lizard survey of the site prior to construction. The EMP must be submitted to Council for certification at least four weeks (20 working days) prior to the commencement of quarrying activities. Certification is limited to confirming compliance with the proposed Restoration Area (red hatched) as detailed on the Jason Rhind Site Plan approved under this consent and the conditions of

this consent. The EMP must implement the relevant recommendations contained in the following documents prepared by Reuben Rorrison at Restore NZ Limited:

- Queensberry Quarry Ecological Values Assessment dated 21 February 2025
- Response to Peer Review dated 24 June 2025,
- Freshwater Impact Assessment dated 21 September 2025; and
- Include indigenous planting on the restored contours of the redundant farm track required by condition 27.

22. For the avoidance of doubt, the proposed shelterbelt along the southern boundary of Stage 3c and 3d (as shown on the Jason Rhind Draughtsman Plans Q001 and Q004, Quarry Development Stages – 15+, Rev A dated 02/04/2026) shall consist of a double-row band of native shrub planting, consisting of a mix of Leptospermum scoparium, Pittosporum tenuifolium and Olearia paniculata or similar suitable native shrub species able to reach 4m height or more. This band shall be maintained and irrigated so as to create a continuous screen of evergreen vegetation and shall not be trimmed or topped. Successional planting shall be done to ensure that this effect is retained throughout the life of the quarrying operation.

23. The objective of the EMP is to ensure the successful establishment and long-term success of the proposed EMP plantings. To achieve the objective, the EMP must include:

a) Planting plans and written specifications detailing the plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting that responds to site plan layout. All indigenous planting must prioritise eco-sourced native species from within the Ecological District.

b) Written specifications for soil preparation to ensure appropriate growing conditions for plants.

c) A programme of post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering (if any) to maintain soil moisture, length of maintenance programme and plant/animal pest control).

d) Details and the locations of stockproof fencing and the use of pest animal barriers (e.g. plant guards) to protect the plantings.

e) Details regarding lizard management with proposed minimisation and remedial measures.

24. Quarrying activities must not commence until the consent holder has received written certification from the Council of the EMP. However, if the consent holder has not received a response from the Council within 30 working days of the date of submission of the EMP, the EMP is deemed to be certified.

25. No quarrying activities (excluding construction of the access road) may commence under the certified SPMP, EMP, Wetland Restoration have been implemented.

Access Road / <u>Culvert Construction</u>

26. The culvert required to form the access road must be constructed in accordance with the culvert design approved under Otago Regional Council Consent RM25.438.02. No additional requirements relating to fish passage, aquatic ecology, or water-quality performance are imposed by this consent.

Advice Note: This condition ensures integration between the district land-use consent and the regional consent. Matters relating to fish passage, aquatic ecology, and discharges to water are regulated by the Otago Regional Council under RM25.438.02.

27. Except as expressly provided below, no clearance, disturbance, damage, or removal of indigenous vegetation shall occur within the Central Gully, as identified on the approved Site Plan stamped as part of this resource consent.

The only exception to this condition is the removal or disturbance of indigenous vegetation necessary for the construction of the access road, strictly within the footprint and alignment shown on the approved Restore Plan stamped as part of this consent. No vegetation clearance shall occur outside this defined area.

All remaining indigenous vegetation within the Central Gully area shall be retained and protected for the duration of construction and thereafter.

In addition:

a) A Pest Plant and Pest Animal Control Programme (**PP&PAP**) shall be implemented within the Central Gully for the life of the consent. The programme shall include:

- Identification of pest plant and pest animal species present within the Central Gully;
- Methods for ongoing control and/or eradication of identified pest plant and pest animal species; and
- Measures to prevent re-establishment or spread of plant pest species as a result of construction activities.

b) Pest plant and pest animal species control shall be undertaken using best practice methods appropriate to the site and surrounding environment and shall avoid adverse effects on retained indigenous vegetation.

c) Evidence of implementation of the **PP&PAP** shall be made available to the CODC on request.

28. The redundant farm track, shown on the Restore NZ refined access route through to Central Gully, shall be restored to natural ground level.

Noise

29. Noise generated by the operation of the quarry must comply with limits of 53 dB LAeq between 07:00 and 22:00, and 38 dB LAeq and 70 dB LAmax between 22:00 and 07:00 at the notional boundary of any dwelling where written approval was not provided. Operational noise must be measured and assessed in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound and NZS 6802:2008 Acoustics – Environmental noise.

30. Tonal reversing alarms (‘beepers’) must not be used on quarry plant and vehicles. Broadband alarms (‘squawkers’) may be used.

Lighting

31. All fixed exterior lighting must be directed away from any adjacent roads, residential properties and the Clutha River.

32. All outdoor lighting (excluding mobile equipment) must:

(a) be shielded from above the light in such a manner that the edge of the shield is below the light source; and
(b) have automated timing controls, dimming functions, and movement sensors to reduce unnecessary luminance.

Reinstatement

33. The site reinstatement following completion of each quarrying stage shall be undertaken in accordance with the method and timing specified in the application. On completion of each quarry stage the cut faces adjacent to the external boundaries of the site shall progressively be battered to a maximum slope no greater than 2H:1V and finished in a profile to reflect existing profile (but not necessarily levels) as much as possible using cleanfill or in situ material. All unused haul roads and face benching within that reinstatement stage shall also be removed.

34. The irrigation of grass-seeded areas shall be undertaken as required to ensure establishment.

35. At the completion of quarrying on the site, all bunds, haul roads (not including road access) and face benching are be removed, top-soiled and re-vegetated.

36. The proposal is undertaken in alignment with Jason Rhind Draughtsman ‘Q001 Site Plan’ including accompanying notation regarding the timing of planting to ensure views are adequately mitigated.

37. The final form of batters within the Site should not exceed 1V:2H as outlined above, to enable the re-establishment of pastoral activity, and reintegration with the surrounding landscape. In addition to this, it is also recommended that the final landform does not reflect an engineered/uniform batter and should include a variation in gradient to reflect the natural topography of the adjacent gullies.

Erosion and Sediment Control

38. Prior to the commencement of quarry operations, the Consent Holder must prepare and submit an Erosion and Sediment Control Plan (ESCP) to council's monitoring officer. The ESCP must be prepared by a suitably qualified person and submitted to Council's monitoring officer and submitted to the Consent Authority for certification prior to the commencement of quarry operations. The ESCP must contain sufficient detail to address the following matters:
    a) Area of quarry operations;
    b) Specific erosion and sediment control works (locations, dimensions, capacity etc);
    c) Supporting calculations and design drawings;
    d) Catchment boundaries and contour information;
    e) Details relating to the management of exposed areas; and
    f) Monitoring and maintenance requirements.

39. Works must not commence until the consent holder has received written certification from the Council of the ESCP. However, if the consent holder has not received a response from the Council within 20 working days of the date of submission of the ESCP, the ESCP is deemed to be certified.

Access

40. The access road shall be constructed in accordance with the Geotago report Ref: GL-159 QT 003 RGA REV 1, dated 24 February 2025 with the following requirements.

    - All Fill areas are to be benched/tied in.
    - Appropriate lift height and compaction commensurate for the material being used as fill (e.g., size, grading and moisture content).
    - Guidance for the fill placement and compaction must be sought from appropriate NZ standards such as NZS4431:2022 if required.
    - Appropriate shallow graded sediment control measures should be installed during construction where rainwater and drainage run-off over exposed soils is likely.

41. The existing vehicle crossing (Crossing Place 71A) located on the southwestern corner of the property boundary of Lot 2 Deposited Plan 605264 is to be upgraded in accordance with New Zealand Transport Agency Diagram

E standard as outlined in the Planning Policy Manual (2007). In addition to the Diagram E standard the vehicle crossing must include line marking, a curve radius of 15 metres and must be give way controlled and be formed to the satisfaction of the New Zealand Transport Agency Network Manager.

42. Prior to the operation of the quarry the consent holder shall provide to Council, correspondence from New Zealand Transport Agency confirming that works to the state highway, including vehicle crossing, have been constructed to New Zealand Transport Agency standards.

43. In areas where ice can form on roads, vegetation shall not be planted or allowed to grow in a position which will shade the carriageway between the hours of 10 am and 2 pm on the shortest day of the year.

44. The consent holder shall take all steps to prevent any material from the consented quarry activity to deposit on the road reserve. This shall include aggregate loaded on to the trucks or residual material (mud and sediment) within the wheel guard and underbody of vehicles entering and exiting the site. Any material that inadvertently spills onto the road shall be removed and the carriageway cleaned immediately.

Bond

45. Prior to the commencement quarrying operations, the consent holder must enter into an enforceable agreement with the Council for a bond pursuant to section 108A(2) to secure compliance with the reinstatement conditions for the first 10 years of extraction. The agreement and bond are to ensure compliance with reinstatement conditions detailed in this consent. This bond is to meet the cost re-spreading stockpiled topsoil, re-establishment of contours sufficient to meet post quarrying land use; application of grass seed and the cost of any required professional fees. The bond amount will be calculated by a suitably qualified and independent quantity surveyor to assess the bond amount required to secure compliance with the reinstatement conditions arising from quarry extraction for the first 10 year period.

46. The bond is required in terms of section 108(2)(b) of the Resource Management Act 1991 and must be prepared by the Council's solicitors at the expense of the consent holder. Pursuant to Section 108A (2) the bond is required to be given

prior to the exercise of this land use consent, the liability of the holder of the resource consent must not be limited to the amount of the bond.

47. Every 10 years thereafter, calculated from the date of first extraction, the consent holder must engage a suitably qualified and independent quantity surveyor to reassess the bond amount required to secure compliance with the reinstatement conditions arising from quarry extraction for the following 10 year period.

48. The quantity surveyor's assessment, including all supporting assumptions and calculations, must be provided to the Council for approval. Any increase in the bond required by the assessment must be provided within 30 working days of written confirmation from Council.

49. The bond referred to in Condition 23 above must be either:

    a) Guaranteed by a guarantor acceptable to the Council, which guarantor must bind itself to pay for the carrying out of the work referred to in Condition 23 above in the event of any default by the consent holder; or
    b) The consent holder must provide the Council with such security that is acceptable to the Council for the performance of the works referred to in Condition 23 above.

50. The Council shall release the bond upon:
    a) The consent holder providing verification that reinstatement for the previous 10 year period has been completed in accordance with condition 23; or
    b) The replacement of the bond with a new bond acceptable to the Council, including if the consent is transferred to another party.

Review

51. The Council may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent on and within the period six (6) months upon each anniversary of the date of this consent, or within two (2) months of

any enforcement action taken by the Council in relation to the exercise of this consent or the purpose of:

a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;

b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant district plans, and/or the Otago Regional Policy Statement;

c) Reviewing the frequency of monitoring or reporting required under this consent;

d) Reviewing the bond amount required by Condition 23 that is likely to differentiate from the original sum by 10% or more due to a result of inflation and/or extenuating circumstance that might impact the likely cost of the remediation works.

Monitoring

52. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the Consent Holder's expense.

53. The Consent Holder shall maintain a record of any complaints alleging adverse effects arising from, or related to, the works activities authorised by this consent; the "Complaints Register".

a) The Complaints Register shall include:
   (i) The date, time, location, and nature of the complaint;
   (ii) The date, time, location and nature of any incident related to the complaint;

(iii) The name, phone number, email and address of the complainant, unless the complainant elects not to supply this information;

(iv) Details of actions taken by Consent Holder to remedy the situation, including actions taken on site to remedy the issue, correspondence with the complainant and any policies or methods put in place to avoid or mitigate the problem occurring again;

b) The Complaints Register shall be provided to Council on request;

c) Upon receipt of any complaint that alleges non-compliance with the conditions of this consent, the Consent Holder shall promptly investigate the complaint, and take necessary action to ensure the activity is compliant with the conditions of this consent.

Accidental Discovery

54. In the event that an unidentified archaeological site is located during works, the following will apply;

a) Work must cease immediately at that place and within 20 metres around the site.

b) All machinery must be shut down, the area must be secured, and the Heritage New Zealand Pouhere Taonga Regional Archaeologist and the Consent Authority must be notified.

c) If the site is of Maori origin, the Consent Holder must also notify the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, as long as all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act 2014, Protected Objects Act 1975).

d) If human remains (koiwi tangata) are uncovered the Consent Holder must advise the Heritage New Zealand Pouhere Taonga Regional Archaeologist, NZ Police, the Consent Authority and the appropriate iwi groups or kaitiaki representative and the above process under (c) will apply.

e) Remains are not to be disturbed or moved until such time as iwi and Heritage New Zealand Pouhere Taonga have responded.

f) Works affecting the archaeological site and any human remains (koiwi tangata) must not resume until Heritage New Zealand Pouhere Taonga gives written approval for work to continue. Further assessment by an archaeologist may be required.

g) Where iwi so request, any information recorded as the result of the find such as a description of location and content, must be provided for their records.

ADVICE NOTES

General

1. In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.

2. Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.

3. It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.

4. The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.

5. This is a resource consent. Please contact the Council's Building Services Department, about the building consent requirements for the work.

6. The site is traversed by Aurora owned power poles and overhead lines. The requirements of NZECP-34 apply with regard to safe electrical distances, and any contractor working near the lines is required to hold an approved close approach permit from Aurora Energy Limited.

Issued at Central Otago 11 June 20226



Tarryn Lines
Team Leader – Planning Support

28421/137/01

CENTRAL OTAGO DISTRICT COUNCIL

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10 April 2015

Cromwell Certified Concrete
PO Box 5068
Dunedin 9054

Dear Sir/Madam

Application for Resource Consent: RC150052 - Luggate Cromwell Road (SH 6)

This is to advise that the application for land use consent to continue the operation of a metal quarry and crushing plant on a property situated on Luggate Cromwell Road (State Highway 6) north of Amisfield Burn described as Lots 5 and 8 DP 301379 as contained in Certificate of Title 5967, has been approved by the Manager, Planning and Environment under delegated authority, subject to the following conditions:

1. The access from State Highway 6 that exists on 1 March 2015 shall continue to be the sole access that serves the quarry from the highway, and shall be maintained by the consent holder so that:
   (a) A minimum seal width of six metres is provided for a distance of at least 20 metres from the State Highway 6 carriageway seal edge
   (b) The access is to be at the same level as the adjoining state highway for a distance of at least 20 metres from the boundary of the site.

2. The consent holder shall maintain the bunds surrounding the operational areas of the quarry at the height existing as at 1 March 2015.

3. The consent holder shall take all practical steps to maintain plantings on the periphery of the site existing as at 1 March 2015.

4. The consent holder shall ensure that any pest plants growing on the site, including on any bunds and stockpiles of material on the site, are eradicated.

5. All material to be crushed shall be thoroughly dampened immediately prior to the crushing process.

6. The consent holder shall be responsible for adopting the best practicable means of preventing any dust nuisance to neighbouring occupiers.

7. Any infrastructural services to the site, including power and telephone, shall be laid underground from State Highway 6.

8. All buildings, other structures and plant shall be located within the quarry pit and shall not be visible from State Highway 6 or Lake Dunstan.

9. At least two years prior to ceasing the extraction of material for processing from the quarry the consent holder shall submit to the Council for the approval of the Chief Executive of the Central Otago District Council a Closure and Rehabilitation Plan for the site.

   The Closure and Rehabilitation Plan shall provide for:
   (a) Removal of all buildings, other structures and plant from the site

28421/137/01

10 April 2015

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1. The access from State Highway 6 that exists on 1 March 2015 shall continue to be the sole access that serves the quarry from the highway, and shall be maintained by the consent holder so that:
   (a) A minimum seal width of six metres is provided for a distance of at least 20 metres from the State Highway 6 carriageway seal edge
   (b) The access is to be at the same level as the adjoining state highway for a distance of at least 20 metres from the boundary of the site.

2. The consent holder shall maintain the bunds surrounding the operational areas of the quarry at the height existing as at 1 March 2015.

3. The consent holder shall take all practical steps to maintain plantings on the periphery of the site existing as at 1 March 2015.

4. The consent holder shall ensure that any pest plants growing on the site, including on any bunds and stockpiles of material on the site, are eradicated.

5. All material to be crushed shall be thoroughly dampened immediately prior to the crushing process.

6. The consent holder shall be responsible for adopting the best practicable means of preventing any dust nuisance to neighbouring occupiers.

7. Any infrastructural services to the site, including power and telephone, shall be laid underground from State Highway 6.

8. All buildings, other structures and plant shall be located within the quarry pit and shall not be visible from State Highway 6 or Lake Dunstan.

9. At least two years prior to ceasing the extraction of material for processing from the quarry the consent holder shall submit to the Council for the approval of the Chief Executive of the Central Otago District Council a Closure and Rehabilitation Plan for the site.

   The Closure and Rehabilitation Plan shall provide for:
   (a) Removal of all buildings, other structures and plant from the site

(b) Recontouring of the land to provide a stable profile.
(c) Management of dust to avoid nuisance beyond the site.
(d) Re-establishment of topsoil and grass utilising best practice, supplemented by appropriate irrigation and maintenance for a period of two years.
(e) Appropriate drainage of the site, so as to avoid ponding of water and uncontrolled runoff into any water body.
(f) Leaving the site in a clean and tidy state

The Closure and Rehabilitation Plan shall be prepared in consultation with adjoining land owners and occupiers and in submitting the Closure and Rehabilitation Plan feedback received from those persons shall be included for the information of the Chief Executive.

10. Measures shall be taken to ensure runoff from disturbed areas, waste rock or stockpiles does not result in contamination of surface water.

11. A buffer strip shall be maintained along the south eastern boundary of the mining area sufficient to preserve the existing landform as viewed from Lake Dunstan.

12. Sound levels due to quarrying, crushing and ancillary work conducted by the consent holder at the site measured at the notional boundary of any dwelling is not to exceed:
(a) on normal working days during the hours of 7.00am and 7.00pm Monday to Saturday, the upper limit of sound exposure (as defined in clause 4.2.2 on New Zealand Standard 6802:1991) of 55dBA L10.

(b) at other times on normal working days, on public holidays and on Sundays, the upper limit of sound exposure (as defined in clause 4.2.2 on New Zealand Standard 6802:1991) shall not exceed 45dBA L10 and a Lmax of 75 dBA.

13. Any sign erected as part of the quarrying operation shall comply with requirements of the Central Otago District Plan, or shall be authorised by a separate resource consent.

14. Within three months of the commencement of this consent, the consent holder shall enter into an enforceable agreement and bond with the Council for a sum of $50,000.00. In the event that following the closure of the quarry the consent holder defaults on implementing the Closure and Rehabilitation Plan this bond is to meet the cost of –
(a) removal of any plant or buildings.
(b) recontouring of the quarry area, respreading of subsoils and topsoil, re-establishing grass, and establishment of drainage sufficient to meet the post mining land use.
(c) leaving the area to which this resource consent relates in a clean and tidy state.

15. The bond referred to in Condition 14 shall be prepared at the expense of the consent holder.

16. Any on site effluent disposal shall meet the minimum standards in AS/NZS 1547:2012 and the Council's By-laws.

17. In accordance with section 128 of the Resource Management Act 1991, the conditions of this consent may be reviewed on each anniversary of the date of this consent coming into force if:
(a) there is or is likely to be an adverse environmental effect that is greater than minor that results from the exercise of this consent, which was unforeseen when the consent was granted,

(b) monitoring the exercise of this consent has revealed that there is likely to be an adverse effect on the environment that is greater than minor.

(c) there has been a change of circumstances such that the conditions of the consent are no longer appropriate in terms of the purpose of the Act.

18. The consent holder shall provide the Chief Executive with a copy of the current Mining Permit that authorises mining of the subject site.

19. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's expense.

20. The consent holder shall pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
    a) Administration, monitoring and inspection relating to this consent; and
    b) Charges authorised by regulations.

Following consideration of the application it has been determined that any effects on the environment will be no more than minor and that granting consent will not be contrary to the objectives and policies of the relevant district plan.

I draw your attention to Section 357 of the Resource Management Act 1991 which confers a right of objection to the Council to the conditions of consent.

Yours faithfully

Louise van der Voort
Manager, Planning and Environment

CENTRAL OTAGO DISTRICT COUNCIL

FULTON HOGAN LIMITED, PARKBURN QUARRY, STATE HIGHWAY 6 – RC 070216

Fulton Hogan Limited has made application for land use consent to extract and convey sand and aggregate from the area referred to in the application as the "Upper Terrace", to be transported by conveyor to the processing plant at the Parkburn Quarry. The site subject to the application is located to the north of the Pisa Village subdivision near Cromwell and is described as Sections 62 and 63 Block IV Wakefield Survey District and Sections 64 and 65 Block IV Wakefield Survey District, as contained in Certificates of Title OT10B/738 and OT10B/1452, at the Otago Land Registry. The application also relates to unformed legal road vested in the Council.

The Council has given consideration to the information presented in support of the application and to the submissions and evidence presented by Messrs Page, Peacock, Andrews, Green and King who appeared with Carmen Taylor in support of the application at the hearing. Consideration has also been given to facsimile correspondence from Transit New Zealand dated 25 September 2007 and to a written statement prepared by Mr H Christian dated 25 September 2007. The Council has also given consideration to the contents of all submissions lodged in response to the application, except that of Downer EDI Works Limited that was withdrawn prior to the hearing. A summary of the submissions is presented at Annex 1 to this decision.

The applicant has provided written approval to the application from B Christensen & N MacTaggart and W & J Hawker. The Christensen & MacTaggart approval contains suggestions with respect to the type of plantings in the landscape strip adjacent to State highway 6. The Council also notes that correspondence has been received from Lakes Property Services Ltd for Land Information New Zealand (LINZ). LINZ requires confirmation that the existing operation of Parkburn Quarry does not involve the use of Crown Land-water race. The Council observes that current proposal does not involve the use of such land.

The site is zoned Rural 1 in the Vincent Section of the Central Otago Transitional District Plan. Rule 4.3.1.2 xix provides for the quarrying, mining and processing of material occurring naturally in the vicinity and not covered under the provisions of the Mining Act 1971 as a discretionary activity. The site is located within the Rural Resource Area in the Proposed Central Otago District Plan (as amended by Council decisions) and part of the site is subject to a Scheduled Activity notation being SA 25A *"Gravel Pit - Parkburn"* as identified on Schedule 19.3 of the amended Proposed District Plan. The proposal relates to that part of the site that is not identified as being subject to SA 25A on Planning Maps 28 and 48 and accordingly the Council does not consider that the proposal has status as a controlled activity in terms of Rule 4.7.2(iv) as suggested in the application. The excavation or displacement of material exceeds the limits specified in Rule 4.7.6J(b) and such a breach is a discretionary activity in terms of Rule 4.7.4(i). It is also anticipated that the proposed activity will involve more than 3 persons in a commercial or industrial activity. This breach of Rule 4.7.6B is also a discretionary activity in terms of Rule 4.7.4(i). The proposal has been considered as an application for land use consent to a discretionary activity pursuant to sections 104 and 104B of the Resource Management Act 1991.

Information submitted in support of the application confirms that the applicant proposes to extend the area of gravel extraction at the site of the Parkburn Quarry into the area referred to in the application as the Upper Terrace. In essence the proposed activity is to involve the removal of topsoil and overburden; and the extraction of sand and aggregate using a hydraulic front-end loader to load the excavated material directly into a hopper; and transporting the excavated material by conveyor to the processing plant that is to remain in its current location on land subject to SA 25A. The applicant also proposes to undertake site rehabilitation on a progressive basis.

The applicant owns and operates the Parkburn Quarry which was developed in the 1980s and that has been in operation since that time. The applicant advises that the Parkburn Quarry site is

underlain by quaternary glacial gravels which are suitable for roading and asphalt aggregates, sealing chips and for use in concrete manufacture. The applicant has emphasised that the Parkburn Quarry underpins a significant proportion of roading and building related activities carried out within the Central Otago and Queenstown Districts and Mr Peacock advised that 12.5 tonnes of material is quarried per annum per resident of these districts.

The applicant holds Mining Permit 41783 which allows for the extraction of sand and aggregate resources from the site. Mr Page confirmed that this mining permit expires in 2044. Only the eastern two thirds of the site is identified as being subject to the Scheduled Activity (SA 25A) notation under the amended Proposed District Plan. The balance (western) portion of the site has an area of approximately 43.55 hectares and is referred to in the application as the Upper Terrace. The applicant seeks land use consent to extend the extraction and conveyance activities into this area and anticipates that sand and gravel will be extracted in stages (as shown in Appendix 3 to the Assessment of Effects (AEE) at Figure 4), over a period of 65 years depending on demand for the excavated material.

The property is located east of State highway 6 approximately 10 kilometres north of Cromwell. State highway 6 forms the western boundary of the site and Lake Dunstan forms the eastern boundary. The Parkburn Quarry site covers an approximate area of 120 hectares that is by Mining Permit 41783. The applicant owns and occupies the land associated with the Quarry and Oamaru Shingle Supplies Limited leases land in the northern part of the site for a concrete block manufacturing plant. Plans submitted with the application confirm that an unformed legal road bisects the property from State highway 6 to the edge of Lake Dunstan and that an unformed legal road crosses the property at the north-west corner. A Crown Land water race strip bisects the site at the north-east corner, being outside the area subject to the application.

The resource located within the Parkburn Quarry consists of quaternary glacial gravel of the Dunstan Formation, which is overlain by approximately 200mm of topsoil and overburden. The applicant estimates that there is approximately 10 million m^3 of material which is suitable for extraction remaining within the site. This is the material which is located in the Upper Terrace area.

Gravel extraction is presently occurring along the southern margin of the Parkburn Quarry. The quarry currently extracts between 240,000 to 300,000 tonnes of material per year. The applicant advises that current quarrying operations consist of the following 5 stages:

> ***Site preparation:*** *Overlying topsoil and overburden is first removed from the areas where material is to be extracted. This material is stored and / or used to rehabilitate areas within the Quarry where operations have been completed. Motorscapers and / or truck and digger combinations undertake this activity.*
>
> ***Material extraction:*** *Hydraulic loaders then extract the sand and aggregate from a working pit face, as governed by the Mining Permit.*
>
> ***Material processing:*** *Conveyor belts are used to transport aggregate from the excavation face to the crushing plant. This plant screens the raw material before it passes through a jaw and hammer mill crusher system. The crushing plant is powered by onsite electricity and uses water drawn from a nearby consented well. The crushed and screened material is stockpiled within relatively close proximity to the plant.*
>
> ***Material dispatch:*** *Material is dispatched, in trucks, from the graded and sorted stockpiles. All dispatched material passes over an electronic weighbridge before leaving the site.*
>
> ***Site rehabilitation****: In areas of the Quarry where site operations have ceased the applicant has an ongoing commitment to site rehabilitation. This principally involves some site recontouring, placement of stored overburden and topsoil. The restored area is then sown with grass.*

Processing, stockpiling and dispatch areas of the Parkburn Quarry operations are located in the southern part of the site. Access to the Parkburn Quarry is via an existing entrance from State highway 6 situated towards the northern boundary of the site, and such entrance is currently being upgraded to provide additional slip lanes (tapers). The applicant advises that the access road is sealed up to the operational area of the site. The applicant considers there to be sufficient area within the site for all vehicle loading, manoeuvring and parking requirements.

The Parkburn Quarry operates from Monday to Friday, and on Saturday mornings. The site is closed on Sundays and statutory holidays. The applicant advises that there are occasions when parts of the quarry operation (but not the crushing plant) are required to operate on a 24 hour per day basis in order to meet demand. The Boffa Miskell report that is attached to the application (at page 7) advises that the quarry typically operates during normal business hours.

The applicant advises that a number of controls have been put in place at the existing quarry to avoid potential adverse effects which may otherwise result from the quarrying operations. These include not excavating the river terrace alongside Lake Dunstan, and undertaking all site activities within the established, or to be established, protective bund located alongside the southern boundary and by establishing landscaped setbacks along all but the northern site boundary as described by Mr Andrews at the hearing.

In essence the proposal is to extend extraction activities at the Parkburn Quarry into the Upper Terrace area of the site as shown on the plans submitted with the application. The Upper Terrace has an approximate area of 43.55 hectares. The applicant advises that the nature of the site preparation, material extraction and subsequent rehabilitation activities on the proposed Upper Terrace are to be the same as those currently undertaken at the existing quarry that are described above.

The applicant advises that once material has been extracted from the Upper Terrace area it is to be conveyed to the current processing area (situated to the east of the Upper Terrace within the area subject to SA 25A) for screening, crushing, sorting, stockpiling and subsequent dispatch. It is proposed that current vehicle access, loading, manoeuvring and parking requirements will not change as a result of the proposed extraction activity. It is also proposed that other aspects of the quarry operation including operating hours, site controls and hazardous substance management will remain unchanged. The Council notes in this context that several submitters raised issues with respect to operating hours at the existing quarry (and the proposed extension). The applicants position is that it is prepared to accept a condition with respect to the maximum hours of gravel extraction activity at the Upper Terrace, but is not willing to accept any constraints with respect to the hours of operation of the primary crushing plant on the site (that is located within the area used at present).

The AEE confirms that the applicant proposes to mitigate visual effects of the proposed extension by establishing a planted landscape buffer adjacent to State highway 6, and to extend and plant the existing bund on the southern boundary (with Central Cherries Ltd) as follows:

- The applicant proposes a 20 metre setback on the western boundary of the site adjacent to State highway 6. The setback is to be planted in screen plantings made up of three sequential rows. The first, commencing approximately 8 metres from the edge of State highway 6, will consist of native shrubs approximately 1 metre to 3 metres in height, which will be followed by *Hoheria angustifolia* and *Pittosporum tenuifolium* approximately 4 metre to 5 metres in height. The final row is to consist of either Lombardy poplars or *Cupressocyparis leylandii* which can be pruned to a desired height. A permanent watering system is to be installed and fertiliser applied, in order to ensure plant growth. The applicant anticipates that the screen plantings will obscure potential views of the site from neighbouring properties to the west of State highway 6.

- A 20 metre setback is also proposed to the southern boundary. The setback is to incorporate an extension of the current 3.5 metre high bund located on the eastern part of the southern boundary. The bund extension is to be planted in Pittosporum. Shrub planting is to be incorporated along the entire length of the bund, including amongst the existing *Pittosporum* plantings on the existing bund. Additional screen planting being two staggered rows of Lombardy Poplars or *Cupressocyparis leylandii* is proposed along the base of the bund. It is anticipated that this will act as a successional initiative in support of the existing shelterbelt. In essence the new plantings are to provide screening in future, to replace the existing shelter belt trees if lost through age or illness.

The applicant's representatives advised at the hearing that it is the applicant's intention not to extend the 3.5 metre high bund to the State highway 6 boundary of the site, following consultation with Mr Peszynski which occurred prior to the notification of the application. The Council notes however that Mr Peszynski has not lodged a submission in response to the application, and that the AEE attached to the application confirm that such a bund was to be constructed. The Council considers that such a bund should be required, unless Mr Peszynski agrees in writing to the waiving of the need for such a bund. Mr King also advised that the applicant had given further consideration to the species to be planted. He favoured *Pittosporum ralphi* rather than *Pittosporum tenuifolium*; and Mr King advised that the applicant preferred to plant *Lombardy Poplars,* rather than *Cupressocyparis leylandii.*

Carmen Taylor responded to the suggestion that a greater buffer area be provided for ecological and visual reasons (as promoted in the Lawrence submission in particular). Carmen Taylor presented correspondence from Dr Allibone of Golder & Associates dated 11 September 2007 which responded to a report from Mr BH Patrick dated August 2007 which was attached to the Lawrence submission. Dr Allibone has observed that indigenous biodiversity values are low in the area concerned and he concluded that the removal or loss of native vegetation and associated invertebrates would have a minor or less than minor effect. Dr Allibone also considered that the proposed 140 metre wide buffer area was not justified.

The applicant has commissioned Boffa Miskell Limited to undertake an assessment of landscape effects associated with the proposed activity. In a report dated July 2007 that is attached as Appendix 3 to the AEE Boffa Miskell Limited advise as follows:

> *Parkburn is only visible within a very narrow view shaft running east – west across the site. The site is situated on a low-lying terrace. The combination of existing vegetation, low lying location of public viewpoints, and extensive viewing distances from elevated viewpoints, limits visibility of the proposed extension area. Where visibility of the upper terrace area is greatest, particularly from elevated private dwellings and sites to the west of the site it is considered that the proposed planting along the western boundary of the site will screen potential views of the excavation area. The proposed native plantings along the western and southern boundary of the site will also have positive ecological and visual effects.*
>
> *The combination of these site attributes means that the site has the potential to accommodate the proposed activity of sand and aggregate extraction and subsequent conveying with only minor visual effects on the surrounding landscape. The site will retain its existing landscape character within a modified environment and plantings will enable the proposed extension to be screened from the majority of public viewpoints.*
>
> *Therefore it can be concluded that the nature and scale of visual effects of the proposed extension to the Scheduled Activity area at Parkburn will be no more than minor."*

Boffa Miskell Limited have made several recommendations in clause 9.2 of their report as follows:

" • *Establishment of all screen planting as soon as practicable, during the next appropriate planting season, coupled with the installation of a permanent watering*

system and fertiliser applications for the first 3 – 5 years following planting, to ensure effective establishment and maturity prior to the commencement of excavation of the extension area.

- *Grading and revegetation of extraction area slopes to ensure that the excavated terrace blends in with the surrounding topography. This will potentially also enhance stability and provide erosion protection for the slopes.*

- *Development of planting and maintenance specifications / standards as per nominal horticultural practice to ensure plant survival.*

- *Further sealing of the haul road as soon as practicable to reduce visual dust effects.*

- *Minimising the size of the operational footprint by re-grassing excavated areas where practicably possible, and retaining the processing and stockpiling activities within their current location."*

As noted above excavation is to occur on the Upper Terrace in a staged manner as shown on Appendix 3 to the AEE – Figure 4. This indicates that excavation will occur initially adjacent to the southern boundary of the site, working towards State highway 6. Excavation will not occur within 100 metres of State highway 6 until years 10 – 15; and it appears that landscape plantings in the buffer area are likely to provide effective screening by that time. The Council also acknowledges that the existing bund between the southern boundary of SA 25A and the adjacent Residential Resource Area (3) (at Pisa Village) appears to provide effective screening of the activities when viewed from the south.

The applicant has commissioned Marshall Day Acoustics Limited to undertake an assessment of potential noise effects associated with the proposal. In a report dated 9 March 2007 that is presented as Appendix 4 to the AEE, Marshal Day Acoustics advise that noise levels were measured at the southern boundary immediately adjacent to the Pisa Moorings (sic) subdivision. Mr Green confirmed that calm and fine conditions were present at the time that the noise levels were measured.

The Marshall Day noise measurements indicated a noise level of 50 dBA on top of the existing bund. This is less than the 55 dBA L_{10} (between 7 am and 10 pm) required at any point in the Residential Resource Area in terms of Rule 4.7.6E. The 50 dBA measurement would exceed the 40 dBA L_{10} limit that is imposed during the hours of 10 pm and 7 am. In this context the Council notes that while the quarry operates generally during normal working hours the applicant seeks the ability to operate on a 24 hour basis at certain times. The Marshall Day Acoustics report concludes as follows:

"***Existing & Future Noise Control***

"We believe from previous measurements and site observations that compliance with the noise rules can be achieved. This can be achieved in the following way:

- *Continued extraction in the same manner as currently.*

- *Leave all processing equipment in the current position.*

- *Continue to move material from quarry face to processing area using conveyor belt system.*

- *Investigate potential additional noise control – this would be best left until after operation occurs so it can be optimised for the local terrain.*

...

In order to ensure noise is controlled it is recommended commissioning noise measurements be completed within six months of operation, should consent be granted. At the time of commissioning tests, any additional work required to satisfy s.16 and 17 of the Act can be considered."

Sections 16 and 17 relate to the general duty persons have to avoid unreasonable noise and to avoid, remedy or mitigate the adverse effects of activities.

Several submitters have expressed concern at the noise associated with existing activity at the site, including the crusher. Mr Peacock confirmed that the applicant proposes to replace the existing jaw crusher with a cone crusher, and the application anticipates that the new crusher will be "noticeably quieter". Mr Peacock advised that the applicant is agreeable to a condition which would require that the existing primary crushing plant be replaced with a cone crusher within 24 months of the commencement of the consent. The applicant's representatives confirmed that it is not practical to relocate the existing crushing plant further to the north, due to the significant cost that would be involved in the relocation of this permanent facility.

The Council's conclusion is that any adverse effects of the proposed activity on the environment can be mitigated through adherence to appropriate conditions of consent. The Council acknowledges that the applicant has offered a condition which will result in the replacement of the existing primary crushing plant with a cone crusher within 24 months of the commencement of the consent, and considers that this will serve to mitigate adverse effects associated with the existing operations at the site, for the benefit of nearby residents.

The relevant objectives and policies of the amended Proposed District Plan have passed the stage where they can be affected by submissions and references (appeals). In these circumstances particular emphasis should be placed on the objectives and policies of the amended Proposed District Plan. Relevant objectives include Objectives 4.3.1, 4.3.2, .4.3.5 and 4.3.7 and relevant policies include Policies 4.4.1, 4.4.2, 4.4.5, 4.4.8, 4.4.9 and 4.4.10. The Council considers that the proposed activity, subject to appropriate conditions of consent which serve to avoid or mitigate adverse effects, will not be contrary to these objectives and policies. It is reasonable to acknowledge that the gravel resource is found in the Rural Resource Area, and that the amended Proposed District Plan provides for extraction activity (over threshold limits) as a discretionary activity. Some adverse effects can be anticipated in association with such activity which are able to be mitigated through adherence to appropriate conditions of consent. The Council also considers that the proposal is not contrary to the objectives and policies of the Transitional District Plan.

The Council notes that Issue 4.2.4 of the amended Proposed District Plan (which relates to the objectives stated above and associated policies) states as follows:

> ***"4.2.4 <u>Development of Mineral Resources</u>***
> ***The Central Otago District contains mineral deposits that may be of considerable social and economic importance to the district and the nation generally. Mineral development and associated land restoration can provide an opportunity to enhance the land resource and landscape values and has done so in the past. However, the development of these resources has the potential to have significant adverse effects upon soil, water and air resources of the District, and landscape and heritage values if not appropriately controlled. The ability to extract mineral resources can adversely affect or be adversely affected by land use, including development of other resources above or in close proximity to mineral deposits."***

It is appropriate to recognise that the quaternary glacial gravels that underlie the site are a resource which is suitable for roading and asphalt aggregates, sealing chips and for use in concrete manufacture, and that such materials are important for the development of the District

and the wider Otago Region. The extraction of the resource elsewhere on the site (which is now close to exhaustion) is recognised by the SA 25A notation in the amended Proposed District Plan. The Council notes that subdivision and development has occurred in the adjacent Residential Resource Area (3) in the knowledge that the applicant's gravel extraction activities were occurring on land to the north. The Council considers that the established nature of the gravel extraction activity on the subject site is a relevant matter in the context of section 104(1)(c) of the Act.

The Council considers that the proposal is consistent with the Regional Policy Statement for Otago including Objective 5.4.5 and Policies 5.5.7 and 5.5.8 in particular, which refer to the recognition of and promotion of access to Otago's mineral resources.

The application does not conflict with any national or regional planning document nor with the purpose of the Act which is to promote the sustainable management of natural and physical resources of the District or to any other matter referred to in Part II of the Act. The proposal is consistent with sections 7(b) and (g) that require that particular regard be had to the efficient use and development of natural and physical resources; and to the finite characteristics of natural and physical resources (including minerals).

Having regard to the reasons detailed above, the Council has resolved pursuant to sections 104 and 104B of the Resource Management Act 1991 to grant consent to the application, subject to the following conditions:

1. This consent authorises the extraction of sand and aggregate resources from that part of the site that is not subject to SA 25A as shown on Maps 28 and 48 of the amended proposed Central Otago District Plan, and the transportation of sand and aggregate resources by use of a conveyer belt system at all times except for an emergency breakdown situation.

2. The crushing of aggregate resources and the transportation of sand and aggregate using trucks is not permitted on land not subject to SA 25 in terms of this consent, except for the existing vehicular access to State highway 6 and for the use of trucks in an emergency breakdown situation. Trucks are also permitted to be used during site preparation when topsoil and overburden is removed.

3. The land within 20 metres of the State highway 6 road reserve boundary shall be established and maintained as a landscape buffer area.

4. Within the landscape buffer area required in terms of condition 3 three segmented rows of plantings shall occur as follows –

   (i) Row 1 shall be eight metres back from State highway 6 and shall include a row of native shrubs 1 metre to 3 metres in height.

   (ii) Row 2 shall be *Hoheria angustifolia* and *Pittosporum* species approximately 4 – 5 metres in height.

   (iii) Row 3 shall be Lombardy poplars or *Cupressocyparis leylandii* that may be pruned to a minimum height of 6 metres.

5. The land within 20 metres of the southern boundary of the site shall also be retained as a landscape buffer area that shall include a 3.5 metre high grassed bund that shall be tied into the existing bund which exists adjacent to the eastern portion of the southern boundary. Such bund shall extend to the western (State highway 6) boundary of the site unless Mr Peszynski of Central Cherries Ltd confirms in writing that such bund extension is not required, and such written confirmation is lodged with the Chief Executive.

6. The bund extension required in terms of condition 5 is to be planted in *Pittosporum* species. Shrub planting is also to be undertaken along the entire length of the bund,

including the existing bund. In addition two rows of Lombardy poplars or *Cupressocparis leyandii* are to be planted along the base of the bund, on the north side of the bund. If the bund extension is not constructed a landscape buffer and plantings as prescribed in conditions 3 and 4 shall be provided adjacent to that part of the southern boundary where no bund is present.

7. The plantings required in terms of conditions 4 and 6 shall be established within 12 months of the commencement of this consent.

8. The consent holder shall install a permanent watering system for the plantings required in terms of conditions 4 and 6 and shall undertake appropriate fertiliser application for the first 5 years following the commencement of this consent.

9. The extraction of sand and aggregate resources shall occur in a staged manner as shown on Appendix 3 – Figure 4 being a plan attached to the Assessment of Environmental Effects lodged with the application.

10. The consent holder shall carry out progressive land restoration to achieve a gradual contour down from the landscape buffer areas required in terms of conditions 3 and 5 and to achieve vegetative cover that is consistent with that found on adjacent dry farmland. Such restoration to pasture shall occur as follows:

    (a) Restoration shall occur no later than when the area of land exposed by gravel extraction activity reaches 20 hectares.
    (b) Restoration shall include recontouring, spreading of topsoil and the sowing of an appropriate grass mix and any necessary fertilisers.

11. Any topsoil present shall be removed and stockpiled separate from overburden such that topsoil is not lost to wind blow or runoff.

12. The post land use objective shall be to return the land to a condition at least as productive as exists prior to quarrying.

13. The maximum hours of operation of the gravel extraction activity are to be 8.00 am to 6.00 pm, Monday to Friday and 8.00 am – Noon on Saturdays, except for public holidays provided that the consent holder is permitted to operate outside the hours stated in this condition on a maximum of 10 days per year.

14. The consent holder shall maintain a log of when the quarry operates outside the hours specified in condition 13 and such log is to be provided to the Chief Executive on request.

15. Access to the quarry shall be obtained from the existing access from State highway 6.

16. In the event that public access is to be provided through the site (via the landscape buffer area) to Lake Dunstan the consent holder shall establish and maintain a public parking area for no less than 5 vehicles located within the buffer zone adjacent to the State highway (that shall be adjusted in width to accommodate the plantings required in terms of condition 4). The parking area will have direct access onto the State highway and operate in a manner similar to a rest area. The parking area shall be located as far away as is practicable from CP 34 and as close as practicable to the pedestrian access to the foreshore of Lake Dunstan. The exact final location and treatment of the access to the public parking area shall be decided in consultation with Transit New Zealand's network management consultant.

17. The consent holder shall, during gravel extraction operations and upon completion of quarrying, leave the area to which the resource consent relates in a clean and tidy state.

18. Any discharge of a hazardous substance must be immediately reported to the Otago Regional Council. Hazardous substances include but are not limited to diesel, petrol, flammable liquids and solids.

19. The consent holder shall be responsible for minimising the generation of dust by regularly spraying water over the extraction area.

20. The consent holder shall at all times adopt the best practicable method to mitigate any adverse dust effects.

21. The consent holder shall ensure that the exhaust systems of all heavy machinery and vehicles owned and operated by the consent holder on-site including those using reverse beepers are muffled by directional control or silenced in accordance with the manufacturer's standards (and OSH requirements) in order to mitigate the effect of noise generation.

Note: It is acknowledged that vehicles may visit the site that are not owned and operated by the consent holder, and that the consent holder does not have control with respect to these vehicles at the site.

22. The gravel extraction activities shall comply with Rule 4.7.6E(a) of the amended Proposed District Plan which relates to noise.

23. If koiwi (human skeletal remains) taoko or artefact material is discovered at the gravel extraction site, work will immediately cease and Kai Tahu and the New Zealand Archaeological Association shall be advised. In the event of such a discovery the consent holder shall arrange for a site inspection by the appropriate Tangata Whenua and their advisers, who will determine whether the discovery is likely to be extensive and whether a thorough site investigation is required. Materials discovered will be handled and removed by Iwi responsible for the tikanga appropriate to their removal or preservation.

24. In accordance with section 128 of the Resource Management Act 1991, the conditions of this consent may be reviewed on and in the period within six (6) months upon each anniversary of the date of this consent, if on reasonable grounds, the consent authority finds that:
    (a) There is or is likely to be an adverse environmental effect as a result of the exercise of this consent which was unforeseen when the consent was granted.

    (b) Monitoring of the exercise of the consent has revealed there is, or is likely to be an adverse effect on the environment.

    (c) There has been a change in circumstances such that the conditions of consent are no longer appropriate in terms of the purpose of the Act.

25. Within six months of the commencement of the sand and aggregate extraction activity the consent holder shall provide a noise measurement report to the Chief Executive that measures the noise at the boundaries of the site during quarry operations; and this report may be peer reviewed at the discretion of the Chief Executive and at the cost of the consent holder.

26. The existing primary crushing plant on the site (within the area subject to SA 25A) shall be replaced with a cone crusher within 24 months of the commencement of this consent.

27. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's expense.

28. The consent holder shall pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:

a) Administration, monitoring and inspection relating to this consent; and
b) Charges authorised by regulations.

29. Upon commencement of the sand and aggregate extraction activity on the land subject to consent, the consent holder shall advise the Chief Executive in writing (quoting RC070216) that all conditions of this consent have been adhered to.

Note: The consent holder shall be responsible for obtaining any necessary archaeological authority which is required in terms of the Historic Places Act 1993.

Certified to be a correct copy of the decision of the Central Otago District Council.

.....
L A VAN DER VOORT
MANAGER, PLANNING AND ENVIRONMENT

10 October 2007

Annex 1

SUBMITTER/S	SUMMARY OF SUBMISSION	DECISION REQUEST
A & K Barrett	**Oppose** The specific parts of the application that the submission relates to are: • Noise – too close to residential properties • Dust – extreme dust clouds during windy weather. The submitters wish to oppose this application as it would cause too much dust and noise to the surrounding subdivision and homes closest to the quarry.	**Refuse consent**
R & H Christian	**Support conditionally** The application by Fulton Hogan Limited for consent to extract and convey material from the Upper Terrace of Parkburn Quarry requires appropriate consideration of the existing impact of the quarry's operations on Pisa Moorings residents, as well as likely future impacts. Although the applicant has expressed the opinion that consultation with landowners in Pisa Moorings is unnecessary, the quarry's operations have ongoing effects on noise, dust and landscape that are more than minor. The primary concern of residents in the Pisa Moorings area is noise originating from the quarry. There are three distinctive sounds that are audible at least 800 metres away on "still air" days: the operation of the primary (jaw) crusher, load emptying, and the reversing safety "beeps" of the trucks. Marshall Day Acoustics were contracted by the applicant to measure noise levels, with testing carried out on 21 March 2005 at the southern boundary of the quarry and immediately adjacent to the Pisa Moorings subdivision. In a summary of their findings in a letter to Fulton Hogan Limited dated 9 March 2007, Marshall Day Acoustics made no representation of the weather conditions at the time of testing or whether the primary crusher was in operation. The absence of noise effect within the subdivision was assumed. It is submitted that the Council needs to undertake its own independent acoustic tests at various locations within the Pisa Moorings subdivision on still-air days to adequately determine the noise effects of the quarry's operations. The submitters understand that the conveyor and stockpile will not be relocated with the proposed Upper Terrace. Dust from the quarry does enter the Pisa Moorings subdivision during northerly winds. The impact of this dust is most likely to be greatest for those landowners immediately adjacent to the quarry's southern boundary. In addition, the quarry's conveyor and raw feed stockpile are visible from certain locations	Grant consent to the application only if conditions can be met. In particular, tree plantings along the quarry's southern boundary should be mandatory, as well as consideration given to: • the primary crusher's hours of operation, • replacement of jaw crusher with cone crusher, • removal of reversal "beeps" from trucks, • relocation of primary crusher

within the Pisa Moorings subdivision. It is relevant that the closest dwelling to the quarry is not 100 metres from the southern boundary as the applicant suggests, but more likely less than 50 metres. The Council would have been aware of this when they issued consent to Pisa Village Limited to develop land for rural residential use at the northern boundary of the subdivision.

The submitters acknowledge the important service that Fulton Hogan Limited provides to local development and infrastructure. However, there is also a need to accommodate the interests of residents of Pisa Moorings, many of whom would have purchased sections without knowledge of the quarry's noise effects in particular. The submitters ask the Council to carefully consider the following measures that are intended to mitigate the concerns of Pisa Moorings residents whilst causing the least possible interference to the activities of Parkburn Quarry. In order of priority:

1. Dense, naturalised tree plantings for the entire 20 metre setback of the quarry's southern boundary (Pisa Moorings' northern boundary). Over time, this planting would act as a noise and dust suppressant while also removing the visual impact of the quarry from local residents. The plantings should incorporate similar trees to those proposed for the west/highway boundary (ie native shrubs of 1–3 metres in height, Hoheria augustifolia/Pittosporum tenuifolium of 4–5 metres in height and tall trees of 6–7 metres in height. Tree plantings should continue to the top of the bund. It should be noted that the existing Pinus radiata trees on the quarry's southern boundary are sparsely planted and nearing the end of their life.

2. Operating hours of the primary crusher should be restricted to 8 am – 5.30 pm on weekdays, with no use of the crusher during the weekend or on statutory holidays. This measure would not interfere with other existing operating times involving equipment other than the primary crusher.

3. Replacement of the jaw crusher with a cone crusher within 12 months, provided that it can be demonstrated that the noise effects of the new crusher would be less than the existing crusher. Alternatively, cover the existing jaw crusher to reduce noise.

4. Remove reversal "beeps" from trucks if not legally mandated as a safety measure.

5. Naturalised tree plantings along the quarry's eastern boundary with the lake to remove the visual impact of the quarry, as viewed from the lake and highway

	6. Relocate the primary crusher further north if this would not have any detrimental impacts on residents to the north of the quarry.	
JM & AG Lawrence	**Oppose** **Background** The submitters own the property at Rapid 827 on State highway 6 as well as Rapid 140 State Highway 6, Cromwell. On these two properties they grow grapes and on the latter make and sell wine under the Aurum brand. The property 827, State Highway 6 is on the opposite side of the road to Parkburn quarry at its south western corner and by nature of boundary lines becomes opposite the quarry progressively back from the road (fig 1 [attached to the submission as are other figures referred to below]). The submitters are life members of the Queen Elizabeth National Trust. The submitters are also longstanding members of the New Zealand Royal Forest and Bird Society, the New Zealand Historic Places Trust, the New Zealand Archaeological Association and the New Zealand Gardens Trust. Whilst the submitters have economic interests in the vineyards they have tried to balance this with conservation realising the importance of the ecology of the Cromwell valley floor. The submitters are currently in the process of protecting about 1/3 of the property opposite the Parkburn quarry by means of a covenant through the Queen Elizabeth National Trust. **Analysis and Comment on the Report by Kingett Mitchell Ltd "Parkburn Quarry Upper Terrace Land Use Consent Application and Assessment of Effects on the Environment July 2007".** **Rehabilitation** While the submitters appreciate that the current quarry is a permitted activity and this is beyond the scope of the application, nevertheless creation of a quarry in the upper terrace does require consent and if it is to be allowed should be subject to some controls, which Fulton Hogan acknowledges. The submitters are very concerned that "The nature of the site preparation, material extraction and subsequent rehabilitation activities on the upper terrace will be the same as those currently undertaken at the quarry …" [p 10]. Any rehabilitation of the site appears to be minimal, at best. Indeed the disused pits remain as eyesores, an industrial complex has been built on part of the site and from the extraction method which can be observed at the southern edge in the current southern pit no allowance has been made for recontouring of the	The submitters would first recommend that unless current activities are brought into line with good practice that no extension of the quarry be allowed. If good practice including better dust control, resiting of the grading and crushing plant to a lower level to reduce noise and visual effects and a plan to rehabilitate the existing and proposed quarries once extraction of gravels was complete is made, then extraction of gravels should be allowed in the upper terrace under the following conditions. • That a buffer zone of 140 metres from State Highway 6 be set aside as a reserve. • That this reserve be protected through an appropriate agency such as the Queen Elizabeth Trust. • That the concept of an irrigated planting strip on the southern and western sides of the upper terrace be abandoned. • That on completion of all quarrying activities including rehabilitation the whole site be vested in a conservation trust such as the Queen Elizabeth Trust. Benefit /costs if these recommendations are accepted: To Fulton Hogan Fulton Hogan will have less gravel to extract than

	extraction faces with an extraction face right to the bund on the southern boundary. This is quite inconsistent with "that recontouring is undertaken to ensure that the 'edges' of the quarry are visually integrated into the terrace landscape. This will be undertaken by FHL on a progressive basis as part of ongoing site rehabilitation." [p 12, 13] **Air Discharge** Fulton Hogan currently have an air discharge permit. [p 12]. The submitters believe that the current permit is consistently abused and there appears to be no system in place to deal with dust created by the extreme winds and habitually extremely dry conditions that this valley experiences. Dust is largely generated from the quarry pits and their faces and the storage heaps. The submitters understand there is a watering truck for the roads but these roads are only marginally responsible for the dust. Figures 2 and 3 show the dust generated by the quarry on a moderately windy day (note the effect of the wind on the shelter belt). On an extremely windy day dust from the quarry completely obliterates the submitters view of the Dunstan Mountain Range shown in these figures. Quarrying the upper terrace would markedly increase this dust discharge on windy days. Furthermore quarrying near the road will likely create visibility problems on State Highway 6, only 20 metres away from the proposed new quarry site as proposed. [p 13]. **Visual and Sound Effects** Fulton Hogan propose planting a 20m strip adjacent to State Highway 6 and along an extended southern bund to mitigate the visual effects of the proposed new upper terrace quarry to neighbours and the travelling public. [p 13]. From discussions with Jonathon Green the submitters understand that these proposed plantings are to mitigate the visual effects of the proposed upper terrace quarrying from neighbouring properties such as the submitters. The submitters believe there is a better option, also discussed but not mentioned in the report, of lowering the sorting and crushing plant into the current south pit once extraction is completed here. This should markedly reduce noise and reduce the visual impact of the quarry from State Highway 8 (figure 4). Stopping quarrying activities further back from the road at the current fence (approximately 140 metres) would also mitigate much of the visual impact both from the road and neighbouring properties.	in their proposal but considerably more than from the existing quarry. Shortfall will be able to be obtained from their Luggate quarry. Fulton Hogan will gain immense kudos as an ecologically sensitive quarry operator making a profit from the short term activity of gravel extraction but being prepared to give something back to the community by creation of a "Fulton Hogan" reserve and by mitigating the adverse short and long term effects of quarrying to the best of their ability. To the Community The community will gain from better control of noise, dust and visual pollution in the short term and the rehabilitation as best possible of a landscape scar and the creation of a reserve in the long term.

Whilst the submitters would prefer the working quarry to not be visible from their house they would sooner see some quarry activities than see plantings of trees adjoining any boundary (see also Brian Patrick's report).

Ecology of the Upper Terrace

Whilst the District Plan does not identify areas of significance on the site [p 12] it is an invalid assumption to make that the upper terrace does indeed not hold significant ecological features. It is simply that no official survey has yet been undertaken. It is, however, known that the Cromwell Valley floor is, even where modified but only lightly grazed, such as the upper terrace, a rich area of indigenous biodiversity (figures 5 and 6).

Such is the recognised importance of the fauna and flora of the Cromwell valley floor in the Upper Clutha that there are a number of DoC reserves in this valley. As examples the Mahaka Katia reserve lies to the north of the site (figure 7). On the same flats and the Cromwell Chaffer Beetle Nature Reserve lies to the south (figure 8).

On 26th August 2007 a brief biological survey was made of the upper terrace. This report and its recommendations by Brian Patrick, the foremost expert in the biodiversity of this region is included as Appendix 1 to the submission and Annex 2 attached. The submitters found that the most interesting and biologically important part of the upper terrace was in the paddock adjacent to the road, the width of this paddock being about 140 metres.

Submission

The submitters believe that the granting of a zoning to allow quarrying of the lower terrace in the 1980's was the correct decision at the time. At that time the importance of the ecology and indigenous biodiversity of the Upper Clutha Valley was not appreciated. Also the quarry was in a relatively isolated area and of a scale where its impact of site, noise, and dust was only small.

The submitters understanding is that the District Council did not change the zoning of the upper terrace from rural due to the proximity to State Highway 6 where its effects would be more noticeable.

Circumstances have changed substantially in the valley since then. There has been a huge increase in rural and urban activity in the valley and particularly around the quarry. This area is renowned for its winds and fruits. The economic value of this valley's activity has grown rapidly and give every indication of continuing.

	The quarry is becoming a more and more inappropriate land use in this region and has a finite life. The report is very vague about how the effects of the extraction can be mitigated once quarrying is complete. There is little or no indications on the present site that any serious attempt has been made to rehabilitate the area, despite claims in the report. [p 16]. The sourcing of material from alternative sites is not addressed in the report. It is well known that Fulton Hogan have recently gained Resource Consent for a quarry in Luggate. This gives them a ready source of gravels to utilise in Central Otago and the Lakes District as well as the Parkburn site.	
L Grau & M Mohr	**Neither Support nor Oppose** The specific parts of the application that the submission relates to are: • Noise level of operating the quarry • Impact of dust with northerly winds (which are very strong in this area all through spring and summer!) Restriction of operating hours from 8 am – 5 pm during week days. Even in 7 Ferry Lane the noise of the crusher can be heard inside the house on still days or with northerly winds. More dense planting of shrubbery and trees at the border to the subdivision.	To help suppress dust and noise the submitters would like Council to seriously consider their amendments and how strongly it affects their quality of life.
Public Health South	**Neither support not oppose** Public health South has studied the documents sent in to support the application and found no issue of public health significance. Public Health South has no objection to the consent applied for.	
CR and SN Thompson	The submitters as representatives of the Thompson Family Trust and Thompson Vineyards Ltd and as individuals concerned for the environmental effects of the proposed mining extension. The Thompson Family Trust owns two blocks of land on the opposite side of State highway 6 and directly west of the Upper Terrace area proposed for the extension of the Parkburn Quarry. Lot 1 DP 24987 is at the same elevation as the Parkburn Quarry Upper Terrace and immediately adjacent on the opposite side of State Highway 6. Lot 2 DP 25665 is on the first step of the terraces directly to the west, with extensive views over the proposed site. The submitters anticipate erecting a dwelling in the near or medium term on one or both of these sites. Thompson Vineyards Limited owns and operates vineyards on both these properties.	That the application for land use consent to extract gravels at the Parkburn Quarry from the area referred to as the Upper Terrace be declined unless the following conditions are met:- a) That the setback area from the State Highway 6 boundary is increased significantly from the proposed 20 m in order to safeguard this important visual corridor. b) That a 5-6 metre strip is created along the western and southern

The areas of concern in the application to which the submission relates are:-

i) The assumption in the application that, because the existing quarry operates to certain standards within the terms of its consent, the new mining area can operate under these same conditions.

ii) That the timeframe for the relocation of the crushing plant is unspecified and loosely indicated at 'medium term'. Given the lifespan of the mine put as 65 years, if extended as proposed, it could mean this would not be achieved for 30 or more years.

iii) The visual effects. These will be of a very long term and lasting nature. Stockpiles, elevator and associated activity are currently visible from the western terraces (contrary to the assertion in 6 "Visibility Analysis of Proposed Site, Assessment of Landscape Effects"). They will be able to be viewed by dwellers and users of land on the terraces overlooking the quarry, by lake users, and by anyone travelling, living or working on land on the opposite side of Lake Dunstan. The larger the quarry is allowed to become, the greater the potential visual eyesore.

iv) Lack of any obvious systematic restoration of the land currently quarried and therefore the reality of the proposed re-grading and revegetation of future extraction areas if allowed.

In discussions with Jonathan Green and the Fulton Hogan representative, it was admitted that once gravel is extracted, it is unrealistic, impracticable and uneconomic to imagine that the fill can be put back in any meaningful way. Therefore, very serious consideration needs to be given to the area actually given land use consent for mining, in order to allow for adequate re-contouring so that as natural an integration is achieved as possible of the disturbance into the landscape.

The submission:

The importance of adequate supplies of gravels for the maintenance and growth of the district, together with the practicality of allowing an extension to the current operations, is acknowledged.

However, it is submitted that, if this proposed extension is granted, every effort is made to mitigate negative effects of the quarry, given the 65 year life of the mine if the new area is allowed, and the large size of the disturbance in the permanent landscape.

boundaries to allow for safe walking and access to the Lake Dunstan foreshore and formalized or given some form of covenant for protections.

c) That relocation of stockpiles, and of the sorting and crushing plant to the lower terrace is carried out before commencement of any mining of the Upper Terrace in order to mitigate the noise and visual impact of mining operations, given that allowing for the proposed extraction will extend the life of the quarry for 65 years.

d) That a specified width along southern, western and northern boundaries is withheld a land use consent for mining, or if allowed, that the depth of extraction is restricted, in order to ensure adequate graduation for long-term integration of the quarry faces into the natural landscape.

e) That the recontouring and regrassing of excavated areas is monitored to ensure that it is carried out in the timeframe and manner agreed on.

	The reasons for these views: The area surrounding the Parkburn Quarry has developed significantly since the 1980's when consents were granted and mining commenced at the site. Not only is there now intensive agriculture in the form of vineyards and orchards in the immediate vicinity which also contribute to the economy of the region, but there is also significant and steadily increasing residential development on the southern boundary and on land that overlooks the site. State Highway 6 carries steadily increasing volumes of traffic as the whole region develops and is a very significant visual corridor.	
Transit New Zealand	**<u>Support conditionally</u>** Pursuant to Section 96 of the Resource Management Act 1991, Transit New Zealand hereby makes this submission **partially supporting** the application by Fulton Hogan Ltd to extend the area of the Parkburn Quarry into an area referred to as the "Upper Terrace". **Transit New Zealand's submission is:** The applicant proposes that a 20m buffer strip extending along the western boundary of the subject site. The buffer will extend from the edge of the road reserve and into the subject site as far as the first row of screening vegetation. The buffer will also include a 5-6m wide strip that will act as a pedestrian walkway. It is envisaged that this walkway will join with a similar strip along the southern boundary to provide public pedestrian access to the Lake Dunstan foreshore. There is no mention in the application as to where cars will park if the public wish to use this walkway. Transit does not wish to have vehicles parking on the State highway road reserve, which would compromise the safety of both the pedestrians and motorists travelling along the State highway. If the applicant is prepared to provide public access to the lake, they should make it accessible by providing a parking area. Consequently, Transit requests the applicants provide car parking for up to 5 vehicles located within the buffer zone towards the southern end of the subject site and as close as practicable to the pedestrian access leading to the foreshore of Lake Dunstan. **The reasons for this submission are:** The objective of Transit New Zealand is to operate the State highway system in a way that contributes to an integrated, safe and sustainable land transport system. The Land Transport Management Act 2003 requires Transit New Zealand to not only build roads in response to traffic pressures, but to actively manage the present State highway resource as a key component of the land transport system.	**Transit New Zealand wishes the consent authority to grant resource consent to the proposed activity and attach the following condition:** *The applicant shall establish and maintain a public parking area for no less than 5 vehicles located within the buffer zone adjacent to the State highway. The parking area will have direct access onto the State highway and operate in a manner similar to a rest area. The parking area shall be located as far away as practicable from CP 34 as [is] possible, and as close as practicable to the pedestrian access to the foreshore of Lake Dunstan. The exact final location and treatment of the access shall be decided in consultation with Transit New Zealand's network management consultant.*

	Transit New Zealand is concerned that the proposed activity will not achieve this objective in the vicinity of the subject site. In particular, vehicles parking on the State highway road reserve could have an adverse effect on the safety and functionality of the State highway and the access to the Parkburn Quarry (being CP 34). Providing car parking for the public who wish to use the walkway could prevent and/or mitigate this potential effect.	